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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2021

or

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

For the transition period from ________ to __________

Commission File Number: 1-14267

REPUBLIC SERVICES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**65-0716904**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
18500 North Allied Way	
Phoenix, Arizona	**85054**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (480) 627-2700

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	RSG	New York Stock Exchange

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

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

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

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

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

As of October 22, 2021, the registrant had outstanding 317,094,795 shares of Common Stock, par value $0.01 per share (excluding treasury shares of 2,349,914).

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)

	September 30, 2021	December 31, 2020
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 40.1	$ 38.2
Accounts receivable, less allowance for doubtful accounts and other of $42.3 and $34.7, respectively	1,265.0	1,091.3
Prepaid expenses and other current assets	264.3	392.3
Total current assets	1,569.4	1,521.8
Restricted cash and marketable securities	155.6	149.1
Property and equipment, net	8,938.9	8,726.2
Goodwill	12,736.3	12,046.4
Other intangible assets, net	228.1	173.1
Other assets	800.6	817.4
Total assets	$ 24,428.9	$ 23,434.0
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 815.0	$ 779.0
Notes payable and current maturities of long-term debt	8.0	168.1
Deferred revenue	381.5	345.6
Accrued landfill and environmental costs, current portion	119.2	114.5
Accrued interest	52.0	54.6
Other accrued liabilities	957.7	820.2
Total current liabilities	2,333.4	2,282.0
Long-term debt, net of current maturities	9,257.0	8,766.1
Accrued landfill and environmental costs, net of current portion	1,793.0	1,694.7
Deferred income taxes and other long-term tax liabilities, net	1,218.8	1,238.8
Insurance reserves, net of current portion	291.7	281.8
Other long-term liabilities	656.1	681.8
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; 319.4 and 318.8 issued including shares held in treasury, respectively	3.2	3.2
Additional paid-in capital	2,801.0	2,741.4
Retained earnings	6,309.4	5,751.8
Treasury stock, at cost; 1.8 and — shares, respectively	(230.7)	(0.1)
Accumulated other comprehensive loss, net of tax	(9.6)	(12.4)
Total Republic Services, Inc. stockholders' equity	8,873.3	8,483.9
Non-controlling interests in consolidated subsidiary	5.6	4.9
Total stockholders' equity	8,878.9	8,488.8
Total liabilities and stockholders' equity	$ 24,428.9	$ 23,434.0

The accompanying notes are an integral part of these statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Revenue	$ 2,933.9	$ 2,572.1	$ 8,342.2	$ 7,580.4
Expenses:				
Cost of operations	1,744.0	1,535.4	4,928.0	4,553.3
Depreciation, amortization and depletion	301.3	270.7	886.5	808.4
Accretion	20.8	20.7	61.9	62.4
Selling, general and administrative	299.0	256.1	880.3	795.3
Withdrawal costs - multiemployer pension funds	—	—	—	35.9
Loss (gain) on business divestitures and impairments, net	—	31.5	(0.2)	32.9
Restructuring charges	4.6	9.8	11.2	15.8
Operating income	564.2	447.9	1,574.5	1,276.4
Interest expense	(78.1)	(88.9)	(234.9)	(277.4)
Loss from unconsolidated equity method investments	(15.1)	(8.2)	(44.0)	(30.8)
Loss on extinguishment of debt	—	(34.5)	—	(34.5)
Interest income	0.6	0.5	2.0	4.0
Other (expense) income, net	(0.9)	1.9	0.6	3.7
Income before income taxes	470.7	318.7	1,298.2	941.4
Provision for income taxes	119.9	58.5	319.0	208.1
Net income	350.8	260.2	979.2	733.3
Net income attributable to non-controlling interests in consolidated subsidiary	(0.5)	(0.2)	(1.9)	(1.5)
Net income attributable to Republic Services, Inc.	$ 350.3	$ 260.0	$ 977.3	$ 731.8
Basic earnings per share attributable to Republic Services, Inc. stockholders:				
Basic earnings per share	$ 1.10	$ 0.81	$ 3.06	$ 2.29
Weighted average common shares outstanding	318.6	319.2	319.2	319.3
Diluted earnings per share attributable to Republic Services, Inc. stockholders:				
Diluted earnings per share	$ 1.10	$ 0.81	$ 3.06	$ 2.29
Weighted average common and common equivalent shares outstanding	319.4	319.7	319.7	319.8
Cash dividends per common share	$ 0.460	$ 0.425	$ 1.310	$ 1.235

The accompanying notes are an integral part of these statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Net income	$ 350.8	$ 260.2	$ 979.2	$ 733.3
Other comprehensive income (loss), net of tax				
Hedging activity:				
Realized loss reclassified into earnings	1.2	1.2	3.5	3.2
Unrealized loss	—	(0.2)	—	(22.5)
Pension activity:				
Change in funded status of pension plan obligations	—	—	(0.7)	1.6
Other comprehensive income (loss), net of tax	1.2	1.0	2.8	(17.7)
Comprehensive income	352.0	261.2	982.0	715.6
Comprehensive income attributable to non-controlling interests	(0.5)	(0.2)	(1.9)	(1.5)
Comprehensive income attributable to Republic Services, Inc.	$ 351.5	$ 261.0	$ 980.1	$ 714.1

The accompanying notes are an integral part of these statements.

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

	Republic Services, Inc. Stockholders' Equity								
	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive (Loss) Income, Net of Tax	Non-controlling Interests In Consolidated Subsidiary	Total
	Shares	Amount			Shares	Amount			
Balance as of December 31, 2020	318.8	$ 3.2	$ 2,741.4	$ 5,751.8	—	$ (0.1)	$ (12.4)	$ 4.9	$ 8,488.8
Net income	—	—	—	295.9	—	—	—	0.5	296.4
Other comprehensive income	—	—	—	—	—	—	1.1	—	1.1
Cash dividends declared	—	—	—	(135.6)	—	—	—	—	(135.6)
Issuances of common stock	0.5	—	2.4	—	(0.2)	(14.7)	—	—	(12.3)
Stock-based compensation	—	—	13.5	(0.9)	—	—	—	—	12.6
Purchase of common stock for treasury	—	—	—	—	(0.1)	(12.7)	—	—	(12.7)
Balance as of March 31, 2021	319.3	3.2	2,757.3	5,911.2	(0.3)	(27.5)	(11.3)	5.4	8,638.3
Net income	—	—	—	331.1	—	—	—	0.9	332.0
Other comprehensive income	—	—	—	—	—	—	0.5	—	0.5
Cash dividends declared	—	—	—	(135.4)	—	—	—	—	(135.4)
Issuances of common stock	0.1	—	3.1	—	—	(0.2)	—	—	2.9
Stock-based compensation	—	—	26.7	(0.9)	—	—	—	—	25.8
Purchase of common stock for treasury	—	—	—	—	(0.3)	(79.5)	—	—	(79.5)
Distributions paid	—	—	—	—	—	—	—	(1.2)	(1.2)
Balance as of June 30, 2021	319.4	3.2	2,787.1	6,106.0	(0.6)	(107.2)	(10.8)	5.1	8,783.4
Net income	—	—	—	350.3	—	—	—	0.5	350.8
Other comprehensive income	—	—	—	—	—	—	1.2	—	1.2
Cash dividends declared	—	—	—	(146.1)	—	—	—	—	(146.1)
Issuances of common stock	—	—	2.5	—	—	(0.2)	—	—	2.3
Stock-based compensation	—	—	11.4	(0.8)	—	—	—	—	10.6
Purchase of common stock for treasury	—	—	—	—	(1.2)	(123.3)	—	—	(123.3)
Balance as of September 30, 2021	319.4	$ 3.2	$ 2,801.0	$ 6,309.4	(1.8)	$ (230.7)	$ (9.6)	$ 5.6	$ 8,878.9

The accompanying notes are an integral part of these statements.

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

	Republic Services, Inc. Stockholders' Equity								
	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive (Loss) Income, Net of Tax	Non-controlling Interests In Consolidated Subsidiary	Total
	Shares	Amount			Shares	Amount			
Balance as of December 31, 2019	353.3	$ 3.5	$ 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	5,013.1	5,433.6	(35.9)	(2,315.4)	(17.6)	3.0	8,120.2
Net income	—	—	—	225.5	—	—	—	0.8	226.3
Other comprehensive income	—	—	—	—	—	—	1.1	—	1.1
Cash dividends declared	—	—	—	(129.0)	—	—	—	—	(129.0)
Issuances of common stock	0.1	—	3.1	—	—	(0.3)	—	—	2.8
Stock-based compensation	—	—	10.4	(0.9)	—	—	—	—	9.5
Balance as of June 30, 2020	354.1	3.5	5,026.6	5,529.2	(35.9)	(2,315.7)	(16.5)	3.8	8,230.9
Net income	—	—	—	260.0	—	—	—	0.2	260.2
Other comprehensive loss	—	—	—	—	—	—	1.0	—	1.0
Cash dividends declared	—	—	—	(135.4)	—	—	—	—	(135.4)
Issuances of common stock	0.3	—	8.1	—	—	(0.1)	—	—	8.0
Stock-based compensation	—	—	10.4	(1.0)	—	—	—	—	9.4
Balance as of September 30, 2020	354.4	$ 3.5	$ 5,045.1	$ 5,652.8	(35.9)	$ (2,315.8)	$ (15.5)	$ 4.0	$ 8,374.1

The accompanying notes are an integral part of these statements.

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

	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Cash provided by operating activities:		
Net income	$ 979.2	$ 733.3
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation, amortization, depletion and accretion	948.4	870.8
Non-cash interest expense	52.4	47.8
Stock-based compensation	49.1	29.0
Deferred tax provision (benefit)	(32.8)	45.7
Provision for doubtful accounts, net of adjustments	18.7	22.0
Loss on extinguishment of debt	—	34.5
Loss on disposition of assets and asset impairments, net	0.5	30.6
Withdrawal costs - multiemployer pension funds, net of payments	—	4.3
Environmental adjustments	(1.8)	(1.2)
Loss from unconsolidated equity method investments	44.0	30.8
Other non-cash items	(1.5)	(2.9)
Change in assets and liabilities, net of effects from business acquisitions and divestitures:		
Accounts receivable	(137.7)	3.4
Prepaid expenses and other assets	105.7	135.0
Accounts payable	99.4	(60.4)
Capping, closure and post-closure expenditures	(41.2)	(39.5)
Remediation expenditures	(32.2)	(39.8)
Other liabilities	87.6	77.0
Payments for retirement of certain hedging relationships	—	(11.4)
Cash provided by operating activities	2,137.8	1,909.0
Cash (used in) provided by investing activities:		
Purchases of property and equipment	(904.2)	(889.0)
Proceeds from sales of property and equipment	10.8	24.8
Cash used in acquisitions and investments, net of cash and restricted cash acquired	(936.3)	(189.9)
Cash received from business divestitures	46.3	32.5
Purchases of restricted marketable securities	(23.8)	(16.9)
Sales of restricted marketable securities	21.9	5.6
Other	(0.3)	—
Cash used in investing activities	(1,785.6)	(1,032.9)
Cash (used in) provided by financing activities:		
Proceeds from notes payable and long-term debt, net of fees	4,646.5	2,439.5
Proceeds from issuance of senior notes, net of discount and fees	—	1,626.6
Payments of notes payable and long-term debt and senior notes	(4,381.8)	(4,101.9)
Premiums paid on extinguishment of debt	—	(34.0)
Issuances of common stock, net	(7.1)	1.3
Purchases of common stock for treasury	(179.0)	(98.8)
Cash dividends paid	(406.5)	(387.1)
Distributions paid to non-controlling interests in consolidated subsidiary	(1.2)	(0.2)
Contingent consideration payments	(14.4)	(9.7)
Cash used in financing activities	(343.5)	(564.3)
Increase in cash, cash equivalents, restricted cash and restricted cash equivalents	8.7	311.8
Cash, cash equivalents, restricted cash and restricted cash equivalents at beginning of year	114.2	177.4
Cash, cash equivalents, restricted cash and restricted cash equivalents at end of period	$ 122.9	$ 489.2

The accompanying notes are an integral part of these statements.

REPUBLIC SERVICES, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

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 one of the largest providers of environmental services in the United States, as measured by revenue. We manage and evaluate our operations through three operating segments, Group 1, Group 2, and Environmental Solutions.

