



THE ECONOMIC AND FISCAL IMPACT OF LOS ALAMOS NATIONAL LABORATORY

Prepared for The Regional Coalition of LANL Communities

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August 21, 2020

Data and Methodology

This study is based primarily on detailed data provided by LANL. These data are inclusive of federal fiscal years 2016-2018; values were averaged and adjusted to FY2017 values by BBER.

Economic Impacts

Payroll records of LANL employees (9,400), unionized or 'craft' employees (1,750) and contract security employees (725). Data includes zip code of residence for all employees.

- a) Payroll records of LANL employees (9,400), unionized or 'craft' employees (1,750) and contract security employees (725). Data includes zip code of residence for all employees.
- b) Nearly 625,000 expenditure records, detailed by industrial sector and zip code;

Fiscal Impacts

- a) Publicly-available records maintained by the New Mexico Taxation and Revenue Department; and
- b) The Local Government Division of the state's Department of Finance and Administration.

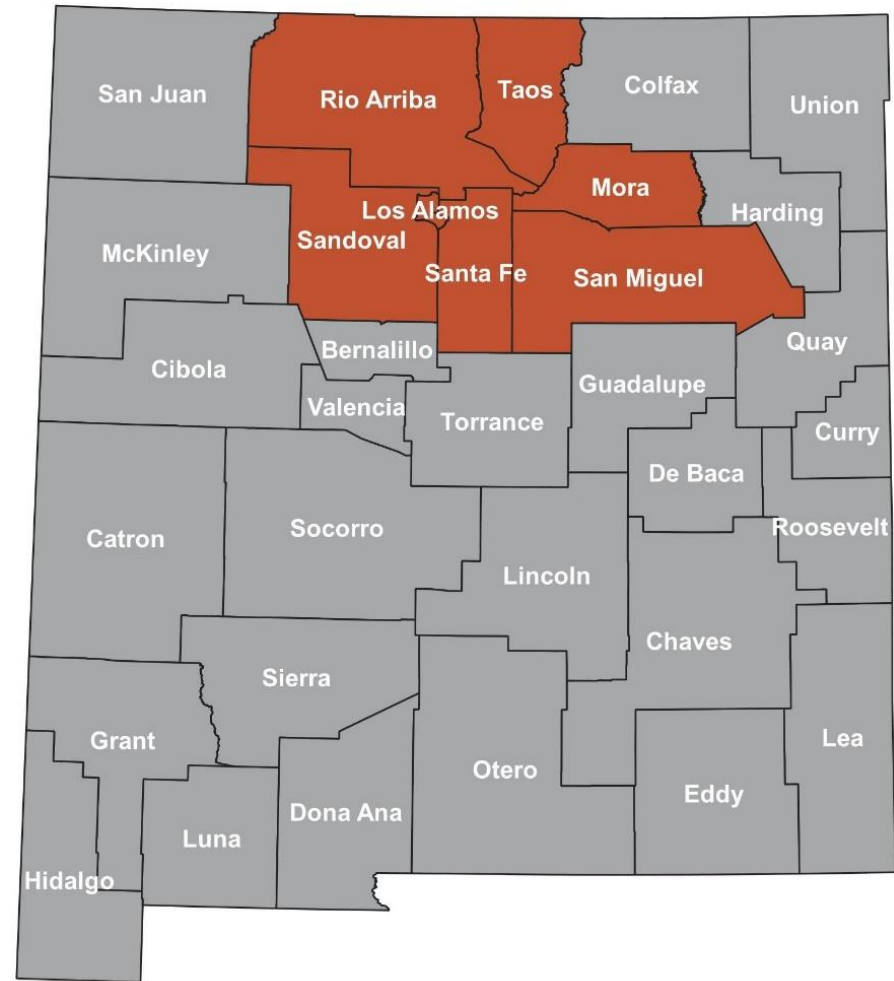


Data and Methodology

In this study, BBER estimated LANL's economic and fiscal impact on both state and local governments.

LANL's economic impacts are concentrated in northern New Mexico, including the seven counties of Los Alamos, Mora, Rio Arriba, Sandoval, San Miguel, Santa Fe, and Taos.

The slides shown in the impacts sections will reflect both state and local impact analyses.



