



ACT
Government

Transport Canberra and
City Services

FREEDOM OF INFORMATION COVERSHEET

The following information is provided pursuant to section 28 of the *Freedom of Information Act 2016*.

FOI reference: 21-117

Information to be published	Status
1. Access application	Published
2. Decision notice and schedule	Published
3. Documents	Published
4. Additional information identified	n/a
5. Fees	waived
6. Processing time (in working days)	28 days
7. Decision made by Ombudsman	n/a
8. Additional information identified by Ombudsman	n/a
9. Decision made by ACAT	n/a
10. Additional information identified by ACAT	n/a

From: [Leonard, Matt](#) on behalf of [CMTEDD FOI](#)
To: [TCCS_FreedomOfInformation](#)
Subject: FW: Freedom of Information request 2021-309
Date: Tuesday, 9 November 2021 9:17:05 AM

Good morning team,

As discussed, please see the request below and confirm that you accept full transfer.

Regards

Matt Leonard | Senior Freedom of Information Coordinator | Information Access Team

Ph: 02 6207 3417

Corporate | Chief Minister, Treasury and Economic Development Directorate | ACT Government

Level 5, 220 London Circuit, Canberra City | GPO Box 158 Canberra ACT 2601 | www.act.gov.au

From: no-reply@act.gov.au <no-reply@act.gov.au>

Sent: Tuesday, 9 November 2021 8:29 AM

To: CMTEDD FOI <CMTEDDFOI@act.gov.au>

Subject: Freedom of Information request

CAUTION: This email originated from outside of the ACT Government. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Please find online enquiry details below. Please ensure this enquiry is responded to within fourteen working days.

Your details

All fields are optional, however an email address OR full postal address must be provided for us to process your request. An email address and telephone contact number will assist us to contact you quickly if we need to discuss your request.

Title: [REDACTED]
First Name: [REDACTED]
Last Name: [REDACTED]
Business/Organisation: None
Address: [REDACTED]
Suburb: [REDACTED]
Postcode: [REDACTED]
State/Territory: ACT
Phone/mobile: [REDACTED]
Email address: [REDACTED]

Request for information

(Please provide as much detail as possible, for example subject matter and relevant dates, and also provide details of documents that you are not interested in.)

Under the Freedom of Information Act 2016 I want to access the

A copy of the traffic management plan or report that identifies Newman Morris Circuit, Oxley as a priority for road safety improvement and-or upgrades between January 2009 and December 2020. The plan or report must outline the rationale for the road safety and traffic calming measures installed for Newman Morris Circuit, such as reduction of speed from 60km per hour to 50km per hour in some areas, speed humps and lane marking and signage such as Form One Lane signage and double speed limit signs. I'm also seeking the traffic survey report

following document/s for Newman Morris Circuit that provides evidence of the traffic volume,
(*required field): speed data, crash history and surrounding land use to provide the
evidence base for the traffic calming measures on Newman Morris
Circuit. I'm seeking a report or information of the community
consultation that occurred in regard to any road safety upgrades to the
suburbs of Oxley either as part of the traffic management plan or not
between the years 2009 and 2020.

I do not want to access
the following
documents in relation
to my request::

Thank you.
Freedom of Information Coordinator



ACT
Government

Transport Canberra and
City Services

[REDACTED]
[REDACTED]

Dear [REDACTED]

Freedom of information request: Reference 21-117

I refer to your application received by Transport Canberra and City Services (TCCS) by way of transfer from the Chief Minister, Treasury and Economic Development Directorate on 9 November 2021, in which you sought access to the following information under the *Freedom of Information Act 2016* (the FOI Act):

1. a copy of the traffic management plan or report that identifies Newman Morris Circuit, Oxley as a priority for road safety improvement and-or upgrades between January 2009 and December 2020.
2. the plan or report must outline the rationale for the road safety and traffic calming measures installed for Newman Morris Circuit, such as reduction of speed from 60km per hour to 50km per hour in some areas, speed humps and lane marking and signage such as Form One Lane signage and double speed limit signs.
3. the traffic survey report for Newman Morris Circuit that provides evidence of the traffic volume, speed data, crash history and surrounding land use to provide the evidence base for the traffic calming measures on Newman Morris Circuit.
4. a report or information of the community consultation that occurred in regard to any road safety upgrades to the suburbs of Oxley either as part of the traffic management plan or not between the years 2009 and 2020.

Timeframes

TCCS was required to provide you with a decision by 7 December 2021. I thank you for agreeing to an extension of 17 December 2021.

Authority

I am an Information Officer appointed by the Director-General under section 18 of the Act to deal with access applications made under Part 5 of the Act.

Decision on access

Transport Canberra and City Services has identified two documents (21 pages) as relevant to your request. I have found that some of the information within these documents is, on balance, contrary to the public interest to disclose. As such, I have decided to provide you with:

- full access to 1 document; and
- partial access to 1 document

My decision is detailed further in the following statement of reasons. I have included a schedule of the documents at Attachment A. The documents are enclosed at Attachment B with deletions applied to information which is contrary to the public interest to disclose.

Statement of Reasons

In making my decision on disclosing government information, I must identify all relevant factors in schedule 2 of the FOI Act and determine, on balance, where the public interest lies.

