

IMPLAN

Discover the Power of IMPLAN's Forward Linkage Suite

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IMPLAN Presenters

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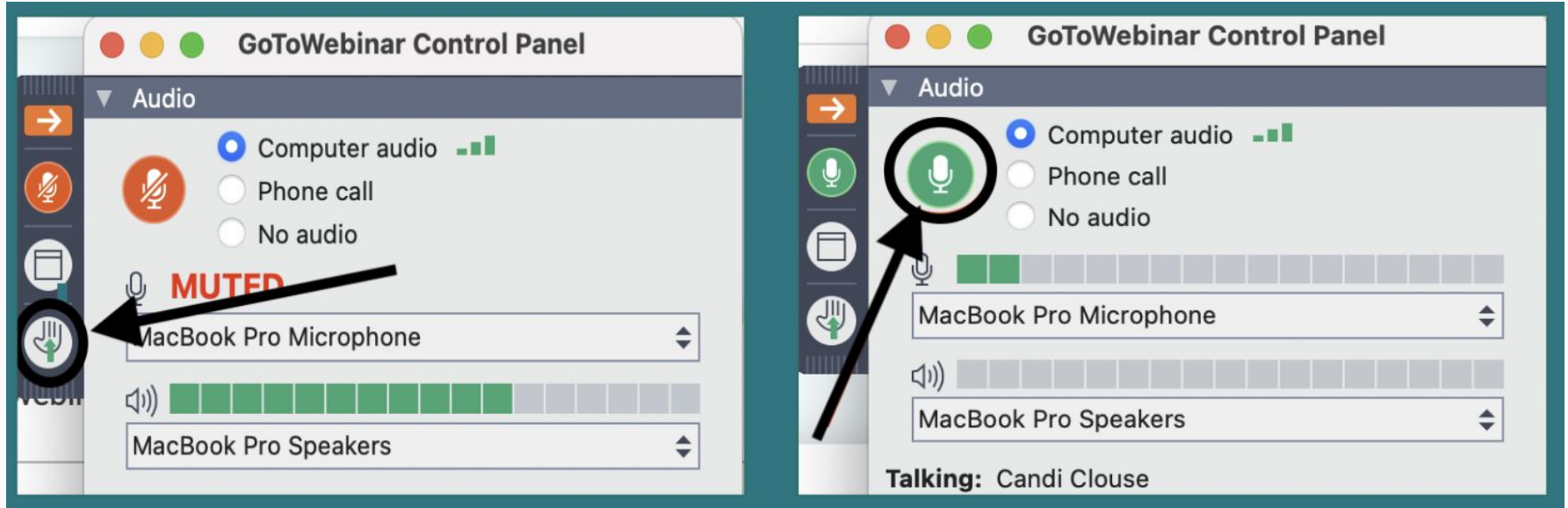


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Have a question?



