
NSW Mining Industry Expenditure Impact Survey 2020/21

March 2022

Executive Summary

Overview

The New South Wales Minerals Council (NSWMC) analysed the expenditure patterns of 28 NSW exploration and mining companies to determine the economic contribution of the industry throughout NSW in 2020/21. The spending data, which included employee salaries and wages, business purchases, community contributions and local and state government payments, was collected by postcode where it was spent to allow local, regional and state-wide economic benefits to be assessed. This report is an extension of previous annual surveys completed since 2011/12.

Direct Spending

The 28 companies surveyed **directly spent an estimated \$14.6 billion in the NSW economy** in 2020/21, comprised of:

- **Total workforce of 30,095 full-time equivalent workers** (including direct resident employees and contract workers), which represented an annual increase of 4.6%;
- **\$2.8 billion in wages and salaries** to approximately **20,003 direct fulltime resident employees** (not including contractors), representing an **average salary** level across the sector of **\$141,417** per annum;
- **\$10.1 billion in purchases of goods and services from over 7,300 local businesses** (including contract payments), community contributions and payments to local government (including rates, developer contributions and other payments); and
- **\$1.7 billion** in state government payments (including royalties, stamp duty, payroll tax and land tax).

*NSW mining companies surveyed contributed **\$14.6 billion** in direct spending to the State economy in 2020/21.*

Disclaimer

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The Hunter region recorded the highest direct expenditure in 2020/21, with \$6.1 billion (or 41.6% of the total direct spend across NSW), followed by Sydney (\$3.7 billion, or 25.2%) and Central West (\$1.1 billion, or 7.4%).

Table E1: Direct Impact of NSW Mining Companies Surveyed by Region, 2020/21

Region	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(b)	Business purchases, community and govt payments (\$M)	No. of local suppliers	Total direct spending (\$M)	% of total direct spend, NSW
Central West	2,891	396.1	5,568	690.0	985	1,086.1	7.4%
Far West	486	59.3	1,036	144.1	124	203.5	1.4%
Hunter	10,194	1,528.9	13,251	4,546.6	3,160	6,075.6	41.6%
Illawarra	1,326	161.7	1,875	540.2	419	701.8	4.8%
Mid-North Coast	57	7.6	57	24.7	40	32.2	0.2%
Murray	31	3.7	31	22.3	48	26.0	0.2%
Murrumbidgee	81	10.6	81	74.7	66	85.4	0.6%
North Western	2,375	300.3	2,708	309.9	627	610.2	4.2%
Northern	1,476	189.7	3,772	154.4	369	344.1	2.4%
Richmond-Tweed	18	1.9	18	8.6	22	10.5	0.1%
South Eastern	84	7.8	87	28.0	66	35.8	0.2%
Sydney	971	159.6	1,580	3,515.5	2,682	3,675.1	25.2%
Unallocated ^(a)	15	1.8	32	4.5		1,710.4	11.7%
Total New South Wales	20,003	2,828.8	30,095	10,063.7	7,311	14,596.6	100.0%
Rest of Australia	522	70.3	526	5,551.5	2,988	5,621.8	
Total Australia	20,526	2,899.1	30,621	15,615.3	10,299	20,218.4	
Overseas	0	0.0	0	145.4	221	145.4	
Other	63	1.7	63	170.7	421	172.4	
Total	20,589	2,900.7	30,684	15,931.4	10,941	20,536.1	

Note: Regions are based on 12 former Statistical Divisions in NSW. (a) Includes state government payments. (b) Includes full-time resident direct employees and contract workers by place of operation.

Comparison with results from previous surveys is difficult due to differences in the composition of participating companies. Based on whole-of-survey totals, the direct expenditure in NSW of the companies surveyed in 2020/21 fell slightly by 2.1% compared to the previous year, although in contrast, the total workforce increased annually by 1,315 FTEs, or 4.6%.

*Compared to 2019/20, the total workforce of NSW mining companies surveyed increased by **1,315 FTEs, or 4.6%**.*

Since 2011/12, NSW mining companies surveyed by NSWMC have generated \$122.3 billion in direct spending, with average annual expenditure of \$12.2 billion.

*Since 2011/12, NSW mining companies surveyed have contributed **\$122.3 billion in direct spending to the State economy.***

Direct Expenditure of NSW Mining Companies Surveyed

New South Wales (\$ billion, real)

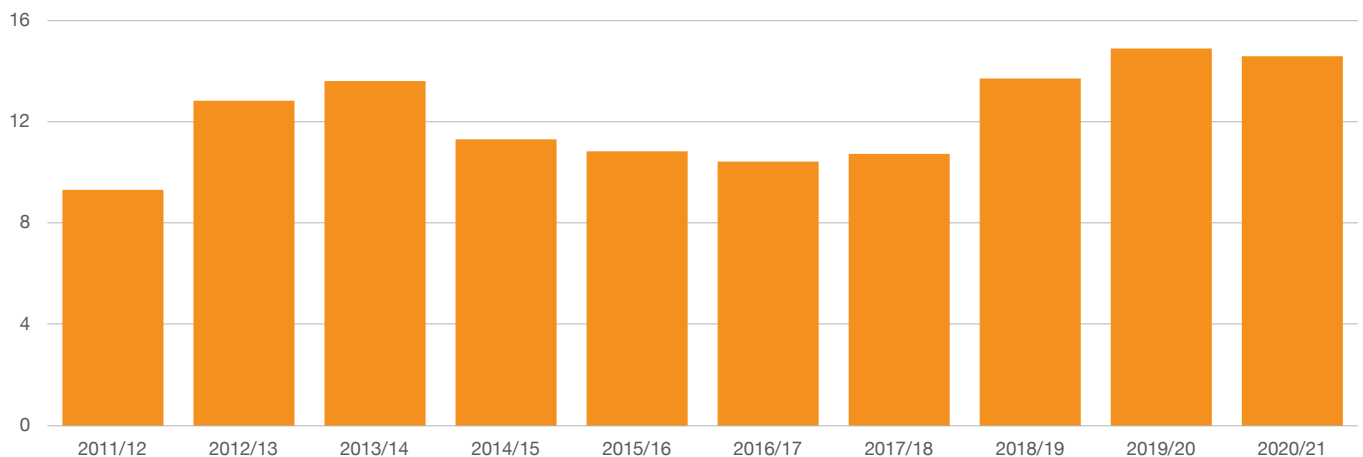


Table E2: Annual Change in Survey Results

Region	Level 2020/21	Level 2019/20	Level 2018/19	Annual % change, 2019/20- 2020-21
No. of companies surveyed	29	28	28	3.6%
DIRECT EMPLOYEES				
No. of direct employees (FTEs)	20,003	20,117	18,820	-0.6%
No. of apprenticeships and traineeships (FTEs)	315	298	261	5.7%
Total wages/salaries paid (\$M)	2,828.8	2,737.9	2,453.6	3.3%
BUSINESS PURCHASES				
No. of suppliers	7,311	7,862	7,003	-7.0%
Total opex spend (\$M)	8,608.4	8,504.6	7,865.5	1.2%
Total capex spend (\$M)	1,362.0	1,683.9	958.6	-19.1%
Total business purchases (\$M)	9,970.4	10,188.5	8,824.1	-2.1%
COMMUNITY CONTRIBUTIONS				
No. of community organisations supported	1,069	1,143	1,137	-6.5%
Total community contributions (\$M)	13.2	8.2	9.5	61.0%
LOCAL COUNCIL PAYMENTS				
Total local government payments (\$M)	80.1	69.5	95.5	15.3%
STATE GOVERNMENT PAYMENTS				
Total state government payments (\$M)	1,704.1	1,900.4	2,337.9	-10.3%
TOTAL SPEND (\$M)	14,596.6	14,904.4	13,720.6	-2.1%
TOTAL WORKFORCE (FTEs)	30,095	28,780	25,844	4.6%

Indirect and Total Economic Impacts

Economic modelling of the flow-on effects of the surveyed companies' direct expenditure allowed the indirect and total economic impact to be estimated. Across NSW, the total economic impact of the surveyed companies in 2020/21, based on Type II multipliers (i.e. including both indirect industry and consumption-induced effects), amounted to:

- **\$35.1 billion in output/turnover** (a measure of direct and supply chain purchases from businesses);
- **\$31.5 billion in gross value added (GVA)**, amounting to 4.9% of Gross State Product (GSP) for NSW (which was \$643.1 billion in 2020/21) through \$14.6 billion in direct effects and \$16.9 billion in supply chain and consumption effects;
- **\$12.1 billion in income** (wages and salaries) paid to workers; and
- **168,677 full time equivalent jobs** supported, or 4.2% of total employment in NSW during 2020/21.

*The total economic impact of the NSW mining companies surveyed to the State economy was estimated at **\$31.5 billion in gross value added and 168,677 jobs supported in 2020/21.***

In terms of total economic benefit, the 28 companies surveyed had the **highest overall impact in the Hunter region**, with total value added of \$12.9 billion, followed by Sydney (\$7.6 billion) and Central West (\$2.5 billion). With regard to economic contribution, the total gross value added from the NSW companies surveyed comprised the largest share of gross regional product in the Far West region (42.9%), followed by Hunter (28.9%), Central West (19.2%) and North Western (12.5%).

With regard to employment, the NSW mining companies surveyed again had the greatest impact on jobs in the Hunter region, supporting 74,812 jobs (FTEs), followed by the Sydney (24,942 FTEs) and Central West (20,084 FTEs) regions.

Table E3: Economic Impact of NSW Mining Companies Surveyed, 2020/21

	New South Wales	Rest of Australia	Total Australia
Gross Value Added (\$M)			
Direct	14,597	5,622	20,218
% of Gross State Product (GSP)	2.3%	0.4%	1.0%
Indirect	10,937	3,683	14,620
Total GVA (Type I)	25,534	9,305	34,839
% of GSP	4.0%	0.7%	1.8%
Consumption-induced	6,012	2,205	8,218
Total GVA (Type II)	31,546	11,510	43,056
% of GSP	4.9%	0.9%	2.2%
Employment (FTEs)			
Direct	20,003	522	20,526
% of total state employment	0.5%	0.0%	0.2%
Indirect	92,418	22,169	114,587
Total employment (Type I)	112,423	22,692	135,115
% of total state employment	2.8%	0.3%	1.1%
Consumption-induced	56,253	13,983	70,236
Total employment (Type II)	168,677	36,675	205,351
% of total state employment	4.2%	0.4%	1.6%
Business spend (incl. community contributions and govt payments) (\$M)			
Direct	11,768	5,552	17,319
Indirect	8,820	3,942	12,762
Total business spend (Type I)	20,588	9,493	30,082
Consumption-induced	11,720	4,145	15,865
Total business spend (Type II)	32,308	13,638	45,946
Wages & salaries (\$M)			
Direct	2,829	70	2,899
Indirect	5,847	1,917	7,765
Total wages & salaries (Type I)	8,676	1,988	10,664
Consumption-induced	3,379	1,015	4,393
Total wages & salaries (Type II)	12,055	3,002	15,057

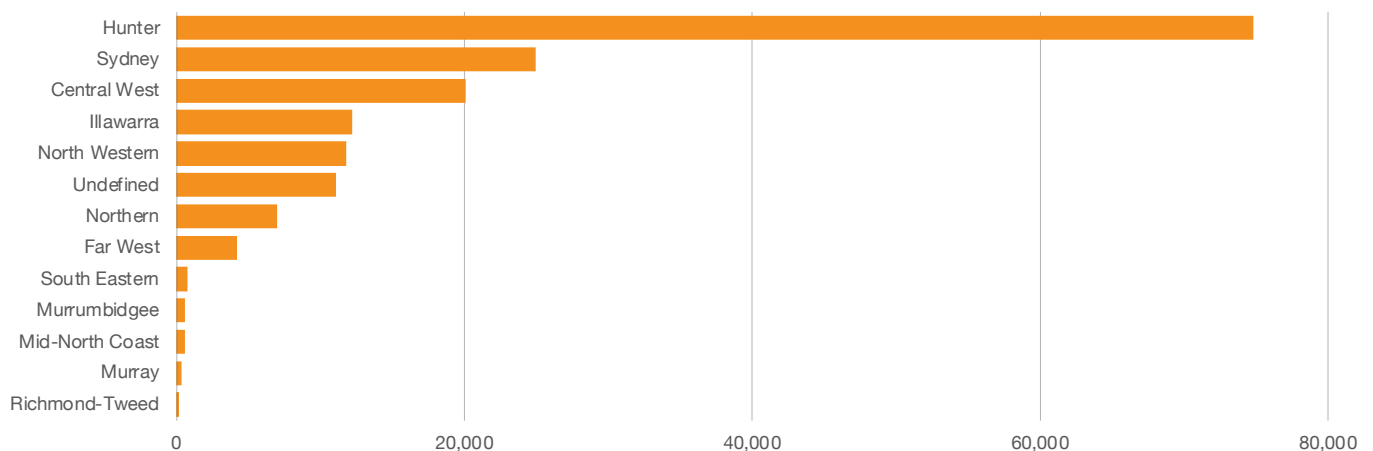
Note: Consumption-induced impacts seek to measure the change in consumption for all goods and services that arise from an increase in final output from the industry in question. Direct employment and wages relate specifically to full-time equivalent residing direct employees (not including contractors).

