

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 June 30, 2022 filed on SEDAR on August 3, 2022 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

FORWARD-LOOKING STATEMENTS

The following discussion should be read in conjunction with our Condensed Consolidated Financial Statements and the related notes included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

We make statements in this Quarterly Report on Form 10-Q that are forward-looking in nature. These include:

- Statements regarding our landfills, including capacity, duration, special projects, demand for and pricing of recyclables, landfill alternatives and related capital expenditures;
- Discussion of competition, loss of contracts, price increases and additional exclusive and/or long-term collection service arrangements;
- Forecasts of cash flows necessary for operations and free cash flow to reduce leverage as well as our ability to draw on our credit facility and access the capital markets to refinance or expand;
- Statements regarding our ability to access capital resources or credit markets at all or on favorable terms;
- Plans for, and the amounts of, certain capital expenditures for our existing and newly acquired properties and equipment;
- Statements regarding fuel, oil and natural gas demand, prices, and price volatility;
- Assessments of regulatory developments and potential changes in environmental, health, safety and tax laws and regulations; and
- Other statements on a variety of topics such as the coronavirus disease 2019 (“COVID-19”) pandemic, credit risk of customers, seasonality, labor/pension costs and labor union activity, operational and safety risks, acquisitions, litigation results, goodwill impairments, insurance costs and cybersecurity threats.

These statements can be identified by the use of forward-looking terminology such as “believes,” “expects,” “intends,” “may,” “might,” “will,” “could,” “should” or “anticipates,” or the negative thereof or comparable terminology, or by discussions of strategy.

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, risk factors detailed from time to time in our filings with the SEC and the securities commissions or similar regulatory authorities in Canada.

There may be additional risks of which we are not presently aware or that we currently believe are immaterial that could have an adverse impact on our business. We make no commitment to revise or update any forward-looking statements to reflect events or circumstances that may change, unless required under applicable securities laws.

OVERVIEW OF OUR BUSINESS

We are an integrated solid waste services company that provides non-hazardous waste collection, transfer and disposal services, along with resource recovery primarily through recycling and renewable fuels generation, in mostly exclusive and secondary markets across 43 states in the U.S. and six provinces in Canada. Waste Connections also provides non-hazardous oil and natural gas exploration and production (“E&P”) waste treatment, recovery and disposal services in several basins across the U.S., as well as intermodal services for the movement of cargo and solid waste containers in the Pacific Northwest.

Environmental, organizational and financial sustainability initiatives have been key components of our success since we were founded in 1997. We remain committed to growing and expanding these efforts as our industry and technology continue to evolve. To that end, in 2020 we made a \$500 million commitment to the advancement of the long-term, aspirational targets outlined in our 2021 Sustainability Report. This report can be found at www.wasteconnections.com/sustainability but does not constitute a part of, and is not incorporated by reference into, this Quarterly Report on Form 10-Q.

We generally 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 non-hazardous E&P waste treatment, recovery and disposal services.

The solid waste industry is local and highly competitive in nature, requiring substantial labor and capital resources. We 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 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. Subject to certain recent developments discussed below, macroeconomic and geopolitical conditions, including a significant decline in oil prices driven by both surplus production and supply, as well as the decrease in demand caused by factors including the COVID-19 pandemic, have resulted in decreased levels of E&P activity and a corresponding decrease in demand for our E&P waste services. Additionally, across the industry there is uncertainty regarding future demand for oil and related services, as noted by several energy companies, many of whom are customers of our E&P operations. These companies have written down the values of their oil and gas assets in anticipation of the potential for the decarbonization of their energy product mix given an increased global focus on reducing greenhouse gases and addressing climate change. Such uncertainty regarding global demand has had a significant impact on the investment and operating plans of our E&P waste customers in the basins where we operate. If the prices of crude oil and natural gas substantially decline, it could lead to 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. Conversely, sustained increases in prices of crude oil as a result of inflationary pressures, the uncertainty associated with the Ukrainian conflict and any related bans on oil sales from Russia or supply chain disruptions [as recently experienced](#) could result in increasing levels of production activity and demand for our E&P waste services.

THE COVID-19 PANDEMIC'S IMPACT ON OUR RESULTS OF OPERATIONS

March 11, 2022 marked the two-year anniversary of COVID-19 being declared a global pandemic by the World Health Organization. The related economic disruptions largely associated with closures or restrictions put into effect following the onset of the COVID-19 pandemic in the first quarter of 2020 resulted in declines in solid waste commercial collection, transfer station and landfill volumes, and roll off activity. Throughout the remaining fiscal year 2020 and during

2021, solid waste revenue and reported volumes largely reflected the pace and shape of the closures and subsequent reopening activity, with the timing and magnitude of recovery varying by market. Most of the impacts to solid waste volumes associated with the pandemic have largely abated, with landfill volumes and roll off pulls returning to pre-pandemic levels. In certain markets, commercial collection volumes have not returned to pre-pandemic levels.

The COVID-19 pandemic also contributed to a decline in demand for and the value of crude oil, which impacted E&P drilling activity and resulted in lower E&P waste revenue. In recent quarters, E&P waste revenue has improved sequentially on increased drilling activity in several of the major basins.

Since the onset of the COVID-19 pandemic, protecting the health, welfare and safety of our employees has been our top priority. Recognizing the potential for financial hardship and other challenges, we have looked to provide a safety net for our employees on issues of income and family health. To that end, since the onset of the pandemic through year-end 2021, we have incurred over \$40 million in incremental COVID-19-related costs, primarily supplemental pay for frontline employees. Through the six months ended June 30, 2022, we continued to provide support for our employees and their families, including approximately \$10 million in supplemental pay and benefits due to surges in cases related to certain variants of COVID-19.

As a result of the COVID-19 pandemic and subsequent reopening activity, we have also experienced an impact to our operating costs as a result of factors including supply chain disruptions and labor constraints, as demand has recovered and competition has increased. As a result, we have incurred incremental costs associated with higher wages, increased overtime as a result of higher turnover, and increased reliance on third-party services.

The impact of the COVID-19 pandemic on our business, results of operations, financial condition and cash flows in future periods will depend largely on future developments, including the duration and spread of the outbreak in the U.S. and Canada, the rate of vaccinations, the severity of COVID-19 variants, the actions to contain such coronavirus variants, and how quickly and to what extent normal economic and operating conditions can resume.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or 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 SIX MONTHS ENDED JUNE 30, 2022 AND 2021

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 June 30,				Six Months Ended June 30,			
	2022		2021		2022		2021	
Revenues	\$ 1,816,435	100.0 %	\$ 1,533,931	100.0 %	\$ 3,462,690	100.0 %	\$ 2,929,874	100.0 %
Cost of operations	1,087,892	59.9	901,191	58.8	2,077,410	60.0	1,727,111	59.0
Selling, general and administrative	168,404	9.3	157,943	10.3	331,818	9.6	299,365	10.2
Depreciation	188,937	10.4	169,221	11.0	368,887	10.6	326,624	11.2
Amortization of intangibles	37,462	2.1	32,707	2.1	75,098	2.2	64,899	2.2
Impairments and other operating items	4,150	0.2	6,081	0.4	6,028	0.2	6,715	0.2
Operating income	329,590	18.1	266,788	17.4	603,449	17.4	505,160	17.2
Interest expense	(45,079)	(2.5)	(41,328)	(2.7)	(86,404)	(2.5)	(83,753)	(2.9)
Interest income	652	0.0	744	0.1	790	0.0	1,848	0.1
Other income (expense), net	(2,649)	(0.1)	(1,235)	(0.1)	(6,114)	(0.1)	2,312	0.1
Income tax provision	(58,307)	(3.2)	(47,868)	(3.2)	(107,146)	(3.1)	(88,159)	(3.0)
Net income	224,207	12.3	177,101	11.5	404,575	11.7	337,408	11.5
Net loss (income) attributable to noncontrolling interests	(133)	(0.0)	(54)	(0.0)	(177)	(0.0)	(52)	(0.0)
Net income attributable to Waste Connections	\$ 224,074	12.3 %	\$ 177,047	11.5 %	\$ 404,398	11.7 %	\$ 337,356	11.5 %

Revenues. Total revenues increased \$282.5 million, or 18.4%, to \$1.816 billion for the three months ended June 30, 2022, from \$1.534 billion for the three months ended June 30, 2021. Total revenues increased \$532.8 million, or 18.2%, to \$3.463 billion for the six months ended June 30, 2022, from \$2.930 billion for the six months ended June 30, 2021.

Acquisitions closed during, or subsequent to, the three months ended June 30, 2021 increased revenues by \$144.2 million for the three months ended June 30, 2022. Acquisitions closed during, or subsequent to, the six months ended June 30, 2021 increased revenues by \$256.5 million for the six months ended June 30, 2022.

Operations that were divested subsequent to June 30, 2021 decreased revenues by \$2.8 million and \$5.1 million, respectively, for the three and six months ended June 30, 2022.

