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, 2017

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

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

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

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of October 26, 2017, the registrant had outstanding 334,224,518 shares of Common Stock, par value $0.01 per share (excluding treasury shares of 15,721,744).

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, 2017	December 31, 2016
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 63.9	$ 67.8
Accounts receivable, less allowance for doubtful accounts and other of $36.7 and $44.0, respectively	1,126.9	994.8
Prepaid expenses and other current assets	205.9	221.9
Total current assets	1,396.7	1,284.5
Restricted cash and marketable securities	96.4	90.5
Property and equipment, net	7,750.1	7,588.6
Goodwill	11,233.6	11,163.2
Other intangible assets, net	152.1	182.3
Other assets	319.7	320.5
Total assets	$ 20,948.6	$ 20,629.6
LIABILITIES AND STOCKHOLDERS’ EQUITY		
Current liabilities:		
Accounts payable	$ 599.3	$ 553.8
Notes payable and current maturities of long-term debt	705.7	5.8
Deferred revenue	329.3	312.9
Accrued landfill and environmental costs, current portion	157.7	142.7
Accrued interest	69.0	71.8
Other accrued liabilities	730.5	725.0
Total current liabilities	2,591.5	1,812.0
Long-term debt, net of current maturities	7,152.0	7,653.1
Accrued landfill and environmental costs, net of current portion	1,669.5	1,684.8
Deferred income taxes and other long-term tax liabilities, net	1,267.5	1,210.2
Insurance reserves, net of current portion	276.5	274.6
Other long-term liabilities	317.4	301.2
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; 349.8 and 348.2 issued including shares held in treasury, respectively	3.5	3.5
Additional paid-in capital	4,821.2	4,764.5
Retained earnings	3,603.4	3,324.0
Treasury stock, at cost; 14.4 and 8.8 shares, respectively	(771.5)	(414.9)
Accumulated other comprehensive income, net of tax	15.4	14.2
Total Republic Services, Inc. stockholders’ equity	7,672.0	7,691.3
Noncontrolling interests in consolidated subsidiary	2.2	2.4
Total stockholders’ equity	7,674.2	7,693.7
Total liabilities and stockholders’ equity	$ 20,948.6	$ 20,629.6

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, 2017	Three Months Ended September 30, 2016	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016
Revenue	$ 2,562.0	$ 2,409.3	$ 7,481.5	$ 7,008.5
Expenses:				
Cost of operations	1,580.1	1,476.7	4,621.6	4,298.7
Depreciation, amortization and depletion	260.8	252.4	769.0	745.7
Accretion	20.0	19.7	59.9	59.3
Selling, general and administrative	266.7	235.4	783.2	720.1
Withdrawal costs - multiemployer pension funds	—	—	1.1	5.6
Gain on disposition of assets and asset impairments, net	(17.4)	—	(27.2)	—
Restructuring charges	3.7	7.2	12.2	33.5
Operating income	448.1	417.9	1,261.7	1,145.6
Interest expense	(90.0)	(96.3)	(269.0)	(281.3)
Loss from unconsolidated equity method investment	(2.2)	—	(8.2)	—
Loss on extinguishment of debt	—	(196.2)	—	(196.2)
Interest income	0.3	0.2	1.0	0.9
Other income, net	0.5	1.3	0.9	2.2
Income before income taxes	356.7	126.9	986.4	671.2
Provision for income taxes	133.4	41.2	371.9	247.6
Net income	223.3	85.7	614.5	423.6
Net income attributable to noncontrolling interests in consolidated subsidiary	(0.1)	(0.1)	(0.5)	(0.5)
Net income attributable to Republic Services, Inc.	$ 223.2	$ 85.6	$ 614.0	$ 423.1
Basic earnings per share attributable to Republic Services, Inc. stockholders:				
Basic earnings per share	$ 0.66	$ 0.25	$ 1.82	$ 1.23
Weighted average common shares outstanding	336.5	342.6	338.2	344.0
Diluted earnings per share attributable to Republic Services, Inc. stockholders:				
Diluted earnings per share	$ 0.66	$ 0.25	$ 1.81	$ 1.23
Weighted average common and common equivalent shares outstanding	338.5	344.0	340.1	345.3
Cash dividends per common share	$ 0.345	$ 0.320	$ 0.985	$ 0.920

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,	
	2017	2016	2017	2016
Net income	$ 223.3	$ 85.7	$ 614.5	$ 423.6
Other comprehensive income, net of tax				
Hedging activity:				
Settlements	(1.3)	(4.8)	(3.6)	(16.2)
Realized loss reclassified into earnings	1.7	9.5	4.8	21.6
Unrealized gain	3.9	3.2	—	2.1
Other comprehensive income, net of tax	4.3	7.9	1.2	7.5
Comprehensive income	227.6	93.6	615.7	431.1
Comprehensive income attributable to noncontrolling interests	(0.1)	(0.1)	(0.5)	(0.5)
Comprehensive income attributable to Republic Services, Inc.	$ 227.5	$ 93.5	$ 615.2	$ 430.6

The accompanying notes are an integral part of these statements.

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

	Republic Services, Inc. Stockholders' Equity								
	Common Stock				Treasury Stock				
	Shares	Amount	Additional Paid-In Capital	Retained Earnings	Shares	Amount	Accumulated Other Comprehensive Income, Net of Tax	Noncontrolling Interests In Consolidated Subsidiary	Total
Balance as of December 31, 2016	348.2	$ 3.5	$ 4,764.5	$ 3,324.0	(8.8)	$ (414.9)	$ 14.2	$ 2.4	$ 7,693.7
Net income	—	—	—	614.0	—	—	—	0.5	614.5
Other comprehensive income	—	—	—	—	—	—	1.2	—	1.2
Cash dividends declared	—	—	—	(331.9)	—	—	—	—	(331.9)
Issuances of common stock	1.6	—	26.7	—	—	—	—	—	26.7
Stock-based compensation	—	—	30.0	(2.7)	—	—	—	—	27.3
Purchase of common stock for treasury	—	—	—	—	(5.6)	(356.6)	—	—	(356.6)
Distributions paid	—	—	—	—	—	—	—	(0.7)	(0.7)
Balance as of September 30, 2017	349.8	$ 3.5	$ 4,821.2	$ 3,603.4	(14.4)	$ (771.5)	$ 15.4	$ 2.2	$ 7,674.2

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,	
	2017	2016
Cash provided by operating activities:		
Net income	$ 614.5	$ 423.6
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation, amortization, depletion and accretion	828.9	805.0
Non-cash interest expense	32.6	41.9
Restructuring related charges	12.2	33.5
Stock-based compensation	27.3	17.7
Deferred tax provision	60.5	58.2
Provision for doubtful accounts, net of adjustments	22.8	17.5
Loss on extinguishment of debt	—	196.2
Gain on disposition of assets and asset impairments, net	(26.5)	(0.3)
Withdrawal costs - multiemployer pension funds	1.1	5.6
Environmental adjustments	—	0.3
Loss from unconsolidated equity method investment	8.2	—
Excess income tax benefit from stock-based compensation activity	—	(8.4)
Other non-cash items	3.0	(12.1)
Change in assets and liabilities, net of effects from business acquisitions and divestitures:		
Accounts receivable	(149.0)	(70.8)
Prepaid expenses and other assets	(1.4)	(52.0)
Accounts payable	30.3	(19.5)
Restructuring expenditures	(14.6)	(24.2)
Capping, closure and post-closure expenditures	(44.5)	(56.7)
Remediation expenditures	(37.7)	(50.7)
Other liabilities	13.8	54.8
Cash provided by operating activities	1,381.5	1,359.6
Cash used in investing activities:		
Purchases of property and equipment	(769.0)	(738.7)
Proceeds from sales of property and equipment	4.2	7.4
Cash used in business acquisitions and investments, net of cash acquired	(136.4)	(30.7)
Cash used in business divestitures	(10.6)	—
Change in restricted cash and marketable securities	(5.9)	10.0
Other	(0.2)	(0.4)
Cash used in investing activities	(917.9)	(752.4)
Cash used in financing activities:		
Proceeds from notes payable and long-term debt	3,428.1	3,068.6
Proceeds from issuance of senior notes, net of discount	—	498.9
Payments of notes payable and long-term debt	(3,238.9)	(3,388.4)
Premiums paid on extinguishment of debt	—	(176.9)
Fees paid to issue senior notes and retire certain hedging relationships	—	(9.5)
Issuances of common stock	26.7	35.4
Excess income tax benefit from stock-based compensation activity	—	8.4
Purchases of common stock for treasury	(353.3)	(306.6)
Cash dividends paid	(324.8)	(309.9)
Distributions paid to noncontrolling interests in consolidated subsidiary	(0.7)	(0.7)
Other	(4.6)	(3.9)
Cash used in financing activities	(467.5)	(584.6)
(Decrease) increase in cash and cash equivalents	(3.9)	22.6
Cash and cash equivalents at beginning of year	67.8	32.4
Cash and cash equivalents at end of period	$ 63.9	$ 55.0

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 the second largest provider of non-hazardous solid waste collection, transfer, recycling, disposal and energy services in the United States, as measured by revenue. We manage and evaluate our operations through two field groups, Group 1 and Group 2, which we have identified as our reportable segments.

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

We have prepared these unaudited consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information related to our organization, significant accounting policies and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP has been condensed or omitted. In the opinion of management, these financial statements include all adjustments that, unless otherwise disclosed, are of a normal recurring nature and necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. Operating results for interim periods are not necessarily indicative of the results you can expect for a full year. You should read these financial statements in conjunction with our audited consolidated financial statements and notes thereto appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

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, 2016. Our actual results may differ significantly from our estimates.

New Accounting Pronouncements

Accounting Standards Adopted

Stock Compensation

On January 1, 2017, Republic adopted the Financial Accounting Standards Board's ("FASB") Accounting Standards Update ("ASU") 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). Under ASU 2016-09, entities are permitted to make an accounting policy election to either estimate forfeitures on share-based payment awards, as previously required, or to recognize forfeitures as they occur. We have elected to recognize forfeitures as they occur. The impact of this change in accounting policy was determined to be insignificant and resulted in no cumulative-effect change to our retained earnings.

ASU 2016-09 also requires that all income tax effects related to settlements of share-based payment awards be reported in earnings as an increase or decrease to income tax expense (benefit), net. Previously, income tax benefits at settlement of an award were reported as an increase (or decrease) to additional paid-in capital to the extent that those benefits were greater than (or less than) the income tax benefits reported in earnings during the award's vesting period. The requirement to report the income tax effects in earnings has been applied on a prospective basis to settlements occurring on or after January 1, 2017, which resulted in a $15.6 million reduction to the current tax provision in the consolidated financial statements for the nine months ended September 30, 2017.

ASU 2016-09 also requires that all income tax-related cash flows resulting from share-based payments be reported as operating activities in the statement of cash flows. Previously, income tax benefits at settlement of an award were reported as a reduction to operating cash flows and an increase to financing cash flows to the extent that those benefits exceeded the income tax benefits reported in earnings during the award's vesting period. Republic has elected to apply that change in cash flow classification on a prospective basis, leaving previously reported net cash provided by operating activities and net cash used in financing activities in the accompanying Unaudited Consolidated Statement of Cash Flows for the period ended September 30, 2016 unchanged. The remaining provisions of ASU 2016-09 did not have a material impact on the accompanying consolidated financial statements.

Accounting Standards Issued but not yet Adopted

Revenue Recognition

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs-Contracts with Customers (Subtopic 340-40)* ("ASU 2014-09"). ASU 2014-09 requires the use of a five step methodology to depict the transfer of promised goods and services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard also requires enhanced disclosures regarding revenue recognition. Due to the complexity of the new standard, the FASB subsequently issued several amendments intended to clarify ASU 2014-09. In July 2015, the FASB voted to amend the guidance by approving a one-year deferral of the effective date. As such, Republic will adopt the standard beginning January 1, 2018. As we progress toward the adoption of the standard, we continually monitor clarifying interpretations.

The new standard must be adopted using either a full retrospective approach for all periods presented in the period of adoption or a modified retrospective approach. We currently plan to adopt the standard using the modified retrospective approach and recognize a cumulative effect adjustment to Retained Earnings as of the date of adoption. Under ASU 2014-09, we will record revenue when control is transferred to the customer, generally at the time we provide waste collection services. We are adopting the standard through the application of the portfolio approach. We selected a sample of customer contracts to assess under the guidance of the new standard that are characteristically representative of each portfolio. We have completed our review of the sample contracts, and we do not anticipate a significant change to the pattern or timing of revenue recognition as a result of adopting the new standard.

While we do not expect a significant change to the timing or pattern of revenue recognition, we identified certain consideration payable to our customers that will be recorded as a reduction of revenue in accordance with Topic 606. These costs are currently recorded as a component of cost of operations. We estimate these costs to total between approximately $30 million and $40 million per quarter.

We have historically recognized certain costs to obtain and fulfill our contracts as a component of selling, general and administrative expenses as they are incurred. We are currently quantifying the incremental contract costs that may be recognized as an asset under the new standard. In addition, we historically recognized certain upfront payments to acquire customer contracts as an asset in our consolidated balance sheet and amortized the asset as a component of depreciation, amortization and depletion over the respective contract life. We estimate the amortization expense recognized on a quarterly basis to total approximately $1 million. In accordance with Topic 606, we expect to amortize the asset as a reduction of revenue.

During our review of the sample contracts, we identified certain contracts with customers in our collection and recycling lines of business that contain commodity rebates. We continue to assess the presentation of the rebates to be paid to the customer in accordance with Topic 606. We do not anticipate a change to the timing or pattern of recognizing the rebates.

We also assessed the disclosure requirements under ASU 2014-09 and we anticipate disclosing additional information, as necessary, to supplement our disaggregated revenue disclosure, as currently presented in our table showing total reported revenue by service line, and our discussion regarding the nature of our customer contracts included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

Leases

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* ("ASU 2016-02"), which increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. ASU 2016-02 requires lessees to recognize lease assets and liabilities for most leases classified as operating leases under previous U.S. GAAP. The standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. As such, Republic will adopt the standard beginning January 1, 2019. We are currently assessing the potential effect this guidance may have on our consolidated financial statements.

Statement of Cash flows

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230) - Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 provides guidance on debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies, distributions received from equity method investees, beneficial interests in securitization transactions, and separately identifiable cash flows and application of the predominance principle. ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years, and will be applied using a retrospective transition method to each period presented. As such, Republic will adopt the standard beginning January 1, 2018. We are currently assessing the potential effect this guidance may have on our consolidated financial statements. However, at this time we do not expect significant changes to our reported cash flows.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230) - Restricted Cash* ("ASU 2016-18"), which clarifies how entities should present restricted cash and restricted cash equivalents in the statement of cash flows. ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be 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. ASU 2016-18 is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those years, and will be applied using a retrospective transition method to each period presented. As such, Republic will adopt the standard beginning January 1, 2018. We are currently assessing the potential effect this guidance may have on our consolidated financial statements.

