

14 TOWNSVILLE TRC

The Townsville TRC consists of the main urban centre of Townsville, which includes all suburbs of the City of Townsville. The Townsville TRC extends north to Balgal Beach and also includes Magnetic Island. Figure 14.1 shows the geographic location of this TRC.

BUSINESS PROFILES

Location and Use of Ports

Table 14.1 shows the number of licence holders within the Townsville TRC and the number of survey respondents who reported having homeports within the TRC. On the basis of the sample count, it is estimated that there are 153 commercial fishing businesses within this TRC and that we can be 95% confident that the population count of commercial fishers within the TRC is between 131 and 175.

Table 14.1
Location of Homeports

Town	Adj. Database Count	Sample Count	Estimated Count	Percent within TRC
Townsville UC	131	63	153	100.0
Balgal Beach UC	3	0	0	0.0
Total TRC	134	63	153	100.0

95% Confidence Interval for Estimated TRC Count 131-175
Percent of Total Active Licence Holders in QLD 6.3%

Note: Townsville Urban Centre includes all suburbs within the Townsville UC and the localities of Pallarenda, Alligator Creek, Magnetic Island, Alice River and the Bohle Plains.
Balgal Beach Urban Centre includes Rollingstone and Balgal Beach.
Adjusted database count is based on the postal address as recorded in the licencing information, which may not be the homeport of the fishing business. The adjusted database count reduces the count for latent licence holders (8.8%)
The estimated count adjusts the sample count by the sampling fraction of 2.444.

In addition to the use of Townsville as a homeport, numerous fishing businesses also used the port of Townsville when travelling to or from fishing areas. Table 14.2 shows the majority of these businesses having their homeports in Mackay (14%), Bowen (13%) and Bundaberg (11%) and a wide range of other towns along the Queensland coast.

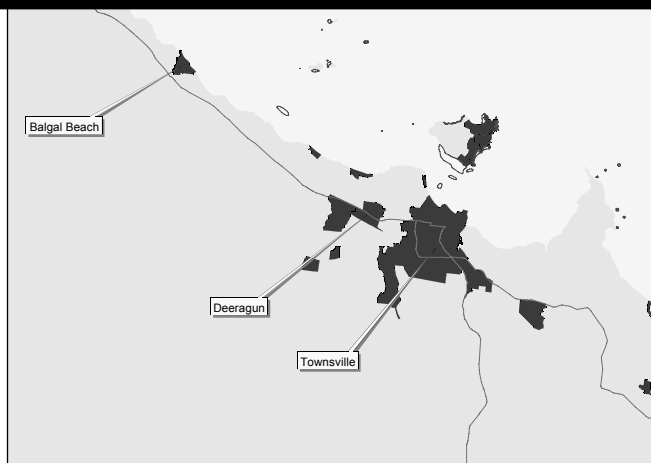


Figure 14.1 Location of the Townsville TRC

Table 14.2
Homeports of Businesses Using Townsville as a Port

Homeports	Sample Count	Percent
Mackay	8	14.5
Bowen	7	12.7
Bundaberg	6	10.9
Gladstone	4	7.3
Southport	4	7.3
Tin Can Bay	4	7.3
Gold Coast	3	5.5
Lucinda	3	5.5
Mooloolaba	3	5.5
Cairns	2	3.6
Hervey Bay	2	3.6
Amity Point	1	1.8
Mourilyan	1	1.8
Port Douglas	1	1.8
Scarborough	1	1.8
Stradbroke Island	1	1.8
Tully	1	1.8
Urangan	1	1.8
Wonga	1	1.8
Yeppoon	1	1.8
Total Businesses	55	100.0

Fishing Activity and Type

Table 14.3 shows the type of fishing activity undertaken within the last year by fishing businesses within this TRC. Trawling (62%) is the primary fishing activity by businesses from the Townsville TRC, followed by line fishing (32%), netting (21%) and crabbing (14%).

Table 14.3
Type of Fishing Activity (During the last 12 months)

Fishing Type	Sample Count	Percent within TRC
Trawling	39	61.9
Line fishing	20	31.7
Netting	13	20.6
Crabbing	9	14.3
Total Sample	77	100.0

Note: This is a multiple response table where all rows are independent.

