

# **Sustainable Transport Plan**

## **Bus Priority Measures on Canberra Avenue**



### **Canberra's East to West Route**

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## **Bus Priority Measures on Canberra Avenue**

### **Background**

The ACT Government has identified bus transport as part of its strategic plan to create a sustainable Canberra.

The Strategic Transport Plan clearly indicates the need for Bus Priority measures for traffic flow on the North South route and from Belconnen to the City but fails to address the East to West route from Queanbeyan to Canberra City.

According to the Queanbeyan City Council, 61% of persons living in Queanbeyan are employed in the ACT and 37% of the persons working in Queanbeyan, live in the ACT.

From any economic, social and community viewpoint Queanbeyan is part of the Greater Canberra Region. Queanbeyan is a major manufacturing and service industry centre for both cities, and the home of a large number of distribution centres and warehouses servicing South East NSW and Canberra.

This high level of inter-dependence has led to a significant volume of traffic in both directions between the cities by commuters and commercial vehicles. This traffic moves between both cities along Canberra Avenue.

Apart from the installation of two sets of traffic signals on Canberra Avenue (HMAS Harman and the Tom Price Street) there has been no change to the structure of Canberra Avenue for several decades. Average bus travel times between Queanbeyan and Fyshwick have increased by 80% in two years – between the September 2006 timetable and the present day. Research shows one of the key impediments to increasing bus patronage is the perception they move at the same, if not slower, speed as cars.

A total of 21 buses depart Queanbeyan for various parts of Canberra during peak times between 7.15am and 8.35am travelling along Canberra Avenue in an westerly direction: four to Civic for commuters and students attending Belconnen schools, three to Woden Town Centre including Canberra College, and Marist College, one to the Airport and 13 school buses to South Canberra, Woden Valley and Weston Creek school directly. On average a total of 1,300 passengers are carried on these 21 buses in the morning peak period each weekday.

Bus priority measures have been proven to work in Canberra. At the time of the installation of the bus lanes on Adelaide Avenue and Yarra Glen in Canberra in 1975, they were the longest such lanes in Australia. Patronage on the express buses between Woden and Civic escalated rapidly following the installation of these lanes.

With an increase in the number of persons travelling by bus the demand for road space and car parking for cars can be reduced. Bus driver and vehicle productivity can also be improved.

Current services travelling on Canberra Avenue are estimated to ease the traffic congestion by 840 cars, but Bus priority measures creating a more efficient service can reduce traffic congestion even further in line with the ACT Governments Sustainable Transport Plan.

## Proposal

Deane's Transit Group believes a Bus Lane or a T3 Transit Lane for 5.5 kilometres in each direction a long Canberra Avenue from Harman to Hume place would be the ideal solution for several decades to come. This could be achieved by using the current road reserve and medium strip. This is an expensive option and could cost between \$5m and \$11m. This would be a long time development.

Examples of highly successful Bus Priority Intersections in the ACT are: Flemington Road Mitchell, Northbourne Ave – Barton Highway, Belconnen Way – Gungahlin Drive, Drakeford Drive – Taverner Street and Drakeford – Drive Athlon Drive.



Flemington Road Mitchell showing Bus lane and Priority right hand turn



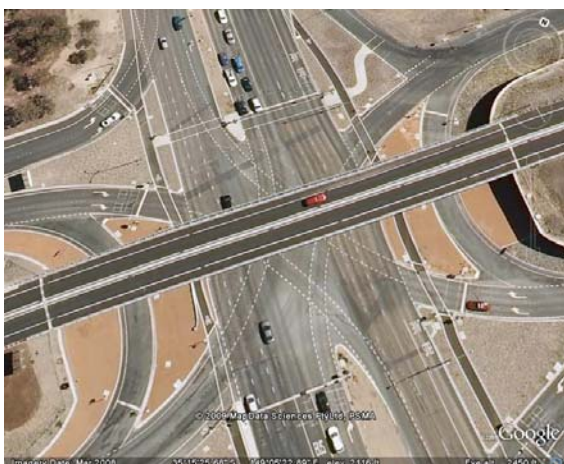
Northbourne Avenue at Barton Highway showing the Bus lane and B Light allowing buses to cross the intersection ahead of queuing traffic.