During the three months ended June 30, 2022, the net increase in prices charged to our customers at our existing operations was \$128.6 million, consisting of \$105.6 million of core price increases and surcharges of \$23.0 million. During the six months ended June 30, 2022, the net increase in prices charged to our customers at our existing operations was \$222.7 million, consisting of \$189.1 million of core price increases and surcharges of \$33.6 million.

During the three months ended June 30, 2022, we recognized volume losses totaling \$10.4 million, which was comprised of \$14.1 million of residential collection volume losses primarily associated with the nonrenewal of two collection contracts subsequent to June 30, 2021, partially offset by \$3.7 million in volume growth primarily attributable to increases in commercial collection and roll off collection. During the six months ended June 30, 2022, we recognized volume losses totaling \$2.0 million, which was comprised of \$24.8 million of residential collection volume losses associated with the aforementioned collection contracts, partially offset by \$22.8 million in volume growth primarily attributable to increases in commercial collection, roll off collection and landfill disposal.

E&P waste revenues at facilities owned during the three and six months ended June 30, 2022 and 2021 increased \$19.9 million and \$36.4 million, respectively, due to increases in overall demand for our E&P waste services resulting from higher demand for crude oil contributing to increases in drilling and production activity levels.

Revenues from sales of recyclable commodities at facilities owned during the three and six months ended June 30, 2022 and 2021 increased \$5.7 million and \$19.2 million, respectively, due primarily to higher prices for old corrugated cardboard, aluminum, plastics and other paper products, higher volumes collected from commercial recycling customers, which declined in the prior year period due to economic disruptions resulting from the COVID-19 pandemic, and the impact of changes in our accounting policy associated with recognizing certain recyclable commodity sales gross of selling and processing expenses.

A decrease in the average Canadian dollar to U.S. dollar currency exchange rate resulted in a decrease in revenues of \$8.5 million for the three months and six months ended June 30, 2022. The average Canadian dollar to U.S. dollar exchange rates on our Canadian revenues were 0.7833 and 0.8147 in the three months ended June 30, 2022 and 2021, respectively. The average Canadian dollar to U.S. dollar exchange rates on our Canadian revenues were 0.7863 and 0.8030 in the six months ended June 30, 2022 and 2021, respectively.

Other revenues increased \$5.8 million during the three months ended June 30, 2022, due primarily to a \$1.9 million increase resulting from higher prices for renewable energy credits associated with the generation of landfill gas at our Canada segment, a \$1.9 million increase in intermodal revenues due primarily to reductions in shipping port logistical constraints which decreased intermodal cargo volumes in the prior year period and a \$2.0 million increase in other non-core revenue sources. Other revenues increased \$13.6 million during the six months ended June 30, 2022, due primarily to a \$4.7 million increase resulting from higher prices for renewable energy credits associated with the generation of landfill gas at our Canada segment, a \$4.6 million increase in intermodal revenues, a \$1.0 million increase in landfill gas sales at our U.S. segments and a \$3.3 million increase in other non-core revenue sources.

Cost of Operations. Total cost of operations increased \$186.7 million, or 20.7%, to \$1.088 billion for the three months ended June 30, 2022, from \$901.2 million for the three months ended June 30, 2021. The increase was primarily the result of an increase in operating costs at our existing operations of \$98.0 million, assuming foreign currency parity, and \$95.4 million of additional operating costs from acquisitions closed during, or subsequent to, the three months ended June 30, 2021, partially offset by a decrease in operating costs of \$4.3 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease of \$2.4 million from operations divested subsequent to the three months ended June 30, 2021.

The increase in operating costs of \$98.0 million, assuming foreign currency parity, at our existing operations for the three months ended June 30, 2022 consisted of an increase in labor and recurring incentive compensation expenses of \$26.6 million due primarily to employee pay increases and headcount additions to support solid waste and E&P volume increases, an increase in fuel expense of \$24.5 million due to higher diesel and natural gas prices, an increase in third-party trucking and transportation expenses of \$15.6 million due primarily to higher rates charged by third-party providers, an increase in truck, container, equipment and facility maintenance and repair expenses of \$11.3 million due primarily to increased collection routes and equipment operating hours and parts and service rate increases, an increase in third-party disposal expenses of \$7.3 million due primarily to increased solid waste collection volumes, an increase in expenses for purchasing and processing recyclable commodities of \$3.6 million due to higher recyclable commodity values and changes in our accounting policy associated with recognizing certain recyclable commodity sales gross of selling and processing expenses, an increase in taxes on revenues of \$1.7 million due primarily to increased revenues, an increase in employee medical benefits expenses of \$1.7 million due to an increase in the cost of provider services, an increase in intermodal rail expenses of \$1.0 million due to higher cargo volumes and \$4.7 million of other net expense increases.

Total cost of operations increased \$350.3 million, or 20.3%, to \$2.077 billion for the six months ended June 30, 2022, from \$1.727 billion for the six months ended June 30, 2021. The increase was primarily the result of an increase in operating costs at our existing operations of \$189.4 million, assuming foreign currency parity, and \$169.6 million of additional operating costs from acquisitions closed during, or subsequent to, the six months ended June 30, 2021, partially offset by a decrease in operating costs of \$4.4 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease of \$4.3 million from operations divested subsequent to the six months ended June 30, 2021.

The increase in operating costs of \$189.4 million, assuming foreign currency parity, at our existing operations for the six months ended June 30, 2022 consisted of an increase in labor and recurring incentive compensation expenses of \$47.0

million due primarily to employee pay increases and headcount additions to support solid waste and E&P volume increases, an increase in fuel expense of \$40.6 million due to higher diesel and natural gas prices, an increase in third-party trucking and transportation expenses of \$25.8 million due primarily to increased landfill special waste volumes requiring trucking and transportation services to our landfills and higher rates charged by third-party providers, an increase in truck, container, equipment and facility maintenance and repair expenses of \$24.0 million due primarily to increased collection routes and equipment operating hours and parts and service rate increases, an increase in third-party disposal expenses of \$14.1 million due primarily to increased solid waste collection volumes, an increase in supplemental compensation to non-management personnel of \$9.0 million to provide financial assistance associated with the impact of COVID-19, an increase in expenses for purchasing and processing recyclable commodities of \$7.1 million due to higher recyclable commodity values and changes in our accounting policy associated with recognizing certain recyclable commodity sales gross of selling and processing expenses, an increase in taxes on revenues of \$6.0 million due primarily to increased revenues, an increase in expenses for auto and workers' compensation claims of \$3.0 million due primarily to adjustments recorded in the prior year period to decrease projected losses on outstanding claims originally recorded prior to 2021, an increase in leachate expense of \$2.8 million due primarily to higher precipitation in certain markets where our landfills are located and higher costs charged by third parties to transport and treat leachate, an increase in intermodal rail expenses of \$2.2 million due to higher cargo volumes, an increase in subcontracted hauling services at our solid waste operations of \$1.6 million due to higher costs charged by third-party providers, an increase in 401(k) matching expenses of \$1.0 million due to higher employee earnings and \$5.2 million of other net expense increases.

Cost of operations as a percentage of revenues increased 1.1 percentage points to 59.9% for the three months ended June 30, 2022, from 58.8% for the three months ended June 30, 2021. The increase as a percentage of revenues consisted of a 1.1 percentage point increase from higher diesel and natural gas expenses, a 0.6 percentage point increase from higher third-party trucking and transportation expenses and a 0.4 percentage point increase from acquisitions closed during, or subsequent to, the three months ended June 30, 2021 having operating margins lower than our company average, partially offset by a combined 0.8 percentage point decrease from disposal, taxes on revenues and labor due to price-driven revenue increases and a 0.2 percentage point decrease from all other net changes.

Cost of operations as a percentage of revenues increased 1.0 percentage points to 60.0% for the six months ended June 30, 2022, from 59.0% for the six months ended June 30, 2021. The increase as a percentage of revenues consisted of a 0.9 percentage point increase from higher fuel expense, a 0.5 percentage point increase from higher third-party trucking and transportation expenses, a 0.4 percentage point increase from acquisitions closed during, or subsequent to, the six months ended June 30, 2021 having operating margins lower than our company average and a 0.1 percentage point increase from higher maintenance and repair expenses, partially offset by a combined 0.9 percentage point decrease from disposal, taxes on revenues and benefits expenses due to price-driven revenue increases.

SG&A. SG&A expenses increased \$10.5 million, or 6.6%, to \$168.4 million for the three months ended June 30, 2022, from \$157.9 million for the three months ended June 30, 2021. The increase was comprised of an increase of \$0.8 million, assuming foreign currency parity, at our existing operations and \$10.7 million from acquisitions closed during, or subsequent to, the three months ended June 30, 2021, partially offset by a decrease of \$0.7 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease of \$0.3 million from operations divested subsequent to the three months ended June 30, 2021.

