

# ECONOMIC OUTLOOK REPORT 4



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A PROJECT OF  
THE MURRAYLANDS REGIONAL DEVELOPMENT BOARD INC

# Murraylands Economic Outlook Report 4: Headline Analysis (Summary)

A report prepared for



Prepared by



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## The Economic Impact of an Increase in Freight Movement in the Region

Development of an intermodal road/rail facility at Monarto is expected to increase transport activity in the Murraylands region.

Estimates of economic impact were based on Census data obtained from the Australian Bureau of Statistics (ABS) on the number of employees by industry of employment. Estimates of economic impact were calculated by increasing total employment in freight transport sectors based on the rate of growth under each scenario. Other measures of economic impact (output and GRP) were calculated based on the employment estimates.

It should be noted that the estimates of economic impact assume that the increase in freight movement will have no discernable effect on the cost of goods and services used in the transport sector or the cost of labour.

### Economic Impact of a 10 per cent Increase in Freight Movement in the Murraylands

Estimates of the net regional economic impact of a 10 per cent increase in freight movement in the Murraylands region are provided in Table 1.

Table 1 Estimated regional economic impact of a 10 per cent increase in freight movement

Sector	Output	Employment	Contribution to GRP
	\$m	fte	\$m
Freight Movement	4.9	31	2.3
Flow-on impacts			
Trade		7	0.2
Public Administration and Defence		1	0.1
Property & Business Services		1	0.1
Health & Community Services		1	0.1
Manufacturing		1	0.1
Other Flow-ons		7	0.7
Total flow-on impact		19	1.3
<b>Total</b>		<b>50</b>	<b>3.6</b>
Estimated proportion of regional total		0.3%	0.4%

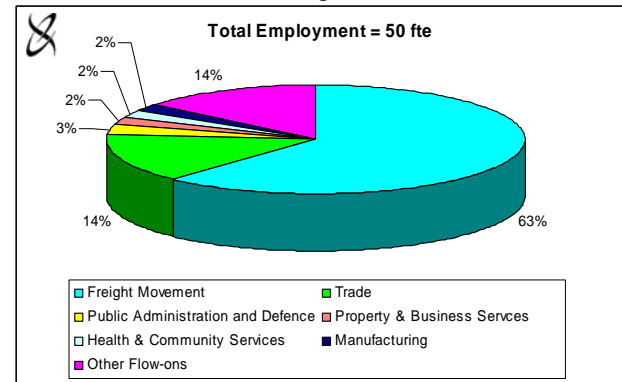
Source: EconSearch analysis

It is estimated that a 10 per cent increase in freight movement would result from an increase in transport services of \$4.9m (in 2008 dollars) (Table 1).

A 10 per cent increase in freight movement would generate an estimated 50 fte jobs in the Murraylands regional economy. Approximately 31 of these jobs would be generated directly in freight movement industries (road transport, rail transport and transport support services) and the remaining 19 jobs would be flow-on jobs in other sectors of the regional economy (Table 1).

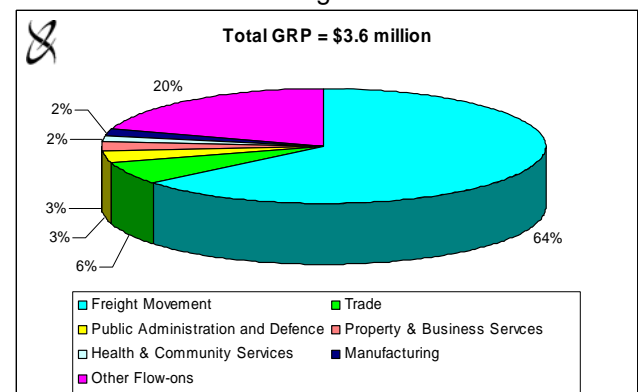
Jobs in freight movement industries would account for 63 per cent of the total employment impact (Figure 1). Flow-on employment would be concentrated in trade (14 per cent), public administration (3 per cent), property and business services (2 per cent), health and community services (2 per cent) and manufacturing (2 per cent).

