

Report Title: The Economic Impact of U.S. Department of Energy Expenditures in New Mexico

Type of Report: Technical Report

Reporting Period Start Date: October 1, 2008

Reporting Period End Date: September 30, 2009

Principal Authors: Leo Delgado, Manuel Reyes, and James Peach.

Date Issued: September 2009

DOE AWARD Number: DE-NT0004397

Name and Address of Submitting Organization:

Arrowhead Center

New Mexico State University

P. O. Box 30001/MSC 3CQ

Las Cruces, NM 88003-8001

Disclaimer

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express 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. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Table of Contents

Title	Page
Disclaimer	1
Table of Contents	2
List of Tables	3
Abstract	4
Executive Summary	5
Introduction	6
Previous Analysis of Department of Energy Impacts in New Mexico	8
Economic Impacts of DOE Expenditures in New Mexico	9
State Fiscal Impacts	13
A Brief Summary	14
Appendix A: Calculation of Effective Tax Rates	15
Works Cited	17

List of Tables

Table	Title	Page
1	Department of Energy, Total Federal Expenditures and GDP in New Mexico 1993:2008.	6
2	Previous Estimates of DOE Impacts of Economic Activity: 1988-1998	8
3	Previously Estimated Employment Effects of DOE Expenditures: 1988 to 1998	9
4	Output Impacts of DOE expenditures 1993 to 2008	10
5	Impact estimates of Value Added from DOE Expenditures 1993 to 2008	11
6	Employment Impacts of DOE Expenditures in New Mexico 1993 to 2008	12
7	Labor Income Impacts of DOE Expenditures in New Mexico 1993 to 2008	13
8	State Tax Revenue from DOE Expenditures in New Mexico 2008	14
A1	Calculation of New Mexico Effective Tax Rates	16

Abstract

This report provides an analysis of the impact of U.S. Department of Energy (DOE) expenditures in New Mexico from 1993 to 2008. This report is one of a series of reports on the impact of energy in New Mexico. The economic impact estimates include direct, indirect, and induced effects of DOE expenditures on the state economy. Estimates of state tax revenue associated with DOE expenditures are also presented for 2008. The estimates were prepared using the input-output model embedded in the IMPLAN Pro Version 2.0 software. It is anticipated that this report will be updated annually.

Executive Summary

This report provides an analysis of the impact of U.S. Department of Energy expenditures in New Mexico from 1993 to 2008. This report is one of a series of reports on the impact of energy in New Mexico. This report has been prepared as part of New Mexico State University's Arrowhead Center's PROSPER project funded by U.S. Department of Energy Grant Award Number DE-NT0004397.

Federal Expenditures have been an important component of the New Mexico economy for many years. Total Federal Spending in New Mexico for FY 2008 was \$23.8 billion (US Census Bureau, 2008) or 29.8 percent of New Mexico's 2008 GDP of \$79.9 billion. U. S. Department of Energy (DOE) expenditures of \$4.87 billion represented 20.4 percent of total federal expenditures in the state and 6.1 percent of the state's 2008 GDP.

Among the many DOE activities in New Mexico, expenditures associated with Los Alamos National Laboratory (LANL) and Sandia National Laboratory (SNL) accounted for about 67 percent of DOE expenditures in the state in FY 2007. LANL and SNL had budgets of \$1.8 and \$1.5 (in billions) respectively. (Department of Energy, 2008).

Direct, indirect, induced and total impact effects are presented for value added, employment and labor income. State fiscal impacts were calculated using effective tax rates as a percent of labor income.

Estimates from earlier studies of the impact of DOE expenditures in New Mexico are summarized in the report.

Major findings of the report are as follow:

- Federal expenditures in New Mexico totaled \$23.85 billion and constitute an important part of the New Mexico economy with GDP of \$79.9 billion.
- DOE expenditures of \$4.85 billion accounted for 20.3 percent of all federal expenditures in the state.
- DOE expenditures generated \$5.0 billion in direct value added and \$7.3 billion in total value added.
- DOE Expenditures generated 37,051 direct jobs and 60,154 total jobs in the state.
- Labor income per worker in direct jobs was \$89,768 –more than twice the state average.
- DOE expenditures generated \$578.5 million in state tax revenue.

