



IDAHO
NATIONAL
LABORATORY **FY16**

Economic Summary

RESEARCH AND DEVELOPMENT

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CONTENTS

RESULTS SUMMARY.....	1
DIRECT IMPACTS.....	2
IMPACT ON TOTAL OUTPUT.....	3
IMPACT ON EMPLOYMENT.....	4
IMPACT ON LABOR INCOME.....	5
VALUE-ADDED IMPACT.....	6
INL TOTAL IMPACT COMPARISON.....	7
MULTIPLIERS.....	7

TABLES

TABLE 1. <i>COMBINED INL ECONOMIC IMPACT ON IDAHO</i>	2
TABLE 2. <i>DIRECT IMPACTS COMPARISON</i>	2
TABLE 3. <i>INL TOTAL IMPACT COMPARISON</i>	7

FIGURES

FIGURE 1. <i>INL DIRECT SPENDING AND TOTAL ECONOMIC IMPACT</i>	2
FIGURE 2. <i>IMPACT ON TOTAL OUTPUT: \$1,907,782,973</i>	3
FIGURE 3. <i>IMPACT ON EMPLOYMENT: 11,276 JOBS</i>	4
FIGURE 4. <i>IMPACT ON LABOR INCOME: \$794,598,403</i>	5
FIGURE 5. <i>IMPACT ON VALUE ADDED: \$1,084,620,317</i>	6

RESULTS SUMMARY

Idaho National Laboratory (INL) is one of the largest employers in Idaho and, as such, has a significant economic impact on Idaho's economy. INL employed nearly 4,100 employees during Fiscal Year (FY) 2016, making it Idaho's sixth largest private employer and tenth largest employer when compared to all public and private businesses. Due to increased activity, INL's total output impact improved by nearly \$324 million—a 20.4% increase—between FY 2015 and FY 2016.

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

This study evaluates the total economic impact that 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, DOE itself or the Naval Reactors Facility. Economic impact studies for INL prior to FY 2014 included the impact of other contractors; this should be considered when comparing the FY 2016 study with those performed prior to FY 2014.

Economic impacts are separated into the following three categories: the direct impacts, composed of INL operation expenditures; indirect impacts, which are the result of interindustry trade between INL and suppliers of goods and services within Idaho; and induced impacts, created by household spending of income earned directly or indirectly from INL operations. Total economic impact is the combination of all three impact categories.

When combined with indirect and induced impacts, INL operations add \$1.9 billion to Idaho's total output and 11,276 jobs to Idaho's economy. Table 1 summarizes the impacts. Other important impacts in FY 2016 include the following:

- INL's total output impact increased by nearly \$324 million between FY 2015 and FY 2016—a 20.4% increase.
- The total employment impact of INL operations accounts for 1.5% of Idaho's employment.
- INL directly employed an average of 4,077 workers in Idaho; secondary impacts in Idaho accounted for an additional 7,199 jobs for a total of 11,276 jobs—a 21.3% increase from FY 2015.
- INL brought money into Idaho and generated value-added output of more than \$1.08 billion.
- INL accounted for more than 2.9% of statewide economic output, up from 2.5% in FY 2015.
- More than \$874 million of economic output was generated through INL suppliers and employee household spending.
- INL increased personal income in the state by \$795 million.
- INL economic impacts accounted for 1.3% of all personal income in the state.
- INL impacts resulted in an estimated \$65 million in state and local tax revenues.
- Taxes generated by INL operations account for 1.7% of total state and local tax revenue (based on FY 2015 state tax revenues).
- Average base salary of an INL employee in FY 2016 was \$92,660 annually, up from \$88,635 in FY 2015.
- BEA subcontracted more than \$136 million to Idaho subcontractors.
- BEA corporate office contributed \$623,454 to charitable giving.