As shown in Table 14.4, trawling as the primary fishing activity, co-occurs predominantly with line fishing (13%). Crabbing co-occurs with netting (67%), while netting co-occurs with line fishing (38%) and crabbing (46%).

Table 14.4
Co-occurrence of Fishing Activities

	Line Fishing	Trawling	Crabbing	Netting
Line fishing	20 <i>100.0</i>	5 <i>12.8</i>	3 <i>33.3</i>	5 <i>38.5</i>
Trawling	5 <i>25.0</i>	39 <i>100.0</i>	0 <i>0.0</i>	1 <i>7.7</i>
Crabbing	3 <i>15.0</i>	0 <i>0.0</i>	9 <i>100.0</i>	6 <i>46.2</i>
Netting	5 <i>25.0</i>	1 <i>2.6</i>	6 <i>66.7</i>	13 <i>100.0</i>

Note: The co-occurrence table should be read by column. Column percentages are given as italics.

Table 14.5 shows the peak months for fishing activity within the TRC to be March to May, with very low fishing activity occurring between October and January.

Table 14.5
Peak Fishing Months During Past 12 Months

Months	Sample Count	Percent within TRC	Percent of QLD Fishery
January	5	8.2	24.5
February	11	18.0	29.7
March	30	49.2	43.9
April	30	49.2	42.8
May	31	50.8	38.1
June	20	32.8	33.5
July	14	23.0	23.9
August	10	16.4	19.9
September	13	21.3	23.5
October	8	13.1	24.8
November	11	18.0	26.2
December	8	13.1	21.4

Table 14.6 provides a more detailed description of the seasonal variation in fishing activities by businesses. Line fishing is most common between July and November, trawling between March and November and crabbing between January and July. Netting activity appears most common between February and October (Table 14.6).

Table 14.6
Seasonal Variations in Fishing Activity

Months	Sample Count	Percent within TRC	Percent of Fishery
Line Fishing			
January	11	57.9	64.6
February	12	63.2	64.3
March	14	73.7	68.1
April	14	73.7	70.4
May	15	78.9	74.7
June	13	68.4	78.7
July	17	89.5	82.0
August	18	94.7	80.8
September	17	89.5	79.7
October	17	89.5	79.7
November	19	100.0	78.2
December	14	73.7	70.6
Trawling			
January	26	65.0	76.0
February	27	67.5	79.0
March	38	95.0	91.2
April	39	97.5	91.6
May	38	95.0	89.3
June	39	97.5	88.7
July	36	90.0	82.7
August	38	95.0	83.1
September	37	92.5	85.0
October	37	92.5	84.4
November	39	97.5	85.0
December	31	77.5	77.1
Crabbing			
January	6	75.0	74.7
February	6	75.0	79.0
March	7	87.5	75.1
April	6	75.0	69.4
May	5	62.5	67.2
June	6	75.0	58.5
July	6	75.0	52.0
August	5	62.5	50.2
September	4	50.0	53.3
October	4	50.0	55.9
November	4	50.0	66.4
December	5	62.5	72.1
Netting			
January	5	38.5	57.5
February	10	76.9	72.9
March	12	92.3	73.9
April	12	92.3	74.2
May	11	84.6	77.6
June	11	84.6	79.9
July	8	61.5	75.9
August	8	61.5	73.9
September	10	76.9	69.6
October	10	76.9	64.2
November	4	30.8	55.9
December	3	23.1	54.5

Location of Resource Use

The location of resource use by commercial fishing operations in the Townsville TRC is shown in Figure 14.2. Although resource use by businesses within the Townsville TRC extends along the entire Queensland coast and into the Gulf of Carpentaria, the primary and secondary catchments associated with resource use are more defined. For instance, the primary resource catchment extends as far south as Bowen and to Innisfail in the north and generally includes all areas between the coast and inner reef. On the other hand, the secondary resource catchment extends from the Torres Strait in the north to Mackay in the south.

