The Management's Discussion and Analysis of Financial Condition and Results of Operations for Waste Connections, Inc. is also included in the Form 10-Q for the period ended September 30, 2017 filed on SEDAR on October 26, 2017 in its entirety. All references to $ are to U.S. dollars unless otherwise indicated.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

On June 1, 2016, pursuant to the terms of the Agreement and Plan of Merger dated as of January 18, 2016 (the "Merger Agreement"), Water Merger Sub LLC, a Delaware limited liability company and a wholly-owned subsidiary of Progressive Waste Solutions Ltd. ("Merger Sub"), merged with and into Waste Connections US, Inc. (f/k/a Waste Connections, Inc.), a Delaware corporation ("Old Waste Connections") in an all-stock business combination with Old Waste Connections continuing as the surviving corporation and an indirect wholly-owned subsidiary of Waste Connections, Inc. (f/k/a Progressive Waste Solutions Ltd.), a corporation organized under the laws of Ontario, Canada ("New Waste Connections," "WCI" or the "Company"). We use the term "Progressive Waste" herein in the context of references to Progressive Waste Solutions Ltd. and its shareholders prior to the completion of the Progressive Waste acquisition on June 1, 2016.

Under the terms of the Merger Agreement, Old Waste Connections' stockholders received 3.1152645 New Waste Connections shares for each Old Waste Connections share they owned. Immediately following the completion of the Progressive Waste acquisition, New Waste Connections also completed (i) a consolidation whereby every 3.1152645 common shares outstanding were converted into one common share (the "Consolidation") and (ii) an amalgamation with a wholly-owned subsidiary whereby its legal name was changed from Progressive Waste Solutions Ltd. to Waste Connections, Inc. (the "Amalgamation"). Upon completion of the Progressive Waste acquisition, Old Waste Connections' former stockholders owned approximately 70% of the combined company, and Progressive Waste's former shareholders owned approximately 30%. Following the completion of the Progressive Waste acquisition, the Consolidation and the Amalgamation, on June 1, 2016, the post-Consolidation common shares of New Waste Connections commenced trading on the Toronto Stock Exchange (the "TSX") and on the New York Stock Exchange (the "NYSE") under the ticker symbol "WCN." The common stock of Old Waste Connections, which traded previously under the symbol "WCN," has ceased trading on, and has been delisted from, the NYSE.

The Company is led by Old Waste Connections' management team and the Board of Directors of the combined company includes the five members of Old Waste Connections' board and two members from Progressive Waste's board.

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Quarterly Report on Form 10-Q are forward-looking in nature, including statements related to our ability to draw on our Credit Agreement or raise other capital, the responsibilities of our subsidiaries with regard to possible cleanup obligations imposed by the EPA or other regulatory authorities, the impact of global, regional and local economic conditions, including the price of crude oil, on our volume, business and results of operations, the effects of seasonality on our business and results of operations, our ability to address any impacts of inflation on our business, demand for recyclable commodities (including landfill gas reclamation) and recyclable commodity pricing, our expectations with respect to capital expenditures, our expectations with respect to our ability to obtain expansions of permitted landfill capacity and to provide collection services under exclusive arrangements, our expectations with respect to our normal course issuer bid (our share repurchase program) and future dividend payments, our expectations with respect to the outcomes of our legal proceedings, our expectations with respect to the potential financial impairment of our reporting units caused by dispositions of certain operating units, our expectations about new accounting standards, our expectations about potential non-performance by counterparties to our hedge agreements and our expectations with respect to the anticipated benefits of the Progressive Waste acquisition and other acquisitions. These statements can be identified by the use of forward-looking terminology such as "believes," "expects," "may," "will," "should" or "anticipates," or the negative thereof or comparable terminology, or by discussions of strategy.

Factors that could cause actual results to differ from those projected include, but are not limited to, those listed below and elsewhere in this report. There may be additional risks of which we are not presently aware or that we currently believe are immaterial which could have an adverse impact on our business. We make no commitment to revise or update any forward-looking statements in order to reflect events or circumstances that may change.

Our business and operations are subject to a variety of risks and uncertainties and, consequently, actual results may differ materially from those projected by any forward-looking statements. Factors that could cause actual results to differ from those projected include, but are not limited to, the following:

- Our industry is highly competitive and includes companies with lower prices, return expectations or other advantages, and governmental service providers, which could adversely affect our ability to compete and our operating results;

- We may lose contracts through competitive bidding, early termination or governmental action;

- Our financial and operating performance may be affected by the inability to renew landfill operating permits, obtain new landfills and expand existing ones;
- Increases in labor costs could impact our financial results;
- Price increases may not be adequate to offset the impact of increased costs, or may cause us to lose customers;
- The integration following the Progressive Waste acquisition may not achieve the anticipated benefits or may disrupt our operations;
- We plan to divest certain assets acquired in the Progressive Waste acquisition, which may result in lower than expected consideration or recorded losses on sale of assets, and such divestitures may take longer than expected to complete;
- A portion of our growth and future financial performance depends on our ability to integrate acquired businesses, and the success of our acquisitions;
- Competition for acquisition candidates, consolidation within the waste industry and economic and market conditions may limit our ability to grow through acquisitions;
- Our results are vulnerable to economic conditions;
- The seasonal nature of our business and "event-driven" waste projects cause our results to fluctuate;
- Our results will be affected by changes in recycled commodity prices;
- Our results will be affected by changes in the value of renewable fuel;
- Lower crude oil prices may adversely affect the level of exploration, development and production activity of E&P companies and the demand for our E&P waste services;
- Increases in the price of diesel or compressed natural gas fuel may adversely affect our collection business and reduce our operating margins;
- Our financial results are based upon estimates and assumptions that may differ from actual results;
- Our accruals for our landfill site closure and post-closure costs may be inadequate;
- Increases in insurance costs and the amount that we self-insure for various risks could reduce our operating margins and reported earnings;
- We may be subject in the normal course of business to judicial, administrative or other third-party proceedings that could interrupt or limit our operations, require expensive remediation, result in adverse judgments, settlements or fines and create negative publicity;
- Pending or future litigation or governmental proceedings could result in material adverse consequences, including judgments or settlements;
- Our financial results could be adversely affected by impairments of goodwill, indefinite-lived intangibles or property and equipment;
- Income taxes may be uncertain;
- Future changes to U.S., Canadian and foreign tax laws could materially adversely affect us;
- We may not be able to maintain a competitive effective corporate tax rate;

- Each business that we acquire or have acquired may have liabilities or risks that we fail or are unable to discover, or that become more adverse to our business than we anticipated at the time of acquisition;

- Our indebtedness could adversely affect our financial condition and limit our financial flexibility;

- We may be unable to obtain performance or surety bonds, letters of credit or other financial assurances or to maintain adequate insurance coverage;

- Our operations in Canada expose us to exchange rate fluctuations that could adversely affect our financial performance and our reported results of operations;

- Alternatives to landfill disposal may cause our revenues and operating results to decline;

- Labor union activity could divert management attention and adversely affect our operating results;

- We could face significant withdrawal liability if we withdraw from participation in one or more multiemployer pension plans in which we participate and the accrued pension benefits are not fully funded;

- We rely on computer systems to run our business and disruptions or privacy breaches in these systems could impact our ability to service our customers and adversely affect our financial results, damage our reputation, and expose us to litigation risk;

- Extensive and evolving environmental, health and safety laws and regulations may restrict our operations and growth and increase our costs;

- Our business is subject to operational and safety risks, including the risk of personal injury to employees and others;

- Future changes in laws regulating the flow of solid waste in interstate commerce could adversely affect our operating results;

- Extensive regulations that govern the design, operation, expansion and closure of landfills may restrict our landfill operations or increase our costs of operating landfills;

- Our E&P waste business could be adversely affected by changes in laws regulating E&P waste;

- Liabilities for environmental damage may adversely affect our financial condition, business and earnings;

- We depend significantly on the services of the members of our senior and regional management team, and the departure of any of those persons could cause our operating results to suffer;

- Our decentralized decision-making structure could allow local managers to make decisions that may adversely affect our operating results; and

- If we are not able to develop and protect intellectual property, or if a competitor develops or obtains exclusive rights to a breakthrough technology, our financial results may suffer.

These risks and uncertainties, as well as others, are discussed in greater detail in this Quarterly Report on Form 10-Q and in other filings with the U.S. Securities and Exchange Commission, or SEC, made by the Company, including its most recent Annual Report on Form 10-K, as well as in the Company's filings during the year with the Canadian Securities Administrators. There may be additional risks of which we are not presently aware or that we currently believe are immaterial which could have an adverse impact on our business. We make no commitment to revise or update any forward-looking statements in order to reflect events or circumstances that may change.

OVERVIEW OF OUR BUSINESS

We are an integrated solid waste services company that provides waste collection, transfer, disposal and recycling services in mostly exclusive and secondary markets in the U.S. and Canada. Through our R360 Environmental Solutions subsidiary, we are also a leading provider of non-hazardous exploration and production, or E&P, waste treatment, recovery and disposal services in several of the most active natural resource producing areas in the U.S. We also provide intermodal services for the rail haul movement of cargo and solid waste containers in the Pacific Northwest through a network of intermodal facilities.

We seek to avoid highly competitive, large urban markets and instead target markets where we can attain high market share either through exclusive contracts, vertical integration or asset positioning. In markets where waste collection services are provided under exclusive arrangements, or where waste disposal is municipally owned or funded or available at multiple municipal sources, we believe that controlling the waste stream by providing collection services under exclusive arrangements is often more important to our growth and profitability than owning or operating landfills. We also target niche markets, like E&P waste treatment and disposal services.

As of September 30, 2017, we served residential, commercial, industrial and E&P customers in 38 states in the U.S. and five provinces in Canada: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin and Wyoming and the provinces of Alberta, British Columbia, Manitoba, Ontario and Québec.

The solid waste industry is a local and highly competitive business, requiring substantial labor and capital resources. The participants compete for collection accounts primarily on the basis of price and, to a lesser extent, the quality of service, and compete for landfill business on the basis of tipping fees, geographic location and quality of operations. The solid waste industry has been consolidating and continues to consolidate as a result of a number of factors, including the increasing costs and complexity associated with waste management operations and regulatory compliance. Many small independent operators and municipalities lack the capital resources, management, operating skills and technical expertise necessary to operate effectively in such an environment. The consolidation trend has caused solid waste companies to operate larger landfills that have complementary collection routes that can use company-owned disposal capacity. Controlling the point of transfer from haulers to landfills has become increasingly important as landfills continue to close and disposal capacity moves farther from the collection markets it serves.

Generally, the most profitable operators within the solid waste industry are those companies that are vertically integrated or enter into long-term collection contracts. A vertically integrated operator will benefit from: (1) the internalization of waste, which is bringing waste to a company-owned landfill; (2) the ability to charge third-party haulers tipping fees either at landfills or at transfer stations; and (3) the efficiencies gained by being able to aggregate and process waste at a transfer station prior to landfilling.

The E&P waste services industry is regional in nature and is also highly fragmented, with acquisition opportunities available in several active natural resource basins. Competition for E&P waste comes primarily from smaller regional companies that utilize a variety of disposal methods and generally serve specific geographic markets, and other solid waste companies. In addition, customers in many markets have the option of using internal disposal methods or outsourcing to another third-party disposal company. The principal competitive factors in this business include: gaining customer approval of treatment and disposal facilities; location of facilities in relation to customer activity; reputation; reliability of services; track record of environmental compliance; ability to accept multiple waste types at a single facility; and price. The demand for our E&P waste services depends on the continued demand for, and production of, oil and natural gas. Crude oil and natural gas prices historically have been volatile and the substantial reductions in crude oil prices that began in October 2014, and continued through 2015 and into early 2016, resulted in a decline in the level of drilling and production activity, reducing the demand for E&P waste services in the basins in which we operate. The prices of crude oil and natural gas have recovered from their low point in February 2016 and the demand for our E&P waste services has improved as a result of increased production of oil and natural gas. If this recovery of the prices of crude oil and natural gas is not sustained, or if a further reduction in crude oil and natural gas prices occurs, it could lead to continued declines in the level of production activity and demand for our E&P waste services, which could result in the recognition of impairment charges on our intangible assets and property and equipment associated with our E&P operations.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of financial statements in conformity with GAAP requires estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses and related disclosures of contingent assets and liabilities in the condensed consolidated financial statements. As described by the SEC, critical accounting estimates and assumptions are those that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on the financial condition or operating performance of a company. Such critical accounting estimates and assumptions are applicable to our reportable segments. Refer to our most recent Annual Report on Form 10-K for a complete description of our critical accounting estimates and assumptions.

NEW ACCOUNTING PRONOUNCEMENTS

For a description of the new accounting standards that affect us, see Note 3 to our Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

RESULTS OF OPERATIONS FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2017 AND 2016

The following table sets forth items in our Condensed Consolidated Statements of Net Income in thousands of U.S. dollars and as a percentage of revenues for the periods indicated.

