

## WASTE CONNECTIONS (WCN)

April 9, 2024

### Industrials – Waste Management Services

Stock Rating

**HOLD**

#### Investment Thesis

We recommend a HOLD rating on Waste Connections with a 10% upside. As a key player among the top three in the waste services industry, WCN is well-positioned for growth across all revenue segments, driven by strategic price increases and volume growth in waste management.

#### Drivers of Thesis

- The recent acquisition of Secure Energy’s waste disposal assets for \$726.1 million enhances the Waste Connections Exploration and Production Segment. This strategic move is projected to foster a robust growth of 67% in the E&P segment by 2024.
- The contracts obtained in New York City offer substantial growth and M&A opportunities. With plans to activate 29 new landfills, these contracts are integral to the anticipated growth of 7.49% for the eastern segment in 2024, eventually reaching a steady 5% CAGR.
- Industry consolidation significantly asserts Waste Connections’ position by continuing to allow the company to allocate \$150 – 200 million in acquired revenue.

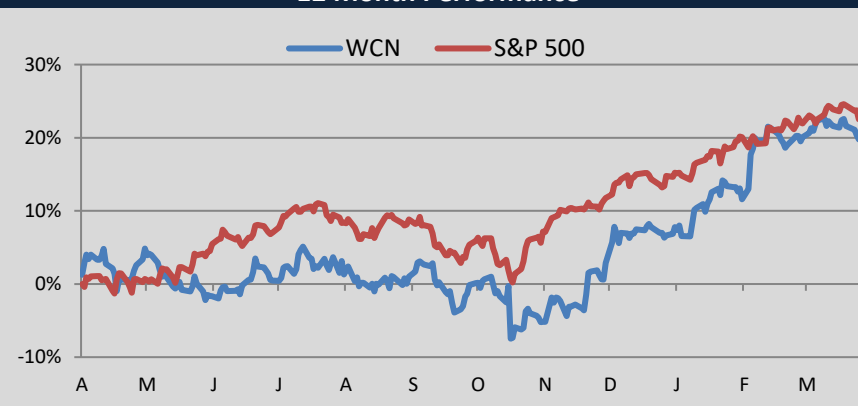
#### Risks to Thesis

- The unpredictable nature of Elevated Temperature Landfill (ETLF) events poses financial and operational risks, accentuated by ongoing landfill acquisitions.
- Competitive pricing pressures and potential volume fluctuations due to housing market instability could challenge profitability.
- Rising fuel and labor costs represent significant risks to operational efficiency and margin sustainability.

#### Earnings Estimates

Year	2021	2022	2023	2024E	2025E	2026E
EPS	\$2.37	\$3.24	\$2.95	\$4.27	\$4.90	\$5.27
HF est.	-	-	-	\$3.80	\$4.53	\$5.20
Growth	-	36.7%	-9.0%	28.8%	19.2%	14.8%

#### 12 Month Performance



#### Target Price

\$165 - 185

Henry Fund DCF	\$166
Henry Fund DDM	\$132
Relative Multiple	\$185

#### Price Data

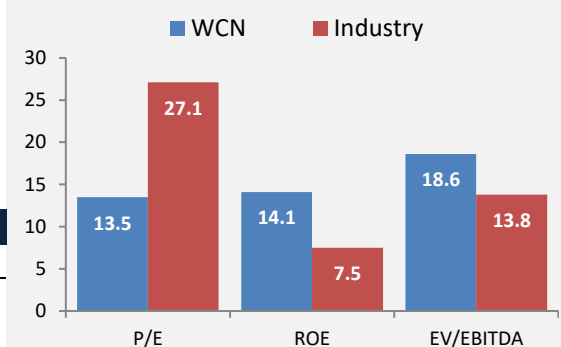
Current Price	\$168.0
52wk Range	\$126.1 – 173.0
Consensus 1yr Target	\$184.3

#### Key Statistics

Market Cap (B)	\$43.2
Shares Outstanding (M)	\$257.6
Institutional Ownership	89.0%
Beta	0.6
Dividend Yield	0.6%
Est. 5yr Growth	15.2%
Price/Earnings (TTM)	51.8
Price/Earnings (FY1)	45.3
Price/Sales (TTM)	5.4
Price/Book (mrq)	5.6

#### Profitability

Operating Margin	11.7%
Profit Margin	9.5%
Return on Assets (TTM)	4.7%
Return on Equity (TTM)	10.3%



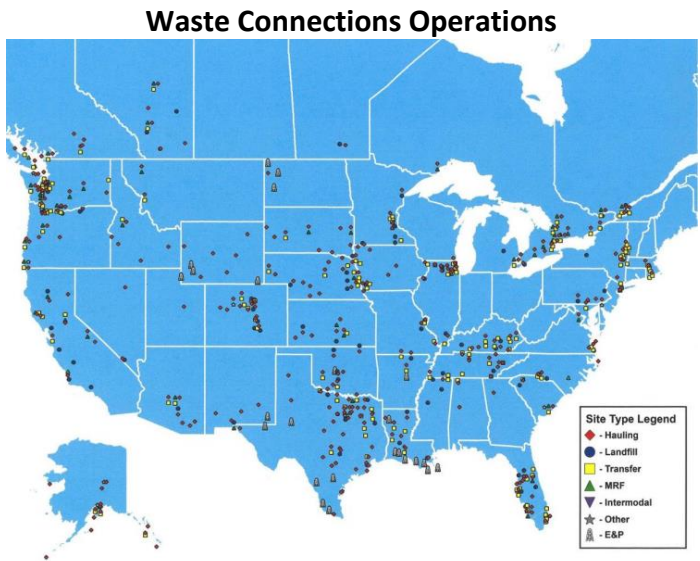
#### Company Description

Waste Connections (WCN) is an integrated waste services company that provides waste collection, transfer, disposal, and recycling services of solid waste. It also offers treatment, recovery, and disposal services for non-hazardous waste from oil and natural gas exploration and production (E&P) as well as intermodal services for transporting cargo and solid waste containers in the Pacific Northwest. The company is the third largest of its kind in North America and operates in 46 states in the United States and six provinces in Canada.

## COMPANY DESCRIPTION

Waste Connections is the third largest solid waste services company in North America, providing waste collection, transfer, and disposal services along with resource recovery primarily through recycling and renewable fuels generation. Additionally, the company provides non-hazardous oil and natural gas exploration and production (E&P), waste treatment, recovery, and disposal services in several basins across North America, as well as intermodal services for the movement of cargo and solid waste containers in the Pacific Northwest.<sup>1</sup>

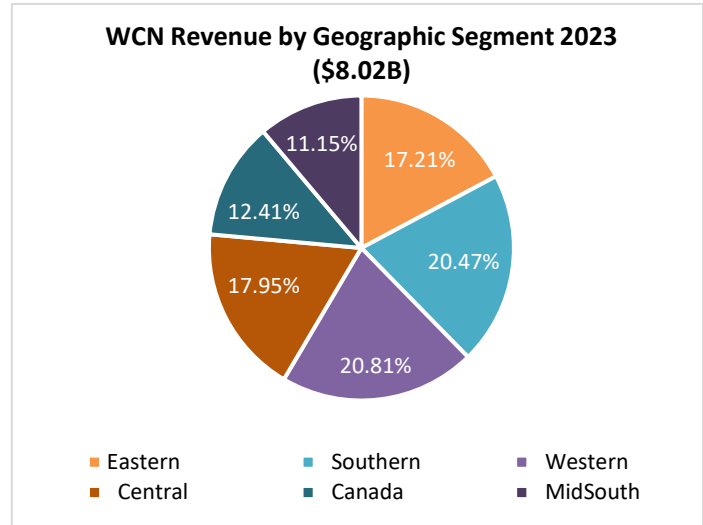
As depicted in the following image, Waste Connections serves approximately nine million residential, commercial, and industrial customers in mostly exclusive and secondary markets across 46 states in the U.S. and six provinces in Canada.



Source: WCN 2023 Investor Presentation

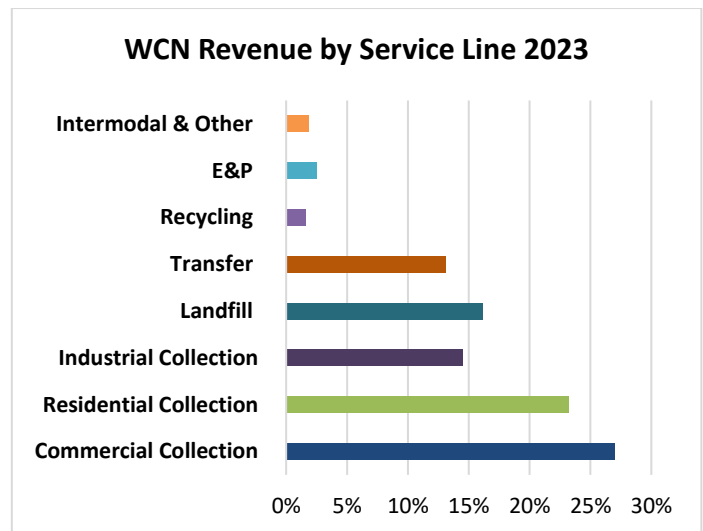
Effective April 1, 2023, the company modified its organizational structure under new regional operating segments as a result of continued growth. Revenues are now reported through six different geographic segments: Eastern, Southern, Western, Central, Canada, and Midsouth.<sup>1</sup> A small number of operating locations previously under the Western segment have transitioned to the Central segment. Additionally, the former Eastern segment has been split into two distinct regions, now known as the Eastern segment and the Midsouth segment—the latter being the latest addition to the segment lineup.

In the graph below we can see that revenue is evenly distributed across the different geographic segments, with the Western and Central segments being slightly more dominant. The Midsouth segment, despite being the newest, also makes a significant contribution to the overall revenue. The Canada and Eastern Segments have been the focus for growth in the past year.<sup>3</sup>



Source: WCN 10-K 2023

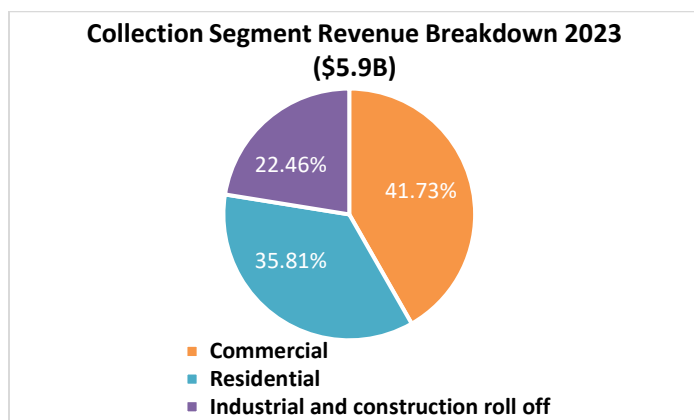
Although Waste Connections does not officially report revenue by service lines, exploring them provides a better understanding of its business operations. These service lines are broken down into Solid Waste Collection (can be commercial, residential, and industrial), Landfill, Transfer, Recycling, E&P Waste Treatment, and Intermodal and Other.



Source: WCN 10K 2023

## Solid Waste Collection

The solid waste collection segment is the largest one serving a diverse customer base that includes residential, commercial, and industrial clients.



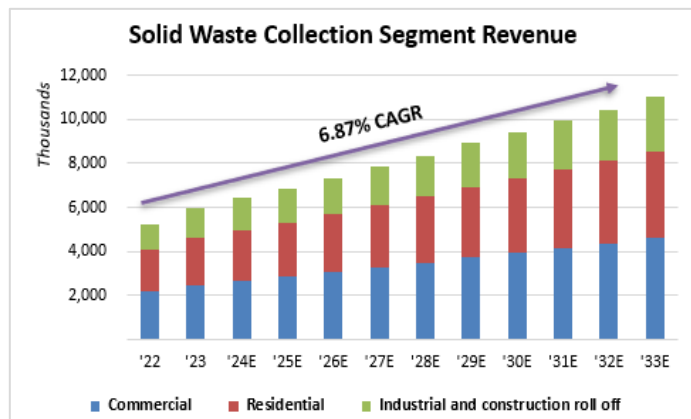
Source: WCN 10-K 2023

This segment is responsible for the regular collection of waste, which is then transported to transfer stations, landfills, or recycling centers. The company maintains a mixture of recurring and temporary customer relationships through service agreements, municipal contracts, and franchise agreements. Many of these contracts offer Waste Connections exclusive rights to provide waste services within a specified territory, typically acquired through competitive bidding or negotiation, and vary in duration from one to five years, with some franchises extending even longer.

Residential services are often provided on a subscription basis, with fees billed monthly or quarterly in advance, while commercial customers are billed monthly for services rendered. The pricing strategy for collection services is influenced by factors like market rates, service frequency, the waste's characteristics, and logistics costs. Furthermore, the segment's revenue is subject to variability based on service factors such as the number of units serviced, collection frequency, and waste volume. Notably, many contracts include annual price escalation clauses tied to indexes like the CPI, allowing for adjustments based on economic conditions. Additionally, the segment includes leasing revenue from compactor equipment, however, this does not constitute a significant portion of the segment's total revenue.

In 2023, this service line saw growth of 13.03% in total revenue due to price increases across all geographic segments and an 8.7% rise in core pricing.<sup>2</sup> This reflects the

company's ability to effectively adjust service fees in response to demand and operational cost pressures. These factors drive the segment's success and provide momentum for 2024.



Source: Henry Fund Model

We expect this segment to continue growing, projecting an 8.37% growth rate in 2024E based on the segment's recent performance and strategic initiatives that have positioned it for continued success. Following this period, we expect the growth rate to moderate slightly, with a steady 6.78% annual growth for the forecast period. This projection reflects the company's strong positioning within the market and its ability to increase volume through acquisitions and modify prices.

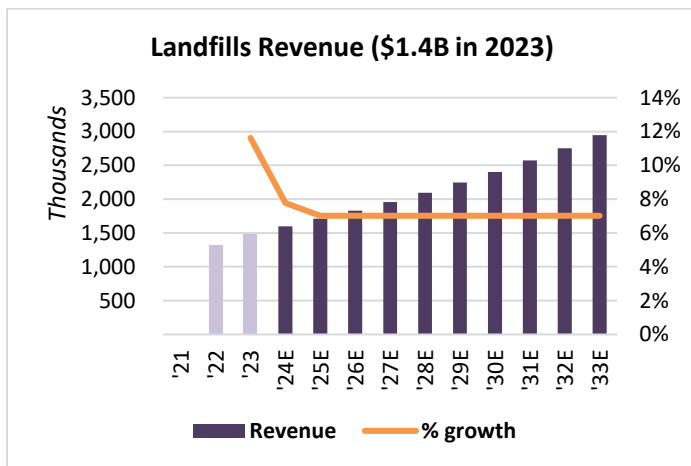
## Landfills

As of December 31, 2023, Waste Connections owned or operated 78 municipal solid waste (MSW) landfills, 9 E&P waste landfills, and 16 non-MSW landfills which only accept construction and demolition, industrial, and other non-putrescible waste.<sup>1</sup>

Revenue at landfills mainly comes from tipping fees, charged to third parties on a per ton or yard basis, depending on the waste's volume and type. These fees tend to vary and are recognized as revenue once the waste is disposed of at the landfill. Many of the company's landfill customers have entered one to ten-year disposal contracts which often include provisions for annual price increases. During the year ended December 31, 2023, the net increase in prices charged to customers at existing operations was \$616.6 million, consisting of \$651.1 million of core price increases and decreases in surcharges of \$34.5 million.<sup>1</sup>

Currently, Waste Connections is dealing with an issue known as Elevated Temperature Landfill Event (ETLF) in their Chiquita Canyon Landfill located in Castaic, California. This event will be further discussed in more detail in the “Recent Developments” section of this report. However, it is worth mentioning that this situation highlights the unpredictability of operating large waste disposal facilities and shows the financial and operational challenges that these types of issues can introduce.

Despite the challenges faced with the Chiquita Canyon landfill, Waste Connections successfully expanded its portfolio by adding three new landfills to its operations in 2023. This expansion contributed to the segment's revenue growth of 11.62% for the year.



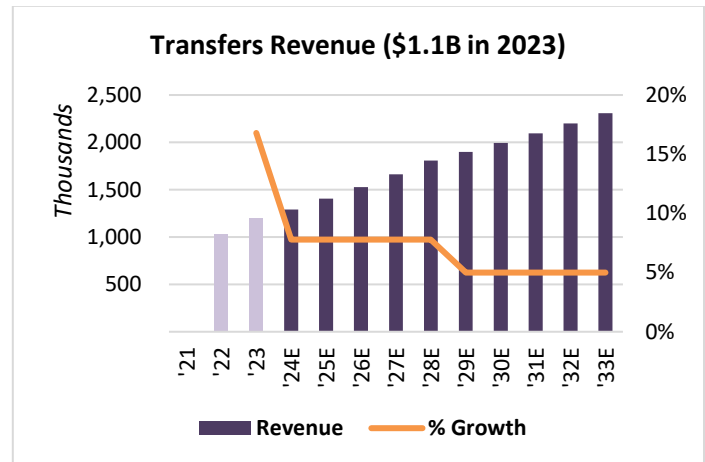
Source: HF model

Looking forward, we are optimistic about the landfill segment's potential to continue flourishing, particularly through strategic acquisitions. Given that it is the second-largest segment for WCN, its growth prospects are promising. However, the situation with the ETLF at Chiquita Canyon also warrants caution. We consider the unpredictability of this issue a significant risk, making it challenging to predict how it will unfold in the coming years. Taking these factors into account, we have forecasted a steady growth rate of 7.02% for the landfill segment. This forecast reflects both the segment's strong growth potential as the company is currently seeking to expand permitted capacity at 11 of their landfills, and the need for caution due to the unpredictable nature of the ETLFs.

