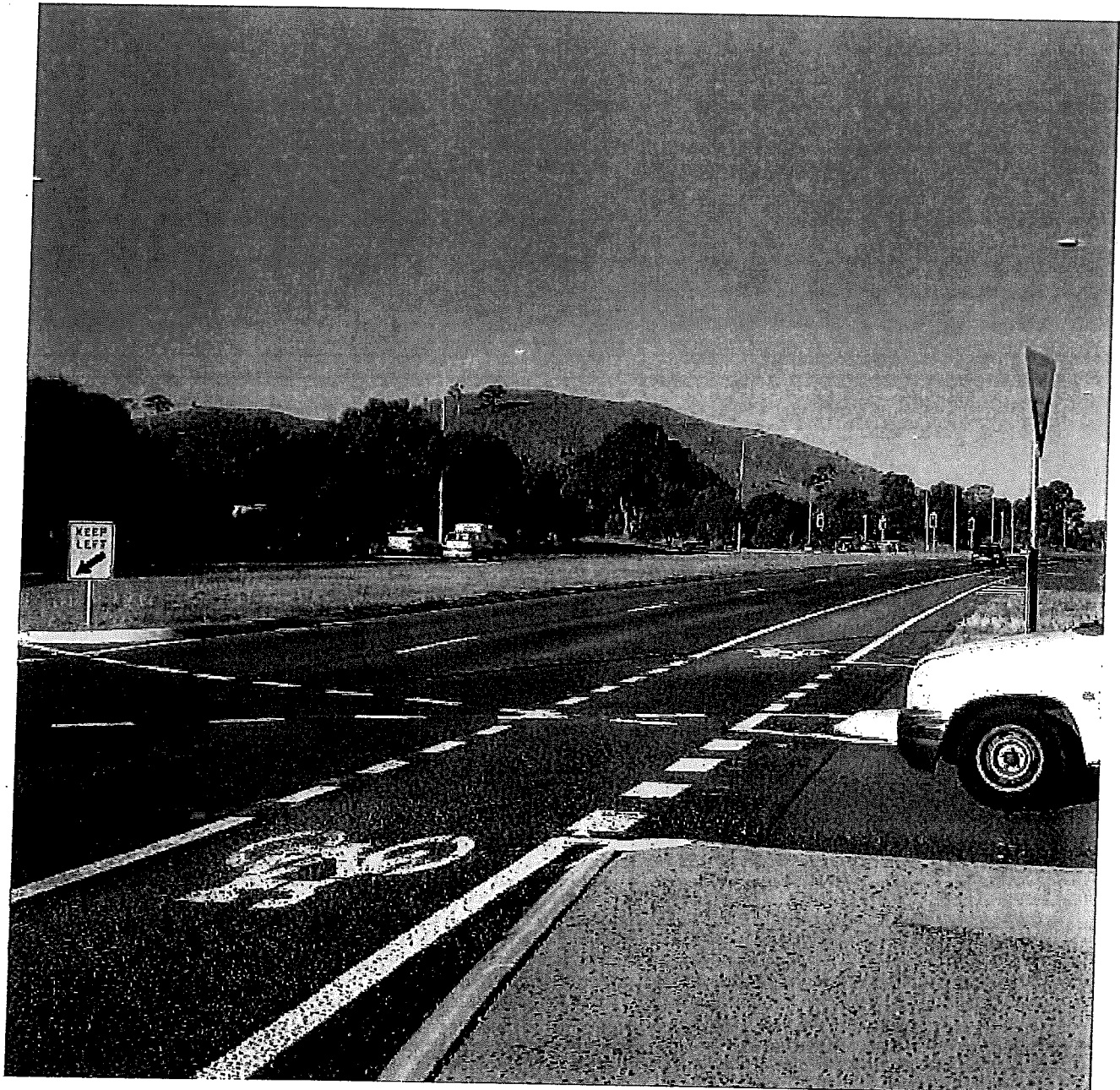




Black Spot Feasibility Study
ACT Department of Territory and
Municipal Services
26 August 2011
Document No. 60216866_RPTRA002_3

Black Spot Feasibility Study

Coppins Crossing Road / William Hovell Drive Intersection



AECOM

Black Spot Feasibility Study
Black Spot Feasibility Study - Coppins Crossing Road / William Hovell Drive
Intersection

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Prepared for

ACT Department of Territory and Municipal Services

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Executive Summary

Background

Roads ACT have commissioned AECOM Australia Pty Ltd to undertake 12 accident black spot studies in the ACT. These investigations examined the most recently available five year crash history for each site to ascertain the contributory factors and develop remedial measures for each site.

Providing a safe road environment for the Territory is a primary objective of Roads ACT. This study aims to provide the ACT Government with a range of cost effective and safe upgrade options which will allow for informed recommendations to be made. This upgrade selection process has been completed using the following key steps:

- Identifying the contributory factors associated with crashes at the site
- Identifying any existing features / deficiencies that may be contributing to crashes at this location.
- Developing remedial measures aimed at reducing crash frequency
- Evaluating the effectiveness of these remedial measures (Benefit / Cost analysis)

This report focuses on the intersection of Coppins Crossing Road with William Hovell Drive.

Crash Analysis

The recorded crashes were obtained from Roads ACT for the five year period from January 2006 until December 2010.

The crash records indicate that 44 crashes have occurred at the intersection of Coppins Crossing Road and William Hovell Drive in Belconnen. Of these crashes, 6 were injury crashes and the rest were property damage only crashes.

The average annual crash rate over the 5 year period was 9 crashes per annum. There was a peak in crashes (15) in 2007 followed by a dramatic reduction in crashes (4.5 crashes *pa*) for the next two years. It is not known what, if any, measures were put in place in 2007. The last year of data indicates that crashes are back to the average rate of 9 crashes per annum.

