



ACT
Government

Territory and Municipal Services

TAMS External Input Request

Requesting Directorate: CMTEDD (via DLO)

Responding TAMS Division: IRAPT

Subject: Oaks Estate Progress Association – meetings outcome

TAMS TRIM reference number (folder): RI15/058

Please address the following issues:

Roads ACT

As Minister for roads and Parking, Minister Gentleman committed to look at the following:

- **CM committed to moving Oaks Estate up the 'warrant' system to see safer traffic/pedestrian management**

The highest ranking street in Oaks Estate is currently Railway Street, which ranks outside top 200 streets for investigation.

- **Traffic Calming measures**

Investigation into the concerns raised by residents of Oaks Estate about the two intersections Hazel Street/George Street, and Hazel Street/McEwan Avenue has been completed. The outcome is that no engineering measures were recommended, given the antisocial behaviour and crash history. Enforcement and education was recommended as a treatment.

As part of the Federal Black Spot program, the intersection of Pialligo Avenue and Oaks Estate Road is planned to be signalised in the 2015-16 financial year.

- **Pedestrian crossings – especially the corner of McEwan Avenue/Railway Street**

Further supplementary investigative work will be done to consider pedestrian safety at the Railway Street and McEwan Avenue intersection to determine the warrant for a crossing or refuge.

Action Officer: Darwin Zeta, a/g Senior Manager, Strategic Planning & Development

Approved by:

13.8.15

Tony Gill, Director – Roads ACT

Approved by Tony Gill
12/8/2015

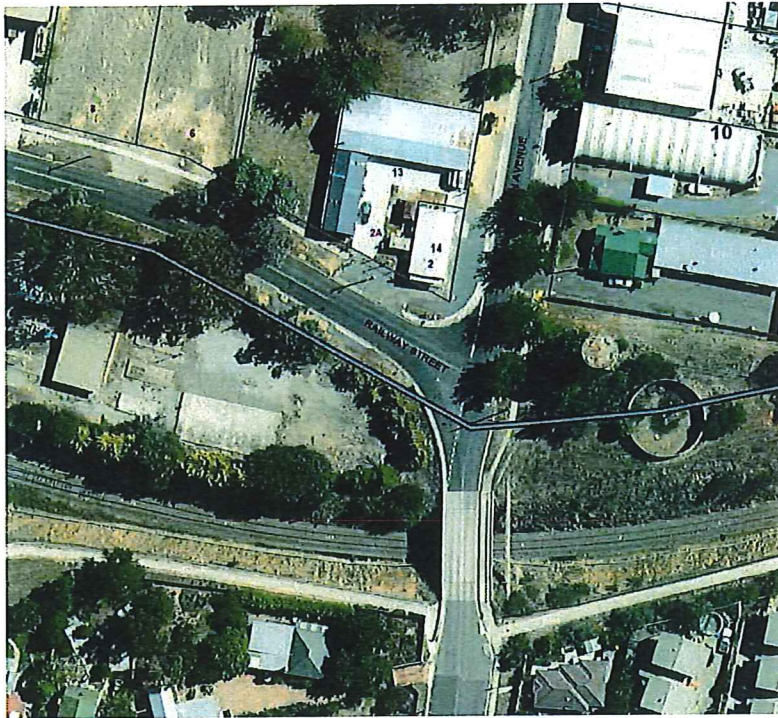
ID no	887107
Location:	Intersection of Railway Street and McEwan Avenue
Suburb	Oaks Estate
Traffic issue	Request for intersection improvements
Enquirer:	S. 41
Prelim. Action:	Inspect site
Date Received	28/01/2015

Issues Raised

Issue rose at a community group and relayed by Natural Disaster Resilience Office (Southside Community Services). Railway Street "is dangerous", sometimes floods, may hinder evacuation in an emergency. Intersection of Railway St & McEwan Avenue has "Frequent near misses", "cars turning right from Railway Street often assume that the cars coming over the bridge are going to turn left into railway". Requesting both sides of Railway Street be cleared to improve visibility and reduce the risk of fire on the only evacuation route from Oaks Estate and the intersection be improved by some form of traffic management, or at least signage to reduce risk of collisions. See enquiry for more details.