Figure 1 Distribution of employment impacts for an increase in freight movement



Source: EconSearch analysis

Figure 2 Distribution of GRP impacts for an increase in freight movement



Source: EconSearch analysis

An estimated \$3.6 million (in 2008 dollars) in GRP would be generated in the Murraylands regional economy in 2007/08 as a result of a 10 per cent increase in output by freight movement industries. An estimated \$2.3 million would be generated directly (road transport, rail transport and transport support services) and the remainder in flow-ons to other industry sectors (Table 1).

GRP in freight movement would account for 64 per cent of the total GRP impact (Figure 5.2). The remaining GRP would be generated in the trade (6 per cent), public administration (3 per cent), property and business services (3 per cent), health and community services (2 per cent) and manufacturing (2 per cent).

### Economic Impact of a 25 per cent Increase in Freight Movement in the Murraylands

Estimates of the net regional economic impact of a 25 per cent increase in freight movement in the Murraylands region are provided in Table 2. The distribution of these impacts is similar to those presented in Figures 1 and 2.

**Table 2** Estimated regional economic impact of a 25 per cent increase in freight movement

Sector	Output	Employment	Contribution to GRP
	\$m	fte	\$m
Freight Movement	12.2	77	5.8
Flow-on impacts			
Trade		18	0.6
Public Administration and Defence		4	0.3
Property & Business Services		3	0.2
Health & Community Services		3	0.1
Manufacturing		3	0.2
Other Flow-ons		17	1.8
Total flow-on impact		47	3.3
Total		124	9.0
Estimated proportion of regional total		0.8%	0.9%

Source: EconSearch analysis

It was estimated that a 25 per cent increase in freight movement would result from an increase in freight movement related output of \$12.2 million (in 2008 dollars).

It was estimated that 124 fte new jobs would be generated in the Murraylands regional economy as a result of a 25 per cent increase in freight movement. Approximately 77 of these jobs would be generated directly in freight movement industries and 47 flow-on jobs in other sectors of the regional economy.

An estimated \$9.0 million in GRP would be generated in the Murraylands economy by an increase in freight transport, \$5.8 million directly and \$3.3 million in flow-on GRP in other sectors of the regional economy.

### The Economic Impact of an Increase in Food Value Adding and Processing in the Region

The value of food processing in the Murraylands region in 2006/07 was estimated to be \$627.7 million. The two growth scenarios were based on the assumption that growth in food manufacturing of five, or ten, per cent would be achieved in 2007/08 by processing otherwise unprocessed, raw agricultural exports or increasing in imports of primary goods from outside the region.

The analysis assumes that the economy has the capacity to meet demands for additional goods, services and labour.

### Economic Impact of a 5 per cent Increase in Food Manufacturing and Processing

Estimates of the regional economic impact of a 5 per cent increase in food manufacturing and processing in the Murraylands in 2007/08 are provided in Table 3.

**Table 3** Estimated net regional economic impact of a 5 per cent increase in food manufacturing and processing

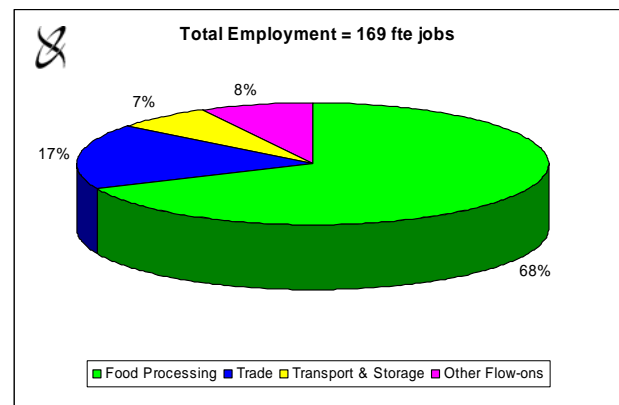
Sector	Output a	Employment	Contribution to GRP
	\$m	fte	\$m
Food Value Adding & Processing	31.4	116	7.6
Flow-on impacts			
Trade		29	1.1
Transport & Storage		12	0.9
Other Flow-ons		13	2.0
Total flow-on impacts		54	4.0
Total		169	11.6
Proportion of regional total		1.0%	1.2%

Source: EconSearch analysis

A 5 per cent increase in food value adding and processing would result in an increase in the value of output of just over \$31m (in 2008 dollars).

