

'Snapshot' cycle path usage survey

Darwin Region July 2010



Background

Darwin and Palmerston have an extensive arterial cycle path network and anecdotal evidence indicates that the paths are well used and that usage is increasing. However, very limited data is available on cycle path usage in the Darwin region. Data on which paths are being used and at what times will assist the ongoing planning and management of cycle paths in the Region.

During the wet season in February 2009, the Department of Lands and Planning undertook a 'snapshot' (one day) survey of six key routes on the Darwin and Palmerston arterial cycle path network. The survey focussed mainly on the arterial cycle path network managed by the Department of Lands and Planning. However the survey also included the Dick Ward Drive cycle path which is managed by the Darwin City Council as this path is a key commuter cyclist route with links to the arterial cycle path network.

In July 2010, the snapshot survey was repeated to provide an indication of dry season cycle path usage. The survey aimed to:

- Gain a snapshot of cycling activity
- Establish a basis for more extensive future data collection
- Assist with the planning and development of Darwin's cycle network

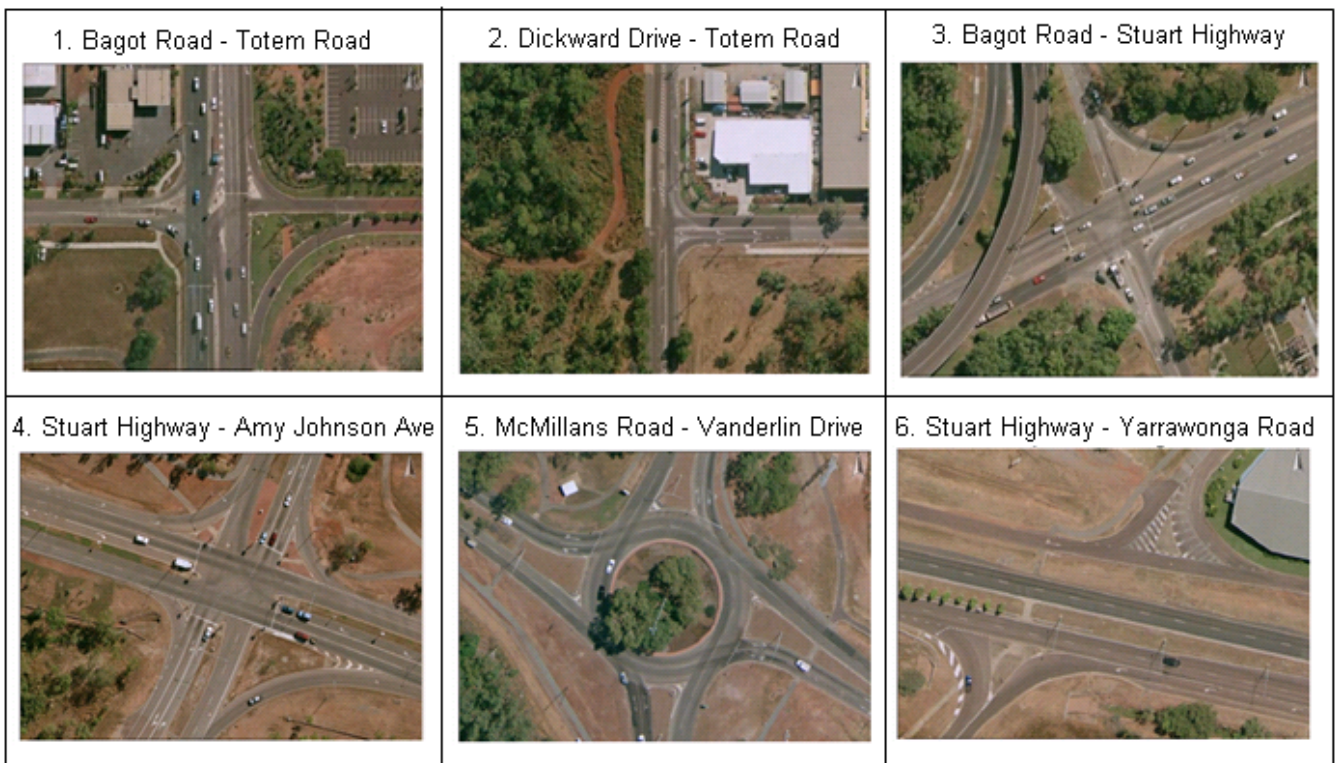
Methodology

The sites surveyed in 2009 and 2010 were:

- Site 1 : Bagot Road ↔ Totem Road
- Site 2 : Dickward Drive ↔ Totem Road (managed by Darwin City Council)
- Site 3 : Bagot Road ↔ Stuart Highway
- Site 4 : Stuart Highway ↔ Amy Johnson Avenue
- Site 5 : McMillans Road ↔ Vanderlin Drive
- Site 6 : Stuart Highway ↔ Yarrowonga Road

Physical counts were conducted from 6.30 to 9.30 am on Monday, Wednesday and Friday from the 5th to 17th of July 2010 (refer to site locations below). In addition to cyclist numbers, the direction travelled and on or off-road use were recorded at each site (refer to Appendix A).

