Super Tuesday

Bicycle Commuter Survey

Department of Lands and Planning (DLP)

October 2011

BICYCLE NETWORK VICTORIA

The Annual Super Tuesday Bike Count

The massive change in bike riding continues across Queensland and the Northern Territory, with both local and state governments at the centre of it.

Super Tuesday, by Bicycle Network Victoria, is Australia's biggest visual bike count. Super Tuesday aims to establish a reliable annual benchmark for bicycle commuting to allow those providing for bike riding to base their judgments on accurate, relevant and up-to-date information. The count measures bike commuter flows in the morning peak (7–9am).

In 2011 for the first time, Super Tuesday took place in the Northern Territory covering the areas of Darwin, Palmerston and Alice Springs. In other Super Tuesday firsts, Townsville, Bundaberg, Rockhampton, Mackay and Gladstone were involved, joining Cairns, Moreton Bay and the Gold Coast, all of which participated in 2010.

There was a total of 210 counters across Queensland and the Northern Territory, a significant increase from the 88 counters in 2010.

The Super Tuesday count enables decision-makers to be more confident about the scale and location of new investments and infrastructure. It also assists in determining locations of further investigations and surveys, enabling officers to monitor the effect of investments and programs on rider flows and numbers.

Data analysis across the Northern Territory and Queensland councils indicates there are significant rider numbers in northern Australia, with several intersections across the region recording well over 100 riders and in some instances over 200 riders.

At the busiest intersection in Queensland (site 5387 in Townsville), 282 riders were recorded moving through the intersection. At site 5483 in Darwin, 186 riders were recorded moving through the intersection.

The Super Tuesday Bike Count 2011 for these new areas provides an excellent baseline for 2012 and enables repeat councils to monitor the growth in bike riding on a year-on-year basis.

Mike Williamson,

Bike Futures Manager.

Contents

List of Tables and Figures

1.0 Executive Summary

This report contains data collected between 7am and 9am on the morning of Tuesday 6 September at 26 sites.

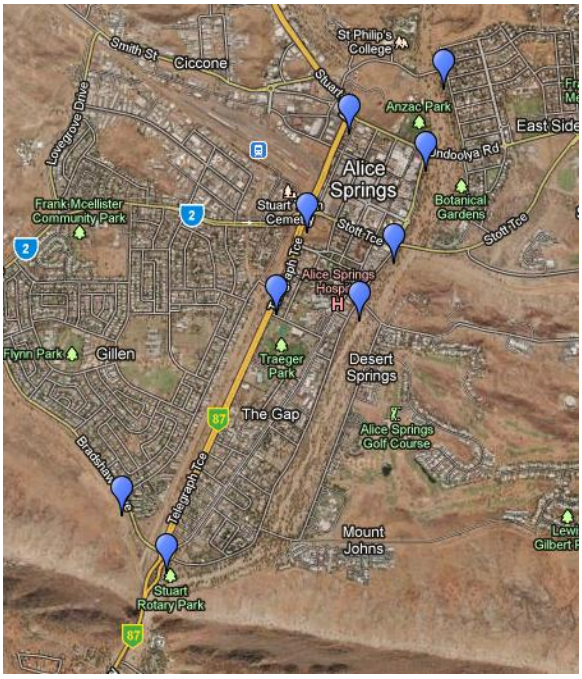
The Department of Lands and Planning (DLP) sites included in the report are located on the arterial cycle path network in parts of Darwin and Alice Springs, managed and maintained by DLP. Further counts were undertaken on the local cycle path network managed by Darwin City Council and Palmerston City Council (and some additional DLP sites within the Palmerston City Council area).

The weather was fine and sunny on Super Tuesday 2011.

The key findings from Super Tuesday 2011 in Alice Springs and Greater Darwin include:

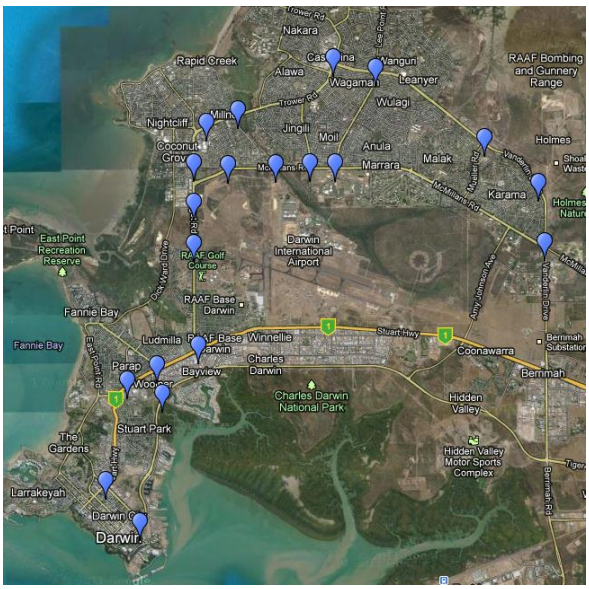
- Site 5418: *Stuart Hwy (north), Stott Tce, Stuart Hwy (south), Larapinta Drv* was the busiest commuter route in Alice Springs, with a total of 132 riders. .
- Site 5507: *Stuart Hwy, McMinn St (east), Daly St, McMinn St (west), Stuart Hwy path* was the busiest commuter route for the DLP with a total of 109 riders.
- DLP sites in Darwin recorded an average of 0.9 riders per minute at the busiest site and DLP sites in Alice Springs recorded 1.1 riders per minute which are both comparable to Cairns.
- Stott Terrace/Larapinta Drive has been identified as the most dominant commuter route for riders in Alice Springs from the Super Tuesday Bike Count.
- Schwarz Crescent has been identified as a significant commuter route towards the northern end of the town for riders in Alice Springs.
- McMinn Street has been identified as the key commuter route into the Darwin CBD for the sites allocated by the DLP.
- Vanderlin Drive in the northern end of the site allocation for the DLP in Greater Darwin, is another significant commuter route for Darwin riders.
- The riders at the busiest site in Alice Springs are worth $1,750,000 in saved bus costs.
- The riders at the busiest site in Greater Darwin are worth $1,500,000 in saved bus costs.