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 the equity method of accounting or, for investments that do not meet the criteria to be accounted for under the equity method, we reflect these investments at their fair value when it is readily determinable. If fair value is not readily determinable, we use an alternative measurement approach. 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 have 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, 2020.

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, 2020. 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 full 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 and the impact of COVID-19 variants, all of which are uncertain and cannot be predicted at this time.

In mid-March 2020, certain customers in our small- and large-container businesses began adjusting their service levels, which included a decrease in the frequency of pickups or a temporary pause in service. In addition, we experienced a decline in volumes disposed at certain of our landfills and transfer stations. As service levels decreased, we also experienced a decrease in certain costs of our operations which are variable in nature. This decline in service activity peaked in the first half of April 2020 and improved sequentially through September 30, 2021.

In April 2020, we launched our Committed to Serve initiative and committed $20 million to support frontline employees and their families, as well as small business customers in the local communities we serve. In addition to this initiative, we have experienced an increase in certain costs of doing business as a direct result of the COVID-19 pandemic, including costs for additional safety equipment and hygiene products and increased facility and equipment cleaning. 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. In December 2020, we recognized our frontline employees for their commitment and contributions to their communities during the pandemic with a $500 award that was paid in January 2021. In addition, we incurred incremental costs associated with expanding certain aspects of our existing healthcare programs.

New Accounting Pronouncements

Accounting Standards Adopted

Effective January 1, 2021, we adopted the following accounting standards updates (ASUs) as issued by the Financial Accounting Standards Board (FASB):

ASU		Effective Date
ASU 2018-14	Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans	January 1, 2021
ASU 2019-12	Simplifying the Accounting for Income Taxes	January 1, 2021

Changes to the Disclosure Requirements for Defined Benefit Plans

Effective January 1, 2021, we adopted 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) on a retrospective basis. The standard removes disclosures that are no longer considered cost beneficial, clarifies the specific requirements of disclosures, and adds disclosure requirements identified as relevant. Our adoption of ASU 2018-14 did not have a material impact on our consolidated financial statements.

Simplifying the Accounting for Income Taxes

Effective January 1, 2021, we adopted 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. Our adoption of ASU 2019-12 did not have a material impact on our consolidated financial statements.

Accounting Standards Updates Issued but not yet Adopted

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 upon adoption during the period from 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 environmental services businesses during the nine months ended September 30, 2021 and 2020. The purchase price paid for these business acquisitions and the allocations of the purchase price follows:

	2021	2020
Purchase price:		
Cash used in acquisitions, net of cash acquired of $12.6 and $—, respectively	$ 913.3	$ 133.9
Holdbacks	9.0	7.5
Fair value, future minimum finance lease payments	40.2	0.3
Total	$ 962.5	$ 141.7
Allocated as follows:		
Restricted cash	$ 7.2	$ 0.1
Accounts receivable	55.4	4.7
Landfill development costs	65.9	—
Property and equipment	138.5	36.9
Operating right-of-use lease assets	7.1	0.2
Assets held for sale	43.6	—
Other assets	6.4	0.2
Inventory	1.7	—
Accounts payable	(29.3)	(1.2)
Environmental remediation liabilities	(25.6)	(1.7)
Closure and post-closure liabilities	(32.2)	(0.7)
Operating right-of-use lease liabilities	(7.1)	(0.2)
Other liabilities	(40.0)	(2.1)
Fair value of tangible assets acquired and liabilities assumed	191.6	36.2
Excess purchase price to be allocated	$ 770.9	$ 105.5
Excess purchase price allocated as follows:		
Other intangible assets	$ 64.7	$ 9.8
Goodwill	706.2	95.7
Total allocated	$ 770.9	$ 105.5

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

On May 5, 2021, we acquired all of the membership interests of Santek Waste Services, LLC (Santek). Santek's vertically integrated recycling and waste services operations are primarily located in the southeastern United States and complement Republic's existing core competencies and expertise in the environmental services industry. The purchase price allocation is preliminary and remains subject to revision as additional information is obtained about the facts and circumstances that existed at the valuation date. The preliminary allocation of purchase price, including the value assigned to tangible and intangible assets acquired as well as certain leases and environmental liabilities assumed, is based on the best estimates of management and is subject to revision based on the final valuations. We expect our valuations to be substantially completed by the end of 2021.

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

Investments

In 2021 and 2020, we acquired 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 $30.7 million and $56.7 million, which were recorded to other assets in our September 30, 2021 and 2020 consolidated balance sheets, respectively. During the three and nine months ended September 30, 2021, we reduced the carrying value of these investments by $10.0 million and $35.7 million, respectively, and during the three and nine months ended September 30, 2020, we reduced the carrying value of these investments by $8.2 million and $30.8 million, respectively, as a result of cash distributions and our share of income and loss pursuant to the terms of the limited liability company agreements. Additionally, our tax provisions reflect a benefit of approximately $20 million for the nine months ended September 30, 2021 due to the tax credits related to these investments. There was no tax benefit reflected due to these tax credits for the three months ended September 30, 2021. Our tax provisions reflect a similar benefit of approximately $16 million and $25 million for the three and nine months ended September 30, 2020, respectively. For further discussion of the income tax benefits, refer to Note 11, *Income Taxes*, in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2020.

Restructuring Charges

In 2020, we incurred costs related to the redesign of certain back-office software systems, which continued into 2021. In addition, in July 2020, we eliminated certain back-office support positions in response to a decline in the underlying demand for services resulting from the COVID-19 pandemic. During the three and nine months ended September 30, 2021, we incurred restructuring charges of $4.6 million and $11.2 million, respectively, and during the three and nine months ended September 30, 2020, we incurred restructuring charges of $9.8 million and $15.8 million, respectively. During the nine months ended September 30, 2021 and 2020, we paid $12.1 million and $11.9 million, respectively, related to these restructuring efforts.

During the remainder of 2021, we expect to incur additional restructuring charges of approximately $5 million primarily related to the redesign of certain of our back-office software systems. Substantially all of these restructuring charges will be recorded in Corporate entities and other.

3. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

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

	Balance as of December 31, 2020	Acquisitions	Divestitures	Adjustments to Acquisitions	Balance as of September 30, 2021
Group 1	$ 6,404.9	$ 134.4	$ —	$ (16.4)	$ 6,522.9
Group 2	5,641.5	333.9	—	0.1	5,975.5
Corporate entities and other	—	237.9	—	—	237.9
Total	$ 12,046.4	$ 706.2	$ —	$ (16.3)	$ 12,736.3

Adjustments to acquisitions during the nine months ended September 30, 2021 primarily related to changes in our valuation of customer relationship intangible assets as a result of obtaining new information regarding the acquisitions that closed in December 2020.

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 16 years. A summary of the activity and balances by intangible asset type follows:

	Gross Intangible Assets				Accumulated Amortization				
	Balance as of December 31, 2020	Acquisitions	Adjustments and Other	Balance as of September 30, 2021	Balance as of December 31, 2020	Additions Charged to Expense	Adjustments and Other	Balance as of September 30, 2021	Other Intangible Assets, Net as of September 30, 2021
Customer relationships	$ 788.1	$ 60.2	$ 14.0	$ 862.3	$ (639.5)	$ (19.0)	$ —	$ (658.5)	$ 203.8
Non-compete agreements	51.4	4.0	(0.2)	55.2	(39.1)	(4.1)	—	(43.2)	12.0
Other intangible assets	57.5	0.5	—	58.0	(45.3)	(0.4)	—	(45.7)	12.3
Total	$ 897.0	$ 64.7	$ 13.8	$ 975.5	$ (723.9)	$ (23.5)	$ —	$ (747.4)	$ 228.1

4. OTHER ASSETS

Prepaid Expenses and Other Current Assets

A summary of prepaid expenses and other current assets as of September 30, 2021 and December 31, 2020 follows:

	2021	2020
Prepaid expenses	$ 99.5	$ 77.7
Inventories	68.2	59.1
Other non-trade receivables	38.7	32.2
Reinsurance receivable	32.6	34.1
Prepaid fees for cloud-based hosting arrangements, current	13.2	11.8
Income taxes receivable	6.1	170.7
Other current assets	6.0	6.7
Total	$ 264.3	$ 392.3

Other Assets

A summary of other assets as of September 30, 2021 and December 31, 2020 follows:

	2021	2020
Operating right-of-use lease assets	$ 244.0	$ 218.8
Deferred compensation plan	141.7	131.8
Investments	129.5	145.4
Reinsurance receivable	82.9	84.8
Deferred contract costs and sales commissions	80.1	82.3
Prepaid fees and capitalized implementation costs for cloud-based hosting arrangements	37.8	29.5
Other derivative assets	21.5	63.8
Amounts recoverable for capping, closure and post-closure obligations	19.6	18.5
Interest rate swaps	6.6	10.0
Deferred financing costs	5.5	2.7
Other	31.4	29.8
Total	$ 800.6	$ 817.4

5. OTHER LIABILITIES

Other Accrued Liabilities

A summary of other accrued liabilities as of September 30, 2021 and December 31, 2020 follows:

	2021	2020
Accrued payroll and benefits	$ 246.7	$ 221.1
Insurance reserves, current	189.7	167.5
Accrued fees and taxes	159.5	132.3
Accrued dividends	146.1	135.5
Operating right-of-use lease liabilities, current	37.1	33.5
Ceded insurance reserves, current	32.6	34.1
Accrued professional fees and legal settlement reserves	25.2	7.2
Other	120.8	89.0
Total	$ 957.7	$ 820.2

Other Long-Term Liabilities

A summary of other long-term liabilities as of September 30, 2021 and December 31, 2020 follows:

	2021	2020
Operating right-of-use lease liabilities	$ 229.9	$ 206.6
Deferred compensation plan liability	134.5	126.6
Ceded insurance reserves	82.9	84.8
Contingent purchase price and acquisition holdbacks	65.1	67.3
Other derivative liabilities	56.3	103.0
Withdrawal liability - multiemployer pension funds	22.3	22.3
Pension and other post-retirement liabilities	5.5	5.5
Legal settlement reserves	3.1	20.2
Other	56.5	45.5
Total	$ 656.1	$ 681.8

6. LANDFILL AND ENVIRONMENTAL COSTS

As of September 30, 2021, we owned or operated 198 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 129 closed landfills.

Accrued Landfill and Environmental Costs

A summary of accrued landfill and environmental liabilities as of September 30, 2021 and December 31, 2020 follows:

	2021	2020
Landfill final capping, closure and post-closure liabilities	$ 1,445.1	$ 1,346.4
Environmental remediation	467.1	462.8
Total accrued landfill and environmental costs	1,912.2	1,809.2
Less: current portion	(119.2)	(114.5)
Long-term portion	$ 1,793.0	$ 1,694.7

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 nine months ended September 30, 2021 and 2020:

	2021	2020
Asset retirement obligation liabilities, beginning of year	$ 1,346.4	$ 1,335.6
Non-cash additions	35.4	32.0
Acquisitions, net of divestitures and other adjustments	32.4	(14.3)
Asset retirement obligation adjustments	10.2	(13.5)
Payments	(41.2)	(39.5)
Accretion expense	61.9	62.4
Asset retirement obligation liabilities, end of period	1,445.1	1,362.7
Less: current portion	(62.9)	(65.2)
Long-term portion	$ 1,382.2	$ 1,297.5

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 September 30, 2021 would be approximately $352 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 nine months ended September 30, 2021 and 2020:

	2021	2020
Environmental remediation liabilities, beginning of year	$ 462.8	$ 500.2
Net adjustments charged to expense	(1.8)	(1.2)
Payments	(32.2)	(39.8)
Accretion expense (non-cash interest expense)	12.7	13.9
Acquisitions, net of divestitures and other adjustments	25.6	2.9
Environmental remediation liabilities, end of period	467.1	476.0
Less: current portion	(56.3)	(58.2)
Long-term portion	$ 410.8	$ 417.8

Bridgeton Landfill. During the nine months ended September 30, 2021, we paid $14.0 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 September 30, 2021, the remediation liability recorded for this site was $107.7 million, of which approximately $4 million is expected to be paid during the remainder of 2021. We believe the remaining reasonably possible high end of our range would be approximately $140 million higher than the amount recorded as of September 30, 2021.

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 credit facilities, finance leases and long-term debt as of September 30, 2021 and December 31, 2020 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, deferred issuance costs, 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.

