



ECONOMIC IMPACT
Summary





Disclaimer

This information was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness, of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. References herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the U.S. Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the U.S. Government or any agency thereof.

Table of Contents

01

Result Summary

02

Direct Effects

03

**Impact on
Total Output**

04

**Impact on
Employment**

05

**Impact on
Employment**

06

**Impact on
Labor Income**

07

**INL Total
Impact
Comparison**

08

Multipliers



Result SUMMARY

As one of the largest employers in Idaho, Idaho National Laboratory provides a significant economic impact on Idaho's economy. During fiscal year 2020, INL employed 5,022 people, making it Idaho's 7th largest private employer and 10th largest employer when compared to all public and private businesses. INL's total impact grew by more than \$336 million – a 13.2% increase – between FY 2019 and FY 2020.

As INL continues to develop and grow so does Idaho's economy. A more developed economy provides an enhanced opportunity for the state of Idaho to capture economic benefits from INL's presence. Dually beneficial economic

activity between INL and supporting businesses becomes increasingly possible.

INL is one of the U.S. Department of Energy's 17 national laboratories. The laboratory performs work in each of DOE's strategic goal areas: energy, national security, science and environment. INL is the nation's leading center for nuclear energy research and development. Day-to-day management and operation of the laboratory is the responsibility of Battelle Energy Alliance.

This study evaluates the total economic impact INL operations have on Idaho's economy. The economic impacts identified in this study only include INL operations managed by BEA

and not the impact of other DOE contractors, the DOE itself, or the Naval Reactors Facility.

Economic impacts are separated into the following three categories:

- Direct impact, composed of operation expenditures made by INL.
- Indirect impacts, which are the result of interindustry trade between INL and suppliers of goods and services within Idaho.
- Induced impacts, created by households spending income earned directly or indirectly from INL operations.

Total economic impact is the combination of all three impact categories.

TABLE 1. COMBINED INL ECONOMIC IMPACT ON STATE OF IDAHO

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	5,022	\$731,038,222	\$925,209,247	\$1,492,299,497
Indirect Effect	4,375	\$206,321,364	\$323,897,818	\$686,749,797
Induced Effect	4,916	\$207,237,077	\$377,165,620	\$701,100,471
Total Impact	14,313	\$1,144,596,663	\$1,626,272,685	\$2,880,149,765
Multiplier	2.85	1.57	1.76	1.93

The number of jobs created or sustained

The amount of income including employee compensation (wages and benefits) and proprietor income

The value of a combination of innovation and improvement made as basic resources and intermediate goods are processed into final goods

The value of industry output or contributions to state gross domestic output

In FY 2020 there was a change in accounting methodology that resulted in shifting expenditures from payroll categories into goods and services. These changes were also applied to FY 2019, requiring a recalculation of economic impacts for FY 2019. This made it possible to accurately compare growth between FY 2019 and FY 2020. For this reason, the FY 2019 impacts in this report will differ slightly from the previously reported impacts for that year.

Combining INL operations with additional indirect and induced impacts, the company adds \$2.88 billion to total output and more than 14,300 to employment in Idaho. Table 1 summarizes the impacts. Other important impacts include the following:

- INL’s total output impact grew by more than \$336 million between FY 2019 and FY 2020 – a 13.2% increase.
- INL’s total output impact increased by 103.7% between 2014 and 2020.
- The total employment impact of INL operations accounts for 1.9% of Idaho’s covered employment.
- INL directly employed 5,022 workers in Idaho; secondary effects in Idaho accounted for an additional 9,291 jobs for a total of 14,313 jobs – a 2.4% increase from FY 2019.
- INL total employment impacts increased by 66.1% between 2014 and 2020.
- INL brought money into Idaho and generated additional value-added output of more than \$1.6 billion.
- INL accounted for more than 3.4% of statewide economic output.
- Nearly \$1.4 billion of economic output was generated through INL suppliers and employee household spending.
- INL increased personal income in the state by \$1.14 billion.
- INL economic impacts accounted for 1.4% of all personal income in the state.
- INL impacts resulted in an estimated \$110.8 million in state and local tax revenues.
- Taxes generated by INL operations account for 2.2% of total state and local tax revenue (based on FY 2020 state tax revenues).
- Average base salary of an INL employee in FY 2020 was \$104,157 annually, up from \$100,485 in FY 2018.
- BEA subcontracted nearly \$229 million to Idaho subcontractors.
- BEA corporate office contributed more than \$566,000 to charitable giving.