Of the 44 crashes at this intersection, 6 resulted in injuries. This corresponds with a casualty crash rate of 13.6%. The ACT annual average casualty rate at a Give Way controlled intersection over the 4 year period 2007 – 2010 has been calculated at 6.4%. This intersection is therefore shown to have a worse rate of casualty crashes than the average Give Way controlled intersection in the ACT.

Options Analysis

As a result of the crash analysis and a review of existing deficiencies found on site, the following improvement options were assessed:

- Option 1 – Reduce Speed Limit on William Hovell Drive
- Option 2 – Modify Left Turn Lane from William Hovell Drive
- Option 3 – Install Traffic Signals

Each option was allocated an indicative implementation cost and assessed for potential crash reduction savings. The results of the cost benefit analysis are summarised in Table A.

Table A Summary of Benefit to Cost Analysis

OPTION	Treatment	Cost	B/C Ratio	NPV
OPTION 1	Reduce Speed Limit	\$40,000	2.70	\$91,669
OPTION 2	Modify Left Turn Lane	\$120,000	0.39	-\$99,667
OPTION 3	Signalisation	\$420,000	1.04	\$23,894

The benefit to cost analysis indicates that the option with greatest Benefit Cost Ratio is Option 1. Speed reduction is a low cost improvement, and it is expected to return over two times the cost of improvements in crash reduction benefits. Option 2, modifying the left turn lane onto Coppins Crossing Road, is not a cost-effective measure to reduce crashes. This is due to the low incidence of crashes in this sector of the intersection. Option 3, signalisation, yields the greatest crash reduction of all options, but yields only slightly greater benefit than its cost and will not compete successfully with more cost-effective Black Spot improvements.

Recommended Option

Option 1, reducing the speed limit on William Hovell Drive, is the recommended option at the intersection of Coppins Crossing Road and William Hovell Drive. This treatment is expected to have the following impact on crash frequency:

- 15% reduction in adjacent right angle crashes (crash codes 101-109)
- 15% reduction in opposing turn crashes (codes 202-206)
- 15% reduction in off-path single vehicle crashes (codes 701-805).

Physically, Option 1 includes:

- Replacing speed limit signs on William Hovell Drive
- Repairing the eroded shoulder on Coppins Crossing Road
- Repairing damaged sump on Coppins Crossing Road

This is a low cost option which will have a mitigating effect on many of the crashes experienced in the intersection. The benefit cost ratio (2.70) indicates that the economic benefit of crash reductions will be almost three times the cost of installing this option and correcting deficiencies within the intersection.

Because William Hovell Drive is seen by many as a peripheral freeway-type facility, this speed limit reduction may not be supported by all roadway users; however it is consistent with speed limits elsewhere in the ACT where major arterial roadways pass through signalised intersections. It also reminded that enforcement will be required, especially immediately after implementation, to ensure compliance with the speed limit.

1.0 Introduction

Roads ACT have commissioned AECOM Australia Pty Ltd to undertake 12 accident black spot studies in the ACT. These investigations examined the most recently available five year crash history for each site to ascertain the contributory factors and develop remedial measures for each site.

The following sites were examined.

1. Eggleston Crescent / Melrose Drive
2. Coppins Crossing Road / William Hovell Drive
3. Athllon Drive / Hindmarsh Drive / Callam Street
4. Girrahween Street / Limestone Avenue
5. Manuka Circle / New South Wales Crescent / Telopea Park (West)
6. Bindubi Street / William Hovell Drive
7. Southern Cross Drive / Kingsford Smith Drive
8. Tharwa Drive / Box Hill Avenue / Woodcock Drive
9. Kingsford Smith Drive / Castieau Street
10. Hindmarsh Drive / Launceston Street
11. Sternberg Crescent / Comrie Street
12. Antill Street / Melba Street

This report is one of twelve studies and presents the findings and recommendations for the intersection of Coppins Crossing Road and William Hovell Drive in Belconnen. The intersection is shown in Figure 1.



Figure 1 Coppins Crossing Road / William Hovell Drive Intersection

1.1 Overall Objective

Providing a safe road environment is the primary objective of most road projects. Our study will provide the ACT Government with a range of cost effective and safe upgrade options which will allow for informed recommendations to be made.

The aim of the project is to

- identify the contributory factors associated with crashes at the site
- identify any features seen during site inspections, which may adversely contribute to crashes at this location.
- develop potential remedial measures
- evaluate the effectiveness of these remedial measures
- select and recommend the most appropriate measure(s).

1.2 Project Tasks

The crash investigations include the following tasks:

- A comprehensive crash analysis using Roads ACT crash data base for the five year period from January 2006 until December 2010 .
- Development of a crash matrix
- Development of a crash diagram
- Development of potential countermeasures
- Assessment of those countermeasures
- Selection and recommendation of the preferred countermeasure
- Summary and conclusions.

2.0 Comprehensive Crash Analysis

2.1 Crash Data Analysis

The recorded crashes were obtained from Roads ACT for the five year period from January 2006 through December 2010. These crashes were reviewed to identify any crash patterns and trends and also assist in the understanding of the contributory causes of the crashes. Ambiguities and coding errors were discovered in some of the crash data. These records were reinterpreted using engineering judgement and consideration of the crash patterns in the intersection.

The records indicate that 44 crashes have occurred at the intersection of Coppins Crossing Road and William Hovell Drive in Belconnen. Of these crashes, 6 were injury crashes and the rest were property damage only crashes as shown in Table 1.