Introduction:

This report provides an analysis of the impact of U.S. Department of Energy expenditures in New Mexico from 1993 to 2008. This report is one of a series of reports on the impact of energy in New Mexico. This report has been prepared as part of New Mexico State University's Arrowhead Center's PROSPER project funded by U.S. Department of Energy Grant Award Number DE-NT0004397. In the original Statement of Project Objectives for the PROSPER project, this report was intended to be a report on the impact of National Energy Technology Laboratory (NETL) spending in New Mexico. After discussions with NETL, the focus was changed to all Department of Energy expenditures in New Mexico.

Federal Expenditures have been an important component of the New Mexico economy for many years. Total Federal Spending in New Mexico for FY 2008 was \$23.8 billion (US Census Bureau, 2008) or 29.8 percent of New Mexico's 2008 GDP of \$79.9 billion. U. S. Department of Energy (DOE) expenditures of \$4.87 billion represented 20.4 percent of total federal expenditures in the state and 6.1 percent of the state's 2008 GDP (Table 1).

Table 1.
Department of Energy, Total Federal Expenditures and GDP in New Mexico: 1993-2008.
(Billions of nominal dollars)

Year	DOE Expenditures in New Mexico	Total Federal Expenditures in New Mexico	DOE As Percent of Total Federal Expenditures	GDP NM Billions	DOE As percent of NM GDP	Total Federal Expenditures as Percent of GDP
1993	2.96	12.43	23.80	36.5	8.1	34.0
1994	2.77	12.70	21.82	41.1	6.7	30.9
1995	2.75	13.07	21.03	41.5	6.6	31.5
1996	2.76	13.63	20.28	43.7	6.3	31.2
1997	2.84	14.02	20.26	47.4	6.0	29.5
1998	3.02	14.87	20.30	45.9	6.6	32.4
1999	3.12	15.55	20.05	49.0	6.4	31.7
2000	3.25	16.74	19.42	50.7	6.4	33.0
2001	4.01	18.88	21.23	51.4	7.8	36.8
2002	4.21	20.11	20.91	52.5	8.0	38.3
2003	4.38	21.88	20.02	57.5	7.6	38.1
2004	4.50	23.12	19.47	63.5	7.1	36.4
2005	4.77	23.66	20.15	68.0	7.0	34.8
2006	4.49	24.18	18.57	71.8	6.3	33.7
2007	4.92	26.11	18.83	75.2	6.5	34.7
2008	4.85	23.85	20.43	79.9	6.1	29.8

Sources: (1) DOE and Federal Expenditure Data, U.S. Bureau of the Census, Consolidated Federal Funds Reports, various years. <http://www.census.gov/prod/2009pubs/cffr-08.pdf> (2) GDP from U.S. Department of Commerce, Bureau of Economic Analysis, <http://www.bea.gov>

New Mexico ranked fifth in the nation in (FY2008) federal expenditures per capita. In 2008 Internal Revenue Service Gross Collections of \$9.9 billion from New Mexico (Internal Revenue Service, 2009), were \$4,968 per capita while federal expenditures in the state (\$23.8 billion) were \$11,996 per capita. (US Census Bureau, 2009). DOE expenditures alone were \$2,460 per capita.

Among the many DOE activities in New Mexico, expenditures associated with Los Alamos National Laboratory (LANL) and Sandia National Laboratory (SNL) accounted for about 67 percent of DOE expenditures in the state in FY 2007. LANL and SNL had budgets of \$1.8 and \$1.5 (in billions) respectively. (Department of Energy, 2008).

LANL reported 11,233 total employees and FY2008 budgeted expenditures of \$2.1 billion. (Los Alamos National Labs, 2009) SNL reported 9,137 regular and temporary employees (8,308 full-time equivalent employees) and \$2.3 billion in total expenditures in FY 2008 (Sandia National Laboratories, 2008)¹. Additional information on LANL can be found at: <http://www.lanl.gov/> . Additional information on SNL can be found at: <http://www.sandia.gov/about/faq/> .

