



Sustain Northern Rivers Transport Survey 2013





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This survey was undertaken by RDA-Northern Rivers in consultation with Sustain Northern Rivers Transport Working Group, whose members collaborated on survey distribution. The report was authored by Katrina Luckie of RDA – Northern Rivers with input and support from staff at RDA-NR, particularly Kyllie Walker and Geof Webb; and Linda Wirf and Kate Geary from Northern Rivers Social Development Council who managed the data entry of the paper-based surveys and sourced pictures for this report. We would also like to acknowledge the work of Avigdor Zask, Denise Hughes and Chalta Lord of Health Promotion Northern NSW Local Health District for the travel network analysis and mapping.

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Photo courtesy Kyogle Council

EXECUTIVE SUMMARY

This study was undertaken by Regional Development Northern Rivers in consultation with the Sustain Transport working group, in response to an identified lack of information about unmet transport need in the Northern Rivers region of NSW. We were particularly interested to identify trips that residents would like to make but cannot due to lack of transport and barriers to using public transport.

The data was analysed to provide a comprehensive picture of the most frequented travel routes within the region, focussing on travel other than for work, as there is already adequate 'journey to work' data for the region. Non-work travel data can provide an indication of the extent of transport related to social exclusion and transport disadvantage in the Northern Rivers. Knowing about the transport barriers will assist *Sustain Transport* and other transport stakeholders to develop innovative and effective solutions.

The research highlights car dependency in the Northern Rivers, with almost 70% of respondents reporting they made their most frequent non-work-related trip as the driver of a private car. More than half the respondents were unable to make trips due to lack of transport. It is of concern that health appointments were given as the 'missed trip' by more than 20% of respondents, and in the case of Indigenous respondents this figure is almost a third. Lack of availability or lack of frequency of services was the main reason given for people being unable to use public transport for trips they wanted to make.

An interesting finding was the demographic differences between people using active transport. Young people on low incomes were more likely to walk, whereas cyclists tended to be 45 - 54 years of age and in higher income brackets.

The findings provide information to support actions identified in the NSW Government's recent *Regional Transport Plans* (Transport for NSW 2013) and the Northern Rivers Regional Social Plan (RDA-NR and NRSDC 2013).

This study also provides a basis to focus future service delivery research in identified 'high use' routes, in particular:

- to Lismore, predominantly from Nimbin, The Channon/Dunoon area, Casino, Ballina, Richmond Valley Coast and Ballina;
- to Ballina from Lismore, Alstonville, Lennox Head and the Richmond Valley Coast;
- to Tweed Heads from the Tweed Coast, Terranora, Murwillumbah and North Byron Coast;
- to Casino from the Inland Hinterland;
- to Grafton from areas to the South, North and West and from Maclean and Yamba; and
- to Maclean from Yamba and Iluka.

Recommendations:

1. That Sustain Transport builds on this report to develop and advocate for innovative local transport solutions to address needs identified through this work.
2. That this report is available across the community sector in the Northern Rivers to highlight the links between transport availability and social wellbeing.
3. That more information about public transport be made easily accessible to the public, via a one stop shop, or telephone service similar to the 131500 service available in metropolitan areas.
4. That existing public transport services, including NSW TrainsLink bus services, be reviewed to ensure maximum integration, coverage and frequency of bus services throughout the region and across the border into South East Queensland.



Photo: All access bus, courtesy Northern Rivers Community Transport

METHODOLOGY

The Northern Rivers Transport Survey was designed by Sustain Transport Working Group members drawing on previous transport surveys conducted in the region including Kyogle, Byron Shire, Northern Rivers Community Transport and the Youth Census. Consultation with the *Casino to Murwillumbah Transport Study* team from Transport for NSW also informed the development of the survey questions.

The members of Sustain Transport agreed to undertake the following activities:

- Regional Development Australia–Northern Rivers (RDA-NR)
 - coordinate liaison with Transport for NSW to confirm survey questions and provision of data for transport planning in the region
 - coordinate distribution and promotion of the survey
 - undertake data analysis, interpretation and report writing
- Northern Rivers Social Development Council (NRSDC)
 - distribute hard copy surveys to supporting organisations
 - enter data from all hard copy surveys submitted
- Southern Cross University
 - provide the Qualtrics online survey platform and ethics approval and oversight
- North Coast Health Promotion
 - assist with network analysis of survey data
- All SNR members
 - support survey distribution and completion, with Clarence Valley Council supporting an additional round of survey promotion to boost low participation rates in the Clarence.

The survey was made available in a hard copy and online from December 2012 to April 2013 in the Northern Rivers (see Figure 1) and a volunteer sample was derived using the networks of SNR to promote the survey. 1,400 hard copies were made available by 62 local organisations including community/neighbourhood centres and libraries (see Appendix 1), which resulted in 472 completed surveys being returned (33.7% response rate). 622 surveys were completed online. No forced answers were required for any question.

Due to the low sample size returned during the first wave, Clarence Valley Council (CVC) initiated a further round of data collection in that LGA through the CVC Transport Committee. This extended the survey period from 25 June to 12 July 2013. This round included advertising, production of a small DL sized survey (to promote broader community response) and placing the survey and advertising on Council's website. This resulted in an additional 304 survey responses: 221 hard copies and 83 online.

The resulting sample size from both surveys was therefore 1,333. Based on a total population of 209,477 people aged between 20-84 years in the region, the sample yields a confidence interval of +/-2.68% based on a 95% confidence level.

ABOUT THE SURVEY RESPONDENTS

Where respondents live

Respondents were asked to identify the town, suburb, village or community where they live. While only 1.4% of respondents stated they did not live in the region, 18.8% did not answer this question. 79.8% of survey respondents stated where they reside in the region, with the majority from the Clarence Valley (20.0%), Tweed (16.8%), Lismore (14.1%) and Ballina (10.2%) local government areas (LGAs). The spread of respondents who answered this question is broadly in line with the population of each LGA. However, the small sample sizes for Kyogle and Richmond Valley LGAs reduce the confidence in the results from these areas.

Respondents identified 197 localities, including major centres, villages and hamlets in the region (Table 1). To enable the data to be analysed in terms of travel destinations, these 197 localities were grouped into 34 locations (see Appendix 2). These locations were determined to provide a suitable sample size and grouping places in close proximity, however some of the locations in the more sparsely populated areas of the region did not meet this criteria (for example Inland Hinterland).

Table 1 – Survey respondents by LGA

Local Government Area	Respondents No.	Respondents %
Ballina (21 localities)	136	10.2
Byron (21 localities)	128	9.6
Clarence Valley (50 localities)	269	20.2
Kyogle (14 localities)	53	4.0
Lismore (38 localities)	188	14.1
Richmond Valley (13 localities)	69	5.2
Tweed (40 localities)	224	16.8
Not in Northern Rivers Region	18	1.4
Not answered/not applicable	248	18.6
Total	1,333	100%

Figure 2 identifies these 34 locations, showing that 46% of respondents lived in the areas of Lismore, Grafton and surrounds, Tweed coast, Maclean and surrounds, Ballina, Yamba and surrounds, and Murwillumbah and surrounds. Small percentages (less than 5%) of respondents say they lived in all other locations.

Figure 2 – Residential locations (based on groups of localities)

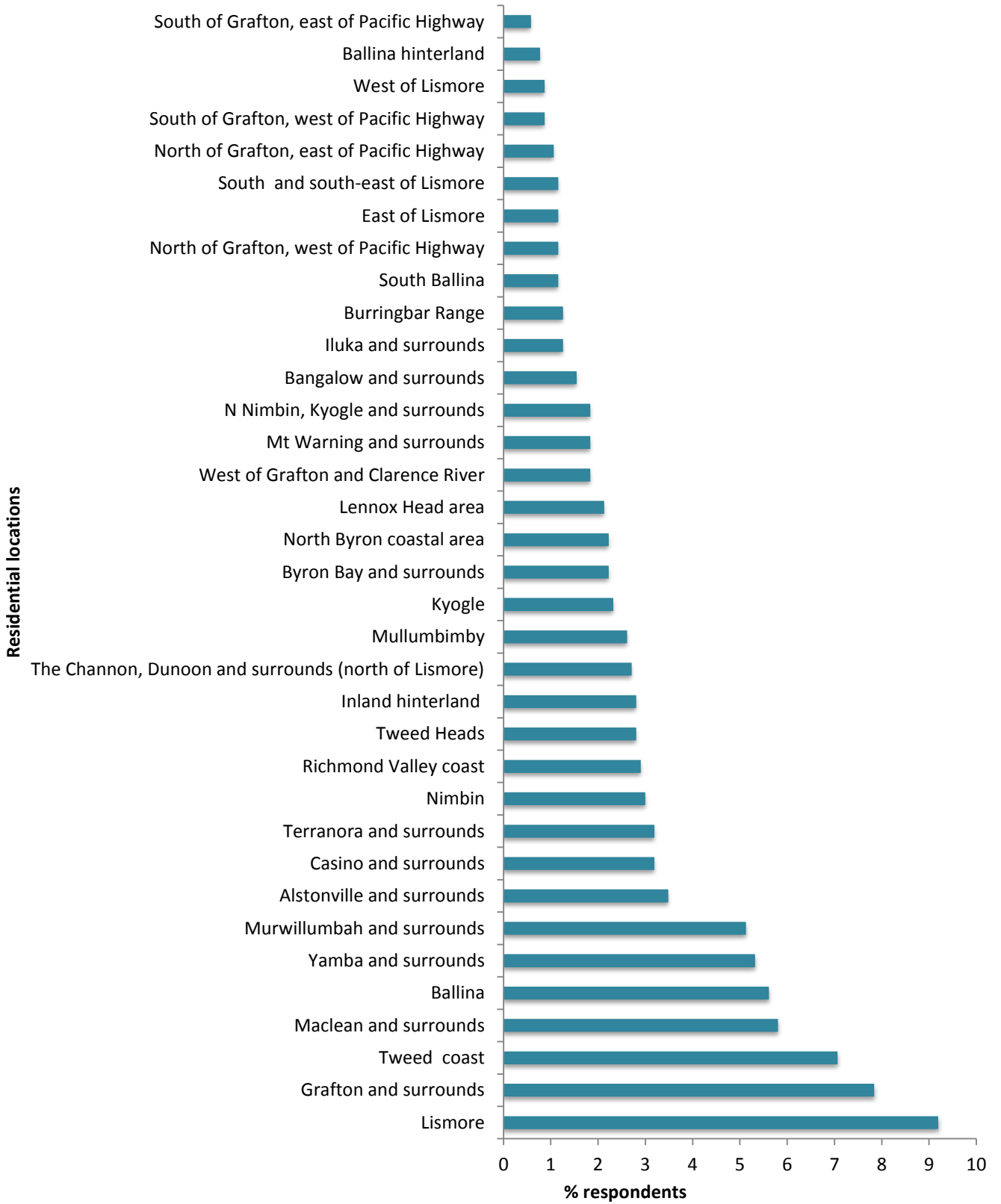


Table 2 identifies the localities with 10 or more residents who responded to the survey. These responses also highlight the extra promotion of the survey in the Clarence Valley with Grafton and Yamba having the highest number of respondents.

Table 2 – Survey respondents’ residential locality

Locality	No. responses	Locality	No. responses
Grafton	61	Banora Point	20
Yamba	47	Maclean	18
Lismore	45	Lennox Head	16
Mullumbimby	44	Gulmarrad	16
Ballina	39	Ocean Shores	14
Murwillumbah	32	East Ballina	13
Nimbin	31	Byron Bay	13
Goonellabah	30	Suffolk Park	13
Casino	28	South Grafton	11
Kingscliff	24	South Tweed	11
Alstonville	23	Cabarita Beach	11
Kyogle	22	Wollongbar	10
Evans Head	21	Uki	10
Pottsville	21		

The 1.4% of respondents who did not live in the region have been excluded from further analysis. The 18.8% who either did not answer this question or provided an answer that made it difficult to enable identification of where they live (i.e. village, town, suburb, in the country, community etc.) have been assumed to live in the region and included in most of the analysis, except for the travel analysis, which requires place of residence to be incorporated¹.

Demographic characteristics

Gender

The total sample is not representative of the Northern Rivers population, with 32.6% of male respondents (actual male population 48.7%) and 67.4% of females (female actually 51.3% [ABS, 2011]). 83 respondents (6.2%) did not state their gender. While the gender response varies across each LGA, the range is from 38.1% male and 61.9% female responses in Ballina to 24.6% male and 75.4% female in Richmond Valley, so the responses by gender across all the LGAs were reasonably consistent with higher rates of female response across the whole region.

¹ Due to survey question design, 151 respondents did not state the name of the village, town or community where they lived, but instead noted a descriptor such as community, village, country, rural area, town, suburb, etc. This question was clarified for the additional round of surveying in the Clarence Valley, which addressed this issue. Whilst these survey respondents have been incorporated into most of the data analysis, as it is assumed they live in the region, they have not been able to be included in the transport network analysis which identifies travel patterns from residence to travel destination.

Ethnicity

The proportion of Aboriginal and Torres Strait Islander respondents was slightly higher than the region's Indigenous population and 4.5% of respondents were from a Non-English speaking background (NESB). There were no NSEB respondents from Ballina and Kyogle LGAs and only one from Lismore LGA. Tweed LGA had the highest response from people with non-English speaking backgrounds at 8.5%.

Table 3 – Ethnicity of respondents

Culture	Respondents (%)	Northern Rivers population (%)*
Aboriginal and / or Torres Strait Islander People	5.1	4.1
Non-English speaking background	4.5	
Neither	69.5	

Age

The age of respondents for the total Northern Rivers sample does not fully reflect the regional population age distribution. The main differences were an under-representation of people aged under 18 years and over 65, and an over-representation of people in the 35-54 age groups. 75 people did not respond to this question.

Table 4 – Age of survey respondents and regional population

Age Group (n=1,229)	Respondents (%)	Northern Rivers population (%)*
Under 18	11.6	22.7
18 – 24	7.2	6.8
25 – 34	10.3	9.2
35 – 44	16.4	12.2
45 – 54	23.7	14.6
55 – 64	15.1	14.5
Over 65	15.9	20.0
No response	n = 75	

* (ABS, 2011)

Weekly income

The survey sample provides a reasonable representation of the region's population with respect to income levels. Most respondents (21.1%) reported a weekly income between \$600 - \$999. 9.9% reported nil income (which is higher than the regional population). Those who earn more than \$1,000 per week were under-represented in the sample (13.8% compared to 16.4%).

Table 5 – Income of survey respondents and regional population

Weekly Income (n=1,071)	Respondents (%)	Northern Rivers population (%)*
Nil	9.9	6.0
\$1 - \$199	11.8	8.4
\$200 - \$299	13.4	15.8
\$300 - \$399	13.9	15.5
\$400 - \$599	16.2	16.9
\$600 - \$999	21.1	20.5
Over \$1,000	13.8	16.4
No response	n = 233	

* (ABS, 2011)

Employment status

The highest proportions of respondents were either employed (24.6% full time and 24.1% part time or casual) or pensioners (22.3%).

Table 6 – Employment Status of survey respondents and regional population

Employment (n = 1,304)	Northern Rivers respondents (%)
Employed full time	24.6
Employed part time or casual	24.1
Not employed	10.6
Pensioner	22.3
Student (full time or part-time)	9.3
Other	9.0
No response	n = 77

REGULAR TRIPS

As 'journey to work' data collected through the Census provides information about travel for work, the survey focused on travel other than work. Respondents were asked to provide information about their most regular trip other than for travelling to work.

Regular destinations

Respondents who live in the Northern Rivers identified 53 locations that they made regular trips to within the region (Appendix 3). A further 21 travel destinations outside the region were identified, resulting in a total of 74 travel destinations for regular travel. Some respondents identified multiple destinations, resulting in a total of 1,533 visits recorded to the 74 destinations.

Appendix 3 provides the detailed data for destinations while Table 7 shows the following summary for each LGA:

- the number of destinations identified in each LGA;
- the number and percentage of respondents recording a destination to each LGA; and
- the number and percentage of total recorded visits to all the destinations within each LGA.

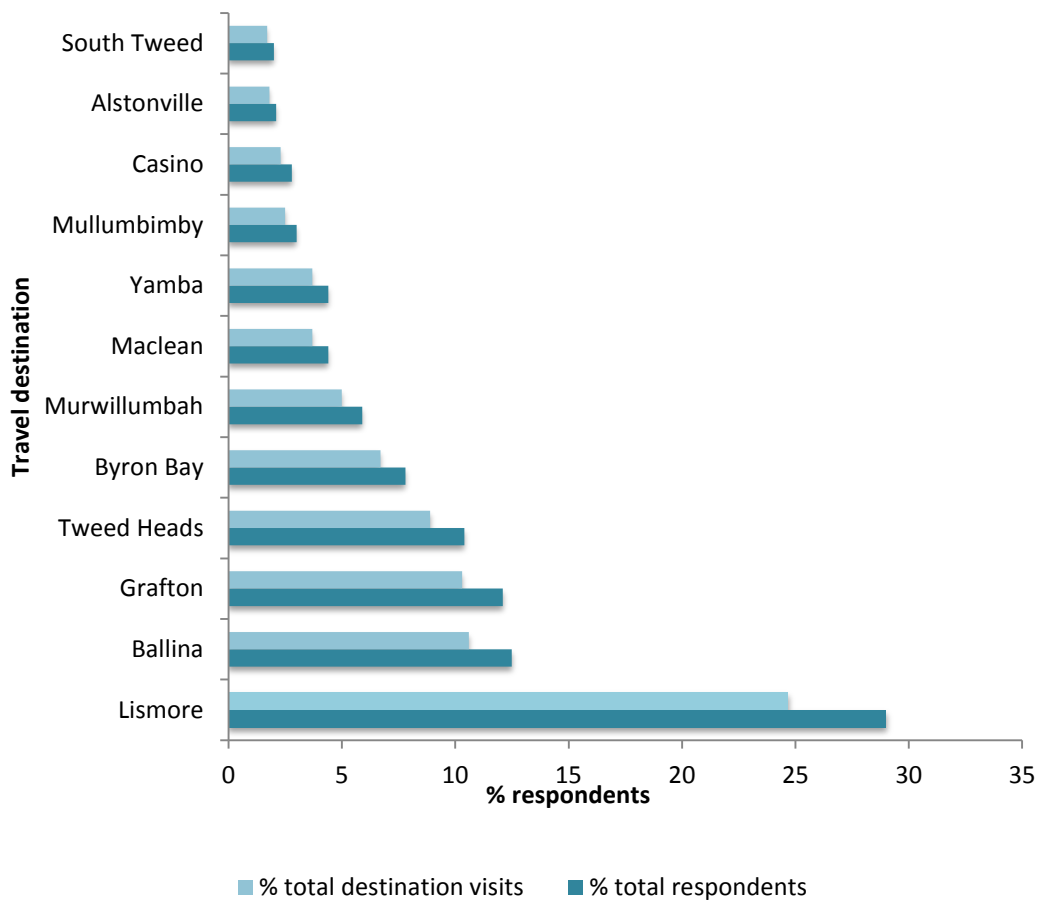
The most frequented destinations were Lismore (26.0%), Clarence Valley (18.7%) and Tweed (18.3%) LGAs. There was some correlation between the sample size of where people live and their destinations. Kyogle and Richmond Valley LGAs, which had the smallest sub-samples, had the least respondents recording the lowest numbers of visits to these LGAs.

Table 7 – Travel destinations by LGA and number of visits

Local Government Area	No. of destinations identified	Respondents		Total visits to identified destinations in the LGA	
		No.	%	No. (n = 1,304)	No. (n = 1,533)
Ballina	5	202	15.5	219	14.3
Byron	8	153	11.7	185	12.1
Clarence Valley	14	253	19.4	286	18.7
Kyogle	2	14	1.1	14	0.1
Lismore	7	388	30.0	399	26.0
Richmond Valley	4	48	3.7	48	3.1
Tweed	13	243	18.6	280	18.5
Not in Northern Rivers	21	47	3.6	102	6.7

The travel destinations that were most popular among survey respondents are shown in Figure 3, depicting locations that were travelled to by more than 2.0% of the survey respondents. This graph shows both the percentage of respondents reporting visiting that destination and the percentage of visits reported out of all 1,533 destinations.

Figure 3 – Most frequented travel destinations by total respondents and total visits



Lismore was frequented by 29.0% of respondents with almost a quarter (24.7%) of the recorded visits. Just over half that number (12.5%) travelled to Ballina (10.6% of total visits), while 12.1% travelled to Grafton (10.3% of visits) and 10.4% to Tweed Heads (8.9% of visits). Other destinations that were recorded more frequently than others, but not shown on this graph include:

- Coffs Harbour and Brisbane (26 respondents recorded visits to this destination);
- Kingscliff (25 respondents);
- Brunswick Heads (23 respondents); and
- Lennox Head (21 respondents).

Of the survey respondents who did not live in the region, 12 respondents recorded frequent trips into the Northern Rivers region as follows:

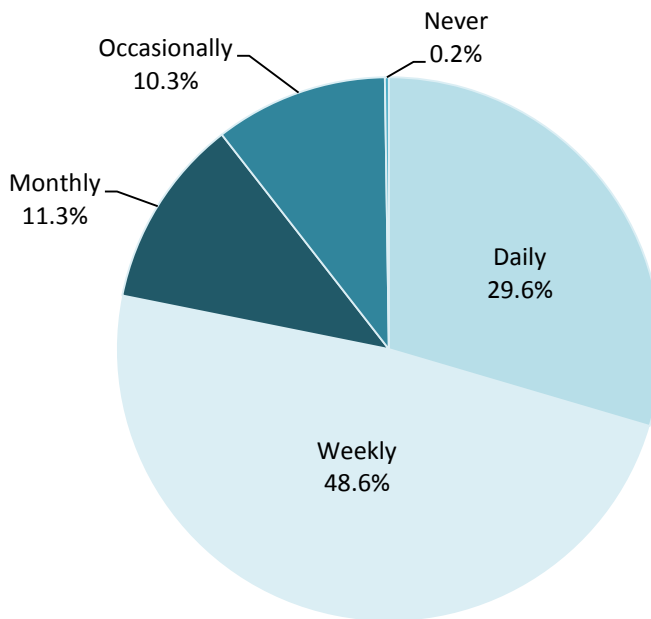
- five trips from Tabulam to Casino;
- one trip from Tabulam to each of the following locations: Urbenville, Bonalbo and Lismore;
- one trip from Drake to Casino;
- one trip to Murwillumbah from Burleigh Heads and Currumbin in QLD; and
- one trip from Palm Beach QLD to Byron Bay.

While this is only a small sample, it highlights a need to better understand the travel patterns in the hinterland of the region, particularly with travel to Casino from outside the region and cross border travel.

Frequency of regular trips

The most regular trip other than for work was made weekly by approximately half (48.6%) of respondents, with 29.6% making it daily. This highlights that these were regular and frequent trips rather than occasional journeys. However, Clarence Valley residents reported similar proportions of respondents travelling weekly (38.7%) and daily (38.3%). There were also much lower proportions of day trips by residents in the Kyogle (3.8%) and Richmond Valley (11.6%) LGAs. Respondents from those LGAs reported twice the levels of 'occasional trips' (21.2% and 20.3% respectively) than the rest of the sample.

Figure 4 – Frequency of regular trips



Travel frequency is reasonably consistent across the other demographic variables, with the following notable differences:

- similar proportions of Aboriginal people and Torres Strait Islanders travelled weekly (38.3%) and daily (31.3%) for their most regular trip;
- respondents who were younger than 18 were more likely to travel daily (57.4%) for their most regular trip than weekly (22.7%);
- more people on low incomes tended to travel daily (49.5% for nil income and 48.0% for those earning \$1-\$199) for their most regular trip other than work, whereas more people on higher incomes made their most frequent non-work travelled weekly (61.9% for incomes of \$1,000); and
- more students travelled daily for their most regular trip other than work (49.1%), with people who were employed full time and pensioners less likely to travel daily (18.5% and 28.7% respectively).

While most travel destinations tended to be visited weekly by about half the respondents, there were some differences, including:

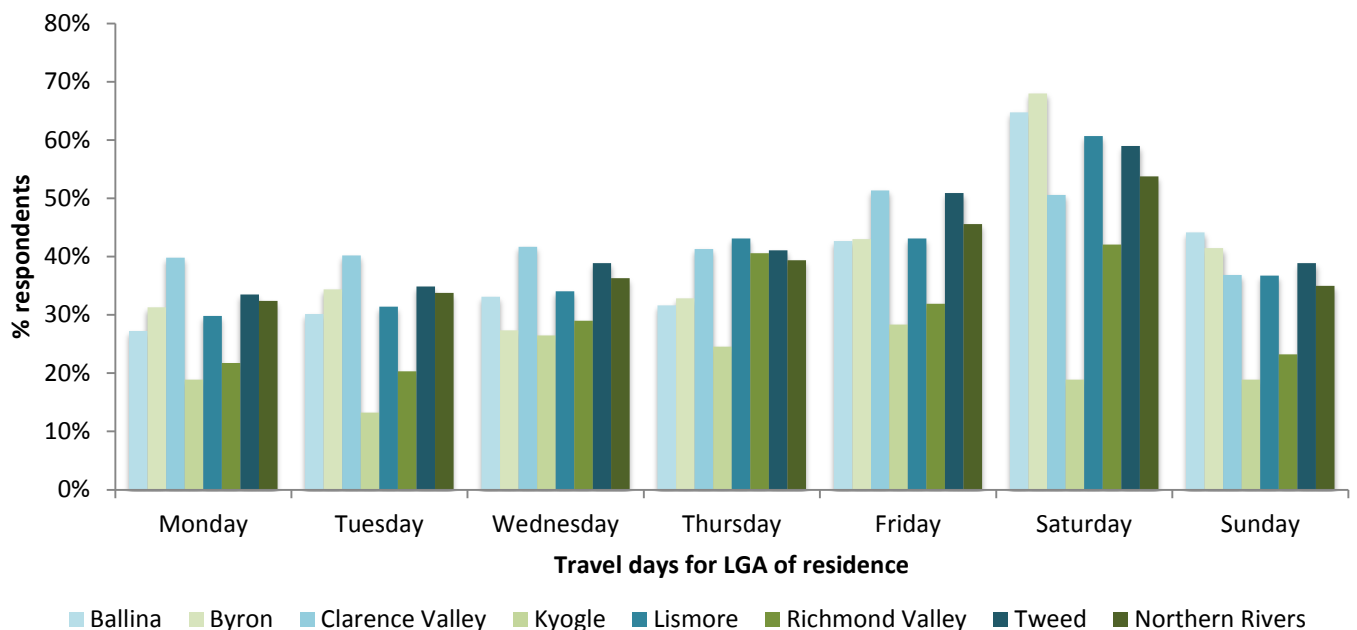
- Similar proportions of respondents travelled weekly and daily to the following locations:
 - Grafton (41.7% and 41.0% respectively);
 - Alstonville (46.4% and 42.9% respectively); and
 - Brunswick Heads (43.5% weekly and daily).

- Of the 11 people travelling to Bangalow, more respondents travelled there daily (54.5%) than weekly (27.3%). This is the same for Maclean with 58.2% travelling there daily and 27.3% travelling there weekly.
- People were more likely to travel to Brisbane and Coffs Harbour on a monthly basis (42.3% and 50.0% respectively) with 42.3% also travelling to Brisbane occasionally.