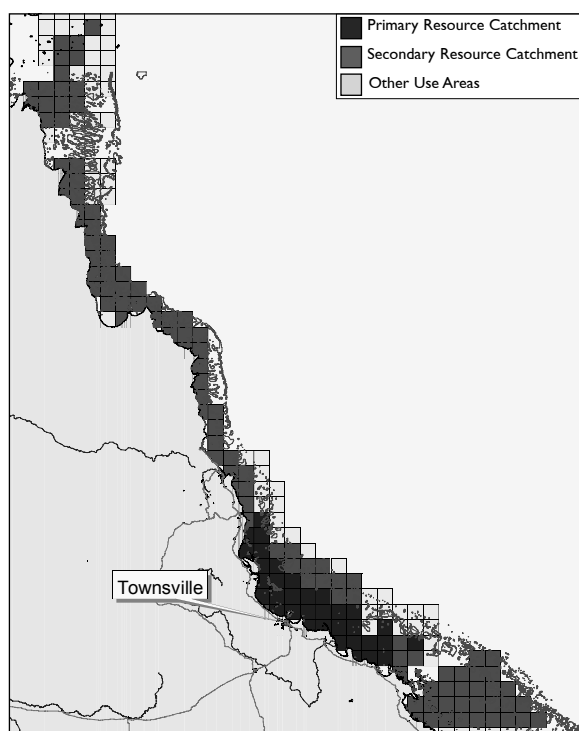


Figure 14.2 Townsville TRC: Location of Resource Use

Fishing Industry Employees

Table 14.7 identifies the number of employees of commercial fishing businesses within this TRC for both peak and off-peak seasons. The majority of businesses within peak and off-peak seasons had between two and three full-time employees (which would include the owner or operator). Over 90% of businesses had no part-time employees and over 87% of businesses had no casual employees. The average number of employees per business during the peak season was 2.8 and in the off-peak season it was 2.3. It is estimated that during

Table 14.7. Number of Employees

Number of Employees	Full-Time Count	Full-Time Percent	Part-Time Count	Part-Time Percent	Casual Count	Casual Percent
Peak Season						
Nil	3	4.8	56	90.3	55	88.7
1	14	22.6	4	6.5	5	8.1
2-3	29	46.8	1	1.6	2	3.2
4-5	11	17.7	1	1.6	0	0.0
6-7	3	4.8	0	0.0	0	0.0
8-9	2	3.2	0	0.0	0	0.0
Total Businesses	62	100.0	62	100.0	62	100.0
Total Employees	165		5.5		5	
Mean Number of Employees per Business (Peak)		2.8				
Estimated Number Employed within the TRC		428				
Off-Peak Season						
Nil	7	11.3	58	93.5	54	87.1
1	17	27.4	2	3.2	7	11.3
2-3	26	41.9	1	1.6	1	1.6
4-5	10	16.1	1	1.6	0	0.0
6-7	1	1.6	0	0.0	0	0.0
8-9	1	1.6	0	0.0	0	0.0
Total Businesses	62	100.0	62	100.0	62	100.0
Total Employees	134		4		4.5	
Mean Nos Employees per Business (Off-Peak)		2.3				
Estimated Number Employed within the TRC		352				

Note: Part-time and casual employment is recorded as 0.5 when contributing to total employment.
Total number of employees includes the owner-operator and is the number of full-time equivalent employees.
Estimates of total employment based on an estimated 153 fishing businesses (Table 14.1)

the peak season there were 428 employees, while during the off-peak season there were an estimated 352 employees.

Business Ownership and Size

Table 14.8 shows the number of years the current owner or operator has owned the fishing business. Businesses within this TRC had been owned for an average of 12.5 years, with 51% of businesses being owned by the current owner for less than 10 years.

Table 14.8
Number of Years of Current Ownership of the Fishing Business

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	22	34.9	34.9
6-10	10	15.9	50.8
11-15	9	14.3	65.1
16-20	11	17.5	82.6
21-25	5	7.9	90.5
26-30	4	6.3	96.8
31+	2	3.2	100.0
Total	63	100.0	
Mean Number of Years owned or operated			12.5
Difference of TRC mean to QLD mean (14.6)			-2.1

Note: Standard errors for number of years ownership (sample = 1.1; QLD population = 0.37).