## Transfer

Similar to landfills, revenue at transfer stations mainly

comes from the tipping or disposal fees collected either per ton or per yard. These fees charged to third parties depend on different factors: the market conditions, the kind of waste being disposed of, its volume or weight, how far away the disposal facility is, the transportation method, and the disposal costs. Typically, fees are charged, and revenue is acknowledged after the service is carried out. The revenue earned under these conditions depends on the amount of waste processed at the transfer station.



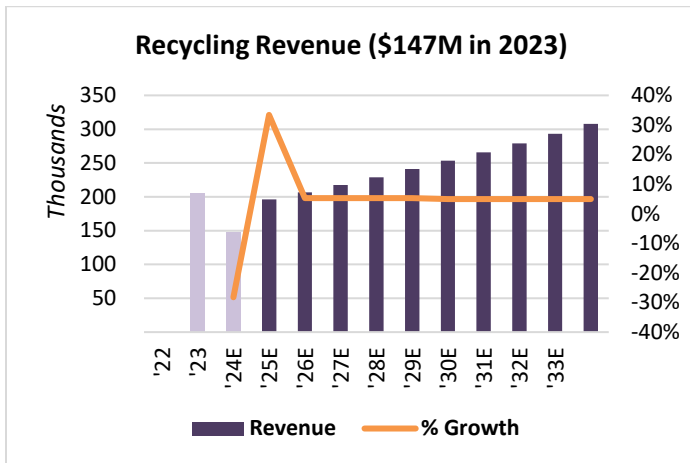
Source: HF Model

We have forecasted a growth rate of 7.78% over the first six years which captures the momentum given to this segment due to the strong growth it has had over the last couple of years. Then, we expect the segment to continue growing at a 5% CAGR through 2033. Growth in this segment is driven by continued expansion and an increase in waste, however, we anticipate a moderation in growth rates after the initial period due to different factors. Market saturation, enhanced waste reduction and recycling efforts, and potential regulatory changes are expected to influence the demand for transfer services.

## Recycling

Waste Connections generates revenue from its recycling segment by selling recyclable materials like paper, plastics, metals, and compost to residential, commercial, industrial, and municipal customers. The company operates its recycling facilities and partners with third parties for the processing and sale of these materials. Revenue depends on the volume of materials sold and market prices at the time of sale. Additionally, Waste Connections offers recycling rebates to some customers based on sales prices, fixed rates, or other criteria, and recognizes fees mainly

when ownership transfers, reflecting the market-driven and variable nature of recycling revenues.



Source: HF Model

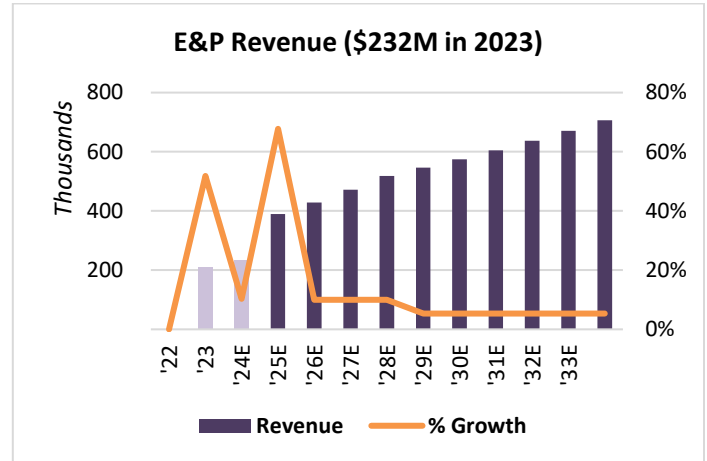
We forecast significant growth (33.40%) for 2024 due to the recent increase in commodity-driven revenues. This positive trend, marked by rising market prices for recyclable materials, is poised to significantly increase segment revenue. This not only increases profitability through higher sales prices of processed recyclables but also justifies investments in advanced recycling technologies and operational efficiencies. Also, the financial uplift from improved commodity prices supports the expansion into new markets and encourages sustainability initiatives in a world that has become more environmentally conscious. Due to this positive outlook, we have forecasted a growth rate of 5.30% for the four years following 2024 before reaching a CAGR of 5% for the rest of the forecasted period.

### Exploration and Production (E&P)

Revenue in this segment comes from handling non-hazardous waste generated through various activities such as vertical and horizontal drilling, hydraulic fracturing, and production and cleanup processes. This includes services like treatment, recovery, and disposal of the waste. The financial returns from these services fluctuate, as they depend on the amount of waste processed or accepted within a given timeframe.

We expect this segment to grow significantly driven by a strategic mix of acquisitions, market dynamics, and operational efficiencies. We forecast a growth rate of 67.75% in 2024 due to the acquisition of Secure Energy's E&P waste disposal assets in Western Canada, expected to

contribute approximately \$325 million in revenue this year. We forecasted three years of 10% growth before reaching a 5.3% CAGR for the rest of the forecast period. This aligns with industry expectations and also showcases the company's focus on long-term contracts and acquisitions which provides a stable revenue outlook.



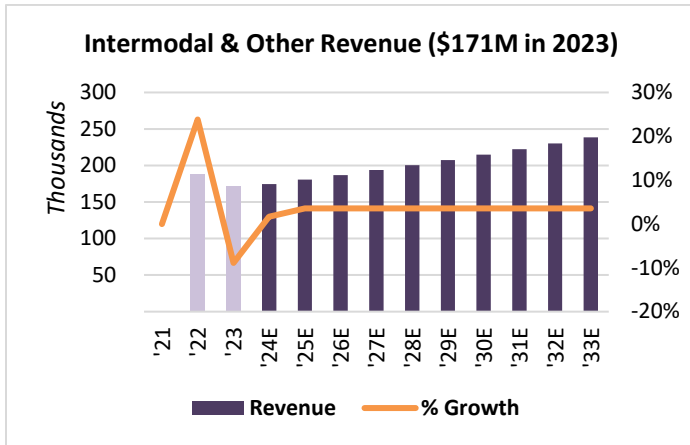
Source: HF Model

### Intermodal & Other

This segment generates its revenue through two streams. First, intermodal services facilitate the rail haul movement of cargo and solid waste containers across the Pacific Northwest and utilize a dedicated network of intermodal facilities. Fees for these services are determined through negotiations, varying according to the volume commitments from shippers and the cargo's final destinations, with revenue recognition occurring upon delivery. The second revenue stream is the sale of methane gas and renewable energy credits, products of the company's MSW landfills.

We expect this segment to increase by 1.66% in 2024 after a year of negative growth and to remain at a CAGR of 3.52% after that driven by the company's tendency to invest in M&A and partnerships. Also, the sale of methane gas and renewable energy credits represents a significant opportunity, especially as the global interest in sustainability and renewable energy sources increases.

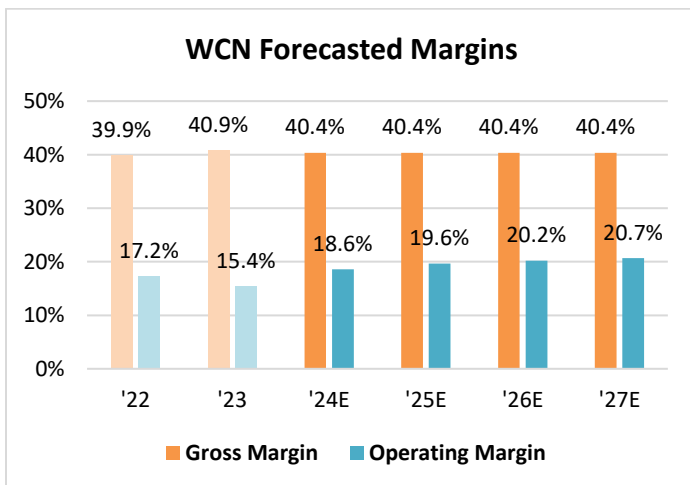




Source: HF Model

### Cost Structure Analysis

The chart below depicts our margin forecasts over six years from 2022 to 2027. We anticipate margins to remain relatively constant throughout the forecast period.



Source: HF Model

We consider this stability to be a blend of solid waste organic growth, acquisitions, and operational efficiencies. The solid waste organic growth that was driven by an 8.7% core pricing increase and supplemented by gains in commodity-driven revenues, showcases Waste Connections' revenue and margin stability. Secondly, the acquisition activity, most recently the \$225 million revenue E&P waste disposal-oriented assets from Secure Energy in Western Canada, along with other acquisitions contributing an expected \$325 million in revenue for 2024, indicate a robust growth strategy. Such acquisitions not only enhance service offerings but also bring efficiencies and synergies that can improve margins. Additionally, a reported 70 basis points adjusted EBITDA

margin expansion, despite 60 basis points in headwinds from recovered commodity values, proves effective cost management and operational efficiency. Finally, the focus on safety and employee retention has shown results in both employee turnover and safety incident rates, achieving multiyear lows. This fosters a more productive and efficient work environment, contributing to margin stability.

### Additional Company Analysis

#### Target Market

Waste Connections targets secondary and rural markets to have a local market share. This results in lower customer churn improves financial performance and differentiates them from the competition. Targeting secondary and rural markets allows Waste Connections to have higher pricing power due to the low competition in rural areas which has resulted in higher EBITDA margins for WCN in comparison to its peers. The company focuses on acquiring and owning landfills rather than opening new ones.

#### Properties

Below we can see the number of properties across different segments. Although Waste Connections owns most of the properties it operates, there are 65 properties that the company operates but does not own.

Number of Owned Properties	
Solid waste collection operations	359
MSW landfills	66
non-MSW landfills	16
Transfer stations	157
Recycling operations	81
E&P waste landfills	9
E&P liquid waste collection wells	22
E&P waste treatment and oil recovery facilities	18
Intermodal operations	4
<b>Total Properties Owned</b>	<b>732</b>

Source: WCN 10-K 2023

Number of Operated but not Owned Facilities	
Transfer stations	53
MSW landfills	12
<b>Total Properties Operated but not Owned</b>	<b>65</b>

Source: WCN 10-K 202

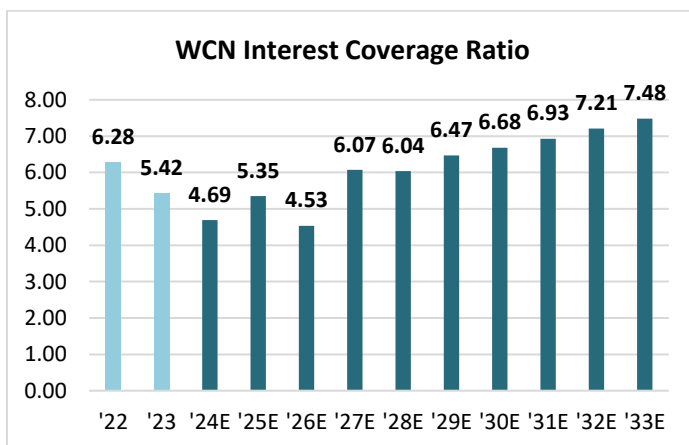
## Debt Maturity Analysis

Fiscal Year	PAYMENT (\$MIL)
2024	\$ 26.46
2025	7.36
2026	1,909.95
2027	5.45
2028	504.64
2029 and beyond	4,358.20
<b>TOTAL</b>	<b>\$ 6,812.05</b>

Source: WCN 10-K 2023

As of December 2023, Waste Connections had a total debt outstanding of \$7,037 million, \$76 million less compared to December 2022. However, WCN's debt-to-equity ratio has increased from 63% to 88% over the past 5 years. The increase in Waste Connections' debt levels over the last few years is mainly attributed to its aggressive growth strategy through acquisitions.

According to the company's debt maturity schedule, there is a required repayment of \$26.46 million by the end of 2024. We estimate operating cash flows of \$1,698 million, thus we are not concerned about WCN's ability to pay back its debt obligations.



Source: Henry Fund estimates

Waste Connections has maintained a strong interest coverage ratio over the past couple of years. The company has demonstrated a strong capacity to generate free cash flow relative to its EBIT over the past three years.<sup>3</sup> This indicates that the company operates efficiently and maintains the financial flexibility to reduce debt, invest in growth opportunities, or return value to shareholders. Therefore, we estimate that Waste Connections will continue to present strong operating cash flows and be able to pay back its debt with no problem.

Company	D/E Ratio	S&P Credit Rating
Waste Connections	0.87	A-
Waste Management	2.35	A-
Republic Services	1.21	BBB+
GFL Environmental	1.23	BB-
Casella Waste Systems	1.02	BB

Source: FactSet

In the table above, Waste Connections showcases a debt-to-equity ratio of 0.87, placing it on solid ground in terms of its peers within the waste management industry. This ratio indicates that the company does not rely excessively on debt to finance its operations. Its S&P Credit Rating of A-, a score that implies the company has a strong capacity to meet its financial obligations, albeit with some sensitivity to economic conditions.

## ESG Analysis

Sustainability efforts are integral to Waste Connections' business, driven by an intentional focus and investments that are consistent with the company's objective of long-term value creation as part of its character.<sup>4</sup>

According to WCN's 2023 sustainability report, last year the company achieved a 14% reduction in Scope 1 and 2 emissions and a 27% reduction in emissions intensity, with an operational offset to emissions ratio over four times, emphasizing their progress in decarbonizing operations. Additionally, investment in RNG facilities is projected to generate approximately \$200 million of annual EBITDA by 2026, showcasing a commitment to renewable energy. They also saw an 18% increase in recycling tons, bringing the total annual recycling tons processed to over two million, demonstrating their effort in resource recovery and support for the circular economy. Moreover, they completed the installation of gas collection systems at 55 of their solid waste landfills, with 27 of these having beneficial reuse facilities, indicating a focus on converting landfill gas to renewable energy sources.

Regarding social, Waste Connections emphasized a servant leadership-based culture, achieving better than industry-average safety metrics and demonstrating a commitment to diversity and inclusion through various initiatives. There was also an expansion of training sessions by 40% in 2022, highlighting an investment in employee development and safety. As a result, both employee turnover and safety incident rates exited 2023

## RECENT DEVELOPMENTS

### Recent Earnings Announcement

On February 13, 2024, Waste Connections announced its Q4 and FYE 2023 results. Revenue for Q4 increased by 8.9% YoY to \$2.03 billion. Quarterly EPS of \$1.21 beat the consensus EPS forecast of \$1.09. For the full year, WCN amounted to approximately \$2.12 billion in net cash from operating activities with an adjusted free cash flow of \$1.22 billion. Additionally, adjusted EBITDA increased by 13.6% to \$2.52 billion, constituting 31.5% of revenue (a 70 basis-point improvement). The company completed acquisitions contributing approximately \$215 million of total annualized revenue in 2023. Waste Connections noted momentum from this accelerating margin expansion and acquisition activities, setting up 2024 for significant growth.

Looking forward, management forecasts a 13% increase in adjusted EBITDA and a 120-basis-point expansion in EBITDA margin to 32.7%. This optimistic outlook is supported by contributions from recent acquisitions, estimated to boost revenue by 4%. The company projects total revenue to reach \$8.75 billion and net income to approximate \$1.09 billion. Capital investments, including in Renewable Natural Gas (RNG) facilities, are planned at \$1.15 billion, with adjusted free cash flow projected at \$1.2 billion. These projections showcase Waste Connections' strategic emphasis on expansion, operational efficiency, and sustainability, indicating a strong performance trajectory for 2024.

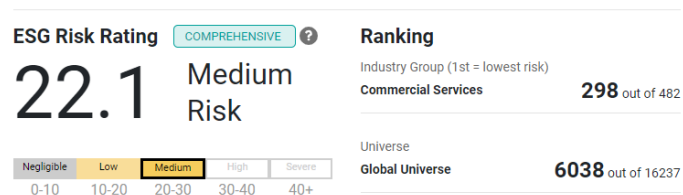
### Mergers & Acquisitions

Waste Connections expands the scope of its operations by continuing to acquire waste businesses in new markets and in existing or adjacent markets that are combined or “tucked in” to its existing operations. The company has developed an acquisition discipline based on a set of financial, market, and management criteria to evaluate opportunities. Once an acquisition is closed, WCN seeks to integrate it while minimizing disruption to its ongoing operations and those of the acquired business.<sup>1</sup>

During the year ended December 31, 2023, Waste Connections acquired 12 individually immaterial non-hazardous solid waste collection, transfer, recycling, and disposal businesses and one immaterial E&P disposal business. The total transaction-related expenses incurred

at multiyear lows, setting up 2024 for continued improvement in trends, along with the opportunity for outsized margin expansion.<sup>2</sup>

Finally, in governance Waste Connections has incorporated ESG targets, including emissions reduction and resource recovery into management compensation, indicating a strong governance framework that aligns executive incentives with sustainability goals. In addition to this, the company achieved a target of over 1/3 of Board members being female, reflecting a commitment to diversity at the highest level of governance.<sup>5</sup>



Source: Morningstar Sustainalytics

As of February 2, 2024, Waste Connections has a 22.1 and it is considered “Medium Risk” according to Morningstar Sustainalytics. This moderate rating reflects a balanced approach to managing ESG responsibilities.