Table 1 Number of Crashes by Severity and Year

Severity	2006	2007	2008	2009	2010	Total
Fatal						
Admitted to Hospital				1	1	2
Received Medical Treatment		2			2	4
Property Damage Only	10	13	4	4	6	38
Total	10	15	4	5	9	44

The average annual crash rate over the 5 year period was 9 crashes per annum. There was a peak in crashes (15) in 2007 followed by a dramatic reduction in crashes (4.5 crashes *pa*) for the next two years. It is not known what, if any, measures were put in place in 2007. The last year of data indicates that crashes are back to the average rate of 9 crashes per annum.

Of the 44 crashes at this intersection, 6 resulted in injuries. This corresponds with a casualty crash rate of 13.6%. The ACT annual average casualty rate at a Give Way controlled intersection over the 4 year period 2007 – 2010 has been calculated at 6.4% (as detailed in Appendix A). This intersection is therefore shown to have a worse rate of casualty crashes than the average Give Way controlled intersection in the ACT.

A crash factor matrix has been prepared and is shown in Table 2.

Analysis of the crash factor matrix reveals the following:

- 19 of the 44 crashes were rear end crashes.
- 17 crashes were from adjacent approach or right angle crashes.
- The majority of crashes (31) occurred during a weekday and 19 of these were in the peak hour.
- Most crashes occurred during good weather and on a dry surface.
- There were 4 out of control crashes which are typically associated with speed, poor friction or inattention.
- There were two overtaking crashes.

2.2 Crash diagram

A crash diagram has been prepared for the intersection and is shown below in Figure 2.

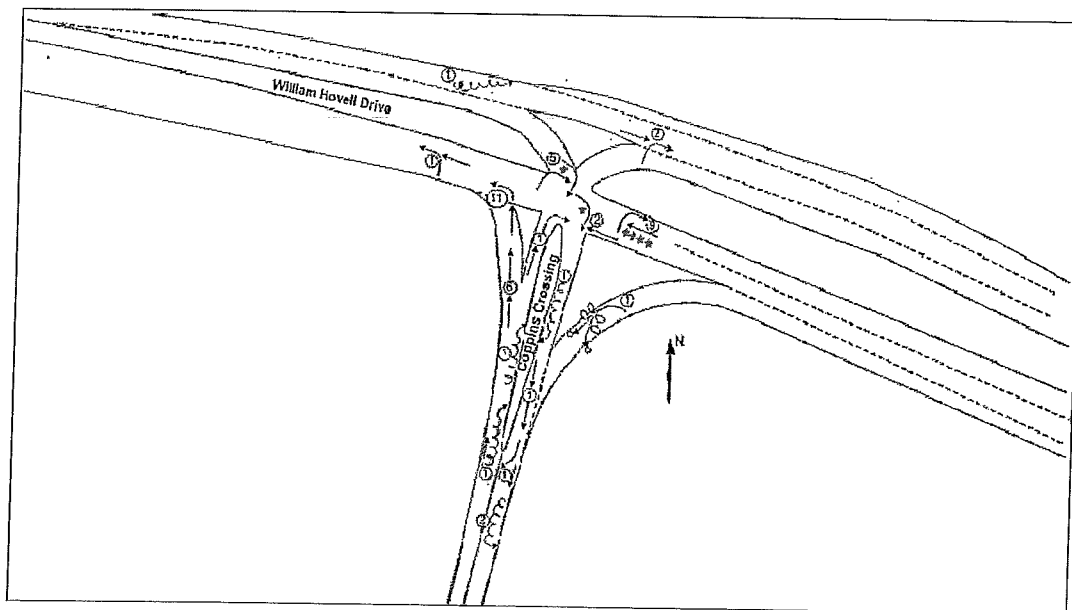


Figure 2 Crash Diagram

★: Number of injury crashes

Analysis of the crash diagram reveals the following:

- The majority of adjacent approach (right angle) crashes involved right turn movements out of Coppins Crossing Road.
- All rear end crashes (19) occurred on Coppins Crossing Road.
- Most of single vehicle crashes occurred on Coppins Crossing Road.
- On southbound Coppins Crossing Road there were a number of crashes involving single vehicles out of control, rear end and overtaking crashes. This indicates that there may be an issue with merging lane on this approach.

2.3 Traffic Characteristics

2.3.1 Intersection / Road Geometry

William Hovell Drive

William Hovell Drive is a major east – west arterial serving the southern side of Belconnen. In the future it will also serve the emerging town of Molonglo, currently constrained to the south bank of the Molonglo River. William Hovell Drive is directly connected to the Glenloch Interchange and therefore to City, Tuggeranong and Gungahlin. It is a high volume, high speed road with limited property access. It is part of the peripheral arterial system and in some aspects it functions like the Tuggeranong Parkway.

Coppins Crossing Road

Coppins Crossing Road was originally a rural gravel road. It was subsequently upgraded and sealed as more Belconnen to Woden traffic discovered this bypass of Glenloch Interchange. It is currently classified as an arterial. With the commencement of housing in the new town of Molonglo, traffic on Coppins Crossing Road is likely to increase.

The traffic volumes for the intersection of William Hovell Drive and Coppins Crossing Road were not available for this report.

Intersection

The intersection is a typical rural t-intersection with raised concrete median and raised traffic islands on the terminating Coppins Crossing Road leg. This treatment is called a seagull arrangement. There has been considerable benching to improve sight distance for traffic exiting Coppins Crossing Road.

Geometry

The road geometry on William Hovell Drive is appropriate for an arterial road carrying heavy volumes. The geometry on Coppins Crossing Road is consistent with a lower order road. It has some curves with advisory speeds indicating a lower design standard. It will need to be upgraded to meet the increased demand as the new town of Molonglo is developed.



Figure 3 Coppins Crossing Road / William Hovell Drive Intersection

2.3.2 Traffic Speed

The sign posted speed limits on the roads approaching the intersection are as follows:

- William Hovell Drive is 90 km/h (posted)
- Coppins Crossing Road is 80 km/h (posted)

Speed survey information was not available for these roads.