The average number of years the business had been operating was 16.7 years (Table 14.9), which was similar to that for all Queensland fishing businesses (18.2 years).

Table 14.9
Number of Years Business has been Operating

Number of Years	Sample Count	Percent within TRC	Cumulative Percent
1-5	13	20.6	20.6
6-10	7	11.1	31.7
11-15	10	15.9	47.6
16-20	14	22.2	69.8
21-25	5	7.9	77.7
26-30	9	14.3	92.1
31+	5	7.9	100.0
Total	63	100.0	
Mean Number of Years owned or operated			16.7
Difference of TRC mean to QLD mean (18.2)			-1.5

Note: Standard errors for number of years operated (sample = 1.2; QLD population = 0.46)

Table 14.10 shows that the majority of fishing businesses within this TRC operated one boat (68%).

Table 14.10
Number of Boats Operated by Fishing Businesses

Number of Boats	Sample Count	Percent within TRC
1	42	67.7
2	9	14.5
3	7	11.3
4	2	3.2
5	1	1.6
6+	1	1.6
Total Number of Businesses	62	100.0
Mean Number of Boats Operated		1.6
Difference of TRC mean to QLD mean (1.7)		-0.1

Note: Standard errors for number of boats operated (sample = 0.2; QLD population = 0.05)

Table 14.11 shows the distribution for length of boats to be bimodal, with 26% of boats being between 3 and 6 metres and a 38% of boats being between 15 and 18 metres. The mean length of all boats and the mean length of the largest boat were also higher than that of all boats in Queensland.

Table 14.11
Length of Boats Operated by Fishing Businesses

Length of Boat (metres)	Sample Count	Percent within TRC
3-6	26	26.3
7-10	14	14.1
11-14	17	17.2
15-18	38	38.4
19-23	2	2.0
23+	2	2.0
Total Number of Boats	99	100.0
Mean Length of Boats Operated (metres)		11.9
Difference of TRC mean to QLD mean (9.9)		+2.0
Mean Length of Largest Boat Operated (metres)		13.5
Difference of TRC mean to QLD mean (11.4)		+2.1

Note: As mean length of boats is a multiple response, standard errors cannot be computed. Standard errors for mean length of largest boat (sample = 0.6; QLD population=0.14)

Value of Production and Location of Sales

Table 14.12 shows for the 12 months prior to the survey, the wholesale value of all products sold by fishing businesses within the Townsville TRC. The profile for the Townsville TRC is markedly different to the overall profile for Queensland. In the Townsville TRC there is a significantly higher percentage of businesses with production values between \$200,000 and \$300,000 per annum (33%) when compared to Queensland (16%). In addition, the median GVP for the Townsville TRC is nearly twice the Queensland median GVP.

Within the Townsville TRC it is estimated that the 153 fishing businesses had a gross value of production of approximately \$35.5 million, which is approximately 11% of the total value of production of the Queensland commercial fishing industry.

Table 14.12
Wholesale Value of Product (Annual value)

Wholesale Value (\$,000)	Sample Count	Sample Percent	Queensland Percent
Less than \$100	14	23.3	42.8
\$101 - \$200	11	18.3	21.4
\$201 - \$300	20	33.3	16.2
\$301 - \$400	6	10.0	8.5
\$401 - \$500	4	6.7	3.8
\$501 - \$600	2	3.3	1.8
\$601 - \$700	1	1.7	1.3
\$701 - \$800	0	0.0	0.4
\$801 - \$900	1	1.7	1.0
\$901 - \$1,000	0	0.0	0.3
Over \$1,000	1	1.7	2.3
Total	60	100.0	100.0
Median GVP for TRC			\$231,941
Estimated Total GVP for TRC			\$35,487,000
Median GVP for QLD Population			\$128,629
Estimated Total GVP for QLD Population			\$314,241,000
Percent of Total Queensland Production			11.3%

Note: Estimated TRC population total is based on an estimate of 153 businesses within the TRC, with a median GVP of \$231,941. Queensland total GVP based on 2,443 businesses (2,679 licenced businesses with 8.8% latency) with a median GVP of \$128,629.