	Three months ended September 30,				Nine months ended September 30,			
	2017		2016		2017		2016	
Revenues	$ 1,206,478	100.0%	$ 1,084,922	100.0%	$ 3,473,313	100.0%	$ 2,327,241	100.0%
Cost of operations	695,122	57.6	636,310	58.7	2,024,402	58.3	1,339,764	57.6
Selling, general and administrative	128,200	10.6	129,576	11.9	383,600	11.0	349,995	15.0
Depreciation	136,941	11.4	125,744	11.6	395,008	11.4	270,988	11.6
Amortization of intangibles	26,613	2.2	26,944	2.5	76,886	2.2	48,719	2.1
Impairments and other operating items	832	0.1	7,682	0.7	141,333	4.1	4,634	0.2
Operating income	218,770	18.1	158,666	14.6	452,084	13.0	313,141	13.5
Interest expense	(32,471)	(2.7)	(27,621)	(2.5)	(92,763)	(2.7)	(65,291)	(2.8)
Interest income	1,656	0.1	171	0.0	3,131	0.1	447	0.0
Other income (expense), net	1,709	0.2	500	0.0	3,561	0.1	(268)	(0.0)
Foreign currency transaction gain (loss)	(1,864)	(0.1)	(350)	(0.0)	(3,502)	(0.1)	339	0.0
Income tax provision	(64,390)	(5.4)	(42,485)	(3.9)	(100,220)	(2.9)	(86,750)	(3.8)
Net income	123,410	10.2	88,881	8.2	262,291	7.5	161,618	6.9
Net income attributable to noncontrolling interests	(183)	(0.0)	(264)	(0.0)	(559)	(0.0)	(670)	(0.0)
Net income attributable to Waste Connections	$ 123,227	10.2%	$ 88,617	8.2%	$ 261,732	7.5%	$ 160,948	6.9%

Revenues. Total revenues increased $121.6 million, or 11.2%, to $1.206 billion for the three months ended September 30, 2017, from $1.085 billion for the three months ended September 30, 2016. Total revenues increased $1.146 billion, or 49.2%, to $3.473 billion for the nine months ended September 30, 2017, from $2.327 billion for the nine months ended September 30, 2016.

During the three months ended September 30, 2017, incremental revenue from acquisitions closed during, or subsequent to, the three months ended September 30, 2016, increased revenues by approximately $61.3 million. During the nine months ended September 30, 2017, incremental revenue from acquisitions closed during, or subsequent to, the nine months ended September 30, 2016, increased revenues by approximately $991.1 million, of which the Progressive Waste acquisition contributed $826.9 million.

Operations that were divested in 2017 decreased revenues by approximately $21.1 million and $25.8 million for the three and nine months ended September 30, 2017, respectively.

During the three months ended September 30, 2017, the net increase in prices charged to our customers at our existing operations was $32.8 million, consisting of $32.6 million of core price increases and $0.2 million from fuel, materials and environmental surcharges due primarily to an increase in the market price of diesel fuel. During the nine months ended September 30, 2017, the net increase in prices charged to our customers at our existing operations was $66.3 million, consisting of $65.4 million of core price increases and $0.9 million from fuel, materials and environmental surcharges due primarily to an increase in the market price of diesel fuel.

During the three and nine months ended September 30, 2017, volume increases in our existing business increased solid waste revenues by $5.0 million and $28.6 million, respectively, from increases in roll off collection, transfer station volumes and landfill volumes resulting from increased construction and general economic activity in our markets, partially offset by declines in residential volumes resulting from certain contracts acquired with the acquisition of Progressive Waste that were terminated subsequent to June 30, 2016 and declines in commercial volumes due to intentional losses of certain low margin commercial collection customers. E&P revenues at facilities owned and fully-operated during the three and nine months ended September 30, 2017 increased by $24.7 million and $50.7 million, respectively, due to a partial recovery in crude oil prices increasing drilling activity and E&P disposal volumes at the majority of our sites, with the most significant increases in the Permian Basin and Louisiana.

An increase in the average Canadian dollar to U.S. dollar currency exchange rate resulted in an increase in revenues of $7.6 million and $5.8 million for the three and nine months ended September 30, 2017, respectively. Our Canada segment was formed in conjunction with the Progressive Waste acquisition on June 1, 2016; therefore, Canadian dollar to U.S. dollar exchange rate changes did not impact our revenues or results of operations prior to June 1, 2016. The average Canadian dollar to U.S. dollar exchange rates were 0.7986 in the three months ended September 30, 2017, 0.7663 in three months ended September 30, 2016, 0.7870 in the four-month period of June to September 2017 and 0.7686 in the four-month period from June to September 2016.

Revenues from sales of recyclable commodities at facilities owned during the three and nine months ended September 30, 2017 and 2016 increased $7.9 million and $22.6 million, respectively, due primarily to increased prices for recyclable commodities, which began to recover in the second half of 2016, continuing through August 2017. In September 2017, prices for recyclable commodities, primarily old corrugated cardboard, began to decline due to a reduction in overseas demand. Recyclable commodity revenue was $41.6 million and $124.2 million for the three and nine months ended September 30, 2017, respectively. If the reductions in prices for recyclable commodities, which began in September 2017, continue into the fourth quarter of 2017 and the full year of 2018, we believe our fourth quarter 2017 and full year 2018 revenue from sales of recyclable commodities will decrease approximately 6% and 27%, respectively, from the comparable periods.

Other revenues increased by $3.4 million and $6.8 million during the three and nine months ended September 30, 2017, respectively, due primarily to an increase in landfill gas sales at our Canada segment of $4.0 million and $5.9 million during the three and nine months ended September 30, 2017, respectively.

Cost of Operations. Total cost of operations increased $58.8 million, or 9.2%, to $695.1 million for the three months ended September 30, 2017, from $636.3 million for the three months ended September 30, 2016. The increase was primarily the result of $39.1 million of operating costs from acquisitions closed during, or subsequent to, the three months ended September 30, 2016 and an increase in operating costs at our existing operations of $35.6 million, partially offset by a decrease in operating costs of $15.9 million at operations divested in 2017.

The increase in operating costs at our existing operations of $35.6 million for the three months ended September 30, 2017 was comprised of an increase in labor expenses of $8.2 million due primarily to employee pay rate increases, an increase in third-party trucking and transportation expenses of $6.8 million due to increased transfer station and landfill volumes that require us to transport the waste to our disposal sites, an increase in taxes on revenues of $5.9 million due to increased revenues in our solid waste markets, an increase in truck, container, equipment and facility maintenance and repair expenses of $4.6 million due to variability in the timing and severity of major repairs, an increase in fuel expense of $3.6 million due to increases in the market price of diesel fuel, an increase in expenses associated with the purchase of recyclable commodities of $2.3 million due to increased recyclable commodity values, an increase of $2.3 million from incremental labor and repair expenses resulting from hurricanes impacting our Texas, Louisiana and Florida operations and $1.9 million of other net expense increases.

Total cost of operations increased $684.6 million, or 51.1%, to $2.024 billion for the nine months ended September 30, 2017, from $1.340 billion for the nine months ended September 30, 2016. The increase was primarily the result of $503.7 million of operating costs from the Progressive Waste acquisition, $109.3 million of additional operating costs from all other acquisitions closed during, or subsequent to, the nine months ended September 30, 2016 and an increase in operating costs at our existing operations of $91.4 million, partially offset by a decrease in operating costs of $19.8 million at operations divested in 2017.

The increase in operating costs at our existing operations of $91.4 million for the nine months ended September 30, 2017 was comprised of an increase in labor expenses of $18.4 million due primarily to employee pay rate increases, an increase in truck, container, equipment and facility maintenance and repair expenses of $16.9 million due to variability in the timing and severity of major repairs, an increase in taxes on revenues of $14.6 million due to increased revenues in our solid waste markets, an increase in third-party trucking and transportation expenses of $13.9 million due to increased transfer station and landfill volumes that require us to transport the waste to our disposal sites, an increase in fuel expense of $6.7 million due to increases in the market price of diesel fuel, an increase in employee benefits expenses of $5.4 million due to increased severity of medical claims, an increase in expenses associated with the purchase of recyclable commodities of $4.3 million due to increased recyclable commodity values, an increase in expenses for auto and workers' compensation claims of $4.1 million due to actuarial driven average claim rate increases resulting from the inclusion of historical Progressive Waste claim experience into rates for current year claims, an increase of $2.3 million from incremental labor and repair expenses resulting from hurricanes impacting our Texas, Louisiana and Florida operations, an increase in equipment rental expenses of $1.3 million primarily at our E&P segment to comply with regulatory requirements, an increase in processing cell remediation expenses at our E&P segment of $1.1 million due to increased disposal volumes, an increase in leachate disposal expenses of $0.9 million due to higher precipitation at certain landfills in our Eastern segment and $1.5 million of other net expense increases.

Cost of operations as a percentage of revenues decreased 1.1 percentage points to 57.6% for the three months ended September 30, 2017, from 58.7% for the three months ended September 30, 2016. The components of the decrease consisted of a 0.7 percentage point decrease from increased internalization of collected waste volumes, primarily in our New York markets, a 0.7 percentage point decrease from leveraging existing personnel to support increases in solid waste and E&P volumes and the benefit of improved commodity prices and a 0.1 percentage point decrease from all other net changes, partially offset by a 0.2 percentage point increase from acquisitions closed during, or subsequent to, the nine months ended September 30, 2016 having operating margins lower than our company average and a 0.2 percentage point increase from expenses resulting from the impact of hurricanes.

Cost of operations as a percentage of revenues increased 0.7 percentage points to 58.3% for the nine months ended September 30, 2017, from 57.6% for the nine months ended September 30, 2016. The components of the increase consisted of a 1.4 percentage point increase from acquisitions closed during, or subsequent to, the nine months ended September 30, 2016 having operating margins lower than our company average, a 0.2 percentage point increase from higher third party trucking and transportation expenses and a 0.3 percentage point increase from all other net changes, partially offset by a 0.6 percentage point decrease from increased internalization of collected waste volumes, primarily in our New York markets and a 0.6 percentage point decrease from leveraging existing personnel to support increases in solid waste and E&P volumes and the benefit of improved commodity prices.

SG&A. SG&A expenses decreased $1.4 million, or 1.1%, to $128.2 million for the three months ended September 30, 2017, from $129.6 million for the three months ended September 30, 2016. The decrease was comprised of a decrease of $7.3 million in integration-related professional fees and severance-related expenses incurred in the prior year period for Progressive Waste personnel who were not permanently retained as employees of New Waste Connections following the close of the Progressive Waste acquisition, a decrease of $5.3 million resulting from the nonrecurring prior year accrual of incentive compensation expenses to certain of our executive officers and key employees related to the achievement of defined synergy goals realized by New Waste Connections from the acquisition of Progressive Waste, a decrease in share-based compensation expenses of $2.1 million due to less outstanding shares in the current period for equity awards accounted for as liabilities that were granted to employees of Progressive Waste prior to June 1, 2016 which are subject to valuation adjustments each period based on changes in fair value and a decrease of $1.9 million consisting of SG&A expenses from operations divested in 2017, partially offset by $3.8 million of additional SG&A expenses from operating locations at acquisitions closed during, or subsequent to, the three months ended September 30, 2016, an increase in payroll expenses of $2.7 million due to increased corporate headcount to support the operations of Progressive Waste and annual compensation increases, an increase in accrued recurring cash incentive compensation expense to our management of $2.2 million due to the achievement of interim financial targets during the three months ended September 30, 2017, an increase in direct acquisition costs of $1.8 million resulting from an increase in acquisition activity and legal costs incurred related to divested operations, an increase in equity-based compensation expenses of $1.6 million associated with our annual recurring grant of restricted share units to our personnel, an increase in corporate travel, meetings and training expenses of $1.0 million resulting primarily from the integration of employees of Progressive Waste into New Waste Connections, an increase in expenses for uncollectible accounts receivable of $1.0 million due primarily to the collection during the three months ended September 30, 2016 of a large receivable balance that was written off as a doubtful account in a prior year, an increase in donations of $0.7 million primarily associated with financial support we have provided to our employees that were impacted by hurricanes in 2017 and $0.4 million of other net expense increases.

SG&A expenses increased $33.6 million, or 9.6%, to $383.6 million for the nine months ended September 30, 2017, from $350.0 million for the nine months ended September 30, 2016. The increase was comprised of $61.3 million of SG&A expenses from operating locations acquired in the Progressive Waste acquisition, $12.0 million of additional SG&A expenses from operating locations at all other acquisitions closed during, or subsequent to, the nine months ended September 30, 2016, an increase in accrued recurring cash incentive compensation expense to our management of $9.8 million due to the achievement of interim financial targets during the nine months ended September 30, 2017 and the addition of accrued cash incentive compensation expense for the retained Progressive Waste employees, an increase in payroll expenses of $6.8 million due to increased corporate headcount to support the operations of Progressive Waste and annual compensation increases, an increase in corporate travel, meetings and training expenses of $4.8 million resulting from the integration of employees of Progressive Waste into New Waste Connections, an increase in legal, accounting and information technology professional fee expenses of $4.1 million due to increased support required as a result of growth from the acquisition of Progressive Waste, an increase in equity-based compensation expenses of $3.6 million associated with our annual recurring grant of restricted share units to our personnel, an increase in software license fees of $2.2 million to support our new payroll processing application and computer applications acquired in the Progressive Waste acquisition, an increase in employee benefits expenses of $1.9 million due to increased severity of medical claims, an increase in employee relocation expenses of $1.4 million associated with corporate personnel added to support the additional administrative oversight resulting from the Progressive Waste acquisition, an increase in expenses for uncollectible accounts receivable of $1.3 million due primarily to the collection during the three months ended September 30, 2016 of a large receivable balance that was written off as a doubtful account in a prior year and increases resulting from higher industrial and special waste revenue, an increase in donations of $0.7 million primarily associated with financial support we have provided to our employees that were impacted by hurricanes in 2017, an increase in deferred compensation expense of $1.4 million resulting from deferred compensation liabilities to employees increasing as a result of increases in the market value of investments to which employee deferred compensation balances are tracked and $1.8 million of other net expense increases, partially offset by a decrease in direct acquisition costs of $27.9 million resulting from amounts incurred in the prior year period related to the Progressive Waste acquisition, a decrease of $22.4 million in integration-related professional fees and severance-related expenses incurred in the prior year period for Progressive Waste personnel who were not permanently retained as employees of New Waste Connections following the close of the Progressive Waste acquisition, a decrease of $14.5 million from New Waste Connections paying excise taxes in the prior year period on the unvested or vested and undistributed equity-compensation holdings of our corporate officers and members of our Board of Directors resulting from the Progressive Waste acquisition, a decrease of $5.3 million resulting from the nonrecurring prior year accrual of incentive compensation expenses to certain of our executive officers and key employees related to the achievement of defined synergy goals realized by New Waste Connections from the acquisition of Progressive Waste, a decrease in share-based compensation expenses of $4.9 million related to awards granted to employees of Progressive Waste prior to June 1, 2016 for which vesting was accelerated in the prior year period due to plan provisions regarding a change in control followed by termination of employment and resulting from less outstanding shares in the current period which are subject to valuation adjustments each period based on changes in fair value, a decrease in equity-based compensation expenses of $2.3 million resulting from the acceleration of vesting in the prior year period of performance share units granted to Old Waste Connections' management in 2014 and 2015 and a decrease of $2.2 million consisting of SG&A expenses from operations divested in 2017.