TABLE 1. COMBINED INL ECONOMIC IMPACT ON IDAHO

IMPACT TYPE	EMPLOYMENT ^a	LABOR INCOME ^b	VALUE ADDED ^c	OUTPUT ^d
Direct	4,077	\$521,487,975	\$625,480,903	\$1,033,850,293
Indirect	3,336	\$130,084,436	\$206,163,816	\$400,407,096
Induced	3,863	\$143,025,992	\$252,975,598	\$473,525,584
Total	11,276	\$794,598,403	\$1,084,620,317	\$1,907,782,973
Multiplier	2.77	1.52	1.73	1.85

^aEmployment — The number of jobs created or sustained

^bLabor Income — The amount of income, including employee compensation (wages and benefits) and proprietor income

^cValue Added — The value of a combination of innovation and improvements made as basic resources and intermediate goods are processed into final goods

^dOutput — The value of industry output or contributions to state gross domestic output

DIRECT IMPACTS

Direct impacts include total operating expenses, including goods and services purchased, taxes, education reimbursements, and payments to employees. These direct impacts for FY-2016 account for more than \$1.03 billion (see Table 2). Payments to employees can be broken down into employee benefits and payment of wages and salaries. See Figure 1 for an illustration of INL's direct spending and total impact on Idaho's economy.


FIGURE 1: INL DIRECT SPENDING AND TOTAL ECONOMIC IMPACT
TABLE 2. DIRECT IMPACTS COMPARISON

EXPENSE	FY 2014	FY 2015	FY 2016	FY 2015- FY 2016 CHANGE
Goods and Services	\$393,658,683	\$433,152,731	\$512,362,318	18.3%
Payroll Benefits, Medical	\$45,603,107	\$53,280,337	\$69,345,685	30.1%
Payroll Benefits, Retirement	\$37,670,747	\$46,833,027	\$55,567,081	18.6%
Payroll Salaries and Taxes ^a	\$355,399,575	\$383,857,473	\$396,575,209	3.3%
Grand Total	\$832,332,112	\$917,123,568	\$1,033,850,293	12.7%

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

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 impacts were aggregated according to industry and directorate similarities, creating a series of industry categories that more closely represent INL operations.