Direct EFFECTS

Direct effects include total operating expenses, including the purchase of goods and services, taxes, education reimbursements and payments to employees. These direct effects for FY 2020 account for nearly \$1.5 billion (see Table 2). Payments to employees

can be broken down into payment of wages and salaries, and employee benefits.

To improve the accuracy of the economic impact model, INL operations and expenditures were analyzed according to the

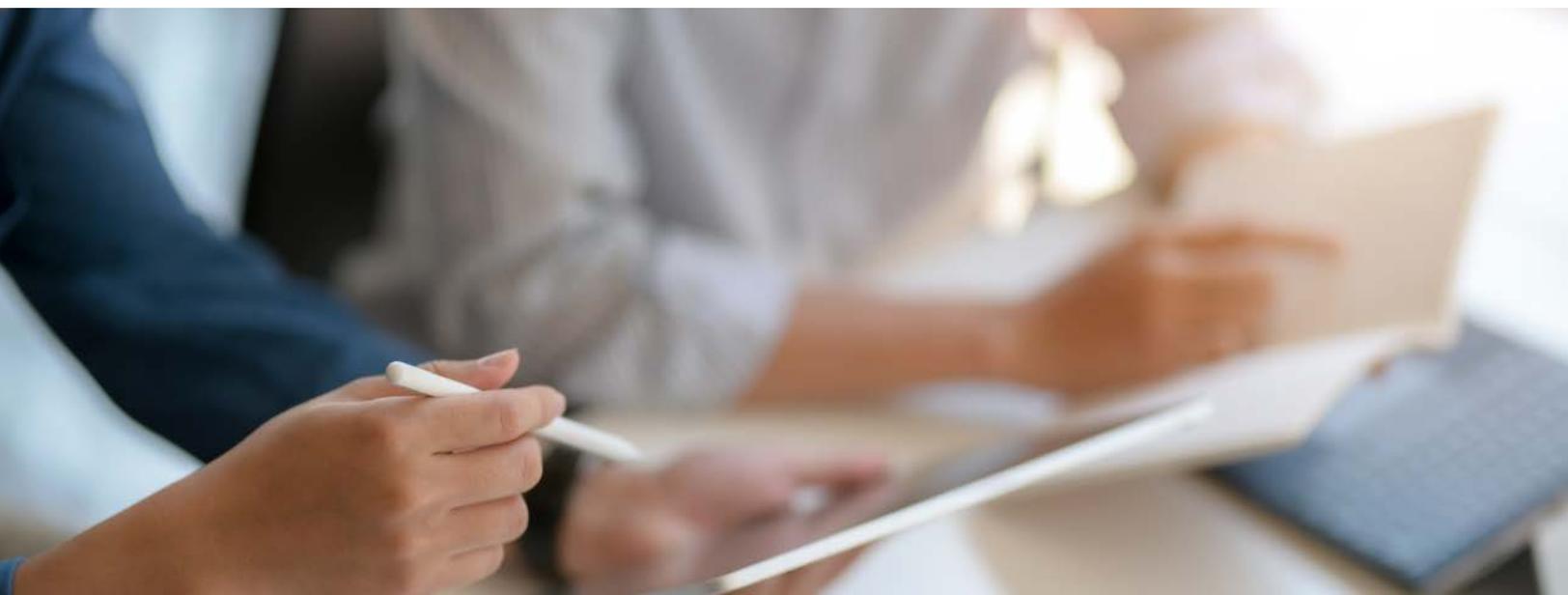
department or directorate where the expenses were incurred. Direct effects were aggregated according to industry and directorate similarities creating a series of industry categories that more closely represent INL operations.