SG&A expenses as a percentage of revenues decreased 1.3 percentage points to 10.6% for the three months ended September 30, 2017, from 11.9% for the three months ended September 30, 2016. The decrease as a percentage of revenues consists of a 0.7 percentage point decrease from integration-related professional fees and severance-related expenses related to Progressive Waste and a 0.5 percentage point decrease from the nonrecurring prior year accrual of incentive compensation expenses to certain of our executive officers and key employees related to the achievement of defined synergy goals realized by New Waste Connections from the acquisition of Progressive Waste and a 0.1 percentage point decrease from the net impact of SG&A expenses from operating locations acquired during, or subsequent to, the three months ended September 30, 2016.

SG&A expenses as a percentage of revenues decreased 4.0 percentage points to 11.0% for the nine months ended September 30, 2017, from 15.0% for the nine months ended September 30, 2016. The decrease as a percentage of revenues consists of a 1.2 percentage point decrease from the decrease in direct acquisition costs, a 1.0 percentage point decrease from integration-related professional fees and severance-related expenses related to Progressive Waste, a 0.9 percentage point decrease from the net impact of SG&A expenses from operating locations acquired in the Progressive Waste acquisition and all other acquisitions closed during, or subsequent to, the nine months ended September 30, 2016, a 0.6 percentage point decrease from excise taxes paid in the prior year period, a 0.2 percentage point decrease from the nonrecurring prior year accrual of incentive compensation expenses to certain of our executive officers and key employees related to the achievement of defined synergy goals realized by New Waste Connections from the acquisition of Progressive Waste and a net 0.1 percentage point decrease from other changes.

Depreciation. Depreciation expense increased $11.2 million, or 8.9%, to $136.9 million for the three months ended September 30, 2017, from $125.7 million for the three months ended September 30, 2016. The increase was primarily the result of additional depreciation and depletion expense of $4.7 million from other acquisitions closed during, or subsequent to, the three months ended September 30, 2016, an increase in depreciation expense of $3.9 million associated with additions to our fleet and equipment purchased to support our existing operations and an increase in depletion expense of $4.8 million at our existing landfills due primarily to an increase in volumes, partially offset by a decrease of $2.2 million resulting from the disposal of property and equipment with operations divested in 2017.

Depreciation expense increased $124.0 million, or 45.8%, to $395.0 million for the nine months ended September 30, 2017, from $271.0 million for the nine months ended September 30, 2016. The increase was primarily the result of additional depreciation and depletion expense of $93.7 million from assets acquired in the Progressive Waste acquisition, additional depreciation and depletion expense of $12.9 million from all other acquisitions closed during, or subsequent to, the nine months ended September 30, 2016, an increase in depreciation expense of $9.0 million associated with additions to our fleet and equipment purchased to support our existing operations and an increase in depletion expense of $11.4 million at our existing landfills due primarily to an increase in volumes, partially offset by a decrease of $3.0 million resulting from the disposal of property and equipment with operations divested in 2017.

Depreciation expense as a percentage of revenues decreased 0.2 percentage points to 11.4% for the three and nine months ended September 30, 2017, from 11.6% for the three and nine months ended September 30, 2016. The decreases as a percentage of revenues were due primarily to the impact of leveraging existing property and equipment to support increases in our E&P revenue and revenue from the sale of recyclable commodities.

Amortization of Intangibles. Amortization of intangibles expense decreased $0.3 million, or 1.2% to $26.6 million for the three months ended September 30, 2017, from $26.9 million for the three months ended September 30, 2016. The decrease in amortization expense was the result of a decrease of $2.9 million from certain intangible assets becoming fully amortized subsequent to September 30, 2016, adjustments to the fair market values of intangible assets acquired in the Progressive Waste acquisition, which were recorded in the fourth quarter of 2016, resulting in a reduction to amortization expense subsequent to September 30, 2016 and a decrease of $0.5 million resulting from the disposal of intangible assets with operations divested in 2017, partially offset by $3.1 million from intangible assets acquired in other acquisitions closed subsequent to September 30, 2016.

Amortization of intangibles expense increased $28.2 million, or 57.8% to $76.9 million for the nine months ended September 30, 2017, from $48.7 million for the nine months ended September 30, 2016. The increase in amortization expense was the result of $27.7 million recorded on contracts, customer lists and transfer station permits acquired in the Progressive Waste acquisition and a net increase of $6.6 million from other acquisitions closed in 2016 and 2017, partially offset by a decrease of $5.3 million from certain intangible assets becoming fully amortized subsequent to September 30, 2016 and adjustments to the fair market values of intangible assets acquired in the Progressive Waste acquisition, which were recorded in the fourth quarter of 2016, resulting in a reduction to amortization expense subsequent to September 30, 2016 and a decrease of $0.8 million resulting from the disposal of intangible assets with operations divested in 2017.

Amortization expense as a percentage of revenues decreased 0.3 percentage points to 2.2% for the three months ended September 30, 2017, from 2.5% for the three months ended September 30, 2016 due primarily to the aforementioned adjustments recorded in the fourth quarter of 2016 to intangible assets acquired in the Progressive Waste acquisition. Amortization expense as a percentage of revenues increased 0.1 percentage points to 2.2% for the nine months ended September 30, 2017, from 2.1% for the nine months ended September 30, 2016. The increase as a percentage of revenues was the result of the net impact of the aforementioned intangible assets acquired in the Progressive Waste acquisition and other acquisitions closed subsequent to September 30, 2016.

Impairments and Other Operating Items. Impairments and other operating items decreased $6.9 million, to net losses totaling $0.8 million for the three months ended September 30, 2017, from net losses totaling $7.7 million for the three months ended September 30, 2016.

The net losses of $0.8 million recorded during the three months ended September 30, 2017 consisted of $6.7 million of charges recorded to increase the carrying value of certain amounts payable under liability-classified contingent consideration arrangements associated with acquisitions closed prior to 2017, $1.4 million of losses on trucks and equipment that were disposed of through sales or as a result of being damaged in operations, $0.6 million of charges to write off the carrying cost of certain contracts that were not renewed prior to their original estimated termination date and $0.7 million of other net charges, partially offset by the reversal of $6.4 million of expenses recognized in prior periods to adjust the carrying cost of assets held for disposal to fair market value due to modifications to our divestiture plan and changes in the fair market value of the divested operations and net gains of $2.2 million from the divestiture of operations not classified as held for disposal in prior periods.

The net losses of $7.7 million recorded during the three months ended September 30, 2016 consisted of impairment charges totaling $2.7 million related to four operating locations in our E&P segment which were permanently closed in 2016, a $4.6 million charge to terminate an operating lease for our corporate aircraft and $0.4 million of net losses on the disposal of other operating assets.

Impairments and other operating items increased $136.7 million, to net losses totaling $141.3 million for the nine months ended September 30, 2017, from net losses totaling $4.6 million for the nine months ended September 30, 2016.

The net losses of $141.3 million recorded during the nine months ended September 30, 2017 consisted of a goodwill impairment charge of $77.3 million at our E&P segment resulting from our early adoption of a new accounting standard on January 1, 2017 which required the recognition of goodwill impairment by the amount which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill, a $35.7 million expense charge to adjust the carrying cost of assets held for disposal to fair market value and an $9.6 million expense charge to increase the fair value of an amount payable under a liability-classified contingent consideration arrangement from an acquisition closed in 2015 by Progressive Waste, $8.4 million of charges recorded to increase the carrying value of certain amounts payable under liability-classified contingent consideration arrangements associated with other acquisitions closed prior to 2016, $8.1 million of charges to write off the carrying cost of certain contracts, primarily acquired from the Progressive Waste acquisition, that were not renewed prior to their original estimated termination date, $3.7 million of losses on property and equipment that were disposed of through sales or as a result of being damaged in operations and $0.7 million of other net charges, partially offset by net gains of $2.2 million from the divestiture of operations not classified as held for disposal in prior periods.

The net losses of $4.6 million recorded during the nine months ended September 30, 2016 consisted of $0.9 million of net losses on the disposal of other operating assets, the aforementioned charges of $2.7 million related to impairments at our E&P segment and $4.6 million for our aircraft lease termination, which were partially offset by a gain of $2.4 million resulting from the decrease to the fair value of an amount payable under a liability-classified contingent consideration arrangement from a prior year acquisition and a gain of $1.2 million from the favorable settlement of a legal matter.

Operating Income. Operating income increased $60.1 million, or 37.9%, to $218.8 million for the three months ended September 30, 2017, from $158.7 million for the three months ended September 30, 2016. The increase was primarily attributable to operating income contributed from acquisitions closed in 2017, gross margins recognized on solid waste and E&P volume growth and a decrease in impairments and other operating charges.

Operating income increased $139.0 million, or 44.4%, to $452.1 million for the nine months ended September 30, 2017, from $313.1 million for the nine months ended September 30, 2016. The increase was primarily attributable to operating income contributed from the June 2016 acquisition of Progressive Waste and other acquisitions closed in 2017, and a decrease in certain SG&A expenses for direct acquisition costs, employee severance, excise taxes and share-based compensation resulting from the acquisition of Progressive Waste, partially offset by an increase in impairments and other operating items resulting primarily from a goodwill impairment charge at our E&P segment, charges to adjust the carrying cost of assets held for disposal to fair market value and charges to increase the fair value of amounts payable under liability-classified contingent consideration arrangements.

Operating income as a percentage of revenues increased 3.5 percentage points to 18.1% for the three months ended September 30, 2017, from 14.6% for the three months ended September 30, 2016. The increase as a percentage of revenues was comprised of a 1.3 percentage point decrease in SG&A expense, a 1.1 percentage point increase in cost of operations, a 0.6 percentage point decrease in impairments and other operating items, a 0.3 percentage point increase in amortization expense and a 0.2 percentage point decrease in depreciation expense.

Operating income as a percentage of revenues decreased 0.5 percentage points to 13.0% for the nine months ended September 30, 2017, from 13.5% for the nine months ended September 30, 2016. The decrease as a percentage of revenues was comprised of a 3.9 percentage point increase in impairments and other operating items, a 0.7 percentage point increase in cost of operations and a 0.1 percentage point increase in amortization expense, partially offset by a 4.0 percentage point decrease in SG&A expense and a 0.2 percentage point decrease in depreciation expense.

Interest Expense. Interest expense increased $4.9 million, or 17.6%, to $32.5 million for the three months ended September 30, 2017, from $27.6 million for the three months ended September 30, 2016. The increase was primarily attributable to an increase of $3.4 million from the April 2017 issuance of our 2017A Senior Notes, an increase of $2.8 million due to higher interest rates on outstanding borrowings under our Credit Agreement and $0.3 million of other net increases, partially offset by a decrease of $1.0 million due to a decrease in the average borrowings outstanding under our Credit Agreement and a decrease of $0.6 million resulting from a $175 million principal interest rate swap agreement expiring in February 2017 and being replaced with two new interest rate swap agreements, totaling $175 million, at a lower fixed interest rate.

Interest expense increased $27.5 million, or 42.1%, to $92.8 million for the nine months ended September 30, 2017, from $65.3 million for the nine months ended September 30, 2016. The increase was primarily attributable to an increase of $8.8 million from the June 2016 issuance of our New 2021 Senior Notes, 2023 Senior Notes and 2026 Senior Notes, an increase of $6.5 million due to higher interest rates on outstanding borrowings under our Credit Agreement, an increase of $6.0 million from the April 2017 issuance of our 2017A Senior Notes, an increase of $5.8 million due to an increase in the average borrowings outstanding under our Credit Agreement, a combined increase in fees associated with our Credit Agreement of $1.7 million due to increases in outstanding letters of credit and commitment fees on unused borrowings and $1.0 million of other net increases, partially offset by a decrease of $1.5 million resulting from a $175 million principal interest rate swap agreement expiring in February 2017 and being replaced with two new interest rate swap agreements, totaling $175 million, at a lower fixed interest rate and a decrease of $0.8 million for the redemption of our 2016 Notes using proceeds from the 2015 Old Waste Connections Credit Agreement which had a lower interest rate relative to the fixed interest rate in effect when the 2016 Notes were outstanding.

Interest Income. Interest income increased $1.5 million, to $1.7 million for the three months ended September 30, 2017, from $0.2 million for the three months ended September 30, 2016. Interest income increased $2.7 million, to $3.1 million for the nine months ended September 30, 2017, from $0.4 million for the nine months ended September 30, 2016. The increases were attributable to higher average outstanding cash balances during the three and nine months ended September 30, 2017, as compared to the cash balances on hand during the comparable prior year periods, and higher reinvestment rates in the current periods.

Other Income (Expense), Net. Other income (expense), net, increased $1.2 million to an income total of $1.7 million for the three months ended September 30, 2017, from an income total of $0.5 million for the three months ended September 30, 2016, due primarily to the receipt of insurance proceeds in excess of the carrying value of certain property and equipment damaged in accidents.

Other income (expense), net, increased $3.9 million to an income total of $3.6 million for the nine months ended September 30, 2017, from an expense total of $0.3 million for the nine months ended September 30, 2016. The increase was primarily attributable to the non recurrence of a prior year charge of $1.4 million resulting from the write off of unamortized debt issuance costs, $1.2 million from the receipt of insurance proceeds in excess of the carrying value of certain property and equipment damaged in accidents, an increase of $1.0 million of income from investments purchased to fund our employee deferred compensation obligations and $0.3 million of other net income.