Company	ESG Risk Rating	
Waste Connections (WCN)	22.1	Medium
Waste Management (WM)	19.6	Low
Republic Services (RSG)	19.3	Low
GFL Environmental (GFL)	20.0	Medium
Casella Waste Systems (CWST)	22.2	Medium

Source: Morningstar Sustainalytics

Waste Connections’ ESG risk rating of 22.1 is in line with Casella Waste Systems (CWST) but indicates potential areas for improvement when compared to its two top competitors: Waste Management (WM) and Republic Services (RSG). WM and RSG's lower scores suggest they may be further ahead in implementing effective ESG practices. WCN's close ESG risk ratings with other industry players reflect a solid standing but also highlight an opportunity for the company to enhance its ESG initiatives to achieve a leadership position in the industry.



during the year for these acquisitions were \$10.65 million.<sup>1</sup> These expenses typically include costs such as advisory fees, legal fees, accounting fees, and other related expenses that are necessary to facilitate the transactions. They are considered part of the Selling, General, and Administrative (SG&A) expenses.

In August 2023, Waste Connections acquired Arrowhead Environmental Partners, gaining access to one of the country’s biggest landfills and opening numerous other M&A opportunities. Although the terms of the sale were not disclosed, WCN said that the deal represents about \$100 million in annualized revenue.<sup>7</sup>

On February 1, 2024, Waste Connections closed on its deal to acquire energy waste treatment and disposal assets from Secure Energy Services in Canada. According to management, this deal represents \$225 million in revenue for the E&P segment and adds about 300 employees to the company.

Year ended 12/31	# of Acquisitions	Expenses Incurred (\$mil)	Net fair value of acquisitions (\$mil)
2023	12	\$10.6	\$752.8
2022	24	\$24.9	\$2,334
2021	30	\$31.6	\$1,069
2020	21	\$9.8	\$481.6
2019	21	\$14.0	\$837.7

Source: WCN 10-K 2023, 10-K 2021

## Elevated Temperature Landfill Event at Chiquita Canyon

Waste Connections is currently dealing with an elevated temperature landfill event (ETLF) at the landfill in Chiquita Canyon located in Castaic, California. This event involves an underground reaction in a section of the landfill that's no longer in use, leading to increased temperatures and the generation of leachate, a liquid waste. This situation has posed significant challenges for the company, both operationally and financially.

To manage and mitigate the effects of the ETLF, the company has had to allocate considerable financial resources. Specifically, they increased their landfill closure and post-closure liabilities by about \$160 million in the fourth quarter to deal with the impacts of this event. Throughout 2023, the company spent approximately \$21

million on related costs, which was slightly below their initial estimates due to the timing of expenditures. They anticipate spending around \$75 million in 2024 to continue addressing the problem. In addition to the financial and operational measures, the company is also offering relocation assistance to nearby residents.

## New York City Contracts

In January 2024, New York’s Department of Sanitation awarded long-awaited contracts for a zone system that will dramatically overhaul the city’s commercial waste industry. Customer transitions for the first zone will begin in September. There were 60 contracts awarded that will encompass service for an estimated 200,000 businesses across 20 nonexclusive zones, plus five citywide agreements for containerized compactor service. Among the companies with the greatest number of contracts was Waste Connections (2<sup>nd</sup> place) with 12 contracts, plus citywide. Waste Connections' expansion into New York City, despite its focus on rural and secondary markets, is part of its strategic growth. The company’s presence in NYC offers it a significant opportunity to partake in a large and complex market, potentially increasing its customer base and revenue streams.

## INDUSTRY TRENDS

### Industry Consolidation and Growth

An ongoing trend of consolidation has been reshaping the landscape of the environmental services industry. Larger companies continue acquiring smaller regional businesses and assert dominance in different regional markets. This makes it harder for smaller and regional firms to expand geographically. This competition based on acquisitions has increased the price of investments and has given an advantage to larger companies with more significant resources and access to capital.

We anticipate the trend of consolidation within this industry to persist, increasing the market share of dominant players even more. However, we also consider it important to keep an eye on the demand for specialized hazardous waste disposal services, an area where the capabilities of the larger companies often fall short, and which could mean a significant opportunity for smaller enterprises.

## Landfill Gas-to-Energy Projects

The landfill gas-to-energy (LFGTE) projects represent a transformative trend within the environmental services industry, reflecting a broader shift towards sustainability and renewable energy utilization. As landfills continue to be a major source of methane emissions (a potent greenhouse gas), the sector is increasingly turning to innovative solutions to mitigate environmental impact while boosting the energy potential of waste. Landfill gas, primarily composed of methane and carbon dioxide, traditionally viewed as a byproduct of waste decomposition, is now being captured and converted into renewable energy sources such as electricity and heat or upgraded to renewable natural gas (RNG).

LFGTE projects have become an important part of what makes the waste management industry valuable for two reasons: first, they help the environment by managing waste better, and second, they are another revenue source for companies. The Inflation Reduction Act has set aside \$27 billion for a Greenhouse Gas Reduction Fund through the EPA, incentivizing the initiation and development of additional gas-to-energy projects.<sup>9</sup> There are currently 2,637 landfills participating in this program.<sup>10</sup>

## Push towards zero-emission fleets

Companies in this industry rely on trucks to collect and transfer waste. The Inflation Reduction Act is investing \$1 billion to help replace carbon-emitting trucks in favor of zero-emission alternative-fueled trucks, including natural gas and electric-powered trash collection vehicles.<sup>9</sup> Key industry players like Waste Management and Republic Services are introducing electric waste collection trucks, offering a cleaner, quieter alternative to traditional trucks. Additionally, compressed natural gas (CNG) vehicles are being adopted as an alternative option, offering lower emissions than diesel. Waste Management, for example, operates a vast fleet of natural gas trucks, setting an industry standard. The exploration of hydrogen fuel cell technology further promises a future of efficient, zero-emission fleets. This shift not only aligns with global environmental goals but also showcases the industry's commitment to innovation and responsible business practices.<sup>7</sup>

## MARKETS AND COMPETITION

The U.S. waste management industry market size was estimated at \$342.7 million in 2023 and it is expected to grow at a CAGR of 5.2% from 2024 to 2030. This is due to the growing population has increased the volume of waste, along with rising environmental concerns and the adoption of sustainable waste management practices. The industry is at a mature stage of growth due to the consolidation trend.

## Peer Comparisons

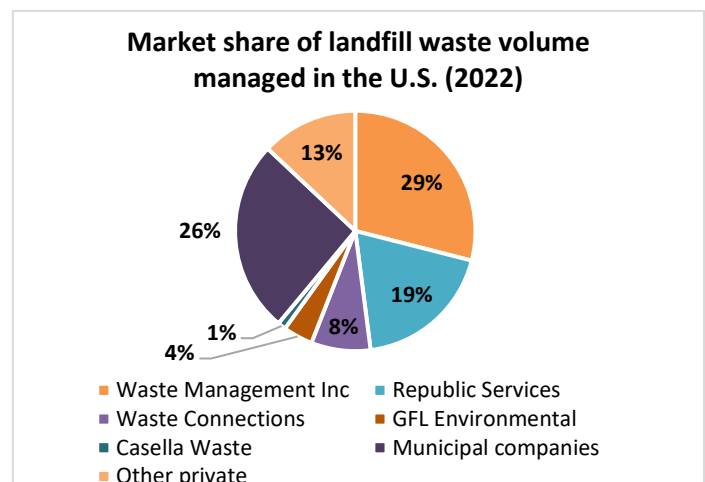
For this analysis, we selected the following peers: Waste Management (WM), Republic Services (RSG), GFL Environmental (GFL), and Casella Waste Systems (CWST). These companies are among the leading players, offering a comprehensive range of services from waste collection to recycling and environmental remediation, similar to Waste Connections.

Company	Mkt Cap	Revenue	Net Income
WM	82,789	20,426	2,304
RSG	59,514	14,964	1,730
WCN	42,332	8,021	762
GFL	12,466	5,568	33
CWST	5,361	1,264	25

Source: FactSet (\$ millions)

## Market Share

The graph below depicts the market share across all five companies.

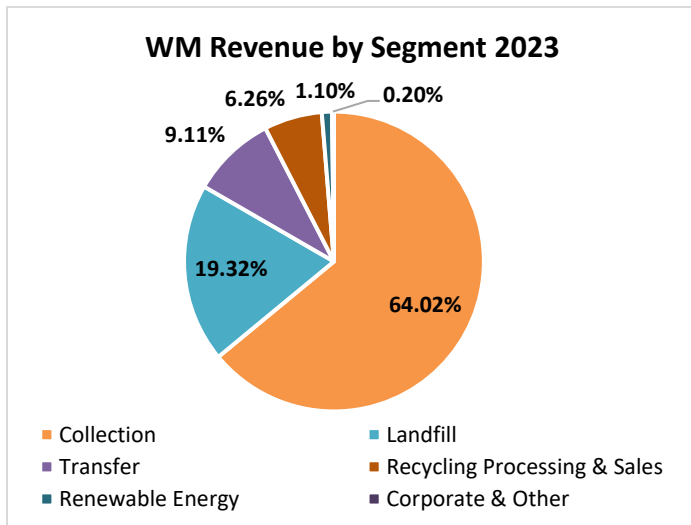


Source: IBIS World

As we can see from the graph, Waste Management (WM) is the company with the largest market capitalization followed by Republic Services (RSG), and in third place Waste Connections (WCN). These three companies hold over 60% of the market share in the waste management industry.

### Waste Management (WM)

Waste Management, Inc. engages in the provision of waste management environmental services. It operates through the following segments: Collection and Disposal-East Tier (East Tier), Collection and Disposal-West Tier (West Tier), Recycling Processing and Sales, WM Renewable Energy, and Corporate and Other. The East Tier and the West Tier segments refer to geographic locations across the U.S. and Canada. The Recycling Processing and Sales segment focuses on the processing and sales of materials collected from residential, commercial, and industrial customers. The WM Renewable Energy segment develops, operates, and promotes projects for landfill gas use. The Corporate and Other segment relates to its corporate office activities.



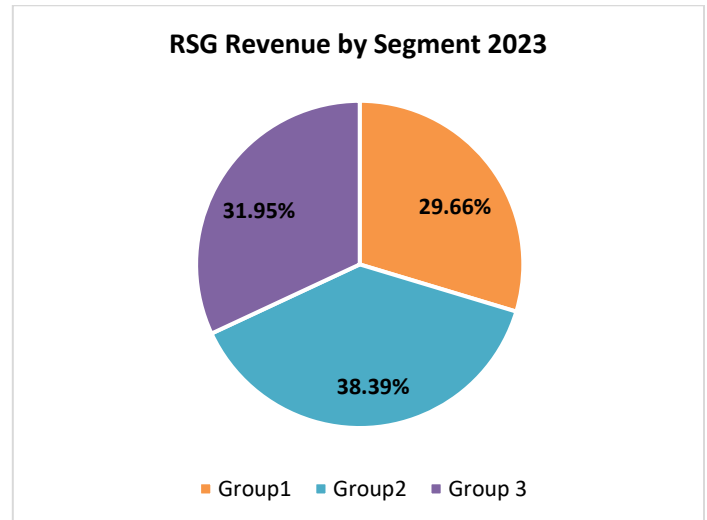
Source: Statista

We can see that WM has segments very similar to WCN and that the collection segment is also the largest revenue segment.

### Republic Services (RSG)

Republic Services, Inc. engages in the provision of environmental services. It operates through the following segments: Group 1, Group 2, and Group 3. The Group 1 segment focuses on the business of recycling and solid

waste in geographic areas located in the western United States. The Group 2 segment includes the recycling and solid waste business in geographic areas located in the southeastern, mid-western, and eastern seaboard of the United States. The Group 3 segment includes environmental solutions businesses in geographic areas located across the United States and Canada.



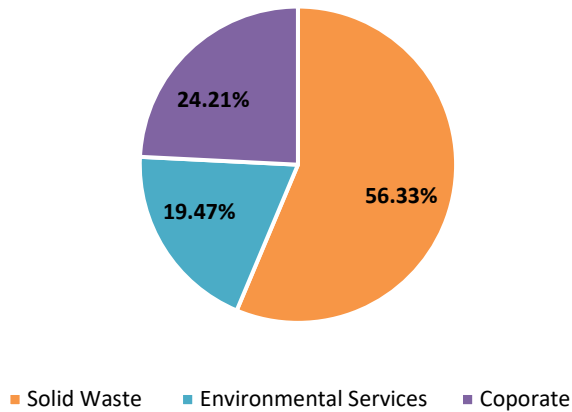
Source: FactSet

Although these segments are not very specific like WCN's or WM's we can still tell that Republic Services' main revenue stream is solid waste collection.

### GFL Environmental (GFL)

GFL Environmental, Inc. engages in the business of transporting, managing, and recycling solid and liquid waste and the provision of soil remediation services. It operates through the following segments: Solid Waste, Environmental Services, and Corporate. The Solid Waste segment includes hauling, landfill, transfers, and material recovery facilities. The Environmental Services segment provides liquid waste management and soil remediation services. The company was founded by Patrick Dovigi on December 19, 2007, and is headquartered in Vaughan, Canada.

### GFL Revenue by Segment 2023

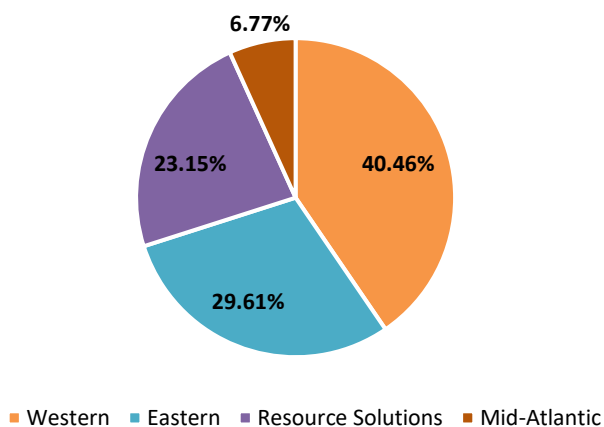


Source: FactSet

### Casella Waste Systems (CWST)

Casella Waste Systems, Inc. engages in the provision of solid waste management services. It operates through the following segments: Eastern, Western, Mid-Atlantic, and Resource Solutions. The Eastern segment involves the operation of landfills located in Bethlehem, New Hampshire, and West Old Town, Maine. The Western region segment includes the management of landfills in Vermont and New York. The Mid-Atlantic consists of collection facilities and transfer station facilities. The Resource Solutions segment focuses on the provision of materials processing, industrial recycling, organics, and resource management services.

### CWST Revenue by Segment 2023



Source: FactSet

After analyzing the revenue breakdowns for all the peers we can conclude that they all operate very similarly and

that their main revenue stream is the collection of solid waste.

## Financial and Operating Metrics

### Market Valuation

Ticker	Market Cap (B)	Trailing P/E	Forward P/E
WCN	43.33	55.82	25.13
WM	82.78	36.42	29.94
RSG	59.51	34.54	31.55
GFL	12.46	1.87	36.90
CWST	5.3	200.96	125.00

Source: FactSet, Yahoo Finance

The table above provides a snapshot of the market valuation for Waste Connections, Inc. (WCN) relative to its industry peers. WCN's market cap is substantial at \$43.33 billion, though it trails behind WM and RSG, indicating a strong but not leading position in the market.

WCN's trailing P/E ratio of 55.82 is higher compared to its larger counterpart WM, which has a trailing P/E of 36.42, and RSG's 34.54. This implies that WCN's stock is more expensively priced relative to its earnings, possibly due to higher growth expectations or perceived stability in its earnings. On the forward P/E, WCN is projected at 25.13, showing that street consensus expects WCN's earnings to grow, making the company's valuation more reasonable in the future compared to its current earnings.

GFL's trailing P/E ratio stands out at 1.87, which might suggest specific market conditions or company events that affected its earnings in the recent past. Nonetheless, its forward P/E is significantly higher at 36.90, indicating expectations of a considerable increase in earnings or an adjustment in stock price.

CWST, on the other hand, shows a significantly higher trailing P/E ratio at 200.96, which is the highest among the peers, reflecting a premium that investors might be paying for its earnings. Its forward P/E is still high at 125.00 but indicates a substantial expected improvement in earnings relative to its stock price.

Ticker	Dividend Yield (%)	Payout ratio (%)
WCN	0.66	35.59
WM	1.56	49.47
RSG	1.25	37.66
GFL	0.15	53.10
CWST	0.00	0.00

Source: FactSet

In the table above, WCN has a lower dividend yield than both WM and RSG. This suggests that WCN is focusing more on reinvesting its earnings into the company rather than distributing them as dividends, which could be indicative of a growth strategy.

In terms of payout ratio, WCN has a ratio of 35.59%, which is lower than WM's 49.47% and close to RSG's 37.66%. This lower payout ratio aligns with WCN's lower dividend yield and supports the idea that WCN is reinvesting a larger portion of its earnings compared to WM. GFL has a notably lower dividend yield at 0.15%, with a payout ratio of 53.10%, which is the highest among the peers listed and signals a commitment to returning income to shareholders despite the lower yield.

Finally, CWST stands out with a dividend yield of 0.00% and a payout ratio of 0.00%, indicating that it currently does not pay a dividend. This reflects a strategy of prioritizing internal investments and growth initiatives over dividend payouts to shareholders.