Figure 1 DLP (Alice Springs) Super Tuesday 2011 Count Sites



To view all Department of Lands and Planning (Alice Springs) 2011 count sites click on this link

Figure 2 DLP (Greater Darwin) Super Tuesday 2011 Count Sites



To view al Department of Lands and Planning (Greater Darwin) 2011 count sites click on this link

** Some sites included in the Palmerston City Council report are on the DLP network.*

2.0 How to use this Report

The Super Tuesday 2011 report for the Department of Lands and Planning is in two parts that span two mediums, electronic and hard copy / pdf.

This document (the pdf / hard copy)

- Identifies key commuter routes;
- Identifies regional bicycle commuting routes and gateways outside the Alice Springs and Greater Darwin area;
- And provides a commentary on changes and trends. The commentary will enable councils to more easily prepare material for internal reporting, council newsletters and press releases.

The electronic data, which includes

- The location of the count sites;
- The total number of riders passing through each site;
- The movement of riders through each site or intersection counted.

Bicycle Network recommends readers view the document pdf and the electronic data components of the report at the same time.

2.1 The PDF / Hard Copy Document

The portion of the Department of Lands and Planning's Super Tuesday 2011 report that is presented in document form can be viewed in hard copy or as a pdf on-screen.

This document is best read on-screen, as a pdf, because it contains links to the electronic data that makes up the remainder of this report. If you are viewing this document on-screen, you can click on these links to go directly to the relevant electronic data.

(If the hyperlinks do not work when you click the mouse pointer on them, try pressing the CTRL key and then clicking the mouse button.)

A second advantage of reading this document electronically is that the quality of the images will be enhanced. Much of the content of this report is represented in highly detailed tables and digital maps, so Bike Futures advises readers who cannot view this document on a computer screen to ensure their hard copy has a high standard of colour image reproduction.

2.2 Viewing the Electronic Data

The second part of this report is the Super Tuesday count data, which has been collected, processed and interpreted in electronic form, using Google Earth.

Viewing the data on Google Earth makes this data far more accessible. Readers can see the site locations, and analyse the data on rider numbers and their movements.

Google Earth allows users to zoom in and out of a map location. Users can also choose to view the count sites on two-dimensional outline maps, three-dimensional topographic maps or as a satellite image.

The flow maps, another feature of Google Earth, show the flow or density of bike commuters.

The Super Tuesday team makes every effort to ensure the full accuracy of the collection and entry of the Super Tuesday data. However, we also retain all of our Super Tuesday data collection records, either electronically or in hard copy form, to verify our figures if necessary.

3.0 Commentary

3.1 Alice Springs and Greater Darwin Rider Numbers

The total numbers of riders and the movement of riders at each of the sites specified by the Department of Lands and Planning in Alice Springs and Greater Darwin can be viewed via the link below, which will provide an electronic and interactive version of the table shown in figure 3.

Figure 3 Count Sites in Alice Springs and Greater Darwin, 6 September 2011

more people cycling more often

Count sites in NT, 6-9-2011

Council (Alice Springs)	Legs	Location ... sort columns by clicking on the column headings	Map ref	Map	am tot
Alice Springs	4	Stuart Hwy (north), Stott Tce, Stuart Hwy (south), Larapinta Drv	105 J15	map 5418	132
Alice Springs	4	Leichardt Tce, Stott Tce (east), South Tce, Stott Tce (west)	106 A16	map 5416	111
Alice Springs	3	Undoolya Rd, Leichardt St, Wills Tce	106 B14	map 5414	97
Alice Springs	3	Wills Tce, Stuart Hwy (south), Stuart Hwy (north)	105 K13	map 5415	80
Alice Springs	3	Sturt Tce (north), Sturt Tce (south), Schwarz Cres	106 C12	map 5421	61
Alice Springs	3	South Tce (north), Tuncks Rd, South Tce (south)	112 A2	map 5420	59
Alice Springs	3	Stuart Hwy (north), Stuart Hwy (south), Espie St	111 H2	map 5419	52
Alice Springs	5	Stuart Hwy (north), Gap Rd, South Tce, Stuart Hwy (south), Bradshaw Drv	111 E9	map 5417	39
Alice Springs	3	Bloomfield St, Bradshaw Drv (south), Bradshaw Drv (north)	111 D7	map 5422	15