Income Tax Provision. Income tax provision increased $21.9 million, to $64.4 million for the three months ended September 30, 2017, from $42.5 million for the three months ended September 30, 2016. Our effective tax rate for the three months ended September 30, 2017 was 34.3%. Our effective tax rate for the three months ended September 30, 2016 was 32.3%. Income tax provision increased $13.5 million, to $100.2 million for the nine months ended September 30, 2017, from $86.7 million for the nine months ended September 30, 2016. Our effective tax rate for the nine months ended September 30, 2017 was 27.6%. Our effective tax rate for the nine months ended September 30, 2016 was 34.9%.

The income tax provision for the three and nine months ended September 30, 2017 includes a portion of our income from internal financing being untaxed or taxed at rates substantially lower than the U.S. federal statutory rate. During the three and nine months ended September 30, 2017, income tax expense was increased by $3.8 million primarily as a result of an increase in the state income tax rate in Illinois. The impairment of goodwill within our E&P segment and disposal of goodwill resulting from the divestitures of certain operations resulted in the write off of goodwill that was not deductible for tax purposes totaling $21.3 million and $30.0 million during the three and nine months ended September 30, 2017, respectively, increasing our tax expense by $8.2 million and $11.5 million during the three and nine months ended September 30, 2017, respectively. The income tax provision for the nine months ended September 30, 2017 included $6.8 million from adopting a new accounting standard in January 2017 which requires all income tax effects of share-based payment awards to be recognized in the income statement when the awards are settled, whereas previously the tax benefits in excess of compensation cost were recorded in equity.

SEGMENT RESULTS

General

No single contract or customer accounted for more than 10% of our total revenues at the consolidated or reportable segment level during the periods presented. The following tables reflect a breakdown of our revenue and inter-company eliminations for the periods indicated (dollars in thousands of U.S. dollars).

	Three months ended September 30, 2017			
	Revenue	**Intercompany Revenue**	**Reported Revenue**	**% of Reported Revenue**
Solid waste collection	$ 815,344	$ (2,484)	$ 812,860	67.4%
Solid waste disposal and transfer	416,764	(157,280)	259,484	21.5
Solid waste recycling	43,864	(2,295)	41,569	3.5
E&P waste treatment, recovery and disposal	57,797	(3,082)	54,715	4.5
Intermodal and other	38,221	(371)	37,850	3.1
Total	$ 1,371,990	$ (165,512)	$ 1,206,478	100.0%

Three months ended September 30, 2016				
	Revenue	Intercompany Revenue	Reported Revenue	% of Reported Revenue
Solid waste collection	$ 760,281	$ (2,472)	$ 757,809	69.9%
Solid waste disposal and transfer	377,998	(144,459)	233,539	21.5
Solid waste recycling	32,138	(2,523)	29,615	2.7
E&P waste treatment, recovery and disposal	33,673	(3,608)	30,065	2.8
Intermodal and other	34,155	(261)	33,894	3.1
Total	$ 1,238,245	$ (153,323)	$ 1,084,922	100.0%

Nine months ended September 30, 2017				
	Revenue	Intercompany Revenue	Reported Revenue	% of Reported Revenue
Solid waste collection	$ 2,380,821	$ (7,075)	$ 2,373,746	68.3%
Solid waste disposal and transfer	1,189,965	(459,659)	730,306	21.0
Solid waste recycling	131,445	(7,229)	124,216	3.6
E&P waste treatment, recovery and disposal	147,662	(8,921)	138,741	4.0
Intermodal and other	107,418	(1,114)	106,304	3.1
Total	$ 3,957,311	$ (483,998)	$ 3,473,313	100.0%

Nine months ended September 30, 2016				
	Revenue	Intercompany Revenue	Reported Revenue	% of Reported Revenue
Solid waste collection	$ 1,619,827	$ (5,571)	$ 1,614,256	69.4%
Solid waste disposal and transfer	804,928	(307,308)	497,620	21.4
Solid waste recycling	60,876	(4,554)	56,322	2.4
E&P waste treatment, recovery and disposal	97,259	(9,228)	88,031	3.8
Intermodal and other	71,401	(389)	71,012	3.0
Total	$ 2,654,291	$ (327,050)	$ 2,327,241	100.0%

Our CODM evaluates operating segment profitability and determines resource allocations based on several factors, of which the primary financial measure is segment EBITDA. We define segment EBITDA as earnings before interest, taxes, depreciation, amortization, impairments and other operating items, other income (expense) and foreign currency transaction gain (loss). Segment EBITDA is not a measure of operating income, operating performance or liquidity under GAAP and may not be comparable to similarly titled measures reported by other companies. Our management uses segment EBITDA in the evaluation of segment operating performance as it is a profit measure that is generally within the control of the operating segments.

We manage our operations through five geographic operating segments and our E&P segment, which includes the majority of our E&P waste treatment and disposal operations. Our five geographic operating segments and our E&P segment comprise our reportable segments. Each operating segment is responsible for managing several vertically integrated operations, which are comprised of districts. In the third quarter of 2017, we moved a district from our Eastern segment to our Canada segment as a significant amount of its revenues are received from Canadian-based customers. The segment information presented herein reflects the realignment of this district.

Under the current orientation, our Southern segment services customers located in Alabama, Arkansas, Florida, Louisiana, Mississippi, southern Oklahoma, western Tennessee and Texas; our Western segment services customers located in Alaska, California, Idaho, Montana, Nevada, Oregon, Washington and western Wyoming; our Eastern segment services customers located in Illinois, Iowa, Kentucky, Maryland, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, eastern Tennessee, Vermont and Wisconsin; our Canada segment services customers located in the state of Michigan and in the provinces of Alberta, British Columbia, Manitoba, Ontario and Québec; and our Central segment services customers located in Arizona, Colorado, Kansas, Minnesota, Missouri, Nebraska, New Mexico, Oklahoma, South Dakota, western Texas, Utah and eastern Wyoming. The E&P segment services E&P customers located in Arkansas, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, Wyoming and along the Gulf of Mexico.

Revenues, net of intercompany eliminations, for our reportable segments are shown in the following table in thousands of U.S. dollars and as a percentage of total revenues for the periods indicated:

	Three months ended September 30,				**Nine months ended September 30,**			
	2017		**2016**		**2017**		**2016**	
Southern	$ 280,528	23.3%	$ 279,909	25.8%	$ 846,034	24.4%	$ 437,378	18.8%
Western	261,877	21.7	246,891	22.8	754,959	21.7	702,556	30.2
Eastern	246,267	20.4	191,979	17.7	718,302	20.7	437,804	18.8
Canada	197,055	16.3	180,572	16.6	546,149	15.7	245,711	10.6
Central	166,360	13.8	155,267	14.3	470,087	13.5	414,874	17.8
E&P	54,391	4.5	30,304	2.8	137,782	4.0	88,918	3.8
	$1,206,478	100.0%	$ 1,084,922	100.0%	$ 3,473,313	100.0%	$ 2,327,241	100.0%

Segment EBITDA for our reportable segments is shown in the following table in thousands of U.S. dollars and as a percentage of segment revenues for the periods indicated:

	Three months ended September 30,				**Nine months ended September 30,**			
	2017		**2016**		**2017**		**2016**	
Southern	$ 63,171	22.5%	$ 62,189	22.2%	$ 199,280	23.6%	$ 98,906	22.6%
Western	84,861	32.4	84,214	34.1	247,475	32.8	237,839	33.9
Eastern	74,018	30.1	57,699	30.1	209,315	29.1	135,456	30.9
Canada	74,369	37.7	66,235	36.7	200,283	36.7	91,471	37.2
Central	64,607	38.8	58,079	37.4	177,975	37.9	154,510	37.2
E&P	27,881	51.3	8,919	29.4	63,518	46.1	21,953	24.7
Corporate[(a)]	(5,751)	-	(18,299)	-	(32,535)	-	(102,653)	-
	$383,156	31.8%	$ 319,036	29.4%	$ 1,065,311	30.7%	$ 637,482	27.4%

(a) Corporate functions include accounting, legal, tax, treasury, information technology, risk management, human resources, training and other administrative functions. Amounts reflected are net of allocations to the six operating segments.

A reconciliation of segment EBITDA to Income before income tax provision is included in Note 10 to our Condensed Consolidated Financial Statements included in Part 1, Item 1 of this report.

Significant changes in revenue and segment EBITDA for our reportable segments for the three and nine month periods ended September 30, 2017, compared to the three and nine month periods ended September 30, 2016, are discussed below:

Segment Revenue

Revenue in our Southern segment increased $0.6 million, or 0.2%, to $280.5 million for the three months ended September 30, 2017, from $279.9 million for the three months ended September 30, 2016. The components of the increase consisted of net price increases of $10.0 million, net revenue growth from acquisitions closed during, or subsequent to, the three months ended September 30, 2016, of $2.9 million, increased recyclable commodity sales of $0.6 million resulting from the impact of higher prices for recyclable commodities in July and August 2017 and increases of $0.5 million from higher E&P disposal volumes at our solid waste landfills, partially offset by net revenue reductions from divestitures closed in 2017 of $7.7 million, solid waste volume decreases of $4.9 million primarily from the declines in residential volumes resulting from certain contracts acquired with the acquisition of Progressive Waste that were terminated subsequent to September 30, 2016 and declines in commercial volumes due to intentional losses of certain low margin customers and other revenue decreases of $0.8 million.

Revenue in our Southern segment increased $408.6 million, or 93.4%, to $846.0 million for the nine months ended September 30, 2017, from $437.4 million for the nine months ended September 30, 2016. The components of the increase consisted of net price increases of $17.2 million, net revenue growth from acquisitions closed during, or subsequent to, the nine months ended September 30, 2016, of $406.0 million, increased recyclable commodity sales of $1.2 million resulting from the impact of higher prices for recyclable commodities through August 2017 and increases of $1.2 million from higher E&P disposal volumes at our solid waste landfills, partially offset by net revenue reductions from divestitures closed in 2017 of $8.4 million, solid waste volume decreases of $7.8 million primarily from the declines in residential volumes resulting from certain contracts acquired with the acquisition of Progressive Waste that were terminated subsequent to September 30, 2016 and declines in commercial volumes due to intentional losses of certain low margin customers and other revenue decreases of $0.8 million.

Revenue in our Western segment increased $15.0 million, or 6.1%, to $261.9 million for the three months ended September 30, 2017, from $246.9 million for the three months ended September 30, 2016. The components of the increase consisted of solid waste volume increases of $7.1 million associated with residential collection, commercial collection, roll off collection, landfill municipal solid waste and landfill special waste, net price increases of $5.1 million, increased recyclable commodity sales of $1.1 million resulting from the impact of higher prices for recyclable commodities in July and August 2017, net revenue growth from acquisitions closed during, or subsequent to, the three months ended September 30, 2016, of $1.5 million and other revenue increases of $0.2 million.

Revenue in our Western segment increased $52.4 million, or 7.5%, to $755.0 million for the nine months ended September 30, 2017, from $702.6 million for the nine months ended September 30, 2016. The components of the increase consisted of solid waste volume increases of $28.9 million associated with residential collection, commercial collection, roll off collection, landfill municipal solid waste and landfill special waste, net price increases of $11.7 million, increased recyclable commodity sales of $7.7 million resulting from the impact of higher prices for recyclable commodities through August 2017, increased intermodal revenues of $1.5 million resulting from higher intermodal cargo volume, net revenue growth from acquisitions and divestitures closed during, or subsequent to, the nine months ended September 30, 2016, of $2.3 million and other revenue increases of $0.3 million.

Revenue in our Eastern segment increased $54.3 million, or 28.3%, to $246.3 million for the three months ended September 30, 2017, from $192.0 million for the three months ended September 30, 2016. The components of the increase consisted of net revenue growth from acquisitions closed during, or subsequent to, the three months ended September 30, 2016, of $55.5 million, solid waste volume increases of $3.0 million as increased roll off collection, transfer station, landfill municipal solid waste and landfill special waste offset decreased residential collection, net price increases of $5.7 million, increased recyclable commodity sales of $1.7 million resulting from the impact of higher prices for recyclable commodities in July and August 2017 and other net revenue increases of $0.3 million, partially offset by net revenue reductions from divestitures closed in 2017 of $11.9 million.

Revenue in our Eastern segment increased $280.5 million, or 64.1%, to $718.3 million for the nine months ended September 30, 2017, from $437.8 million for the nine months ended September 30, 2016. The components of the increase consisted of net revenue growth from acquisitions closed during, or subsequent to, the nine months ended September 30, 2016, of $267.8 million, solid waste volume increases of $9.9 million as increased roll off collection, transfer station, landfill municipal solid waste and landfill special waste offset decreased residential collection, net price increases of $13.1 million and increased recyclable commodity sales of $5.4 million resulting from the impact of higher prices for recyclable commodities through August 2017, partially offset by net revenue reductions from divestitures closed in 2017 of $15.7 million.

Revenue in our Canada segment increased $16.5 million, or 9.1%, to $197.1 million for the three months ended September 30, 2017, from $180.6 million for the three months ended September 30, 2016. Our Canada segment was formed in conjunction with the Progressive Waste acquisition on June 1, 2016. The components of the increase consisted of an increase of $7.6 million resulting from an increase in the average foreign currency exchange rate in effect during the comparable reporting periods, net price increases of $6.4 million, increased landfill gas sales of $4.0 million resulting from higher pricing and increased recyclable commodity sales of $3.5 million resulting from the impact of higher prices for recyclable commodities in July and August 2017, partially offset by solid waste volume decreases of $4.5 million associated with decreased landfill special waste volumes and intentional losses of certain low margin commercial collection customers and $0.5 million of other revenue decreases.

Revenue in our Canada segment increased $300.4 million, or 122.3%, to $546.1 million for the nine months ended September 30, 2017, from $245.7 million for the nine months ended September 30, 2016. The components of the increase consisted of revenue growth from the Progressive Waste acquisition of $279.8 million for the nine months ended September 30, 2017, net price increases of $8.9 million, increased landfill gas sales of $5.9 million resulting from higher pricing, an increase of $5.8 million resulting from an increase in the average foreign currency exchange rate in effect during the comparable reporting periods and increased recyclable commodity sales of $5.1 million resulting from the impact of higher prices for recyclable commodities through August 2017, partially offset by solid waste volume decreases of $4.4 million associated with decreased landfill special waste volumes and intentional losses of certain low margin commercial collection customers and $0.7 million of other revenue decreases.