Most typical day of travel

Respondents were able to choose multiple options for the typical day on which they travelled, and as Figure 5 shows there was some variability across LGAs of residence for the most typical travel day. More than half the respondents (53.8%) made their regular trip for non-work purposes on a Saturday. While Saturday was the most frequent travel day for all LGAs except Kyogle (only 18.9%), a much higher proportion of residents in Ballina (64.7%), Byron (68.0%), Lismore (60.6%) and Tweed (58.9%) LGAs typically travelled on Saturdays, than their counterparts in Richmond and Clarence Valley LGAs. The most typical travel days for Kyogle respondents were Fridays (28.3%) and Wednesdays (26.4%).

Figure 5 – Frequency of travel days based on LGA of residence



In terms of travel destination – and frequency of travel days – for the most-visited travel destinations: Lismore, Ballina, Grafton, Tweed Heads and Byron Bay, there were no major differences to Saturday as the primary day for travel other than for work. However, a higher proportion of people who travelled to Byron Bay made these trips on a Saturday (74.5%), than for the other destinations, which range between 50.9-55.1%. Also, more respondents travelled to Grafton on weekdays, with the highest number of visits to Grafton on Fridays, by over half (55.7%) the respondents who travelled there.

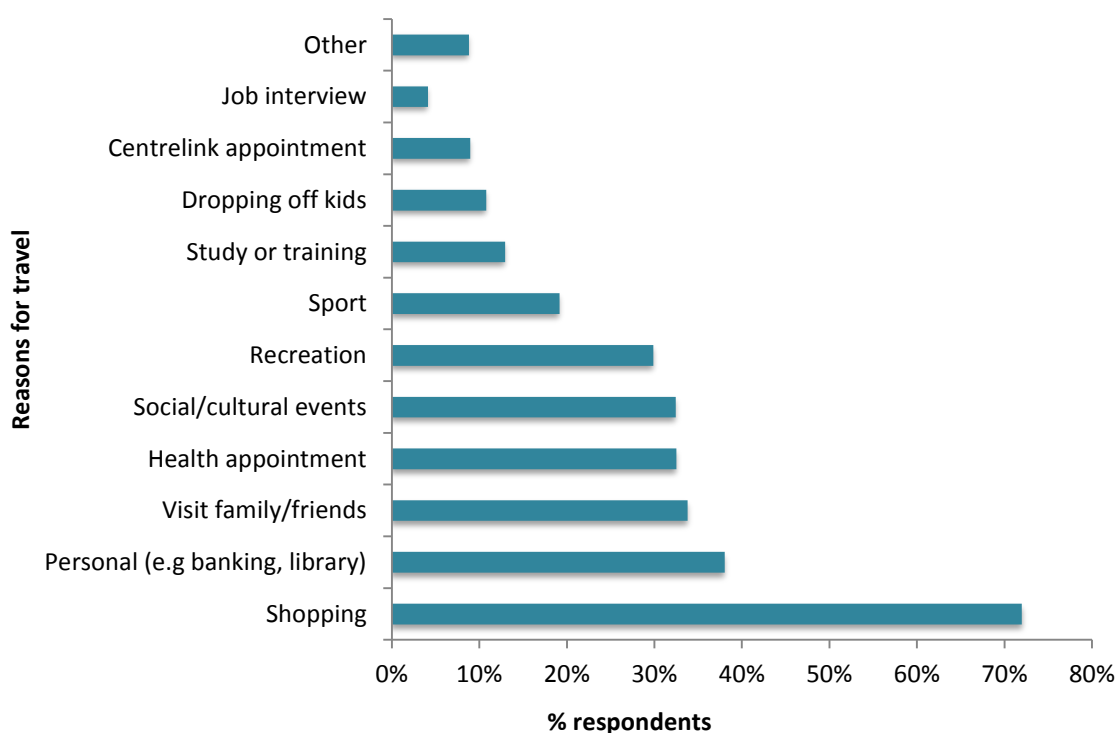
In terms of employment status and days of travel, more employed people travelled on a Saturday than other days, with 75.8% for full time employees and 57.8% for part time or casual employees. Unemployed respondents were more likely to travel on Thursdays and Fridays (50.8% and 50.0% respectively). More pensioners travelled between Tuesdays to Fridays (40.9-46.4%), with only 16.8% reporting Sunday as a day to travel. In terms of income, 69.0% of respondents who earned \$600 - \$999 and 75.7% of

respondents who earned over \$1,000 a week travelled on a Saturday for purposes other than work, compared to 35.7-57.1% for respondents in other income categories. Travel on weekdays is higher for respondents in the lower income categories. In terms of age, Saturday is the day most travelled on by all age groups, except for people in the age cohorts 18-25 and over 65, most of whom travelled on Fridays.

Reasons for travel

Respondents were able to choose multiple options for their reason for making their most regular non-work trip. The primary reason identified for regular trips was for shopping (72.0%), with other main travel motivations being personal reasons (38.0%), visiting family or friends (33.8%), health appointments (32.5%), social/cultural events (32.4%), and recreation (29.9%). Job interviews, Centrelink appointments, transporting children, study/training and sport were not major reasons for regular travel (with between 4.1-19.2% of respondents identifying these options).

Figure 6 – Reasons for travel



Other reasons for undertaking regular trips were identified by 8.8% of respondents and include:

- airport departures/arrivals;
- participating in exercise, community groups, volunteering;
- attending meetings;
- general duties or daily living needs, including going to the tip and paying bills;
- going to specific locations including the beach, child care, church, choir, clubbing, farmers market, gym, hairdresser, landcare, library, rehearsals, TAFE, theatre, yoga;
- job seeking;
- to catch a Countrylink bus;
- holidaying;
- just for travel;
- picking up materials; and
- showing visitors around the area.

The main reasons for travel were fairly similar across all LGAs of residence, but the second main reason for travel by Kyogle respondents was for health appointments rather than personal reasons, with a higher proportion of Kyogle residents (45.3%) than all Northern Rivers residents (32.5%) travelling for this reason. There were also more Lismore residents (43.6%) travelling for recreation than the regional response rate of 29.9%. Another minor variation was that 14.5% of Richmond Valley and 12.8% of Lismore residents travelling regularly for a Centrelink appointment, compared to 9.0% for the region as a whole.

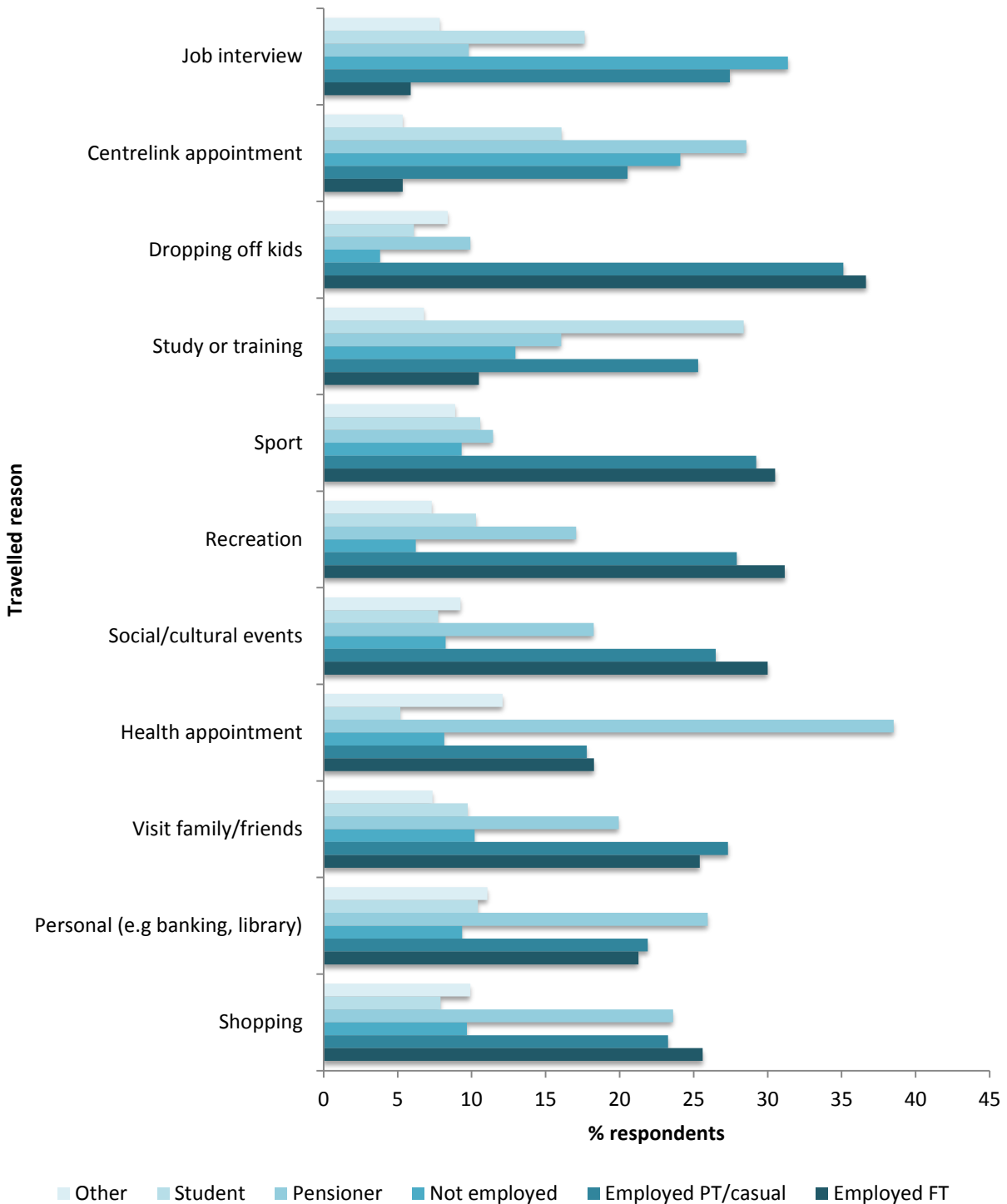
Aboriginal people and Torres Strait Islanders report a higher rate of travelling to visit family or friends at 46.3% (compared to 33.8%) and for Centrelink appointments at 23.9% (compared to 9.0%) than the regional population.

In terms of age, there were a number of differences in terms of reasons for regular travel, with some of the most notable being:

- while the main reason for those who were under 18 years old for making regular trips is shopping (55.6%), the other major travel reasons in rank order were: visiting family or friends (43.0%), sport (33.8%), social/cultural events (32.4%), personal (26.8%) and study or training (23.2%);
- the main reasons for regular travel for those aged 18-24 were: shopping (47.7%), visiting family or friends (46.6%), personal (34.1%), recreation and study or training (both at 30.7%), social/cultural events (26.1%) and health appointments (22.1%);
- health appointments were the second most frequent reason for travel for those aged 65 and older;
- more people aged under 18 travelled for study or training than other age groups (20.2% compared to a 4.3-18.4% in other cohorts);
- of those who travelled regularly for health appointments, 29.5% were over 65 and a similar number were aged 45-54, followed by 18.3% of 55-64 year olds;
- those most likely to travel regularly for social/cultural events, recreation and sport were aged 45-54 (26.5%, 27.5% and 26.9% respectively). This age group was also more likely to travel regularly for job interviews (28.8%) and Centrelink appointments (23.7%); and
- as would be expected, people aged under 24 and over 55 were less likely to be dropping kids off.

It is interesting to note that the equal second reason for regular travel for people on nil incomes (34.0%) was for social/cultural events, visiting family/friends and personal reasons. The second main reason for regular travel for people on incomes over \$1,000 is for social/cultural events, although of the people travelling for social/cultural events, most of them earned \$600-\$999. This is the same for recreation travel, with 25.0% of those travelling for recreation earned \$600-\$999 and only 6.9% on nil incomes travelled for this purpose. While people travelling for study or training tended to be on a range of incomes, those earning \$100-\$199 had the highest proportion who travelled for this reason at 20.4%, with only 4.1% of those earning over \$1,000 travelling for this reason. Of those who travelled regularly for job interviews, a quarter was earning \$200-\$299; and of those who travelled for Centrelink appointments were predominantly earning \$200-\$299 (28.6%) and \$300-\$399 (22.9%).

Figure 7 – Employment status by reasons for travel



Employment status has an impact on reasons for regular travel. Figure 7 highlights that:

- those who travelled for shopping were more likely to be employed (48.9%) or pensioners (23.6%), with students least likely to travel regularly for shopping (7.9%);
- of those who travelled for personal reasons, people who were not employed travelled (9.4%) and students (10.4%) were least likely to have travelled for this purpose;
- of those who travelled for health appointments, 38.5% were pensioners;
- more employed people travelled regularly for social/cultural events, recreation, sport and dropping off kids than people in the other employment categories;

- those who were most likely to travel for study or training were students (28.4%) and part time or casual employees (25.3%);
- of those who travelled for Centrelink appointments, 28.6% were pensioners, 24.1% were not employed and 20.5% were part time or casual employees; and
- those most likely to travel regularly for job interviews were not employed (31.4%), part time or casual employees (27.5%) or students (17.6%).

There is not significant variability between the main reasons for travel and travel destinations. Other than Lismore being the most frequented travelled to destination for all travelled reasons, the following trends were worth noting:

- of those who travelled regularly to shop, only 5.9% travelled to Byron for this purpose; and
- while Lismore is the travel destination most visited by those travelling for recreation (27.7%) and social/cultural events (26.0%), these were also the most popular reasons to travel to Byron Bay for more than half (54.9%) of those who travelled to Byron.

The data indicates that of those who travelled for **health** appointments:

- 51.8% were aged 45-54 or older than 65 (both age groups at 25.9%);
- 22.0% earned \$300-\$399 a week;
- 38.5% were pensioners; and
- 39.2% travelled to Lismore.

The most frequent characteristics of those who travelled to **study** were:

- 20.2% were under 18 years old;
- 18.2% earned \$1-\$199 a week;
- 28.4% were students; and
- 39.1% travelled to Lismore.

Of those who travelled for **Centrelink** (C) appointments or to **job interviews** (J):

- 27.7% (C) and 28.8% (J) were aged 45-54;
- 28.6% (C) and 25.5% (J) earned \$200-\$299 a week;
- 49.6% (C) and 53.7% (J) travelled to Lismore; and
- 28.6% were pensioners (C) and 31.4% (J) were unemployed.

In terms of travelling for **sport**, the most frequent characteristics were:

- 26.9% were aged 45-54;
- 22.4% had weekly incomes of \$600-\$999;
- 59.7% were employed; and
- 27.2% travelled to Lismore.

Type of transport

Respondents were able to identify multiple options for the type of transport used for their most regular trip other than for work. The dependency of our region's residents on cars is clear, with almost seven in 10 (68.9%) of respondents driving and 35.7% as passengers. The limitations of public transport are reinforced, with bus the most common form of public transport used (18.6%) while only 1.3% used a train

for their most frequent trip. Participation in ‘active transport’ was also strong, with 15.4% walking or cycling for their regular trips.

Table 8 – Type of transport used for regular trips

Type of transport used for regular trips	Respondents (%)
Car – as driver	68.9
Car – as passenger	35.7
Public bus	18.7
Walk	9.0
Bicycle	6.4
Taxi	3.8
Hitch hike	2.9
Community Transport	2.9
Carpool	2.8
Train	1.3
Other	2.4
Youth Transport	0.3

A small percentage of respondents (2.4%) indicated other modes of transport, including:

- Countrylink bus;
- friends, neighbours
- mobility scooter;
- motorcycle;
- specific buses;
- truck;
- wheelchair; and
- the XPT passenger service to Sydney and Brisbane.

Types of transport were reasonably consistent for respondents from the different LGAs, with the following differences:

- more respondents who live in Byron Shire hitchhike (10.2%) and cycle (11.7%) than walk (5.5%), and no Byron respondents reported using taxis, community or youth transport;
- Kyogle residents reported low rates of walking (1.9%) and cycling (0%); and
- the highest rates of train usage were reported by Tweed residents at 2.7% followed by the Clarence at 1.9%. No respondents from Ballina or Kyogle reported using the train.

In terms of other demographic differences, as would be expected, of those who drive a car, only 2.8% were under 18 and 4.8% were 18-24 years old. Those under 18 were also the largest proportion of car passengers (23.0%), car poolers (32.4%) and of those who walk (22.0%). The largest users of community transport were people aged 65 and older (63.2%). Those who used a bicycle were mostly aged 45-54 (20.5%) and 35-44 (18.1%). Aboriginal people and Torres Strait Islanders reported higher rates of using a car as a passenger (52.2%) than as a driver (37.3%), and of using buses (31.3%), walking (23.9%), taxis (11.9%) and hitchhiking (10.4%) for their main transport than the population as a whole (as shown in Table 8).

The lowest percentage of respondents on higher incomes (over \$1,000) travelled in cars as passengers (8.6%), used a public bus (1.2%) or carpoled (2.7%). Of those who drive cars, more than half (54.7%) were employed, with students (5.7%) and unemployed people (6.1%) least likely to drive a car as their regular transport. Pensioners (33.2%) and part time or casual employees (20.1%) were the main users of buses. The main users of carpooling and hitchhiking for travel were part time or casual employees (29.7% for carpooling, 28.9% for hitchhiking), students (21.6% carpool, 21.1% hitchhiking) and unemployed people (18.9% carpool, 26.3% hitchhiking).

In summary, those who **drive cars** were mostly:

- employed (54.7%);
- earning \$600-\$999 a week (22.6%); and
- aged 45-54 (26.2%);

whereas those who were **passengers in cars** were mostly:

- part time or casual employees (25.6%);
- earning \$1-\$199 a week (16.1%); and
- and under 18 (23.0%).

Of those respondents who **used a public bus** as their main type of transport:

- 33.2% were pensioners
- 51.6% had a weekly incomes of less than \$299;
- and 24.2% were under 18 years old and 13.5% were over 65.

Walkers and car-poolers:

- were mostly part time or casual employees (26.3% and 29.7% respectively);
- had weekly incomes of \$1-\$199 (20.3% and 29.7%); and
- under 18 (22.0% and 32.4%)

whereas **cyclists** tended to be:

- employed (full time, part time and casual 44.6%);
- earning over \$1,000 a week (18.1%); and
- aged 45-54 (20.5%).

The most common features of **those who use taxis** is that they:

- were pensioners (42.9%);
- had weekly incomes of \$300 - \$399 (20.4%); and
- most likely to be either over 65 (18.4%) or 18-24 (18.4%);

while those who **hitchhike** were mostly:

- part time and casual employees (28.9%) or unemployed (26.6%)
- earning \$300 - \$399 a week (28.9%); and
- aged 45 – 54 (26.3%).



Picture: Linda Wirf NRSDC

BARRIERS TO TRAVEL

Similar proportions of respondents identified there were trips they ‘would like to make’ (50.4%) but couldn’t because of lack of transport. For those who made their regular trip as the driver of a car, 40.8% identified there were trips they would like to make but couldn’t; whereas for those as passengers in cars, this is 55.9%. People who identified public bus as their main form of transport were more likely to be restricted with 79.0% unable to make trips they wanted to, due to lack of transport. There were also higher proportions of respondents unable to make trips due to lack of transport who were:

- living in Byron Bay (64.8%);
- under 18 (59.0%) or 18-24 years old (60.7%);
- on low incomes, earning less than \$399 per week (ranging from 57.3%-66.4% for the income categories of less than \$399, including nil income);
- not employed (63.5%), pensioners (60.1%) or students (58.7%); and
- Aboriginal and Torres Strait Islanders (68.9%).

Reasons you would like to use transport but can’t

Respondents were asked to identify multiple reasons for which they would like to use transport, but couldn’t. The main reasons identified were: social/cultural events, shopping, recreation visiting family/friends, personal, and health appointments. These were also the main reasons respondents identified for making regular non-work trips.

Table 9 – Reasons to travel, but can’t

Reasons to use transport, but unable to	Respondents (%)	Reasons to use transport, but unable to	Respondents (%)
Social / cultural events	31.9	Study or training	13.1
Shopping	30.4	Sport	10.2
Recreation	26.5	Centrelink Appointment	6.8
Visit family / friends	22.8	Job interview	6.1
Personal (e.g. banking, library)	21.8	Dropping off kids	5.1
Health Appointment	20.8	Other	9.4

Other reasons for which respondents would have liked to use transport for but were unable to include:

- airport, including airport transfers (16 respondents noted this reason);
- entertainment;
- day trips;
- trips to locations such as the beach, markets, festivals, gigs, creek, different places out of town, hospitals;
- environment, saving petrol;
- experience for children;
- trips for purposes including funerals, swimming, going out in the evening, hairdresser, collecting things, attending meetings, dancing lessons, yoga;
- car service;
- holidays;

- prefer not to drive at night;
- to prevent drink driving;
- one car family; and
- a small number of respondents noted work-related purposes.

Reasons respondents **would like to** have used transport for **but couldn't** were fairly consistent for respondents from the different LGAs, with the following differences:

- **shopping** was the most common reason for residents from the Clarence Valley (28.3%), Kyogle (47.2%) and Richmond Valley (36.2%) LGAs;
- **health** appointments (37.7%) and social/cultural events (37.7%) were the next highest reasons reported by Kyogle residents;
- the highest rates of wanting to travel for **sport** were reported by Byron (14.1%) and Clarence Valley (13.8%) residents, with the lowest reported by those living in Ballina (5.1%) and Kyogle (5.7%);
- **study** or **training** was a reason for travel that cannot be met by respondents in Byron (25.0%) and Richmond Valley (23.2%); and
- Richmond Valley respondents report a much higher rate of being unable to travel to **Centrelink** appointments, at 15.9% compared to 6.8% for the entire region.

Indigenous respondents reported higher rates of being unable to travel than the regional population for:

- **shopping** (41.8% compared to 30.4%), which is similar for those who were not employed (41.5%) and pensioners (40.5%);
- **visiting family/friends** (43.3% compared to 22.8%);
- **personal reasons** (31.3% compared to 21.8%);
- **health** appointments (31.3% compared to 20.8%);
- **study** or **training** (22.4% compared to 13.1%);
- **sport** (25.4% compared to 10.2%); and
- **Centrelink** appointments (20.9% compared to 6.8%).

It is also interesting to note that people travelling to Byron as a destination reported higher rates of wanting to travel but couldn't than the regional population for **social/cultural** events (55.9%), **shopping** (42.2%), **recreation** (42.2%), **visiting family/friends** (35.3%), **personal** reasons (30.4%) and **study** or **training** (24.5%). There were also higher rates of being unable to travel to Lismore (18.3%) and Ballina (17.2%) for **study** or **training**, both of which have large educational facilities.

There were no major distinctions between the reasons respondents wanted to travel but couldn't based on age, but it is interesting to note there were more people aged 45-54 unable to travel for **recreation** (30.7%) and **social/cultural events** (28.0%) than other age groups. Almost a quarter (25.6%) of those who wanted to travel but couldn't for **health appointments** were aged 65 or older.

In terms of weekly income, 59.5% of those who would have liked to travel but couldn't for **job interviews** earned less than \$299 per week. In general, those who were unable to travel for all reasons except **Centrelink** appointments and **job interviews** were most likely to be employed (either full time, part time or casual). Pensioners make up the largest proportion of those who wanted to travel but couldn't for **Centrelink** appointments (26.7%), followed by unemployed people (22.1%). Part time and casual

employees comprised 19.8% of that group and the highest proportion of those unable to travel but couldn't for **job interviews** (27.8%), followed by unemployed people (26.6%).

Those who would like to travel for **health appointments** but were unable to were most likely to be:

- pensioners (39.6%);
- over 65 (25.6%); and
- earning \$300-\$399 a week (24.2%).

Those who were unable to travel for **study** or **training** tended to be:

- part time or casual employees (28.7%);
- aged 45-54 years (24.7%); and
- earning \$400-\$599 a week (22.6%);

whereas those unable to travel for **sport** were mostly

- under 18 (22.9%);
- earning a weekly income of \$1-\$199 (22.7%); and
- employed on a part time or casual basis (32.6%).

The profiles of most of those who would like to travel but can't for **Centrelink appointments** and **job interviews** were slightly different. 47.1% of those aged 35-54 were unable to travel for Centrelink appointments, while 22.5% of 45-54 year olds were unable to travel for job interviews. 29.6% of those on weekly incomes of \$200-\$299 could not attend Centrelink appointments while 28.4% of those on incomes of \$1-\$199 were unable to travel for job interviews; and 26.7% of pensioners were unable to travel for Centrelink appointments, compared to 26.6% of part time or casual employees who were unable to travel for job interviews.

Barriers to using public transport

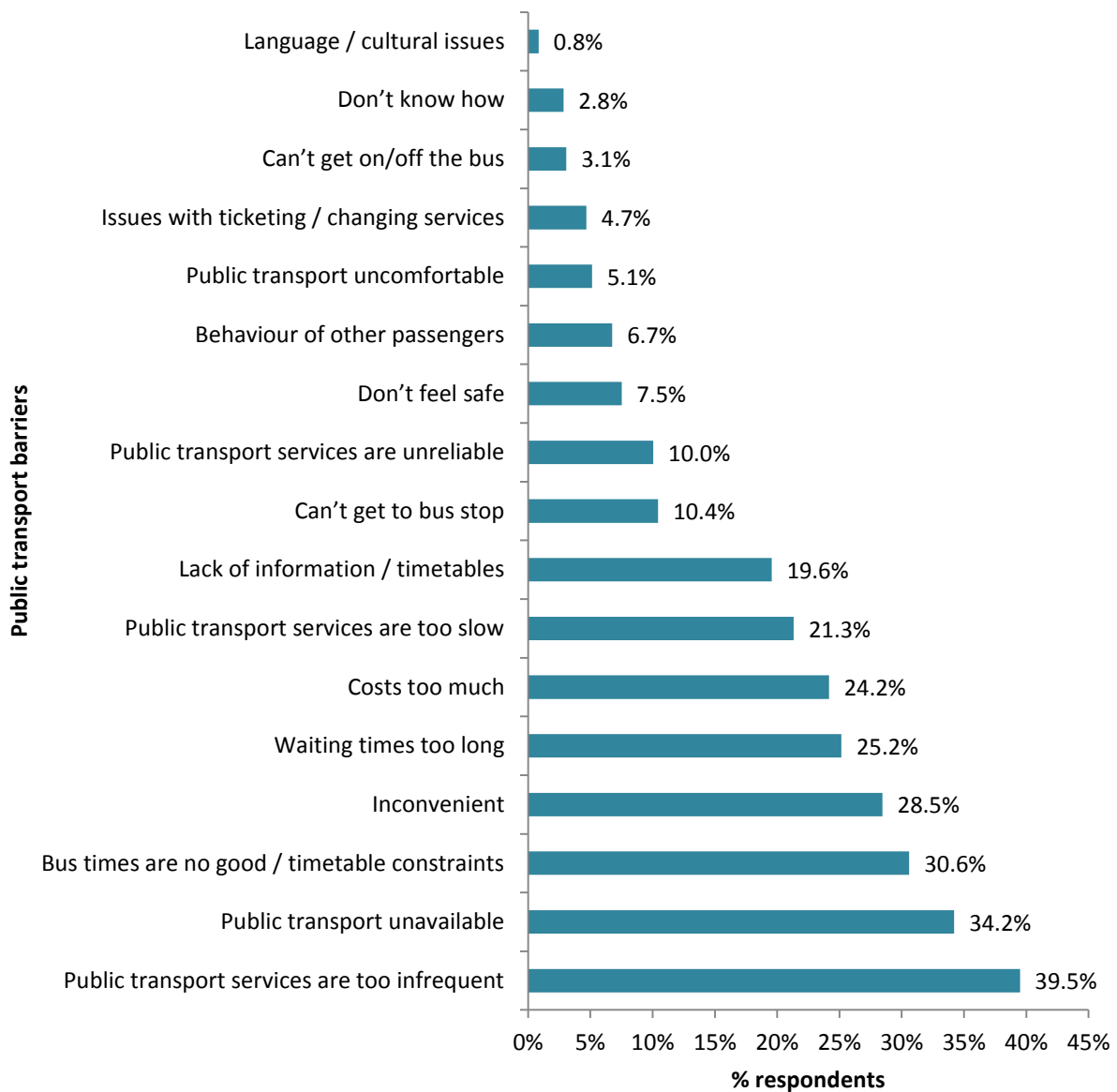
Respondents were asked to identify barriers that stopped them from using public transport and could give more than one reason. The main barrier was **service provision**, with frequency of service (39.5%), service unavailability (34.2%), timetabling constraints (30.6%), inconvenience (28.5%), long waiting times (25.2%), cost (24.2%), slowness (21.3%) and lack of information/timetables (19.6%) identified by most respondents.