Methodology

Forward Linkages



New product offering supported by the development of forward-linked multipliers

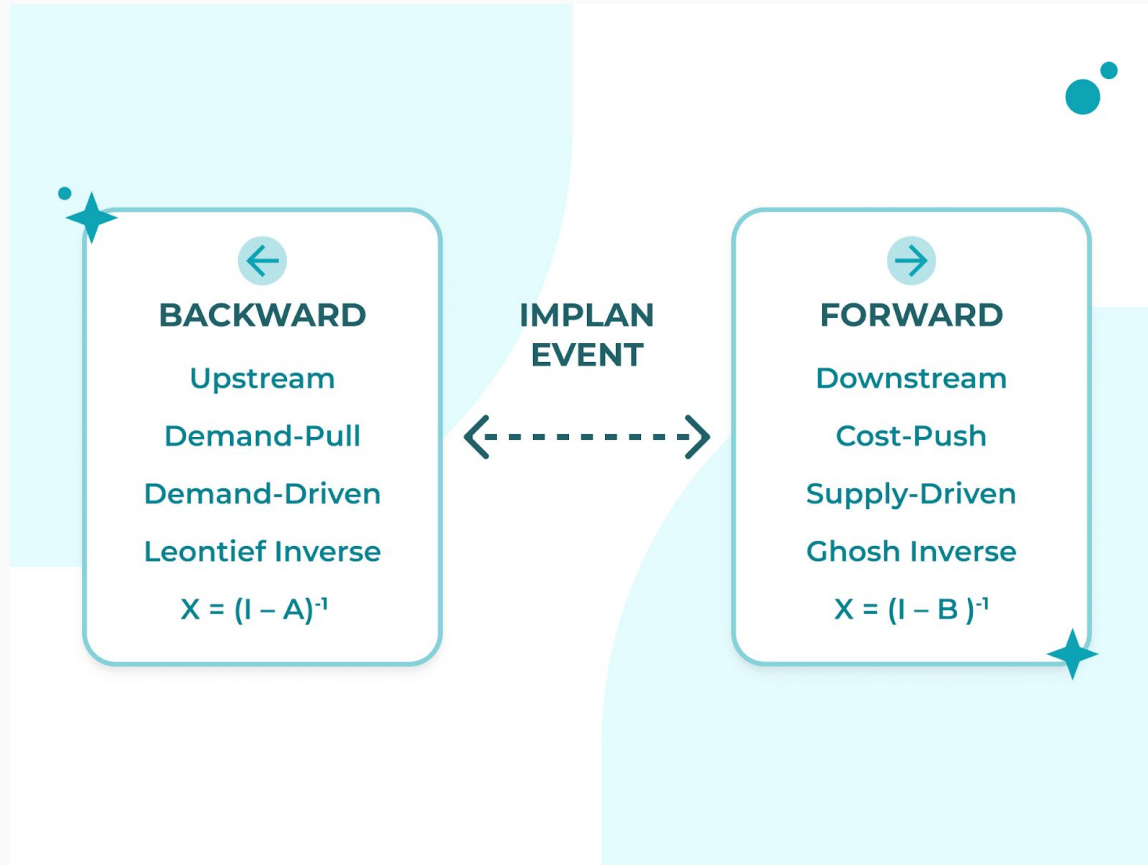


Two new guides make it easy to analyze

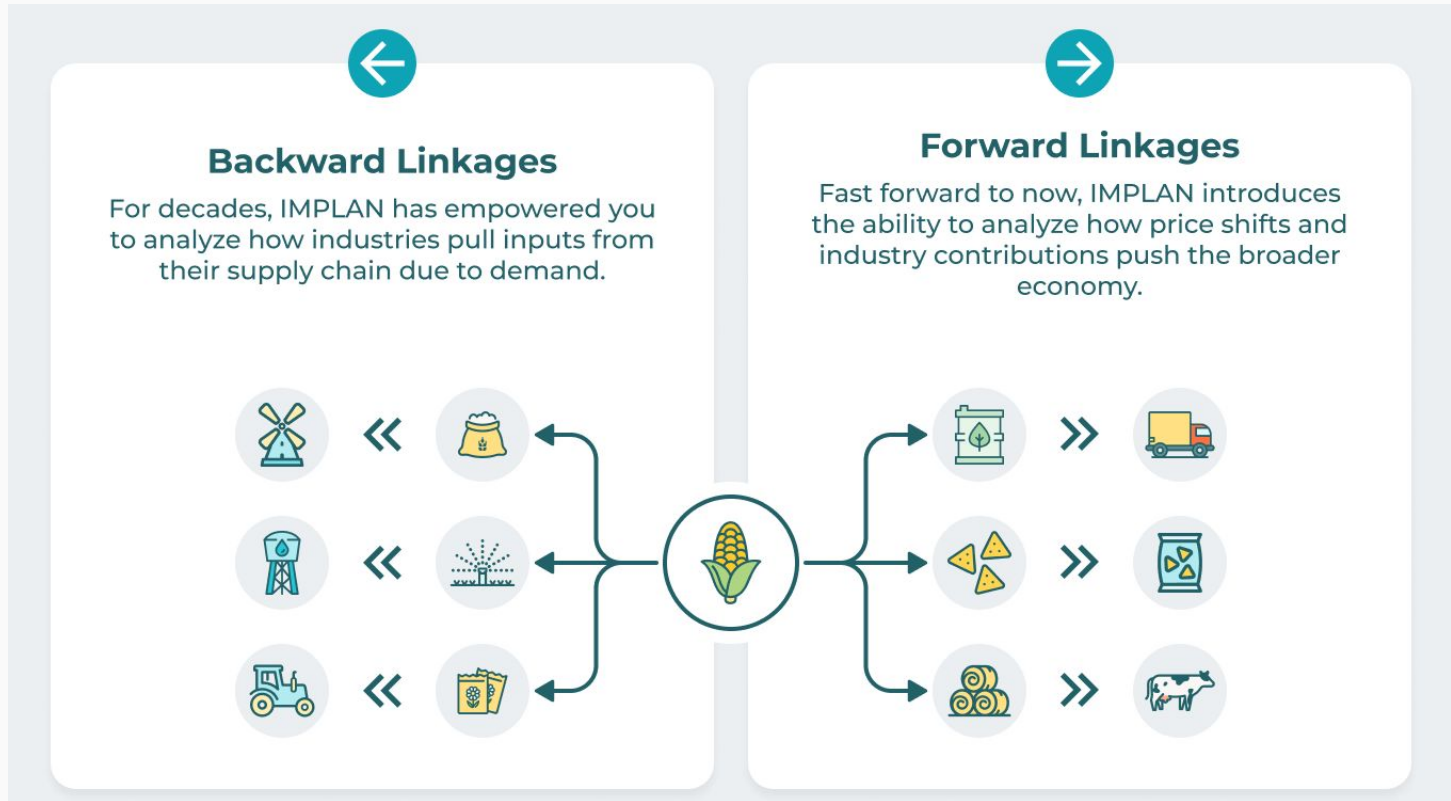


