



THE LANDFILL IN RUTHERFORD COUNTY

Economic and Fiscal Impact

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Executive Summary

Middle Point Landfill is one of the largest landfills in Tennessee and the only Class I landfill in Rutherford County. Since 1988, Middle Point Landfill has managed the municipal solid waste (MSW) generated by Rutherford County and the neighboring areas.

This study assesses the economic and fiscal impact of Middle Point Landfill's operations in Rutherford County, Tennessee. Using data from the Middle Point Landfill's current operations, the Business and Economic Research Center (BERC) measured the landfill's direct and indirect economic and fiscal impacts on the local economy. Further, BERC assessed the direct and indirect economic and fiscal implications of the expansion proposed by Middle Point Landfill. Some of the key findings of this study include:

Waste Management Cost Savings:

- **Rutherford County Households:** Without Middle Point Landfill, the 67,294 county households would incur **\$3.1 million in costs for household waste disposal**, with each ton of waste costing \$91.67 at the transfer station.
- **Murfreesboro City Households:** Without Middle Point Landfill, the cost of waste management for the 58,567 Murfreesboro city households would be \$6.8 million, with each ton costing \$88.73.
- **Businesses and Industries:** For the 1,142 Rutherford County businesses, the cost of managing commercial waste would increase to \$1.4 million. Among the 346 industrial companies, waste management costs include \$558,000 for manufacturing companies and \$867,000 for construction companies.

Economic Impact of Middle Point Landfill's Current Operations:

- **Business Revenue:** The total business revenue impact of Middle Point's current operation is estimated at **\$49.7 million**. The landfill is a significant economic contributor to the region.
- **Employment and Personal Income:** Middle Point Landfill provides **226 jobs** in Rutherford County through its current operations. The landfill contributes **\$15.6 million** in wages and salaries through direct, indirect, and induced employment.
- **Fiscal Contribution:** The total fiscal contribution of Middle Point's current operation is estimated to be **\$4.7 million** in local, state, and federal taxes.

Economic Impact of Middle Point's Proposed Expansion:

- **Business Revenue:** Middle Point Landfill's proposed expansion would contribute \$52.7 million in total business revenue to Rutherford County's economy.
- **Employment:** The proposed expansion would support 242 jobs in the county and \$16.5 million in personal income.
- **Fiscal Contribution:** The total fiscal contribution of Middle Point's future expansion is estimated to be \$5.1 million in local, state, and federal taxes.

Middle Point Landfill plays the primary role in managing waste for Rutherford County. It generates substantial county employment, business revenue, and personal income. County residents can manage their waste free of charge, and there are convenient waste management solutions for local businesses and industries. Without Middle Point Landfill, county residents, local businesses, and industries would incur significant expenses in waste management.

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I. Introduction

Since 1988, Middle Point Landfill has been responsible for managing municipal solid waste (MSW) from Rutherford County and surrounding regions. It remains the sole Class I landfill within Rutherford County and its adjacent counties and ranks among Tennessee's largest landfills. As a result, it serves as the primary destination for solid waste produced by residents and businesses in Rutherford County, extending its reach into the broader Nashville area.

The existing 30-year agreement between Rutherford County and Browning-Ferris Industries (BFI) began in 1995 and is nearing completion, with less than five years remaining before reaching its total capacity. To address future needs, Middle Point Landfill has proposed an expansion contract with Rutherford County. BFI Waste Systems of Middle Tennessee, LLC, commissioned the Business and Economic Research Center (BERC) at Middle Tennessee State University (MTSU) to evaluate the economic and fiscal impacts of its current landfill operations and assess the broader implications of the proposed expansion, including new lease terms, on the local economy.

This report summarizes the findings from the BERC study, highlighting implications for Rutherford County regarding regional solid waste management scenarios, both with and without an operational landfill. To provide context and ensure a comprehensive evaluation, BERC reviewed existing literature on landfill operations, their economic impacts, and the status of landfills across Tennessee. The analysis utilized data from Middle Point Landfill's current operations to quantify direct and indirect economic and fiscal effects on Rutherford County residents. Furthermore, BERC assessed the potential economic and fiscal impacts of the landfill's proposed contractual expansion. The IMPLAN (Impact Analysis for Planning) tool, a highly regarded economic analysis software, was employed to facilitate this detailed economic impact assessment.