Direct, indirect, induced and total impact effects are presented for value added, employment and labor income. Direct effects are the result of economic activity in the sector under consideration. Direct effects can be calculated using industry output, value added or employment. Indirect effects represent changes in inter-industry purchases as they respond to the new demands of the directly affected industries. Indirect effects reflect the interdependence of industries. Induced effects reflect changes in spending from households as income increases or decreases due to the changes in production. The total effect is simply the sum of the direct, indirect and induced effects.

The value added, employment and labor income impacts were calculated using IMPLAN PRO version 2.0 software. IMPLAN (Pro Version 2.0) is economic modeling software developed by the Minnesota IMPLAN Group (<http://implan.com>) to conduct economic impact analysis. The IMPLAN model is based on the national input-output model produced by the U.S. Department of Commerce, Bureau of Economic Analysis.

State fiscal impacts were calculated using effective tax rates as a percent of labor income calibrated to the most recent data available. The calculation of these effective tax rates is presented in Appendix A.

¹ Total expenditures reported by LANL (\$2.1 billion) and SNL (\$2.3 billion) differ from that reported in the US Department of Energy Budget. LANL and SNL perform contract work beyond that funded by DOE. SNL reported \$909 million in non-DOE contract work in FY 2008.

Previous Research on the Economic Impact of DOE Expenditures in New Mexico:

The economic impact of DOE expenditures in New Mexico was analyzed annually between 1988 and 1998. Robert Landsford (an economist at New Mexico State University) and Larry Adcock (an economist with the DOE Albuquerque Operations Office in Albuquerque, New Mexico) were the principal authors of these reports but they were sometimes joined by others (Landsford, et al. 1989 and 1998).

The authors of the 1988 to 1998 studies constructed an input-output model of the New Mexico economy to obtain multipliers for the analysis. These multipliers differ substantially from those used in the current studies. The authors of these studies also constructed their own estimates of New Mexico Gross Domestic Product (GDP). At the time, GDP estimates from the Bureau of Economic Analysis were still in an experimental stage. The authors refer to the effects of DOE expenditures on total economic activity in the state, but it is not clear if this concept refers to state GDP or gross output in the state.

A summary of the major findings of these earlier studies appears in Tables 2 and 3 . The employment effects from the previous studies are presented in Table 3. As reported, the total estimated impact of DOE expenditures in New Mexico from 1988 to 1998 averaged 12.7 percent of total economic activity and 10.7 percent of total employment in the state.

Table 2
Previous Estimates of DOE Impacts of Economic Activity: 1988-1998.
Expenditures and total economic activity in billions of nominal dollars.

	Direct DOE Expenditures in New Mexico	Total Economic Activity	Economic Activity Multiplier	Total Economic Activity in the State (Estimated)	DOE as % of State
FY1988	2.49	7.81	3.14	53.51	14.60
FY1989	2.56	8.27	3.24	57.26	14.40
FY1990	2.59	8.31	3.20	61.21	13.60
FY1991	2.72	8.82	3.24	66.10	12.80
FY1992	2.84	9.52	3.36	70.20	13.60
FY1993	2.84	9.85	3.47	75.90	13.20
FY1994	3.04	10.49	3.45	81.60	12.90
FY1995	2.97	10.01	3.37	84.60	11.40
FY1996	2.86	9.71	3.39	87.10	11.10
FY1997	2.94	9.86	3.36	91.20	11.20
FY1998	3.01	10.24	3.39	96.50	10.60

Sources: Landsford and Adcock (1988 through 1998).

Table 3
Previously Estimated Employment Effects of DOE Expenditures: 1988 to 1998.

Year	Direct Impact	Total Employment	Employment Multiplier	Total Employment in the State	DOE as Percent of State
1988	20,988	74,400	3.54	635,000	11.70
1989	21,707	76,842	3.54	651,000	11.80
1990	21,678	76,044	3.51	656,000	11.60
1991	22,052	81,070	3.68	665,000	11.40
1992	22,610	83,234	3.68	674,000	12.30
1993	22,811	86,232	3.78	700,000	12.50
1994	21,762	83,435	3.83	722,000	11.60
1995	21,307	74,838	3.51	738,440	10.31
1996	19,881	72,018	3.62	735,363	9.80
1997	19,705	69,669	3.54	820,469	8.90
1998	20,214	72,453	3.58	831,052	8.70

Sources: Landsford and Adcock (1988 through 1998).