Issues such as **accessibility** of bus stops (10.4%), **safety** (7.5%) and **comfort** (5.1%) were noted as barriers to use by far fewer respondents. It is also encouraging, that social factors such as behaviour of passengers and language/cultural issues were not identified by most respondents. While 45.5% of those who identified language/cultural barriers were from a non-English speaking background, no Indigenous respondents identified this issue.



Picture: Linda Wirf NRSDC

Figure 8 – Barriers to using public transport



The majority of people who identified the main barriers of **infrequency, unavailability and timetable constraints** were travelling to Lismore (30.7%, 32.3% and 31.8% respectively), employed full time (28.2%, 31.8% and 23.8%), earning \$600-\$999 a week (23.3%, 25.6% and 19.8%) and aged 45-54 (28.2%, 31.6% and 28.6%).

Those who were most likely to identify **cost** as a barrier to using public transport were aged 45-54 (21.6%), earning between \$1-\$199 per week (18.9%), travelling to Lismore (33.3%) and part time or casual employees (28.3%).

The people who mostly identified **not being able to get to a bus stop** as a barrier to using public transport were pensioners (27.9%), earning \$1-\$199 per week (17.6%), and either under 18 or over 65 (19.1% for both age cohorts).

Almost one in five (19.6%) of respondents indicated that lack of information and timetables were a barrier to public transport use, however analysis of the many comments made about a lack of services that are

known to exist, indicates the need for better information about services, for instance via a 'one stop shop' or a 131500 telephone service.

Comments about other barriers to using public transport tended to reinforce the reasons above and some comments highlighted additional barriers, including:

- unable to take bicycles on buses;
- alcohol free zones on public transport;
- do not feel safe waiting at bus stop;
- difficult for transporting children;
- distance to bus stops;
- wheelchair access limitations;
- limitations in travel destinations;
- changes in buses and times;
- lack of services after hours, on weekends and holidays;
- restrictions with eating and drinking.



Picture: courtesy Sustain TRANSPORT / NRSDC

"...for me to catch the bus from Nimbin to Lismore it costs \$18. I can drive for cheaper than that and I own a V8!"

"[we need] more cycle paths, or a small verge on the side of the roads. I would ride everywhere if it was safer."

"If I could use a bicycle/bus combination I would use public transport a lot more. That is, take the bus to my destination ... and then use my bicycle to get around between places once I'm there. In some places buses have front racks which

"Better public transport unites a community and makes the area more accessible to the elderly, those not driving and as an outing for parents/children. With such concern for environment in this area if public transport was more accessible it would be a much more popular mode of transport."

"I think greater investment in cycle ways and walkways would be good - and not just on the main roads. I live a few kilometres out of town (Alstonville) and would ride or walk into town, but currently it's not safe to do so. Roads are too narrow for cyclists and there are no walkways."

"As a youth worker the YOWI voucher system is a really fantastic program for disadvantaged young people as it makes it possible for them to access public transport."

"I would like to use more public transport but I live 6 kms from village and pick-up point so need to use car to get to village. Maybe we need more little minivan style buses like bemos in Bali which are

"It is very sad that so much money is put into building freeways so that everyone can rush about. I enjoy driving slower on smaller roads as well as riding on [public transport] where I can read a book in transit."

COMMENTS

Increasing use of public transport

Respondents were asked to provide comments about what, if anything would help increase their households' use of public transport. Many respondents identified multiple service issues, and a summary of the numbers of common reasons is recorded in Table 10. Increasing the regularity/frequency of services (27.4%), service availability (17.5%) and comparative cost (15.8%) of public transport were identified as the most important factors that could increase public transport use.

Some respondents recommended the re-introduction or widening of rail networks and services (9.5%) within the region. The limited availability of after-hours public transport was noted as a current barrier with 72 respondents noting that later night/earlier morning services (8.6%) and weekend/public holiday (7.0%) transport would increase use.

Respondents identified that while better timetables (4.9%) and promotion of current public transport services (4.6%) were likely to increase their use of public transport, access to bus stops or appropriate drop off points was likely to continue to impede public transport usage for 6.2% of respondents.

Table 10 – What would help increase public transport use?

Comment Category (n = 842)	No. Respondents	% Respondents
Frequency/regularity	231	27.4
Availability	147	17.5
Cost/comparative cost	133	15.8
Train services	80	9.5
Late night/early morning services	72	8.6
Weekend/public holiday availability	59	7.0
Access i.e. to bus stop/drop off points	52	6.2
Other	42	5.0
Better timetable (including better printing)	41	4.9
Public transport other than school buses	40	4.8
More promotion of services available (including phone app)	39	4.6
Reliability	34	4.0
More convenient times	31	3.7
More destinations	29	3.4
More direct routes	28	3.3
Express/faster service	27	3.2
More public transport	24	2.9

Comment Category (n = 842)	No. Respondents	% Respondents
Convenience	11	1.3
Luggage, e.g. bicycle, shopping, prams	11	1.3
Safety/security	8	1.0
Flexible ticketing	8	1.0
Connecting services i.e. airports, trains and other buses	8	1.0
Efficiency	7	0.8
Disability access	6	0.7
Quality	6	0.7
Cleaner/more comfortable	4	0.5
Stop at hospitals	3	0.4
Integration with other services i.e. ticketing	3	0.4
Parking at bus stop	2	0.2
Road Infrastructure	1	0.1

General transport comments

Respondents were asked to provide any other general comments about transport, particularly public transport or community transport in the region. Almost half these comments were about the lack of services or the lack of use of current services (44.5%), with more specific barriers about the lack of transport identified due to the lack of rail services (14.6%), costs (9.7%), timing (9.2%) and information/promotion (5.7%). A range of other barriers, such as flexibility of services, security, access, shelters, ticketing and convenience of service were identified by 9.8% of those who responded to this question (Table 11).

Table 11 – General comments about transport in the Northern Rivers region

General transport comments (n = 652)	No. Respondents	% Respondents
Access (pick-up or drop off)	9	1.4%
Age/mobility/disability issues	13	2.0%
Better bike tracks	21	3.2%
Better bus shelters	9	1.4%
Call for rail networks	95	14.6%
Cost/comparative costs	63	9.7%
Current services non-existent or insufficient/under supported	290	44.5%
Feel that rural areas/smaller communities disadvantaged	27	4.1%

General transport comments (n = 652)	No. Respondents	% Respondents
Important for social inclusion/ transport should support local events (including at night or on weekends)	25	3.8%
Inconvenient (luggage/shopping bags/bikes/prams)	6	0.9%
More targeted – smaller more regular buses	18	2.8%
Need extended hours of service	60	9.2%
Praise for community transport	18	2.8%
Praise for current public transport system	18	2.8%
Preventing or hindering access to educational, vocational opportunities	28	4.3%
Promotion and information	37	5.7%
Safety/security	13	2.0%
Should be encouraged for environmental and efficiency benefits	12	1.8%
Ticketing issues (including border crossing/multi-service)	6	0.9%
Traffic/road infrastructure/ time impact	26	4.0%
Other/not applicable	62	9.5%

While 14.3% expressed concerns about transport disadvantage, particularly with respect to education, employment and social inclusion, 7.4% of respondents provided positive feedback on the current public and community transport services, and/or noted the need to encourage these services for environmental and efficiency benefits.

“As a Public Bus Driver, it is very important for people to be made aware of the services that are available to them. It must be very frustrating if the information is not readily available. Many people have come up to me over the years and expressed surprise that the bus route I drive between Murwillumbah and Nimbin even exists.”



Picture: Linda Wirf NRSDC

“If public transport ran on weekends, especially late afternoon and nights I would definitely use more public transport and head into Byron bay more often. I have recently moved to Ballina from the Hunter Valley and the lack of public transport is the only fault I have of the northern rivers area!!”

“Create an environment in which the community are supported and encouraged to develop solutions to transport challenges. This survey is a great start.”

MAJOR TRAVEL PATTERNS

Appendix 5 provides detailed travel network maps of the survey responses. To ensure adequate sample sizes for this mapping, areas – often those in close proximity – were aggregated. However in some instances, such as the Inland Hinterland, this was not possible as individual locations were quite remote from each other, although they were in the western part of the region. It is acknowledged that there is a loss of data integrity by this aggregation, but due to the large number of individual residential localities it was necessary to try and determine travel patterns.

The major travel patterns that emerged are shown in Figure 9. This highlights the following strong travel flows to:

- **Lismore**, predominantly from Nimbin, The Channon/Dunoon area, Casino, Ballina, Richmond Valley Coast and Ballina;
- **Ballina** from Lismore, Alstonville, Lennox Head and Richmond Valley Coast;
- **Tweed Heads** from the Tweed Coast, Terranora area, Murwillumbah and North Byron Coast;
- **Casino** from the Inland Hinterland;
- **Grafton** from Maclean, Yamba, south, north and west of Grafton; and
- **Maclean** from Yamba and Iluka.

Figure 9 also highlights strong internal travel patterns within a locality and these are shown as numbers in red squares next to the town or locality name. These trends were partly impacted by the data aggregation, but in order of trip numbers people travelled with the following areas:

- **Lismore** (55 trips);
- **Grafton** area (54 trips);
- **Ballina** area (30 trips);
- **Murwillumbah** area (25 trips);
- **Maclean** area (23 trips);
- **Tweed Coast** (18 trips);
- **Tweed Heads** (16 trips);
- **Yamba** area (16 trips); and
- **Mullumbimby** area (15 trips).

Figure 9 – Major travel patterns within the Northern Rivers



ACRONYMS

CWA	Country Women’s Association
DAISI	Disability and Aged Information Service Inc.
DEEWR	(Australian) Department of Education, Employment and Workplace Relations
LGA	Local government area
n	Symbol to denote sample size
NORWACS	Northern Rivers Women and Children’s Services
NRSDC	Northern Rivers Social Development Council
RED Inc	Realising Every Dream, Incorporated
RDA-NR	Regional Development Australia –Northern Rivers
SNR	Sustain Northern Rivers

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- Northern Rivers Social Development Council (2012) *The Northern Rivers Youth Census – Report of Findings*
- Transport for NSW (2013) *Mid North Coast Regional Transport Plan*
- Transport for NSW (2013) *Northern Rivers Regional Transport Plan*
- Transport for NSW (2013) *Casino to Murwillumbah Transport Study*
- Transport for NSW (2012) *NSW Long Term Transport Master Plan*, State of New South Wales through the Director General of Transport for NSW

APPENDIX 1: DISTRIBUTION OF HARD COPY SURVEYS

1,400 hard copies of the survey were distributed to the following 68 organisations and offices, along with an information poster and reply paid envelopes.

Ability, Inc.	State Member for Lismore
ACE Community College Byron	Federal Member for Page
Anglicare North Coast Inc	State Member for Tweed
Ballina District and Community Services Association	Men and Family Centre
Ballina Interagency	Mid Richmond Neighbourhood Centre
Ballina Occupational Therapy	Mountainview Retirement Village
Ballina Youth Service	Muli Muli Local Aboriginal Land Council
Ballina-Sustainability Planner	Mullumbimby Community Garden
BAT Bus Treelands Drive Community Centre	Mullumimby Neighbourhood Centre
Bonalbo Aboriginal Corporation	Murwillumbah Neighbourhood Centre
Bunjum Aboriginal Co-op, Ballina	Nimbin Neighbourhood Centre
Busways (Grafton)	North Coast Community Housing
Byron Council	Northern Rivers Community Health
Byron Youth Service	NORWACS
Casino Neighbourhood Centre	NRSDC
Clarence Library	On Track Community Programs
Countrylink	Pottsville Neighbourhood Centre
CWA Far North Coast Group	RDA – Northern Rivers
DAISI	Reconnect and Switch Youth Programs
DEEWR	RED Inc
Family Support Service	Richmond Tweed Regional Library
Grafton Family Referral Service	Richmond Valley Council
Grafton Interagency	South Grafton School of Arts
Kyogle Council	Southern Cross University
Kyogle Care Connections	Strategic and Community Services Group
Kyogle Youth Action	TAFE Kingscliff
Lismore Aboriginal Land Council	TAFE Lismore
Lismore Byron Community College	Tweed Council
Lismore City Lions Club	Tweed Family Centre
Lismore Education Office	Waller's Bus Co (Grevillea)
Lismore Neighbourhood Centre	Women's Health Matters
Lismore Transit Centre	Woodburn Chamber of Commerce
State Member for Ballina	Yamba Community Garden
State Member for Clarence	YWCA Casino & Lismore

APPENDIX 2: SURVEY TOOL

Northern Rivers Transport Survey

1. Please tell us about your most regular trip, other than travelling for work

- a. What is the town or major centre you travel to or visit the most other than for going to work (e.g. Lismore, Alstonville, Uki)?

.....

- b. How often do you make your most regular trip that is not for work?

Daily Once a week Once a month Occasionally Never

- c. What days do you typically make your most regular trips that are not for work?

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

- d. Why do you make your most regular trips, other than for work?

Shopping Centrelink appointment Personal (e.g. banking, library)
 Sport Health appointment Social/cultural events
 Recreation Dropping kids off Visit family/friends
 Study or training Job interview Other (please specify)

2. What type of transport do you use for your most regular trip other than work?

Car – as driver Car – as passenger Public bus
 Taxi Train Community Transport
 Bicycle Walk Carpool
 Hitch hike Youth transport Other (please specify)

3. Are there trips you would like to make, but can't because of lack of transport?

Yes No

4. Which of these reasons would you like to use transport for, but can't? (tick all that apply)

Shopping Centrelink appointment Personal (e.g. banking, library)
 Sport Health appointment Social/cultural events
 Recreation Dropping kids off Visit family/friends
 Study or training Job interview Other (please specify).....

5. Do any of these issues or barriers stop you from using public transport (PT)? (tick all that apply)

Don't feel safe on PT PT unavailable here Issues with ticketing /changing services
 PT uncomfortable Language/cultural issues Lack of information/timetables
 Can't get to a bus stop Costs too much PT services are too infrequent
 PT services are too slow Waiting times too long Behaviour of other passengers
 Inconvenient Can't get on/off the bus Bus times are no good/timetable
 Don't know how PT services are unreliable constraints

Other (please specify).....

6. What, if anything would help increase your household's use of public transport?

.....

7. Do you have any other comments about transport (including public transport or community transport) in the area?

.....

8. Where do you live (town, suburb, village or community)?

.....

9. Are you (please tick)

Male Female

Aboriginal or Torres Strait Islander From a non-English speaking background Neither

10. How old are you?

under 18 18 - 24 25 -34 35 - 44 45 - 54 55 - 64 over 65

11. What is your weekly income?

Nil income \$1 - \$199 \$200 - \$299
 \$300 - \$399 \$400 - \$599 \$600 - \$999 over \$1,000

12. What is your employment status?

Employed full time Employed part time or casual Not employed
 Pensioner Student full time or part time Other

APPENDIX 3: WHERE THE RESPONDENTS LIVE

There was significant detail provided by respondents on their place of residence. This appendix details the locations defined by people, and also defines the recoded locations for further analysis. Where possible, areas have been recoded within each LGA, but in some instances to establish a sufficient sample size locations have been grouped across multiple LGAs.

Ballina LGA

Ballina LGA (n=135)	% (Ballina LGA)	No.	Recode Area	% (Ballina LGA)	No.
Alstonvale	0.7	1	Alstonville and surrounds	25.9	36
Alstonville	16.9	23			
Rous	0.7	1			
Uralba	0.7	1			
Wollongbar	7.4	10			
Ballina	28.7	39	Ballina	43.0	58
Ballina Heights	0.7	1			
East Ballina	9.6	13			
Shaws Bay	0.7	1			
West Ballina	2.9	4			
Cumbalum	1.5	2	Ballina hinterland	5.9	8
Fernleigh	0.7	1			
Newrybar	0.7	1			
Teven	0.7	1			
Tintenbar	1.5	2			
Tuckombil	0.7	1			
Lennox Head	11.8	16	Lennox Head area	16.3	22
Skennars Head	4.4	6			
Cabbage Tree Island	1.5	2	South Ballina	8.9	12
Meerschaum Vale	2.9	4			
Wardell	4.4	6			

Byron LGA

Byron LGA (n=89)	% (Byron LGA)	No.	Recode Area	% (Byron LGA)	No.
Bangalow	2.4	3	Bangalow and surrounds	14.2	16
Clunes	4.7	6			
Coopers Shoot	0.8	1			
Coorabell	0.8	1			
Eureka	1.6	2			
Federal	2.4	3			
Googengerry	0.8	1			
Nashua	0.8	1			
Byron Bay	10.2	13	Byron Bay and surrounds	21.3	23
Ewingsdale	0.8	1			
Suffolk Park	10.2	13			
Main Arm	3.1	4	Mullumbimby	42.5	27
Mullumbimby	34.6	44			
Myocum	2.4	3			
Upper Main Arm	0.8	1			
Wilson's Creek	1.6	2			
Billinudgel	0.8	1	North Byron coastal area	22.8	23
Brunswick Heads	7.1	9			
New Brighton	0.8	1			
Ocean Shores	11.0	14			
South Golden Beach	3.1	4			

Clarence Valley LGA

Clarence Valley LGA (n=266)	% (Clarence Valley LGA)	No.	Recode Area	% (Clarence Valley LGA)	No.
Clarenza	1.1	3	Grafton and surrounds	30.2	81
Grafton	22.8	61			
Great Marlow	0.7	2			
South Grafton	4.1	11			
Swan Creek	0.7	2			
Townsend	0.7	2			

Clarence Valley LGA (n=266)	% (Clarence Valley LGA)	No.	Recode Area	% (Clarence Valley LGA)	No.
Ashby	1.9	5	Maclean and surrounds	22.5	60
Brooms Head	0.4	1			
Gulmarrad	6.0	16			
Harwood	1.5	4			
Harwood Island	0.4	1			
Ilarwill	0.7	2			
James Creek	1.1	3			
Lawrence	2.2	6			
Maclean	6.7	18			
Southgate	0.4	1			
Woodford Island	1.1	3			
Angourie	0.4	1	Yamba and surrounds	20.5	55
Palmers Channel	1.1	3			
Palmers Island	0.7	2			
Wooloweyah	0.7	2			
Yamba	17.6	47			
Goodwood Island	0.4	1	Iluka and surrounds	4.9	13
Iluka	2.2	6			
Mororo	0.4	1			
Woombah	1.9	5			
Copmanhurst	2.6	7	West of Grafton and Clarence River	7.1	19
Ramornie	1.9	5			
Seelands	0.4	1			
Waterview Heights	2.2	6			
Tucabia	1.5	4	North of Grafton, east of Pacific Highway	4.1	11
Ulmarra	2.6	7			
Coaldale	0.4	1	North of Grafton, west of Pacific Highway	4.5	12
Gurranang	0.7	2			
Junction Hill	1.9	5			
Mountain View	0.4	1			
The Pinnacles	0.7	2			
Whiteman Creek	0.4	1			

Clarence Valley LGA (n=266)	% (Clarence Valley LGA)	No.	Recode Area	% (Clarence Valley LGA)	No.
Blaxland Flat	0.4	1	South of Grafton, west of Pacific Highway	3.4	9
Braunstone	0.4	1			
Coutts Crossing	1.5	4			
Glenreagh	0.4	1			
Lanitza	0.4	1			
Nymboida	0.4	1			
Diggers Camp	0.4	1	South of Grafton, east of Pacific Highway	2.2	6
Glenugie	0.4	1			
Halfway Creek	0.4	1			
Pillar Valley	0.7	2			
Wooli	0.4	1			
Ewingar	0.7	2	Inland Hinterland (non-LGA group)	0.7	2

Kyogle LGA

Kyogle LGA (n=53)	% (Kyogle LGA)	No.	Recode Area	% (Kyogle LGA)	No.
Cawongla	1.9	1	Kyogle	45.3	24
Geneva	1.9	1			
Kyogle	41.5	22			
Barkers Vale	7.5	4	N Nimbin, Kyogle and surrounds (non-LGA group)	20.8	11
Wadeville	11.3	6			
Warrazambil Ck	1.9	1			
Afterlee	1.9	1	Inland hinterland (non-LGA group)	32.1	17
Bonalbo	11.3	6			
Dyraaba	1.9	1			
Old Bonalbo	3.8	2			
Urbenville	7.5	4			
Tunglebung	1.9	1			
Woodenbong	3.8	2			
Bentley	1.9	1	West of Lismore (non-LGA group)	1.9	1

Lismore LGA

Lismore LGA (n=188)	% (Lismore LGA)	No.	Recode Area	% (Lismore LGA)	No.
Chilcotts Grass	0.5	1	Lismore	49.5	95
East Lismore	2.7	5			
Girards Hill	0.5	1			
Goonellabah	16.0	30			
Lismore	24.1	45			
Lismore Heights	4.3	8			
North Lismore	1.1	2			
South Lismore	1.1	2			
Tregeagle	0.5	1			
Bexhill	1.1	2			
Boatharbour	0.5	1	East of Lismore	6.4	12
Booyong	1.6	3			
Corndale	0.5	1			
Numulgi	0.5	1			
Richmond Hill	1.1	2			
Rosebank	1.1	2			
Billen Cliffs Community	0.5	1			
Jiggi	1.6	3	West of Lismore (non-LGA group)	4.3	8
Larnook	1.1	2			
Rock Valley	0.5	1			
Tuncester	0.5	1			
Nimbin	16.6	31			
Nimbin	16.6	31	Nimbin	16.5	31
Coffee Camp	0.5	1	The Channon, Dunoon and surrounds (north of Lismore)	14.9	28
Dunoon	0.5	1			
Goolmangar	2.1	4			
Koonorigan	0.5	1			
Modanville	4.3	8			
The Channon	4.3	8			
Tullera	1.6	3			
Tuntable Falls	0.5	1			
Whian Whian	0.5	1			
Caniaba	1.6	3			
McKees Hill	0.5	1	South /south east of Lismore (non-LGA group)	4.8	8
Marom Creek	0.5	1			
Wyrallah	1.6	3			
Stony Chute	1.1	2			
Blue Knob	0.5	1	N Nimbin, Kyogle and surrounds (non-LGA group)	2.7	5
Lillian Rock	1.1	2			

Richmond Valley LGA

Richmond Valley LGA (n=68)	% (Richmond Valley LGA)	No.	Recode Area	% (Richmond Valley LGA)	No.
Broadwater	1.4	1	Richmond Valley coast	43.5	30
Evans Head	30.4	21			
New Italy	1.4	1			
Woodburn	10.1	7			
Casino	40.6	28	Casino and surrounds	47.8	33
North Casino	1.4	1			
Casino (20 minutes out)	1.4	1			
Woodview	1.4	1			
Fairy Hill	2.9	2	South/south east of Lismore (non-LGA area)	5.8	4
Coraki	4.3	3			
Swan Bay	1.4	1	Inland hinterland (non-LGA area)	2.9	2
Hogarth Range	1.4	1			
Whiporie	1.4	1			

Tweed LGA

Tweed LGA (n=224)	% (Tweed LGA)	No.	Recode Area	% (Tweed LGA)	No.
Banora Point	8.9	20	Terranora and surrounds	14.7	33
Bilambil	0.9	2			
Bilambil Heights	2.2	5			
Carool	0.4	1			
Terranora	2.2	5			
Anchorage Island	1.8	4	Tweed Heads	12.9	29
Tweed Heads	3.6	8			
Tweed Shire	0.4	1			
South Tweed	4.9	11			
West Tweed	2.2	5			
Bogangar	3.1	7	Tweed coast	32.6	73
Cabarita Beach	4.9	11			
Casuarina	1.8	4			
Chinderah	0.4	1			
Cudgen	1.3	3			
Hastings Point	0.9	2			
Kingscliff	10.7	24			
Pottsville	9.4	21			

Tweed LGA (n=224)	% (Tweed LGA)	No.	Recode Area	% (Tweed LGA)	No.
Bray Park	1.3	3	Murwillumbah and surrounds	23.7	53
Chillingham	2.2	5			
Condong	0.4	1			
Dungay	0.9	2			
Fernvale	0.9	2			
Kielvale	0.4	1			
Murwillumbah	14.3	32			
Murwillumbah South	0.4	1			
Nunderi	0.4	1			
Reserve Creek	0.4	1			
Tumbulgum	1.8	4			
Burringbar	2.2	5	Burringbar Range	5.8	13
Dunbible	0.9	2			
Stokers Siding	2.7	6			
Eungella	1.3	3	Mt Warning and surrounds	8.5	19
Mt Warning	0.4	1			
Nobby's Creek	0.4	1			
Numinbah	0.4	1			
Tyalgum	1.3	3			
Uki	4.4	10			
Byrrill Creek	1.3	3	N Nimbin, Kyogle and surrounds (non-LGA area)	1.7	4
Mount Burrell	0.4	1			

Non-LGA Locations

Non-LGA related areas	No.	Recode Area	No.
Afterlee	1	Inland hinterland	30
Bonalbo	6		
Dyraaba	1		
Old Bonalbo	2		
Urbenville	4		
Tunglebung	1		
Woodenbong	2		
Ewingar	2		
Hogarth Range	1		
Whiporie	1		
Tenterfield Shire (Drake, Tabulam)	9		
Barkers Vale	4		
Blue Knob	1		
Byrrill Creek	3		
Mount Burrell	1		
Stony Chute	2		
Wadeville	6		
Warrazambil Creek	1		

Non-LGA related areas	No.	Recode Area	No.
Billen Cliffs Community	1	West of Lismore	9
Larnook	2		
Jiggi	3		
Rock Valley	1		
Tuncester	1		
Bentley	1		
Marom Creek	1	South and south-east of Lismore	12
Swan Bay	1		
Wyrallah	3		
Coraki	3		
Caniaba	3		
McKees Hill	1		

Not relevant answers

Not applicable/not relevant answers (n=77)	No.
Community/mission	7
Country/hinterland/rural area/ in the hills/out of town	11
Village	21
Town/suburb	27
Suburb	9
Other	1
No response	151

Outside the Northern Rivers

Not living in Northern Rivers (n=18)	No.
Southern Qld (Burleigh Heads, Currumbin, Palm Beach, Kirra)	4
Tenterfield Shire (Drake, Tabulam)	9
Mid North Coast (Bonny Hills, Toormina)	2
Other (Sydney, tourist, Barcaldine)	3

APPENDIX 4: TRAVEL DESTINATIONS

While respondents were asked to nominate the town or major centre they visit most other than for going to work, many respondents have recorded more than one most frequently travel destination. In some instances, respondents were very specific; naming a shopping centre or street location, but data is only recorded at the locality level.