II. State of Landfills in Middle Tennessee

Industry Overview

The economic significance of the solid waste management industry is frequently underestimated. Current analyses indicate significant growth potential for this sector. Grand View Research (2024) projects the market segment related to disposal, particularly landfill operations, to experience the fastest growth within the industry. Multiple market reports from sources such as Fortune Business Insights (2024), Mordor Intelligence (n.d.), and Grand View Research (2024) forecast substantial industry expansion, estimating increased demand and economic activity. Specifically, the 2022 Economic Census highlights the dynamic growth of landfill operations in Tennessee, reporting shipments valued at over \$223 million - a 30% increase over five years. Additionally, total quarterly wages for Tennessee landfill operations have grown by 5%, emphasizing the industry's expanding role in the state's economy. Thus, landfills, beyond being essential infrastructure, represent a dynamic, rapidly growing, and economically critical industry segment.

A. Demand

Middle Tennessee is among the fastest-growing regions in the United States, experiencing significant demographic and economic growth in recent years. From 2010 to 2020, the region witnessed remarkable population expansion, with Rutherford County alone seeing a 30% increase in population and a corresponding 23% rise in housing units (GNRC, n.d.). This growth rate surpasses many other regions nationally. The Tennessee State Data Center further projects that by 2050, the Nashville metropolitan area's population will grow by more than 700,000 individuals, representing an increase of over one-third compared to current figures.

This rapid population growth has significant implications for regional waste management infrastructure. According to available statistics, the Nashville area is projected to generate approximately 2.8 million tons of municipal solid waste annually by 2040, compared to 2.38 million tons generated annually between 2017 and 2022. Despite sustained initiatives aimed at increasing recycling efforts, recycling rates have stagnated, and per capita waste generation remains consistently high, indicating limited progress in reducing overall waste (Tennessee State Data Center, n.d.; Bureau of Labor Statistics, n.d.; EPA, 2022).

The housing market in Rutherford County has also expanded considerably, reflecting a 23% increase in housing units during the same period (GNRC, n.d.). Additionally, the County Business Patterns

dataset highlights ongoing economic growth, with Middle Tennessee's economic dynamism evidenced by continued employment and business expansion (Bureau of Labor Statistics, n.d.).

Given these demographic and economic trends, effectively addressing municipal and industrial waste management challenges becomes critical. Despite extensive initiatives to boost recycling rates, progress has stagnated, complicating waste management further (EPA, 2022). These combined factors—rising population, increasing waste generation, ongoing housing growth, and economic expansion—underline the necessity of proactive waste management planning and infrastructure investments in Middle Tennessee.

B. About Middle Point Landfill

Republic Services manages Middle Point Landfill, one of the largest providers of waste disposal services in the United States, operating 207 active landfills nationwide (Rosengren et al., 2023; Republic Services, 2024). Officially established in 1995, Middle Point Landfill is classified as a Class I landfill and a Class III and IV disposal facility, meeting the standards established by the U.S. Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC).

Spanning multiple roles, Middle Point Landfill currently receives approximately 3,563 tons of solid waste daily and employs 34 people. The landfill provides free disposal services to approximately 125,861 Rutherford County residents and accepts household waste from 30 Tennessee counties. In 2022 alone, ten of these counties disposed of more waste in Middle Point than at any other landfill in the region. Notably, Davidson County is the facility's largest single user. Indeed, more than 80% of the waste received originates outside of Rutherford County, with Davidson County and its residents representing the single largest source.

The landfill's classification as a Class III and IV disposal facility, along with its Class I designation, dates to 1995 under standards set by the United States Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation. As it stands, Middle Point Landfill plays a critical role in regional waste management infrastructure yet faces limitations on its operational lifespan. The facility currently has less than five years of remaining capacity, prompting discussions around potential expansion. If an expansion is not approved, the landfill could reach its maximum permitted capacity within this period (EPA, 2022; TDEC, 2023).

C. Alternative Class I Landfills

As early as 2015, projections indicated that Tennessee's landfill capacity would fall short of its waste generation demands by 2036 (TDEC, 2015). Since the publication of that report, no new landfill facilities have been constructed within the region. Only the relatively small Smith County landfill has received approval for an expansion. Currently, just two Class I landfills serve the entire Nashville metropolitan area.