In reaching my access decision, I have considered the FOI Act in general which favours disclosure of information unless it is found to be contrary to the public interest. I have also identified the following factors as relevant to the information identified as in scope of your request:

Factors favouring disclosure (Schedule 2.1)

- Section 2.1 (a)(i) - promote open discussion of public affairs and enhance the government's accountability;
- Section 2.1 (a)(iv) - ensure effective oversight of expenditure of public funds; and
- Section 2.1 (a)(viii) reveal the reason for a government decision and any background or contextual information that informed the decision.

Factors favouring non-disclosure (Schedule 2.2)

- Section 2.2 (a)(ii) – prejudice the protection of an individual's right to privacy or any other right under the *Human Rights Act 2004*.

I find that it is in the public interest to release most of this information. However, I have found some information within the relevant documents to be contrary to the public interest to disclose.

In reviewing the information in scope of your application, the personal information of third parties was identified, including the names and contact details of these parties. Deletions have been applied to information where it would prejudice the protection of an individual's right to privacy or any other right under the *Human Rights Act 2004*.

Factors in favour of release can still be met while protecting the personal information of these individuals. The protection of this information outweighs disclosure in this instance.

Charges

No fee is applicable, as the total number of pages being disclosed is within the fee-free threshold.

Online publishing – disclosure log

Under section 28 of the Act, TCCS maintains an online record of access applications called a disclosure log. Your original access application, my decision and documents will be published in the TCCS disclosure log from 3 days after the date of this decision.

Your personal contact details will not be published. You may view the TCCS' disclosure log at http://www.tccs.act.gov.au/about-us/freedom_of_information.

Ombudsman review

My decision on your access request is a reviewable decision as identified in Schedule 3 of the Act. You have the right to seek an Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day that my decision is published in TCCS' disclosure log or a longer period allowed by the Ombudsman.

If you wish to request a review of my decision, you may write to the Ombudsman at:

The ACT Ombudsman
GPO Box 442
CANBERRA ACT 2601
Via email: actfoi@ombudsman.gov.au

ACT Civil and Administrative Tribunal (ACAT) review

Under section 84 of the Act, if a decision is made under section 82 on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision.

Further information may be obtained from ACAT at:

ACT Civil and Administrative Tribunal
Level 4, 1 Moore Street
GPO Box 370
CANBERRA CITY ACT 2601
Telephone: (02) 6207 1740
www.acat.act.gov.au

If you have any queries concerning the directorate's processing of your request, or would like further information, please contact the TCCS FOI team on (02) 6207 2987 or email to tccs.foi@act.gov.au.

Yours sincerely



Meghan Oldfield
Information Officer

15 December 2021



NEWMAN-MORRIS CIRCUIT, OXLEY

SAFE SYSTEMS INFRASTRUCTURE ASSESSMENT

TRANSPORT CANBERRA AND CITY SERVICES

FINAL

RG19019-3 / 1

01 AUGUST 2019



NEWMAN-MORRIS CIRCUIT, OXLEY
SAFE SYSTEMS INFRASTRUCTURE ASSESSMENT

Prepared for Transport Canberra and City Services

Document Register

Revision	Date	Details	Author	Verifier	Approver
Draft	7/06/19	Draft			
Draft 01	01/07/19	Revised draft			
1	01/08/19	Final			

R D Gossip Pty Ltd
2 Lawry Place
Macquarie ACT 2614
Australia
Telephone: +61 2 6251 6313
Email: [REDACTED]@rdgossip.com.au

TABLE OF CONTENTS

1.	SUMMARY	1
1.1	Conclusion.....	1
2.	ASSESSMENT DETAILS	2
2.1	Assessment Scope	2
2.2	Assessment Team	2
2.3	Meeting and Site Inspections.....	2
3.	PROJECT CONTEXT AND DESCRIPTION	3
3.1	Existing Conditions.....	3
3.2	Improvement Treatments.....	5
4.	ASSESSMENT OF DESIGN OPTIONS.....	8
4.1	Assessment Summary	8
4.2	Safe System Assessment Matrices	8
4.3	Safer Vehicles, People and Post-Crash Care.....	11
5.	CONCLUSION.....	12
APPENDIX 1	SAFE SYSTEM MATRIX SCORING SYSTEM.....	13
APPENDIX 2	CONCEPT SKETCH OF OPTIONS.....	15
APPENDIX 3	OPTION PRELIMINARY COSTING	17

LIST OF TABLES

Table 1-1	Safe System Matrix scores	1
Table 3-1	Speed and Traffic Volumes.....	3
Table 3-2	Project Context.....	4
Table 4-1	SSA Matrix Scores for the Project.....	8
Table 4-2	Safe System Assessment Matrix – Existing Conditions	9
Table 4-3	Safe System Assessment Matrix – Design Option	10
Table 4-4	Additional Safe System Component	11
Table A-1	Safe System Matrix Scoring System.....	13

1. SUMMARY

Project Name:	Newman-Morris Circuit – Safe System Infrastructure Assessment
Assessment for:	Transport Canberra and City Services
Telephone:	(02) 6205 3208
Project Officer	Jayanthi Vikneson
Assessors:	<div style="background-color: black; width: 100px; height: 15px; display: inline-block;"></div> Senior Traffic Engineer <div style="background-color: black; width: 100px; height: 15px; display: inline-block;"></div> Senior Designer
Meetings:	No meetings with Roads ACT were undertaken as part of this assessment
Site Inspections:	Thursday 11 April 2019 between: <ul style="list-style-type: none"> • 8:30 pm – 9:30 pm, and • 5:00 pm – 6:00 pm.
Site Description	Two way two lane Minor Collector Road with a 50 km/h speed limit. Urban road with driveway access and a child care centre.
Assessment Options	The assessment was undertaken on Newman-Morris Circuit
Design Options:	The assessment was undertaken for the design option: <ul style="list-style-type: none"> • Lane narrowing, and • Vertical deflection devices.