		September 30, 2021			December 31, 2020		
Maturity	Interest Rate	Principal	Adjustments	Carrying Value	Principal	Adjustments	Carrying Value
Credit facilities:							
Uncommitted Credit Facility	Variable	$ 98.1	$ —	$ 98.1	$ —	$ —	$ —
$1.0 billion - August 2021	Variable	—	—	—	—	—	—
$2.25 billion - June 2023	Variable	—	—	—	186.0	—	186.0
$3.0 billion - August 2026	Variable	364.7	—	364.7	—	—	—
Senior notes:							
May 2023	4.750	300.0	1.5	301.5	300.0	4.8	304.8
August 2024	2.500	900.0	(5.2)	894.8	900.0	(6.6)	893.4
March 2025	3.200	500.0	(2.5)	497.5	500.0	(3.0)	497.0
November 2025	0.875	350.0	(2.7)	347.3	350.0	(3.3)	346.7
July 2026	2.900	500.0	(2.9)	497.1	500.0	(3.3)	496.7
November 2027	3.375	650.0	(3.9)	646.1	650.0	(4.5)	645.5
May 2028	3.950	800.0	(12.9)	787.1	800.0	(14.2)	785.8
March 2030	2.300	600.0	(6.0)	594.0	600.0	(6.5)	593.5
February 2031	1.450	650.0	(8.1)	641.9	650.0	(8.6)	641.4
February 2032	1.750	750.0	(6.6)	743.4	750.0	(7.1)	742.9
March 2035	6.086	181.9	(13.0)	168.9	181.9	(13.4)	168.5
March 2040	6.200	399.9	(3.6)	396.3	399.9	(3.6)	396.3
May 2041	5.700	385.7	(5.0)	380.7	385.7	(5.1)	380.6
March 2050	3.050	400.0	(7.2)	392.8	400.0	(7.3)	392.7
Debentures:							
May 2021	9.250	—	—	—	35.3	(0.1)	35.2
September 2035	7.400	148.1	(31.4)	116.7	148.1	(32.1)	116.0
Tax-exempt:							
2023 - 2051	0.130 - 0.300	1,159.1	(7.5)	1,151.6	1,111.2	(6.5)	1,104.7
Finance leases:							
2021 - 2063	0.806 - 9.750	244.5	—	244.5	206.5	—	206.5
Total Debt		$ 9,382.0	$ (117.0)	9,265.0	$ 9,054.6	$ (120.4)	8,934.2
Less: current portion				(8.0)			(168.1)
Long-term portion				$ 9,257.0			$ 8,766.1

Credit Facilities

The 364-Day Credit Facility

In August 2020, we entered into a $1.0 billion 364-day unsecured revolving credit facility (the 364-Day Credit Facility), which matured in August 2021. As of December 31, 2020, we had no borrowings outstanding under our 364-Day Credit Facility.

The Credit Facility

In August 2021, we entered into a $3.0 billion unsecured revolving credit facility (as amended, the Credit Facility), which amends and restates the prior $2.25 billion unsecured revolving credit facility which would have matured in June 2023 (the Replaced Credit Facility). Borrowings under the Credit Facility mature in August 2026. As permitted by the Credit Facility, we have the right to 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, a daily floating London Interbank Offered Rate (LIBOR), or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Credit Facility agreement). On the earliest of (i) the date that all available tenors of U.S. dollar LIBOR have permanently or indefinitely ceased to be provided or have been announced to be no longer representative, (ii) June 30, 2023 or (iii) the effective date of an election to opt into a secured overnight financing rate (“SOFR”), the LIBOR rate will be replaced by a forward-looking term rate based on SOFR or a daily rate based on SOFR published on such date.

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 $2,296.7 million as of September 30, 2021. 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.

We had $364.7 million and $186.0 million outstanding under our Credit Facility and Replaced Credit Facility as of September 30, 2021 and December 31, 2020, respectively. We had $338.6 million and $376.5 million of letters of credit outstanding under our Credit Facility and Replaced Credit Facility as of September 30, 2021 and December 31, 2020, respectively.

Uncommitted Credit Facility

We also have an Uncommitted Credit Facility, which bears interest at LIBOR or a Cost of Funds rate (both as defined in the Uncommitted Credit Facility agreement), 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 September 30, 2021, we had $98.1 million outstanding under our Uncommitted Credit Facility. As of December 31, 2020, we had no borrowings outstanding under our Uncommitted Credit Facility.

Senior Notes and Debentures

During the second quarter of 2021, we paid the entire $35.3 million principal balance of our 9.250% debentures which matured in May 2021.

In November 2020, we issued $350.0 million of 0.875% senior notes due November 2025 (the 0.875% Notes) and $750.0 million of 1.750% senior notes due February 2032 (the 1.750% Notes). We used the net proceeds from the 0.875% Notes and 1.750% Notes to redeem all $850.0 million of the outstanding 3.550% senior notes due June 2022 and $250.0 million of the $550.0 million outstanding 4.750% senior notes due May 2023 (the 4.750% Notes).

In August 2020, we issued $650.0 million of 1.450% senior notes due February 2031 (the 1.450% Notes). We used the net proceeds to redeem all $600.0 million of the outstanding 5.250% senior notes due November 2021 plus a make-whole premium of $34.0 million. Additionally, we incurred a non-cash charge related to the unamortized deferred issuance costs of $0.5 million. The remaining proceeds were used for general corporate purposes.

In February 2020, we issued $600.0 million of 2.300% senior notes due March 2030 (the 2.300% Notes) and $400.0 million of 3.050% senior notes due March 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.

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

In 2013, we entered into various interest rate swap agreements relative to the 4.750% Notes. The goal was to reduce overall borrowing costs and rebalance our debt portfolio's ratio of fixed-to-floating interest rates. As of September 30, 2021, 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.

Contemporaneously with the $250.0 million partial redemption of the 4.750% Notes in November 2020, we dedesignated the proportional share of these swap agreements as fair value hedges. There was no ineffectiveness recognized in the dedesignation of these fair value hedges. Following the dedesignation, 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 September 30, 2021 and December 31, 2020, these free-standing derivatives were reflected at their fair value of $5.5 million and $8.3 million, respectively, and were included in other assets in our consolidated balance sheets. For the three and nine months ended September 30, 2021, we recognized a loss of $0.8 million and $2.8 million, respectively, directly in earnings as an adjustment to non-cash interest expense attributable to the change in fair value of the free-standing derivatives.

As of September 30, 2021 and December 31, 2020, the interest rate swap agreements that were designated as fair value hedges were reflected at their fair value of $6.6 million and $10.0 million, respectively, and were included in other assets in our consolidated balance sheets. 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 $2.0 million and $1.8 million during the three months ended September 30, 2021 and 2020, respectively, and net interest income of $5.9 million and $3.8 million during the nine months ended September 30, 2021 and 2020, respectively, related to net settlements for these interest rate swap agreements, which was included as an offset to interest expense in our consolidated statements of income.

For the three months ended September 30, 2021 and 2020, we recognized gains of $0.9 million and $2.1 million, respectively, on the change in fair value of the hedged senior notes and offsetting losses of $1.0 million and $1.8 million, respectively, on the related interest rate swaps, both attributable to changes in the benchmark interest rate. For the nine months ended September 30, 2021 and 2020, we recognized a gain of $3.5 million and a loss of $7.5 million, respectively, on the change in fair value of the hedged senior notes with an offsetting loss of $3.3 million and an offsetting gain of $9.3 million on the related interest rate swaps, both attributable to changes in the benchmark interest rate. The difference of these fair value changes for the three and nine months ended September 30, 2021 and 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

We have historically entered into multiple swap agreements designated as cash flow hedges to manage exposure to fluctuations in interest rates in anticipation of planned future issuances of senior notes. 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. All of our cash flow hedges settled on or before December 31, 2020, thus there was no related asset or liability as of September 30, 2021 or December 31, 2020.

The fair value of our interest rate locks is 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).

There was no unrealized gain or loss recognized in other comprehensive income for the three or nine months ended September 30, 2021. For the three and nine months ended September 30, 2020, total unrealized loss recognized in other comprehensive income for interest rate locks was $0.2 million and $22.5 million, net of tax, respectively.

As of September 30, 2021 and December 31, 2020, our previously terminated interest rate locks were recorded as components of accumulated other comprehensive loss, net of tax of $26.9 million and $30.4 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 $4.4 million, net of tax, 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 an aggregate 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 an aggregate 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, in both years we entered into offsetting interest rate swaps to offset future exposures to fair value fluctuations of the Extended Interest Rate Locks (the 2019 Offsetting Interest Rate Swap and the 2020 Offsetting Interest Rate Swap, or collectively 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 September 30, 2021 and December 31, 2020, the fair values of the Extended Interest Rate Locks were liabilities of $56.3 million and $103.0 million, respectively, which were included in other long-term liabilities in our consolidated balance sheets. As of September 30, 2021 and December 31, 2020, the fair value of the Offsetting Interest Rate Swaps were assets of $16.0 million and $55.5 million, respectively, which were included in other assets in our consolidated balance sheet. For the three and nine months ended September 30, 2021, we recognized gains of $9.7 million and $38.7 million, respectively, on the change in fair value of the Extended Interest Rate Locks with offsetting losses of $10.1 million and $39.2 million, respectively, on the change in fair value of the Offsetting Interest Rate Swaps. For the three and nine months ended September 30, 2020, we recognized a gain of $8.6 million and a loss of $62.9 million, respectively, on the change in fair value of the Extended Interest Rate Locks with an offsetting loss of $8.6 million and an offsetting gain of $60.7 million, respectively, on the change in fair value of the Offsetting Interest Rate Swaps. The changes in fair value were recorded directly in earnings as an adjustment to interest expense in our consolidated statements of income.

Tax-Exempt Financings

As of September 30, 2021 we had $1,151.6 million of certain variable rate tax-exempt financings outstanding with maturities ranging from 2023 to 2051. As of December 31, 2020, we had $1,104.7 million of certain variable rate tax-exempt financings outstanding with maturities ranging from 2021 to 2050. During the third quarter of 2021, we issued $175.0 million of tax exempt financings. During the second quarter of 2020, we issued $60.0 million of tax-exempt financings.

All of our tax-exempt financings are remarketed either quarterly or semiannually 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 Credit Facility to fund these bonds until they are remarketed successfully. Accordingly, we classified these borrowings as long-term in our consolidated balance sheets as of September 30, 2021 and December 31, 2020.

Finance Leases

We had finance lease liabilities of $244.5 million and $206.5 million as of September 30, 2021 and December 31, 2020, respectively, with maturities ranging from 2021 to 2063.

8. INCOME TAXES

Our effective tax rate, exclusive of non-controlling interests, for the three and nine months ended September 30, 2021 was 25.5% and 24.6%, respectively. Our effective tax rate, exclusive of non-controlling interests, for the three and nine months ended September 30, 2020 was 18.4% and 22.1%, respectively.

Cash paid for income taxes was $182.1 million for the nine months ended September 30, 2021 and $34.2 million for the same period in 2020. The year over year increase results from tax refunds received in the prior year that did not recur in 2021 and higher projected taxable income in the current year.

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. 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 September 30, 2021, the valuation allowance associated with our state loss carryforwards was approximately $45 million.

We are subject to income tax in the United States, 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. Our federal statute of limitations is closed for all years prior to 2015. We are currently under examination by the Internal Revenue Service (IRS) for tax years 2015 through 2018. In addition, we are currently under state examination or administrative review in various jurisdictions for tax years 2012 through 2019.

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 September 30, 2021, 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 September 30, 2021, we accrued a liability for penalties of $0.3 million and a liability for interest (including interest on penalties) of $13.3 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. 2021 Stock Incentive Plan.

Stock Repurchases

In October 2020, our Board of Directors approved a $2.0 billion share repurchase authorization effective starting January 1, 2021 and extending through December 31, 2023. 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. On a quarterly basis, our Board of Directors reviews the intrinsic value of our stock and the parameters around which we repurchase our shares. The share repurchase program may be extended, suspended or discontinued at any time.

Stock repurchase activity during the three and nine months ended September 30, 2021 and 2020 follows (in millions, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Number of shares repurchased	1.2	—	1.6	1.2
Amount paid	$ 138.9	$ —	$ 179.0	$ 98.8
Weighted average cost per share	$ 117.78	$ —	$ 113.79	$ 85.06

As of September 30, 2021, 0.3 million repurchased shares were pending settlement. As of September 30, 2021, $36.5 million of share repurchases were unpaid and included within other accrued liabilities. As of September 30, 2020, no repurchased shares were pending settlement. As of September 30, 2021, the remaining authorized purchase capacity under our October 2020 repurchase program was $1.8 billion.