Given the scarcity of available facilities, the nearest alternatives for Rutherford County include the Cedar Ridge landfill in Marshall County (which has limited remaining capacity), the Smith County landfill, and ultimately the West Camden landfill in Benton County. If the approximately 1 million tons of annual waste currently directed to Middle Point Landfill were diverted to existing alternatives, the remaining landfill capacities within the region would be exhausted even sooner. Under such circumstances, West Camden landfill in Benton County would become the primary alternative landfill site available to the Nashville metropolitan region. However, estimating precisely how much waste West Camden landfill could accommodate from the Nashville MSA is challenging. In a worst-case scenario, the West Camden landfill itself might quickly approach capacity, potentially precipitating a broader regional waste disposal crisis.

Given these constraints, the steadily increasing waste generation in the Nashville metropolitan area underscores the urgency of addressing landfill capacity and exploring sustainable, long-term alternatives.

III. The Economic Impact of Landfills: A Survey

Solid waste management is increasingly significant in contemporary discussions around environmental sustainability and economic development. As urban populations expand, the amount of municipal solid waste generated by human activities also rises, highlighting the urgent need for waste disposal solutions that are both economically feasible and environmentally responsible. In the United States, the primary responsibility for solid waste management typically falls to local and regional authorities. While not always legally required, conducting economic assessments and considering cost implications is essential for informed decision-making by these administrations.

Recent research trends emphasize the importance of evaluating both the direct and indirect economic impacts of municipal solid waste management practices, with a growing awareness of sustainability considerations. Scholarly literature consistently identifies notable economic and fiscal advantages associated with implementing effective waste management systems.

The following section provides a summary of selected literature addressing the economic and fiscal impacts of various solid waste management practices and explores their broader implications for local economic development.

Jiang and Ai (2022) comprehensively reviewed waste management legislation, strategic plans, and technical reports on economic impact assessments of municipal solid waste across various U.S. states. Their analysis revealed that economic impact studies for municipal solid waste management vary significantly in methodologies, yet they provide essential insights for policymakers and planners.

Econsult Solutions (2013) assessed Pennsylvania's municipal solid waste industry, which annually managed approximately 8.6 million tons of waste through multiple landfill facilities. Employing the IMPLAN Input-Output economic model, the study identified a significant statewide economic impact of over \$4.2 billion annually, supporting more than 26,000 jobs and generating approximately \$1.4 billion in labor income. Additionally, it highlighted that the industry contributed nearly \$250 million per year in state and local tax revenues.

Goldman and Ogishi (2001) analyzed the economic effects of California's waste disposal and diversion systems using IMPLAN. Their findings indicated that, in 1999, waste disposal and diversion activities collectively produced over \$9 billion in sales and exceeded \$21 billion in overall economic output. The study emphasized the higher economic benefits of waste diversion methods like recycling

and composting compared to traditional disposal, noting nearly double the impacts on sales and job creation. This research underscored the importance of supportive governmental policies and recommended improved data collection for more precise economic analyses.

The Northwest Economic Research Center at Portland State University utilized IMPLAN to evaluate the Metro Solid Waste System in Oregon, managing over two million tons of waste annually. Their study indicated the system generated a total economic output of \$537.4 million and supported 3,766 jobs, predominantly in the material recovery and waste collection sectors.

Hill and Evans (2018), utilizing IMPLAN as well, analyzed Republic Services' landfill operations in Walker County, Alabama, between 2013 and 2017. Their study found that landfill operations had a total economic impact of \$7.1 million in gross regional product, supported 82 jobs, and contributed \$4 million in labor income. Additionally, these operations generated approximately \$377,000 annually in local government tax revenues, with employee compensation significantly exceeding the state average.

These studies collectively highlight significant economic and fiscal impacts generated through strategic investment and planning in municipal solid waste management. The input-output economic impact analysis, particularly the IMPLAN model, continues to be a preferred and reliable method for quantifying the economic contributions of the municipal solid waste sector at local and regional levels.

IV. Methodology

A. Conceptual Framework

This study assesses the economic impact of Middle Point Landfill on Rutherford County, Tennessee.