Ballina LGA	No. respondents	% total respondents	% total visits
Alstonville	28	2.1	1.8
Ballina	163	12.5	10.6
Cabbage Tree Island	1	0.1	0.1
Lennox Head	21	1.6	1.4
Wollongbar	6	0.5	0.4
Total respondents travelling to Ballina LGA	202	15.5	
Total visits to destinations in Ballina LGA	219		14.3

Byron LGA	No. respondents	% total respondents	% total visits
Bangalow	11	0.8	0.7
Brunswick Heads	23	1.8	1.5
Byron Bay	102	7.8	6.7
Clunes	1	0.1	0.1
Mullumbimby	39	3.0	2.5
Ocean Shores	5	0.4	0.3
South Golden Beach	1	0.1	0.1
Suffolk Park	3	0.2	0.2
Total no. respondents travelling to Byron LGA	153	11.7	
Total visits to destinations in Byron LGA	185		12.1

Clarence Valley LGA	No. respondents	% total respondents	% total visits
Coutts Crossing	2	0.2	0.1
Eatonville	1	0.1	0.1
Grafton (includes 4 trips to South Grafton)	158	12.1	10.3
Gulmarrad	1	0.1	0.1
Iluka	3	0.2	0.2
Harwood	1	0.1	0.1
Lawrence	1	0.1	0.1
Maclean	57	4.4	3.7
Minnie Waters/Wooli	2	0.2	0.1
Palmers Island	1	0.1	0.1
Southgate	1	0.1	0.1
Ulmarra	1	0.1	0.1
Yamba	57	4.4	3.7
Total no. respondents travelling to Clarence Valley LGA	253	19.4	0.1
Total visits to destinations in Clarence Valley LGA	286		18.7

Kyogle LGA	No. respondents	% total respondents	% total visits
Bonalbo	1	0.1	0.1
Kyogle	13	1.0	0.8
Total no. respondents travelling to Kyogle LGA	14	1.1	
Total visits to destinations in Kyogle LGA	14		0.9

Lismore LGA	No. respondents	% total respondents	% total visits
Bexhill	1	0.1	0.1
Goolmangar	1	0.1	0.1
Goonellabah	7	0.5	0.5
Lismore	378	29.0	24.7
Nimbin	10	0.8	0.7
The Channon	1	0.1	0.1
Wyrallah	1	0.1	0.1
Total no. respondents travelling to Lismore LGA	388	30.0	
Total visits to destinations in Lismore LGA	399		26.0

Richmond Valley LGA	No. respondents	% total respondents	% total visits
Broadwater	1	0.1	0.1
Casino	36	2.8	2.3
Coraki	1	0.1	0.1
Evans Head	10	0.8	0.7
Total no. respondents travelling to Richmond Valley LGA	48	3.7	
Total visits to destinations in Richmond Valley LGA	48		3.1

Tweed LGA	No. respondents	% total respondents	% total visits
Anchorage Island	2	0.2	0.1
Banora Point	1	0.1	0.1
Cabarita	3	0.2	0.2
Hastings Point	1	0.1	0.1
Kingscliff	25	1.9	1.6
Mount Burrell	1	0.1	0.1
Murwillumbah	77	5.9	5.0
Pottsville	4	0.3	0.3
Terranora	1	0.1	0.1
Tumbulgum	1	0.1	0.1
Tweed Heads	136	10.4	8.9
South Tweed	26	2.0	1.7
Uki	5	0.4	0.3
Total no. respondents travelling to Tweed LGA	243	18.6	
Total visits to destinations in Tweed LGA	280		18.5

Not in Northern Rivers	No. respondents	% total respondents	% total visits
Tenterfield Shire (Drake, Sunnyside, Tenterfield)	3	0.2	0.2
Coffs Harbour (Mid North Coast)	26	2.0	1.7
Other Mid North Coast (Nambucca Heads, Port Macquarie)	2	0.2	0.1
Sydney	5	0.4	0.3
Other NSW (Armidale, Glen Innes, Inverell)	3	0.2	0.2
Gold Coast, Coolangatta, Miami, Robina, Currumbin	31	2.4	2.0
Brisbane	26	2.0	1.7
Other Qld (Beaudesert, Mooloolaba, Benowa, Toowoomba, Warwick)	6	0.5	0.4
Total no. respondents travelling to destinations out of the Northern Rivers	47	3.6	
Total visits to destinations out of the Northern Rivers	102		6.7

APPENDIX 5: TRAVEL NETWORK ANALYSIS

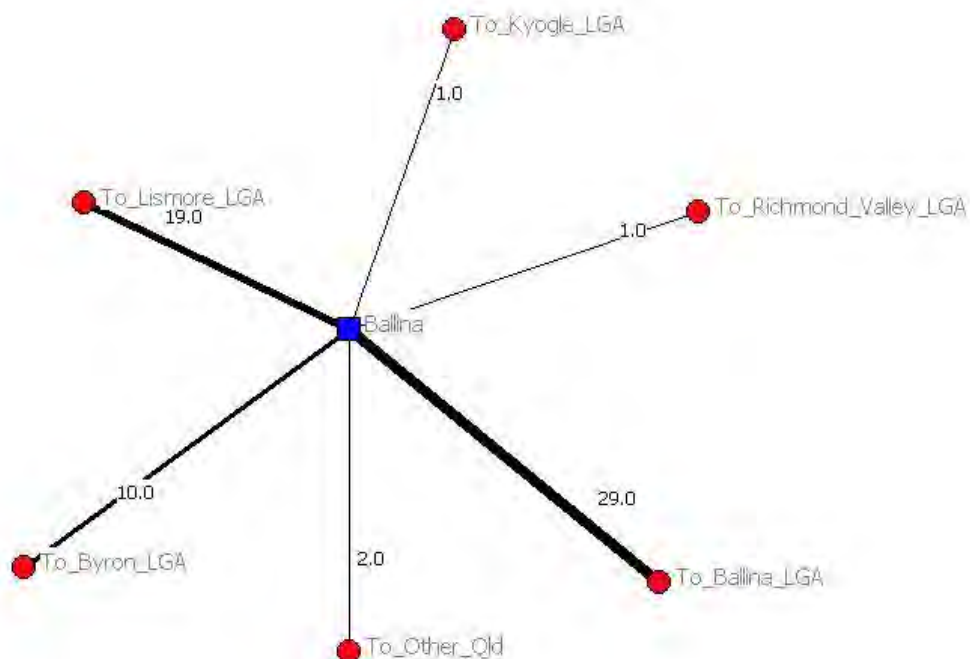
The travel network analysis was completed by Health Promotion Northern NSW Local Health District using the Ucinet for Windows: Software for Social Network Analysis. The analysis required residential location and travel destination. As not all respondents answered both these questions, the sample size for the network analysis is 1,035.

On each of the following images, the blue squares denote where people live and the red circles indicate the travel destinations. The numbers on the lines identify the number of people travelling between the residential location and LGA or specific travel destination. For most (but not all) of the groups of residential locations, there is an image based on the travel location to individual travel destinations, and an image of the travel location residence to the destination LGAs. Each image has a description of what areas were included in the locations, for residential locations and sometimes to clarify the descriptors for travel destinations.

Note that in Figures 64 to 66, the home locations of Grafton includes the residential locations of Grafton and surrounds, south and north of Grafton (both east and west of Pacific Highway) and west of Grafton; Tweed Heads includes Tweed Coast; Murwillumbah includes Burringbar Range; Ballina includes Ballina, Ballina hinterland, South Ballina and Lennox Head area; Byron Bay includes Byron Bay and surrounds and North Byron coastal area.

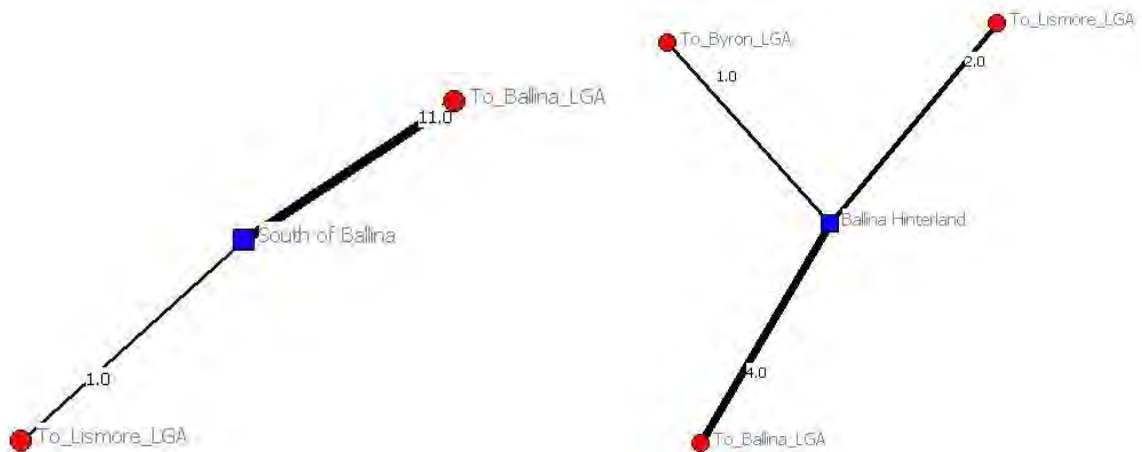
Ballina LGA residents

Figure A5 (1) – LGA travel destinations of Ballina residents



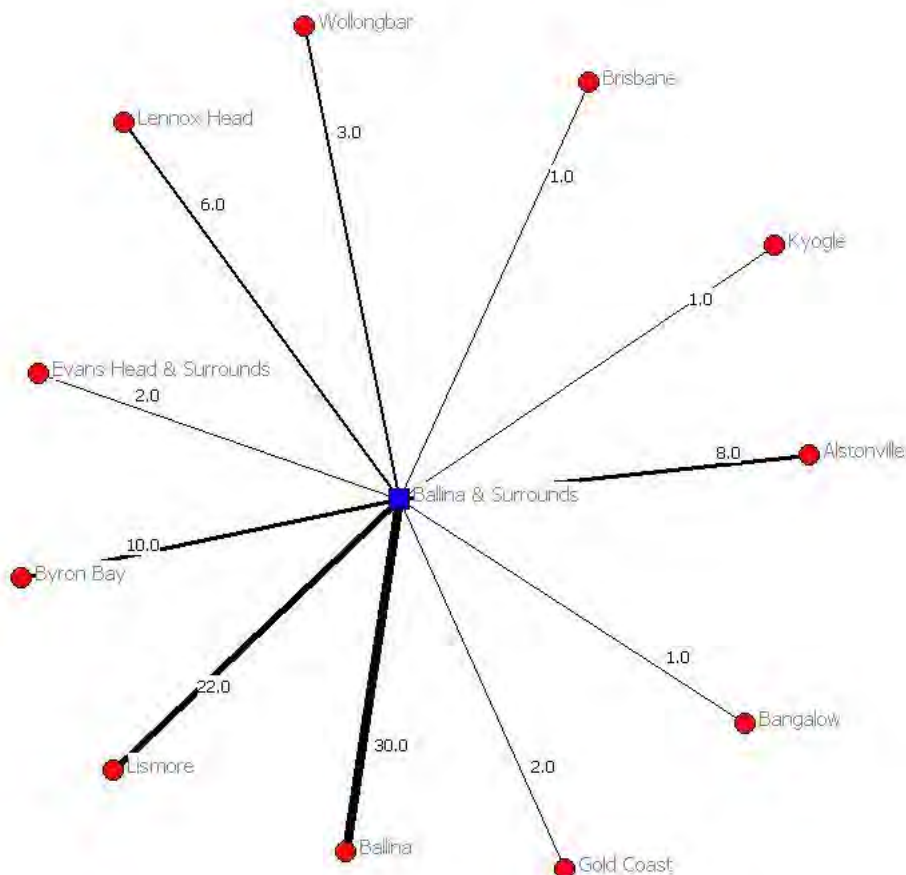
- Ballina includes the following residential localities: Ballina, Ballina Heights, East Ballina, Shaws Bay and West Ballina.

Figure A5 (2) – LGA travel destinations of South of Ballina and Ballina Hinterland residents



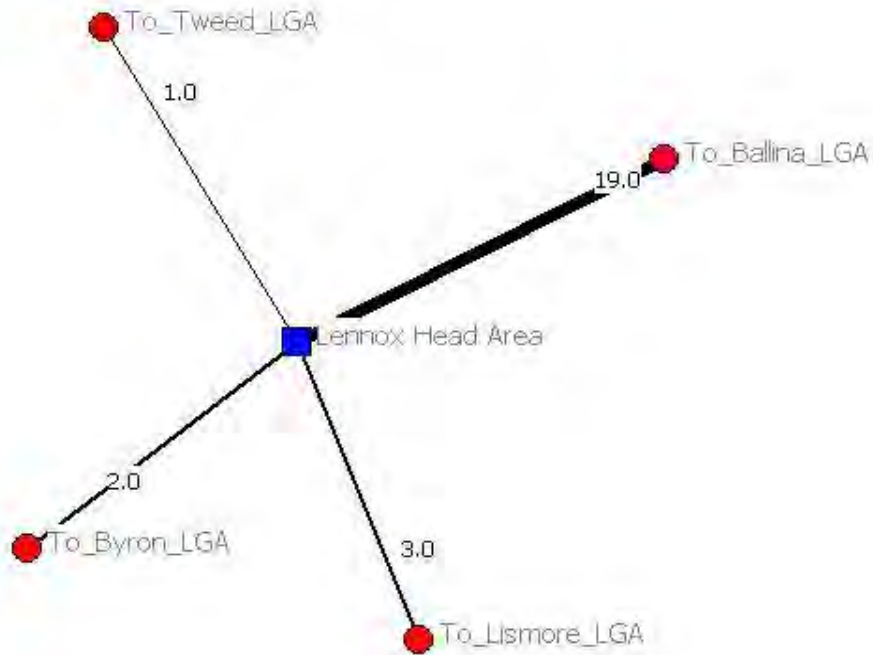
- South of Ballina includes: Cabbage Tree Island, Meerschaum Vale and Wardell.
- Ballina Hinterland includes Cumbalum, Fernleigh, Newrybar, Teven, Tintenbar and Tuckombil.

Figure A5 (3) – Specific travel destinations of residents of Ballina and surrounds



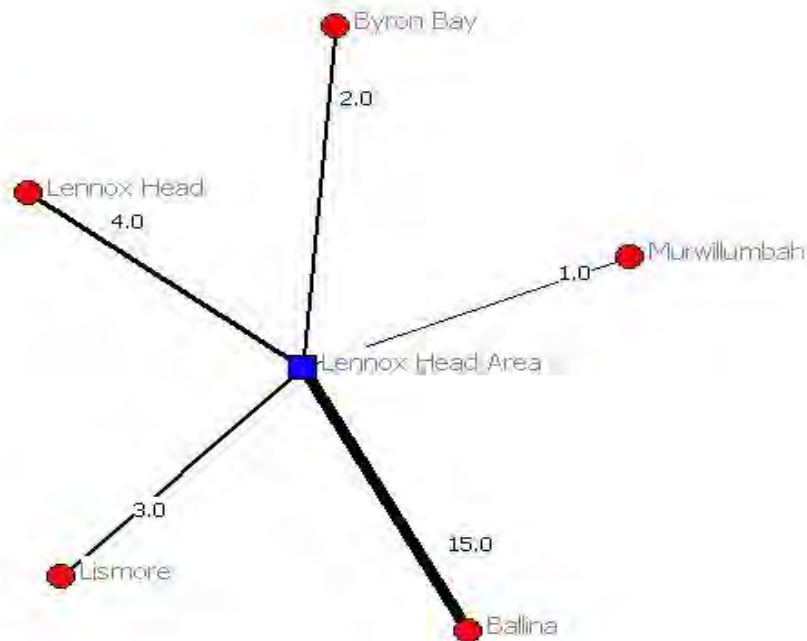
- Ballina and surrounds includes: Ballina, Ballina Heights, East Ballina, Shaws Bay, West Ballina, Cabbage Tree Island, Meerschaum Vale, Wardell, Cumbalum, Fernleigh, Newrybar, Teven, Tintenbar and Tuckombil.
- Travel destinations: Evans Head and surrounds includes Evans Head and Broadwater; Byron Bay includes Byron Bay and Suffolk Park; and Lismore includes Lismore and Goonellabah.

Figure A5 (4) – LGA travel destinations of Lennox Head area residents



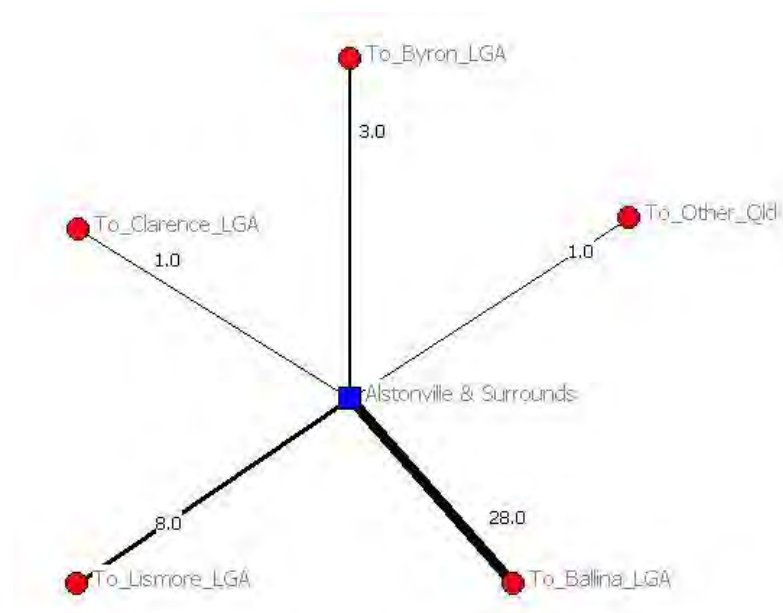
- Lennox Head area includes: Lennox Head and Skennars Head.

Figure A5 (5) – Specific travel destinations of residents of Lennox Head area



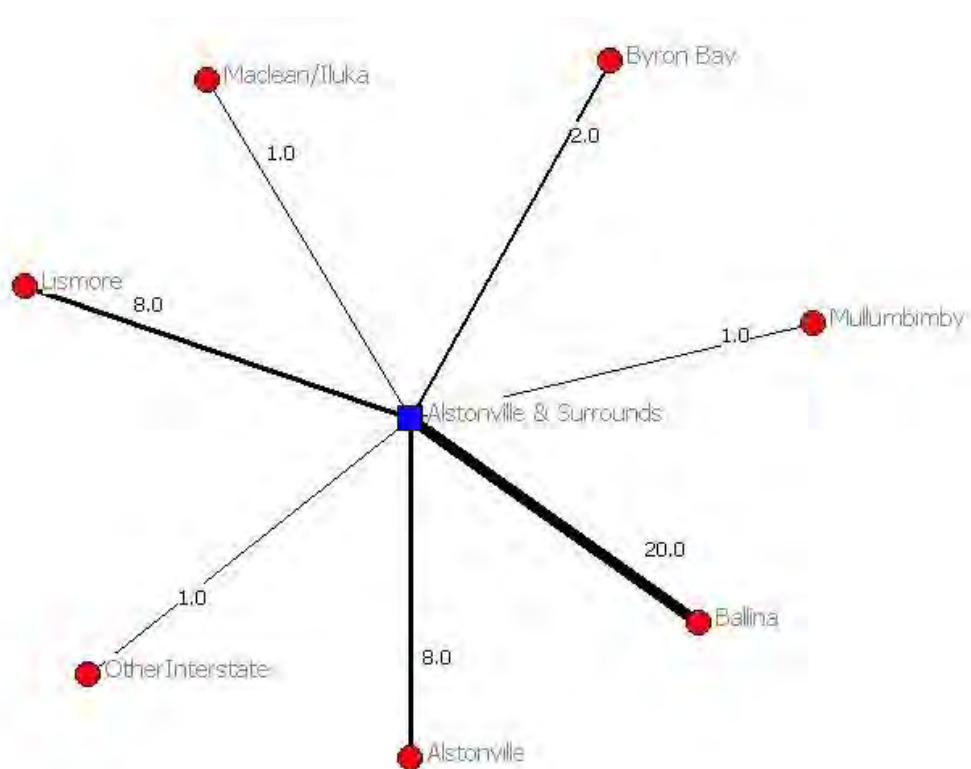
- Lennox Head area includes: Lennox Head and Skennars Head.
- Travel destination Byron Bay includes Byron Bay and Suffolk Park; and Lismore includes Lismore and Goonellabah.

Figure A5 (6) – LGA travel destinations of Alstonville and surrounds residents



- Alstonville and surrounds includes: Alstonvale, Alstonville, Rous, Uralba and Wollongbar.
- Other interstate destination is Toowoomba.

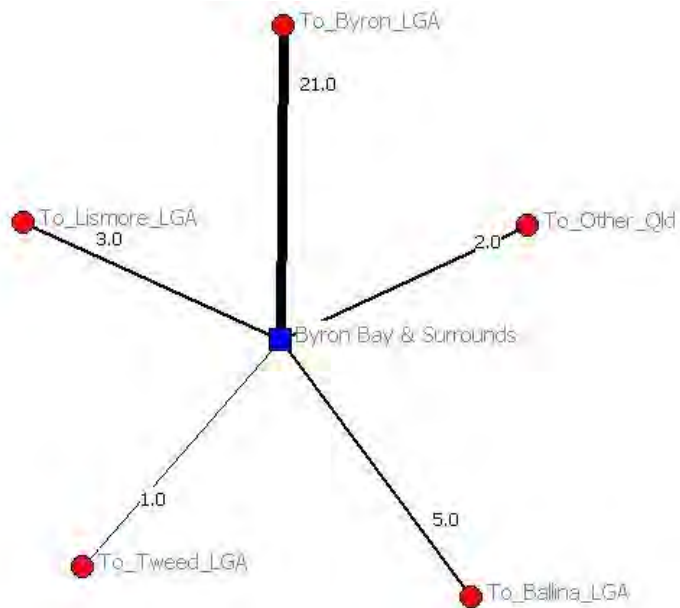
Figure A5 (7) – Specific travel destinations of residents of Ballina and surrounds



- Alstonville and surrounds includes: Alstonvale, Alstonville, Rous, Uralba and Wollongbar.
- Travel destination Lismore includes Lismore and Goonellabah; and Alstonville includes Alstonville and Wollongbar.
- Other interstate destination is Toowoomba.

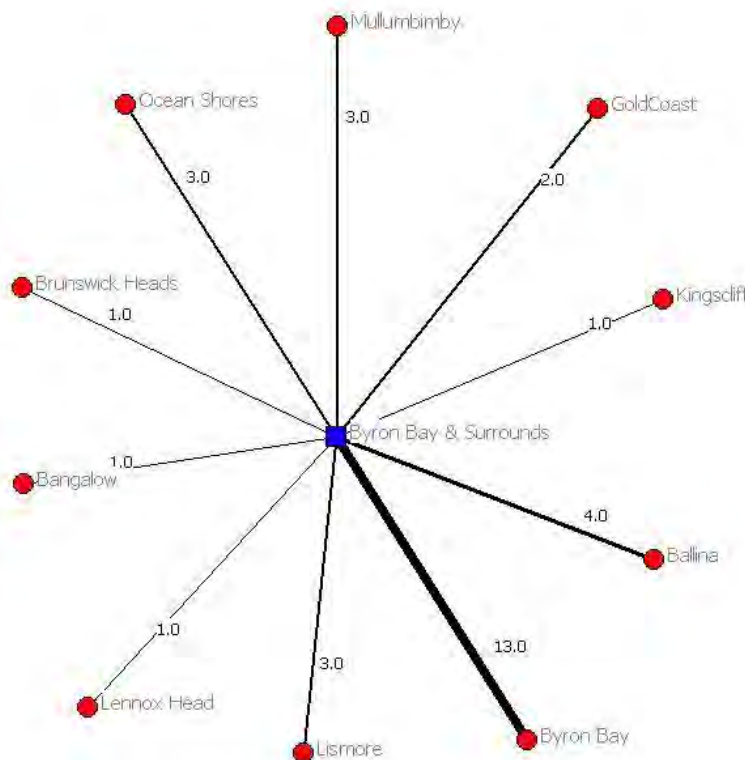
Byron LGA residents

Figure A5 (8) – LGA travel destinations of Byron Bay and surrounds residents



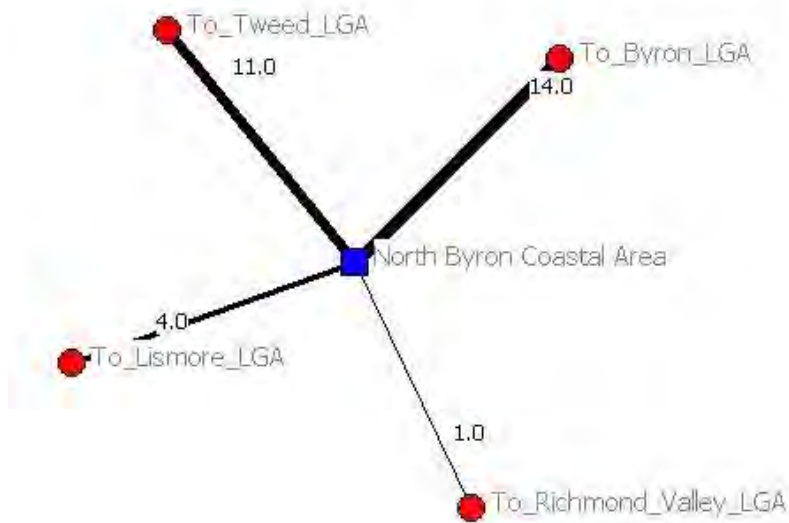
- Byron Bay and surrounds includes: Byron Bay, Ewingsdale and Suffolk Park.
- Other Qld destination is the Gold Coast.