The Safe System Matrix scores for the existing conditions and the score that would be achieved if the identified design options were to be incorporated are provided in **Table 1-1**.

Table 1-1 Safe System Matrix scores

Option	Score
Existing conditions	46/448
Design Option	27.75/448

1.1 Conclusion

The installation of the treatments associated with the Design Option would provide benefit to the safety of Newman-Morris Circuit.

2. ASSESSMENT DETAILS

2.1 Assessment Scope

The purpose of this Safe Systems Assessment is to assess existing conditions against proposed infrastructure so it aligns with the Safe Systems principles and the objectives to eliminate collisions that result in fatal and serious injuries.

2.2 Assessment Team

The following team members involved with this project:

- [REDACTED] R D Gossip Pty Ltd Senior Traffic Engineer (Lead Road Safety Auditor)
- [REDACTED] R D Gossip Pty Ltd Senior Designer (Level 2 Road Safety Auditor)

2.3 Meeting and Site Inspections

2.3.1 Meetings

No meetings with Roads ACT were undertaken as part of this assessment.

2.3.2 Site Inspections

Site inspections were undertaken on Thursday 11 April 2019 during the following periods:

- 8:30 am – 9:30 am (AM inspection), and
- 5:00 pm – 6:00 pm (PM inspection).

There is some evidence of antisocial behaviour on the road in various locations, including the curved sections of the road (skid marks on the road).

A summary of the key observations are listed below for the respective periods.

2.3.2.1 AM Inspection (8:30 am – 9:30 am)

- The majority of the road users appeared to abide by the speed limit, mainly within the sections of the curved section of the road. However, there were drivers that appeared to exceed the speed limit on the straight sections of the road.
- It does not appear to attract “rat-run” activities, although some external traffic was generated by the Oxley Early Learning Centre.
- A cyclist was observed riding on the road. Traffic volumes were low and passing vehicles appeared to travel at the speed limit and provided a gap greater than 1 m to the cyclists.
- There were some pedestrians on the path network. It is expected that there would be a high pedestrian crossing demand near the intersection with Singleton Crescent (north) due to the connection to Lake Tuggeranong.
- No delay was observed at the priority controlled intersections.
- No vehicles were parked on the road.

2.3.2.2 PM Inspection (5:00 pm – 6:00 pm)

- Similar conditions to the AM peak period.
- A group of pedestrians were observed walking along the northern verge of Singleton Crescent (north), crossing Newman-Morris Circuit, then walking up a path up Oxley Hill.

3. PROJECT CONTEXT AND DESCRIPTION

3.1 Existing Conditions

3.1.1 Road Description

Newman-Morris Circuit is a Minor Collector road in the ACT road hierarchy with a speed limit of 50 km/h. It connects to Taverner Street and loops around Oxley (connecting back onto itself between Connibere Crescent (south) and Hammond Close. It is circa 2.9 km long and circa 9 m wide.

There are no traffic calming devices on the road.

Parking is permitted on either side of the road (where legally permitted).

3.1.2 Traffic Volume and Speed Data

Traffic volume and speed data were collected on Newman-Morris Circuit in June 2017 and December 2018. The data collected in 2018 was part of the “Smiley Face” speed trials. The results are provided in Table 3-1.

Table 3-1 Speed and Traffic Volumes

Towards	Survey Start Date	Weekday Average (vpd)	Weekday Average Speed Km/hr	Weekday 85 %ile Speed Km/hr
Newman-Morris Crescent between Connibere Crescent (North) and Taverner Street				
Connibere Crescent (North)	2/06/2017	1,313	49.5	56.2
Taverner Street		1,340	52.8	61.2
Newman-Morris Crescent between Singleton Crescent (South) and Dalgarno Close				
Singleton Crescent (South)	2/06/2017	426	52.9	62.3
Dalgarno Close		416	52.1	61.2
Newman-Morris Crescent between Clutterbuck Crescent (East) and Farelly Close				
Clutterbuck Crescent (East)	2/06/2017	444	51.5	61.2
Farrelly Close		460	51.8	60.8
Newman-Morris Crescent between Singleton Crescent North and Singleton Crescent South				
Singleton Crescent (South)	10/12/2018	425	50.4	59.2
Singleton Crescent (North)		-	-	-

The data indicates that there are circa 2,650 vehicles per day on Newman-Morris Circuit between Taverner Street and its' looping connecting intersection. The traffic volumes at this location are within a Minor Collector road classification (1,000 to 3,000 daily vehicles). Traffic volumes on the other sections of Newman-Morris Circuit are typical to a Local Access road classification (300 to 1,000) daily vehicles.

Speed data indicates that the average motorists travels within an acceptable range of the 50 km/h speed limit (circa 5%), however, the 85th percentile motorist travels above the 50 km/h speed limit. This includes the locations where the “Smiley Face” speed trials were undertaken.

