

# District Council of Orroroo Carrieton

## Economic impact model

Economic impact modelling enables RDA Yorke and Mid North Region to explore how change in employment or output (sales) in one sector of the local economy will impact on all other sectors of the economy, by modelling the flow-on effects across different industries.

This provides District Council of Orroroo Carrieton with powerful evidence to advocate against industrial closures or strategically target new industry sectors which are likely to have the greatest positive economic impact.

Different industries will have different flow on effects. Adding jobs in a particular sector will not only add to the value of that sector, but also to other industries related to the supply chain (eg. suppliers, wholesalers) and service industries (retail, food services, administration) which will expand to service the additional workforce. Jobs in associated industries may be added in the local area or outside it, based on journey to work information.

The economic impacts are calculated using an input-output model which is derived from the local economy microsimulation model by National Economics (NIEIR).

To use the model, simply input the number of jobs (per year) to be added to (+) or removed (-) from the economy in a particular industry sector. The results show the theoretical addition (or loss) to the local economy of jobs and value added by industry sector. It also shows the proportion of the new employment that would occur inside and outside District Council of Orroroo Carrieton.

To model construction impacts related to a project, input the total cost of construction or direct jobs created. The results shown will represent total direct and indirect impacts over the life of the construction period. To estimate annual impacts, simply divide the total impacts by the estimated life of the project in years (e.g. divide results by 3 if the project will take 3 years to build, or 1.5 for 18 months).

Industry: Heavy and Civil Engineering Construction  
Impact modeled: ADDITION of \$2.2 million sales  
Company name: Orroroo Bypass

## Impact Summary

District Council of Orroroo Carrieton - Modelling the effect of adding \$2.2m sales in Heavy and Civil Engineering Construction - Inflation adjusted

Summary	Output (\$m)	Value-added (\$m)	Local jobs	Residents jobs
<b>Starting position District Council of Orroroo Carrieton (year ended June 2018)</b>	--	--	--	--
Heavy and Civil Engineering Construction	5.83	1.84	6	6
All industries	79.28	39.60	412	374
<b>Impacts on District Council of Orroroo Carrieton economy</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Direct impact on Heavy and Civil Engineering Construction sector	2.20	0.69	2	--
Industrial impact	1.35	0.42	3	--
Consumption impact	0.15	0.06	1	--
<b>Total impact on District Council of Orroroo Carrieton economy</b>	<b>3.70</b>	<b>1.17</b>	<b>7</b>	<b>6</b>
▪ Type 1 multiplier (direct & industrial)	1.61	1.60	2.36	--
Type 2 multiplier (direct, industrial & consumption)	1.68	1.69	2.90	--
<b>Impact on South Australia economy</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Total impact - South Australia outside District Council of Orroroo Carrieton	0.24	0.11	1	1
Total impact South Australia economy	3.94	1.28	8	8
<b>Impact on Australian economy</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Total impact outside South Australia economy	1.48	0.68	6	6
<b>Total impact on Australian economy</b>	<b>5.42</b>	<b>1.96</b>	<b>13</b>	<b>14</b>

## Impact on Output

The direct addition of \$2.2 million annual output in the Heavy and Civil Engineering Construction sector of District Council of Orroroo Carrieton economy would lead to an increase in indirect demand for intermediate goods and services across related industry sectors. These indirect industrial impacts (Type 1) are estimated to be an additional \$1.35m in Output, representing a Type 1 Output multiplier of 1.61.

There would be an additional contribution to District Council of Orroroo Carrieton economy through consumption effects as correspondingly more wages and salaries are spent in the local economy. It is estimated that this would result in a further increase in Output of \$0.15m .

**The combination of all direct, industrial and consumption effects would result in total estimated rise in Output of \$3.70m in District Council of Orroroo Carrieton economy, representing a Type 2 Output multiplier of 1.68.**

These impacts would not be limited to the local economy. Industrial and consumption effects would flow outside the region to the wider Australian economy to the tune of \$1.72m in Output.

**The combined effect of economic multipliers in District Council of Orroroo Carrieton and the wider Australian economy is estimated to be \$5.42m added to Australia's Output.**

## Impact on Local Employment (jobs)

The direct addition of \$2.2 million annual output in the Heavy and Civil Engineering Construction sector of the District Council of Orroroo Carrieton economy would lead to a further increase in indirect demand for intermediate good and services across related industry sectors. These indirect industrial impacts (Type 1) are estimated to result in an additional 3 jobs, representing Type 1 Employment multiplier of 2.36.