Site locations



Survey results

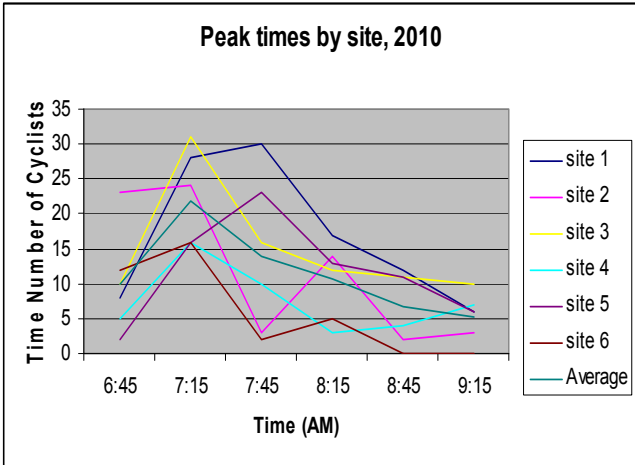


Chart 1: The peak riding times are approximately between 7-8am which is likely to represent cyclists travelling to work or school.

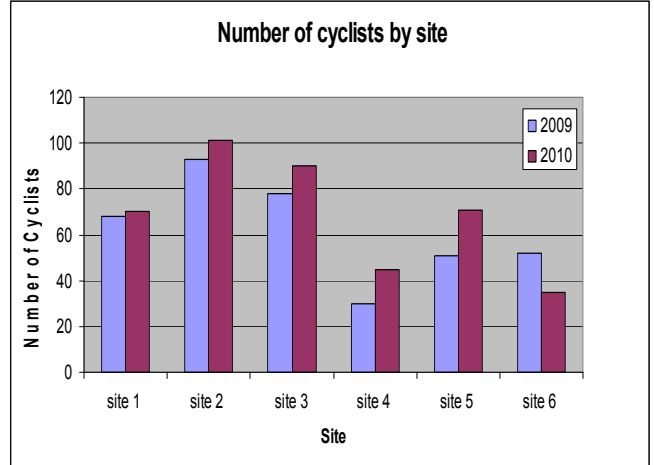


Chart 2: Overall there has been about an 11% increase in the number of cyclists observed from 2009 to 2010. The largest increase has been at site 4 which has shown a 50% increase in the number of cyclists observed. The decrease in cyclists at site 6 is possibly related to current road construction work at the site. Seasonal factors are also likely to be relevant.

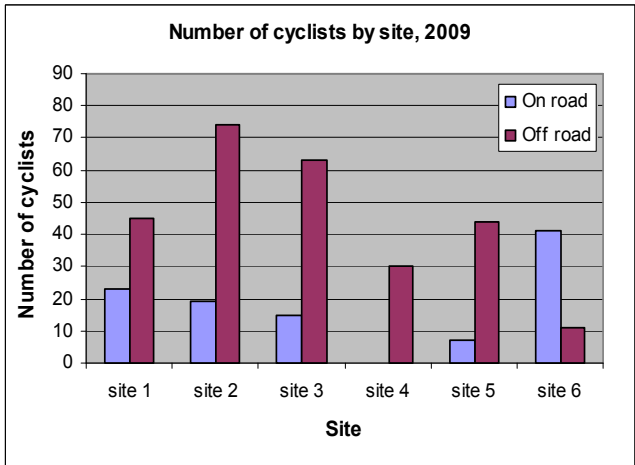


Chart 3: In 2009, a higher number of cyclists were observed off-road rather than on-road at all sites except site 6.

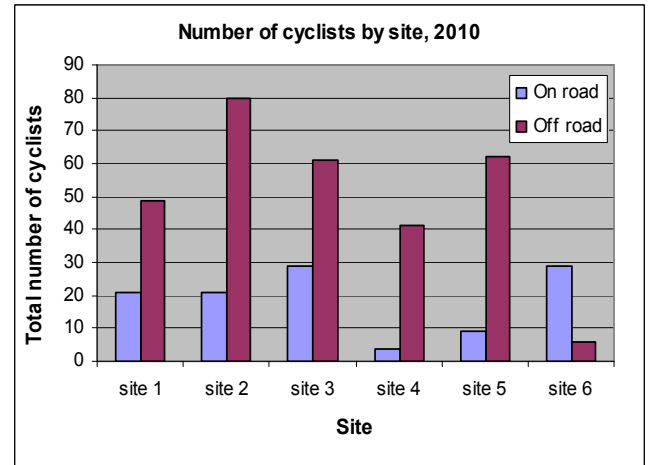


Chart 4: Comparing on-road and off-road cyclists, 2010 shows similar observations as 2009.

