UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

		FORM 10-Q			
(Mark One)				_	
` ·	PORT PURSUANT TO SI	ECTION 13 OR 15(d) OF THI	E SECURITIES EXC	CHANGE ACT OF 1934	
	For	the quarterly period ended M	arch 31, 2020		
		or			
☐ TRANSITION REI	PORT PURSUANT TO S	ECTION 13 OR 15(d) OF TH	E SECURITIES EX	CHANGE ACT OF 1934	
	For the	transition period from	to		
		Commission File Number: 1	-14267		
	REPU	UBLIC SERVI	CES, INC.	_	
		t name of registrant as specifie	•		
	Delaware			65-0716904	
	te or other jurisdiction of poration or organization)			I.R.S. Employer lentification No.)	
	00 North Allied Way			,	
	Phoenix, Arizona			85054	
(Address	of principal executive offices)			(Zip Code)	
	5		1 (400) CD 7	-00	
	Registrant's to	elephone number, including ar	ea code: (480) 627-2	/ 00 	
	Se	ecurities registered pursuant to Secti	on 12(b) of the Act:		
Title of each	ı class	Trading Symbol(s)	Name of e	ach exchange on which reg	gistered
Common Stock, par val	ue \$0.01 per share	RSG	N	ew York Stock Exchange	
		ed all reports required to be filed by ant was required to file such reports			
		tted electronically every Interactive r for such shorter period that the reg			
		accelerated filer, an accelerated filer " "accelerated filer," "smaller repor			
Large accelerated filer	✓ Accelera	ited filer	☐ Smaller rep	orting company	
Non-accelerated filer			0 00	rowth company	
If an emerging growth company, revised financial accounting stand	9	registrant has elected not to use the ction 13(a) of the Exchange Act.	extended transition peri	od for complying with any ne	w or
Indicate by check mark wh	ether the registrant is a shell c	company (as defined in Rule 12b-2 o	of the Exchange Act).	Yes □ No ☑	
As of April 30, 2020, the re	egistrant had outstanding 318,	312,189 shares of Common Stock,	oar value \$0.01 per shar	e (excluding treasury shares o	of 35,784,616).

REPUBLIC SERVICES, INC.

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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

REPUBLIC SERVICES, INC. CONSOLIDATED BALANCE SHEETS (in millions, except per share data)

		March 31, 2020	D	ecember 31, 2019
	(Unaudited)		
ASSETS				
Current assets:				
Cash and cash equivalents	\$	281.6	\$	47.1
Accounts receivable, less allowance for doubtful accounts and other of \$32.4 and \$34.0, respectively		1,095.3		1,125.9
Prepaid expenses and other current assets		377.0		433.0
Total current assets		1,753.9		1,606.0
Restricted cash and marketable securities		117.7		179.4
Property and equipment, net		8,442.0		8,383.5
Goodwill		11,667.5		11,633.4
Other intangible assets, net		130.0		133.9
Other assets		797.8		747.6
Total assets	\$	22,908.9	\$	22,683.8
LIABILITIES AND STOCKHOLDERS' EQUITY	===			
Current liabilities:				
Accounts payable	\$	660.6	\$	777.9
Notes payable and current maturities of long-term debt		24.5		929.9
Deferred revenue		342.9		336.0
Accrued landfill and environmental costs, current portion		131.1		132.6
Accrued interest		77.9		74.0
Other accrued liabilities		743.6		814.2
Total current liabilities		1,980.6		3,064.6
Long-term debt, net of current maturities		8,952.2		7,758.6
Accrued landfill and environmental costs, net of current portion		1,716.5		1,703.2
Deferred income taxes and other long-term tax liabilities, net		1,191.9		1,180.6
Insurance reserves, net of current portion		262.6		276.5
Other long-term liabilities		684.9		579.4
Commitments and contingencies				
Stockholders' equity:				
Preferred stock, par value \$0.01 per share; 50 shares authorized; none issued		_		_
Common stock, par value \$0.01 per share; 750 shares authorized; 354.0 and 353.3 issued including shares held in treasury, respectively		3.5		3.5
Additional paid-in capital		5,013.1		4,994.8
Retained earnings		5,433.6		5,317.3
Treasury stock, at cost; 35.9 and 34.5 shares, respectively		(2,315.4)		(2,199.6)
Accumulated other comprehensive income (loss), net of tax		(17.6)		2.2
Total Republic Services, Inc. stockholders' equity		8,117.2		8,118.2
Non-controlling interests in consolidated subsidiary		3.0		2.7
Total stockholders' equity		8,120.2		8,120.9
Total liabilities and stockholders' equity	\$	22,908.9	\$	22,683.8

REPUBLIC SERVICES, INC. UNAUDITED CONSOLIDATED STATEMENTS OF INCOME (in millions, except per share data)

	Т	Three Months Ended March 31,			
		2020		2019	
Revenue	\$	2,553.9	\$	2,470.6	
Expenses:					
Cost of operations		1,550.1		1,506.1	
Depreciation, amortization and depletion		268.6		251.5	
Accretion		20.9		20.5	
Selling, general and administrative		277.1		266.4	
Withdrawal costs - multiemployer pension funds		4.3		_	
(Gain) loss on business divestitures and impairments, net		(3.9)		0.3	
Restructuring charges		3.8		3.0	
Operating income		433.0		422.8	
Interest expense		(96.6)		(100.4)	
Loss from unconsolidated equity method investments		(13.2)		(11.6)	
Interest income		0.3		1.9	
Other (loss) income, net		(0.9)		0.1	
Income before income taxes		322.6		312.8	
Provision for income taxes		75.8		77.9	
Net income		246.8		234.9	
Net income attributable to non-controlling interests in consolidated subsidiary		(0.5)		(0.7)	
Net income attributable to Republic Services, Inc.	\$	246.3	\$	234.2	
Basic earnings per share attributable to Republic Services, Inc. stockholders:			-		
Basic earnings per share	\$	0.77	\$	0.73	
Weighted average common shares outstanding		319.6		322.3	
Diluted earnings per share attributable to Republic Services, Inc. stockholders:					
Diluted earnings per share	\$	0.77	\$	0.72	
Weighted average common and common equivalent shares outstanding		320.2		323.5	
Cash dividends per common share	\$	0.405	\$	0.375	

REPUBLIC SERVICES, INC. UNAUDITED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (in millions)

	Th	Three Months Ended Marc 31,				
		2020 2				
Net income	\$	246.8	\$	234.9		
Other comprehensive loss, net of tax						
Hedging activity:						
Realized loss (gain) reclassified into earnings		8.0		(0.1)		
Unrealized loss		(22.2)		(11.3)		
Pension activity:						
Change in funded status of pension plan obligations		1.6		_		
Other comprehensive loss, net of tax		(19.8)		(11.4)		
Comprehensive income		227.0		223.5		
Comprehensive income attributable to non-controlling interests		(0.5)		(0.7)		
Comprehensive income attributable to Republic Services, Inc.	\$	226.5	\$	222.8		

REPUBLIC SERVICES, INC. UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in millions)

Republic Services, Inc. Stockholders' Equity

	Common Stock		1 Idditional		Treasi	ury Stock	Accumulated Other	Non-controlling Interests In		
	Shares	Amount		Paid-In Capital	Retained Earnings	Shares	Amount	Comprehensive Income, Net of Tax	Consolidated Subsidiary	Total
Balance as of December 31, 2019	353.3	\$ 3.5	5 5	\$ 4,994.8	\$ 5,317.3	(34.5)	\$ (2,199.6)	\$ 2.2	\$ 2.7	\$ 8,120.9
Net income	_	_	-	_	246.3	_	 ,	_	0.5	246.8
Other comprehensive loss	_	-	-	_	_	_	_	(19.8)	_	(19.8)
Cash dividends declared	_	_	-	_	(128.9)	_	 ,	_	_	(128.9)
Issuances of common stock	0.7	_	-	7.5	_	(0.2)	(17.0)	_	_	(9.5)
Stock-based compensation	_	_	-	10.8	(1.1)		_	_	_	9.7
Purchase of common stock for treasury	_	_	-	_	_	(1.2)	(98.8)	_	_	(98.8)
Distributions paid	_	_	-	_	_	_	_	_	(0.2)	(0.2)
Balance as of March 31, 2020	354.0	\$ 3.5	5 5	\$ 5,013.1	\$ 5,433.6	(35.9)	\$ (2,315.4)	\$ (17.6)	\$ 3.0	\$ 8,120.2

Republic Services, Inc. Stockholders' Equity

	Comn	Common Stock Additional Paid-In Retained			ury Stock	Accumulated Other						
	Shares	A	mount	Capital	Retained Earnings	Shares	Amount	Comprehensive Income, Net of Tax		Consolidated Subsidiary		Total
Balance as of December 31, 2018	351.9	\$	3.5	\$ 4,924.9	\$ 4,750.5	(29.4)	\$ (1,782.6)	\$	30.8	\$	2.4	\$ 7,929.5
Adoption of accounting standard, net of tax	_		_	_	(3.1)	_	_		3.1		_	_
Net income	_		_	_	234.2	_	_		_		0.7	234.9
Other comprehensive income	_		_	_	_	_	_		(11.4)		_	(11.4)
Cash dividends declared	_		_	_	(120.7)	_	_		_		_	(120.7)
Issuances of common stock	0.9		_	7.7	_	(0.2)	(16.8)		_		_	(9.1)
Stock-based compensation	_		_	12.0	(1.1)	_	_		_		_	10.9
Purchase of common stock for treasury	_		_	_	_	(1.5)	(111.5)		_		_	(111.5)
Balance as of March 31, 2019	352.8	\$	3.5	\$ 4,944.6	\$ 4,859.8	(31.1)	\$ (1,910.9)	\$	22.5	\$	3.1	\$ 7,922.6

REPUBLIC SERVICES, INC. UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS (in millions)

	Three Months I	Ended March 31,		
	2020	2019		
Cash provided by operating activities:				
Net income	\$ 246.8	\$ 234.9		
Adjustments to reconcile net income to cash provided by operating activities:				
Depreciation, amortization, depletion and accretion	289.5	272.0		
Non-cash interest expense	14.9	11.0		
Restructuring related charges	3.8	3.0		
Stock-based compensation	9.9	11.1		
Deferred tax provision	17.6	27.7		
Provision for doubtful accounts, net of adjustments	4.9	7.5		
Gain on disposition of assets and asset impairments, net	(4.9)	(1.4)		
Withdrawal costs - multiemployer pension funds	4.3	_		
Environmental adjustments	(0.4)	(10.5)		
Loss from unconsolidated equity method investments	13.2	11.6		
Other non-cash items	1.2	(0.1)		
Change in assets and liabilities, net of effects from business acquisitions and divestitures:				
Accounts receivable	28.0	23.2		
Prepaid expenses and other assets	88.2	56.8		
Accounts payable	(63.5)	(45.6)		
Restructuring expenditures	(3.8)	(4.6)		
Capping, closure and post-closure expenditures	(8.7)	(8.4)		
Remediation expenditures	(17.2)	(7.2)		
Other liabilities	(54.3)	(27.3)		
Cash provided by operating activities	569.5	553.7		
Cash used in investing activities:		555.7		
Purchases of property and equipment	(346.8)	(299.3)		
Proceeds from sales of property and equipment	6.0	4.1		
Cash used in acquisitions and investments, net of cash and restricted cash acquired	(61.0)	(62.7)		
Cash received from business divestitures	(0.2)	(02.7)		
Purchases of restricted marketable securities	(14.0)	(5.0)		
Sales of restricted marketable securities	5.6	(5.0)		
Other	(25.0)	(1.3)		
Cash used in investing activities				
5	(435.4)	(359.1)		
Cash provided by (used in) financing activities:	1.051.0	4.404.0		
Proceeds from notes payable and long-term debt, net of fees	1,974.9	1,104.9		
Proceeds from issuance of senior notes, net of discount and fees	985.6	(4.050.6)		
Payments of notes payable and long-term debt and senior notes	(2,688.7)	(1,052.6)		
Issuances of common stock, net	(9.5)	(9.1)		
Purchases of common stock for treasury	(98.8)	(111.5)		
Cash dividends paid	(129.2)	(121.0)		
Distributions paid to non-controlling interests in consolidated subsidiary	(0.2)	_		
Contingent consideration payments	(2.2)	(2.1)		
Cash provided by (used in) financing activities	31.9	(191.4)		
Increase in cash, cash equivalents, restricted cash and restricted cash equivalents	166.0	3.2		
Cash, cash equivalents, restricted cash and restricted cash equivalents at beginning of year	177.4	133.3		
Cash, cash equivalents, restricted cash and restricted cash equivalents at end of period	\$ 343.4	\$ 136.5		

1. BASIS OF PRESENTATION

Republic Services, Inc., a Delaware corporation, and its consolidated subsidiaries (also referred to collectively as Republic, the Company, we, us, or our), is the second largest provider of non-hazardous solid waste collection, transfer, recycling, disposal and environmental services in the United States, as measured by revenue. We manage and evaluate our operations through two field groups, Group 1 and Group 2, which we have identified as our reportable segments.

The unaudited consolidated financial statements include the accounts of Republic Services, Inc. and its wholly owned and majority owned subsidiaries in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). We account for investments in entities in which we do not have a controlling financial interest under either the equity method or cost method of accounting, as appropriate. All material intercompany accounts and transactions have been eliminated in consolidation.

We have prepared these unaudited consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information related to our organization, significant accounting policies and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP has been condensed or omitted. In the opinion of management, these financial statements include all adjustments that, unless otherwise disclosed, are of a normal recurring nature and necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. Operating results for interim periods are not necessarily indicative of the results you can expect for a full year. You should read these financial statements in conjunction with our audited consolidated financial statements and notes thereto appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

For comparative purposes, certain prior year amounts have been reclassified to conform to the current year presentation. All dollar amounts in tabular presentations are in millions, except per share amounts and unless otherwise noted.

Management's Estimates and Assumptions

In preparing our financial statements, we make numerous estimates and assumptions that affect the amounts reported in these financial statements and accompanying notes. We must make these estimates and assumptions because certain information we use is dependent on future events, cannot be calculated with a high degree of precision from data available or simply cannot be readily calculated based on generally accepted methodologies. In preparing our financial statements, the more critical and subjective areas that deal with the greatest amount of uncertainty relate to our accounting for our long-lived assets, including recoverability, landfill development costs, and final capping, closure and post-closure costs; our valuation allowances for accounts receivable and deferred tax assets; our liabilities for potential litigation, claims and assessments; our liabilities for environmental remediation, multiemployer pension funds, employee benefit plans, deferred taxes, uncertain tax positions, and insurance reserves; and our estimates of the fair values of assets acquired and liabilities assumed in any acquisition. Each of these items is discussed in more detail in our description of our significant accounting policies in Note 2, *Summary of Significant Accounting Policies*, of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019. Our actual results may differ significantly from our estimates.

In March 2020, the World Health Organization declared the outbreak of a new strain of coronavirus (COVID-19) a pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. The extent of the impact of the COVID-19 pandemic on our operations and financial performance will depend on future developments, including the duration and spread of the pandemic, all of which are uncertain and cannot be predicted at this time. An extended period of economic disruption could materially and adversely affect our business, results of operations, access to sources of liquidity and financial condition. We will continue to monitor the evolving COVID-19 pandemic along with the effect on our business and review our estimates for recoverability of our assets and the valuation of our obligations on, at least, a quarterly basis.

As a direct result of COVID-19, we have experienced an increase in certain costs of doing business, including costs for additional safety equipment and hygiene products, increased facility and equipment cleaning, and meals for our frontline employees. These costs are intended to assist in protecting the safety of our frontline employees as we continue to provide an essential service to our customers. We expect to incur similar costs throughout 2020, and potentially into future years. The magnitude of the costs we expect to incur throughout the remainder of the year cannot be predicted at this time due to the various uncertainties surrounding the pandemic (e.g., the duration and spread of the pandemic).

New Accounting Pronouncements

Accounting Standards Adopted

Effective January 1, 2020, we adopted the following accounting standards updates (ASUs) as issued by the Financial Accounting Standards Board (FASB):

ASU		Effective Date
ASU 2016-13	Credit Losses (Topic 326)	January 1, 2020
ASU 2018-13	Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement (Topic 820)	January 1, 2020

Credit Losses

Effective January 1, 2020, we adopted ASU 2016-13, *Credit Losses Topic 326* (ASU 2016-13 or the new credit losses standard) using the modified retrospective approach. The comparative periods have not been restated and continue to be reported under the accounting standard in effect for those periods. The new credit losses standard amends the impairment model to use a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Our adoption of ASU 2016-13 did not have a material impact on our consolidated financial statements for the three months ended March 31, 2020, and we did not recognize a cumulative effect adjustment to retained earnings as of January 1, 2020.

To assist in quantifying the impact on our consolidated financial statements and supplementing our existing disclosures, we identified financial assets measured at an amortized cost basis in our consolidated balance sheet and evaluated the collectability considerations based on an expected credit loss assessment. We are exposed to credit losses primarily through the collection, transfer and disposal of non-hazardous solid waste and environmental services we provide our customers as well as the recovering and sale of certain recyclable materials. We perform ongoing credit evaluations of our customers, but generally do not require collateral to support customer receivables. We establish an allowance for doubtful accounts based on various factors including the age of receivables outstanding, historical trends, economic conditions and other information. We also review outstanding balances on an account-specific basis based on the credit risk of the customer. We determined that all of our accounts receivable share similar risk characteristics. We monitor our credit exposure on an ongoing basis and assess whether assets in the pool continue to display similar risk characteristics.