3.1.3 Collision History

In the five year period from 1 January 2013 to 31 December 2017, a total of 11 collisions occurred on Newman-Morris Circuit, excluding 8 collisions at the intersection with Taverner Street.

There were no collisions which resulted in a fatality. 3 collisions resulted in injuries requiring medical treatment.

- 5 collisions occurred at intersections and 6 collisions occurred in midblock sections;
- An injury occurred at the Newman-Morris Circuit/ Newman-Morris Circuit intersection where a westbound vehicle turning right lost control (RUM Code 707);
- An injury occurred at the intersection with Nunan Crescent (south) when an eastbound vehicle was collided by a southbound vehicle (RUM Code 101);
- An injury occurred on the midblock section between Raphael Close and Clutterbuck Crescent when a southbound vehicle left the road on the curve to the right and collided with an object (RUM Code 803);
- There was a collision between a pedestrian on the footpath and a vehicle leaving the driveway (RUM Code 7). The collision did not result in an injury

There were no trends associated with collisions occurring on Newman-Morris Circuit.

3.1.3.1 Lighting lux levels

- Lighting along Newman-Morris Circuit varies depending on the location, with some LED luminaries installed.
- The majority of Newman-Morris Circuit does not achieve the 3.5 Lux (minimum) lighting between light columns required for the installation of traffic calming devices (typically 3 Lux or lower).

3.1.4 Context of Assessment

Table 3-2 Project Context

Austrroads AP-R509-16 Prompts	Comments
What is the reason for the project ? Is there specific crash type risk? Is it addressing specific issues such as poor speed limit compliance, road access, congestion, future traffic growth, freight movement, amenity concerns from the community, maintenance/asset renewal, etc.	<ul style="list-style-type: none"> • The project aims to improve road safety for all users of Newman-Morris Circuit.
What is the function of the road? Consider location, roadside land use, area type, speed limit, intersection type, presence of parking, public transport services and vehicle flows. What traffic features exist nearby (e.g. upstream and downstream)? What alternative routes exist?	<ul style="list-style-type: none"> • The road is the main access into and through Oxley, with a short connection to Erindale Drive from Judkins Street. • The street is predominately residential with a Child Care Centre and parkland. • The speed limit is 50 km/h. • All the intersections are priority controlled T-intersections with priority to Newman-Morris Circuit.

Austroads AP-R509-16 Prompts	Comments
What is the speed environment? What is the current speed limit? Has it changed recently? Is it similar to other roads of this type? How does it compare to Safe System speeds? What is the acceptability of lowering the speed limit at this location?	<ul style="list-style-type: none"> • The road is sign posted as 50 km/h. • There are straight alignments in the road that do not encourage road users to abide by the speed limit.
What road users are present? Consider the presence of elderly pedestrians, school children and cyclists. Also note what facilities are available to vulnerable road users (e.g. signalised crossings, bicycle lanes, school speed limits, etc.)	<ul style="list-style-type: none"> • Majority of the road users are expected to be passenger vehicles. • Pedestrian activity is generated by residential activities. There is a pedestrian link to Lake Tuggeranong from Singleton Crescent (north) and walking trails to Oxley Hill.). Paths are provided on both sides of Newman-Morris Circuit. • No on-road bicycle lanes are provided.
What is the vehicle composition? Consider the presence of heavy vehicles (and what type), motorcyclists and other vehicles using the roadway.	<ul style="list-style-type: none"> • It is expected that at least 98% of vehicles would be passenger sized vehicles (including Utes). • Circa 1% would be heavy vehicles including buses • Circa 1% would be motorcycles.

3.2 Improvement Treatments

3.2.1 Design Considerations

The following needs to be considered as part of the selection of the proposed treatments:

- Devices should be visible for approaching road users from 55 m at 50 km/h (not accounting for corrections due to grade).
- Lighting – 3.5 Lux is required within 3 m of the device.

Based on the site inspections, road geometry and observations and the review of the traffic volume, speed and collision data, the following options could be considered.

3.2.1.1 Traffic lane width reduction

Newman-Morris Circuit is circa 9 m wide with circa 4.5 m lanes in both directions. There are some sections of the road where there are unbroken lines where parking is not permitted, however, generally vehicles can park on both sides of the road.

The narrowing of the traffic lanes with the provision of marked on-road cycle lanes/ marked shoulder would assist with encouraging road users to conform to the speed limit through constraining lane widths. Some sections of the road may also benefit from providing horizontal deflection devices to “break” the straight sections of the road where higher speeds and antisocial behaviour would be more prevalent, however, the devices would need to facilitate large vehicles (*buses). The position of these devices could be placed to align with locations where pedestrians are more likely to cross the road (further described below).

This option would also assist with encouraging the 85th percentile road users to conform to the 50 km/h speed limit.

3.2.1.2 Traffic Calming – Deflection Devices

Vertical deflection devices can be designed to accommodate all types of vehicles, with the option to install either rubber cushions or asphalt humps. The recently installed asphalt humps are considered a more appropriate solution due to the forecasted lifecycle and installation cost. They are also easier to traverse meaning that road users conforming to the speed limit do not have to decrease their speed to the same extent as a rubber cushion, while still provided the same level of discomfort for road users that are exceeding the speed limit. However, asphalt humps should not be installed in proximity to pedestrian crossing locations due to potential confusion that the device is a raised pedestrian crossing.