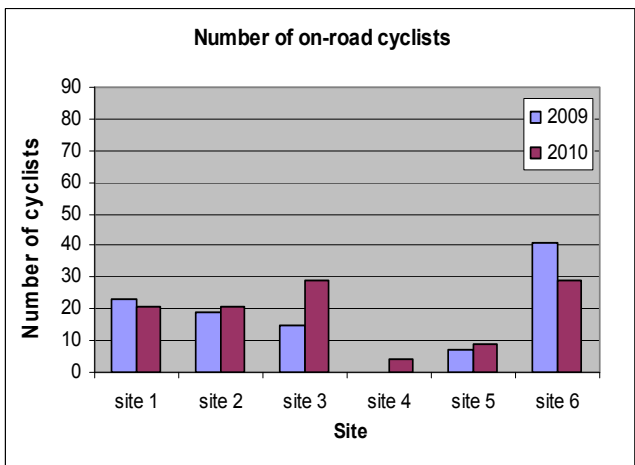


Chart 5: The number of on-road cyclists has increased by approximately 8% from 2009 to 2010. The decrease in the number of cyclists at site 6 is likely due to the road works occurring at that site.

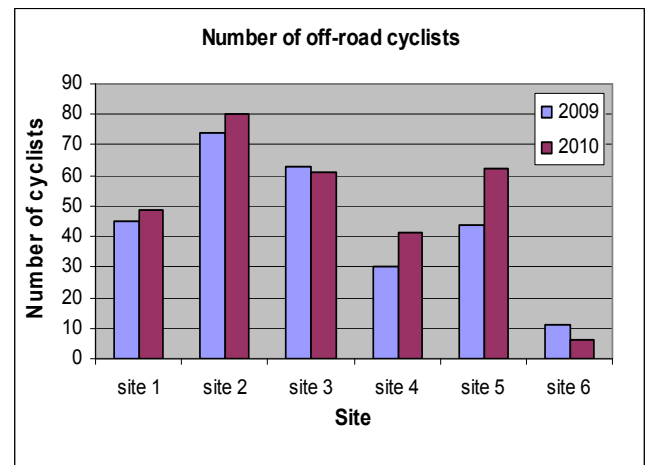


Chart 6: The number of off-road cyclists has increased by approximately 12% from 2009 to 2010. The small number of cyclists at site 6 is possibly due to current road construction work at the site.

Table 1: On-road, Off-road and Total Cyclists, 2009 and 2010 - Number and Percentage changes

| | 2009 data | | | 2010 data | | | % Change 2009-2010 | | |
|----------------|-----------|----------|-------|-----------|----------|-------|--------------------|----------|-------|
| Site | On road | Off road | Total | On road | Off road | Total | On road | Off road | Total |
| site 1 | 23 | 45 | 68 | 21 | 49 | 70 | -9% | 9% | 3% |
| site 2 | 19 | 74 | 93 | 21 | 80 | 101 | 11% | 8% | 9% |
| site 3 | 15 | 63 | 78 | 29 | 61 | 90 | 93% | -3% | 15% |
| site 4 | 0 | 30 | 30 | 4 | 41 | 45 | 400% | 37% | 50% |
| site 5 | 7 | 44 | 51 | 9 | 62 | 71 | 29% | 41% | 39% |
| site 6 | 41 | 11 | 52 | 29 | 6 | 35 | -29% | -45% | -33% |
| Average | 17.5 | 44.5 | 62 | 18.8 | 49.8 | 68.7 | 8% | 12% | 11% |
| Total | 105 | 267 | 372 | 113 | 299 | 412 | 8% | 12% | 11% |

Discussion

The results indicated that most cyclists in 2010 (73%) were using off-road paths at the time of the survey.

More cyclists were observed in 2010 (412) compared to 2009 (372), this represents an increase of 11%. This could be attributed to a range of factors including, the small amount of data collected and the different times of the year in which the surveys were conducted (the 2009 survey was conducted in the wet season, the 2010 survey during the dry season).

The highest number of cyclists recorded in both the 2009 and 2010 surveys were recorded at sites 2 (Dick Ward Drive) and site 3 (Bagot Road/Stuart Highway).

During the 2010 survey period, site 6 (Stuart Highway/Yarrowonga Road) was effected by road construction works and changes to cycle paths; this was reflected in a 33% reduction in cyclist numbers between surveys. A new cycle/pedestrian bridge over the Stuart Highway will be available on completion of the works.

The 2010 survey was conducted during school holidays which may have reduced the total number of cyclists recorded.