Figure A5 (9) – Specific travel destinations of Byron Bay and surrounds residents



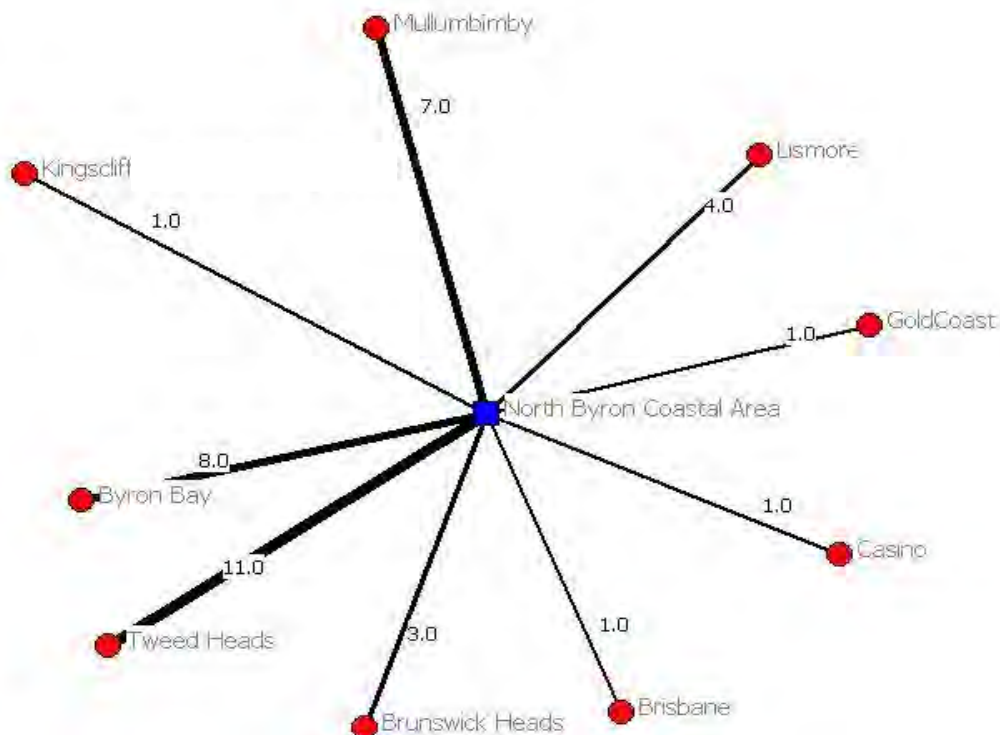
- Byron Bay and surrounds includes: Byron Bay, Ewingsdale and Suffolk Park.
- Travel destination Byron Bay includes Byron Bay and Suffolk Park; and Lismore includes Lismore and Goonellabah.

Figure A5 (10) – LGA travel destinations of North Byron coastal area residents



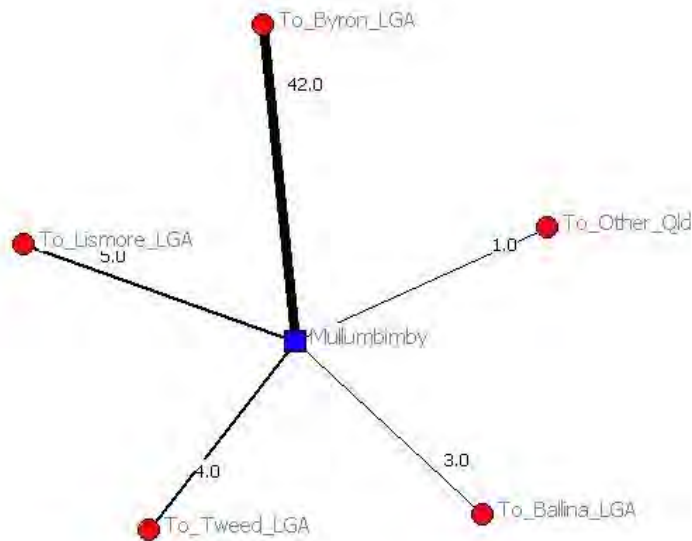
- North Byron coastal area includes: Billinudgel, Brunswick Heads, New Brighton, Ocean Shores and South Golden Beach.

Figure A5 (11) – Specific travel destinations of North Byron coastal area residents



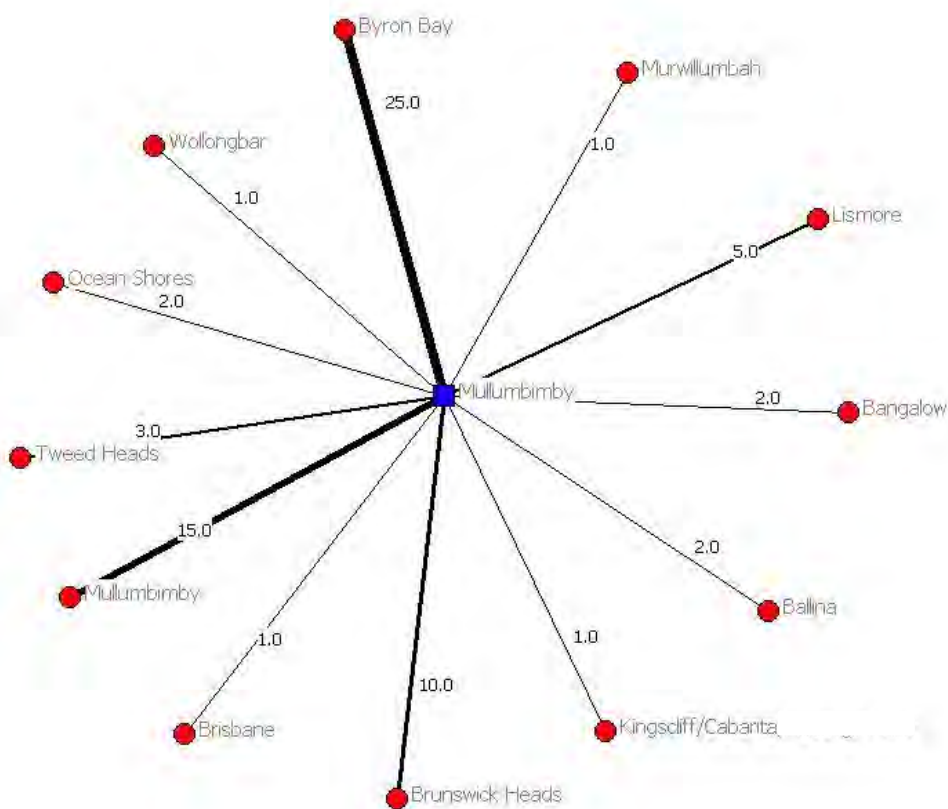
- North Byron coastal area includes: Billinudgel, Brunswick Heads, New Brighton, Ocean Shores and South Golden Beach.
- Travel destination Byron Bay includes Byron Bay and Suffolk Park; Lismore includes Lismore Goonellabah; and Brunswick Heads includes Brunswick Heads, Ocean Shores and South Golden Beach.

Figure A5 (12) – LGA travel destinations of Mullumbimby residents



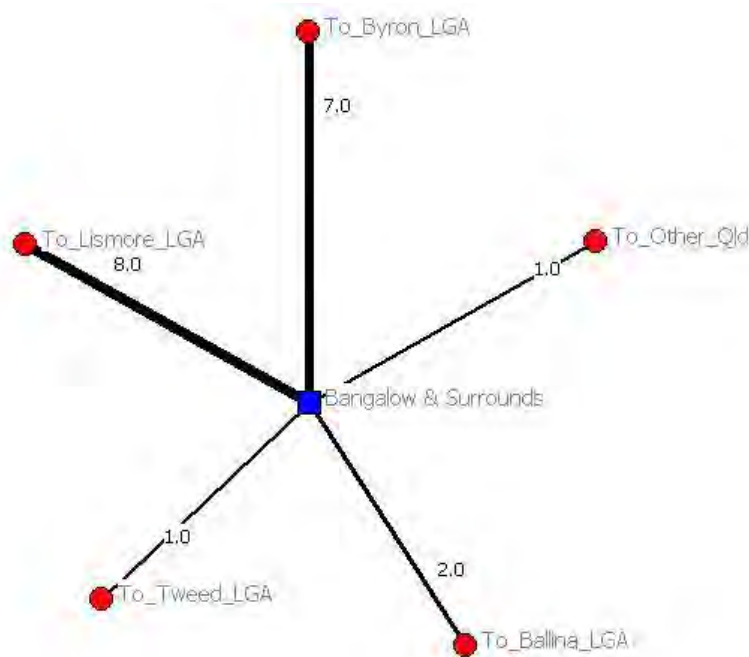
- Mullumbimby includes: Main Arm, Mullumbimby, Myocum and Wilsons Creek.

Figure A5 (13) – Specific travel destinations of Mullumbimby residents



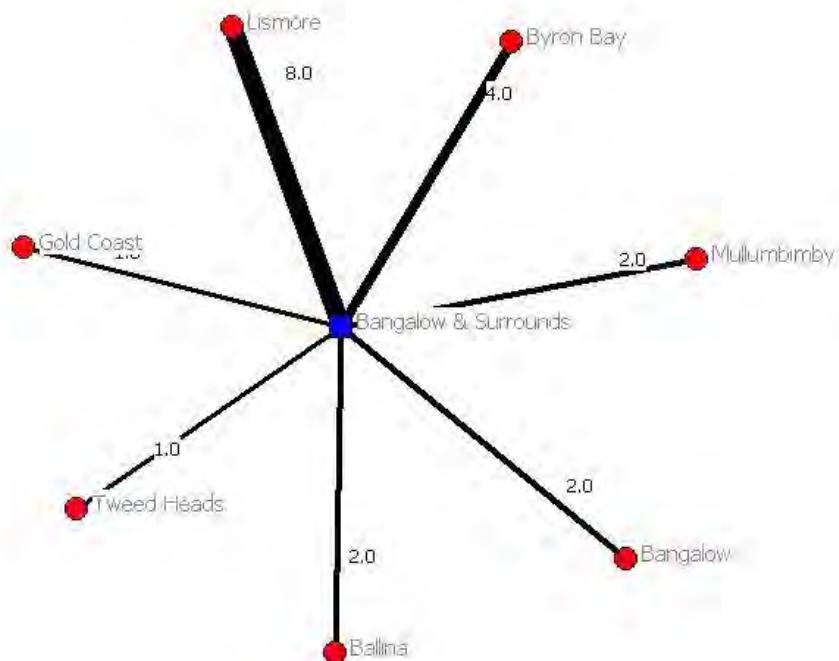
- North Byron coastal area includes: Billinudgel, Brunswick Heads, New Brighton, Ocean Shores and South Golden Beach.
- Travel destination Byron Bay includes Byron Bay and Suffolk Park; Lismore includes Lismore and Goonellabah. Note Cabarita is the destination in the group of Kingscliff/Cabarita.

Figure A5 (14) – LGA travel destinations of Bangalow and surrounds residents



- Bangalow and surrounds includes: Bangalow, Clunes, Coopers Shoot, Coorabell, Eureka, Federal, Googengerry and Nashua.

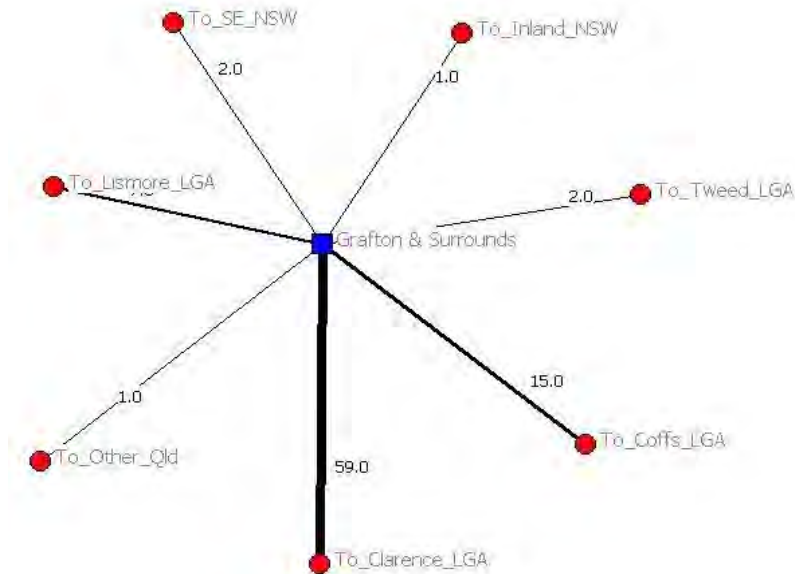
Figure A5 (15) – Specific travel destinations of Mullumbimby residents



- Bangalow and surrounds includes: Bangalow, Clunes, Coopers Shoot, Coorabell, Eureka, Federal, Googengerry and Nashua.
- Travel destination Byron Bay includes Byron Bay and Suffolk Park; and Lismore includes Lismore and Goonellabah.

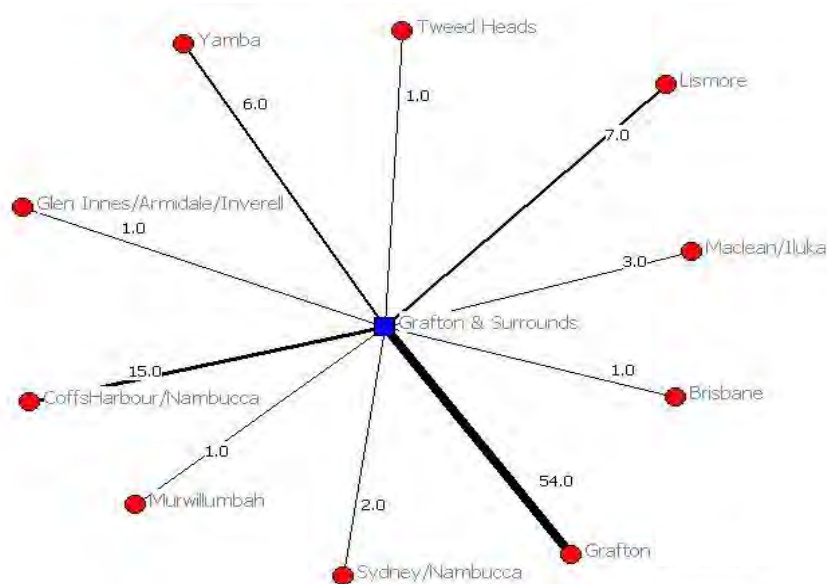
Clarence Valley LGA residents

Figure A5 (16) – LGA travel destinations of Grafton and surrounds residents



- Grafton and surrounds includes: Clarence, Grafton, South Grafton, Great Marlow, Swan Creek and Townsend.
- Inland NSW travel destination includes one person travelling to both Glen Innes and Armidale.
- South east NSW destinations include Sydney and Nambucca.
- Other Qld destinations include Brisbane.

Figure A5 (17) – Specific travel destinations of Grafton and surrounds residents



- Grafton and surrounds includes: Clarence, Grafton, South Grafton, Great Marlow, Swan Creek and Townsend.
- Travel destination Lismore includes Lismore and Goonellabah; and Maclean/Iluka includes Gulmarrad, Harwood Island, Lawrence and Maclean.
- Note Glen Innes/Armidale/Inverell is one person travelling to both Glen Innes and Armidale.

Figure A5 (18) – LGA travel destinations of residents who live north of Grafton, both east and west of the Pacific Highway



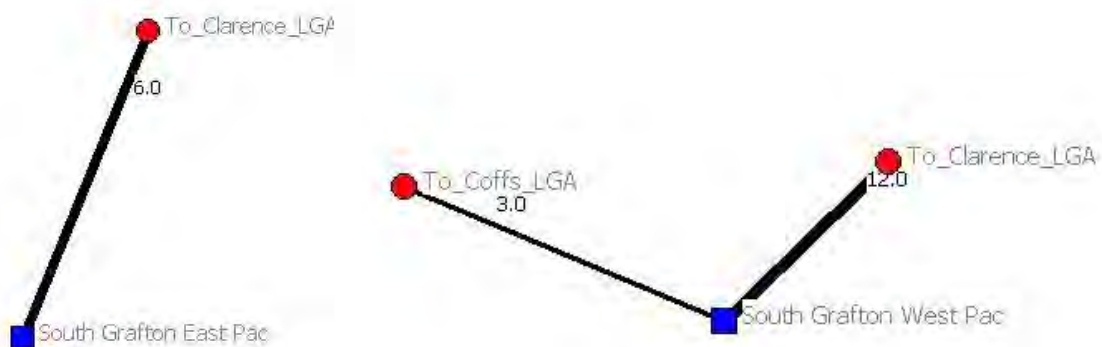
- North of Grafton, east of the Pacific Highway includes: Tucabia and Ulmurra.
- North of Grafton, west of the Pacific Highway includes: Coaldale, Gurrang, Junction Hill, Mountain View, The Pinnacles and Whiteman Creek.

Figure A5 (19) – Specific travel destinations of residents who live north of Grafton



- North of Grafton includes: Tucabia, Ulmurra, Coaldale, Gurrang, Junction Hill, Mountain View, The Pinnacles and Whiteman Creek.

Figure A5 (20) – LGA travel destinations of residents who live south of Grafton, both east and west of the Pacific Highway



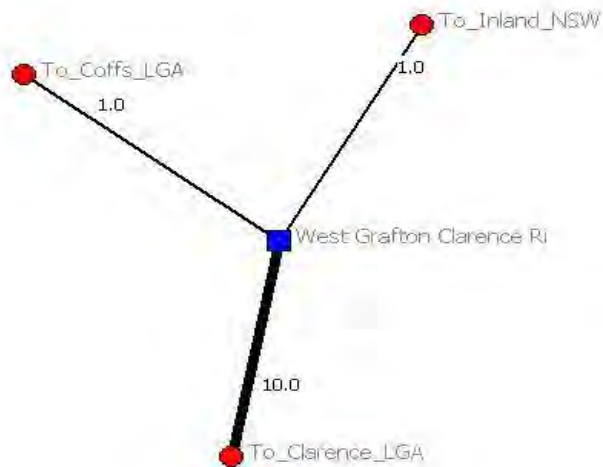
- South of Grafton, east of the Pacific Highway includes: Diggers Camp, Glenugie, Halfway Creek, Pillar Valley and Wooli.
- South of Grafton, west of the Pacific Highway includes: Blaxland Flat, Braunstone, Coutts Crossing, Glenreagh, Lanitza and Nymboida.

Figure A5 (21) – Specific travel destinations of residents who live south of Grafton



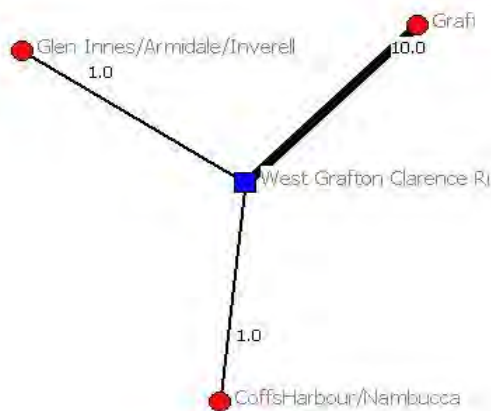
- South of Grafton includes: Diggers Camp, Glenugie, Halfway Creek, Pillar Valley, Woolli, Blaxland Flat, Braunstone, Coutts Crossing, Glenreagh, Lanitza and Nymboida.
- The travel destination Grafton and surrounds includes Grafton, with one visit to Coutts Crossing.

Figure A5 (22) – LGA travel destinations of residents who live west of Grafton and the Clarence River



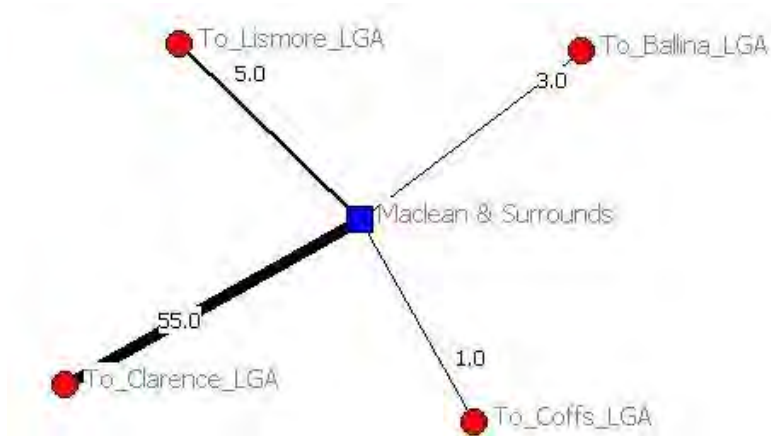
- West of Grafton and the Clarence River includes: Copmanhurst, Ramornie and Waterview Heights.

Figure A5 (23) – Specific travel destinations of residents who live west of Grafton and the Clarence River



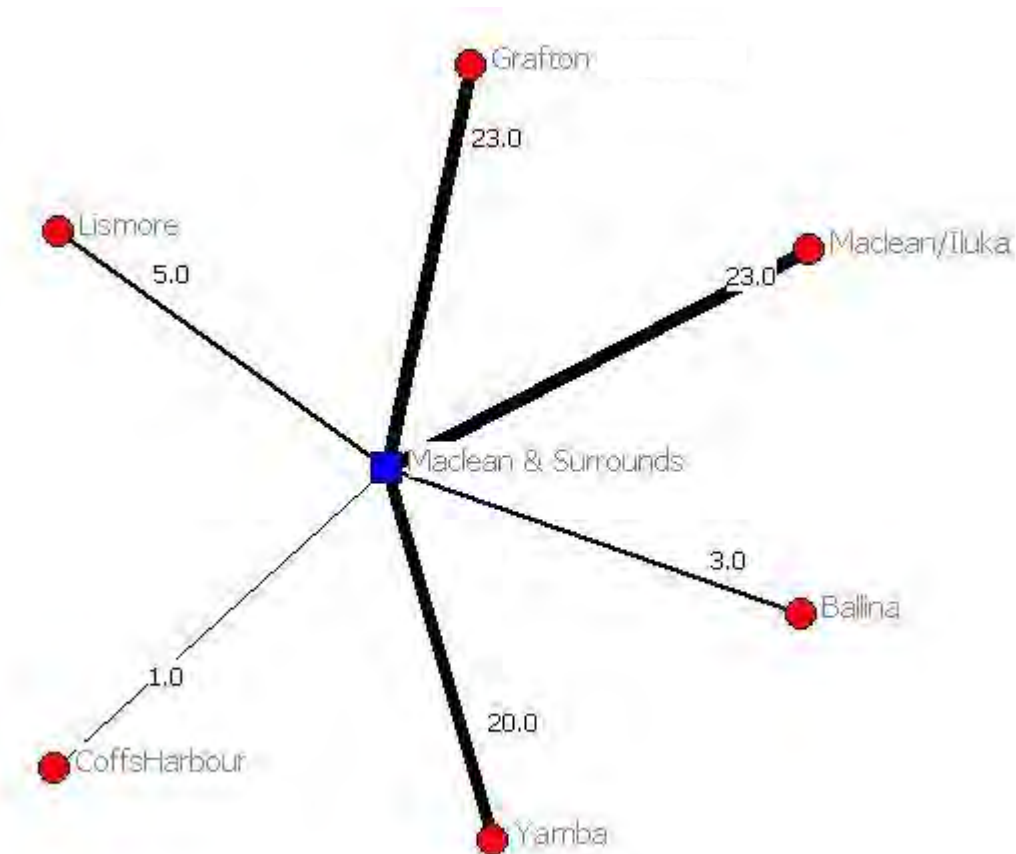
- West of Grafton and the Clarence River includes: Copmanhurst, Ramornie and Waterview Heights.

Figure A5 (24) – LGA travel destinations of residents of Maclean and surrounds



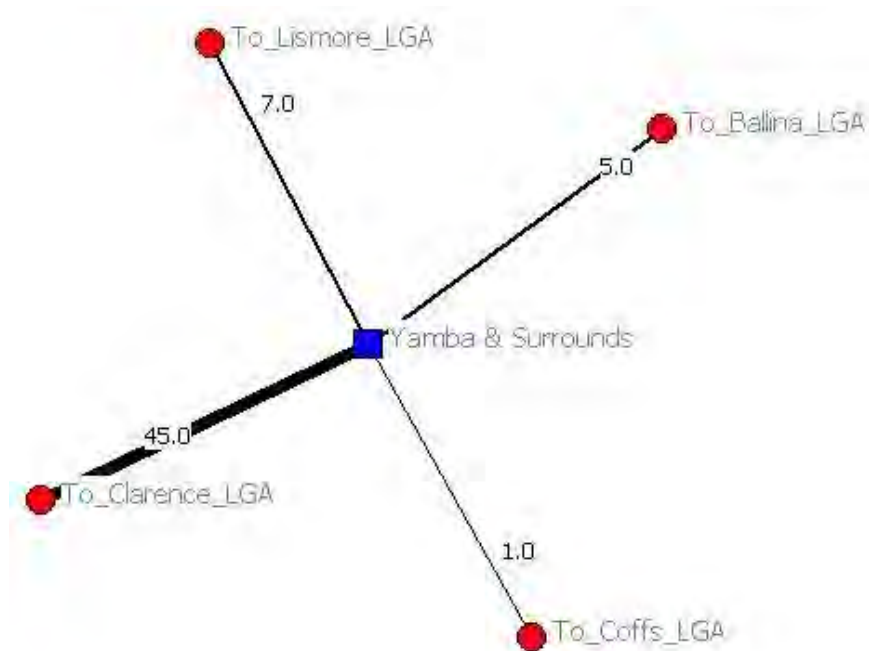
- Maclean and surrounds includes: Ashby, Brooms Head, Gulmarrad, Harwood, Harwood Island, Ilarwill, James Creek, Lawrence, Maclean, Southgate and Woodford Island.

Figure A5 (25) – Specific travel destinations of residents of Maclean and surrounds



- Maclean and surrounds includes: Ashby, Brooms Head, Gulmarrad, Harwood, Harwood Island, Ilarwill, James Creek, Lawrence, Maclean, Southgate and Woodford Island.
- Travel destination Lismore includes Lismore and Goonellabah; Yamba includes Yamba and Palmers Island; and Maclean/Iluka includes Gulmarrad, Harwood Island, Lawrence and Maclean.

Figure A5 (26) – LGA travel destinations of residents of Yamba and surrounds



- Yamba and surrounds includes: Angourie, Palmers Channel, Palmers Island, Wooloweyah and Yamba.