more people cycling more often

Count sites in NT, 6-9-2011

Council (Dept L and P)	Legs	Location ... sort columns by clicking on the column headings	Map ref	Map	am tot
Dept L and P	5	Stuart Hwy, McMinn St (east), Daly St, McMinn St (west), Stuart Hwy path	36 B7	map 5507	109
Dept L and P	4	Parap Rd, Stuart Hwy (east), Stuart Hwy (west), Stokes St	26 C15	map 5510	106
Dept L and P	3	Stuart Hwy (east), Stuart Hwy (west), Ross Smith Ave - Count on & off road as one	26 F14	map 5511	98
Dept L and P	4	Trower Rd (east), Rapid Creek Rd (south), Trower Rd (west), Rapid Creek Rd (north)	17 C9	map 5518	87
Dept L and P	4	Lee Point Rd (north), Vanderlin Drv (east), Lee Point Rd (south), Vanderlin Drv (west)	18 D5	map 5520	83
Dept L and P	4	Bagot Rd (north), Osgood Drv, Bagot Rd (south), Totem Rd	16 J16	map 5514	73
Dept L and P	4	Stuart Hwy (east), Snell St, Stuart Hwy (west), Bagot Rd	26 J12	map 5512	70
Dept L and P	3	Bagot Rd (north), Bagot Rd (south), Fitzer Drv	26 J4	map 5513	62
Dept L and P	3	McMillans Rd (east), Charles Eaton Drv, McMillans Rd (west)	17 F13	map 5524	61
Dept L and P	4	Bagot Rd (north), Old McMillans Rd (east), Bagot Rd (south), Old McMillans Rd (west)	16 J13	map 5515	59
Dept L and P	3	McMillans Rd (east), McMillans Rd (west), Sabine Rd	17 B13	map 5517	50
Dept L and P	3	Trower Rd (east), Sabine Rd, Trower Rd (west)	16 K10	map 5516	49
Dept L and P	4	Trower Rd (north), Vanderlin Drv (east), Trower Rd (south), Casuarina Shops	18 A4	map 5519	48
Dept L and P	4	Rothdale Rd, McMillans Rd (east), Henry Wrigley Drv, McMillans Rd (west)	17 J13	map 5525	48
Dept L and P	4	Lee Point Rd, McMillans Rd (east), Marrara Drv, McMillans Rd (west)	18 A13	map 5526	44
Dept L and P	4	Vanderlin Drive (north), McMillans Road (east), Vanderlin Drive (south), McMillans Road (west)	29 H4	map 5523	42
Dept L and P	4	Tiger Brennan Drv, McMinn St (east), Bennett St, McMinn St (west)	36 D11	map 5506	34
Dept L and P	3	Vanderlin Drv (east), Mueller Rd, Vanderlin Drv (west)	19 C11	map 5521	25
Dept L and P	4	Tiger Brennan Drv (north), Stoddart Drv, Tiger Brennan Drv (south), Woolner Rd	26 F16	map 5509	23
Dept L and P	3	Vanderlin Drv (south), Kalymnos Drv, Vanderlin Drv (north)	19 H15	map 5522	21

Click this link to see figure 2 in full – Alice Springs

Click this link to see figure 2 in full – Greater Darwin

3.2 The Busiest Commuter Routes in Alice Springs and Greater Darwin

Table 1 shows the busiest intersections recorded in the Department of Lands and Planning Super Tuesday count. This table is best viewed electronically to allow a greater understanding of rider movements at each of the intersections.

Table 1 The Busiest Commuter Locations in Alice Springs and Greater Darwin

Location	Location	Map Ref	Map	Total Rider Numbers	Percentage Difference from 2010
Alice Springs	Stuart Hwy (north), Stott Tce, Stuart Hwy (south), Larapinta Drv	105 J15	map 5418	132	NA
Alice Springs	Leichardt Tce, Stott Tce (east), South Tce, Stott Tce (west)	106 A16	map 5416	111	NA
Alice Springs	Undoolya Rd, Leichardt St, Wills Tce	106 B14	map 5414	97	NA
Greater Darwin	Stuart Hwy, McMinn St (east), Daly St, McMinn St (west), Stuart Hwy path	36 B7	map 5507	109	NA
Greater Darwin	Parap Rd, Stuart Hwy (east), Stuart Hwy (west), Stokes St	26 C15	map 5510	106	NA
Greater Darwin	Stuart Hwy (east), Stuart Hwy (west), Ross Smith Ave	26 F14	map 5511	98	NA

- Site 5418: *Stuart Hwy (north), Stott Tce, Stuart Hwy (south), Larapinta Drv* was the busiest commuter route in Alice Springs, with a total of 132 riders. The major flow of riders at this site travelled west on Larapinta Drive (71) into this location and continuing west on Stott Terrace.
- Site 5507: *Stuart Hwy, McMinn St (east), Daly St, McMinn St (west), Stuart Hwy path* was the busiest commuter route in the Greater Darwin region with a total of 109 riders. The major flow of riders at this site was 83 travelling south-east down McMinn Street.