Source: ACTimap



Source: ACTmapi

Site Inspection Observations - Site inspected 10/02/2015 (afternoon)

- The intersection of Railway Street and McEwan Avenue is Stop Sign controlled T intersection with Railway being the terminating leg. The Stop Sign control is Stop Sign is due to sight restrictions relating to skewed intersection geometry, super elevations and the location of the railway bridge.
- The intersection at the time of inspecting was well linemarked and all signage was in place and in good condition.
- There was some vegetation along the eastern side of McEwan Avenue that limited visibility of the street blade sign for Railway Street.

Railway Street:

- Fully line marked including mid block lengths with edge lines and double barrier centre line along full length. Rpm's are also in place.
- Railway Street connects the estate to Oaks Estate Road and Pialligo as well as McEwan St and Queanbeyan cbd.

Traffic Warrant System

- Road Hierarchy: Minor Collector with a 50km/hr speed limit.
- **85% speed is 65.1/hr (2009 data)**
- 24hr traffic volume 687 vehicles with **8.1% heavy vehicles (2009 data)**
- Crash data: 5 property damage crashes (2006-2010 data)
- Ranked 202 (2013 TWS)



Photos of intersection

Crash History

- One reported crash, property damage only, through-right type crash, five year crash history from Jan 2009 to Dec 2013.

Recommendation:

- Currently no long term work planned. Spoke to Darwin 24/2/2015.
- No further action recommended at this time.

<p>Prepared by: Trish Wilson</p>	<p>Date: 24/2/2015</p>
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ACT
Government

Transport Canberra and
City Services

TRIM/Objective No: DLO16/058

Requests for Information - Minister for Transport and City Services

Subject:	Oaks Estate Association - Request for Information from DLO - Minister Gentleman Response
Critical Date / Time	8/7/2016
Director-General	 12/7/16
Deputy Director-General	JC 11.7.16
Director	

Minister Berry has been asked a QON about Oaks Estate, which touches on follow up occurring from the Ministers' meeting with Oaks Estate Progress Association on 27/5/15.

The Questions relating to Transport Canberra and City Service are:

As Minister for Roads and Parking, Minister Gentleman committed to look at the following:

1. CM committed to moving Oaks Estate up the 'warrant' system to see safer traffic / pedestrian management.
2. Traffic Calming measures.
3. Pedestrian crossings – especially the Corner of McEwan Avenue / Railway.

Transport Canberra and City Services Response

1. Railway Street in Oaks Estate has moved up in the warrant system since 2013 by 104 places and it currently ranks 98 in priority for detailed investigation in relation to local area traffic management.
2. To identify the need for, and priority of, traffic calming measures in residential areas, Roads ACT considers a range of factors such as traffic volume and speed data, crash history and percentage of heavy vehicles, as well as surrounding land use such as the presence of shops or schools. The results are compared with other streets across Canberra that are also of concern to determine the priority for detailed investigation. An assessment of Railway Street in this manner indicates that it carries approximately 4,100 vehicles per day travelling at an average speed of around 54 km/h.

An analysis of crash records at the Railway Street and McEwan Avenue intersection also revealed that there has been only one reported crash at this location in the last seven years (2009-2015), with a total of seven crashes between Oaks Estate Road and McEwen Avenue. Hence Railway Street performs better in comparison to other similar roads in the ACT, and is lower in terms of priority for traffic management measures.

3. In 2015 Roads ACT completed an investigation at the intersection of McEwen Avenue and Railway Street intersection, with no indication of pedestrian crossing needs. Roads ACT will undertake a new survey at this location after school holidays to assess any changes to the pedestrian requirements.

Bruan, Nicole

From: Hawkins, Robyn
Sent: Monday, 8 August 2016 1:43 PM
To: Gill, Tony
Subject: RE: Oaks Estate - McEwan Ave/Railway Street [SEC=UNCLASSIFIED]
Attachments: Railway & McEwan Pedestrian Count.pdf

Hi Tony,

We did an observation in 2015 that showed minimal pedestrian movements. Attached is the follow up survey completed last week.

In terms of the warrant for a pedestrian crossing we are looking at in two separate one hour periods having greater than 60 pedestrians and 600 vehicles that would justify a marked pedestrian crossing (zebra).

Based on the most recent afternoon survey the numbers are 7 pedestrians and 79 vehicles. The time 3PM to 4PM was chosen as it coincides with school finish time.

No pedestrians were observed to have difficulties finding a gap to cross the road. This would be expected given the number of vehicles.