Table 14.13 shows the value of sales to specific locations within Australia for the sample of 63 businesses and the percentage of sales to each location. The sample percent of sales to each location has been used directly to estimate the total value of business sales to all locations. From Table 14.13, and as shown in Figure 3, 45% of sales (\$16.1 million) occurs directly to Townsville, \$4.8 million to Cairns, while a further \$2.3 million is sold to Brisbane. It is probable that much of the sale to overseas markets (\$11.1 million) occurred firstly within Townsville and to a lesser extent Cairns and Brisbane, thereby increasing the total value of sales within these locations.

Table 14.13
Town Location of Sales (\$'000)

Location of Sales	Sample Value Sales	Percent of Sample	Estimated Sales
Townsville	6,790	45.5	16,147
Cairns	2,031	13.6	4,826
Brisbane	956	6.4	2,271
Gladstone	175	1.2	426
New South Wales	95	0.6	213
Bowen	85	0.6	213
Gold Coast	45	0.3	106
Bundaberg	38	0.2	71
Innisfail	29	0.2	71
Total Sales (Australia)	10,244	68.7	24,380
Total Sales (Overseas)	4,664	31.3	11,107
Total Sales	14,908	100.0	35,487

Note: The sample value of sales is based on GVP as reported by businesses in the survey.
The estimated value of business sales (Table 14.12) is proportionally distributed to all locations on the basis of sample percentages.

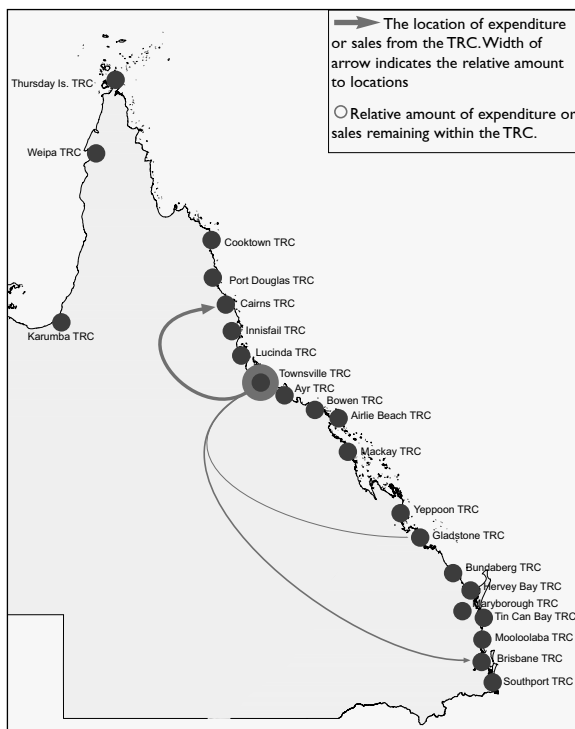


Figure 14.3 Townsville TRC: Location of Business Sales

Business Expenditure and Debt Levels

Table 4.14 shows that approximately \$18.5 million was spent by businesses in this TRC within the previous year on business goods and services (excluding salaries and wages). The majority of this expenditure occurred in the towns of Townsville (\$13 million) and Cairns (\$3.4 million).

Table 14.14
Town Location of Business Expenditure
(All costs, excluding salaries and wages)

Location of Expenditure	Sample Value of Expenditure (\$'000)	Percent of Sample	Estimated Expenditure (\$'000)
Townsville	5,538	70.3	12,998
Cairns	1,462	18.6	3,439
Brisbane	221	2.8	518
Bowen	132	1.7	314
Hervey Bay	88	1.1	203
Gladstone	84	1.1	203
Mackay	52	0.7	129
Bundaberg	51	0.7	129
Northern Territory	51	0.7	129
New South Wales	49	0.6	111
Innisfail	39	0.5	92
Cooktown	38	0.5	92
Mourilyan	36	0.4	74
Ayr	16	0.2	37
Yeppoon	13	0.2	37
Proserpine	3	0.1	18
Airlie Beach	1	0.1	18
Karumba	1	0.1	18
Lucinda	1	0.1	18
Total Expenditure	7,876	100.0	18,489

