Executive summary

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Executive summary – Project overview

Scope of Engagement

Methodology and Approach

The Convenience Distribution Association ("CDA") engaged FTI Consulting, Inc. ("FTI") to assess the 2017 economic and fiscal impacts of convenience distributors on the U.S. economy and across the 50 states.

FTI collected data to characterize the direct employment and economic activities of the convenience distribution sector. Next, FTI then applied the data as inputs into the IMPLAN economic impact modeling system.

Direct Economic Footprint

- Sector sales and sector output
- Average wholesale markup
- Direct employment, wages, compensation, and labor income
- Geographic distribution
- Capital expenditures

Total Economic Impact

- Sales and output
- Employment
- Gross domestic product ("GDP")
- Labor income
- Federal taxes supported as well as state/local taxes supported

Collect Input Data

- CDA reports and literature
 - Adding-Value Flyer
 - Cross-Industry Compensation
 - Membership Roster
- Data from the U.S. Bureau of Economic Analysis or U.S. Census

IMPLAN Economic Modeling

- Applied the IMPLAN model to estimate the economic activity supported by the sector
 - Direct industry sector
 - Indirect (supply chain) and induced (consumer spending)





National Employment

Total Jobs Supported by State (thousands)



173,300

Total jobs nationally



58,900

Directly employed



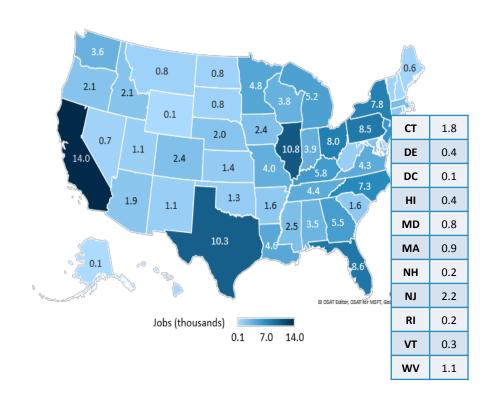
43,000

Jobs in the sector's supply chain



71,400

From employee spending



- Total jobs include indirect supplier jobs and induced jobs from consumer spending
- California (14,000), Illinois (10,800), and Texas (10,300) have the most jobs supported
- Every state (and the District of Columbia) had at least some jobs supported in 2017



Executive summary – The sector contributes billions in economic and fiscal activities throughout the U.S.

Output (\$ billions)



\$13.4 billion total

Sales throughout the U.S. economy counting the impact of indirect suppliers and induced consumer spending

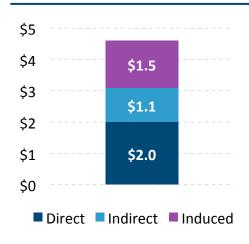
GDP (\$ billions)



\$8.2 billion total

GDP is the net of all new economic activity, production, or income because of the sector and its multipliers

Labor Income (\$ billions)



\$4.5 billion total

The sum of household income including wages, salaries, health insurance, other benefits, and the income of proprietors

Tax Revenues (\$ billions)



\$2.3 billion total

The economic activity supported by the sector supports tax collections by the federal, state, and local governments



Methodology and approach

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Methodology – Approach and overview

Data Sources

- FTI relied on a number of data sources to develop inputs for its analysis
- Key sources (described in more detail on next slide) included:
 - Prior CDA membership surveys and reports
 - Bureau of Economic Analysis
 - U.S. Census Bureau and its Annual Capital Expenditure Survey

Modeling and Analysis

- Using the above data sources, FTI developed national and state-by-state estimates for the direct economic scope of the convenience distribution sector
 - Includes direct sales, direct output, and direct employment across the U.S.
 - Used CDA membership survey to estimate the same metrics on a state-by-state basis
- FTI then fed these estimates into the IMPLAN economic model
 - IMPLAN is in wide use across academia, government, and private industry
 - IMPLAN estimates the economic activity associated with an economic sector through its suppliers (the "indirect" effect) and employee spending (the "induced" effect)
- IMPLAN models the total economic and fiscal scope of an economic sector
 - Economic: employment, sales output, gross domestic product, and labor income
 - Fiscal: federal taxes supported, state/local taxes supported



