

September 2023

# Economic Impact Analysis:

## Marine Cargo Facility

Ashland City, Cheatham County, TN

Prepared for:  
Ingram Marine Group

**REVIEW  
DRAFT**

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PREPARED BY:



JACKSON » 97 DIRECTORS ROW | JACKSON, TN 38305 | 731.668.7367  
MEMPHIS » 2157 MADISON AVENUE | MEMPHIS, TN 38104 | 901.272.5005



## **Ingram Marine Group Cargo Terminal Economic Impact Analysis**

### **Introduction & Scope**

Ingram Marine Group retained Younger Associates to conduct an analysis of the economic impact of a new marine cargo operation to be located in Ashland City, Cheatham County, Tennessee.

This analysis evaluates the economic impact of the construction and ongoing operations of the new terminal. It is intended to provide key stakeholders, policymakers, and elected officials with a better understanding of the economic significance of new developments like the one proposed by Ingram Marine Group.

The analysis is based upon data from the U.S. Bureau of Economic Analysis (BEA) and a model of the local economy utilizing historical employment patterns, wage rates, tax rates, and tax collection ratios. Primary data regarding site development costs and construction costs were provided by the developer.

The analysis provides impact projections from capital investments and ongoing operations of the terminal. Impact is measured in terms of jobs, wages, and tax revenue, both direct and indirect.

### **Methodology**

The economic impact calculations in this study were generated using a model of the Cheatham County economy based on regional input-output multipliers (RIMS II) from the U.S. Bureau of Economic Analysis (BEA). The BEA developed the RIMS II system based on historical economic activity at the county level for 372 industry sectors. The RIMS II multipliers account for inter-industry relationships within regions comprised of one or more counties, in both the public and private sectors. The multipliers were originally developed to estimate the regional impacts of public projects such as military base closings and airport construction. The multipliers eliminate the need for surveys, which can introduce bias into the data. It should be noted that the RIMS II Type II Multipliers are utilized in this analysis, which project the total indirect as well as the induced jobs. When the term “indirect job” is used, it includes the induced jobs as well.

To effectively use RIMS II multipliers for economic impact analyses, detailed geographical and operational information on the initial changes in output, earnings, or employment is utilized. This data, which includes capital investment costs and operational data such as operational spending, jobs, and wages, was provided by Ingram Marine Group. The model also utilizes local wage rates, local tax rates, historical local tax collection ratios, local property values, and historical regional consumer spending patterns.

Younger Associates has used this impact calculation methodology in hundreds of projects across the United States for more than 30 years. The methodology is recognized by the International Economic Development Council and utilized in courses by the Economic Development Institute. The Younger Associates model for impact analyses is highly accurate, yet slightly conservative by design, in projecting tax revenue generation.

Secondary data collected by Younger Associates from the U.S. Department of Labor - Bureau of Labor Statistics, the U.S Bureau of Economic Analysis, the State of Tennessee Department of Revenue, and the State of Tennessee Department of Labor and Workforce Development is also used in this analysis.

### **Impact Definitions**

**Economic Impact** – the total dollar value of change in output from all industries within the local economy that results from \$1 of change in output from operations. This impact represents the total dollars flowing through the local economy due to the activity associated with the new marine cargo terminal.

**Direct Jobs** – the number of jobs directly employed by Ingram Marine Group.

**Indirect Jobs** – the number of jobs across all industries in the local economy supported by the ongoing operations of the marine cargo terminal. This includes jobs (or hours of work, which comprise portions of a job) of vendors and other businesses that provide direct services to the terminal, as well as induced jobs that are supported in ancillary sectors such as retail stores, restaurants, personal services, transportation, and all other industry sectors.

**Local Taxes** – the dollar amount of taxes collected for Ashland City and Cheatham County both directly and indirectly from local option sales tax and other, smaller local tax revenue sources such as business permits and alcohol and tobacco taxes. The state portion of sales tax and other state and federal taxes that are reapportioned to the city and county are not included.

### **One-Time Impact**

Ingram Marine Group plans to invest \$41.8 million for construction and set-up of the new cargo terminal. This includes \$23.3 million for the building and \$18.5 million for equipment. This investment is projected to generate a one-time impact of \$56.2 million for the local economy during the construction and set-up period.

Additionally, 234 jobs will be supported during the development period. For example, should the construction period be two years, an average of 117 jobs would be supported annually. Total wages paid to jobs supported during the construction and set-up period are projected to be \$12.6 million.

Direct sales tax from taxable goods and services for the construction of the terminal and indirect sales tax generated by the spending of wages paid to jobs supported are estimated to total \$707,000 during the development period.

### **Impact from Ongoing Operations**

Ingram Marine Group estimates an annual operating budget of \$2.7 million, and the annual economic impact generated by these operations is estimated to be \$3.5 million. This is a measure of the total dollars flowing through the Cheatham County economy because of the terminal's operations.