3.3 Other Significant Findings

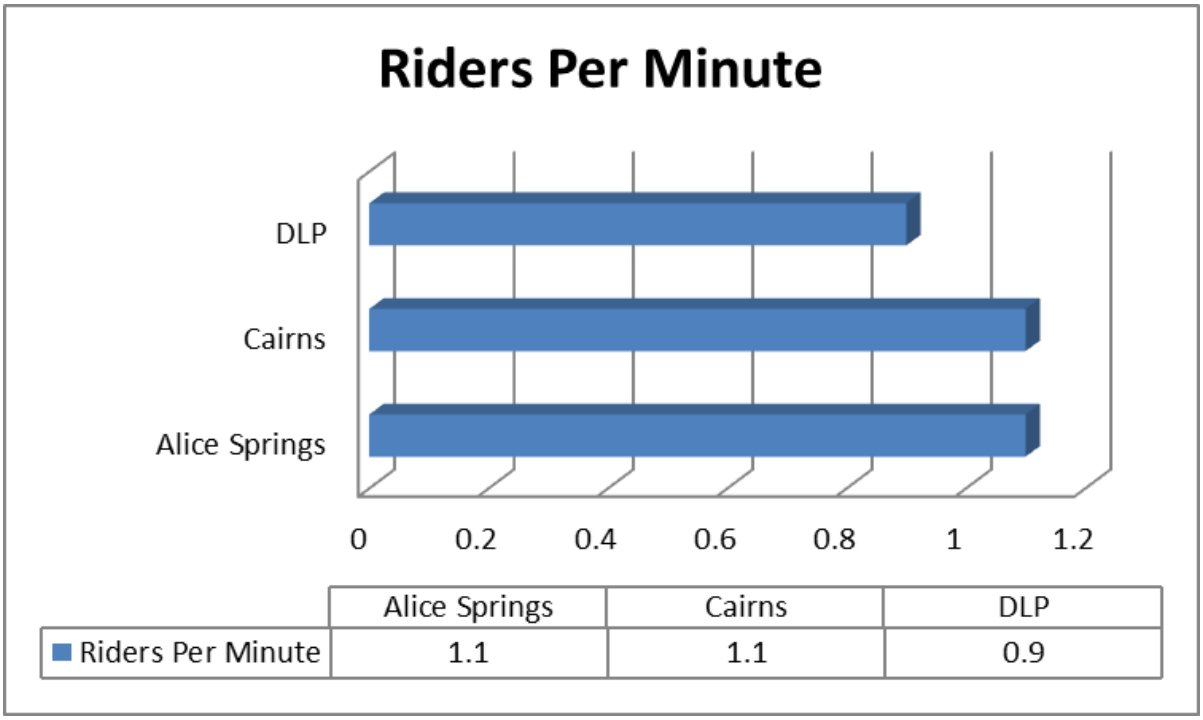
- Site 5416: *Leichardt Tce, Stott Tce (east), South Tce, Stott Tce (west)* was another significant site recorded on Super Tuesday, with a total of 111 riders. The most predominant movement of riders mirrored above, with 45 riders travelling west into this location.
- Site 5510: *Parap Rd, Stuart Hwy (east), Stuart Hwy (west), Stokes St* was another busy site recorded on Super Tuesday in the Greater Darwin region, with a total of 106 riders. The major flow of riders was recorded travelling west on Stokes Street (73).

3.4 Riders Per Minute

3.41 Riders Per Minute

Riders per minute are calculated on the busiest counted site in each municipality.

Figure 4 Riders Per Minute



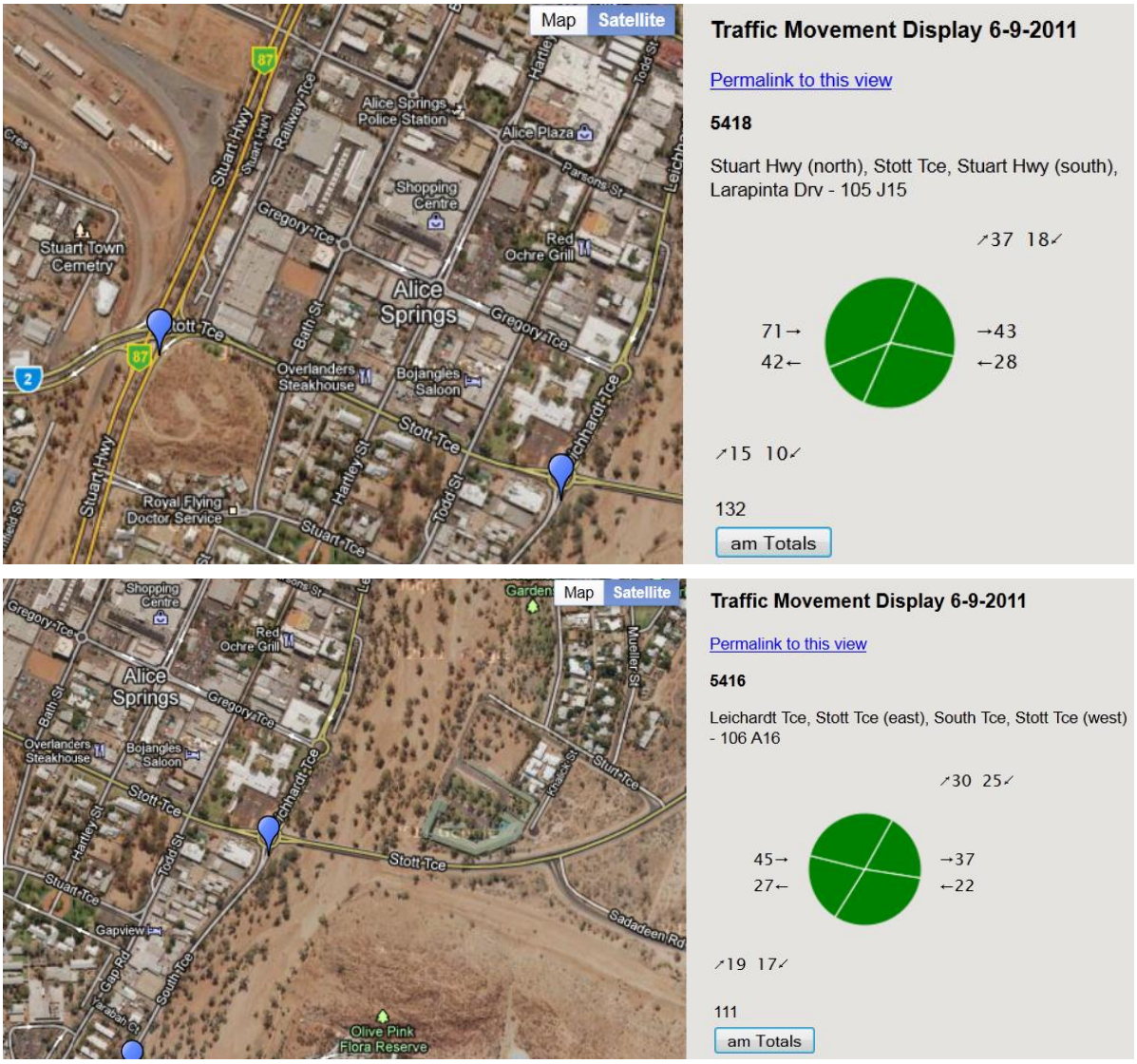
	Alice Springs	Cairns	DLP
Riders Per Minute	1.1	1.1	0.9

- Figure 3 shows DLP is comparable to (in terms of riders per minute) to the major Northern Queensland city of Cairns.
- Cairns recorded 129 riders at their busiest site.