To measure the total economic impact, the BERC began its inquiry with a set of research questions:

- *In the absence of a landfill, what would happen to the tons of municipal waste in Rutherford County that is currently disposed of there?*
- *In the absence of a landfill, what would happen to the tons of waste and sludge from Murfreesboro that is currently disposed of there?*
- *What would happen to area businesses in the absence of a landfill?*

To answer these questions, BERC created a conceptual framework for economic impact analysis using two specific scenarios:

- **Scenario 1:** Middle Point Landfill's current operations are counterfactually removed entirely from the county's economy. This models the impact of the closure of the landfill.
- **Scenario 2 (proposed contract):** explores the impact of continuing landfill operations under the new lease terms proposed by Middle Point Landfill.

BERC used these two scenarios to understand how Middle Point Landfills' current operations and proposed expansion might affect the local economy in Rutherford County, paying particular attention to households, businesses, and public finances.

Economic Impact Analysis

Economic impact studies often rely on input-output analysis, also known as impact analysis, to quantify how an industry influences local and regional economies. This approach synthesizes data on capital investments, operational expenses, payroll, and other financial outlays to derive the overall economic effect. Central to the analysis are multipliers—categorized as direct, indirect, and induced—that illustrate the cascading impacts of industry interdependencies. These multipliers capture the backward linkages that contribute to the final value of industrial output by reflecting the economic interactions driven by input purchases, wage payments, and related transactions. A widely used tool for such assessments is the IMPLAN (Impact Analysis for Planning) software, originally developed by the United States Forest Service and now maintained by an independent research firm. In this study, BERC

utilized IMPLAN to calculate the multipliers for Rutherford County under both scenarios, thereby estimating the comprehensive economic impact of Middle Point Landfill on the local economy.

- **Direct Impact:** The direct impact represents the initial economic change in the local economy triggered by the primary level of activity, such as direct employment by Middle Point Landfill, operating expenditure, or production cost.
- **Indirect Impact:** The indirect impact captures the supply chain effects that follow due to Middle Point Landfill's inner industry linkages. For example, Middle Point Landfill buys construction materials from local suppliers, which increases their economic activity. These indirect impacts are part of the multiplier effect that follows the initial economic activity.
- **Induced Impact:** The induced effect results from increased household spending by Middle Point Landfill employees and/or its supplier firms whose incomes are created or increased because they work in industries benefiting from the direct or indirect impacts.

B. Study Assumption

Every economic impact study relies on several assumptions related to the economic activities to be studied. In measuring the economic impact of Middle Point Landfill on Rutherford County's economy, BEREC relied on the following assumptions. As discussed earlier, BEREC devised two scenarios to understand how the landfill's potential closure or continuation might affect the local economy in Rutherford County.

- **Study Region:** Defining an appropriate regional boundary is pivotal to any economic impact study. For this analysis, Rutherford County serves as the study region, and only economic activities associated with Middle Point Landfill within its borders are considered.
- **Physical Structures Remain Intact:** In measuring the economic impact of the current operations of Middle Point Landfill, the study assumes that the physical structure would remain intact even if Middle Point Landfill closed.
- **Residency Adjustment:** The study assumes that all Middle Point Landfill employees reside in Rutherford County and that all employee spending occurs within the county.
- **Counterfactual Approach:** If Middle Point Landfill is counterfactually removed from Rutherford County, the county will lose all the economic activities related to Middle Point's operation and its interaction with other industry sectors.
 - In Scenario 1, the current operation of the landfill is counterfactually removed entirely from the county's economy.

- In Scenario 2, the economic impact of the landfill under the new lease terms is considered.
- This study isolates and removes the jobs and economic activities associated with Middle Point Landfill's suppliers and vendor companies in determining its impact on the regional economy.
- Monetary values associated with local government revenues are modeled as corresponding to changes in household disposable income.
- The study assumes that the reductions (or reallocations) in property taxes or other household fees are the primary way local government savings would be returned to residents rather than through adjustments to business taxes or fees.
- Current tipping fees and other local estimates form the basis for our monetary calculations. Actual market rates for tipping and transportation costs will likely be significantly higher than those used in our estimates. Tipping fees are the prices charged for the disposal of waste at the landfill.
- All operational and capital expenditures are adjusted using Middle Point Landfill data. The study limits the capital or operational expenditures to only those made in Rutherford County.
- All direct cost estimates regarding landfill operations come from the current contract between the landfill operator and local governments, plus comparisons to nearby landfill rates.
- Although the City of Murfreesboro and Rutherford County have distinct costs, the study applies to a single impact model due to the operational complexity of separating each entity's tasks.