Vertical deflection devices should be considered at the locations where the 85th percentile speed is above the current 50 km/h speed limit and locations where pedestrian crossing activity occurs.

Additional vertical displacement devices can also be installed as a secondary priority option.

3.2.1.3 Pedestrian crossing improvements

Several pedestrians were observed walking on either side of the road, with crossing activities occurring at various locations, usually at typical locations (i.e. intersections, connections to community paths, bus stops).

The pedestrian crossing sight distance (CSD) is 150 m. On some sections of the road the CSD is not achieved due to the horizontal and vertical geometry of the road, including roadside vegetation at some locations. The provision of kerb extensions/ blisters will assist in reducing the crossing sight distance (reduce to 123 m) and assist in calming traffic movements. Refuge islands could be considered, however, this would be subject to an assessment of whether on-road cycling should be provided on Newman-Morris Circuit. This would have to be considered during the design and consultation phase of the project.

Enhancements to active travel infrastructure through improved crossing safety would provide benefit to pedestrians and cyclists using the path network. The improved crossing safety has the potential to encourage additional users that previously avoided walking/ cycling due to concerns over limited safe road crossing locations. The provision of crossing improvements can decrease crossing distance and time that pedestrians/ cyclists are within the trafficable section of the road. It would also improve the pedestrian crossing sight distance at locations where the sight distance is reduced due to the curvature of the road.

There are also opportunities to improve the active travel path network through Oxley, enhancing the connectivity between Greenway, Wanniasa and Monash via Oxley. There are various sections of the network where paths are not provided, mainly on local Access Street. The provision of a complete path network on key desire routes would assist with the safety of pedestrians and cyclists. As the missing path links are on local Access Streets, there is potential to mark these routes as Community Routes facilities on-street without paths as a retrofit (refer ACTSD-0513 & ACTSD-0514). Through correctly marking and signing these routes and providing additional wayfinding, it creates an opportunity to encourage more pedestrian and cyclist activity.

Improvements to pedestrian crossing facilities and network connections should be considered as part of an assessment of connectivity through the suburb. These improvements should be considered in future Active Travel programs.

3.2.1.4 Roundabout treatment at Newman-Morris Circuit / Newman Morris Circuit

The installation of a roundabout at the Newman-Morris Circuit/ Newman Morris Circuit intersection would act as traffic calming due to the deflection to vehicles on the approach.

However, due to the low number of collisions at these intersections and the construction cost, this treatment is not considered appropriate.

3.2.2 Assessment Options

The assessment was undertaken for the full length of Newman-Morris Circuit.

The assessment was undertaken for the design option:

- Lane narrowing, and
- Vertical deflection devices.

The assessment of this road was based on the worst case scenario for the road section.

4. ASSESSMENT OF DESIGN OPTIONS

4.1 Assessment Summary

The Safe System Assessment (SSA) Matrix scoring was based on the Austroads Safe System Assessment Framework Table 4.4 Safe System matrix scoring system (refer Appendix 1).

The Safe System Assessment Matrix scores for the existing conditions and the proposed design options are shown in Table 4-1. The scores for each crash type are shown in Figure 4-1. The detailed assessments are presented in Section 4.2.

Table 4-1 SSA Matrix Scores for the Project

Option	Score
Existing conditions	46/448
Design Option	27.75/448

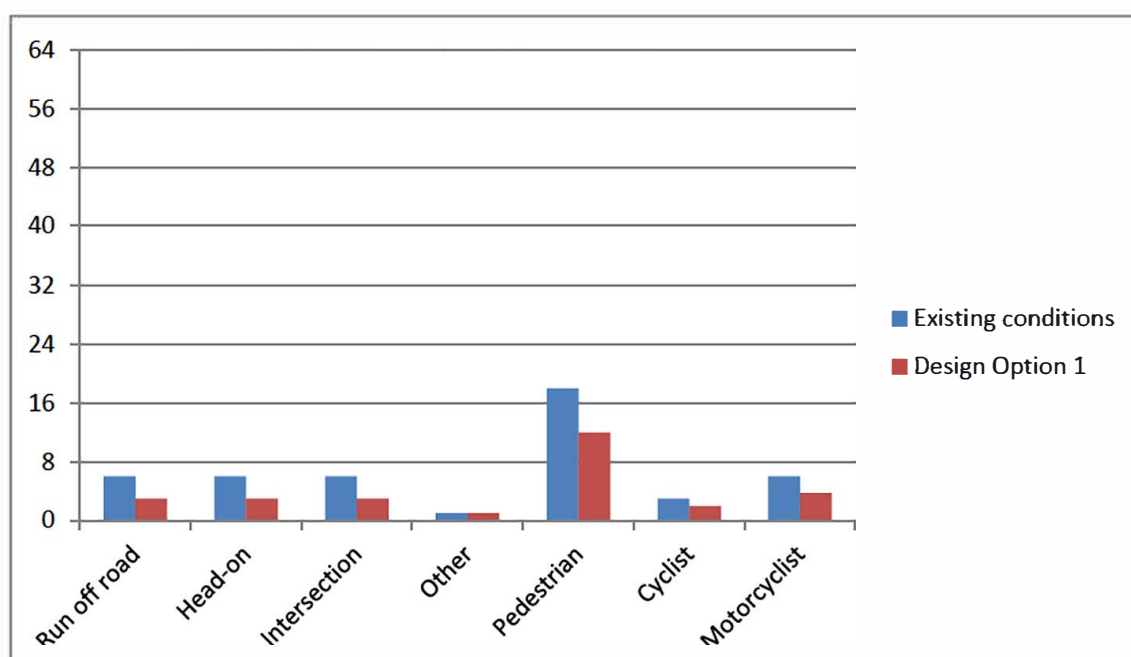


Figure 4-1 Newman-Morris Circuit SSA Scores for Crash Types

4.2 Safe System Assessment Matrices

The columns of the Safe System matrix show the crash types that represent the main crash and road user types that contribute to death and serious injury.