LANL's Economic Impacts

Economic Impacts of LANL

Including both direct and indirect and induced activities, LANL is responsible for the creation of 24,169 jobs, \$1.82 billion in labor income, and total revenues of \$3.12 billion to businesses in the state.

For context, jobs directly and indirectly supported by LANL are nearly equal to total employment in the state's manufacturing sector (26,398); wages & salaries exceed those of the manufacturing industry by nearly \$400 million.



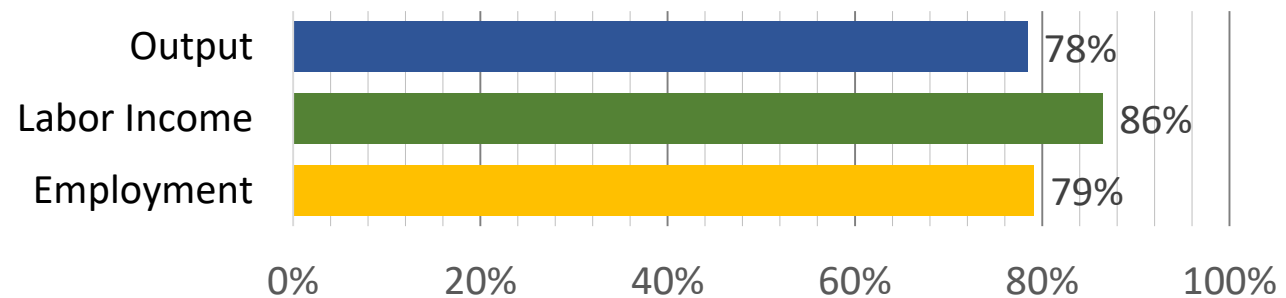
LANL's Total Economic Impacts by Type, Statewide

<u>Impact Type</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Direct	14,754	1,462,553,134	1,910,517,889
Indirect & Induced	9,415	353,593,366	1,211,148,422
Total Effect	24,169	1,816,146,500	3,121,666,311
Multiplier	1.64	1.24	1.63

LANL's Total Economic Impacts by Type, 7-County Region

<u>Impact Type</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Direct	12,690	1,342,364,382	1,649,516,969
Indirect & Induced	6,433	228,121,448	798,229,031
Total Effect	19,122	1,570,485,830	2,447,746,000
Multiplier	1.51	1.17	1.48

Share of LANL Statewide Impacts in the 7-County Region



Economic Impacts of LANL by Activity

Nearly half of LANL's impact is its direct employment of 11,882 workers.

- LANL Employment includes LANL staff, Craft and Contract workers.
- Indirect Employment: impacts of spending by LANL employment; e.g. grocery stores, restaurants, etc.
- Procurement: direct and indirect impacts of regional procurement of goods & services by LANL.
- Construction: direct and indirect impacts of construction contracts within the region.

LANL's Economic Impacts by Activity, Statewide

<u>Impact Source</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>	<u>Employment Multiplier</u>
LANL HH Spending	11,882	1,335,372,695	1,532,518,459	1.66
Indirect Employment	7,790	288,449,873	992,110,906	NA
Procurement	3,947	167,977,948	526,914,360	1.58
Construction	551	24,345,984	70,122,586	1.44
Total Effect	24,169	1,816,146,500	3,121,666,311	1.64
Multiplier	1.64	1.24	1.63	

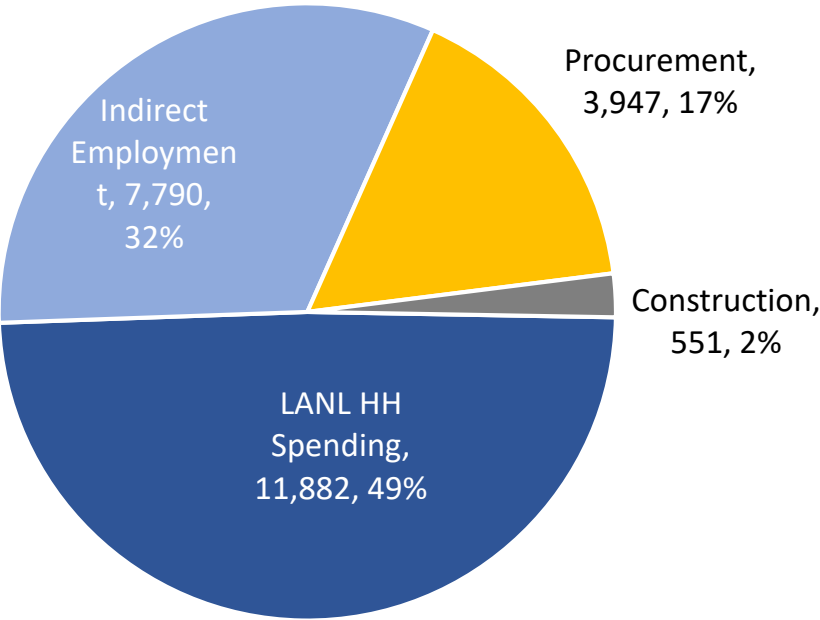
LANL's Economic Impacts by Activity, 7-County