Dividends

In July 2021, our Board of Directors approved a quarterly dividend of $0.46 per share. Cash dividends declared were $417.1 million for the nine months ended September 30, 2021. As of September 30, 2021, we recorded a quarterly dividend payable of $146.1 million to shareholders of record at the close of business on October 1, 2021.

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 restricted stock units and performance stock units) 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 restricted stock units (RSUs) and unvested performance stock units (PSUs) at the expected attainment levels. We use the treasury stock method in computing diluted earnings per share.

Earnings per share for the three and nine months ended September 30, 2021 and 2020 are calculated as follows (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Basic earnings per share:				
Net income attributable to Republic Services, Inc.	$ 350,336	$ 259,986	$ 977,344	$ 731,786
Weighted average common shares outstanding	318,639	319,201	319,204	319,275
Basic earnings per share	$ 1.10	$ 0.81	$ 3.06	$ 2.29
Diluted earnings per share:				
Net income attributable to Republic Services, Inc.	$ 350,336	$ 259,986	$ 977,344	$ 731,786
Weighted average common shares outstanding	318,639	319,201	319,204	319,275
Effect of dilutive securities:				
Options to purchase common stock	—	41	—	68
Unvested RSU awards	340	169	238	168
Unvested PSU awards	393	323	306	313
Weighted average common and common equivalent shares outstanding	319,372	319,734	319,748	319,824
Diluted earnings per share	$ 1.10	$ 0.81	$ 3.06	$ 2.29

There were less than 0.1 million antidilutive securities outstanding for the three and nine months ended September 30, 2021. During the three months ended September 30, 2020, there were less than 0.1 million antidilutive securities outstanding, and during the nine months ended September 30, 2020, there were 0.1 million antidilutive securities outstanding.

10. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE LOSS BY COMPONENT

A summary of changes in accumulated other comprehensive loss, net of tax, by component, for the nine months ended September 30, 2021 follows:

	Cash Flow Hedges	Defined Benefit Pension Items	Total
Balance as of December 31, 2020	$ (30.4)	$ 18.0	$ (12.4)
Amounts reclassified from accumulated other comprehensive loss	3.5	(0.7)	2.8
Net current period other comprehensive income	3.5	(0.7)	2.8
Balance as of September 30, 2021	$ (26.9)	$ 17.3	$ (9.6)

A summary of reclassifications out of accumulated other comprehensive loss for the three and nine months ended September 30, 2021 and 2020 follows:

	Three Months Ended September 30,		Nine Months Ended September 30,		
	2021	2020	2021	2020	
Details about Accumulated Other Comprehensive Loss Components	Amount Reclassified from Accumulated Other Comprehensive (Loss) Income		Amount Reclassified from Accumulated Other Comprehensive (Loss) Income		Affected Line Item in the Statement where Net Income is Presented
Loss on cash flow hedges:					
Terminated interest rate locks	$ (1.6)	$ (1.6)	$ (4.7)	$ (4.3)	Interest expense
Total before tax	(1.6)	(1.6)	(4.7)	(4.3)	
Tax benefit	0.4	0.4	1.2	1.1	
Net of tax	$ (1.2)	$ (1.2)	$ (3.5)	$ (3.2)	
Pension gains:					
Pension settlement	$ —	$ —	$ 0.9	$ —	Other income
Tax expense	—	—	(0.2)	—	
Net of tax	—	—	0.7	—	
Total loss reclassified into earnings, net of tax	$ (1.2)	$ (1.2)	$ (2.8)	$ (3.2)	

11. FINANCIAL INSTRUMENTS

The effect of our hedging relationships and derivative instruments on the consolidated statements of income for the three and nine months ended September 30, 2021 and 2020 follows (in millions):

	Classification and amount of gain (loss) recognized in income on hedging relationships and derivative instruments			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	Interest Expense	Interest Expense	Interest Expense	Interest 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	$ (78.1)	$ (88.9)	$ (234.9)	$ (277.4)
The effects of fair value and cash flow hedging relationships in Subtopic 815-20:				
Gain (loss) on fair value hedging relationships:				
Interest rate swaps:				
Net swap settlements	$ 2.0	$ 1.8	$ 5.9	$ 3.8
Net periodic (loss) earnings	$ (0.1)	$ 0.3	$ 0.2	$ 1.8
Loss on cash flow hedging relationships:				
Interest rate swap locks:				
Amount of loss reclassified from accumulated other comprehensive loss into income, net of tax	$ (1.2)	$ (1.2)	$ (3.5)	$ (3.2)
The effects of derivative instruments not in Subtopic 815-20:				
(Loss) gain on free-standing derivative instruments:				
Interest rate swaps:				
Loss on change in fair value of free-standing derivative instruments	$ (0.8)	$ —	$ (2.8)	$ —
Interest rate contract:				
Net loss on change in fair value of free-standing derivative instruments	$ (0.4)	$ —	$ (0.5)	$ (2.2)

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.

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 September 30, 2021 and December 31, 2020, our assets and liabilities that are measured at fair value on a recurring basis include the following:

	September 30, 2021				
		Fair Value			
	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	$ 38.1	$ 38.1	$ 38.1	$ —	$ —
Bonds - restricted cash and marketable securities and other assets	73.5	73.5	—	73.5	—
Interest rate swaps - other assets	6.6	6.6	—	6.6	—
Other derivative assets - other assets	21.5	21.5	—	21.5	—
Total assets	$ 139.7	$ 139.7	$ 38.1	$ 101.6	$ —
Liabilities:					
Other derivative liabilities - other long-term liabilities	$ 56.3	$ 56.3	$ —	$ 56.3	$ —
Contingent consideration - other accrued liabilities and other long-term liabilities	69.4	69.4	—	—	69.4
Total liabilities	$ 125.7	$ 125.7	$ —	$ 56.3	$ 69.4

	December 31, 2020				
		Fair Value			
	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	$ 32.3	$ 32.3	$ 32.3	$ —	$ —
Bonds - restricted cash and marketable securities and other assets	73.8	73.8	—	73.8	—
Interest rate swaps - other assets	10.0	10.0	—	10.0	—
Other derivative assets - other assets	63.8	63.8	—	63.8	—
Total assets	$ 179.9	$ 179.9	$ 32.3	$ 147.6	$ —
Liabilities:					
Other derivative liabilities - other long-term liabilities	$ 103.0	$ 103.0	$ —	$ 103.0	$ —
Contingent consideration - other accrued liabilities and other long-term liabilities	70.6	70.6	—	—	70.6
Total liabilities	$ 173.6	$ 173.6	$ —	$ 103.0	$ 70.6

Total Debt

The carrying value of our total debt was $9.3 billion and $8.9 billion as of September 30, 2021 and December 31, 2020, respectively, and the fair value of our total debt was $10.1 billion and $10.0 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 were based on Level 2 inputs of the fair value hierarchy as of September 30, 2021 and December 31, 2020. See Note 7, *Debt*, for further information related to our debt.

Contingent Consideration

In 2015, we entered into a waste management contract with the County of Sonoma, California to operate the county's waste management facilities. As of September 30, 2021, the Sonoma contingent consideration represents the fair value of $62.9 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 $80 million and $100 million. During the nine months ended September 30, 2021, 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.

12. SEGMENT REPORTING

In December 2020, our senior management began evaluating, overseeing and managing the financial performance of our operations through three operating segments. 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. Our Environmental Solutions operating segment, which provides environmental solutions for daily operations of industrial, petrochemical and refining facilities, is aggregated with Corporate entities and other as it only represents approximately 1% of our consolidated revenue. Each of our operating segments provides integrated environmental services, including collection, transfer, recycling, and disposal.

Summarized financial information concerning our reportable segments for the three and nine months ended September 30, 2021 and 2020 follows:

	Gross Revenue	Intercompany Revenue	Net Revenue	Depreciation, Amortization, Depletion and Accretion	Operating Income (Loss)	Capital Expenditures	Total Assets
Three Months Ended September 30, 2021							
Group 1	$ 1,719.5	$ (277.9)	$ 1,441.6	$ 140.7	$ 391.1	$ 144.3	$ 12,018.7
Group 2	1,626.5	(238.5)	1,388.0	139.4	294.0	141.1	9,723.4
Corporate entities and other	115.3	(11.0)	104.3	42.0	(120.9)	10.2	2,686.8
Total	$ 3,461.3	$ (527.4)	$ 2,933.9	$ 322.1	$ 564.2	$ 295.6	$ 24,428.9
Three Months Ended September 30, 2020							
Group 1	$ 1,544.2	$ (254.1)	$ 1,290.1	$ 131.2	$ 349.7	$ 117.7	$ 11,530.4
Group 2	1,432.6	(217.5)	1,215.1	125.0	241.9	116.7	8,883.9
Corporate entities and other	76.5	(9.6)	66.9	35.2	(143.7)	(0.1)	2,695.8
Total	$ 3,053.3	$ (481.2)	$ 2,572.1	$ 291.4	$ 447.9	$ 234.3	$ 23,110.1

	Gross Revenue	Intercompany Revenue	Net Revenue	Depreciation, Amortization, Depletion and Accretion	Operating Income (Loss)	Capital Expenditures	Total Assets
Nine Months Ended September 30, 2021							
Group 1	$ 4,935.4	$ (801.9)	$ 4,133.5	$ 411.5	$ 1,122.4	$ 420.6	$ 12,018.7
Group 2	4,627.2	(675.3)	3,951.9	406.2	839.4	341.9	9,723.4
Corporate entities and other	289.3	(32.5)	256.8	130.7	(387.3)	141.7	2,686.8
Total	$ 9,851.9	$ (1,509.7)	$ 8,342.2	$ 948.4	$ 1,574.5	$ 904.2	$ 24,428.9
Nine Months Ended September 30, 2020							
Group 1	$ 4,526.6	$ (751.8)	$ 3,774.8	$ 390.5	$ 983.7	$ 403.4	$ 11,530.4
Group 2	4,197.1	(623.8)	3,573.3	374.2	698.5	335.4	8,883.9
Corporate entities and other	263.9	(31.6)	232.3	106.1	(405.8)	150.2	2,695.8
Total	$ 8,987.6	$ (1,407.2)	$ 7,580.4	$ 870.8	$ 1,276.4	$ 889.0	$ 23,110.1

Financial information for the three and nine months ended September 30, 2020 reflects the transfer of our Environmental Solutions operating segment from Group 2 to Corporate entities and other.

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 and other 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, other administrative functions, and environmental solutions.

13. REVENUE AND CREDIT LOSSES

Our operations primarily consist of providing environmental services. The following table disaggregates our revenue by service line for the three and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
Collection:								
Residential	$ 626.7	21.4 %	$ 581.2	22.6 %	$ 1,831.3	22.0 %	$ 1,723.3	22.8 %
Small-container	871.9	29.7	773.7	30.1	2,525.3	30.3	2,321.8	30.6
Large-container	621.7	21.2	553.1	21.5	1,762.0	21.1	1,606.8	21.2
Other	15.3	0.5	13.1	0.5	44.4	0.5	38.0	0.5
Total collection	2,135.6	72.8	1,921.1	74.7	6,163.0	73.9	5,689.9	75.1
Transfer	395.3		352.4		1,110.4		1,004.8	
Less: intercompany	(212.6)		(190.9)		(605.9)		(556.9)	
Transfer, net	182.7	6.2	161.5	6.3	504.5	6.0	447.9	5.9
Landfill	657.6		597.3		1,871.6		1,719.6	
Less: intercompany	(285.6)		(263.4)		(818.1)		(763.9)	
Landfill, net	372.0	12.7	333.9	13.0	1,053.5	12.6	955.7	12.6
Environmental solutions	51.4	1.7	24.1	0.9	110.8	1.3	101.0	1.3
Other:								
Recycling processing and commodity sales	119.9	4.1	75.0	2.9	310.6	3.8	216.2	2.9
Other non-core	72.3	2.5	56.5	2.2	199.8	2.4	169.7	2.2
Total other	192.2	6.6	131.5	5.1	510.4	6.2	385.9	5.1
Total revenue	$ 2,933.9	100.0 %	$ 2,572.1	100.0 %	$ 8,342.2	100.0 %	$ 7,580.4	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 is 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, 2020 was recognized as revenue during the nine months ended September 30, 2021 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 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 material collected, transported and disposed, and the nature of the material 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 September 30, 2021 and December 31, 2020, we recognized $80.1 million and $82.3 million, respectively, of deferred contract costs and capitalized sales commissions. During the three and nine months ended September 30, 2021, we amortized $3.0 million and $9.4 million, respectively, of capitalized sales commissions to selling, general and administrative expenses and we amortized $1.5 million and $4.6 million, respectively, of other deferred contract costs as a reduction of revenue. During the three and nine months ended September 30, 2020, we amortized $2.9 million and $9.1 million, respectively, of capitalized sales commissions to selling, general and administrative expenses and we amortized $1.6 million and $4.9 million, respectively, of other deferred contract costs as a reduction of revenue.