This addition of jobs in the local economy would lead to a corresponding increase in wages and salaries, a proportion of which would be spent on local goods and services, creating a further 1 jobs through consumption impacts.

**The combination of all direct, industrial and consumption effects would result in a total estimated increase of 7 jobs located in District Council of Orroroo Carrieton. This represents a Type 2 Employment multiplier of 2.90.**

Employment impacts would not be limited to the local economy. Industrial and consumption effects would flow outside the region to the wider Australian economy creating a further 7 jobs.

**The combined effect of economic multipliers in District Council of Orroroo Carrieton and the wider Australian economy is estimated to be an addition of 13 jobs.**

## Impact on value added

The direct addition of \$2.2 million annual output in the Heavy and Civil Engineering Construction sector of District Council of Orroroo Carrieton economy would lead to a corresponding direct increase in value added of \$0.69m. A further \$0.42m in value added would be generated from related intermediate industries. These indirect industrial impacts represent a Type 1 value added multiplier of 1.60.

There would be an additional contribution to District Council of Orroroo Carrieton economy through consumption effects as correspondingly more wages and salaries are spent in the local economy. It is estimated that this would result in a further increase in value added of \$0.06m.

**The combination of all direct, industrial and consumption effects would result in an estimated addition in value added of \$1.17m in District Council of Orroroo Carrieton economy, representing a Type 2 value added multiplier of 1.69.**

These impacts would not be limited to the local economy. Industrial and consumption effects would flow outside the region to the wider Australian economy to the tune of \$0.79m in value added.

**The combined effect of economic multipliers in District Council of Orroroo Carrieton and the wider Australian economy is estimated to be \$1.96m added to Australia's value added.**

## Impact on GRP

Value added by industry represents the industry component of Gross Regional Product (GRP). The impact on District Council of Orroroo Carrieton's GRP as a result of this change to the economy is directly equivalent to the change in value added outlined in the section above.

In summary, GRP in District Council of Orroroo Carrieton is estimated to increase by \$1.17m.

The effect on the Australian economy (including District Council of Orroroo Carrieton) is estimated to be a growth in Gross Domestic Product (GDP) of \$1.96m.

## Impact on employment by industry sector

This table shows a detailed breakdown of how employment will be affected by the addition of \$2.2 million annual output in the Heavy and Civil Engineering Construction sector of District Council of Orroroo Carrieton economy. This includes both the direct industrial impact (Type 1) and ongoing consumption impact (Type 2).