As scores vary along routes and between intersections, an average score is taken for the project as a whole. However, traffic volumes (under 1,000 vehicles per day) will be used as the majority of the road network experiences low volumes. Detailed matrix assessments were undertaken to determine the overall scores.

Reference is made to AP-R509-16 Table 4.2 which is used to quantify the risk rating scores, with AP-R509-16 Table 4.4 used as a scoring index.

Table 4-2 Safe System Assessment Matrix – Existing Conditions

	Run-off road	Head-on	Intersection	Other	Pedestrian	Cyclist	Motorcyclists
Exposure Comments:	AADT is < 1,000 veh/day	AADT is < 1,000 veh/day	AADT is < 1,000 veh/day	AADT is < 1,000 veh/day	Pedestrian volumes are expected to be high based on visual observations (50-100 units/ day).	Cyclist volumes are expected to be low based on visual observations (<10 units/ day).	For motorcyclist crash types, AADT is estimated between <10 per day
Score:	1/4	1/4	1/4	1/4	2/4	1/4	1/4
Likelihood Comments:	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Uncontrolled intersections meaning that vehicles are likely to run off the road avoiding a vehicle entering or exiting the side road. Some roadside hazards close to the lane. The curvature of the road. Factors that decrease the likelihood include: <ul style="list-style-type: none"> None. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. The road is undivided. Vehicles overtaking buses stopped at bus stops. The curvature of the road Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low volume. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Controlled by give way signs. Poor visibility at intersections on the inside of curves. Alignment and speed of intersections. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low volume. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Drivers not leaving adequate gap acceptance. Driveways. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low volume 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Width of road. Pedestrian crossing sight distance not achieved in some locations. Factors that decrease the likelihood include: <ul style="list-style-type: none"> None. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. On street parking permitted. Driveways. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low cyclist volume. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Visibility at intersections on the inside of curves. On street parking permitted Driveways. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low motorcycle volume.
Score:	3/4	3/4	3/4	1/4	3/4	1/4	2/4
Severity Comments:	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Trees and non-frangible, structures located in the clear zone. Factors that decrease the severity include: <ul style="list-style-type: none"> None. 	Factors that increase the severity include: <ul style="list-style-type: none"> The road is undivided. Factors that decrease the severity include: <ul style="list-style-type: none"> For head on crash types, the operating speeds (60-70 km/h) are considered to be close to tolerable levels for fatalities, however not serious injuries. 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Right angle collisions. Factors that decrease the severity include: <ul style="list-style-type: none"> None. 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None. 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None. 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None. 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None.
Score:	2/4	2/4	2/4	1/4	3/4	3/4	3/4
Product	6/64	6/64	6/64	1/64	18/64	3/64	6/64
						TOTAL	46/448

Below is the legend for the following option tables

- Black text Common factor between this plan and the existing conditions
- ~~Strikethrough~~ Factor that is removed or significantly diminished between the existing conditions and this option
- *Blue italic text* New or significantly altered in this option compared to the existing conditions