Credit Losses

Accounts receivable represent receivables from customers for environmental services, including collection and processing of recyclable materials, collection, transfer, and disposal of solid waste, and other environmental solutions. Our receivables are recorded when billed or when the related revenue is earned and represent claims against third parties that will be settled in cash. The carrying value of our receivables, net of the allowance for doubtful accounts and customer credits, represents their estimated net realizable value.

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. We perform ongoing credit evaluations of our customers, but generally do not require collateral to support customer receivables.

The following table reflects the activity in our allowance for doubtful accounts for the nine months ended September 30, 2021 and 2020:

	2021	2020
Balance at beginning of year	$ 34.7	$ 34.0
Additions charged to expense	18.7	22.0
Accounts written-off	(11.1)	(22.4)
Balance at end of period	$ 42.3	$ 33.6

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 $27 million relating to our outstanding legal proceedings as of September 30, 2021. 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 $4 million higher than the amount recorded as of September 30, 2021.

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, our withdrawal (which we consider from time to time) or the mass withdrawal from any under-funded multiemployer pension plan (each, a Withdrawal Event) could 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.

Cash, Cash Equivalents, Restricted Cash and Restricted Cash Equivalents

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:

	September 30, 2021	December 31, 2020	September 30, 2020	December 31, 2019
Cash and cash equivalents	$ 40.1	$ 38.2	$ 406.4	$ 47.1
Restricted cash and marketable securities	155.6	149.1	145.2	179.4
Less: restricted marketable securities	(72.8)	(73.1)	(62.4)	(49.1)
Cash, cash equivalents, restricted cash and restricted cash equivalents	$ 122.9	$ 114.2	$ 489.2	$ 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 as well as restricted cash and marketable securities related to our insurance obligations.

The following table summarizes our restricted cash and marketable securities:

	September 30, 2021	December 31, 2020
Capping, closure and post-closure obligations	$ 42.2	$ 31.5
Insurance	113.4	117.6
Total restricted cash and marketable securities	$ 155.6	$ 149.1

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 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, 2020.

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 "forward-looking 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 in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" includes forward-looking statements, including, but not limited to, the information set forth under the caption "Recent Developments – Updated Full-Year 2021 Adjusted Earnings Per Share Guidance." 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, 2020, particularly under Part I, Item 1A - Risk Factors. 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.

Impact of the COVID-19 Pandemic

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 full 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 and the impact of COVID-19 variants, all of which are uncertain and cannot be predicted at this time.

In mid-March 2020, certain customers in our small- and large-container businesses began adjusting their service levels, which included a decrease in the frequency of pickups or a temporary pause in service. In addition, we experienced a decline in volumes disposed at certain of our landfills and transfer stations. As service levels decreased, we also experienced a decrease in certain costs of our operations which are variable in nature. This decline in service activity peaked in the first half of April 2020 and improved sequentially through September 30, 2021.

In April 2020, we launched our Committed to Serve initiative and committed $20 million to support frontline employees and their families, as well as small business customers in the local communities where we serve. In addition to this initiative, we have experienced an increase in certain costs of doing business as a direct result of the COVID-19 pandemic, including costs for additional safety equipment and hygiene products and increased facility and equipment cleaning. 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. In December 2020, we recognized our frontline employees for their commitment and contributions to their communities during the pandemic with a $500 award that was paid in January 2021. In addition, we incurred incremental costs associated with expanding certain aspects of our existing healthcare programs. We expect to incur similar costs throughout 2021, and potentially into future years, although we expect the amount of such costs annually to be less than those incurred in 2020.

The effects of the COVID-19 pandemic on our business are described in more detail in the *Results of Operations* discussion in this *Management's Discussion and Analysis of Financial Condition and Results of Operations.*

Recent Developments

Updated Full-Year 2021 Adjusted Earnings Per Share Guidance

The following is a summary of anticipated adjusted diluted earnings per share for the year ending December 31, 2021. Adjusted diluted earnings per share is not a measure determined in accordance with U.S. GAAP:

	(Anticipated) Year Ending December 31, 2021
Diluted earnings per share	$4.01 to $4.04
Restructuring charges	0.04
Accelerated vesting of compensation expense for CEO transition	0.05
Adjusted diluted earnings per share	$4.10 to $4.13

We believe that presenting adjusted diluted earnings per share provides an understanding of operational activities before the financial impact of certain items. We use this measure, and believe investors will find it 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 definition of adjusted diluted earnings per share may not be comparable to similarly titled measures presented by other companies.

The guidance set forth above constitutes forward-looking information and is not a guarantee of future performance. The guidance is based upon the current beliefs and expectations of our management and is subject to significant risk and uncertainties that could cause actual results to differ materially from those shown above. See “Disclosure Regarding Forward-Looking Statements.”

Overview

Republic is one of the largest providers of environmental services in the United States, as measured by revenue. As of September 30, 2021, we operated facilities in 41 states through 355 collection operations, 238 transfer stations, 198 active landfills, 73 recycling processing centers, 3 treatment, recovery and disposal facilities, 2 treatment, storage and disposal facilities (TSDF), 6 salt water disposal wells and 7 deep injection wells. We are engaged in 75 landfill gas to energy and renewable energy projects and had post-closure responsibility for 129 closed landfills as of September 30, 2021.

Revenue for the nine months ended September 30, 2021 increased by 10.0% to $8,342.2 million compared to $7,580.4 million for the same period in 2020. This change in revenue is due to increased volume of 3.8%, average yield of 2.7%, acquisitions, net of divestitures of 2.1%, recycling processing and commodity sales of 1.2%, and fuel recovery fees of 0.6%, partially offset by decreased environmental solutions revenue of 0.2%. Additionally, revenue decreased 0.2% due to the impact of one less workday during the nine months ended September 30, 2021 as compared to the same period in 2020.

The following table summarizes our revenue, expenses and operating income for the three and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
Revenue	$ 2,933.9	100.0 %	$ 2,572.1	100.0 %	$ 8,342.2	100.0 %	$ 7,580.4	100.0 %
Expenses:								
Cost of operations	1,744.0	59.4	1,535.4	59.7	4,928.0	59.1	4,553.3	60.1
Depreciation, amortization and depletion of property and equipment	282.7	9.6	255.5	9.9	832.8	10.0	763.7	10.1
Amortization of other intangible assets	8.5	0.3	5.3	0.2	23.5	0.3	15.8	0.2
Amortization of other assets	10.1	0.4	9.9	0.4	30.2	0.4	28.9	0.4
Accretion	20.8	0.7	20.7	0.8	61.9	0.7	62.4	0.8
Selling, general and administrative	299.0	10.2	256.1	10.0	880.3	10.6	795.3	10.5
Withdrawal costs - multiemployer pension funds	—	—	—	—	—	—	35.9	0.5
Loss (gain) on business divestitures and impairments, net	—	—	31.5	1.2	(0.2)	—	32.9	0.4
Restructuring charges	4.6	0.2	9.8	0.4	11.2	0.1	15.8	0.2
Operating income	$ 564.2	19.2 %	$ 447.9	17.4 %	$ 1,574.5	18.8 %	$ 1,276.4	16.8 %

Our pre-tax income was $470.7 million and $1,298.2 million for the three and nine months ended September 30, 2021, respectively, compared to $318.7 million and $941.4 million for the same respective periods in 2020. Our net income attributable to Republic Services, Inc. was $350.3 million and $977.3 million for the three and nine months ended September 30, 2021, or $1.10 and $3.06 per diluted share, respectively, compared to $260.0 million and $731.8 million, or $0.81 and $2.29 per diluted share, for the same periods in 2020, respectively.

During each of the three and nine months ended September 30, 2021 and 2020, 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 our *Results of Operations* discussion in 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 and nine months ended September 30, 2021 and 2020.

	Three Months Ended September 30, 2021			Three Months Ended September 30, 2020		
	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share
As reported	$ 470.7	$ 350.3	$ 1.10	$ 318.7	$ 260.0	$ 0.81
Loss on extinguishment of debt	—	—	—	34.5	25.5	0.08
Restructuring charges	4.6	3.4	0.01	9.8	7.2	0.02
Loss on business divestitures and impairments, net	—	—	—	31.5	26.6	0.09
Total adjustments	4.6	3.4	0.01	75.8	59.3	0.19
As adjusted	$ 475.3	$ 353.7	$ 1.11	$ 394.5	$ 319.3	$ 1.00

	Nine Months Ended September 30, 2021			Nine Months Ended September 30, 2020		
	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share
As reported	$ 1,298.2	$ 977.3	$ 3.06	$ 941.4	$ 731.8	$ 2.29
Loss on extinguishment of debt	—	—	—	34.5	25.5	0.08
Restructuring charges	11.2	8.2	0.02	15.8	11.7	0.04
(Gain) loss on business divestitures and impairments, net(1)	(0.2)	(0.1)	—	32.9	30.1	0.10
Withdrawal costs - multiemployer pension funds	—	—	—	35.9	26.5	0.08
Bridgeton insurance recovery	—	—	—	(10.8)	(8.2)	(0.03)
Accelerated vesting of compensation expense for CEO transition	15.4	15.4	0.05	—	—	—
Total adjustments	26.4	23.5	0.07	108.3	85.6	0.27
As adjusted	$ 1,324.6	$ 1,000.8	$ 3.13	$ 1,049.7	$ 817.4	$ 2.56

(1) The aggregate impact to adjusted diluted earnings per share totals to less than $0.01 for the nine months ended September 30, 2021.

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.

Loss on extinguishment of debt. During the three and nine months ended September 30, 2020, we incurred a $34.5 million loss on the early extinguishment of debt related to the redemption of our $600.0 million 5.250% senior notes due November 2021. We paid a cash premium of $34.0 million and incurred a non-cash charge related to the unamortized deferred issuance costs of $0.5 million.

Restructuring charges. In 2020, we incurred costs related to the redesign of certain back-office software systems, which continued into 2021. In addition, in July 2020, we eliminated certain back-office support positions in response to a decline in the underlying demand for services resulting from the COVID-19 pandemic. During the three and nine months ended September 30, 2021, we incurred restructuring charges of $4.6 million and $11.2 million, respectively, and during the three and nine months ended September 30, 2020, we incurred restructuring charges of $9.8 million and $15.8 million, respectively. During the nine months ended September 30, 2021 and 2020, we paid $12.1 million and $11.9 million, respectively, related to these restructuring efforts.

During the remainder of 2021, we expect to incur additional restructuring charges of approximately $5 million primarily related to the redesign of certain of our back-office software systems. Substantially all of these restructuring charges will be recorded in Corporate entities and other.

Loss (gain) on business divestitures and impairments, net. During the nine months ended September 30, 2021, we recorded a net gain on business divestitures and impairments of $(0.2) million. During the three and nine months ended September 30, 2020, we recorded a net loss on business divestitures and impairments of $31.5 million and $32.9 million, respectively.

Withdrawal costs - multiemployer pension funds. During the nine months ended September 30, 2020, we recorded charges to earnings of $35.9 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 nine months ended September 30, 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.

Accelerated vesting of compensation expense for CEO transition. In June 2021, Donald W. Slager retired as Chief Executive Officer (CEO) of Republic Services, Inc. During the nine months ended September 30, 2021, we recognized a charge of $15.4 million related to the accelerated vesting of his compensation awards that were previously scheduled to vest in 2022 and beyond.