Enables Supply-Driven Input-Output Analysis

Backwards and Forwards



What are Forward Linkages?



Key Assumptions

Price Change (Cost-Push)

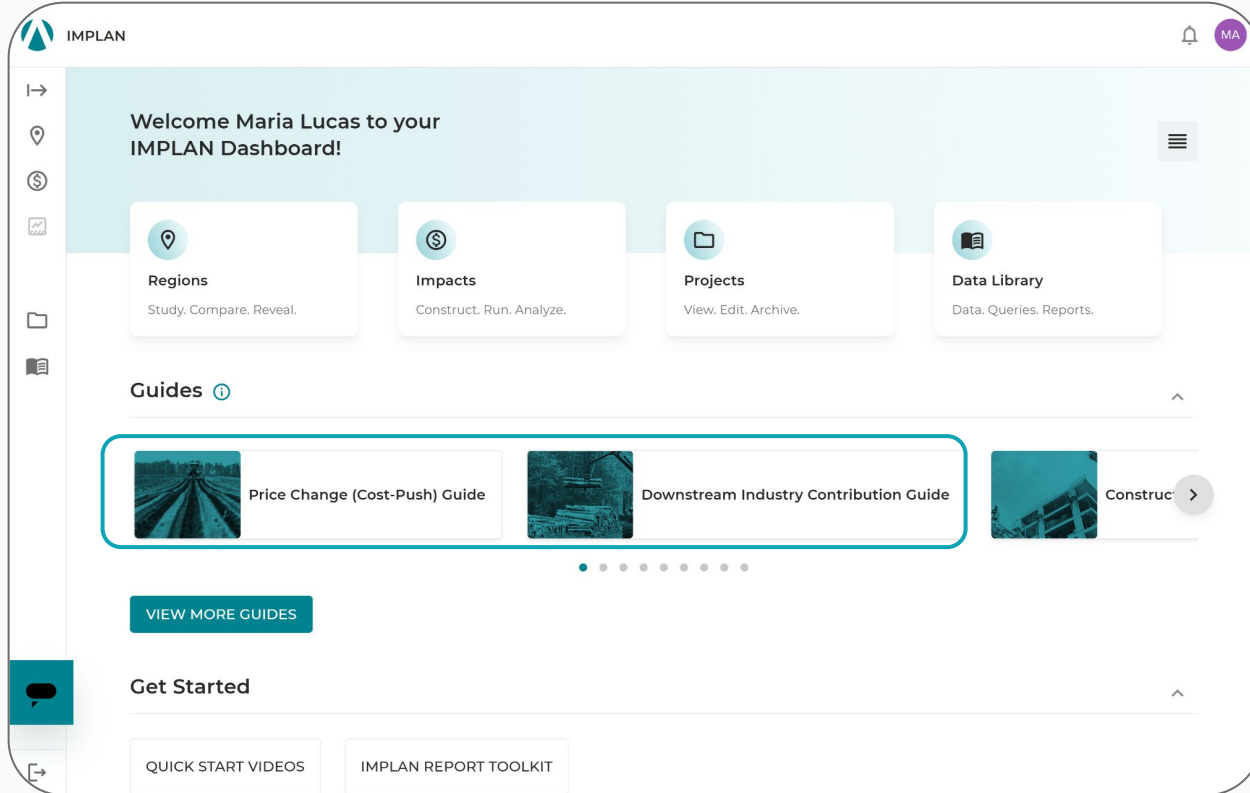
There is no change in the quantity of purchases of the good or service being analyzed.