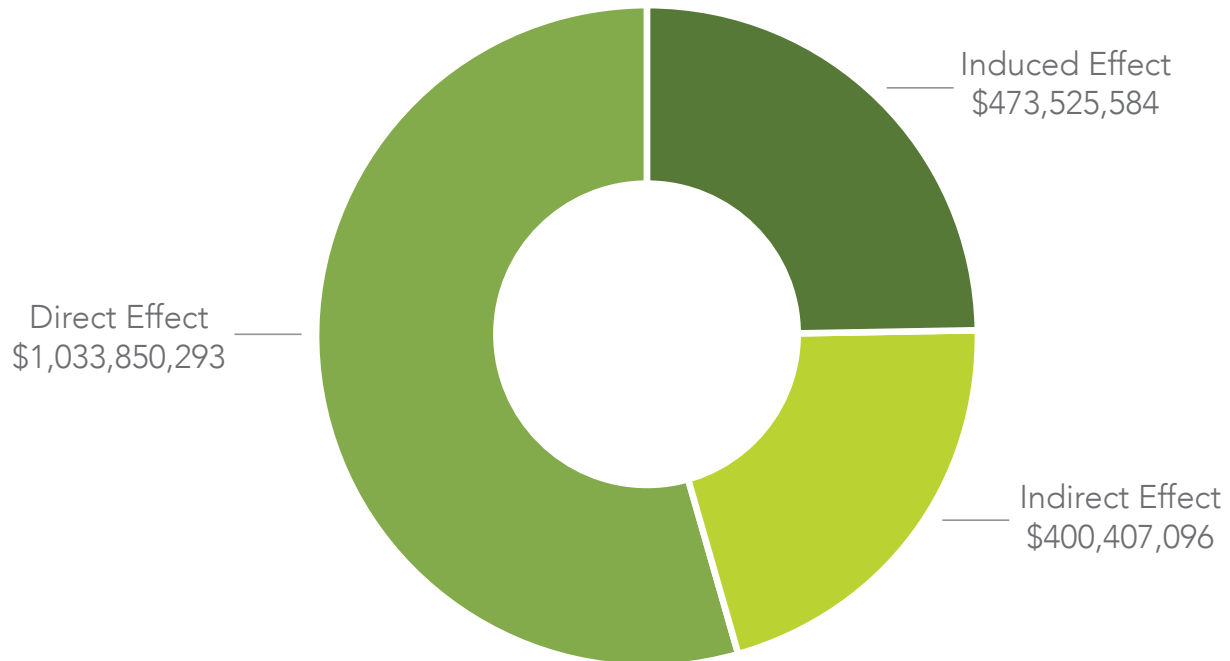


FIGURE 2: IMPACT ON TOTAL OUTPUT: \$1,907,782,973

IMPACT ON TOTAL OUTPUT

In FY 2016, INL operations added \$1.9 billion to Idaho's gross economic output. This represents more than 2.9% of Idaho's total output or gross state product. This comes as a result of the direct impacts of INL operations being multiplied throughout the economy. During FY 2016, INL contracted to purchase more than \$136 million worth of goods and services from Idaho businesses. According to the economic impact model and the presence of potential supporting businesses, the actual indirect impact of INL operations could reach \$400 million.

INL employees' spending creates an additional induced impact of more than \$473 million on Idaho's economy. For every \$100 in direct economic activity at INL, an additional \$85 of activity is created or sustained throughout the state's economy. This results in an output multiplier of 1.85. See Figure 2 for an illustration of INL's impact on total output.

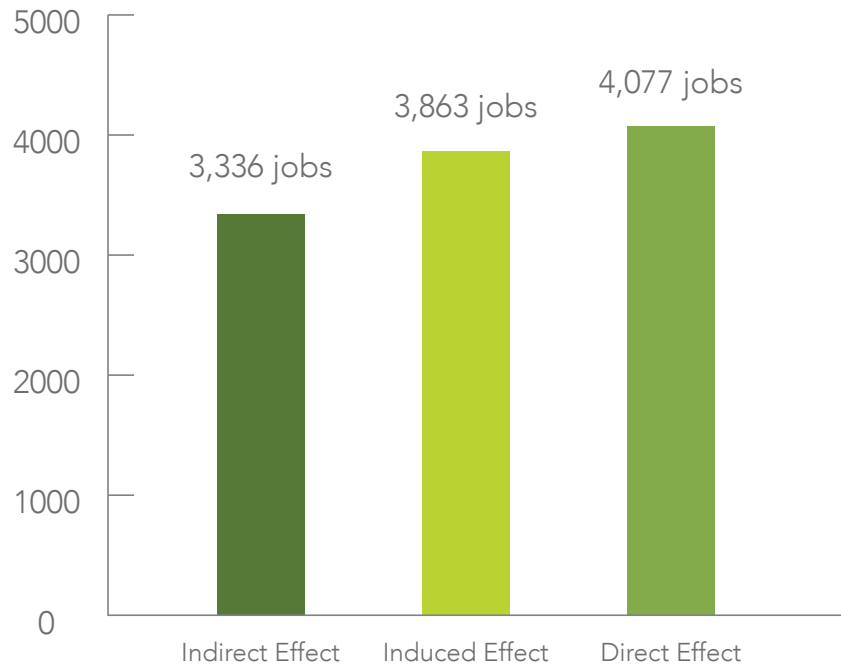


FIGURE 3. IMPACT ON EMPLOYMENT: 11,276

IMPACT ON EMPLOYMENT

INL's average employment for FY 2016 was 4,077 employees. An additional 3,336 jobs are created or sustained by industries that support INL operations. INL employee spending creates or sustains an additional 3,863 jobs throughout Idaho. The combined employment impact accounts for 11,276 jobs. For every 100 INL jobs created, an additional 177 jobs are created or sustained throughout Idaho. See Figure 3 for an illustration of INL's impact on employment.