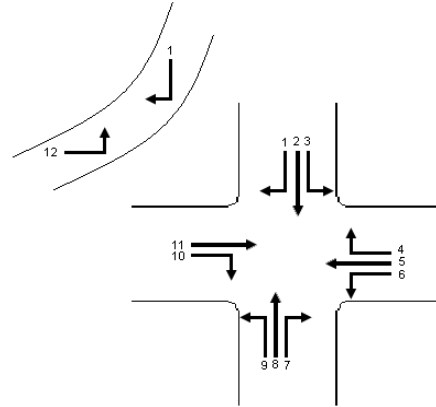
Conclusions and recommendations

The surveys provide a snapshot of cycling activity. The infrequency of the surveys and the limited data captured restrict the conclusions that can be made from the surveys. However, the surveys do support anecdotal evidence of increasing cycling in the Darwin Region.

It is recommended that a formal cycle path usage data collection program be developed including investigation into the establishment of permanent, electronic cycle path data collection system. As a minimum, it is recommended that the same snapshot of data could be collected each year in the same weeks in February and July providing a time series data set.

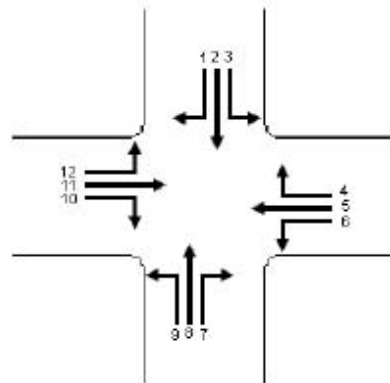
It is also recommended that additional sites be included in the survey in the future. Possible new sites include Fitzner Drive connecting the Bagot Road Cycle Path and Dick Ward Drive, recently constructed by Darwin City Council, the new pedestrian/cyclist overpass over the Stuart Highway at Yarrowonga and the Palmerston to Howard Springs cycle path scheduled for completion in 2011.

Site 3: Bagot Road ↔ Stuart Highway



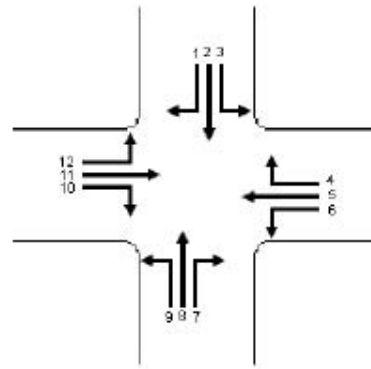
| Direction | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|--------------|-----------|----------|----------|----------|-----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| On-road | 2 | 3 | - | - | 2 | 3 | 1 | 2 | - | - | 11 | 5 | 29 |
| Off-road | 10 | 3 | - | 1 | 16 | 1 | 1 | 3 | 1 | 11 | 8 | 6 | 61 |
| Total | 12 | 6 | 0 | 1 | 18 | 4 | 2 | 5 | 1 | 11 | 19 | 11 | 90 |

Site 4: Stuart Highway ↔ Amy Johnson Avenue



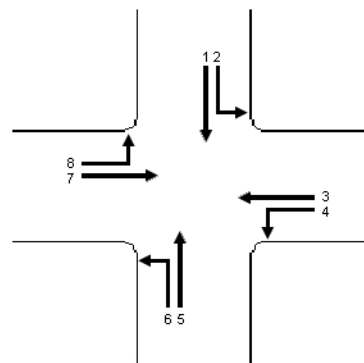
| Direction | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|--------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| On-road | - | - | - | - | - | - | - | 2 | 2 | - | - | - | 4 |
| Off-road | 17 | - | 4 | 1 | 9 | - | - | 1 | - | 4 | 5 | - | 41 |
| Total | 17 | 0 | 4 | 1 | 9 | 0 | 0 | 3 | 2 | 4 | 5 | 0 | 45 |

Site 5: McMillans Road ↔ Vanderlin Drive



| Direction | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|--------------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|-----------|
| On-road | - | - | 2 | - | 1 | 1 | - | - | - | - | 5 | 1 | 10 |
| Off-road | 6 | 12 | 6 | 6 | - | 3 | - | 1 | - | 20 | 1 | 6 | 61 |
| Total | 6 | 12 | 8 | 6 | 1 | 4 | 0 | 1 | 0 | 20 | 6 | 7 | 71 |

Site 6: Stuart Highway ↔ Yarrowonga Road



| Direction | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | Total |
|--------------|----------|----------|----------|----------|-----------|----------|----------|----------|--|--|--|--|-----------|
| On-road | 7 | 3 | - | - | 24 | - | - | - | | | | | 34 |
| Off-road | - | - | - | - | 1 | - | - | - | | | | | 1 |
| Total | 7 | 3 | 0 | 0 | 25 | 0 | 0 | 0 | | | | | 35 |