Regards
Robyn

From: Gill, Tony
Sent: Monday, 8 August 2016 1:32 PM
To: Hawkins, Robyn
Subject: FW: Oaks Estate - McEwan Ave/Railway Street [SEC=UNCLASSIFIED]

Hi Robyn

We discussed this on Friday – will this be covered in the material you will provide me for Oakes Estate

Regards

Tony

From: Corrigan, Jim
Sent: Wednesday, 27 July 2016 1:31 PM
To: Gill, Tony
Subject: Oaks Estate - McEwan Ave/Railway Street [SEC=UNCLASSIFIED]

Tony

Mins office has asked I call **S. 41** the secretary Oaks Estate Progress Association. I understand that one of her queries is about the outcomes of investigative work that was to be done on whether pedestrian crossings are warranted at the McEwan Ave/Railway St intersection. I have a brief (TRIM R115/058) from 12 August 2015 saying this work to happen.

Do you have an update on what the outcome was?

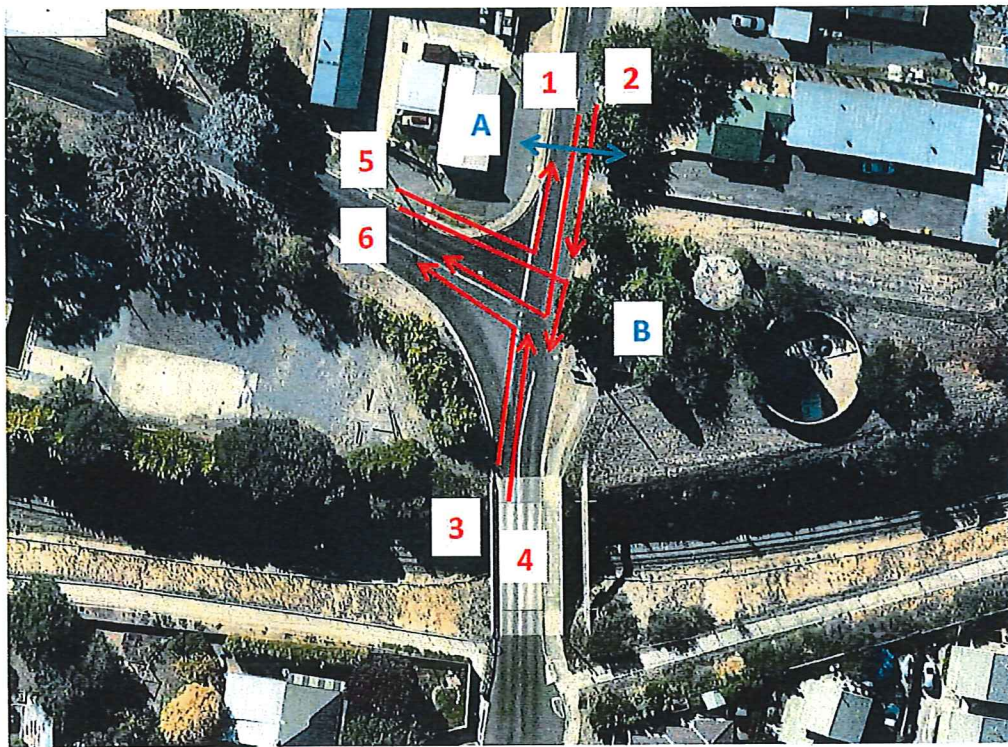
Thanks

Jim

Intersection of Railway Street and McEwan Avenue, Oaks Estate

04/08/2016

Time	McEwan - northern leg		McEwan - southern leg		Railway - western leg		PEDESTRIANS	
	1	2	3	4	5	6	A	B
	right turn	straight	left turn	straight	left turn	right turn	east-west	north-south
3:00 - 3:15pm	1	6	20	13	1	41	0	1
3:15 - 3:30pm	5	7	17	3	7	49	1	1
3:30 - 3:45pm	5	6	27	11	2	62	0	1
3:45 - 4:00pm	2	6	22	3	1	72		4
Total	13	25	86	30	11	224	1	7
	38		116		235		8	



Assessment against Warrants:

	Peds / hr	Veh / hr	Product Ped x Veh
	A	1,2,4,5	
Warrant	> 60	> 600	>90,000
McEwan Ave	7	79	553
	X	X	X

OBSERVATIONS:

Standard T intersection with Stop sign control due to sight restrictions caused by the railway bridge. Line marking and sign posting at intersection in good condition, with generally good adherence to the stop sign observed. The 50km/hr urban speed limit is signposted.