Table 4-3 Safe System Assessment Matrix – Design Option

	Run-off road	Head-on	Intersection	Other	Pedestrian	Cyclist	Motorcyclists
Exposure Comments:	AADT is < 1,000 veh/day	AADT is < 1,000 veh/day	AADT is < 1,000 veh/day	AADT is < 1,000 veh/day Crash types: Rear end, manoeuvring	Pedestrian volumes are expected to be high based on visual observations (50-100 units/ day).	Cyclist volumes are expected to be low based on visual observations (<10 units/ day).	For motorcyclist crash types, AADT is estimated between <10 per day
Score:	1/4	1/4	1/4	1/4	2/4	1/4	1/4
Likelihood Comments:	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Uncontrolled intersections meaning that vehicles are likely to run off the road avoiding a vehicle entering or exiting the side road. Some roadside hazards close to the lane. The curvature of the road. Factors that decrease the likelihood include: <ul style="list-style-type: none"> None. Tightening of intersections. Improved delineation. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. The road is undivided. Vehicles overtaking buses stopped at bus stops. The curvature of the road Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low volume. Improved delineation. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Controlled by give way signs. Poor visibility at intersections on the inside of curves. Alignment and speed of intersections. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low volume. Tightening of intersections. Improved delineation. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Drivers not leaving adequate gap acceptance. Driveways. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low volume. Improved delineation. 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Width of road. Pedestrian crossing sight distance not achieved in some locations. Factors that decrease the likelihood include: <ul style="list-style-type: none"> None. . 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. On street parking permitted. Driveways Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low cyclist volume. . 	Factors that increase the likelihood include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Visibility at intersections on the inside of curves. On street parking permitted Driveways. Factors that decrease the likelihood include: <ul style="list-style-type: none"> Low motorcycle volume. Improved delineation.
Score:	2/4	2/4	2/4	1/4	3/4	1/4	1.5/4
Severity Comments:	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Trees and non-frangible, structures located in the clear zone. Factors that decrease the severity include: <ul style="list-style-type: none"> None. Reduction in kinetic energy at hump locations 	Factors that increase the severity include: <ul style="list-style-type: none"> Road is undivided. Factors that decrease the severity include: <ul style="list-style-type: none"> For head on crash types, the operating speeds (60-70 km/h) are considered to be close to tolerable levels for fatalities, however not serious injuries. Reduction in kinetic energy at hump locations 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Right angle collisions. Factors that decrease the severity include: <ul style="list-style-type: none"> None. Reduction in kinetic energy at hump locations 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None. Reduction in kinetic energy at hump locations 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> 40 km/h school zone speed limit. Reduction in kinetic energy at hump locations 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None. Reduction in kinetic energy at hump locations 	Factors that increase the severity include: <ul style="list-style-type: none"> 85th percentile exceeding the 50 km/h speed limit. Factors that decrease the severity include: <ul style="list-style-type: none"> None. Reduction in kinetic energy at hump locations
Score:	1.5/4	1.5/4	1.5/4	1/4	2/4	2/4	2.5/4
Product	3/64	3/64	3/64	1/64	12/64	2/64	3.75/64
						TOTAL	27.75/448

4.3 Safer Vehicles, People and Post-Crash Care

Table 4-4 provides a general high level overview of additional safe systems components associated with the assessed roads.

Table 4-4 Additional Safe System Component

Pillar	Prompt	Comment
Road User	Are road users likely to be alert and compliant, or are there factors that might influence this?	<ul style="list-style-type: none"> Treatments associated with the design option would assist with providing guidance to road users and support compliance. Potential that there could be objective from older drivers regarding the vehicle deflection devices due to driver discomfort.
	What are the expected compliance and enforcement levels (alcohol/drugs, speed, road rules, and driving hours) and what is the likelihood of driver fatigue? Can enforcement of these issues be conducted safely?	<ul style="list-style-type: none"> There is potential for road users to use these roads when travelling from an event/ club, etc. home and may be under the influence. This would occur network wide and should be addressed accordingly.
	Are there special road uses (e.g. entertainment precincts, elderly, children, on-road activities), distraction by environmental factors (e.g. commerce, tourism), or risk-taking behaviours?	<ul style="list-style-type: none"> Early learning centre likely generates traffic from outside the suburb.
Vehicle	What level of alignment is there with the ideal of safer vehicles?	<ul style="list-style-type: none"> There is nothing to indicate this project contravenes the ideals of safer vehicles.
	Are there factors which might attract large numbers of unsafe vehicles? Is the percentage of heavy vehicles too high for the proposed/existing road design?	<ul style="list-style-type: none"> The distribution of vehicle types will likely remain.
	Are there enforcement resources in the area to detect non-roadworthy, overloaded or unregistered vehicles and thus remove them from the network? Can enforcement of these issues be conducted safely?	<ul style="list-style-type: none"> Inspections of vehicle roadworthy are undertaken network wide. Potential to undertake additional reviews network wide at locations where compliance could be an issue (i.e. schools). Additionally, schools should provide guidance and requirements regarding the vehicles parked on their sites. Nothing constrains enforcement.
	Has vehicle breakdown been catered for?	<ul style="list-style-type: none"> The provision of the cycle lane/ marked shoulder may be used to accommodate broken down vehicles.
Post-crash care	Are there issues that might influence safe and efficient post-crash care in the event of a severe injury?	<ul style="list-style-type: none"> No identified issues.
	Do emergency and medical services operate as efficiently and rapidly as possible?	<ul style="list-style-type: none"> Emergency services are in close proximity. It is assumed that there would be an efficient post-crash response and care.
	Are other road users and emergency response teams protected during a crash event? Are drivers provided the correct information to address travelling speeds on the approach and adjacent to the incident? Is there reliable information available via radio, VMS etc.?	<ul style="list-style-type: none"> Opportunity to close the road where the event occurred with minimal impact to road users. A detour plan would need to account for access through the suburb, particularly at the two connections to the external road network.
	Is there provision for e-safety (i.e. safety systems based on modern information and communication technologies, C-ITS)?	<ul style="list-style-type: none"> Not applicable for this location due to the road side environment

5. CONCLUSION

The installation of the treatments associated with the Design Option would provide benefit to the safety of Newman-Morris Circuit.