Note: Business expenditure includes all non labour expenditure (ie., fuel, equipment, repairs etc). Coefficients from the QLD input-output table for 1992-1993 indicate that expenditure on local intermediate purchases and imports, accounted for 52.1% of total revenue. The amount of business expenditure occurring within specific locations is based on 52.1% of the estimated GVP for the business.

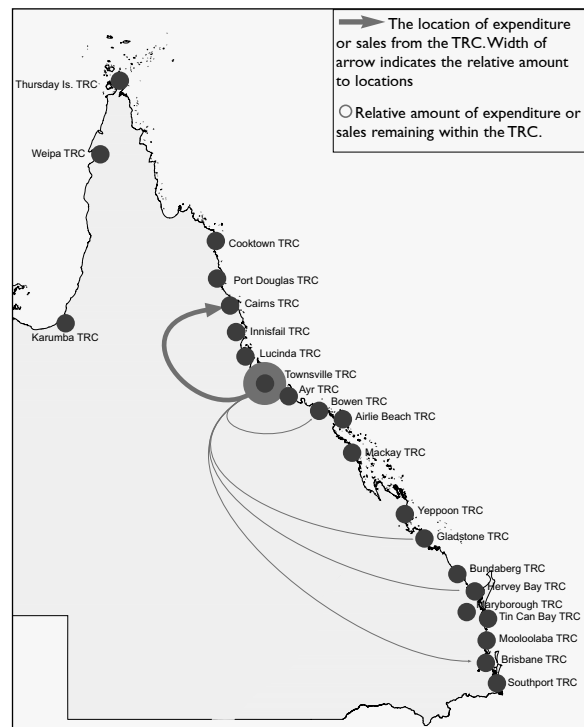


Figure 14.4 Townsville TRC: Location of Business Expenditure

Asking each business operator, what percentage of their business assets were not owned outright by their business, identified for the purpose of this study the level of business debt. Table 14.15 shows that 55% of businesses within the Townsville TRC had no debt. The mean debt level within the TRC was 24% of business assets, which was 7% higher than the Queensland industry average.

**Table 14.15
Business Debt Levels**

Percent of Assets Not Owned	Sample Count	Sample Percent	Queensland Percent
Nil	26	55.3	60.1
1 – 10%	1	2.1	6.4
11 - 20%	2	4.2	5.2
21 - 30%	4	8.4	6.4
31 – 40%	2	4.2	3.3
41 – 50%	4	8.4	9.6
51 – 60%	0	0.0	1.8
61 – 70%	2	4.2	1.2
71 – 80%	2	4.2	1.1
81 – 90%	1	2.1	1.6
91 – 100%	3	6.4	3.3
Total	47	100.0	100.0

Mean Debt Level for TRC	23.6%
Median Debt Level for QLD Population	16.6%
Difference of TRC mean to QLD mean (16.6)	+7.0%

Note: Debt level defined as the percentage of total business assets not owned outright by the business.

EMPLOYEE PROFILES

Town of Residence

Table 14.16 indicates that the majority of employees reside within the Townsville urban centre (97%).

Table 2.16

Town of Residence	Sample Count	Percent of Sample
Townsville UC	75	97.4
Balgol	2	2.6
Total	77	100.0

Note: Townsville Urban Centre includes all suburbs within the Townsville UC and the localities of Pallarenda, Alligator Creek, Magnetic Island, Alice River and the Bohle Plains.

Months Employed in the Fishing Industry

Table 14.17 shows that during the past 12 months the owner-operators and employees within this TRC were employed in the fishing industry between March and October.