Business Combinations

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805) - Clarifying the Definition of Business* ("ASU 2017-01"), which assists entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. ASU 2017-01 provides a screen that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. If the screen is not met, the entity then evaluates whether the set meets the requirement that a business include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. ASU 2017-01 is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those years, and will be applied prospectively to any transactions occurring within the period of adoption. As such, Republic will adopt the standard beginning January 1, 2018. We are currently assessing the potential effect this guidance may have on our consolidated financial statements.

Goodwill

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment* ("ASU 2017-14"). Under this guidance, entities should perform their annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. Entities should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. ASU 2017-14 is effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those years, and will be applied prospectively. Early adoption is permitted for interim and annual goodwill impairment tests performed on testing dates after January 1, 2017.

In conjunction with our annual goodwill impairment assessment, we early adopted this standard effective October 1, 2017. We do not expect the adoption to have a material impact on the accompanying consolidated financial statements. Additional information regarding the results of our annual goodwill impairment assessment will be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

Retirement Benefits

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715) - Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* ("ASU 2017-07"), which requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. If a separate line item or items are used to present the other components of net benefit cost, that line item or items must be appropriately described. If a separate line item or items are not used, the line item or items used in the income statement to present the other components of net benefit cost must be disclosed. ASU 2017-07 also allows only the service cost component to be eligible for capitalization when applicable (e.g., as a cost of internally manufactured inventory or a self-constructed asset).

ASU 2017-07 is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those years. The ASU will be applied retrospectively for the presentation of the service cost component and the other components of net periodic pension cost and net periodic postretirement benefit cost in the income statement and prospectively, on and after the effective date, for the capitalization of the service cost component of net periodic pension cost and net periodic postretirement benefit in assets. Early adoption is permitted as of the beginning of an annual period for which financial statements (interim or annual) have not been issued or made available for issuance. Republic will adopt the standard beginning January 1, 2018. We are currently assessing the effect this guidance may have on our consolidated financial statements.

Stock Compensation

In May 2017, the FASB issued ASU 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"), which provides clarification on when modification accounting should be used for changes to the terms or conditions of a share-based payment award. ASU 2017-09 does not change the accounting for modifications but clarifies that modification accounting guidance should only be applied if there is a change to the value, vesting conditions, or award classification and would not be required if the changes are considered non-substantive. ASU 2017-09 is effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. Early adoption is permitted, including at an interim period. ASU 2017-09 is to be applied on a prospective basis to an award modified on or after the adoption date. As such, Republic will adopt the standard beginning January 1, 2018. We do not expect the adoption of ASU 2017-09 to have a material impact on our condensed consolidated financial statements.

Derivatives and Hedging

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12"). ASU 2017-12 intends to address concerns through changes to hedge accounting guidance which will accomplish the following: a) Expand hedge accounting for nonfinancial and financial risk components and amend measurement methodologies to more closely align hedge accounting with a company's risk management activities; b) Decrease the complexity of preparing and understanding hedge results through eliminating the separate measurement and reporting of hedge ineffectiveness; c) Enhance transparency, comparability and understandability of hedge results through enhanced disclosures and changing the presentation of hedge results to align the effects of the hedging instrument and the hedged item; and d) Reduce the cost and complexity of applying hedge accounting by simplifying the manner in which assessments of hedge effectiveness may be performed. ASU 2017-12 is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted in any interim period following the issuance date. We are currently assessing the effect this guidance may have on our consolidated financial statements.

2. BUSINESS ACQUISITIONS AND RESTRUCTURING CHARGES

Acquisitions

We acquired various waste businesses during the nine months ended September 30, 2017 and 2016. The purchase price for these acquisitions and the allocations of the purchase price follow:

	2017	2016
Purchase price:		
Cash used in acquisitions, net of cash acquired	$ 136.0	$ 30.7
Contingent consideration	5.2	—
Holdbacks	7.7	3.3
Fair value of operations surrendered	70.1	—
Total	219.0	34.0
Allocated as follows:		
Accounts receivable	10.6	0.5
Landfill airspace	28.0	—
Property and equipment	76.3	11.8
Other assets	0.1	0.1
Inventory	0.7	—
Environmental remediation liabilities	(0.1)	(0.1)
Closure and post-closure liabilities	(5.4)	(0.1)
Other liabilities	(6.5)	(0.7)
Fair value of tangible assets acquired and liabilities assumed	103.7	11.5
Excess purchase price to be allocated	$ 115.3	$ 22.5
Excess purchase price allocated as follows:		
Other intangible assets	$ 20.1	$ 5.3
Goodwill	95.2	17.2
Total allocated	$ 115.3	$ 22.5

One of our third quarter 2017 acquisitions included certain hauling, recycling and landfill operations, the effects of which impacted both of our operating segments. On a preliminary basis, we recorded $34.8 million of property and equipment, $8.8 million of intangible assets and $26.4 million goodwill. Contemporaneous with this acquisition, we divested certain hauling operations in our Group 1 operating segment with a fair value of approximately $70 million, resulting in a gain on disposition of $17.1 million.

The purchase price allocations are preliminary and are 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. 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.

ReCommunity Acquisition - Subsequent Event

In October 2017, we acquired all of the issued and outstanding shares of RE Community Holdings II, Inc. ("ReCommunity") for approximately $165 million, net of cash acquired, plus the assumption of certain capital leases. Prior to the acquisition, ReCommunity was the largest independent recycling-processing company in the United States, with 26 recycling centers in 14 states, operating primarily in locations where Republic maintains a leading market presence.

Restructuring Charges

In January 2016, we realigned our field support functions by combining our three regions into two field groups, consolidating our areas and streamlining select operational support roles at our Phoenix headquarters. These changes included reducing administrative staffing levels, relocating office space and closing certain office locations. Additionally during 2016, we began the redesign of our back-office functions as well as the consolidation of over 100 customer service locations into three Customer Resource Centers. The savings realized from these restructuring efforts have been reinvested in our customer-focused programs and initiatives. We expect our consolidation efforts to continue through 2017 and 2018.

We incurred restructuring charges of $3.7 million and $12.2 million during the three and nine months ended September 30, 2017, respectively, and $7.2 million and $33.5 million during the three and nine months ended September 30, 2016, respectively, that consisted of severance and other employee termination benefits, transition costs, relocation benefits, and the closure of offices with lease agreements with non-cancelable terms. We paid $3.7 million and $14.6 million during the three and nine months ended September 30, 2017, respectively, and $9.7 million and $24.2 million during the three and nine months ended September 30, 2016, respectively, related to these restructuring efforts. We expect to incur additional charges of between approximately $1 million to $2 million for the remainder of 2017 related to our field realignment, the consolidation of our customer service locations, and the redesign of our back-office functions. Substantially all of these restructuring charges will be recorded in our corporate segment.

3. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

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

Goodwill

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

	Balance as of December 31, 2016	Acquisitions	Divestitures	Adjustments to Acquisitions and Other	Balance as of September 30, 2017
Group 1	$ 5,258.2	$ 27.7	$ (23.5)	$ (6.1)	$ 5,256.3
Group 2	5,905.0	67.5	(1.1)	5.9	5,977.3
Total	$ 11,163.2	$ 95.2	$ (24.6)	$ (0.2)	$ 11,233.6

Adjustments to acquisitions during the nine months ended September 30, 2017 primarily related to deferred taxes.

Other Intangible Assets, Net

Other intangible assets, net, include values assigned to customer relationships, franchise agreements, other municipal agreements, non-compete agreements and trade names, and are amortized over periods ranging from 1 to 20 years. A summary of the activity and balances by intangible asset type follows:

	Gross Intangible Assets			Accumulated Amortization			
	Balance as of December 31, 2016	Acquisitions	Balance as of September 30, 2017	Balance as of December 31, 2016	Additions Charged to Expense	Balance as of September 30, 2017	Other Intangible Assets, Net as of September 30, 2017
Customer relationships, franchise and other municipal agreements	$ 650.8	$ 11.3	$ 662.1	$ (492.5)	$ (47.0)	$ (539.5)	$ 122.6
Non-compete agreements	32.1	3.1	35.2	(25.3)	(2.4)	(27.7)	7.5
Other intangible assets	67.0	5.7	72.7	(49.8)	(0.9)	(50.7)	22.0
Total	$ 749.9	$ 20.1	$ 770.0	$ (567.6)	$ (50.3)	$ (617.9)	$ 152.1

4. OTHER ASSETS

Prepaid Expenses and Other Current Assets

A summary of prepaid expenses and other current assets as of September 30, 2017 and December 31, 2016 follows:

	2017	2016
Prepaid expenses	$ 86.2	$ 74.5
Inventories	47.8	44.0
Other non-trade receivables	30.3	31.4
Reinsurance receivable	21.8	15.0
Income tax receivable	14.9	51.5
Commodity and fuel hedge assets	1.2	—
Other current assets	3.7	5.5
Total	$ 205.9	$ 221.9

Other Assets

A summary of other assets as of September 30, 2017 and December 31, 2016 follows:

	2017	2016
Deferred compensation plan	$ 95.7	$ 87.9
Reinsurance receivable	70.1	69.7
Amounts recoverable for capping, closure and post-closure obligations	29.9	27.7
Interest rate swaps	28.7	32.4
Investments	16.4	24.8
Other	78.9	78.0
Total	$ 319.7	$ 320.5

5. OTHER LIABILITIES

Other Accrued Liabilities

A summary of other accrued liabilities as of September 30, 2017 and December 31, 2016 follows:

	2017	2016
Accrued payroll and benefits	$ 189.4	$ 195.4
Insurance reserves, current portion	140.4	143.9
Accrued fees and taxes	133.6	131.2
Accrued dividends	115.7	108.6
Accrued professional fees and legal settlement reserves	35.3	49.2
Ceded insurance reserves, current portion	21.8	15.0
Current tax liabilities	9.6	1.4
Commodity and fuel hedge liabilities	1.6	5.9
Other	83.1	74.4
Total	$ 730.5	$ 725.0

Other Long-Term Liabilities

A summary of other long-term liabilities as of September 30, 2017 and December 31, 2016 follows:

	2017	2016
Deferred compensation plan	$ 94.6	$ 88.3
Contingent consideration and acquisition holdbacks	71.6	66.0
Ceded insurance reserves	70.1	69.7
Withdrawal liability - multiemployer pension funds	12.6	11.7
Legal settlement reserves	10.0	1.7
Pension and other post-retirement liabilities	6.2	6.7
Other	52.3	57.1
Total	$ 317.4	$ 301.2

Insurance Reserves

Our liabilities for unpaid and incurred but not reported claims as of September 30, 2017 and December 31, 2016 (which include claims for workers' compensation, commercial general and auto liability, and employee-related health care benefits) were $416.9 million and $418.5 million, respectively, under our risk management program and are included in other accrued liabilities and insurance reserves, net of current portion, in our consolidated balance sheets. While the ultimate amount of claims incurred depends on future developments, we believe the recorded reserves are adequate to cover the future payment of claims; however, it is possible that these recorded reserves may not be adequate to cover the future payment of claims. Adjustments, if any, to estimates recorded resulting from ultimate claim payments will be reflected in our consolidated statements of income in the periods in which such adjustments are known.

6. LANDFILL AND ENVIRONMENTAL COSTS

As of September 30, 2017, we owned or operated 193 active landfills with total available disposal capacity of approximately 5.0 billion in-place cubic yards. We also have post-closure responsibility for 124 closed landfills.

Accrued Landfill and Environmental Costs

A summary of accrued landfill and environmental liabilities as of September 30, 2017 and December 31, 2016 follows:

	2017	2016
Landfill final capping, closure and post-closure liabilities	$ 1,252.4	$ 1,224.6
Environmental remediation liabilities	574.8	602.9
Total accrued landfill and environmental costs	1,827.2	1,827.5
Less: current portion	(157.7)	(142.7)
Long-term portion	$ 1,669.5	$ 1,684.8

Final Capping, Closure and Post-Closure Costs

The following table summarizes the activity in our asset retirement obligation liabilities, which include liabilities for landfill final capping, closure and post-closure, for the nine months ended September 30, 2017 and 2016:

	2017	2016
Asset retirement obligation liabilities, beginning of year	$ 1,224.6	$ 1,181.6
Non-cash additions	34.1	30.4
Acquisitions, net of divestitures and other adjustments	(19.6)	0.5
Asset retirement obligation adjustments	(2.1)	(3.2)
Payments	(44.5)	(56.7)
Accretion expense	59.9	59.3
Asset retirement obligation liabilities, end of period	1,252.4	1,211.9
Less: current portion	(84.5)	(94.3)
Long-term portion	$ 1,167.9	$ 1,117.6

We review annually, in the fourth quarter, and update as necessary, our estimates of asset retirement obligation liabilities. However, if there are significant changes in the facts and circumstances related to a site during the year, we will update our assumptions prospectively in the period that we know all the relevant facts and circumstances and make adjustments as appropriate. During the nine months ended September 30, 2017, we transferred our ownership of the landfill gas collection and control system and the remaining post-closure and environmental liabilities of $24.8 million and $6.3 million, respectively, associated with one of our divested landfills.

The fair value of assets that are legally restricted for purposes of settling final capping, closure and post-closure liabilities was $28.4 million and $27.9 million as of September 30, 2017 and December 31, 2016, respectively, and is included in restricted cash and marketable securities in our consolidated balance sheets.

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, 2017 would be approximately $377 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, 2017 and 2016:

	2017	2016
Environmental remediation liabilities, beginning of year	$ 602.9	$ 646.1
Net additions charged to expense	—	0.3
Payments	(37.7)	(50.7)
Accretion expense (non-cash interest expense)	15.7	17.6
Acquisitions, net of divestitures and other adjustments	(6.1)	1.8
Environmental remediation liabilities, end of period	574.8	615.1
Less: current portion	(73.2)	(82.7)
Long-term portion	$ 501.6	$ 532.4

Bridgeton Landfill. During the nine months ended September 30, 2017, we paid $13.9 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 remediation liability. As of September 30, 2017, the remediation liability recorded for this site was $183.3 million, of which approximately $13 million is expected to be paid during the remainder of 2017. We believe the remaining reasonably possible high end of our range would be approximately $156 million higher than the amount recorded as of September 30, 2017.

7. DEBT

The carrying value of our notes payable, capital leases and long-term debt as of September 30, 2017 and December 31, 2016 is listed in the following table, and is adjusted for the fair value of interest rate swaps, unamortized discounts, deferred issuance costs and the unamortized portion of adjustments to fair value recorded in purchase accounting. Original issue discounts and adjustments to fair value recorded in purchase accounting are amortized to interest expense over the term of the applicable instrument using the effective interest method.