Methodology – Data sources

Prior CDA membership surveys and reports

- "Adding Value" Flyer
 - Total revenues (across the U.S.) for convenience distributors
 - Total employment (nationally again) for convenience distributors
- "Cross-Industry Compensation & Benefits Survey"
 - National and regional averages for wages, salaries, fringe benefits, and compensation
 - FTI converted these into aggregates (i.e., total compensation across the whole sector, not the average per worker) using the "Adding Value" employment numbers
- "Membership Geography"
 - List of CDA members by their name, city, and state

U.S. Bureau of Economic Analysis ("BEA")

- U.S. total economic (GDP) growth
 - Used as an input to scale CDA data from 2016 results to 2017 results

U.S. Census Bureau

- The U.S. Census Bureau runs the Annual Capital Expenditure Survey ("ACES") tracking the capital expenditures made by different sectors relative to their total output
- FTI used the ratio of investments to sales for the wholesale sector in the ACES survey to estimate a reasonable rate of capital expenditures by convenience distributors



Methodology – "Sales" and "output" calculations

Direct "Sales" and Direct "Output"

- IMPLAN distinguishes between a sector's total "sales" and total "output"
 - For most sectors, these quantities are the same
 - Retail and wholesale are the exceptions
- Federal statistical agencies, such as the BEA, treat retail and wholesale differently
 - They subtract the value of inventories from their "sales" to calculate retail or wholesale "output"
 - For instance, if a wholesaler has annual sales of \$100 million per year yet \$95 million goes towards the purchase of inventories, then their annual output is \$5 million
 - Federal data treats the distribution of inventories differently because the inventory is not "substantially transformed" by the retail or wholesale sector
- FTI accounted for this difference in constructing inputs into the IMPLAN economic model

Calculating "Sales" and "Output" for Convenience Distributors

- According to CDA literature, the convenience distribution sector had \$92 billion in sales for 2016
 - This figure for total revenue is equivalent to "sales" above
 - FTI grew this to \$94.28 billion for 2017 (the same as GDP growth between 2016 and 2017 of 2.5%)
- To transform this into "output," FTI asked for the average wholesale markup from CDA
 - CDA reported the sector's average wholesale markup was 6.0%
 - \$94.3 billion "sales" * 6.0% = \$5.7 billion "output"



Methodology – Employment and capital expenditures

Employment and Compensation

- CDA literature reported the sector's direct employment for 2016 was 57,500
 - FTI grew this figure based on GDP growth from 2016 to 2017 (the same method as output)
 - With an increase of 2.5%, direct employment for 2017 becomes 58,900
- FTI divided these 58,900 jobs between the 50 states and the District of Columbia based on the dispersal of CDA members across the states
 - CDA reported 115 distributor members
 - CDA reported an additional 176 manufacturers and affiliated groups
- FTI calculated the direct wages and compensation based on the compensation and benefits survey
 - The survey released its data regionally East, Midwest, South, and West
 - FTI applied its region-specific numbers to the calculation by state

Capital Expenditures ("Capex")

- Companies need to make investments in capital assets to expand or replace obsolete assets
 - Buildings, vehicles, equipment, software, etc.
- The rate of capex relative to sales or output is different by sector in the ACES survey
 - FTI used the general capex rate (i.e., 2.6% of annual output) for wholesale
 - FTI then applied that rate to convenience distributors (i.e., \$5.66 billion * 2.6% = \$144.3 billion)
 - Included in the modeling as output for a mixture of construction and manufacturing sectors



Economic impact results

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We modeled the economic impact of the convenience distribution sector across six economic metrics

- **1.** Sales: total business sales, economy-wide, supported by the sector's activities
- 2. Output: net sales or sales less inventories sold
 - The federal definition of "sales" and "output" are the same except for in retail and wholesale
 - Retail and wholesale do not "transform" what are already final goods for sale
 - For all other sectors, sales and output are equal
- **3. Employment:** the number of jobs supported by the sector's activities
- **4. Labor income:** the household income supported by the sector's activities
- **5. Gross domestic product:** the sum of all incomes related to production
 - Most typical of the total economic activity associated with a project or economic sector
 - Combination of sales, receipts, operating income, commodity taxes, and inventory changes minus its intermediate inputs (energy, raw materials, and semi-finished goods and services)
- **6. Tax revenues:** tax payments generated by the economic activity
 - Federal taxes paid
 - State and local taxes paid combined, not separately



There are three sub-categories of economic impact metrics

Direct Impacts

- Definition: the company or sector under study
- Examples: McLane, Core-Mark, Eby-Brown, Harold Levinson, and other convenience distributors

Indirect Impacts

- **Definition:** industries in the supply chain of the company or sector under study
- **Examples:** fuel, utilities, vehicle manufacturers, construction, software, and parts

Induced Impacts

- **Definition:** industries affected by the spending of "direct and indirect" employees
- **Examples:** spending on food, housing, healthcare, education, entertainment, etc.