The consolidated statement of income for the three months ended March 31, 2020 reflects the measurement of credit losses for newly recognized financial assets as well as any changes to historical financial assets. The following table reflects the activity in our allowance for doubtful accounts during the three months ended March 31, 2020.

	 for Doubtful and Other
Balance as of December 31, 2019	\$ 34.0
Additions charged to expense	4.9
Accounts written-off	(6.5)
Balance as of March 31, 2020	\$ 32.4

As a result of the unprecedented nature of COVID-19 and the various uncertainties surrounding the pandemic (e.g., the duration and spread of the pandemic), we continue to apply our historical loss rate assumptions and reserve against outstanding balances on an account-specific basis as we assess the collectability of our receivables. In certain situations, we may offer credit extensions to our customers as they navigate the current economic environment. In accordance with our accounting policy, we are actively monitoring the credit risk of our specific customers, age of receivables outstanding, recent collection trends and general economic conditions to evaluate the risk of credit loss.

Fair Value Measurement

Effective January 1, 2020, we adopted the FASB's ASU 2018-13, *Fair Value Measurement (Topic 820) Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* (ASU 2018-13). ASU 2018-13 intends to increase the consistency and comparability of fair value measurements used in financial reporting through eliminating, modifying, and adding certain disclosure requirements within Topic 820. The adoption of ASU 2018-13 did not have a material impact on our consolidated financial statements for the three months ended March 31, 2020.

Accounting Standards Updates Issued but not yet Adopted

Changes to the Disclosure Requirements for Defined Benefit Plans

In August 2018, the FASB issued ASU 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20) Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans* (ASU 2018-14). ASU 2018-14 removes disclosures that no longer are considered cost beneficial, clarifies the specific requirements of disclosures, and adds disclosure requirements identified as relevant. Although narrow in scope, the amendments are considered an important part of the FASB's efforts to improve the effectiveness of disclosures in the notes to financial statements. ASU 2018-14 is effective for public business entities for fiscal years beginning after December 15, 2020, including interim periods within that fiscal year. Early adoption is permitted for all entities. We are currently assessing the effect this guidance may have on our consolidated financial statements.

Simplifying the Accounting for Income Taxes

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes (ASU 2019-12). ASU 2019-12 attempts to simplify aspects of accounting for franchise taxes and enacted changes in tax laws or rates, and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The amended guidance contains a model under which an entity can consider a list of factors in determining whether the step-up in tax basis of goodwill is related to the business combination that caused the initial recognition of goodwill or to a separate transaction. ASU 2019-12 is effective for public business entities for fiscal years beginning after December 15, 2020, including interim periods within that fiscal year. Early adoption is permitted for all entities. We are currently assessing the effect this guidance may have on our consolidated financial statements.

Reference Rate Reform

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (ASU 2020-04). ASU 2020-04 provides optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The amendments in ASU 2020-04 provide optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. We are currently assessing the effect this guidance may have on our consolidated financial statements.

2. BUSINESS ACQUISITIONS, INVESTMENTS AND RESTRUCTURING CHARGES

Acquisitions

We acquired various waste businesses during the three months ended March 31, 2020 and 2019. The purchase price for these business acquisitions and the allocations of the purchase price follows:

	2020		2019
Purchase price:			
Cash used in acquisitions, net of cash acquired	\$	52.2	\$ 50.6
Holdbacks		2.5	3.9
Fair value, future minimum finance lease payments		0.3	
Total	\$	55.0	\$ 54.5
Allocated as follows:			
Accounts receivable	\$	2.3	\$ 1.6
Property and equipment		17.3	7.7
Operating right-of-use lease assets		0.2	_
Other assets		0.2	0.4
Accounts payable		(1.2)	_
Environmental remediation liabilities		(1.5)	
Operating right-of-use lease liabilities		(0.2)	_
Other liabilities		(0.9)	(0.4)
Fair value of tangible assets acquired and liabilities assumed		16.2	9.3
Excess purchase price to be allocated	\$	38.8	\$ 45.2
Excess purchase price allocated as follows:	-		
Other intangible assets	\$	1.8	\$ 12.7
Goodwill		37.0	32.5
Total allocated	\$	38.8	\$ 45.2

The purchase price allocations are based on information existing at the acquisition dates. Accordingly, certain of the purchase price allocations are preliminary and subject to change. Substantially all of the goodwill and intangible assets recorded for these acquisitions are deductible for tax purposes.

These acquisitions are not material to our results of operations, individually or in the aggregate. As a result, no pro forma financial information is provided.

Investments

In 2020, we continued to acquire non-controlling equity interests in certain limited liability companies that qualified for investment tax credits under Section 48 of the Internal Revenue Code. In exchange for our non-controlling interests, we made capital contributions of \$9.4 million, which were recorded to other assets in our March 31, 2020 consolidated balance sheet. During the three months ended March 31, 2020 and 2019, we also reduced the carrying value of these investments by \$13.2 million and \$11.6 million, respectively, as a result of tax credits allocated to us, cash distributions and our share of income and loss pursuant to the terms of the limited liability company agreements.

Restructuring Charges

In 2019, we incurred costs related to the redesign of certain back-office software systems, which continued into 2020. During the three months ended March 31, 2020 and 2019, we incurred restructuring charges of \$3.8 million and \$3.0 million, respectively, that primarily related to these restructuring efforts. During the three months ended March 31, 2020 and 2019, we paid \$3.8 million and \$4.6 million, respectively, related to these restructuring efforts.

In 2020, we expect to incur additional restructuring charges of approximately \$10 million primarily related to the redesign of certain of our back-office software systems. Substantially all of these restructuring charges will be recorded in our corporate segment.

3. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Our senior management evaluates, oversees and manages the financial performance of our operations through two field groups, referred to as Group 1 and Group 2.

Goodwill

A summary of the activity and balances in goodwill accounts by reporting segment follows:

	Balan	ce as of December 31, 2019	Acc	quisitions	Div	estitures	justments to cquisitions	Balan	ice as of March 31, 2020
Group 1	\$	6,235.6	\$	7.5	\$		\$ (0.3)	\$	6,242.8
Group 2		5,397.8		29.5		(3.1)	0.5		5,424.7
Total	\$	11,633.4	\$	37.0	\$	(3.1)	\$ 0.2	\$	11,667.5

Other Intangible Assets, Net

Other intangible assets, net, include values assigned to customer relationships, non-compete agreements and trade names, and are amortized over periods ranging from 1 to 17 years. A summary of the activity and balances by intangible asset type follows:

	 Gross Intangible Assets															
	ance as of ember 31, 2019	Acc	quisitions		ljustments nd Other		nlance as of March 31, 2020		alance as of ecember 31, 2019	Cl	dditions narged to Expense	ljustments nd Other		lance as of March 31, 2020	Asse	r Intangible ts, Net as of ch 31, 2020
Customer relationships	\$ 733.8	\$	0.7	\$		\$	734.5	\$	(623.0)	\$	(4.2)	\$ 	\$	(627.2)	\$	107.3
Non-compete agreements	45.3		1.1		(0.2)		46.2		(35.3)		(0.9)	0.1		(36.1)		10.1
Other intangible assets	58.2		_		(0.7)		57.5		(45.1)		(0.2)	0.4		(44.9)		12.6
Total	\$ 837.3	\$	1.8	\$	(0.9)	\$	838.2	\$	(703.4)	\$	(5.3)	\$ 0.5	\$	(708.2)	\$	130.0

We evaluate goodwill for impairment annually as of October 1, or when an indicator of impairment exists. In accordance with our accounting policy, we also perform a quarterly review of our long-lived and intangible assets. During the performance of our first quarter impairment review, we considered the impact of the COVID-19 pandemic on our business, noting no indicators of impairment for goodwill or other intangible assets.

4. OTHER ASSETS

Prepaid Expenses and Other Current Assets

A summary of prepaid expenses and other current assets as of March 31, 2020 and December 31, 2019 follows:

	2020	2019	
Income tax receivable	\$ 102.5	\$	156.7
Prepaid expenses	74.4		75.5
Other non-trade receivables	61.1		88.1
Inventories	57.1		56.8
Reinsurance receivable	36.6		31.9
Investments, current	25.0		_
Prepaid fees for cloud-based hosting arrangements, current	12.3		12.4
Interest rate swap locks	_		3.6
Other current assets	8.0		8.0
Total	\$ 377.0	\$	433.0

Other Assets

A summary of other assets as of March 31, 2020 and December 31, 2019 follows:

	2020	2019
Operating right-of-use lease assets	\$ 238.0	\$ 243.6
Deferred compensation plan	101.2	118.0
Investments	94.2	87.8
Reinsurance receivable	88.8	78.9
Deferred contract costs and sales commissions	80.6	83.1
Other derivative assets	61.6	2.9
Amounts recoverable for capping, closure and post-closure obligations	32.0	31.8
Prepaid fees and capitalized implementation costs for cloud-based hosting arrangements	30.0	32.0
Interest rate swaps	21.0	10.7
Deferred financing costs	2.7	3.0
Other	47.7	55.8
Total	\$ 797.8	\$ 747.6

5. OTHER LIABILITIES

Other Accrued Liabilities

A summary of other accrued liabilities as of March 31, 2020 and December 31, 2019 follows:

	2020	2019		
Accrued payroll and benefits	\$ 173.5	\$	207.7	
Insurance reserves, current	168.1		162.0	
Accrued dividends	128.9		129.2	
Accrued fees and taxes	126.3		140.8	
Ceded insurance reserves, current	36.3		31.6	
Operating right-of-use lease liabilities, current	35.3		51.5	
Accrued professional fees and legal settlement reserves	6.8		11.8	
Interest rate swap locks	_		14.9	
Other	68.4		64.7	
Total	\$ 743.6	\$	814.2	

Other Long-Term Liabilities

A summary of other long-term liabilities as of March 31, 2020 and December 31, 2019 follows:

	2	2020	2019
Operating right-of-use lease liabilities	\$	222.7	\$ 212.5
Other derivative liabilities		112.6	22.2
Deferred compensation plan liability		102.1	116.1
Ceded insurance reserves		90.5	80.6
Contingent purchase price and acquisition holdbacks		70.9	71.2
Withdrawal liability - multiemployer pension funds		15.9	12.0
Legal settlement reserves		12.6	10.0
Interest rate swap locks		11.0	0.8
Pension and other post-retirement liabilities		6.3	6.2
Other		40.3	47.8
Total	\$	684.9	\$ 579.4

6. LANDFILL AND ENVIRONMENTAL COSTS

As of March 31, 2020, we owned or operated 190 active solid waste landfills with total available disposal capacity estimated to be 5.0 billion in-place cubic yards. Additionally, we had post-closure responsibility for 130 closed landfills.

Accrued Landfill and Environmental Costs

A summary of accrued landfill and environmental liabilities as of March 31, 2020 and December 31, 2019 follows:

	2020	2019		
Landfill final capping, closure and post-closure liabilities	\$ 1,358.9	\$	1,335.6	
Environmental remediation	488.7		500.2	
Total accrued landfill and environmental costs	 1,847.6		1,835.8	
Less: current portion	 (131.1)		(132.6)	
Long-term portion	\$ 1,716.5	\$	1,703.2	

Final Capping, Closure and Post-Closure Costs

The following table summarizes the activity in our asset retirement obligation liabilities, which includes liabilities for final capping, closure and post-closure, for the three months ended March 31, 2020 and 2019:

	2020	2019		
Asset retirement obligation liabilities, beginning of year	\$ 1,335.6	\$	1,292.0	
Non-cash additions	11.5		10.3	
Acquisitions, net of divestitures and other adjustments	0.1		0.1	
Asset retirement obligation adjustments	(0.5)		(0.5)	
Payments	(8.7)		(8.4)	
Accretion expense	20.9		20.5	
Asset retirement obligation liabilities, end of period	1,358.9		1,314.0	
Less: current portion	(74.4)		(75.4)	
Long-term portion	\$ 1,284.5	\$	1,238.6	

We review annually, in the fourth quarter, and update as necessary, our estimates of asset retirement obligation liabilities. However, if there are significant changes in the facts and circumstances related to a site during the year, we will update our assumptions prospectively in the period that we know all the relevant facts and circumstances and make adjustments as appropriate.

Landfill Operating Expenses

In the normal course of business, we incur various operating costs associated with environmental compliance. These costs include, among other things, leachate treatment and disposal, methane gas and groundwater monitoring, systems maintenance, interim cap maintenance, costs associated with the application of daily cover materials, and the legal and administrative costs of ongoing environmental compliance. These costs are expensed as cost of operations in the periods in which they are incurred.

Environmental Remediation Liabilities

We accrue for remediation costs when they become probable and can be reasonably estimated. There can sometimes be a range of reasonable estimates of the costs associated with remediation of a site. In these cases, we use the amount within the range that constitutes our best estimate. If no amount within the range appears to be a better estimate than any other, we use the amount that is at the low end of the range. It is reasonably possible that we will need to adjust the liabilities recorded for remediation to reflect the effects of new or additional information, to the extent such information impacts the costs, timing or duration of the required actions. If we used the reasonably possible high ends of our ranges, our aggregate potential remediation liability as of March 31, 2020 would be approximately \$365 million higher than the amount recorded. Future changes in our estimates of the cost, timing or duration of the required actions could have a material adverse effect on our consolidated financial position, results of operations and cash flows.

The following table summarizes the activity in our environmental remediation liabilities for the three months ended March 31, 2020 and 2019:

	2020		2	019
Environmental remediation liabilities, beginning of year	\$ 5	500.2	\$	540.2
Net adjustments charged to expense		(0.4)		(10.5)
Payments		(17.2)		(7.2)
Accretion expense (non-cash interest expense)		4.6		4.8
Acquisitions, net of divestitures and other adjustments		1.5		_
Environmental remediation liabilities, end of period		488.7		527.3
Less: current portion		(56.7)		(58.6)
Long-term portion	\$ 4	432.0	\$	468.7

Bridgeton Landfill. During the three months ended March 31, 2020, we paid \$12.1 million related to management and monitoring of the remediation area for our closed Bridgeton Landfill in Missouri. We continue to work with state and federal regulatory agencies on our remediation efforts. From time to time, this may require us to modify our future operating timeline and procedures, which could result in changes to our expected liability. As of March 31, 2020, the remediation liability recorded for this site was \$132.4 million, of which approximately \$12 million is expected to be paid during the remainder of 2020. We believe the remaining reasonably possible high end of our range would be approximately \$163 million higher than the amount recorded as of March 31, 2020.

During the three months ended March 31, 2020, we recognized a favorable insurance recovery of \$10.8 million related to our closed Bridgeton Landfill as a reduction of remediation expenses in our consolidated statement of income for the applicable period.

West Lake Landfill Superfund Site. Our subsidiary Bridgeton Landfill, LLC is one of several currently designated Potentially Responsible Parties for the West Lake Landfill Superfund site (West Lake) in Missouri. On September 27, 2018, the U.S. Environmental Protection Agency (EPA) issued a Record of Decision Amendment for West Lake that includes a total undiscounted cost estimate of \$229 million over a four- to five-year design and construction timeline. On March 11, 2019, the EPA issued special notice letters under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) to Bridgeton Landfill, LLC and the other currently designated Potentially Responsible Parties to initiate negotiations to implement the remedy. At this time we are neither able to predict the final design of that remedy, nor estimate how much of the future response costs of the site our subsidiary may agree or be required to pay. During any subsequent administrative proceedings or litigation, our subsidiary will vigorously contest liability for the costs of remediating radiologically-impacted materials generated on behalf of the federal government during the Manhattan Project and delivered to the site by an Atomic Energy Commission licensee and its subcontractor. Currently, we believe we are adequately reserved for our expected remediation liability. However, subsequent events related to remedy design, divisibility, or allocation may require us to modify our expected remediation liability.

7. DEBT

The carrying value of our notes payable, finance leases and long-term debt as of March 31, 2020 and December 31, 2019 is listed in the following table, and is adjusted for the fair value of interest rate swaps, unamortized discounts, deferred issuance costs and the unamortized portion of adjustments to fair value recorded in purchase accounting. Original issue discounts and adjustments to fair value recorded in purchase accounting are amortized to interest expense over the term of the applicable instrument using the effective interest method.