There is a footpath along the northern side of Railway Street only. On McEwan Avenue there is a footpath on the eastern side only over the railway bridge and then is on both sides of the street between Railway Street and Hazel Street.

At the east-west crossing point (A) there was reduced traffic volumes. The crossing point had footpath connection and pram ramps.

Only one cyclist was observed during the count. He was travelling north along McEwan Street.

There is insufficient width across McEwan Street (at location A) to install a pedestrian refuge.

Queue lengths of up to eight vehicles were observed for right turns out of Railway Street to head south along McEwan Avenue (movement 6). The queues clear quickly with little delay. Traffic appeared to arrive along Railway Street in platoons, possible as a result of the traffic signals at the intersection of Railway Street and Oaks Estate Road.



S



TRIM: B16/023

Date 3 February 2016

To Minister for Transport and Municipal Services

- Director-General *AS 9/2/16*
- Director-General's Executive Officer *JW 4/2/16*
- Director, Finance *AKP 4/2/16*
- Executive Director, Infrastructure, Roads and Public Transport *P 4.2.16*
- Director, Roads ACT *TEA 3/2/16*

From Senior Manager, Traffic Management and Safety, Roads ACT

Subject Traffic Warrants System (TWS) – 2016 Update

Recommendation

That you:

- Note the information contained in this brief.

NOTED/PLEASE DISCUSS

- Note Roads ACT's intention to start using the 2016 TWS from February 2016.

NOTED/PLEASE DISCUSS

Meegan Fitzharris MLA..... *9/2/16*

Critical Date

- Roads ACT intends to start using the 2016 TWS in February 2016.

Purpose

To brief you on the 2016 update of the ACT TWS.

Background

Roads ACT developed the TWS in response to the ever-increasing number of community requests to address speeding and traffic volume (rat running) issues on residential streets. The TWS provides a way of objectively prioritising the need for investigations into traffic management issues on residential streets (major and minor collector roads) in the ACT.

The TWS is also used by Roads ACT to identify priorities for the implementation of traffic calming measures on residential streets under Roads ACT's capital upgrades programs, as well as to respond to community concerns and to answer ministerial correspondence.

The system takes into account traffic volume, speed, crash history and land use. It allocates point scores against each of these attributes according to the class of road, applies a weighting to each of the scores and finally applies a factor for width of verge to arrive at a final score for each street included in the TWS. The TWS is an internal system and is for Roads ACT's use only.

The initial TWS was developed at the request of the Assembly and involved consultation at that time. In March 2000, the ACT Legislative Assembly approved the adoption of the TWS. Subsequent updates of the TWS do not require any consultations.

Roads ACT updated the TWS in 2004, 2006, 2009 and 2013 with up-to-date traffic data. The updates ensure that the traffic volume and speed data reflect the results of the most recent surveys. The most recently available five year traffic crash data is also included and the land use generators are reviewed to reflect changes such as shopping centre and/or school closures.

The total number of residential streets in the database had increased in every update with the addition of roads in new suburbs as well as roads in the old suburbs for which data has been collected. The 2013 TWS included data for over 400 residential streets.

Issues

The collection of up-to-date information for all streets in the TWS has now become a large and lengthy task without making a marked difference to low ranked streets. As such, the 2016 TWS (copy attached at Attachment A) only lists the top 100 streets.

The inclusion of new streets and the updating of the data in the TWS can result in the ranking of some streets to change in either direction. Residents of streets that ranked higher in the 2013 TWS and now rank lower or are not listed in the 2016 TWS, may query why this has occurred. Such changes in the rankings are mainly the result of changes in traffic volumes and to a lesser extent changes in speed and traffic crashes.

In this new update, some major collector roads were also removed from the list. While similar traffic issues may be experienced on such roads (e.g. Antill Street in Dickson), it was considered that traffic calming measures may not be applicable or the best treatment for such roads. Such roads will be investigated, and treated if necessary, as part of road safety, minor new works and/or capital upgrades programs. } ?

Members of the public are always interested in where their street ranks in the TWS. Information on the TWS and a link to query the ranking of specific residential streets will be uploaded on the Territory and Municipal Services Directorate (TAMS) website and can be used by the community.