Economic Impacts of DOE Expenditures in New Mexico

This section contains estimates of the output, value added, employment and labor income impacts of DOE expenditures in New Mexico from 1993 to 2008. Direct, indirect, induced and total impacts are presented. The impact estimates were calculated using IMPLAN PRO Version 2.0 economic modeling software. The results are presented in Table 4 (output), Table 5 (value added), Table 6 (employment) and Table 7 (Labor Income). The impact estimates for output, value added and labor income are in billions of 2008 dollars.

As shown in Table 4, Direct DOE expenditures in New Mexico measured in 2008 dollars ranges from \$3.8 billion in 1997 to \$5.1 billion in 2005. State DOE expenditures in 2008 (\$4.8 billion) were 4.8 percent higher in real terms than in 1993. The total output generated from DOE expenditures in New Mexico varied from \$5.8 billion in the mid 1990s to \$7.7 billion in 2005.

Impact estimates of value added in 2008 dollars are shown in Table 5. In 2008 dollars, value added ranged from \$4.0 billion in the late 1990s to \$5.2 billion in 2007. Gross Domestic Product (GDP) is a value added concept. That is, only the value added at each stage of production is included in the state GDP accounts. In 2008, total value added (\$7.297 billion) was 9.1 percent of New Mexico's GDP (\$79.901 billion). Value added comparisons with GDP for other years are not included because the methods used to estimate state level GDP have changed significantly during the sample period.

Table 4.
Output Impacts of DOE expenditures 1993 to 2008
Billions of 2008 dollars

Year	DOE Direct Expenditures	Indirect	Induced	Total
1993	4.622	0.306	2.033	6.961
1994	4.162	0.275	1.830	6.267
1995	4.028	0.267	1.772	6.066
1996	3.905	0.258	1.717	5.881
1997	3.839	0.254	1.688	5.781
1998	3.917	0.259	1.722	5.898
1999	3.873	0.256	1.703	5.833
2000	3.897	0.258	1.714	5.869
2001	4.769	0.316	2.097	7.182
2002	4.924	0.326	2.166	7.416
2003	5.003	0.331	2.200	7.534
2004	4.960	0.328	2.181	7.469
2005	5.104	0.338	2.245	7.686
2006	4.677	0.309	2.057	7.044
2007	5.021	0.332	2.208	7.562
2008	4.846	0.321	2.131	7.297

Source: Author computations Using IMPLAN Pro Version 2.0 software.

Table 5.
 Impact estimates of Value Added from DOE Expenditures
 (Billions of 2008 dollars)

Year	Direct	Indirect	Induced	Total
1993	3.511	0.158	1.120	4.788
1994	3.161	0.142	1.008	4.311
1995	3.059	0.138	0.976	4.173
1996	2.966	0.133	0.946	4.045
1997	2.915	0.131	0.930	3.976
1998	2.975	0.134	0.949	4.057
1999	2.942	0.132	0.938	4.012
2000	2.960	0.133	0.944	4.037
2001	3.622	0.163	1.155	4.940
2002	3.740	0.168	1.193	5.101
2003	3.800	0.171	1.212	5.182
2004	3.767	0.169	1.201	5.138
2005	3.876	0.174	1.236	5.287
2006	3.552	0.160	1.133	4.845
2007	3.814	0.171	1.216	5.202
2008	3.680	0.165	1.174	5.020

Source: Author calculations using IMPLAN Pro Version 2.0

Estimates of the employment impacts of DOE expenditures in New Mexico are displayed in Table 6. The direct employment estimates vary from just under 30,000 jobs in the late 1990s to 38,395 jobs in 2007. The total number of jobs (including direct, indirect and induced) generated by DOE expenditures ranges from 48,000 in the late 1990s to 62,336 in 2007. In the last three years, direct employment due to DOE expenditures averages slightly more than three percent of total jobs in New Mexico and total jobs due to DOE expenditures averages slightly above five percent of all jobs in the state.