**Table 14.17
Months Employed in the Fishing Industry During the Past 12 Months**

Months	Owner/ Operators	Employee	Total Within TRC	All QLD Employees
January	90.7	66.7	84.7	80.7
February	90.7	72.2	86.1	82.3
March	98.1	66.7	90.3	86.1
April	100.0	77.8	94.4	86.8
May	100.0	66.7	91.7	87.3
June	98.1	66.7	90.3	87.8
July	98.1	72.2	91.7	86.7
August	98.1	66.7	90.3	86.3
September	96.3	83.3	93.1	86.8
October	98.1	72.2	91.7	85.4
November	90.7	66.7	84.7	84.4
December	92.6	66.7	86.1	82.3

Note: Owner/operator sample of 57; employee sample of 20.

Location of Household Expenditure

Table 14.18 and Figure 14.5 show the location of household expenditure related to individual income derived from employment in the fishing industry. Townsville attracts 96% (\$8.5 million) of all annual employee household expenditure from within the TRC. As shown in Table 14.18 there is only relatively minor expenditure to other towns, including Cairns which receives 3% or \$0.2 million in annual household expenditure.

Table 14.18

Town Location of Household Expenditure (all commodities and services)

Location	Sample Value of Expenditure (\$'000)	Percent of Sample	Estimated Expenditure (\$'000)
Townsville	1,529	95.7	8,500
Cairns	42	2.6	231
Karumba	10	0.6	53
Rollingstone	10	0.6	53
Gladstone	6	0.4	36
Brisbane	1	0.1	9
Total Expenditure	1,598	100.0	8,882

Note: The gross individual annual income of fishers within this TRC was estimated as \$34,115 (Table 2.20). The Household Expenditure Survey for Queensland: 1993-1994 (ABS, 1996) indicates that for households in non-metropolitan areas 79% of gross weekly income was related to commodity and service purchases. Furthermore, of the total expenditure on commodities and services purchased by households, Queensland Input-Output tables indicate that 77% of expenditure occurs within Queensland, with the balance contributing to taxes and imports from outside Queensland. Applying these percentages to the gross individual annual income of employees indicates that direct employee expenditure on household commodities and services to be \$20,752, with total household expenditure across all 428 (Table 14.7) employees to be \$8.9 million (Table 14.18)

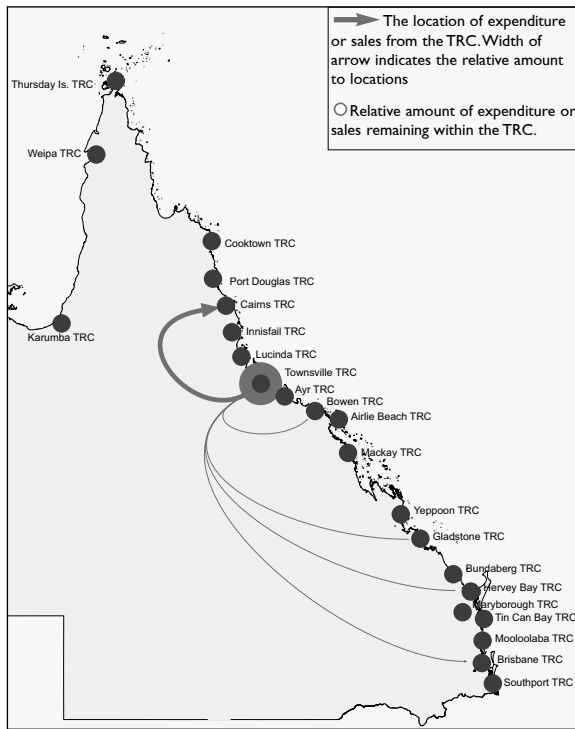


Figure 14.5 Townsville TRC: Location of Household Expenditure

School and Employment Locations of Family Members

The towns in which family members attend school and are employed are shown in Table 14.19. As might be expected, Townsville (87%) is the primary town location for school and employment.

Table 14.19
School and Employment Locations of Family Members

Location of Employment or School	Sample Count	Percent of Sample
Townsville	140	87.5
Rollingstone	4	2.5
Brisbane	4	2.5
Other towns and interstate	12	7.5
Total Family Members	160	100.0

Note: Counts and percentages based on all family members.
Other towns includes all towns with a frequency of one.