Consultation

Consultation is not required. The TWS is for Roads ACT's use only.

Financial

The annual allocation for the *Residential Street Improvement Capital Upgrade Program* will be used to investigate and address, where practicable, the high ranked streets in the TWS.

Over the last few years, traffic studies on Copland Drive, Maribyrnong Avenue, Sternberg Crescent, Coyne Street, Heagney Crescent, Clift Crescent, Hambidge Street, Streeton Drive, Beaurepaire Crescent, Trickett Street and Messenger Street have been completed and the high priority works resulting from these studies have been, or in the case of Copland Drive are about to be, implemented as part of this program.

Media

The TWS has been used since 2000. It is unlikely that a new update would generate significant media interest.


Rifaat Shoukrallah
Senior Manager
Traffic Management and Safety

Contact Officer: Rifaat Shoukrallah
Phone: 6207 6157

2016 ACT TRAFFIC WARRANT SYSTEM

2016 TRAFFIC WARRANT SYSTEM

- 1 Crash statistics for period 1/1/2010 to 31/12/2014
- 2 Activity generators amended to reflect school and shopping centre closures.
- 3 # Major collector roads with a speed limit of 50 introduced as part of Local Area Traffic Management treatments. Speed points adjusted accordingly.
- 4 * new streets added to the database in 2016

