



**Socio-economic performance of LGAs in the Northern Rivers:  
an analysis using 2006 Socio-Economic Indexes  
for Areas (SEIFA) scores**

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**Research Report No. 13**

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## Report Background

In March 2008 the Australian Bureau of Statistics (ABS) released scores of four socio-economic indexes. This paper presents the results of the index scores for the Local Government Areas (LGA) of the Northern Rivers region of New South Wales. The LGAs covered in this report are Ballina, Byron Bay, Clarence Valley, Kyogle, Lismore, Richmond Valley and the Tweed.

These notes should be read in conjunction with the ABS media release of March 26, 2008 (2033.0.55.001) which is available from the ABS website<sup>1</sup>.

## About the Author

### Dr Peter Vitartas

Peter Vitartas is a Marketing academic based at the Lismore campus of Southern Cross University. Peter is Unit Assessor for Consumer Behaviour and Marketing Research and has recently completed his PhD on the topic "Factors affecting media time use" which looked at how people spend time with media and how this is affected by demographic, situational and psychographic factors. He also holds a Masters of Business (Research) in which he investigated perceived risk across the goods-service continuum. His undergraduate degree was a BCom (Marketing) from the University of New South Wales. His academic interests also include Community and Economic Development and resident satisfaction with Local Governments.



Prior to joining the University, Peter worked in Sydney and London in a number of marketing management positions for local and international companies. He has extensive experience in market research and has published widely in the areas of, media consumption, non-profit marketing and technology adoption in tertiary education and has numerous publications to his name. Since joining the University Peter has been actively involved in research consultancies for both local and national organisations. Peter is a member of the Australian Market and Social Research Society and serves on the committee of the Queensland branch.

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1. [www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/2033.0.55.001Media%20Release22006?opendocument&tabname=Summary&prodno=2033.0.55.001&issue=2006&num=&view](http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/2033.0.55.001Media%20Release22006?opendocument&tabname=Summary&prodno=2033.0.55.001&issue=2006&num=&view)

## Index of relative socio-economic advantage and disadvantage

The index of relative socio-economic advantage/disadvantage (IRSAD) provides an index score based on twenty-one variables that represent both advantage and disadvantage. This index includes the most variables of the indices. Areas with low index scores can be categorised as relatively disadvantaged areas and areas with higher scores can be categorised as relatively advantaged areas.

Table 1 presents the IRSAD score and decile of each LGA in the Northern Rivers area. The decile scores indicate that Byron and Ballina Shire are the most advantaged LGA's in the region with scores of 9 and 8 respectively. The Richmond Valley, Kyogle and Clarence Valley are the most disadvantaged areas in the region with deciles of 2, 2 and 3 respectively. Lismore City and Tweed Shire fall in the sixth decile indicating they are neither advantaged nor disadvantaged.

**Table 1: IRSAD scores and deciles**

Local Government Area	Index of Relative Socio-economic Advantage and Disadvantage	
	Score	Decile
Ballina Shire	986	8
Byron Shire	1003	9
Clarence Valley	913	3
Kyogle	898	2
Lismore City	954	6
Richmond Valley	885	2
Tweed Shire	954	6

In relationship of the IRSAD scores for the LGAs to the rest of Australia and New South Wales are presented in Table 2. These rankings show the relative advantage/disadvantage of each LGA. The table shows that the Richmond Valley is ranked 96th in Australia and 4th in New South Wales in terms of disadvantage. Conversely Byron Bay is ranked 543rd in Australia out of 667 and 113th out of 153 in New South Wales.

**Table 2: Relative ranking of LGAs to the rest of Australia and New South Wales**

Local Government Area	Rank in Australia (out of 667)	Rank in New South Wales (out of 153)
Ballina	505	103
Byron Bay	543	113
Clarence Valley	182	23
Kyogle	123	12
Lismore	399	79
Richmond Valley	96	4
Tweed	400	80

Table 3 presents the results of the minimum and maximum scores for the collection districts (CD) in each of the LGAs. The range indicates the extent of disadvantage and advantage in each of the LGAs. The difference column highlights the size of the range. From the Table it can be seen that the Tweed has the largest range of scores while Kyogle has the lowest range. The Clarence Valley LGA contains the most disadvantaged CD while the Tweed has the most advantaged CD.