3.5 Observations on Key Sites

3.5.1 Stott Terrace/Larapinta Drive

Figure 5 Sites 5418 & 5416 (Alice Springs)



Stott Terrace/Larapinta Drive has been identified as the most dominant commuter route for riders in Alice Springs from the Super Tuesday Bike Count.

At site 5418 featured in figure 5, riders funnel into this location from the west from Larapinta Drive with many continuing to travel east along Stott Terrace towards site 5416.

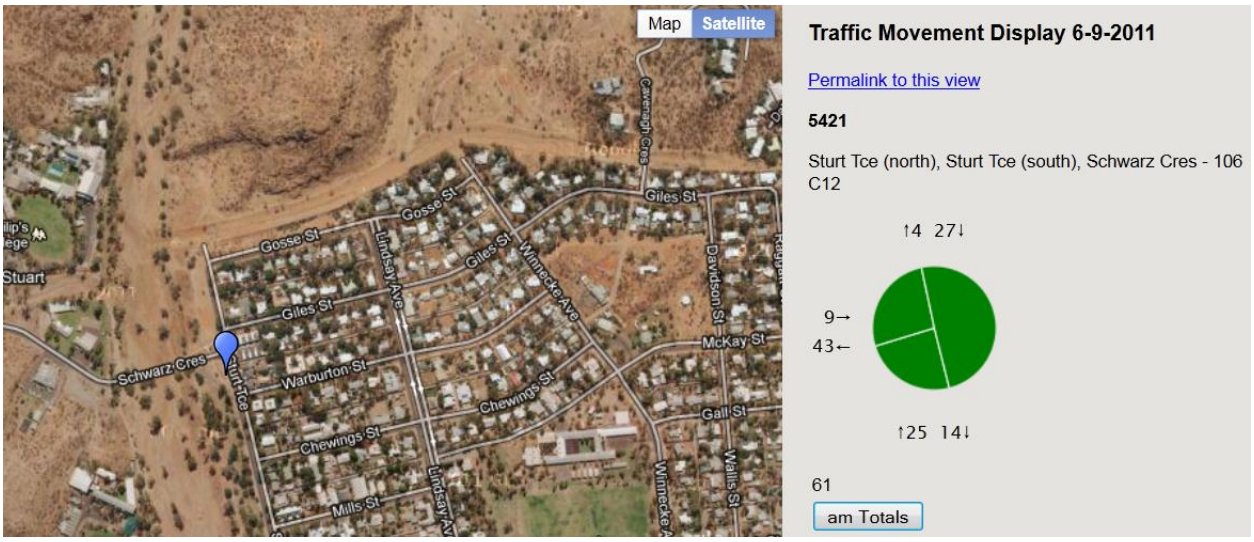
However, many riders were using this as a vehicle to access the dominant northbound route of the Stuart Highway as 37 were recorded doing. Larapinta

Drive is such a dominant route for the Alice Springs bicycle network as this route carries riders into and out of the town centre as 42 riders were recorded doing.

Further east at site 5416 riders are using Stott Terrace as an avenue to continue to travel east out of the town centre and similar to the above site using this site as a vehicle to access the northbound route of Leichhardt Terrace.

3.5.2 Schwarz Crescent

Figure 6 Site 5421 (Alice Springs)



Schwarz Crescent has been identified as a significant commuter route towards the northern end of the town for riders in Alice Springs.

As highlighted in figure 6, riders funnel to this location down from the north and up from the south, as 27 and 25 riders were recorded doing.

Riders are then accessing Schwarz Crescent, with two clear distinct possibilities of their intention, one is to access St Phillips College or continuing along Schwarz Crescent and using this as a link route to access the Stuart Highway from the north.

3.5.3 McMinn Street

Figure 7 Site 5507 (Greater Darwin)

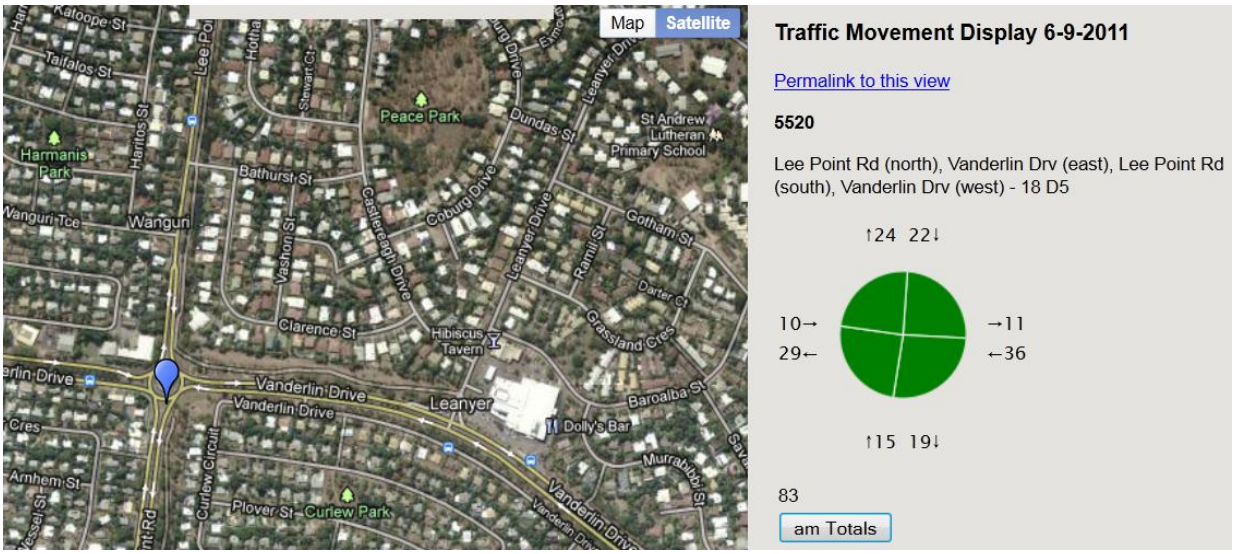
McMinn Street has been identified as the key commuter into the Darwin CBD for the sites allocated by the DLP.