Table 6.
Employment Impacts of DOE Expenditures in New Mexico
(Full and Part-time jobs)

Year	Direct	Indirect	Induced	Total
1993	35,343	2,680	19,359	57,381
1994	31,822	2,413	17,430	51,664
1995	30,801	2,335	16,871	50,007
1996	29,858	2,264	16,354	48,476
1997	29,350	2,225	16,076	47,652
1998	29,948	2,270	16,403	48,621
1999	29,614	2,245	16,220	48,079
2000	29,798	2,259	16,321	48,379
2001	36,465	2,765	19,973	59,203
2002	37,653	2,855	20,623	61,130
2003	38,252	2,900	20,952	62,104
2004	37,922	2,875	20,771	61,568
2005	39,024	2,959	21,375	63,357
2006	35,763	2,711	19,588	58,062
2007	38,395	2,911	21,030	62,336
2008	37,051	2,809	20,294	60,154

Source: Author calculations using IMPLAN Pro Version 2.0 Software.

Labor income impact estimates are presented in Table 7 measured in 2008 dollars. Labor income follows the same general pattern as output and value added. That is, labor income due to DOE expenditures was lower in the late 1990s and reached a peak \$4.2 billion in 2007. In 2008, estimated labor income was \$89,768 per job compared to the state average of all jobs of \$39,978. Labor income for total jobs (direct, indirect and induced) was \$67,859 per job.

Table 7.
 Labor Income Impacts of DOE Expenditures in New Mexico 1993 to 2008
 (Billions of 2008 dollars)

Year	Direct	Indirect	Induced	Total
1993	3.172	0.100	0.622	3.894
1994	2.856	0.090	0.560	3.506
1995	2.765	0.087	0.542	3.394
1996	2.680	0.085	0.525	3.290
1997	2.634	0.083	0.516	3.234
1998	2.688	0.085	0.527	3.300
1999	2.658	0.084	0.521	3.263
2000	2.675	0.084	0.524	3.283
2001	3.273	0.103	0.642	4.018
2002	3.379	0.107	0.663	4.149
2003	3.433	0.108	0.673	4.215
2004	3.404	0.107	0.667	4.178
2005	3.503	0.111	0.687	4.300
2006	3.210	0.101	0.629	3.940
2007	3.446	0.109	0.676	4.230
2008	3.326	0.105	0.652	4.082

Source: Author Computations using IMPLAN Pro Version 2.0 Software.

State Fiscal Impacts of DOE Expenditures in New Mexico

State tax revenue associated with DOE expenditures in New Mexico arises from the income and subsequent spending of workers whose jobs depend on DOE expenditures either directly or indirectly. Effective tax rates based on labor income were used to calculate tax impacts for 2008. The taxes fall into four categories: (1) Gross Receipts Taxes [GRT], (2) Personal Income Taxes [PIT], (3) Corporate Income Taxes [CIT] and (4) all other taxes. The effective tax rates are described in detail in Appendix A.

In 2008, DOE expenditures in New Mexico generated \$578.5 million in state taxes. More than 80 percent (81.5 percent) of the estimated taxes were associated with direct labor income. The tax estimates do not include tax payments by DOE contractors or sub-contractors such as gross receipts or corporate income taxes.

Table 8.
 State Tax Revenue from DOE Expenditures in New Mexico 2008
 (Millions of 2008 dollars)

	Tax Rate	Taxes on Direct Labor Income	Taxes on Indirect Labor Income	Taxes on Induced Labor Income	Taxes on Total Labor Income
GRT	0.0710	236.2	7.5	46.3	289.9
PIT	0.0331	109.9	3.5	21.5	134.9
CIT	0.0075	25.0	0.8	4.9	30.7
All Other	0.0301	100.2	3.2	19.6	122.9
Total	0.1417	471.3	14.9	92.4	578.5

Source: Author calculations.

A Brief Summary

This report presented estimates of the impact of Department of Energy expenditures in New Mexico from 1993 to 2008. Previously reported estimates of the impact of DOE expenditures in the late 1980s and 1990s (Landsford and Adcock, various years) were summarized.