APPENDIX 1 SAFE SYSTEM MATRIX SCORING SYSTEM

Table A-1 Safe System Matrix Scoring System

Road user exposure	Crash likelihood	Crash severity
<p>0 = there is no exposure to a certain crash type. This might mean there is no side flow or intersecting roads, no cyclists, no pedestrians, or motorcyclists).</p>	<p>0 = there is only minimal chance that a given crash type can occur for an individual road user given the infrastructure in place. Only extreme behaviour or substantial vehicle failure could lead to a crash. This may mean, for example, that two traffic streams do not cross at grade, or that pedestrians do not cross the road.</p>	<p>0 = should a crash occur, there is only minimal chance that it will result in a fatality or serious injury to the relevant road user involved. This might mean that kinetic energies transferred during the crash are low enough not to cause a fatal or serious injury (FSI), or that excessive kinetic energies are effectively redirected/dissipated before being transferred to the road user.</p> <p>Users may refer to Safe System-critical impact speeds for different crash types, while considering impact angles, and types of roadside hazards/barriers present.</p>
<p>1 = volumes of vehicles that may be involved in a particular crash type are particularly low, and therefore exposure is low.</p> <p>For run-of-road, head-on, intersection and 'other' crash types, AADT is < 1 000 per day.</p> <p>For cyclist, pedestrian and motorcycle crash types, volumes are < 10 units per day.</p>	<p>1 = it is highly unlikely that a given crash type will occur.</p>	<p>1 = should a crash occur, it is highly unlikely that it will result in a fatality or serious injury to any road user involved. Kinetic energies must be fairly low during a crash, or the majority is effectively dissipated before reaching the road user.</p>
<p>2 = volumes of vehicles that may be involved in a particular crash type are moderate, and therefore exposure is moderate.</p> <p>For run-of-road, head-on, intersection and 'other' crash types, AADT is between 1 000 and 5 000 per day.</p> <p>For cyclist, pedestrian and motorcycle crash types, volumes are 10–50 units per day.</p>	<p>2 = it is unlikely that a given crash type will occur.</p>	<p>2 = should a crash occur, it is unlikely that it will result in a fatality or serious injury to any road user involved. Kinetic energies are moderate, and the majority of the time they are effectively dissipated before reaching the road user.</p>
<p>3 = volumes of vehicles that may be involved in a particular crash type are high, and therefore exposure is high.</p> <p>For run-of-road, head-on, intersection and 'other' crash types, AADT is between 5 000 and 10 000 per day.</p> <p>For cyclist, pedestrian and motorcycle crash types, volumes are 50–100 units per day.</p>	<p>3 = it is likely that a given crash type will occur.</p>	<p>3 = should a crash occur, it is likely that it will result in a fatality or serious injury to any road user involved. Kinetic energies are moderate, but are not effectively dissipated and therefore may or may not result in an FSI.</p>




SAFE SYSTEMS INFRASTRUCTURE ASSESSMENT

Road user exposure	Crash likelihood	Crash severity
<p>4 = volumes of vehicles that may be involved in a particular crash type are very high, or the road is very long, and therefore exposure is very high.</p> <p>For run-of-road, head-on, intersection and 'other' crash types, AADT is > 10 000 per day.</p> <p>For cyclist, pedestrian and motorcycle crash types, volumes are > 100 units per day.</p>	<p>4 = the likelihood of individual road user errors leading to a crash is high given the infrastructure in place (e.g. high approach speed to a sharp curve, priority movement control, filtering right turn across several opposing lanes, high speed).</p>	<p>4 = should a crash occur, it is highly likely that it will result in a fatality or serious injury to any road user involved. Kinetic energies are high enough to cause an FSI crash, and it is unlikely that the forces will be dissipated before reaching the road user.</p>

APPENDIX 2 CONCEPT SKETCH OF OPTIONS



Legend

-  Lane width reduction (3.3m traffic lanes and 1.2m on road cycle lanes/ marked shoulder)
-  Speed hump
-  Pedestrian crossing improvements to be considered in future programs



PRE-SCHOOL

APPENDIX 3 OPTION PRELIMINARY COSTING

	Description	Estimated Costs (Excl. GST)
Design Option		
Vertical Deflection Devices	4 asphalt cushions*	\$40,000.00 (\$10,000 per cushion location)
Channelisation treatment	3.3 m traffic lanes and 1.2 m on road cycle lanes/ marked shoulder,	\$12,800.00
	Total	\$52,800.00** (excl. GST)

Note:

- * Location of final design may require lighting.
- ** A review of services has not been undertaken and the impact of work on existing services is unknown. Estimated costs are indicative only and exclude relocation of services.

It is estimated that the cost to install kerb blisters or refuge islands at four locations would be circa \$120,000 (circa \$30,000 per location).



Dear resident/business owner,

The ACT Government is fast tracking additional infrastructure projects to keep Canberrans working through the COVID-19 pandemic. This program focuses on work that can start immediately and will support local jobs, businesses and our Canberra community.

Among the projects there is close to \$9.75 million in building new footpaths, improving road safety, upgrading transport and other facilities and undertaking a range of landscaping works in our open spaces.

From **Monday 8 June 2020** we will commence the installation of local area traffic management and road safety initiatives to improve pedestrian and road user safety on **Newman-Morris Circuit in Oxley**. This may include the installation of pedestrian refuges, speed humps and signage.

The works are expected to take approximately two weeks to complete. Work hours are from 7 am to 5 pm Monday to Friday and 8 am to 4 pm Saturdays. Access to your property will be maintained at all times and we will make every effort to minimise disruptions to local residents during the works.

These works will be delivered by Project Coordination (Australia) Pty Ltd.

If you have any questions in relation to the works, please contact Access Canberra on 13 22 81.

We thank you for your patience whilst we complete these works.

Kind regards

Jeremy Smith

Executive Branch Manager, Infrastructure Delivery

Transport Canberra and City Services