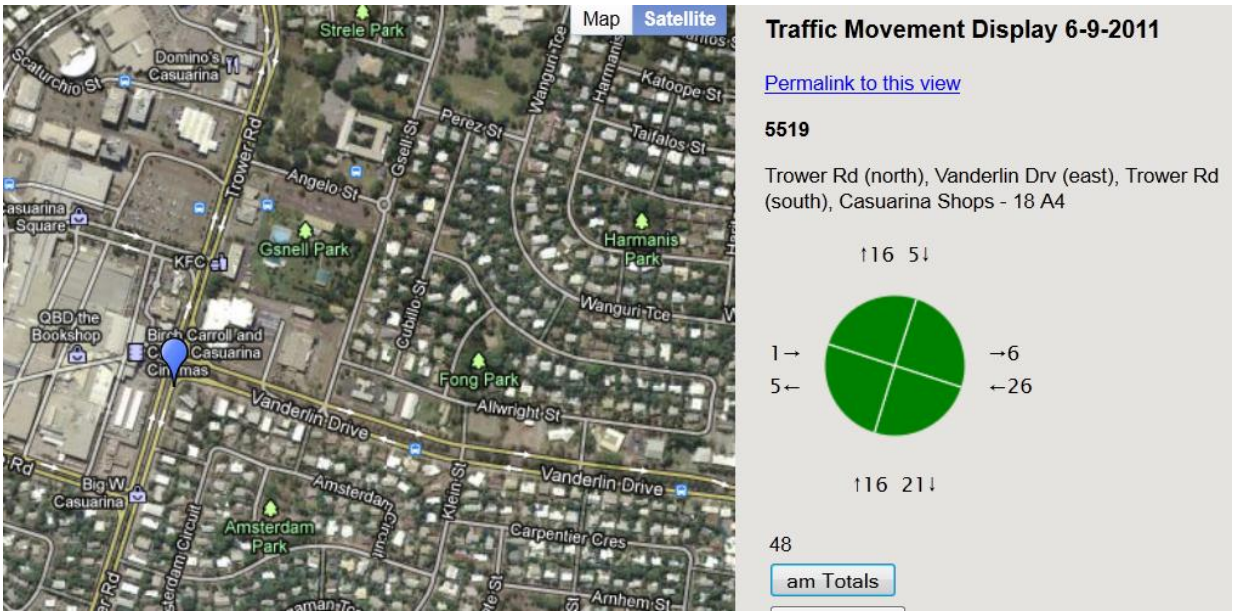
Riders flow into this location from the north and also the west via the Stuart Highway path through the park (41 riders) or via the western leg of McMinn Street (47 riders), which links to Gardens Road.

This location is vital to the Darwin bicycle network as the CBD is located in a pocket to the south and riders commuting from the north are funneling into the one junction point. This is also evident as another major route into the CBD, Tiger Brennan Drive recorded little riders traveling south towards the CBD.

3.5.3 Vanderlin Drive

Figure 8 Sites 5520 & 5519 (Greater Darwin)