TABLE 2. INL EXPENDITURES (MILLIONS): FY 2014-2020

Expense	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019*	FY 2020*	'19-'20 Change	% Change
Goods & Services	\$394	\$433	\$512	\$431	\$322	\$695	\$761	\$66	9.6%
Payroll Benefits Medical	\$46	\$53	\$62	\$67	\$69	\$78	\$76	-\$1	-1.8%
Payroll Benefits Retirement	\$38	\$47	\$63	\$57	\$67	\$60	\$73	\$13	21.2%
Payroll Salaries ^a	\$355	\$384	\$397	\$445	\$631	\$516	\$582	\$66	12.7%
Grand Total	\$832	\$917	\$1,034	\$1,001	\$1,089	\$1,349	\$1,492	\$143	10.6%

*A change in accounting methodology resulted in a shift of funds from the payroll categories into goods and services

^aTotal Payroll Salaries and Taxes include base salary, special pay, overtime, and taxes



IMPACT ON TOTAL Output

In FY 2020, INL operations added \$2.88 billion to Idaho's gross economic output. This represents more than 3.44% of Idaho's total output or gross state product. This comes as a result of the direct effects of INL operations being multiplied through the economy. During FY 2020, INL contracted to purchase more than \$229 million worth of goods and services with

Idaho businesses. According to the economic impact model and the presence of potential supporting businesses, the actual indirect impact of INL operations could reach \$686 million.

INL employees' spending creates an additional induced effect of more than \$701 million on

Idaho's economy. For every \$100 in direct economic activity at INL, an additional \$93 of activity is created or sustained throughout the state's economy. This results in an output multiplier of 1.93. INL total output impacts increased by 104% between 2014 and 2020. See Figure 1 for an illustration of INL's impact on total output.