Downstream Industry Contribution

Economic Effects are attributable to the downstream supply chain of the existing production being analyzed.

In IMPLAN

From the IMPLAN Dashboard



From the Region Details

The image shows a screenshot of the IMPLAN dashboard. The main header says "Welcome Maria Lucas to your IMPLAN Dashboard!". Below this are three main cards: "Regions" (Study, Compare, Reveal), "Impacts" (Construct, Run, Analyze), and "Projects" (View, Edit, Archive). The "Regions" card is highlighted with a red border. Below these is a "Guides" section with two items: "Price Change (Cost-Push) Guide" and "Downstream Industry Contr...".

On the right side, a dropdown menu is open for "MULTIPLIERS". The menu items are:

- Summary Multipliers >
- Detail Multipliers >
- Per Million Effects >
- Output Multiplier
- Employment Multipliers
- Labor Income Multipliers
- Value Added >
- Power Series
- Forward-Linked Output Multipliers
- Forward-Linked Power Series

The "Forward-Linked Output Multipliers" and "Forward-Linked Power Series" items are highlighted with a red border.

Price Changes

What happens when the price of something changes?

- ❖ Tariffs
- ❖ Price increase
- ❖ Climate Change

Price Change Example

According to the BLS PPI Detailed Reported for August 2025 the producer price index for Steel Mill Products went up 13.1% compared to 12 months prior.

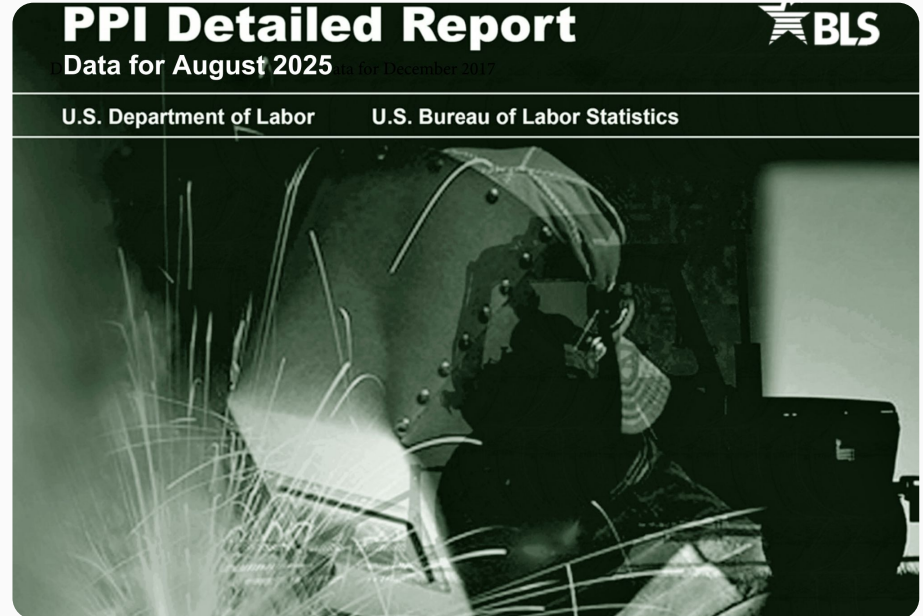


Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued
 [August 2025]