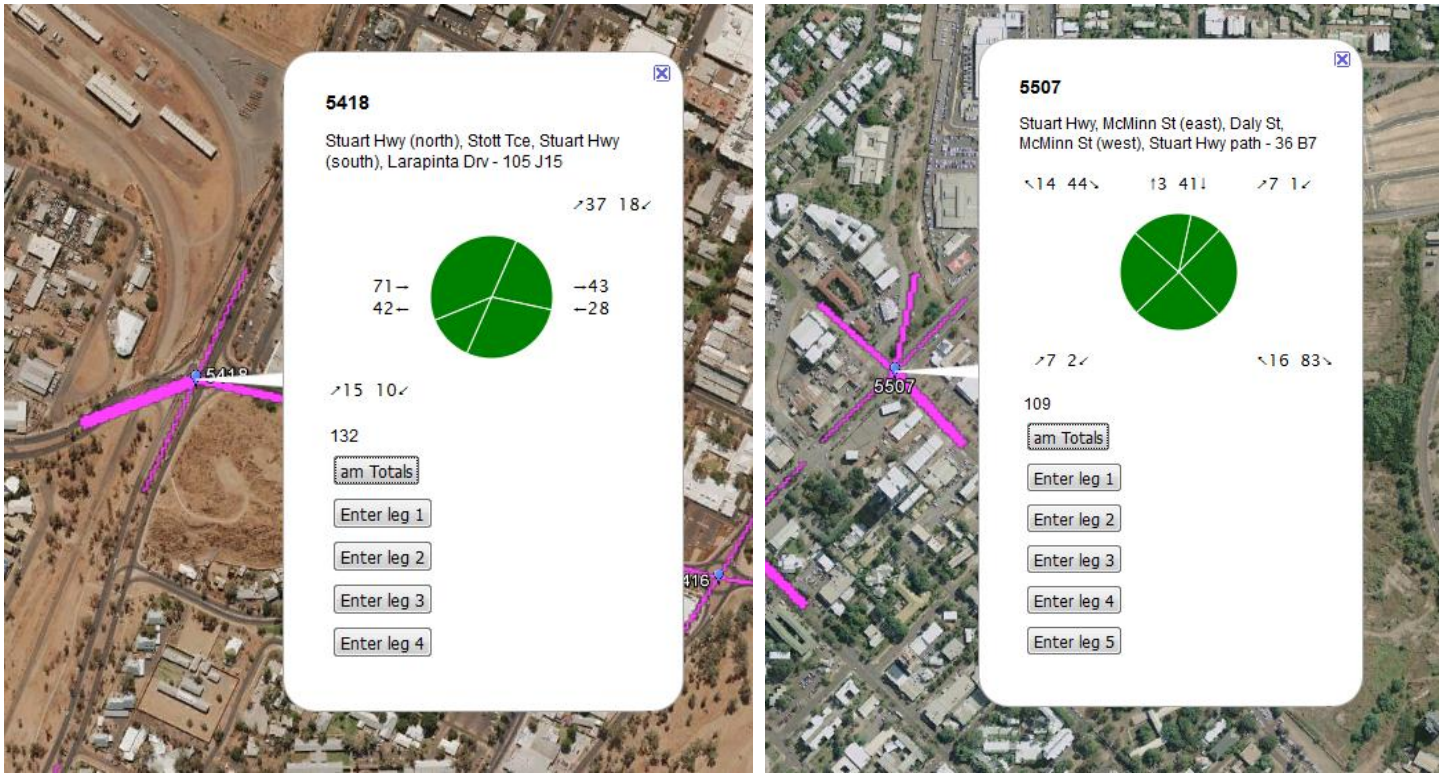
Vanderlin Drive in the northern end of the site allocation for the DLP in Greater Darwin, is another significant commuter route for Darwin riders.

As shown in figure 8, riders travel west along this route passing through site 5520 and continuing west towards site 5519. From this point riders are accessing Trower Road and using this as their commuter primary route travelling south.

Also at 5520 a significant number of riders are using Vanderlin Drive to access Lee Point Road, which 24 riders were recorded doing.

3.5.4 Commuter Flow at the Busiest Site in Alice Springs and Greater Darwin

Figure 9 Commuter Flow at Sites 5418 & 5507



Access the Google Earth map Northern Territory through the Google Earth attachment accompanying this report.

Please note that the attachment will not provide count site totals, rather it shows rider flows not only in your municipality, but across the state.

Figure 9 illustrates the rider flow at the busiest locations counted in Alice Springs and Greater Darwin on Super Tuesday.

4.0 Recommendations for Further Analysis

- DLP should consider adding more count sites in 2012, in consultation with the Darwin City Council. This would provide government with more data on which to base for bicycle infrastructure investments.
- Also, to get a more in-depth understanding of rider movement and patterns, DLP may consider undertaking further services available in the Bike Futures program which are specifically designed to help and inform local and state government, with regard to the riding environment (see section 5.0).

5.0 Other Tools for Agencies

These tools from the Bike Futures Toolbox may be of use to councils wanting to learn more about their current bike facilities and rider numbers and movements within their municipality. Visit the Bike Futures website (www.bikefutures.com.au) to learn more, or contact the Bike Futures team to discuss how your council can better utilise these tools.

5.1 BikeScope

BikeScope is an online consultation tool that collects base data and direct input from riders, allowing in-depth analysis of an area's bike riding environment. The analysis looks at all bike facilities and infrastructure in a council area and provides feedback from the views of the riding community.

BikeScope helps councils identify and prioritise the actions that will improve and increase cycling in their municipality, clearly identifying resident riders' needs with qualitative certainty.

Click on link to learn more: http://www.bv.com.au/bike-futures/40536/

5.2 Census Data

We use data obtained from the Australian Bureau of Statistics to understand the role of bikes as a mode of transport. With a sample size of more than one million people who travel to work, this data represents the most comprehensive data set for cycling trips to work around Australia.

Click on link to learn more: http://www.bv.com.au/general/bike-futures/91532/

5.3 RiderLog

RiderLog is a free iPhone app. Once downloaded, the app will log your ride in your phone and track your cumulative distance and time, providing a record of your activity. The data is then anonymously uploaded to the Bicycle Network to show when, where and why people ride.

Click on link to learn more: http://www.bv.com.au/general/ride-to-work/91481/

5.4 Intercept Surveys

A good way to find out what riders need in your municipality is to ask them. To gather information on rider attitudes and behaviours, a coffee cart can be set up along a route and riders are offered a free coffee. At this time riders can be interviewed on specific issues.

5.5 Bike Path Audits

Good access, connectivity, gradient and user safety are all key features of a successful shared path. These encourage a greater number and wider range of users. Therefore, it is important that councils audit the shared paths in their area and establish a prioritised works program.

Path audits identify the areas which can be improved or modified. Key findings are then ranked in order of priority to enable the responsible authority to carry out works in a manner that will add the most benefit.

Click on link to learn more: http://www.bv.com.au/general/bike-futures/10562/

5.6 Telephone Surveys

Telephone surveys can be undertaken on behalf of local government to gather feedback from ratepayers and assess performance against benchmarks. They are a useful tool in gathering information about bike riding.