<u>Impact Source</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>	<u>Employment Multiplier</u>
LANL HH Spending	10,833	1,260,810,702	1,446,948,618	1.53
Indirect Employment	5,752	203,292,390	711,916,454	NA
Procurement	2,228	94,366,111	252,959,104	1.38
Construction	310	12,016,627	35,921,824	1.28
Total Effect	19,122	1,570,485,830	2,447,746,000	1.51
Multiplier	1.51	1.17	1.48	

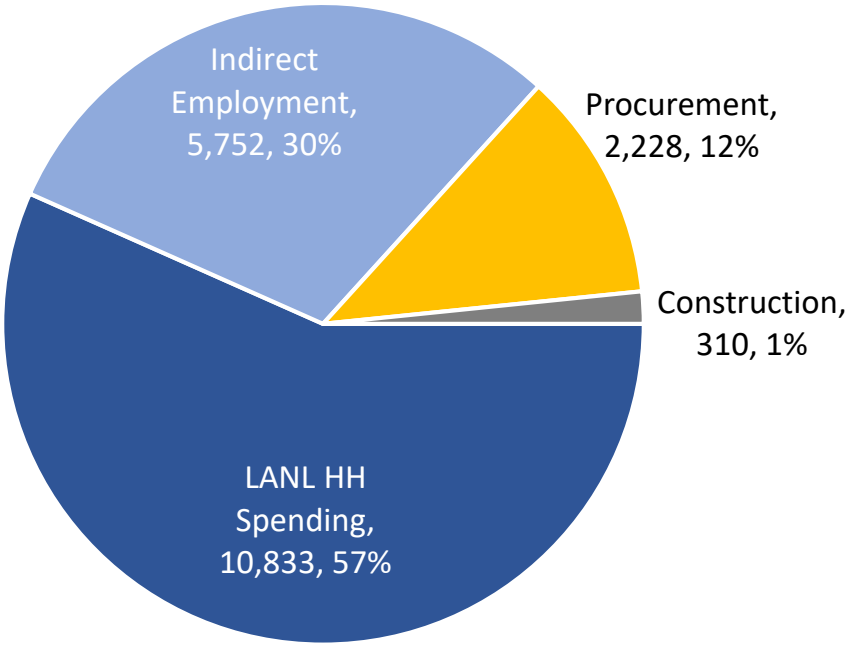


Employment Impacts by Activity

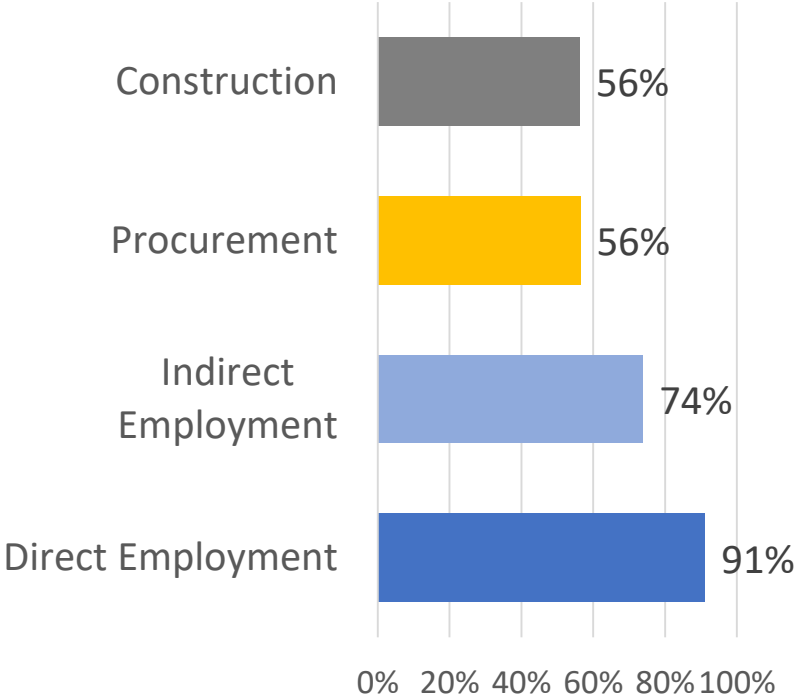
Statewide



7-County

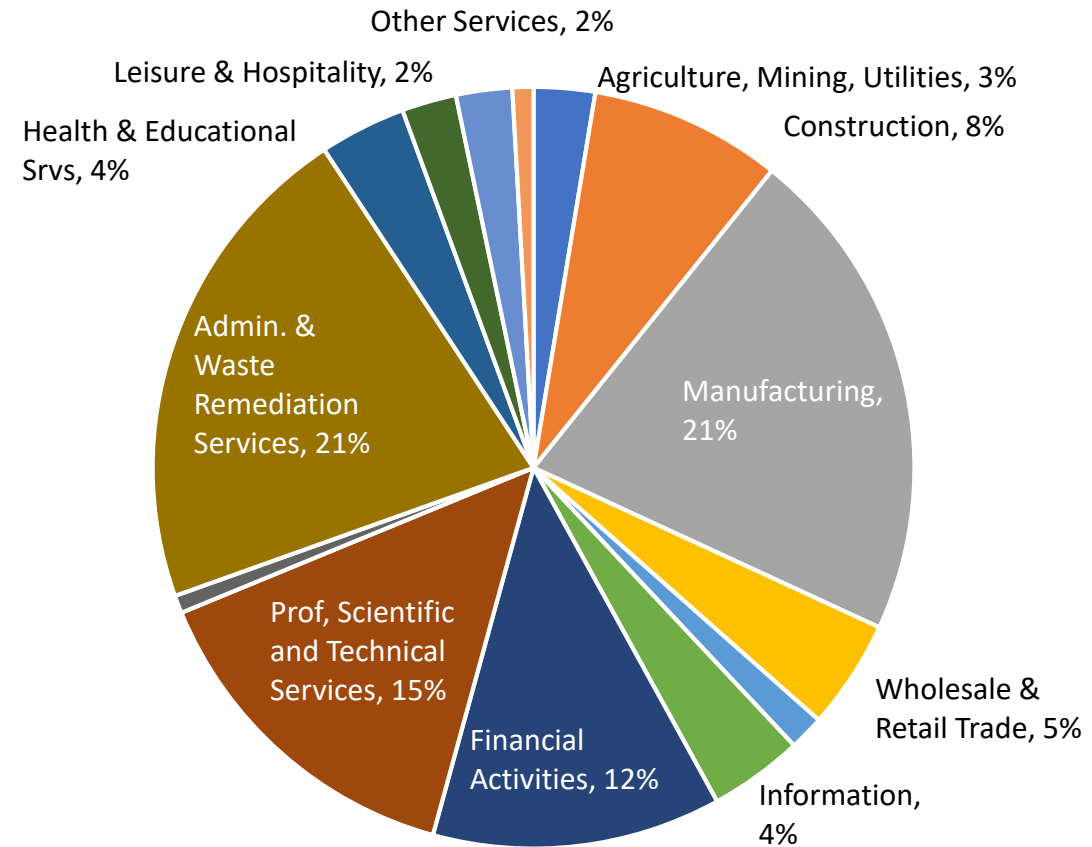


7-County Share of State Total



Economic Impacts by Industry, Statewide