The increase in SG&A expenses at our existing operations of \$0.8 million, assuming foreign currency parity, for the three months ended June 30, 2022 was comprised of a collective increase in travel, meetings, training and community activity expenses of \$7.8 million due to increased travel and social gatherings in the current year period due to a reduction in restrictions associated with the COVID-19 pandemic, an increase in direct acquisition expenses of \$3.6 million due to an increase in acquisition activity in the current period, an increase in administrative payroll expenses of \$2.4 million due primarily to annual pay and headcount increases and \$2.5 million of other net expense increases, partially offset by a decrease in deferred compensation expenses of \$6.2 million as a result of decreases in the market value of investments to which employee deferred compensation liability balances are tracked, a decrease in equity-based compensation expenses of \$5.3 million due to the prior year SG&A expense including an adjustment to increase the fair value of our common shares held in our deferred compensation plan by certain key executives as a result of the shares being exchanged for other investment options, a decrease in equity-based compensation expenses of \$2.0 million associated with decreases in our share price resulting in fair value measurement decreases to 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, and a decrease in accrued recurring cash incentive compensation expense to our management of \$2.0 million.

SG&A expenses increased \$32.4 million, or 10.8%, to \$331.8 million for the six months ended June 30, 2022, from \$299.4 million for the six months ended June 30, 2021. The increase was comprised of an increase of \$14.5 million, assuming foreign currency parity, at our existing operations and \$19.2 million from acquisitions closed during, or subsequent to, the six months ended June 30, 2021, partially offset by a decrease of \$0.7 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease of \$0.6 million from operations divested subsequent to the six months ended June 30, 2021.

The increase in SG&A expenses at our existing operations of \$14.5 million, assuming foreign currency parity, for the six months ended June 30, 2022 was comprised of a collective increase in travel, meetings, training and community activity expenses of \$13.2 million due to increased travel and social gatherings in the current year period due to a reduction in restrictions associated with the COVID-19 pandemic, an increase in direct acquisition expenses of \$7.6 million due to an increase in acquisition activity in the current period, an increase in administrative payroll expenses of \$6.2 million due primarily to annual pay and headcount increases, an increase in equity-based compensation expenses of \$2.7 million associated with our annual recurring grant of restricted share units to our personnel, an increase in professional fees of \$1.8 million due primarily to increased legal services, an increase in software license fees of \$1.2 million associated with new information technology applications, an increase of \$0.8 million resulting from the payment of supplemental bonuses to non-management employees to provide financial assistance associated with the impact of COVID-19 and \$1.6 million of other net expense increases, partially offset by a decrease in deferred compensation expenses of \$9.3 million as a result of decreases in the market value of investments to which employee deferred compensation liability balances are tracked, a decrease of \$5.2 million in equity-based compensation expenses associated with the prior year period including adjustments to increase the fair value of our common shares held in our deferred compensation plan by certain key executives as a result of the shares being exchanged for other investment options, a decrease in accrued recurring cash incentive compensation expense to our management of \$3.8 million and a decrease in equity-based compensation expenses of \$2.3 million associated with decreases in our share price resulting in fair value measurement decreases to 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.

SG&A expenses as a percentage of revenues decreased 1.0 percentage point to 9.3% for the three months ended June 30, 2022, from 10.3% for the three months ended June 30, 2021. The decrease as a percentage of revenues consisted of a 0.6 percentage point decrease from lower equity compensation expenses, a 0.4 percentage point decrease from lower deferred compensation expense, a 0.3 percentage point decrease from lower cash incentive compensation expense and a 0.3 percentage point decrease from all other net changes due primarily to price-led revenue increases, partially offset by a 0.4 percentage point increase from increased travel, meetings, training and community activity expenses and a 0.2 percentage point increase from higher direct acquisition expenses.

SG&A expenses as a percentage of revenues decreased 0.6 percentage points to 9.6% for the six months ended June 30, 2022, from 10.2% for the six months ended June 30, 2021. The decrease as a percentage of revenues consisted of a 0.3 percentage point decrease from lower equity compensation expenses, a 0.3 percentage point decrease from lower cash incentive compensation expense, a 0.3 percentage point decrease from lower deferred compensation expense and a 0.2 percentage point decrease from all other net changes due primarily to price-led revenue increases, partially offset by a 0.3 percentage point increase from increased travel, meetings, training and community activity expenses and a 0.2 percentage point increase from higher direct acquisition expenses.

Depreciation. Depreciation expense increased \$19.7 million, or 11.7%, to \$188.9 million for the three months ended June 30, 2022, from \$169.2 million for the three months ended June 30, 2021. The increase was comprised of an increase in depreciation and depletion expense of \$13.7 million from acquisitions closed during, or subsequent to, the three months ended June 30, 2021, an increase in depreciation expense of \$6.0 million from the impact of additions to our fleet and equipment purchased to support our existing operations and an increase in depletion expense of \$2.0 million resulting from increased landfill E&P volumes and higher landfill development costs increasing our landfill depletion rates, partially offset by a decrease in depreciation and depletion expense of \$1.1 million from operations divested subsequent to the three

months ended June 30, 2021 and a decrease of \$0.9 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Depreciation expense increased \$42.3 million, or 12.9%, to \$368.9 million for the six months ended June 30, 2022, from \$326.6 million for the six months ended June 30, 2021. The increase was comprised of an increase in depreciation and depletion expense of \$25.4 million from acquisitions closed during, or subsequent to, the six months ended June 30, 2021, an increase in depreciation expense of \$11.3 million from the impact of additions to our fleet and equipment purchased to support our existing operations and an increase in depletion expense of \$8.3 million resulting from increased landfill special waste and E&P volumes and higher landfill development costs increasing our per ton landfill depletion rates, partially offset by a decrease in depreciation and depletion expense of \$1.8 million from operations divested subsequent to the six months ended June 30, 2021 and a decrease of \$0.9 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Depreciation expense as a percentage of revenues decreased 0.6 percentage points to 10.4% for the three months ended June 30, 2022, from 11.0% for the three months ended June 30, 2021. Depreciation expense as a percentage of revenues decreased 0.6 percentage points to 10.6% for the six months ended June 30, 2022, from 11.2% for the six months ended June 30, 2021. The decreases as a percentage of revenues were primarily attributable to the impact of price-driven revenue increases in our solid waste services.

Amortization of Intangibles. Amortization of intangibles expense increased \$4.8 million, or 14.5%, to \$37.5 million for the three months ended June 30, 2022, from \$32.7 million for the three months ended June 30, 2021. The increase was the result of \$9.7 million from intangible assets acquired in acquisitions closed during, or subsequent to, the three months ended June 30, 2021, partially offset by a decrease of \$4.7 million from certain intangible assets becoming fully amortized subsequent to June 30, 2021 and a decrease of \$0.2 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Amortization of intangibles expense increased \$10.2 million, or 15.7%, to \$75.1 million for the six months ended June 30, 2022, from \$64.9 million for the six months ended June 30, 2021. The increase was the result of \$19.0 million from intangible assets acquired in acquisitions closed during, or subsequent to, the six months ended June 30, 2021, partially offset by a decrease of \$8.6 million from certain intangible assets becoming fully amortized subsequent to June 30, 2021 and a decrease of \$0.2 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Amortization expense as a percentage of revenues was unchanged at 2.1% for the three months ended June 30, 2022 and 2021 and 2.2% for the six months ended June 30, 2022 and 2021.

Impairments and Other Operating Items. Impairments and other operating items decreased \$2.0 million, to net losses totaling \$4.1 million for the three months ended June 30, 2022, from net losses totaling \$6.1 million for the three months ended June 30, 2021.

The net losses of \$4.1 million recorded during the three months ended June 30, 2022 consisted of \$2.6 million of losses on property and equipment disposals, \$1.3 million of charges to write off the carrying cost of certain contracts that were not, or are not expected to be, renewed prior to the original estimated termination date and \$0.2 million of other net charges.

The net losses of \$6.1 million recorded during the three months ended June 30, 2021 consisted of a \$4.6 million loss resulting from property and equipment damaged in a facility fire, \$0.6 million of charges to write off the carrying cost of certain contracts that were not, or are not expected to be, renewed prior to the original estimated termination date and \$0.9 million of other net charges.

Impairments and other operating items decreased \$0.7 million, to net losses totaling \$6.0 million for the six months ended June 30, 2022, from net losses totaling \$6.7 million for the six months ended June 30, 2021.

The net losses of \$6.0 million recorded during the six months ended June 30, 2022 consisted of \$4.9 million of charges to write off the carrying cost of certain contracts that were not, or are not expected to be, renewed prior to the original estimated termination date, \$0.9 million of losses on property and equipment disposals and \$0.2 million of other net charges.

The net losses of \$6.7 million recorded during the six months ended June 30, 2021 consisted of a \$4.6 million loss resulting from property and equipment damaged in a facility fire, \$1.1 million of charges to write off the carrying cost of certain contracts that were not, or are not expected to be, renewed prior to the original estimated termination date and \$1.0 million of other net charges.

Operating Income. Operating income increased \$62.8 million, or 23.5%, to \$329.6 million for the three months ended June 30, 2022, from \$266.8 million for the three months ended June 30, 2021.