Revenue in our Central segment increased $11.1 million, or 7.1%, to $166.4 million for the three months ended September 30, 2017, from $155.3 million for the three months ended September 30, 2016. The components of the increase consisted of net price increases of $5.5 million, solid waste volume increases of $4.4 million as increased roll off collection, transfer station and landfill special waste offset decreased residential and commercial collection, revenue growth from acquisitions closed during, or subsequent to, the three months ended September 30, 2016, of $1.4 million, increased recyclable commodity sales of $1.0 million resulting from the impact of higher prices for recyclable commodities in July and August 2017 and other revenue increases of $0.3 million, partially offset by net revenue reductions from divestitures closed in 2017 of $1.5 million.

Revenue in our Central segment increased $55.2 million, or 13.3%, to $470.1 million for the nine months ended September 30, 2017, from $414.9 million for the nine months ended September 30, 2016. The components of the increase consisted of net revenue growth from acquisitions and divestitures closed during, or subsequent to, the nine months ended September 30, 2016, of $35.0 million, net price increases of $15.3 million, increased recyclable commodity sales of $3.2 million resulting from the impact of higher prices for recyclable commodities through August 2017, solid waste volume increases of $2.3 million as increased roll off collection, transfer station and landfill special waste offset decreased residential and commercial collection and other revenue increases of $1.0 million, partially offset by net revenue reductions from divestitures closed in 2016 and 2017 of $1.6 million.

Revenue in our E&P segment increased $24.1 million, or 79.5%, to $54.4 million for the three months ended September 30, 2017, from $30.3 million for the three months ended September 30, 2016. Revenue in our E&P segment increased $48.9 million, or 55.0% to $137.8 million for the nine months ended September 30, 2017, from $88.9 million for the nine months ended September 30, 2016. The components of the increases consisted of higher E&P volumes, primarily in our E&P disposal operations in the Permian Basin and Louisiana.

Segment EBITDA

Segment EBITDA in our Southern segment increased $1.0 million, or 1.6%, to $63.2 million for the three months ended September 30, 2017, from $62.2 million for the three months ended September 30, 2016. The increase was due primarily to an increase in revenues of $8.3 million from organic growth and acquisitions, decreases in equipment rental expense of $0.9 million due to the termination of certain short-term equipment leases assumed in the acquisition of Progressive Waste and an increase of $0.1 million from the impact of operations disposed of in 2017, partially offset by an increase of $2.2 million from incremental labor and repair expenses resulting from hurricanes impacting our Texas, Louisiana and Florida operations, an increase in direct and administrative labor expenses of $2.2 million due primarily to employee pay rate increases, a net $1.6 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in fuel expense of $1.3 million due to increases in the market price of diesel fuel, an increase in corporate overhead expense allocations of $0.9 million due to a higher overhead allocation rate and $0.1 million of other net expense increases.

Segment EBITDA in our Southern segment increased $100.4 million, or 101.5%, to $199.3 million for the nine months ended September 30, 2017, from $98.9 million for the nine months ended September 30, 2016. The increase was due primarily to an increase in revenues of $417.0 million from organic growth and acquisitions, decreases in insurance expense of $2.1 million due to improved incident rates at operations acquired from Progressive Waste, decreases in equipment rental expense of $1.1 million due to the termination of certain short-term equipment leases assumed in the acquisition of Progressive Waste and an increase of $0.4 million from the impact of operations disposed of in 2017, partially offset by a net $308.9 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in direct and administrative labor expenses of $3.4 million due primarily to employee pay rate increases, an increase of $2.2 million from incremental labor and repair expenses resulting from hurricanes impacting our Texas, Louisiana and Florida operations, an increase in truck, container, equipment and facility maintenance and repair expenses of $1.8 million due to variability in the timing and severity of major repairs, an increase in fuel expense of $1.7 million due to increases in the market price of diesel fuel, an increase in corporate overhead expense allocations of $0.8 million due to a higher overhead allocation rate, an increase in employee benefits expenses of $0.7 million due to increased severity of medical claims and $0.7 million of other net expense increases.

Segment EBITDA in our Western segment increased $0.7 million, or 0.8%, to $84.9 million for the three months ended September 30, 2017, from $84.2 million for the three months ended September 30, 2016. The increase was due primarily to an increase in revenues of $15.0 million from organic growth and acquisitions, partially offset by an increase in direct and administrative labor expenses of $3.0 million due primarily to employee pay rate increases, an increase in taxes on revenues of $3.0 million due to the aforementioned increase in revenues, an increase in third-party disposal expense of $1.5 million due to increased collection volumes and disposal rate increases, an increase in corporate overhead expense allocations of $1.3 million due to a higher overhead allocation rate, an increase in third-party trucking and transportation expenses of $1.2 million due to increased disposal volumes that require transportation to our landfills, a net $0.9 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in expenses associated with the purchase of recyclable commodities of $0.7 million due to increased recyclable commodity values, an increase in fuel expense of $0.7 million due to increases in the market price of diesel fuel, an increase in equipment and facility rental expenses of $0.5 million resulting from new property leases and equipment rented to support growth in our intermodal operations, an increase in truck, container, equipment and facility maintenance and repair expenses of $0.4 million due to variability in the timing and severity of major repairs and $1.1 million of other net expense increases.

Segment EBITDA in our Western segment increased $9.7 million, or 4.1%, to $247.5 million for the nine months ended September 30, 2017, from $237.8 million for the nine months ended September 30, 2016. The increase was due primarily to an increase in revenues of $52.4 million from organic growth and acquisitions and a decrease in corporate overhead expense allocations of $0.9 million due to a lower overhead allocation rate, partially offset by an increase in direct and administrative labor expenses of $9.6 million due primarily to employee pay rate increases, an increase in taxes on revenues of $7.4 million due to the aforementioned increase in revenues, an increase in third-party disposal expense of $3.8 million due to increased collection volumes and disposal rate increases, an increase in third-party trucking and transportation expenses of $3.6 million due to increased disposal volumes that require transportation to our landfills, an increase in truck, container, equipment and facility maintenance and repair expenses of $3.5 million due to variability in the timing and severity of major repairs, an increase in employee benefits expenses of $3.1 million due to increased severity of medical claims, an increase in fuel expense of $2.3 million due to increases in the market price of diesel fuel, an increase in expenses associated with the purchase of recyclable commodities of $2.1 million due to increased recyclable commodity values, an increase in expenses for auto and workers' compensation claims of $1.8 million due to increased claims and higher average rates per claim, an increase in equipment and facility rental expenses of $1.0 million resulting from new property leases and equipment rented to support growth in our intermodal operations, a net $0.9 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in intermodal expenses of $0.9 million resulting from an increase in intermodal cargo volume, an increase in professional fees of $0.6 million due primarily to higher legal expenses at our landfills, an increase in leachate disposal expenses at our landfills of $0.5 million due to heavy precipitation experienced in the first quarter of 2017 and $2.5 million of other net expense increases.

Segment EBITDA in our Eastern segment increased $16.3 million, or 28.3%, to $74.0 million for the three months ended September 30, 2017, from $57.7 million for the three months ended September 30, 2016. The increase was due primarily to an increase in revenues of $66.2 million from organic growth and acquisitions, a decrease in third party disposal expenses of $1.9 million due primarily to increased internal disposal of waste at our transfer stations and landfills in our New York markets and $0.5 million of other net expense decreases, partially offset by a net $40.8 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in corporate overhead expense allocations of $2.6 million due to an increased overhead allocation rate and an increase in budgeted revenues, which is the basis upon which overhead allocations are calculated, an increase in third-party trucking and transportation expenses of $2.4 million due to increased disposal volumes that require transportation to our landfills, a decrease of $1.9 million from the impact of operations disposed of in 2017, an increase in expenses for uncollectible accounts receivable of $1.2 million due primarily to the collection during the three months ended September 30, 2016 of a large receivable balance that was written off as a doubtful account in a prior year, an increase in direct labor expenses of $1.1 million due primarily to employee pay rate increases, an increase in taxes on revenues of $1.1 million resulting from the aforementioned increase in revenues, an increase in truck, container, equipment and facility maintenance and repair expenses of $0.7 million due to variability in the timing and severity of major repairs and an increase in fuel expense of $0.5 million due to increases in the market price of diesel fuel.

Segment EBITDA in our Eastern segment increased $73.8 million, or 54.5%, to $209.3 million for the nine months ended September 30, 2017, from $135.5 million for the nine months ended September 30, 2016. The increase was due primarily to an increase in revenues of $296.2 million from organic growth and acquisitions and a decrease in third party disposal expenses of $4.2 million due primarily to increased internal disposal of waste at our transfer stations and landfills in our New York markets, partially offset by a net $199.9 million increase in cost of operations and SG&A expenses attributable to acquired operations, a decrease of $2.2 million from the impact of at operations disposed of in 2017, an increase in third-party trucking and transportation expenses of $5.4 million due to increased disposal volumes that require transportation to our landfills, an increase in corporate overhead expense allocations of $3.6 million due primarily to an increase in budgeted revenues, which is the basis upon which overhead allocations are calculated, an increase in direct and administrative labor expenses of $3.5 million due primarily to employee pay rate increases, an increase in truck, container, equipment and facility maintenance and repair expenses of $3.0 million due to variability in the timing and severity of major repairs, an increase in taxes on revenues of $2.6 million resulting from the aforementioned increase in revenues, an increase in employee benefits expenses of $1.5 million due to increased severity of medical claims, an increase in expenses for uncollectible accounts receivable of $1.3 million due primarily to the collection during the three months ended September 30, 2016 of a large receivable balance that was written off as a doubtful account in a prior year, an increase in fuel expense of $1.0 million due to increases in the market price of diesel fuel, an increase in leachate disposal expenses at our landfills of $0.7 million and $1.9 million of other net expense increases.

Segment EBITDA in our Canada segment increased $8.2 million, or 12.3%, to $74.4 million for the three months ended September 30, 2017, from $66.2 million for the three months ended September 30, 2016. The $8.2 million increase was comprised of an increase of $2.8 million resulting from an increase in the average foreign currency exchange rate in effect during the comparable reporting periods and a $5.4 million increase assuming foreign currency parity during the comparable reporting periods. The $5.4 million increase, which assumes foreign currency parity, was due primarily to an increase in revenues of $8.9 million and $0.9 million of other net expense decreases, partially offset by an increase in truck, container, equipment and facility maintenance and repair expenses of $1.5 million due to variability in the timing and severity of major repairs, an increase in expenses associated with the purchase of recyclable commodities of $1.3 million due to increased recyclable commodity values, an increase in corporate overhead charges of $0.7 million due to a higher allocation rate, an increase in third-party disposal expense of $0.4 million due to disposal rate increases and an increase in fuel expense of $0.5 million due to increases in the market price of diesel fuel.

Segment EBITDA in our Canada segment increased $108.8 million, or 119.0%, to $200.3 million for the nine months ended September 30, 2017, from $91.5 million for the nine months ended September 30, 2016. The $108.8 million increase was comprised of an increase of $2.2 million resulting from an increase in the average foreign currency exchange rate in effect during the comparable reporting periods and a $106.6 million increase assuming foreign currency parity during the comparable reporting periods. The $106.6 million increase, which assumes foreign currency parity, was due primarily to EBITDA contribution of $99.2 million from the five month period of January to May 2017, an increase in revenues from organic growth of $14.8 million and $1.1 million other net expense decreases, partially offset by an increase in corporate overhead charges of $2.6 million due to the Canada segment not receiving an allocation of corporate overhead for the month of June 2016, an increase in truck, container, equipment and facility maintenance and repair expenses of $2.1 million due to variability in the timing and severity of major repairs, an increase in third-party disposal expense of $1.4 million due to disposal rate increases, an increase in expenses associated with the purchase of recyclable commodities of $1.2 million due to increased recyclable commodity values, an increase in taxes on revenues of $0.7 million due to an increase in revenues and an increase in fuel expense of $0.5 million due to increases in the market price of diesel fuel.

Segment EBITDA in our Central segment increased $6.5 million, or 11.2%, to $64.6 million for the three months ended September 30, 2017, from $58.1 million for the three months ended September 30, 2016. The increase was due primarily to an increase in revenues of $11.1 million and a decrease in third party disposal expenses of $1.1 million due primarily to increased internal disposal of waste at our transfer stations and landfills in our Nebraska markets, partially offset by an increase in third-party trucking and transportation expenses of $1.6 million due to increased disposal volumes that require transportation to our landfills, an increase in taxes on revenues of $1.5 million resulting from the aforementioned increase in revenues, an increase in direct and administrative labor expenses of $1.3 million due primarily to employee pay rate increases and a decrease in unfilled positions, an increase in truck, container, equipment and facility maintenance and repair expenses of $0.7 million due to variability in the timing and severity of major repairs, and an increase in corporate overhead expense allocations of $0.6 million due to a higher overhead allocation rate.

Segment EBITDA in our Central segment increased $23.4 million, or 15.2%, to $177.9 million for the nine months ended September 30, 2017, from $154.5 million for the nine months ended September 30, 2016. The increase was due primarily to an increase in revenues of $55.2 million and a decrease in third party disposal expenses of $1.5 million due primarily to increased internal disposal of waste at our transfer stations and landfills in our Nebraska markets and a decrease in corporate overhead expense allocations of $0.9 million due to a lower overhead allocation rate, partially offset by a net $19.6 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in direct and administrative labor expenses of $4.1 million due primarily to employee pay rate increases and a decrease in unfilled positions, an increase in truck, container, equipment and facility maintenance and repair expenses of $2.8 million due to variability in the timing and severity of major repairs, an increase in employee benefits expenses of $1.4 million due to increased severity of medical claims, an increase in taxes on revenues of $3.0 million resulting from the aforementioned increase in revenues, an increase in third-party trucking and transportation expenses of $2.6 million due to increased disposal volumes that require transportation to our landfills, an increase in fuel expense of $0.5 million due to increases in the market price of diesel fuel and $0.2 million of other net expense increases.