		September 30, 2017			December 31, 2016		
Maturity	Interest Rate	Principal	Adjustments	Carrying Value	Principal	Adjustments	Carrying Value
Credit facilities:							
Uncommitted Credit Facility	Variable	$ 43.0	$ —	$ 43.0	$ —	$ —	$ —
June 2019	Variable	—	—	—	140.0	—	140.0
May 2021	Variable	365.0	—	365.0	70.0	—	70.0
Senior notes:							
May 2018	3.800	700.0	(0.5)	699.5	700.0	(1.2)	698.8
September 2019	5.500	650.0	(2.4)	647.6	650.0	(3.3)	646.7
March 2020	5.000	850.0	(2.0)	848.0	850.0	(2.6)	847.4
November 2021	5.250	600.0	(1.7)	598.3	600.0	(1.9)	598.1
June 2022	3.550	850.0	(4.8)	845.2	850.0	(5.6)	844.4
May 2023	4.750	550.0	2.6	552.6	550.0	3.5	553.5
March 2025	3.200	500.0	(5.0)	495.0	500.0	(5.4)	494.6
June 2026	2.900	500.0	(5.1)	494.9	500.0	(5.5)	494.5
March 2035	6.086	181.9	(15.0)	166.9	181.9	(15.4)	166.5
March 2040	6.200	399.9	(3.9)	396.0	399.9	(3.9)	396.0
May 2041	5.700	385.7	(5.5)	380.2	385.7	(5.6)	380.1
Debentures:							
May 2021	9.250	35.3	(1.0)	34.3	35.3	(1.1)	34.2
September 2035	7.400	148.1	(34.7)	113.4	148.1	(35.2)	112.9
Tax-exempt:							
2019 - 2044	0.950 - 5.625	1,079.1	(5.9)	1,073.2	1,079.1	(6.4)	1,072.7
Capital leases:							
2017 - 2046	3.980 - 12.203	104.6	—	104.6	108.5	—	108.5
Total Debt		$ 7,942.6	$ (84.9)	7,857.7	$ 7,748.5	$ (89.6)	7,658.9
Less: current portion				(705.7)			(5.8)
Long-term portion				$ 7,152.0			$ 7,653.1

Credit Facilities

In 2016, we entered into a $1.0 billion unsecured revolving credit facility (the "Replacement Credit Facility"), which replaced our $1.0 billion credit facility maturing in May 2017. The Replacement Credit Facility matures in May 2021 and includes a feature that allows us to increase availability, at our option, by an aggregate amount up to $500.0 million through increased commitments from existing lenders or the addition of new lenders. At our option, borrowings under the Replacement Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Replacement Credit Facility).

Contemporaneous with the execution of the Replacement Credit Facility, we entered into Amendment No. 1 to our existing $1.25 billion unsecured credit facility (the "Existing Credit Facility" and, together with the Replacement Credit Facility, the "Credit Facilities"), to conform certain terms of the Existing Credit Facility with those of the Replacement Credit Facility. Amendment No. 1 does not extend the maturity date of the Existing Credit Facility, which matures in June 2019. The Existing Credit Facility also maintains the feature that allows us to increase availability, at our option, by an aggregate amount of up to $500.0 million through increased commitments from existing lenders or the addition of new lenders.

Our Credit Facilities are subject to facility fees based on applicable rates defined in the credit facility agreements and the aggregate commitments, regardless of usage. Availability under our Credit Facilities totaled $1,405.3 million and $1,543.1 million as of September 30, 2017 and December 31, 2016, respectively, and can be used for working capital, capital expenditures, acquisitions, letters of credit and other general corporate purposes. The credit agreements require us to comply with financial and other covenants. We may pay dividends and repurchase common stock if we are in compliance with these covenants. As of September 30, 2017, we had $365.0 million of borrowings under our Credit Facilities and $210.0 million of borrowings as of December 31, 2016. We had $461.5 million and $478.4 million of letters of credit outstanding under our Credit Facilities as of September 30, 2017 and December 31, 2016, respectively.

During 2016, we increased the size of our existing unsecured credit facility (the "Uncommitted Credit Facility") to $135.0 million, with all other terms of the agreement remaining unchanged. Our Uncommitted Credit Facility bears interest at LIBOR, plus an applicable margin and is subject to facility fees defined in the agreement, regardless of usage. We can use borrowings under the Uncommitted Credit Facility for working capital and other general corporate purposes. The agreement governing our Uncommitted Credit Facility requires us to comply with certain covenants. The Uncommitted Credit Facility may be terminated by either party at any time. As of September 30, 2017 we had $43.0 million of borrowings and no borrowings as of December 31, 2016, under our Uncommitted Credit Facility.

Senior Notes and Debentures

During 2016 we issued $500.0 million of 2.90% senior notes due 2026 (the "2.90% Notes"). We used the net proceeds from the 2.90% Notes to purchase outstanding notes and debentures with coupons ranging from 5.70% to 7.40%.

Our senior notes and debentures are general unsecured obligations. Interest is payable semi-annually. The senior notes have a make-whole provision that is exercisable at any time prior to their respective maturity dates at a stated redemption price.

Tax-Exempt Financings

As of September 30, 2017 and December 31, 2016, we had $1,073.2 million and $1,072.7 million, respectively, of fixed and variable rate tax-exempt financings outstanding with maturities ranging from 2019 to 2044. Approximately 90% of our tax-exempt financings are remarketed quarterly 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. To date, the remarketing agents have been able to remarket our variable rate unsecured tax-exempt bonds. These bonds have been classified as long-term because of our ability and intent to refinance them using availability under our revolving Credit Facilities, if necessary.

Capital Leases

We had capital lease liabilities of $104.6 million and $108.5 million as of September 30, 2017 and December 31, 2016, respectively, with maturities ranging from 2017 to 2046.

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 have also entered into interest rate swap and lock agreements to manage risk associated with interest rates, either to effectively convert specific fixed rate debt to a floating rate (fair value hedges), or to lock interest rates in anticipation of future debt issuances (cash flow hedges).

Fair Value Hedges

During the second half of 2013, we entered into various interest rate swap agreements relative to our 4.750% fixed rate senior notes due in May 2023. The goal was to reduce overall borrowing costs and rebalance our debt portfolio's ratio of fixed to floating interest rates. As of September 30, 2017, these swap agreements had a total notional value of $300.0 million and mature in May 2023, which is identical to the maturity of the hedged senior notes. We pay interest at floating rates based on changes in LIBOR and receive interest at a fixed rate of 4.750%. These transactions were designated as fair value hedges because the swaps hedge against the changes in fair value of the fixed rate senior notes resulting from changes in interest rates.

As of September 30, 2017 and December 31, 2016, the interest rate swap agreements are reflected at their fair value of $11.6 million and $12.2 million, respectively, and are included in other assets. 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 $1.1 million and $3.8 million during the three and nine months ended September 30, 2017, respectively, and $1.5 million and $4.9 million during the three and nine months ended September 30, 2016, respectively, related to net swap settlements for these interest rate swap agreements, which is included as an offset to interest expense in our unaudited consolidated statements of income.

For the three months ended September 30, 2017 and 2016, we recognized gains of $1.0 million and $4.5 million, respectively, on the change in fair value of the hedged senior notes attributable to changes in the benchmark interest rate, and (losses) of $(0.8) million and $(3.8) million, respectively, on the related interest rate swaps. For the nine months ended September 30, 2017 and 2016, we recognized a gain (loss) of $1.3 million and $(9.6) million, respectively, on the change in fair value of the hedged senior notes attributable to changes in the benchmark interest rate, and a (loss) gain of $(0.6) million and $11.4 million, respectively, on the related interest rate swaps. The net amount of these fair value changes represents hedge ineffectiveness, which is recorded directly in earnings as other income, net.

Cash Flow Hedges

During the nine months ended September 30, 2017, we entered into interest rate lock agreements having an aggregate notional amount of $300.0 million with fixed interest rates ranging from 2.170% to 2.418%. During 2016, we also entered into a number of interest rate lock agreements having an aggregate notional amount of $525.0 million with fixed interest rates ranging from 1.900% to 2.280%. Upon the expected issuance of the senior notes, we will terminate the interest rate locks and settle with our counterparties. These transactions were accounted for as cash flow hedges. The fair value of our interest rate locks as of September 30, 2017 was determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy). The aggregate fair values of the outstanding interest rate locks as of September 30, 2017 and December 31, 2016 were $17.1 million and $20.2 million, respectively, and were recorded in other assets in our consolidated balance sheet. As of September 30, 2017 and December 31, 2016, the effective portion of the interest rate locks recorded as a component of accumulated other comprehensive income, net of tax, was $10.3 million and $12.2 million, respectively.

As of September 30, 2017 and December 31, 2016, the effective portion of our previously terminated interest rate locks, recorded as a component of accumulated other comprehensive income, net of tax, was $12.2 million and $13.4 million, respectively. The effective portion of the interest rate locks is amortized as an adjustment to interest expense over the life of the issued debt using the effective interest method. We expect to amortize approximately $1.5 million of net expense, net of tax, over the next twelve months as a yield adjustment of our senior notes.

The effective portion of the interest rate locks amortized as a net increase to interest expense was $0.7 million and $7.8 million during the three months ended September 30, 2017 and 2016, respectively, and $2.0 million and $9.1 million during the nine months ended September 30, 2017 and 2016, respectively.

8. INCOME TAXES

Our effective tax rate, exclusive of noncontrolling interests, for the three and nine months ended September 30, 2017 was 37.4% and 37.7%, respectively. Our effective tax rate, exclusive of noncontrolling interests, for each of the three and nine months ended September 30, 2017 was favorably affected by the realization of federal and state benefits as well as adjustments to deferred taxes due to the completion of our 2016 tax returns, the adoption of ASU 2016-09, and by tax refunds received as a result of filing various state amended tax returns. In addition, our effective rate was unfavorably impacted by the write-off of goodwill associated with a divestiture that had no corresponding tax basis.

Our effective tax rate, exclusive of noncontrolling interests, for the three and nine months ended September 30, 2016 was 32.5% and 36.9%, respectively. The effective tax rate for the three and nine months ended September 30, 2016 was favorably affected by the realization of federal and state benefits on our 2015 tax returns, certain debt refinancings and the resolution of various state and federal tax matters.

Cash paid for income taxes was $270.5 million and $145.7 million for the nine months ended September 30, 2017 and 2016, respectively. The year over year increase is attributable to lower cash taxes paid in 2016 as a result of our 2016 debt refinancing activities.

We are subject to income tax in the United States and Puerto Rico, as well as in multiple state jurisdictions. Our compliance with income tax rules and regulations is periodically audited by taxing authorities. These authorities may challenge the positions taken in our tax filings. We are currently under examination or administrative review by state and local taxing authorities for various tax years. We recognize interest and penalties as incurred within the provision for income taxes in the consolidated statements of income. As of September 30, 2017, we accrued a liability for penalties of $0.5 million and a liability for interest (including interest on penalties) of $12.9 million related to our uncertain tax positions.

We believe that 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. During the next twelve months, it is reasonably possible that the amount of unrecognized tax benefits will increase or decrease. Gross unrecognized benefits we expect to settle in the next twelve months are in the range of zero to $10 million.

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 weight given to the positive and negative evidence is commensurate with the extent such evidence can be objectively verified. We adjust the valuation allowance in the period management determines it is more likely than not that deferred tax assets will or will not be realized.

Substantially all of our valuation allowance is associated with state loss carryforwards. 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. We continue to regularly monitor both positive and negative evidence in determining the ongoing need for a valuation allowance. As of September 30, 2017, the valuation allowance associated with our state loss carryforwards was approximately $60 million.

9. STOCK-BASED COMPENSATION

Available Shares

In March 2013, our board of directors approved the Republic Services, Inc. Amended and Restated 2007 Stock Incentive Plan (the Plan), and in May 2013 our shareholders ratified the Plan. We currently have approximately 14.0 million shares of common stock reserved for future grants under the Plan.

Stock Options

The following table summarizes stock option activity for the nine months ended September 30, 2017:

	Number of Shares (in millions)	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in millions)
Outstanding as of December 31, 2016	3.2	$ 30.35		
Granted	—	—		
Exercised	(1.0)	29.76		$ 32.4
Forfeited or expired	—	—		
Outstanding as of September 30, 2017	2.2	$ 30.62	1.8	$ 77.0
Exercisable as of September 30, 2017	2.1	$ 30.51	1.8	$ 74.6

During the nine months ended September 30, 2017 and 2016, compensation expense for stock options was $0.1 million and $0.4 million, respectively.

As of September 30, 2017, total unrecognized compensation expense related to outstanding stock options was less than $0.1 million, which will be recognized over a weighted average period of 0.6 year. The total fair value of stock options that vested during the nine months ended September 30, 2017 was $3.0 million.

Restricted Stock Units

The following table summarizes restricted stock unit (RSU) activity for the nine months ended September 30, 2017:

	Number of RSUs (in thousands)	Weighted Average Grant Date Fair Value per Share	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in millions)
Outstanding as of December 31, 2016	1,823.8	$ 37.49		
Granted	624.7	60.11		
Vested and issued	(586.7)	36.08		
Forfeited	(57.5)	47.29		
Outstanding as of September 30, 2017	1,804.3	$ 45.47	1.2	$ 119.2
Vested and unissued as of September 30, 2017	681.0	$ 32.89		

During the nine months ended September 30, 2017, we awarded our non-employee directors 47,913 RSUs, which vested immediately. During the nine months ended September 30, 2017, we awarded 547,815 RSUs to executives and employees that vest in four equal annual installments beginning on the anniversary date of the original grant or cliff vest after four years. In addition, 29,047 RSUs were earned as dividend equivalents. The RSUs do not carry any voting or dividend rights, except the right to receive additional RSUs in lieu of dividends.

The fair value of RSUs is based on the closing market price on the date of the grant. The compensation expense related to RSUs is amortized ratably over the vesting period, or to the employee's retirement eligible date, if earlier.

During the nine months ended September 30, 2017 and 2016, compensation expense related to RSUs totaled $18.3 million and $13.5 million, respectively. As of September 30, 2017, total unrecognized compensation expense related to outstanding RSUs was $47.7 million, which will be recognized over a weighted average period of 3.0 years.

Performance Shares

During the nine months ended September 30, 2017, we awarded 116,872 performance shares (PSUs) to our named executive officers. These awards are performance-based as the number of shares ultimately earned depends on performance against pre-determined targets for return on invested capital (ROIC), cash flow value creation (CFVC), and total shareholder return relative to the S&P 500 index (RTSR). The PSUs are payable 50% in shares of common stock and 50% in cash after the end of a three-year performance period, when our financial performance for the entire performance period is reported, typically in February of the succeeding year. At the end of the performance period, the number of PSUs awarded can range from 0% to 150% of the targeted amount, depending on the performance against the pre-determined targets.

During the nine months ended September 30, 2017, we awarded 181,650 PSUs to our employees other than our named executive officers. These PSUs are payable 100% in shares of common stock after the end of a three-year performance period, when the Company's financial performance for the entire performance period is reported, typically in February of the succeeding year. At the end of the performance period, the number of PSUs awarded can range from 0% to 150% of the targeted amount, depending on the performance against the pre-determined targets.

The following table summarizes PSU activity for the nine months ended September 30, 2017:

	Number of PSUs (in thousands)	Weighted Average Grant Date Fair Value per Share
Outstanding as of December 31, 2016	504.8	$ 44.40
Granted	309.3	60.60
Vested and issued	—	—
Forfeited	(7.9)	52.23
Outstanding as of September 30, 2017	806.2	$ 50.55

During the nine months ended September 30, 2017, 10,858 PSUs accumulated as dividend equivalents. The PSUs do not carry any voting or dividend rights, except the right to accumulate additional PSUs in lieu of dividends.