The increase in our operating income for the three months ended June 30, 2022 was due primarily to price increases for our solid waste services, operating income generated from acquisitions closed during, or subsequent to, the three months ended June 30, 2021 and an increase in earnings at our E&P waste operations.

Operating income increased \$98.2 million, or 19.5%, to \$603.4 million for the six months ended June 30, 2022, from \$505.2 million for the six months ended June 30, 2021.

The increase in our operating income for the six months ended June 30, 2022 was due primarily to price increases for our solid waste services, operating income contributions from increased sales of recyclable commodities and renewable energy credits associated with the generation of landfill gas, operating income generated from acquisitions closed during, or subsequent to, the six months ended June 30, 2021 and an increase in earnings at our E&P waste operations.

Operating income as a percentage of revenues increased 0.7 percentage points to 18.1% for the three months ended June 30, 2022, from 17.4% for the three months ended June 30, 2021. The increase in operating income as a percentage of revenues was comprised of a 1.0 percentage point decrease in SG&A expense, a 0.6 percentage point decrease in depreciation expense and a 0.2 percentage point decrease in impairments and other operating items, partially offset by a 1.1 percentage point increase in cost of operations.

Operating income as a percentage of revenues increased 0.2 percentage points to 17.4% for the six months ended June 30, 2022, from 17.2% for the six months ended June 30, 2021. The increase in operating income as a percentage of revenues was comprised of a 0.6 percentage point decrease in SG&A expense and a 0.6 percentage point decrease in depreciation expense, partially offset by a 1.0 percentage point increase in cost of operations.

Interest Expense. Interest expense increased \$3.8 million, or 9.1%, to \$45.1 million for the three months ended June 30, 2022, from \$41.3 million for the three months ended June 30, 2021. The increase was primarily attributable to an increase of \$14.0 million from the issuance of \$2.0 billion of senior unsecured notes subsequent to June 30, 2021, an increase of \$2.1 million due to an increase in the average borrowings outstanding under our Credit Agreement and an increase of \$0.5 million from higher interest rates on borrowings outstanding under our Credit Agreement, partially offset by a decrease of \$12.6 million from the repayment of \$1.75 billion of senior unsecured notes in 2021 and \$0.2 million of other net decreases.

Interest expense increased \$2.6 million, or 3.2%, to \$86.4 million for the six months ended June 30, 2022, from \$83.8 million for the six months ended June 30, 2021. The increase was primarily attributable to an increase of \$25.0 million from the issuance of \$2.0 billion of senior unsecured notes subsequent to June 30, 2021 and an increase of \$5.3 million due to an increase in the average borrowings outstanding under our Credit Agreement, partially offset by a decrease of \$26.6 million from the repayment of \$1.75 billion of senior unsecured notes in 2021 and \$1.1 million of other net decreases.

Other Income (Expense), Net. Other income (expense), net decreased \$1.4 million, to an expense total of \$2.6 million for the three months ended June 30, 2022, from an expense total of \$1.2 million for the three months ended June 30, 2021.

Other expense of \$2.6 million recorded during the three months ended June 30, 2022 consisted of \$4.3 million from a decline in the value of investments purchased to fund our employee deferred compensation obligations and a \$1.0 million adjustment to increase certain acquisition-related accrued liabilities recorded in prior periods, partially offset by foreign currency transaction gains of \$2.5 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods reducing the U.S. dollar consideration required to settle international liabilities and \$0.2 million of other net income.

Other expense of \$1.2 million recorded during the three months ended June 30, 2021 consisted of \$1.8 million of adjustments to increase certain accrued liabilities acquired in prior period acquisitions and a \$0.9 million increase in other net expenses, partially offset by \$1.5 million of income earned on investments purchased to fund our employee deferred compensation obligations.

Other income (expense), net decreased \$8.4 million, to an expense total of \$6.1 million for the six months ended June 30, 2022, from an income total of \$2.3 million for the six months ended June 30, 2021.

Other expense of \$6.1 million recorded during the six months ended June 30, 2022 consisted of \$6.2 million from a decline in the value of investments purchased to fund our employee deferred compensation obligations and a \$2.0 million adjustment to increase certain acquisition-related accrued liabilities recorded in prior periods, partially offset by foreign currency transaction gains of \$1.9 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods reducing the U.S. dollar consideration required to settle international liabilities and \$0.2 million of other net income.

Other income of \$2.3 million recorded during the six months ended June 30, 2021 consisted of \$2.7 million of income earned on investments purchased to fund our employee deferred compensation obligations and a \$1.1 million increase in other net income sources, partially offset by \$1.5 million of adjustments to increase certain accrued liabilities acquired in prior period acquisitions.

Income Tax Provision. Income taxes increased \$10.4 million, to \$58.3 million for the three months ended June 30, 2022, from \$47.9 million for the three months ended June 30, 2021. Our effective tax rate for the three months ended June 30, 2022 was 20.6%. Our effective tax rate for the three months ended June 30, 2021 was 21.3%. Income taxes increased \$18.9 million, to \$107.1 million for the six months ended June 30, 2022, from \$88.2 million for the six months ended June 30, 2021. Our effective tax rate for the six months ended June 30, 2022 was 20.9%. Our effective tax rate for the six months ended June 30, 2021 was 20.7%.

The income tax provision for the three and six months ended June 30, 2022 included a benefit of \$0.1 million and \$2.5 million, respectively, from share-based payment awards being recognized in the income statement when settled, as well as a portion of our internal financing being taxed at effective rates substantially lower than the U.S. federal statutory rate.

The income tax provision for the six months ended June 30, 2021 included a benefit of \$2.0 million from share-based payment awards being recognized in the income statement when settled, as well as a portion of our internal financing being taxed at effective rates substantially lower than the U.S. federal statutory rate.

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 table disaggregates our revenue by service line for the periods indicated (dollars in thousands of U.S. dollars).

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Commercial	\$ 538,525	\$ 444,044	\$ 1,038,201	\$ 870,439
Residential	463,320	416,975	903,608	817,794
Industrial and construction roll off	295,557	237,300	555,045	446,558
Total collection	1,297,402	1,098,319	2,496,854	2,134,791
Landfill	339,719	327,124	639,484	599,060
Transfer	261,475	217,133	479,432	406,456
Recycling	67,504	41,539	130,598	73,987
E&P	54,155	34,607	97,711	62,618
Intermodal and other	46,310	38,590	92,002	74,225
Intercompany	(250,130)	(223,381)	(473,391)	(421,263)
Total	<u>\$ 1,816,435</u>	<u>\$ 1,533,931</u>	<u>\$ 3,462,690</u>	<u>\$ 2,929,874</u>

We manage our operations through the following five geographic solid waste operating segments: Eastern, Southern, Western, Central and Canada. Our five geographic solid waste operating segments comprise our reportable segments. Our Chief Operating Decision Maker 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 and other income (expense). 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. Each operating segment is responsible for managing several vertically integrated operations, which are comprised of districts.

Summarized financial information for our reportable segments are shown in the following tables in thousands of U.S. dollars and as a percentage of total segment revenue for the periods indicated.

	Three Months Ended June 30, 2022		EBITDA Margin	Depreciation and Amortization
	Revenue	EBITDA ^(b)		
Eastern	\$ 478,739	\$ 126,042	26.3 %	\$ 70,126
Southern	416,464	124,507	29.9 %	49,598
Western	360,923	110,602	30.6 %	37,617
Central	309,927	109,023	35.2 %	38,016
Canada	250,382	92,648	37.0 %	31,914
Corporate ^(a)	—	(2,683)	—	(872)
	<u>\$ 1,816,435</u>	<u>\$ 560,139</u>	30.8 %	<u>\$ 226,399</u>

	Three Months Ended June 30, 2021		EBITDA Margin	Depreciation and Amortization
	Revenue	EBITDA ^(b)		
Eastern	\$ 369,617	\$ 99,382	26.9 %	\$ 59,032
Southern	363,336	98,928	27.2 %	46,414
Western	313,789	99,402	31.7 %	31,379
Central	266,845	94,886	35.6 %	33,030
Canada	220,344	88,641	40.2 %	30,133
Corporate ^(a)	—	(6,442)	—	1,940
	<u>\$ 1,533,931</u>	<u>\$ 474,797</u>	31.0 %	<u>\$ 201,928</u>

	Six Months Ended		EBITDA	Depreciation and
	June 30, 2022			
	Revenue	EBITDA ^(b)		
Eastern	\$ 900,335	\$ 233,830	26.0 %	\$ 135,411
Southern	803,528	233,117	29.0 %	97,170
Western	707,633	215,349	30.4 %	74,180
Central	586,104	201,059	34.3 %	73,042
Canada	465,090	177,492	38.2 %	59,279
Corporate ^(a)	—	(7,385)	—	4,903
	<u>\$ 3,462,690</u>	<u>\$ 1,053,462</u>	30.4 %	<u>\$ 443,985</u>

	Six Months Ended		EBITDA	Depreciation and
	June 30, 2021			
	Revenue	EBITDA ^(b)		
Eastern	\$ 706,079	\$ 188,503	26.7 %	\$ 112,507
Southern	701,497	192,352	27.4 %	91,899
Western	610,793	193,228	31.6 %	61,469
Central	502,231	173,926	34.6 %	64,605
Canada	409,274	162,581	39.7 %	56,624
Corporate ^(a)	—	(7,192)	—	4,419
	<u>\$ 2,929,874</u>	<u>\$ 903,398</u>	30.8 %	<u>\$ 391,523</u>

- (a) The majority of Corporate expenses are allocated to the five operating segments. Direct acquisition expenses, expenses associated with common shares held in the deferred compensation plan exchanged for other investment options and share-based compensation expenses associated with Progressive Waste share-based grants outstanding at June 1, 2016 that were continued by the Company are not allocated to the five operating segments and comprise the net EBITDA for our Corporate segment for the periods presented.
- (b) For those items included in the determination of segment EBITDA, the accounting policies of the segments are the same as those described in our most recent Annual Report on Form 10-K.