2.3.3 Public Transport

There are no weekday, Xpresso or weekend ACTION bus services travelling through this intersection.

2.3.4 Bicycles and Pedestrians

There is on road cycling in either direction on William Hovell Drive through this intersection. There are no specific pedestrian facilities and pedestrians are rare at this location.

2.3.5 Land Use

The adjacent land use is currently rural. There is a very wide road reservation of over 100 metres on William Hovell Drive.

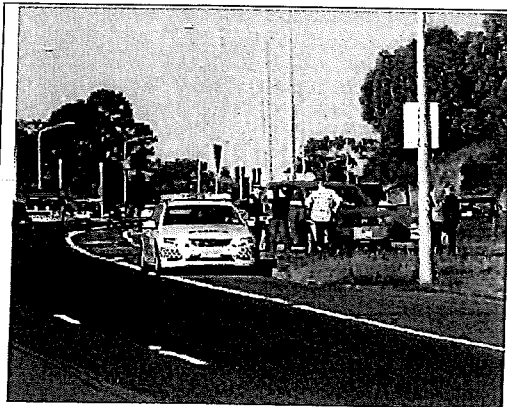
2.4 Site Inspection

2.4.1 General Description of the Site

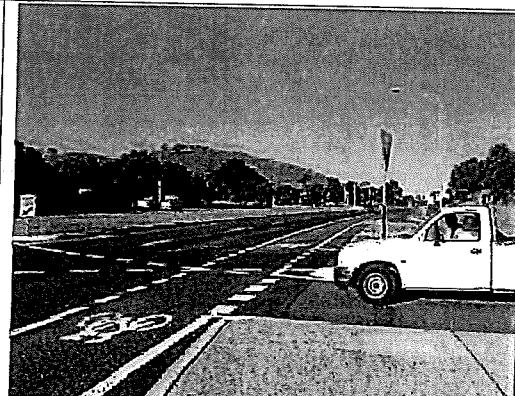
A daytime inspection was undertaken on Monday 30th May 2011 at 4:00pm. The following observations were noted:

- Sight distance is adequate at the intersection; however it seems that drivers turning right out of Coppins Crossing do not select a safe gap, possibly due to difficulty detecting vehicles in multiple lanes on William Hovell Drive which is a high speed arterial road.
- During the site investigation, there was a crash being cleaned-up which involved a right turning vehicle out of Coppins Crossing Road and a vehicle travelling west on William Hovell Drive. This crash may have been the result of inability to judge an appropriate gap in traffic.
- Signage at the intersection is good although street signage at the actual intersection point is limited.

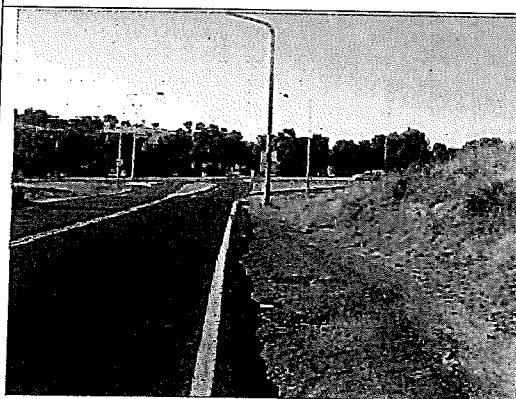
2.4.2 Site Observations



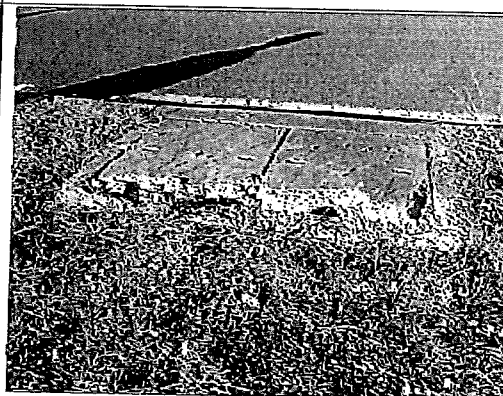
A right angle crash involving a right turn out of Coppins Crossing Road and through movement on William Hovell Drive occurred immediately prior to the site visit.



Sight distance is adequate at the intersection; however the drivers may misjudge the gap due to frustration caused by difficulty finding a safe gap.



The road shoulder pavement on Coppins Crossing Road has eroded and needs to be reconstructed.



Trucks and other vehicles turning left out of Coppins Crossing Road may have jumped the kerb due to frustration caused by delays.

3.0 Development of Remedial Measures

3.1 Objectives

The key objective of any measure is to reduce the number and or severity of the crashes occurring at the intersection. The reduction in severity or total trauma is often best done by reducing the potential for right angle crashes.

3.2 Constraints

The adjacent land is occupied rural area or nature park. Without land resumption, the solution needs to remain within the road reserve. However, the road reserve for William Hovell Drive is very wide in the vicinity of this intersection (greater than 100 metres.)

There are traffic signals at the intersection of William Hovell Drive and Coulter Street, approximately 200 metres to the east of this intersection. Any improvements at this intersection will necessarily be considered for effects on safety and operations of the signalised intersection.

The form and function of Coppins Crossing Road is likely to change dramatically in response to greater traffic demand as the new town of Molonglo is developed. Any improvements to this intersection should be considered with a view that major changes may be implemented in the future.

There are no other significant restraints to potential road safety schemes.

3.3 Opportunities for Remedial Measures

3.3.1 Speed Control

One option would be to reduce the speed limit on William Hovell Drive from the current 90 km/h to 80 km/h. Slowing oncoming traffic would give turning drivers more time to cross, once they have identified gaps in through traffic, and reduce braking distance and the force encountered during right-angle crashes. This may not be popular with users as the road is considered to be performing a peripheral freeway function.