C. INPUT Data and Methods

BERC devised two specific scenarios to examine the economic impact of Middle Point Landfill on Rutherford County's economy. In scenario 1, the analysis uses a counterfactual approach, removing Middle Point Landfill entirely from the county's economy. For analytical purposes, the study assumes that the Middle Point Landfill no longer exists and that its associated operations, costs, and revenue streams have ceased. Scenario 2, meanwhile, explores the continuation of landfill operations under the proposed lease terms.

This study assumes that a cost will be associated with that decision when Middle Point Landfill closes. Rutherford County currently does not have a viable substitute for handling the massive amounts of waste (household, commercial, and industrial) associated with the growing population. The county and

city residents shoulder the burden of waste management, including sludge. This analysis models the associated cost as changes in the disposable income of the residents in Rutherford County.

BERC researchers relied on real-world data. The tipping fees and other financial details used in this analysis reflect current rates set by the existing landfill contract (Table 1). While BERC anticipates that market rates for both tipping and transportation could be higher, BERC calculations hold them constant to maintain consistency and reliability. Additionally, although the City of Murfreesboro and Rutherford County track some costs separately, this study utilized a single, comprehensive impact model. Practical considerations drove this decision: The tasks handled by the county and the city are deeply intertwined, which makes isolating each jurisdiction's individual impacts without double-counting or omitting key relationships difficult.

Finally, all direct cost estimates related to the landfill's operations were drawn from publicly available contracts between the landfill operator and local government agencies and the prevailing rates at nearby facilities. Using actual contract terms and comparable market data, BERC researchers ensured that each scenario in the analysis remained grounded in factual, up-to-date information. This approach allowed researchers to provide a realistic portrayal of how the landfill's continuation or closure could reshape the local economy and affect household finances across the county.

Table 1 (following) presents the cost categories BERC used as INPUTS for the economic impact analysis in both scenarios.

Table 1: Input Categories for Current and Proposed Operations of Middle Point Landfill

INPUT Categories	Middle Point Landfill	
	CURRENT OPERATIONS (Scenario 1)	PROPOSED CONTRACT (Scenario 2)
OPERATING		
Non-Payroll Operating Expenditures	\$14,798,000	\$14,798,000
Total Employment	34	34
Total Payroll	\$3,458,000	\$3,458,000
Annual Capital Expenditures	\$6,953,935	\$6,953,935
Philanthropic Contributions	\$110,000	\$110,000
LOCAL GOVERNMENT IMPACT		
Host County Revenue Fees	\$838,800	\$1,416,550
Rutherford County Landfill Operating Cost	--	\$1,642,000
Annual Debt Service	--	\$1,300,000
COST OF WASTE MANAGEMENT FOR RESIDENTS		
Cost of Transfer Station (Free Tons + Sludge)		
Cost of Transfer Station to County Residents	\$3,116,780	\$3,116,780
Cost of Transfer Station to City Residents	\$6,830,373	\$6,830,373
INCREASED COST OF DOING BUSINESS		
Industrial Clients		
Manufacturing	\$558,781	\$558,781
Construction	\$867,604	\$867,604
Commercial Clients	\$1,469,220	\$1,469,220
Subscription-Based County Resident Cost Impact	\$181,853	\$181,853

Source: Middle Point Landfill data and BERC calculations.

V. Costs of Doing Business – Households and Businesses

The following sections discuss the possible costs Rutherford County and Murfreesboro city residents would bear if the landfill were removed.

A. Cost of Waste Management for City and County Households

To calculate the cost per ton of waste management for Rutherford County and Murfreesboro city households to divert to another landfill, BERC used the current data available from Middle Point Landfill. As shown in Table 2, county residents could anticipate paying transfer station costs of \$91.67 per ton for their household waste. Similarly, Murfreesboro city residents would pay \$88.73 per ton to haul away their household waste.

Table 2: Costs of Waste Per Ton for the City and County Households

Transfer Station Costs	Rutherford County	Murfreesboro City
Receiving	\$40.00	\$40.00
Transportation	\$22.28	\$22.28
Labor and Management	\$12.18	\$11.55
Maintenance and Fees	\$17.21	\$14.90
Total Transfer Station Cost	\$91.67	\$88.73

Source: Middle Point Landfill data and BERC calculations.