Employee Social and Demographic Profiles

Table 14.20 provides profile information about employees within the TRC. Information is provided separately for owner-operators and non owner-operator employees of businesses within the TRC. For comparative purposes, information is also provided for all employees throughout Queensland.

Table 14.20. Owner-Operator and Employee Profiles

Profile	Owner/ Operators ^a	Employee	Total Within TRC	All QLD Employees
Estimated Number of Employees ^b	153	275	428	7,088
Mean age of fisher	45.6	33.3	42.4	37.3
Age range	19-68	18-62	18-68	15-79
Percent males	96.5	90.0	94.8	94.8
Mean years resident in town	22.4	20.5	21.9	19.1
Mean number of years in fishing industry	18.2	9.2	15.9	12.6
Median hours per week in fishing industry	70.0	65.0	70.0	60.0
Percent moved town to retain employment	28.6	20.0	26.3	20.5
Percent currently employed in other industry	8.8	40.0	16.9	34.2
Percent previously employed in other industry	84.2	65.0	79.2	69.2
Housing tenure				
Rent	22.8	52.6	28.9	33.6
Mortgage	28.1	10.5	23.7	20.1
Own home	40.4	15.8	35.5	31.1
Other (eg, live with parents, on boat)	8.8	21.1	11.8	15.2
Educational				
Year completed school				
Primary school	7.3	5.3	6.8	5.2
Year 8	3.6	0.0	2.7	8.0
Year 9	10.9	0.0	8.1	11.9
Year 10	41.8	63.2	47.3	44.4
Year 11	14.5	5.3	12.2	10.1
Year 12	21.8	26.3	23.0	20.2
Percent completed trade or TAFE certificate	42.9	55.0	46.1	37.7
Percent completed industry or business course	15.8	20.0	16.9	15.2
Percent with business plan ^c	32.7	—	32.7	22.9
Percent active fishing group member	43.9	5.0	33.8	25.7
Marital Status				
Percent married or relationship	78.9	50.0	71.4	62.0
Percent with partner employed in business ^d	60.0	—	60.0	56.1
Median hours per week employed in business	17.5	—	17.5	20.0
Partners Income^{de}				
Full-time employment	32.6	30.0	32.1	28.3
Part-time employment	14.0	20.0	15.1	18.5
Casual employment	9.3	30.0	13.2	11.6
Not employed	44.2	20.0	39.6	41.5
Family Composition				
Mean family size	3.5	1.9	3.1	2.6
Estimated number of total family members	535	522	1,327	18,429
Dependency Ratios				
Age Dependency Ratio ^f	38.3	13.1	33.4	33.4
Elderly Dependency Ratio	1.2	0.0	1.2	2.3
Child Dependency Ratio	28.3	11.8	25.4	31.2
Family Member Industry Dependency Ratio ^g	36.3	14.3	33.6	23.9
Gross Individual Income				
Less than \$16,000	18.2	52.9	27.9	34.6
\$16,000 - \$26,000	11.4	23.5	14.8	19.6
\$26,000 - \$36,000	13.6	17.6	14.8	22.1
\$36,000 - \$52,000	29.5	0.0	21.3	11.7
\$52,000 - \$78,000	20.5	0.0	14.8	6.6
Over \$78,000	6.8	5.9	6.6	5.4
Average Income (\$)	39,818	19,353	34,115	27,471

Note: ^a Owner/operator sample of 57, employee sample = 20.

^b Based on peak estimates derived in Table 14.7.

^c Percentages for owner-operators only.

^d Percentage based on those fishers with partners.

^e Includes partners income from all sources.

^f The age dependency ratio is the number of children (below 15 years) and elderly persons (above 65 years) to every 100 persons in the population.

^g The industry dependency ratio is the number of persons in the family who are over 15 years of age and working in the fishing industry (excluding the direct industry employee) as a proportion of all family members over 15 years of age.

All Queensland employees includes all owner-operators and employees. Value is the weighted sample of owner-operators (2.43) and employees (8.68).