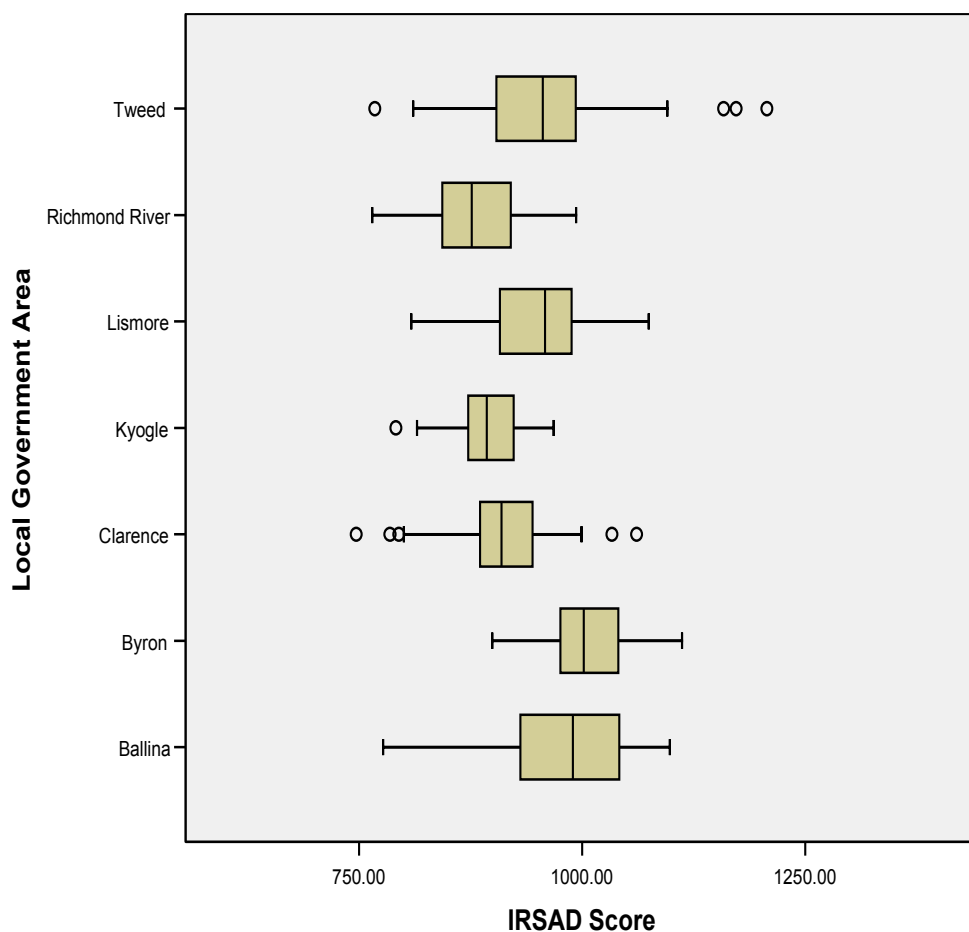
**Table 3: Range of scores for CDs in LGA areas**

Local Government Area	Minimum score for CDs in area	Maximum score for CDs in area	Difference	Usual Resident Population
Ballina	777	1098	321	38461
Byron Bay	899	1112	213	28768
Clarence Valley	747	1061	314	48145
Kyogle	791	968	177	9257
Lismore	808	1074	266	42208
Richmond Valley	764	993	229	21312
Tweed	768	1207	439	79322

Figure 1 presents the distribution of IRSAD scores for each LGA using a boxplot (also called a box and whisker plot). The vertical line inside the box is the median (midpoint) value, the box represents the 50% of values that lie between the 25th and 75th percentiles while the whiskers are the two lines outside the box that extend to the highest and lowest observations. The circles represent outliers, or extreme values that are not included in the whiskers.

The boxplot graphically presents the IRSAD scores highlighting each LGA has areas of advantage and disadvantage. Notable from the graph is that Tweed Shire and the Clarence Valley have a number of CD's with extreme relative advantage and disadvantage.

**Figure 1: Distribution of IRSAD Scores by LGA**



### Index of Economic Resources

In addition to the index of relative socio-economic advantage and disadvantage the SIEFA include an index of economic resources (IER). Based on 15 variables, not all of which are included in the IRSAD, the index covers family income, rental and mortgage payments and dwelling size.

Table 4 presents the scores and rankings of LGAs based on the IER. From the table it can be seen that all areas in the region are relatively disadvantaged in relation to the

rest of Australia and New South Wales as evidenced by the relatively low decile rankings. The Richmond Valley and Kyogle are the most disadvantaged LGA's in relation to Australia while the Clarence and Lismore join them in the bottom two deciles for New South Wales. The findings highlight the LGA's in the Northern Rivers region are disadvantaged economically especially in relation to other areas of New South Wales.

**Table 4: Index of Economic Resources for Northern Rivers LGAs**

Local Government Area	IER Score	Ranking within Aust.		Ranking within NSW		Minimum score for CDs in area	Maximum score for CDs in area
		Rank	Decile	Rank	Decile		
Ballina	985	371	6	88	6	753	1126
Byron	979	343	6	81	6	848	1094
Clarence Valley	942	142	3	16	2	746	1053
Kyogle	931	118	2	10	1	814	1037
Lismore	946	151	3	21	2	706	1102
Richmond Valley	932	121	2	12	1	772	1072
Tweed	976	329	5	74	5	771	1197

### Index of Education and Occupation

A further index in the suite of SIEFA indexes is the Index of Education and Occupation (IEO). The index is developed from 9 variables covering employment and qualifications. High scores on this index mean that the area has higher proportions of people who are well education, or who are employed in professional occupations.