Table E4: Total Economic Impact of NSW Mining Companies Surveyed by Region, 2020/21

Region	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Central West	2,468.8	19.2%	20,084	20.1%
Far West	498.7	42.9%	4,203	50.6%
Hunter	12,825.2	28.9%	74,812	21.8%
Illawarra	1,678.4	7.3%	12,231	5.6%
Mid-North Coast	76.8	0.6%	612	0.6%
Murray	50.2	0.7%	331	0.6%
Murrumbidgee	132.8	0.9%	613	0.7%
North Western	1,370.5	12.5%	11,826	21.1%
Northern	788.7	6.0%	7,013	8.0%
Richmond-Tweed	25.7	0.2%	187	0.2%
South Eastern	89.6	0.8%	755	0.7%
Sydney	7,579.1	1.6%	24,942	0.9%
Undefined	3,961.7	n.a.	11,067	n.a.
Total New South Wales	31,546.1	4.9%	168,677	4.2%
Rest of Australia	11,510.2	0.9%	36,675	0.4%
Total Australia	43,056.3	2.2%	205,351	1.6%

Total Employment Supported by NSW Mining Companies Surveyed by Region

New South Wales (FTEs)



Local Suppliers

Approximately 7,311 unique businesses in New South Wales received payments for goods and services supplied during 2020/21 to those survey respondents that provided supplier details. The highest number of businesses was recorded in the Hunter region (3,160), followed by Sydney (2,682), Central West (985), North Western (627) and Illawarra (419).

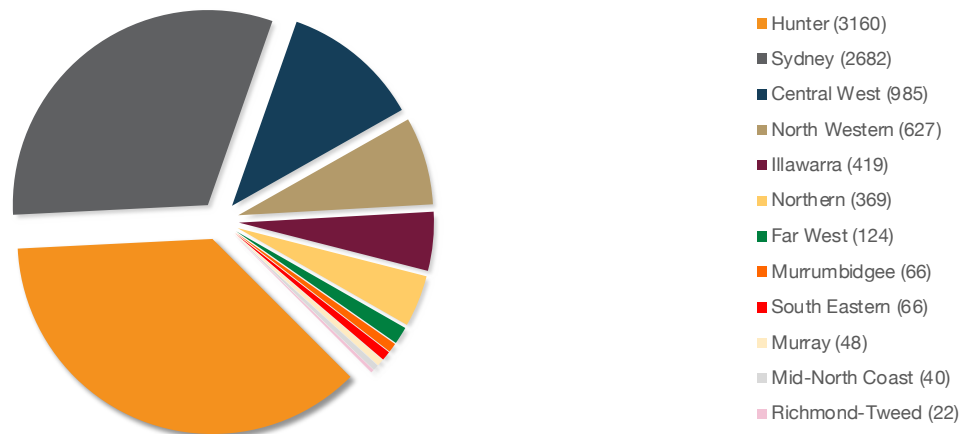
Table E5: Number of Businesses Supported by Region, 2020/21

Region	Number of local suppliers
Central West	985
Far West	124
Hunter	3,160
Illawarra	419
Mid-North Coast	40
Murray	48
Murrumbidgee	66
North Western	627
Northern	369
Richmond-Tweed	22
South Eastern	66
Sydney	2,682
Total New South Wales	7,311

Note: Only for those companies that provided supplier details. Duplicates were removed to the best extent practicable to ensure an accurate estimation of the number of businesses supported at both state and regional level.

Local Businesses Supported by NSW Mining Companies Surveyed by Region

New South Wales, 2020/21



Community Support

During 2020/21, survey respondents directly contributed over \$13.2 million to 1,069 separate community groups across New South Wales in a wide range of areas including health, education, environment and the arts. The Hunter region recorded the highest number of community organisations supported (443), followed by Central West (281).

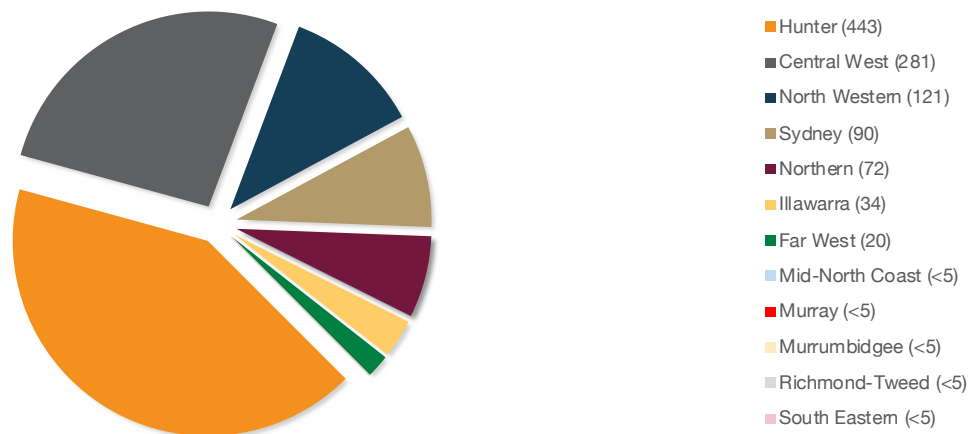
Table E6: Number of Community Organisations Supported by Region, 2020/21

Region	No. of community groups	% of total	Total contribution (\$)
Central West	281	26.3%	3,760,734
Far West	20	1.9%	61,738
Hunter	443	41.4%	4,596,650
Illawarra	34	3.2%	1,271,057
Mid-North Coast	<5	n.p.	2,000
Murray	<5	0.2%	2,353
Murrumbidgee	<5	n.p.	2,939
North Western	121	11.3%	606,366
Northern	72	6.7%	399,983
Richmond-Tweed	<5	n.p.	21,500
South Eastern	<5	n.p.	16,949
Sydney	90	8.4%	2,456,760
Total New South Wales	1,069	100.0%	13,200,889

Note: Only for those companies that provided details. n.p. not publishable data. Duplicates were removed to the best extent practicable to ensure an accurate estimation of the number of individual community organisations supported at both state and regional level.

Community Organisations Supported by Companies Surveyed by Region

New South Wales, 2020/21



Local Council Contributions

Mining companies contribute to local councils through the payment of rates, developer contributions agreed as a condition of planning approval, and through other payments such as water rates and payments for specific infrastructure upgrades.

During 2020/21, survey respondents reported direct contributions to local councils totalling \$80.1 million, which represented a significant annual increase of \$10.6 million, or 15.3% from the level for 2019/20. Rates (\$62.3 million) comprised the largest proportion of local council payments, followed by Voluntary Planning Agreements (VPA)/developer contributions (\$11.5 million) and Other contributions (\$6.3 million).

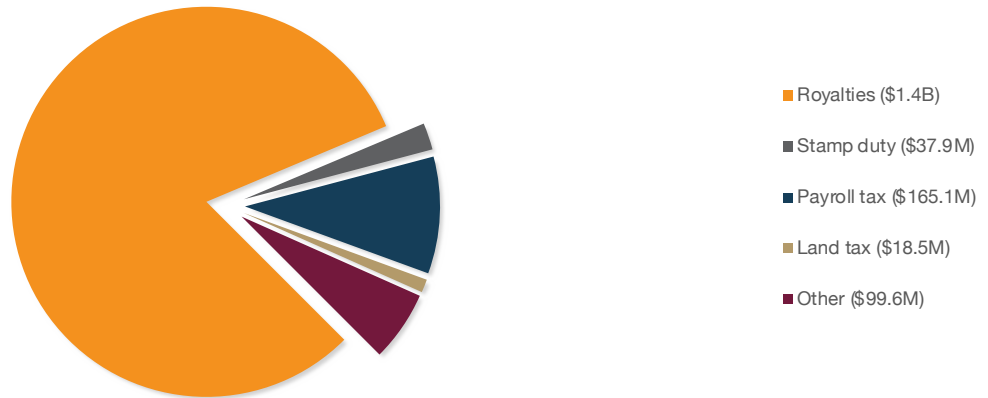
Table E7: Local Council Contributions by Region, 2020/21

Region	Rates (\$)	VPA/Developer (\$)	Other (\$)	Total contributions (\$)
Central West	11,157,420	793,185	896,380	12,846,986
Far West	2,094,839	0	92,929	2,187,768
Hunter	24,966,990	7,654,739	1,792,659	34,414,387
Illawarra	1,244,688	4,377	0	1,249,065
Mid-North Coast	7,515	0	0	7,515
Murray	0	0	1,598,783	1,598,783
Murrumbidgee	0	0	0	0
North Western	13,635,069	1,710,582	1,886,308	17,231,959
Northern	5,134,600	832,988	578	5,968,166
Richmond-Tweed	0	0	0	0
South Eastern	29,350	550,866	0	580,215
Sydney	3,980,274	618	118	3,981,011
Total New South Wales	62,315,513	11,547,354	6,276,924	80,139,792
Annual % change	33.4%	-10.8%	-36.3%	15.3%

State Government Payments

During 2020/21, the direct contribution made by companies surveyed in state government payments was approximately \$1.9 billion, comprised of royalties (\$1.4 billion), payroll tax (\$165.1 million), stamp duty (\$37.9 million) and land tax (\$18.5 million).

State Government Contributions by Companies Surveyed by Category
New South Wales, 2020/21



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Introduction

The NSW Minerals Council (NSWMC) commissioned Lawrence Consulting to determine the total direct, indirect and consumption-induced economic benefit to the state economy based on expenditure data provided by 28 exploration and mining companies operating in NSW. This report provides a detailed summary of the level of expenditure into the New South Wales economy by these companies in 2020/21 and the multiplier and consumption-induced effects that are generated by that initial stimulus. The analysis is an update of previous studies completed since 2011/12, available to download at www.nswmining.com.au.

While the mining sector makes a significant contribution to the New South Wales and Australian economies, information about the impacts of the sector on regional and metropolitan economies within New South Wales is limited. Impacts on regional and metropolitan areas of New South Wales occur through direct, indirect and consumption-induced effects. There are two key types of direct impacts:

- Wages for direct employment of workforce; and
- Expenditure on business goods and services in local and regional economies.

Business expenditure generates both upstream and downstream ripple effects through the supply chain as local businesses purchase goods and services from other businesses, often through several links in the supply chain. The net effect of subsequent rounds of economic activity in the business supply chain can be categorised as indirect effects. The increased employment generated through the direct effects (resources sector employment) and the indirect effects (business supply chain) generates a number of final consumption-induced effects to support the increased population base.

The focus of this report is to identify the geographical spread of impacts (direct, indirect and consumption-induced) from the mining industry across New South Wales at five geographic scales:

- State (the whole area of New South Wales);
- Regional (represented by 12 former Statistical Divisions in NSW);
- Local (represented by 128 Local Government Areas in NSW);
- State electoral divisions (represented by 93 SEDs in NSW); and
- Commonwealth electoral divisions (represented by 47 CEDs in NSW).

This report concentrates more on the state and regional profiles, whilst data tables for LGA, SED and CED areas are contained in the Appendices.

Company Survey

The process was initiated in July 2021 when NSWMC distributed an expenditure survey form to New South Wales exploration and mining companies, which were asked to disclose total operational spending in 2020/21 in the following categories:

- Employee salaries and wages (by place of residence) for full-time direct employees, along with the number of apprenticeships and traineeships;
- Goods and services expenditure, including payments made to contractors (including identification of the number of contract FTEs employed on-site) as well as other goods and services providers;
- Voluntary community contributions;
- Local government payments, including council rates and infrastructure charges; and
- State government payments, including royalties, stamp duty, payroll tax and land tax.

Of the companies surveyed, 28 returned the survey, representing the majority of the New South Wales mining sector based on current value of production. The data includes both operational expenditure (OPEX) data for current projects and capital expenditure (CAPEX) data from proposed investments currently under development.

The data was supplied by Australian postcodes where the salary was paid (residence of the direct employee) and where the community contributions and business expenditures were made. The companies that provided expenditure data as part of the study are shown in Table 1.

The postcode spend data were then aggregated using geographical concordance files from the Australian Bureau of Statistics and the economic impacts (direct, indirect and consumption impacts) of the minerals and energy sector were analysed at five geographic levels:

- State (the whole area of New South Wales);
- Regional (represented by 12 former Statistical Divisions in NSW);
- Local (represented by 128 Local Government Areas in NSW);
- State electoral divisions (represented by 93 SEDs in NSW); and
- Commonwealth electoral divisions (represented by 47 CEDs in NSW).

The current analysis of the economic contribution of the NSW mining companies surveyed in 2020/21 was based on identification and allocation of purchases by region to relevant industry categories based on commodity groupings as used in the input-output modelling (refer methodology outlined in Appendix A), which was done to alleviate any possible supply constraint issues. Similarly, household (or consumption) spending was allocated based on different industry expenditure coefficients for each region.