Segment EBITDA in our E&P segment increased $19.0 million, or 212.6%, to $27.9 million for the three months ended September 30, 2017, from $8.9 million for the three months ended September 30, 2016. The increase was due primarily to an increase in revenues of $24.1 million and a decrease in corporate overhead expense allocations of $0.4 million due primarily to a decrease in budgeted revenues, which is the basis upon which overhead allocations are calculated, partially offset by the following increases attributable to higher disposal volumes in the current period: an increase in equipment and facility maintenance and repair expenses of $1.7 million; an increase in third party trucking expenses of $1.0 million; an increase in taxes on revenues of $0.6 million; an increase in direct labor expenses of $0.5 million, an increase in equipment rental expenses of $0.5 million and $1.2 million of other expense increases.

Segment EBITDA in our E&P segment increased $41.5 million, or 189.3%, to $63.5 million for the nine months ended September 30, 2017, from $22.0 million for the nine months ended September 30, 2016. The increase was due primarily to an increase in revenues of $48.9 million and a decrease in corporate overhead expense allocations of $1.6 million due primarily to a decrease in budgeted revenues, which is the basis upon which overhead allocations are calculated, partially offset by the following increases attributable to higher disposal volumes in the current period: an increase in equipment and facility maintenance and repair expenses of $3.1 million; an increase in equipment rental expenses of $1.4 million; an increase in taxes on revenues of $1.3 million; an increase in third party trucking expenses of $1.2 million; an increase in processing cell remediation expenses of $1.1 million and $0.9 million of other expense increases.

Segment EBITDA at Corporate increased $12.5 million, to a loss of $5.8 million for the three months ended September 30, 2017, from a loss of $18.3 million for the three months ended September 30, 2016. The decrease in the loss was due to a decrease of $7.4 million in integration-related professional fees and severance-related expenses incurred in the prior year period for Progressive Waste personnel who were not permanently retained as employees of New Waste Connections following the close of the Progressive Waste acquisition, an increase in corporate overhead allocated to our segments of $5.6 million due to an increase in total corporate expenses to support the operations acquired in the Progressive Waste acquisition, a decrease of $5.3 million resulting from the nonrecurring prior year accrual of incentive compensation expenses to certain of our executive officers and key employees related to the achievement of defined synergy goals realized by New Waste Connections from the Progressive Waste acquisition and a decrease in share-based compensation expenses of $2.1 million due to less outstanding shares in the current period for equity awards accounted for as liabilities that were granted to employees of Progressive Waste prior to June 1, 2016 which are subject to valuation adjustments each period based on changes in fair value, partially offset by an increase in accrued recurring cash incentive compensation expense to our management of $2.0 million due to the achievement of interim financial targets during the three months ended September 30, 2017, an increase in direct acquisition costs of $1.8 million resulting from an increase in acquisition activity and legal costs incurred related to divested operations, an increase in equity-based compensation expenses of $1.6 million associated with our annual recurring grant of restricted share units to our personnel, an increase in payroll and employee benefits expenses of $1.2 million due to increased corporate headcount to support the operations of Progressive Waste and annual compensation increases, an increase in software license fees of $0.6 million to support our new payroll processing application, an increase in corporate travel, meetings and training expenses of $0.5 million resulting primarily from the integration of employees of Progressive Waste into New Waste Connections and $0.2 million of other net expense increases.

Segment EBITDA at Corporate increased $70.2 million, to a loss of $32.5 million for the nine months ended September 30, 2017, from a loss of $102.7 million for the nine months ended September 30, 2016. The decrease in the loss was due to an increase in corporate overhead allocated to our segments of $29.5 million due to an increase in total corporate expenses to support the operations acquired in the Progressive Waste acquisition, a decrease in direct acquisition costs of $27.9 million resulting from amounts incurred in the prior year period related to the Progressive Waste acquisition, a decrease of $21.7 million in integration-related professional fees and severance-related expenses incurred in the prior year period for Progressive Waste personnel who were not permanently retained as employees of New Waste Connections following the close of the Progressive Waste acquisition, a decrease of $14.5 million from New Waste Connections paying excise taxes in the prior year period on the unvested or vested and undistributed equity-compensation holdings of our corporate officers and members of our Board of Directors resulting from the Progressive Waste acquisition, a decrease of $5.3 million resulting from the nonrecurring prior year accrual of incentive compensation expenses to certain of our executive officers and key employees related to the achievement of defined synergy goals realized by New Waste Connections from the Progressive Waste acquisition, a decrease in share-based compensation expenses of $4.9 million related to awards granted to employees of Progressive Waste prior to June 1, 2016 for which vesting was accelerated in the prior year period due to plan provisions regarding a change in control followed by termination of employment and resulting from less outstanding shares in the current period which are subject to valuation adjustments each period based on changes in fair value and a decrease in equity-based compensation expenses of $2.3 million resulting from the acceleration of vesting in the prior year period of performance share units granted to Old Waste Connections' management in 2014 and 2015, partially offset by an increase in accrued recurring cash incentive compensation expense to our management of $9.5 million due to the achievement of interim financial targets during the nine months ended September 30, 2017 and the addition of accrued cash incentive compensation expense for the retained Progressive Waste employees, an increase in legal, accounting and information technology professional fee expenses of $5.4 million due to increased support required as a result of growth from the Progressive Waste acquisition, an increase in payroll and employee benefits expenses of $4.9 million due to increased corporate headcount to support the operations of Progressive Waste and annual compensation increases, an increase in equity-based compensation expenses of $3.6 million associated with our annual recurring grant of restricted share units to our personnel, an increase in corporate travel, meetings and training expenses of $3.3 million resulting from the integration of employees of Progressive Waste into New Waste Connections, an increase in software license fees of $3.0 million to support our new payroll processing application and computer applications acquired in the Progressive Waste acquisition, an increase in employee relocation expenses of $2.1 million associated with corporate personnel added to support the additional administrative oversight resulting from the Progressive Waste acquisition, an increase in deferred compensation expense of $1.4 million resulting from deferred compensation liabilities to employees increasing as a result of increases in the market value of investments to which employee deferred compensation balances are tracked and $2.7 million of other net expense increases.

LIQUIDITY AND CAPITAL RESOURCES

The following table sets forth certain cash flow information for the nine month periods ended September 30, 2017 and 2016 (in thousands of U.S. dollars):

	Nine Months Ended September 30,	
	2017	**2016**
Net cash provided by operating activities	$ 888,375	$ 538,831
Net cash used in investing activities	(683,562)	(153,047)
Net cash provided by (used in) financing activities	135,159	(276,940)
Effect of exchange rate changes on cash and equivalents	927	(483)
Net increase in cash and equivalents	340,899	108,361
Cash and equivalents at beginning of period	154,382	10,974
Less: change in cash held for sale	(27)	-
Cash and equivalents at end of period	$ 495,254	$ 119,335

<u>Operating Activities Cash Flows</u>

For the nine months ended September 30, 2017, net cash provided by operating activities was $888.4 million. For the nine months ended September 30, 2016, net cash provided by operating activities was $538.8 million. The $349.6 million increase was due primarily to the following:

1) An increase in net income of $100.7 million, adjusted for a decrease in cash flows from operating assets and liabilities, net of effects from closed acquisitions, of $4.2 million. Cash flows from changes in operating assets and liabilities, net of effects from acquisitions, was a cash outflow of $23.8 million for the nine months ended September 30, 2017 and a cash outflow of $19.6 million for the nine months ended September 30, 2016. The significant components of the $23.8 million in net cash outflows from changes in operating assets and liabilities, net of effects from closed acquisitions, for the nine months ended September 30, 2017, include the following:
   a) an increase in cash resulting from a $49.7 million increase in accounts payable and accrued liabilities due primarily to an increase in accrued interest expense due to the timing of interest payments for our long-term notes, an increase in income taxes payable for our Canadian entities, an increase in accrued payroll and payroll related expenses due to the timing of pay cycles; and
   b) an increase in cash resulting from an $18.2 million decrease in prepaid expenses and other current assets due primarily to a decrease in prepaid income taxes for our US entities, partially offset by an increase in prepaid insurance resulting from the timing of our annual policy renewals; less
   c) a decrease in cash resulting from a $72.9 million increase in accounts receivable due to increased revenues, with less favorable collection results, contributing to an increased amount of revenues remaining uncollected at the end of the current period; less
   d) a decrease in cash resulting from a $17.9 million decrease in other long-term liabilities due primarily to the cash settlement of share-based compensation awards granted to Progressive Waste employees prior to the June 1, 2016 acquisition date that continued to remain outstanding following the close of the Progressive Waste acquisition;
2) An increase in the loss on disposal of assets and impairments of $118.5 million due primarily to the impairment of goodwill at our E&P segment and recording charges to adjust the carrying cost of assets held for disposal to fair market value;
3) An increase in depreciation expense of $124.0 million due primarily to increased depreciation expense resulting from increased capital expenditures and property, equipment and landfill assets acquired in the Progressive Waste and Groot acquisitions;
4) An increase in amortization expense of $28.2 million due primarily to intangible assets acquired in the Progressive Waste and Groot acquisitions;
5) An increase of $20.3 million attributable to post-closing adjustments resulting primarily in a net increase in the fair value of an amount payable under a liability-classified contingent consideration arrangement from an acquisition closed in 2015 by Progressive Waste and increases to the carrying value of certain amounts payable under liability-classified contingent consideration arrangements associated with other acquisitions closed prior to 2016; less

6) A decrease in our provision for deferred taxes of $46.9 million due primarily to the aforementioned impairment of goodwill at our E&P segment and recording an expense charge to adjust the carrying cost of assets held for disposal to fair market value resulting in the reduction of corresponding deferred tax liabilities.

As of September 30, 2017, we had a working capital surplus of $373.2 million, including cash and equivalents of $495.3 million. Our working capital surplus increased $322.0 million from a working capital surplus of $51.2 million at December 31, 2016, including cash and equivalents of $154.4 million, due primarily to increased cash balances. To date, we have experienced no loss or lack of access to our cash or cash equivalents; however, we can provide no assurances that access to our cash and cash equivalents will not be impacted by adverse conditions in the financial markets. Our strategy in managing our working capital is generally to apply the cash generated from our operations that remains after satisfying our working capital and capital expenditure requirements, along with share repurchase and dividend programs, to reduce the unhedged portion of our indebtedness under our Credit Agreement and to minimize our cash balances.

Investing Activities Cash Flows

Net cash used in investing activities increased $530.6 million to $683.6 million for the nine months ended September 30, 2017, from $153.0 million for the nine months ended September 30, 2016. The significant components of the decrease included the following:

1) An increase in cash paid for acquisitions of $380.3 million due primarily to the January 2017 acquisition of Groot;
2) An increase in capital expenditures for property and equipment of $112.5 million; and
3) A decrease in cash acquired in the prior year period from the Progressive Waste acquisition of $65.7 million; less
4) An increase in cash proceeds from the disposal of assets of $22.8 million due primarily to the divestiture of certain operations in 2017.

Total consideration for the June 2016 Progressive Waste acquisition consisted of the issuance of common shares and assumption of Progressive Waste's debt and other liabilities. We did not transfer cash consideration to the former shareholders of Progressive Waste. Progressive Waste had cash balances totaling $65.7 million, which we acquired upon the close of the Progressive Waste acquisition.

The increase in capital expenditures for property and equipment was due primarily to increases in expenditures resulting from the January 2017 acquisition of Groot, the June 2016 Progressive Waste acquisition, additional heavy equipment to support volume increases in our landfill operations and increased spending on information technology to support our Progressive Waste acquisition.

Financing Activities Cash Flows

Net cash from financing activities increased $412.1 million to net cash provided by financing activities of $135.2 million for the nine months ended September 30, 2017, from net cash used in financing activities of $276.9 million for the nine months ended September 30, 2016. The significant components of the increase included the following:

1) An increase in the net change in long-term borrowings of $435.6 million (long-term borrowings decreased $205.4 million during the nine months ended September 30, 2016 and increased $230.2 million during the nine months ended September 30, 2017) due primarily to increased payments for acquisitions;
2) An increase of $7.8 million from an increase in book overdraft due to a higher volume of outstanding checks resulting from the acquisition of Progressive Waste; and
3) An increase of $9.9 million from reduced debt issuance costs resulting primarily from our Credit Agreement that we entered into in June 2016 in conjunction with the Progressive Waste acquisition; less
4) An increase in cash dividends paid of $34.2 million due primarily to an increase in our quarterly dividend rate to $0.12 per share for the nine months ended September 30, 2017, from $0.097 per share for the nine months ended September 30, 2016, and an increase in common shares outstanding resulting from the acquisition of Progressive Waste; and
5) A decrease of $6.6 million from a reduction in the sale of common shares held in trust.

Our business is capital intensive. Our capital requirements include acquisitions and capital expenditures for landfill cell construction, landfill development, landfill closure activities and intermodal facility construction in the future.

On July 24, 2017, our Board of Directors approved, subject to receipt of regulatory approvals, the annual renewal of our normal course issuer bid (the "NCIB") to purchase up to 13,181,806 of our common shares during the period August 8, 2017 to August 7, 2018 or until such earlier time as the NCIB is completed or terminated at our option. The renewal followed on the conclusion of our original NCIB that expired August 7, 2017 under which no shares were repurchased. We received TSX approval for our annual renewal of the NCIB on August 2, 2017. Under the NCIB, we may make share repurchases only in the open market, including on the NYSE, the TSX, and/or alternative Canadian trading systems, at the prevailing market price at the time of the transaction.