Without Middle Point landfill, a total of 34,000 tons of waste per year,¹ would have to be processed through the Rutherford County Transfer Station. This is currently done at no cost. Using the cost of moving one ton of residential waste as per Table 2, the total cost to the 67,294 county households² will be \$3,116,703. This would result in a \$46.30 cost increase per county household each year in the absence of Middle Point Landfill.

Costs of Waste Management for Murfreesboro City Households

Currently, 58,567 Murfreesboro city households depend on Middle Point Landfill for household waste disposal. Without Middle Point landfill, the cost of handling their 47,000 tons of waste through the transfer station would have to be shared by the city residents, along with the cost of 28,000 tons of

¹ This tonnage excludes the city of Murfreesboro household waste.

² This excludes the Murfreesboro city households. The total number of Rutherford County households during 2019-2023 is 125,861(Census Data).

sludge. This is unique to the city. Each ton of waste would cost city residents \$88.73 at the transfer station. In addition, the city residents would have to pay for the 28,000 tons of sludge disposal cost at \$73 per ton and the \$22 per ton transportation cost. Together, this would result in a \$116.60 annual cost increase per Murfreesboro city household.

Table 3: Cost of Waste Disposal Per Ton for City Residents

Sludge Transportation Costs	Murfreesboro City
Transportation	\$22.00
Disposal Cost	\$73.00
Total Sludge Disposed	28,000
Total Cost (Sludge + Waste Transfer) Burden	\$6,830,373

Source: Middle Point Landfill data and BERC calculations.

B. Cost of Doing Business for Industrial and Commercial Establishments

Middle Point Landfill contracts with 1,488 Rutherford County businesses and industries to handle industrial and commercial “special waste.” This includes 346 industrial clients (manufacturing and others) and 1,142 commercial business entities. These companies rely on Middle Point Landfill to manage their waste. The 1,142 commercial companies are comprised of retail, transportation, real estate, wholesale, professional business services, and restaurants. These are vital parts of Rutherford County’s economy. Without Middle Point Landfill, these businesses and industries would need to find a Class I landfill to dispose of their industrial and commercial category “special waste.” This would increase costs for area businesses. Without Middle Point Landfill, most construction, retail, transportation, real estate, etc., (commercial) waste would flow through an alternative (Republic) transfer station. This waste-handling process would result in a cost increase of \$867,000 to construction and \$1.4 million to other commercial clients.

Table 4: Cost of Waste Disposal Per Ton for Businesses and Industries

Increased Cost of Doing Business	
Rutherford County Clients	1,488
Industrial Clients	346
Commercial Clients	1,142
Cost to Industrial Clients	\$558,000
Cost to Construction	\$867,000
Cost to Commercial Clients	\$1,400,000

Source: Middle Point Landfill data and BERC calculations.

VI. Economic and Fiscal Impact of Middle Point Landfill's Current Operation

Middle Point Landfill's operations are sizable. Table 5 shows that Middle Point Landfill has 34 full-time employees with an average payroll expenditure of \$3,458,000. Its non-payroll operating expenditure, on average, is \$14,798,000, with a capital expenditure of \$6,953,935.

Table 5: Middle Point Landfill's Current Operations in Rutherford County

Middle Point Landfill's Current Operations	
Non-Payroll Operating Expenditures	\$14,798,000
Total Employment	34
Total Payroll	\$3,458,000
Annual Capital Expenditures	\$6,953,935
Philanthropic Contributions	\$110,000

Source: Middle Point Landfill data

A. Economic Impact of Middle Point Landfill's Current Operation

This study counterfactually removes the landfill's current operation to measure Middle Point's current economic impact on the local economy. In other words, we examine the county economy as if the landfill was not operating. We then compare that fictional economy to the current, real economy. As discussed in the methodology, the study uses Middle Point's current operational expenses along with the transfer station costs for the county residents and the costs of doing business for commercial entities and industries to assess the economic impact of its current operation. (See Table 1 in the methodology section and Table 5 above.)

Table 6 (below) shows the categorical breakdown of the total economic impact of Middle Point's current operation. BERC calculated the total economic impact of each operational category. With the current operating expenditure, Middle Point Landfill has contributed 68 jobs, \$5.4 million in personal income, and \$21.9 million in business revenue.