## Jobs, Wages and Local Taxes

The ongoing operations of the cargo terminal will support 24 jobs directly paying \$2 million in wages. Operations of the terminal will support an additional 21 indirect jobs paying \$1.1 million in wages. Spending of wages paid to the direct and indirect jobs is projected to generate over \$104,000 in local indirect tax revenue annually.

**Table 1: Summary of Economic Impact**

Impact from Operations			
Metric	One-Time Impact from Construction	Annual Impact (at full operation)	10-Year Impact (includes one-time impact)
Economic Impact	\$ 56,211,160	\$ 3,550,774	\$ 91,718,904
Direct/Indirect Jobs	234	45	45
Wages (Direct & Indirect)	\$ 12,631,796	\$ 3,165,379	\$ 31,653,791
Local Sales Tax (Direct & Indirect)	\$ 707,534	\$ 104,230	\$ 3,568,200

The tables on the following pages contain detailed calculations supporting the numbers cited in this report.

# Economic Impact Analysis

## Project Summary

Company/Applicant:	Ingram Marine Group
Capital Investment: (new)	\$ 44,300,000
Jobs:	24
Annual Average Wage: (weighted average)	\$ 104,557
Annual Economic Impact:	\$ 3,550,774
Annual Net New Property Tax:	\$ 275,644
Annual Local Tax Benefit: (Direct & Indirect - All Sources)	\$ 379,873

## 10-Year Operations Impact, Plus One-Time Construction Impact

Economic Impact	\$ 91,718,904
Wages:	\$ 31,653,791
Net New Property Tax	\$ 2,756,436
Total Local Taxes: (Direct & Indirect - All Sources)	\$ 3,568,200

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One-Time Expansion Impact		
Total Capital Investment	\$	41,800,000
Building - Real Property	\$	23,300,000
Final Demand Output Multiplier <sup>1</sup>		1.4077
Economic Impact	\$	32,799,410
Equipment Purchase/Set-up - Personal Property	\$	18,500,000
Final Demand Output Multiplier <sup>2</sup>		1.2655
Economic Impact	\$	23,411,750
Local Sales Tax (Direct) 2.75%*	\$	459,800
<b>Total Economic Impact</b>	<b>\$</b>	<b>56,211,160</b>
Final Demand Employment Multiplier <sup>3</sup>		5.6094
<b>Jobs Supported During the Construction Period**</b>		<b>234</b>
Cheatham County Projected 2023 Annual Average Wage <sup>4</sup>	\$	53,873
<b>Wages Paid to Jobs Supported During Construction Period</b>	<b>\$</b>	<b>12,631,796</b>
Local Sales Tax Revenue (Indirect) <sup>5</sup>	\$	203,561
Other Local Tax Revenue (Indirect) <sup>6</sup>	\$	44,173
<b>Total Tax Revenue</b>	<b>\$</b>	<b>707,534</b>

*\*Assumes 40% of construction and equipment are subject to local sales tax.*

*\*\*Total employment for the construction period. If the construction period is two years, the annual average employment would be 117.*

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Annual Impact of Operations		
Employment, Direct (New full-time equivalent jobs) *		24
Wages & Benefits, Direct*	\$	2,057,316
Direct Effect Employment Multiplier <sup>7</sup>		1.8570
<b>Total Employment</b>		<b>45</b>
Employment, Indirect		21
Cheatham County Projected 2023 Annual Average Wage <sup>4</sup>	\$	53,873
Wages, Indirect	\$	1,108,063
<b>Total Wages</b>	<b>\$</b>	<b>3,165,379</b>
Local Sales Tax Revenue (Indirect) <sup>5</sup>	\$	51,010
Other Local Tax Revenue (Indirect) <sup>6</sup>	\$	11,069
Indirect Local Property Tax Revenue <sup>8</sup>	\$	42,151
<b>Total Tax Revenue</b>	<b>\$</b>	<b>104,230</b>
Annual Operating Budget*	\$	2,713,000
Final Demand Output Multiplier <sup>9</sup>		1.3088
<b>Economic Impact from Operations</b>	<b>\$</b>	<b>3,550,774</b>

*\*Provided by the developer.*

**Ashland City, Cheatham County, TN  
Ingram Marine Group Cargo Facility  
Real Property Tax Schedule**

Appraised Value after Completion:	\$	22,000,000
Current Appraised Value:	\$	752,500
Net New Value:	\$	21,247,500
Assessed Value after Completion: (40% Ratio)	\$	8,499,000