Results of Operations

Revenue

We generate revenue by providing environmental services to our customers, including the collection and processing of recyclable materials, the collection, transfer and disposal of non-hazardous solid waste, and other environmental solutions. 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 centers generate revenue from tipping fees charged to third parties and the sale of recycled commodities. Our revenue from environmental solutions consists mainly of fees we charge for disposal of hazardous and non-hazardous solid and liquid material and in-plant services, such as transportation and logistics, including at our TSDFs. 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 material handling is 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 and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
Collection:								
Residential	$ 626.7	21.4 %	$ 581.2	22.6 %	$ 1,831.3	22.0 %	$ 1,723.3	22.8 %
Small-container	871.9	29.7	773.7	30.1	2,525.3	30.3	2,321.8	30.6
Large-container	621.7	21.2	553.1	21.5	1,762.0	21.1	1,606.8	21.2
Other	15.3	0.5	13.1	0.5	44.4	0.5	38.0	0.5
Total collection	2,135.6	72.8	1,921.1	74.7	6,163.0	73.9	5,689.9	75.1
Transfer	395.3		352.4		1,110.4		1,004.8	
Less: intercompany	(212.6)		(190.9)		(605.9)		(556.9)	
Transfer, net	182.7	6.2	161.5	6.3	504.5	6.0	447.9	5.9
Landfill	657.6		597.3		1,871.6		1,719.6	
Less: intercompany	(285.6)		(263.4)		(818.1)		(763.9)	
Landfill, net	372.0	12.7	333.9	13.0	1,053.5	12.6	955.7	12.6
Environmental solutions	51.4	1.7	24.1	0.9	110.8	1.3	101.0	1.3
Other:								
Recycling processing and commodity sales	119.9	4.1	75.0	2.9	310.6	3.8	216.2	2.9
Other non-core	72.3	2.5	56.5	2.2	199.8	2.4	169.7	2.2
Total other	192.2	6.6	131.5	5.1	510.4	6.2	385.9	5.1
Total revenue	$ 2,933.9	100.0 %	$ 2,572.1	100.0 %	$ 8,342.2	100.0 %	$ 7,580.4	100.0 %

The following table reflects changes in components of our revenue, as a percentage of total revenue, for the three and nine months ended September 30, 2021 and 2020:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Average yield	3.2 %	2.6 %	2.7 %	2.7 %
Fuel recovery fees	1.3	(0.9)	0.6	(0.6)
Total price	4.5	1.7	3.3	2.1
Volume	4.3	(3.4)	3.8	(3.7)
Change in workdays	—	—	(0.2)	0.1
Recycling processing and commodity sales	1.6	0.3	1.2	0.1
Environmental solutions	0.2	(1.3)	(0.2)	(0.9)
Total internal growth	10.6	(2.7)	7.9	(2.3)
Acquisitions / divestitures, net	3.5	(0.1)	2.1	0.5
Total	14.1 %	(2.8)%	10.0 %	(1.8)%
Core price	5.2 %	4.5 %	4.9 %	4.8 %

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 3.4% and 2.9% for the three and nine months ended September 30, 2021, respectively, and 2.8% for each of the same respective periods in 2020. Core price as a percentage of related-business revenue was 5.4% and 5.1% for the three and nine months ended September 30, 2021, respectively, and 4.8% and 5.1% for the same respective periods in 2020.

During the three and nine months ended September 30, 2021, we experienced the following changes in our revenue as compared to the same respective periods in 2020:

- Average yield increased revenue by 3.2% and 2.7% during the three months and nine months ended September 30, 2021, respectively, due to price increases in all lines of business.
- The fuel recovery fee program, which mitigates our exposure to increases in fuel prices, increased revenue by 1.3% and 0.6% during the three and nine months ended September 30, 2021, respectively, primarily due to an increase in fuel prices compared to the same periods in 2020.
- Volume increased revenue by 4.3% and 3.8% during the three and nine months ended September 30, 2021, respectively, primarily due to volume growth in our landfill, transfer, and small- and large-container collection lines of business. The volume increase in our landfill line of business is primarily attributable to increased solid and special waste volumes. In mid-March 2020, certain customers in these lines of business began adjusting their service levels as a result of the COVID-19 pandemic. This decline in service activity peaked in the first half of April 2020 and sequentially improved thereafter.
- Revenue decreased by 0.2% due to one less workday during the nine months ended September 30, 2021 as compared to the same period in 2020.
- Recycling processing and commodity sales increased revenue by 1.6% and 1.2% during the three and nine months ended September 30, 2021, respectively, primarily due to an increase in overall commodity prices as compared to the same periods in 2020. The average price for recycled commodities, excluding glass and organics, for the three and nine months ended September 30, 2021 was $230 and $178 per ton, respectively, compared to $99 and $92 per ton for the same respective periods in 2020.

  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 would change both annual revenue and operating income by approximately $12 million.
- Environmental solutions revenue decreased by 0.2% during the nine months ended September 30, 2021 primarily due to a decrease in rig counts, drilling activity, and the delay of in-plant project work that began during the second quarter of 2020 as a result of lower demand for crude oil. Rig counts and drilling activity have sequentially improved during

the nine months ended September 30, 2021 but remain below pre-COVID levels. Consequently, environmental solutions revenue increased by 0.2% during the three months ended September 30, 2021.

- Acquisitions, net of divestitures, increased revenue by 3.5% and 2.1% during the three and nine months ended September 30, 2021, respectively, reflecting our continued growth strategy of acquiring privately held solid waste, recycling, and environmental services companies that complement and expand 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 that 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 and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
Labor and related benefits	$ 588.2	20.0 %	$ 546.0	21.2 %	$ 1,715.4	20.6 %	$ 1,617.1	21.3 %
Transfer and disposal costs	228.9	7.8	206.9	8.0	641.3	7.7	594.7	7.9
Maintenance and repairs	273.9	9.3	246.5	9.6	770.9	9.2	726.0	9.6
Transportation and subcontract costs	206.2	7.0	172.7	6.7	565.5	6.8	501.0	6.6
Fuel	100.4	3.4	66.1	2.6	271.7	3.3	204.4	2.7
Disposal fees and taxes	87.0	3.0	79.7	3.1	252.4	3.0	234.0	3.1
Landfill operating costs	61.9	2.1	60.0	2.4	188.2	2.3	190.1	2.5
Risk management	74.8	2.6	48.8	1.9	186.8	2.2	162.3	2.1
Other	122.7	4.2	108.7	4.2	335.8	4.0	334.5	4.4
Subtotal	1,744.0	59.4	1,535.4	59.7	4,928.0	59.1	4,564.1	60.2
Bridgeton insurance recovery	—	—	—	—	—	—	(10.8)	(0.1)
Total cost of operations	$ 1,744.0	59.4 %	$ 1,535.4	59.7 %	$ 4,928.0	59.1 %	$ 4,553.3	60.1 %

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 and of ours for prior periods.

The most significant items impacting our cost of operations during the three and nine months ended September 30, 2021 and 2020 are summarized below:

- Labor and related benefits increased in aggregate dollars due to higher hourly and salaried wages as a result of annual merit increases and an increase in service levels attributable to the economic recovery from the COVID-19 pandemic. These increases were partially offset by one less workday during the nine months ended September 30, 2021 as compared to the same period in 2020.
- Transfer and disposal costs increased in aggregate dollars as a result of higher collection volumes and an increase in third party disposal rates.

  During both the three and nine months ended September 30, 2021 and 2020, approximately 68% of the total solid waste volume we collected was disposed at landfill sites that we own or operate (internalization).
- Maintenance and repairs expense increased in aggregate dollars due to an increase in service levels attributable to the economic recovery from the COVID-19 pandemic.
- Transportation and subcontract costs increased during the three and nine months ended September 30, 2021 primarily due to higher collection and transfer station volumes, acquisition-related activity, and increased subcontract work

attributable to an increase in non-core revenues, partially offset by one less workday during the nine months ended September 30, 2021 as compared to the same period in 2020.

- Our fuel costs increased due to an increase in the average diesel fuel cost per gallon. The national average diesel fuel cost per gallon for the three and nine months ended September 30, 2021 was $3.36 and $3.16, respectively, as compared to $2.43 and $2.58 for the same respective periods in 2020.

  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 $25 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 would change our fuel recovery fee by approximately $25 million per year.

- Risk management expenses increased during the three and nine months ended September 30, 2021 primarily due to unfavorable actuarial development in our auto liability claims as well as higher premium costs, partially offset by favorable workers compensation development in prior year programs.

- Other costs of operations increased during the three and nine months ended September 30, 2021 due to increased occupancy and facility related expenses partially offset by certain costs associated with our Committed to Serve initiative recognized during the nine months ended September 30, 2020, which did not recur in the same respective period in 2021.

- During the nine months ended September 30, 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 and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
Depreciation and amortization of property and equipment	$ 184.9	6.3 %	$ 174.9	6.8 %	$ 543.6	6.5 %	$ 518.8	6.9 %
Landfill depletion and amortization	97.8	3.3	80.6	3.1	289.2	3.5	244.9	3.2
Depreciation, amortization and depletion expense	$ 282.7	9.6 %	$ 255.5	9.9 %	$ 832.8	10.0 %	$ 763.7	10.1 %

Depreciation and amortization of property and equipment increased for the three and nine months ended September 30, 2021 primarily due to assets added through acquisitions.

Landfill depletion and amortization expense increased due to higher landfill disposal volumes primarily driven by special and solid waste volumes coupled with an increase in our overall average depletion rate. Additionally, we recognized unfavorable amortization adjustments related to the asset retirement obligation at certain of our closed landfills during the three and nine months ended September 30, 2021.

Amortization of Other Intangible Assets

Amortization of other intangible assets primarily relates to customer relationships and, to a lesser extent, non-compete agreements. Expenses for amortization of other intangible assets were $8.5 million and $23.5 million, or 0.3% of revenue, for the three and nine months ended September 30, 2021, respectively, compared to $5.3 million and $15.8 million, or 0.2% of revenue, for the same respective periods in 2020. Amortization expense increased due to assets added through acquisitions.

Amortization of Other Assets

Our other assets primarily relate to the prepayment of fees and capitalized implementation costs associated with cloud-based hosting arrangements. Expenses for amortization of other assets were $10.1 million and $30.2 million, or 0.4% of revenue, for the three and nine months ended September 30, 2021, respectively, compared to $9.9 million and $28.9 million, or 0.4% of revenue, for the same respective periods in 2020.

Accretion Expense

Accretion expense was $20.8 million and $61.9 million, or 0.7% of revenue, for the three and nine months ended September 30, 2021, respectively, compared to $20.7 million and $62.4 million, or 0.8% of revenue, for the same respective periods in 2020. 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 and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2021		2020		2021		2020	
Salaries and related benefits	$ 210.1	7.2 %	$ 183.4	7.1 %	$ 626.9	7.5 %	$ 555.8	7.3 %
Provision for doubtful accounts	7.2	0.2	6.1	0.3	18.7	0.2	22.0	0.3
Other	81.7	2.8	66.6	2.6	219.3	2.7	217.5	2.9
Subtotal	299.0	10.2	256.1	10.0	864.9	10.4	795.3	10.5
Accelerated vesting of compensation expense for CEO transition	—	—	—	—	15.4	0.2	—	—
Total selling, general and administrative expenses	$ 299.0	10.2 %	$ 256.1	10.0 %	$ 880.3	10.6 %	$ 795.3	10.5 %

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 and of ours for prior periods.

The most significant items affecting our selling, general and administrative expenses during the three and nine months ended September 30, 2021 and 2020 are summarized below:

- Salaries and related benefits increased primarily due to higher management incentive expenses.
- Other selling, general and administrative expenses increased for the three months ended September 30, 2021 largely due an increase in recruiting and advertising costs. Consulting fees increased during the third quarter but decreased for the nine months ended September 30, 2021. Additionally, we recognized an unfavorable change in certain legal reserves during the nine months ended September 30, 2020 that did not recur in 2021.
- In June 2021, Donald W. Slager retired as CEO of Republic Services, Inc. During the nine months ended September 30, 2021, we recognized a charge of $15.4 million related to the accelerated vesting of his compensation awards that were previously scheduled to vest in 2022 and beyond.

Withdrawal Costs - Multiemployer Pension Funds

During the nine months ended September 30, 2020, we recorded charges to earnings of $35.9 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.

Loss (Gain) 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 nine months ended September 30, 2021, we recorded a net gain on business divestitures and impairments of $0.2 million. During the three and nine months ended September 30, 2020, we recorded a net loss on business divestitures and impairments of $31.5 million and $32.9 million, respectively.