### Profitability Ratios

Ticker	Net Margin	ROA (%)	ROE (%)
WCN	9.51	4.36	10.41
WM	11.28	7.08	33.51
RSG	11.57	5.73	17.11
GFL	0.60	0.22	0.69
CWST	2.01	1.27	3.34

Source: FactSet

WCN's net margin stands at 9.51%, showing a healthy profit from revenues but trailing behind WM and RSG, which have margins exceeding 11%. This indicates tighter cost control or pricing power for WM and RSG. The return on assets (ROA) for WCN is 4.36%, lower than WM's 7.08% and RSG's 5.73%, implying that WM and RSG are more efficient at converting their investments into profits. A higher ROA denotes a more efficient use of the company's assets to generate earnings. Regarding return on equity

(ROE), WCN's figure is 10.41%, suggesting a decent return on shareholder equity, but significantly lower than WM's substantial 33.51% ROE. WM's higher ROE reflects a much more efficient use of shareholder equity to generate profits, possibly through leverage or superior profitability. RSG's ROE is at 17.11%, indicating a solid performance, though not as exceptional as WM's.

GFL and CWST show much lower metrics across the board, with GFL's figures being notably low. This suggests that GFL may be struggling with profitability and asset utilization, while CWST, with somewhat higher margins and returns, still has room for improvement compared to its larger peers. Overall, WCN appears to be performing well, maintaining profitability, and generating returns, but there is a gap when compared to the higher efficiencies and profitability metrics of WM and RSG.

### Number of Owned/Operated Landfills and Average Remaining Landfill Life

Ticker	Owned/Operated Landfills 2023	Average Remaining Landfill Life
WCN	103	32 years
WM	258	39 years
RSG	207	62 years
GFL	95	23 years
CWST	64	-

Source: Companies' 10-Ks

The number of owned or operated landfills indicates the scale of a waste management company's physical infrastructure for waste disposal, which is a key aspect of their operations. From the table, WM has the most extensive network with 258 sites, suggesting a dominant market position and capacity. GFL, with 95 sites, indicates a smaller, but still significant, operational footprint. CWST has the least with 64, which implies more regional focus or specialization.

The average remaining landfill life reflects the estimated number of years a company's landfill can continue to operate before reaching capacity. A longer landfill life indicates a strategic advantage as it suggests a longer horizon for stable revenue generation without the need for significant capital investment in new sites. RSG, with an average remaining life of 62 years, appears to be in a robust position, suggesting it won't face the need for new

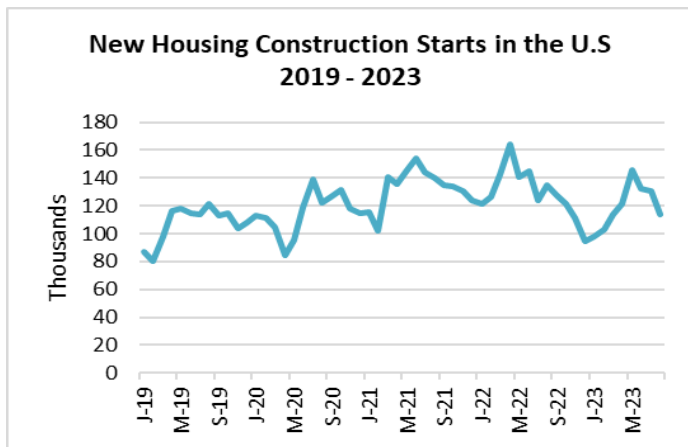


landfill investments for a considerable time. In contrast, GFL has the shortest at 23 years, which may require future investment in capacity sooner than its competitors. This metric helps understand the long-term sustainability and potential future costs for a waste management company.

## ECONOMIC OUTLOOK

### U.S Housing Construction Starts

The impact of the initiation of new residential projects on the industry is observed in different areas. First, new construction projects increase waste volume or construction and demolition (C&D) waste. As housing increases, the volume of C&D waste needing collection and disposal also increases, boosting the demand for waste management services. C&D waste is estimated to be nearly 23% of the national waste stream.<sup>12</sup>



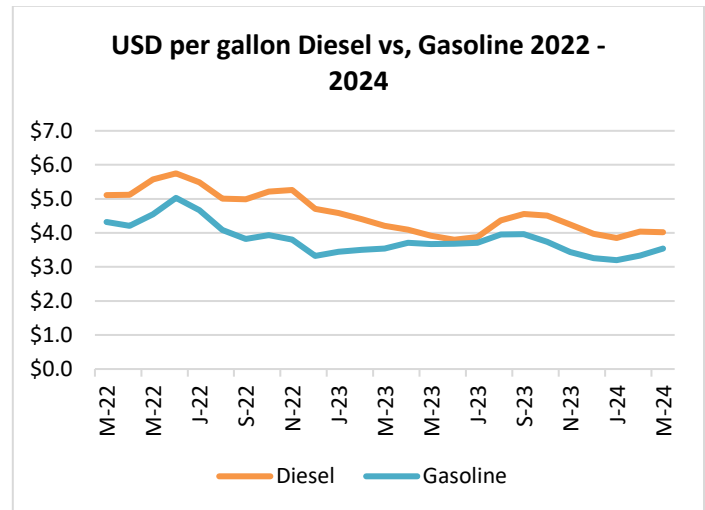
Source: Statista

Construction of new housing projects dropped 8.3% in 2023 due to rising interest rates and high inflation. The National Association of REALTORS forecasts an increase in housing starts of 4.7% in 2024 and 4.2% in 2025. The Henry Fund anticipates a rapid recovery in the construction of new projects once interest rates are cut and amid the housing shortage that the U.S. is currently experiencing. A surge in housing starts translates into enhanced business prospects for Waste Connections, affirming the significant role of construction trends in the company's operational and financial performance.

### Fuel Prices

Fuel prices increase operational costs due to the reliance on large fleets for waste collection and transportation. When fuel prices rise, Waste Connections faces higher

expenses, which can lead to adjustments in service pricing, including the addition of fuel surcharges, to maintain profitability. This situation may prompt the company to seek efficiency improvements, such as investing in fuel-efficient or alternative fuel vehicles and optimizing routes to reduce fuel consumption. The volatility of fuel prices also makes financial planning harder, making strategic budgeting necessary to mitigate the impact on operational costs.



Source: Statista

Waste Connections has a pricing policy that includes a fuel surcharge component. This surcharge fluctuates with the price of diesel and other fuels used to operate their fleet of vehicles. It's designed to help the company control fuel costs and maintain an acceptable operating margin. The surcharge is not directly tied to the costs of servicing specific accounts but is based on overall costs incurred regionally or company-wide.

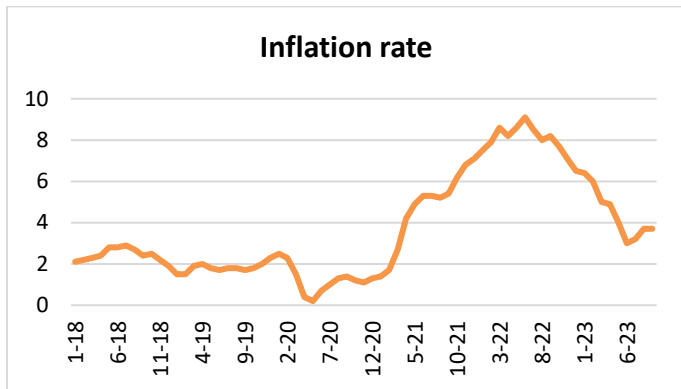
The U.S Energy Information Administration (EIA) expects diesel fuel prices to drop 4.8% to \$4.01/gallon and gasoline prices to decrease 1.4% to \$3.59/gallon in 2024. We anticipate this drop in prices to favor Waste Connections' operations.

### Inflation and Consumer Price Index (CPI)

CPI influences operational costs and service pricing. As CPI rises, indicating inflation, companies such as Waste Connections face increased costs for fuel, labor, equipment, and vehicle maintenance. To maintain profitability, WCN may need to adjust its service prices or renegotiate contracts with provisions for CPI-related increases. Additionally, high inflation can affect demand

for services, as customers look to cut costs. This requires more strategic budgeting and financial planning within the industry to manage inflationary pressures and ensure stable operations. We anticipate inflation to remain sticky for 2024.

Despite these challenges, in its most recent earnings call, Waste Connections announced that it has made notable progress in employee retention. The company achieved multi-year lows in both employee turnover and safety incident rates in FYE 2023.<sup>2</sup>



Source: Statista

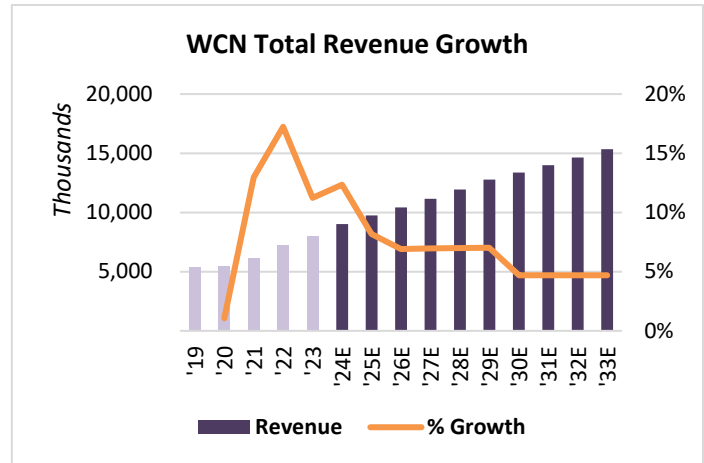
## VALUATION

### Revenue Growth

The Henry Fund forecasts Waste Connections revenue to grow by 12.35% in 2024. We expect the highest revenue growth to come from the E&P segment consistent with the acquisition of energy waste treatment and disposal assets from Secure Energy Services and that is expected to add \$225 million in revenue for this segment.

For each of the segments, the Henry Fund used growth rates based on consensus estimates obtained from Bloomberg for FY24, FY25, and FY26. For the following years, the assumptions were made based on historical and consensus data.

WCN is a company that grows through acquisitions and contracts. Therefore, we believe that it will continue to experience steady growth as we start to see positive revenues from 2023's acquisitions and the ones in progress. Additionally, we anticipate the New York City contracts to significantly contribute to the growth of the company as it opens new opportunities in the area for Waste Connections.



Source: HF Model

### Operating Expenses

WCN's operating expenses as a percentage of sales have fluctuated over time. Thus, our model takes an average of those changes and applies it to the forecast. We expect operating costs to increase as Waste Connections continues to make new acquisitions and expand.

When SG&A expenses for Waste Connections, we opted for a cautious approach given the inherent uncertainty in predicting M&A-related costs. Typically, M&A expenses are included in SG&A on financial statements, making precise forecasting difficult. Our projections are based on historical SG&A expenses as a percentage of sales, utilizing an average to maintain consistency. However, given Waste Connections' active acquisition strategy, we recognize that this estimate might be conservative, potentially underestimating future expenses.

For interest expense, our methodology involved aggregating forecasted interest-bearing operational items from the balance sheet. We then applied a pre-tax cost of debt to these aggregated figures to estimate interest expenses.

### Earnings estimates

Our forecasted earnings per share for 2024E and 2025E are slightly lower compared to consensus estimates. However, our EPS is still anticipated to be higher than in previous years. We are forecasting impairments using an average as a % of revenues over the past five years since events such as ETLF are likely to happen and impossible to predict but are related to operations.

## Capital Expenditures

Waste Connections does not guide CapEx further than what the company expects to spend in 2024. However, we expect WCN to continue increasing due to the nature of its growth strategy. Thus, we estimated this increase at a rate consistent with the historical average and the inflation rate over the forecast period.

## WACC Assumptions

Our calculated weighted average cost of capital (WACC) for Waste Connections was 6.59%, a little lower than the 6.61% consensus estimate. For this calculation, we made the following assumptions:

**Risk-Free Rate:** We used the 10-year Treasury bond yield as of March 25, 2024.

**Beta:** We obtained 0.68 beta from Bloomberg using the average 5-year weekly raw beta.

**Equity Risk Premium:** We used the Henry Fund consensus estimate of 5.00%

**Pre-Tax Cost of Debt:** We obtained 5.12% from Bloomberg as the yield to maturity for a WCN 10-year corporate bond.

**Tax Rate:** We used an implied marginal tax rate of 19.92% based on EMN's historical average.

## Discounted Cash Flow Model (DCF)

The Henry Fund DCF and Economic Profit (EP) models resulted in an implied share price of \$166.87. This method considers more company-specific factors and allows us to incorporate growth assumptions per business segment; however, we don't consider it the best in the case of WCN since it involves adjusting for employee-stock options that the company does not issue. By accounting for all free cash flows and discounting by WACC, this model draws a picture of the company's potential. This is not the model we are the most confident about, however, as previously mentioned, it includes factors that we cannot use in other models, thus we consider it to be a good low-end for the price range.

## Dividend Discount Model (DDM)

The DDM model calculates the per-share value of equity by applying the cost of equity to future dividend payments

to determine an appropriate share purchase price, which is \$132.62 in this case. This number is significantly lower compared to the value obtained from DCF and Relative Valuation Models. This is because DDM is solely focused on dividends and discounts them by the cost of equity. Since the cost of equity does not account for debt, it is generally higher, consequently resulting in a lower valuation. Therefore, we do not believe this model is accurately pricing the stock.

## Relative Valuation Model

For this model, we calculated Waste Connections' relative value based on four other peers that operate very similarly. By comparing EPS, we obtained an implied share value between \$185.07 and \$209.38. Secondly, we compared the companies using EV/EBITDA and noticed that WCN has the highest multiple relative to its peers and is also higher than the average calculated. This may be because of the company's strong cash flow and higher margins. The final implied value from this multiple was \$164.02, which is just below DCF/EP. However, we are comfortable with this model and will use the implied values obtained here for the final target price.

## KEYS TO MONITOR

### Drivers

We recognize the growth potential that Waste Connections has. First, the recent acquisition of Secure Energy's waste disposal assets notably enhances the Waste Connections Exploration and Production Segment, contributing \$225 million in revenue and marking a significant expansion into Western Canada's waste management sector.

In addition to this, the contracts obtained in New York City serve as catalysts for expansion. These contracts are not only an entrance into one of the country's largest markets but also open opportunities for additional M&A activities. This strategic positioning could yield an expanded footprint and diversified revenue streams.

Finally, Waste Connections' active acquisition strategy, especially in the context of industry consolidation, strengthens its competitive position. High barriers to entry protect and stabilize WCN's operational landscape, aligning with its ongoing expansion and market

penetration efforts. This strategic consolidation helps safeguard WCN's long-term growth trajectory.

## Risks

Despite Waste Connections' solid positioning, we must consider the inherent risks. These include potential ETLF events, despite their rarity, which could unpredictably impact both finances and operations, especially as the company continues its landfill acquisitions. Additionally, competitive pricing pressures within the waste services industry, softer-than-expected volumes influenced by housing market dynamics, and spikes in fuel and labor costs pose challenges. Furthermore, the risk of dilutive acquisitions cannot be overlooked, as these could potentially affect our optimistic outlook and target.

## Recommendation and Conclusion

Our final rating for Waste Connections is a hold within a range of \$165 and \$185 based on our DCF and Relative Valuation models.

In conclusion, we believe that Waste Connections still has a lot of growth opportunities and will continue to thrive while asserting its position as the third-largest company within its industry. However, there are unpredictable events that can occur at the landfills and other macroeconomic events out of the company's control that could hurt its finances and operations.