In accordance with TSX rules, any daily repurchases made through the TSX and alternative Canadian trading systems would be limited to a maximum of 80,287 common shares, which represents 25% of the average daily trading volume on the TSX of 321,151 common shares for the period from February 1, 2017 to July 31, 2017. The TSX rules also allow us to purchase, once a week, a block of common shares not owned by any insiders, which may exceed such daily limit. The maximum number of shares that can be purchased per day on the NYSE will be 25% of the average daily trading volume for the four calendar weeks preceding the date of purchase, subject to certain exceptions for block purchases. Shareholders may obtain a copy of our TSX Form 12 – Notice of Intention to Make a Normal Course Issuer Bid, without charge, by request directed to our Vice President – Finance at (832) 442-2200.

The timing and amounts of any repurchases pursuant to the NCIB will depend on many factors, including our capital structure, the market price of the common shares and overall market conditions. All common shares purchased under the NCIB shall be immediately cancelled following their repurchase.

For the nine months ended September 30, 2017, we did not repurchase any common shares pursuant to the NCIB. For the nine months ended September 30, 2016, we did not repurchase any common shares pursuant to the NCIB, nor did Old Waste Connections repurchase shares of its common stock pursuant to its share repurchase program.

The Board of Directors of Old Waste Connections authorized the initiation of a quarterly cash dividend in October 2010 and has increased it on an annual basis. In October 2016, our Board of Directors authorized an increase to our regular quarterly cash dividend of $0.023, from $0.097 to $0.12 per share. Cash dividends of $95.2 million and $61.0 million were paid during the nine months ended September 30, 2017 and 2016, respectively. We cannot assure you as to the amounts or timing of future dividends.

We made $317.4 million in capital expenditures during the nine months ended September 30, 2017. We expect to make capital expenditures of approximately $460 million in 2017 in connection with our existing business. We have funded and intend to fund the balance of our planned 2017 capital expenditures principally through cash on hand, internally generated funds and borrowings under our Credit Agreement. In addition, we may make substantial additional capital expenditures in acquiring municipal solid waste and E&P waste businesses. If we acquire additional landfill disposal facilities, we may also have to make significant expenditures to bring them into compliance with applicable regulatory requirements, obtain permits or expand our available disposal capacity. We cannot currently determine the amount of these expenditures because they will depend on the number, nature, condition and permitted status of any acquired landfill disposal facilities. We believe that our cash and equivalents, Credit Agreement and the funds we expect to generate from operations will provide adequate cash to fund our working capital and other cash needs for the foreseeable future. However, disruptions in the capital and credit markets could adversely affect our ability to draw on our Credit Agreement or raise other capital. Our access to funds under the Credit Agreement is dependent on the ability of the banks that are parties to the agreement to meet their funding commitments. Those banks may not be able to meet their funding commitments if they experience shortages of capital and liquidity or if they experience excessive volumes of borrowing requests within a short period of time.

As of September 30, 2017, $1.638 billion under the term loan and $218.8 million under the revolving credit facility were outstanding under our Credit Agreement, exclusive of outstanding standby letters of credit of $221.6 million. Our Credit Agreement matures in June 2021.

As of September 30, 2017, we had the following contractual obligations:

	Payments Due by Period (amounts in thousands of U.S. dollars)									
Recorded Obligations		**Total**		**Less Than 1 Year**		**1 to 3 Years**		**3 to 5 Years**		**Over 5 Years**
Long-term debt	$	3,953,167	$	11,596	$	178,215	$	2,327,182	$	1,436,174
Cash interest payments	$	555,782	$	110,947	$	213,674	$	121,143	$	110,018
Contingent consideration	$	64,813	$	15,227	$	7,369	$	7,431	$	34,786
Final capping, closure and post-closure	$	1,356,474	$	16,164	$	21,315	$	18,480	$	1,300,515

Long-term debt payments include:

1) $218.8 million in principal payments due June 2021 related to our revolving credit facility under our Credit Agreement. We may elect to draw amounts on our Credit Agreement in either U.S. dollar base rate loans or LIBOR loans or Canadian dollar Canadian prime rate loans or Bankers' Acceptance loans. At September 30, 2017, $12.0 million of the outstanding borrowings drawn under the revolving credit facility were in Canadian-based Canadian prime rate loans, which bear interest at the Canadian prime rate plus the applicable Canadian prime rate margin (for a total rate of 3.45% at September 30, 2017) and $206.7 million of the outstanding borrowings drawn under the revolving credit facility were in Canadian-based Bankers' Acceptance loans, which bear interest at the Canadian Dollar Offered Rate plus the applicable acceptance fee (for a total rate of 2.51% at September 30, 2017).

2) $1.638 billion in principal payments due June 2021 related to our term loan under our Credit Agreement. Outstanding amounts on the term loan can be either base rate loans or LIBOR loans. At September 30, 2017, all amounts outstanding under the term loan were in LIBOR loans which bear interest at the LIBOR rate plus the applicable LIBOR margin (for a total rate of 2.44% at September 30, 2017).

3) $50.0 million in principal payments due April 20, 2018 related to our 2018 Senior Notes. Holders of the 2018 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2018 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the Assumed 2008 NPA. The 2018 Senior Notes bear interest at a rate of 4.00%. We have recorded this obligation in the payments due in 3 to 5 years category in the table above as we have the intent and ability to redeem the 2018 Senior Notes on April 20, 2018 using borrowings under our Credit Agreement.

4) $175.0 million in principal payments due 2019 related to our 2019 Senior Notes. Holders of the 2019 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2019 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the Assumed 2008 NPA. The 2019 Senior Notes bear interest at a rate of 5.25%.

5) $100.0 million in principal payments due 2021 related to our 2021 Senior Notes. Holders of the 2021 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2021 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the Assumed 2008 NPA. The 2021 Senior Notes bear interest at a rate of 4.64%.

6) $150.0 million in principal payments due 2021 related to our New 2021 Senior Notes. Holders of the New 2021 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the New 2021 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the 2016 NPA. The New 2021 Senior Notes bear interest at a rate of 2.39%.

7) $125.0 million in principal payments due 2022 related to our 2022 Senior Notes. Holders of the 2022 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2022 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the Assumed 2008 NPA. The 2022 Senior Notes bear interest at a rate of 3.09%.

8) $200.0 million in principal payments due 2023 related to our 2023 Senior Notes. Holders of the 2023 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2023 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the 2016 NPA. The 2023 Senior Notes bear interest at a rate of 2.75%.

9) $150.0 million in principal payments due 2024 related to our 2024 Senior Notes. Holders of the 2024 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2024 Senior Notes plus

accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the 2016 NPA. The 2024 Senior Notes bear interest at a rate of 3.24%.

10) $375.0 million in principal payments due 2025 related to our 2025 Senior Notes. Holders of the 2025 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2025 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the Assumed 2008 NPA. The 2025 Senior Notes bear interest at a rate of 3.41%.

11) $400.0 million in principal payments due 2026 related to our 2026 Senior Notes. Holders of the 2026 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2026 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the 2016 NPA. The 2026 Senior Notes bear interest at a rate of 3.03%.

12) $250.0 million in principal payments due 2027 related to our 2027 Senior Notes. Holders of the 2027 Senior Notes may require us to purchase their notes in cash at a purchase price of 100% of the principal amount of the 2027 Senior Notes plus accrued and unpaid interest and the LIBOR breakage amount, if any, upon a change in control, as defined in the 2016 NPA. The 2027 Senior Notes bear interest at a rate of 3.49%.

13) $95.4 million in principal payments related to our tax-exempt bonds, which bear interest at variable rates (ranging between 1.03% and 1.05% at September 30, 2017). The tax-exempt bonds have maturity dates ranging from 2018 to 2039. The West Valley tax-exempt bond, with a principal amount of $15.5 million, is due August 1, 2018. We have recorded the West Valley bond obligation in the payments due in 3 to 5 years category in the table above as we have the intent and ability to redeem the West Valley bond on August 1, 2018 using borrowings under our Credit Agreement.

14) $26.5 million in principal payments related to our notes payable to sellers and other third parties. Our notes payable to sellers and other third parties bear interest at rates between 2.00% and 24.81% at September 30, 2017, and have maturity dates ranging from 2017 to 2036.

The following assumptions were made in calculating cash interest payments:

1) We calculated cash interest payments on the Credit Agreement using the LIBOR rate plus the applicable LIBOR margin, the Canadian Dollar Offered Rate plus the applicable acceptance fee and the Canadian prime rate plus the applicable Canadian prime rate margin at September 30, 2017. We assumed the Credit Agreement is paid off when it matures in June 2021.

2) We calculated cash interest payments on our interest rate swaps using the stated interest rate in the swap agreement less the LIBOR rate through the earlier expiration of the term of the swaps or the term of the credit facility.

Contingent consideration payments include $45.0 million recorded as liabilities in our Condensed Consolidated Financial Statements at September 30, 2017, and $19.8 million of future interest accretion on the recorded obligations.

The estimated final capping, closure and post-closure expenditures presented above are in current dollars.

	Amount of Commitment Expiration Per Period (amounts in thousands of U.S. dollars)				
Unrecorded Obligations[(1)]	**Total**	**Less Than 1 Year**	**1 to 3 Years**	**3 to 5 Years**	**Over 5 Years**
Operating leases	$ 174,549	$ 28,433	$ 42,381	$ 29,690	$ 74,045
Unconditional purchase obligations	$ 41,799	$ 38,044	$ 3,755	$ -	$ -

(1) We are party to operating lease agreements and unconditional purchase obligations. These lease agreements and purchase obligations are established in the ordinary course of our business and are designed to provide us with access to facilities and products at competitive, market-driven prices. At September 30, 2017, our unconditional purchase obligations consisted of multiple fixed-price fuel purchase contracts under which we have 18.0 million gallons remaining to be purchased for a total of $41.8 million. The current fuel purchase contracts expire on or before December 31, 2018. These arrangements have not materially affected our financial position, results of operations or liquidity during the nine months ended September 30, 2017, nor are they expected to have a material impact on our future financial position, results of operations or liquidity.

We have obtained financial surety bonds, primarily to support our financial assurance needs and landfill and E&P operations. We provided customers and various regulatory authorities with surety bonds in the aggregate amounts of approximately $886.0 million and $862.7 million at September 30, 2017 and December 31, 2016, respectively. These arrangements have not materially affected our financial position, results of operations or liquidity during the nine months ended September 30, 2017, nor are they expected to have a material impact on our future financial position, results of operations or liquidity.

From time to time, we evaluate our existing operations and their strategic importance to us. If we determine that a given operating unit does not have future strategic importance, we may sell or otherwise dispose of those operations. Although we believe our reporting units would not be impaired by such dispositions, we could incur losses on them.

The disposal tonnage that we received in the nine month periods ended September 30, 2017 and 2016, at all of our landfills during the respective period, is shown below (tons in thousands):

	Nine months ended September 30,			
	2017		**2016**	
	Number of Sites	**Total Tons**	**Number of Sites**	**Total Tons**
Owned operational landfills and landfills operated under life-of-site agreements	86	30,832	88	22,955
Operated landfills	6	1,876	6	427
	92	32,708	94	23,382

NON-GAAP FINANCIAL MEASURES

Adjusted Free Cash Flow

We present adjusted free cash flow, a non-GAAP financial measure, supplementally because it is widely used by investors as a valuation and liquidity measure in the solid waste industry. Management uses adjusted free cash flow as one of the principal measures to evaluate and monitor the ongoing financial performance of our operations. We define adjusted free cash flow as net cash provided by operating activities, plus or minus change in book overdraft, plus proceeds from disposal of assets, plus excess tax benefit associated with equity-based compensation, less capital expenditures for property and equipment and distributions to noncontrolling interests. We further adjust this calculation to exclude the effects of items management believes impact the ability to assess the operating performance of our business. This measure is not a substitute for, and should be used in conjunction with, GAAP liquidity or financial measures. Other companies may calculate adjusted free cash flow differently. Our adjusted free cash flow for the nine month periods ended September 30, 2017 and 2016, are calculated as follows (amounts in thousands of U.S. dollars):

	Nine months ended September 30,	
	2017	**2016**
Net cash provided by operating activities	$ 888,375	$ 538,831
Plus: Change in book overdraft	13,814	6,050
Plus: Proceeds from disposal of assets	25,826	3,026
Plus: Excess tax benefit associated with equity-based compensation	-	5,151
Less: Capital expenditures for property and equipment	(317,385)	(204,934)
Less: Distributions to noncontrolling interests	-	(3)
Adjustments:		
Payment of contingent consideration recorded in earnings (a)	-	413
Cash received for divestitures (b)	(21,100)	-
Transaction-related expenses (c)	4,418	41,748
Integration-related and other expenses (d)	7,968	78,521
Pre-existing Progressive Waste share-based grants (e)	11,740	-
Synergy bonus (f)	11,798	-
Tax effect (g)	(11,426)	(28,537)
Adjusted free cash flow	$ 614,028	$ 440,266

(a) Reflects the addback of acquisition-related payments for contingent consideration that were recorded as expenses in earnings and as a component of cash flows from operating activities as the amounts paid exceeded the fair value of the contingent consideration recorded at the acquisition date.

(b) Reflects the elimination of cash received in conjunction with the divestiture of Progressive Waste operations.

(c) Reflects the addback of acquisition-related transaction costs, which for 2016 primarily related to the Progressive Waste acquisition.

(d) Reflects the addback of rebranding costs and other integration-related items associated with the Progressive Waste acquisition, including professional fees and severance costs.

(e) Reflects the cash settlement of pre-existing Progressive Waste share-based awards during the period.

(f) Reflects the addback of cash bonuses paid pursuant to the Company’s Synergy Bonus Program adopted on July 19, 2016 in conjunction with the Progressive Waste acquisition.

(g) The aggregate tax effect of footnotes (a) through (f) is calculated based on the applied tax rates for the respective periods.