3.3.2 Modify Left Turn Lane from William Hovell Drive

This measure may have an impact on up to 5 of the 44 crashes. These 5 are the crashes associated with the left turn movement from westbound William Hovell Drive. These are out of control crashes and collisions with the right turning vehicles from eastbound William Hovell Drive.

3.3.3 Install traffic signals

The installation of traffic signals will control most of the movements and will reduce the number of right angle crashes. The installation of traffic signals will typically increase the number of rear end crashes on the approaches controlled by the signals.

Because this intersection is so close to the signalised intersection of Coulter Drive and William Hovell Drive, they both need to be co-ordinated. This has the potential to increase delays on the existing signalised intersection.

In the longer term as the population of Molonglo increases, it is likely that this intersection would become a signalised cross intersection.

4.0 Improvement Options

In all options, the following deficiencies contributing to safe operation on the roads should be corrected:

- The wind eroded shoulder on Coppins Crossing Road should be repaired
- The damaged sump on Coppins Crossing Road should be repaired

4.1 Option 1 – Reduce Speed Limit on William Hovell Drive

4.1.1 Physical Description

The reduction of speed limit to 80 km/h on William Hovell Drive could occur with the replacement of a series of signs along its length. The 90 km/h zone runs for some 8 kilometres from Glenloch Interchange to Drake Brockman Drive.

It is proposed that only 300 metres either side of these two intersections be reduced in speed. Alternately, a reduced speed limit may be implemented from the approach to these intersections through to Glenloch Interchange. This would have the advantage of maintaining a uniform speed limit through the signalised intersections of Coulter Street and Bindubi Street with William Hovell Drive, and is also consistent with speed limits on other arterials with signalised intersections in the ACT. It would however not be popular with users as William Hovell Drive is considered to be performing a peripheral freeway function. Given the rural environment and the current speed limit, sustained enforcement activity would be required to change the current driving behaviour of users.

As this option is essentially the installation of signs prior to and after the intersection, a sketch has not been prepared.

4.1.2 Cost

The order of cost for Option 1, reduced speed limit in the vicinity of this intersection, is \$40,000 plus GST. No detailed design or assessment of the existing hardware or underground services has been undertaken. An approximate breakdown of costs includes:

• Replace speed limit signs on William Hovell Drive	\$20,000
• Repair wind eroded shoulder on Coppins Crossing Road	\$15,000
• Repair damaged sump on Coppins Crossing Road	\$5,000

4.1.3 Potential Crash Reduction

This proposed treatment at this intersection is the reduction of the speed limit on William Hovell Drive from 90 km/h to 80 km/h.

This proposed treatment will increase the driver's ability to avoid a potential crash and decrease the severity of crashes which might occur, and is expected to have the following impact on crash frequency:

- This measure should reduce adjacent right angle crashes (crash codes 101-109) by 15%, and opposing turn crashes (codes 202-206) by 15%. Speed limit reductions have also been shown to reduce off-path single vehicle crashes (codes 701-805) by up to 15%¹.

4.2 Option 2 – Modify Left Turn Lane from William Hovell Drive

The current geometry of the left turn from William Hovell Drive westbound to Coppins crossing Road is a very generous smooth sweeping curve of approximately 45 metres radius. This has the potential to increase speed and not provide for a good right hand view of the traffic into which this movement must merge. It was designed for a merge on entry which can work well especially with low traffic volumes.

¹ RTA Economic Analysis Manual , Version 2, 1999 Table 7-4(d)

4.2.1 Physical Description

Option 2 is the modification of the sweeping left hand curve to the more current design with a 70° approach angle. This arrangement allows a driver to view the approaching movement safely from the hold line.

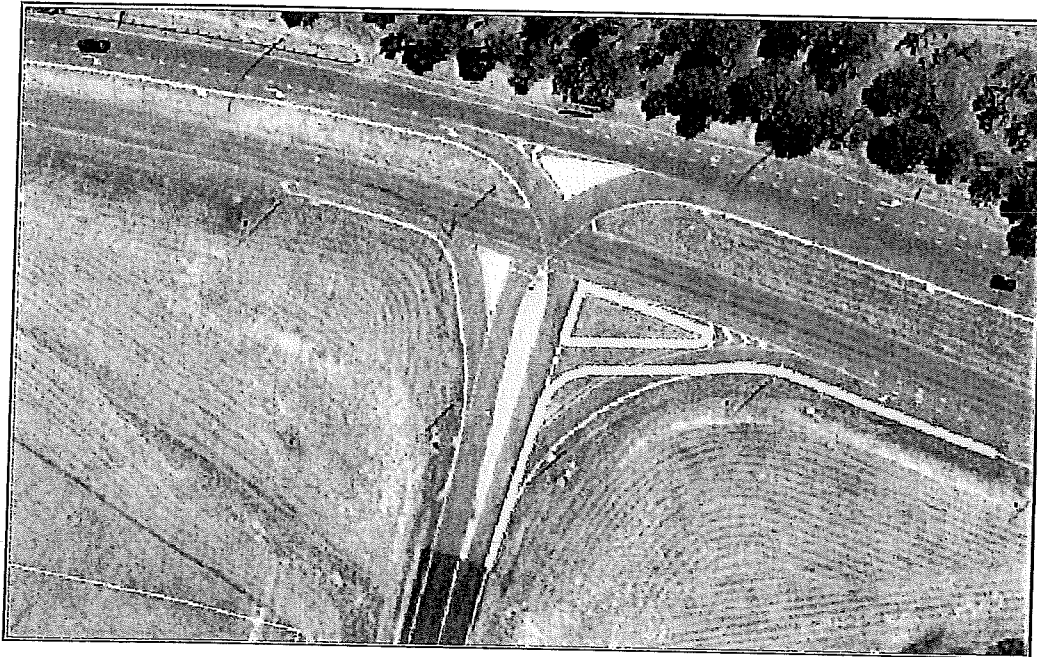


Figure 4 Option 2 – Modify Left Turn Lane from Wm Hovell Drive to 70°

4.2.2 Cost

The order of cost for Option 2 is \$120,000 plus GST. No detailed design or assessment of the existing hardware or underground services has been undertaken. An approximate breakdown of costs includes:

• Modify Left Turn Lane	\$100,000
• Repair wind eroded shoulder on Coppins Crossing Road	\$15,000
• Repair damaged sump on Coppins Crossing Road	\$5,000

4.2.3 Potential Crash Reduction

This proposed treatment at this intersection is the modification of the left turn lane for westbound William Hovell Drive.

This measure will slow the left turn traffic from westbound William Hovell Drive and improve their ability to recognise a potential conflict with the right turn traffic from eastbound William Hovell Drive, and is expected to have the following impact on crash frequency:

- This option should reduce rear-end crashes (crash codes 301-304) by 50%², and should also reduce merging (codes 305-307) and single-vehicle crashes (701-805) on southbound Coppins Crossing Road by 50%.

² Austroads Guide to Road Safety Part B: Treatment of Crash Locations - Table 9.5

4.3 Option 3 – Install Traffic Signals

4.3.1 Physical Description

Option 3 is the installation of traffic signals. Due to the closeness of the adjacent signals at Coulter Drive, these two signals would need to be permanently linked. It is not envisaged that there is a need to significantly alter the current kerb layout.

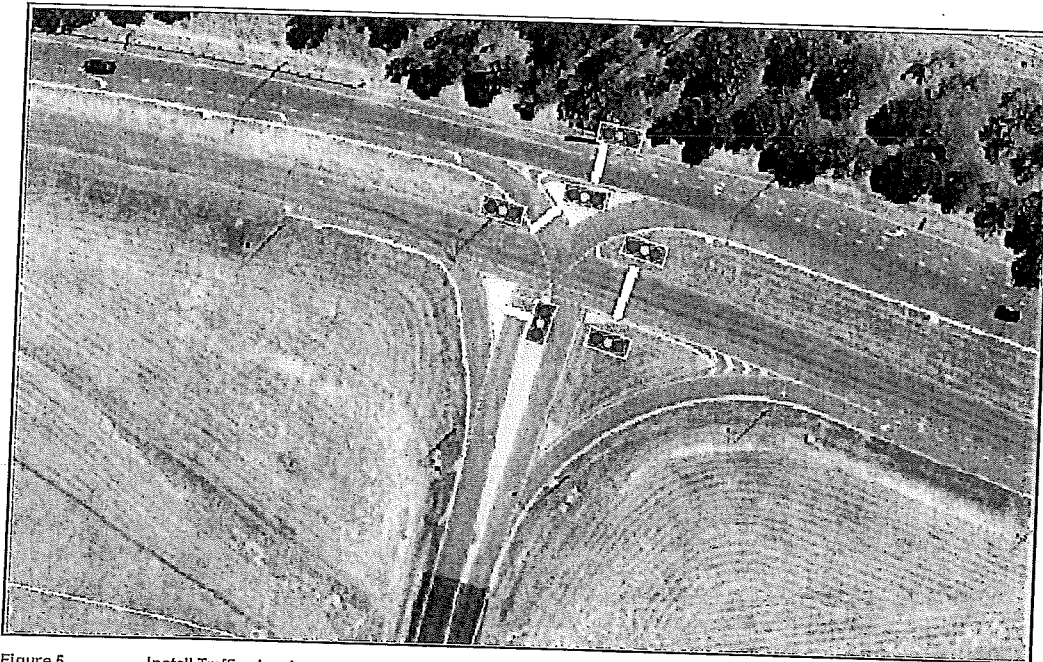


Figure 5 Install Traffic signals

4.3.2 Cost

The order of cost to install traffic lights at this intersection is \$420,000 plus GST. No detailed design or assessment of the existing hardware or underground services has been undertaken. An approximate breakdown of costs includes:

- | | |
|--|-----------|
| • Install traffic lights | \$400,000 |
| • Repair wind eroded shoulder on Coppins Crossing Road | \$15,000 |
| • Repair damaged sump on Coppins Crossing Road | \$5,000 |

4.3.3 Potential Crash Reduction

This proposed treatment at this intersection is the installation of traffic signals at this intersection. Signals will control all of the more dangerous conflicts, and is expected to have the following impact on crash frequency:

- Signalisation should reduce adjacent approach crashes (crash codes 101-109) by 70%, and opposing turn crashes (codes 202-206) by 45%.³

³ Ibid

5.0 Options Assessment

At the Coppins Crossing Road and William Hovell Drive intersection, the following options were assessed:

- Option 1 – Reduce Speed Limit on William Hovell Drive
- Option 2 – Modify Left Turn Lane from William Hovell Drive
- Option 3 – Install Traffic Signals

5.1 Options Comparison

5.1.1 Expected Crash Reductions

Expected crash reductions were tabulated by applying reductions available from road safety literature to the 5-year crash experience in the intersection. Where crash reductions were not available through research, engineering judgement and experience were used to determine potential benefits. Only crashes of the particular type identified through literature or by engineering judgment, and on the correct approach to be affected by the option, were considered targeted crashes for reduction. The results are detailed in the "Target Crashes" and "Assumed Reduction" columns in Table 6 below.