For the stock-settled portion of the awards that vest based on future ROIC and CFVC performance, compensation expense is measured using the fair value of our common stock at the grant date. For the cash-settled portion of the awards that vest based on future ROIC and CFVC performance, compensation expense is recorded based on the fair value of our common stock at the end of each reporting period. Compensation expense is recognized ratably over the performance period based on our estimated achievement of the established performance criteria. Compensation expense is only recognized for the portion of the award that we expect to vest, which we estimate based on an assessment of the probability that the performance criteria will be achieved.

For the stock-settled portion of the awards that vest based on RTSR, the grant date fair value is based on a Monte Carlo valuation and compensation expense is recognized on a straight-line basis over the vesting period. For the cash-settled portion of the awards that vest based on RTSR, compensation expense incorporates the fair value of our PSUs at the end of each reporting period. Compensation expense is recognized for the RTSR portion of the award whether or not the market conditions are achieved.

During the nine months ended September 30, 2017 and 2016, compensation expense related to PSUs totaled $13.7 million and $5.9 million, respectively. As of September 30, 2017, total unrecognized compensation expense related to outstanding PSUs was $24.0 million, which we expect to be recognized over a weighted average period of 1.4 years.

10. STOCK REPURCHASES, DIVIDENDS AND EARNINGS PER SHARE

Stock Repurchases

Stock repurchase activity during the three and nine months ended September 30, 2017 and 2016 follows (in millions, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Number of shares repurchased	1.9	2.2	5.6	6.5
Amount paid	$ 122.7	$ 110.5	$ 353.3	$ 306.6
Weighted average cost per share	$ 64.78	$ 50.75	$ 62.81	$ 47.83

As of September 30, 2017 and 2016, 0.1 million and 0.2 million repurchased shares were pending settlement and $3.3 million and $9.1 million was unpaid and included within other accrued liabilities, respectively.

In October 2017, our board of directors added $2.0 billion to our existing share repurchase authorization. Before this, $98.4 million remained under a prior authorization. The total authorization is now $2.1 billion through December 31, 2020. Share repurchases under the program may be made through open market purchases or privately negotiated transactions in accordance with applicable federal securities laws. While the board of directors has approved the share purchase 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, and will depend upon market conditions and other factors. The program may be extended, suspended or discontinued at any time.

Dividends

In July 2017, our board of directors approved a quarterly dividend of $0.345 per share. Cash dividends declared were $331.9 million for the nine months ended September 30, 2017. As of September 30, 2017, we recorded a quarterly dividend payable of $115.7 million to shareholders of record at the close of business on October 2, 2017.

Earnings per Share

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

Earnings per share for the three and nine months ended September 30, 2017 and 2016 are calculated as follows (in thousands, except per share amounts):

	Three Months Ended September 30, 2017	Three Months Ended September 30, 2016	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016
Basic earnings per share:				
Net income attributable to Republic Services, Inc.	$ 223,200	$ 85,600	$ 614,000	$ 423,100
Weighted average common shares outstanding	336,549	342,611	338,158	343,968
Basic earnings per share	$ 0.66	$ 0.25	$ 1.82	$ 1.23
Diluted earnings per share:				
Net income attributable to Republic Services, Inc.	$ 223,200	$ 85,600	$ 614,000	$ 423,100
Weighted average common shares outstanding	336,549	342,611	338,158	343,968
Effect of dilutive securities:				
Options to purchase common stock	1,200	1,040	1,295	1,097
Unvested RSU awards	355	204	347	172
Unvested PSU awards	370	125	312	82
Weighted average common and common equivalent shares outstanding	338,474	343,980	340,112	345,319
Diluted earnings per share	$ 0.66	$ 0.25	$ 1.81	$ 1.23
Antidilutive securities not included in the diluted earnings per share calculations:				
Options to purchase common stock	—	—	—	—

11. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME BY COMPONENT

A summary of changes in accumulated other comprehensive income (loss), net of tax, by component, for the nine months ended September 30, 2017 follows:

	Cash Flow Hedges	Defined Benefit Pension Items	Total
Accumulated other comprehensive income (loss) as of December 31, 2016	$ (3.3)	$ 17.5	$ 14.2
Other comprehensive loss before reclassifications	(3.6)	—	(3.6)
Amounts reclassified from accumulated other comprehensive loss	4.8	—	4.8
Net current period other comprehensive income	1.2	—	1.2
Accumulated other comprehensive income (loss) as of September 30, 2017	$ (2.1)	$ 17.5	$ 15.4

A summary of reclassifications out of accumulated other comprehensive income (loss) for the three and nine months ended September 30, 2017 and 2016 follows:

Details about Accumulated Other Comprehensive Income (Loss) Components	Three Months Ended September 30, 2017	Three Months Ended September 30, 2016	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016	Affected Line Item in the Statement where Net Income is Presented
	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)		Amount Reclassified from Accumulated Other Comprehensive Income (Loss)		
Gain (loss) on cash flow hedges:					
Recyclable commodity hedges	$ (1.3)	$ —	$ (2.8)	$ —	Revenue
Fuel hedges	(0.8)	(8.0)	(3.1)	$ (26.7)	Cost of operations
Terminated interest rate locks	(0.7)	(7.8)	(2.0)	(9.1)	Interest expense
Total before tax	(2.8)	(15.8)	(7.9)	(35.8)	
Tax benefit	1.1	6.3	3.1	14.2	
Total loss reclassified into earnings, net of tax	$ (1.7)	$ (9.5)	$ (4.8)	$ (21.6)	

12. FINANCIAL INSTRUMENTS

Fuel Hedges

We have entered into multiple swap agreements designated as cash flow hedges to mitigate some of our exposure related to changes in diesel fuel prices. These swaps qualified for, and were designated as, effective hedges of changes in the prices of forecasted diesel fuel purchases (fuel hedges).

The following table summarizes our outstanding fuel hedges as of September 30, 2017:

Year	Gallons Hedged	Weighted Average Contract Price per Gallon
2017	3,000,000	2.92
2018	7,500,000	2.59

If the national U.S. on-highway average price for a gallon of diesel fuel as published by the Department of Energy exceeds the contract price per gallon, we receive the difference between the average price and the contract price (multiplied by the notional gallons) from the counterparty. If the average price is less than the contract price per gallon, we pay the difference to the counterparty.

The fair values of our fuel hedges are determined using standard option valuation models with assumptions about commodity prices based on those observed in underlying markets (Level 2 in the fair value hierarchy). The aggregate fair values of our outstanding fuel hedges as of September 30, 2017 were current assets of $1.2 million and current liabilities of $0.4 million, which are included in prepaid expenses and other current assets and other accrued liabilities in our consolidated balance sheets, respectively. As of December 31, 2016, the aggregate fair values of our outstanding fuel hedges were current liabilities of $2.7 million, which are included in other accrued liabilities in our consolidated balance sheets. The ineffective portions of the changes in fair values resulted in no gain (loss) for the three and nine months ended September 30, 2017, and gains of $0.1 million and $0.6 million for the three and nine months ended September 30, 2016, respectively, and have been recorded in other income, net in our unaudited consolidated statements of income.

Total gain recognized in other comprehensive income, net of tax, for fuel hedges (the effective portion) was $2.1 million for the three and nine months ended September 30, 2017, and $4.0 million and $14.7 million for the three and nine months ended September 30, 2016, respectively. We classify cash inflows and outflows from our fuel hedges within operating activities in the unaudited consolidated statements of cash flows.

Recyclable Commodity Hedges

Revenue from the sale of recycled commodities is primarily from sales of old corrugated containers (OCC) and old newsprint. From time to time we use derivative instruments such as swaps and costless collars designated as cash flow hedges to manage our exposure to changes in prices of these commodities. During 2016, we entered into multiple agreements related to the forecasted OCC sales. The agreements qualified for, and were designated as, effective hedges of changes in the prices of certain forecasted recyclable commodity sales (commodity hedges).

We entered into costless collar agreements on forecasted sales of OCC. The agreements involve combining a purchased put option giving us the right to sell OCC at an established floor strike price with a written call option obligating us to deliver OCC at an established cap strike price. The puts and calls have the same settlement dates, are net settled in cash on such dates and have the same terms to expiration. The contemporaneous combination of options resulted in no net premium for us and represents costless collars. Under these agreements, we will make or receive no payments as long as the settlement price is between the floor price and cap price; however, if the settlement price is above the cap, we will pay the counterparty an amount equal to the excess of the settlement price over the cap times the monthly volumes hedged. If the settlement price is below the floor, the counterparty will pay us the deficit of the settlement price below the floor times the monthly volumes hedged. The objective of these agreements is to reduce variability of cash flows for forecasted sales of OCC between two designated strike prices.

As of September 30, 2017, we had outstanding costless collar hedges for OCC totaling 150,000 tons with a weighted average floor strike price of $81.50 per ton and a weighted average cap strike price of $120.00 per ton, all of which will be settled in 2017 and 2018. Costless collar hedges are recorded in our consolidated balance sheets at fair value. Fair values of costless collars are determined using standard option valuation models with assumptions about commodity prices based upon forward commodity price curves in underlying markets (Level 2 in the fair value hierarchy).

The aggregate fair values of the outstanding recyclable commodity hedges as of September 30, 2017 were current assets of less than $0.1 million and current liabilities of $1.1 million, which are included in prepaid expenses and other current assets and other accrued liabilities in our consolidated balance sheets, respectively. As of December 31, 2016, the aggregate fair values of the outstanding recyclable commodity hedges were current liabilities of $0.8 million, which are included in other accrued liabilities in our consolidated balance sheets. No amounts were recognized in other income, net in our unaudited consolidated statements of income for the ineffectiveness portion of the changes in fair values during the three and nine months ended September 30, 2017, respectively.

Total gain (loss) recognized in other comprehensive income for recyclable commodity hedges (the effective portion) was $1.1 million and $(0.2) million, net of tax, for the three and nine months ended September 30, 2017, respectively.

Fair Value Measurements

In measuring the 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, accounts payable and certain other accrued liabilities, approximates fair value because of their short-term nature.

As of September 30, 2017 and December 31, 2016, our assets and liabilities that are measured at fair value on a recurring basis include the following:

			Fair Value Measurements Using		
	Carrying Amount	Total as of September 30, 2017	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:					
Money market mutual funds	$ 29.7	$ 29.7	$ 29.7	$ —	$ —
Bonds - restricted cash and marketable securities and other assets	53.5	53.5	—	53.5	—
Commodity and fuel hedges - other current assets	1.2	1.2	—	1.2	—
Interest rate swaps - other assets	11.6	11.6	—	11.6	—
Interest rate locks - other assets	17.1	17.1	—	17.1	—
Total assets	$ 113.1	$ 113.1	$ 29.7	$ 83.4	$ —
Liabilities:					
Fuel hedges - other accrued liabilities	$ 0.4	$ 0.4	$ —	$ 0.4	$ —
Commodity hedges - other accrued liabilities	1.1	1.1	—	1.1	—
Contingent consideration - other long-term liabilities	73.5	73.5	—	—	73.5
Total liabilities	$ 75.0	$ 75.0	$ —	$ 1.5	$ 73.5

		Fair Value Measurements Using			
	Carrying Amount	Total as of December 31, 2016	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:					
Money market mutual funds	$ 23.8	$ 23.8	$ 23.8	$ —	$ —
Bonds - restricted cash and marketable securities and other assets	57.6	57.6	—	57.6	—
Interest rate swaps - other assets	12.2	12.2	—	12.2	—
Interest rate locks - other assets	20.2	20.2	—	20.2	
Total assets	$ 113.8	$ 113.8	$ 23.8	$ 90.0	$ —
Liabilities:					
Fuel hedges - other accrued liabilities	$ 2.7	$ 2.7	$ —	$ 2.7	$ —
Commodity hedges - other accrued liabilities	0.8	0.8	—	0.8	—
Contingent consideration- other long-term liabilities	68.9	68.9	—	—	68.9
Total liabilities	$ 72.4	$ 72.4	$ —	$ 3.5	$ 68.9

Total Debt

As of September 30, 2017 and December 31, 2016, the carrying value of our total debt was $7.9 billion and $7.7 billion, respectively, and the fair value of our total debt was $8.5 billion and $8.3 billion, respectively. The estimated fair value of our fixed rate senior notes and debentures is based on quoted market prices. The fair value of our remaining notes payable, tax-exempt financings and borrowings under our credit facilities approximates the carrying value because the interest rates are variable. The fair value estimates are based on Level 2 inputs of the fair value hierarchy as of September 30, 2017 and December 31, 2016, respectively. See Note 7, *Debt*, for further information related to our debt.

Contingent Consideration

In April 2015, we entered into a waste management contract with Sonoma County, California to operate the county's waste management facilities. As of September 30, 2017, we recognized $68.3 million of contingent consideration which represents the fair value of amounts payable to Sonoma County based on the achievement of future annual tonnage targets through the expected remaining capacity of the landfill. We estimate the remaining life of the landfill to be approximately 30 years. 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 $85 million and $174 million.

The fair value of the contingent consideration was determined using probability assessments of the expected future payments over the remaining useful life of the landfill, and applying a discount rate of 4.0%. The future payments are based on significant inputs that are not observable in the market. Key assumptions include annual volume of tons disposed at the landfill, the price paid per ton and the discount rate that represent the best estimates of management, which are subject to remeasurement at each reporting date.

During the three months ended September 30, 2017, we recognized additional contingent consideration associated with the acquisition of a landfill. As of September 30, 2017, the contingent consideration of $5.2 million represents the fair value of amounts payable to the seller based on annual volume of tons disposed at the landfill. The fair value of the contingent consideration was determined using probability assessments of the expected future payments over the remaining useful life of the landfill, and applying a discount rate of 4.3%. The future payments are based on significant inputs that are not observable in the market. Key assumptions include annual volume of tons disposed at the landfill, which are subject to remeasurement at each reporting date. The contingent consideration liabilities are classified within Level 3 of the fair value hierarchy.

13. SEGMENT REPORTING

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

We manage and evaluate our operations through the two field groups, Group 1 and Group 2. These two groups are presented below as our reportable segments, which provide integrated waste management services consisting of non-hazardous solid waste collection, transfer, recycling, disposal and energy services.