\$2.88 BILLION

IDAHO'S GROSS economic output in FY 2020

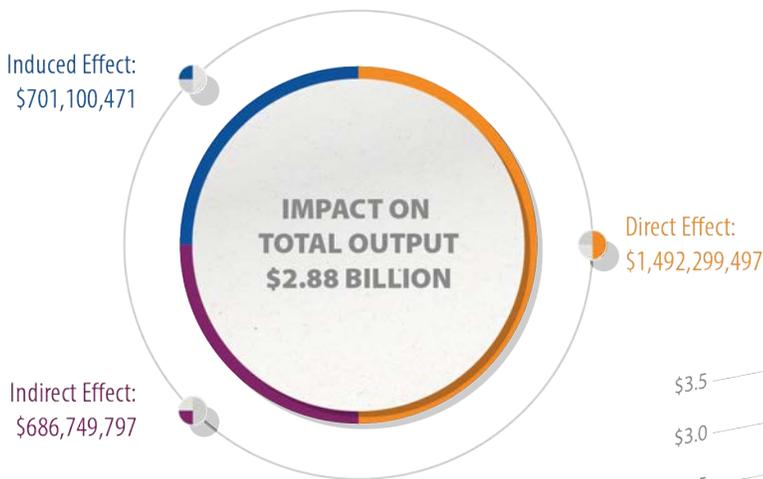


FIGURE 1. IMPACT ON TOTAL OUTPUT: \$2.88 BILLION

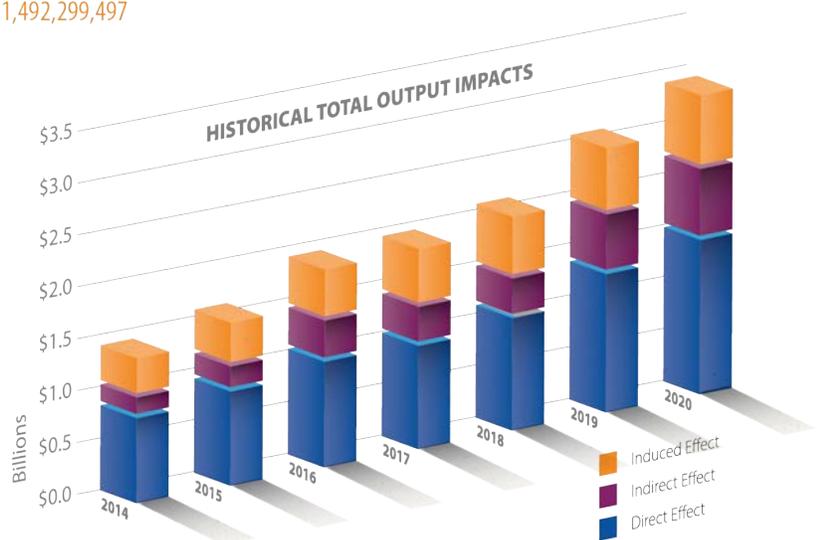


FIGURE 2. HISTORICAL TOTAL OUTPUT IMPACTS

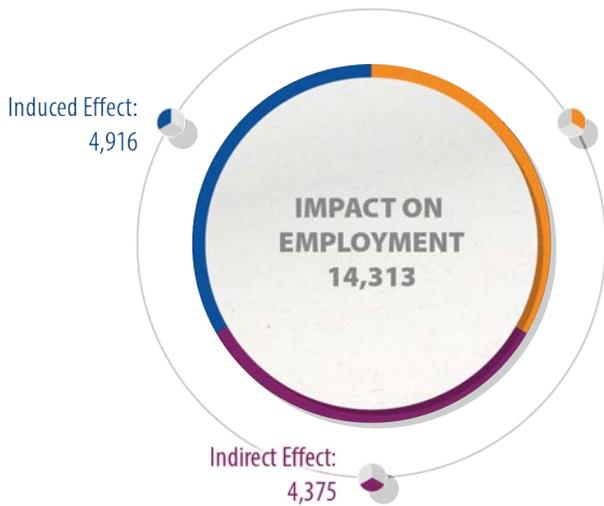


FIGURE 3. IMPACT ON EMPLOYMENT: 14,313

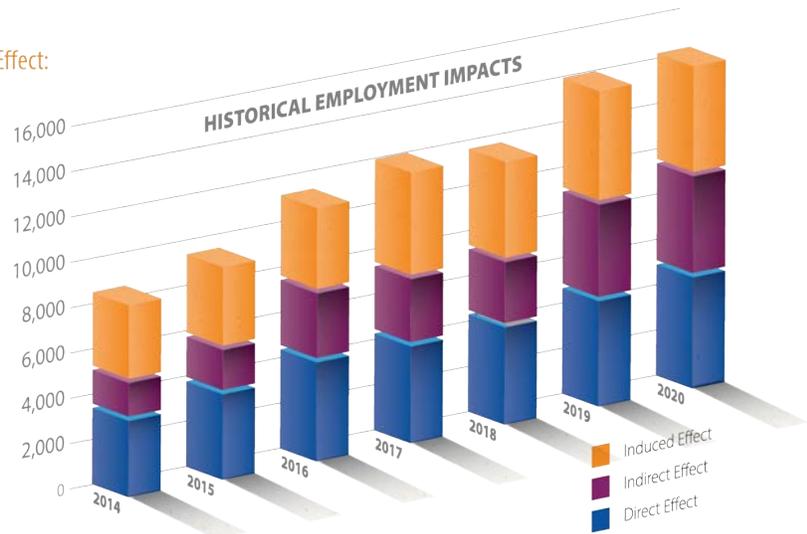


FIGURE 4. HISTORICAL EMPLOYMENT IMPACTS

IMPACT ON **Employment**

In FY 2020, INL employed an average of 5,022 people. An additional 4,375 jobs are created or sustained by industries that support INL operations. INL employee spending creates or sustains an additional 4,916 jobs throughout Idaho. The combined employment impact accounts for

14,313 jobs. For every 100 INL jobs created, an additional 185 jobs are created or sustained throughout Idaho. Total employment impacts increased by nearly 66 percent between 2014 and 2020. See Figure 3 for an illustration of INL's impact of employment.

5,022
INL EMPLOYEES
 average for FY 2020

IMPACT ON LABOR

Income

INL's impact on Idaho's total labor income for FY 2020 was more than \$1.14 billion — or 1.4% of Idaho's total personal income. Total labor income includes wages and salaries, employee benefits and payroll taxes. The

total income for employees of industries that support INL operations were more than \$206 million. INL employee's household spending patterns generated \$207 million in employee compensation for individuals

employed by Idaho businesses. The average base salary of an INL employee was \$104,157. Labor income impacts increased by 73% between 2014 and 2020. See Figure 5 for an illustration of INL's impact on labor income.