				M	arch 31, 2020			December 31, 2019						
Maturity	Interest Rate		Principal	A	djustments	Car	rying Value		Principal	Adjustments		Cai	rrying Value	
Credit facilities:														
Uncommitted Credit Facility	Variable	\$	40.0	\$	_	\$	40.0	\$	11.6	\$	_	\$	11.6	
June 2023	Variable		354.4		_		354.4		184.4		_		184.4	
Senior notes:														
March 2020	5.000		_		_		_		850.0		(0.1)		849.9	
November 2021	5.250		600.0		(0.7)		599.3		600.0		(8.0)		599.2	
June 2022	3.550		850.0		(2.4)		847.6		850.0		(2.6)		847.4	
May 2023	4.750		550.0		12.4		562.4		550.0		2.6		552.6	
August 2024	2.500		900.0		(7.9)		892.1		900.0		(8.3)		891.7	
March 2025	3.200		500.0		(3.4)		496.6		500.0		(3.6)		496.4	
July 2026	2.900		500.0		(3.7)		496.3		500.0		(3.9)		496.1	
November 2027	3.375		650.0		(5.0)		645.0		650.0		(5.2)		644.8	
May 2028	3.950		800.0		(15.3)		784.7		800.0		(15.7)		784.3	
March 2030	2.300		600.0		(7.0)		593.0		_		_		_	
March 2035	6.086		181.9		(13.8)		168.1		181.9		(13.9)		168.0	
March 2040	6.200		399.9		(3.7)		396.2		399.9		(3.7)		396.2	
May 2041	5.700		385.7		(5.2)		380.5		385.7		(5.3)		380.4	
March 2050	3.050		400.0		(7.4)		392.6		_		_		_	
Debentures:														
May 2021	9.250		35.3		(0.3)		35.0		35.3		(0.4)		34.9	
September 2035	7.400		148.1		(32.8)		115.3		148.1		(33.0)		115.1	
Tax-exempt:														
2020 - 2049	0.960 - 2.500		1,066.2		(6.1)		1,060.1		1,122.4		(6.2)		1,116.2	
Finance leases:														
2020 - 2049	1.917 - 12.203		117.5		_		117.5		119.3		_		119.3	
Total Debt		\$	9,079.0	\$	(102.3)		8,976.7	\$	8,788.6	\$	(100.1)	_	8,688.5	
Less: current portion							(24.5)						(929.9)	
Long-term portion						\$	8,952.2					\$	7,758.6	

Credit Facilities

In June 2018, we entered into a \$2.25 billion unsecured revolving credit facility (the Credit Facility), which replaced our \$1.0 billion and \$1.25 billion unsecured credit facilities that would have matured in May 2021 and June 2019, respectively. The Credit Facility matures in June 2023. We may request two one-year extensions of the maturity date but none of the lenders are committed to participate in such extension. The Credit Facility also includes a feature that allows us to increase availability, at our option, by an aggregate amount of up to \$1.0 billion through increased commitments from existing lenders or the addition

of new lenders. At our option, borrowings under the Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Credit Facility agreement).

The Credit Facility is subject to facility fees based on applicable rates defined in the Credit Facility agreement and the aggregate commitment, regardless of usage. Availability under our Credit Facility totaled \$1,526.6 million and \$1,696.9 million as of March 31, 2020 and December 31, 2019, respectively. The Credit Facility can be used for working capital, capital expenditures, acquisitions, letters of credit and other general corporate purposes. The Credit Facility agreement requires us to comply with financial and other covenants. We may pay dividends and repurchase common stock if we are in compliance with these covenants.

As of March 31, 2020 and December 31, 2019, we had \$354.4 million and \$184.4 million of borrowings under our Credit Facility, respectively. We had \$352.3 million and \$351.4 million of letters of credit outstanding under our Credit Facility as of March 31, 2020 and December 31, 2019, respectively.

As of April 30, 2020, we had \$189.4 million of borrowings under our Credit Facility.

We also have an Uncommitted Credit Facility, which bears interest at LIBOR, plus an applicable margin and is subject to facility fees defined in the agreement, regardless of usage. We can use borrowings under the Uncommitted Credit Facility for working capital and other general corporate purposes. The agreement governing our Uncommitted Credit Facility requires us to comply with certain covenants. The Uncommitted Credit Facility may be terminated by either party at any time. We had \$40.0 million of borrowings and \$11.6 million of borrowings outstanding under our Uncommitted Credit Facility as of March 31, 2020 and December 31, 2019, respectively.

As of April 30, 2020, we had \$100.0 million of borrowings outstanding under our Uncommitted Credit Facility.

Senior Notes and Debentures

In February 2020, we issued \$600.0 million of 2.300% senior notes due 2030 (the 2.300% Notes) and \$400.0 million of 3.050% senior notes due 2050 (the 3.050% Notes). We used the net proceeds from the 2.300% Notes and 3.050% Notes to repay \$850.0 million of 5.000% senior notes that matured in March 2020. The remaining proceeds were used to repay amounts outstanding under our unsecured credit facilities as well as for general corporate purposes.

In August 2019, we issued \$900.0 million of 2.500% senior notes due 2024 (the 2.500% Notes). We used the net proceeds from the 2.500% Notes to repay \$650.0 million of 5.500% senior notes that matured in September 2019. The remaining proceeds were used to repay amounts outstanding under our unsecured credit facilities as well as for general corporate purposes.

Our senior notes and debentures are general unsecured obligations. Interest is payable semi-annually.

Interest Rate Swap and Lock Agreements

Our ability to obtain financing through the capital markets is a key component of our financial strategy. Historically, we have managed risk associated with executing this strategy, particularly as it relates to fluctuations in interest rates, by using a combination of fixed and floating rate debt. From time to time, we also have entered into interest rate swap and lock agreements to manage risk associated with interest rates, either to effectively convert specific fixed rate debt to a floating rate (fair value hedges), or to lock interest rates in anticipation of future debt issuances (cash flow hedges).

Fair Value Hedges

During the second half of 2013, we entered into various interest rate swap agreements relative to our 4.750% fixed rate senior notes due in May 2023. The goal was to reduce overall borrowing costs and rebalance our debt portfolio's ratio of fixed-to-floating interest rates. As of March 31, 2020, these swap agreements had a total notional value of \$300.0 million and mature in May 2023, which is identical to the maturity of the hedged senior notes. We pay interest at floating rates based on changes in LIBOR and receive interest at a fixed rate of 4.750%. These transactions were designated as fair value hedges because the swaps hedge against the changes in fair value of the fixed rate senior notes resulting from changes in interest rates.

As of March 31, 2020 and December 31, 2019, the interest rate swap agreements are reflected at their fair value of \$21.0 million and \$10.7 million, respectively, and are included in other assets in our consolidated balance sheet. To the extent they are effective, these interest rate swap agreements are included as an adjustment to long-term debt in our consolidated balance sheets. We recognized net interest income of \$0.7 million and \$0.1 million during the three months ended March 31, 2020 and 2019, respectively, related to net settlements for these interest rate swap agreements, which is included as an offset to interest expense in our consolidated statements of income.

For the three months ended March 31, 2020 and 2019, we recognized losses of \$9.7 million and \$3.4 million, respectively, on the change in fair value of the hedged senior notes attributable to changes in the benchmark interest rate, with offsetting gains

of \$10.3 million and \$3.4 million, respectively, on the related interest rate swaps. The difference of these fair value changes for the three months ended March 31, 2020 was recorded directly in earnings as an adjustment to interest expense in our consolidated statements of income.

For further detail regarding the effect of our fair value hedging on interest expense, refer to Note 11, *Financial Instruments*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Cash Flow Hedges

As of March 31, 2020 and December 31, 2019, our interest rate lock agreements had an aggregate notional value of \$200.0 million and \$575.0 million, respectively, with fixed interest rates ranging from 0.784% to 2.374% and 1.330% to 3.000%, respectively. We entered into these transactions to manage exposure to fluctuations in interest rates in anticipation of planned future issuances of senior notes in 2020 and 2021. Upon the expected issuance of senior notes, we terminate the interest rate locks and settle with our counterparties. These transactions were accounted for as cash flow hedges.

The fair value of our interest rate locks was determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy). The aggregate fair values of the outstanding interest rate locks as of March 31, 2020 were liabilities of \$11.0 million, which were recorded in other long-term liabilities in our consolidated balance sheet. As of December 31, 2019, the aggregate fair values of the outstanding interest rate locks were assets of \$3.6 million, which were recorded in prepaid expenses and other current assets in our consolidated balance sheet and liabilities of \$15.7 million, which were recorded in other accrued liabilities and other long-term liabilities in our consolidated balance sheet.

Total unrealized loss recognized in other comprehensive income for interest rate locks was \$22.2 million and \$11.3 million for the three months ended March 31, 2020 and 2019, respectively.

As of March 31, 2020 and December 31, 2019, our previously terminated interest rate locks were recorded as components of accumulated other comprehensive loss, net of tax of \$26.9 million and \$4.7 million, respectively. The amortization of the terminated interest rate locks is recorded as an adjustment to interest expense over the life of the issued debt using the effective interest method. Over the next 12 months, we expect to amortize approximately \$4.5 million from accumulated other comprehensive loss to interest expense as a yield adjustment of our senior notes .

For further detail regarding the effect of our cash flow hedging on interest expense, refer to Note 11, *Financial Instruments*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Derivative Contracts

Contemporaneously with the issuance of our 2.300% Notes in February 2020, we amended interest rate lock agreements with a notional value of \$550.0 million, extending the mandatory maturity date from 2020 to 2030 and dedesignated them as cash flow hedges (the 2020 Extended Interest Rate Locks). Contemporaneously with the issuance of our 2.500% Notes in August 2019, we amended interest rate lock agreements with a notional value of \$375.0 million, extending the mandatory maturity date from 2019 to 2024 and dedesignated them as cash flow hedges (collectively with the 2020 Extended Interest Rate Locks referred to as the Extended Interest Rate Locks). There was no ineffectiveness recognized in the termination of these cash flow hedges. In addition, we entered into offsetting interest rate swaps to offset future exposures to fair value fluctuations of the Extended Interest Rate Locks (the Offsetting Interest Rate Swaps). The fair value of these free-standing derivatives was determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy).

As of March 31, 2020 and December 31, 2019, the fair value of the Extended Interest Rate Locks was a liability of \$112.6 million and \$22.2 million, respectively, which was included in other long-term liabilities in our consolidated balance sheets, and the fair value of the Offsetting Interest Rate Swaps was an asset of \$61.6 million and \$2.9 million, respectively, and was included in other assets in our consolidated balance sheets. For the three months ended March 31, 2020, we recognized a loss of \$61.3 million on the change in fair value of the Extended Interest Rate Locks, with an offsetting gain of \$58.7 million on the Offsetting Interest Rate Swaps. The change in fair value was recorded directly in earnings as an adjustment to interest expense in our consolidated statements of income.

Tax-Exempt Financings

As of March 31, 2020 and December 31, 2019, we had \$1,060.1 million and \$1,116.2 million of certain variable rate tax-exempt financings outstanding, respectively, with maturities ranging from 2020 to 2049. During the second quarter of 2019, we refinanced \$35.0 million of tax-exempt financings and issued \$30.0 million of new tax-exempt financings. In addition, we issued \$50.0 million of tax-exempt financings during the fourth quarter of 2019.

All of our tax-exempt financings are remarketed either quarterly or semi-annually by remarketing agents to effectively maintain a variable yield. The holders of the bonds can put them back to the remarketing agents at the end of each interest period. If the remarketing agent is unable to remarket our bonds, the remarketing agent can put the bonds to us. In the event of a failed remarketing, we currently have availability under our \$2.25 billion unsecured revolving credit facility to fund these bonds until they are remarketed successfully. Accordingly, we have classified these borrowings as long-term in our consolidated balance sheets as of March 31, 2020 and December 31, 2019. As of March 31, 2020, we elected not to remarket and, instead, acquired \$25.0 million of tax-exempt financings as a result of the rates available at the time. We intend to remarket these bonds when we believe the rates available are acceptable. Our investment in these bonds was recorded in prepaid expenses and other current assets in our consolidated balance sheet as of March 31, 2020.

Finance Leases

We had finance lease liabilities of \$117.5 million and \$119.3 million as of March 31, 2020 and December 31, 2019, respectively, with maturities ranging from 2020 to 2049.

8. INCOME TAXES

Our effective tax rate, exclusive of non-controlling interests, for the three months ended March 31, 2020 and 2019 was 23.5% and 25.0%, respectively.

Cash paid for income taxes was \$1.4 million for the three months ended March 31, 2020 and a net refund of \$32.2 million for the same period in 2019. The net refund received for the three months ended March 31, 2019 was due to the receipt of funds from amended tax returns.

We have deferred tax assets related to state net operating loss carryforwards. We provide a partial valuation allowance due to uncertainty surrounding the future utilization of these carryforwards in the taxing jurisdictions where the loss carryforwards exist. When determining the need for a valuation allowance, we consider all positive and negative evidence, including recent financial results, scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies.

As a result of our ongoing efforts to evaluate, streamline and maximize the efficiency of our tax footprint, we could adjust our valuation allowance in a future period if there is sufficient evidence to support a conclusion that it is more certain than not that a portion of the state net operating loss carryforwards, on which we currently provide a valuation allowance, would be realized. Future changes in our valuation allowance could have a material effect on our results of operations in the period recorded.

The realization of our deferred tax asset for state loss carryforwards ultimately depends upon the existence of sufficient taxable income in the appropriate state taxing jurisdictions in future periods. The weight given to the positive and negative evidence is commensurate with the extent such evidence can be objectively verified. We continue to regularly monitor both positive and negative evidence in determining the ongoing need for a valuation allowance. As of March 31, 2020, the valuation allowance associated with our state loss carryforwards was approximately \$67 million, which we believe is sufficient at this time.

Given the various uncertainties surrounding the COVID-19 pandemic, we will continue to review our estimates for recoverability of our assets on, at least, a quarterly basis.

We are subject to income tax in the United States and Puerto Rico, as well as in multiple state jurisdictions. Our compliance with income tax rules and regulations is periodically audited by taxing authorities. These authorities may challenge the positions taken in our tax filings. We are currently under examination by the Internal Revenue Service for tax years 2015 through 2017, as well as state and local taxing authorities and Puerto Rico for various tax years.

We believe our recorded liabilities for uncertain tax positions are adequate. However, a significant assessment against us in excess of the liabilities recorded could have a material adverse effect on our consolidated financial position, results of operations and cash flows. As of March 31, 2020, we are unable to estimate the resolution of our gross unrecognized benefits over the next 12 months.

We recognize interest and penalties as incurred within the provision for income taxes in the consolidated statement of income. As of March 31, 2020, we accrued a liability for penalties of \$0.3 million and a liability for interest (including interest on penalties) of \$11.8 million related to our uncertain tax positions.

9. STOCK REPURCHASES, DIVIDENDS AND EARNINGS PER SHARE

Available Shares

We currently have approximately 12.3 million shares of common stock reserved for future grants under the Republic Services, Inc. Amended and Restated 2007 Stock Incentive Plan.

Stock Repurchases

Stock repurchase activity during the three months ended March 31, 2020 and 2019 follows (in millions, except per share amounts):

	Thi		s Ene 31,	Ended March 1,		
	2020			2019		
Number of shares repurchased		1.2		1.5		
Amount paid	\$	98.8	\$	111.5		
Weighted average cost per share	\$	85.06	\$	74.76		

As of March 31, 2020 and 2019, no repurchased shares were pending settlement.

In October 2017, our Board of Directors added \$2.0 billion to the existing share repurchase authorization that now extends through December 31, 2020. Share repurchases under the program may be made through open market purchases or privately negotiated transactions in accordance with applicable federal securities laws. While the Board of Directors has approved the program, the timing of any purchases, the prices and the number of shares of common stock to be purchased will be determined by our management, at its discretion, and will depend upon market conditions and other factors. The share repurchase program may be extended, suspended or discontinued at any time. As of March 31, 2020, the remaining authorized purchase capacity under our October 2017 repurchase program was \$605.8 million.

Dividends

In February 2020, our Board of Directors approved a quarterly dividend of \$0.405 per share. Cash dividends declared were \$128.9 million for the three months ended March 31, 2020. As of March 31, 2020, we recorded a quarterly dividend payable of \$128.9 million to shareholders of record at the close of business on April 1, 2020.

Earnings per Share

Basic earnings per share is computed by dividing net income attributable to Republic Services, Inc. by the weighted average number of common shares (including vested but unissued RSUs and PSUs) outstanding during the period. Diluted earnings per share is based on the combined weighted average number of common shares and common share equivalents outstanding, which include, where appropriate, the assumed exercise of employee stock options, unvested RSUs and unvested PSUs at the expected attainment levels. We use the treasury stock method in computing diluted earnings per share.

Earnings per share for the three months ended March 31, 2020 and 2019 are calculated as follows (in thousands, except per share amounts):

		Three Months	s End 31,	led March
	_	2020		2019
Basic earnings per share:	_			
Net income attributable to Republic Services, Inc.	\$	246,300	\$	234,200
Weighted average common shares outstanding	_	319,577		322,282
Basic earnings per share	\$	0.77	\$	0.73
Diluted earnings per share:	=			
Net income attributable to Republic Services, Inc.	\$	246,300	\$	234,200
Weighted average common shares outstanding	_	319,577		322,282
Effect of dilutive securities:				
Options to purchase common stock		92		504
Unvested RSU awards		217		227
Unvested PSU awards		345		437
Weighted average common and common equivalent shares outstanding		320,231		323,450
Diluted earnings per share	\$	0.77	\$	0.72
	_			

During the three months ended March 31, 2020, there were 0.1 million antidilutive securities outstanding. During the three months ended March 31, 2019, there were no antidilutive securities outstanding.

10. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME BY COMPONENT

A summary of changes in accumulated other comprehensive income (AOCI), net of tax, by component, for the three months ended March 31, 2020 follows:

	Cash Flow	Hedges	Defined Benefit dges Pension Items			Total
Balance as of December 31, 2019	\$	(13.7)	\$	15.9	\$	2.2
Other comprehensive (loss) income before reclassifications		(22.2)		1.6		(20.6)
Amounts reclassified from accumulated other comprehensive income		8.0		_		0.8
Net current period other comprehensive (loss) income		(21.4)		1.6		(19.8)
Balance as of March 31, 2020	\$	(35.1)	\$	17.5	\$	(17.6)

A summary of reclassifications out of accumulated other comprehensive income for the three months ended March 31, 2020 and 2019 follows:

		Three Months I	larch 31,		
		2020		2019	
Details about Accumulated Other Comprehensive Income Components	Amo	ount Reclassifie Other Compre	Affected Line Item in the Statement where Net Income is Presented		
Gain (loss) on cash flow hedges:					
Terminated interest rate locks	\$	(1.1)	\$	0.1	Interest expense
Total before tax		(1.1)		0.1	
Tax expense		0.3		_	
Total (loss) gain reclassified into earnings, net of tax	\$	(0.8)	\$	0.1	

11. FINANCIAL INSTRUMENTS

The effect of our hedging relationships and derivative instruments on the consolidated statements of income for the three months ended March 31, 2020 and 2019 follows (in millions):

		ication and amount of ome on hedging relation instrum	` / 0		
	<u> </u>	Three Months En	ded N	farch 31,	
	<u> </u>	2020	2019 Interest Expense		
	I	nterest Expense			
Total amount of expense line items presented in the consolidated statements of income in which the effects of hedging relationships and derivative instruments are recorded	\$	(96.6)	\$	(100.4)	
The effects of fair value and cash flow hedging relationships in Subtopic 815-20:					
Gain on fair value hedging relationships:					
Interest rate swaps:					
Net swap settlements	\$	0.7	\$	0.1	
Net periodic earnings	\$	0.6	\$	_	
(Loss) gain on cash flow hedging relationships:					
Interest rate swap locks:					
Amount of (loss) gain reclassified from AOCI into income, net of tax	\$	(0.8)	\$	0.1	
The effects of derivative instruments not in Subtopic 815-20:					
Loss on free-standing derivative instruments:					
Interest rate contract:					
Net loss on change in fair value of free-standing derivative instruments	\$	(2.6)	\$	_	

Fair Value Measurements

In measuring fair values of assets and liabilities, we use valuation techniques that maximize the use of observable inputs (Level 1) and minimize the use of unobservable inputs (Level 3). We also use market data or assumptions that we believe market participants would use in pricing an asset or liability, including assumptions about risk when appropriate.

Total liabilities

REPUBLIC SERVICES, INC. NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS - (CONTINUED)

The carrying value for certain of our financial instruments, including cash, accounts receivable, current investments, accounts payable and certain other accrued liabilities, approximates fair value because of their short-term nature. As of March 31, 2020 and December 31, 2019, our assets and liabilities that are measured at fair value on a recurring basis include the following:

				Ma	arch 31, 2020				
					Fai	ir Va	lue		
	Carrying Amount		Total		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)			Significant Unobservable Inputs (Level 3)
Assets:									
Money market mutual funds	\$	43.3	\$ 43.3	\$	43.3	\$	_	\$	_
Bonds - restricted cash and marketable securities and other assets		58.5	58.5		_		58.5		_
Interest rate swaps - other assets		21.0	21.0		_		21.0		
Other derivative assets - other assets		61.6	61.6				61.6		_
Total assets	\$	184.4	\$ 184.4	\$	43.3	\$	141.1	\$	_
Liabilities:	-					_		_	
Other derivative liabilities - other long-term liabilities	\$	112.6	\$ 112.6	\$	_	\$	112.6	\$	_
Interest rate locks - other long-term liabilities		11.0	11.0		_		11.0		_
Contingent consideration - other accrued liabilities and other long-term liabilities		71.7	71.7		_		_		71.7
Total liabilities	\$	195.3	\$ 195.3	\$		\$	123.6	\$	71.7
			 I	Dece	ember 31, 2019 Fai Quoted Prices in	ir Va	ue Significant Other		Significant
	Carr	rying Amount	Total		Active Markets (Level 1)		Observable Inputs (Level 2)		Unobservable Inputs (Level 3)
Assets:									
Money market mutual funds	\$	43.0	\$ 43.0	\$	43.0	\$	_	\$	_
Bonds - restricted cash and marketable securities and other assets		51.6	51.6		_		51.6		_
Interest rate swaps - other assets		10.7	10.7		_		10.7		
Other derivative assets - other assets		2.9	2.9		_		2.9		_
Interest rate locks - prepaid expenses and other current assets		3.6	3.6		_		3.6		
Total assets	\$	111.8	\$ 111.8	\$	43.0	\$	68.8	\$	_
Liabilities:									
Other derivative liabilities - other long-term liabilities	\$	22.2	\$ 22.2	\$	_	\$	22.2	\$	_
Interest rate locks - other accrued liabilities and other long- term liabilities		15.7	15.7		_		15.7		_
Contingent consideration - other accrued liabilities and other long-term liabilities		72.0	72.0						72.0

109.9

37.9

\$

72.0

109.9

Total Debt

As of March 31, 2020 and December 31, 2019, the carrying value of our total debt was \$9.0 billion and \$8.7 billion, respectively, and the fair value of our total debt was \$9.5 billion and \$9.4 billion, respectively. The estimated fair value of our fixed rate senior notes and debentures is based on quoted market prices. The fair value of our remaining notes payable, tax-exempt financings and borrowings under our credit facilities approximates the carrying value because the interest rates are variable. The fair value estimates are based on Level 2 inputs of the fair value hierarchy as of March 31, 2020 and December 31, 2019. See Note 7, *Debt*, for further information related to our debt.

Contingent Consideration

In April 2015, we entered into a waste management contract with the County of Sonoma, California to operate the county's waste management facilities. As of March 31, 2020, the Sonoma contingent consideration represents the fair value of \$65.2 million payable to the County of Sonoma based on the achievement of future annual tonnage targets through the expected remaining capacity of the landfill. The potential undiscounted amount of all future contingent payments that we could be required to make under the waste management contract is estimated to be between approximately \$75 million and \$165 million. During the three months ended March 31, 2020, the activity in the contingent consideration liability included accretion, which was offset by concession payments made in the ordinary course of business. There were no changes to the estimate of fair value.

In 2017, we recognized additional contingent consideration associated with the acquisition of a landfill. As of March 31, 2020, the contingent consideration of \$3.9 million represents the fair value of amounts payable to the seller based on annual volume of tons disposed at the landfill. During the three months ended March 31, 2020, the activity in the contingent consideration liability included accretion, which was offset by concession payments made in the ordinary course of business. There were no changes to the estimate of fair value.

In June 2019, we recognized additional contingent consideration associated with the acquisition of a collection business. As of March 31, 2020, the contingent consideration of \$2.6 million represents the fair value of amounts payable to the seller based on annual volume of tons collected from certain customers of the business. During the three months ended March 31, 2020, the activity in the contingent consideration liability included accretion. There were no changes to the estimate of fair value.

12. SEGMENT REPORTING

Our senior management evaluates, oversees and manages the financial performance of our operations through two field groups, referred to as Group 1 and Group 2. Group 1 primarily consists of geographic areas located in the western United States, and Group 2 primarily consists of geographic areas located in the southeastern and mid-western United States, and the eastern seaboard of the United States. These two groups are presented below as our reportable segments, which provide integrated waste management services consisting of non-hazardous solid waste collection, transfer, recycling, disposal and environmental services.

Summarized financial information concerning our reportable segments for the three months ended March 31, 2020 and 2019 follows:

	Gr	oss Revenue	Intercompany Revenue Ne		Amo Dep		Depreciation, Amortization, Depletion and Accretion	ortization, letion and Operating Income		Capital Expenditures		Total Assets	
Three Months Ended March 31, 202	0											-	
Group 1	\$	1,507.5	\$	(252.9)	\$	1,254.6	\$	128.5	\$	311.7	\$	114.0	\$ 11,376.6
Group 2		1,467.9		(209.4)		1,258.5		134.5		234.5		82.4	9,369.4
Corporate entities		46.1		(5.3)		40.8		26.5		(113.2)		150.4	2,162.9
Total	\$	3,021.5	\$	(467.6)	\$	2,553.9	\$	289.5	\$	433.0	\$	346.8	\$ 22,908.9
Three Months Ended March 31, 201	9												
Group 1	\$	1,430.9	\$	(237.7)	\$	1,193.2	\$	121.5	\$	288.3	\$	86.9	\$ 11,103.6
Group 2		1,438.1		(198.4)		1,239.7		126.0		223.3		84.2	8,980.2
Corporate entities		41.3		(3.6)		37.7		24.5		(88.8)		128.2	1,698.2
Total	\$	2,910.3	\$	(439.7)	\$	2,470.6	\$	272.0	\$	422.8	\$	299.3	\$ 21,782.0

Intercompany revenue reflects transactions within and between segments that generally are made on a basis intended to reflect the market value of such services. Capital expenditures for corporate entities primarily include vehicle inventory acquired but not yet assigned to operating locations and facilities. Corporate functions include legal, tax, treasury, information technology, risk management, human resources, closed landfills and other administrative functions.

13. REVENUE

Our operations primarily consist of providing collection, transfer and disposal of non-hazardous solid waste, recovering and recycling of certain materials, and environmental services. The following table disaggregates our revenue by service line for the three months ended March 31, 2020 and 2019 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,						
	20	20	20:	19			
Collection:							
Residential	\$ 568.5	22.3 %	\$ 557.4	22.6 %			
Small-container	805.7	31.5	777.9	31.5			
Large-container	552.4	21.6	530.7	21.5			
Other	12.3	0.5	10.8	0.4			
Total collection	1,938.9	75.9	1,876.8	76.0			
Transfer	323.0		294.9				
Less: intercompany	(186.0)		(172.0)				
Transfer, net	137.0	5.4	122.9	5.0			
Landfill	558.3		536.4				
Less: intercompany	(252.3)		(239.6)				
Landfill, net	306.0	12.0	296.8	12.0			
Environmental services	46.8	1.8	45.0	1.8			
Other:							
Recycling processing and commodity sales	67.1	2.6	72.9	3.0			
Other non-core	58.1	2.3	56.2	2.2			
Total other	125.2	4.9	129.1	5.2			
Total revenue	\$ 2,553.9	100.0 %	\$ 2,470.6	100.0 %			

Other non-core revenue consists primarily of revenue from National Accounts, which represents the portion of revenue generated from nationwide or regional contracts in markets outside our operating areas where the associated waste handling services are subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

The factors that impact the timing and amount of revenue recognized for each service line may vary based on the nature of the service performed. Generally, we recognize revenue at the time we perform a service. In the event that we bill for services in advance of performance, we recognize deferred revenue for the amount billed and subsequently recognize revenue at the time the service is provided. Substantially all of the deferred revenue recognized as of December 31, 2019 was recognized as revenue during the three months ended March 31, 2020 when the service was performed.

See Note 12, Segment Reporting, for additional information regarding revenue by reportable segment.

Revenue Recognition

Our service obligations of a long-term nature, e.g., certain solid waste collection service contracts, are satisfied over time, and we recognize revenue based on the value provided to the customer during the period. The amount billed to the customer is based on variable elements such as the number of residential homes or businesses for which collection services are provided, the volume of waste collected, transported and disposed, and the nature of the waste accepted. We do not disclose the value of unsatisfied performance obligations for these contracts as our right to consideration corresponds directly to the value provided to the customer for services completed to date and all future variable consideration is allocated to wholly unsatisfied performance obligations.

Additionally, certain elements of our long-term customer contracts are unknown upon entering into the contract, including the amount that will be billed in accordance with annual price escalation clauses, our fuel recovery fee program and commodity

prices. The amount to be billed is often tied to changes in an underlying base index such as a consumer price index or a fuel or commodity index, and revenue can be recognized once the index is established for the period.

Deferred Contract Costs

We incur certain upfront payments to acquire customer contracts which are recognized as other assets in our consolidated balance sheet, and we amortize the asset over the respective contract life. In addition, we recognize sales commissions that represent an incremental cost of the contract as other assets in our consolidated balance sheets, and we amortize the asset over the average life of the customer relationship. As of March 31, 2020 and December 31, 2019, we recognized \$80.6 million and \$83.1 million, respectively, of deferred contract costs and capitalized sales commissions. During each of the three months ended March 31, 2020 and 2019, we amortized \$3.0 million of capitalized sales commissions to selling, general and administrative expenses. During the three months ended March 31, 2020 and 2019, we amortized \$1.6 million and \$1.5 million, respectively, of other deferred contract costs as a reduction of revenue.

Effective January 1, 2020, we adopted ASU 2016-13. In accordance with the standard, we evaluated the impairment considerations for our deferred contract cost assets based on an expected credit loss assessment. We considered the impact of the COVID-19 pandemic on our business, noting no significant changes to our expected credit loss assessment.

14. COMMITMENTS AND CONTINGENCIES

Legal Proceedings

We are subject to extensive and evolving laws and regulations and have implemented safeguards to respond to regulatory requirements. In the normal course of our business, we become involved in legal proceedings. Some may result in fines, penalties or judgments against us, or settlements, which may impact earnings and cash flows for a particular period. Although we cannot predict the ultimate outcome of any legal matter with certainty, we do not believe the outcome of any of our pending legal proceedings will have a material adverse impact on our consolidated financial position, results of operations or cash flows.

As used herein, the term *legal proceedings* refers to litigation and similar claims against us and our subsidiaries, excluding: (1) ordinary course accidents, general commercial liability and workers' compensation claims, which are covered by insurance programs, subject to customary deductibles, and which, together with insured employee health care costs, are discussed in Note 5, *Other Liabilities*; and (2) environmental remediation liabilities, which are discussed in Note 6, *Landfill and Environmental Costs*.

We accrue for legal proceedings when losses become probable and reasonably estimable. We have recorded an aggregate accrual of approximately \$19 million relating to our outstanding legal proceedings as of March 31, 2020. As of the end of each applicable reporting period, we review each of our legal proceedings and, where it is probable that a liability has been incurred, we accrue for all probable and reasonably estimable losses. Where we can reasonably estimate a range of losses we may incur regarding such a matter, we record an accrual for the amount within the range that constitutes our best estimate. If we can reasonably estimate a range but no amount within the range appears to be a better estimate than any other, we use the amount that is the low end of such range. If we had used the high ends of such ranges, our aggregate potential liability would be approximately \$14 million higher than the amount recorded as of March 31, 2020.

Multiemployer Pension Plans

We participate in multiemployer pension plans that generally provide retirement benefits to participants of contributing employers. We do not administer these plans.

Under current law regarding multiemployer pension plans, a plan's termination, our voluntary withdrawal (which we consider from time to time) or the mass withdrawal of all contributing employers from any under-funded multiemployer pension plan (each, a Withdrawal Event) would require us to make payments to the plan for our proportionate share of the plan's unfunded vested liabilities. During the course of operating our business, we incur Withdrawal Events regarding certain of the multiemployer pension plans in which we participate. We accrue for such events when losses become probable and reasonably estimable.

The COVID-19 pandemic has created significant volatility and disruption of financial markets, which has negatively impacted companies across the globe. We will continue to monitor the Pension Protection Act zone status of the multiemployer pension plans in which we participate, noting that the current economic environment may impact certain contributing employers' ability to fulfill their obligations under the plans. We believe the largest risk is attributable to plans in the critical red zone, which are less than 65% funded. In the event other contributing employers default on their obligations under the plans, we could be required to adjust our estimates for these matters, which could have a material and adverse effect on our consolidated financial position, results of operations and cash flows.

Restricted Cash and Marketable Securities

Restricted cash and restricted cash equivalents are included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. Beginning-of-period and end-of-period cash, cash equivalents, restricted cash and restricted cash equivalents as presented in the statement of cash flows is reconciled as follows:

	M	March 31, 2020		cember 31, 2019	March 31, 2019	December 31, 2018		
Cash and cash equivalents	\$	281.6	\$	47.1	\$ 68.0	\$	70.5	
Restricted cash and marketable securities		117.7		179.4	115.1		108.1	
Less: restricted marketable securities		(55.9)		(49.1)	(46.6)		(45.3)	
Cash, cash equivalents, restricted cash and restricted cash equivalents	\$	343.4	\$	177.4	\$ 136.5	\$	133.3	

Our restricted cash and marketable securities include, among other things, restricted cash and marketable securities pledged to regulatory agencies and governmental entities as financial guarantees of our performance under certain collection, landfill and transfer station contracts and permits, and relating to our final capping, closure and post-closure obligations at our landfills, restricted cash and marketable securities related to our insurance obligations, and restricted cash related to a payment for a certain maturing tax-exempt financing.

The following table summarizes our restricted cash and marketable securities:

	Marc	ch 31, 2020	Dece	ember 31, 2019
Capping, closure and post-closure obligations	\$	31.0	\$	30.6
Insurance		86.7		99.4
Payment for maturing tax-exempt financing		_		49.4
Total restricted cash and marketable securities	\$	117.7	\$	179.4

Off-Balance Sheet Arrangements

We have no off-balance sheet debt or similar obligations, other than short-term operating leases and financial assurances, which are not classified as debt. We have no transactions or obligations with related parties that are not disclosed, consolidated into or reflected in our reported financial position or results of operations. We have not guaranteed any third-party debt.

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

You should read the following discussion in conjunction with the unaudited consolidated financial statements and notes thereto included under Part I, Item 1, and the risk factors in Part II, Item 1A of this Quarterly Report on Form 10-Q. In addition, you should refer to our audited consolidated financial statements and notes thereto and related *Management's Discussion and Analysis of Financial Condition and Results of Operations* appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Disclosure Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains certain forward-looking information about us that is intended to be covered by the safe harbor for "forwardlooking statements" provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. Words such as "guidance," "expect," "will," "may," "anticipate," "plan," "estimate," "project," "intend," "should," "can," "likely," "could," "outlook" and similar expressions are intended to identify forward-looking statements. In particular, information appearing under "Updated 2020 Financial Guidance" and elsewhere in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" includes forward-looking statements. These statements include information about our plans, strategies, expectations of future financial performance and prospects. Forward-looking statements are not guarantees of performance. These statements are based upon the current beliefs and expectations of our management and are subject to significant risk and uncertainties that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot assure you that the expectations will prove to be correct. Among the factors that could cause actual results to differ materially from the expectations expressed in the forward-looking statements are the effects of the COVID-19 pandemic and actions taken in response thereto, as well as acts of war, riots or terrorism, and the impact of these acts on economic, financial and social conditions in the United States as well as our dependence on large, long-term collection, transfer and disposal contracts. More information on factors that could cause actual results or events to differ materially from those anticipated is included from time to time in our reports filed with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2019, particularly under Part I, Item 1A - Risk Factors, and in Part II, Item 1A of this Quarterly Report on Form 10-Q. Additionally, new risk factors emerge from time to time and it is not possible for us to predict all such risk factors, or to assess the impact such risk factors might have on our business. We undertake no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.