Summarized financial information concerning our reportable segments for the three and nine months ended September 30, 2017 and 2016 follows:

	Gross Revenue	Intercompany Revenue	Net Revenue	Depreciation, Amortization, Depletion and Accretion	Operating Income (Loss)	Capital Expenditures	Total Assets
Three Months Ended September 30, 2017							
Group 1	$ 1,410.8	$ (273.8)	$ 1,137.0	$ 106.8	$ 249.8	$ 127.9	$ 9,229.1
Group 2	1,607.5	(237.5)	1,370.0	143.0	290.3	156.3	10,148.5
Corporate entities	58.9	(3.9)	55.0	31.0	(92.0)	(12.7)	1,571.0
Total	$ 3,077.2	$ (515.2)	$ 2,562.0	$ 280.8	$ 448.1	$ 271.5	$ 20,948.6
Three Months Ended September 30, 2016							
Group 1	$ 1,348.8	$ (269.8)	$ 1,079.0	$ 105.7	$ 237.0	$ 118.1	$ 9,155.3
Group 2	1,515.7	(235.1)	1,280.6	136.4	259.9	97.4	9,953.0
Corporate entities	53.1	(3.4)	49.7	30.0	(79.0)	11.2	1,553.4
Total	$ 2,917.6	$ (508.3)	$ 2,409.3	$ 272.1	$ 417.9	$ 226.7	$ 20,661.7

	Gross Revenue	Intercompany Revenue	Net Revenue	Depreciation, Amortization, Depletion and Accretion	Operating Income (Loss)	Capital Expenditures	Total Assets
Nine Months Ended September 30, 2017							
Group 1	$ 4,135.8	$ (813.5)	$ 3,322.3	$ 315.6	$ 701.0	$ 320.1	$ 9,229.1
Group 2	4,700.2	(704.8)	3,995.4	421.3	851.5	349.3	10,148.5
Corporate entities	174.6	(10.8)	163.8	92.0	(290.8)	99.6	1,571.0
Total	$ 9,010.6	$ (1,529.1)	$ 7,481.5	$ 828.9	$ 1,261.7	$ 769.0	$ 20,948.6
Nine Months Ended September 30, 2016							
Group 1	$ 3,910.0	$ (780.0)	$ 3,130.0	$ 312.4	$ 675.9	$ 338.6	$ 9,155.3
Group 2	4,431.3	(688.5)	3,742.8	405.9	742.7	257.7	9,953.0
Corporate entities	145.8	(10.1)	135.7	86.7	(273.0)	142.4	1,553.4
Total	$ 8,487.1	$ (1,478.6)	$ 7,008.5	$ 805.0	$ 1,145.6	$ 738.7	$ 20,661.7

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

The following table shows our total reported revenue by service line for the three and nine months ended September 30, 2017 and 2016 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
Collection:								
Residential	$ 576.5	22.5%	$ 564.4	23.4%	$ 1,717.2	23.0%	$ 1,675.5	23.9%
Small-container	752.7	29.4	728.0	30.2	2,233.5	29.9	2,150.6	30.7
Large-container	541.3	21.1	511.7	21.2	1,565.4	20.9	1,480.5	21.1
Other	11.6	0.4	9.4	0.4	32.1	0.4	28.3	0.4
Total collection	1,882.1	73.4	1,813.5	75.2	5,548.2	74.2	5,334.9	76.1
Transfer	312.8		304.9		907.0		869.9	
Less: intercompany	(178.0)		(179.1)		(531.3)		(521.9)	
Transfer, net	134.8	5.3	125.8	5.2	375.7	5.0	348.0	5.0
Landfill	576.1		543.0		1,650.5		1,568.6	
Less: intercompany	(252.7)		(249.7)		(740.7)		(726.9)	
Landfill, net	323.4	12.6	293.3	12.2	909.8	12.2	841.7	12.0
Energy services	40.0	1.6	17.3	0.7	103.3	1.4	53.1	0.8
Other:								
Sale of recycled commodities	130.5	5.1	114.6	4.8	400.4	5.3	302.8	4.3
Other non-core	51.2	2.0	44.8	1.9	144.1	1.9	128.0	1.8
Total other	181.7	7.1	159.4	6.7	544.5	7.2	430.8	6.1
Total revenue	$ 2,562.0	100.0%	$ 2,409.3	100.0%	$ 7,481.5	100.0%	$ 7,008.5	100.0%

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

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 $44 million relating to our outstanding legal proceedings as of September 30, 2017. 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 $44 million higher than the amount recorded as of September 30, 2017.

Multiemployer Pension Plans

We contribute to 26 multiemployer pension plans under collective bargaining agreements covering union-represented employees. These plans generally provide retirement benefits to participants based on their service to contributing employers. We do not administer these plans.

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

Restricted Cash and Marketable Securities

Our restricted cash and marketable securities include, among other things, restricted cash and marketable securities held for capital expenditures under certain debt facilities, restricted cash and marketable securities pledged to regulatory agencies and governmental entities as financial guarantees of our performance related to our final capping, closure and post-closure obligations at our landfills, and restricted cash and marketable securities related to our insurance obligations. The following table summarizes our restricted cash and marketable securities as of September 30, 2017 and December 31, 2016:

	2017	2016
Capping, closure and post-closure obligations	28.4	27.9
Insurance	68.0	62.6
Total restricted cash and marketable securities	$ 96.4	$ 90.5

Off-Balance Sheet Arrangements

We have no off-balance sheet debt or similar obligations, other than 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 Item 1 of Part I of this 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, 2016.

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 under this “Management's Discussion and Analysis of Financial Condition and Results of Operations” includes forward-looking statements. These statements include information about our plans, strategies 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 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 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, 2016, 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.

Overview

Republic is the second largest provider of services in the domestic non-hazardous solid waste industry, as measured by revenue. As of September 30, 2017, we operated facilities in 39 states and Puerto Rico through 341 collection operations, 203 transfer stations, 193 active landfills, 64 recycling centers, 7 treatment, recovery and disposal facilities, and 11 salt water disposal wells. We also operated 70 landfill gas and renewable energy projects and had post-closure responsibility for 124 closed landfills.

Revenue for the nine months ended September 30, 2017 increased by 6.7% to $7,481.5 million compared to $7,008.5 million for the same period in 2016. This change in revenue is due to increases in average yield of 2.5%, recycled commodities of 1.4%, volume of 1.5%, fuel recovery fees of 0.4%, energy services of 0.6%, and acquisitions net of divestitures, of 0.3%.

The following table summarizes our revenue, costs and expenses for the three and nine months ended September 30, 2017 and 2016 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
Revenue	$ 2,562.0	100.0 %	$ 2,409.3	100.0 %	$ 7,481.5	100.0 %	$ 7,008.5	100.0 %
Expenses:								
Cost of operations	1,580.1	61.7	1,476.7	61.3	4,621.6	61.8	4,298.7	61.3
Depreciation, amortization and depletion of property and equipment	242.9	9.5	234.5	9.7	715.5	9.6	692.1	9.9
Amortization of other intangible assets and other assets	17.9	0.7	17.9	0.7	53.5	0.7	53.6	0.8
Accretion	20.0	0.8	19.7	0.8	59.9	0.8	59.3	0.8
Selling, general and administrative	266.7	10.4	235.4	9.8	783.2	10.5	720.1	10.3
Withdrawal costs - multiemployer pension funds	—	—	—	—	1.1	—	5.6	0.1
Gain on disposition of assets and asset impairments, net	(17.4)	(0.7)	—	—	(27.2)	(0.4)	—	—
Restructuring charges	3.7	0.1	7.2	0.3	12.2	0.2	33.5	0.5
Operating income	$ 448.1	17.5 %	$ 417.9	17.4 %	$ 1,261.7	16.8 %	$ 1,145.6	16.3 %

Our pre-tax income was $356.7 million and $986.4 million for the three and nine months ended September 30, 2017, respectively, compared to $126.9 million and $671.2 million for the same periods in 2016, respectively. Our net income attributable to Republic Services, Inc. was $223.2 million and $614.0 million for the three and nine months ended September 30, 2017, or $0.66 and $1.81 per diluted share, respectively, compared to $85.6 million and $423.1 million, or $0.25 and $1.23 per diluted share, for the same periods in 2016, respectively.

During each of the three and nine months ended September 30, 2017 and 2016, we recorded a number of charges, other expenses and gains 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 *"Cost of Operations," "Selling, General and Administrative Expenses"* and *"Income Taxes"* discussions contained in the *Results of Operations* section of this *Management's Discussion and Analysis of Financial Condition and Results of Operations* for a discussion of other items that impacted our earnings during the three and nine months ended September 30, 2017 and 2016.

The following table summarizes our adjustments to pre-tax income, net income – Republic, and diluted earnings per share for the three and nine months ended September 30, 2017 and 2016 (in millions of dollars except per share data):

	Three Months Ended September 30, 2017			Three Months Ended September 30, 2016		
	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share
As reported	$ 356.7	$ 223.2	$ 0.66	$ 126.9	$ 85.6	$ 0.25
Loss on extinguishment of debt and other related costs	—	—	—	203.4	122.7	0.36
Gain on disposition of assets and asset impairments, net	(17.4)	(2.0)	(0.01)	—	—	—
Restructuring charges	3.7	2.2	0.01	7.2	4.3	0.01
Incremental contract startup costs - large municipal contract	2.7	1.8	0.01	—	—	—
Total adjustments	(11.0)	2.0	0.01	210.6	127.0	0.37
As adjusted	$ 345.7	$ 225.2	$ 0.67	$ 337.5	$ 212.6	$ 0.62

	Nine Months Ended September 30, 2017			Nine Months Ended September 30, 2016		
	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share (1)
As reported	$ 986.4	$ 614.0	$ 1.81	$ 671.2	$ 423.1	$ 1.23
Loss on extinguishment of debt and other related costs	—	—	—	203.4	122.7	0.36
Gain on disposition of assets and impairments, net	(27.2)	(6.7)	(0.02)	—	—	—
Restructuring charges	12.2	7.4	0.02	33.5	20.2	0.06
Withdrawal costs - multiemployer pension funds	1.1	0.7	—	5.6	3.4	0.01
Incremental contract startup costs - large municipal contract	5.0	3.0	0.01	—	—	—
Total adjustments	(8.9)	4.4	0.01	242.5	146.3	0.42
As adjusted	$ 977.5	$ 618.4	$ 1.82	$ 913.7	$ 569.4	$ 1.65

(1) Line items in this column do not total to $1.65 per share due to rounding.

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 and costs in prior periods, and similar types of adjustments can reasonably be expected to be recorded in future periods. Although our business regularly incurs startup costs under municipal contracts, we specifically identify in the table above the startup costs with respect to an individual municipal contract (and do not adjust for other startup costs under other contracts in 2017). We do this because of the magnitude of the costs involved with this particular municipal contract and the unusual nature for the time period in which they are incurred. 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.

Gain on disposition of assets and asset impairments, net. During the three and nine months ended September 30, 2017, we recorded a net gain on disposition of assets and asset impairments related to business divestitures of $17.4 million and $20.4 million, respectively. During the nine months ended September 30, 2017, we also recorded a net gain on disposition of assets and asset impairments of $6.8 million due to the transfer of ownership of the landfill gas collection and control system and the remaining post-closure and environmental liabilities associated with one of our divested landfills.

Restructuring charges. In January 2016, we realigned our field support functions by combining our three regions into two field groups, consolidating our areas and streamlining select operational support roles at our Phoenix headquarters. These changes included reducing administrative staffing levels, relocating office space and closing certain office locations. Additionally during 2016, we began the redesign of our back-office functions as well as the consolidation of over 100 customer service locations into three Customer Resource Centers. The savings realized from these restructuring efforts have been reinvested in our customer-focused programs and initiatives. We expect our consolidation efforts to continue through 2017 and 2018.

We incurred restructuring charges of $3.7 million and $12.2 million during the three and nine months ended September 30, 2017, respectively, and $7.2 million and $33.5 million during the three and nine months ended September 30, 2016, respectively, that consisted of severance and other employee termination benefits, transition costs, relocation benefits, and the closure of offices with lease agreements with non-cancelable terms. We paid $3.7 million and $14.6 million during the three and nine months ended September 30, 2017, respectively, and $9.7 million and $24.2 million during the three and nine months ended September 30, 2016, respectively, related to these restructuring efforts. We expect to incur additional charges of between approximately $1 million to $2 million for the remainder of 2017 related to our field realignment, the consolidation of our customer service locations, and the redesign of our back-office functions. Substantially all of these restructuring charges will be recorded in our corporate segment.

Withdrawal costs - multiemployer pension funds. During the nine months ended September 30, 2017 and September 30, 2016, we recorded charges to earnings of $1.1 million and $5.6 million, respectively, 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.

Incremental contract startup costs - large municipal contract. During the three and nine months ended September 30, 2017, we incurred direct and incremental costs of $2.7 million and $5.0 million, respectively, related to the implementation of a large municipal contract. We expect such costs to continue through the remainder of the year.

Recent Developments

Fiscal Year 2018 Preliminary Outlook

We are providing our preliminary outlook for 2018. This does not represent full detailed guidance, but rather a point-in-time estimate based on current projections of 2017 performance, early reviews of the 2018 budget process and current economic conditions. Consistent with prior practice, we will provide formal guidance in February 2018 once the budget process is complete and full year 2017 results are reported. The following is a summary of anticipated adjusted diluted earnings per share preliminary outlook for the year ending December 31, 2018, which is not a measure determined in accordance with U.S. GAAP:

	(Preliminary Outlook) Year Ending December 31, 2018
Diluted earnings per share	$2.52 - $2.57
Restructuring charges	0.01
Adjusted diluted earnings per share	$2.53 - $2.58

We believe that the presentation of an adjusted diluted earnings per share preliminary outlook, which excludes restructuring charges, 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 and costs 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 guidance may not be comparable to similarly titled measures presented by other companies.

Adverse Weather Conditions

In August and September of 2017, our landfill and collection operations were impacted by hurricane and storm related activity in Texas, Puerto Rico and Florida. In the third quarter, our storm related revenue was favorably impacted by approximately $5 million while our cost of operations and selling, general and administrative expenses were unfavorably impacted by approximately $12 million. We did not recognize any significant property or equipment impairments. In the fourth quarter of 2017, we will continue to assess both the favorable and unfavorable impacts to our operations from these named storms and, as such, we may continue to experience higher operating expenses, remediation costs or asset impairments. Certain of these expenses may in part be offset by higher revenue in our landfill and large-container operations.

ReCommunity Acquisition

In October 2017, we acquired all of the issued and outstanding shares of RE Community Holdings II, Inc. ("ReCommunity") for approximately $165 million, net of cash acquired, plus the assumption of certain capital leases. Prior to the acquisition, ReCommunity was the largest independent recycling-processing company in the United States, with 26 recycling centers in 14 states, operating primarily in locations where Republic maintains a leading market presence. We expect this acquisition will add approximately 1 million tons to our current recycling volumes.

Share Repurchase Authorization

In October 2017, our board of directors added $2.0 billion to the existing share repurchase authorization. Before this, $98.4 million remained under the prior authorization. The total authorization is now $2.1 billion through December 31, 2020. Share repurchases under the program may be made through open market purchases or privately negotiated transactions in accordance with applicable federal securities laws. While the board of directors has approved the share purchase 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, and will depend upon market conditions and other factors. The program may be extended, suspended or discontinued at any time.