Regarding industry impact, Middle Point Landfill's current operation has contributed 20 additional jobs, \$1.3 million in personal income, and \$4.1 million in business revenue. Middle Point's maintenance and capital expenditure has contributed to 87 jobs, with an additional \$6.2 million in personal income

and another \$14.8 million in business revenue. It has also contributed to 51 additional jobs through changes in household income.

Table 6: Economic Impact of Middle Point Landfill's Current Operation

Economic Impact of Middle Point Landfill's Current Operation			
Operating	Employment	Wages and Salaries	Business Revenue
Direct	34	\$3,458,000	\$15,721,000
Indirect and Induced	34	\$1,985,321	\$6,159,251
Total	68	\$5,443,321	\$21,880,251
Industry Impact	Employment	Wages and Salaries	Business Revenue
Direct	13	\$868,521	\$2,895,605
Indirect and Induced	7	\$386,682	\$1,235,946
Total	20	\$1,255,203	\$4,131,551
Household and Local Government Impact	Employment	Wages and Salaries	Business Revenue
Direct	0	0	0
Indirect and Induced	51	\$2,679,014	\$8,963,126
Total	51	\$2,679,014	\$8,963,126
Maintenance and Capital Expenditures	Employment	Wages and Salaries	Business Revenue
Direct	57	\$4,637,657	\$9,598,935
Indirect and Induced	30	\$1,600,363	\$5,173,621
Total	87	\$6,238,020	\$14,772,556

Source: Middle Point Landfill data and BERC calculations, IMPLAN Analysis.

Table 7 summarizes the economic impact of Middle Point Landfill's current operations on Rutherford County's economy. As shown below, Middle Point's current operation has contributed to 226 jobs in Rutherford County. Further, it has contributed \$15.6 million in personal income in wages and salaries and \$49.7 million in total business revenue in Rutherford County.

Table 7: Economic Impact Summary of Middle Point Landfills' Current Operation

Economic Impact Summary (Current Operation)			
Impact Category	Employment	Wages and Salaries	Business Revenue
Operating Expenditures	68	\$5,443,321	\$21,880,251
Industry Impact	20	\$1,255,203	\$4,131,551
Household and Local Government	51	\$2,679,014	\$8,963,126
Maintenance and Capital Expenditures	87	\$6,238,020	\$14,772,556
Total Economic Impact	226	\$15,615,558	\$49,747,483

Source: Middle Point Landfill data and BERC calculations, IMPLAN Analysis.

B. Fiscal Impact of Middle Point Landfill's Current Operation

In terms of fiscal impact, Middle Point Landfill has contributed county taxes as well as state and federal taxes. The total fiscal impact of Middle Point's operations is estimated to be \$4.7 million, including \$567,037 in county taxes and fees, \$1.3 million in state taxes and fees, and \$2.8 million in federal taxes and fees.

Table 8: Fiscal Impact of Middle Point Landfill's Current Operation

Fiscal Impact Summary (Current Operation)	
Impact Category	Total Impact
County Taxes and Fees	\$567,037
State Taxes and Fees	\$1,274,716
Federal Taxes	\$2,885,245
Total	\$4,726,998

Source: Middle Point Landfill data and BERC calculations, IMPLAN Analysis.

VII. Study Findings: Economic and Fiscal Impact of Middle Point Landfill's Proposed Expansion

This section presents the economic impact analysis of Middle Point Landfill's proposed contract extension with Rutherford County. This is the second scenario. The proposed expansion contract includes increased host county fees, environmental liability costs, and debt services savings. To measure the economic impact of Middle Point's proposed expansion, the study uses the current data on employment, operating expenses (including maintenance and payroll), capital expenditures, costs of waste management for county residents (such as transfer station costs), and the costs of doing business for commercial and industrial entities in Rutherford County (See Table 1 in the methodology section). Further, it uses the increasing host county fee, landfill operating costs, and annual debt services to be contributed under the contract to calculate the impact of the proposed expansion.

A. Economic Impact of Middle Point Landfill's Proposed Expansion

As shown in Table 9, Middle Point's proposed expansion will bring an economic impact of \$21.9 million in business revenue and \$5.4 million in personal income in terms of wages and salaries to Rutherford County's economy through its operating expenditures. It will also add 68 jobs to the economy. Its industry impact will add another 20 jobs and \$4.1 million in business revenue.