	Direct	Indirect	Total
Agriculture, Mining, Utilities	\$5,817,234	\$9,726,720	\$15,543,954
Construction	\$45,190,864	\$3,507,501	\$48,698,365
Manufacturing	\$116,359,486	\$9,751,758	\$126,111,244
Wholesale & Retail Trade	\$0	\$27,723,489	\$27,723,489
Transportation	\$63,249	\$8,793,560	\$8,856,809
Information	\$11,128,121	\$12,666,013	\$23,794,134
Financial Activities	\$14,580,233	\$58,631,816	\$73,212,049
Prof, Scientific and Technical Services	\$67,625,937	\$19,097,385	\$86,723,322
Management of Companies	\$0	\$4,502,791	\$4,502,791
Admin. & Waste Remediation Services	\$111,309,425	\$15,265,743	\$126,575,168
Health & Educational Srvs	\$1,938,763	\$19,968,157	\$21,906,920
Leisure & Hospitality	\$859,312	\$12,983,733	\$13,843,045
Other Services	\$3,126,768	\$11,095,771	\$14,222,539
Public Administration	\$29	\$5,323,097	\$5,323,126
Total	\$377,999,421	\$219,037,534	\$597,036,955

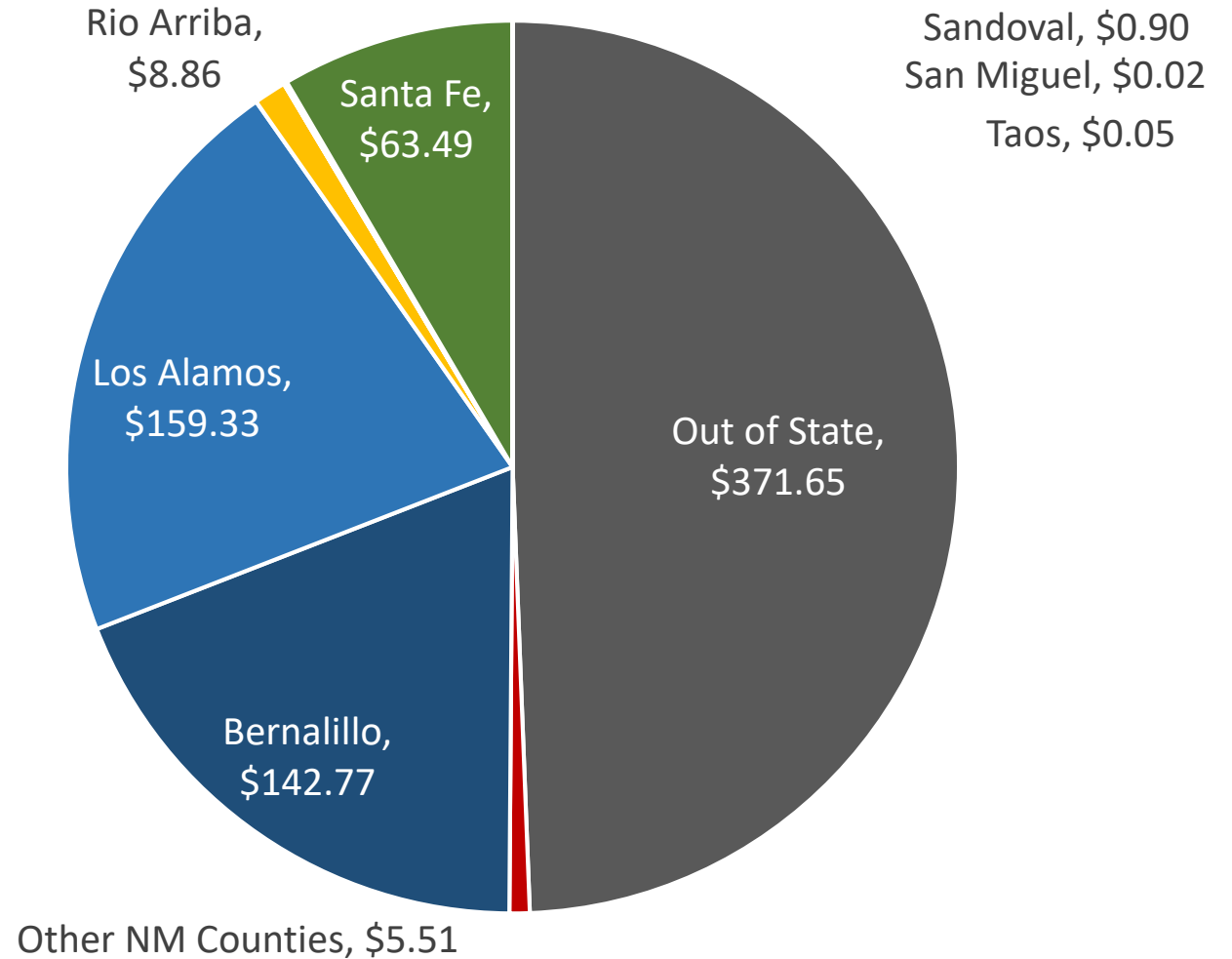


LANL Procurements by State and County

- About 50% of LANL's procurements of Goods & Services are in New Mexico
- 21% of the total goes to Los Alamos, 8% to Santa Fe, and 1.3% to other 5 regional counties.
- About 19% of the total goes to Bernalillo Co. and <1% to other counties.