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6. [Morningstar Sustainalytics](#)
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Waste Connections  
Revenue Decomposition

Fiscal Years Ending Dec. 31	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
<b>Total Revenue</b>	5,388,679	5,445,990	6,151,361	7,211,859	8,021,951	9,012,389	9,749,915	10,424,392	11,149,313	11,928,730	12,767,043	13,366,068	13,993,864	14,651,834	15,341,452
% growth		1.06%	12.95%	17.24%	11.23%	12.35%	8.18%	6.92%	6.95%	6.99%	7.03%	4.69%	4.70%	4.70%	4.71%

Revenue by Service Line

<b>Collection</b>															
Commercial	1,593,217	1,610,313	1,813,426	2,176,295	2,476,891	2,684,207	2,866,196	3,060,524	3,268,028	3,489,600	3,726,195	3,978,831	4,248,595	4,536,650	4,844,235
% growth		1.07%	12.61%	20.01%	13.81%	8.37%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%
Residential	1,380,763	1,528,217	1,673,819	1,891,108	2,125,068	2,302,936	2,459,075	2,625,801	2,803,830	2,993,930	3,196,918	3,413,669	3,645,116	3,892,255	4,156,149
% growth		10.68%	9.53%	12.98%	12.37%	8.37%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%
Industrial and construction roll off	841,173	833,148	954,181	1,183,624	1,333,020	1,444,594	1,542,537	1,647,121	1,758,796	1,878,042	2,005,374	2,141,338	2,286,521	2,441,547	2,607,084
% growth		-0.95%	14.53%	24.05%	12.62%	8.37%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%
<b>Total collection</b>	3,815,153	3,971,678	4,441,426	5,251,027	5,934,979	6,431,737	6,867,808	7,333,446	7,830,654	8,361,572	8,928,486	9,533,838	10,180,232	10,870,452	11,607,468
% growth		4.10%	11.83%	18.23%	13.03%	8.37%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%	6.78%
Landfill	1,132,935	1,146,732	1,233,499	1,328,942	1,483,397	1,598,805	1,711,041	1,831,157	1,959,704	2,097,275	2,244,504	2,402,068	2,570,693	2,751,156	2,944,287
% growth		1.22%	7.57%	7.74%	11.62%	7.78%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%
Transfer	771,316	777,754	859,113	1,026,050	1,198,385	1,291,619	1,392,107	1,500,413	1,617,145	1,742,959	1,830,107	1,921,613	2,017,693	2,118,578	2,224,507
% growth		0.83%	10.46%	19.43%	16.80%	7.78%	7.78%	7.78%	7.78%	7.78%	5.00%	5.00%	5.00%	5.00%	5.00%
Recycling	64,245	86,389	205,076	204,876	147,039	196,150	206,546	217,493	229,020	241,158	253,216	265,877	279,171	293,129	307,786
% growth		34.47%	137.39%	-0.10%	-28.23%	33.40%	5.30%	5.30%	5.30%	5.30%	5.00%	5.00%	5.00%	5.00%	5.00%
E&P	271,887	159,438	138,707	210,562	232,211	389,534	428,487	471,336	518,470	545,949	574,884	605,353	637,436	671,221	706,795
% growth		-41.36%	-13.00%	51.80%	10.28%	67.75%	10.00%	10.00%	10.00%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%
Intermodal and other	121,137	118,396	152,194	188,471	171,721	174,572	180,716	187,078	193,663	200,480	207,537	214,842	222,404	230,233	238,337
% growth		-2.26%	28.55%	23.84%	-8.89%	1.66%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%	3.52%
<b>Total</b>	6,176,673	6,260,387	7,030,015	8,209,928	9,167,732	10,082,417	10,786,707	11,540,922	12,348,655	13,189,393	14,038,734	14,943,590	15,907,630	16,934,768	18,029,180
Intercompany	(787,994)	(814,397)	(878,654)	(998,069)	(1,145,781)	(1,070,028)	(1,036,792)	(1,116,530)	(1,199,342)	(1,260,663)	(1,271,691)	(1,577,522)	(1,913,766)	(2,282,934)	(2,687,728)
<b>Total Revenue by Service Line</b>	<b>5,388,679</b>	<b>5,445,990</b>	<b>6,151,361</b>	<b>7,211,859</b>	<b>8,021,951</b>	<b>9,012,389</b>	<b>9,749,915</b>	<b>10,424,392</b>	<b>11,149,313</b>	<b>11,928,730</b>	<b>12,767,043</b>	<b>13,366,068</b>	<b>13,993,864</b>	<b>14,651,834</b>	<b>15,341,452</b>

<b>Landfills</b>				809,601	683,952	496,758									
Owned operational landfills and landfills operated under life-of-site agreements	92	87	92	93	96	99	103	106	110	113	117	120	124	127	131
% growth		-5.43%	5.75%	1.09%	3.23%	3.35%	3.35%	3.35%	3.35%	3.35%	3.00%	3.00%	3.00%	3.00%	3.00%
Operated landfills	4	4	5	7	7	10	10	10	12	12	12	15	15	15	15
% growth		0.00%	25.00%	40.00%	0.00%	40.00%	0.00%	0.00%	25.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%
<b>Total</b>	96	91	97	100	103	109	112	116	122	125	129	135	138	142	146
<b>Implied landfill revenue per landfill</b>	<b>11,801</b>	<b>12,601</b>	<b>12,716</b>	<b>13,289</b>	<b>14,402</b>	<b>14,665</b>	<b>15,230</b>	<b>15,815</b>	<b>16,091</b>	<b>16,716</b>	<b>17,418</b>	<b>17,819</b>	<b>18,573</b>	<b>19,358</b>	<b>20,174</b>
% growth		6.78%	0.91%	4.51%	8.37%	1.83%	3.85%	3.84%	1.74%	3.89%	4.20%	2.30%	4.23%	4.23%	4.22%

<b>Disposal Tonnage at Landfills</b>															
Owned operational landfills and landfills operated under life-of-site agreements	47,394	44,346	46,632	47,229	49,713	51,651	53,664	55,756	57,930	60,188	61,994	63,854	65,769	67,742	69,774
% growth		-6.43%	5.15%	1.28%	5.26%	3.90%	3.90%	3.90%	3.90%	3.90%	3.00%	3.00%	3.00%	3.00%	3.00%
Operated landfills	570	544	580	620	694	753	821	902	985	1,034	1,086	1,140	1,197	1,257	1,320
% growth		-4.56%	6.62%	6.90%	11.94%	8.48%	9.11%	9.84%	9.14%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
<b>Total</b>	<b>47,964</b>	<b>44,890</b>	<b>47,212</b>	<b>47,849</b>	<b>50,407</b>	<b>52,404</b>	<b>54,486</b>	<b>56,659</b>	<b>58,915</b>	<b>61,222</b>	<b>63,079</b>	<b>64,993</b>	<b>66,966</b>	<b>68,999</b>	<b>71,094</b>
<b>Implied revenue per ton disposed</b>	<b>23.62</b>	<b>25.55</b>	<b>26.13</b>	<b>27.77</b>	<b>29.43</b>	<b>30.51</b>	<b>31.40</b>	<b>32.32</b>	<b>33.26</b>	<b>34.26</b>	<b>35.58</b>	<b>36.96</b>	<b>38.39</b>	<b>39.87</b>	<b>41.41</b>
% growth		8.15%	2.28%	6.30%	5.96%	3.67%	2.93%	2.92%	2.92%	2.99%	3.87%	3.87%	3.87%	3.87%	3.87%

<b>Revenue by (Reported) Geographic Segment</b>															
Eastern	1,268,964	1,335,865	1,521,288	1,233,695	1,380,233	1,483,612	1,567,437	1,655,997	1,749,561	1,848,411	1,952,846	2,050,488	2,153,013	2,260,663	2,373,696
% growth		5.27%	13.88%	-18.90%	11.88%	7.49%	5.65%	5.65%	5.65%	5.65%	5.65%	5.00%	5.00%	5.00%	5.00%
Southern	1,192,922	1,369,580	1,446,746	1,494,439	1,642,274	1,791,557	1,884,538	1,982,346	2,085,230	2,193,453	2,307,293	2,422,658	2,543,791	2,670,981	2,804,530
% growth		14.81%	5.63%	3.30%	9.89%	9.09%	5.19%	5.19%	5.19%	5.19%	5.19%	5.00%	5.00%	5.00%	5.00%
Western	1,098,849	1,149,762	1,280,188	1,428,031	1,669,289	2,060,070	2,308,926	2,498,952	2,704,614	2,927,204	3,168,113	3,326,518	3,492,844	3,667,487	3,850,861
% growth		4.63%	11.34%	11.55%	16.89%	23.41%	12.08%	8.23%	8.23%	8.23%	8.23%	5.00%	5.00%	5.00%	5.00%
Central	838,584	880,323	1,046,416	1,288,348	1,440,157	1,556,954	1,631,376	1,709,356	1,791,063	1,876,676	1,966,381	2,025,372	2,086,134	2,148,718	2,213,179
% growth		4.98%	18.87%	23.12%	11.78%	8.11%	4.78%	4.78%	4.78%	4.78%	4.78%	3.00%	3.00%	3.00%	3.00%
Canada	733,282	710,460	856,723	940,624	995,842	1,149,500	1,298,706	1,436,109	1,588,049	1,756,064	1,941,856	2,038,949	2,140,896	2,247,941	2,360,338
% growth		-3.11%	20.59%	9.79%	5.87%	15.43%	12.98%	10.58%	10.58%	10.58%	5.00%	5.00%	5.00%	5.00%	5.00%
MidSouth		(segment did not exist)		826,722	894,156	970,696	1,058,932	1,141,635	1,230,796	1,326,921	1,430,554	1,502,082	1,577,186	1,656,045	1,738,847
% growth				8.16%	8.56%	9.09%	7.81%	7.81%	7.81%	7.81%	7.81%	5.00%	5.00%	5.00%	5.00%
E&P	256,078	(segment no longer considered reportable)													
<b>Total Revenue by Geographic Segment</b>	<b>5,388,679</b>	<b>5,445,990</b>	<b>6,151,361</b>	<b>7,211,859</b>	<b>8,021,951</b>	<b>9,012,389</b>	<b>9,749,915</b>	<b>10,424,392</b>	<b>11,149,313</b>	<b>11,928,730</b>	<b>12,767,043</b>	<b>13,366,068</b>	<b>13,993,864</b>	<b>14,651,834</b>	<b>15,341,452</b>



**Waste Connections**

*Income Statement*

(in Thousands)

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
<b>Revenues</b>	<b>5,388,679</b>	<b>5,445,990</b>	<b>6,151,361</b>	<b>7,211,859</b>	<b>8,021,951</b>	<b>9,012,389</b>	<b>9,749,915</b>	<b>10,424,392</b>	<b>11,149,313</b>	<b>11,928,730</b>	<b>12,767,043</b>	<b>13,366,068</b>	<b>13,993,864</b>	<b>14,651,834</b>	<b>15,341,452</b>
Cost of operations	3,198,757	3,276,808	3,654,074	4,336,012	4,744,513	5,374,990	5,814,850	6,217,109	6,649,451	7,114,296	7,614,266	7,971,524	8,345,942	8,738,356	9,149,644
Selling, general, and administrative	546,278	537,632	612,337	696,467	799,119	893,722	966,860	1,033,745	1,105,632	1,182,924	1,266,056	1,325,459	1,387,715	1,452,963	1,521,350
Depreciation	618,396	621,102	673,730	763,285	845,638	894,757	926,352	958,307	990,705	1,023,623	1,057,133	1,091,302	1,126,192	1,161,862	1,198,369
Amortization of Intangibles	125,522	131,302	139,279	155,675	157,573	172,446	126,061	109,934	95,848	85,582	85,582	85,582	85,582	85,582	85,582
Impairments and other operating items	61,948	466,718	32,316	18,230	238,796	110,503	119,546	127,816	136,705	146,261	156,540	163,885	171,582	179,650	188,105
<b>Operating income/loss</b>	<b>837,778</b>	<b>412,428</b>	<b>1,039,625</b>	<b>1,242,190</b>	<b>1,236,312</b>	<b>1,565,970</b>	<b>1,796,245</b>	<b>1,977,481</b>	<b>2,170,971</b>	<b>2,376,043</b>	<b>2,587,466</b>	<b>2,728,316</b>	<b>2,876,851</b>	<b>3,033,422</b>	<b>3,198,402</b>
Interest expense	(147,368)	(162,375)	(162,796)	(202,331)	(274,642)	(360,298)	(360,557)	(467,583)	(382,609)	(420,390)	(426,850)	(435,297)	(442,386)	(448,046)	(455,149)
Interest income	9,777	5,253	2,916	5,950	9,350	13,159	13,139	147,063	105,737	192,645	257,841	334,604	414,359	500,373	596,218
Other income/expense, net	5,704	(1,392)	6,285	3,154	12,481	-	-	-	-	-	-	-	-	-	-
Loss on early extinguishment of debt	-	-	(115,288)	-	-	-	-	-	-	-	-	-	-	-	-
Income/loss before tax provision	705,891	253,914	770,742	1,048,963	983,501	1,218,832	1,448,827	1,656,962	1,894,099	2,148,298	2,418,457	2,627,623	2,848,824	3,085,749	3,339,471
Income tax provision	(139,210)	(49,922)	(152,253)	(212,962)	(220,675)	(242,791)	(288,606)	(330,067)	(377,305)	(427,941)	(481,757)	(523,422)	(567,486)	(614,681)	(665,223)
Net income/loss	566,681	203,992	618,489	836,001	762,826	976,041	1,160,221	1,326,895	1,516,795	1,720,357	1,936,701	2,104,200	2,281,338	2,471,068	2,674,249
Net income attributable to NCI	160	685	(442)	(339)	(26)	(31)	(34)	(37)	(40)	(42)	(45)	(49)	(51)	(53)	(56)
<b>Net income attributable to Waste Connections</b>	<b>566,841</b>	<b>204,677</b>	<b>618,047</b>	<b>835,662</b>	<b>762,800</b>	<b>976,010</b>	<b>1,160,186</b>	<b>1,326,858</b>	<b>1,516,755</b>	<b>1,720,314</b>	<b>1,936,655</b>	<b>2,104,152</b>	<b>2,281,287</b>	<b>2,471,014</b>	<b>2,674,193</b>
Total shares outstanding	263,618	262,825	260,212	257,146	257,600	256,589	255,644	254,761	253,935	253,164	252,442	251,768	251,138	250,549	249,999
Weighted average shares outstanding	263,793	263,190	261,167	257,384	257,551	257,095	256,117	255,203	254,348	253,549	252,803	252,105	251,453	250,844	250,274
Basic EPS	2.15	0.78	2.37	3.25	2.96	3.80	4.53	5.20	5.96	6.78	7.66	8.35	9.07	9.85	10.69
Dividends per share	0.67	0.76	0.85	0.95	1.05	1.14	1.26	1.38	1.50	1.62	1.74	1.86	1.98	2.10	2.22

**Waste Connections**

*Balance Sheet*

(in Thousands)