Regarding household and local government impact, it will further add 68 jobs (not to be confused with the 68 above) and \$11.9 million in business revenue. Through the maintenance and capital expenditures, Middle Point Landfill's proposed expansion will bring 86 jobs, \$6.2 million in personal income, and \$14.7 million worth of business revenue to Rutherford County.

Table 9: Economic Impact of Middle Point Landfill’s Proposed Operation

Economic Impact of Middle Point’s Proposed Expansion			
Operating	Employment	Wages and Salaries	Business Revenue
Direct	34	\$3,458,000	\$15,721,000
Indirect and Induced	34	\$1,985,321	\$6,159,251
Total	68	\$5,443,321	\$21,880,251
Industry Impact	Employment	Wages and Salaries	Business Revenue
Direct	13	\$868,521	\$2,895,605
Indirect	7	\$386,682	\$1,235,946
Total	20	\$1,255,203	\$4,131,551
Household and Local Government Impact	Employment	Wages and Salaries	Business Revenue
Direct	0	\$0	\$0
Indirect and Induced	68	\$3,562,635	\$11,896,887
Total	68	\$3,562,635	\$11,896,887
Maintenance and Capital Expenditures	Employment	Wages and Salaries	Business Revenue
Direct	57	\$4,637,657	\$9,598,935
Indirect and Induced	29	\$1,600,363	\$5,173,621
Total	86	\$6,238,020	\$14,772,556

Source: Middle Point Landfill data and BERC calculations, IMPLAN Analysis.

Table 10 summarizes the figures in Table 9 to display the total economic impact estimates of Middle Point Landfill’s proposed operations in Rutherford County. Middle Point Landfill’s proposed expansion will contribute \$52.7 million in business revenue and \$16.5 in personal income to the local economy. Further, it will provide 242 jobs in the Rutherford County economy.

Table 10: Economic Impact Summary of Middle Point Landfills' Proposed Expansion

Economic Impact Summary (Proposed Expansion)			
Impact Category	Employment	Wages and Salaries	Business Revenue
Operating Expenditures	68	\$5,443,321	\$21,880,251
Industry Impact	20	\$1,255,203	\$4,131,551
Household and Local Government	68	\$3,562,635	\$11,896,887
Maintenance and Capital Expenditures	86	\$6,238,020	\$14,772,556
Total Economic Impact	242	\$16,499,179	\$52,681,244

Source: Middle Point Landfill data and BERC calculations, IMPLAN Analysis.

B. Fiscal Impact of Middle Point Landfill's Proposed Expansion

Regarding fiscal impact, Middle Point Landfill's proposed expansion will contribute \$5.1 million in local, state, and federal taxes. This includes \$636,103 in county taxes and fees, \$1,427,409 in state taxes, and \$3,084,947 in federal taxes.

Table 11: Fiscal Impact of Middle Point Landfill's Proposed Expansion

Fiscal Impact Summary (Proposed Expansion)	
Impact Category	Total Impact
County Taxes and Fees	\$636,103
State Taxes and Fees	\$1,427,409
Federal Taxes	\$3,084,947
Total	\$5,148,459

Source: Middle Point Landfill data and BERC calculations, IMPLAN Analysis.

VIII. Conclusion

This report presents an economic impact assessment of Middle Point Landfill's current operations and proposed expansion. Middle Point Landfill's currently projected short lifespan presents major challenges for Middle Tennessee.

Middle Point Landfill's current economic footprint (including direct, indirect, and induced) is substantial. It produces 226 jobs and \$49.7 million in business revenue in the county. Further, it has an impact of \$15.6 million in personal income. This presumably would be lost if the landfill closed.

In the short run, its closure would produce substantial costs for residents and area businesses. The study findings indicate that the closure of Middle Point Landfill would result in \$3.1 million in waste disposal costs for county households and \$6.8 million for Murfreesboro city households. For 1,142 Rutherford County businesses, the cost of managing commercial waste would increase to \$1.4 million. Among the 346 industrial companies, waste management costs include \$558,000 for manufacturing and \$867,000 for construction companies.

Under the proposed contract extension between Rutherford County and Middle Point Landfill, the landfill would impact the local economy by producing 242 jobs and \$52.7 million in business revenue.

In sum, both scenarios show sizable impacts on the economies of Rutherford County and the City of Murfreesboro in the short run.

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