The estimates for the 1993 to 2008 period were prepared using the input-output model embedded in IMPLAN Pro Version 2.0 software. The major findings for 2008 include:

- Federal expenditures in New Mexico totaled \$23.85 billion and constitute an important part of the New Mexico economy with GDP of \$79.9 billion.
- DOE expenditures of \$4.85 billion accounted for 20.3 percent of all federal expenditures in the state.
- DOE expenditures generated \$5.0 billion in direct value added and \$7.3 billion in total value added.
- DOE Expenditures generated 37,051 direct jobs and 60,154 total jobs in the state.
- Labor income per worker in direct jobs was \$89,768 –more than twice the state average.
- DOE expenditures generated \$578.5 million in state tax revenue.

Appendix A: Calculation of Effective State Tax Rates

Estimates of state tax revenue resulting from DOE expenditures in New Mexico occur because employees whose jobs depend on DOE expenditures earn and spend income. This applies to those who work directly for DOE and those workers who earn and spend income as a result of the direct and indirect effects of DOE expenditures.

In New Mexico these taxes include gross receipts taxes, personal income taxes, corporate income taxes, and a tax category called 'other taxes.'

The tax revenue calculations in each sector are based on effective tax rates reflecting the proportion of labor income paid in New Mexico in each tax category. Labor income is one of the impact variables produced by the IMPLAN economic modeling software. Total personal income (TPI) has often been used for effective tax rate calculations, but does not correspond directly to an IMPLAN impact variable. Labor income includes wage and salary disbursements and proprietor's income.

For the purpose of estimating tax revenue, the important issues are (a) the stability of the effective tax rates from year to year, and (b) capturing all tax revenue. Labor income and TPI based effective tax rates satisfy both criteria. Labor income based effective tax rates were selected for consistency with the IMPLAN output variables.

The calculation of the effective tax rates is shown in Table A1 below. The average effective tax rates from 2000 to 2008 are used throughout the report.

Table A1 Calculation of New Mexico Effective Tax Rates

Year	GRT	PIT	CIT	All Other	Total	IMPLAN LABOR INCOME
2000	\$2,006,930	\$880,859	\$159,338	\$696,051	\$3,743,178	\$24,528,034
2001	\$2,083,196	\$830,006	\$190,673	\$898,371	\$4,002,246	\$26,948,772
2002	\$1,882,878	\$982,891	\$124,327	\$637,959	\$3,628,055	\$27,565,904
2003	\$1,873,420	\$923,113	\$101,456	\$709,167	\$3,607,156	\$28,777,716
2004	\$2,083,440	\$1,007,248	\$138,196	\$772,896	\$4,001,780	\$30,684,439
2005	\$2,170,521	\$1,086,015	\$242,462	\$979,323	\$4,478,321	\$32,540,997
2006	\$2,387,718	\$1,123,954	\$377,185	\$1,221,826	\$5,110,683	\$34,712,424
2007	\$2,646,901	\$1,177,918	\$459,880	\$1,242,518	\$5,527,217	\$36,329,019
2008	\$2,663,292	\$1,213,394	\$403,524	\$1,394,320	\$5,674,530	\$37,887,754

GRT includes gross receipts and selective sales taxes.

PIT refers to personal income taxes.

CIT refers to corporate income taxes.

IMPLAN Labor Income calculated from Bureau of Economic Analysis data and includes wage and salary disbursements and proprietor's income.

Effective Tax Rates (proportion of labor income)

Year	GRT	PIT	CIT	All Other	Total
2000	0.0818	0.0359	0.0065	0.0284	0.1526
2001	0.0773	0.0308	0.0071	0.0333	0.1485
2002	0.0683	0.0357	0.0045	0.0231	0.1316
2003	0.0651	0.0321	0.0035	0.0246	0.1253
2004	0.0679	0.0328	0.0045	0.0252	0.1304
2005	0.0667	0.0334	0.0075	0.0301	0.1376
2006	0.0688	0.0324	0.0109	0.0352	0.1472
2007	0.0729	0.0324	0.0127	0.0342	0.1521
2008	0.0703	0.0320	0.0107	0.0368	0.1498
Average	0.0710	0.0331	0.0075	0.0301	0.1417
Std. Deviation	0.0051	0.0016	0.0030	0.0048	0.0099

Effective tax rates = specified tax divided by IMPLAN Labor Income.