<b>Fiscal Years Ending Dec. 31</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>	<b>2031E</b>	<b>2032E</b>	<b>2033E</b>
<b>Assets</b>															
<i>Current Assets:</i>															
Cash and cash equivalents	326,738	617,294	147,441	78,637	78,399	68,757	2,737,536	1,900,824	3,628,281	4,920,985	6,444,454	8,027,165	9,734,446	11,637,689	13,730,423
Accounts receivable, net of allowance for credit losses	662,808	630,264	709,614	833,862	856,953	1,039,198	1,124,240	1,202,013	1,285,602	1,375,475	1,472,139	1,541,211	1,613,601	1,689,470	1,768,988
Prepaid expenses and other current assets	141,052	160,714	175,722	205,146	206,433	249,520	269,939	288,613	308,684	330,263	353,473	370,057	387,439	405,656	424,749
<b>Total current assets</b>	<b>1,130,598</b>	<b>1,408,272</b>	<b>1,032,777</b>	<b>1,117,645</b>	<b>1,141,785</b>	<b>1,357,475</b>	<b>4,131,715</b>	<b>3,391,450</b>	<b>5,222,567</b>	<b>6,626,722</b>	<b>8,270,065</b>	<b>9,938,433</b>	<b>11,735,486</b>	<b>13,732,814</b>	<b>15,924,160</b>
<i>Long-term Assets:</i>															
Restricted cash and investments	147,662	154,611	131,188	170,826	175,989	184,788	194,028	203,729	213,916	224,612	235,842	247,634	260,016	273,017	286,668
Property and equipment, net	5,516,347	5,284,506	5,721,949	6,950,915	7,228,331	7,483,574	7,741,721	8,003,449	8,269,380	8,540,092	8,816,124	9,097,982	9,386,146	9,681,069	9,983,190
Operating lease right-of-use assets	183,220	170,923	160,567	192,506	261,782	271,026	280,375	289,854	299,485	309,289	319,286	329,493	339,930	350,611	361,552
Goodwill	5,510,851	5,726,650	6,187,643	6,902,297	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400	7,404,400
Intangible assets, net	1,163,063	1,155,079	1,350,597	1,673,917	1,603,541	1,431,095	1,305,034	1,195,100	1,099,252	1,013,670	928,088	842,506	756,924	671,342	585,760
Other assets, net	85,954	92,323	115,203	126,497	100,048	147,160	159,203	170,216	182,053	194,780	208,469	218,250	228,501	239,245	250,505
<b>Total long-term assets</b>	<b>12,607,097</b>	<b>12,584,092</b>	<b>13,667,147</b>	<b>16,016,958</b>	<b>16,774,091</b>	<b>16,922,043</b>	<b>17,084,761</b>	<b>17,266,749</b>	<b>17,468,486</b>	<b>17,686,843</b>	<b>17,912,208</b>	<b>18,140,266</b>	<b>18,375,916</b>	<b>18,619,683</b>	<b>18,872,075</b>
<b>Total Assets</b>	<b>13,737,695</b>	<b>13,992,364</b>	<b>14,699,924</b>	<b>17,134,603</b>	<b>17,915,876</b>	<b>18,279,518</b>	<b>21,216,477</b>	<b>20,658,198</b>	<b>22,691,053</b>	<b>24,313,565</b>	<b>26,182,273</b>	<b>28,078,699</b>	<b>30,111,402</b>	<b>32,352,497</b>	<b>34,796,234</b>
<b>Liabilities and Equity</b>															
<i>Current Liabilities:</i>															
Accounts payable	436,970	290,820	392,868	638,728	642,455	661,530	715,666	765,174	818,385	875,596	937,130	981,100	1,027,182	1,075,478	1,126,098
Book overdraft	15,954	17,079	16,721	15,645	14,855	18,003	19,476	20,823	22,271	23,828	25,503	26,700	27,954	29,268	30,645
Deferred revenue	216,443	233,596	273,720	325,002	355,203	38,770	41,943	44,844	47,962	51,315	54,922	57,499	60,199	63,030	65,996
Accrued liabilities	281,308	404,923	442,596	431,247	521,428	582,748	630,437	674,050	720,923	771,321	825,527	864,261	904,854	947,399	991,991
Current portion of operating lease liabilities	29,929	30,671	38,017	35,170	32,533	48,055	49,712	51,393	53,101	54,839	56,611	58,421	60,272	62,165	64,105
Current portion of contingent consideration	26,159	43,297	62,804	60,092	94,996	1,612	1,612	1,612	1,612	4,978	4,978	4,978	4,978	4,978	4,978
Current portion of long-term debt and notes payable	465	8,268	6,020	6,759	26,462	7,355	1,909,946	5,447	726,367	726,367	726,367	726,367	726,367	726,367	726,367
<b>Total current liabilities</b>	<b>1,007,228</b>	<b>1,028,654</b>	<b>1,232,746</b>	<b>1,512,643</b>	<b>1,687,932</b>	<b>1,358,072</b>	<b>3,368,792</b>	<b>1,563,343</b>	<b>2,390,622</b>	<b>2,508,244</b>	<b>2,631,038</b>	<b>2,719,325</b>	<b>2,811,805</b>	<b>2,908,685</b>	<b>3,010,180</b>
<i>Long-term Liabilities:</i>															
Long-term portion of debt and notes payable	4,353,782	4,708,678	5,040,500	6,890,149	6,724,771	6,734,967	6,911,526	7,145,172	7,150,710	7,265,121	7,418,038	7,544,680	7,643,120	7,769,422	7,903,103
Long-term portion of operating lease liabilities	160,033	147,223	129,628	165,462	238,440	233,757	241,821	249,996	258,303	266,759	275,381	284,185	293,186	302,398	311,835
Long-term portion of contingent consideration	42,825	28,439	31,504	21,323	20,034	35,593	38,506	41,170	44,033	47,111	50,422	52,788	55,267	57,866	60,589
Deferred income taxes	818,622	760,044	850,921	1,013,742	1,022,480	1,160,240	1,208,422	1,382,020	1,579,810	1,791,829	2,017,160	2,191,619	2,376,116	2,573,728	2,785,350
Other long-term liabilities	416,851	455,888	421,080	417,640	524,438	550,660	578,193	607,103	637,458	669,331	702,797	737,937	774,834	813,575	854,254
<b>Total long-term liabilities</b>	<b>5,792,113</b>	<b>6,100,272</b>	<b>6,473,633</b>	<b>8,508,316</b>	<b>8,530,163</b>	<b>8,715,218</b>	<b>8,978,467</b>	<b>9,425,462</b>	<b>9,670,313</b>	<b>10,040,150</b>	<b>10,463,798</b>	<b>10,811,208</b>	<b>11,142,523</b>	<b>11,516,990</b>	<b>11,915,131</b>
<b>Total Liabilities</b>	<b>6,799,341</b>	<b>7,128,926</b>	<b>7,706,379</b>	<b>10,020,959</b>	<b>10,218,095</b>	<b>10,073,290</b>	<b>12,347,260</b>	<b>10,988,805</b>	<b>12,060,935</b>	<b>12,548,394</b>	<b>13,094,836</b>	<b>13,530,533</b>	<b>13,954,328</b>	<b>14,425,675</b>	<b>14,925,311</b>
<b>Equity</b>															
Common Equity	4,290,260	4,200,923	3,892,509	3,516,034	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945	3,560,945
Accumulated other comprehensive loss	(10,963)	(651)	39,584	(56,830)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)	(9,826)
Retained earnings	2,654,207	2,659,001	3,056,845	3,649,494	4,141,690	4,650,107	5,313,061	6,113,201	7,073,885	8,208,895	9,531,117	10,991,797	12,600,654	14,370,350	16,314,394
<b>Total Waste Connections' equity</b>	<b>6,933,504</b>	<b>6,859,273</b>	<b>6,988,938</b>	<b>7,108,698</b>	<b>7,692,809</b>	<b>8,201,226</b>	<b>8,864,180</b>	<b>9,664,320</b>	<b>10,625,004</b>	<b>11,760,014</b>	<b>13,082,236</b>	<b>14,542,916</b>	<b>16,151,773</b>	<b>17,921,469</b>	<b>19,865,513</b>
Noncontrolling interest in subsidiaries	4,850	4,165	4,607	4,946	4,972	5,003	5,037	5,074	5,113	5,156	5,201	5,250	5,301	5,354	5,409
<b>Total equity</b>	<b>6,938,354</b>	<b>6,863,438</b>	<b>6,993,545</b>	<b>7,113,644</b>	<b>7,697,781</b>	<b>8,206,228</b>	<b>8,869,217</b>	<b>9,669,394</b>	<b>10,630,118</b>	<b>11,765,170</b>	<b>13,087,437</b>	<b>14,548,166</b>	<b>16,157,074</b>	<b>17,926,823</b>	<b>19,870,923</b>
<b>Total liabilities and equity</b>	<b>13,737,695</b>	<b>13,992,364</b>	<b>14,699,924</b>	<b>17,134,603</b>	<b>17,915,876</b>	<b>18,279,518</b>	<b>21,216,477</b>	<b>20,658,198</b>	<b>22,691,053</b>	<b>24,313,565</b>	<b>26,182,273</b>	<b>28,078,699</b>	<b>30,111,402</b>	<b>32,352,497</b>	<b>34,796,234</b>

**Waste Connections**
*Historical Cash Flow Statement*

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022	2023
<b>Cash flows from operating activities</b>					
Net income	566,681	203,992	618,489	836,001	762,826
Loss on disposal of assets and impairments	60,592	445,647	27,727	9,519	38,877
Depreciation	618,396	621,102	673,730	763,285	845,638
Amortization of intangibles	125,522	131,302	139,279	155,675	157,573
Loss on early extinguishment of debt	-	-	115,288	-	-
Deferred income taxes, net of acquisitions	54,637	50,487	14,563	93,481	6,329
Current period provision for expected credit losses	11,973	15,509	9,719	17,353	17,430
Amortization of debt issuance costs	5,001	7,509	5,055	5,454	6,483
Share-based compensation	42,671	45,751	58,221	63,485	70,436
Interest accretion	16,426	17,205	15,970	17,668	22,720
Payment of contingent consideration	-	10,371	520	2,982	-
Adjustments to contingent consideration	1,498	18,418	2,954	1,030	30,367
Other	2,240	2,426	1,260	8,217	3,943
Accounts receivable, net	34,906	31,332	54,688	100,546	20,630
Prepaid expenses and other current assets	9,135	17,749	8,229	752	10,262
Accounts payable	71,147	148,362	66,752	192,850	32,327
Deferred revenue	19,156	14,981	31,707	42,252	26,519
Accrued liabilities	22,938	88,612	3,853	28,082	21,753
Capping, closure and post-closure expenditures	5,062	6,484	21,040	18,881	39,427
Other long-term liabilities	2,858	1,812	659	14,041	18,270
<b>Net cash provided by operating activities</b>	<b>1,540,547</b>	<b>1,408,521</b>	<b>1,698,229</b>	<b>2,022,492</b>	<b>2,126,817</b>
<b>Cash flows from investing activities</b>					
Payments for acquisitions, net of cash acquired	736,610	388,789	960,449	2,206,901	676,793
Capital expenditures for property and equipment	634,406	597,053	744,315	912,677	934,000
Investment in noncontrolling interests	25,000	-	25,000	-	-
Proceeds from disposal of assets	3,566	19,084	42,768	30,676	31,581
Other	1,873	11,777	6,486	1,731	1,867
<b>Net cash used in investing activities</b>	<b>1,426,006</b>	<b>1,046,043</b>	<b>1,693,482</b>	<b>3,087,171</b>	<b>1,581,079</b>
<b>Cash flows from financing activities</b>					
Proceeds from long-term debt	1,575,795	1,815,625	2,112,193	4,816,146	1,818,765
Principal payments on notes payable and long-term debt	1,470,711	1,542,958	1,893,100	3,073,985	2,052,153
Premiums paid on early extinguishment of debt	-	-	110,617	-	-
Payment of contingent consideration recorded at acquisition date	3,200	12,566	12,934	16,911	13,317
Change in book overdraft	2,564	1,096	367	1,076	790
Payment for repurchase of common shares	-	105,654	338,993	424,999	-
Payments for cash dividends	175,067	199,883	220,203	243,013	270,604
Tax withholdings net share settlements of equity-based compensation	17,660	23,446	18,606	18,358	31,009
Debt issuance costs	5,953	11,117	18,521	13,271	-
Proceeds from issuance of shares under employee share purchase plan	-	-	1,222	3,270	3,909
Proceeds from sale of common shares held in trust	4,036	679	430	660	794
<b>Net cash provided by/used in financing activities</b>	<b>95,894</b>	<b>78,224</b>	<b>499,496</b>	<b>1,028,463</b>	<b>544,405</b>
Effect of exchange rate changes on cash and cash equivalents	608	6,914	25	2,035	1,341
Net cash inflow/outflow	19,255	291,168	494,774	38,251	2,674
Beginning cash, cash equivalents, and restricted cash	403,966	423,221	714,389	219,615	181,364
<b>Ending cash, cash equivalents, and restricted cash</b>	<b>423,221</b>	<b>714,389</b>	<b>219,615</b>	<b>181,364</b>	<b>184,038</b>

**Waste Connections**

*Forecasted Cash Flow Statement*

<b>Fiscal Years Ending Dec. 31</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>	<b>2031E</b>	<b>2032E</b>	<b>2033E</b>
<b>Operating Activities</b>										
Net Income	976,041	1,160,221	1,326,895	1,516,795	1,720,357	1,936,701	2,104,200	2,281,338	2,471,068	2,674,249
Depreciation	894,757	926,352	958,307	990,705	1,023,623	1,057,133	1,091,302	1,126,192	1,161,862	1,198,369
Amortization of Intangibles	172,446	126,061	109,934	95,848	85,582	85,582	85,582	85,582	85,582	85,582
Accounts receivable	(182,245)	(85,042)	(77,772)	(83,589)	(89,873)	(96,664)	(69,072)	(72,390)	(75,869)	(79,518)
Prepaid expenses and other current assets	(43,087)	(20,419)	(18,674)	(20,070)	(21,579)	(23,210)	(16,585)	(17,381)	(18,217)	(19,093)
Other assets, net	(47,112)	(12,043)	(11,013)	(11,837)	(12,727)	(13,689)	(9,781)	(10,251)	(10,744)	(11,261)
Accounts payable	19,075	54,136	49,508	53,211	57,211	61,534	43,970	46,082	48,297	50,619
Deferred revenue	(316,433)	3,173	2,901	3,118	3,353	3,606	2,577	2,701	2,830	2,967
Accrued liabilities, net	61,320	47,689	43,612	46,874	50,398	54,206	38,733	40,594	42,545	44,591
Deferred income tax liabilities	<b>137,760</b>	<b>48,182</b>	<b>173,599</b>	<b>197,789</b>	<b>212,019</b>	<b>225,332</b>	<b>174,459</b>	<b>184,497</b>	<b>197,612</b>	<b>211,622</b>
Other LT liabilities	26,222	27,533	28,910	30,355	31,873	33,467	35,140	36,897	38,742	40,679
<b>Net Cash from Operating Activities</b>	<b>1,698,744</b>	<b>2,275,842</b>	<b>2,586,207</b>	<b>2,819,199</b>	<b>3,060,237</b>	<b>3,323,998</b>	<b>3,480,525</b>	<b>3,703,859</b>	<b>3,943,707</b>	<b>4,198,806</b>
<b>Investing Activities</b>										
Capex	(1,150,000)	(1,184,500)	(1,220,035)	(1,256,636)	(1,294,335)	(1,333,165)	(1,373,160)	(1,414,355)	(1,456,786)	(1,500,489)
Restricted cash and investments	(8,799)	(9,239)	(9,701)	(10,186)	(10,696)	(11,231)	(11,792)	(12,382)	(13,001)	(13,651)
Operating lease right-of-use assets	(9,244)	(9,349)	(9,479)	(9,631)	(9,804)	(9,997)	(10,208)	(10,436)	(10,681)	(10,942)
<b>Net Cash from Investing Activities</b>	<b>(1,168,043)</b>	<b>(1,203,089)</b>	<b>(1,239,215)</b>	<b>(1,276,453)</b>	<b>(1,314,835)</b>	<b>(1,354,393)</b>	<b>(1,395,160)</b>	<b>(1,437,173)</b>	<b>(1,480,467)</b>	<b>(1,525,082)</b>
<b>Financing Activities</b>										
Book overdraft	3,148	1,473	1,347	1,448	1,557	1,675	1,197	1,254	1,314	1,378
Current portion of operating lease liabilities	15,522	1,658	1,681	1,708	1,738	1,772	1,810	1,850	1,894	1,940
Current portion of contingent consideration	(93,384)	-	-	-	3,366	-	-	-	-	-
Long term portion of contingent consideration	15,559	2,913	2,664	2,863	3,078	3,311	2,366	2,479	2,599	2,724
Current portion of long-term debt and notes payable	(19,107)	1,902,591	(1,904,499)	720,920	-	-	-	-	-	-
Long-term portion of debt and notes payable	<b>10,196</b>	<b>176,559</b>	<b>233,647</b>	<b>5,538</b>	<b>114,411</b>	<b>152,917</b>	<b>126,642</b>	<b>98,440</b>	<b>126,302</b>	<b>133,681</b>
Long-term portion of operating lease liabilities	<b>(4,683)</b>	<b>8,064</b>	<b>8,175</b>	<b>8,307</b>	<b>8,456</b>	<b>8,622</b>	<b>8,804</b>	<b>9,001</b>	<b>9,212</b>	<b>9,437</b>
Common Equity	-	-	-	-	-	-	-	-	-	-
Dividends paid	(293,665)	(323,303)	(352,789)	(382,141)	(411,375)	(440,505)	(469,543)	(498,501)	(527,390)	(556,219)
Share repurchases	(173,929)	(173,929)	(173,929)	(173,929)	(173,929)	(173,929)	(173,929)	(173,929)	(173,929)	(173,929)
<b>Net Cash from Financing Activities</b>	<b>(540,343)</b>	<b>1,596,025</b>	<b>(2,183,703)</b>	<b>184,712</b>	<b>(452,698)</b>	<b>(446,137)</b>	<b>(502,654)</b>	<b>(559,405)</b>	<b>(559,998)</b>	<b>(580,989)</b>
<b>Net Cash</b>	(9,642)	2,668,779	(836,712)	1,727,458	1,292,703	1,523,469	1,582,711	1,707,282	1,903,242	2,092,735
<b>Beginning Cash</b>	78,399.00	68,757	2,737,536	1,900,824	3,628,281	4,920,985	6,444,454	8,027,165	9,734,446	11,637,689
<b>Ending Cash</b>	68,757	2,737,536	1,900,824	3,628,281	4,920,985	6,444,454	8,027,165	9,734,446	11,637,689	13,730,423

Waste Connections

Common Size Income Statement

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
<b>Revenues</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of operations	59.36%	60.17%	59.40%	60.12%	59.14%	59.64%	59.64%	59.64%	59.64%	59.64%	59.64%	59.64%	59.64%	59.64%	59.64%
Selling, general, and administrative	10.14%	9.87%	9.95%	9.66%	9.96%	9.92%	9.92%	9.92%	9.92%	9.92%	9.92%	9.92%	9.92%	9.92%	9.92%
Depreciation	11.48%	11.40%	10.95%	10.58%	10.54%	11.15%	11.55%	11.95%	12.35%	12.76%	13.18%	13.60%	14.04%	14.48%	14.94%
Amortization of Intangibles	2.33%	2.41%	2.26%	2.16%	1.96%	1.91%	1.29%	1.05%	0.86%	0.72%	0.67%	0.64%	0.61%	0.58%	0.56%
Impairments and other operating items	1.15%	8.57%	0.53%	0.25%	2.98%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%
<b>Operating income/loss</b>	<b>15.55%</b>	<b>7.57%</b>	<b>16.90%</b>	<b>17.22%</b>	<b>15.41%</b>	<b>17.38%</b>	<b>18.42%</b>	<b>18.97%</b>	<b>19.47%</b>	<b>19.92%</b>	<b>20.27%</b>	<b>20.41%</b>	<b>20.56%</b>	<b>20.70%</b>	<b>20.85%</b>
Interest expense	2.73%	3.01%	3.02%	3.75%	5.10%	6.69%	6.69%	8.68%	7.10%	7.80%	7.92%	8.08%	8.21%	8.31%	8.45%
Interest income	0.18%	0.10%	0.05%	0.08%	0.12%	0.15%	0.13%	1.41%	0.95%	1.61%	2.02%	2.50%	2.96%	3.42%	3.89%
Other income/expense, net	0.11%	-0.03%	0.10%	0.04%	0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Loss on early extinguishment of debt	0.00%	0.00%	-1.87%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income/loss before tax provision	13.10%	4.66%	12.53%	14.54%	12.26%	13.52%	14.86%	15.90%	16.99%	18.01%	18.94%	19.66%	20.36%	21.06%	21.77%
Income tax provision	2.58%	0.93%	2.83%	3.95%	4.10%	4.51%	5.36%	6.13%	7.00%	7.94%	8.94%	9.71%	10.53%	11.41%	12.34%
Net income/loss	10.52%	3.75%	10.05%	11.59%	9.51%	10.83%	11.90%	12.73%	13.60%	14.42%	15.17%	15.74%	16.30%	16.87%	17.43%
Net income attributable to NCI	0.00%	0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Net income attributable to Waste Connections</b>	<b>10.52%</b>	<b>3.76%</b>	<b>10.05%</b>	<b>11.59%</b>	<b>9.51%</b>	<b>12.17%</b>	<b>14.46%</b>	<b>16.54%</b>	<b>18.91%</b>	<b>21.45%</b>	<b>24.14%</b>	<b>26.23%</b>	<b>28.44%</b>	<b>30.80%</b>	<b>33.34%</b>