## Employment by industry sector

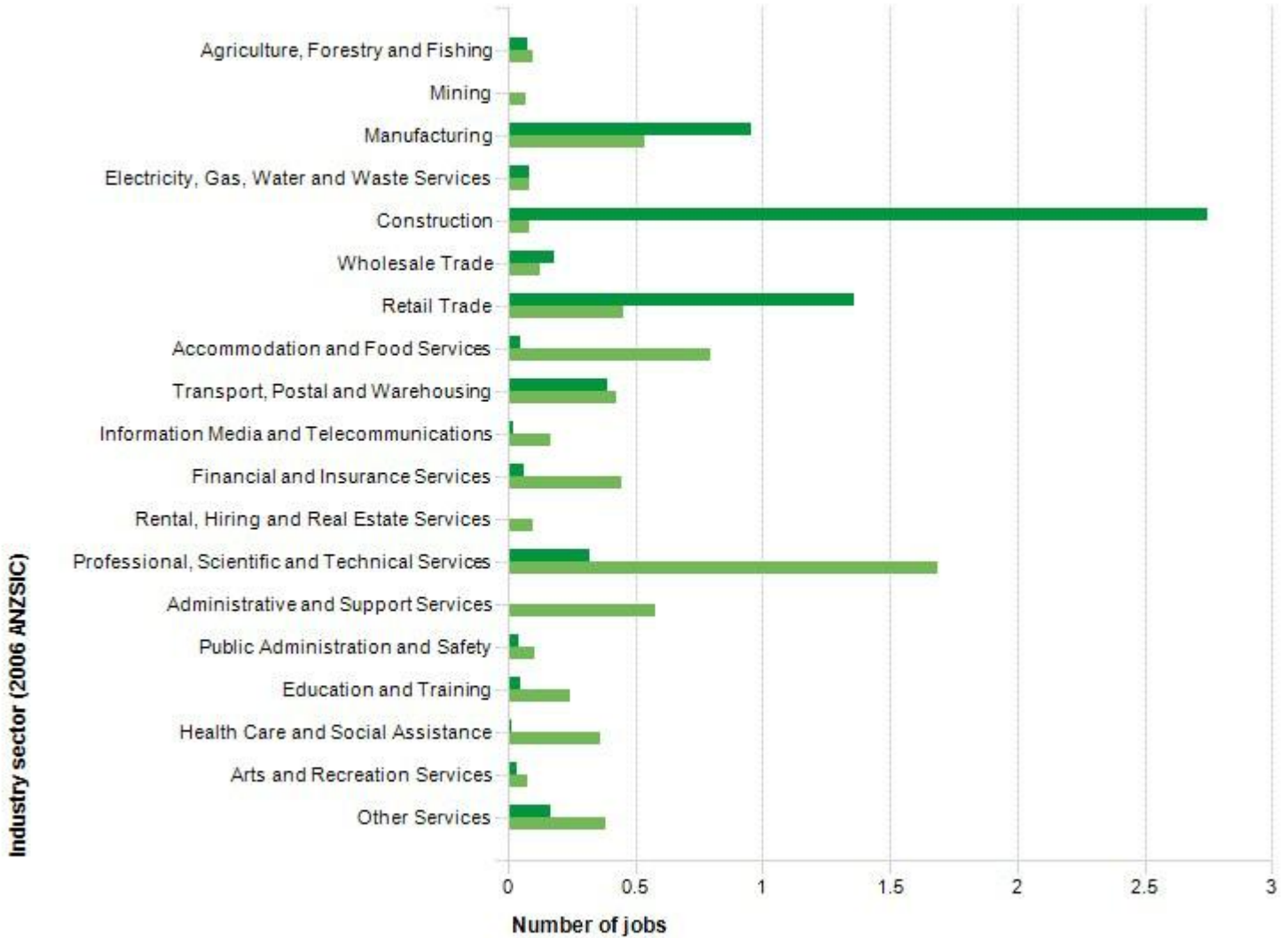
Industry sectors (1-digit ANSIC)	Employment impacts			
	Existing jobs in District Council of Orroroo Carrieton*	Jobs created in District Council of Orroroo Carrieton	Jobs created outside of District Council of Orroroo Carrieton	Jobs created for District Council of Orroroo Carrieton residents
Agriculture, Forestry and Fishing	150	0	0	0
Mining	0	0	0	0
Manufacturing	34	1	1	1
Electricity, Gas, Water and Waste Services	1	0	0	0
Construction	13	3	0	3
Wholesale Trade	11	0	0	0
Retail Trade	29	1	0	1
Accommodation and Food Services	17	0	1	0
Transport, Postal and Warehousing	12	0	0	0
Information Media and Telecommunications	5	0	0	0
Financial and Insurance Services	6	0	0	0
Rental, Hiring and Real Estate Services	0	0	0	0
Professional, Scientific and Technical Services	10	0	2	0
Administrative and Support Services	4	0	1	0
Public Administration and Safety	20	0	0	0
Education and Training	26	0	0	0
Health Care and Social Assistance	64	0	0	0
Arts and Recreation Services	0	0	0	0
Other Services	11	0	0	0
<b>Total Industries</b>	<b>412</b>	<b>7</b>	<b>7</b>	<b>6</b>

Source: [National Institute of Economic and Industry Research \(NIEIR\)](#) ©2019. Compiled and presented in economy.id by [.id](#) The population experts

# Employment by industry sector

Impact of \$2.2 million new sales in Heavy and Civil Engineering Construction sector

■ Jobs created in District Council of Orroroo Carrieton ■ Jobs created outside District Council of Orroroo...



Source: National Institute of Economic and Industry Research (NIEIR) ©2019  
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## Resident employment impacts

The combination of all direct, industrial and consumption effects of adding \$2.2 million annual output to the Heavy and Civil Engineering Construction sector of District Council of Orroroo Carrieton economy would be an estimated increase of 6 jobs located in District Council of Orroroo Carrieton and 7 jobs located outside District Council of Orroroo Carrieton – a total of 14 jobs.