Option 1, reducing the speed limit on William Hovell Drive, should reduce adjacent right angle crashes (crash codes 101-109) by 15%, and opposing turn crashes (codes 202-206) by 15%. This option would have an effect on all crashes involving vehicles crossing the westbound through lanes of William Hovell Drive. The targeted crashes include all 17 adjacent approach crashes, and 2 of 2 opposing vehicle crashes. Speed limit reductions can also reduce off-path single vehicle crashes (codes 701-805) by up to 15%. One single vehicle crash, off path right turn (code 707) appears to have taken place on William Hovell Drive—this crash has been considered in the reductions for this option.

Option 2, modification of the left turn lane should reduce rear-end crashes (crash codes 301-304) by 50%⁴, and merging (codes 305-307) and single-vehicle crashes (701-805) on southbound Coppins Crossing Road by 50%. Of 19 recorded rear-end crashes, none were in the southbound Coppins Crossing Road merge. All of the "Other" single vehicle crash codes, for which crash costs were not available, were on southbound Coppins Crossing Road. Accordingly, only the 5 single vehicle crashes categorised as "Other" could be counted in the analysis for this option.

Option 3, the Signalisation, should reduce adjacent approach crashes (codes 101-109) by 70%, and opposing turn crashes (codes 202-206) by 45%. These reductions would affect all 17 right angle crashes and both of the opposing vehicle crashes.

5.1.2 Economic Analysis

The 2009 crash costs were obtained from Roads ACT to develop an economic analysis of the costs and benefits of Black Spot improvements. Crash costs by crash type was used for costing future crashes. When crash types were encountered that did not have indicative costs; the cost of an average property damage crash was substituted in the analysis. The crash costs are summarized in Table 4 and Table 5.

⁴ Austroads Guide to Road Safety Part B: Treatment of Crash Locations - Table 9.5

Table 4 Crash Costs in the Australian Capital Territory

Crash Code	Crash Description	Cost per Crash
101-109	Intersection, adjacent approaches	\$32,845
201	Head-on	100,406
202-206	Opposing vehicles; turning	33,497
301 - 304	Rear-end	19,516
305 - 307	Lane change	19,209
001 - 003	Vehicle hits pedestrian	181,613
706 - 707	Loss of Control (L or R turns)	66,199
401 - 402	Hit parked vehicle	18,380
601	Hit parked vehicle	20,506
501 - 506	Overtaking	30,130
901	Fell from moving vehicle	93,842

Table 5 Crash Cost by Severity in the Australian Capital Territory

Severity	Cost per Crash
Fatal	\$2,075,788
Serious Injury	\$341,792
Minor Injury	\$53,967
Property Damage Only	\$17,990

The present-day value of the expected costs and benefits over a 10-year project life for each option were analysed. The results are detailed in Table 6 below.

5.1.3 Discussion

The results of the cost benefit analysis are summarised in Table 7.

Table 7 Summary of Benefit to Cost Analysis

OPTION	Treatment	Cost	B/C Ratio	NPV
OPTION 1	Reduce Speed Limit	\$40,000	2.70	\$91,669
OPTION 2	Modify Left Turn Lane	\$120,000	0.39	-\$99,667
OPTION 3	Signalisation	\$420,000	1.04	\$23,894

The benefit to cost analysis indicates that the option with greatest Benefit Cost Ratio is Option 1. Speed Reduction is a low cost improvement, and it is expected to return over two times the cost of improvements in crash reduction benefits. Option 2, modifying the left turn lane onto Coppins Crossing Road, is not a cost-effective measure to reduce crashes. This is due to the low incidence of crashes in this sector of the intersection. Option 3, signalisation, yields the greatest crash reduction of all options, but yields only slightly greater benefit than its cost and will not compete successfully with more cost-effective Black Spot improvements.

5.2 Recommended Option

Option 1, reducing the speed limit on William Hovell Drive is the recommended option. This option includes

- Replacing speed limit signs on William Hovell Drive
- Repairing the eroded shoulder on Coppins Crossing Road
- Repairing damaged sump on Coppins Crossing Road

This is a low cost option which will have a mitigating effect on many of the crashes experienced in the intersection. The benefit cost ratio indicates that the economic benefit of crash reductions will be almost three times the cost of installing this option and correcting deficiencies within the intersection.

Because William Hovell Drive is seen by many as a peripheral freeway-type facility, this speed limit reduction may not be supported by all roadway users, however it is consistent with speed limits elsewhere in the ACT where major arterial roadways pass through signalised intersections. It also reminded that the enforcement will be required, especially immediately after implementation, to ensure compliance with the speed limit.

AECOM

Black Spot Feasibility Study
Black Spot Feasibility Study - Coppins Crossing Road / William Hovell Drive
Intersection

Appendix A

Crash Data for the ACT (2007 - 2010)

Appendix A Crash Data for the ACT (2007 - 2010)

CRASH DATA for the ACT (2007 - 2010)

Total Crashes by Severity + Traffic Control Type (2007-2010)						
Traffic Control	PD	Injury	Fatal	Sub Totals	% of total crashes	% of Injury / Fatal
0 Unknown	205	7	0	212	2.73%	3.30%
1 Uncontrolled	14513	1171	38	15722	202.58%	7.69%
2 Control Not Operated	49	3	0	52	0.67%	5.77%
3 Traffic Lights	6746	319	5	7070	91.10%	4.58%
4 Give Way Sign / Roundabout	6059	400	11	6470	83.37%	6.35%
5 Stop Sign	845	66	0	911	11.74%	7.24%
6 Police	28	4	0	32	0.41%	12.50%
7 School Crossing	20	3	0	23	0.30%	13.04%
8 Marked Pedestrian Crossing	275	35	1	311	4.01%	11.58%
9 Other	191	10	0	201	2.59%	4.98%
TOTAL	28931	2018	55	31004	399.48%	6.69%