Grouping	Commodity code		Unadjusted 12-month percent change ¹	Seasonally adjusted 1-month percent change ¹				
	Group code	Item code		Aug. 2024 to Aug. 2025 ^P	Mar. to Apr.	Apr. to May ^P	May to June ^P	June to July ^P
Finished lubricants ²	05	76	-0.3	-0.4	-0.1	0.0	0.1	0.0
Lubricating oil base stocks ²	05	78	-18.2	-4.6	1.7	1.4	-1.8	-1.2
Asphalt.....	05	8102	-5.0	-2.2	-6.5	-4.9	-0.8	5.7
Basic inorganic chemicals ²	06	13	2.9	0.2	1.0	0.5	0.7	-0.3
Basic organic chemicals.....	06	14	-5.8	-2.3	-1.3	-0.5	0.3	-0.5
Prepared paint ²	06	21	0.8	0.0	0.1	0.1	0.1	0.0
Paint materials ²	06	22	8.2	-2.8	2.1	-0.9	-0.3	4.4
Medicinal and botanical chemicals ²	06	31	1.7	0.1	0.3	0.4	-0.3	0.8
Biological products, including diagnostics.....	06	37	3.8	0.3	0.3	0.5	0.6	0.3
Fats and oils, inedible ²	06	4	18.5	-1.9	4.0	-0.7	6.8	6.9
Nitrogenates.....	06	5201	19.6	-0.9	6.7	1.6	3.8	5.8
Phosphates.....	06	5202	27.5	0.7	0.9	10.8	8.6	4.5
Other agricultural chemicals ²	06	53	-0.1	-0.1	-0.7	0.8	0.1	0.0
Plastic resins and materials.....	06	6	-1.9	-0.9	-1.6	-1.1	-0.6	0.2
Industrial gases ²	06	7903	13.7	5.8	0.1	1.5	0.7	0.0
Adhesives and sealants ²	06	7904	3.0	0.4	0.5	0.6	-0.2	0.0
Synthetic rubber ²	07	1102	1.5	-1.2	-1.2	-1.4	-1.3	-0.2
Tires ²	07	1201	2.7	0.0	0.2	-0.2	1.1	0.9
Plastic construction products ²	07	21	-1.6	0.5	0.6	-0.2	-0.3	-0.3
Unsupported plastic film, sheet, other shapes ²	07	22	0.3	-0.2	-0.1	0.4	0.4	0.4
Parts for manufacturing from plastics ²	07	26	-1.1	0.0	0.0	-1.0	-0.1	0.0
Plastic packaging products ²	07	2A	1.3	0.1	-0.1	0.1	-0.3	0.1
Softwood lumber.....	08	11	5.2	2.8	-4.4	2.0	-0.2	-0.4
Hardwood lumber ²	08	12	6.2	0.4	0.4	-0.1	0.6	0.5
Millwork.....	08	2	0.8	0.0	0.1	0.2	0.3	0.5
Plywood ²	08	3	1.8	-1.0	0.2	-1.6	0.5	0.3
Paper ²	09	13	2.3	0.6	-0.3	-0.2	0.7	0.3
Paperboard ²	09	14	4.6	1.1	0.3	1.4	-0.9	-0.1
Paper boxes and containers ²	09	1503	5.7	1.2	1.0	0.1	0.5	0.2
Building paper and board ²	09	2	-19.5	-4.5	-3.9	-7.6	-2.7	-8.1
Commercial printing ²	09	47	2.3	0.4	0.5	0.3	-0.1	0.3
Foundry and forge shop products ²	10	15	1.9	0.4	0.1	-0.2	0.8	0.1
Steel mill products ²	10	17	13.1	5.7	7.5	-5.4	-0.8	1.5
Primary nonferrous metals ²	10	22	39.9	-3.1	4.6	5.9	8.1	1.4
Secondary nonferrous metals ²	10	24	16.6	4.1	-1.0	1.4	2.6	1.5
Aluminum mill shapes ²	10	2501	22.8	1.8	-3.6	-0.1	7.6	5.5
Copper and brass mill shapes ²	10	2502	4.9	1.7	-1.3	1.1	5.7	-3.7
Nonferrous wire and cable ²	10	26	10.2	4.2	-1.2	0.7	4.3	-3.1
Nonferrous foundry shop products ²	10	28	4.8	1.6	0.0	0.1	0.6	-0.1

Analyzing Steel Price Increase

✓ Region ————— 2 Cost Push

How would you like to model this price change?

% change in price before/after prices

Enter the change you are looking to model for the commodity you have previously selected below.

% change in price
13.10%

Dollar Year Timeline

2023

United States (US Totals)
Industry/Commodity

3207 - Iron and steel and ferroalloy products

New/Current State
\$29,316,387,196

- ❖ US Total
- ❖ IMPLAN Commodity 3207 - Iron and steel and ferroalloy products
- ❖ 13.1% increase in price

Results Report

Price Change Cost Impacts **United States (US Totals)**



\$29,316,387,196

Total Annual Cost Increase of Iron and steel and ferroalloy products

in 2023 dollars

\$27,662,246,444

Total Annual Direct Cost Increase to Industries

\$27,055,216,269

Total Annual Indirect Cost Increase to Industries

Summary

The price change results in a cost increase of \$29,316,387,196 in Iron and steel and ferroalloy products, in 2023 dollars. This cost change impacts production costs to industries further down the value chain due to their supply chain purchases. Assuming no changes to the quantity purchased, industries throughout the region experience a total cost increase of \$54,717,462,713. These figures are reported in 2025 dollar year. To adjust this, visit your preferences.