Table 1: NSW Mining Companies Supplying Expenditure Data

Alkane Resources Limited	Iluka Resources
Aurelia Metals	Kepeco Bylong Australia
Bengalla Mining Company Pty Ltd	Mach Energy Australia Pty Ltd
BHP Billiton NSW Energy Coal	Malabar Coal Limited
Bloomfield Collieries Pty Ltd	Newcrest Mining Limited Cadia Valley Operations
Centennial Coal Company Limited	Peabody Energy Australia
CleanTeq Holdings Pty Ltd	Perilya Limited
CMOC Northparkes	Regis Resources Limited
CSA Copper	South 32 Illawarra Coal
Delta Electricity	Thiess Pty Limited
Evolution Cowal Gold	Tronox Holdings
Glencore Coal (NSW) Pty Ltd	Whitehaven Coal Limited
Heron Resources	Wyong Areas Coal Joint Venture
Idemitsu Australia Resources Pty Ltd	Yancoal Australia

Economic Benefits

Direct Impact

Direct Spending

Expenditure data provided by the 28 NSW mining companies surveyed indicated that these companies **contributed an estimated \$14.6 billion to the NSW economy** in 2020/21, comprised of:

- **Total workforce of 30,095 full-time equivalent workers** (including direct resident employees and contract workers), which represented an annual increase of 4.6%;
- **\$2.8 billion in wages and salaries** to approximately **20,003 direct fulltime resident employees** (not including contractors), representing an **average salary** level across the sector of **\$141,417** per annum;
- **\$10.1 billion in purchases of goods and services from over 7,300 local businesses** (including contract payments), community contributions and payments to local government (including rates, developer contributions and other payments); and
- **\$1.7 billion** in state government payments (including royalties, stamp duty, payroll tax and land tax).

*NSW mining companies surveyed contributed **\$14.6 billion** in direct spending to the State economy in 2020/21.*

The direct economic stimulus provided by the NSW mining companies surveyed in 2020/21 also extended to other states, with an additional \$5.6 billion in direct spending, which combined with the impact in New South Wales for a **total direct impact of \$20.2 billion for the whole of Australia**, comprised of:

- \$2.9 billion in wages and salaries to approximately 20,526 full-time residing employees; and
- \$17.3 billion in purchases of goods and services from local businesses, government and community contributions.

When overseas and other unallocated spending of \$317.8 million was also included, the total direct expenditure relating to the NSW mining companies surveyed was approximately \$20.5 billion in 2020/21.

Comparison with results from previous surveys is difficult due to differences in the composition of participating companies. Based on whole-of-survey totals, the direct expenditure in NSW of the companies surveyed in 2020/21 fell slightly by 2.1% compared to the previous year, although in contrast, the total workforce increased annually by 1,315 FTEs, or 4.6%.

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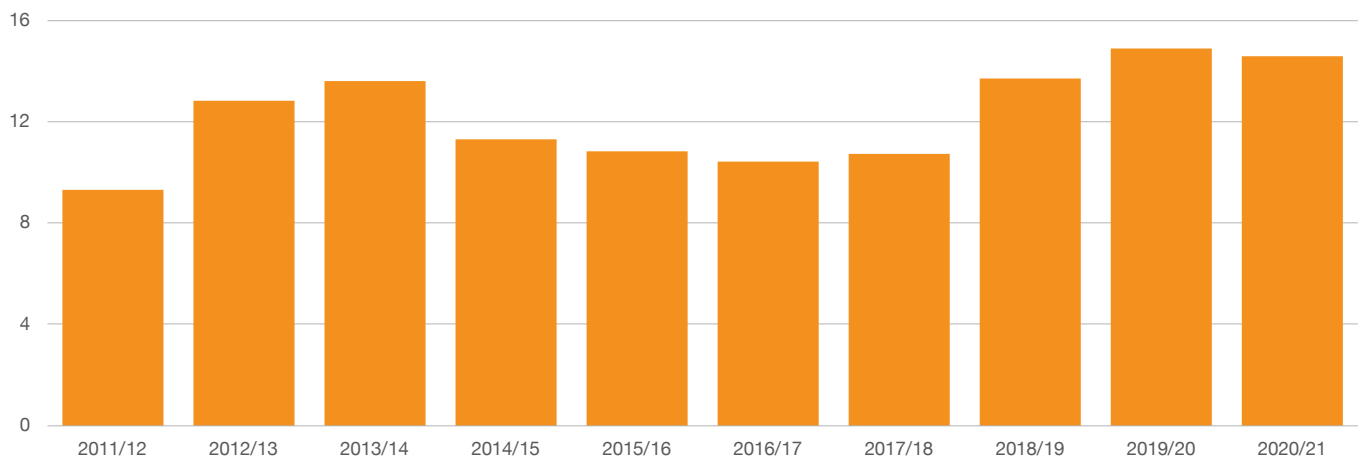


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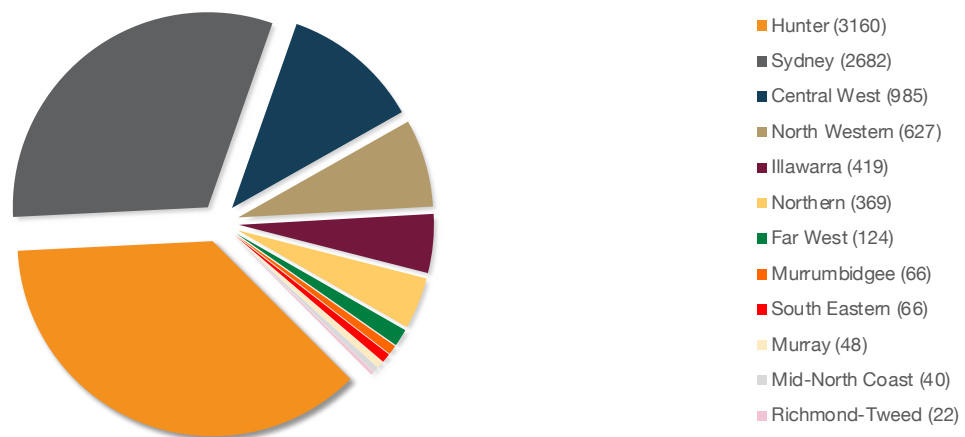
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Community Support

During 2020/21, survey respondents directly contributed over \$13.2 million to 1,069 separate community groups across New South Wales in a wide range of areas including health, education, environment and the arts. The Hunter region recorded the highest number of community organisations supported (443), followed by Central West (281).

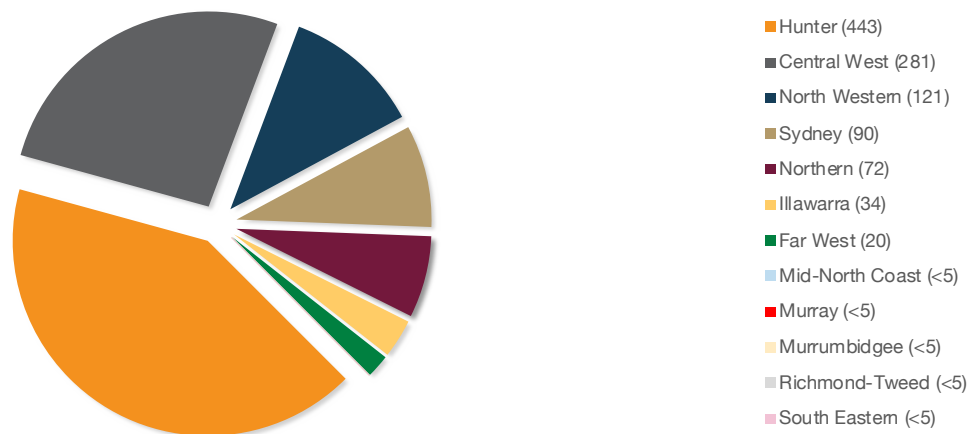
Table 4: Number of Community Organisations Supported by Region, 2020/21

Region	No. of community groups	% of total	Total contribution (\$)
Central West	281	26.3%	3,760,734
Far West	20	1.9%	61,738
Hunter	443	41.4%	4,596,650
Illawarra	34	3.2%	1,271,057
Mid-North Coast	<5	n.p.	2,000
Murray	<5	0.2%	2,353
Murrumbidgee	<5	n.p.	2,939
North Western	121	11.3%	606,366
Northern	72	6.7%	399,983
Richmond-Tweed	<5	n.p.	21,500
South Eastern	<5	n.p.	16,949
Sydney	90	8.4%	2,456,760
Total New South Wales	1,069	100.0%	13,200,889

Note: Only for those companies that provided details. n.p. not publishable data. Duplicates were removed to the best extent practicable to ensure an accurate estimation of the number of individual community organisations supported at both state and regional level.

Community Organisations Supported by Companies Surveyed by Region

New South Wales, 2020/21



Indirect Impact

The I-O modelling conducted for this project has estimated the indirect (Type I) and consumption-induced (Type II) effects flowing from the business expenditure, community and government contributions of \$11.8 billion and the employment expenditure of \$2.8 billion. These impacts have been modelled separately and then aggregated to identify the level of impacts on output, incomes, employment and industry value added in New South Wales. In 2020/21, the \$14.6 billion in direct spending by the 28 NSW mining companies surveyed supported additional supply chain and consumption-induced effects of 148,672 fulltime jobs and \$29.8 billion in aggregate spending (\$9.2 billion in wages and salaries and \$20.5 billion in purchases of goods and services).

In 2020/21, the NSW mining companies surveyed supported an additional 148,672 fulltime jobs and \$29.8 billion in aggregate spending (\$9.2 billion in wages and salaries and \$20.5 billion in purchases of goods and services).

Total Impact

The results of the I-O modelling allow forecasts to be made about the total size of impacts from the 28 NSW mining companies surveyed on the economy. For each key measure, the total impact on the economy is the sum of the direct effects from industry, the indirect effects through the business chain, and the final consumption-induced effects. The total economic impact (i.e. direct, indirect and induced, or Type II impact) from the minerals and energy sector to the New South Wales economy in 2020/21 amounted to:

- **\$35.1 billion in output/turnover** (or purchases from supplying businesses);
- **\$31.5 billion in gross value added** (contribution to gross state product);
- **\$12.1 billion in income** (wages and salaries); and
- **168,677 full-time equivalent jobs.**

Estimates of the contribution to Gross State Product (GSP) require an estimate of the initial contribution of the industry in terms of direct value added – defined as compensation of employees plus gross operating surplus plus other taxes less subsidies on production – plus the value added effects generated through the business chain and consumption effects. A precise measure of direct value added for the minerals and energy sector is not available from the data; an estimated value added of \$14.6 billion – equivalent to the sum of input and labour costs, or total direct spending – has instead been adopted.

When business supply and employment effects are considered, the minerals and energy sector generated approximately **\$31.5 billion in gross value added** (\$14.6 billion in direct effects, and \$16.9 billion in supply chain and consumption effects) in 2020/21 and was responsible for supporting approximately **168,677 jobs** (20,003 in direct employment and 148,672 in additional employment). This means that the 28 NSW mining companies surveyed contributed an estimated **4.9% of Gross State Product** (based on the figure of \$643.1 billion in 2020/21) and **4.2% of total employment** (4,048,373 persons) in New South Wales in 2020/21.

*The total economic impact of the NSW mining companies surveyed was estimated at **\$31.5 billion in gross value added and 168,677 jobs supported in 2020/21.***

Under the more conservative Type I scenario (i.e. excluding consumption-induced effects), direct spending by the companies surveyed and flow-on impacts contributed 4.0% to GSP and 2.8% of total state employment.

Table 5: Economic Impact of NSW Mining Companies Surveyed, 2020/21

	New South Wales	Rest of Australia	Total Australia
Gross Value Added (\$M)			
Direct	14,597	5,622	20,218
% of Gross State Product (GSP)	2.3%	0.4%	1.0%
Indirect	10,937	3,683	14,620
Total GVA (Type I)	25,534	9,305	34,839
% of GSP	4.0%	0.7%	1.8%
Consumption-induced	6,012	2,205	8,218
Total GVA (Type II)	31,546	11,510	43,056
% of GSP	4.9%	0.9%	2.2%
Employment (FTEs)			
Direct	20,003	522	20,526
% of total state employment	0.5%	0.0%	0.2%
Indirect	92,418	22,169	114,587
Total employment (Type I)	112,423	22,692	135,115
% of total state employment	2.8%	0.3%	1.1%
Consumption-induced	56,253	13,983	70,236
Total employment (Type II)	168,677	36,675	205,351
% of total state employment	4.2%	0.4%	1.6%
Business spend (incl. community contributions and govt payments) (\$M)			
Direct	11,768	5,552	17,319
Indirect	8,820	3,942	12,762
Total business spend (Type I)	20,588	9,493	30,082
Consumption-induced	11,720	4,145	15,865
Total business spend (Type II)	32,308	13,638	45,946
Wages & salaries (\$M)			
Direct	2,829	70	2,899
Indirect	5,847	1,917	7,765
Total wages & salaries (Type I)	8,676	1,988	10,664
Consumption-induced	3,379	1,015	4,393
Total wages & salaries (Type II)	12,055	3,002	15,057

Note: Consumption-induced impacts seek to measure the change in consumption for all goods and services that arise from an increase in final output from the industry in question. Direct employment and wages relate specifically to full-time equivalent residing direct employees (not including contractors).

Regional Impact

The postcode expenditure data provided by companies was aggregated using geographical concordances at the regional (or SD) and local (LGA) levels. The expenditures of the 28 NSW mining companies surveyed varied considerably across regional areas.

The level of employment, and direct expenditure on employees and business purchases in 2020/21 is summarised for the 12 major regions in New South Wales in Table 6.

The largest proportion of direct expenditure from the 28 companies surveyed in New South Wales in 2020/21 was in the Hunter region (\$6.1 billion), followed by the Sydney (\$3.7 billion), Central West (\$1.1 billion) and Illawarra (\$701.2 million) regions.

Hunter recorded the largest share of direct expenditure by region in 2020/21 (\$6.1 billion), followed by Sydney (\$3.7 billion) and Central West (\$1.1 billion).