It was estimated that almost 170 fte new jobs would be generated in the Murraylands region in response to a 5 per cent increase in food manufacturing and processing. Approximately 116 of these jobs (68 per cent) would be generated directly in food value adding and processing and 54 flow-on jobs would be generated in other sectors of the regional economy.

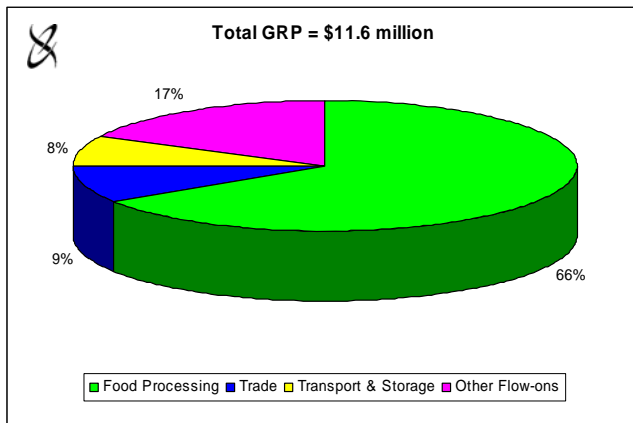
**Figure 3** Distribution of employment impacts for an increase in food processing



Source: EconSearch analysis

Jobs generated in the food manufacturing and processing sector account for approximately 68 per cent of the total employment impact (Figure 3). Flow-on jobs would account for the balance of the total employment impact and would be concentrated in trade (17 per cent), transport and storage (7 per cent) and other service sectors.

Figure 4 Distribution of GRP impacts for an increase in food processing



Source: EconSearch analysis

It was estimated that \$11.6m (in 2008 dollars) in additional GRP would be generated in the Murraylands regional economy in 2007/08 in response to a 5 per cent increase in food value adding and processing. Approximately \$7.6m in GRP would be generated directly in food value adding and processing and \$4.0m in flow-on GRP would be generated in other sectors of the regional economy.

GRP generated in food value adding and processing would account for 66 per cent of the total impact, with the balance being attributable to flow-ons in other sectors of the regional economy (Figure 4).

#### Economic Impact of a 10 per cent Increase in Food Value Adding and Processing

Estimates of the regional economic impact of a 10 per cent increase in food value adding and processing in the Murraylands in 2007/08 are provided in Table 4. The distribution of the employment impacts and GRP impacts for the 10 per cent increase scenario are similar to that presented in Figures 3 and 4.

Table 4 Estimated net regional economic impact of a 10 per cent increase in food manufacturing and processing

Sector	Output	Employment	Contribution to GRP
	\$m	fte	\$m
Food Value Adding & Processing	62.8	231	15.3
Flow-on impacts			
Trade		58	2.1
Transport & Storage		23	1.7
Other Flow-ons		26	4.0
Total flow-on impacts		107	7.9
Total		339	23.2
Proportion of regional total		2.1%	2.4%

Source: EconSearch analysis

A 10 per cent increase in food value adding and processing would result in an increase in the value of output of almost \$63m (in 2008 dollars).

It was estimated that almost 340 fte new jobs would be generated in the Murraylands region response to 10 per cent growth in food value adding and processing.

Approximately 230 of these jobs would be generated directly in the food value adding and processing sector and 107 flow-on jobs would be generated in other sectors of the regional economy.