As some of District Council of Orroroo Carrieton’s residents leave the area to work and residents of other areas enter District Council of Orroroo Carrieton to work, not all of these jobs will be filled by District Council of Orroroo Carrieton residents. It is estimated that of the 14 jobs created, 6 or 46.4% would be expected to be filled by District Council of Orroroo Carrieton residents.



## Industry employment impacts

The combination of all direct, industrial and consumption effects of adding \$2.2 million annual output to the Heavy and Civil Engineering Construction sector of District Council of Ororoo Carrieton economy would result in an estimated increase of 7 jobs located in District Council of Ororoo Carrieton.

Of the 7 jobs created within District Council of Ororoo Carrieton, 3, or 41.9% would be added within Construction the sector. This includes the direct jobs created in the sector, and the effect of flow-on jobs within the same sector.

The largest increase in jobs outside Construction would be in Retail Trade (1), Manufacturing (1) and Transport, Postal and Warehousing (0).

A total of 7 jobs are estimated to be created outside District Council of Ororoo Carrieton, with the largest number being in Professional, Scientific and Technical Services (2) Accommodation and Food Services (1) and Administrative and Support Services (1).

## Impact on value added by industry sector

This table shows a detailed breakdown of how adding \$2.2 million annual output in the Heavy and Civil Engineering Construction sector of District Council of Ororoo Carrieton economy will impact on the value added of each industry sector. This highlights the relationships between industry. This includes both the direct industrial impact (Type 1) and ongoing consumption impact (Type 2).

## Value-added by industry

District Council of Ororoo Carrieton - Impact of \$2.2 million new sales in 'Heavy and Civil Engineering Construction' output (Type 1 & 2 combined impact)

Value added 2017-18 (\$m constant prices)