Table 5 presents the scores and rankings of LGAs based on the IEO. From the table it can be seen that a number of LGAs perform well in terms of education and occupation. In particular Byron, Ballina and Lismore are in the top three deciles nationally. Kyogle also scores relatively highly in comparison to its scores on the other indices. The areas with the most disadvantage in relation to education and occupation are the Richmond and Clarence Valleys. The Tweed Shire is also relatively disadvantaged compared to the other LGAs.

The findings highlight that a number of LGAs in the Northern Rivers region are advantaged in terms of education and occupation at the national level, although this is not as apparent at the State level.

**Table 5: Index of Education and Occupation for Northern Rivers LGAs**

Local Government Area	IEO Score	Ranking within Aust.		Ranking within NSW		Minimum score for CDs in area	Maximum score for CDs in area
		Rank	Decile	Rank	Decile		
Ballina	980	476	8	104	7	828	1106
Byron	1022	567	9	121	8	936	1126
Clarence Valley	909	117	2	9	1	781	1079
Kyogle	945	307	5	67	5	846	1015
Lismore	969	431	7	91	6	829	1083
Richmond Valley	882	61	1	2	1	792	1022
Tweed	935	232	4	44	3	810	1138

**Figure 2: LGAs by Education, Occupation and Economic Resources Index Scores**

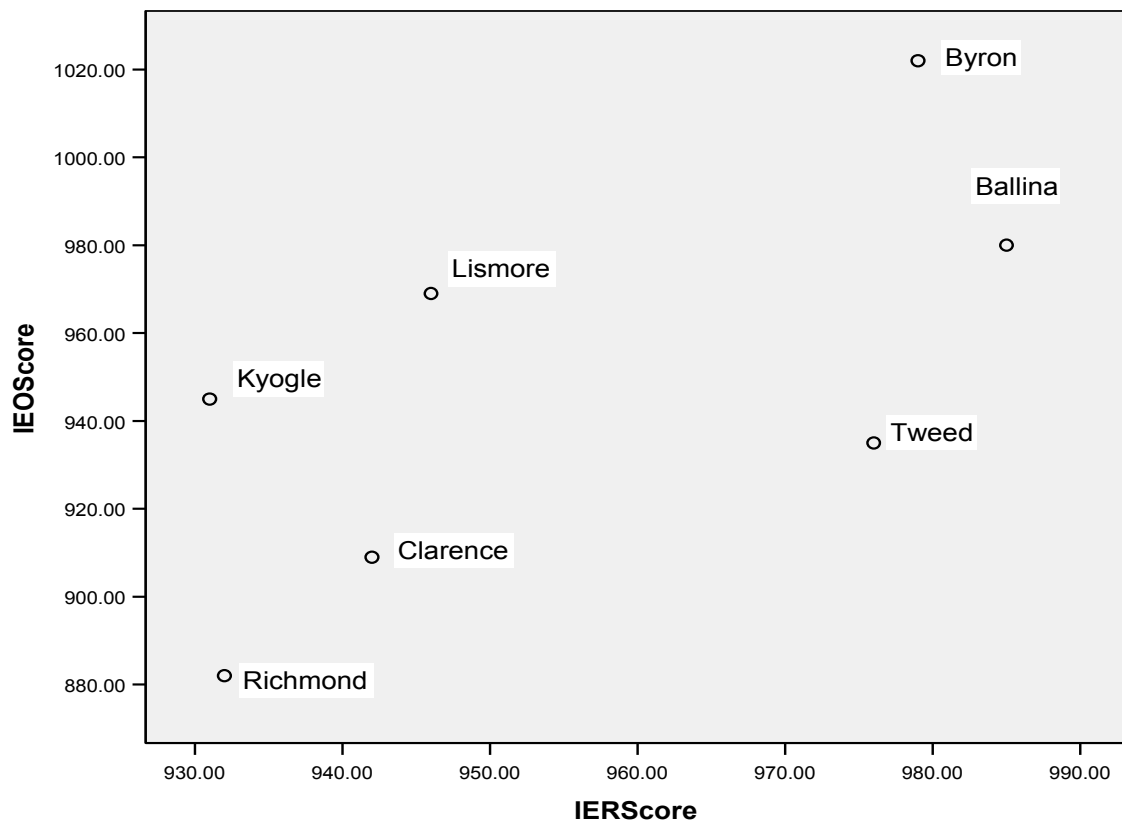


Figure 2 presents a special map of the seven LGA's by their education and occupation and economic resources index scores. The figure highlights the similarity between the LGA's with Byron and Ballina Shires clustered in the top right of the graph (high education/occupation, high economic resources) while Lismore, Kyogle, Clarence and

Richmond are clustered toward the bottom left of the graph (low education/occupation, low economic resources).

To provide a perspective on the performance of the LGA's from the Northern Rivers region they were graphed against the best performing LGA on the index of relative socio-economic advantage and disadvantage, Ku-ring-gai. Ku-ring-gai was the most advantaged LGA in NSW and also for Australia so provides a relative measure of the most advantaged LGA across both areas. Figure 3 presents the LGA's in the local area mapped with Ku-ring-gai to provide the relative perspective.

**Figure 3: Northern Rivers LGAs in Comparison to NSW's Best**