Total Impacts

The combination of direct, indirect and induced impacts shows the total contribution of the industry to U.S. and state economies.



The table below shows the impact on the U.S. economy from convenience distribution activities for 2017

U.S. Level	Unit	Direct Impacts	Indirect Impacts*	Induced Impacts	Total Impacts
Employment	Units	58,900	43,000	71,400	173,300
Sales Output	\$ billions	\$94.3**	\$3.2	\$4.6	\$102.0**
	\$ billions	\$5.7	\$3.2	\$4.6	\$13.4
GDP	\$ billions	\$3.8	\$1.8	\$2.6	\$8.2
Labor Income	\$ billions	\$2.0	\$1.1	\$1.5	\$4.5

- Total federal tax revenues = \$1.2 billion
- State and local tax revenues = \$1.1 billion

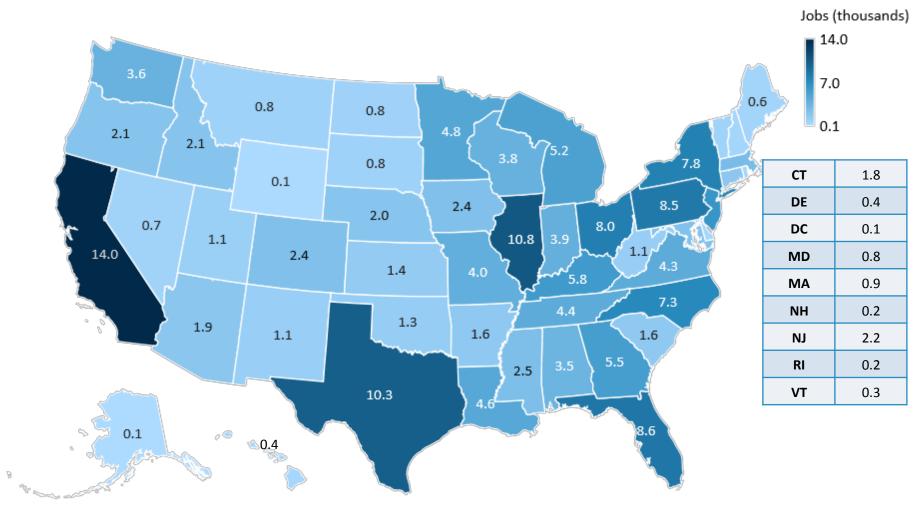


^{*}includes direct capex expenditures throughout results

^{**}includes the value of the convenience distribution sector's inventory not counted as "output" in federal definitions

Convenience distributors directly employed 58,900 in the U.S. and supported 173,300 total jobs nationally

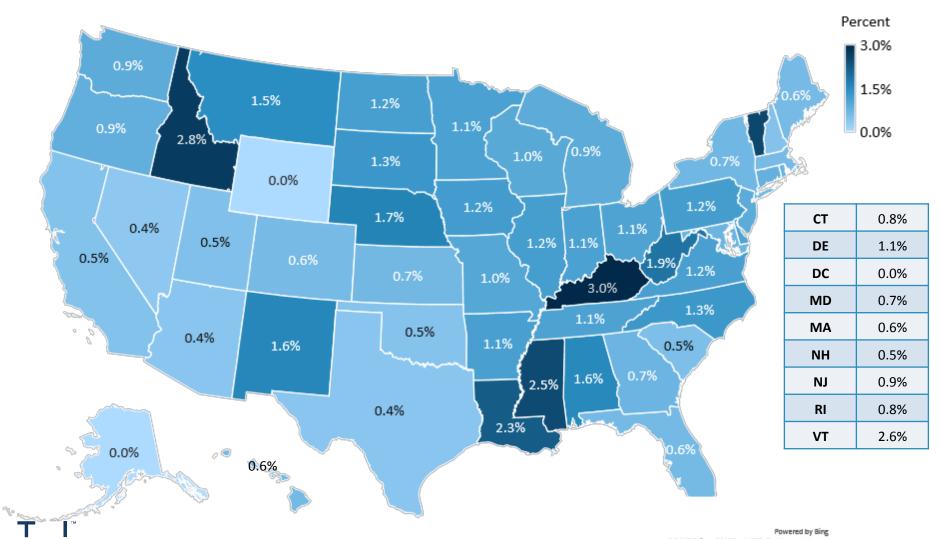
Total Jobs Supported by State (thousands)