Details by Industry

Annual By Industry Cost Increase

Industry Name	Direct	Indirect	Total
Iron and steel mills and ferroalloy manufacturing	\$2,309,920,467	\$681,782,162	\$2,991,702,629
Automobile and light duty motor vehicle manufacturing	\$583,994,358	\$2,300,435,673	\$2,884,430,032
Fabricated structural metal manufacturing	\$1,536,622,935	\$428,624,614	\$1,965,247,549
Motor vehicle metal stamping	\$1,478,088,321	\$360,445,609	\$1,838,533,930
Rolled steel shape manufacturing	\$1,466,170,444	\$334,517,573	\$1,800,688,017
Iron, steel pipe and tube manufacturing from purchased steel	\$1,201,464,976	\$255,216,565	\$1,456,681,541
Totals	\$27,662,246,444	\$27,055,216,269	\$54,717,462,713

Downstream Industry Contribution

How is this Industry connected?

- ❖ Industry Significance
- ❖ Strategic Planning
- ❖ Cluster Analysis & Market Demand
- ❖ Natural & Human Made Disasters

Analyzing Corn Industry



- ❖ Ohio
- ❖ IMPLAN Industry 2 - Grain Farming
- ❖ \$3.5M in production

Results Report

Downstream Value Chain Contribution **Grain farming**



\$3,540,122,608

Direct Output

1,681.929

**Direct Wage &
Salary
Employment**

\$865,534,441

**Direct
Contribution to
GDP**

Details by Industry

Indirect Contribution By Industry

Industry Name	Output	Wage & Salary Employment	Value Added
Other animal food manufacturing	\$665,979,544	365.162	\$97,067,847
Other basic organic chemical manufacturing	\$498,946,685	222.382	\$121,209,283
Frozen specialties manufacturing	\$318,499,281	708.154	\$91,211,788
Flour milling	\$202,398,927	140.947	\$37,101,981
Poultry and egg production	\$178,829,561	83.237	\$41,902,580
All other food manufacturing	\$111,676,833	217.219	\$24,734,704
Totals	\$2,828,999,790	3,491.21	\$696,340,623

Summary Results

Summary

5,173.139 wage and salary jobs and 14,360.681 proprietors are attributable to the Grain farming industry and its downstream economic contribution. The industry's value chain also supports \$1,561,875,064 in GDP, \$831,228,632 of Labor Income, and \$6,369,122,398 of Output or total production value. The downstream activity supports a combined tax revenue of \$4,327,411 at the local, state, and federal levels. These figures are reported in 2025 dollar year. To adjust this, visit your preferences.

Economic Indicators by Impact

Impact	^	Employment	Labor Income	Value Added	Output
1 - Direct		14,911.58	\$525,461,297.98	\$865,534,441.19	\$3,540,122,607.57
2 - Indirect		4,622.24	\$305,767,334.38	\$696,340,622.62	\$2,828,999,790.28
3 - Induced		0.00	\$0.00	\$0.00	\$0.00
Totals		19,533.82	\$831,228,632.36	\$1,561,875,063.81	\$6,369,122,397.85

Tax Results

Tax Results							
Impact	Sub County General	Sub County Special Districts	County	State	Federal	Total	
1 - Direct	\$(12,789,492.50)	\$(80,906,353.14)	\$(36,460,395.47)	\$(135,487,163.04)	\$105,352,454.11	\$(160,290,950.04)	
2 - Indirect	\$8,020,435.73	\$23,057,075.09	\$10,229,588.72	\$46,268,771.24	\$77,042,489.78	\$164,618,360.57	
3 - Induced	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Totals	\$(4,769,056.77)	\$(57,849,278.05)	\$(26,230,806.75)	\$(89,218,391.80)	\$182,394,943.90	\$4,327,410.53	

Live Q&A

Additional Resources

- ❖ Check out how the guides work in this interactive page
- ❖ Dig into the details on the support site
- ❖ Test it out in IMPLAN

[Link to Overview](#)

[Forward Linkages Article](#)

[Take me to IMPLAN](#)

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Price Change
(Cost-Push) Guide



Downstream Industry
Contribution Guide


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