Source: New Mexico Tax Data from U.S. Bureau of the Census, "State Government Tax Revenue,
<http://www.census.gov/govs/statetax/0832nmstax.html>

IMPLAN Labor Income calculated from

Bureau of Economic Analysis, State Income and Employment Summary (SA04)

<http://www.bea.gov/regional/spi/action.cfm>

Works Cited

- Adcock, L., Lansford, R. R., & Turpin, A. (1989). *The Social and Economic Impact of the Department of Energy on the state of New Mexico FY 1988*. Las Cruces: NMSU.
- Bureau of Economic Analysis. (2008, June 8). *Gross Domestic Product by State*. Retrieved January 6, 2009, from <http://www.bea.gov/regional/gsp/action.cfm>
- Bureau of Economic Analysis. (2008, April). *Population* . Retrieved January 26, 2009, from Regional Economic Accounts: <http://www.bea.gov/regional/reis/drill.cfm>
- Department of Energy. (2008, January 30). *FY 2009 DOE Budget Request to Congress*. Retrieved February 16, 2009, from Office of Chief Financial Officer: <http://www.cfo.doe.gov/budget/09budget/Content/Labandstate/FY2009lab.pdf>
- Internal Revenue Service. (2009, January 12). *IRS Data Book: 2008, Table 5*. Retrieved March 3, 2009, from Internal Revenue Service: United States Department of the Treasury : <http://www.irs.gov/taxstats/article/0,,id=206488,00.html>
- Lansford,et al.. (1990). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1989*. Las Cruces: NMSU.
- Lansford,et al.. (1991). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1990*. Las Cruces: NMSU.
- Lansford,et al.. (1992). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1991*. Las Cruces: NMSU.
- Lansford,et al.. (1993). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1992*. Las Cruces: NMSU.
- Lansford,et al.. (1994). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1993*. Las Cruces: NMSU.
- Lansford,et al.. (1995). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1994*. Las Cruces: NMSU.
- Lansford,et al.. (1996). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1995*. Las Cruces: NMSU.
- Lansford,et al.. (1997). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1996*. Las Cruces: NMSU.
- Lansford,et al.. (1998). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1997*. Las Cruces: NMSU.

- Lansford, R. R. et al. (1999). *The Economic Impact of the Department of Energy on the State of New Mexico in Fiscal Year 1998*. Las Cruces: NMSU.
- National Atomic Museum. (n.d.). *Home: National Atomic Museum*. Retrieved January 6, 2009, from National Atomic Museum web site: <http://www.atomicmuseum.com/>
- National Nuclear Security Administration Service Center. (n.d.). *Home: National Nuclear Security Administration Service Center*. Retrieved March 4, 2009, from National Nuclear Security Administration Service Center: <http://www.doeal.gov/>
- New Mexico Energy, Minerals and Natural Resources Department. (2009). *Energy Conservation and Management Division*. Retrieved January 26, 2009, from Invest in New Mexico's Energy Future: <http://www.emnrd.state.nm.us/ecmd/>
- Office of the Chief Financial Officer, U.S. Department of Energy. (2008, February). *Department of Energy FY 2009 Congressional Budget Request Highlights*. Retrieved March 4, 2009, from Office of the Chief Financial Officer: <http://www.cfo.doe.gov/budget/09budget/Content/Highlights/Highlight2009.pdf>
- US Census Bureau (July 2009) *Federal Aid to States for Fiscal Year 2008*. <http://www.census.gov/prod/2009pubs/fas-08.pdf>
- US Census Bureau,(July 2009) Consolidated Federal Funds Report for State and Local Areas, Fiscal Year 2008. <http://www.census.gov/prod/2009pubs/fas-08.pdf>
- US Census Bureau. (2008, October 2). *Federal, State, and Local Governments: Consolidated Federal Funds Report 2007*. Retrieved January 6, 2009, from <http://www.census.gov/govs/www/cffr07.html>
- US Census Bureau. (2009, Feb 20). *State and County Quickfacts*. Retrieved March 3, 2009, from US Census Bureau: <http://quickfacts.census.gov/qfd/states/35000.html>