Source: multiple publications - see below

Total Crashes by Severity and Traffic Control Type (2010)						
Traffic Control	PD	Injury	Fatal	Sub Totals	% of total crashes	% of Injury / Fatal
0 Unknown	1	0	0	1	0.01%	0.00%
1 Uncontrolled	3599	374	10	3983	51.32%	9.64%
2 Control Not Operated	7	1	0	8	0.10%	12.50%
3 Traffic Lights	1535	105	2	1642	21.16%	6.52%
4 Give Way Sign / Roundabout	1650	125	4	1779	22.92%	7.25%
5 Stop Sign	182	16	0	198	2.55%	8.08%
6 Police	5	1	0	6	0.08%	16.67%
7 School Crossing	3	1	0	4	0.05%	25.00%
8 Marked Pedestrian Crossing	71	14	0	85	1.10%	16.47%
9 Other	49	6	0	55	0.71%	10.91%
TOTAL	7102	643	16	7761	100.00%	8.49%

Source: '2010 Road Traffic Crashes in the ACT', Traffic Management and Safety, April 2011

Total Crashes by Severity and Traffic Control Type (2009)

Traffic Control	PD	Injury	Fatal	Sub Totals	% of total crashes	% of Injury / Fatal
0 Unknown	3	0	0	3	0.04%	0.00%
1 Uncontrolled	3272	300	9	3581	46.14%	8.63%
2 Control Not Operated	3	0	0	3	0.04%	0.00%
3 Traffic Lights	1918	77	1	1996	25.72%	3.91%
4 Give Way Sign / Roundabout	1812	101	1	1914	24.66%	5.33%
5 Stop Sign	201	28	0	229	2.95%	12.23%
6 Police	8	0	0	8	0.10%	0.00%
7 School Crossing	3	2	0	5	0.06%	40.00%
8 Marked Pedestrian Crossing	60	6	0	66	0.85%	9.09%
9 Other	32	2	0	34	0.44%	5.88%
TOTAL	7312	516	11	7839	101.01%	6.72%

Source: '2009 Road Traffic Crashes in the ACT', Traffic Management and Safety, April 2010

Total Crashes by Severity and Traffic Control Type (2008)

Traffic Control	PD	Injury	Fatal	Sub Totals	% of total crashes	% of Injury / Fatal
0 Unknown	122	3	0	125	1.61%	2.40%
1 Uncontrolled	3400	223	8	3631	46.79%	6.36%
2 Control Not Operated	22	1	0	23	0.30%	4.35%
3 Traffic Lights	1566	57	2	1625	20.94%	3.63%
4 Give Way Sign / Roundabout	1422	60	4	1486	19.15%	4.31%
5 Stop Sign	215	7	0	222	2.86%	3.15%
6 Police	6	0	0	6	0.08%	0.00%
7 School Crossing	6	0	0	6	0.08%	0.00%
8 Marked Pedestrian Crossing	61	7	0	68	0.88%	10.29%
9 Other	37	0	0	37	0.48%	0.00%
TOTAL	6857	358	14	7229	93.15%	5.15%

Source: '2008 Road Traffic Crashes in the ACT', Traffic Management and Safety, May 2009

Total Crashes by Severity and Traffic Control Type (2007)

Traffic Control	PD	Injury	Fatal	Sub Totals	% of total crashes	% of Injury / Fatal
0 Unknown	79	4	0	83	1.07%	4.82%
1 Uncontrolled	4242	274	11	4527	58.33%	6.30%
2 Control Not Operated	17	1	0	18	0.23%	5.56%
3 Traffic Lights	1727	80	0	1807	23.28%	4.43%
4 Give Way Sign / Roundabout	1175	114	2	1291	16.63%	8.99%
5 Stop Sign	247	15	0	262	3.38%	5.73%
6 Police	9	3	0	12	0.15%	25.00%
7 School Crossing	8	0	0	8	0.10%	0.00%
8 Marked Pedestrian Crossing	83	8	1	92	1.19%	9.78%
9 Other	73	2	0	75	0.97%	2.67%
TOTAL	7660	501	14	8175	105.33%	6.30%

Source: '2007 Road Traffic Crashes in the ACT', Traffic Management and Safety, April 2008

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Reduced speed limit on William Hovell Drive

Released 19/04/2012

The ACT Government wishes to advise that permanent speed reductions have been made on William Hovell Drive between Coppins Crossing Road and 500 metres east of Bindubi Street to address road safety concerns raised as part of the Nation Building Black Spot Program.

"There has been a total of 11 casualty crashes at the intersections of William Hovell Drive/Coppins Crossing Road and the intersection of William Hovell Drive/Bindubi Street in the last five years," Director, Roads ACT, Tony Gill, said today.

"A report completed in August 2011, which assessed the safety of William Hovell Drive, recommended that the speed limit be reduced from 90 km/h to 80 km.

"William Hovell Drive was the only road in the ACT with traffic lights that had a speed limit of higher than 80 km/h.

"By reducing the speed limit to 80 kilometres per hour we are mitigating the risk of accidents at the intersections of William Hovell Drive/Coppins Crossing Road and William Hovell Drive/Bindubi Street.

"This speed reduction is part of road improvements including traffic signal enhancements and intersection upgrade works at the Bindubi Street intersection.

"The 80 km/h speed is consistent with speed limits on other arterial roads with traffic light intersections in the ACT and in other jurisdictions across Australia.

"Motorists are urged to adhere to the new speed limit which is signposted," Mr Gill said.

Variable message signs have been erected to advise motorists of the reduced speed limit.

For up-to-date information on road closures please call Canberra Connect on 13 22 81.

- Statement ends -

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