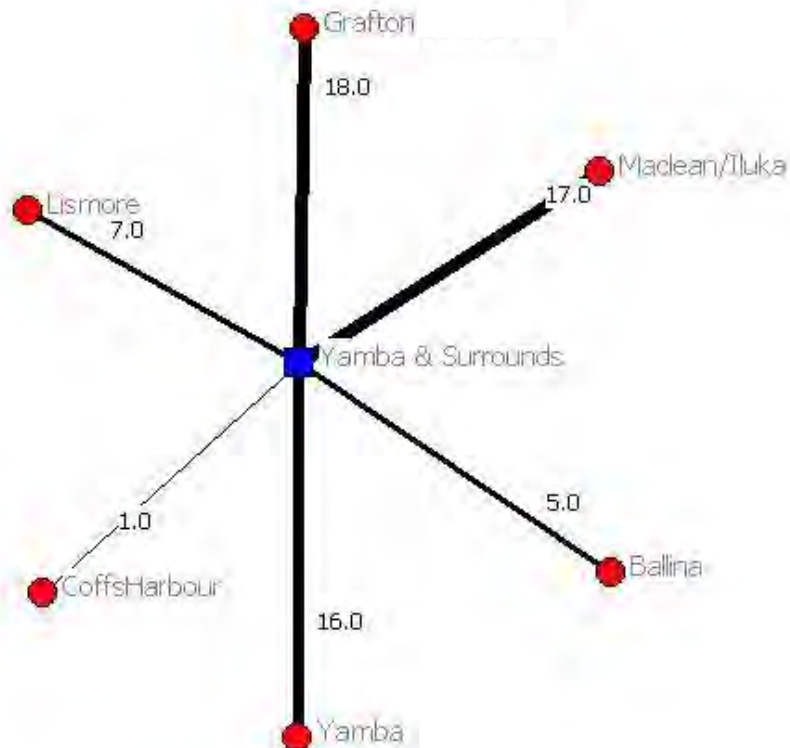


Figure A5 (27) – Specific travel destinations of residents of Yamba and surrounds

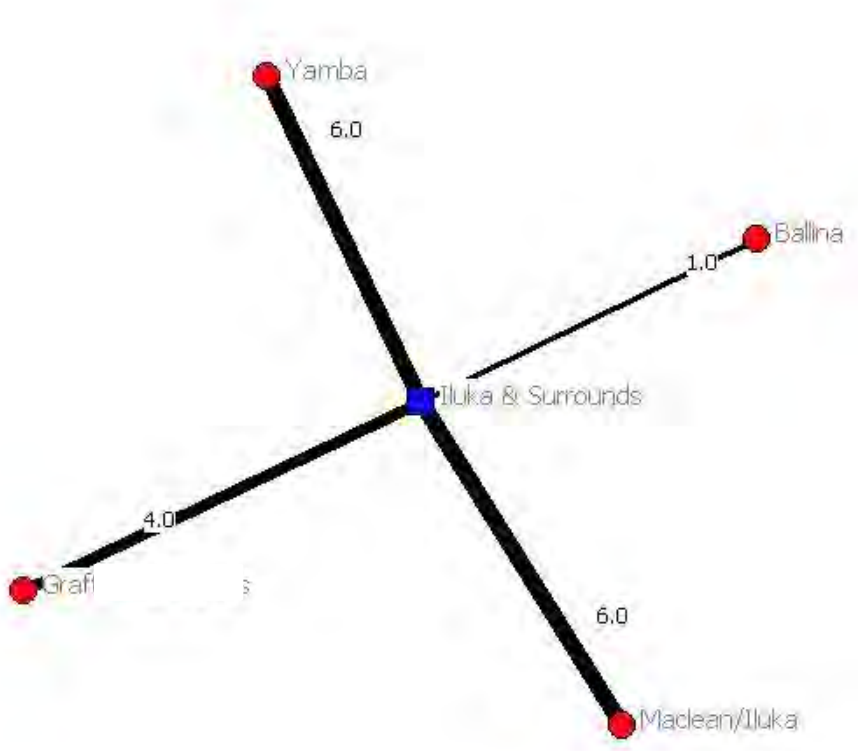
- Yamba and surrounds includes: Angourie, Palmers Channel, Palmers Island, Wooloweyah and Yamba.
- Travel destination Lismore includes Lismore and Goonellabah; Yamba includes Yamba and Palmers Island; and Maclean/Iuka includes Gulmarrad, Harwood Island, Lawrence and Maclean.

Figure A5 (28) – LGA travel destinations of residents of Iluka and surrounds



- Iluka and surrounds includes: Goodwood Island, Iluka, Mororo and Woombah.

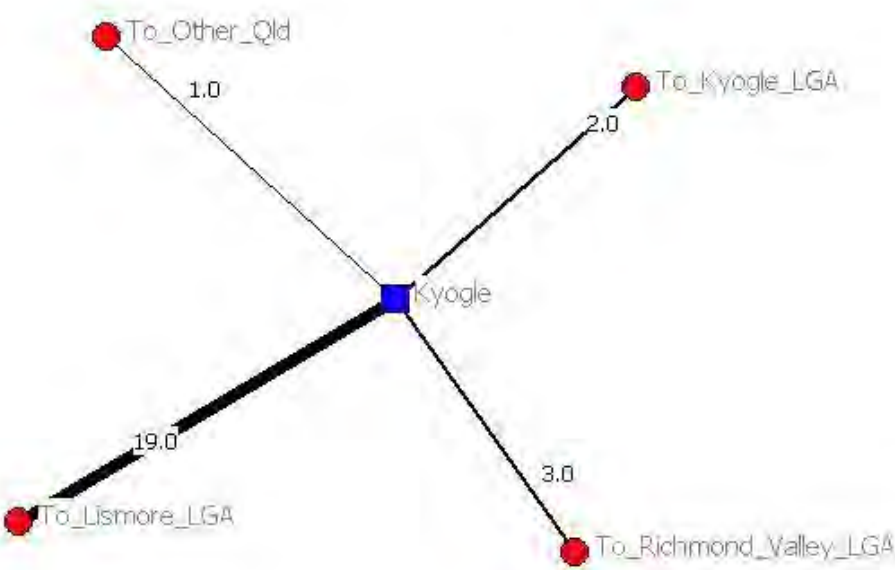
Figure A5 (29) – Specific travel destinations of residents of Iluka and surrounds



- Iluka and surrounds includes: Goodwood Island, Iluka, Mororo and Woombah.
- Travel destination Yamba includes Yamba and Palmers Island; and Macleay/Iluka includes Gulmarrad, Harwood Island, Lawrence and Macleay.

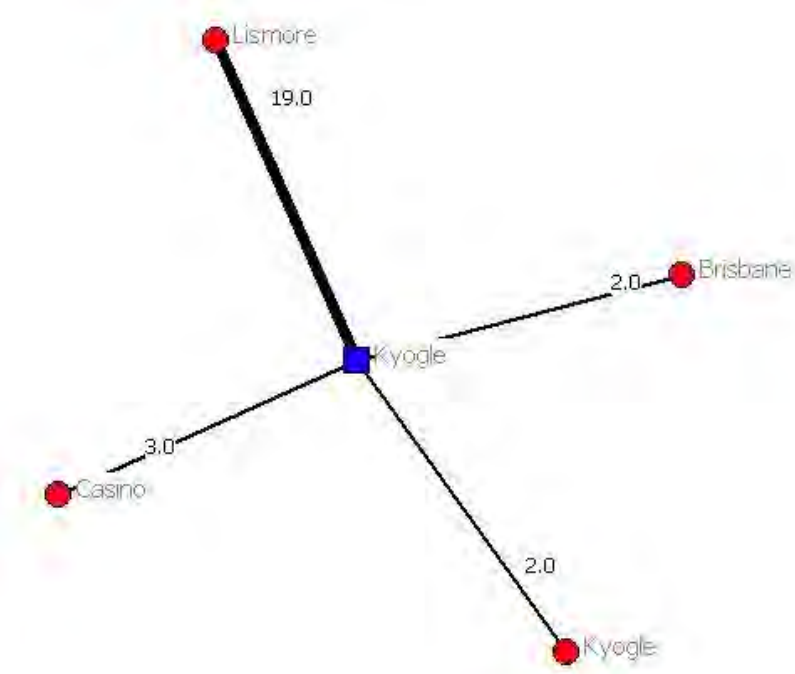
Kyogle LGA residents

Figure A5 (30) – LGA travel destinations of residents of Kyogle



- Kyogle includes Cawongla, Geneva and Kyogle.

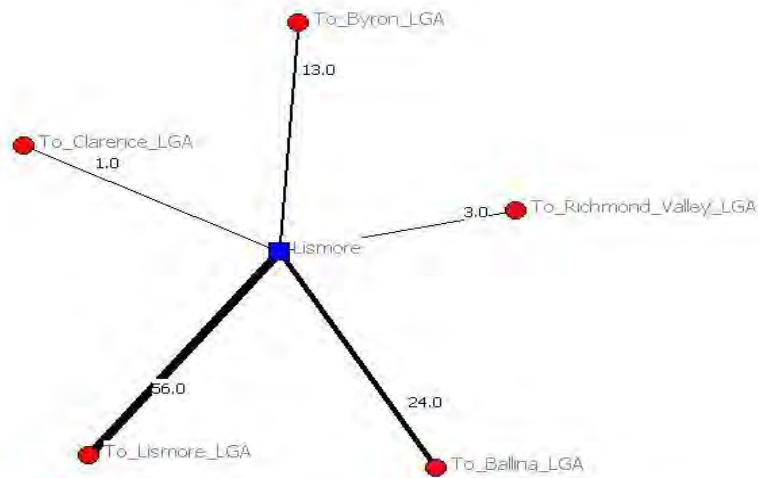
Figure A5 (31) – Specific travel destinations of residents of Kyogle



- Kyogle includes: Cawongla, Geneva and Kyogle.
- Travel destination Lismore includes Lismore and Goonellabah.

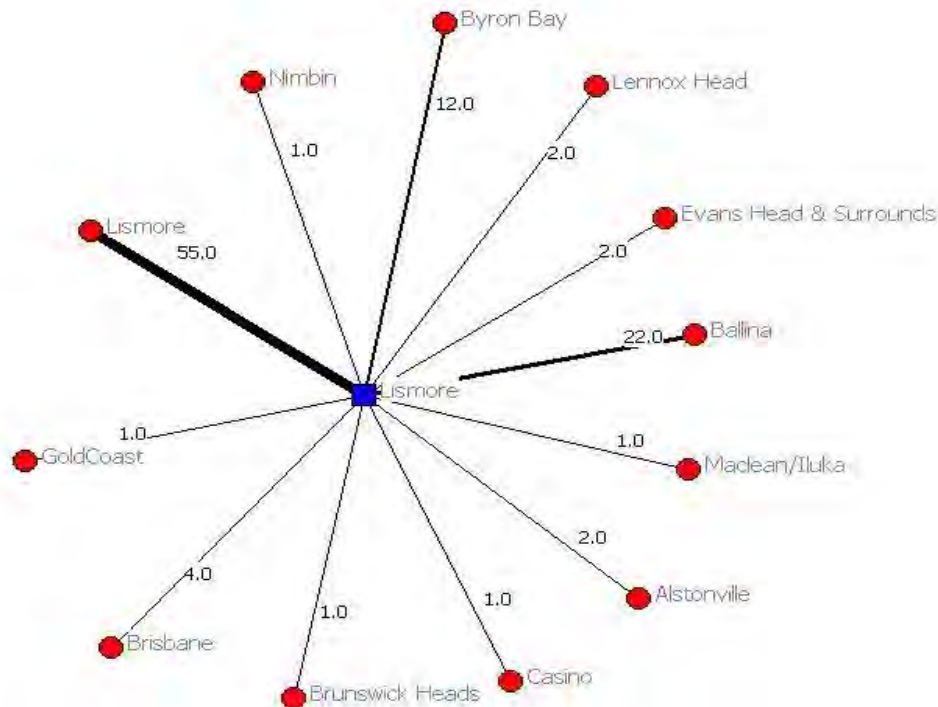
Lismore LGA residents

Figure A5 (32) – LGA travel destinations of residents of Lismore



- Lismore includes: Chilcotts Grass, East Lismore, Girards Hill, Goonellabah, Lismore, Lismore Heights, North Lismore, South Lismore and Tregeagle.

Figure A5 (33) – Specific travel destinations of residents of Lismore



- Lismore includes: Chilcotts Grass, East Lismore, Girards Hill, Goonellabah, Lismore, Lismore Heights, North Lismore, South Lismore and Tregeagle.
- Travel destination Lismore includes Lismore and Goonellabah; Maclean/Iluka includes Gulmarrad, Harwood Island, Lawrence and Maclean; Evans Head and surrounds includes Evans Head and Broadwater; Alstonville includes Alstonville and Wollongbar; Byron Bay includes Byron Bay and Suffolk Park; and Brunswick Heads includes Brunswick Heads, Ocean Shores and South Golden Beach.

Figure A5 (34) – LGA travel destinations of residents of Nimbin

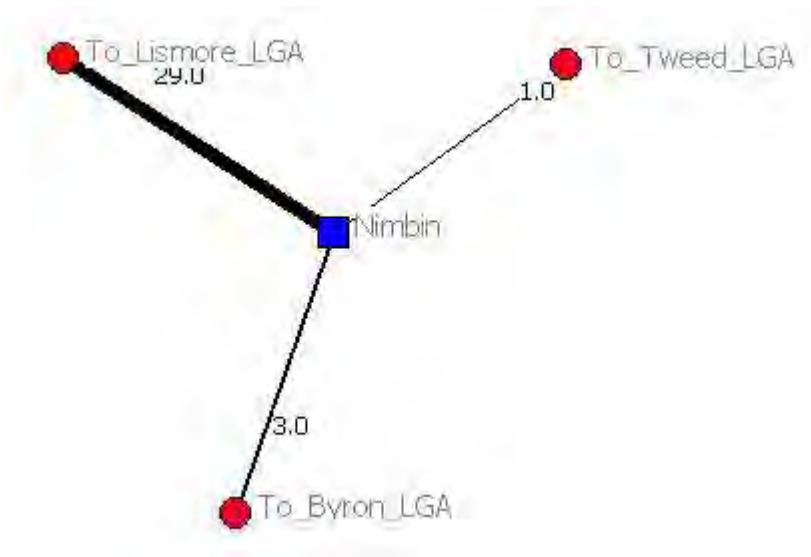
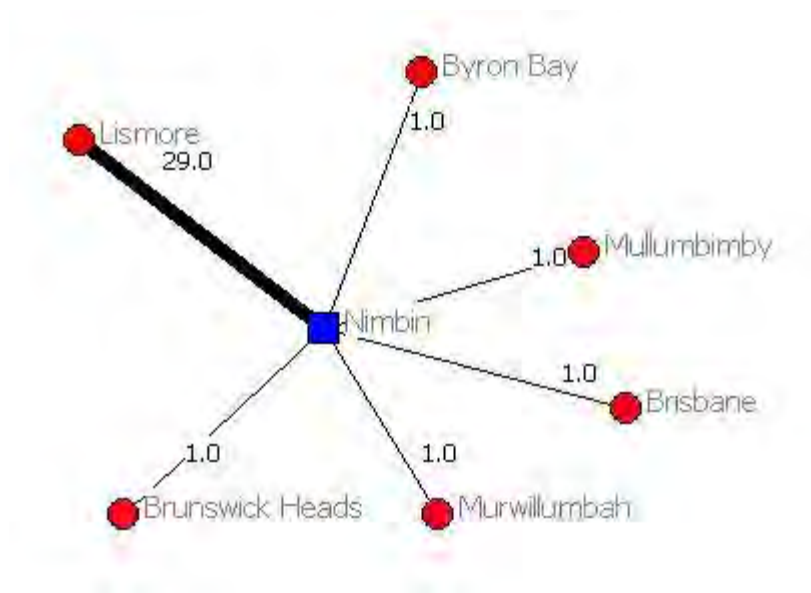
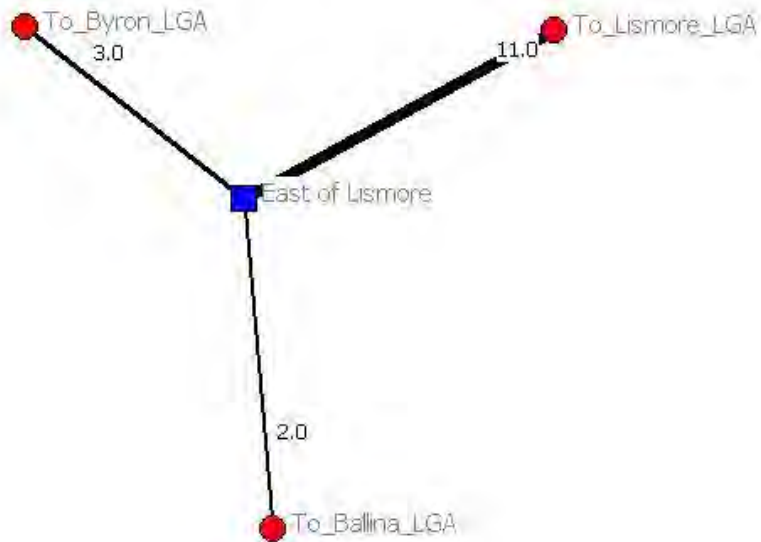


Figure A5 (35) – Specific travel destinations of residents of Nimbin



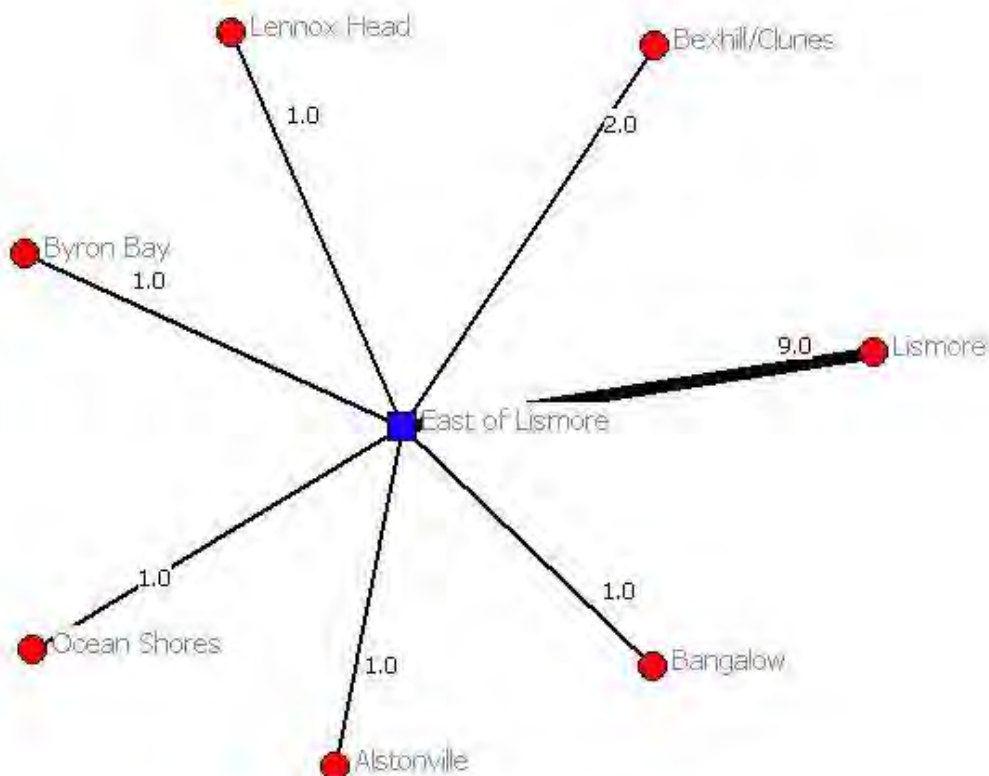
- Travel destination Lismore includes Lismore and Goonellabah; Byron Bay includes Byron Bay and Suffolk Park; and Brunswick Heads includes Brunswick Heads, Ocean Shores and South Golden Beach.

Figure A5 (36) – LGA travel destinations of East of Lismore residents



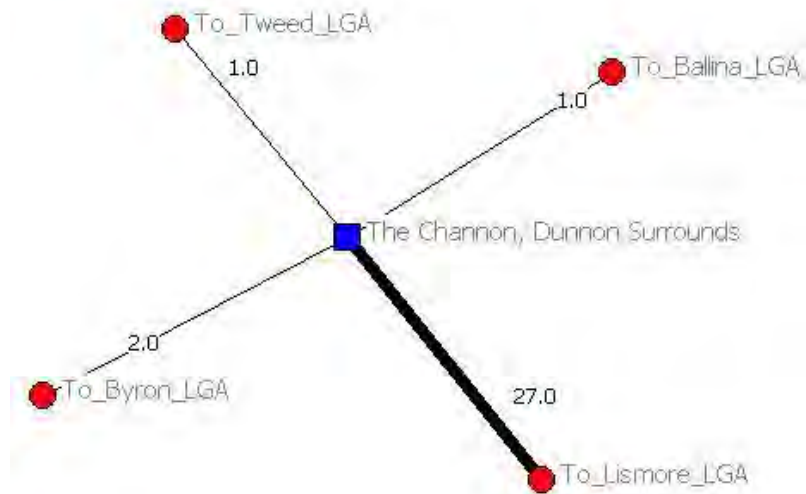
- East of Lismore includes: Bexhill, Boatharbour, Booyong, Corndale, Numulgi, Richmond Hill and Rosebank.

Figure A5 (37) – Specific travel destinations of East of Lismore residents



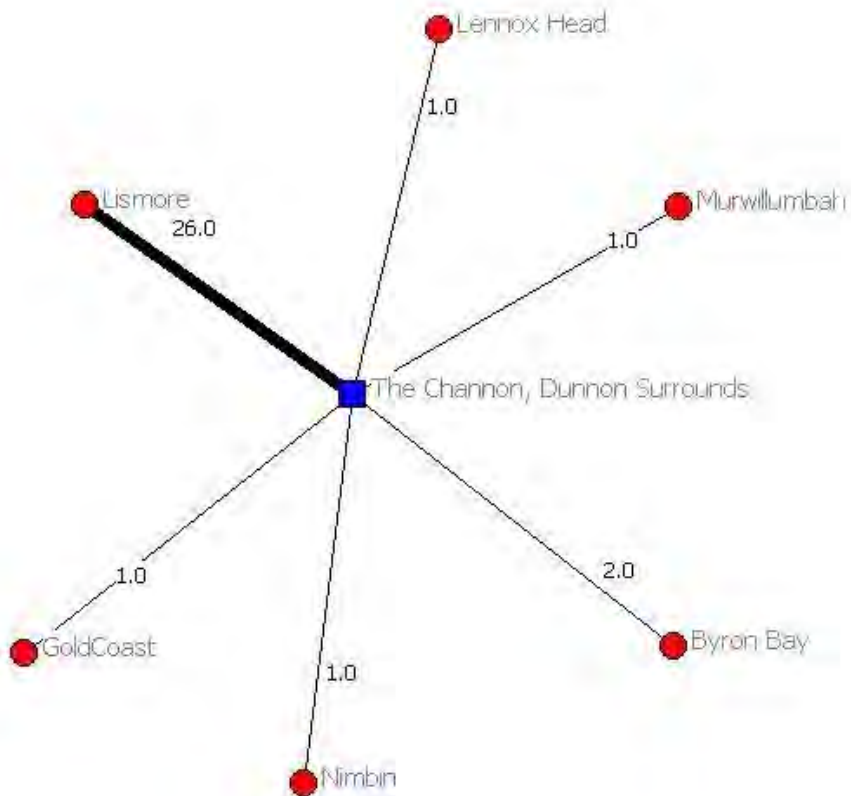
- East of Lismore includes: Bexhill, Boatharbour, Booyong, Corndale, Numulgi, Richmond Hill and Rosebank.
- Travel destination Lismore includes Lismore and Goonellabah; Alstonville includes Alstonville and Wollongbar; and Byron Bay includes Byron Bay and Suffolk Park.

Figure A5 (38) – LGA travel destinations of residents of The Channon, Dunoon and surrounds



- The Channon, Dunoon and surrounds includes: Bexhill, Boatharbour, Booyong, Corndale, Numulgi, Richmond Hill and Rosebank.

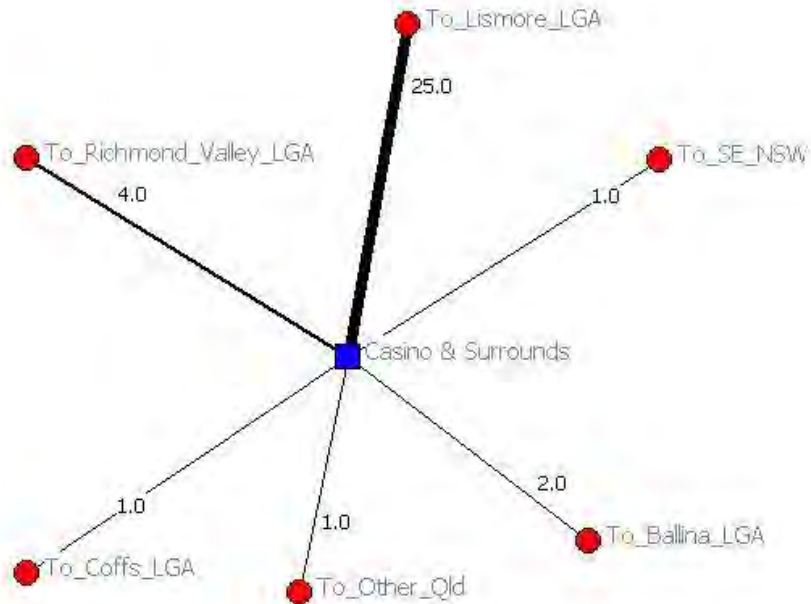
Figure A5 (39) – Specific travel destinations of residents of The Channon, Dunoon and surrounds



- The Channon, Dunoon and surrounds includes: Bexhill, Boatharbour, Booyong, Corndale, Numulgi, Richmond Hill and Rosebank.
- Travel destination Lismore includes Lismore and Goonellabah; and Byron Bay includes Byron Bay and Suffolk Park.

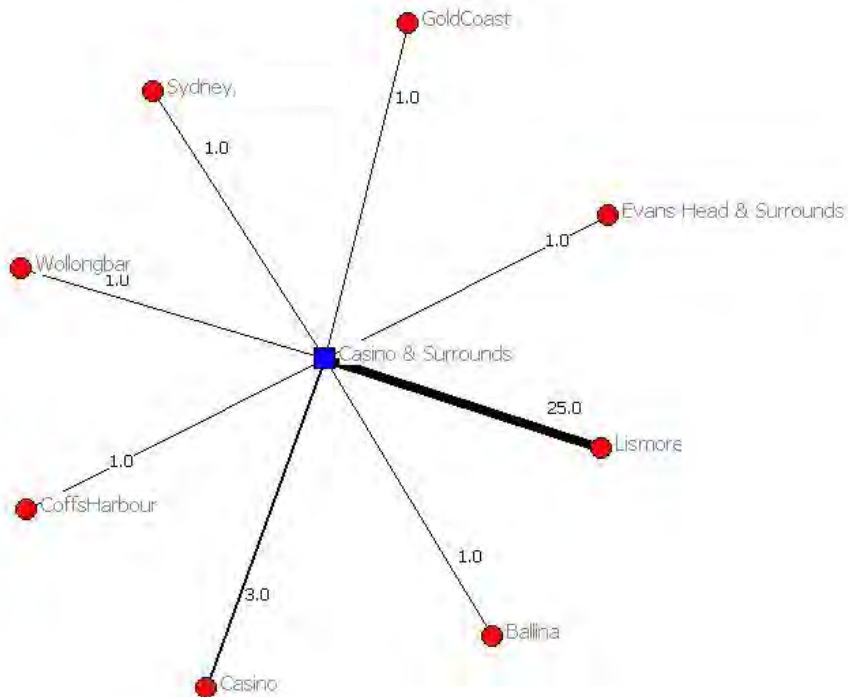
Richmond Valley Residents

Figure A5 (40) – LGA travel destinations of Casino and surrounds residents



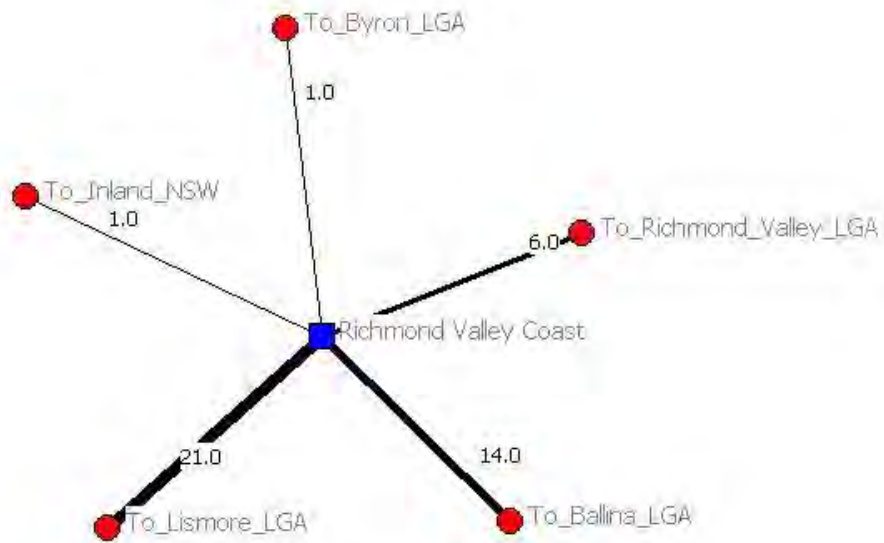
- Casino and surrounds includes: Casino, Fairy Hill, North Casino and Woodview.