Restructuring Charges

In 2020, we incurred costs related to the redesign of certain back-office software systems, which continued into 2021. In addition, in July 2020, we eliminated certain back-office support positions in response to a decline in the underlying demand for services resulting from the COVID-19 pandemic. During the three and nine months ended September 30, 2021, we incurred restructuring charges of $4.6 million and $11.2 million, respectively, and during the three and nine months ended September 30, 2020, we incurred restructuring charges of $9.8 million and $15.8 million, respectively, that primarily related to these efforts. During the nine months ended September 30, 2021 and 2020, we paid $12.1 million and $11.9 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 and nine months ended September 30, 2021 and 2020:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Interest expense on debt	$ 61.3	$ 74.2	$ 185.3	$ 233.6
Non-cash interest	18.1	16.6	52.4	47.8
Less: capitalized interest	(1.3)	(1.9)	(2.8)	(4.0)
Total interest expense	$ 78.1	$ 88.9	$ 234.9	$ 277.4

Total interest expense for the three and nine months ended September 30, 2021 decreased primarily due to lower interest rates on our floating and fixed rate debt. The decrease attributable to our fixed rate debt is primarily due to the issuance of $350.0 million of 0.875% senior notes and $750.0 million of 1.750% senior notes in November 2020 as well as the issuance of $650.0 million of 1.450% senior notes in August 2020, the proceeds of which were used to repay outstanding senior notes with coupons ranging from 3.550% to 5.250%.

Cash paid for interest, excluding net swap settlements for our fixed-to-floating interest rate swaps, was $193.8 million and $246.1 million for the nine months ended September 30, 2021 and 2020, respectively.

Income Taxes

Our effective tax rate, exclusive of non-controlling interests, for the three and nine months ended September 30, 2021 was 25.5% and 24.6%, respectively. Our effective tax rate, exclusive of non-controlling interests, for the three and nine months ended September 30, 2020 was 18.4% and 22.1%, respectively.

Cash paid for income taxes was $182.1 million for the nine months ended September 30, 2021 and $34.2 million for the same period in 2020. The year over year increase results from tax refunds received in the prior year that did not recur in 2021 and higher projected taxable income in the current year.

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

In December 2020, our senior management began evaluating, overseeing and managing the financial performance of our operations through three operating segments. 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. Our Environmental Solutions operating segment, which provides environmental solutions for daily operations of industrial, petrochemical and refining facilities, is aggregated with Corporate entities and other as it only represents approximately 1% of our consolidated revenue. Each of our operating segments provides integrated environmental services, including collection, transfer, recycling, and disposal.

Summarized financial information concerning our reportable segments for the three and nine months ended September 30, 2021 and 2020 (in millions of dollars and as a percentage of revenue in the case of operating margin) follows:

	Net Revenue	Depreciation, Amortization, Depletion and Accretion Before Adjustments for Asset Retirement Obligations	Adjustments to Amortization Expense for Asset Retirement Obligations	Depreciation, Amortization, Depletion and Accretion	Loss (Gain) on Business Divestitures and Impairments, Net	Operating Income (Loss)	Operating Margin
Three Months Ended September 30, 2021							
Group 1	$ 1,441.6	$ 140.7	$ —	$ 140.7	$ —	$ 391.1	27.1 %
Group 2	1,388.0	139.4	—	139.4	—	294.0	21.2 %
Corporate entities and other	104.3	41.0	1.0	42.0	—	(120.9)	—
Total	$ 2,933.9	$ 321.1	$ 1.0	$ 322.1	$ —	$ 564.2	19.2 %
Three Months Ended September 30, 2020							
Group 1	$ 1,290.1	$ 131.7	$ (0.5)	$ 131.2	$ —	$ 349.7	27.1 %
Group 2	1,215.1	128.4	(3.4)	125.0	—	241.9	19.9 %
Corporate entities and other	66.9	35.9	(0.7)	35.2	31.5	(143.7)	—
Total	$ 2,572.1	$ 296.0	$ (4.6)	$ 291.4	$ 31.5	$ 447.9	17.4 %

	Net Revenue	Depreciation, Amortization, Depletion and Accretion Before Adjustments for Asset Retirement Obligations	Adjustments to Amortization Expense for Asset Retirement Obligations	Depreciation, Amortization, Depletion and Accretion	Loss (Gain) on Business Divestitures and Impairments, Net	Operating Income (Loss)	Operating Margin
Nine Months Ended September 30, 2021							
Group 1	$ 4,133.5	$ 413.0	$ (1.5)	$ 411.5	$ —	$ 1,122.4	27.2 %
Group 2	3,951.9	405.7	0.5	406.2	—	839.4	21.2 %
Corporate entities and other	256.8	117.4	13.3	130.7	(0.2)	(387.3)	—
Total	$ 8,342.2	$ 936.1	$ 12.3	$ 948.4	$ (0.2)	$ 1,574.5	18.9 %
Nine Months Ended September 30, 2020							
Group 1	$ 3,774.8	$ 391.2	$ (0.7)	$ 390.5	$ —	$ 983.7	26.1 %
Group 2	3,573.3	379.3	(5.1)	374.2	—	698.5	19.5 %
Corporate entities and other	232.3	106.7	(0.6)	106.1	32.9	(405.8)	—
	$ 7,580.4	$ 877.2	$ (6.4)	$ 870.8	$ 32.9	$ 1,276.4	16.8 %

Financial information for the three and nine months ended September 30, 2020 reflects the transfer of our Environmental Solutions operating segment from Group 2 to Corporate entities and other. Corporate entities and other include legal, tax, treasury, information technology, risk management, human resources, closed landfills, other administrative functions, and environmental solutions. National Accounts revenue included in Corporate entities and other represents the portion of revenue generated from nationwide and regional contracts in markets outside our operating areas where the associated material handling is 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 and nine months ended September 30, 2021 and 2020 are discussed below.

Group 1

Revenue for the three and nine months ended September 30, 2021 increased 11.7% and 9.5%, respectively, due to an increase in both average yield and volume in all lines of business.

Operating income in Group 1 increased from $349.7 million for the three months ended September 30, 2020, or a 27.1% operating income margin, to $391.1 million for the three months ended September 30, 2021, or a 27.1% operating income margin. Operating income in Group 1 increased from $983.7 million for the nine months ended September 30, 2020, or a 26.1% operating income margin, to $1,122.4 million for the nine months ended September 30, 2021, or a 27.2% operating income margin. Operating income margin for the three and nine months ended September 30, 2021 was favorably impacted by the increase in revenue attributable to economic recovery coupled with the effective management of certain operating costs. This benefit was partially offset by an increase in fuel costs.

Group 2

Revenue for the three and nine months ended September 30, 2021 increased 14.2% and 10.6%, respectively, due to an increase in average yield in all lines of business. Additionally, volume increased in our landfill, transfer station, and small- and large-container collection lines of business, partially offset by volume declines in our residential line of business.

Operating income in Group 2 increased from $241.9 million for the three months ended September 30, 2020, or a 19.9% operating income margin, to $294.0 million for the three months ended September 30, 2021, or a 21.2% operating income margin. Operating income in Group 2 increased from $698.5 million for the nine months ended September 30, 2020, or a 19.5% operating income margin, to $839.4 million for the nine months ended September 30, 2021, or a 21.2% operating income margin. Operating income margin for the three and nine months ended September 30, 2021 was favorably impacted by the increase in revenue attributable to economic recovery coupled with the effective management of certain operating costs. This benefit was partially offset by an increase in fuel costs.

Corporate Entities and Other

The Corporate entities and other operating loss decreased from $143.7 million for the three months ended September 30, 2020 to $120.9 million for the three months ended September 30, 2021. The Corporate entities and other operating loss decreased from $405.8 million for the nine months ended September 30, 2020 to $387.3 million for the nine months ended September 30, 2021. The operating loss for the three and nine months ended September 30, 2021 was impacted by favorable CNG tax credits recognized during the respective periods as well as a net loss on business divestitures and impairments and favorable remediation adjustments recognized during the nine months ended September 30, 2020, which did not recur at the same magnitude in 2021.

Landfill and Environmental Matters

Available Airspace

As of September 30, 2021, we owned or operated 198 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, 2020	New Expansions Undertaken	Landfills Acquired, Net of Divestitures	Permits Granted / New Sites, Net of Closures	Airspace Consumed	Changes in Engineering Estimates	Balance as of September 30, 2021
Cubic yards (in millions):							
Permitted airspace	4,792.5	—	67.2	34.2	(59.1)	1.4	4,836.2
Probable expansion airspace	196.4	20.5	—	(27.3)	—	—	189.6
Total cubic yards (in millions)	4,988.9	20.5	67.2	6.9	(59.1)	1.4	5,025.8
Number of sites:							
Permitted airspace	186	—	13	(1)			198
Probable expansion airspace	11	2	—	(1)			12

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 September 30, 2021, 12 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 34 years, including probable expansion airspace. The average estimated remaining life of all of our landfills is 61 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.

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.

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.

Property and Equipment

The following tables reflect the activity in our property and equipment accounts for the nine months ended September 30, 2021:

	Gross Property and Equipment							
	Balance as of December 31, 2020	Capital Additions	Retirements	Acquisitions, Net of Divestitures	Non-cash Additions for Asset Retirement Obligations	Adjustments for Asset Retirement Obligations	Impairments, Transfers and Other Adjustments	Balance as of September 30, 2021
Land	$ 467.1	$ 12.5	$ (0.9)	$ 15.2	$ —	$ —	$ (0.2)	$ 493.7
Non-depletable landfill land	166.3	0.1	—	(0.4)	—	—	0.8	166.8
Landfill development costs	7,991.7	6.3	—	65.9	34.9	10.2	176.4	8,285.4
Vehicles and equipment	8,119.0	429.2	(309.0)	103.6	—	—	62.2	8,405.0
Buildings and improvements	1,402.5	3.7	(1.9)	16.6	0.5	—	23.1	1,444.5
Construction-in-progress - landfill	303.8	232.8	—	—	—	—	(178.2)	358.4
Construction-in-progress - other	107.4	118.0	—	5.3	—	—	(90.7)	140.0
Total	$ 18,557.8	$ 802.6	$ (311.8)	$ 206.2	$ 35.4	$ 10.2	$ (6.6)	$ 19,293.8

	Accumulated Depreciation, Amortization and Depletion						
	Balance as of December 31, 2020	Additions Charged to Expense	Retirements	Acquisitions, Net of Divestitures	Adjustments for Asset Retirement Obligations	Impairments, Transfers and Other Adjustments	Balance as of September 30, 2021
Landfill development costs	$ (4,249.5)	$ (276.9)	$ —	$ —	$ (12.3)	$ —	$ (4,538.7)
Vehicles and equipment	(4,953.4)	(490.8)	303.0	—	—	2.6	(5,138.6)
Buildings and improvements	(628.7)	(50.3)	1.5	0.3	—	(0.4)	(677.6)
Total	$ (9,831.6)	$ (818.0)	$ 304.5	$ 0.3	$ (12.3)	$ 2.2	$ (10,354.9)

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:

	September 30, 2021	December 31, 2020
Cash and cash equivalents	$ 40.1	$ 38.2
Restricted cash and marketable securities	155.6	149.1
Less: restricted marketable securities	(72.8)	(73.1)
Cash, cash equivalents, restricted cash and restricted cash equivalents	$ 122.9	$ 114.2

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 as well as restricted cash and marketable securities related to our insurance obligations.

The following table summarizes our restricted cash and marketable securities:

	September 30, 2021	December 31, 2020
Capping, closure and post-closure obligations	$ 42.2	$ 31.5
Insurance	113.4	117.6
Total restricted cash and marketable securities	$ 155.6	$ 149.1

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 on 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 nine months ended September 30, 2021 and 2020:

	Nine Months Ended September 30,	
	2021	2020
Cash provided by operating activities	$ 2,137.8	$ 1,909.0
Cash used in investing activities	$ (1,785.6)	$ (1,032.9)
Cash used in financing activities	$ (343.5)	$ (564.3)

Cash Flows Provided by Operating Activities

The most significant items affecting the comparison of our operating cash flows for the nine months ended September 30, 2021 and 2020 are summarized below.

Changes in assets and liabilities, net of effects from business acquisitions and divestitures, increased our cash flow from operations by $81.6 million during the nine months ended September 30, 2021, compared to an increase of $75.7 million during the same period in 2020, primarily as a result of the following:

- Our accounts receivable, exclusive of the change in allowance for doubtful accounts and customer credits, increased $137.7 million during the nine months ended September 30, 2021 due to the timing of billings net of collections, compared to a $3.4 million decrease in the same period in 2020. As of September 30, 2021, our days sales outstanding were 39.2, or 27.4 days net of deferred revenue, compared to 38.9, or 26.8 days net of deferred revenue, as of September 30, 2020.