Adjusted EBITDA

We present adjusted EBITDA, a non-GAAP financial measure, supplementally because it is widely used by investors as a performance and valuation measure in the solid waste industry. Management uses adjusted EBITDA as one of the principal measures to evaluate and monitor the ongoing financial performance of our operations. We define adjusted EBITDA as net income attributable to Waste Connections, plus net income attributable to noncontrolling interests, plus or minus income tax provision (benefit), plus interest expense, less interest income, plus depreciation and amortization expense, plus closure and post-closure accretion expense, plus or minus any loss or gain on impairments and other operating items, plus other expense, less other income, plus foreign currency transaction loss, less foreign currency transaction gain. We further adjust this calculation to exclude the effects of other items management believes impact the ability to assess the operating performance of our business. This measure is not a substitute for, and should be used in conjunction with, GAAP financial measures. Other companies may calculate adjusted EBITDA differently. Our adjusted EBITDA for the three and nine month periods ended September 30, 2017 and 2016, are calculated as follows (amounts in thousands of U.S. dollars):

	Three months ended September 30,		Nine months ended September 30,	
	2017	**2016**	**2017**	**2016**
Net income attributable to Waste Connections	$ 123,227	$ 88,617	$ 261,732	$ 160,948
Plus: Net income attributable to noncontrolling interests	183	264	559	670
Plus: Income tax provision	64,390	42,485	100,220	86,750
Plus: Interest expense	32,471	27,621	92,763	65,291
Less: Interest income	(1,656)	(171)	(3,131)	(447)
Plus: Depreciation and amortization	163,554	152,688	471,894	319,707
Plus: Closure and post-closure accretion	2,971	3,034	8,805	5,908
Plus: Impairments and other operating items	832	7,682	141,333	4,634
Plus/less: Other expense (income), net	(1,709)	(500)	(3,561)	268
Plus/less: Foreign currency transaction loss (gain)	1,864	350	3,502	(339)
Adjustments:				
Plus: Transaction-related expenses (a)	1,958	310	4,418	46,827
Plus: Pre-existing Progressive Waste share-based grants (b)	2,369	4,466	12,947	9,823
Plus: Integration-related and other expenses (c)	2,922	10,178	8,344	40,300
Plus: Synergy bonus (d)	-	5,300	-	5,300
Adjusted EBITDA	$ 393,376	$ 342,324	$ 1,099,825	$ 745,640

(a) Reflects the addback of acquisition-related transaction costs, which for 2016 primarily related to the Progressive Waste acquisition.

(b) Reflects share-based compensation costs, including changes in fair value, associated with share-based awards granted by Progressive Waste outstanding at the time of the Progressive Waste acquisition.

(c) Reflects the addback of rebranding costs and other integration-related items, including professional fees and severance costs, associated with the Progressive Waste acquisition.

(d) Reflects the addback of bonuses accrued pursuant to the Company's Synergy Bonus Program adopted on July 19, 2016 in connection with the Progressive Waste acquisition.

Adjusted Net Income and Adjusted Net Income per Diluted Share

We present adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections, both non-GAAP financial measures, supplementally because they are widely used by investors as a valuation measure in the solid waste industry. Management uses adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections as one of the principal measures to evaluate and monitor the ongoing financial performance of our operations. We provide adjusted net income attributable to Waste Connections to exclude the effects of items management believes impact the comparability of operating results between periods. Adjusted net income attributable to Waste Connections has limitations due to the fact that it excludes items that have an impact on our financial condition and results of operations. Adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections are not a substitute for, and should be used in conjunction with, GAAP financial measures. Other companies may calculate these non-GAAP financial measures differently. Our adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections for the three and nine month periods ended September 30, 2017 and 2016, are calculated as follows (amounts in thousands of U.S. dollars, except per share amounts):

	Three months ended September 30,		**Nine months ended September 30,**	
	2017	**2016**	**2017**	**2016**
Reported net income attributable to Waste Connections	$ 123,227	$ 88,617	$ 261,732	$ 160,948
Adjustments:				
Amortization of intangibles (a)	26,613	26,944	76,886	48,719
Impairments and other operating items (b)	832	7,682	141,333	4,634
Transaction-related expenses (c)	1,958	310	4,418	46,827
Pre-existing Progressive Waste share-based grants (d)	2,369	4,466	12,947	9,823
Integration-related and other expenses (e)	2,922	10,178	8,344	40,300
Synergy bonus (f)	-	5,300	-	5,300
Tax effect (g)	(3,575)	(19,001)	(75,828)	(43,630)
Impact of deferred tax adjustment (h)	3,787	1,964	3,787	1,964
Adjusted net income attributable to Waste Connections	$ 158,133	$ 126,460	$ 433,619	$ 274,885
Diluted earnings per common share attributable to Waste Connections' common shareholders:				
Reported net income	$ 0.47	$ 0.34	$ 0.99	$ 0.73
Adjusted net income	$ 0.60	$ 0.48	$ 1.64	$ 1.25

(a) Reflects the elimination of the non-cash amortization of acquisition-related intangible assets.
(b) Reflects the addback of impairments and other operating items.
(c) Reflects the addback of acquisition-related transaction costs, which for 2016 primarily related to the Progressive Waste acquisition.
(d) Reflects share-based compensation costs, including changes in fair value, associated with share-based awards granted by Progressive Waste outstanding at the time of the Progressive Waste acquisition.
(e) Reflects the addback of rebranding costs and other integration-related items, including professional fees and severance costs, associated with the Progressive Waste acquisition.
(f) Reflects the addback of bonuses accrued pursuant to the Company's Synergy Bonus Program adopted on July 19, 2016 in connection with the Progressive Waste acquisition.
(g) The aggregate tax effect of the adjustments in footnotes (a) through (f) is calculated based on the applied tax rates for the respective periods.
(h) Reflects in 2016 a change in the geographical apportionment of our deferred tax liabilities resulting from the Progressive Waste acquisition. In 2017, reflects the elimination of an increase to the income tax provision associated with an increase in the Company's deferred tax liabilities resulting from the enactment of the Illinois State Budget Public Act 100-0022 on July 6, 2017.

INFLATION

Other than volatility in fuel prices and labor costs in certain markets, inflation has not materially affected our operations in recent years. Consistent with industry practice, many of our contracts allow us to pass through certain costs to our customers, including increases in landfill tipping fees and, in some cases, fuel costs. Therefore, we believe that we should be able to increase prices to offset many cost increases that result from inflation in the ordinary course of business. However, competitive pressures or delays in the timing of rate increases under our contracts may require us to absorb at least part of these cost increases, especially if cost increases exceed the average rate of inflation. Management's estimates associated with inflation have an impact on our accounting for landfill liabilities.

SEASONALITY

We expect our operating results to vary seasonally, with revenues typically lowest in the first quarter, higher in the second and third quarters and lower in the fourth quarter than in the second and third quarters. This seasonality reflects (a) the lower volume of solid waste generated during the late fall, winter and early spring because of decreased construction and demolition activities during winter months in Canada and the U.S. and (b) reduced E&P activity during harsh weather conditions, with expected fluctuation due to such seasonality between our highest and lowest quarters of approximately 10%. In addition, some of our operating costs may be higher in the winter months. Adverse winter weather conditions slow waste collection activities, resulting in higher labor and operational costs. Greater precipitation in the winter increases the weight of collected municipal solid waste, resulting in higher disposal costs, which are calculated on a per ton basis.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

In the normal course of business, we are exposed to market risk, including changes in interest rates and prices of certain commodities. We use hedge agreements to manage a portion of our risks related to interest rates and fuel prices. While we are exposed to credit risk in the event of non-performance by counterparties to our hedge agreements, in all cases such counterparties are highly rated financial institutions and we do not anticipate non-performance. We do not hold or issue derivative financial instruments for trading purposes. We monitor our hedge positions by regularly evaluating the positions at market and by performing sensitivity analyses over the unhedged fuel and variable rate debt positions.

At September 30, 2017, our derivative instruments included 14 interest rate swap agreements that effectively fix the interest rate on the applicable notional amounts of our variable rate debt as follows (dollars in thousands of U.S. dollars):

Date Entered	**Notional Amount**	**Fixed Interest Rate Paid***	**Variable Interest Rate Received**	**Effective Date**	**Expiration Date**
April 2014	$ 100,000	1.800%	1-month LIBOR	July 2014	July 2019
May 2014	$ 50,000	2.344%	1-month LIBOR	October 2015	October 2020
May 2014	$ 25,000	2.326%	1-month LIBOR	October 2015	October 2020
May 2014	$ 50,000	2.350%	1-month LIBOR	October 2015	October 2020
May 2014	$ 50,000	2.350%	1-month LIBOR	October 2015	October 2020
April 2016	$ 100,000	1.000%	1-month LIBOR	February 2017	February 2020
June 2016	$ 75,000	0.850%	1-month LIBOR	February 2017	February 2020
June 2016	$ 150,000	0.950%	1-month LIBOR	January 2018	January 2021
June 2016	$ 150,000	0.950%	1-month LIBOR	January 2018	January 2021
July 2016	$ 50,000	0.900%	1-month LIBOR	January 2018	January 2021
July 2016	$ 50,000	0.890%	1-month LIBOR	January 2018	January 2021
August 2017	$ 100,000	1.900%	1-month LIBOR	July 2019	July 2022
August 2017	$ 200,000	2.200%	1-month LIBOR	October 2020	October 2025
August 2017	$ 150,000	1.950%	1-month LIBOR	February 2020	February 2023

* Plus applicable margin.

Under derivatives and hedging guidance, the interest rate swap agreements are considered cash flow hedges for a portion of our variable rate debt, and we apply hedge accounting to account for these instruments. The notional amounts and all other significant terms of the swap agreements are matched to the provisions and terms of the variable rate debt being hedged.

We have performed sensitivity analyses to determine how market rate changes will affect the fair value of our unhedged floating rate debt. Such an analysis is inherently limited in that it reflects a singular, hypothetical set of assumptions. Actual market movements may vary significantly from our assumptions. Fair value sensitivity is not necessarily indicative of the ultimate cash flow or earnings effect we would recognize from the assumed market rate movements. We are exposed to cash flow risk due to changes in interest rates with respect to the unhedged floating rate balances owed at September 30, 2017 and December 31, 2016, of $1.502

billion and $1.594 billion, respectively, including floating rate debt under our Credit Agreement and floating rate tax-exempt bond obligations. A one percentage point increase in interest rates on our variable-rate debt as of September 30, 2017 and December 31, 2016, would decrease our annual pre-tax income by approximately $15.0 million and $15.9 million, respectively. All of our remaining debt instruments are at fixed rates, or effectively fixed under the interest rate swap agreements described above; therefore, changes in market interest rates under these instruments would not significantly impact our cash flows or results of operations, subject to counterparty default risk.

The market price of diesel fuel is unpredictable and can fluctuate significantly. We purchase approximately 64.0 million gallons of fuel per year; therefore, a significant increase in the price of fuel could adversely affect our business and reduce our operating margins. To manage a portion of this risk, we periodically enter into fuel hedge agreements related to forecasted diesel fuel purchases.

At September 30, 2017, our derivative instruments included four fuel hedge agreements as follows:

Date Entered	Notional Amount (in gallons per month)	Diesel Rate Paid Fixed (per gallon)	Diesel Rate Received Variable	Effective Date	Expiration Date
May 2015	300,000	$3.2800	DOE Diesel Fuel Index*	January 2016	December 2017
May 2015	200,000	$3.2750	DOE Diesel Fuel Index*	January 2016	December 2017
July 2016	500,000	$2.4988	DOE Diesel Fuel Index*	January 2017	December 2017
July 2016	1,000,000	$2.6345	DOE Diesel Fuel Index*	January 2018	December 2018

* If the national U.S. on-highway average price for a gallon of diesel fuel, or average price, as published by the U.S. 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 number of gallons) from the counterparty. If the average price is less than the contract price per gallon, we pay the difference to the counterparty.

Under derivatives and hedging guidance, the fuel hedges are considered cash flow hedges for a portion of our forecasted diesel fuel purchases, and we apply hedge accounting to account for these instruments.

We have performed sensitivity analyses to determine how market rate changes will affect the fair value of our unhedged diesel fuel purchases. Such an analysis is inherently limited in that it reflects a singular, hypothetical set of assumptions. Actual market movements may vary significantly from our assumptions. Fair value sensitivity is not necessarily indicative of the ultimate cash flow or earnings effect we would recognize from the assumed market rate movements. For the year ending December 31, 2017, we expect to purchase approximately 64.0 million gallons of fuel, of which 33.2 million gallons will be purchased at market prices, 18.8 million gallons will be purchased under our fixed price fuel purchase contracts and 12.0 million gallons are hedged at a fixed price under our fuel hedge agreements. During the three month period of October 1, 2017 to December 31, 2017, we expect to purchase approximately 8.3 million gallons of fuel at market prices; therefore, a $0.10 per gallon increase in the price of fuel over the remaining three months in 2017 would decrease our pre-tax income during this period by approximately $0.8 million.

We market a variety of recyclable materials, including cardboard, office paper, plastic containers, glass bottles and ferrous and aluminum metals. We own and operate recycling operations and sell other collected recyclable materials to third parties for processing before resale. To reduce our exposure to commodity price risk with respect to recycled materials, we have adopted a pricing strategy of charging collection and processing fees for recycling volume collected from third parties. In the event of a decline in recycled commodity prices, a 10% decrease in average recycled commodity prices from the average prices that were in effect during the nine months ended September 30, 2017 and 2016, would have had a $12.4 million and $5.6 million impact on revenues for the nine months ended September 30, 2017 and 2016, respectively.

Item 4. Controls and Procedures

As required by Rule 13a-15(b) under the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) as of the end of the fiscal quarter covered by this Quarterly Report on Form 10-Q. In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of September 30, 2017, that our disclosure controls and procedures were effective at the reasonable assurance level such that information required to be disclosed in our Exchange Act reports: (1) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and (2) is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

During the quarter ended September 30, 2017, there was no change in our internal control over financial reporting 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

Information regarding our legal proceedings can be found in Note 17 of our Condensed Consolidated Financial Statements included in Part I, Item 1 of this report and is incorporated herein by reference.