Figure A5 (41) – Specific travel destinations of Casino and surrounds residents



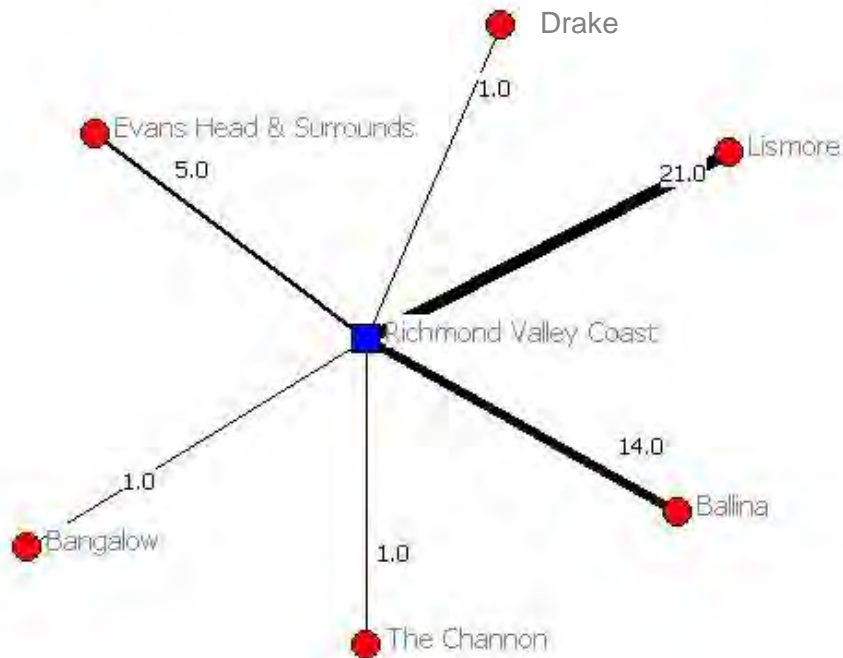
- Casino and surrounds includes: Casino, Fairy Hill, North Casino and Woodview.
- The travel destination Evans Head and surrounds refers to Evans Head; and Lismore includes Lismore and Goonellabah.

Figure A5 (42) – LGA travel destinations of Richmond Valley coast residents



- Richmond Valley Coast includes: Broadwater, Evans Head, New Italy and Woodburn.
- The travel destination Inland NSW refers to Drake.

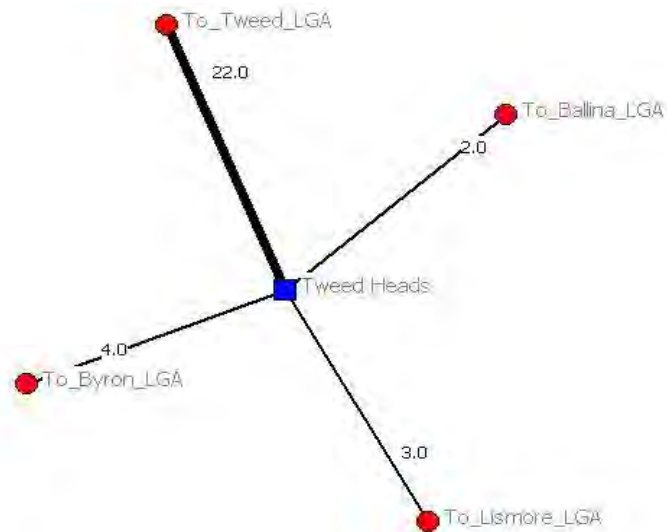
Figure A5 (43) – Specific travel destinations of Richmond Valley coast residents



- Richmond Valley Coast includes: Broadwater, Evans Head, New Italy and Woodburn.
- Travel destination Lismore includes Lismore and Goonellabah; and Evans Head and surrounds includes Evans Head and Broadwater.

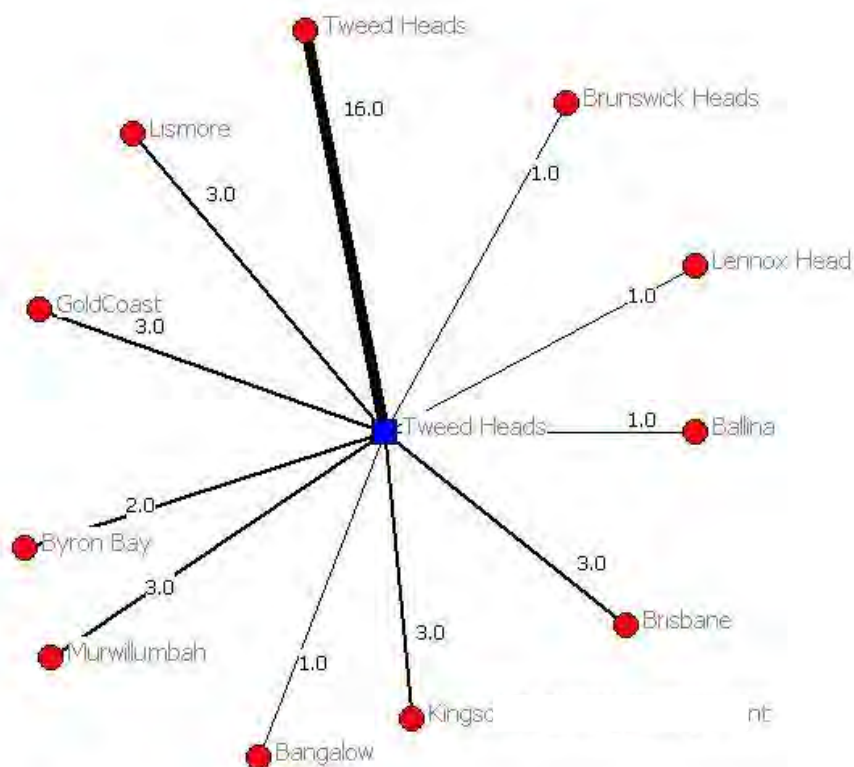
Tweed LGA Residents

Figure A5 (44) – LGA travel destinations of Tweed Heads residents



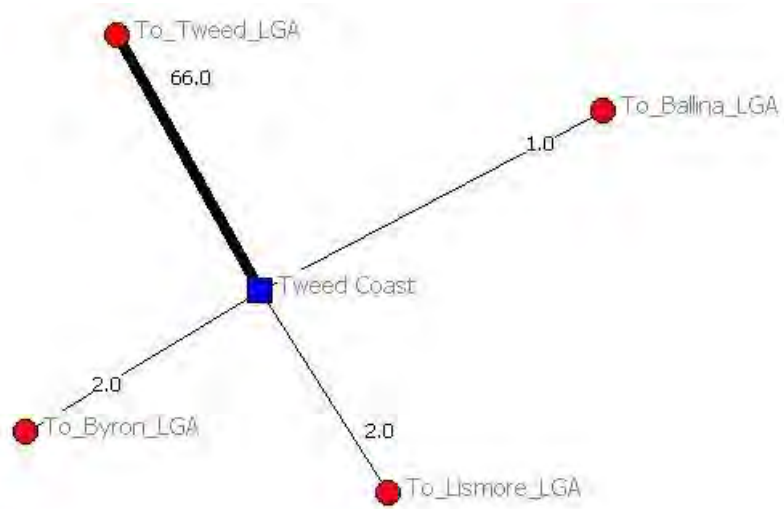
- Tweed Heads includes: Anchorage Island, Tweed Heads, South Tweed and West Tweed.

Figure A5 (45) – Specific travel destinations of Tweed Heads residents



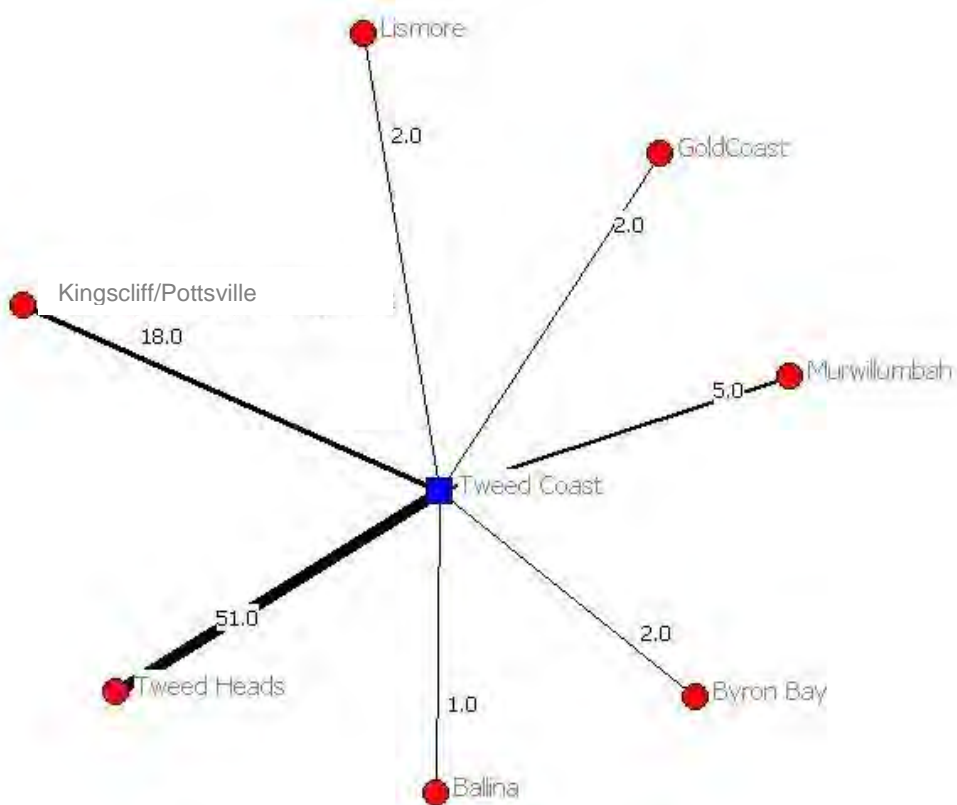
- Tweed Heads includes: Anchorage Island, Tweed Heads, South Tweed and West Tweed.
- Travel destination Lismore includes Lismore and Goonellabah; Byron Bay includes Byron Bay and Suffolk Park; and Brunswick Heads includes Brunswick Heads, Ocean Shores and South Golden Beach.

Figure A5 (46) – LGA travel destinations of Tweed Coast residents



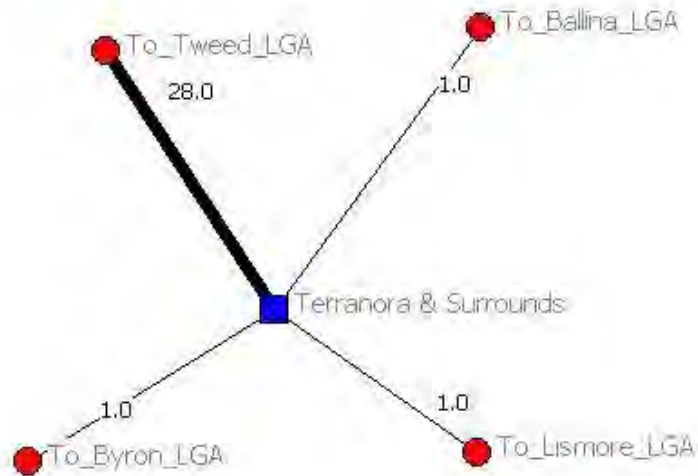
- Tweed Coast includes: Bogangar, Cabarita Beach, Casuarina, Chinderah, Cudgen, Hastings Point, Kingscliff and Pottsville.

Figure A5 (47) – Specific travel destinations of Tweed Coast residents



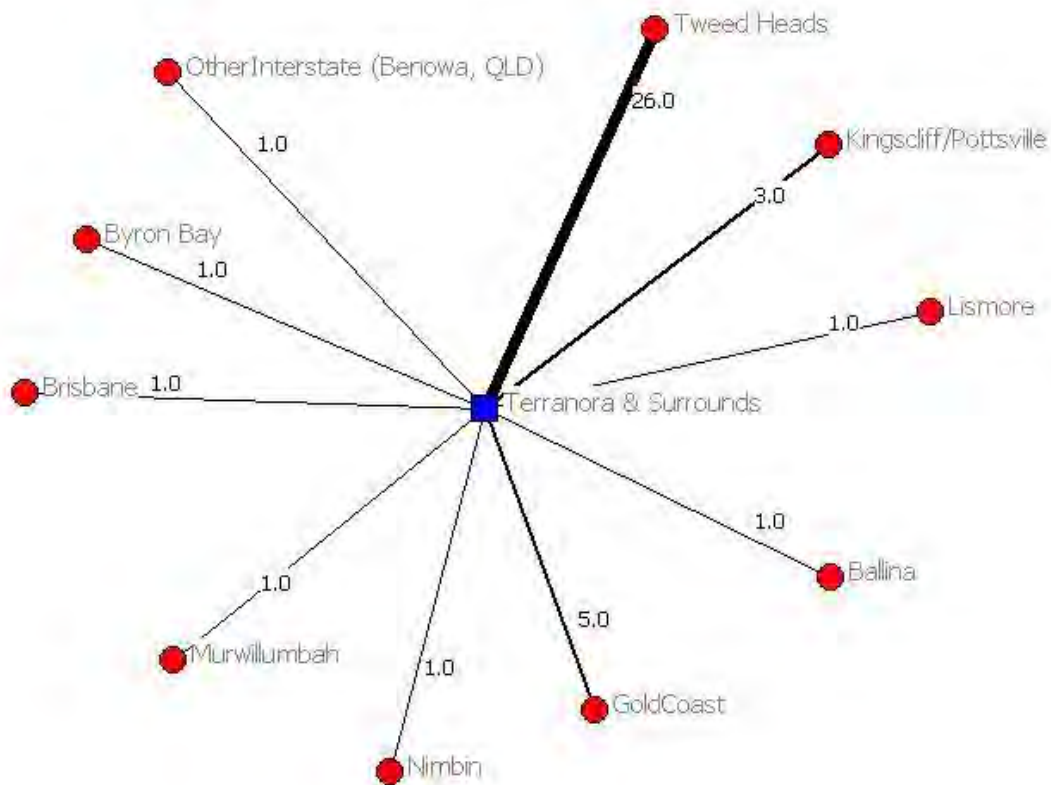
- Tweed Coast includes: Bogangar, Cabarita Beach, Casuarina, Chinderah, Cudgen, Hastings Point, Kingscliff and Pottsville.
- Travel destination Lismore includes Lismore and Goonellabah; and Byron Bay includes Byron Bay and Suffolk Park.

Figure A5 (48) – LGA travel destinations of residents of Terranora and surrounds



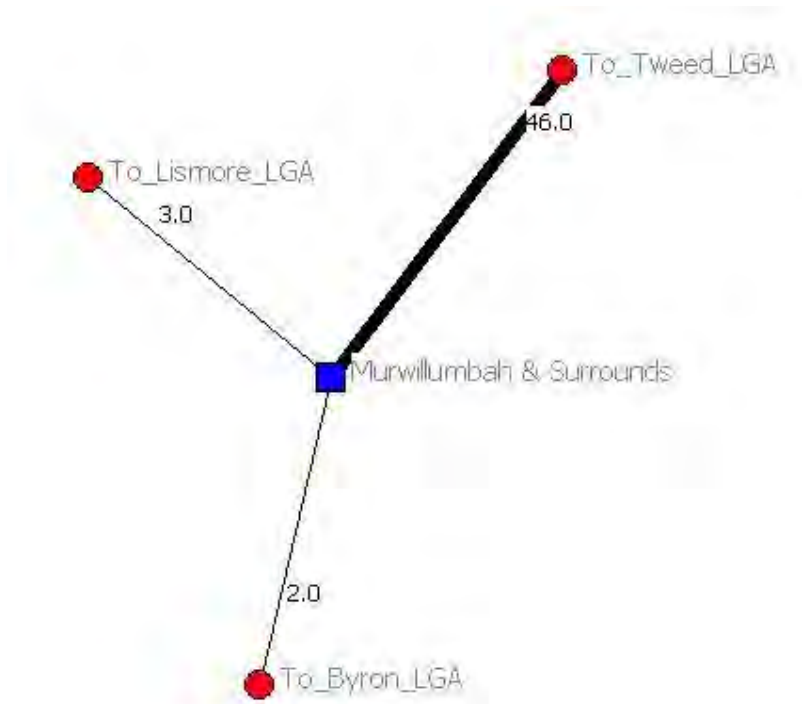
- Terranora and surrounds includes: Banora Point, Bilambil, Bilambil Heights, Carool and Terranora.

Figure A5 (49) – Specific travel destinations of residents of Terranora and surrounds



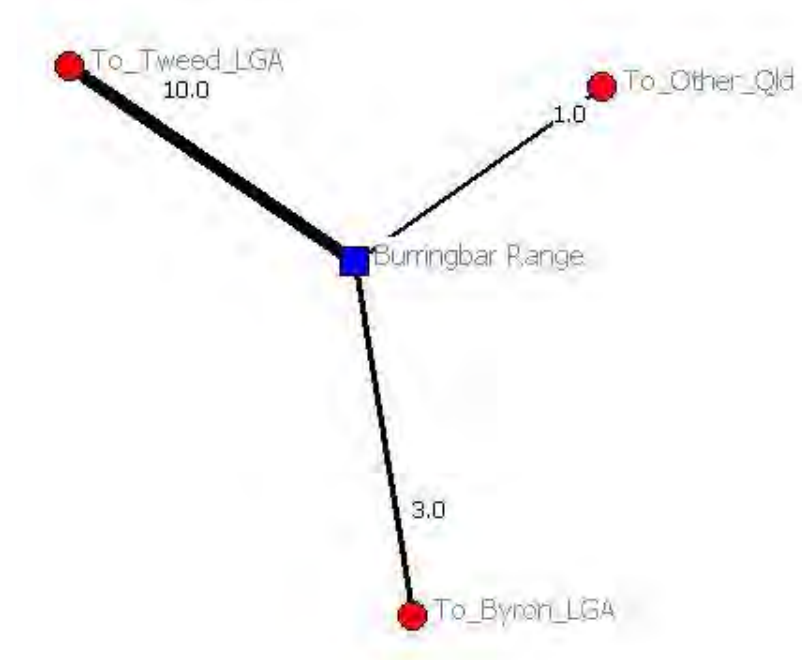
- Terranora and surrounds includes: Banora Point, Bilambil, Bilambil Heights, Carool and Terranora.
- Travel destination Lismore includes Lismore and Goonellabah; and Byron Bay includes Byron Bay and Suffolk Park.

Figure A5 (50) – LGA travel destinations of residents of Murwillumbah and surrounds



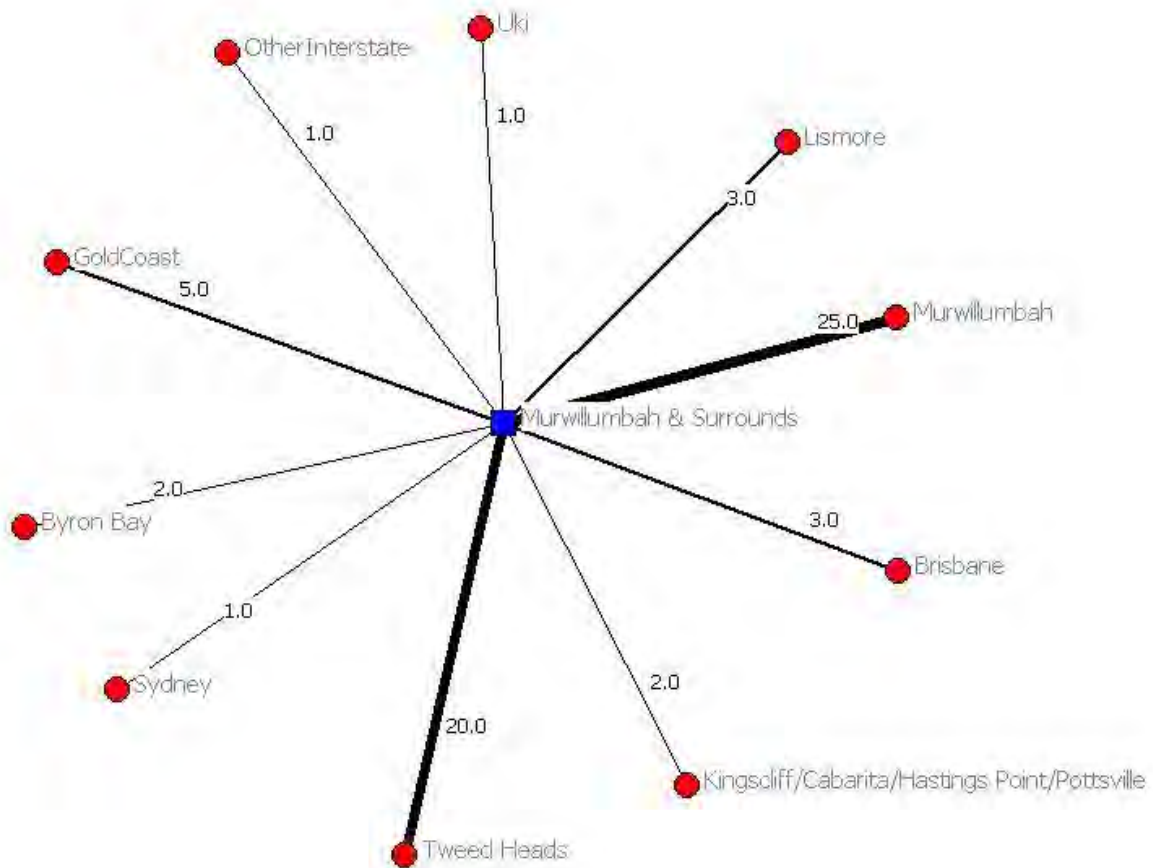
- Murwillumbah and surrounds includes: Bray Park, Chillingham, Condong, Dungay, Fernvale, Kielvale, Murwillumbah, Murwillumbah South, Nunderi, Reserve Creek and Tumbulgum.

Figure A5 (51) – LGA travel destinations of Burringbar Range residents



- Burringbar Range includes: Burringbar, Dunbible and Stokers Siding.
- Other Qld destination is Coolangatta.

Figure A5 (52) – Specific travel destinations of residents of Murwillumbah and surrounds



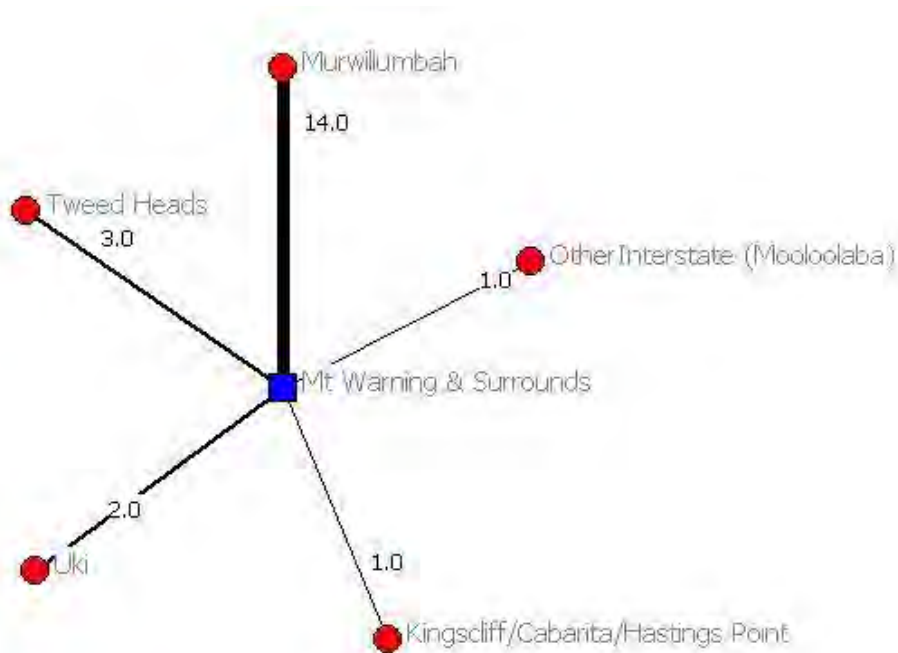
- Murwillumbah and surrounds includes: Bray Park, Chillingham, Condong, Dungay, Fernvale, Kielvale, Murwillumbah, Murwillumbah South, Nunderi, Reserve Creek, Tumbulgum, Burringbar, Dunbible and Stokers Siding.
- Travel destination Lismore includes Lismore and Goonellabah; and Byron Bay includes Byron Bay and Suffolk Park.

Figure A5 (53) – LGA travel destinations of residents of Mount Warning and surrounds



- Mount Warning and surrounds includes: Eungella, Mt Warning, Nobby's Creek, Numinbah, Tyalgum and Uki.

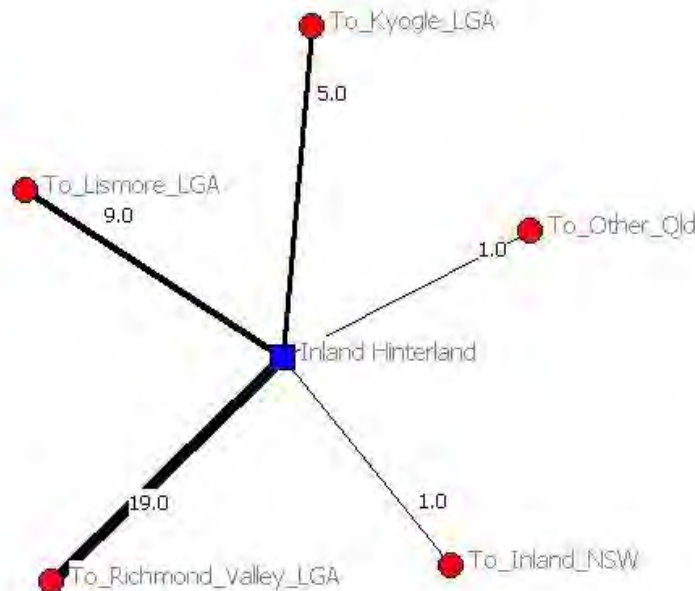
Figure A5 (54) – Specific travel destinations of residents of Mount Warning and surrounds



- Mount Warning and surrounds includes: Eungella, Mt Warning, Nobby’s Creek, Numinbah, Tyalgum and Uki.