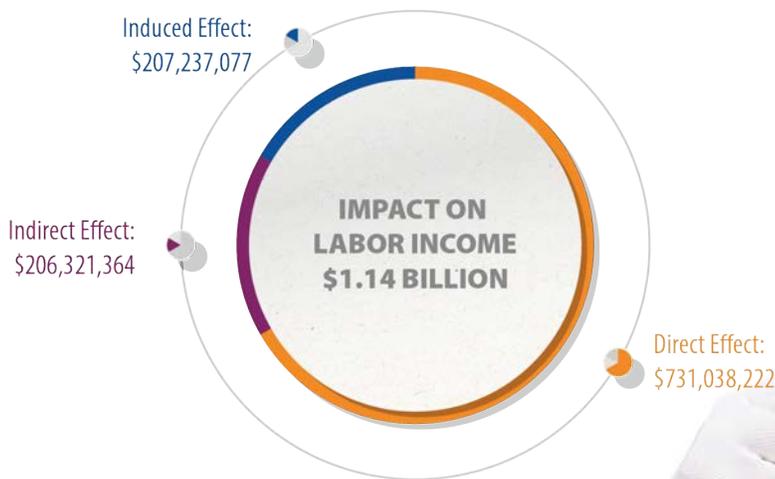


FIGURE 5. IMPACT ON LABOR INCOME: \$1.14 BILLION

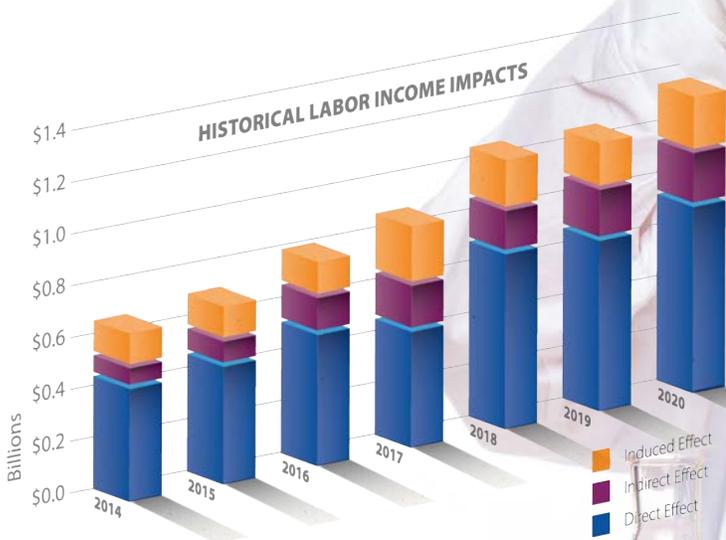


FIGURE 6. HISTORICAL LABOR INCOME IMPACT





Value-Added IMPACT

Value-added impacts are created by a combination of innovation and improvement made as basic resources and intermediate goods are processed into final goods. Service-related production also added significant value to the economy. INL directly added more than \$925 million of value to Idaho. Industries that supported INL indirectly added nearly \$324

million of value to Idaho. Induced value-added impacts resulted in more than \$377 million in economic activity. The total value-added impact was more than \$1.6 billion. Value added impacts increased by more than 80% between 2014 and 2020. See Figure 7 for an illustration of INL's value-added impact.