With regard to employment, the largest workforce share (i.e. number of direct full-time resident employees and contract workers by place of operation) across New South Wales was also recorded in the Hunter region (13,251 FTEs, or 44.0%), followed by the Central West (5,568 FTEs, or 18.5%), Northern (3,772 FTEs, or 12.5%), North Western (2,708 FTEs, or 9.0%) and Illawarra (1,875 FTEs, or 6.2%).

The average salary for workers directly employed by the 28 NSW mining companies surveyed was approximately \$141,417 in 2020/21.

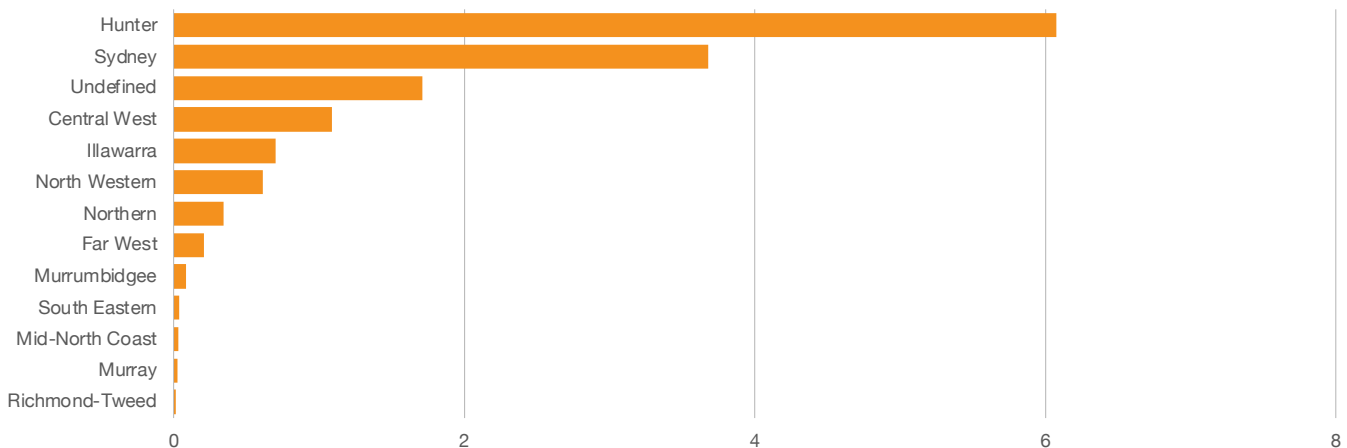
Table 6: Direct Impact of NSW Mining Companies Surveyed by Region, 2020/21

Region	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(b)	Business purchases, community and govt payments (\$M)	No. of local suppliers	Total direct spending (\$M)	% of total direct spend, NSW
Central West	2,891	396.1	5,568	690.0	985	1,086.1	7.4%
Far West	486	59.3	1,036	144.1	124	203.5	1.4%
Hunter	10,194	1,528.9	13,251	4,546.6	3,160	6,075.6	41.6%
Illawarra	1,326	161.7	1,875	540.2	419	701.8	4.8%
Mid-North Coast	57	7.6	57	24.7	40	32.2	0.2%
Murray	31	3.7	31	22.3	48	26.0	0.2%
Murrumbidgee	81	10.6	81	74.7	66	85.4	0.6%
North Western	2,375	300.3	2,708	309.9	627	610.2	4.2%
Northern	1,476	189.7	3,772	154.4	369	344.1	2.4%
Richmond-Tweed	18	1.9	18	8.6	22	10.5	0.1%
South Eastern	84	7.8	87	28.0	66	35.8	0.2%
Sydney	971	159.6	1,580	3,515.5	2,682	3,675.1	25.2%
Unallocated ^(a)	15	1.8	32	4.5		1,710.4	11.7%
Total NSW	20,003	2,828.8	30,095	10,063.7	7,311	14,596.6	100.0%

Note: Regions are based on 12 former Statistical Divisions in NSW. (a) Includes state government payments. (b) Includes full-time resident direct employees and contract workers by place of operation.

NSW Mining Companies Surveyed Direct Spend by Region

New South Wales (\$ billion)



The economic modelling conducted for this project has estimated the indirect and consumption-induced effects flowing from the two key direct impacts on the economy, i.e. those generated by business supply chain expenditure in each region and those generated by consumption-induced spending in each region. These impacts have been modelled separately and then aggregated to identify the level of impacts on output, incomes, employment and industry value added for each region.

Table 7: Flow-on Impacts of NSW Mining Companies Surveyed by Region, 2020/21 (Type II)

Region	Indirect full-time employees (FTEs)	Associated salaries (\$M)	Supply of goods and services (\$M)	Total indirect value added (\$M)
Central West	17,193	1,416.6	634.1	1,382.7
Far West	3,717	333.9	160.8	295.2
Hunter	64,618	8,062.0	3,851.3	6,749.7
Illawarra	10,905	1,107.2	563.0	976.6
Mid-North Coast	555	45.4	20.2	44.5
Murray	300	27.3	13.0	24.2
Murrumbidgee	531	49.5	22.2	47.4
North Western	9,451	780.9	351.9	760.3
Northern	5,537	456.8	206.3	444.7
Richmond-Tweed	169	17.1	8.6	15.2
South Eastern	671	54.7	24.3	53.8
Sydney	23,971	5,318.7	1,936.3	3,904.0
Undefined	11,052	2,870.0	1,433.6	2,251.3
Total New South Wales	148,672	20,540.1	9,225.9	16,949.5

Table 8 shows that the direct expenditure of the 28 companies surveyed has the highest overall impact in the Hunter region, with estimated total value added of \$12.8 billion, meaning these companies contributed 28.9% to gross regional product (\$44.4 billion) in 2020/21. The impact in the Hunter region was significantly higher than other regional economies, the next highest of which was Sydney (\$7.6 billion in value added) and Central West (\$2.5 billion).

The Far West region recorded the highest proportion of GRP contributed by the companies surveyed (42.9%), followed by the Hunter (28.9%), Central West (19.2%), North Western (12.5%) and Illawarra (7.3%) regions.

The Far West region had the highest proportion of GRP contributed by the resource sector (42.9%), followed by Hunter (28.9%) and Central West (19.2%).

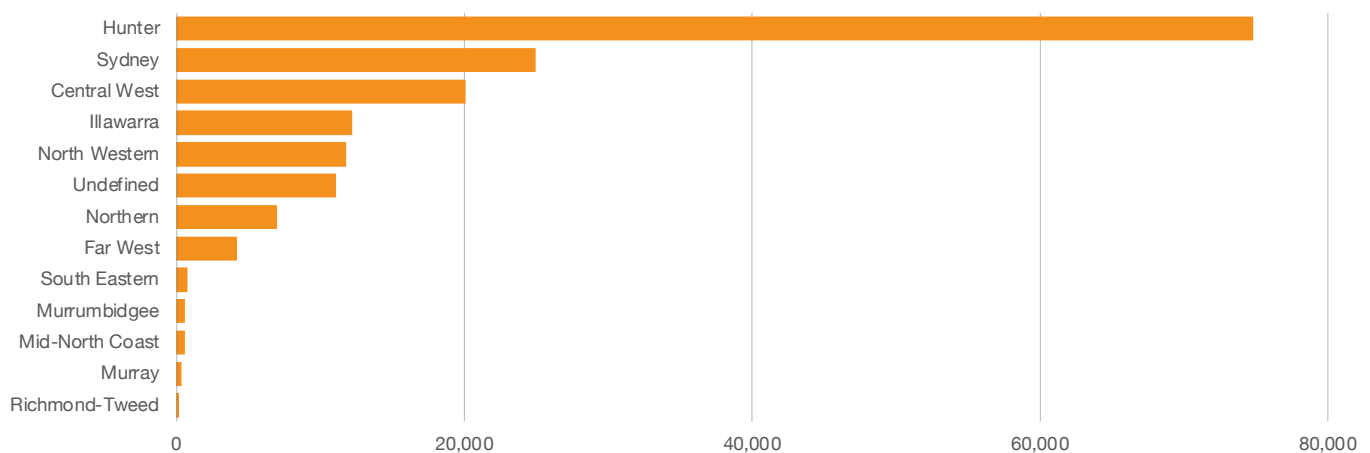
With regard to employment, the companies surveyed again had the highest impact on jobs in the Hunter region, supporting 74,812 FTEs, comprising 21.8% of the total regional workforce. The Sydney (24,942 FTEs), Central West (20,084 FTEs) and Illawarra (12,231 FTEs) regions recorded the next highest number of employees. The Far West region recorded the greatest proportion of total jobs (50.6%) from the impact of the 28 companies surveyed.

Table 8: Total Economic Impact of Minerals and Energy Sector by Region, 2020/21

Region	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Central West	2,468.8	19.2%	20,084	20.1%
Far West	498.7	42.9%	4,203	50.6%
Hunter	12,825.2	28.9%	74,812	21.8%
Illawarra	1,678.4	7.3%	12,231	5.6%
Mid-North Coast	76.8	0.6%	612	0.6%
Murray	50.2	0.7%	331	0.6%
Murrumbidgee	132.8	0.9%	613	0.7%
North Western	1,370.5	12.5%	11,826	21.1%
Northern	788.7	6.0%	7,013	8.0%
Richmond-Tweed	25.7	0.2%	187	0.2%
South Eastern	89.6	0.8%	755	0.7%
Sydney	7,579.1	1.6%	24,942	0.9%
Undefined	3,961.7	n.a.	11,067	n.a.
Total New South Wales	31,546.1	4.9%	168,677	4.2%

Total Employment Supported by NSW Mining Companies Surveyed by Region

New South Wales (FTEs)



Central West

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$1.1 billion in direct spending in this region (representing 5.2% annual growth), through:

- Total workforce of 4,946 FTEs, including 2,677 contract workers whose place of work was in the region;
- \$396.1 million in wages and salaries to 2,891 direct full-time employees (not including contractors);
- \$673.4 million in purchases of goods and services from 985 local businesses (includes contractors);
- \$3.8 million in contributions to 281 community organisations; and
- \$12.8 million in local government payments.

Indirect Contribution

This **\$1.1 billion in direct spending** supported:

- \$1.4 billion in additional supply chain purchases and household consumption; and
- \$634.1 million in wages and salaries associated with a further 17,193 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$2.1 billion in supplying business purchases;
- \$1.0 billion in total wages and salaries paid to workers;
- **\$2.5 billion in gross value added**, or 19.2% of total GRP in this region (\$12.9 billion); and
- **20,084 full-time equivalent jobs**, or 10.1% of the regional workforce.

Far West

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$203.5 million in direct spending in this region through:

- Total workforce of 1,036 FTEs, including 550 contract workers whose place of work was in the region;
- \$59.3 million in wages and salaries to 486 direct full-time employees (not including contractors);
- \$141.9 million in purchases of goods and services from 124 local businesses (includes contractors);
- \$0.1 million in contributions to 20 community organisations; and
- \$2.2 million in local government payments.

Indirect Contribution

This **\$203.5 million in direct spending** supported:

- \$333.9 million in additional supply chain purchases and household consumption; and
- \$160.8 million in wages and salaries associated with a further 3,717 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$475.8 million in supplying business purchases;
- \$220.1 million in total wages and salaries paid to workers;
- **\$498.7 million in gross value added**, or 42.9% of total GRP in this region (\$1.2 billion); and
- **4,203 full-time equivalent jobs**, or 50.6% of the regional workforce.

Hunter

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$6.1 billion in direct spending in this region through:

- Total workforce of 13,251 FTEs, including 3,057 contract workers whose place of work was in the region;
- \$1.5 billion in wages and salaries to 10,194 direct full-time employees (not including contractors);
- \$4.5 billion in purchases of goods and services from 3,160 local businesses (includes contractors);
- \$4.6 million in contributions to 443 community organisations; and
- \$34.4 million in local government payments.

Indirect Contribution

This **\$6.1 billion in direct spending** supported:

- \$8.1 billion in additional supply chain purchases and household consumption; and
- \$3.9 billion in wages and salaries associated with a further 64,618 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$12.6 billion in supplying business purchases;
- \$5.4 billion in total wages and salaries paid to workers;
- **\$12.8 billion in gross value added**, or 28.9% of total GRP in this region (\$44.4 billion); and
- **74,812 full-time equivalent jobs**, or 21.8% of the regional workforce.

Illawarra

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$701.8 million in direct spending in this region through:

- Total workforce of 1,875 FTEs, including 549 contract workers whose place of work was in the region;
- \$161.7 million in wages and salaries to 1,326 direct full-time employees (not including contractors);
- \$537.7 million in purchases of goods and services from 419 local businesses (includes contractors);
- \$1.3 million in contributions to 34 community organisations; and
- \$1.2 million in local government payments.

Indirect Contribution

This **\$701.8 million in direct spending** supported:

- \$1.1 billion in additional supply chain purchases and household consumption; and
- \$563.0 million in wages and salaries associated with a further 10,905 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$1.6 billion in supplying business purchases;
- \$724.7 million in total wages and salaries paid to workers;
- **\$1.7 billion in gross value added**, or 7.3% of total GRP in this region (\$22.9 billion); and
- **12,231 full-time equivalent jobs**, or 5.6% of the regional workforce.

Mid-North Coast

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$32.2 million in direct spending in this region through:

- \$7.6 million in wages and salaries to 57 direct full-time employees (not including contractors); and
- \$24.7 million in purchases of goods and services from 40 local businesses (includes contractors).