Cheatham County		Ashland City	
Real Property - Land & Building		Real Property - Land & Building	
Cheatham County Rate: \$2.4767	Full Taxes	Ashland City Tax Rate: \$0.59	Full Taxes
Year 1	\$ 210,486	Year 1	\$ 50,144
Year 2	\$ 210,486	Year 2	\$ 50,144
Year 3	\$ 210,486	Year 3	\$ 50,144
Year 4	\$ 210,486	Year 4	\$ 50,144
Year 5	\$ 210,486	Year 5	\$ 50,144
Year 6	\$ 210,486	Year 6	\$ 50,144
Year 7	\$ 210,486	Year 7	\$ 50,144
Year 8	\$ 210,486	Year 8	\$ 50,144
Year 9	\$ 210,486	Year 9	\$ 50,144
Year 10	\$ 210,486	Year 10	\$ 50,144
Total	\$ 2,104,862	Total	\$ 501,441
Total Taxes:		\$	2,606,303



**Ashland City, Cheatham County, TN  
Ingram Marine Group Cargo Facility  
Personal Property Tax Schedule**

Cheatham County Personal Property			Ashland City Personal Property		
Cheatham County Rate: \$2.4767	Full Taxes 30% Assessment Ratio	MACRS Depreciation Schedule	Ashland City Tax Rate: \$0.59	Full Taxes 30% Assessment Ratio	MACRS Depreciation Schedule
<b>Value</b>	<b>\$ 18,500,000</b>		<b>Value</b>	<b>\$ 18,500,000</b>	
Year 1	\$ 13,745	0.100	Year 1	\$ 3,219	0.100
Year 2	\$ 24,741	0.180	Year 2	\$ 5,794	0.180
Year 3	\$ 19,793	0.144	Year 3	\$ 4,635	0.144
Year 4	\$ 12,646	0.092	Year 4	\$ 2,961	0.092
Year 5	\$ 10,171	0.074	Year 5	\$ 2,382	0.074
Year 6	\$ 9,072	0.066	Year 6	\$ 2,125	0.066
Year 7	\$ 9,072	0.066	Year 7	\$ 2,125	0.066
Year 8	\$ 8,934	0.065	Year 8	\$ 2,092	0.065
Year 9	\$ 8,934	0.065	Year 9	\$ 2,092	0.065
Year 10	\$ 4,536	0.033	Year 10	\$ 1,062	0.033
<b>Total</b>	<b>\$ 121,644</b>		<b>Total</b>	<b>\$ 28,488</b>	

**Total Projected New Property Tax: \$ 150,133**

Annual Average: \$ 15,013

## Notes for Ingram Maine Ashland City Terminal Impact Analysis:

1. U.S. Bureau of Economic Analysis RIMS II final demand aggregate output multiplier for Cheatham County, Tennessee for Construction. This multiplier represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered by the specified industry.
2. U.S. Bureau of Economic Analysis RIMS II final demand aggregate output multiplier for Cheatham County, Tennessee for wholesale trade support activities.
3. U.S. Bureau of Economic Analysis RIMS II final demand employment multiplier for Cheatham County, Tennessee for Construction. This multiplier represents the number of jobs supported per million dollars of output from the specified industry.
4. Projection based upon data from Tennessee Department of Labor; Annual Average Wage/Salary for all industry sectors in Cheatham County, 2022. Assumes an average wage increase of 1.5% for 2023.
5. U.S. Department of Labor, "Consumer Expenditure Survey, Southern US" 2021; factor applied to direct and indirect wages to determine the rate of indirect or "downstream" expenditures on sales taxable goods and services at the Ashland City and Cheatham County local option rate of 2.75%.
6. Based upon July 2022 - June 2023 collections of business, motor vehicle and other local taxes compared to sales tax for Cheatham County.
7. U.S. Bureau of Economic Analysis RIMS II direct effect employment multiplier for Cheatham County, for truck transportation. This multiplier represents the total change in the number of jobs supported in all industries for each additional job created by the specified industry.
8. Indirect property tax for Cheatham County and Ashland City is based on the new direct jobs created by the company. For this calculation, it is assumed that 75% of the direct jobs reside in Cheatham County and represent one household per job. The 2023 median home value is utilized as a proxy for residential property value, to determine property tax generated per job. The residential assessment rate of 25% is utilized for all residences, including those in multifamily buildings assessed at 40%, and a combined Cheatham County (\$2.4766) and Ashland City (\$0.58) tax rate of \$3.06 per \$100 of assessed value is used to project the annual tax per job. The property tax from new or expanded commercial property that is generated indirectly from economic activity associated with the jobs supported by the company is not projected.
9. U.S. Bureau of Economic Analysis RIMS II final demand aggregate output multiplier for Cheatham County, Tennessee for truck transportation.

Note: All calculations are in constant 2023 dollars. No tax rate increases are assumed.  
The 2012/2021 RIMS II multipliers are utilized for this analysis.