Drakeford Drive at Taverner Street showing the bus priority lane adapted into existing intersection.



Drakeford Drive and Athllon Drive showing Bus Priority lane in both Directions incorporated into an existing intersection.



Belconnen Way and Gungahlin Drive showing what can be accomplished when a intersection is fully rebuilt with Bus Priority lights and lanes.

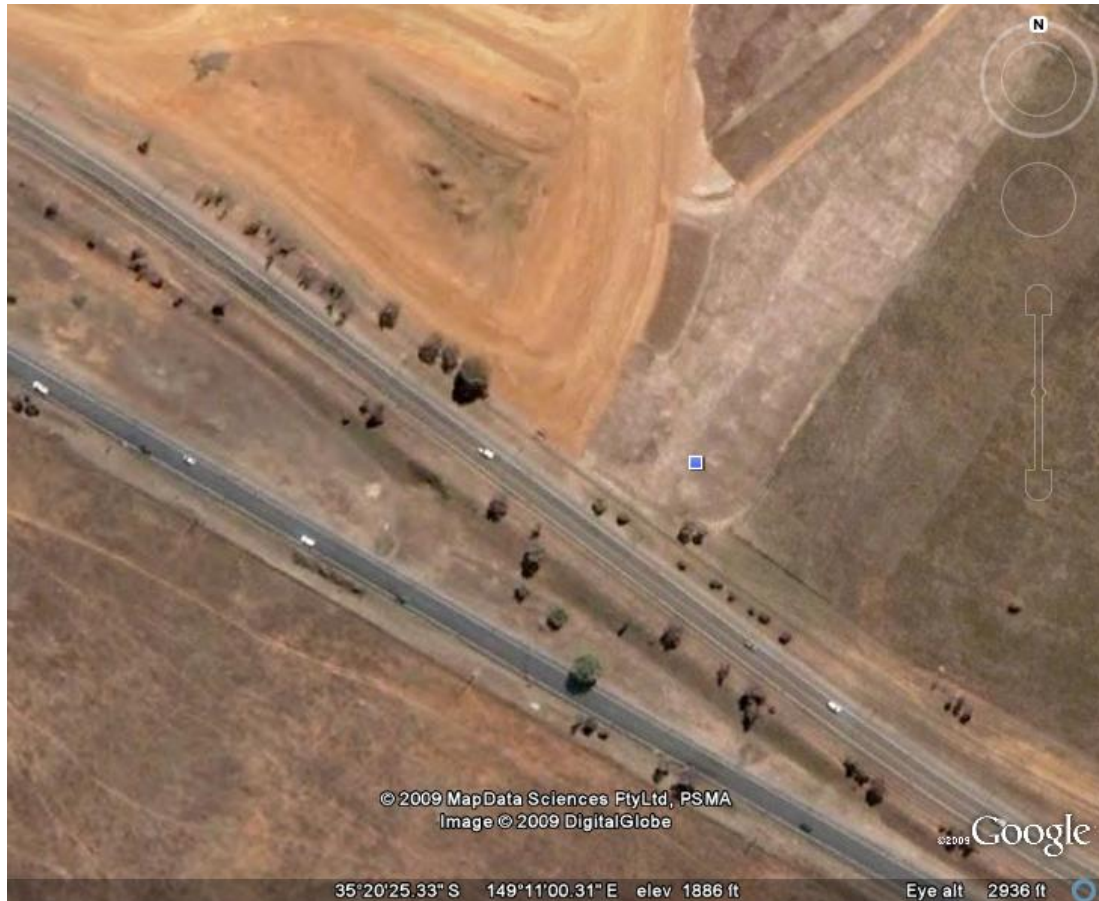
Using existing infrastructure a similar style of intersection could be produced. With ingress bus lanes and egress bus lanes incorporating “B” Light systems the intersections on Canberra Avenue between Harman and Hume place could be vastly improved.