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, EBITDA and depreciation, depletion and amortization for our reportable segments for the three and six month periods ended June 30, 2022, compared to the three and six month periods ended June 30, 2021, are discussed below.

Eastern

Revenue increased \$109.1 million to \$478.7 million for the three months ended June 30, 2022, from \$369.6 million for the three months ended June 30, 2021, due to price increases, increased commercial and roll off collection, transfer station volume increases, landfill special waste volume increases, contributions from acquisitions closed subsequent to June 30, 2021 and higher prices for recyclable commodities, partially offset by decreased residential collection volumes.

Revenue increased \$194.2 million to \$900.3 million for the six months ended June 30, 2022, from \$706.1 million for the six months ended June 30, 2021, due to price increases, increased commercial and roll off collection, municipal solid waste disposal volume increases, contributions from acquisitions closed subsequent to June 30, 2021 and higher prices for recyclable commodities, partially offset by decreased residential collection volumes.

EBITDA increased \$26.6 million to \$126.0 million for the three months ended June 30, 2022, from \$99.4 million for the three months ended June 30, 2021. EBITDA margin was 26.3% and 26.9% for the three months ended June 30, 2022 and 2021, respectively. EBITDA increased \$45.3 million to \$233.8 million for the six months ended June 30, 2022, from \$188.5 million for the six months ended June 30, 2021. EBITDA margin was 26.0% and 26.7% for the six months ended June 30, 2022 and 2021, respectively. The decrease in our EBITDA margin for the three and six months ended June 30, 2022 was due primarily to increased diesel fuel expenses, increased third-party trucking and transportation expenses, increased repair and maintenance expenses, increased leachate disposal expenses and increased travel, meetings, training and community activity expenses, partially offset by benefits from price-led revenue increases.

Depreciation, depletion and amortization expense increased \$11.1 million, to \$70.1 million for the three months ended June 30, 2022, from \$59.0 million for the three months ended June 30, 2021. Depreciation, depletion and amortization expense increased \$22.9 million, to \$135.4 million for the six months ended June 30, 2022, from \$112.5 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to assets acquired in acquisitions, additions to our fleet and equipment and higher depletion expense due to higher landfill development costs increasing our per ton landfill depletion rates.

Southern

Revenue increased \$53.2 million to \$416.5 million for the three months ended June 30, 2022, from \$363.3 million for the three months ended June 30, 2021. Revenue increased \$102.0 million to \$803.5 million for the six months ended June 30, 2022, from \$701.5 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to solid waste price increases, increased E&P waste revenues attributable to increases in drilling and production activity levels resulting in increases in the demand for our E&P waste services, contributions from acquisitions closed subsequent to June 30, 2021 and increased roll off collection and landfill municipal solid waste volumes, partially offset by lower residential collection volumes due to the loss of a collection contract subsequent to June 30, 2021, a decrease resulting from the divestiture of certain non-strategic operating locations and lower landfill special waste volumes.

EBITDA increased \$25.6 million to \$124.5 million for the three months ended June 30, 2022, from \$98.9 million for the three months ended June 30, 2021. EBITDA margin was 29.9% and 27.2% for the three months ended June 30, 2022 and 2021, respectively. EBITDA increased \$40.7 million to \$233.1 million for the six months ended June 30, 2022, from \$192.4 million for the six months ended June 30, 2021. EBITDA margin was 29.0% and 27.4% for the six months ended June 30, 2022 and 2021, respectively. The increase in our EBITDA margin for the three and six months ended June 30, 2022 was due to increased earnings at our E&P operations and price-led increases in solid waste revenue, partially offset by increased diesel and natural gas fuel expenses, increased vehicle and equipment maintenance and repair expenses, the impact of acquisitions closed subsequent to June 30, 2021 having lower EBITDA margins than our segment average, increased travel, meetings, training and community activity expenses and increased legal expenses.

Depreciation, depletion and amortization expense increased \$3.2 million, to \$49.6 million for the three months ended June 30, 2022, from \$46.4 million for the three months ended June 30, 2021. Depreciation, depletion and amortization expense increased \$5.3 million, to \$97.2 million for the six months ended June 30, 2022, from \$91.9 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to assets acquired in acquisitions, additions to our fleet and equipment and higher depletion expense due to increased landfill volumes and higher landfill development costs increasing our per ton landfill depletion rates, partially offset by a decrease resulting from the divestiture of certain non-strategic operating locations and a reduction in amortization expense associated with the loss of a large residential collection contract.

Western

Revenue increased \$47.1 million to \$360.9 million for the three months ended June 30, 2022, from \$313.8 million for the three months ended June 30, 2021. Revenue increased \$96.8 million to \$707.6 million for the six months ended June 30, 2022, from \$610.8 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to contributions from acquisitions closed subsequent to June 30, 2021, price increases, increased collection volumes, higher prices for recyclable commodities and increased intermodal revenue.

EBITDA increased \$11.2 million to \$110.6 million for the three months ended June 30, 2022, from \$99.4 million for the three months ended June 30, 2021. EBITDA margin was 30.6% and 31.7% for the three months ended June 30, 2022 and 2021, respectively. EBITDA increased \$22.1 million to \$215.3 million for the six months ended June 30, 2022, from \$193.2 million for the six months ended June 30, 2021. EBITDA margin was 30.4% and 31.6% for the six months ended June 30, 2022 and 2021, respectively. The decrease in our EBITDA margin for the three and six months ended June 30, 2022 was due to increased diesel and natural gas fuel expenses, increased third-party trucking and transportation expenses, acquisitions closed subsequent to June 30, 2021 having operating margins lower than our segment average, increased cost

of recyclable commodities expenses and increased travel, meetings, training and community activity expenses, partially offset by benefits from price-led increases in revenue.

Depreciation, depletion and amortization expense increased \$6.2 million, to \$37.6 million for the three months ended June 30, 2022, from \$31.4 million for the three months ended June 30, 2021. Depreciation, depletion and amortization expense increased \$12.7 million, to \$74.2 million for the six months ended June 30, 2022, from \$61.5 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to assets acquired in acquisitions and additions to our fleet and equipment.

Central

Revenue increased \$43.1 million to \$309.9 million for the three months ended June 30, 2022, from \$266.8 million for the three months ended June 30, 2021. Revenue increased \$83.9 million to \$586.1 million for the six months ended June 30, 2022, from \$502.2 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to price increases, contributions from acquisitions closed subsequent to June 30, 2021, higher roll off collection volumes and higher prices for recyclable commodities.

EBITDA increased \$14.1 million to \$109.0 million for the three months ended June 30, 2022, from \$94.9 million for the three months ended June 30, 2021. EBITDA margin was 35.2% and 35.6% for the three months ended June 30, 2022 and 2021, respectively. EBITDA increased \$27.2 million to \$201.1 million for the six months ended June 30, 2022, from \$173.9 million for the six months ended June 30, 2021. EBITDA margin was 34.3% and 34.6% for the six months ended June 30, 2022 and 2021, respectively. The decrease in our EBITDA margin for the three and six months ended June 30, 2022 was due to acquisitions closed subsequent to June 30, 2021 having operating margins lower than our segment average, increased diesel and natural gas fuel expenses, increased labor expenses attributable to pay rate increases, increased vehicle and equipment maintenance and repair expenses and increased travel, meetings, training and community activity expenses, partially offset by benefits from price-led increases in revenue.

Depreciation, depletion and amortization expense increased \$5.0 million, to \$38.0 million for the three months ended June 30, 2022, from \$33.0 million for the three months ended June 30, 2021. Depreciation, depletion and amortization expense increased \$8.4 million, to \$73.0 million for the six months ended June 30, 2022, from \$64.6 million for the six months ended June 30, 2021. The increase for the three and six months ended June 30, 2022 was due to assets acquired in acquisitions, additions to our fleet and equipment and higher depletion expense due to higher landfill development costs increasing our per ton landfill depletion rates.