It was estimated that \$23.2m (in 2008 dollars) in additional GRP would be generated in the Murraylands regional economy each year in response to a 10 per cent increase in food value adding and processing. Approximately \$15.3m in GRP would be generated directly in food value adding and processing and \$7.9m in flow-on GRP would be generated in other sectors of the regional economy.

#### The Economic Impact of an Increase in Wholesale Distribution in the Region

Development of an intermodal facility at Monarto has the potential to attract businesses and industries that require a wholesale storage and/or distribution point.

Estimates of economic impact were based on Census data obtained from the Australian Bureau of Statistics (ABS) on the number of employees by industry of employment.

The ABS Census data indicate that 573 persons were employed in industries related to wholesale distribution in the Murraylands in 2006. It should be noted that the Census data are based on the place of employment and could include persons who reside outside the Murraylands region.

Estimates of economic impact were calculated by increasing total employment in the wholesale trade and warehouse and storage sectors to reflect each growth scenario. Other measures of economic impact (output and GRP) were imputed based on the employment estimates.

#### Economic Impact of a 10 per cent Increase in Wholesale Distribution Activity

Estimates of the net regional economic impact relating to a 10 per cent increase in wholesale distribution in the Murraylands region are provided in Table 5.

Table 6 Estimated regional economic impact of a 10 per cent increase in wholesale distribution activity

Sector	Output	Employment	Contribution to GRP
	\$m	fte	\$m
Direct impacts (wholesale distribution)			
Warehouse & Storage Services	1.3	8	0.6
Wholesale Trade	6.4	41	2.7
Total direct impact	7.6	49	3.3
Flow-on impacts			
Retail Trade		9	0.3
Public Administration and Defence		1	0.1
Property & Business Services		3	0.2
Health & Community Services		2	0.1
Manufacturing		2	0.1
Other Flow-ons		13	1.3
Total flow-on impact		29	2.0
Total		78	5.3
Estimated proportion of regional total		0.5%	0.5%

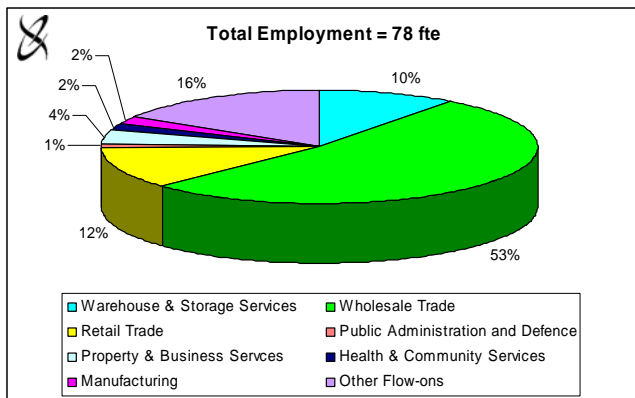
Source: EconSearch analysis

A 10 per cent increase in wholesale distribution would result in an estimated \$7.6m increase in output (in 2008 dollars), \$1.3m in to warehouse and storage services and \$6.4m in wholesale trade

It was estimated that 78 fte new jobs would be generated in the Murraylands regional economy in response to a 10 per cent increase in wholesale distribution. Approximately 49 of these jobs (63 per cent) would be generated directly in the wholesale distribution sector and 29 flow-on jobs would be generated in other sectors of the regional economy.

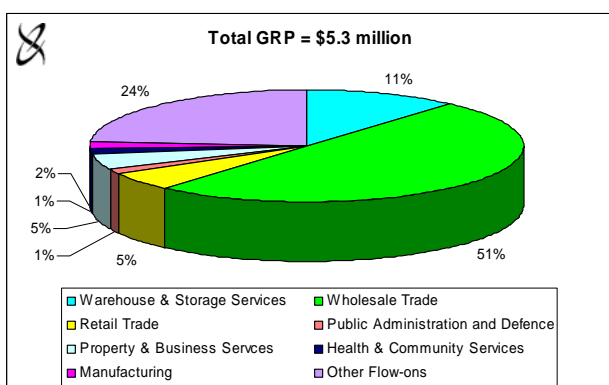
Job generated in the warehouse and storage services and wholesale sales sectors would account for 10 and 53 per cent, respectively, of the total employment impact (Figure 5). Flow-on jobs would account for the balance of the total employment impact and would be concentrated in trade, public administration and defence, property and business services, health and community services and manufacturing.