Recent Developments

In March 2020, the World Health Organization declared the outbreak of a new strain of coronavirus (COVID-19) a pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. The extent of the impact of the COVID-19 pandemic on our operations and financial performance will depend on future developments, including the duration and spread of the pandemic, all of which are uncertain and cannot be predicted at this time. An extended period of economic disruption associated with the COVID-19 pandemic could materially and adversely affect our business, results of operations, access to sources of liquidity and financial condition.

As a direct result of COVID-19, we have experienced an increase in certain costs of doing business, including costs for additional safety equipment and hygiene products, increased facility and equipment cleaning, and meals for our frontline employees. These costs, which we refer to as business resumption costs, are intended to assist in protecting the safety of our frontline employees as we continue to provide an essential service to our customers. We expect to incur similar costs throughout 2020, and potentially into future years. The magnitude of the costs we expect to incur throughout the remainder of the year cannot be predicted at this time due to the various uncertainties surrounding the pandemic (e.g., the duration and spread of the pandemic).

Refer to Part II, Item 1A - Risk Factors of this Quarterly Report on Form 10-Q for a discussion of certain risk factors related to this pandemic.

Business Update

In light of the COVID-19 pandemic, the Company is suspending its full-year 2020 detailed financial guidance. At this time, the full impact of the COVID-19 pandemic on the U.S. economy remains uncertain, and we have limited visibility into the timing and sequencing of increases in economic activity in the markets where we operate.

Overview

Republic is the second largest provider of non-hazardous solid waste collection, transfer, disposal, recycling, and environmental services in the United States, as measured by revenue. As of March 31, 2020, we operated facilities in 41 states and Puerto Rico through 340 collection operations, 213 transfer stations, 190 active landfills, 79 recycling processing centers, 7 treatment, recovery and disposal facilities, 15 salt water disposal wells and 4 deep injection wells. We are engaged in 75 landfill gas to energy and renewable energy projects and had post-closure responsibility for 130 closed landfills as of March 31, 2020.

Revenue for the three months ended March 31, 2020 increased by 3.4% to \$2,553.9 million compared to \$2,470.6 million for the same period in 2019. This change in revenue is due to increases in average yield of 2.9%, volumes of 0.4%, and acquisitions, net of divestitures of 1.0%, partially offset by the impact of decreased fuel recovery fees of (0.2)%, recycling processing and commodity sales of (0.2)%, and environmental services of (0.5)%.

The following table summarizes our revenue, expenses and operating income for the three months ended March 31, 2020 and 2019 (in millions of dollars and as a percentage of revenue):

	·					
		,	Three Months En	ded March 31,		
		202	20	201	19	
Revenue	\$	2,553.9	100.0 %	\$ 2,470.6	100.0 %	
Expenses:						
Cost of operations		1,550.1	60.7	1,506.1	61.0	
Depreciation, amortization and depletion of property and equipment		253.8	9.9	238.8	9.7	
Amortization of other intangible assets		5.3	0.2	4.6	0.2	
Amortization of other assets		9.5	0.4	8.1	0.3	
Accretion		20.9	0.8	20.5	0.8	
Selling, general and administrative		277.1	10.9	266.4	10.8	
Withdrawal costs - multiemployer pension funds		4.3	0.2	_	_	
(Gain) loss on business divestitures and impairments, net		(3.9)	(0.2)	0.3	_	
Restructuring charges		3.8	0.1	3.0	0.1	
Operating income	\$	433.0	17.0 %	\$ 422.8	17.1 %	

Our pre-tax income was \$322.6 million for the three months ended March 31, 2020 compared to \$312.8 million for the same respective period in 2019. Our net income attributable to Republic Services, Inc. was \$246.3 million for the three months ended March 31, 2020, or \$0.77 per diluted share, compared to \$234.2 million, or \$0.72 per diluted share, for the same period in 2019.

During each of the three months ended March 31, 2020 and 2019, we recorded a number of charges, other expenses and benefits that impacted our pre-tax income, net income attributable to Republic Services, Inc. (net income – Republic) and diluted earnings per share as noted in the following table (in millions, except per share data). Additionally, see the *Results of Operations* discussion of this *Management's Discussion and Analysis of Financial Condition and Results of Operations* for a discussion of other items that impacted our earnings during the three months ended March 31, 2020 and 2019.

	 Three M	onth	s Ended March	ı 31	, 2020	Three Months Ended March				31,	2019												
	Pre-tax Income	Net Income - Republic		Income -		Income -		Income -		Diluted Earnings per Share		Income - Ea		ncome -			Net Pre-tax Income - Income Republic				Income -		Diluted Earnings per Share
As reported	\$ 322.6	\$	246.3	\$	0.77	\$	312.8	\$	234.2	\$	0.72												
Restructuring charges	3.8		2.8		0.01		3.0		2.3		0.01												
Business resumption costs (COVID-19)	3.1		2.3		0.01		_		_		_												
(Gain) loss on business divestitures and impairments, net $^{\left(1\right)}$	(3.9)		(2.9)		(0.01)		0.3		0.2		_												
Acquisition integration and deal costs	3.8		2.8		0.01		_		_		_												
Withdrawal costs - multiemployer pension funds	4.3		3.2		0.01		_		_		_												
Bridgeton insurance recovery	(10.8)		(8.2)		(0.03)		_		_		_												
Incremental contract startup costs - large municipal contract $^{(1)}$	_		_		_		0.7		0.5		_												
Total adjustments	0.3		_				4.0		3.0		0.01												
As adjusted	\$ 322.9	\$	246.3	\$	0.77	\$	316.8	\$	237.2	\$	0.73												

⁽¹⁾ The aggregate impact to adjusted diluted earnings per share totals to less than \$0.01 for the three months ended March 31, 2019.

We believe that presenting adjusted pre-tax income, adjusted net income – Republic, and adjusted diluted earnings per share, which are not measures determined in accordance with U.S. GAAP, provides an understanding of operational activities before the financial impact of certain items. We use these measures, and believe investors will find them helpful, in understanding the ongoing performance of our operations separate from items that have a disproportionate impact on our results for a particular period. We have incurred comparable charges, costs and recoveries in prior periods, and similar types of adjustments can reasonably be expected to be recorded in future periods. Our definitions of adjusted pre-tax income, adjusted net income – Republic, and adjusted diluted earnings per share may not be comparable to similarly titled measures presented by other companies. Further information on each of these adjustments is included below.

Restructuring charges. In 2019, we incurred costs related to the redesign of certain back-office software systems, which continued into 2020. During the three months ended March 31, 2020 and 2019, we incurred restructuring charges of \$3.8 million and \$3.0 million, respectively, that primarily related to these restructuring efforts. During the three months ended March 31, 2020 and 2019, we paid \$3.8 million and \$4.6 million, respectively, related to these restructuring efforts.

In 2020, we expect to incur additional restructuring charges of approximately \$10 million primarily related to the redesign of certain of our back-office software systems. Substantially all of these restructuring charges will be recorded in our corporate segment.

Business resumption costs. During the three months ended March 31, 2020, we incurred \$3.1 million of incremental business resumption costs related to the COVID-19 pandemic, including costs for additional safety equipment and hygiene products, increased facility and equipment cleaning, and meals for our frontline employees. These costs are intended to assist in protecting the safety of our frontline employees as we continue to provide an essential service to our customers. Although we regularly incur costs of this nature, we identify these costs in the table above due to the unusual nature of the pandemic and the magnitude of the costs incurred. We expect to incur similar costs throughout 2020, and potentially into future years. The magnitude of the costs we expect to incur throughout the remainder of the year cannot be predicted at this time due to the various uncertainties surrounding the pandemic (e.g., the duration and spread of the pandemic).

(*Gain*) loss on business divestitures and impairments, net. During the three months ended March 31, 2020 and 2019, we recorded a net (gain) loss on business divestitures and impairments of \$(3.9) million and \$0.3 million, respectively.

Acquisition integration and deal costs. Although our business regularly incurs costs related to acquisitions, we specifically identify in the table above integration and deal costs of \$3.8 million incurred during the three months ended March 31, 2020. We do this because of the magnitude of the costs associated with the particular acquisition and integration activity during this time period.

Withdrawal costs - multiemployer pension funds. During the three months ended March 31, 2020, we recorded charges to earnings of \$4.3 million for withdrawal events at multiemployer pension funds to which we contribute. As we obtain updated information regarding multiemployer pension funds, the factors used in deriving our estimated withdrawal liabilities will be subject to change, which may adversely impact our reserves for withdrawal costs.

Bridgeton insurance recovery. During the three months ended March 31, 2020, we recognized an insurance recovery of \$10.8 million related to our closed Bridgeton Landfill in Missouri as a reduction of remediation expenses in our cost of operations.

Incremental contract startup costs - large municipal contract. Although our business regularly incurs startup costs under municipal contracts, we specifically identify in the table above the startup costs with respect to an individual municipal contract (and do not adjust for other startup costs under other contracts). We do this because of the magnitude of the costs involved with this particular municipal contract and the unusual nature for the time period in which they were incurred. During the three months ended March 31, 2019, we incurred costs of \$0.7 million related to the implementation of this large municipal contract. These costs did not meet the capitalization criteria prescribed by Accounting Standards Update 2014-09, Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs-Contracts with Customers (Subtopic 340-40).

Results of Operations

Revenue

We generate revenue primarily from our solid waste collection operations. Our remaining revenue is from other services, including transfer station, landfill disposal, recycling, and environmental services. Our residential, small-container and large-container collection operations in some markets are based on long-term contracts with municipalities. Certain of our municipal contracts have annual price escalation clauses that are tied to changes in an underlying base index such as a consumer price index. We generally provide small-container and large-container collection services to customers under contracts with terms up to three years. Our transfer stations and landfills generate revenue from disposal or tipping fees charged to third parties. Our recycling processing facilities generate revenue from tipping fees charged to third parties and the sale of recycled commodities. Our revenue from environmental services consists mainly of fees we charge for disposal of non-hazardous solid and liquid waste and in-plant services, such as transportation and logistics. Environmental services waste is generated from the by-product of oil and natural gas exploration and production activity. Additionally, it is generated by the daily operations of industrial, petrochemical and refining facilities, including maintenance, plant turnarounds and capital projects. Other non-core revenue consists primarily of revenue from National Accounts, which represents the portion of revenue generated from nationwide or regional contracts in markets outside our operating areas where the associated waste handling services are subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

The following table reflects our revenue by service line for the three months ended March 31, 2020 and 2019 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,					
		2020	20)19		
Collection:						
Residential	\$ 568.5	22.3 %	\$ 557.4	22.6 %		
Small-container	805.7	31.5	777.9	31.5		
Large-container	552.4	21.6	530.7	21.5		
Other	12.3	0.5	10.8	0.4		
Total collection	1,938.9	75.9	1,876.8	76.0		
Transfer	323.0		294.9			
Less: intercompany	(186.0)		(172.0)			
Transfer, net	137.0	5.4	122.9	5.0		
Landfill	558.3		536.4			
Less: intercompany	(252.3)		(239.6)			
Landfill, net	306.0	12.0	296.8	12.0		
Environmental services	46.8	1.8	45.0	1.8		
Other:						
Recycling processing and commodity sales	67.1	2.6	72.9	3.0		
Other non-core	58.1	2.3	56.2	2.2		
Total other	125.2	4.9	129.1	5.2		
Total revenue	\$ 2,553.9	100.0 %	\$ 2,470.6	100.0 %		

The following table reflects changes in components of our revenue, as a percentage of total revenue, for the three months ended March 31, 2020 and 2019:

	Three Months End	ed March 31,
	2020	2019
Average yield	2.9 %	2.9 %
Fuel recovery fees	(0.2)	0.2
Total price	2.7	3.1
Volume (1)	0.4	(1.5)
Recycling processing and commodity sales	(0.2)	(0.2)
Environmental services	(0.5)	(0.1)
Total internal growth	2.4	1.3
Acquisitions / divestitures, net	1.0	0.5
Total	3.4 %	1.8 %
Core price	5.2 %	4.7 %

(1) The increase in volume of 0.4% during the three months ended March 31, 2020 includes an increase of 0.5% due to one additional work day as compared to the three months ended March 31, 2019.

Average yield is defined as revenue growth from the change in average price per unit of service, expressed as a percentage. Core price is defined as price increases to our customers and fees, excluding fuel recovery fees, net of price decreases to retain customers. We also measure changes in average yield and core price as a percentage of related-business revenue, defined as total revenue excluding recycled commodities and fuel recovery fees, to determine the effectiveness of our pricing strategies. Average yield as a percentage of related-business revenue was 3.0% for the three months ended March 31, 2020 and 3.1% for the same respective period in 2019. Core price as a percentage of related-business revenue was 5.5% for the three months ended March 31, 2020 and 5.1% for the same respective period in 2019.

During the three months ended March 31, 2020, we experienced the following changes in our revenue as compared to the same period in 2019:

- Average yield increased revenue by 2.9% during the three months ended March 31, 2020 due to price increases in all lines of business.
- The fuel recovery fee program, which mitigates our exposure to increases in fuel prices, decreased revenue by (0.2)% during the three months ended March 31, 2020, primarily due to a decrease in fuel prices compared to the same period in 2019 combined with a decrease in the total revenue subject to the fuel recovery fees.
- Volume increased revenue by 0.4% primarily due to one additional workday during the three months ended March 31, 2020 as compared to the same period in 2019 along with volume growth in our transfer and landfill lines of business. The volume increase in our landfill line of business was primarily attributable to increased construction and demolition volume, which was partially offset by a decline in special waste volume. These increases were partially offset by volume declines in our residential collection line of business primarily due to certain non-regrettable losses during the three months ended March 31, 2020 as compared to the same period in 2019. Additionally, we experienced volume declines in our small-container and large-container collection lines of business due to a decrease in service levels attributable to the COVID-19 pandemic.
- Recycling processing and commodity sales decreased revenue by (0.2)% during the three months ended March 31, 2020, primarily due to a decline in overall commodity prices as compared to the same period in 2019. The average price for recycled commodities, excluding glass and organics, for the three months ended March 31, 2020 was \$76 per ton, compared to \$93 per ton for the same period in 2019.
 - Changing market demand for recycled commodities causes volatility in commodity prices. At current volumes and mix of materials, we believe a \$10 per ton change in the price of recycled commodities will change both annual revenue and operating income by approximately \$13 million.
- Environmental services decreased revenue by (0.5)% during the three months ended March 31, 2020, primarily due to a decline in drilling activity.
- Acquisitions, net of divestitures, increased revenue by 1.0% during the three months ended March 31, 2020, due to our continued growth strategy of acquiring privately held solid waste, recycling and environmental services companies that complement our existing business platform.

Cost of Operations

Cost of operations includes labor and related benefits, which consists of salaries and wages, health and welfare benefits, incentive compensation and payroll taxes. It also includes transfer and disposal costs representing tipping fees paid to third party disposal facilities and transfer stations; maintenance and repairs relating to our vehicles, equipment and containers, including related labor and benefit costs; transportation and subcontractor costs, which include costs for independent haulers that transport our waste to disposal facilities and costs for local operators who provide waste handling services associated with our National Accounts in markets outside our standard operating areas; fuel, which includes the direct cost of fuel used by our vehicles, net of fuel tax credits; disposal fees and taxes, consisting of landfill taxes, host community fees and royalties; landfill operating costs, which includes financial assurance, leachate disposal, remediation charges and other landfill maintenance costs; risk management costs, which include insurance premiums and claims; cost of goods sold, which includes material costs paid to suppliers; and other, which includes expenses such as facility operating costs, equipment rent and gains or losses on sale of assets used in our operations.

The following table summarizes the major components of our cost of operations for the three months ended March 31, 2020 and 2019 (in millions of dollars and as a percentage of revenue):

		Three Months Ended March 31,						
	2	2020	20)19				
Labor and related benefits	\$ 556.9	21.8 %	\$ 537.2	21.7 %				
Transfer and disposal costs	198.5	7.8	197.3	8.0				
Maintenance and repairs	247.3	9.7	241.8	9.8				
Transportation and subcontract costs	167.3	6.6	153.8	6.2				
Fuel	79.6	3.1	92.2	3.7				
Disposal fees and taxes	77.4	3.0	73.1	3.0				
Landfill operating costs	64.7	2.5	53.7	2.2				
Risk management	61.9	2.4	52.5	2.1				
Other	104.5	4.1	104.5	4.3				
Subtotal	1,558.1	61.0	1,506.1	61.0				
Business resumption costs	2.8	0.1	_	_				
Bridgeton insurance recovery	(10.8)	(0.4)	_	_				
Total cost of operations	\$ 1,550.1	60.7 %	\$ 1,506.1	61.0 %				

These cost categories may change from time to time and may not be comparable to similarly titled categories presented by other companies. As such, you should take care when comparing our cost of operations by component to that of other companies.