Residential locations not confined to one LGA

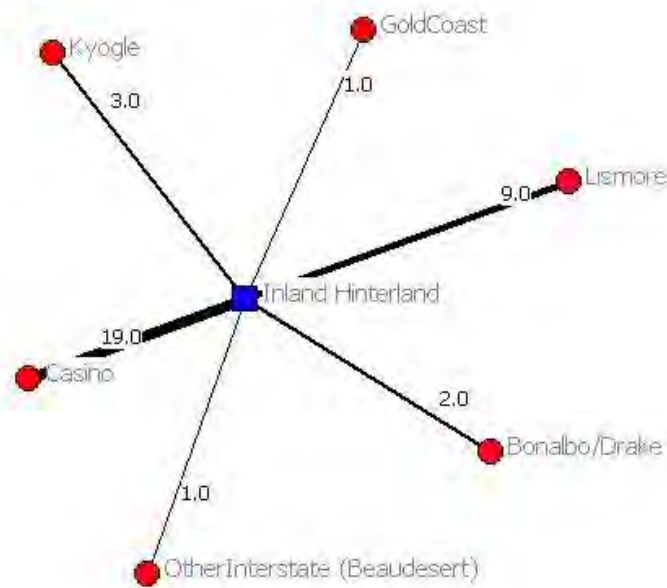
Figure A5 (55) – LGA travel destinations of Inland Hinterland residents



- Inland hinterland includes: Afterlee, Bonalbo, Drake (note this is in the Tenterfield Shire), Dyraaba, Ewingar, Hogarth Range, Old Bonalbo, Tabulam (Tenterfield Shire), Tunglebung, Urbenville, Whiporie and Woodenbong
- The Inland NSW destination is Drake and other Qld destination is Beaudesert.

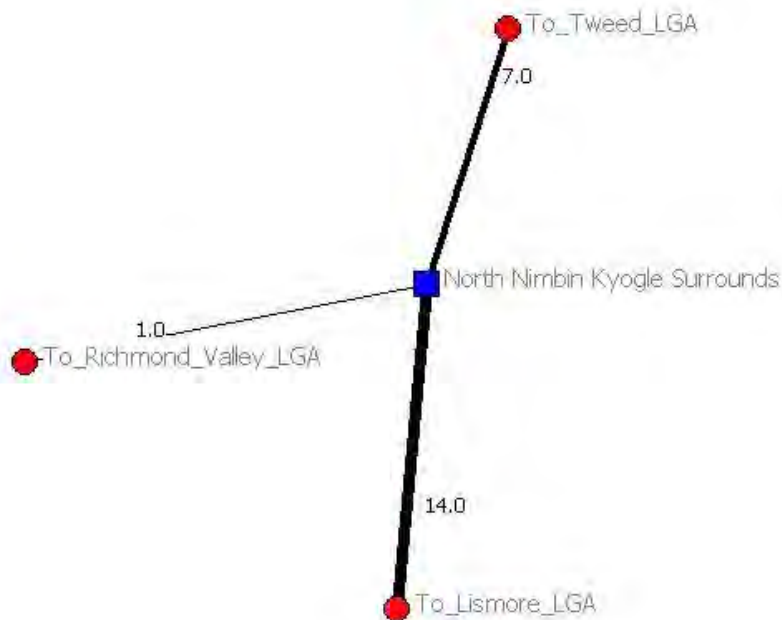
* Note Drake and Tabulam have been included in these figures due to recognised travel relationships into the Northern Rivers from these localities that were on the edge of the region.

Figure A5 (56) – Specific travel destinations of Inland Hinterland residents



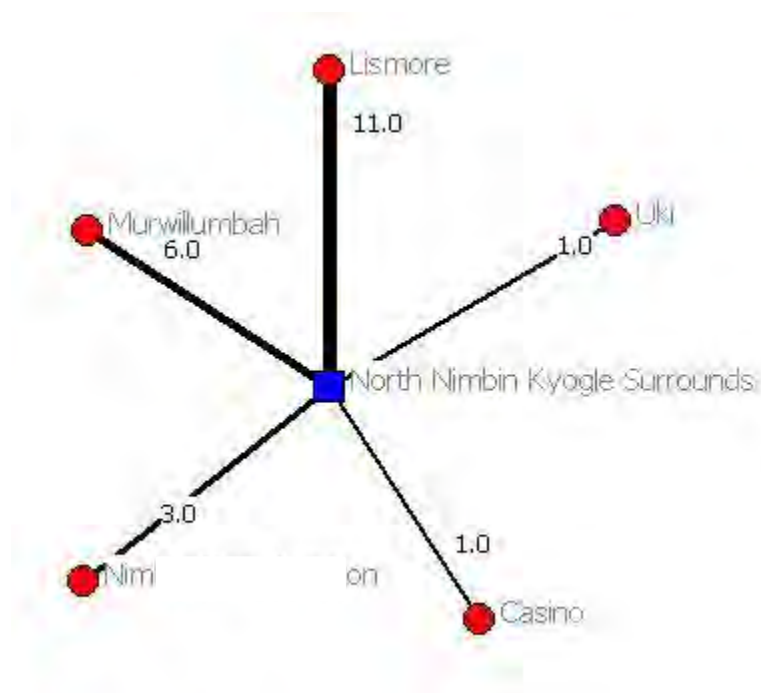
- Inland hinterland includes: Afterlee, Bonalbo, Drake (note this is in the Tenterfield Shire), Dyraba, Ewingar, Hogarth Range, Old Bonalbo, Tabulam (Tenterfield Shire), Tunglebung, Urbenville, Whiporie and Woodenbong.
- Travel destination Lismore includes Lismore and Goonellabah.

Figure A5 (57) – LGA travel destinations of North Nimbin, Kyogle and surrounds residents



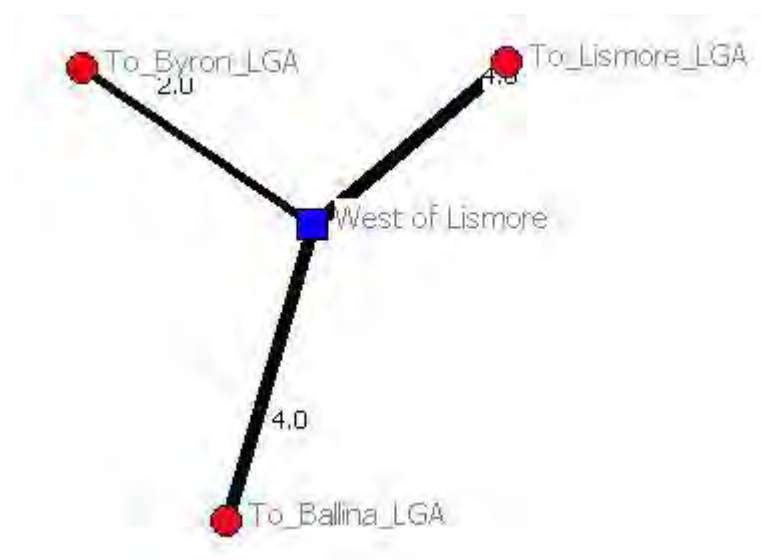
- North Nimbin, Kyogle and surrounds includes: Barkers Vale, Blue Knob, Byrrill Creek, Lillian Rock, Mount Burrell, Stoney Chute, Wadeville and Warrazambil Creek.

Figure A5 (58) – Specific travel destinations of North Nimbin, Kyogle and surrounds residents



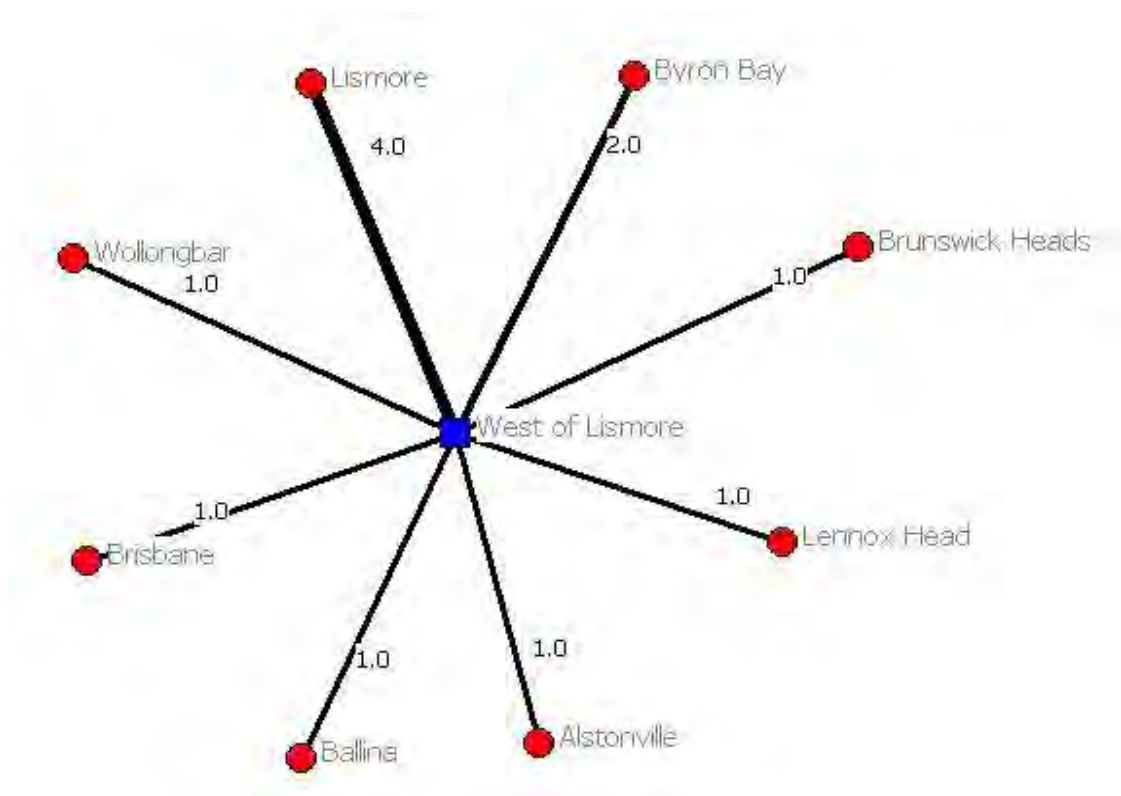
- North Nimbin, Kyogle and surrounds includes: Barkers Vale, Blue Knob, Byrriil Creek, Lillian Rock, Mount Burrell, Stoney Chute, Wadeville and Warrazambil Creek.
- Travel destination Lismore includes Lismore and Goonellabah.

Figure A5 (59) – LGA travel destinations of residents who live West of Lismore



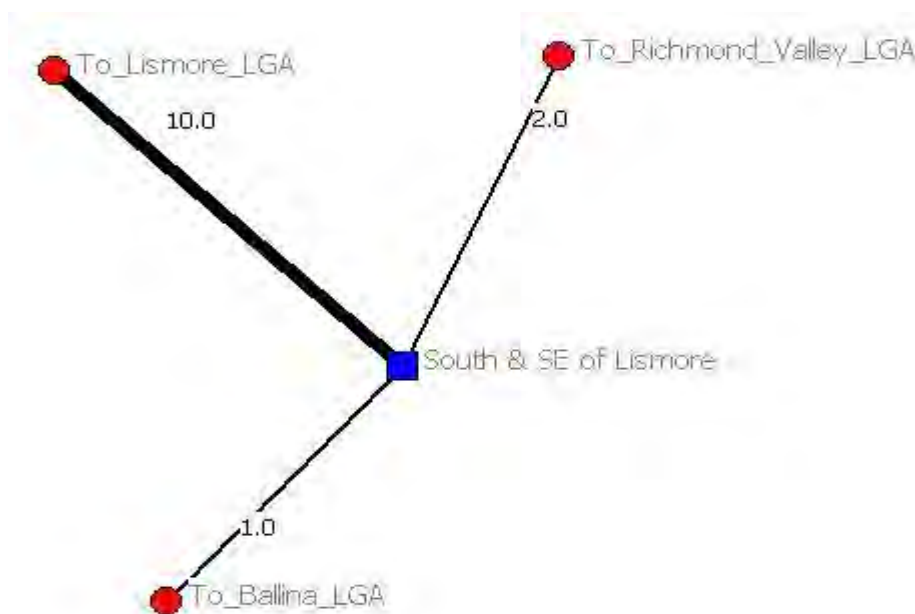
- West of Lismore includes: Bentley, Billen Cliffs community, Larnook, Jiggi, Rock Valley and Tuncester.

Figure A5 (60) – Specific travel destinations of residents who live West of Lismore



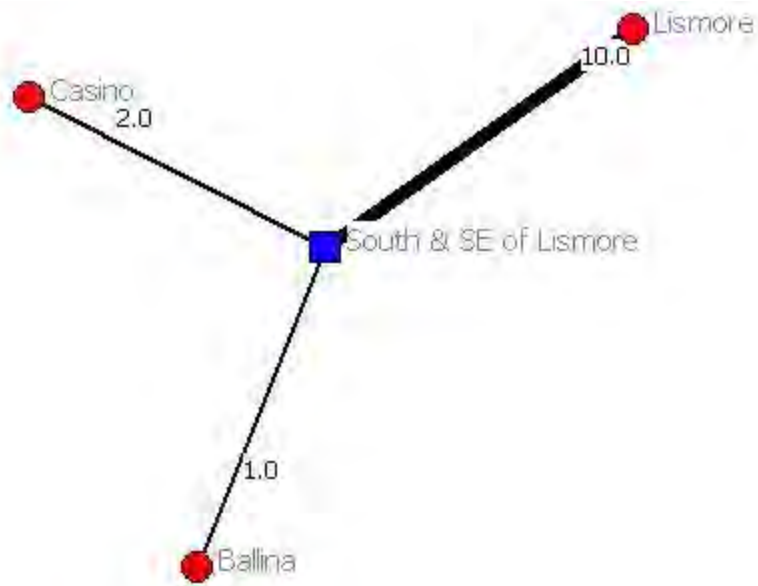
- West of Lismore includes: Bentley, Billen Cliffs community, Larnook, Jiggi, Rock Valley and Tuncester.
- Travel destination Lismore includes Lismore and Goonellabah; Byron Bay includes Byron Bay and Suffolk Park; and Brunswick Heads includes Brunswick Heads, Ocean Shores and South Golden Beach.

Figure A5 (61) – LGA travel destinations of residents who live South and South East of Lismore



- South and South East of Lismore includes: Caniaba, Coraki, Marom Creek, McKees Hill, Swan Bay, Wyrallah.

Figure A5 (62) – LGA travel destinations of residents who live South and South East of Lismore



- South and South East of Lismore includes: Caniaba, Coraki, Marom Creek, McKees Hill, Swan Bay and Wyrallah.
- Travel destination Lismore includes Lismore and Goonellabah.

Comprehensive travel analysis diagrams

Figure A5 (63) – All travel patterns identified by survey respondents

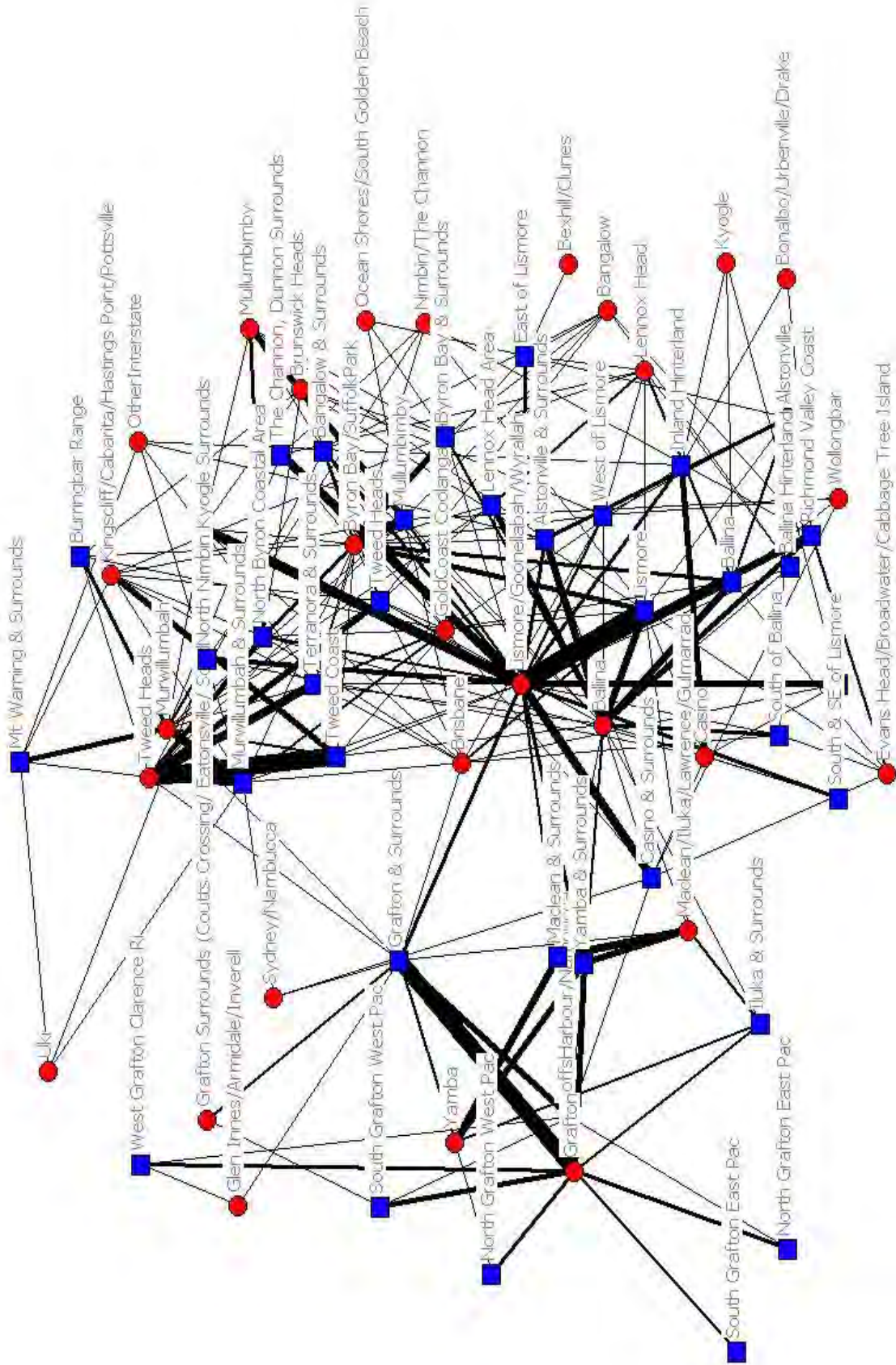


Figure A5 (64) – Travel between most populated residential locations and all travel destinations

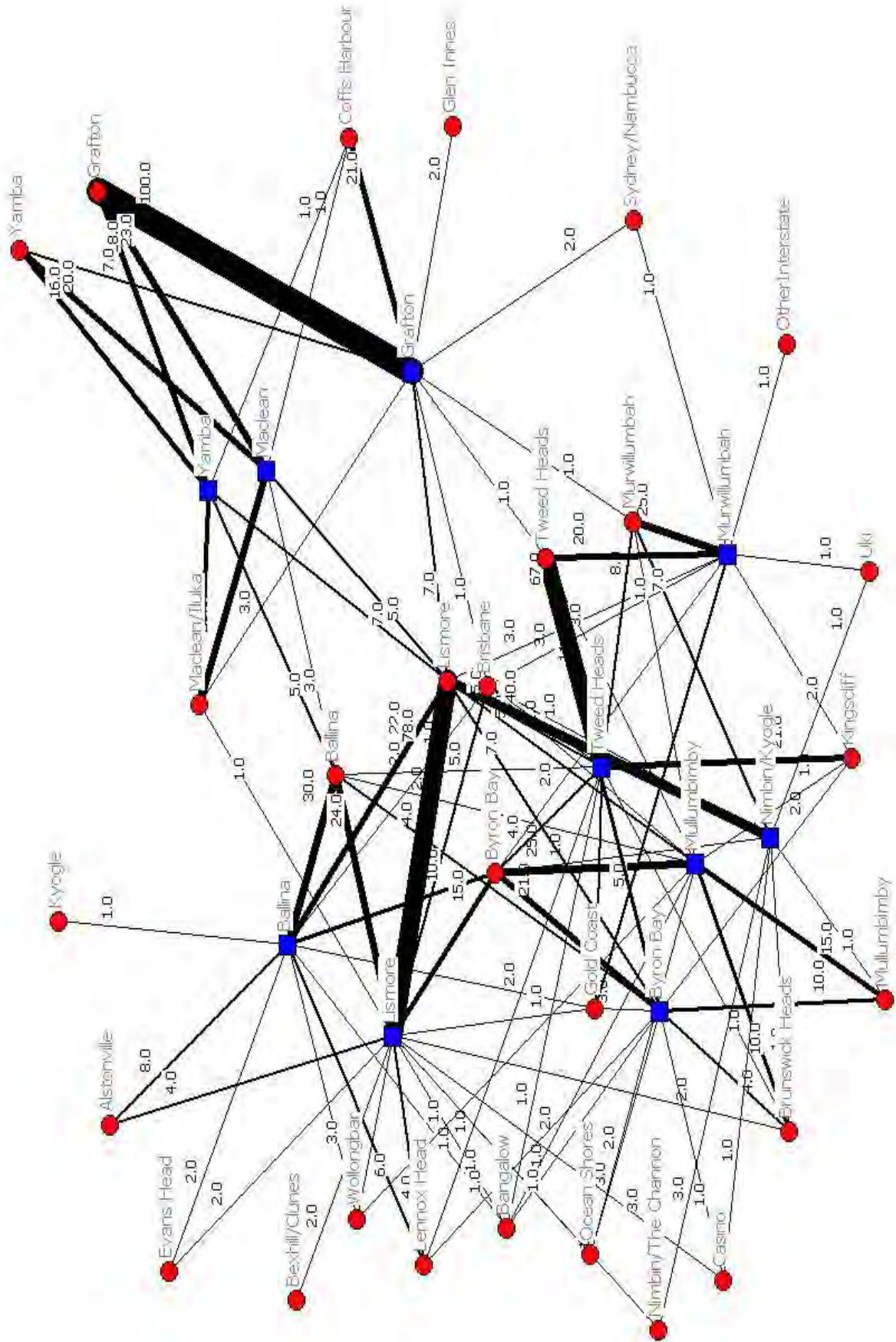
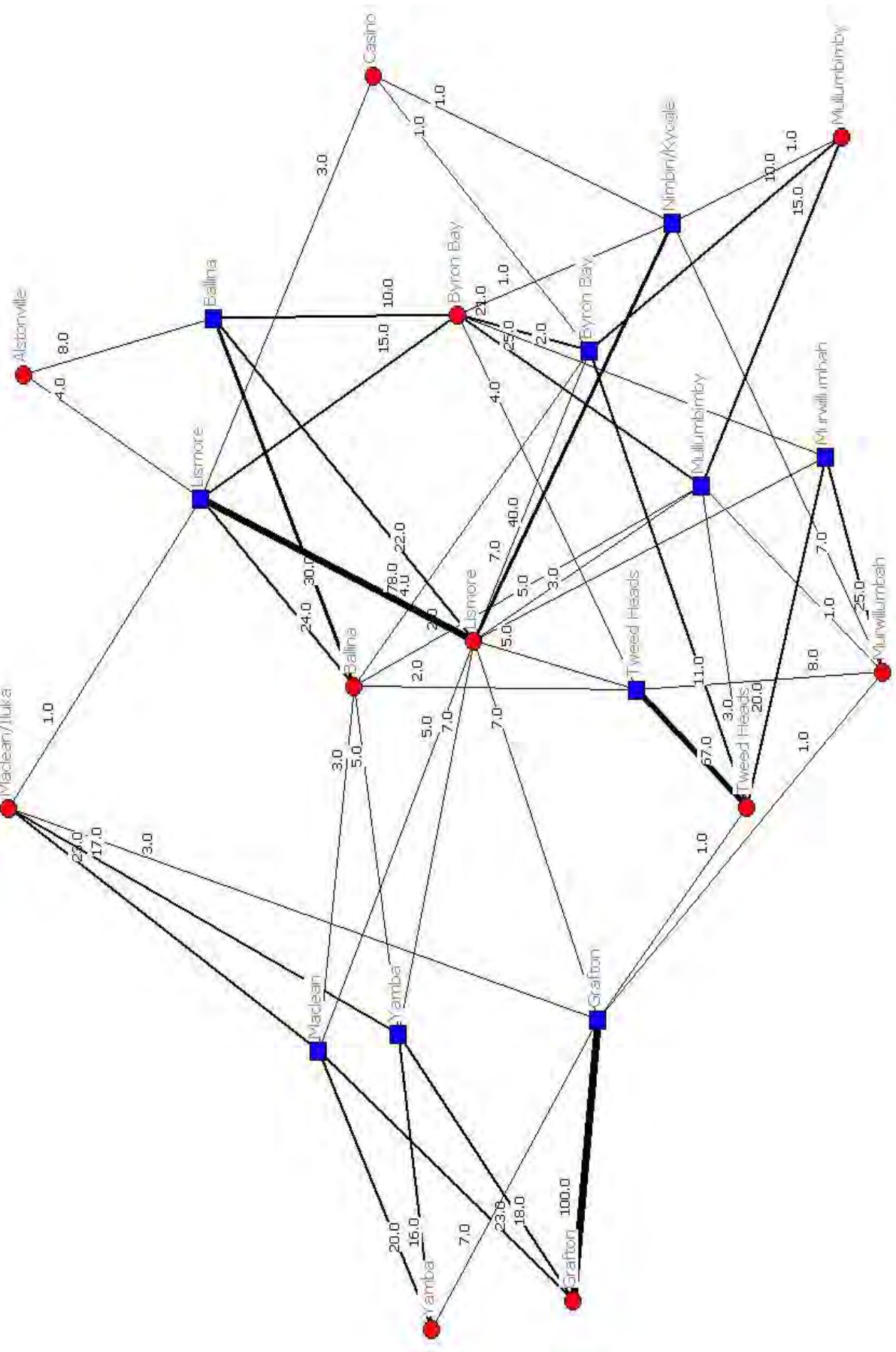


Figure A5 (65) – Travel between most populated residential locations and the most frequently visited travel destinations



APPENDIX 6: MEMBERS OF SUSTAIN NORTHERN RIVERS

Ballina Shire Council
Byron Shire Council
Clarence Valley Council
ENVITE
Northern Rivers Catchment Management Authority
Kyogle Council
Lismore City Council
Local Community Services Association – Far North Coast
North Coast Community Colleges
North Coast TAFE
North East Waste Forum
Northern NSW Local Health District
Northern Rivers Community Colleges
Northern Rivers Social Development Council
Northern Rivers Tourism
Northern Rivers University Centre for Rural Health
Northern Rivers Youth Advisory Council
Northern Star Pty Ltd
NSW Department of Education and Training
NSW Department of Primary Industries
NSW Trade & Investment
Regional Development Australia – Northern Rivers
Richmond Valley Council
Southern Cross University
Tweed Shire Council
Youth Environment Society