Indirect Contribution

This **\$32.2 million in direct spending** supported:

- \$45.4 million in additional supply chain purchases and household consumption; and
- \$20.2 million in wages and salaries associated with a further 555 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$70.1 million in supplying business purchases;
- \$27.8 million in total wages and salaries paid to workers;
- **\$76.8 million in gross value added**, or 0.6% of total GRP in this region (\$11.9 billion); and
- **612 full-time equivalent jobs**, or 0.6% of the regional workforce.

Murray

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$26.0 million in direct spending in this region through:

- \$3.7 million in wages and salaries to 31 direct full-time employees (not including contractors);
- \$20.7 million in purchases of goods and services from 48 local businesses (includes contractors); and
- \$1.6 million in local government payments.

Indirect Contribution

This **\$26.0 million in direct spending** supported:

- \$27.3 million in additional supply chain purchases and household consumption; and
- \$13.0 million in wages and salaries associated with a further 300 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$48.0 million in supplying business purchases;
- \$16.7 million in total wages and salaries paid to workers;
- **\$50.2 million in gross value added**, or 0.7% of total GRP in this region (\$7.2 billion); and
- **331 full-time equivalent jobs**, or 0.6% of the regional workforce.

Murrumbidgee

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$85.4 million in direct spending in this region through:

- \$10.6 million in wages and salaries to 81 direct full-time employees (not including contractors); and
- \$74.7 million in purchases of goods and services from 66 local businesses (includes contractors).

Indirect Contribution

This **\$85.4 million in direct spending** supported:

- \$49.5 million in additional supply chain purchases and household consumption; and
- \$22.2 million in wages and salaries associated with a further 531 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$124.2 million in supplying business purchases;
- \$32.9 million in total wages and salaries paid to workers;
- **\$132.8 million in gross value added**, or 0.9% of total GRP in this region (\$14.2 billion); and
- **613 full-time equivalent jobs**, or 0.7% of the regional workforce.

North Western

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$610.2 million in direct spending in this region through:

- Total workforce of 2,708 FTEs, including 333 contract workers whose place of work was in the region;
- \$300.3 million in wages and salaries to 2,375 direct full-time employees (not including contractors);
- \$292.1 million in purchases of goods and services from 627 local businesses (includes contractors);
- \$0.6 million in contributions to 121 community organisations; and
- \$17.2 million in local government payments.

Indirect Contribution

This **\$610.2 million in direct spending** supported:

- \$780.9 million in additional supply chain purchases and household consumption; and
- \$351.9 million in wages and salaries associated with a further 9,451 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$1.1 billion in supplying business purchases;
- \$652.2 million in total wages and salaries paid to workers;
- **\$1.4 billion in gross value added**, or 12.5% of total GRP in this region (\$11.0 billion); and
- **11,826 full-time equivalent jobs**, or 21.1% of the regional workforce.

Northern

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$344.1 million in direct spending in this region through:

- Total workforce of 3,772 FTEs, including 2,296 contract workers whose place of work was in the region;
- \$189.7 million in wages and salaries to 1,476 direct full-time employees (not including contractors);
- \$148.0 million in purchases of goods and services from 369 local businesses (includes contractors);
- \$0.4 million in contributions to 72 community organisations; and
- \$6.0 million in local government payments.

Indirect Contribution

This **\$344.1 million in direct spending** supported:

- \$456.8 million in additional supply chain purchases and household consumption; and
- \$206.3 million in wages and salaries associated with a further 5,537 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$604.9 million in supplying business purchases;
- \$395.9 million in total wages and salaries paid to workers;
- **\$788.7 million in gross value added**, or 6.0% of total GRP in this region (\$13.1 billion); and
- **7,013 full-time equivalent jobs**, or 8.0% of the regional workforce.

Richmond-Tweed

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$10.5 million in direct spending in this region through:

- \$1.9 million in wages and salaries to 18 direct full-time employees (not including contractors); and
- \$8.5 million in purchases of goods and services from 22 local businesses (includes contractors).

Indirect Contribution

This **\$10.5 million in direct spending** supported:

- \$17.1 million in additional supply chain purchases and household consumption; and
- \$8.6 million in wages and salaries associated with a further 169 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$25.6 million in supplying business purchases;
- \$10.6 million in total wages and salaries paid to workers;
- **\$25.7 million in gross value added**, or 0.2% of total GRP in this region (\$12.7 billion); and
- **187 full-time equivalent jobs**, or 0.2% of the regional workforce.

South Eastern

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$35.8 million in direct spending in this region through:

- Total workforce of 87 FTEs, including 3 contract workers whose place of work was in the region;
- \$7.8 million in wages and salaries to 84 direct full-time employees (not including contractors);
- \$27.4 million in purchases of goods and services from 66 local businesses (includes contractors); and
- \$0.6 million in local government payments.

Indirect Contribution

This **\$35.8 million in direct spending** supported:

- \$54.7 million in additional supply chain purchases and household consumption; and
- \$24.3 million in wages and salaries associated with a further 671 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$82.1 million in supplying business purchases;
- \$32.1 million in total wages and salaries paid to workers;
- **\$89.6 million in gross value added**, or 0.8% of total GRP in this region (\$11.1 billion); and
- **755 full-time equivalent jobs**, or 0.7% of the regional workforce.

Sydney

Direct Contribution

In 2020/21, NSW mining companies surveyed contributed \$3.7 billion in direct spending in this region through:

- Total workforce of 1,580 FTEs, including 609 contract workers whose place of work was in the region;
- \$159.6 million in wages and salaries to 971 direct full-time employees (not including contractors);
- \$3.5 billion in purchases of goods and services from 2,682 local businesses (includes contractors);
- \$2.5 million in contributions to 90 community organisations; and
- \$4.0 million in local government payments.

Indirect Contribution

This **\$3.7 billion in direct spending** supported:

- \$5.3 billion in additional supply chain purchases and household consumption; and
- \$1.9 billion in wages and salaries associated with a further 23,971 jobs supported in this region.

Total Contribution

The total economic contribution (direct, indirect and consumption-induced) from the minerals sector in 2020/21 amounted to:

- \$8.8 billion in supplying business purchases;
- \$2.1 billion in total wages and salaries paid to workers;
- **\$7.8 billion in gross value added**, or 1.6% of total GRP in this region (\$480.6 billion); and
- **24,942 full-time equivalent jobs**, or 0.9% of the regional workforce.

Local Impact

Direct Spending

The spending and employment data provided by companies was aggregated using geographical concordances at the local government area (LGA) level. As expected, the surveyed companies' expenditures, split across salary and supplier and voluntary community contribution expenditure, varied considerably across LGAs. The level of employment and direct expenditure on employees and business supply chain purchases is summarised for the 128 LGAs in New South Wales in Appendix B (where significant activity occurs in an LGA).

Table 9 shows the distribution of total direct spending (i.e. salaries, business purchases and community contributions) from the 28 mining companies surveyed across New South Wales to the top 20 LGAs by expenditure. Sydney LGA recorded the largest share of direct expenditure in 2020/21 (\$1.8 billion), followed by Newcastle (\$1.7 billion), Singleton (\$1.2 billion), Maitland (\$1.1 billion) and Muswellbrook (\$590.8 million).

Sydney recorded the largest share of direct expenditure by local government area in 2020/21 (\$1.8 billion), followed by Newcastle (\$1.7 billion).

Direct resident employment was greatest in the Singleton LGA (2,179 FTEs), followed by the Maitland (1,671 FTEs), Mid-Western Regional (1,574 FTEs), Lake Macquarie (1,524 FTEs) and Cessnock (1,468 FTEs) LGAs.

NSW Mining Companies Surveyed Direct Employment by LGA

New South Wales (FTEs), 2020/21

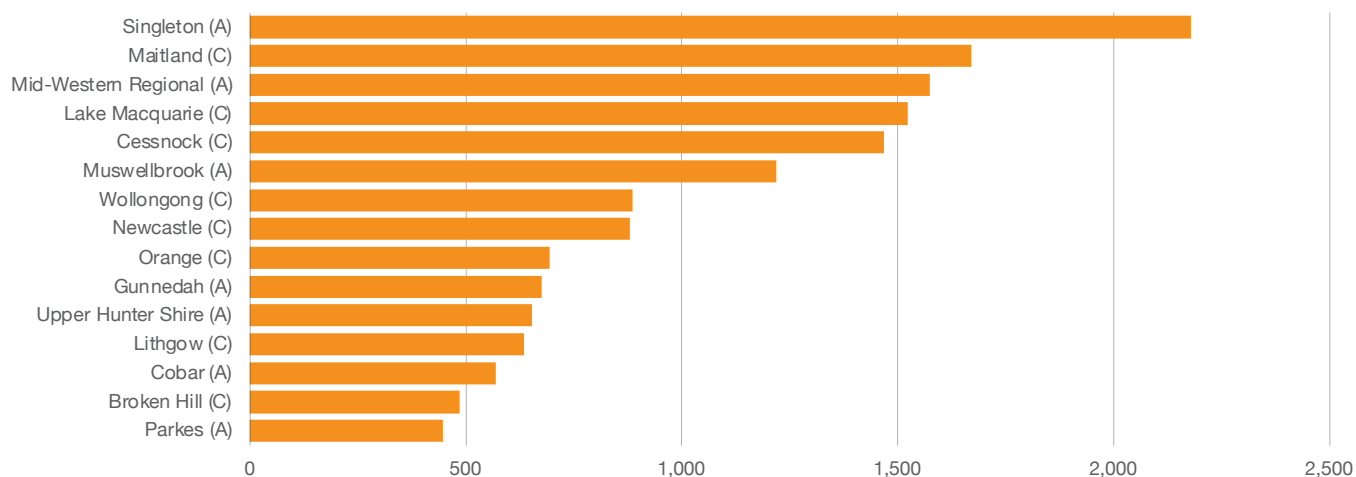


Table 9: Direct Impact of NSW Mining Companies Surveyed, Highest LGAs by Expenditure, 2020/21

Region	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) (FTEs)	Business purchases, community and govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Sydney (C)	32	6.8	48	1,793.6	1,800.4	645
Newcastle (C)	881	136.3	881	1,526.7	1,662.9	790
Singleton (A)	2,179	331.8	3,803	907.4	1,239.2	539
Maitland (C)	1,671	253.7	1,677	859.8	1,113.6	528
Muswellbrook (A)	1,220	179.5	2,616	426.5	606.0	358
Cessnock (C)	1,468	212.9	1,469	377.9	590.8	184
Lake Macquarie	1,524	230.3	1,534	280.3	510.6	488
Orange (C)	694	99.0	1,446	406.9	505.9	243
Wollongong (C)	885	111.0	1,434	335.1	446.1	329
Mid-Western	1,574	221.5	1,912	162.8	384.3	295
Parramatta (C)	13	3.5	13	370.0	373.5	200
Fairfield (C)	3	0.4	3	216.4	216.8	116
Broken Hill (C)	485	59.2	1,035	144.1	203.2	122
Central Coast (C)	366	56.9	456	114.2	171.1	195
Wingecarribee (A)	37	4.7	37	163.1	167.9	31
Lithgow (C)	634	90.5	637	70.1	160.6	129
Gunnedah (A)	675	89.3	1,279	69.6	158.9	126
Blacktown (C)	9	1.2	9	148.2	149.3	172
Cobar (A)	569	56.3	569	66.1	122.4	128
Port Stephens (A)	291	42.9	291	75.7	118.6	83

Note: (a) Includes full-time resident direct employees and contract workers by place of operation.

Indirect Impact

The I-O modelling estimated the indirect and consumption effects flowing from business supply chain expenditure and consumption spending in each LGA. These impacts have been modelled separately and then aggregated to identify the level of impacts on output, incomes, employment and industry value added for each region. The I-O model allowed for spending leakages to imports in both the first and subsequent rounds of economic activity.

Modelling consumption impacts is problematic for smaller shires with limited economic structures because only a subset of goods and services are available. Smaller and specialised mining LGAs tend to have larger expenditure leakages, typically to the nearest large regional centre. To incorporate this into the modelling, a further correction factor has been applied for LGAs, as shown in Table 10. The rates were further reduced for a number of mining focused LGAs to account for the tendency of residents of those communities to travel to major centres for consumption spending and to alleviate any constrained consumption capacity.

The total economic impact (i.e. Type II model scenario) of the 28 companies' direct spending for each LGA across New South Wales in 2020/21 are contained in Appendix C (where significant activity occurs in an LGA), with a summary of the top 20 LGAs by value added provided in Table 11. The largest contributions made by the 28 NSW mining companies surveyed to gross regional product (i.e. total estimated value added) occurred in the Newcastle LGA, with total estimated value added of \$3.7 billion, followed by Sydney (\$3.6 billion), Maitland (\$2.4 billion), Singleton (\$2.1 billion) and Wollongong (\$1.2 billion)

With regard to employment, the surveyed companies again had the greatest impact on jobs in the Newcastle LGA, with 19,299 FTEs, followed by the Maitland (14,192 FTEs) and Sydney (11,147 FTEs) LGAs, whilst the regions where the impact of the 28 companies' direct spending accounted for the largest share of employment were Muswellbrook (93.1%), Cobar (91.8%) and Singleton (85.9%).