2016 Rank	Street	Suburbs	From	To	Road Class	Speed Limit (km/hr)	Road Length (km)	Verge Width (m)	85th %ile Speed (km/hr)	24hr Traffic Vol. (vpd)	Speed, Vol, HV Data Year	Heavy Vehicles (%)	No. of Fatal crashes	No. of Injury crashes	No. of Property Damage crashes	Activity Generators	Final Total Points Score	2016 Rank
1	Manibymong Av	Kaleen	Baldwin Dr	Baldwin Dr	Maj C	60	4.2	5.0	66.8	7,066	2015	6.8	0	7	102	6 6 8	216	1
2	Denison St	Deakin	Kent St	Carruthers St	Maj C	60	1.5	8.8	59.8	7,154	2015	4.5	0	6	42	4 4 5	170	2
3	Carruthers St (east)	Deakin/Curtin	McCulloch St		Maj C	60	0.5	9.8	66.1	5,204	2015	3.7	0	7	52	2 4 7	164	3
4	Theodore St	Curtin	Carruthers St	Melrose Dr	Maj C	60	1.7	5.0	55.5	6,154	2015	3.8	0	2	33	4 4 7	150	4
5	Torrans St	Braddon	Jjong St	Coooyong St	Maj C	60	1.2	11.0	59.3	6,755	2015	2.0	0	8	76	3 7 8	146	5
6	Hambidge Cr	Chisholm	Isabella Dr	Goldstein Cr	Maj C	60	1.7	5.0	61.4	6,407	2015	4.9	0	3	20	4 4 7	144	6
7	Brigalow St #	Lynneham/O'Connor	Mouat St	Boronia Dr	Maj C	50	1.4	11.0	54.6	7,055	2013	3.1	0	3	16	4 4 7	140	7
8	Hesagney Cr	Chisholm	Hambidge Cr	Cliff Cr	Maj C	60	3.6	6.0	65.9	7,224	2015	3.1	0	6	36	1 2 4	136	8
9	Ware St	Calwell	Johnson Dr	Thanwa Dr	Maj C	60	1.2	5.8	65.0	4,852	2015	3.7	0	0	22	4 5 9	128	9
10	Castleton Cr	Gowrie	Bugden Av	Bugden Av	Maj C	60	2.8	6.0	62.2	4,185	2015	3.2	0	11	51	4 4 6	127	10
11	Tillyard Dr (south)	Charnwood	Kerrigan St	Kerrigan St	Maj C	60	1.4	6.0	64.4	6,288	2015	4.7	0	4	38	2 7 8	125	11
12	Box Hill Av	Conder	Thanwa Dr	Thanwa Dr	Maj C	60	1.8	9.1	65.7	4,744	2012	2.8	0	2	36	4 5 8	125	12
13	Boddington Cr	Kambah	Bateman Street	O'Halloran Cct	Maj C	60	0.7	6.0	67.4	2,282	2014	4.5	0	7	29	4 4 6	122	13
14	Captain Cook Cr	Griffith	Canberra Av	Jerrabomberra Av	Maj C	60	2.1	10.8	66.8	5,675	2014	5.6	1	18	87	1 2 9	122	14
15	Wattle St (south)	Lynneham	Macarthur Av	Brigalow St	Maj C	60	2.1	10.0	57.8	5,280	2015	2.2	0	4	54	4 7 9	120	15
16	Kosciuszko Av	Palmerston	Gungahlin Dr	Gungahlin Dr	Maj C	60	2.7	6.0	65.3	4,375	2015	7.9	0	3	26	6 4 8	120	16
17	Copland Dr	Evatt	Moyrihan St	Owen Dixon Dr	Maj C	60	3.3	5.0	63.9	6,801	2015	4.3	0	1	19	2 5 6	116	17
18	Ashley Dr	Wanniassa	Erindale Dr	Stemberg Cr	Maj C	60	0.5	5.0	54.9	4,339	2015	2.5	1	4	32	2 3 7	114	18
19	Gillmore Cr	Garran	Kitchener St	Kitchener St	Maj C	60	1.9	6.0	53.4	5,229	2012	5.8	0	2	27	4 6 8	113	19