Canada

Revenue increased \$30.1 million to \$250.4 million for the three months ended June 30, 2022, from \$220.3 million for the three months ended June 30, 2021, due to price increases, contributions from acquisitions closed subsequent to June 30, 2021, higher commercial and roll off collection volumes, higher prices for renewable energy credits associated with the generation of landfill gas, higher prices for recyclable commodities and higher volumes collected from commercial recycling customers, partially offset by lower residential collection volumes due to the loss of a collection contract subsequent to June 30, 2021, lower landfill special waste volumes and the divestiture of a non-strategic operating location.

Revenue increased \$55.8 million to \$465.1 million for the six months ended June 30, 2022, from \$409.3 million for the six months ended June 30, 2021, due to price increases, contributions from acquisitions closed subsequent to June 30, 2021, higher commercial and roll off collection volumes, higher landfill special waste volumes, higher prices for renewable energy credits associated with the generation of landfill gas, higher prices for recyclable commodities and higher volumes collected from commercial recycling customers, partially offset by lower residential collection volumes due to the loss of a collection contract subsequent to June 30, 2021 and the divestiture of a non-strategic operating location.

EBITDA increased \$4.0 million to \$92.6 million for the three months ended June 30, 2022, from \$88.6 million for the three months ended June 30, 2021. EBITDA margin was 37.0% and 40.2% for the three months ended June 30, 2022 and 2021, respectively. EBITDA increased \$14.9 million to \$177.5 million for the six months ended June 30, 2022, from \$162.6 million for the six months ended June 30, 2021. EBITDA margin was 38.2% and 39.7% for the six months ended

June 30, 2022 and 2021, respectively. The decrease in our EBITDA margin during the three and six months ended June 30, 2022 was due to increased diesel fuel expenses, acquisitions closed subsequent to June 30, 2021 having operating margins lower than our segment average, increased cost of recyclable commodities expenses, increased disposal expenses, increased subcontracted hauling services and increased travel, meetings, training and community activity expenses, partially offset by benefits from price-led increases in revenue.

Depreciation, depletion and amortization expense increased \$1.8 million, to \$31.9 million for the three months ended June 30, 2022, from \$30.1 million for the three months ended June 30, 2021 due to assets acquired in acquisitions and additions to our fleet and equipment, partially offset by a decrease resulting from the divestiture of a non-strategic operating location.

Depreciation, depletion and amortization expense increased \$2.7 million, to \$59.3 million for the six months ended June 30, 2022, from \$56.6 million for the six months ended June 30, 2021 due to assets acquired in acquisitions, additions to our fleet and equipment and higher depletion expense due to increased landfill disposal volumes and higher landfill development costs increasing our per ton landfill depletion rates, partially offset by a decrease resulting from the divestiture of a non-strategic operating location.

Corporate

EBITDA increased \$3.7 million, to a loss of \$2.7 million for the three months ended June 30, 2022, from a loss of \$6.4 million for the three months ended June 30, 2021. The increase was due to decreased equity-based compensation expenses and decreased deferred compensation expenses, partially offset by increased travel, meetings, training and community activity expenses, increased direct acquisition expenses and increased allocations of corporate overhead expenses to our segments.

EBITDA decreased \$0.2 million, to a loss of \$7.4 million for the six months ended June 30, 2022, from a loss of \$7.2 million for the six months ended June 30, 2021. The decrease was due to increased travel, meetings, training and community activity expenses, increased direct acquisition expenses, increased legal expenses, increased software license fees and the payment of supplemental bonuses to non-management employees to provide financial assistance associated with the impact of COVID-19, partially offset by decreased equity-based compensation expenses, decreased deferred compensation expenses, decreased cash incentive compensation expense to our management and decreased allocations of corporate overhead expenses to our segments.

LIQUIDITY AND CAPITAL RESOURCES

The following table sets forth certain cash flow information for the six months ended June 30, 2022 and 2021 (in thousands of U.S. dollars):

	Six Months Ended	
	June 30,	
	2022	2021
Net cash provided by operating activities	\$ 973,678	\$ 848,478
Net cash used in investing activities	(891,950)	(332,794)
Net cash provided by (used in) financing activities	25,142	(393,184)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1,941)	873
Net increase in cash, cash equivalents and restricted cash	104,929	123,373
Cash, cash equivalents and restricted cash at beginning of period	219,615	714,389
Cash, cash equivalents and restricted cash at end of period	<u>\$ 324,544</u>	<u>\$ 837,762</u>

Operating Activities Cash Flows

For the six months ended June 30, 2022, net cash provided by operating activities was \$973.7 million. For the six months ended June 30, 2021, net cash provided by operating activities was \$848.5 million. The \$125.2 million increase was due primarily to the following:

- 1) *Increase in earnings* — Our increase in net cash provided by operating activities was favorably impacted by \$117.8 million from an increase in net income, excluding depreciation, amortization of intangibles, share-based compensation, adjustments to and payments of contingent consideration recorded in earnings and loss on disposal of assets and impairments, due primarily to price increases, earnings from acquisitions closed during, or subsequent to, the six months ended June 30, 2021, earnings generated from the increased sales of recyclable commodities and renewal energy credits associated with the generation of landfill gas and an increase in earnings at our E&P waste operations.
- 2) *Deferred income taxes* — Our increase in net cash provided by operating activities was favorably impacted by \$81.5 million from deferred income taxes as changes in deferred income taxes resulted in an increase to operating cash flows of \$85.0 million for the six months ended June 30, 2022, compared to an increase to operating cash flows of \$3.5 million for the six months ended June 30, 2021. The increase for the six months ended June 30, 2022 was attributable to capital expenditures providing tax benefits resulting from accelerated depreciation and tax benefits resulting from the divestiture of certain non-strategic E&P disposal operating locations. The increase in deferred taxes for the six months ended June 30, 2021 was attributable to capital expenditures providing tax benefits resulting from accelerated tax depreciation.
- 3) *Accounts payable and accrued liabilities* — Our increase in net cash provided by operating activities was favorably impacted by \$47.3 million from accounts payable and accrued liabilities as changes in accounts payable and accrued liabilities resulted in an increase to operating cash flows of \$82.8 million for the six months ended June 30, 2022, compared to an increase to operating cash flows of \$35.6 million for the six months ended June 30, 2021. The increase for the six months ended June 30, 2022 was due primarily to increases in operating expenses during the period which remained as outstanding obligations at June 30, 2022 and increased accrued interest due to the timing of interest payments for our senior unsecured notes issued subsequent to June 30, 2021, partially offset by the payment of annual cash incentive compensation to our management, which was accrued as a liability at year end. The increase for the six months ended June 30, 2021 was due primarily to increases in operating expenses during the period which remained as outstanding obligations at June 30, 2021 and the timing of payroll cycles.
- 4) *Deferred revenue* — Our increase in net cash provided by operating activities was favorably impacted by \$13.0 million from deferred revenue as changes in deferred revenue resulted in an increase to operating cash flows of \$27.5 million for the six months ended June 30, 2022, compared to an increase to operating cash flows of \$14.5 million for the six months ended June 30, 2021. For both comparative periods, deferred revenue increased due to price increases on our advanced billed residential and commercial collection services.
- 5) *Accounts receivable* — Our increase in net cash provided by operating activities was unfavorably impacted by \$64.2 million from accounts receivable as changes in accounts receivable resulted in a decrease to operating cash flows of \$83.3 million for the six months ended June 30, 2022, compared to a decrease to operating cash flows of \$19.1 million for the six months ended June 30, 2021. The decrease for the six months ended June 30, 2022 was due to increases in revenues, which remained as outstanding receivables at June 30, 2022. The decrease for the six months ended June 30, 2021 was due to increases in revenues, which remained as outstanding receivables at June 30, 2021.
- 6) *Other long-term liabilities* — Our increase in net cash provided by operating activities was unfavorably impacted by \$22.7 million from other long-term liabilities as changes in other long-term liabilities resulted in a decrease to operating cash flows of \$12.1 million for the six months ended June 30, 2022, compared to an increase to operating cash flows of \$10.6 million for the six months ended June 30, 2021. The decrease for the six months ended June 30, 2022 was due primarily to decreased employee deferred compensation liabilities. The increase for the six months ended June 30, 2021 was primarily attributable to the receipt of funds associated with the eminent domain purchase of an operating facility that will be replaced with a newly constructed facility in a future period.

- 7) *Prepaid expenses* – Our increase in net cash provided by operating activities was unfavorably impacted by \$49.3 million from prepaid expenses as changes in prepaid expenses resulted in a decrease to operating cash flows of \$18.3 million for the six months ended June 30, 2022, compared to an increase to operating cash flows of \$31.0 million for the six months ended June 30, 2021. The decrease for the six months ended June 30, 2022 was due primarily to increases in fuel inventory, prepaid income taxes and prepaid information technology application licenses. The increase for the six months ended June 30, 2021 was due primarily to the benefit of utilizing prior period prepaid vendor payments and prepaid income taxes.