Table 10: Rates of Adjustment for Local Consumption Expenditure by LGA Population Size

Population of LGA	Rate of consumption expenditure in LGA
0 – 2,000	40%
2,000 – 5,000	46.7%
5,000 – 10,000	53.3%
10,000 – 30,000	73.3%
30,000 – 50,000	80%
50,000 – 100,000	86.7%
Over 100,000	100%

Table 11: Total Economic Impact of NSW Mining Companies Surveyed, Highest LGAs by Gross Value Added, 2020/21 (Type II)

Region	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Newcastle (C)	3,678.4	24.8%	19,299	22.9%
Sydney (C)	3,616.4	2.4%	11,147	6.7%
Maitland (C)	2,427.6	56.7%	14,192	33.9%
Singleton (A)	2,078.8	53.4%	10,366	85.9%
Wollongong (C)	1,205.5	10.0%	9,353	8.7%
Muswellbrook (A)	1,202.4	51.6%	7,012	93.1%
Cessnock (C)	1,191.2	55.3%	7,298	28.3%
Orange (C)	1,117.2	34.5%	8,311	36.5%
Lake Macquarie (C)	1,047.5	13.3%	6,857	7.2%
Mid-Western Regional (A)	831.1	52.6%	7,132	55.8%
Parramatta (C)	831.0	2.6%	2,800	2.0%
Broken Hill (C)	477.2	46.6%	3,882	51.5%
Wingecarribee (A)	431.5	16.2%	2,882	12.5%
Central Coast (C) (NSW)	343.9	2.4%	1,462	0.9%
Gunnedah (A)	341.6	41.7%	2,949	49.7%
Fairfield (C)	314.2	44.1%	601	0.7%
Lithgow (C)	304.2	22.9%	2,402	23.7%
Blacktown (C)	271.1	1.3%	764	0.4%
Dubbo Regional (A)	255.6	8.2%	2,118	8.2%
Cobar (A)	244.2	46.7%	2,087	91.8%

Conclusion

This report contains the outcomes of two key pieces of analysis. The first is the collection of primary data by the NSW Minerals Council (NSWMC) that identifies the direct impact of 28 exploration and mining companies by local and regional areas in New South Wales. The second is the conduct of I-O modelling that identifies the flow-on effects through the economy at a State, Regional, Local Government Authority and State and Federal electoral boundary levels.

The results of the analysis demonstrate that incomes and expenditures from the 28 companies surveyed are widely distributed across the state generating significant flow-on effects, and that traditional economic techniques understate the true contribution of the mining sector as they do not attribute the output from related sectors such as construction, rail transport, utilities, professional services, manufacturing and contract workers.

The analysis identifies that the 28 companies surveyed contributed an estimated \$14.6 billion in direct spending to the state economy in 2020/21, comprised of:

- Total workforce of 30,095 full-time equivalent workers (including direct resident employees and contract workers), which represented an annual increase of 4.6%;
- \$2.8 billion in wages and salaries to approximately 20,003 direct fulltime resident employees (not including contractors), representing an average salary level across the sector of \$141,417 per annum;
- \$10.1 billion in purchases of goods and services from over 7,300 local businesses (including contract payments), community contributions and payments to local government (including rates, developer contributions and other payments); and
- \$1.7 billion in state government payments (including royalties, stamp duty, payroll tax and land tax).

*The NSW mining companies surveyed contributed **\$14.6 billion** in direct spending to the New South Wales economy in 2020/21.*

Of the total workforce employed by the 28 companies surveyed, 20,589 were direct full-time employees, or 67.1% of the total workforce – of which 2,360 direct workers, or 11.5% were female – with another 10,096 contract workers.

The economic stimulus provided by the 28 mining companies in 2020/21 also extended to other states, with an additional \$5.6 billion in direct spending, which combined with the impact in New South Wales for a total impact of \$20.2 billion for the whole of Australia, comprised of:

- \$2.9 billion in wages and salaries to approximately 20,526 full-time direct residing employees; and
- \$17.3 billion in purchases of goods and services from local businesses, government (state and local) and community contributions.

The total impact of the \$14.6 billion in direct spending by the minerals sector, measured through supply chain and consumption-induced spending effects, amounted to an estimated 4.9% of Gross State Product and 4.2% of employment in New South Wales. Using a conservative approach of excluding consumption-induced effects, direct spending by the companies surveyed and flow-on impacts still contributed 4.0% to GSP and 2.8% of total state employment.

*The total economic impact of the NSW mining companies surveyed was estimated at **\$31.5 billion** in gross value added and **168,677 jobs** supported in 2020/21.*

Since 2011/12, NSW mining companies surveyed have generated approximately \$262.3 billion in value added, including \$122.3 billion in direct spending and has supported average total employment of 147,426 jobs per annum.

Appendix A: Modelling Approach

Input-Output Modelling

For this study, input-output (I-O) modelling has been used to estimate the sum of direct, indirect and consumption-induced effects of the companies surveyed on different regions of New South Wales. I-O techniques provide a solid approach for taking account of the inter-relationships between the various sectors of the economy in the short-term and hence are an appropriate tool for determining the direct, indirect and induced economic impact of economic stimuli.

I-O models can be used to capture only the indirect impacts that occur through other industry sectors (Type I models), or the indirect plus the consumption-induced effects (Type II models), which have been adopted for the current study. Further, the I-O models used in this study were based on the ABS model of the Australian economy generated from general equilibrium models. Note: Type II models involve assumptions about fixed relationships between income and consumption patterns. These factors mean that the results of I-O models should generally be treated as the upper bound of estimates, and that care has to be taken in interpreting the results of very large changes in demand or production.

A concept underlying I-O modelling is that an initial economic shock or stimulus can have multiplier effects through a series of successive spending rounds. The size of the economic multiplier in a local or regional area can be summarised in the following way:

- The extent to which project operators purchase inputs from the local or regional economy. Examples of inputs include wages for labour supplied from the local or regional area, and purchases of goods and services. The more that a project operator sources from the local or regional economy, the more money that is directly injected into the economy; and
- The extent to which money spent in a local or regional economy is retained within that economy. If there is not much opportunity for people receiving income to spend it on goods and services in their local or regional area, then not as much money will be kept in the local or regional area. Larger and more diverse regional economies tend to be better at keeping expenditures in their economy and not 'losing' it to other regions.

Key advantages of using input-output models are the fineness of detail available at a disaggregated industry level, the relative ease of application, particularly for sub-regional levels, and the ability to model effects in a timely manner.

To generate predictions, the economic contribution of an industry is applied to the relevant industry sectors of the input-output model of a regional economy. The stimulus from economic activity can be traced through the economy in several different ways:

- The first-round effect, or direct effect, are those from the activities expenditure in purchasing goods from other industries;
- The second-round effects are those from the supplying industries increasing their purchases to meet the additional demand. The second and subsequent rounds of purchasing are termed the indirect effects; and
- The consumption-induced effects, which recognise that the level of local production is important in determining regional levels of household consumption, that this in turn will be spent locally to a large extent and therefore influence the level of regional consumption and the level of output of each sector.

These effects can be represented in terms of multipliers and changes in four key variables:

Output

The output impact measures the increase in gross sales throughout the whole economy by summing all the individual transactions resulting, directly and indirectly, from the economic stimulus.

Income

The income impact measures the additional amount of wages and salaries paid to employees of the industry under consideration and to other industries benefiting from the stimulus to the economy.

Employment

The employment impact measures the combined number of existing jobs sustained and new jobs generated by the stimulus, both directly and indirectly, although allocation between these forms of employment is not separately identified.

Value Added

The value added or Gross Regional Product (GRP) impact measures only the net activity at each stage of production. GRP is defined as the addition of consumption, investment and government expenditure, plus exports of goods and services, minus imports of goods and services for a region. The GRP impacts are the preferred measure for the assessment and contribution of a stimulus to the economy.

Key advantages of using input-output models are the fineness of detail available at a disaggregated industry level, the relative ease of application, particularly for sub-regional levels, and the ability to model effects in a timely manner. However, care has to be taken in its application and interpretation of results. Key assumptions that underpin the application of I-O models are:

- The inputs purchased by each industry are a function of the level of output of that industry. The input function is generally assumed linear and homogenous of degree one (which implies constant returns to scale and no substitution between inputs);
- Each commodity (or group of commodities) is supplied by a single industry or sector of production. This implies that there is only one method used to produce each commodity and that each sector has only a single primary output;
- The total effect of carrying on several types of production is the sum of the separate effects. This rules out external economies and diseconomies and is known simply as the additivity assumption;
- The system is in equilibrium at given prices. This would not be the case in an economic system subject to external influences;
- In the static input-output model, there are no capacity constraints so that the supply of each good is perfectly elastic. Each industry can supply whatever quantity is demanded of it and there are no capital restrictions. This assumption would come into play depending upon the magnitude of the changes in quantities demanded, brought about through changes in taxation levels; and
- The input-output model is an optimisation model that allocates resources between sectors to their most efficient use.

Type II models involve additional assumptions about fixed relationships between income and consumption patterns. These factors mean that the results of I-O models should generally be treated as the upper bound of estimates, and that care has to be taken in interpreting the results of very large changes in demand or production.

Construction of Regional I-O Models

For the derivation of the regional I-O tables, a variable interference non-survey technique was applied, involving a formalised non-survey method compilation. This allowed data on direct effects of the companies surveyed to be inserted at any stage of the compilation procedure. This approach is based primarily on the Generation of Regional Input-Output Tables (GRIT) technique, a widely used method of constructing local and regional input-output tables in Australia, America and Europe. The procedure utilises cross-industry location quotients as well as superior data (including expenditure patterns of within the primary company data) for the regionalisation of the national direct requirements matrix (DRM) or at the elements of other final payments and demand, which are at the core of any I-O table.

In summary, the construction of the local and regional I-O models employed the following steps:

- Adjustment to the latest available national I-O table;
- Computation of the regional direct requirement matrix;
- Aggregation of regional sectors (if necessary); and
- Computation of the complete regional I-O table.

All the necessary data for the regionalisation procedure were collected from the Australian Bureau of Statistics as well as other reliable sources for secondary data such as regional household expenditure patterns, income and productivity measures. The latest available national I-O tables were 2018-19, which consisted of 114 sectors of economic activity, at the 4-digit level, compiled following the industry-technology assumption, product-by-product, with total flows and valued at basic values in current prices.

For estimating the regional I-O tables, and especially in the interpretation of results, relevant limitations of the I-O approach (static, linear production function, no substitution or scale economy effects, infinite elasticity of supply) were taken into consideration. Once the I-O models were generated, predictions of impact were estimated for each regional area using the available data on salary and business expenditure.

The predictions of the I-O models for regional area were estimated in two separate groups. The first group involved the economic impacts of expenditure on business goods and services (business suppliers), while the second involved economic expenditure of the labour force. Each stimulus group was modelled using expenditure coefficients and household consumption patterns applicable for each region, also taking into account the type of commodity (e.g. coal, gas, metals, etc.) and the nature of the expenditure (i.e. operating or capital expenditure).

The outputs of the models can be classified into First Round and Indirect Effects, representing industry impacts through the business chain, and Final Consumption-Induced effects, which represent the economic activity needed to support the increased workforce from Direct, First Round and Indirect Effects.

The data collection and the methodology applied in this study are notable in three key aspects:

- First, the data collected on actual spending by the minerals and energy sector allowed an assessment of impacts by spending in the economy in comparison to the more traditional approach of predicting economic impacts from total revenue changes;
- Second, the collection of primary data by local area allowed a much more accurate assessment of the direct impacts by geographic area than had previously been available; and
- Third, the application of the I-O modelling framework down to the LGA, SED and CED levels, when combined with the accuracy of the primary data, meant that relatively accurate models of local impacts from the New South Wales minerals and energy sector could be generated.

The outcomes of the data collection and modelling approach meant that the assessment of direct, indirect and consumption effects could be expected to be more detailed and accurate at the LGA, SED and CED levels than could be achieved with standard applications of general equilibrium models.