Results of Operations

Revenue

We generate revenue primarily from our solid waste collection operations. Our remaining revenue is from other services, including transfer station, landfill disposal, recycling, and energy services. Our residential and small-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, landfills and, to a lesser extent, our recycling facilities generate revenue from disposal or tipping fees charged to third parties. In general, we integrate our recycling operations with our collection operations and obtain revenue from the sale of recycled commodities. Our revenue from energy services consists mainly of fees we charge for the treatment and disposal of liquid and solid waste derived from the production of oil and natural gas. Other revenue consists primarily of revenue from National Accounts, which represents the portion of revenue generated from nationwide or regional contracts in markets outside our operating areas where the associated waste handling services are subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

The following table reflects our revenue by service line for the three and nine months ended September 30, 2017 and 2016 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
Collection:								
Residential	$ 576.5	22.5 %	$ 564.4	23.4 %	$ 1,717.2	23.0 %	$ 1,675.5	23.9 %
Small-container	752.7	29.4	728.0	30.2	2,233.5	29.9	2,150.6	30.7
Large-container	541.3	21.1	511.7	21.2	1,565.4	20.9	1,480.5	21.1
Other	11.6	0.4	9.4	0.4	32.1	0.4	28.3	0.4
Total collection	1,882.1	73.4	1,813.5	75.2	5,548.2	74.2	5,334.9	76.1
Transfer	312.8		304.9		907.0		869.9	
Less: intercompany	(178.0)		(179.1)		(531.3)		(521.9)	
Transfer, net	134.8	5.3	125.8	5.2	375.7	5.0	348.0	5.0
Landfill	576.1		543.0		1,650.5		1,568.6	
Less: intercompany	(252.7)		(249.7)		(740.7)		(726.9)	
Landfill, net	323.4	12.6	293.3	12.2	909.8	12.2	841.7	12.0
Energy services	40.0	1.6	17.3	0.7	103.3	1.4	53.1	0.8
Other:								
Sale of recycled commodities	130.5	5.1	114.6	4.8	400.4	5.3	302.8	4.3
Other non-core	51.2	2.0	44.8	1.9	144.1	1.9	128.0	1.8
Total other	181.7	7.1	159.4	6.7	544.5	7.2	430.8	6.1
Total revenue	$ 2,562.0	100.0 %	$ 2,409.3	100.0 %	$ 7,481.5	100.0 %	$ 7,008.5	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, 2017 and 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Average yield	2.5%	2.1 %	2.5%	2.0 %
Fuel recovery fees	0.3	(0.6)	0.4	(1.0)
Total price	2.8	1.5	2.9	1.0
Volume	1.6	0.6	1.5	1.2
Recycled commodities	0.7	0.7	1.4	0.3
Energy services	0.8	(0.3)	0.6	(0.5)
Total internal growth	5.9	2.5	6.4	2.0
Acquisitions / divestitures, net	0.4	0.3	0.3	0.7
Total	6.3%	2.8 %	6.7%	2.7 %
Core price	4.1%	3.2 %	4.1%	3.2 %

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 2.7% and 2.6% for the three and nine months ended September 30, 2017, respectively, and 2.3% and 2.2% for the same respective periods in 2016. Core price as a percentage of related-business revenue was 4.3% and 4.4% for the three and nine months ended September 30, 2017, respectively, and 3.5% and 3.7% for the same respective periods in 2016.

During the three and nine months ended September 30, 2017, we experienced the following changes in our revenue as compared to the same period in 2016:

- Average yield increased revenue by 2.5% for the three and nine months ended September 30, 2017, respectively, due to positive pricing in all lines of business.
- The fuel recovery fee program, which mitigates our exposure to increases in fuel prices, increased revenue by 0.3% and 0.4% during the three and nine months ended September 30, 2017, respectively. These fees fluctuate with the price of fuel and, consequently, any increase in fuel prices results in an increase in our revenue. Higher fuel recovery fees for the three and nine months ended September 30, 2017 resulted primarily from the increase in fuel prices when compared to fuel prices for the same period in 2016.
- Volume increased revenue by 1.6% and 1.5% during the three and nine months ended September 30, 2017, primarily due to volume growth in our large-container collection, landfill and transfer station lines of business, which were partially offset by volume declines in our small-container collection line of business primarily due to lost broker volumes. The volume increase in our landfill line of business is primarily attributable to increased special waste and construction and demolition waste volumes.
- Recycled commodities increased revenue by 0.7% and 1.4% during the three and nine months ended September 30, 2017, due to increased commodity prices. The average price for old corrugated containers for the three and nine months ended September 30, 2017 was $185 and $174 per ton, respectively, compared to $125 and $109 per ton, for the same respective periods in 2016. The average price of old newsprint for the three and nine months ended September 30, 2017 was $108 and $114 per ton, respectively, compared to $114 and $92 per ton, for the same respective periods in 2016. Our processed recycled commodity volume for the three and nine months ended September 30, 2017 was 0.5 million and 1.7 million tons sold, respectively, compared to 0.7 million and 1.9 million tons sold for the same respective periods in 2016.

  Changing market demand for recycled commodities causes volatility in commodity prices. At current volumes and mix of materials, we believe a $10 per ton change in the price of recycled commodities will change annual revenue and operating income by approximately $27 million and $18 million, respectively.
- Acquisitions, net of divestitures, increased revenue by 0.4% and 0.3% during the three and nine months ended September 30, 2017, due to our continued acquisition growth strategy of acquiring privately held solid waste and recycling companies that complement our existing business platform.

- Energy services increased revenue by 0.8% and 0.6% during the three and nine months ended September 30, 2017, due primarily to increased drilling activity compared to a decline in revenue during the same respective periods in 2016.

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 subcontract costs, which include costs for independent haulers that transport our waste to disposal facilities and costs for local operators who provide waste handling services associated with our National Accounts in markets outside our standard operating areas; fuel, which includes the direct cost of fuel used by our vehicles, net of fuel tax credits; disposal franchise fees and taxes, consisting of landfill taxes, municipal franchise fees, host community fees and royalties; landfill operating costs, which include financial assurance, leachate disposal, remediation charges and other landfill maintenance costs; risk management costs, which include casualty insurance premiums and claims; cost of goods sold, which includes material costs paid to suppliers associated with recycled commodities; 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, 2017 and 2016 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
Labor and related benefits	$ 507.6	19.8 %	$ 484.3	20.1 %	$ 1,502.8	20.1 %	$ 1,432.2	20.4 %
Transfer and disposal costs	204.0	8.0	194.8	8.1	598.6	8.0	568.6	8.1
Maintenance and repairs	240.0	9.4	231.7	9.6	702.8	9.4	673.7	9.6
Transportation and subcontract costs	153.1	6.0	142.3	5.9	432.1	5.8	397.9	5.7
Fuel	87.2	3.4	82.0	3.4	255.0	3.4	232.6	3.3
Franchise fees and taxes	120.2	4.7	116.0	4.8	348.2	4.7	339.0	4.8
Landfill operating costs	53.6	2.1	43.6	1.8	163.7	2.2	131.5	1.9
Risk management	58.6	2.3	49.3	2.0	162.1	2.2	141.7	2.0
Cost of goods sold	60.0	2.3	49.3	2.0	182.7	2.4	131.8	1.9
Other	95.8	3.7	83.4	3.6	273.6	3.6	249.7	3.6
Total cost of operations	$ 1,580.1	61.7 %	$ 1,476.7	61.3 %	$ 4,621.6	61.8 %	$ 4,298.7	61.3 %

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

Our cost of operations increased for the three and nine months ended September 30, 2017 compared to the same period in 2016, primarily as a result of the following:

- Labor and related benefits increased in aggregate dollars due to increased hourly and salaried wages as a result of merit increases, increased headcount, higher collection volumes, and higher health care and benefits costs. However, as a percentage of revenue, labor and related benefits costs decreased due to higher post-collection revenue primarily driven by our transfer and landfill lines of business.

- Transfer and disposal costs increased primarily due to higher collection volumes. During each of the nine months ended September 30, 2017 and 2016, approximately 68% of the total waste volume we collected was disposed at landfill sites that we own or operate (internalization).

- Maintenance and repairs expense increased due to higher collection volumes, cost of parts, and internal labor. However, as a percentage of revenue, maintenance and repair costs decreased due to higher post-collection revenue primarily driven by our transfer and landfill lines of business.

- Transportation and subcontract costs increased primarily due to higher collection and transfer station volumes.

- Our fuel costs increased due to higher prices of diesel fuel and the expiration of compressed natural gas ("CNG") tax credits. The national average diesel fuel cost per gallon for the three and nine months ended September 30, 2017 was $2.62 and $2.58, respectively, compared to $2.38 and $2.25 for the same respective periods in 2016.

  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 changes our fuel recovery fee by approximately $25 million per year.
- Landfill operating expenses increased due to volume increases in our landfill line of business, increased leachate transportation and disposal costs and landfill maintenance costs.
- Risk management expenses increased primarily due to favorable actuarial development in our workers' compensation programs recorded during the three and nine months ended September 30, 2016 as compared to the same periods in 2017 coupled with continued 2017 adverse development in our auto liability programs.
- During the three and nine months ended September 30, 2017, cost of goods sold increased primarily due to higher rebates paid for volumes delivered to our recycling facilities as a result of the increase in commodity prices.
- During the three and nine months ended September 30, 2017, other costs of operations increased primarily due to higher occupancy and facility costs due to a 2016 favorable property tax settlement, facility repairs and third party equipment rental.

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, 2017 and 2016 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
Depreciation and amortization of property and equipment	$ 159.6	6.2 %	$ 157.7	6.5 %	$ 475.0	6.4 %	$ 470.4	6.7 %
Landfill depletion and amortization	83.3	3.3	76.8	3.2	240.5	3.2	221.7	3.2
Depreciation, amortization and depletion expense	$ 242.9	9.5 %	$ 234.5	9.7 %	$ 715.5	9.6 %	$ 692.1	9.9 %

Depreciation and amortization of property and equipment for the three and nine months ended September 30, 2017 increased due to higher acquisition costs of replacement vehicles, an increased number of vehicles to support volume growth, additional assets acquired with our acquisitions and an increased number of CNG vehicles, which are more expensive to purchase than diesel vehicles.

During the three and nine months ended September 30, 2017, landfill depletion and amortization expense increased primarily due to increased landfill disposal volumes and an overall increase in our average depletion rate.

Amortization of Other Intangible Assets and Other Assets

Expenses for amortization of other intangible assets and other assets were $17.9 million and $53.5 million, or 0.7% of revenue, for the three and nine months ended September 30, 2017, respectively, compared to $17.9 million and $53.6 million, or 0.7% and 0.8% of revenue, for the same respective periods in 2016. Our other intangible assets and other assets primarily relate to customer relationships, franchise agreements, other municipal agreements, favorable lease assets and, to a lesser extent, non-compete agreements. The amortization has remained relatively unchanged as a result of assets acquired in the acquisitions of various waste businesses throughout the year, offset by certain intangible assets that are now fully amortized.

Accretion Expense

Accretion expense was $20.0 million and $59.9 million, or 0.8% of revenue, for the three and nine months ended September 30, 2017, respectively, compared to $19.7 million and $59.3 million, or 0.8% of revenue, for the same respective periods in 2016. Accretion expense has remained relatively unchanged as our asset retirement obligations 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 below.

The following table summarizes our selling, general and administrative expenses for the three and nine months ended September 30, 2017 and 2016 (in millions of dollars and as a percentage of revenue):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
Salaries	$ 176.8	6.9 %	$ 161.6	6.7 %	$ 527.0	7.0 %	$ 474.8	6.8 %
Provision for doubtful accounts	8.0	0.3	6.0	0.2	22.8	0.3	17.5	0.2
Other	81.9	3.2	67.8	2.9	233.4	3.2	227.8	3.3
Total selling, general and administrative expenses	$ 266.7	10.4 %	$ 235.4	9.8 %	$ 783.2	10.5 %	$ 720.1	10.3 %

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

The most significant items affecting our selling, general and administrative expenses during the three and nine months ended September 30, 2017 and 2016 are summarized below:

- Salaries increased due to higher incentive pay and wages and other payroll related items resulting from merit increases.
- Other selling, general and administrative expenses increased for the three and nine months ended September 30, 2017, primarily due to a favorable legal settlement during the three months ended September 30, 2016. Additionally, we had an increase in acquisition-related transaction costs associated with our increased acquisition activity during the year.

Withdrawal Costs - Multiemployer Pension Funds

During the nine months ended September 30, 2017 and September 30, 2016, we recorded charges to earnings of $1.1 million and $5.6 million, respectively, for withdrawal events at multiemployer pension funds to which we contribute. As we obtain updated information regarding multiemployer pension funds, the factors used in deriving our estimated withdrawal liabilities will be subject to change, which may adversely impact our reserves for withdrawal costs.

Gain on Disposition of Assets and Asset Impairments, Net

During the three and nine months ended September 30, 2017, we recorded net gains on disposition of assets and asset impairments related to business divestitures of $17.4 million and $20.4 million, respectively. During the nine months ended September 30, 2017, we also recorded a net gain on disposition of assets and asset impairments of $6.8 million due to the transfer of ownership of the landfill gas collection and control system and the remaining post-closure and environmental liabilities associated with one of our divested landfills.

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. Asset or business divestitures could result in gains, losses or asset impairment charges that may be material to our results of operations in a given period.

Restructuring Charges

In January 2016, we realigned our field support functions by combining our three regions into two field groups, consolidating our areas and streamlining select operational support roles at our Phoenix headquarters. These changes included reducing administrative staffing levels, relocating office space and closing certain office locations. Additionally during 2016, we began the redesign of our back-office functions as well as the consolidation of over 100 customer service locations into three Customer Resource Centers. The savings realized from these restructuring efforts have been reinvested in our customer-focused programs and initiatives. We expect our consolidation efforts to continue through 2017 and 2018.

We incurred restructuring charges of $3.7 million and $12.2 million during the three and nine months ended September 30, 2017, respectively, and $7.2 million and $33.5 million during the three and nine months ended September 30, 2016, respectively, that consisted of severance and other employee termination benefits, transition costs, relocation benefits, and the closure of offices with lease agreements with non-cancelable terms. We paid $3.7 million and $14.6 million during the three and nine months ended September 30, 2017, respectively, and $9.7 million and $24.2 million during the three and nine months ended September 30, 2016, respectively, related to these restructuring efforts. We expect to incur additional charges of between approximately $1 million to $2 million throughout the remainder of 2017 related to our field realignment, the consolidation of our customer service locations, and the redesign of our back-office functions. Substantially all of these restructuring charges will be recorded in our corporate segment.

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, 2017 and 2016 (in millions of dollars):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Interest expense on debt and capital lease obligations	$ 81.2	$ 79.4	$ 240.7	$ 243.9
Accretion of debt discounts	1.9	1.9	5.7	5.8
Accretion of remediation liabilities and other	8.8	16.8	26.9	36.1
Less: capitalized interest	(1.9)	(1.8)	(4.3)	(4.5)
Total interest expense	$ 90.0	$ 96.3	$ 269.0	$ 281.3

Total interest expense for the three and nine months ended September 30, 2017 decreased primarily due to the issuance of $500.0 million of 2.90% senior notes in July 2016 that were used to purchase outstanding notes and debentures with coupons ranging from 5.70% to 7.40%. Cash paid for interest was $247.0 million and $253.0 million for the nine months ended September 30, 2017 and 2016, respectively.

Income Taxes

Our effective tax rate, exclusive of noncontrolling interests, for the three and nine months ended September 30, 2017 was 37.4% and 37.7%, respectively. Our effective tax rate for the three and nine months ended September 30, 2017 was favorably affected by the realization of federal and state benefits as well as adjustments to deferred taxes due to the completion of our 2016 tax returns, the adoption of the Financial Accounting Standards Board's ("FASB") Accounting Standards Update ("ASU") 2016-09, and by tax refunds received as a result of filing various state amended tax returns. In addition, our effective rate was unfavorably impacted by the write-off of goodwill associated with a divestiture that had no corresponding tax basis.

Our effective tax rate, exclusive of noncontrolling interests, for the three and nine months ended September 30, 2016 was 32.5% and 36.9%, respectively. The effective tax rate for the three and nine months ended September 30, 2016 was favorably affected by the realization of federal and state benefits on our 2015 tax returns, certain debt refinancings and the resolution of various state and federal tax matters.