Our cost of operations increased in aggregate dollars for the three months ended March 31, 2020 compared to the same period in 2019 as a result of the following:

- Labor and related benefits increased due to higher hourly and salaried wages as a result of annual merit increases along with an additional workday during the three months ended March 31, 2020 as compared to the same period in 2019.
- Transfer and disposal costs increased in aggregate dollars as a result of acquisition-related activity and an increase in third party disposal rates. This increase was partially offset by a decrease in container weights.
 - During the three months ended March 31, 2020 and 2019, we internalized approximately 69% and 68%, respectively, of the total waste volume we collected.
- · Maintenance and repairs expense increased in aggregate dollars due to the complexity of trucks, including the cost of parts and internal labor.
- Transportation and subcontract costs increased due to acquisition-related activity along with an additional workday during the three months ended March 31, 2020 as compared to the same period in 2019.
- Fuel costs decreased during the three months ended March 31, 2020 due to a decline in both fuel prices and collection volumes as well as compressed natural gas (CNG) tax credits that were enacted in December 2019 and recognized during the three months ended March 31, 2020. The national average diesel fuel cost per gallon for the three months ended March 31, 2020 was \$2.88 as compared to \$3.02 for the same period in 2019.

At current consumption levels, we believe a twenty-cent per gallon change in the price of diesel fuel would change our fuel costs by approximately \$26 million per year. Offsetting these changes in fuel expense would be changes in our fuel recovery fee charged to our customers. At current participation rates, a twenty-cent per gallon change in the price of diesel fuel changes our fuel recovery fee by approximately \$26 million per year.

- Landfill operating costs increased due to certain favorable remediation adjustments recorded during the three months ended March 31, 2019, which did not recur in 2020.
- Risk management expenses increased during the three months ended March 31, 2020 primarily due to an increase in premiums for our current year programs combined with favorable actuarial development in our workers' compensation programs recorded during the three months ended March 31, 2019 that did not recur for the same period in 2020.
- During the three months ended March 31, 2020, we recognized \$2.8 million of incremental business resumption costs related to the COVID-19 pandemic, including costs for additional safety equipment and hygiene products, increased facility and equipment cleaning, and meals for our frontline employees.
- During the three months ended March 31, 2020, we recognized a favorable insurance recovery of \$10.8 million related to our closed Bridgeton Landfill as a reduction of remediation expenses in our consolidated statement of income for the applicable period.

Depreciation, Amortization and Depletion of Property and Equipment

The following table summarizes depreciation, amortization and depletion of property and equipment for the three months ended March 31, 2020 and 2019 (in millions of dollars and as a percentage of revenue):

		Three Months Ended March 31,					
	' <u></u>	2020			2019		
Depreciation and amortization of property and equipment	\$	170.8	6.7 %	\$	159.3		6.5 %
Landfill depletion and amortization		83.0	3.2		79.5		3.2
Depreciation, amortization and depletion expense	\$	253.8	9.9 %	\$	238.8		9.7 %

Depreciation and amortization of property and equipment for the three months ended March 31, 2020 increased primarily due to additional assets acquired with our acquisitions.

During the three months ended March 31, 2020, landfill depletion and amortization expense increased in aggregate dollars due to an increase in our overall average depletion rate combined with overall volume growth in our landfill line of business.

Amortization of Other Intangible Assets

Expenses for amortization of other intangible assets were \$5.3 million, or 0.2% of revenue, for the three months ended March 31, 2020, compared to \$4.6 million, or 0.2% of revenue, for the same period in 2019. Our other intangible assets primarily relate to customer relationships and, to a lesser extent, non-compete agreements. Amortization expense increased due to additional assets acquired with our acquisitions.

Amortization of Other Assets

Expenses for amortization of other assets were \$9.5 million, or 0.4% of revenue, for the three months ended March 31, 2020, compared to \$8.1 million, or 0.3% of revenue, for the same period in 2019. Our other assets primarily relate to the prepayment of fees and capitalized implementation costs associated with cloud-based hosting arrangements.

Accretion Expense

Accretion expense was \$20.9 million, or 0.8% of revenue, for the three months ended March 31, 2020, compared to \$20.5 million, or 0.8% of revenue, for the same period in 2019. Accretion expense has remained relatively unchanged as our asset retirement obligations have remained relatively consistent period over period.

Selling, General and Administrative Expenses

Selling, general and administrative expenses include salaries, health and welfare benefits, and incentive compensation for corporate and field general management, field support functions, sales force, accounting and finance, legal, management information systems, and clerical and administrative departments. Other expenses include rent and office costs, fees for professional services provided by third parties, legal settlements, marketing, investor and community relations services, directors' and officers' insurance, general employee relocation, travel, entertainment and bank charges. Restructuring charges are excluded from selling, general and administrative expenses and are discussed separately.

The following table summarizes our selling, general and administrative expenses for the three months ended March 31, 2020 and 2019 (in millions of dollars and as a percentage of revenue):

		Three Months Ended March 31,					
		20	020	2019			
Salaries and related benefits	\$	191.3	7.5 %	\$ 184.2	7.5 %		
Provision for doubtful accounts		4.9	0.2	7.5	0.3		
Other		76.8	3.0	74.7	3.0		
Subtotal		273.0	10.7	266.4	10.8		
Acquisition integration and deal costs		3.8	0.2	_	_		
Business resumption costs		0.3	_	_	_		
Total selling, general and administrative expenses	\$	277.1	10.9 %	\$ 266.4	10.8 %		

These cost categories may change from time to time and may not be comparable to similarly titled categories presented by other companies. As such, you should take care when comparing our selling, general and administrative expenses by cost component to those of other companies.

The most significant items affecting our selling, general and administrative expenses during the three months ended March 31, 2020 and 2019 are summarized below:

- Salaries and related benefits increased in aggregate dollars primarily due to higher wages, benefits, and other payroll related items resulting from annual merit increases.
- Other selling, general and administrative expenses increased in aggregate dollars for the three months ended March 31, 2020, primarily due to an increase in consulting fees, partially offset by a one-time favorable legal settlement recognized during the three months ended March 31, 2020.
- During the three months ended March 31, 2020, we recognized \$3.8 million of acquisition integration and deal costs as well as \$0.3 million of incremental business resumption costs related to the COVID-19 pandemic as selling, general and administrative expenses. Our business resumption costs included costs for additional safety equipment and hygiene products as well as increased facility and equipment cleaning.

Withdrawal Costs - Multiemployer Pension Funds

During the three months ended March 31, 2020, we recorded charges to earnings of \$4.3 million for withdrawal events at multiemployer pension funds to which we contribute. As we obtain updated information regarding multiemployer pension funds, the factors used in deriving our estimated withdrawal liabilities will be subject to change, which may adversely impact our reserves for withdrawal costs.

(Gain) Loss on Business Divestitures and Impairments, Net

We strive to have a number one or number two market position in each of the markets we serve, or have a clear path on how we will achieve a leading market position over time. Where we cannot establish a leading market position, or where operations are not generating acceptable returns, we may decide to divest certain assets and reallocate resources to other markets. Business divestitures could result in gains, losses or impairment charges that may be material to our results of operations in a given period.

During the three months ended March 31, 2020 and 2019, we recorded a net (gain) loss on business divestitures and impairments of \$(3.9) million and \$0.3 million, respectively.

Restructuring Charges

In 2019, we incurred costs related to the redesign of certain back-office software systems, which continued into 2020. During the three months ended March 31, 2020 and 2019, we incurred restructuring charges of \$3.8 million and \$3.0 million, respectively, that primarily related to these restructuring efforts. During the three months ended March 31, 2020 and 2019, we paid \$3.8 million and \$4.6 million, respectively, related to these restructuring efforts.

Interest Expense

The following table provides the components of interest expense, including accretion of debt discounts and accretion of discounts primarily associated with environmental and risk insurance liabilities assumed in acquisitions, for the three months ended March 31, 2020 and 2019 (in millions of dollars):

	Th	Three Months Ended March 31,					
	2020			2019			
Interest expense on debt	\$	82.5	\$	90.0			
Non-cash interest		14.9		11.0			
Less: capitalized interest		(8.0)		(0.6)			
Total interest expense	\$	96.6	\$	100.4			

Total interest expense for the three months ended March 31, 2020 decreased primarily due to lower interest rates associated with our variable rate debt. This decrease was partially offset by the change in fair value of certain derivative contracts which was recorded as an adjustment to interest expense. For additional discussion and detail regarding our derivative contracts, see the *Financial Condition* discussion of this *Management's Discussion and Analysis of Financial Condition and Results of Operations*.

Cash paid for interest, excluding net swap settlements for our fixed-to-floating interest rate swaps, was \$78.1 million and \$78.9 million for the three months ended March 31, 2020 and 2019, respectively.

Income Taxes

Our effective tax rate, exclusive of non-controlling interests, for the three months ended March 31, 2020 and 2019 was 23.5% and 25.0%, respectively.

Cash paid for income taxes was \$1.4 million for the three months ended March 31, 2020 and a net refund of \$32.2 million for the same period in 2019. The net refund received for the three months ended March 31, 2019 was due to the receipt of funds from amended tax returns.

For additional discussion and detail regarding our income taxes, see Note 8, *Income Taxes*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Reportable Segments

Our senior management evaluates, oversees and manages the financial performance of our operations through two field groups, referred to as Group 1 and Group 2. Group 1 primarily consists of geographic areas located in the western United States, and Group 2 primarily consists of geographic areas located in the southeastern and mid-western United States, and the eastern seaboard of the United States.

The two field groups, Group 1 and Group 2, are presented below as our reportable segments, which provide integrated waste management services consisting of non-hazardous solid waste collection, transfer, recycling, disposal and environmental services. Summarized financial information concerning our reportable segments for the three months ended March 31, 2020 and 2019 is shown in the following tables (in millions of dollars and as a percentage of revenue in the case of operating margin):

Depreciation

	N	let Revenue	A Adjı	Amortization, Depletion and ccretion Before istments for Asset ement Obligations	Adjustments to Amortization Expense for Asset Retirement Obligations		Depreciation, Amortization, Depletion and Accretion		(Gain) Loss on Business Divestitures and Impairments, Net		perating Income (Loss)	Operating Margin
Three Months Ended M	Aarch (31, 2020										
Group 1	\$	1,254.6	\$	128.7	\$	(0.2)	\$ 128.5	\$	_	\$	311.7	24.8 %
Group 2		1,258.5		134.7		(0.2)	134.5		_		234.5	18.6 %
Corporate entities		40.8		26.5		_	26.5		(3.9)		(113.2)	_
Total	\$	2,553.9	\$	289.9	\$	(0.4)	\$ 289.5	\$	(3.9)	\$	433.0	17.0 %
Three Months Ended M	/Iarch	31, 2019										
Group 1	\$	1,193.2	\$	121.6	\$	(0.1)	\$ 121.5	\$	_	\$	288.3	24.2 %
Group 2		1,239.7		126		_	126.0		_		223.3	18.0 %
Corporate entities		37.7		24.5		_	24.5		0.3		(88.8)	_
Total	\$	2,470.6	\$	272.1	\$	(0.1)	\$ 272.0	\$	0.3	\$	422.8	17.1 %

Corporate entities include legal, tax, treasury, information technology, risk management, human resources, closed landfills and other administrative functions. National Accounts revenue included in corporate entities represents the portion of revenue generated from nationwide and regional contracts in markets outside our operating areas where the associated waste handling services are subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

Significant changes in the revenue and operating margins of our reportable segments comparing the three months ended March 31, 2020 with the same period in 2019 are discussed below:

Group 1

Revenue for the three months ended March 31, 2020 increased 5.1% due to an increase in average yield in all lines of business and an increase in volume in our collection and transfer lines of business as well as an increase in construction and demolition volumes in our landfill line of business. These increases were partially offset by a decline in solid and special waste volumes in our landfill line of business.

Operating income in Group 1 increased from \$288.3 million for the three months ended March 31, 2019, or a 24.2% operating income margin, to \$311.7 million for the three months ended March 31, 2020, or a 24.8% operating income margin. The following cost categories impacted operating income margin:

- Cost of operations favorably impacted operating income margin for the three months ended March 31, 2020, primarily due to a decrease in fuel costs as a result of a decline in diesel fuel prices combined with CNG tax credits that were enacted in December 2019 and recognized during the three months ended March 31, 2020. These decreases were partially offset by an increase in transportation and subcontract costs as a percentage of revenue.
- Depreciation unfavorably impacted operating income margin for the three months ended March 31, 2020, primarily due to additional assets
 acquired with our acquisitions.

Group 2

Revenue for the three months ended March 31, 2020 increased 1.5% due primarily to increases in average yield in all lines of business and increased volumes in our landfill line of business, partially offset by a decline in volume in our collection lines of business.

Operating income in Group 2 increased from \$223.3 million for the three months ended March 31, 2019, or an 18.0% operating income margin, to \$234.5 million for the three months ended March 31, 2020, or an 18.6% operating income margin. The following cost categories impacted operating income margin:

- Cost of operations favorably impacted operating income margin for the three months ended March 31, 2020, primarily due to a decrease in fuel costs as a result of a decline in diesel fuel prices combined with CNG tax credits that were enacted in December 2019 and recognized during the three months ended March 31, 2020 along with a decrease in maintenance and repairs costs as a percentage of revenue. These decreases were partially offset by an increase in disposal fees as well as transportation and subcontract costs as a percentage of revenue.
- Landfill depletion and amortization unfavorably impacted operating income margin as a result of an increase in our overall average depletion rate combined with overall volume growth in our landfill line of business. Depreciation unfavorably impacted operating income margin during the three months ended March 31, 2020, primarily due to additional assets acquired with our acquisitions.

Corporate Entities

Operating loss in our Corporate Entities increased from \$88.8 million for the three months ended March 31, 2019 to \$113.2 million for the three months ended March 31, 2020. The operating loss for the three months ended March 31, 2020 was unfavorably impacted by favorable actuarial development in our workers' compensation programs recorded during the three months ended March 31, 2019 that did not recur for the same period in 2020. This was partially offset by favorable legal settlements and a net gain on business divestitures and impairments recognized during the three months ended March 31, 2020.

Landfill and Environmental Matters

Available Airspace

As of March 31, 2020 we owned or operated 190 active solid waste landfills with total available disposal capacity estimated to be 5.0 billion in-place cubic yards. For these landfills, the following table reflects changes in capacity and remaining capacity, as measured in cubic yards of airspace:

	Balance as of December 31, 2019	New Expansions Undertaken	Permits Granted / New Sites, Net of Closures	Airspace Consumed	Changes in Engineering Estimates	Balance as of March 31, 2020
Cubic yards (in millions):						
Permitted airspace	4,673.0	_	55.5	(18.8)	(0.2)	4,709.5
Probable expansion airspace	321.7	30.0	(52.2)	_	_	299.5
Total cubic yards (in millions)	4,994.7	30.0	3.3	(18.8)	(0.2)	5,009.0
Number of sites:						
Permitted airspace	189		1			190
Probable expansion airspace	12	2	(1)			13

Total available disposal capacity represents the sum of estimated permitted airspace plus an estimate of probable expansion airspace. Engineers develop these estimates at least annually using information provided by annual aerial surveys. Before airspace included in an expansion area is determined to be probable expansion airspace and, therefore, included in our calculation of total available disposal capacity, it must meet all of our expansion criteria.

As of March 31, 2020, 13 of our landfills met all of our criteria for including their probable expansion airspace in their total available disposal capacity. At projected annual volumes, these landfills have an estimated remaining average site life of 127 years, including probable expansion airspace. The average estimated remaining life of all of our landfills is 62 years. We have other expansion opportunities that are not included in our total available airspace because they do not meet all of our criteria for treatment as probable expansion airspace.

Final Capping, Closure and Post-Closure Costs

As of March 31, 2020, accrued final capping, closure and post-closure costs were \$1,358.9 million, of which \$74.4 million were current, as reflected in our unaudited consolidated balance sheet in accrued landfill and environmental costs included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Remediation and Other Charges for Landfill Matters

It is reasonably possible that we will need to adjust our accrued landfill and environmental liabilities to reflect the effects of new or additional information, to the extent that such information impacts the costs, timing or duration of the required actions. Future changes in our estimates of the costs, timing or duration of the required actions could have a material adverse effect on our consolidated financial position, results of operations and cash flows.

During the three months ended March 31, 2020, we recognized a favorable insurance recovery of \$10.8 million related to our closed Bridgeton Landfill as a reduction of remediation expenses in our consolidated statement of income for the applicable period.