**Waste Connections**  
Common Size Balance Sheet

<b>Fiscal Years Ending Dec. 31</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>	<b>2031E</b>	<b>2032E</b>	<b>2033E</b>
<b>Assets</b>															
<i>Current Assets:</i>															
Cash and cash equivalents	6.06%	11.33%	2.40%	1.09%	0.98%	0.76%	28.08%	18.23%	32.54%	41.25%	50.48%	60.06%	69.56%	79.43%	89.50%
Accounts receivable, net of allowance for credit losses	12.30%	11.57%	11.54%	11.56%	10.68%	11.53%	11.53%	11.53%	11.53%	11.53%	11.53%	11.53%	11.53%	11.53%	11.53%
Prepaid expenses and other current assets	2.62%	2.95%	2.86%	2.84%	2.57%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%	2.77%
<b>Total current assets</b>	<b>20.98%</b>	<b>25.86%</b>	<b>16.79%</b>	<b>15.50%</b>	<b>14.23%</b>	<b>15.06%</b>	<b>42.38%</b>	<b>32.53%</b>	<b>46.84%</b>	<b>55.55%</b>	<b>64.78%</b>	<b>74.36%</b>	<b>83.86%</b>	<b>93.73%</b>	<b>103.80%</b>
<i>Long-term Assets:</i>															
Restricted cash and investments	2.74%	2.84%	2.13%	2.37%	2.19%	2.05%	1.99%	1.95%	1.92%	1.88%	1.85%	1.85%	1.86%	1.86%	1.87%
Property and equipment, net	102.37%	97.03%	93.02%	96.38%	90.11%	93.29%	96.51%	99.77%	103.08%	106.46%	109.90%	113.41%	117.01%	120.68%	124.45%
Operating lease right-of-use assets	3.40%	3.14%	2.61%	2.67%	3.26%	3.38%	3.50%	3.61%	3.73%	3.86%	3.98%	4.11%	4.24%	4.37%	4.51%
Goodwill	102.27%	105.15%	100.59%	95.71%	92.30%	92.30%	92.30%	92.30%	92.30%	92.30%	92.30%	92.30%	92.30%	92.30%	92.30%
Intangible assets, net	21.58%	21.21%	21.96%	23.21%	19.99%	17.84%	16.27%	14.90%	13.70%	12.64%	11.57%	10.50%	9.44%	8.37%	7.30%
Other assets, net	1.60%	1.70%	1.87%	1.75%	1.25%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%	1.63%
<b>Total long-term assets</b>	<b>233.96%</b>	<b>231.07%</b>	<b>222.18%</b>	<b>222.09%</b>	<b>209.10%</b>	<b>210.95%</b>	<b>212.98%</b>	<b>215.24%</b>	<b>217.76%</b>	<b>220.48%</b>	<b>223.29%</b>	<b>226.13%</b>	<b>229.07%</b>	<b>232.11%</b>	<b>235.26%</b>
<b>Total Assets</b>	<b>254.94%</b>	<b>256.93%</b>	<b>238.97%</b>	<b>237.59%</b>	<b>223.34%</b>	<b>227.87%</b>	<b>264.48%</b>	<b>257.52%</b>	<b>282.86%</b>	<b>303.09%</b>	<b>326.38%</b>	<b>350.02%</b>	<b>375.36%</b>	<b>403.30%</b>	<b>433.76%</b>
<b>Liabilities and Equity</b>															
<i>Current Liabilities:</i>															
Accounts payable	8.11%	5.34%	6.39%	8.86%	8.01%	7.34%	7.34%	7.34%	7.34%	7.34%	7.34%	7.34%	7.34%	7.34%	7.34%
Book overdraft	0.30%	0.31%	0.27%	0.22%	0.19%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%
Deferred revenue	4.02%	4.29%	4.45%	4.51%	4.43%	4.34%	4.34%	4.34%	4.34%	4.34%	4.34%	4.34%	4.34%	4.34%	4.34%
Accrued liabilities	5.22%	7.44%	7.20%	5.98%	6.50%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%
Current portion of operating lease liabilities	0.56%	0.56%	0.62%	0.49%	0.41%	0.53%	0.51%	0.49%	0.48%	0.46%	0.44%	0.44%	0.43%	0.42%	0.42%
Current portion of contingent consideration	0.49%	0.80%	1.02%	0.83%	1.18%	0.03%	0.03%	0.03%	0.02%	0.07%	0.07%	0.06%	0.06%	0.06%	0.05%
Current portion of long-term debt and notes payable	0.01%	0.15%	0.10%	0.09%	0.33%	0.82%	197.54%	0.53%	65.70%	61.40%	57.37%	54.80%	52.34%	49.99%	47.74%
<b>Total current liabilities</b>	<b>18.69%</b>	<b>18.89%</b>	<b>20.04%</b>	<b>20.97%</b>	<b>21.04%</b>	<b>151.78%</b>	<b>363.66%</b>	<b>163.14%</b>	<b>241.31%</b>	<b>245.04%</b>	<b>248.88%</b>	<b>249.18%</b>	<b>249.67%</b>	<b>250.35%</b>	<b>251.19%</b>
<i>Long-term Liabilities:</i>															
Long-term portion of debt and notes payable	80.79%	86.46%	81.94%	95.54%	83.83%	74.73%	70.89%	68.54%	64.14%	60.90%	58.10%	56.45%	54.62%	53.03%	51.51%
Long-term portion of operating lease liabilities	2.97%	2.70%	2.11%	2.29%	2.97%	2.59%	2.48%	2.40%	2.32%	2.24%	2.16%	2.13%	2.10%	2.06%	2.03%
Long-term portion of contingent consideration	0.79%	0.52%	0.51%	0.30%	0.25%	0.39%	0.39%	0.39%	0.39%	0.39%	0.39%	0.39%	0.39%	0.39%	0.39%
Deferred income taxes	15.19%	13.96%	13.83%	14.06%	12.75%	12.87%	12.39%	13.26%	14.17%	15.02%	15.80%	16.40%	16.98%	17.57%	18.16%
Other long-term liabilities	7.74%	8.37%	6.85%	5.79%	6.54%	6.11%	5.93%	5.82%	5.72%	5.61%	5.50%	5.52%	5.54%	5.55%	5.57%
<b>Total long-term liabilities</b>	<b>107.49%</b>	<b>112.01%</b>	<b>105.24%</b>	<b>117.98%</b>	<b>106.34%</b>	<b>96.70%</b>	<b>92.09%</b>	<b>90.42%</b>	<b>86.73%</b>	<b>84.17%</b>	<b>81.96%</b>	<b>80.89%</b>	<b>79.62%</b>	<b>78.60%</b>	<b>77.67%</b>
<b>Total Liabilities</b>	<b>126.18%</b>	<b>130.90%</b>	<b>125.28%</b>	<b>138.95%</b>	<b>127.38%</b>	<b>111.77%</b>	<b>126.64%</b>	<b>105.41%</b>	<b>108.18%</b>	<b>105.19%</b>	<b>102.57%</b>	<b>101.23%</b>	<b>99.72%</b>	<b>98.46%</b>	<b>97.29%</b>
<b>Equity</b>															
Common Equity	79.62%	77.14%	63.28%	48.75%	44.39%	39.51%	36.52%	34.16%	31.94%	29.85%	27.89%	26.64%	25.45%	24.30%	23.21%
Accumulated other comprehensive loss	-0.20%	-0.01%	0.64%	-0.79%	-0.12%	-0.18%	-0.17%	-0.16%	-0.15%	-0.14%	-0.13%	-0.12%	-0.12%	-0.11%	-0.11%
Retained earnings	49.26%	48.82%	49.69%	50.60%	51.63%	51.60%	54.49%	58.64%	63.45%	68.82%	74.65%	82.24%	90.04%	98.08%	106.34%
<b>Total Waste Connections' equity</b>	<b>128.67%</b>	<b>125.95%</b>	<b>113.62%</b>	<b>98.57%</b>	<b>95.90%</b>	<b>91.00%</b>	<b>90.92%</b>	<b>92.71%</b>	<b>95.30%</b>	<b>98.59%</b>	<b>102.47%</b>	<b>108.80%</b>	<b>115.42%</b>	<b>122.32%</b>	<b>129.49%</b>
Noncontrolling interest in subsidiaries	0.09%	0.08%	0.07%	0.07%	0.06%	0.06%	0.05%	0.05%	0.05%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%
<b>Total equity</b>	<b>128.76%</b>	<b>126.03%</b>	<b>113.69%</b>	<b>98.64%</b>	<b>95.96%</b>	<b>91.05%</b>	<b>90.97%</b>	<b>92.76%</b>	<b>95.34%</b>	<b>98.63%</b>	<b>102.51%</b>	<b>108.84%</b>	<b>115.46%</b>	<b>122.35%</b>	<b>129.52%</b>
<b>Total liabilities and equity</b>	<b>254.94%</b>	<b>256.93%</b>	<b>238.97%</b>	<b>237.59%</b>	<b>223.34%</b>	<b>202.83%</b>	<b>217.61%</b>	<b>198.17%</b>	<b>203.52%</b>	<b>203.82%</b>	<b>205.08%</b>	<b>210.07%</b>	<b>215.18%</b>	<b>220.81%</b>	<b>226.81%</b>

**Waste Connections**  
Value Driver Estimation

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
<b>NOPLAT:</b>															
Revenues	5,388,679	5,445,990	6,151,361	7,211,859	8,021,951	9,012,389	9,749,915	10,424,392	11,149,313	11,928,730	12,767,043	13,366,068	13,993,864	14,651,834	15,341,452
Less: Cost of operations	3,198,757	3,276,808	3,654,074	4,336,012	4,744,513	5,374,990	5,814,850	6,217,109	6,649,451	7,114,296	7,614,266	7,971,524	8,345,942	8,738,356	9,149,644
Less: Selling, general, and administrative	546,278	537,632	612,337	696,467	799,119	893,722	966,860	1,033,745	1,105,632	1,182,924	1,266,056	1,325,459	1,387,715	1,452,963	1,521,350
Less: Depreciation	618,396	621,102	673,730	763,285	845,638	894,757	926,352	958,307	990,705	1,023,623	1,057,133	1,091,302	1,126,192	1,161,862	1,198,369
Less: Amortization of Intangibles	125,522	131,302	139,279	155,675	157,573	172,446	126,061	109,934	95,848	85,582	85,582	85,582	85,582	85,582	85,582
Add: Implied interest on operating leases	9,381	8,751	8,221	9,856	13,403	13,877	14,355	14,841	15,334	15,836	16,347	16,870	17,404	17,951	18,511
<b>EBITA</b>	<b>909,107</b>	<b>887,897</b>	<b>1,080,162</b>	<b>1,270,276</b>	<b>1,488,511</b>	<b>1,690,350</b>	<b>1,930,147</b>	<b>2,120,138</b>	<b>2,323,010</b>	<b>2,538,140</b>	<b>2,760,353</b>	<b>2,909,071</b>	<b>3,065,838</b>	<b>3,231,023</b>	<b>3,405,019</b>
<b>Less: Adjusted Taxes</b>															
Marginal Tax Rate	19.10%	18.50%	19.40%	21.20%	21.40%	19.92%	19.92%	19.92%	19.92%	19.92%	19.92%	19.92%	19.92%	19.92%	19.92%
Income tax provision	139,210	49,922	152,253	212,962	220,675	242,791	288,606	330,067	377,305	427,941	481,757	523,422	567,486	614,681	665,223
Add: Tax shield operating lease interest	1,792	1,619	1,595	2,090	2,868	2,764	2,860	2,956	3,054	3,154	3,256	3,361	3,467	3,576	3,687
Add: Tax shield on interest expense	28,147	30,039	31,582	42,894	58,773	71,771	71,823	93,143	76,216	83,742	85,029	86,711	88,123	89,251	90,666
Add: Tax on loss on early extinguishment of debt	-	-	22,366	-	-	-	-	-	-	-	-	-	-	-	-
Add: Tax on impairments and other operating items	11,832	86,343	6,269	3,865	51,102	22,012	23,814	25,461	27,232	29,135	31,183	32,646	34,179	35,786	37,471
Less: Tax on interest income	1,867	972	566	1,261	2,001	2,621	2,617	29,295	21,063	38,375	51,362	66,653	82,540	99,674	118,767
Less: Tax on other non-operating income	1,089	(258)	1,219	669	2,671	-	-	-	-	-	-	-	-	-	-
<b>Total Adjusted Taxes</b>	<b>178,024</b>	<b>167,209</b>	<b>212,280</b>	<b>259,880</b>	<b>328,747</b>	<b>336,718</b>	<b>384,485</b>	<b>422,331</b>	<b>462,744</b>	<b>505,598</b>	<b>549,862</b>	<b>579,487</b>	<b>610,715</b>	<b>643,620</b>	<b>678,280</b>
Change in deferred taxes	54,637	(58,578)	90,877	162,821	8,738	137,760	48,182	173,599	197,789	212,019	225,332	174,459	184,497	197,612	211,622
<b>NOPLAT</b>	<b>785,720</b>	<b>662,110</b>	<b>958,759</b>	<b>1,173,217</b>	<b>1,168,502</b>	<b>1,491,393</b>	<b>1,593,843</b>	<b>1,871,405</b>	<b>2,058,055</b>	<b>2,244,562</b>	<b>2,435,823</b>	<b>2,504,043</b>	<b>2,639,620</b>	<b>2,785,015</b>	<b>2,938,361</b>
<b>Invested Capital (IC):</b>															
Normal Cash	52,664	53,224	60,118	70,482	78,399	88,079	95,286	101,878	108,963	116,580	124,773	130,627	136,763	143,193	149,933
Add: Accounts receivable, net of allowance for credit losses	662,808	630,264	709,614	833,862	856,953	1,039,198	1,124,240	1,202,013	1,285,602	1,375,475	1,472,139	1,541,211	1,613,601	1,689,470	1,768,988
Add: Prepaid expenses and other current assets	141,052	160,714	175,722	205,146	206,433	249,520	269,939	288,613	308,684	330,263	353,473	370,057	387,439	405,656	424,749
Less: Accounts payable	436,970	290,820	392,868	638,728	642,455	661,530	715,666	765,174	818,385	875,596	937,130	981,100	1,027,182	1,075,478	1,126,098
Less: Deferred revenue	216,443	233,596	273,720	325,002	355,203	38,770	41,943	44,844	47,962	51,315	54,922	57,499	60,199	63,030	65,996
Less: Accrued liabilities	281,308	404,923	442,596	431,247	521,428	582,748	630,437	674,050	720,923	771,321	825,527	864,261	904,854	947,399	991,991
<b>NWC</b>	<b>(78,197)</b>	<b>(85,137)</b>	<b>(163,730)</b>	<b>(285,487)</b>	<b>(377,301)</b>	<b>93,749</b>	<b>101,420</b>	<b>108,436</b>	<b>115,977</b>	<b>124,085</b>	<b>132,805</b>	<b>139,036</b>	<b>145,567</b>	<b>152,411</b>	<b>159,585</b>
Add: Net PPE	5,516,347	5,284,506	5,721,949	6,950,915	7,228,331	7,483,574	7,741,721	8,003,449	8,269,380	8,540,092	8,816,124	9,097,982	9,386,146	9,681,069	9,983,190
Add: PV of operating leases	183,220	170,923	160,567	192,506	261,782	271,026	280,375	289,854	299,485	309,289	319,286	329,493	339,930	350,611	361,552
Add: Intangible assets, net	1,163,063	1,155,079	1,350,597	1,673,917	1,603,541	1,431,095	1,305,034	1,195,100	1,099,252	1,013,670	928,088	842,506	756,924	671,342	585,760
Add: Other assets, net	85,954	92,323	115,203	126,497	100,048	147,160	159,203	170,216	182,053	194,780	208,469	218,250	228,501	239,245	250,505
Less: Other long-term liabilities	416,851	455,888	421,080	417,640	524,438	550,660	578,193	607,103	637,458	669,331	702,797	737,937	774,834	813,575	854,254
<b>IC</b>	<b>6,453,536</b>	<b>6,161,806</b>	<b>6,763,506</b>	<b>8,240,708</b>	<b>8,291,963</b>	<b>8,875,944</b>	<b>9,009,561</b>	<b>9,159,953</b>	<b>9,328,690</b>	<b>9,512,585</b>	<b>9,701,974</b>	<b>9,889,331</b>	<b>10,082,233</b>	<b>10,281,102</b>	<b>10,486,338</b>
<b>Free Cash Flow (FCF):</b>															
NOPLAT	785,720	662,110	958,759	1,173,217	1,168,502	1,491,393	1,593,843	1,871,405	2,058,055	2,244,562	2,435,823	2,504,043	2,639,620	2,785,015	2,938,361
Change in IC		(291,730)	601,700	1,477,202	51,255	583,981	133,617	150,392	168,737	183,896	189,389	187,357	192,902	198,869	205,235
<b>FCF</b>	<b>953,840</b>	<b>357,059</b>	<b>(303,985)</b>	<b>1,117,247</b>	<b>907,412</b>	<b>1,460,226</b>	<b>1,721,013</b>	<b>1,889,319</b>	<b>2,060,666</b>	<b>2,246,434</b>	<b>2,435,823</b>	<b>2,316,686</b>	<b>2,446,717</b>	<b>2,586,146</b>	<b>2,733,126</b>
<b>Return on Invested Capital (ROIC):</b>															
NOPLAT	785,720	662,110	958,759	1,173,217	1,168,502	1,491,393	1,593,843	1,871,405	2,058,055	2,244,562	2,435,823	2,504,043	2,639,620	2,785,015	2,938,361
Beginning IC		6,453,536	6,161,806	6,763,506	8,240,708	8,291,963	8,875,944	9,009,561	9,159,953	9,328,690	9,512,585	9,701,974	9,889,331	10,082,233	10,281,102
<b>ROIC</b>		<b>10.26%</b>	<b>15.56%</b>	<b>17.35%</b>	<b>14.18%</b>	<b>17.99%</b>	<b>17.96%</b>	<b>20.77%</b>	<b>22.47%</b>	<b>24.06%</b>	<b>25.61%</b>	<b>25.81%</b>	<b>26.69%</b>	<b>27.62%</b>	<b>28.58%</b>
<b>Economic Profit (EP):</b>															
Beginning IC		6,453,536	6,161,806	6,763,506	8,240,708	8,291,963	8,875,944	9,009,561	9,159,953	9,328,690	9,512,585	9,701,974	9,889,331	10,082,233	10,281,102
x (ROIC - WACC)	-6.59%	3.67%	8.97%	10.76%	7.59%	11.40%	11.37%	14.18%	15.88%	17.47%	19.02%	19.22%	20.10%	21.03%	21.99%
<b>EP</b>		<b>236,894</b>	<b>552,764</b>	<b>727,577</b>	<b>625,531</b>	<b>945,045</b>	<b>1,009,017</b>	<b>1,277,776</b>	<b>1,454,517</b>	<b>1,629,905</b>	<b>1,809,049</b>	<b>1,864,791</b>	<b>1,988,023</b>	<b>2,120,708</b>	<b>2,260,951</b>