Cash paid for income taxes was $270.5 million and $145.7 million for the nine months ended September 30, 2017 and 2016, respectively. Cash paid for income taxes was lower for 2016 primarily due to benefits realized from our debt refinancing in July 2016. For additional discussion and detail regarding our income taxes, see Note 8, *Income Taxes*, to our unaudited consolidated financial statements included in Item 1 of Part I of this Quarterly Report on Form 10-Q.

Reportable Segments

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

The two field groups, Group 1 and Group 2, are presented below as our reportable segments, which provide integrated waste management services consisting of non-hazardous solid waste collection, transfer, recycling, disposal and energy services. Summarized financial information concerning our reportable segments for the three and nine months ended September 30, 2017 and 2016 is shown in the following table (in millions of dollars and as a percentage of revenue in the case of operating margin):

	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	Gain (Loss) on Disposition of Assets and Asset Impairments, Net	Operating Income (Loss)	Operating Margin
Three Months Ended September 30, 2017							
Group 1	$ 1,137.0	$ 107.3	$ (0.5)	$ 106.8	$ —	$ 249.8	22.0 %
Group 2	1,370.0	143.2	(0.2)	143.0	(0.4)	290.3	21.2
Corporate entities	55.0	31.0	—	31.0	17.8	(92.0)	—
Total	$ 2,562.0	$ 281.5	$ (0.7)	$ 280.8	$ 17.4	$ 448.1	17.5 %
Three Months Ended September 30, 2016							
Group 1	$ 1,079.0	$ 105.7	$ —	$ 105.7	$ —	$ 237.0	22.0 %
Group 2	1,280.6	136.7	(0.3)	136.4	—	259.9	20.3
Corporate entities	49.7	30.0	—	30.0	—	(79.0)	—
Total	$ 2,409.3	$ 272.4	$ (0.3)	$ 272.1	$ —	$ 417.9	17.3 %

	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	Gain (Loss) on Disposition of Assets and Asset Impairments, Net	Operating Income (Loss)	Operating Margin
Nine Months Ended September 30, 2017							
Group 1	$ 3,322.3	$ 316.1	$ (0.5)	$ 315.6	$ —	$ 701.0	21.1 %
Group 2	3,995.4	421.6	(0.3)	421.3	(0.4)	851.5	21.3
Corporate entities	163.8	91.4	0.6	92.0	27.6	(290.8)	—
Total	$ 7,481.5	$ 829.1	$ (0.2)	$ 828.9	$ 27.2	$ 1,261.7	16.9 %
Nine Months Ended September 30, 2016							
Group 1	$ 3,130.0	$ 312.4	$ —	$ 312.4	$ —	$ 675.9	21.6 %
Group 2	3,742.8	406.6	(0.7)	405.9	—	742.7	19.8
Corporate entities	135.7	87.2	(0.5)	86.7	—	(273.0)	
Total	$ 7,008.5	$ 806.2	$ (1.2)	$ 805.0	$ —	$ 1,145.6	16.3 %

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

Significant changes in the revenue and operating margins of our reportable segments comparing the three and nine months ended September 30, 2017 with the same periods in 2016 are discussed below:

Group 1

Revenue for the three months ended September 30, 2017 increased 5.4% due primarily to increases in average yield and volume in all lines of business. Recycled commodities also increased revenue by 0.5% during the three months ended September 30, 2017, due to increased commodity prices.

Revenue for the nine months ended September 30, 2017 increased 6.1% due primarily to increases in average yield and volume in all lines of business. Recycled commodities also increased revenue by 1.3% during the nine months ended September 30, 2017, due to increased commodity prices.

Operating income in Group 1 increased from $237.0 million for the three months ended September 30, 2016, or a 22.0% operating income margin, to $249.8 million for the three months ended September 30, 2017, or a 22.0% operating income margin. Operating income in Group 1 increased from $675.9 million for the nine months ended September 30, 2016, or a 21.6% operating income margin, to $701.0 million for the nine months ended September 30, 2017, or a 21.1% operating income margin. The following cost categories impacted operating income:

- Cost of operations unfavorably impacted operating income margin during the three and nine months ended September 30, 2017, primarily due to higher cost of goods sold and increased landfill operating costs.
- Depreciation and amortization of property and equipment favorably impacted operating income margin for the three and nine months ended September 30, 2017, primarily as a result of increases in revenue from increases in average yield. Landfill depletion and amortization also favorably impacted operating income margin for the three and nine months ended September 30, 2017, primarily due to changes in the mix of landfill disposal volumes.
- Selling, general and administrative expenses had a favorable impact on operating income margin for the three and nine months ended September 30, 2017 primarily as a result of increases in revenue from increases in average yield and decreased headcount related to our restructuring.

Group 2

Revenue for the three months ended September 30, 2017 increased 7.0% due primarily to increases in average yield in all lines of business and volume increases in our large-container collection, landfill and transfer lines of business. Volume increases in our landfill line of business were primarily attributable to increased special waste and construction and demolition volumes. These increases were partially offset by volume declines in our small-container collection line of business. Recycled commodities also increased revenue by 0.8% during the three months ended September 30, 2017, due to increased commodity prices. Additionally, energy services increased revenue during the three months ended September 30, 2017, due primarily to increased drilling activity compared to the same period in 2016.

Revenue for the nine months ended September 30, 2017 increased 6.7% due primarily to increases in average yield in all lines of business and volume increases in our large-container collection, landfill and transfer lines of business. Volume increases in our landfill line of business were primarily attributable to increased special waste and construction and demolition volumes. These increases were partially offset by volume declines in our small-container collection line of business. Recycled commodities also increased revenue by 1.1% during the nine months ended September 30, 2017, due to increased commodity prices. Additionally, energy services increased revenue during the nine months ended September 30, 2017, due primarily to increased drilling activity compared to the same period in 2016.

Operating income in Group 2 increased from $259.9 million for the three months ended September 30, 2016, or a 20.3% operating income margin, to $290.3 million for the three months ended September 30, 2017, or a 21.2% operating income margin. Operating income in Group 2 increased from $742.7 million for the nine months ended September 30, 2016, or a 19.8% operating income margin, to $851.5 million for the nine months ended September 30, 2017, or a 21.3% operating income margin.

The following cost categories impacted operating income:

- Cost of operations favorably impacted operating income margin for the three and nine months ended September 30, 2017, primarily due to favorable transfer and disposal costs, labor and related benefits, and maintenance and repairs, primarily as a result of increases in revenue from increases in average yield. These favorable items were partially offset by higher cost of goods sold and landfill operating costs.
- Depreciation and amortization of property and equipment favorably impacted operating income margin for the three and nine months ended September 30, 2017, primarily as a result of increases in revenue from increases in average yield.
- Selling, general and administrative costs favorably impacted operating income margin for the three and nine months ended September 30, 2017 primarily due to decreased headcount related to our restructuring.

Corporate Entities

Operating loss in our Corporate Entities increased from $79.0 million for the three months ended September 30, 2016 to $92.0 million for the three months ended September 30, 2017. The operating loss for the three months ended September 30, 2017 was favorably impacted by a decrease in restructuring charges of $3.5 million from the same period in 2016 and gain on disposition of businesses. Offsetting these favorable items were increases in salaries and related benefits due to certain employees relocating from our field operations to our corporate segment as a result of our restructuring, increased hourly and salaried wages as a result of merit increases, increased facility costs as a result of our restructuring as well as overall adverse development in our insurance programs. Additionally, we had a favorable legal settlement during the three months ended September 30, 2016.

Operating loss in our Corporate Entities increased from $273.0 million for the nine months ended September 30, 2016 to $290.8 million for the nine months ended September 30, 2017. The operating loss for the nine months ended September 30, 2017 was favorably impacted by a decrease in restructuring charges of $21.3 million from the same period in 2016, a decrease in charges related to withdrawal events associated with certain multiemployer pension funds of $4.5 million from the same period in 2016, gain on disposition of businesses, net favorable legal settlements from matters occurring in the ordinary course of business and a decrease in legal fees due to the settlement of legal matters. Offsetting these favorable items were increases in salaries and related benefits due to certain employees relocating from our field operations to our corporate segment as a result of our restructuring, increased hourly and salaried wages as a result of merit increases, increased facility costs as a result of our restructuring as well as overall adverse development in our insurance programs.

Landfill and Environmental Matters

Available Airspace

The following table reflects landfill airspace activity for active landfills we owned or operated during the nine months ended September 30, 2017:

	Balance as of December 31, 2016	New Expansions Undertaken	Landfills Acquired, Net of Divestitures	Permits Granted, Net of Closures	Airspace Consumed	Changes in Engineering Estimates	Balance as of September 30, 2017
Cubic yards (in millions):							
Permitted airspace	4,707.6	—	10.8	71.7	(61.3)	0.2	4,729.0
Probable expansion airspace	286.8	—	—	(64.6)	—	—	222.2
Total cubic yards (in millions)	4,994.4	—	10.8	7.1	(61.3)	0.2	4,951.2
Number of sites:							
Permitted airspace	192	—	2	(1)			193
Probable expansion airspace	13	—	—	(4)			9

As of September 30, 2017, we owned or operated 193 active landfills with total available disposal capacity estimated to be 4,951.2 million in-place cubic yards. 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. As of September 30, 2017, total available disposal capacity is estimated to be 4,729.0 million in-place cubic yards of permitted airspace plus 222.2 million in-place cubic yards of probable expansion airspace. 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. The average estimated remaining life of all of our landfills is 63 years.

As of September 30, 2017, 9 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 47 years, including probable expansion airspace. We have other expansion opportunities that are not included in our total available airspace because they do not meet all of our criteria to be deemed probable expansion airspace.

Final Capping, Closure and Post-Closure Costs

As of September 30, 2017, accrued final capping, closure and post-closure costs were $1,252.4 million, of which $84.5 million were classified as current, as reflected in our unaudited consolidated balance sheet in accrued landfill and environmental costs included in Item 1 of Part I of this Quarterly Report on Form 10-Q.

Remediation and Other Charges for Landfill Matters

Bridgeton Landfill. During the nine months ended September 30, 2017, we paid $13.9 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 remediation liability. As of September 30, 2017, the remediation liability recorded for this site was $183.3 million, of which approximately $13 million is expected to be paid during the remainder of 2017. We believe the remaining reasonably possible high end of our range would be approximately $156 million higher than the amount recorded as of September 30, 2017.

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.

Investment in Landfills

The following table reflects changes in our investment in landfills for the nine months ended September 30, 2017 (in millions of dollars):

	Balance as of December 31, 2016	Capital Additions (Amortization)	Acquisitions, Net of Divestitures	Non-cash Additions for Asset Retirement Obligations	Impairments, Transfers and Other Adjustments	Adjustments for Asset Retirement Obligations	Balance as of September 30, 2017
Non-depletable landfill land	$ 166.8	$ —	$ —	$ —	$ —	$ —	$ 166.8
Landfill development costs	6,386.7	4.4	2.7	34.1	147.1	(2.1)	6,572.9
Construction-in-progress - landfill	221.2	269.7	—	—	(153.0)	—	337.9
Accumulated depletion and amortization	(3,016.5)	(240.8)	25.4	—	—	0.2	(3,231.7)
Net investment in landfill land and development costs	$ 3,758.2	$ 33.3	$ 28.1	$ 34.1	$ (5.9)	$ (1.9)	$ 3,845.9

Selected Balance Sheet Accounts

The following table reflects the activity in our allowance for doubtful accounts and other, final capping, closure, post-closure costs, remediation liabilities, and accrued insurance during the nine months ended September 30, 2017 (in millions of dollars):

	Allowance for Doubtful Accounts and Other	Final Capping, Closure and Post-Closure	Remediation	Insurance Reserves
Balance as of December 31, 2016	$ 44.0	$ 1,224.6	$ 602.9	$ 418.5
Non-cash additions for asset retirement obligations	—	34.1	—	—
Acquisitions, net of divestitures and other adjustments	4.9	(19.6)	(6.1)	—
Asset retirement obligation adjustments	—	(2.1)	—	—
Accretion expense	—	59.9	15.7	0.9
Premium written for third-party risk assumed	—	—	—	22.3
Reclass to ceded insurance reserves	—	—	—	(10.9)
Net additions charged to expense	22.8	—	—	328.2
Payments or usage	(35.0)	(44.5)	(37.7)	(342.1)
Balance as of September 30, 2017	36.7	1,252.4	574.8	416.9
Less: current portion	(36.7)	(84.5)	(73.2)	(140.4)
Long-term portion	$ —	$ 1,167.9	$ 501.6	$ 276.5

As of September 30, 2017, accounts receivable were $1,126.9 million, net of allowance for doubtful accounts and other of $36.7 million, resulting in days sales outstanding of 40.0, or 28.3 days net of deferred revenue. As of December 31, 2016, accounts receivable were $994.8 million, net of allowance for doubtful accounts and other of $44.0 million, resulting in days sales outstanding of 38.1, or 26.1 days net of deferred revenue.

Property and Equipment

The following tables reflect the activity in our property and equipment accounts for the nine months ended September 30, 2017 (in millions of dollars):

	Gross Property and Equipment							
	Balance as of December 31, 2016	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, 2017
Land	$ 430.2	$ 0.3	$ (0.7)	$ 1.3	$ —	$ —	$ 1.6	$ 432.7
Non-depletable landfill land	166.8	—	—	—	—	—	—	166.8
Landfill development costs	6,386.7	4.4	—	2.7	34.1	(2.1)	147.1	6,572.9
Vehicles and equipment	6,551.8	438.3	(157.2)	3.0	—	—	20.2	6,856.1
Buildings and improvements	1,160.1	3.4	(1.6)	(4.8)	—	—	21.4	1,178.5
Construction-in-progress - landfill	221.2	269.7	—	—	—	—	(153.0)	337.9
Construction-in-progress - other	35.7	68.6	—	—	—	—	(43.0)	61.3
Total	$ 14,952.5	$ 784.7	$ (159.5)	$ 2.2	$ 34.1	$ (2.1)	$ (5.7)	$ 15,606.2

	Accumulated Depreciation, Amortization and Depletion						
	Balance as of December 31, 2016	Additions Charged to Expense	Retirements	Acquisitions, Net of Divestitures	Adjustments for Asset Retirement Obligations	Impairments, Transfers and Other Adjustments	Balance as of September 30, 2017
Landfill development costs	$ (3,016.5)	$ (240.8)	$ —	$ 25.4	$ 0.2	$ —	$ (3,231.7)
Vehicles and equipment	(3,931.4)	(433.3)	155.0	39.5	—	0.3	(4,169.9)
Buildings and improvements	(416.0)	(42.7)	0.6	3.9	—	(0.3)	(454.5)
Total	$ (7,363.9)	$ (716.8)	$ 155.6	$ 68.8	$ 0.2	$ —	$ (7,856.1)

Liquidity and Capital Resources

The following table summarizes our cash flow from operating activities, investing activities and financing activities for the nine months ended September 30, 2017 and 2016 (in millions of dollars):

	Nine Months Ended September 30,	
	2017	2016
Cash provided by operating activities	$ 1,381.5	$ 1,359.6
Cash used in investing activities	(917.9)	(752.4)
Cash used in financing activities	(467.5)	(584.6)

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, 2017 and 2016 are summarized below:

Changes in assets and liabilities, net of effects from business acquisitions and divestitures, decreased our cash flow from operations by $203.1 million during the nine months ended September 30, 2017, compared to a decrease of $219.1 million during the same period in 2016, primarily as a result of the following:

- Our accounts receivable, exclusive of the change in allowance for doubtful accounts and customer credits, increased $149.0 million during the nine months ended September 30, 2017 due to the timing of billings net of collections, compared to a $70.8 million increase in the same period in 2016. As of September 30, 2017, our days sales outstanding, were 40.0, or 28.3 days net of deferred revenue, compared to 38.4, or 26.3 days net of deferred revenue, as of September 30, 2016.