- Our prepaid expenses and other assets decreased $105.7 million during the nine months ended September 30, 2021, compared to a $135.0 million decrease in the same period in 2020, primarily due to the change in our estimated tax liability and timing of estimated tax payments. Cash paid for incomes taxes was $182.1 million and $34.2 million for the nine months ended September 30, 2021 and 2020, respectively.
- Our accounts payable increased $99.4 million during the nine months ended September 30, 2021, compared to a $60.4 million decrease in the same period in 2020, due to the timing of payments.
- Cash paid for capping, closure and post-closure obligations was $41.2 million during the nine months ended September 30, 2021, compared to $39.5 million in the same period in 2020. 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 $7.6 million lower during the nine months ended September 30, 2021, compared to the same period in 2020, primarily due to $14.0 million of payments related to management and monitoring of the remediation area of our closed Bridgeton Landfill in Missouri during the nine months ended September 30, 2021 as compared to $19.8 million of payments for the same period in 2020.

In addition, cash paid for interest, excluding net swap settlements for our fixed-to-floating interest rate swaps, was $193.8 million and $246.1 million for the nine months ended September 30, 2021 and 2020, 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 nine months ended September 30, 2021 and 2020 are summarized below:

- Capital expenditures during the nine months ended September 30, 2021 were $904.2 million, compared with $889.0 million for the same period in 2020.
- During the nine months ended September 30, 2021 and 2020, we paid $936.3 million and $189.9 million, respectively, for acquisitions and investments. During the nine months ended September 30, 2021 and 2020, we received $46.3 million and $32.5 million for business divestitures, respectively.

We intend to finance capital expenditures and acquisitions through cash on hand, 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 nine months ended September 30, 2021 and 2020 are summarized below:

- Net proceeds from notes payable and long-term debt and senior notes were $264.7 million during the nine months ended September 30, 2021, compared to net payments of $35.8 million in the same period in 2020.
- During the nine months ended September 30, 2021, we repurchased 1.6 million shares of our stock for $179.0 million compared to repurchases of 1.2 million shares for $98.8 million during the same period in 2020.
- Dividends paid were $406.5 million and $387.1 million during the nine months ended September 30, 2021 and 2020, respectively.
- During the nine months ended September 30, 2021 and 2020, cash paid for purchase price holdback releases and contingent purchase price related to acquisitions was $14.4 million and $9.7 million, respectively.

Financial Condition

Debt Obligations

As of September 30, 2021, we had $8.0 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 semiannually 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 $3.0

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 September 30, 2021.

For further discussion of the components of our overall debt, 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.

Credit Facilities

The 364-Day Credit Facility

In August 2020, we entered into a $1.0 billion 364-day unsecured revolving credit facility (the 364-Day Credit Facility), which matured in August 2021. As of December 31, 2020, we had no borrowings outstanding under our 364-Day Credit Facility.

The Credit Facility

In August 2021, we entered into a $3.0 billion unsecured revolving credit facility (as amended, the Credit Facility), which amends and restates the prior $2.25 billion unsecured revolving credit facility which would have matured in June 2023 (the Replaced Credit Facility). The Credit Facility matures in August 2026. As permitted by the Credit Facility, we have the right to 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, a daily floating London Interbank Offered Rate (LIBOR), or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Credit Facility agreement). On the earliest of (i) the date that all available tenors of U.S. dollar LIBOR have permanently or indefinitely ceased to be provided or have been announced to be no longer representative, (ii) June 30, 2023 or (iii) the effective date of an election to opt into a secured overnight financing rate (“SOFR”), the LIBOR rate will be replaced by a forward-looking term rate based on SOFR or a daily rate based on SOFR published on such date.

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 $2,296.7 million as of September 30, 2021. 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.

We had $364.7 million and $186.0 million outstanding under our Credit Facility and Replaced Credit Facility as of September 30, 2021 and December 31, 2020, respectively. We had $338.6 million and $376.5 million of letters of credit outstanding under our Credit Facility and Replaced Credit Facility as of September 30, 2021 and December 31, 2020, respectively.

Uncommitted Credit Facility

We also have an Uncommitted Credit Facility, which bears interest at LIBOR or a Cost of Funds rate (both as defined in the Uncommitted Credit Facility agreement), 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 September 30, 2021, we had $98.1 million outstanding under our Uncommitted Credit Facility. As of December 31, 2020, we had no borrowings outstanding under our Uncommitted Credit Facility.

Financial and Other Covenants

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 the 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). The Credit Facility provides that our total debt to EBITDA ratio may not exceed 3.75 to 1.00 as of the last day of any fiscal quarter. In the case of an "elevated ratio period", which may be elected by us if one or more acquisitions during a fiscal quarter involve aggregate consideration in excess of $200.0 million (the Trigger Quarter), the total debt to EBITDA ratio may not exceed 4.25 to 1.00 during the Trigger Quarter and for the three fiscal quarters thereafter. The Credit Facility also provides that there may not be more than two elevated ratio periods during the respective terms of the Credit Facility agreement. As of September 30, 2021, our total debt to EBITDA ratio was 2.84 compared to the 3.75 maximum allowed by the covenants. As of September 30, 2021, we were in compliance with the covenants under our Credit Facility, and we expect to be in compliance throughout the remainder of 2021.

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 the Credit Facility, as well as the occurrence of certain material adverse events, would constitute defaults and would allow the lenders under the Credit Facility to accelerate the maturity of all indebtedness under the Credit Facility. This could have an adverse effect on the availability of financial assurances. In addition, maturity acceleration on the 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 the Credit Facility for relief from the financial covenant 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 the Credit Facility or raise sufficient capital to repay such obligations in the event the maturity is accelerated.

Senior Notes and Debentures

During the second quarter of 2021, we paid the entire $35.3 million principal balance of our 9.250% debentures which matured in May 2021.

In November 2020, we issued $350.0 million of 0.875% senior notes due November 2025 (the 0.875% Notes) and $750.0 million of 1.750% senior notes due February 2032 (the 1.750% Notes). We used the net proceeds from the 0.875% Notes and 1.750% Notes to redeem all $850.0 million of the outstanding 3.550% senior notes due June 2022 and $250.0 million of the $550.0 million outstanding 4.750% senior notes due May 2023 (the 4.750% Notes).

In August 2020, we issued $650.0 million of 1.450% senior notes due February 2031 (the 1.450% Notes). We used the net proceeds to redeem all $600.0 million of the outstanding 5.250% senior notes due November 2021 plus a make-whole premium of $34.0 million. Additionally, we incurred a non-cash charge related to the unamortized deferred issuance costs of $0.5 million. The remaining proceeds were used for general corporate purposes.

In February 2020, we issued $600.0 million of 2.300% senior notes due March 2030 (the 2.300% Notes) and $400.0 million of 3.050% senior notes due March 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.

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

Derivative Instruments and Hedging Relationships

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).

Additionally, we amended certain interest rate lock agreements, extending the mandatory maturity date and dedesignated them as cash flow hedges (the Extended Interest Rate Locks). In addition, we entered into offsetting interest rate swaps to offset future exposures to fair value fluctuations of the Extended Interest Rate Locks.

For a description of our derivative contracts and hedge accounting, see Note 7, *Debt*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Tax-Exempt Financings

As of September 30, 2021 we had $1,151.6 million of certain variable rate tax-exempt financing outstanding with maturities ranging from 2023 to 2051. As of December 31, 2020, we had $1,104.7 million of certain variable rate tax-exempt financings outstanding with maturities ranging from 2021 to 2050. During the third quarter of 2021, we issued $175.0 million of tax exempt financings. During the second quarter of 2020, we issued $60.0 million of tax-exempt financings.

Finance Leases

We had finance lease liabilities of $244.5 million and $206.5 million as of September 30, 2021 and December 31, 2020, respectively, with maturities ranging from 2021 to 2063.

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 September 30, 2021, 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, 2020. 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 September 30, 2021, 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 $25 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 $25 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 $271.7 million during the nine months ended September 30, 2021, or 3.3% of revenue, compared to $204.4 million, or 2.7% of revenue, during the comparable period in 2020.

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 September 30, 2021, 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 $12 million.

Revenue from recycling processing and commodity sales during the nine months ended September 30, 2021 and 2020 was $310.6 million and $216.2 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 September 30, 2021, we had $1,621.9 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 $19 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 December 2020, we acquired all of the issued and outstanding equity interests of Randy's Sanitation, LLC and Randy's Rentals, LLC. In the same month, we also acquired certain assets and assumed certain liabilities from Gallegos Sanitation, Inc. and related entities as well as Eagle Waste & Recycling, Inc. and related entities. In May 2021, we acquired all of the issued and outstanding equity interests of Santek Waste Services, LLC. In June 2021, we acquired certain environmental services businesses from third parties. Additionally, in August 2021, we acquired all of the issued and outstanding shares of ACV Enviro Corporation. As permitted by the SEC Staff interpretive guidance for newly acquired businesses, management's assessment of our internal control over financial reporting as of September 30, 2021 did not include an assessment of internal control over financial reporting as it relates to these acquisitions. We will continue the process of implementing internal control over financial reporting for these acquired businesses. These businesses represented approximately 2% and 3% of our consolidated revenue for the three and nine months ended September 30, 2021, respectively.

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 recorded an aggregate accrual of approximately $27 million relating to our outstanding legal proceedings as of September 30, 2021. 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 $4 million higher than the amount recorded as of September 30, 2021.

Legal Proceedings over Certain Environmental Matters Involving Governmental Authorities with Possible Sanctions of $1,000,000 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 a specified threshold. Pursuant to Item 103, we use a reporting threshold of $1,000,000.

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. Allied-Niagara is negotiating a resolution to the FOV, including the amount of the penalty. We believe that any penalty assessed by the EPA in connection with this proceeding will not exceed our reporting threshold and therefore, we do not intend to report on this matter in the future.

ITEM 1A. RISK FACTORS.

Our risk factors are disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2020. There have been no material changes during the nine months ended September 30, 2021 from or updates to the risk factors discussed in Part I, Item 1A, Risk Factors, of our 2020 Annual Report on Form 10-K.

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 September 30, 2021:

	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)
July 1 - 31	474,802	$ 109.70	474,802	$ 1,907,814,988
August 1 - 31	94,708	$ 118.17	94,708	$ 1,896,623,372
September 1 -30	610,000	$ 124.00	610,000	$ 1,820,984,780
	1,179,510		1,179,510	

a. In October 2020, our Board of Directors approved a $2.0 billion share repurchase authorization effective starting January 1, 2021 and extending through December 31, 2023. 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 September 30, 2021, 0.3 million 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 2020 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

ber	Description of Exhibit
	Amended and Restated Credit Agreement, dated as of August 17, 2021, by and among Republic Services, Inc., as Borrower, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, and the other lenders party thereto (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K dated August 23, 2021).
	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
	Section 1350 Certification of Chief Executive Officer.
	Section 1350 Certification of Chief Financial Officer.
	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.
	XBRL Taxonomy Extension Schema Document.
	XBRL Taxonomy Extension Calculation Linkbase Document.
	XBRL Taxonomy Extension Labels Linkbase Document.
	XBRL Taxonomy Extension Presentation Linkbase Document.
	XBRL Taxonomy Extension Definition Linkbase Document.
	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:	October 28, 2021	By:	/s/ BRIAN DELGHIACCIO
			Brian DelGhiaccio **Executive Vice President, Chief Financial Officer (Principal Financial Officer)**
Date:	October 28, 2021	By:	/s/ BRIAN A. GOEBEL
			Brian A. Goebel **Vice President and Chief Accounting Officer (Principal Accounting Officer)**

EXHIBIT 31.1

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, Jon Vander Ark, 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/ JON VANDER ARK

Jon Vander Ark
President and Chief Executive Officer
(Principal Executive Officer)

Date: October 28, 2021

EXHIBIT 31.2

**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, Brian DelGhiaccio, 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/ BRIAN DELGHIACCIO

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

Date: October 28, 2021

EXHIBIT 32.1

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

In connection with the Quarterly Report on Form 10-Q of Republic Services, Inc. (the Company) for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Jon Vander Ark, President and 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/ JON VANDER ARK

Jon Vander Ark
President and Chief Executive Officer
(Principal Executive Officer)

Date: October 28, 2021

EXHIBIT 32.2

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

In connection with the Quarterly Report on Form 10-Q of Republic Services, Inc. (the Company) for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Brian DelGhiaccio, 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/ BRIAN DELGHIACCIO

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

Date: October 28, 2021