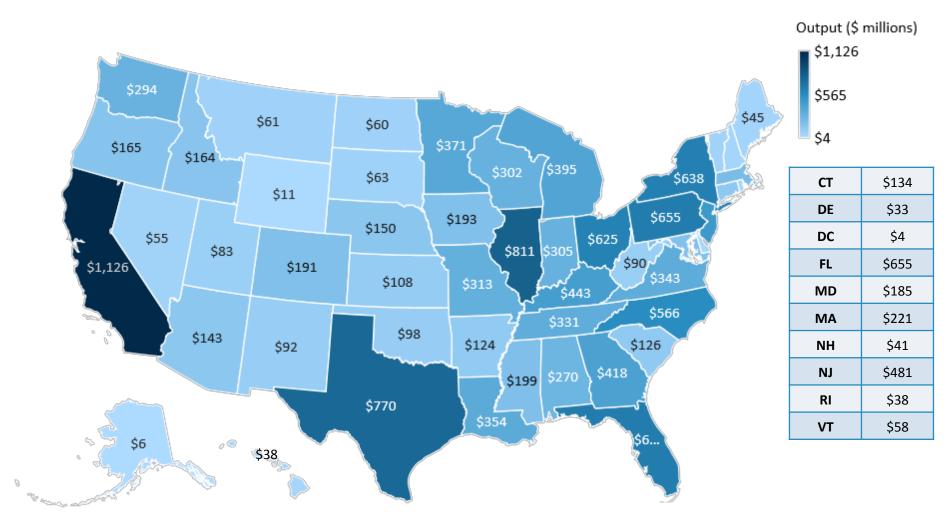
Convenience distribution represents approximately 1% of wholesale employment in a state (0.9% nationally)

Percent of Convenience Distribution Jobs of Total Wholesale Jobs



The states with the largest impacts on output include California, Illinois, Texas, Florida, Pennsylvania, and New York

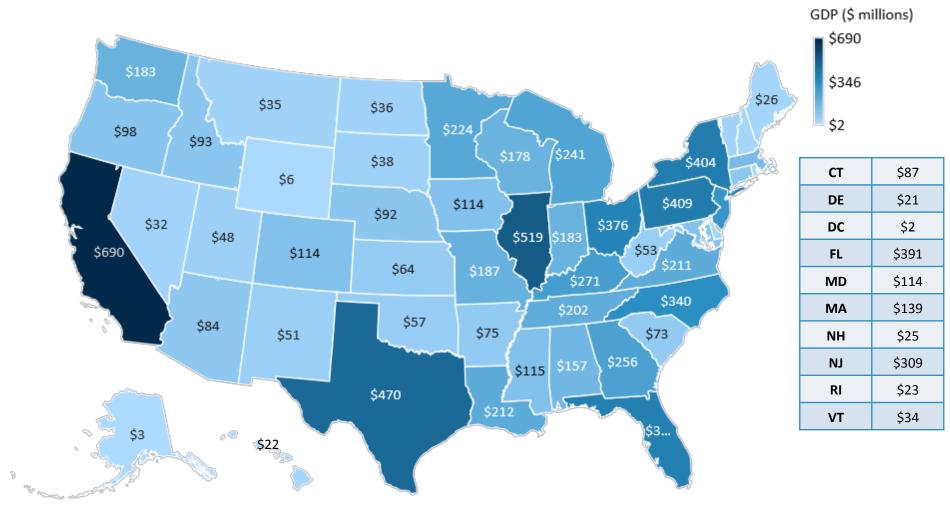
Total Output Supported by State (\$ millions)





In 2017, the convenience distribution sector supported \$8.2 billion of U.S. GDP across the states and DC