For a description of our significant remediation matters, see Note 6, *Landfill and Environmental Costs*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Selected Balance Sheet Accounts

The following table reflects the activity in our allowance for doubtful accounts and other, final capping, closure, post-closure costs, remediation liabilities, and accrued insurance during the three months ended March 31, 2020 (in millions of dollars):

Allowance for Doubtful			Final Capping, Closure and				_
Accoun	ts and Other		Post-Closure		Remediation	Insurance Reserves	
\$	34.0	\$	1,335.6	\$	500.2	\$	438.5
	_		11.5		_		_
	_		0.1		1.5		_
	_		(0.5)		_		_
	_		20.9		4.6		0.1
	_		_		_		9.4
	_		_		_		(12.1)
	4.9		_		(0.4)		129.8
	(6.5)		(8.7)		(17.2)		(135.0)
	32.4		1,358.9		488.7		430.7
	(32.4)		(74.4)		(56.7)		(168.1)
\$	_	\$	1,284.5	\$	432.0	\$	262.6
	Do	Doubtful Accounts and Other \$ 34.0	Doubtful Accounts and Other \$ 34.0 \$	Closure and Post-Closure	Doubtful Accounts and Other Closure and Post-Closure \$ 34.0 \$ 1,335.6 - 11.5 - 0.1 - (0.5) - 20.9 - - 4.9 - (6.5) (8.7) 32.4 1,358.9 (32.4) (74.4)	Doubtful Accounts and Other Closure and Post-Closure Remediation \$ 34.0 \$ 1,335.6 \$ 500.2 — 11.5 — — 0.1 1.5 — (0.5) — — 20.9 4.6 — — — 4.9 — (0.4) (6.5) (8.7) (17.2) 32.4 1,358.9 488.7 (32.4) (74.4) (56.7)	Doubtful Accounts and Other Closure and Post-Closure Remediation Ins \$ 34.0 \$ 1,335.6 \$ 500.2 \$ — 11.5 — — — 0.1 1.5 — — (0.5) — — — 20.9 4.6 — — — — — 4.9 — (0.4) — 4.9 — (0.4) — 32.4 1,358.9 488.7 (32.4) (74.4) (56.7)

As of March 31, 2020, accounts receivable were \$1,095.3 million, net of allowance for doubtful accounts and other of \$32.4 million. As of December 31, 2019, accounts receivable were \$1,125.9 million, net of allowance for doubtful accounts and other of \$34.0 million.

Property and Equipment

The following tables reflect the activity in our property and equipment accounts for the three months ended March 31, 2020 (in millions of dollars):

	 Gross Property and Equipment														
	salance as of ecember 31, 2019		Capital Additions		Retirements		Acquisitions, Net of Divestitures		Non-cash Additions for Asset Retirement Obligations		Adjustments for Asset Retirement Obligations		Impairments, Transfers and Other Adjustments		alance as of arch 31, 2020
Land	\$ 448.3	\$	0.3	\$		\$	2.0	\$		\$		\$		\$	450.6
Non-depletable landfill land	170.5		0.2		_		_		_		_		_		170.7
Landfill development costs	7,474.7		0.4		_		_		10.0		(0.5)		193.5		7,678.1
Vehicles and equipment	7,766.0		222.2		(70.3)		(1.2)		_		_		6.4		7,923.1
Buildings and improvements	1,342.6		0.1		(1.8)		10.8		1.5		_		6.3		1,359.5
Construction-in- progress - landfill	366.8		50.1		_		_		_		_		(192.0)		224.9
Construction-in- progress - other	87.7		19.8		_		_		_		_		(15.4)		92.1
Total	\$ 17,656.6	\$	293.1	\$	(72.1)	\$	11.6	\$	11.5	\$	(0.5)	\$	(1.2)	\$	17,899.0

		Accumulated Depreciation, Amortization and Depletion												
	Balance as of December 31, 2019			Additions Charged to Expense	Retirements		Acquisitions, Net of Divestitures		Adjustments for Asset Retirement Obligations		Impairments, Transfers and Other Adjustments		Balance as of March 31, 2020	
Landfill development costs	\$	(3,968.6)	\$	(83.4)	\$	_	\$	_	\$	0.4	\$	_	\$	(4,051.6)
Vehicles and equipment		(4,728.2)		(154.9)		66.2		2.0		_		0.3		(4,814.6)
Buildings and improvements		(576.3)		(16.3)		1.8		_		_		_		(590.8)
Total	\$	(9,273.1)	\$	(254.6)	\$	68.0	\$	2.0	\$	0.4	\$	0.3	\$	(9,457.0)

Liquidity and Capital Resources

Cash and Cash Equivalents

The following is a summary of our cash and cash equivalents and restricted cash and marketable securities balances as of:

	March 31, 2020			December 31, 2019		
Cash and cash equivalents	\$	281.6	\$	47.1		
Restricted cash and marketable securities		117.7		179.4		
Less: restricted marketable securities		(55.9)		(49.1)		
Cash, cash equivalents, restricted cash and restricted cash equivalents	\$	343.4	\$	177.4		

Our restricted cash and marketable securities include, among other things, restricted cash and marketable securities pledged to regulatory agencies and governmental entities as financial guarantees of our performance under certain collection, landfill and transfer station contracts and permits, and relating to our final capping, closure and post-closure obligations at our landfills, restricted cash and marketable securities related to our insurance obligations, and restricted cash related to a payment for a certain maturing tax-exempt financing.

The following table summarizes our restricted cash and marketable securities:

	March 31, 2	2020	Dec	cember 31, 2019
Capping, closure and post-closure obligations	\$	31.0	\$	30.6
Insurance		86.7		99.4
Payment for maturing tax-exempt financing		_		49.4
Total restricted cash and marketable securities	\$	117.7	\$	179.4

Intended Uses of Cash

We intend to use excess cash on hand and cash from operating activities to fund capital expenditures, acquisitions, dividend payments, share repurchases and debt repayments. Debt repayments may include purchases of our outstanding indebtedness in the secondary market or otherwise. We believe that our excess cash, cash from operating activities and our availability to draw from our credit facilities provide us with sufficient financial resources to meet our anticipated capital requirements and maturing obligations as they come due.

We may choose to voluntarily retire certain portions of our outstanding debt before their maturity dates using cash from operations or additional borrowings. We may also explore opportunities in the capital markets to fund redemptions should market conditions be favorable. Early extinguishment of debt will result in an impairment charge in the period in which the debt is repaid. The loss on early extinguishment of debt relates to premiums paid to effectuate the repurchase and the relative portion of unamortized note discounts and debt issue costs.

Summary of Cash Flow Activity

The major components of changes in cash flows are discussed in the following paragraphs. The following table summarizes our cash flow from operating activities, investing activities and financing activities for the three months ended March 31, 2020 and 2019 (in millions of dollars):

	Three Months Ended March 31,				
	2020		2019		
Cash provided by operating activities	\$ 569.5	\$	553.7		
Cash used in investing activities	\$ (435.4)	\$	(359.1)		
Cash provided by (used in) financing activities	\$ 31.9	\$	(191.4)		

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security (CARES) Act was signed into law, which provides companies the option to defer the payment of the employer's portion of social security taxes that would otherwise be required to be made during the period beginning on March 27, 2020 and ending December 31, 2020 (Payroll Tax Deferral Period). The first half of the deferred payments are due to be paid by December 31, 2021, and the second half of the deferred payments are due to be paid by December 31, 2022. We intend to defer between \$100 million and \$110 million of payments related to our portion of our employees' social security taxes throughout the Payroll Tax Deferral Period in accordance with the CARES Act.

Cash Flows Provided by Operating Activities

The most significant items affecting the comparison of our operating cash flows for the three months ended March 31, 2020 and 2019 are summarized below:

Changes in assets and liabilities, net of effects from business acquisitions and divestitures, decreased our cash flow from operations by \$31.3 million during the three months ended March 31, 2020, compared to a decrease of \$13.1 million during the same period in 2019, primarily as a result of the following:

- Our accounts receivable, exclusive of the change in allowance for doubtful accounts and customer credits, decreased \$28.0 million during the three months ended March 31, 2020 due to the timing of billings net of collections, compared to a \$23.2 million decrease in the same period in 2019. As of March 31, 2020, our days sales outstanding were 39.0, or 26.8 days net of deferred revenue, compared to 39.5, or 27.4 days net of deferred revenue, as of March 31, 2019.
- Our prepaid expenses and other assets decreased \$88.2 million during the three months ended March 31, 2020, compared to a \$56.8 million decrease in the same period in 2019, primarily due to timing of our estimated tax payments and our receipt of the \$24.0 million Bridgeton insurance settlement we recognized in the fourth quarter of 2019. Cash paid for income taxes was \$1.4 million and a net refund of \$32.2 million for the three months ended March 31, 2020 and 2019, respectively.
- Our accounts payable decreased \$63.5 million during the three months ended March 31, 2020, compared to a \$45.6 million decrease in the same period in 2019, due to the timing of payments.

- Cash paid for capping, closure and post-closure obligations was \$8.7 million during the three months ended March 31, 2020, compared to \$8.4 million in the same period in 2019. The increase in cash paid for capping, closure, and post-closure obligations is primarily due to the timing of capping and post-closure payments at certain of our landfill sites.
- Cash paid for remediation obligations was \$10.0 million higher during the three months ended March 31, 2020, compared to the same period in 2019, primarily due to \$12.1 million of payments related to management and monitoring of the remediation area for our closed Bridgeton Landfill in Missouri.

In addition, cash paid for interest, excluding net swap settlements for our fixed-to-floating interest rate swaps, was \$78.1 million and \$78.9 million for the three months ended March 31, 2020 and 2019, respectively.

We use cash flows from operations to fund capital expenditures, acquisitions, dividend payments, share repurchases and debt repayments.

Cash Flows Used in Investing Activities

The most significant items affecting the comparison of our cash flows used in investing activities for the three months ended March 31, 2020 and 2019 are summarized below:

- Capital expenditures during the three months ended March 31, 2020 were \$346.8 million, compared with \$299.3 million for the same period in 2019.
- During the three months ended March 31, 2020 and 2019, we paid \$61.0 million and \$62.7 million, respectively, for acquisitions and investments.
- Other cash used in investing activities increased \$23.7 million during the three months ended March 31, 2020, compared to the same period in 2019, as a result of our \$25.0 million investment in certain tax-exempt financings we elected not to remarket due to available rates at the time.

We intend to finance capital expenditures and acquisitions through cash on hand, restricted cash held for capital expenditures, cash flows from operations, our revolving credit facilities, and tax-exempt bonds and other financings. We expect to primarily use cash and borrowings under our revolving credit facilities to pay for future business acquisitions.

Cash Flows Used in Financing Activities

The most significant items affecting the comparison of our cash flows used in financing activities for the three months ended March 31, 2020 and 2019 are summarized below:

- Net proceeds from notes payable and long-term debt and senior notes were \$271.8 million during the three months ended March 31, 2020, compared to net proceeds of \$52.3 million in the same period in 2019.
- During the three months ended March 31, 2020, we repurchased 1.2 million shares of our stock for \$98.8 million compared to repurchases of 1.5 million shares for \$111.5 million during the same period in 2019.
- Dividends paid were \$129.2 million and \$121.0 million during the three months ended March 31, 2020 and 2019, respectively.

Financial Condition

Debt Obligations

As of March 31, 2020, we had \$24.5 million of principal debt maturing within the next 12 months, which includes certain variable rate tax-exempt financings and finance lease obligations. All of our tax-exempt financings are remarketed either quarterly or semi-annually by remarketing agents to effectively maintain a variable yield. The holders of the bonds can put them back to the remarketing agents at the end of each interest period. If the remarketing agent is unable to remarket our bonds, the remarketing agent can put the bonds to us. In the event of a failed remarketing, we currently have availability under our \$2.25 billion unsecured revolving credit facility to fund these bonds until they are remarketed successfully. Accordingly, we have classified these borrowings as long-term in our consolidated balance sheet as of March 31, 2020. As of March 31, 2020, we elected not to remarket and, instead, acquired \$25.0 million of tax-exempt financings as a result of the rates available at the time. We intend to remarket these bonds when we believe the rates available are acceptable. Our investment in these bonds was recorded in prepaid expenses and other current assets in our consolidated balance sheet as of March 31, 2020.

An extended period of economic disruption associated with the COVID-19 pandemic could materially and adversely affect our business, including our access to sources of liquidity and financial condition. We will continue to monitor the evolving COVID-19 pandemic along with the effect on our business and access to capital markets.

For further discussion of the components of our overall debt, see to Note 7, *Debt*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Credit Facilities

In 2018, we entered into a \$2.25 billion unsecured revolving credit facility (the Credit Facility), which replaced our \$1.0 billion and \$1.25 billion unsecured credit facilities that would have matured in May 2021 and June 2019, respectively. The Credit Facility matures in June 2023. We may request two one-year extensions of the maturity date but none of the lenders are committed to participate in such extension. The Credit Facility also includes a feature that allows us to increase availability, at our option, by an aggregate amount of up to \$1.0 billion through increased commitments from existing lenders or the addition of new lenders. At our option, borrowings under the Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Credit Facility agreement).

The Credit Facility requires us to comply with financial and other covenants. To the extent we are not in compliance with these covenants, we cannot pay dividends or repurchase common stock. Compliance with covenants also is a condition for any incremental borrowings under our Credit Facility, and failure to meet these covenants would enable the lenders to require repayment of any outstanding loans (which would adversely affect our liquidity). As of March 31, 2020, our EBITDA to interest ratio was 7.68 compared to the 3.00 minimum required by the covenants, and our total debt to EBITDA ratio was 3.09 compared to the 3.50 maximum allowed by the covenants. Our total debt to EBITDA ratio as of March 31, 2020 increased as compared to December 31, 2019 as a result of an increase in borrowings under the Credit Facility, which resulted in an increase in cash and cash equivalents on our consolidated balance sheet during the same period. As of March 31, 2020, we were in compliance with the covenants under our Credit Facility, and we expect to be in compliance throughout the remainder of 2020.

EBITDA, which is a non-U.S. GAAP measure, is calculated as defined in our Credit Facility agreement. In this context, EBITDA is used solely to provide information regarding the extent to which we are in compliance with debt covenants and is not comparable to EBITDA used by other companies or used by us for other purposes.

Failure to comply with the financial and other covenants under our Credit Facility, as well as the occurrence of certain material adverse events, would constitute defaults and would allow the lenders under our Credit Facility to accelerate the maturity of all indebtedness under the Credit Facility agreement. This could have an adverse effect on the availability of financial assurances. In addition, maturity acceleration on our Credit Facility constitutes an event of default under our other debt instruments, including our senior notes, and, therefore, our senior notes would also be subject to acceleration of maturity. If such acceleration were to occur, we would not have sufficient liquidity available to repay the indebtedness. We would likely have to seek an amendment under our Credit Facility for relief from the financial covenants or repay the debt with proceeds from the issuance of new debt or equity, or asset sales, if necessary. We may be unable to amend our Credit Facility or raise sufficient capital to repay such obligations in the event the maturity is accelerated.

Availability under our Credit Facility totaled \$1,526.6 million and \$1,696.9 million as of March 31, 2020 and December 31, 2019, respectively. The Credit Facility can be used for working capital, capital expenditures, acquisitions, letters of credit and other general corporate purposes. As of March 31, 2020 and December 31, 2019, we had \$354.4 million and \$184.4 million of borrowings under our Credit Facility, respectively. We had \$352.3 million and \$351.4 million of letters of credit outstanding under our Credit Facility as of March 31, 2020 and December 31, 2019, respectively.

As of April 30, 2020, we had \$189.4 million of borrowings under our Credit Facility.

We also have an Uncommitted Credit Facility, which bears interest at LIBOR, plus an applicable margin. We can use borrowings under the Uncommitted Credit Facility for working capital and other general corporate purposes. The agreement governing our Uncommitted Credit Facility requires us to comply with certain covenants. The Uncommitted Credit Facility may be terminated by either party at any time. As of March 31, 2020 and December 31, 2019, we had \$40.0 million of borrowings and \$11.6 million of borrowings outstanding under our Uncommitted Credit Facility, respectively.

As of April 30, 2020, we had \$100.0 million of borrowings outstanding under our Uncommitted Credit Facility.

Senior Notes and Debentures

As of March 31, 2020, we had \$7,404.7 million of unsecured senior notes and debentures outstanding with maturities ranging from 2021 to 2050. As of December 31, 2019, we had \$7,257.0 million of unsecured senior notes and debentures outstanding with maturities ranging from 2020 to 2041.

In February 2020, we issued \$600.0 million of 2.300% senior notes due 2030 (the 2.300% Notes) and \$400.0 million of 3.050% senior notes due 2050 (the 3.050% Notes). We used the net proceeds from the 2.300% Notes and 3.050% Notes to repay \$850.0 million of 5.000% senior notes that matured in March 2020. The remaining proceeds were used to repay amounts outstanding under our unsecured credit facilities as well as for general corporate purposes.

In August 2019, we issued \$900.0 million of 2.500% senior notes due 2024 (the 2.500% Notes). We used the net proceeds from the 2.500% Notes to repay \$650.0 million of 5.500% senior notes that matured in September 2019. The remaining proceeds were used to repay amounts outstanding under our unsecured credit facilities as well as for general corporate purposes.

Interest Rate Swap and Lock Agreements

During the second half of 2013, we entered into various interest rate swap agreements relative to our 4.750% fixed rate senior notes due in May 2023. The goal was to reduce overall borrowing costs and rebalance our debt portfolio's ratio of fixed-to-floating interest rates. As of March 31, 2020, these swap agreements had a total notional value of \$300.0 million and require us to pay interest at floating rates based on changes in LIBOR and receive interest at a fixed rate of 4.750%. We recognized net interest income of \$0.7 million and \$0.1 million during the three months ended March 31, 2020 and 2019, respectively, related to net settlements for these interest rate swap agreements, which is included as an offset to interest expense in our consolidated statements of income

As of March 31, 2020 and December 31, 2019, our interest rate lock agreements had an aggregate notional value of \$200.0 million and \$575.0 million, respectively, with fixed interest rates ranging from 0.784% to 2.374% and 1.330% to 3.000%, respectively. We entered into these transactions to manage exposure to fluctuations in interest rates in anticipation of planned future issuances of senior notes in 2020 and 2021. Upon the expected issuance of senior notes, we terminate the interest rate locks and settle with our counterparties. The aggregate fair values of the outstanding interest rate locks as of March 31, 2020 were liabilities of \$11.0 million, which were recorded in other long-term liabilities in our consolidated balance sheet. The aggregate fair values of the outstanding interest rate locks as of December 31, 2019 were assets of \$3.6 million which were recorded in prepaid expenses and other current assets in our consolidated balance sheet and liabilities of \$15.7 million, which were recorded in other accrued liabilities and other long-term liabilities in our consolidated balance sheet.