Figure 5 Distribution of employment impacts for growth in wholesale distribution



Source: EconSearch analysis

Figure 6 Distribution of GRP impacts for growth in wholesale distribution



Source: EconSearch analysis

It was estimated that \$5.3 million (in 2008 dollars) in additional GRP would be generated in the Murraylands regional economy in response to a 10 per cent increase in wholesale distribution. Approximately \$3.3 million in GRP would be generated directly in the wholesale distribution sector and \$2.0 million in flow-on GRP would be generated in other sectors of the regional economy.

GRP generated in the warehouse and storage services and wholesale trade sectors would account for 11 and 51 per cent, respectively, of the total impact, with the balance being attributed to flow-ons in other sectors of the regional economy (Figure 6).

**Economic Impact of a 25 per cent Increase in Wholesale Distribution Activity**

Estimates of the net regional economic impact relating to a 25 per cent increase in wholesale distribution in the Murraylands region are provided in Table 7. The distributions of the impacts are similar to those presented in Figures 5 and 6.

Table 7 Estimated regional economic impact of a 25 per cent increase in wholesale distribution activity

Sector	Output \$m	Employment fte	Contribution to GRP \$m
<b>Direct impacts (wholesale distribution)</b>			
Warehouse & Storage Services	3.2	20	1.5
Wholesale Trade	15.9	103	6.7
<b>Total direct impact</b>	<b>19.1</b>	<b>123</b>	<b>8.1</b>
<b>Flow-on impacts</b>			
Trade		23	0.8
Public Administration and Defence		2	0.2
Property & Business Services		8	0.6
Health & Community Services		4	0.2
Manufacturing		4	0.3
Other Flow-ons		32	3.0
<b>Total flow-on impact</b>		<b>73</b>	<b>5.1</b>
<b>Total</b>		<b>195</b>	<b>13.3</b>
<b>Estimated proportion of regional total</b>		<b>1.2%</b>	<b>1.4%</b>

Source: EconSearch analysis

A 25 per cent increase in wholesale distribution would result from an estimated \$19.1m increase in output (in 2008 dollars), \$3.2m in warehouse and storage sectors and \$15.9m in wholesale trade

It was estimated that approximately 195 fte new jobs would be generated in response to a 25 per cent increase in wholesale distribution in the Murraylands. The majority of these jobs would be generated in the wholesale trade (103 fte) and warehouse and storage services (20 fte) sectors and the remainder (73 fte) in flow-ons to other sectors of the regional economy.

It was estimated that \$13.3m (in 2008 dollars) in GRP was generated in the Murraylands regional economy as a result of 25 per cent growth in wholesale distribution. An estimated \$8.1m as a direct result of the growth in wholesale distribution and \$5.1m in flow-on GRP in other sectors of the regional economy (Table 7).

**Summary Results**

The total employment impact ranged from almost 300 fte employees for the 'low' scenarios (10 per cent growth in freight movement and wholesale distribution and 5 per cent growth in food processing) to almost 660 fte employees for the 'high' scenarios (25 per cent growth in freight movement and wholesale distribution and 10 per cent growth in food processing). The total employment impacts represent between 1.8 and 4.0 per cent of the total employment in the region.

Total GRP impact ranged from \$20.5m for the 'low' scenarios to \$45.5m for the 'high' scenarios. Total GRP impacts represent between approximately 2.1 and 4.7 per cent of the regional total.

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