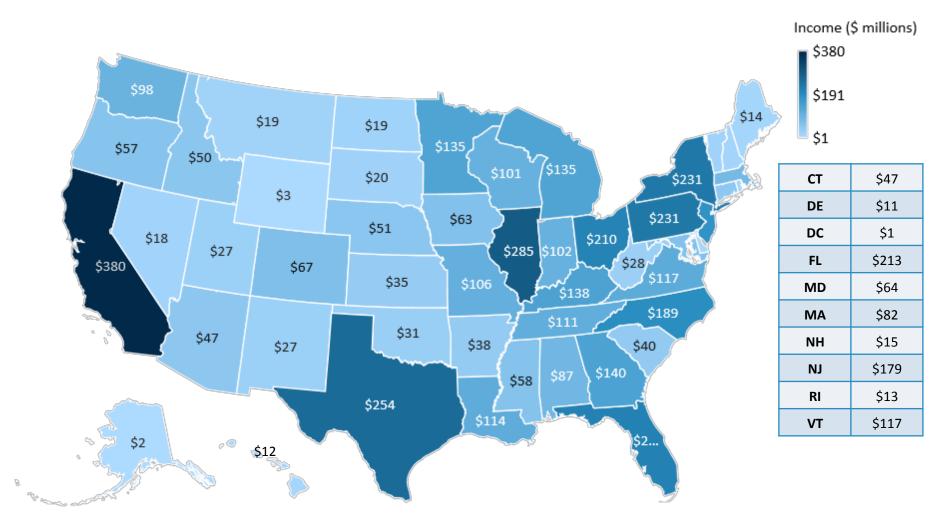
Total GDP Supported by State (\$ millions)





The industry supports \$4.5 billion in labor income nationally, with the largest impacts in California and Illinois

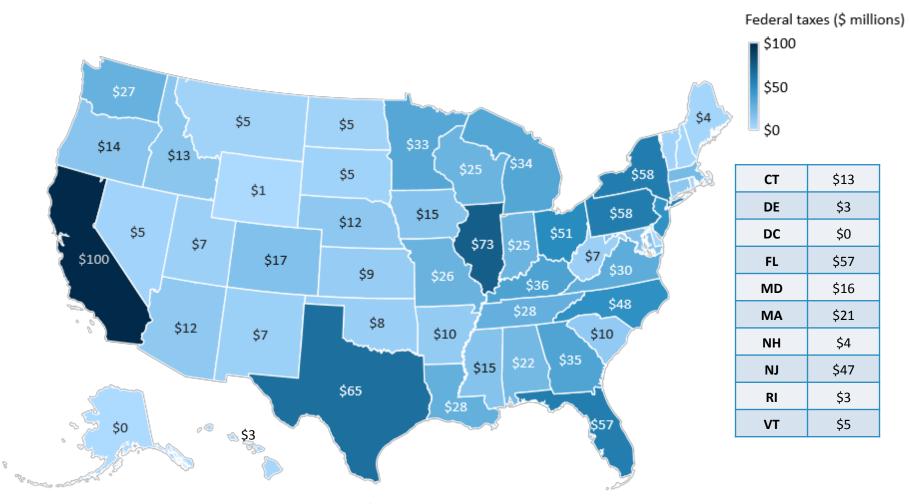
Total Labor Income Supported by State (\$ millions)





The economic impact of the convenience distribution sector contributes \$1.2 billion in federal tax revenues

Total Federal Taxes Supported by State (\$ millions)

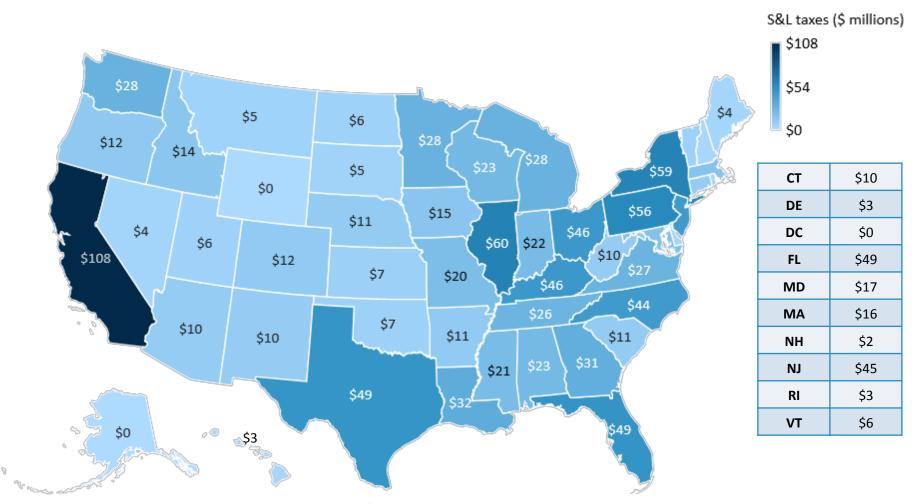




Includes all tax revenue from all sources, not just the direct taxes paid by the convenience distribution sector