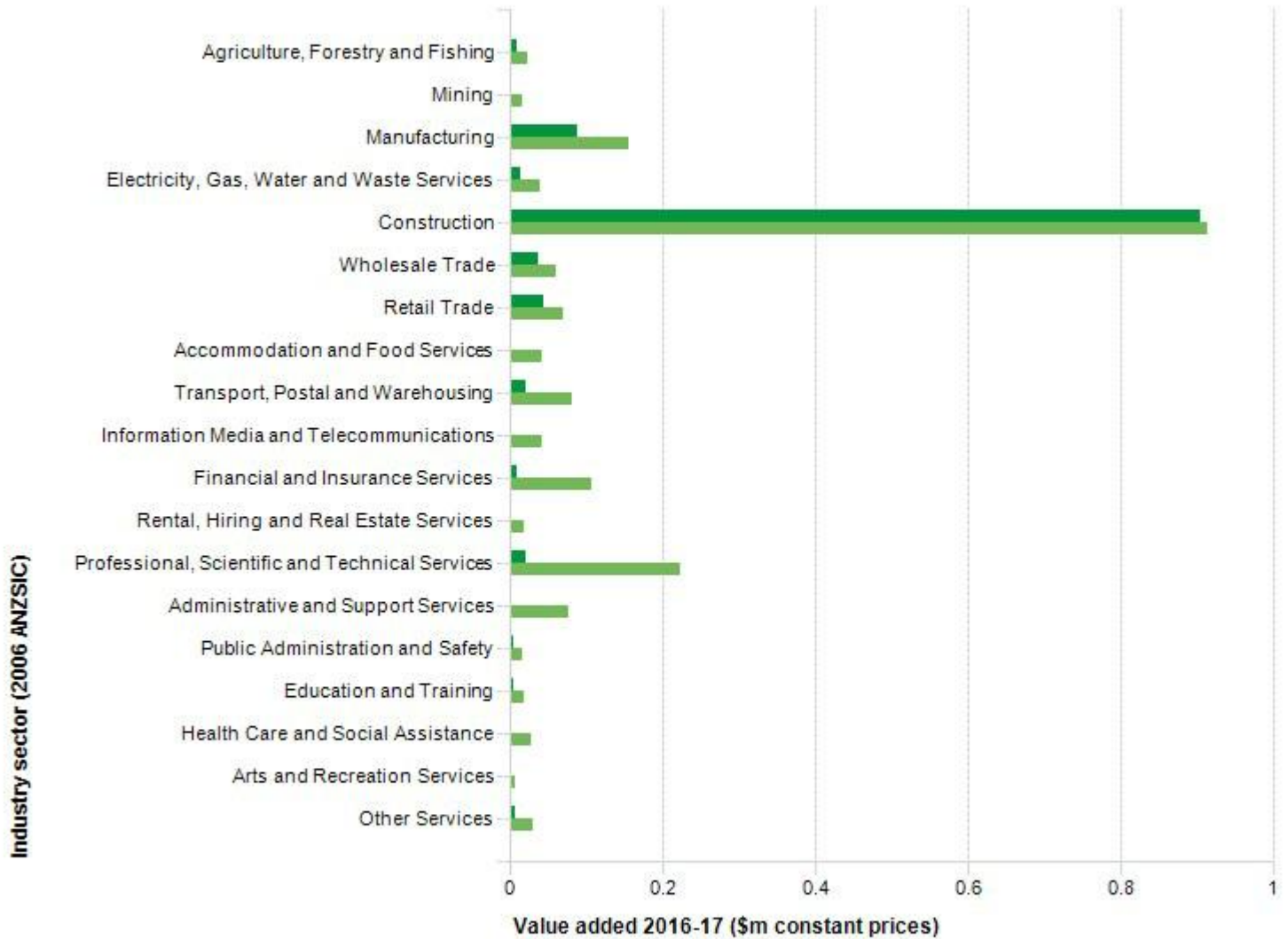
Industry sectors (1-digit ANSIC)	Current local value-added*	Value-added to District Council of Ororoo Carrieton	Percentage change	Value-added to Australian economy
Agriculture, Forestry and Fishing	\$17.39	\$0.01	0.1%	\$0.02
Mining	\$0.00	\$0.00	0.0%	\$0.02
Manufacturing	\$2.31	\$0.09	3.9%	\$0.16
Electricity, Gas, Water and Waste Services	\$0.16	\$0.01	8.0%	\$0.04
Construction	\$4.49	\$0.90	20.1%	\$0.91
Wholesale Trade	\$2.63	\$0.04	1.4%	\$0.06
Retail Trade	\$1.28	\$0.04	3.4%	\$0.07
Accommodation and Food Services	\$0.61	\$0.00	0.3%	\$0.04
Transport, Postal and Warehousing	\$0.70	\$0.02	3.0%	\$0.08
Information Media and Telecommunications	\$0.67	\$0.00	0.5%	\$0.04
Financial and Insurance Services	\$0.94	\$0.01	1.0%	\$0.11
Rental, Hiring and Real Estate Services	\$0.00	\$0.00	0.0%	\$0.02
Professional, Scientific and Technical Services	\$0.79	\$0.02	2.8%	\$0.22
Administrative and Support Services	\$0.27	\$0.00	0.5%	\$0.08
Public Administration and Safety	\$1.16	\$0.01	0.5%	\$0.02
Education and Training	\$1.65	\$0.00	0.3%	\$0.02
Health Care and Social Assistance	\$4.06	\$0.00	0.0%	\$0.03
Arts and Recreation Services	\$0.04	\$0.00	7.6%	\$0.01
Other Services	\$0.45	\$0.01	1.5%	\$0.03
<b>Total Industries</b>	<b>\$39.60</b>	<b>\$1.17</b>	<b>3.0%</b>	<b>\$1.96</b>

Source: [National Institute of Economic and Industry Research \(NIEIR\)](#) ©2019. Compiled and presented in economy.id by [.id](#) The population experts

# Value-added by industry

Impact of \$2.2 million new sales in Heavy and Civil Engineering Construction sector

■ Value-added to Local GRP (industry)
 ■ Value-added to total Australian economy



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The combination of all direct, industrial and consumption effects of adding \$2.2 million annual output to the Heavy and Civil Engineering Construction sector of District Council of Orroroo Carrieton economy would result in an estimated increase in value added of \$1.17m in District Council of Orroroo Carrieton economy.

The Construction sector of the economy is estimated to increase in value added by 20.1%, with the total District Council of Orroroo Carrieton economy estimated to grow by 3.0%.

The main impacts in value added within District Council of Orroroo Carrieton, outside of Construction, are in Manufacturing (0.09m), Retail Trade (0.04m) and Wholesale Trade (0.04m).

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