Bus Priority Measures at the intersections travelling west could include:

1. Harman. By reworking the ingress and egress to Harman to be a bus priority lane and to the end of the retaining wall this intersection could be vastly improved. A “B” light would allow buses to move ahead of the traffic.



2. Tom Price Street. By using the grass verge create a bus priority lane and light around the intersection. This intersection has traffic light already installed but not “B” lights.



3. Hindmarsh Drive By cutting back the ingress and egress lanes and moving island back slightly and the installation of “B” lights at bus priority lane could be made.



4. Ipswich Street. By cutting back the ingress and egress lanes and moving island back at bus priority lane could be made. The bridge has an area currently only used for a footpath that was designed for a lane of traffic similar to the easterly direction lane. Converting this area to a bus lane would greatly decrease congestion at this intersection.



5. Nyrang Street little work would have to be done here as the ingress and egress appears wide enough to accommodate a bus lane only "B" lights need to be fitted and some line marking to allow buses move ahead of traffic.



The afternoon peak travelling east from Kingston to Harman has less congestion as the school peak does not coincide with the workers peak. With changing work practices and numerous workers starting earlier to avoid peak traffic, the congestion in the afternoon is increasing at a far slower rate.

Bus Priority Measures at the intersections travelling east could include:

6. Nyrang Street little work would have to be done here as the ingress and egress is nearly wide enough to accommodate a bus lane.



7. Hindmarsh Drive By cutting back the ingress and egress lanes and moving island back slightly and installing “B” lights at bus priority lane could be made with ease.



#### **Estimated Costs of Construction:**

The following estimation of cost is based the cost of the duplication of Athlon Drive between Drakeford Drive and Anketell Street at \$1000 per metre for new lanes. Bus lights cost approximately \$4000 to add to existing traffic signals.

New signals cost approximately \$20000 to install. Road marking is costed at \$300 per metre for strips and \$300 for sign writing of bus lane based on similar costings from the Melbourne CBD.

**The total work could cost as little as \$595000.**

|                                                    |                 |
|----------------------------------------------------|-----------------|
| 1. Harman; approximately 160 metres of new roadway | \$160000        |
| Bus Priority lights                                | \$ 4000         |
| Line markings                                      | \$ 48000        |
| Total                                              | <b>\$212000</b> |

|                                                           |                 |
|-----------------------------------------------------------|-----------------|
| 2. Tom Price Street: approx 50 metres of new roadway      | \$50000         |
| Bus Priority lights                                       | \$ 4000         |
| Line markings                                             | \$ 15000        |
| Total                                                     | <b>\$69000</b>  |
| 3. Hindmarsh Drive: movement of lights and island         |                 |
| and road markings                                         | \$40000         |
| Bus Priority lights                                       | \$ 4000         |
| Total                                                     | <b>\$44000</b>  |
| 4. Ipswich Street approximately 160 metres of new roadway | \$160000        |
| Bus Priority lights                                       | \$ 4000         |
| Line markings                                             | \$ 48000        |
| Total                                                     | <b>\$212000</b> |
| 5. Nyrang Street: Bus Priority lights                     | \$ 4000         |
| Line markings                                             | \$ 3000         |
| Total                                                     | <b>\$ 7000</b>  |
| 6. Nyrang Street: Bus Priority lights                     | \$ 4000         |
| Line markings                                             | \$ 3000         |
| Total                                                     | <b>\$ 7000</b>  |
| 7. Hindmarsh Drive: movement of lights and island         |                 |
| and road markings                                         | \$40000         |
| Bus Priority lights                                       | \$ 4000         |
| Total                                                     | <b>\$44000</b>  |