Additionally, the economic activity supported by the sector contributes \$1.1 billion in state and local taxes

Total State and Local Taxes Supported by State (\$ millions)





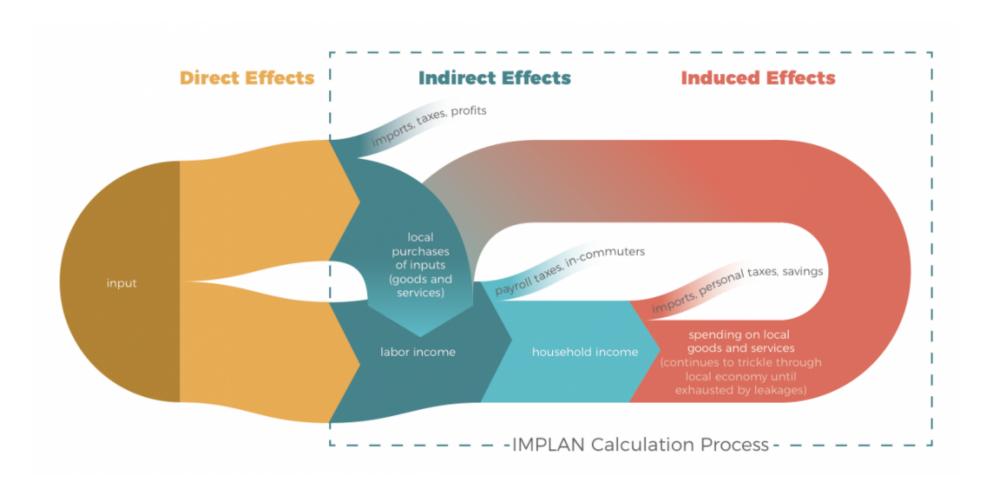
Includes all tax revenue from all sources, not just the direct taxes paid by the convenience distribution sector

Technical appendix

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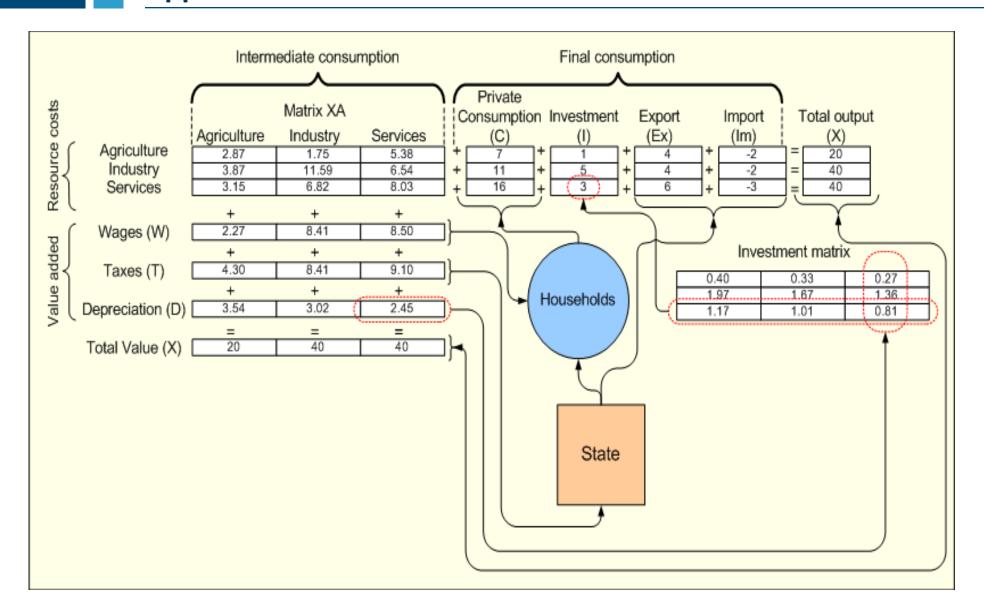


Appendix – IMPLAN model diagram





Appendix – IO model calculations







EXPERTS WITH IMPACT

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