20	Tillyard Dr (north)	Fraser	Kerrigan St	Kurringa Dr	Maj C	60	2.7	6.0	62.7	3,568	2014	8.3	0	4	36	4 5 6	108	21
21	Ellerston Av	Isabella Plains	Ashley Dr	Johnson Dr	Maj C	60	2.2	7.0	60.9	3,195	2014	5.5	0	6	30	4 4 6	107	22
22	Beasley St	Torrans	Athlon Dr	Athlon Dr	Maj C	60	1.5	5.0	51.6	5,441	2014	6.8	0	3	21	6 2 4	107	23
23	Wanganee Av	Ngunnawal	Gungahlin Dr	Mirabei Dr	Maj C	60	2.3	8.0	69.3	6,965	2015	3.1	0	1	21	1 2 4	105	24
24	Streeton Dr	Stirling	Hindmarsh Dr	Namatjira Dr	Maj C	60	1.1	7.0	52.9	4,126	2015	4.8	1	6	29	2 7 9	103	25
25	Namatjira Dr (north)	Weston	Streeton Dr	Hindmarsh Dr	Maj C	60	1.1	7.0	52.9	4,126	2015	4.8	1	6	29	2 7 9	103	25
26	Ratcliffe Cr	Florey	Southern Cross Dr	Southern Cross Dr	Maj C	60	1.9	5.0	67.4	3,453	2013	4.5	0	4	9	2 4 7	103	26
27	Mildura St	Kingston/Fyshwick	Wentworth Av	Canberra Ave	Min C	50	1.5	9.2	65.2	2,553	2015	9.6	0	2	14	1 1 7	102	27
28	Marconi Cr	Kambah	Drakeford Dr	Summerland Cct	Maj C	60	1.5	6.0	59.8	3,372	2015	4.6	0	3	22	4 6 7	101	28
29	O'Halloran Cct	Kambah	Drakeford Dr	Drakeford Dr	Maj C	60	2.2	8.0	61.3	3,929	2014	2.7	0	3	25	4 4 5	100	29
30	Bindel St #	Aranda	Bindubi St	Bandjalong Cr	Maj C	50	0.3	5.8	60.0	4,149	2012	3.3	0	0	2	2 4 8	98	30
31	Eardley St	Bruce	Haydon Dr	Thynne St	Min C	50	0.2	8.9	58.1	6,792	2014	3.7	0	1	6	1 1 1	98	31
32	Wisdom St #	Hughes	Yamba Dr	Groom St	Maj C	50	1.1	6.0	50.8	3,722	2015	4.3	0	1	17	8 4 7	98	32
33	Langdon Av #	Wanniassa	Athlon Dr	Stemberg Cr	Maj C	50	2.2	5.0	54.4	3,550	2015	6.9	0	3	24	2 4 4	96	33
34	Casey Cr	Calwell	Outtrim Av	Were St	Min C	50	1.4	4.7	60.9	1,162	2015	7.4	0	4	4	4 5 9	96	34
35	Kitchener St (south)	Garran	Lynch St (south)	Yamba Dr	Maj C	60	0.9	10.0	56.0	7,094	2014	2.7	0	1	21	1 2 8	95	35
36	Melbourne Av	Forrest	State Cr	Stonehaven Cr	Maj C	60	1.1	6.0	55.9	4,335	2014	6.8	0	8	52	1 2 5	95	36
37	Heydon Cr	Evatt	Clancy St	Owen Dixon Dr	Min C	50	0.9	5.0	60.5	1,903	2013	7.9	0	3	4	4 6 8	95	37
38	Kitchener St (north)	Hughes	Wisdom St	Lynch St (south)	Maj C	60	0.9	10.0	60.8	7,739	2014	1.4	0	0	18	1 2 8	94	38
39	Cowper St (south)	Ainslie	Majura Av	Limestone Av	Maj C	60	1.2	11.0	57.1	3,756	2014	4.3	0	10	59	2 8 8	93	39
40	Kelway Av	Nicholls	Clarrie Hermes Dr	Gungahlin Dr	Maj C	60	1.5	7.4	54.5	3,446	2015	4.7	0	3	6	4 4 5	92	40
41	Francis Forde Boulevard #	Forde	Horse Park Dr	Amy Ackman St	Maj C	50	1.0	7.2	47.3	3,650	2014	5.7	0	0	9	4 4 6	92	41