Click on link to learn more: http://www.bv.com.au/general/bike-futures/91545/

6.0 DLP and the Bike Futures Program

Summary of participation in the Bike Futures program:

- Participated in the Super Tuesday Bike Count in 2011
- Was represented at the 2010 Bike Futures conference

Current situation – Bike Plan:

- The Department of Lands and Planning undertakes periodic reviews of the major cycle path networks in Northern Territory. An Overview of the Cycle Path Networks in Darwin and Alice Springs , which includes a summary of the most recent network reviews, is available on the Department's cycling webpage at: http://www.nt.gov.au/transport/ntroads/cycling/pdfs/DLP_CyclePath_Overview_v3.pdf

- DLP undertakes one day bicycle counts at key sites on the arterial cycle path network in July and February each year to assist in planning the ongoing development of the network. A copy of the most recent survey report is available on DLP's cycling webpage: http://www.nt.gov.au/transport/ntroads/cycling/pdfs/SnapshotCyclingSurvey2011.pdf

APPENDIX A: Super Tuesday

A.1 Aims and Purpose

The Super Tuesday project provides reliable annual figures of bicycle commuters and their movements on roads and bike paths. This information is accurate, relevant, up-to-date and – for those councils who participate in Super Tuesday for consecutive years – cumulative, making the Super Tuesday data an important tool for councils, who are responsible for providing bike riding facilities for their constituents.

Super Tuesday is designed to complement the surveys that individual councils and other agencies run on a regular or occasional basis. To better inform council's decisions, the Department of Lands and Planning has commissioned Bike Futures to run the Super Tuesday bicycle count in their area.

The Super Tuesday count is a bike commuter count conducted simultaneously across council boundaries. The project aims to answer two questions:

- How many riders are there?
- Which routes are riders using?

The Super Tuesday sites collect data from popular commuter routes in this municipality and from subsidiary routes that are of a lower priority.

The sites are staffed by volunteer counters who record their observations on standardised counting templates (see Visual Count Sheets in Appendix B). This data is submitted to Bike Futures and compiled into reports for participating councils.

A.2 Visual Count Sites

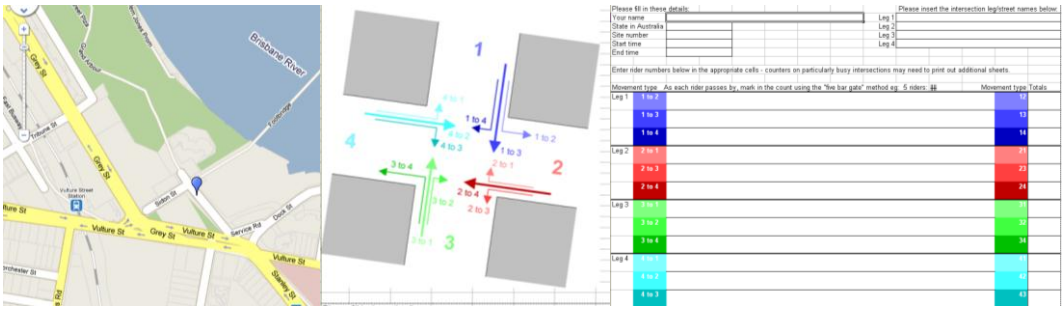
Super Tuesday project aims to record the movements of a minimum of 80% of riders. To determine rider routes, the sites are placed along known bicycle commuter routes and at locations on known or suspected 'tributaries'. Sites are more spread out at the outer edge of the rider catchments and more closely clustered near high volume destinations. Councils can also request counts at locations where they are considering infrastructure or where they have infrastructure planned, in order to establish a 'before' data set.

Initially, the sites are selected in consultation with the commissioning local government. Sites are designated in locations that are considered worth counting in the long term. In subsequent years some sites may be eliminated; for example where the data shows that there is no rider route. Sometimes, sites may be moved to a better location along a route. But we recommend using the same sites from year to year as much as possible, for the sake of continuity.

A.3 Visual Count Sheets

All bicycle movements are counted at each site and recorded in a count sheet (hard copy). An example of a four-way intersection count sheet is shown here:

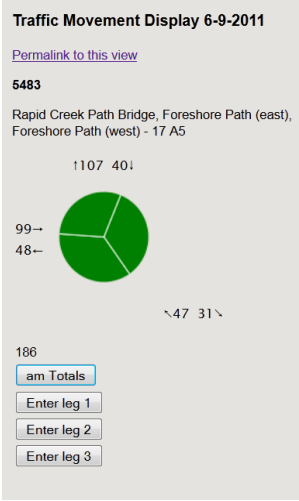
Figure 8 An Example of a Four-way Intersection Count Sheet from Super Tuesday



Following the completion of the visual count, counters are able to send the count data to Bike Futures in one of three ways, as follows:

1. Enter the data directly online via the Bike Futures web link.
2. Via email with the count sheet attached.
3. As a 'hard copy' count sheet in the post.

Once data has been entered and checked, it is displayed in an electronic form, as shown on the right. Each intersection 'balloon' shows total rider numbers and the movement of riders through the intersection.



Each council has access to the data for their municipality electronically, through the clickable map of their count area and through the links in the table showing their list of count locations.

APPENDIX B: Media Coverage

Table 2 Print Media Coverage for Super Tuesday 2011

Publication	Article	Date	Circulation
Cairns Sun	Counting Bikes	31 August	56,765
Northern Territory Times	Counting Bikes	2 September	20,640
Daily Mercury (online)	Cyclists counting on Super Tuesday	7 September	1,034
Capricorn Coast Mirror	Bikes Counted	14 September	11,056

- Table 2 shows a list of the print media coverage generated from Super Tuesday 2011.
- This does not include radio coverage that was generated by Super Tuesday.