Total: \$752.57 million

Average, FY16-FY18
In Millions 2017 \$



Economic Impacts of LANL

- LANL supports the employment of more than 24,000 workers in New Mexico, and creates more than \$3.1 billion in total output.
- About 79% of jobs, 86% of labor income and 78% of output supported by LANL in New Mexico are in the 7-county region.
- LANL's impacts are mainly in direct employment – the wages & salaries that LANL pays to its employees and direct contractors (49% of statewide impacts, and 57% of regional impacts).
- Indirect impacts are second most important – jobs and economic activity that is supported by spending of LANL employees (32% statewide, 30% in the region).
- Half of LANL's \$752.5 million annual procurement (purchase of goods & services) are in-State, most going to Los Alamos, Bernalillo and Santa Fe Counties.



LANL's Fiscal Impacts

Methodology: Estimating Revenues

- Personal income taxes – accrue exclusively to the State of New Mexico.
- Gross Receipts Taxes – includes GRT paid on LANL procurements + LANL-supported household spending.
 - IMPLAN output impact estimates, by 561 industries for state and counties.
 - TRD RP-80s FY2017 to calculate effective GRT rates by county and 561 IMPLAN industries (Gross Tax / Gross Receipts)
 - $GRT = LANL \text{ output by IMPLAN industry by county} \times \text{effective GRT rate.}$
- Residential Property Taxes – includes property taxes paid by LANL-supported households (including employees).
 - LANL & IMPLAN to estimate total wages of LANL-supported employees by County.
 - $LANL/Total \text{ wage ratio} = LANL \text{ Wages} / \text{total wages by county (BEA).}$
 - $LANL \text{ residential property value} = \text{Total assessed residential property value} \times LANL/Total \text{ Share.}$
 - $LANL \text{ residential Taxes} = LANL \text{ residential property assessed value} \times \text{Mill rate.}$
- Non-Residential Property Taxes – includes property taxes paid by businesses (LANL procurements + LANL-supported household spending)
 - IMPLAN output to estimate output by county.
 - $LANL/Total \text{ Ratio} = IMPLAN \text{ output by county} / \text{Total Gross Receipts by County}$
 - $LANL \text{ non-residential property value} = \text{Total assessed Non-residential property value by LANL/Total Share.}$
 - $LANL \text{ non-residential Taxes} = LANL \text{ nonresidential property assessed value} \times \text{mill rate.}$

Estimates of Revenues

- Personal income taxes accrue exclusively to the State.
- Gross Receipts Taxes: IMPLAN output impact estimates, by >561 industries.
- Used TRD RP-80s to calculate effective GRT rates by county and 561 IMPLAN industries.
- Residential Property Taxes – LANL & IMPLAN to estimate total wages of LANL-supported employees by County. Divide by total wages & salaries (BEA).
Shared

	Personal Income Taxes	Gross Receipts Taxes	LANL Residential Property Taxes	LANL Non- residential Property Taxes	TOTAL Revenues
TOTAL	\$62,092,631	\$124,175,889	\$23,812,510	\$4,135,256	\$214,216,286
State Government	\$62,092,631	\$67,320,454			\$129,413,085
7 Counties		\$47,366,069	\$20,307,999	\$3,084,985	\$70,759,053
Los Alamos		\$36,800,473	\$11,240,634	\$1,979,039	\$50,020,145
Mora		\$8,775	\$6,667	\$1,000	\$16,442
Rio Arriba		\$3,233,218	\$1,677,246	\$179,791	\$5,090,255
Sandoval		\$1,407,208	\$98,837	\$12,996	\$1,519,041
San Miguel		\$53,452	\$491,849	\$271	\$545,572
Santa Fe		\$5,311,697	\$6,445,068	\$712,077	\$12,468,842
Taos		\$551,248	\$347,698	\$199,811	\$1,098,757



Methodology: Estimating Spending

Estimates are based on LANL employees as % of households.