As of June 30, 2022, we had a working capital deficit of \$79.8 million, including cash and equivalents of \$217.8 million. Our working capital increased \$120.2 million from a working capital deficit of \$200.0 million at December 31, 2021 including cash and equivalents of \$147.4 million, due primarily to an increase in cash balances, accounts receivable and current income tax benefits, partially offset by an increase in accounts payable and deferred revenue. To date, we have experienced no loss or lack of access to our cash and equivalents; however, we can provide no assurances that access to our cash and 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 \$559.1 million to \$891.9 million for the six months ended June 30, 2022, from \$332.8 million for the six months ended June 30, 2021. The significant components of the increase included the following:

- 1) An increase in cash paid for acquisitions of \$479.5 million;
- 2) An increase in capital expenditures at operations owned in the comparable periods of \$63.5 million due to increases in land and buildings, landfill site costs, trucks, equipment and containers; and
- 3) An increase in capital expenditures at operations acquired during the comparative periods of \$36.5 million due to additional trucks, equipment and containers; less
- 4) An increase in proceeds from disposal of assets of \$9.0 million due to additional disposal of non-strategic assets to provide funding toward new capital expenditures.

Financing Activities Cash Flows

Net cash provided by financing activities increased \$418.3 million to \$25.1 million for the six months ended June 30, 2022, from net cash used in financing activities of \$393.2 million for the six months ended June 30, 2021. The significant components of the increase included the following:

- 1) An increase from the net change in long-term borrowings of \$554.2 million (long-term borrowings increased \$598.7 million during the six months ended June 30, 2022 and increased \$44.5 million during the six months ended June 30, 2021); less
- 2) A decrease from higher payments to repurchase our common shares of \$119.4 million due to an increased volume of shares repurchased; less
- 3) A decrease from higher cash dividends paid of \$11.5 million due primarily to an increase in our quarterly dividend rate for the six months ended June 30, 2022 to \$0.23 per share, from \$0.205 per share for the six months ended June 30, 2021; less
- 4) A decrease from higher debt issuance costs of \$4.7 million attributable to senior note offerings completed in 2022.

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 27, 2021, our Board of Directors approved, subject to receipt of regulatory approvals, the annual renewal of our normal course issuer bid, or the NCIB, to purchase up to 13,025,895 of our common shares during the period of August 10, 2021 to August 9, 2022 or until such earlier time as the NCIB is completed or terminated at our option.

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 Executive Vice President and Chief Financial Officer 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 our common shares and overall market conditions. All common shares purchased under the NCIB will be immediately cancelled following their repurchase. Information regarding our NCIB can be found under the “Normal Course Issuer Bid” section in Note 16 to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q and is incorporated herein by reference.

On July 26, 2022, our Board of Directors approved, subject to receipt of regulatory approvals, the annual renewal of our NCIB. The renewal is expected to commence following the conclusion of our current NCIB expiring August 9, 2022. Upon approval, we anticipate that we will be authorized to make purchases during the period of August 10, 2022 to August 9, 2023 or until such earlier time as the NCIB is completed or terminated at our option.

Our Board of Directors authorized the initiation of a quarterly cash dividend in October 2010 and has increased it on an annual basis. In October 2021, our Board of Directors authorized an increase to our regular quarterly cash dividend of \$0.025, from \$0.205 to \$0.230 per share. Cash dividends of \$118.8 million and \$107.3 million were paid during the six months ended June 30, 2022 and 2021, respectively. We cannot assure you as to the amounts or timing of future dividends.

We made \$371.4 million in capital expenditures for property and equipment during the six months ended June 30, 2022, and we expect to make total capital expenditures for property and equipment of approximately \$850 million in 2022. We have funded and intend to fund the balance of our planned 2022 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 land and solid 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 June 30, 2022, \$650.0 million under the term loan and \$902.0 million under the revolving credit facility were outstanding under the Credit Agreement, exclusive of outstanding standby letters of credit of \$43.3 million. We also had \$84.6 million of letters of credit issued and outstanding at June 30, 2022 under a facility other than the Credit Agreement. Our Credit Agreement matures in July 2026.

On March 9, 2022, we completed an underwritten public offering (the “Offering”) of \$500.0 million aggregate principal amount of 3.20% Senior Notes due 2032 (the “New 2032 Senior Notes”). We issued the New 2032 Senior Notes under the Indenture, dated as of November 16, 2018, by and between the Company and U.S. Bank Trust Company, National Association, as successor in interest to U.S. Bank National Association, as trustee, as supplemented by the Sixth Supplemental Indenture, dated as of March 9, 2022.

We will pay interest on the New 2032 Senior Notes semi-annually in arrears. The New 2032 Senior Notes will mature on June 1, 2032. The New 2032 Senior Notes are our senior unsecured obligations, ranking equally in right of payment with our other existing and future unsubordinated debt and senior to any of our future subordinated debt. The New 2032 Senior Notes are not guaranteed by any of our subsidiaries.

See Note 9 to our Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for further details on the debt agreements.

We are a well-known seasoned issuer with an effective shelf registration statement on Form S-3 filed in September 2021, which registers an unspecified amount of debt securities, including debentures, notes or other types of debt. In the future, we may issue debt securities under our shelf registration statement or in private placements from time to time on an opportunistic basis, based on market conditions and available pricing. Unless otherwise indicated in the relevant offering documents, we expect to use the proceeds from any such offerings for general corporate purposes, including repaying, redeeming or repurchasing debt, acquiring additional assets or businesses, capital expenditures and increasing our working capital.

As of June 30, 2022, we had the following contractual obligations:

Recorded Obligations	Payments Due by Period				
	(amounts in thousands of U.S. dollars)				
	Total	Less Than 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Long-term debt	\$ 5,698,281	\$ 6,342	\$ 13,175	\$ 1,563,894	\$ 4,114,870
Cash interest payments	\$ 2,088,954	\$ 179,844	\$ 359,104	\$ 304,257	\$ 1,245,749
Contingent consideration	\$ 108,549	\$ 59,023	\$ 12,999	\$ 3,224	\$ 33,303
Operating leases	\$ 202,360	\$ 20,588	\$ 65,409	\$ 38,641	\$ 77,722
Final capping, closure and post-closure	\$ 1,653,406	\$ 21,592	\$ 38,670	\$ 14,643	\$ 1,578,501

Long-term debt payments include:

- 1) \$902.0 million in principal payments due July 2026 related to our revolving credit facility under our Credit Agreement. We may elect to draw amounts on our Credit Agreement in U.S. dollar LIBOR rate loans, U.S. dollar base rate loans, Canadian-based bankers' acceptances or BA equivalent notes, and Canadian dollar prime rate loans. At June 30, 2022, \$723.5 million of the outstanding borrowings drawn under the revolving credit facility were in U.S. LIBOR rate loans, which bear interest at the LIBOR rate plus the applicable margin (for a total rate of 2.67% on such date). At June 30, 2022, \$3.9 million of the outstanding borrowings drawn under the revolving credit facility were in Canadian dollar prime rate loans, which bear interest at the Canadian prime rate plus the applicable prime rate margin (for a total rate of 3.70% on such date). At June 30, 2022, \$174.6 million of the outstanding borrowings drawn under the revolving credit facility were in Canadian-based bankers' acceptances, which bear interest at the Canadian Dollar Offered Rate plus the applicable acceptance fee (for a total rate of 3.23% on such date).
- 2) \$650.0 million in principal payments due July 2026 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 June 30, 2022, all amounts outstanding under the term loan were in LIBOR loans which bear interest at the LIBOR rate plus the applicable margin (for a total rate of 2.67% on such date).
- 3) \$500.0 million in principal payments due 2028 related to our 2028 Senior Notes. The 2028 Senior Notes bear interest at a rate of 4.25%.
- 4) \$500.0 million in principal payments due 2029 related to our 2029 Senior Notes. The 2029 Senior Notes bear interest at a rate of 3.50%.
- 5) \$600.0 million in principal payments due 2030 related to our 2030 Senior Notes. The 2030 Senior Notes bear interest at a rate of 2.60%.
- 6) \$650.0 million in principal payments due 2032 related to our 2032 Senior Notes. The 2032 Senior Notes bear interest at a rate of 2.20%.
- 7) \$500.0 million in principal payments due 2032 related to our New 2032 Senior Notes. The New 2032 Senior Notes bear interest at a rate of 3.20%.

- 8) \$500.0 million in principal payments due 2050 related to our 2050 Senior Notes. The 2050 Senior Notes bear interest at a rate of 3.05%.
- 9) \$850.0 million in principal payments due 2052 related to our 2052 Senior Notes. The 2052 Senior Notes bear interest at a rate of 2.95%.
- 10) \$35.5 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 2.42% and 10.35% at June 30, 2022, and have maturity dates ranging from 2028 to 2036.
- 11) \$10.8 million in principal payments related to our financing leases. Our financing leases bear interest at rates between 1.89% and 2.16% at June 30, 2022, and have expiration dates ranging from 2026 to 2027.