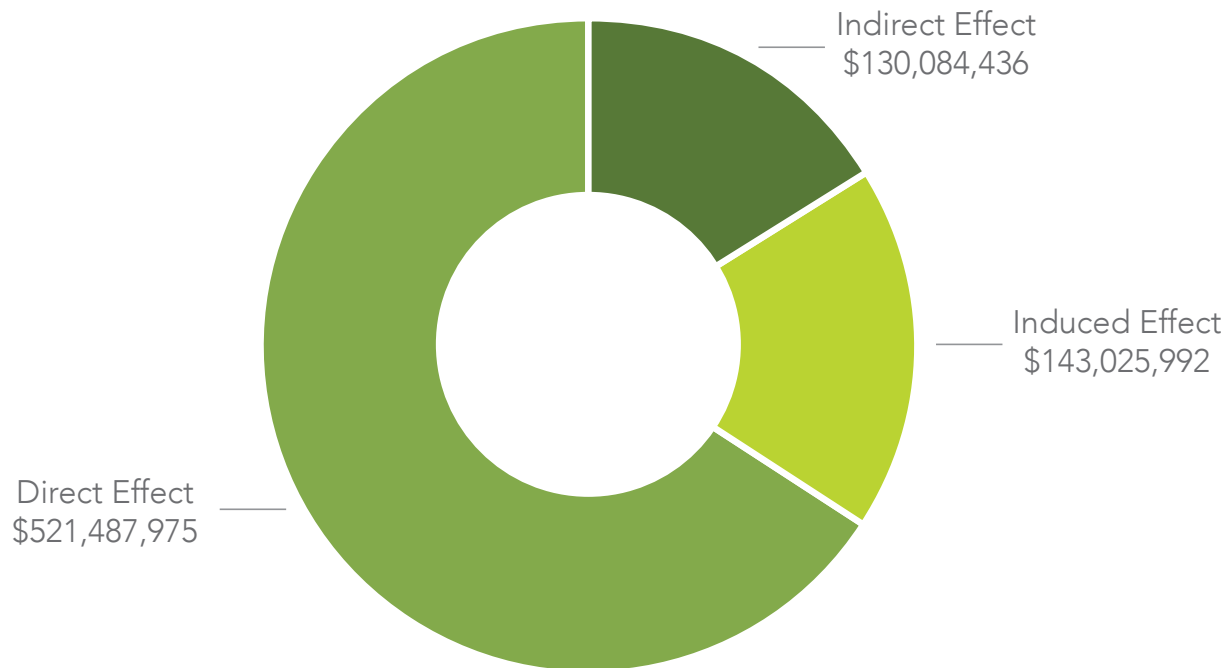


FIGURE 4. IMPACT ON LABOR INCOME: \$794,598,403

IMPACT ON LABOR INCOME

INL's impact on Idaho's total labor income for FY 2016 was nearly \$800 million—or 1.3% 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 was more than \$130 million. INL employees' household spending patterns generated \$143 million in employee compensation for individuals employed by Idaho businesses. The average base salary of an INL employee was \$92,660. See Figure 4 for an illustration of INL's impact on labor income.