- Estimates for all Counties and Municipalities; does not include non-governmental tax entities (e.g. hospital, colleges)
- LANL households = LANL-provided employee data by zip codes + IMPLAN indirect employment; assumes each employee represents one household.
- Total households = Census American Community Survey 2016-2017 data.
- General Fund Budget FY17 from DFA Local Government Division.
- Does NOT include Enterprise (self-funded) or bonded funds
- LANL related spending = $\text{LANL} / \text{Total households} \times \text{General Fund Budget}$.



Estimates of Fiscal Spending

- Estimates are based on LANL employees as % of households.
- Households counts are from Census American Community Survey 2016-2017 average.
- LANL households are actual, using payroll zip codes provided by LANL.
- Spending is FY17 General Budget (actuals where available).
- Does NOT include Enterprise and other dedicated funds.
- Data from DFA Local Gov't Division

	Households	LANL-supported Households	LANL Share	FY16-18 Budget (Avg)	LANL Employee costs
Los Alamos County	7,567	5,242	69.3%	\$52,503,403	\$36,369,147
Mora County	1,535	63	4.1%	\$2,428,453	\$99,977
Rio Arriba	12,398	3,395	27.4%	\$28,107,361	\$7,697,067
Rio Arriba County				\$16,629,668	
Municipalities				\$11,477,693	
Sandoval	50,340	2,070	4.1%	\$81,819,665	\$3,365,098
Sandoval County				\$18,926,338	
Municipalities				\$62,893,327	
San Miguel	11,392	418	3.7%	\$16,758,194	\$615,326
San Miguel County				\$5,592,823	
Municipalities				\$11,165,371	
Santa Fe	35,593	4,194	11.8%	\$124,686,953	\$14,692,133
Santa Fe County				\$41,721,900	
Municipalities				\$82,965,053	
Taos	12,127	958	7.9%	\$22,744,367	\$1,796,781
Taos County				\$11,401,724	
Municipalities				\$11,342,643	



Fiscal Impacts of LANL

Local governments provide services to residents – public safety, culture & recreation, streets & roads, judicial.

Receive 50% GRT, 33% property taxes, rest (fees, grants, misc taxes) – municipalities much more in GRT, counties more in property taxes.

	Revenues	Expenditures	Balance
TOTAL	\$214,216,286	\$186,861,891	\$27,354,395
State Government	\$129,413,085	\$117,678,594	\$11,734,491
7 Counties	\$70,759,053	\$64,635,529	\$6,123,524
Los Alamos	\$50,020,145	\$36,369,147	\$13,650,998
Mora	\$16,442	\$99,977	(\$83,535)
Rio Arriba	\$5,090,255	\$7,697,067	(\$2,606,812)
Sandoval	\$1,519,041	\$3,365,098	(\$1,846,057)
San Miguel	\$545,572	\$615,326	(\$69,754)
Santa Fe	\$12,468,842	\$14,692,133	(\$2,223,290)
Taos	\$1,098,757	\$1,796,781	(\$698,024)



Why are Fiscal Impacts negative in Most LANL Communities?

- Personal income taxes – very substantial for LANL employees – accrue only to State government.
- LANL's direct spending in New Mexico is highly concentrated – 96% of LANL's procurements are in Los Alamos (42%), Bernalillo (37%) and Santa Fe (17%) counties. 2.6% are in other five Coalition communities. GRT distributions follow roughly in proportion.
- Residential distribution of LANL employees is much wider – 44% in Los Alamos, 22% in Santa Fe, 18% in Rio Arriba, 7% in the remaining Coalition counties.
- Local governments assume general fund costs (e.g. public safety, culture & recreation, streets & roads) roughly in proportion to residential distribution
- Some residential counties have comparatively low residential property tax rates and fail to collect revenues necessary to fund local services.
- Higher income households (such as LANL employees) generally spend a smaller share of income locally (lower marginal propensity to spend generally, and a smaller share of spending is local).
- Most counties leak GRT on household purchases because they offer inadequate goods & services.



LANL employee residence & Procurements