Appendix B: Direct Impact by Local Government Area

Table B1: Direct Impacts of NSW Mining Companies Surveyed Sector by LGA, 2020/21

Local government area	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Albury (C)	8	0.9	7.9	11.1	11.9	10
Armidale Regional (A)	11	1.3	10.5	1.9	3.2	14
Ballina (A)	n.a.	n.a.	n.a.	n.a.	n.a.	5
Balranald (A)	n.a.	n.a.	n.a.	4.7	4.8	12
Bathurst Regional (A)	235	33.2	237.3	26.9	60.1	89
Bayside (A)	14	2.6	14.2	44.3	46.9	64
Bega Valley (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bellingen (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Berrigan (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Blacktown (C)	9	1.2	9.4	148.2	149.3	172
Bland (A)	246	38.5	393.2	21.5	59.9	119
Blayney (A)	168	23.4	169.0	10.7	34.1	91
Blue Mountains (C)	78	9.5	78.2	2.7	12.2	18
Bogan (A)	7	0.8	7.3	1.7	2.5	7
Bourke (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brewarrina (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Broken Hill (C)	485	59.2	1,035.0	144.1	203.2	122
Burwood (A)	n.a.	n.a.	n.a.	n.a.	n.a.	5
Byron (A)	n.a.	n.a.	n.a.	7.1	7.4	n.a.
Cabonne (A)	141	19.3	233.7	55.2	74.5	41
Camden (A)	30	3.3	30.1	101.5	104.8	32
Campbelltown (C) (NSW)	30	3.0	30.0	54.4	57.3	65
Canada Bay (A)	14	2.6	14.0	3.1	5.7	15
Canterbury-Bankstown (A)	13	2.0	13.0	71.4	73.5	93
Carrathool (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Central Coast (C) (NSW)	366	56.9	455.8	114.2	171.1	195

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Local government area	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Central Darling (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cessnock (C)	1,468	212.9	1,468.9	377.9	590.8	184
Clarence Valley (A)	9	1.4	9.5	n.a.	2.1	n.a.
Cobar (A)	569	56.3	569.1	66.1	122.4	128
Coffs Harbour (C)	11	1.0	10.8	1.9	2.9	8
Coolamon (A)	5	0.6	5.1	n.a.	n.a.	n.a.
Coonamble (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cootamundra-Gundagai (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cowra (A)	25	3.2	25.4	n.a.	3.7	7
Cumberland (A)	12	1.8	11.9	47.7	49.6	71
Dubbo Regional (A)	208	23.2	209.4	79.3	102.5	196
Dungog (A)	149	22.0	148.7	6.2	28.2	18
Edward River (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Eurobodalla (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Fairfield (C)	n.a.	n.a.	n.a.	216.4	216.8	116
Federation (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forbes (A)	131	16.9	146.2	4.2	21.1	48
Georges River (A)	6	0.9	6.4	4.3	5.2	20
Gilgandra (A)	9	1.2	8.9	n.a.	1.3	n.a.
Glen Innes Severn (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Goulburn Mulwaree (A)	18	1.4	20.6	n.a.	1.6	26
Greater Hume Shire (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Griffith (C)	6	0.8	6.0	2.6	3.3	13
Gunnedah (A)	675	89.3	1,278.9	69.6	158.9	126
Gwydir (A)	12	1.5	15.0	2.0	3.5	n.a.
Hawkesbury (C)	12	1.5	12.2	6.9	8.4	27
Hay (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hilltops (A)	16	2.1	16.4	2.1	4.2	n.a.

Table B1: Direct Impacts of NSW Mining Companies Surveyed Sector by LGA, 2020/21

Local government area	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Hornsby (A)	14	2.4	13.9	6.3	8.7	58
Hunters Hill (A)	n.a.	n.a.	n.a.	n.a.	2.4	7
Inner West (A)	26	4.6	25.7	17.3	21.9	44
Inverell (A)	9	1.3	9.1	4.6	5.9	n.a.
Junee (A)	n.a.	n.a.	n.a.	n.a.	1.0	n.a.
Kempsey (A)	5	0.6	5.4	1.2	1.7	n.a.
Kiama (A)	67	8.5	67.3	2.0	10.5	14
Ku-ring-gai (A)	25	7.3	24.7	8.2	15.4	27
Kyogle (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Lachlan (A)	48	6.2	51.0	7.2	13.4	54
Lake Macquarie (C)	1,524	230.3	1,533.9	280.3	510.6	488
Lane Cove (A)	6	1.4	6.4	12.9	14.3	29
Leeton (A)	7	0.9	7.0	41.2	42.1	14
Lismore (C)	n.a.	n.a.	n.a.	n.a.	n.a.	6
Lithgow (C)	634	90.5	636.9	70.1	160.6	129
Liverpool (C)	8	1.4	8.1	34.4	35.8	47
Liverpool Plains (A)	92	11.2	283.2	8.3	19.5	22
Lockhart (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Maitland (C)	1,671	253.7	1,677.1	859.8	1,113.6	528
Mid-Coast (A)	158	22.2	157.8	65.8	88.0	63
Mid-Western Regional (A)	1,574	221.5	1,912.2	162.8	384.3	295
Moree Plains (A)	8	1.0	11.2	n.a.	1.1	n.a.
Mosman (A)	5	0.7	5.0	n.a.	n.a.	5
Murray River (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Murrumbidgee (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Muswellbrook (A)	1,220	179.5	2,615.6	426.5	606.0	358
Nambucca (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Narrabri (A)	407	52.1	1,901.6	37.7	89.8	112

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Local government area	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Narrandera (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Narromine (A)	43	3.9	43.3	2.4	6.3	14
Newcastle (C)	881	136.3	880.6	1,526.7	1,662.9	790
North Sydney (A)	20	5.1	19.8	68.3	73.4	129
Northern Beaches (A)	24	4.9	24.0	21.8	26.7	105
Oberon (A)	10	1.4	10.3	16.2	17.5	n.a.
Orange (C)	694	99.0	1,445.7	406.9	505.9	243
Parkes (A)	447	48.3	2,100.4	63.5	111.8	131
Parramatta (C)	13	3.5	12.8	370.0	373.5	200
Penrith (C)	13	1.5	12.7	47.5	48.9	42
Port Macquarie-Hastings (A)	25	3.7	25.3	20.7	24.4	19
Port Stephens (A)	291	42.9	291.1	75.7	118.6	83
Queanbeyan-Palerang Regional (A)	29	1.8	29.3	22.2	24.0	26
Randwick (C)	15	2.7	15.1	70.3	73.1	19
Richmond Valley (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ryde (C)	16	2.6	15.7	99.3	102.0	135
Shellharbour (C)	298	33.2	297.5	23.6	56.9	24
Shoalhaven (C)	39	4.1	39.2	16.4	20.5	21
Singleton (A)	2,179	331.8	3,802.7	907.4	1,239.2	539
Snowy Monaro Regional (A)	5	0.8	5.3	n.a.	1.3	n.a.
Snowy Valleys (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Strathfield (A)	n.a.	n.a.	n.a.	12.9	13.0	18
Sutherland Shire (A)	44	7.1	43.8	49.6	56.6	77
Sydney (C)	32	6.8	48.4	1,793.6	1,800.4	645
Tamworth Regional (A)	253	30.7	253.5	28.8	59.4	83
Temora (A)	11	1.7	11.4	n.a.	2.6	n.a.

Table B1: Direct Impacts of NSW Mining Companies Surveyed Sector by LGA, 2020/21

Local government area	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Tenterfield (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
The Hills Shire (A)	17	4.9	16.8	31.8	36.6	86
Tweed (A)	8	0.9	8.3	n.a.	1.4	n.a.
Upper Hunter Shire (A)	653	97.2	674.9	20.5	117.7	109
Upper Lachlan Shire (A)	n.a.	n.a.	n.a.	1.5	2.0	n.a.
Uralla (A)	n.a.	n.a.	n.a.	n.a.	1.1	n.a.
Wagga Wagga (C)	30	3.8	29.9	28.7	32.6	25
Walcha (A)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Walgett (A)	6	0.5	5.6	n.a.	n.a.	n.a.
Warren (A)	7	0.8	6.8	n.a.	1.1	n.a.
Warrumbungle Shire (A)	46	5.7	46.2	3.3	9.0	8
Waverley (A)	6	2.6	5.9	n.a.	3.3	11
Weddin (A)	10	1.8	10.3	n.a.	1.8	n.a.
Wentworth (A)	17	2.0	17.0	4.8	6.8	18
Willoughby (C)	10	1.5	9.5	43.4	44.8	74
Wingecarribee (A)	37	4.7	37.2	163.1	167.9	31
Wollondilly (A)	75	8.2	578.5	9.3	17.5	23
Wollongong (C)	885	111.0	1,433.7	335.1	446.1	329
Woollahra (A)	10	2.8	10.1	1.5	4.3	11
Yass Valley (A)	n.a.	n.a.	n.a.	1.2	1.9	n.a.

Note: Data not published for LGAs with total direct spend of less than \$1 million and/or less than 5 residing employees. (a) Includes full-time resident direct employees and contract workers by place of operation.

Appendix C: Total Impact by Local Government Area

Table C1: Estimated Total Economic Impact of NSW Mining Companies Surveyed by LGA, 2020/21 (Type II)

Local government area	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Albury (C)	16.1	0.4%	59	0.2%
Armidale Regional (A)	7.5	0.4%	65	0.5%
Ballina (A)	2.6	0.1%	25	0.1%
Balranald (A)	5.8	4.3%	14	1.1%
Bathurst Regional (A)	126.8	4.1%	1,064	4.5%
Bayside (A)	82.4	0.4%	231	0.2%
Bega Valley (A)	n.a.	n.a.	8	0.1%
Bellingen (A)	1.5	0.3%	13	0.3%
Berrigan (A)	n.a.	n.a.	8	0.2%
Blacktown (C)	271.1	1.3%	764	0.4%
Bland (A)	129.6	32.6%	1,115	33.9%
Blayney (A)	56.9	10.8%	449	11.0%
Blue Mountains (C)	28.3	1.1%	180	0.5%
Bogan (A)	24.2	8.9%	277	22.3%
Bourke (A)	n.a.	n.a.	9	0.8%
Brewarrina (A)	n.a.	n.a.	n.a.	n.a.
Broken Hill (C)	477.2	46.6%	3,882	51.5%
Burwood (A)	1.2	0.0%	6	0.0%
Byron (A)	20.5	1.0%	145	0.8%
Cabonne (A)	152.0	20.4%	1,105	14.1%
Camden (A)	211.5	4.4%	697	1.3%
Campbelltown (C)	140.0	1.9%	540	0.7%
Canada Bay (A)	10.7	0.2%	47	0.1%
Canterbury-Bankstown (A)	145.0	0.9%	448	0.3%
Carrathool (A)	n.a.	n.a.	7	0.5%
Central Coast (C)	343.9	2.4%	1,462	0.9%

Table C1: Estimated Total Economic Impact of NSW Mining Companies Surveyed by LGA, 2020/21 (Type II)

Local government area	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Central Darling (A)	n.a.	n.a.	n.a.	n.a.
Cessnock (C)	1,191.2	55.3%	7,298	28.3%
Clarence Valley (A)	4.9	0.2%	44	0.2%
Cobar (A)	244.2	46.7%	2,087	91.8%
Coffs Harbour (C)	7.9	0.2%	74	0.2%
Coolamon (A)	1.3	0.6%	11	0.5%
Coonamble (A)	2.2	1.0%	19	1.1%
Cootamundra-Gundagai (A)	n.a.	n.a.	10	0.2%
Cowra (A)	6.8	0.9%	64	1.1%
Cumberland (A)	127.3	0.8%	488	0.4%
Dubbo Regional (A)	255.6	8.2%	2,118	8.2%
Dungog (A)	47.3	12.7%	350	7.8%
Edward River (A)	n.a.	n.a.	n.a.	n.a.
Eurobodalla (A)	1.9	0.1%	21	0.1%
Fairfield (C)	314.2	44.1%	601	0.7%
Federation (A)	n.a.	n.a.	n.a.	n.a.
Forbes (A)	47.4	7.1%	458	9.0%
Georges River (A)	9.6	0.1%	34	0.0%
Gilgandra (A)	2.4	1.1%	22	1.1%
Glen Innes Severn (A)	n.a.	n.a.	7	0.2%
Goulburn Mulwaree (A)	10.7	0.6%	131	0.9%
Greater Hume Shire (A)	2.0	0.4%	13	0.3%
Griffith (C)	4.7	0.2%	21	0.1%
Gunnedah (A)	341.6	41.7%	2,949	49.7%
Gwydir (A)	8.0	2.4%	68	2.8%
Hawkesbury (C)	15.2	0.4%	54	0.2%
Hay (A)	n.a.	n.a.	n.a.	n.a.
Hilltops (A)	11.1	1.1%	103	1.2%

Table C1: Estimated Total Economic Impact of NSW Mining Companies Surveyed by LGA, 2020/21 (Type II)

Local government area	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Hornsby (A)	20.8	0.3%	88	0.1%
Hunters Hill (A)	7.7	0.9%	35	0.4%
Inner West (A)	33.8	0.3%	101	0.1%
Inverell (A)	15.8	1.5%	133	1.8%
Junee (A)	1.6	0.4%	11	0.4%
Kempsey (A)	4.5	0.4%	40	0.4%
Kiama (A)	28.4	3.2%	278	2.3%
Ku-ring-gai (A)	30.2	0.6%	118	0.2%
Kyogle (A)	n.a.	n.a.	n.a.	n.a.
Lachlan (A)	26.6	6.6%	212	6.8%
Lake Macquarie (C)	1,047.5	13.3%	6,857	7.2%
Lane Cove (A)	28.4	0.9%	94	0.4%
Leeton (A)	57.1	1.7%	174	3.2%
Lismore (C)	1.5	0.1%	16	0.1%
Lithgow (C)	304.2	22.9%	2,402	23.7%
Liverpool (C)	75.7	0.6%	250	0.2%
Liverpool Plains (A)	35.8	6.9%	295	8.4%
Lockhart (A)	n.a.	n.a.	n.a.	n.a.
Maitland (C)	2,427.6	56.7%	14,192	33.9%
Mid-Coast (A)	167.9	4.7%	932	2.8%
Mid-Western Regional (A)	831.1	52.6%	7,132	55.8%
Moree Plains (A)	2.5	0.3%	25	0.4%
Mosman (A)	2.0	0.1%	11	0.1%
Murray River (A)	n.a.	n.a.	6	0.1%
Murrumbidgee (A)	n.a.	n.a.	n.a.	n.a.
Muswellbrook (A)	1,202.4	51.6%	7,012	93.1%
Nambucca (A)	1.2	0.2%	12	0.2%
Narrabri (A)	199.8	9.4%	1,777	26.9%

Table C1: Estimated Total Economic Impact of NSW Mining Companies Surveyed by LGA, 2020/21 (Type II)

Local government area	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
Narrandera (A)	1.3	0.4%	9	0.3%
Narromine (A)	11.5	1.6%	107	3.6%
Newcastle (C)	3,678.4	24.8%	19,299	22.9%
North Sydney (A)	200.7	1.3%	836	1.7%
Northern Beaches (A)	59.7	0.4%	229	0.2%
Oberon (A)	24.2	5.7%	93	3.2%
Orange (C)	1,117.2	34.5%	8,311	36.5%
Parkes (A)	234.1	25.8%	1,972	26.3%
Parramatta (C)	831.0	2.6%	2,800	2.0%
Penrith (C)	67.6	0.7%	127	0.1%
Port Macquarie-Hastings (A)	77.4	2.2%	688	2.1%
Port Stephens (A)	231.6	5.4%	1,401	4.3%
Queanbeyan-Palerang Regional (A)	72.7	2.6%	638	1.8%
Randwick (C)	94.3	1.2%	144	0.2%
Richmond Valley (A)	3.9	0.4%	35	0.4%
Ryde (C)	215.9	0.8%	717	0.9%
Shellharbour (C)	138.4	5.4%	1,258	3.5%
Shoalhaven (C)	56.7	1.2%	440	1.1%
Singleton (A)	2,078.8	53.4%	10,366	85.9%
Snowy Monaro Regional (A)	3.2	0.2%	29	0.3%
Snowy Valleys (A)	1.2	0.1%	7	0.1%
Strathfield (A)	27.5	0.4%	90	0.3%
Sutherland Shire (A)	81.0	0.8%	194	0.2%
Sydney (C)	3,616.4	2.4%	11,147	6.7%
Tamworth Regional (A)	139.0	3.4%	1,246	4.2%
Temora (A)	4.0	1.0%	27	1.0%
Tenterfield (A)	n.a.	n.a.	n.a.	n.a.