## Waste Connections

### Weighted Average Cost of Capital (WACC) Estimation

#### Cost of Equity:

Risk-Free Rate	4.25%
Beta	0.68
Equity Risk Premium	5.00%
<b>Cost of Equity</b>	<b>7.65%</b>

#### ASSUMPTIONS:

10-year Treasury bond as of 3/25/24

5-year weekly beta `

Henry Fund consensus

#### Cost of Debt:

Risk-Free Rate	4.25%
Implied Default Premium	0.87%
Pre-Tax Cost of Debt	5.12%
Marginal Tax Rate	19.92%
<b>After-Tax Cost of Debt</b>	<b>4.10%</b>

YTM on company's 10-year corporate bond

#### Market Value of Common Equity:

Total Shares Outstanding	257,600
Current Stock Price	\$172.01
<b>MV of Equity</b>	<b>44,309,858</b>

#### MV Weights

85.86%

#### Market Value of Debt:

Short-Term Debt	14,855
Current Portion of LTD	58,995
Long-Term Debt	6,963,211
PV of Operating Leases	261,782
<b>MV of Total Debt</b>	<b>7,298,843</b>

14.14%

#### Market Value of the Firm

51,608,701.39

100.00%

Estimated WACC

6.59%

## Waste Connections

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

### Key Inputs:

CV Growth of NOPLAT	2.50%
CV Year ROIC	28.58%
WACC	6.59%
Cost of Equity	7.65%

Fiscal Years Ending Dec. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
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### DCF Model:

Free Cash Flow (FCF)	907,412	1,460,226	1,721,013	1,889,319	2,060,666	2,246,434	2,316,686	2,446,717	2,586,146	2,733,126
Continuing Value (CV)										65,576,170
PV of FCF	851,320	1,285,275	1,421,178	1,463,719	1,497,780	1,531,871	1,482,121	1,468,549	1,456,283	36,926,556

Value of Operating Assets:	49,384,652
Non-Operating Adjustments	
Add: Excess cash	-
Add: Restricted cash and investments	184,788
Less: ROU Assets	(261,782)
Less: Book Overdraft	(14,855)
Less: Current portion of LTD	(58,995)
Less: LTD	(6,963,211)
Value of Equity	42,270,597
Shares Outstanding	257,600
Intrinsic Value of Last FYE	\$ 164.09
<b>Implied Price as of Today</b>	<b>\$ 166.87</b>

### EP Model:

Economic Profit (EP)	945,045	1,009,017	1,277,776	1,454,517	1,629,905	1,809,049	1,864,791	1,988,023	2,120,708	2,260,951
Continuing Value (CV)										55,295,067
PV of EP	886,626	888,126	1,055,161	1,126,863	1,184,685	1,233,613	1,193,017	1,193,235	1,194,191	31,137,171

Total PV of EP	41,092,689
Invested Capital (last FYE)	8,291,963
Value of Operating Assets:	49,384,652
Non-Operating Adjustments	
Add: Excess cash	-
Add: Restricted cash and investments	184,788
Less: ROU Assets	(261,782)
Less: Book Overdraft	(14,855)
Less: Current portion of LTD	(58,995)
Less: LTD	(6,963,211)
Value of Equity	42,270,597
Shares Outstanding	257,600
Intrinsic Value of Last FYE	\$ 164.09
<b>Implied Price as of Today</b>	<b>\$ 166.87</b>

## Waste Connections

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

<i>Fiscal Years Ending</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
EPS	\$ 3.80	\$ 4.53	\$ 5.20	\$ 5.96	\$ 6.78	\$ 7.66	\$ 8.35	\$ 9.07	\$ 9.85	\$ 10.69
<b>Key Assumptions</b>										
CV growth of EPS	2.50%									
CV Year ROE	14.92%									
Cost of Equity	7.65%									
<b>Future Cash Flows</b>										
P/E Multiple (CV Year)										16.16
EPS (CV Year)										\$ 10.69
Future Stock Price										\$ 172.71
Dividends Per Share	1.14	1.26	1.38	1.5	1.62	1.74	1.86	1.98	2.10	
Discounted Cash Flows	1.09	1.16	1.22	1.27	1.32	1.36	1.39	1.42	1.44	\$ 118.75
Intrinsic Value as of Last FYE	\$ 130.41									
<b>Implied Price as of Today</b>	<b>\$ 132.62</b>									

## Waste Connections

### Relative Valuation Models

Ticker	Company	Price	EPS	EPS	P/E 24	P/E 25	EV	EBITDA	Multiples
			2024E	2025E			2024E	2024E	2024E
GFL	GFL Environmental	\$33.60	\$0.88	\$1.11	38.18	30.27	19,540	1,642	11.90
RSG	Republic Services	\$188.92	\$6.00	\$6.72	31.49	28.11	72,825	4,855	15.00
WM	Waste Management	\$211.11	\$6.89	\$7.78	30.64	27.13	102,224	6,389	16.00
CWST	Casella Waste Systems	\$95.04	\$0.79	\$1.22	120.30	77.90	6,140	357	17.20
			Average		<b>55.15</b>	<b>40.85</b>			<b>15.03</b>
WCN	Waste Connections	\$172.01	\$3.80	\$4.53	45.3	38.0	60,583	3,256	18.6

### Implied Relative Value:

P/E (EPS24)	\$ 209.38
P/E (EPS25)	\$ 185.07
EV/EBITDA 2024	\$ 164.02



**Waste Connections**  
Key Management Ratios

<b>Fiscal Years Ending Dec. 31</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>	<b>2031E</b>	<b>2032E</b>	<b>2033E</b>
<b>Liquidity Ratios:</b>															
Current Ratio (Current Assets / Current Liabilities)	1.12	1.37	0.84	0.74	0.68	1.00	1.23	2.17	2.18	2.64	3.14	3.65	4.17	4.72	5.29
Cash Ratio (Cash & Cash Equivalents / Current Liabilities)	0.32	0.60	0.12	0.05	0.05	0.05	0.81	1.22	1.52	1.96	2.45	2.95	3.46	4.00	4.56
Cash to Current Assets	0.29	0.44	0.14	0.07	0.07	0.05	0.66	0.56	0.69	0.74	0.78	0.81	0.83	0.85	0.86
<b>Asset-Management Ratios:</b>															
Total Assets Turnover (Sales / Avg Total Assets)		0.39	0.43	0.45	0.46	0.50	0.49	0.50	0.51	0.51	0.51	0.49	0.48	0.47	0.46
Current Assets Turnover (Sales / Avg Current Assets)		4.29	5.04	6.71	7.10	7.21	3.55	2.77	2.59	2.01	1.71	1.47	1.29	1.15	1.03
Payables Turnover (Cost of Operations / Avg Accts Payable)		14.97	17.99	13.98	12.52	13.82	14.16	14.08	14.08	14.08	14.09	13.94	13.94	13.94	13.94
<b>Financial Leverage Ratios:</b>															
Debt to Assets (Total Debt / Total Assets)	0.32	0.34	0.34	0.40	0.38	0.37	0.42	0.35	0.35	0.33	0.31	0.29	0.28	0.26	0.25
Debt to Equity (Total Debt / Total Equity)	0.63	0.69	0.72	0.97	0.88	0.82	0.99	0.74	0.74	0.68	0.62	0.57	0.52	0.47	0.43
Debt to Capital (Total Debt / (Total Debt + Total Equity))	0.39	0.41	0.42	0.49	0.47	0.45	0.50	0.43	0.43	0.40	0.38	0.36	0.34	0.32	0.30
Debt to EBITDA (Total Debt / EBITDA)	2.49	3.63	2.38	2.75	2.48	2.07	2.37	1.75	1.75	1.63	1.52	1.47	1.41	1.36	1.31
<b>Profitability Ratios:</b>															
Return on Equity (NI/Beg TSE)		2.95%	9.00%	11.95%	10.72%	12.68%	14.14%	14.96%	15.69%	16.18%	16.46%	16.08%	15.68%	15.29%	14.92%
Return on Assets (Net Income / Total Assets)	4.13%	1.46%	4.20%	4.88%	4.26%	5.34%	5.47%	6.42%	6.68%	7.08%	7.40%	7.49%	7.58%	7.64%	7.69%
Profit Margin (Net Income / Sales)	10.52%	3.76%	10.05%	11.59%	9.51%	10.83%	11.90%	12.73%	13.60%	14.42%	15.17%	15.74%	16.30%	16.86%	17.43%
<b>Payout Policy Ratios:</b>															
Dividend Payout Ratio (Dividend/EPS)	30.93%	97.44%	35.65%	29.08%	35.47%	30.03%	27.82%	26.54%	25.15%	23.88%	22.71%	22.29%	21.82%	21.32%	20.78%
Total Payout Ratio ((Divs. + Repurchases)/NI)	30.88%	149.28%	90.48%	79.94%	35.48%	47.91%	42.86%	39.70%	36.66%	34.02%	31.73%	30.58%	29.48%	28.38%	27.30%
<b>Margins</b>															
Gross Margin	40.64%	39.83%	40.60%	39.88%	40.86%	40.36%	40.36%	40.36%	40.36%	40.36%	40.36%	40.36%	40.36%	40.36%	40.36%
Operating Margin	15.55%	7.57%	16.90%	17.22%	15.41%	17.38%	18.42%	18.97%	19.47%	19.92%	20.27%	20.41%	20.56%	20.70%	20.85%
Interest Coverage Ratio	6.17	5.47	6.64	6.28	5.42	4.69	5.35	4.53	6.07	6.04	6.47	6.68	6.93	7.21	7.48

**Waste Connections***Effects of Share Repurchases on Common Stock Account and Number of Shares Outstanding*

Cost of Equity: 7.65%

Current Stock Price: \$172.01

<b>Fiscal Years Ending Dec. 31</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>	<b>2031E</b>	<b>2032E</b>	<b>2033E</b>
Share Repurchases (\$)	173,929	173,929	173,929	173,929	173,929	173,929	173,929	173,929	173,929	173,929
Expected Price of Repurchased Shares:	\$ 172.01	\$ 184.03	\$ 196.90	\$ 210.66	\$ 225.39	\$ 241.14	\$ 258.00	\$ 276.03	\$ 295.32	\$ 315.97
<b>Number of Shares Repurchased:</b>	<b>1,011</b>	<b>945</b>	<b>883</b>	<b>826</b>	<b>772</b>	<b>721</b>	<b>674</b>	<b>630</b>	<b>589</b>	<b>550</b>
Shares Outstanding (beginning of the year)	257,600	256,589	255,644	254,761	253,935	253,164	252,442	251,768	251,138	250,549
Less: Shares Repurchased in Treasury	1,011	945	883	826	772	721	674	630	589	550
<b>Shares Outstanding (end of the year)</b>	<b>256,589</b>	<b>255,644</b>	<b>254,761</b>	<b>253,935</b>	<b>253,164</b>	<b>252,442</b>	<b>251,768</b>	<b>251,138</b>	<b>250,549</b>	<b>249,999</b>

**Waste Connections**

*Sensitivity Tables*

DCF		Risk Free Rate						
166.87		3.50%	3.75%	4.00%	4.25%	4.50%	4.75%	5.00%
CV of NOPLAT	2.20%	192.38	179.84	168.61	158.47	149.29	140.92	133.28
	2.30%	196.37	183.32	171.64	161.14	151.65	143.02	135.14
	2.40%	200.59	186.98	174.83	163.94	154.11	145.20	137.08
	2.50%	205.06	190.83	178.19	166.87	156.69	147.48	139.11
	2.60%	209.79	194.91	181.72	169.96	159.40	149.86	141.22
	2.70%	214.82	199.22	185.44	173.20	162.23	152.36	143.42
	2.80%	220.16	203.78	189.38	176.61	165.21	154.97	145.73

DDM		Dividend Growth						
132.62		0.2000	0.2500	0.2750	0.0300	0.0325	0.0350	0.0375
CV growth of EPS	2.20%	144.12	148.65	150.92	128.73	128.96	129.18	129.41
	2.30%	145.66	150.28	152.58	129.98	130.21	130.44	130.67
	2.40%	147.26	151.96	154.32	131.27	131.51	131.75	131.98
	2.50%	148.92	153.72	156.11	132.62	132.86	133.10	133.34
	2.60%	150.65	155.54	157.98	134.02	134.27	134.51	134.75
	2.70%	152.44	157.44	159.93	135.48	135.73	135.98	136.23
	2.80%	154.31	159.41	161.96	136.99	137.25	137.50	137.76

DCF		Pre-tax cost of debt						
166.87		2.62%	3.12%	4.12%	5.12%	6.12%	7.12%	8.12%
Equity risk premium	4.25%	193.13	192.78	192.07	191.37	190.67	189.97	189.27
	4.50%	184.26	183.92	183.25	182.57	181.90	181.23	180.56
	4.75%	176.06	175.73	175.08	174.43	173.78	173.14	172.49
	5.00%	168.44	168.13	167.50	166.87	166.25	165.62	165.00
	5.25%	161.35	161.05	160.44	159.84	159.23	158.63	158.03
	5.50%	154.74	154.44	153.86	153.27	152.69	152.10	151.52
	5.75%	148.55	148.27	147.70	147.13	146.56	146.00	145.43

DCF		Beta						
166.87		0.53	0.58	0.63	0.68	0.73	0.78	0.83
Marginal tax rate	16.92%	210.67	196.07	183.09	171.47	161.02	151.57	142.97
	17.92%	208.81	194.33	181.46	169.95	159.58	150.21	141.69
	18.92%	206.94	192.59	179.83	168.41	158.14	148.85	140.40
	19.92%	205.06	190.83	178.19	166.87	156.69	147.48	139.11
	20.92%	203.17	189.07	176.54	165.33	155.24	146.11	137.81
	21.92%	201.28	187.31	174.89	163.78	153.78	144.73	136.51
	22.92%	199.38	185.53	173.23	162.22	152.31	143.35	135.20

DCF		SGA%						
166.87		6.92%	7.92%	8.92%	9.92%	10.92%	11.92%	12.92%
Cost of Operations%	44.64%	352.84	342.53	332.23	321.95	311.61	301.31	291.00
	49.64%	301.14	290.84	280.53	270.26	259.92	249.61	239.31
	54.64%	249.45	239.14	228.84	218.57	208.23	197.92	187.61
	59.64%	197.76	187.45	177.14	166.87	156.53	146.23	135.92
	64.64%	146.06	135.76	125.45	115.18	104.84	94.53	84.23
	69.64%	94.37	84.06	73.76	63.49	53.14	42.84	32.53
	74.64%	42.68	32.37	22.06	11.79	1.45	(8.86)	(19.16)

DCF		% Growth Capex						
166.87		2.25%	2.50%	2.75%	3.00%	3.25%	3.50%	3.75%
Depreciation	9.38%	172.99	172.00	170.99	169.98	168.94	167.90	166.84
	10.38%	171.81	170.78	169.74	168.69	167.62	166.53	165.44
	11.38%	170.89	169.83	168.75	167.66	166.56	165.44	164.30
	12.38%	170.20	169.11	168.00	166.87	165.73	164.58	163.41
	13.38%	169.70	168.58	167.44	166.28	165.11	163.92	162.72
	14.38%	169.37	168.21	167.04	165.85	164.65	163.43	162.20
	15.38%	169.17	167.99	166.79	165.57	164.34	163.09	161.82