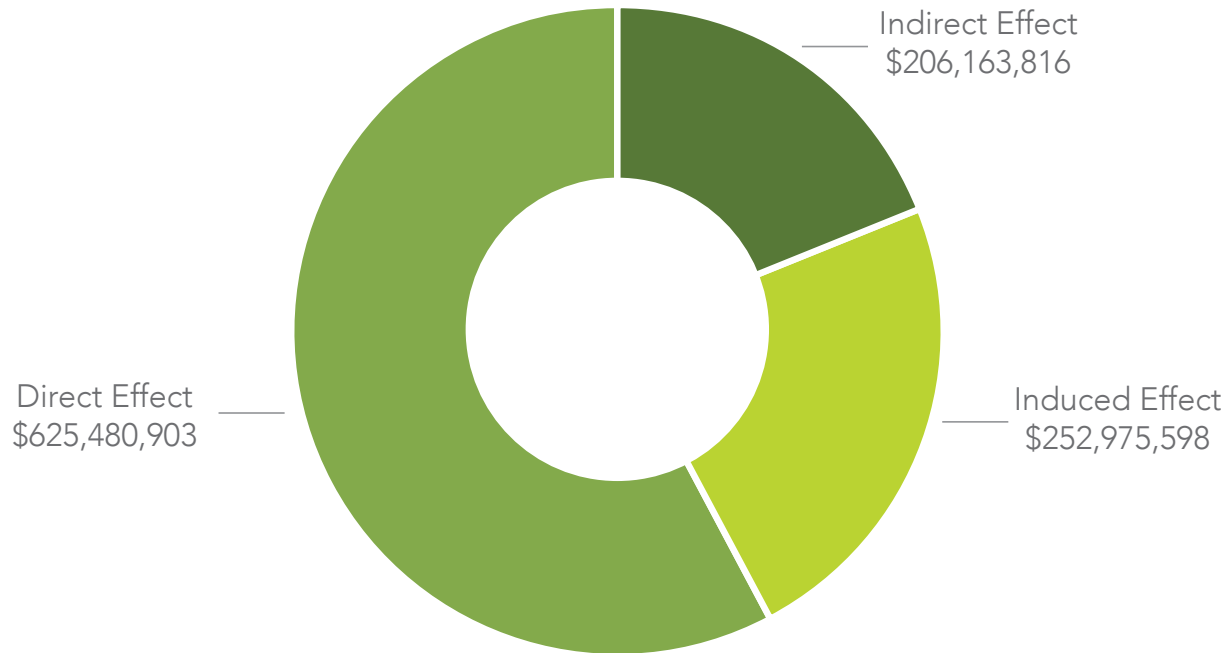


FIGURE 5. IMPACT ON VALUE ADDED: \$1,084,620,317

VALUE-ADDED IMPACT

Value-added impacts are created by a combination of innovation and improvements 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 \$625 million of value to Idaho. Industries that supported INL indirectly added more than \$206 million of value to Idaho. Induced value-added impacts resulted in nearly \$253 million in economic activity. The total value-added impact was more than \$1.08 billion. See Figure 5 for an illustration of INL's value-added impact.

INL TOTAL IMPACT COMPARISON

INL's increased economic activity in FY 2016 led to a nearly \$324 million, or 20.4%, increase in output when compared to FY 2015. This resulted in a net increase of 1,983 jobs throughout Idaho. Added employment at INL and supporting businesses fueled growth in labor income by almost \$92 million—a 13.1% increase compared to FY 2015. The combined value-added impact of innovation at INL and supporting businesses improved by more than \$142 million or 15.2% from FY 2015 to FY 2016.

TABLE 3. INL TOTAL IMPACT COMPARISON

IMPACT TYPE	FY 2014	FY 2015	FY 2016	FY 2015- FY 2016 CHANGE	CHANGE
Output	\$1,414,073,866	\$1,584,224,324	\$1,907,782,973	\$323,558,649	20.4%
Value Added	\$902,501,176	\$941,892,352	\$1,084,620,317	\$142,727,965	15.2%
Labor Income	\$661,489,021	\$702,866,059	\$794,598,403	\$91,732,344	13.1%
Employment	8,615 jobs	9,293 jobs	11,276 jobs	1,983 jobs	21.3%

MULTIPLIERS

INL has a direct impact on the economy, but it also has a “multiplier” impact because of interdependencies between industries. These industries support INL operations by supplying goods and services that further impact Idaho’s economy. Additionally, INL employees who live in Idaho spend a portion of their paychecks and support local business—which contributes to induced economic impacts. INL’s multipliers are as follows:

- **Employment Multiplier** — INL’s employment multiplier is **2.77**, which means that an addition of 100 employees to INL’s payroll will result in an additional 177 positions created throughout the Idaho economy.
- **Labor Income Multiplier** — INL’s labor income multiplier is **1.52**, which means that if INL’s employee compensation were to increase by \$100, then an additional \$52 in employee compensation would be added to the Idaho economy.
- **Value-Added Multiplier** — INL’s value-added multiplier is **1.73**, which means that if value added by INL to the production of final goods and services were to increase by \$100, then an additional \$73 in value would be added to the Idaho economy.
- **Output Multiplier** — INL’s output multiplier was **1.85**, which means that for every \$100 of direct impact added by INL operations, an additional \$85 will be generated throughout the Idaho economy.



INL is one of the U.S. Department of Energy's multiprogram national laboratories and is managed by Battelle Energy Alliance LLC.

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