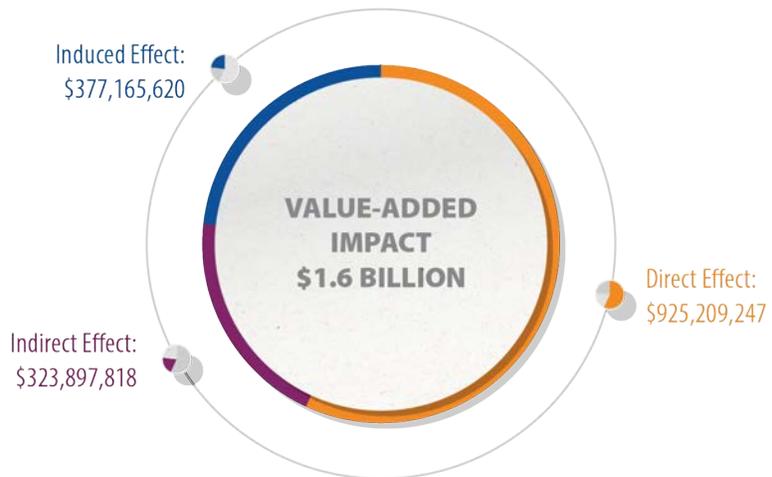


FIGURE 7. VALUE-ADDED IMPACT: \$1.6 BILLION

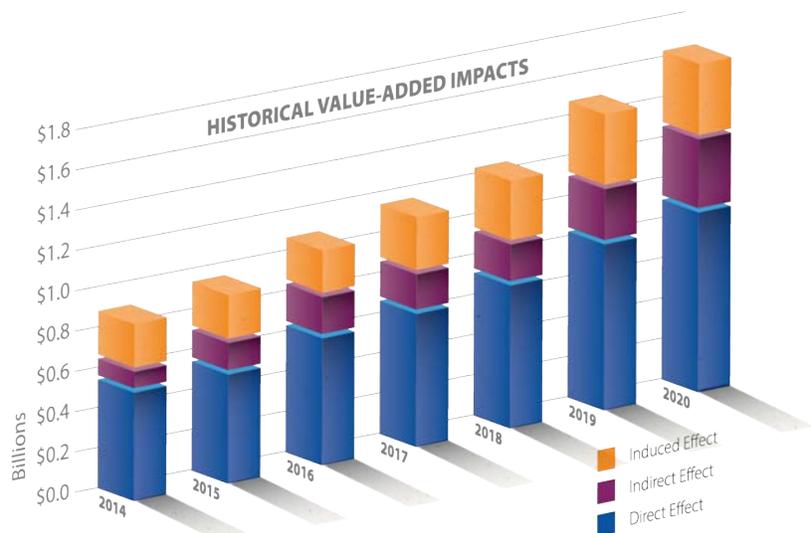


FIGURE 8. HISTORICAL VALUE-ADDED IMPACT

INL TOTAL IMPACT COMPARISON

INL's increased economic activity in FY 2020 led to a \$336 million or 13.2% increase in output when compared to FY 2019. This resulted in a net change of 342 jobs throughout Idaho. Added employment at INL and supporting business fueled growth in labor

income by almost \$98 million – a 9.5% increase over FY 2019. The combined value-added impact of innovation at INL and supporting businesses improved by more than \$139 million or 9.4% from FY 2019 to FY 2020.

TABLE 3. INL TOTAL IMPACT COMPARISON (\$MILLIONS)

Impact Type	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019*	FY 2020*	'19-'20 Change	% Change
Output	\$1,414	\$1,584	\$1,908	\$1,935	\$2,059	\$2,544	\$2,880	\$336	13.2%
Value Added	\$903	\$942	\$1,085	\$1,160	\$1,236	\$1,487	\$1,626	\$139	9.4%
Labor Income	\$661	\$703	\$795	\$862	\$1,035	\$1,046	\$1,145	\$99	9.5%
Employment	8,615	9,293	11,276	12,027	11,789	13,971	14,313	342	2.4%

MULTIPLIERS

- **Output Multiplier** – INL's output multiplier was **1.93**, which means that for every \$100 of direct impact added by INL operations, an additional \$93 dollars will be generated throughout Idaho's economy.
- **Employment Multiplier** – INL's employment multiplier is **2.85**, which means that an addition of 100 employees to INL's payroll will result in an additional 185 created throughout Idaho's economy.

- **Labor Income Multiplier** – INL's labor income multiplier is **1.57**, which means that if INL increased its employee's compensation by \$100, then an additional \$57 in employee compensation would be added to Idaho's economy.
- **Value-Added Multiplier** – INL's value-added multiplier is **1.76**, which means that if INL increased its value-added production of final goods

and services by \$100, then an additional \$76 in value would be added to Idaho's economy.



Multipliers are calculated by dividing total impacts by direct impacts; multipliers increase as INL's ability to use local businesses increases. Multipliers are generated based on government data sources feeding the economic model. These data sources help identify the availability of businesses within the defined region – all of Idaho in this case. Each industry is part of a matrix that identifies how dollars spent in one industry will be absorbed by all the other industries in the model. If there are not enough businesses in the region to meet purchasing needs, then dollars are allowed to "leak" from the region. Consumer spending is also a factor when calculating multipliers. For induced spending multipliers, when Idaho residents shop online there will be a lower local economic impact than if they visit local stores. The model used in this report utilizes IMPLAN's Social Accounting Matrix multipliers.