- Our accounts payable increased $30.3 million during the nine months ended September 30, 2017, compared to a $19.5 million decrease in the same period in 2016, due to the timing of payments.
- Cash paid for capping, closure and post-closure obligations was $12.2 million lower during the nine months ended September 30, 2017 compared to the same period in 2016. The decrease in cash paid for capping, closure, and post-closure obligations is primarily due to payments in 2016 related to capping events at two of our active landfills.
- Cash paid for remediation obligations was $13.0 million lower during the nine months ended September 30, 2017 compared to the same period in 2016 primarily due to the timing of obligations.
- Our other liabilities increased $13.8 million during the nine months ended September 30, 2017, compared to a $54.8 million increase in the same period in 2016 primarily due to an increase in claim payments for our insurance programs.

In addition, cash paid for income taxes (net of refunds) was $270.5 million and $145.7 million for the nine months ended September 30, 2017 and 2016, respectively. Cash paid for interest was $247.0 million and $253.0 million for the nine months ended September 30, 2017 and 2016, 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, 2017 and 2016 are summarized below:

- Capital expenditures during the nine months ended September 30, 2017 were $769.0 million, compared with $738.7 million for the same period in 2016. Property and equipment received during the nine months ended September 30, 2017 and 2016 was $783.4 million and $725.0 million, respectively.
- During the nine months ended September 30, 2017 and 2016, we paid $136.0 million and $30.7 million, respectively, for business acquisitions. During the nine months ended September 30, 2017, we paid $10.6 million, net of proceeds, related to business divestitures. There were no divestitures during the nine months ended September 30, 2016.

We intend to finance capital expenditures and acquisitions through cash on hand, restricted cash held for capital expenditures, cash flows from operations, our revolving credit facilities, and tax-exempt bonds and other financings. We expect to use primarily cash and borrowings on 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, 2017 and 2016 are summarized below:

- Net proceeds from notes payable and long-term debt were $189.2 million during the nine months ended September 30, 2017, compared to net payments of $319.8 million in the same period in 2016.
- During the nine months ended September 30, 2017, we repurchased 5.6 million shares of our stock for $353.3 million compared to repurchases of 6.5 million shares for $306.6 million during the same period in 2016.
- Dividends paid were $324.8 million and $309.9 million during the nine months ended September 30, 2017 and 2016, respectively.

Financial Condition

Cash and Cash Equivalents

As of September 30, 2017, we had $63.9 million of cash and cash equivalents and $96.4 million of restricted cash deposits and restricted marketable securities, including $28.4 million of restricted cash and marketable securities pledged to regulatory agencies and governmental entities as financial guarantees of our performance related to our final capping, closure and post-closure obligations at our landfills, and $68.0 million of restricted cash and marketable securities related to our insurance obligations.

Debt

For discussion and detail regarding our debt, refer to Note 7, *Debt,* to our unaudited consolidated financial statements included in Item 1 of Part I of this Quarterly Report on Form 10-Q.

Credit Facilities

In 2016, we entered into a $1.0 billion unsecured revolving credit facility (the "Replacement Credit Facility"), which replaced our $1.0 billion credit facility maturing in May 2017. The Replacement Credit Facility matures in May 2021 and includes a feature that allows us to increase availability, at our option, by an aggregate amount up to $500.0 million through increased commitments from existing lenders or the addition of new lenders. At our option, borrowings under the Replacement Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Replacement Credit Facility).

Contemporaneous with the execution of the Replacement Credit Facility, we entered into Amendment No. 1 to our existing $1.25 billion unsecured credit facility (the "Existing Credit Facility" and, together with the Replacement Credit Facility, the "Credit Facilities"), to conform certain terms of the Existing Credit Facility with those of the Replacement Credit Facility. Amendment No. 1 does not extend the maturity date of the Existing Credit Facility, which matures in June 2019. The Existing Credit Facility also maintains the feature that allows us to increase availability, at our option, by an aggregate amount of up to $500.0 million through increased commitments from existing lenders or the addition of new lenders.

The credit agreements require us to comply with financial and other covenants. To the extent we are not in compliance with these covenants, we cannot pay dividends and repurchase common stock. Compliance with covenants also is a condition for any incremental borrowings under our Credit Facilities, and failure to meet these covenants would enable the lenders to require repayment of any outstanding loans (which would adversely affect our liquidity). As of September 30, 2017, our EBITDA to interest ratio was 7.66 compared to the 3.00 minimum required by the covenants, and our total debt to EBITDA ratio was 2.89 compared to the 3.50 maximum allowed by the covenants. As of September 30, 2017, we were in compliance with the covenants under our Credit Facilities, and we expect to be in compliance throughout the remainder of 2017.

EBITDA, which is a non-GAAP measure, is calculated as defined in our Credit Facility agreements. 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.

Availability under our Credit Facilities totaled $1,405.3 million and $1,543.1 million as of September 30, 2017 and December 31, 2016, respectively, and can be used for working capital, capital expenditures, acquisitions, letters of credit and other general corporate purposes. As of September 30, 2017, we had $365.0 million of borrowings under our Credit Facilities and $210.0 million of borrowings as of December 31, 2016. We had $461.5 million and $478.4 million of letters of credit outstanding under our Credit Facilities as of September 30, 2017 and December 31, 2016, respectively.

During 2016, we increased the size of our existing unsecured credit facility (the "Uncommitted Credit Facility") to $135.0 million, with all other terms of the agreement remaining unchanged. Our Uncommitted Credit Facility bears interest at LIBOR, plus an applicable margin and is subject to facility fees defined in the agreement, regardless of usage. We can use borrowings under the Uncommitted Credit Facility for working capital and other general corporate purposes. The agreement governing our Uncommitted Credit Facility requires us to comply with certain covenants. The Uncommitted Credit Facility may be terminated by either party at any time. As of September 30, 2017 we had $43.0 million of borrowings and no borrowings as of December 31, 2016, under our Uncommitted Credit Facility.

Senior Notes and Debentures

During 2016 we issued $500.0 million of 2.90% senior notes due 2026 (the "2.90% Notes"). We used the net proceeds from the 2.90% Notes to purchase outstanding notes and debentures with coupons ranging from 5.70% to 7.40%.

Tax-Exempt Financings

As of September 30, 2017 and December 31, 2016, we had $1,073.2 million and $1,072.7 million, respectively, of fixed and variable rate tax-exempt financings outstanding with maturities ranging from 2019 to 2044. Approximately 90% of our tax-exempt financings are remarketed quarterly 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. To date, the remarketing agents have been able to remarket our variable rate unsecured tax-exempt bonds.

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, 2017, our credit ratings were BBB+, Baa3 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.

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 our excess cash, cash from operating activities and our availability to draw from our Credit Facilities provide us with sufficient financial resources to meet our anticipated capital requirements and maturing obligations as they come due.

We may choose to voluntarily retire certain portions of our outstanding debt before their maturity dates using cash from operations or additional borrowings. We also may explore opportunities in 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.

Off-Balance Sheet Arrangements

We have no off-balance sheet debt or similar obligations, other than 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. See *Adverse Weather Conditions* in the Recent Developments section of Item 2 of Part I of this Quarterly Report on Form 10-Q.

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 Item 1 of Part I 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, 2016. 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 Item 1 of Part I 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. Where appropriate, we have implemented a fuel recovery fee that is designed to recover our fuel costs. 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 changes 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, we believe a twenty-cent per gallon change in the price of diesel fuel changes 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) whose costs 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 indirect fuel recovery fees from our vendors.

Our fuel costs were $255.0 million during the nine months ended September 30, 2017, or 3.4% of revenue, compared to $232.6 million during the comparable period in 2016, or 3.3% of revenue.

For additional discussion and detail of our fuel hedges, see Note 12, *Financial Instruments*, of the notes to our unaudited consolidated financial statements in Item 1 of Part I of this Form 10-Q.

Commodities Price Risk

We market recyclable products such as old corrugated containers and old newsprint from our recycling centers. Market demand for recyclable commodities causes volatility in commodity prices. We enter 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. At current volumes and mix of materials, we believe a $10 per ton change in the price of recycled commodities will change annual revenue and operating income by approximately $27 million and $18 million, respectively.

Revenue from sales of these products during the nine months ended September 30, 2017 and 2016 was $400.4 million and $302.8 million, respectively.

For additional discussion and detail of our recyclable commodity hedges, see Note 12, *Financial Instruments*, of the notes to our unaudited consolidated financial statements in Item 1 of Part I of this Form 10-Q.

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, 2017, we had $1,375.4 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 $17 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 Item 1 of Part I of this 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.

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, 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 Item 1 of Part I of this 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 Item 1 of Part I of this Form 10-Q.

We accrue for legal proceedings when losses become probable and reasonably estimable. We have recorded an aggregate accrual of approximately $44 million relating to our outstanding legal proceedings as of September 30, 2017. 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 $44 million higher than the amount recorded as of September 30, 2017.

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

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

Bridgeton Landfill Matters - Regulatory

On July 23, 2012, the Missouri Department of Natural Resources (MDNR) issued a notice of violation (NOV) to the closed Bridgeton Landfill in Bridgeton, Missouri after it determined that a sub-surface smoldering event (SSE) was occurring at the landfill. The NOV specified required actions intended to prevent the spread of the SSE, offsite odors, and environmental pollution. On March 27, 2013, the Missouri Attorney General's Office, on behalf of MDNR, sued Republic Services, Inc., and our subsidiaries Allied Services, LLC, and Bridgeton Landfill, LLC in the Circuit Court of St. Louis County in connection with odors and leachate from the landfill. The action alleges, among other things, violations of the Missouri Solid Waste Management, Hazardous Waste Management, Clean Water, and Air Conservation Laws, and claims for nuisance, civil penalties, costs, and natural resource damages. The suit seeks a preliminary and permanent injunction requiring us to take measures to remedy the alleged resulting nuisance, civil penalties of approximately $37 million, and other relief. On May 13, 2013, the court entered a stipulated preliminary injunction under which Bridgeton Landfill, LLC agreed, among other things, to continue remedial work plans previously approved by MDNR and to continue reporting to MDNR. On June 19, 2014, the court entered an agreed amendment to the injunction providing for increased frequency in some carbon monoxide monitoring, three new rounds of air sampling, implementation of an Odor Management Plan, and cost reimbursement to MDNR. The case is presently set for trial beginning March 5, 2018. On April 28, 2016, Bridgeton Landfill, LLC and the United States Environmental Protection Agency entered into an Administrative Settlement Agreement and Order on Consent addressing certain remedial actions in the north quarry of the Bridgeton Landfill, including a heat extraction barrier, an expanded landfill cover, and additional temperature monitoring probes.

Sunshine Canyon Landfill Matter

The Sunshine Canyon Landfill in Sylmar, California entered into settlement agreements with the South Coast Air Quality Management District (SCAQMD) in 2012 and 2013. The settlement agreements resolved claims for excess emission charges, civil penalties, and investigative and administrative costs relating to odor-related and surface emissions NOVs received from SCAQMD. Since the end of the period covered by the 2013 settlement agreement, which was September 6, 2013, and through October 26, 2017, Sunshine Canyon has received an additional 134 NOVs from SCAQMD for odors. We received a $2.2 million civil penalty demand from the SCAQMD, and the SCAQMD's Executive Officer filed a Petition before the Hearing Board of the SCAQMD for an abatement order. We entered into a Stipulated Abatement Order with the Hearing Board providing for certain abatement measures to be implemented at the landfill. On July 13, 2017, we paid $1.3 million to SCAQMD to resolve the outstanding civil penalty demand.

Arbor Hills Landfill Matter

BFI Waste Systems of North America, LLC (BFIWS) formerly owned a landfill gas collection and control system (GCCS) at the Arbor Hills Landfill in Salem Township, Michigan. The Michigan Department of Environmental Quality issued NOVs to BFIWS on February 2, March 15, April 29, and December 14, 2016 and the EPA issued a Finding of Violation (FOV) to BFIWS on September 29, 2016. The NOVs and FOV, which were issued prior to the transfer of ownership of the GCCS, relate to alleged off site odors and operation conditions at the landfill. BFIWS has not yet received a civil penalty demand from either agency.

Pine Avenue Landfill Matter

On December 20, 2016, the EPA issued an 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 Falls, New York. On October 16, 2017, Allied-Niagara received a civil penalty demand from the EPA. The demand proposes a penalty of $0.6 million or $2.5 million, depending on the results of requested sampling analysis at the site. Allied-Niagara intends to perform the sampling analysis and plans to negotiate the amount of the penalty.

ITEM 1A. RISK FACTORS.

There were no material changes during the nine months ended September 30, 2017 in the risk factors previously disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

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, 2017:

	Total Number of Shares Purchased (a)	Average Price Paid per Share (a)	Total Number of Shares Purchased as Part of Publicly Announced Program (b)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (c)
July 1 - 31	426,500	$ 64.16	426,500	$ 193,702,290
August 1 - 31	889,385	64.50	889,385	136,335,272
September 1 - 30	577,730	65.67	577,730	98,398,074
	1,893,615		1,893,615	

(a) In October 2017, our board of directors added $2.0 billion to the existing share repurchase authorization. Before this, $98.4 million remained under the prior authorization. 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, 2017, 0.1 million repurchased shares were pending settlement and an associated $3.3 million was unpaid and included within other accrued liabilities.

(b) The total number of shares purchased as part of the publicly announced program were all purchased pursuant to the October 2015 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 issued to employees.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

None.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS.

Exhibit Number	Description of Exhibit
31.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
31.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
32.1*	Section 1350 Certification of Chief Executive Officer.
32.2*	Section 1350 Certification of Chief Financial Officer.
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Labels Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.

* Filed herewith.

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:	November 2, 2017	By:	/s/ CHARLES F. SERIANNI
			Charles F. Serianni **Executive Vice President and** **Chief Financial Officer** **(Principal Financial Officer)**
Date:	November 2, 2017	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, Donald W. Slager, certify that:

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

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ DONALD W. SLAGER

Donald W. Slager
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 2, 2017

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, Charles F. Serianni, certify that:

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

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ CHARLES F. SERIANNI

Charles F. Serianni
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

Date: November 2, 2017

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, 2017 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Donald W. Slager, 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/ DONALD W. SLAGER

Donald W. Slager
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 2, 2017

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, 2017 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Charles F. Serianni, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

/S/ CHARLES F. SERIANNI

Charles F. Serianni
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

Date: November 2, 2017