Table C1: Estimated Total Economic Impact of NSW Mining Companies Surveyed by LGA, 2020/21 (Type II)

Local government area	Total GVA (\$M)	Total value added as % of GRP	Total jobs supported (FTEs)	% of regional employment
The Hills Shire (A)	93.3	0.9%	364	0.4%
Tweed (A)	2.8	0.1%	25	0.1%
Upper Hunter Shire (A)	227.9	26.8%	1,820	25.5%
Upper Lachlan Shire (A)	2.6	0.6%	12	0.3%
Uralla (A)	4.4	1.4%	43	1.4%
Wagga Wagga (C)	57.6	1.2%	309	0.9%
Walcha (A)	1.6	0.7%	13	0.8%
Walgett (A)	2.3	0.8%	22	1.0%
Warren (A)	2.8	1.7%	27	2.2%
Warrumbungle Shire (A)	17.0	0.4%	147	3.7%
Waverley (A)	5.1	0.1%	18	0.0%
Weddin (A)	3.0	1.6%	25	1.4%
Wentworth (A)	12.6	2.3%	89	2.9%
Willoughby (C)	105.2	0.8%	383	0.9%
Wingecarribee (A)	431.5	16.2%	2,882	12.5%
Wollondilly (A)	40.9	0.7%	224	0.8%
Wollongong (C)	1,205.5	10.0%	9,353	8.7%
Woollahra (A)	6.0	0.1%	21	0.1%
Yass Valley (A)	4.8	0.7%	40	0.4%

Note: Data not published for LGAs with total value added of less than \$1 million and/or less than 5 total employees.

Appendix D: Direct Impact by State Electorate

Table D1: Direct Impacts of NSW Mining Companies Surveyed Sector by SED, 2020/21

State electoral division	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Albury	12	1.4	12	12.0	13.4	12
Auburn	n.a.	n.a.	n.a.	31.5	32.0	97
Ballina	7	0.8	7	7.4	8.1	10
Balmain	16	2.9	16	4.4	7.4	33
Bankstown	n.a.	n.a.	n.a.	41.5	41.6	31
Barwon	1,607	185.5	3,672	266.1	451.6	441
Bathurst	1,141	161.7	1,154	130.4	292.1	338
Baulkham Hills	8	2.0	8	22.4	24.4	50
Bega	7	0.5	7	n.a.	n.a.	n.a.
Blacktown	n.a.	n.a.	n.a.	84.6	84.6	64
Blue Mountains	78	9.6	78	1.8	11.4	14
Cabramatta	n.a.	n.a.	n.a.	3.4	3.6	n.a.
Camden	32	3.5	32	102.2	105.7	33
Campbelltown	22	2.3	22	3.2	5.5	16
Canterbury	n.a.	n.a.	n.a.	n.a.	1.5	8
Castle Hill	8	2.7	8	11.5	14.2	35
Cessnock	1,771	256.8	1,860	469.8	726.6	286
Charlestown	428	65.6	428	107.7	173.4	188
Clarence	10	1.4	10	1.3	2.7	n.a.
Coffs Harbour	11	1.0	11	1.9	2.9	8
Coogee	9	2.0	9	1.3	3.2	15
Cootamundra	324	49.1	471	25.7	74.8	143
Cronulla	12	1.5	12	9.6	11.1	40
Davidson	10	2.7	10	9.1	11.8	26

Table D1: Direct Impacts of NSW Mining Companies Surveyed Sector by SED, 2020/21

State electoral division	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Drummoyne	13	2.5	13	3.1	5.6	14
Dubbo	1,665	226.0	1,983	230.4	456.4	468
East Hills	8	0.8	8	14.9	15.7	44
Epping	n.a.	n.a.	n.a.	4.7	5.2	19
Fairfield	n.a.	n.a.	n.a.	188.9	189.0	49
Gosford	21	2.8	21	30.5	33.3	39
Goulburn	41	4.5	44	147.2	151.7	46
Granville	n.a.	n.a.	n.a.	38.4	39.2	26
Hawkesbury	13	2.0	13	7.3	9.3	31
Heathcote	57	7.5	165	39.0	46.5	36
Heffron	16	2.1	16	26.5	28.6	62
Holsworthy	n.a.	n.a.	n.a.	21.5	22.6	26
Hornsby	10	1.8	10	2.1	4.0	39
Keira	441	56.5	471	59.7	116.2	79
Kiama	167	19.6	167	34.5	54.1	34
Kogarah	n.a.	n.a.	n.a.	2.7	3.2	13
Ku-ring-gai	17	4.8	17	4.1	8.8	19
Lake Macquarie	631	97.6	638	107.9	205.5	191
Lakemba	n.a.	n.a.	n.a.	15.3	15.5	11
Lane Cove	13	4.1	13	51.8	55.9	79
Lismore	8	0.6	8	n.a.	1.2	8
Liverpool	n.a.	n.a.	n.a.	9.6	9.8	14
Londonderry	n.a.	n.a.	n.a.	5.6	5.9	20
Macquarie Fields	11	1.1	11	53.6	54.8	55
Maitland	1,664	252.6	1,670	859.8	1,112.5	528
Manly	13	3.0	13	1.4	4.5	18
Maroubra	7	1.6	7	96.8	98.5	32
Miranda	12	2.2	12	4.1	6.3	18
Monaro	34	2.6	34	22.7	25.2	28

Table D1: Direct Impacts of NSW Mining Companies Surveyed Sector by SED, 2020/21

State electoral division	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Mount Druitt	n.a.	n.a.	n.a.	15.4	15.7	29
Mulgoa	6	0.6	6	16.9	17.5	11
Murray	37	4.6	37	54.3	58.9	63
Myall Lakes	61	8.7	61	48.6	57.3	25
Newcastle	421	67.5	421	1,213.5	1,280.9	582
Newtown	12	2.6	12	17.3	19.9	33
North Shore	22	5.2	22	63.7	68.9	125
Northern Tablelands	44	5.7	50	9.7	15.4	25
Oatley	n.a.	n.a.	n.a.	1.6	2.0	10
Orange	1,413	183.6	3,927	530.1	713.7	464
Oxley	14	2.0	14	17.1	19.1	13
Parramatta	6	2.0	6	308.7	310.7	94
Penrith	n.a.	n.a.	n.a.	27.2	27.9	25
Pittwater	n.a.	n.a.	n.a.	5.5	6.3	36
Port Macquarie	27	3.9	27	5.0	8.9	16
Port Stephens	284	42.3	284	88.9	131.2	90
Prospect	n.a.	n.a.	n.a.	60.7	61.4	90
Riverstone	5	0.8	5	5.6	6.4	8
Rockdale	7	1.4	7	n.a.	2.1	9
Ryde	12	1.9	12	74.4	76.3	103
Seven Hills	n.a.	n.a.	n.a.	40.5	41.4	80
Shellharbour	328	36.9	330	9.7	46.7	30
South Coast	22	2.2	22	n.a.	2.9	8
Strathfield	n.a.	n.a.	n.a.	12.5	12.9	24
Summer Hill	10	1.5	10	1.7	3.2	12
Swansea	383	58.5	408	14.1	72.6	63
Sydney	13	3.8	29	1,777.3	1,781.1	582
Tamworth	954	123.3	1,750	99.5	222.8	215
Terrigal	43	6.5	43	13.5	20.0	23

Table D1: Direct Impacts of NSW Mining Companies Surveyed Sector by SED, 2020/21

State electoral division	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
The Entrance	50	7.8	51	43.1	50.8	44
Tweed	7	0.7	7	n.a.	n.a.	n.a.
Upper Hunter	4,300	641.8	7,269	1,331.0	1,972.9	1,052
Vaucluse	11	3.8	11	1.8	5.6	12
Wagga Wagga	36	4.6	36	29.0	33.7	27
Wakehurst	6	1.1	6	10.1	11.2	37
Wallsend	461	67.0	461	326.9	393.9	211
Willoughby	11	2.0	11	35.0	37.0	73
Wollondilly	97	11.1	600	28.7	39.8	40
Wollongong	292	37.1	701	268.5	305.6	219
Wyong	173	27.4	235	20.2	47.5	65

Note: Data not published for SEDs with total direct spend of less than \$1 million and/or less than 5 residing employees. (a) Includes full-time resident direct employees and contract workers by place of operation.

Appendix E: Impact by Commonwealth Electorate

Table E1: Direct Impacts of NSW Mining Companies Surveyed Sector by CED, 2020/21

Commonwealth electoral division	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
Banks	12	1.4	12	14.5	15.9	43
Barton	10	1.9	10	3.7	5.6	27
Bennelong	19	3.1	19	100.4	103.5	149
Berowra	16	4.7	16	6.4	11.0	60
Blaxland	n.a.	n.a.	n.a.	53.1	53.5	68
Bradfield	28	7.7	28	10.2	17.9	47
Calare	3,470	489.9	4,655	750.5	1,240.5	901
Chifley	n.a.	n.a.	n.a.	60.5	61.0	62
Cook	19	2.4	19	9.8	12.2	48
Cowper	31	3.5	31	4.0	7.5	26
Cunningham	742	94.5	1,280	326.1	420.6	307
Dobell	228	35.9	291	61.8	97.8	107
Eden-Monaro	46	4.1	46	24.5	28.5	32
Farrer	52	6.4	52	66.5	72.8	77
Fowler	n.a.	n.a.	n.a.	47.9	48.2	26
Gilmore	110	13.0	110	17.7	30.6	36
Grayndler	23	4.1	23	15.6	19.7	37
Greenway	6	0.9	6	91.5	92.4	112
Hughes	29	5.6	29	44.5	50.1	36
Hume	131	14.1	637	89.0	103.1	79
Hunter	5,273	789.2	8,301	1,532.2	2,321.4	1,240
Kingsford Smith	21	3.6	21	113.9	117.6	69
Lindsay	12	1.3	12	37.4	38.7	37
Lyne	660	98.7	660	190.3	288.9	176
Macarthur	38	3.8	38	94.4	98.3	71
Mackellar	11	1.8	11	17.3	19.0	71
Macquarie	90	11.0	90	9.6	20.6	45

Table E1: Direct Impacts of NSW Mining Companies Surveyed Sector by CED, 2020/21

Commonwealth electoral division	Residing employees (FTEs)	Associated salaries (\$M)	Total workforce ^(a) FTEs	Business purchases, community and local govt payments (\$M)	Total direct spending (\$M)	Local suppliers (no.)
McMahon	6	0.9	6	214.2	215.1	136
Mitchell	14	3.1	14	38.7	41.8	93
Newcastle	1,034	143.8	1,250	67.3	211.0	238
New England	839	130.2	839	1,335.1	1,465.3	729
North Sydney	35	9.1	35	123.3	132.5	221
Page	17	2.1	17	1.8	3.9	13
Parkes	2,531	301.7	5,203	415.8	717.5	770
Parramatta	10	2.8	10	352.2	355.1	117
Paterson	2,000	298.1	2,006	1,334.0	1,632.1	658
Reid	18	2.9	18	37.3	40.3	108
Richmond	14	1.6	14	7.8	9.4	13
Riverina	932	118.3	2,754	122.1	240.4	348
Robertson	59	8.6	59	45.4	54.0	64
Shortland	861	130.2	888	161.3	291.5	282
Sydney	32	6.5	48	1,794.5	1,800.9	641
Warringah	20	4.3	20	5.1	9.5	45
Watson	n.a.	n.a.	n.a.	15.6	16.6	17
Wentworth	18	6.0	18	2.4	8.4	28
Werriwa	6	0.8	6	18.3	19.1	32
Whitlam	468	53.1	479	178.1	231.2	71

Note: Data not published for CEDs with total direct spend of less than \$1 million and/or less than 5 residing employees. (a) Includes full-time resident direct employees and contract workers by place of operation.

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