Derivative Contracts

Contemporaneously with the issuance of our 2.300% Notes in February 2020, we amended interest rate lock agreements with a notional value of \$550.0 million, extending the mandatory maturity date from 2020 to 2030 and dedesignated them as cash flow hedges (the 2020 Extended Interest Rate Locks). Contemporaneously with the issuance of our 2.500% Notes in August 2019, we amended interest rate lock agreements with a notional value of \$375.0 million, extending the mandatory maturity date from 2019 to 2024 and dedesignated them as cash flow hedges (collectively with the 2020 Extended Interest Rate Locks referred to as the Extended Interest Rate Locks). There was no ineffectiveness recognized in the termination of these cash flow hedges. In addition, we entered into offsetting interest rate swaps to offset future exposures to fair value fluctuations of the Extended Interest Rate Locks (the Offsetting Interest Rate Swaps). The fair value of these free-standing derivatives was determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy).

As of March 31, 2020 and December 31, 2019, the fair value of the Extended Interest Rate Locks was a liability of \$112.6 million and \$22.2 million, respectively, which was included in other long-term liabilities in our consolidated balance sheets, and the fair value of the Offsetting Interest Rate Swaps was an asset of \$61.6 million and \$2.9 million, respectively, and was included in other assets in our consolidated balance sheets. For the three months ended March 31, 2020, we recognized a loss of \$61.3 million on the change in fair value of the Extended Interest Rate Locks, with an offsetting gain of \$58.7 million on the Offsetting Interest Rate Swaps. The change in fair value was recorded directly in earnings as an adjustment to interest expense in our consolidated statements of income.

Tax-Exempt Financings

As of March 31, 2020 and December 31, 2019, we had \$1,060.1 million and \$1,116.2 million of certain variable rate tax-exempt financings outstanding, respectively, with maturities ranging from 2020 to 2049.

During the second quarter of 2019, we refinanced \$35.0 million of tax-exempt financings and issued \$30.0 million of new tax-exempt financings. In addition, we issued \$50.0 million of tax-exempt financings during the fourth quarter of 2019.

Finance Leases

We had finance lease liabilities of \$117.5 million and \$119.3 million as of March 31, 2020 and December 31, 2019, respectively, with maturities ranging from 2020 to 2049.

Credit Ratings

Our continued access to the debt capital markets and to new financing facilities, as well as our borrowing costs, depend on multiple factors, including market conditions, our operating performance and maintaining strong credit ratings. As of March 31, 2020, our credit ratings were BBB+, Baa2 and BBB by Standard & Poor's Ratings Services, Moody's Investors Service and Fitch Ratings, Inc., respectively. If our credit ratings were downgraded, especially any downgrade to below investment grade, our ability to access the debt markets with the same flexibility that we have experienced historically, our cost of funds and other terms for new debt issuances, could be adversely impacted.

Off-Balance Sheet Arrangements

We have no off-balance sheet debt or similar obligations, other than short-term operating leases and financial assurances, which are not classified as debt. We have no transactions or obligations with related parties that are not disclosed, consolidated into or reflected in our reported financial position or results of operations. We have not guaranteed any third-party debt.

Seasonality and Severe Weather

Our operations can be adversely affected by periods of inclement or severe weather, which could increase the volume of waste collected under our existing contracts (without corresponding compensation), delay the collection and disposal of waste, reduce the volume of waste delivered to our disposal sites, or delay the construction or expansion of our landfills and other facilities. Our operations also can be favorably affected by severe weather, which could increase the volume of waste in situations where we are able to charge for our additional services.

Contingencies

For a description of our commitments and contingencies, see Note 6, *Landfill and Environmental Costs*, Note 8, *Income Taxes*, and Note 14, *Commitments and Contingencies*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Critical Accounting Judgments and Estimates

We identified and discussed our critical accounting judgments and estimates in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019. Although we believe our estimates and judgments are reasonable, they are based upon information available at the time the judgment or estimate is made. Actual results may differ significantly from estimates under different assumptions or conditions.

New Accounting Pronouncements

For a description of new accounting standards that may affect us, see Note 1, *Basis of Presentation*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Fuel Price Risk

Fuel costs represent a significant operating expense. When economically practical, we may enter into new fuel hedges, renew contracts, or engage in other strategies to mitigate market risk. As of March 31, 2020, we had no fuel hedges in place. While we charge fuel recovery fees to a majority of our customers, we are unable to charge such fees to all customers.

At current consumption levels, we believe a twenty-cent per gallon change in the price of diesel fuel would change our fuel costs by approximately \$26 million per year. Offsetting these changes in fuel expense would result in changes in our fuel recovery fee charged to our customers. At current participation rates, we believe a twenty-cent per gallon change in the price of diesel fuel would change our fuel recovery fee by approximately \$26 million per year.

Our operations also require the use of certain petrochemical-based products (such as liners at our landfills) the cost of which may vary with the price of petrochemicals. An increase in the price of petrochemicals could increase the cost of those products, which would increase our operating and capital costs. We also are susceptible to increases in fuel recovery fees from our vendors.

Our fuel costs were \$79.6 million during the three months ended March 31, 2020, or 3.1% of revenue, compared to \$92.2 million during the comparable period in 2019, or 3.7% of revenue.

Commodities Price Risk

We market recovered materials such as old corrugated containers and old newsprint from our recycling processing centers. Changes in market supply and demand for recycled commodities causes volatility in commodity prices. In prior periods, we have entered into derivative instruments such as swaps and costless collars designated as cash flow hedges to manage our exposure to changes in prices of these commodities. As of March 31, 2020, we had no recycling commodity hedges in place.

At current volumes and mix of materials, we believe a \$10 per ton change in the price of recycled commodities would change both annual revenue and operating income by approximately \$13 million.

Revenue from recycling processing and commodity sales during the three months ended March 31, 2020 and 2019 was \$67.1 million and \$72.9 million, respectively.

Interest Rate Risk

We are subject to interest rate risk on our variable rate long-term debt. Additionally, we enter into various interest rate swap agreements with the goal of reducing overall borrowing costs and increasing our floating interest rate exposure, as well as interest rate locks to manage exposure to fluctuations in anticipation of future debt issuances. Our interest rate swap and lock contracts have been authorized pursuant to our policies and procedures. We do not use financial instruments for trading purposes and are not a party to any leveraged derivatives.

As of March 31, 2020, we had \$1,460.6 million of floating rate debt and \$300.0 million of floating interest rate swap contracts. If interest rates increased or decreased by 100 basis points on our variable rate debt, annualized interest expense and net cash payments for interest would increase or decrease by approximately \$18 million. This analysis does not reflect the effect that interest rates would have on other items, such as new borrowings and the impact on the economy. See Note 7, *Debt*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for further information regarding how we manage interest rate risk.

ITEM 4. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e), and 15d-15(e)) as of the end of the period covered by this Form 10-Q. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Form 10-Q.

Changes in Internal Control Over Financial Reporting

Based on an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, there has been no change in our internal control over financial reporting during the period covered by this Form 10-Q identified in connection with that evaluation, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

In July 2019, we acquired all of the issued and outstanding shares of Southern Tank Leasing, Inc., Tidal Tank, Inc. and Bealine Service Company, Inc. (collectively Sprint). As permitted by the SEC Staff interpretive guidance for newly acquired businesses, management's assessment of our internal control over financial reporting as of March 31, 2020 did not include an assessment of internal control over financial reporting as it relates to the Sprint acquisition. We will continue the process of implementing internal control over financial reporting for Sprint. As of March 31, 2020, assets excluded from management's assessment totaled \$136.8 million and contributed less than 1% of revenue to our unaudited consolidated financial statements for the three months ended March 31, 2020.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

General Legal Proceedings

We are subject to extensive and evolving laws and regulations and have implemented safeguards to respond to regulatory requirements. In the normal course of our business, we become involved in legal proceedings. Some may result in fines, penalties or judgments against us, or settlements, which may impact earnings and cash flows for a particular period. Although we cannot predict the ultimate outcome of any legal matter with certainty, we do not believe the outcome of any of our pending legal proceedings will have a material adverse impact on our consolidated financial position, results of operations or cash flows.

As used herein, the term *legal proceedings* refers to litigation and similar claims against us and our subsidiaries, excluding: (1) ordinary course accidents, general commercial liability and workers' compensation claims, which are covered by insurance programs, subject to customary deductibles, and which, together with self-insured employee health care costs, are discussed in Note 5, *Other Liabilities*, to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q; and (2) environmental remediation liabilities, which are discussed in Note 6, *Landfill and Environmental Costs*, to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

We accrue for legal proceedings when losses become probable and reasonably estimable. We have recorded an aggregate accrual of approximately \$19 million relating to our outstanding legal proceedings as of March 31, 2020. As of the end of each applicable reporting period, we review each of our legal proceedings and, where it is probable that a liability has been incurred, we accrue for all probable and reasonably estimable losses. Where we are able to reasonably estimate a range of losses we may incur with respect to such a matter, we record an accrual for the amount within the range that constitutes our best estimate. If we are able to reasonably estimate a range but no amount within the range appears to be a better estimate than any other, we use the amount that is the low end of such range. If we had used the high ends of such ranges, our aggregate potential liability would be approximately \$14 million higher than the amount recorded as of March 31, 2020.

Legal Proceedings over Certain Environmental Matters Involving Governmental Authorities with Possible Sanctions of \$100,000 or More

Item 103 of the SEC's Regulation S-K requires disclosure of certain environmental matters when a governmental authority is a party to the proceedings and the proceedings involve potential monetary sanctions unless we reasonably believe the monetary sanctions will not equal or exceed \$100,000. We are disclosing the following matters in accordance with that requirement:

Pine Avenue Landfill Matter

On December 20, 2016, the EPA issued a Finding of Violation (FOV) to Allied Waste Niagara Falls Landfill, LLC (Allied-Niagara). The FOV alleges violations of the Clean Air Act and associated regulations relating to operation of Allied-Niagara's Pine Avenue Landfill in Niagara County, New York. On October 16, 2017, Allied-Niagara received a civil penalty demand from the EPA. The demand proposes a penalty of \$0.6 million or \$2.5 million, depending on the results of requested sampling analysis at the site. Allied-Niagara is negotiating a resolution to the FOV, including the amount of the penalty.

West Contra Costa Sanitary Landfill Matters

The West Contra Costa Sanitary Landfill is a closed landfill formerly operated by West Contra Costa Sanitary Landfill, Inc. (WCCSL). The top deck area of the closed landfill is being utilized for a composting operation. In 2017 and 2018, the California State Water Resources Control Board (Water Board) issued three Notices of Violation alleging that operations at the closed landfill violated stormwater and waste discharge requirements permits. In September 2018, we received a proposed penalty assessment from the Water Board in the amount of \$513,400. After negotiations between the parties, the Water Board's penalty assessment is now \$460,600. WCCSL is continuing to negotiate a resolution of the alleged violations, including the amount of the penalty.

Blue Ridge Landfill Matter

On January 9, 2020, the Texas Commission on Environmental Quality (TCEQ) sent a Proposed Agreed Order (PAO) to Blue Ridge Landfill TX, LP (BRLF). The PAO alleges that BRLF violated certain federal and state air regulations and permit requirements and failed to prevent nuisance odor conditions at our Blue Ridge Landfill in Fresno, Texas. The TCEQ proposed an administrative penalty in the amount of \$183,055. BRLF declined to accept the PAO but did provide a substantive response to the PAO to the TCEQ. On April 7, 2020, BRLF learned that the TCEQ referred enforcement to the Office of the Attorney General (OAG). BRLF will seek to negotiate a resolution with the OAG.

ITEM 1A. RISK FACTORS.

Our material risk factors are disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019. There have been no material changes during the three months ended March 31, 2020 from or updates to the risk factors discussed in Part I, Item 1A, Risk Factors, of our 2019 Annual Report on Form 10-K, except as follows:

Weakened global economic conditions, including those resulting from the recent COVID-19 pandemic, may harm our industry, business and results of operations.

Our business is directly affected by changes in national and general economic factors and overall economic activity that are outside of our control, including consumer confidence and interest rates. For example, the COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. A weak economy generally results in decreases in volumes of waste generated, which adversely affects our revenues. In addition, we have certain fixed costs (e.g., facility expense associated with long-term leases, depreciation expense and accretion expense), which may be difficult to adjust quickly to match declining waste volume levels. Consumer uncertainty and the loss of consumer confidence may decrease overall economic activity and thereby limit the amount of services we provide. Additionally, a decline in waste volumes may result in increased competitive pricing pressure and increased customer turnover, resulting in lower revenue and increased operating costs. Operating in an environment of worsening economic conditions could have a material adverse effect on our consolidated financial condition, results of operations and cash flows. Further, recovery in the solid waste industry historically has lagged behind recovery in the general economy. Accordingly, we cannot assure you that an improvement in general economic conditions will result in an immediate, or any, improvement in our consolidated financial condition, results of operations or cash flows.

The recent COVID-19 outbreak has negatively impacted, and is likely to continue to negatively impact, our business, results of operations and financial performance.

The recent outbreak of COVID-19 and its development into a pandemic is having an unprecedented effect on the U.S. economy, which has created significant uncertainties. These uncertainties include, but are not limited to, the potential adverse effect of the pandemic on the economy, our supply chain partners, our employees and our customers. As a result of the COVID-19 pandemic, our costs of doing business have increased, including for the purchase of additional safety equipment and hygiene products, increased facility and equipment cleaning, and meals for our frontline employees. Additionally, if the pandemic continues and conditions worsen, we expect to experience additional adverse impacts on our operational and commercial activities and our collections of accounts receivable, which adverse impacts may be material. The degree to which COVID-19 impacts our results going forward will depend on future developments, which are uncertain and cannot be predicted, including, but not limited to, the duration and spread of COVID-19, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume. Any of the foregoing factors, or other cascading effects of the COVID-19 pandemic that are not currently foreseeable, could materially increase our costs, negatively impact our business and damage our results of operations and our liquidity position, possibly to a significant degree.

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

Issuer Purchases of Equity Securities

The following table provides information relating to our purchases of shares of our common stock during the three months ended March 31, 2020:

	Total Number of Shares Purchased (a)	Average Price Paid per Share (a)	Total Number of Shares Purchased as Part of Publicly Announced Program (b)	Dollar Value of Shares that May Yet Be Purchased Under the Program (c)
January 1 - 31	_	\$ _	_	\$ 704,583,889
February 1 - 29	_	\$ _	_	\$ 704,583,889
March 1 - 31	1,161,170	\$ 85.06	1,161,170	\$ 605,818,899
	1,161,170		1,161,170	

- a. In October 2017, our Board of Directors added \$2.0 billion to the existing share repurchase authorization that now extends through December 31, 2020. Share repurchases under the program may be made through open market purchases or privately negotiated transactions in accordance with applicable federal securities laws. While the Board of Directors has approved the program, the timing of any purchases, the prices and the number of shares of common stock to be purchased will be determined by our management, at its discretion, and will depend upon market conditions and other factors. The share repurchase program may be extended, suspended or discontinued at any time. As of March 31, 2020, no repurchased shares were pending settlement.
- b. The total number of shares purchased as part of the publicly announced program were all purchased pursuant to the October 2017 authorization.
- c. Shares that may be purchased under the program exclude shares of common stock that may be surrendered to satisfy statutory minimum tax withholding obligations in connection with the vesting of restricted stock units and performance stock units issued to employees.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

None.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS.

Exhibit Number	Description of Exhibit
4.1	Ninth Supplemental Indenture, dated as of February 27, 2020, between Republic Services, Inc. and U.S. Bank National Association, as trustee, including the form of 2.300% Notes due 2030 and the form of 3.050% Notes due 2050 (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K dated February 21, 2020).
<u>31.1*</u>	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
<u>31.2*</u>	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
<u>32.1**</u>	Section 1350 Certification of Chief Executive Officer.
32.2**	Section 1350 Certification of Chief Financial Officer.
101.INS*	XBRL Instance Document the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Labels Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

^{*} Filed herewith.

^{**} This exhibit is being furnished rather than filed, and shall not be deemed incorporated by reference into any filing, in accordance with Item 601 of Regulation S-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant, Republic Services, Inc., has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

REPUBLIC SERVICES, INC.

Date: May 5, 2020

By: /s/ CHARLES F. SERIANNI

Charles F. SERIANNI

Executive Vice President,
Chief Financial Officer
(Principal Financial Officer)

Date: May 5, 2020

By: /s/ BRIAN A. GOEBEL

Brian A. Goebel Vice President and Chief Accounting Officer (Principal Accounting Officer)

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Donald W. Slager, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Republic Services, 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.

/S/ DONALD W. SLAGER

Donald W. Slager

Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Charles F. Serianni, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Republic Services, 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.

/s/ CHARLES F. SERIANNI Charles F. Serianni

Executive Vice President, Chief Financial Officer (Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Republic Services, Inc. (the Company) for the period ended March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Donald W. Slager, Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/S/ DONALD W. SLAGER

Donald W. Slager

Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Republic Services, Inc. (the Company) for the period ended March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Charles F. Serianni, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ CHARLES F. SERIANNI
Charles F. Serianni
Executive Vice President,
Chief Financial Officer
(Principal Financial Officer)