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 base rate plus the applicable base rate margin, the Canadian Dollar Offered Rate plus the applicable acceptance fee and the Canadian prime rate plus the applicable prime rate margin at June 30, 2022. We assumed the Credit Agreement is paid off when it matures in July 2026.
- 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 \$90.6 million recorded as liabilities in our Condensed Consolidated Financial Statements at June 30, 2022, and \$17.9 million of future interest accretion on the recorded obligations.

We are party to operating lease agreements and finance leases. These lease agreements are established in the ordinary course of our business and are designed to provide us with access to facilities and equipment at competitive, market-driven prices.

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
Unconditional purchase obligations	\$ 114,695	\$ 85,400	\$ 29,295	\$ —	\$ —

- (1) We are party to unconditional purchase obligations. These purchase obligations are established in the ordinary course of our business and are designed to provide us with access to products at competitive, market-driven prices. At June 30, 2022, our unconditional purchase obligations consisted of multiple fixed-price fuel purchase contracts under which we have 42.9 million gallons remaining to be purchased for a total of \$114.7 million. The current fuel purchase contracts expire on or before December 31, 2024. These arrangements have not materially affected our financial position, results of operations or liquidity during the six months ended June 30, 2022, 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 \$1.374 billion and \$1.301 billion at June 30, 2022 and December 31, 2021, respectively. These arrangements have not materially affected our financial position, results of operations or liquidity during the six months ended June 30, 2022, 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 six month periods ended June 30, 2022 and 2021, at all of our landfills during the respective period, is shown below (tons in thousands):

	Six Months Ended June 30,			
	2022		2021	
	Number of Sites	Total Tons	Number of Sites	Total Tons
Owned operational landfills and landfills operated under life-of-site agreements	89	23,403	87	22,622
Operated landfills	5	296	4	274
	<u>94</u>	<u>23,699</u>	<u>91</u>	<u>22,896</u>

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, 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 six month periods ended June 30, 2022 and 2021, are calculated as follows (amounts in thousands of U.S. dollars):

	Six Months Ended	
	June 30,	
	2022	2021
Net cash provided by operating activities	\$ 973,678	\$ 848,478
Less: Change in book overdraft	(54)	(190)
Plus: Proceeds from disposal of assets	16,894	7,906
Less: Capital expenditures for property and equipment	(371,428)	(271,392)
Adjustments:		
Payment of contingent consideration recorded in earnings ^(a)	—	520
Cash received for divestitures ^(b)	(5,671)	—
Transaction-related expenses ^(c)	27,096	583
Pre-existing Progressive Waste share-based grants ^(d)	12	144
Tax effect ^(e)	(2,165)	(214)
Adjusted free cash flow	\$ 638,362	\$ 585,835

(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 certain operations.

(c) Reflects the addback of acquisition-related transaction costs and the settlement of an acquired tax liability.

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

(e) The aggregate tax effect of footnotes (a) through (d) 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 or minus net income (loss) attributable to noncontrolling interests, plus income tax provision, 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. 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 six month periods ended June 30, 2022 and 2021, are calculated as follows (amounts in thousands of U.S. dollars):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2022	2021	2022	2021
Net income attributable to Waste Connections	\$ 224,074	\$ 177,047	\$ 404,398	\$ 337,356
Plus: Net income attributable to noncontrolling interests	133	54	177	52
Plus: Income tax provision	58,307	47,868	107,146	88,159
Plus: Interest expense	45,079	41,328	86,404	83,753
Less: Interest income	(652)	(744)	(790)	(1,848)
Plus: Depreciation and amortization	226,399	201,928	443,985	391,523
Plus: Closure and post-closure accretion	3,992	3,666	8,087	7,375
Plus: Impairments and other operating items	4,150	6,081	6,028	6,715
Plus (less): Other expense (income), net	2,649	1,235	6,114	(2,312)
Adjustments:				
Plus: Transaction-related expenses ^(a)	3,692	57	8,232	583
Plus: Fair value changes to equity awards ^(b)	(1,009)	6,385	(847)	6,723
Adjusted EBITDA	<u>\$ 566,814</u>	<u>\$ 484,905</u>	<u>\$ 1,068,934</u>	<u>\$ 918,079</u>

(a) Reflects the addback of acquisition-related transaction costs.

(b) Reflects fair value accounting changes associated with certain equity awards.

Adjusted Net Income Attributable to Waste Connections and Adjusted Net Income per Diluted Share Attributable to Waste Connections

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 six month periods ended June 30, 2022 and 2021, are calculated as follows (amounts in thousands of U.S. dollars, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Reported net income attributable to Waste Connections	\$ 224,074	\$ 177,047	\$ 404,398	\$ 337,356
Adjustments:				
Amortization of intangibles ^(a)	37,462	32,707	75,098	64,899
Impairments and other operating items ^(b)	4,150	6,081	6,028	6,715
Transaction-related expenses ^(c)	3,692	57	8,232	583
Fair value changes to equity awards ^(d)	(1,009)	6,385	(847)	6,723
Tax effect ^(e)	(11,224)	(11,393)	(22,316)	(19,935)
Adjusted net income attributable to Waste Connections	\$ 257,145	\$ 210,884	\$ 470,593	\$ 396,341
Diluted earnings per common share attributable to Waste Connections' common shareholders:				
Reported net income	\$ 0.87	\$ 0.68	\$ 1.57	\$ 1.29
Adjusted net income	\$ 1.00	\$ 0.81	\$ 1.82	\$ 1.51

(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.

(d) Reflects fair value accounting changes associated with certain equity awards.

(e) The aggregate tax effect of the adjustments in footnotes (a) through (d) is calculated based on the applied tax rates for the respective periods.

INFLATION

In the current environment, we have seen inflationary pressures resulting from higher fuel, materials and labor costs in certain markets and higher resulting third-party costs in areas such as brokerage, repairs and construction. 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. To the extent that there are decreases in fuel costs, in some cases, a portion of these reductions are passed through to customers in the form of lower fuel and material surcharges. 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 certain of 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

Based on historic trends, excluding any impact from the COVID-19 pandemic or an economic recession, we would 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, and to a lesser extent, foreign currency exchange rate risks. We use hedge agreements to manage a portion of our risks related to interest rates. 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 under current market conditions. 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 variable rate debt positions.

At June 30, 2022, our derivative instruments included six 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):

<u>Date Entered</u>	<u>Notional Amount</u>	<u>Fixed Interest Rate Paid*</u>	<u>Variable Interest Rate Received</u>	<u>Effective Date</u>	<u>Expiration Date</u>
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
June 2018	\$ 200,000	2.925 %	1-month LIBOR	October 2020	October 2025
June 2018	\$ 200,000	2.925 %	1-month LIBOR	October 2020	October 2025
December 2018	\$ 200,000	2.850 %	1-month LIBOR	July 2022	July 2027

* 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 June 30, 2022 and December 31, 2021, of \$702.0 million and \$603.9 million, respectively, including floating rate debt under our Credit Agreement. A one percentage point increase in interest rates on our variable-rate debt as of June 30, 2022 and December 31, 2021, would decrease our annual pre-tax income by approximately \$7.0 million and \$6.0 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. Because of the volume of fuel we purchase each year, 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, and we also enter into fixed price fuel purchase contracts. At June 30, 2022, we had no fuel hedge agreements in place; however, we have entered into fixed price fuel purchase contracts for 2022 as described below.

For the year ending December 31, 2022, we expect to purchase approximately 87.0 million gallons of fuel, of which 44.3 million gallons will be purchased at market prices and 42.7 million gallons will be purchased under our fixed price fuel purchase contracts. We have performed sensitivity analyses to determine how market rate changes will affect the fair value of our unhedged, market rate 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. During the six month period of July 1, 2022 to December 31, 2022, we expect to purchase approximately 22.1 million gallons of fuel at market prices; therefore, a \$0.10 per gallon increase in the price of fuel over the remaining six months in 2022 would decrease our pre-tax income during this period by approximately \$2.2 million.

We market a variety of recyclable materials, including compost, cardboard, mixed paper, plastic containers, glass bottles and ferrous and aluminum metals. We own and operate recycling operations and market collected recyclable materials to third parties for processing before resale. Where possible, 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 six months ended June 30, 2022 and 2021, would have had a \$12.5 million and \$7.2 million impact on revenues for the six months ended June 30, 2022 and 2021, respectively.

We have operations in Canada and, where significant, we have quantified and described the impact of foreign currency translation on components of income, including operating revenue and operating costs. However, the impact of foreign currency has not materially affected our results of operations in 2021 or 2022. A \$0.01 change in the Canadian dollar to U.S. dollar exchange rate would impact our annual revenue and EBITDA by approximately \$12.0 million and \$4.5 million, 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 President and Chief Executive Officer and our Executive Vice President and 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 President and Chief Executive Officer and our Executive Vice President and Chief Financial Officer concluded as of June 30, 2022, 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 President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

During the quarter ended June 30, 2022, 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.