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42	Knoke Av	Gordon	Woodcock Dr	Thanwa Dr	Maj C	60	2.6	6.0	55.4	5,188	2012	4.0	0	3	27	8	2	4	91	42
43	Perry Dr	Chapman	Darwinia Tce	Namatjira Dr	Min C	50	1.8	6.0	60.8	2,504	2014	4.9	0	1	10	2	4	6	91	43
44	Beaurepaire Cr	Holt	Stärke St	Southern Cross Dr	Min C	50	1.4	5.5	61.0	2,719	2014	3.0	0	0	10	2	6	8	89	44
45	Kreff St	Florey	Kingsford Smith Dr	Ratcliffe Cr	Maj C	60	1.5	5.0	67.6	4,321	2013	3.8	0	4	21	1	2	4	88	45
46	Antill St (east)	Hackett	Ted Noffs Foundation	Phillip Av	Maj C	60	1.4	7.0	65.7	3,858	2015	9.8	0	2	40	1	2	4	88	46
47	Harwick Cr	Holt	Stärke St	Flack St	Min C	50	1.2	5.3	58.1	2,585	2015	3.9	0	0	4	4	5	8	88	47
48	Palmer St#	Garran	Gilmore Cr	Hindmarsh Dr	Maj C	50	0.5	5.9	55.4	6,715	2014	6.1	0	1	18	1	1	2	87	48
49	McCaughy St	Turner	Barry Dr	David St	Maj C	60	1.0	10.6	60.1	7,541	2013	4.5	0	3	24	1	1	2	87	49
50	Stärke St (west)	Holt	Maclaughon St	Southern Cross Dr	Maj C	60	1.0	5.0	61.2	5,346	2015	4.0	0	3	24	1	2	7	87	50
51	Lawrence Wackett Cr	Theodore	Thanwa Dr	Thanwa Dr	Maj C	60	2.1	5.0	68.3	2,915	2014	2.6	0	2	20	2	4	6	87	51
52	Catchpole St	Pearce	Melrose Dr	Beasley St	Maj C	60	1.6	6.0	53.6	3,750	2015	6.9	0	2	26	4	6	2	87	52
53	Deamer Cres	Macquarie	Belconnen Way	Bowman St	Maj C	60	0.9	6.0	62.5	5,632	2014	2.0	0	3	21	2	8	9	86	53
54	Batye St	Richardson/Chisholm	Heagney Cr	Cliff Cr	Min C	50	1.5	5.0	71.1	1,830	2015	8.9	0	1	3	2	1	1	86	54
55	Burnlueck Cr	Duffy	Haydon Dr	end	Maj C	60	0.9	5.8	67.5	6,396	2014	4.1	0	4	14	1	1	1	86	55
56	Elouera St	Braddon	Dixon Dr	Northbourne Av	Min C	50	1.9	5.5	63.5	1,612	2014	7.5	0	2	11	2	4	6	86	56
57	Macfarland Cr	Pearce/Chiffey	Northbourne Av	Donaldson St	Min C	50	0.6	10.0	44.1	4,690	2015	2.8	0	0	23	1	3	7	85	57
58	Knock St	Macquarie	Eggleston Cr	Hodgson Cr	Maj C	60	0.8	8.0	68.4	3,493	2015	9.8	0	1	11	2	6	8	83	58
59	Knock St	Macquarie	Coulter Dr	Bindubi St	Maj C	60	2.0	12.0	67.3	4,126	2015	2.3	0	6	33	1	2	7	82	59
60	Heard St	Mawson	Stirling Av	Antill St	Maj C	60	1.7	5.0	54.6	2,821	2015	4.2	0	1	13	4	6	8	82	60
61	Stärke St (east)	Higgins	Beasley St	Wilkins St	Min C	50	0.7	5.0	56.0	3,422	2015	4.6	0	0	9	7	3	2	81	61
62	National Circuit*	Barton/Deakin	Southern Cross Dr	Macnaughton St	Maj C	60	1.3	11.2	57.8	3,126	2015	6.7	0	3	24	2	4	5	81	62
63	David St	Turner/O'Connor	Kings Av	Canberra Av	Maj C	60	1.2	10.6	51.9	4,887	2014	8.5	0	7	51	1	2	9	81	63
64	Winder St	Watson	Macarthur Av	Nicholson Cr	Maj C	60	1.9	11.0	58.3	2,229	2013	3.8	0	1	33	4	6	8	80	64
65	Springvale Dr	Westtangera	Gramplans St	Gundaroo Dr	Maj C	60	0.6	23	77.0	3,010	2012	2.3	0	1	2	1	1	9	80	65
66	Parkinson St	Weston	Phillip Av	Knox St	Maj C	60	0.4	5.4	60.1	3,574	2015	5.8	0	2	10	2	6	8	80	66
67	Ross Smith Cr	Forrest	Coulter Dr	Belconnen Way	Maj C	60	2.3	12.0	69.4	5,435	2014	1.8	0	4	20	1	2	7	80	67
68	McBryde Cr (west)	Wanniassa	Brierly St	Namatjira Dr	Min C	50	0.5	5.4	51.8	3,827	2014	3.3	0	1	4	2	7	8	79	68
69	Springvale Dr	Forrest	Johnson Dr	Were St	Maj C	60	1.6	6.0	68.0	4,199	2015	5.6	0	3	35	1	2	5	79	69
70	Lawson Cr	Acton	Northbourne Av	Cowper St	Maj C	60	0.5	10.6	52.4	3,208	2014	3.5	0	0	27	2	5	8	79	70
71	Ross Smith Cr	Forrest	Armsack St	Wheeler Cr	Min C	50	1.1	11.0	59.2	2,727	2015	4.2	0	0	9	4	5	8	78	71
72	Lawson Cr	Acton	Eridale Dr	Castleton Cr	Maj C	60	1.4	10.0	62.7	7,782	2015	1.4	0	1	19	2	1	1	78	72
73	Ross Smith Cr	Forrest	Parkes Way	Lennox Crossing	Min C	50	1.3	16.2	70.4	3,812	2015	3.9	0	0	6	1	1	1	78	73
74	Flinders Way	Forrest	Southern Cross Dr	Chewings	Maj C	60	2.1	5.0	62.2	1,414	2015	1.8	0	1	6	4	6	8	77	74
75	Hobart Av	Aranda	Murrav Cr	Mugga Way	Maj C	60	1.6	10.6	54.7	5,661	2014	2.5	0	5	42	2	5	1	77	75
76	Bandjalong Cr	Aranda	Bindubi St	Dominion Cct	Maj C	60	0.5	10.4	55.7	3,555	2014	2.2	1	4	31	2	2	8	77	76
77	Caruthers St (west)	Charnwood/Dunlop/Fraser	Bindubi St	Caswell Dr	Maj C	60	1.7	9.0	59.2	3,718	2015	4.2	0	2	11	2	4	6	77	77
78	Kenyan St	Griffith	Tillyard Dr	McCulloch St	Maj C	60	1.7	6.0	58.0	3,463	2015	4.8	0	2	22	2	4	8	76	78
79	Manuka Circle (east)	Phillip	Canberra Av	Ginninderra Dr	Maj C	60	0.8	5.0	62.4	5,142	2013	4.4	0	6	36	1	2	7	75	79
80	Lambing St	Farrer	Yamba Dr	Currie Cr/NSW Cr	Maj C	60	0.3	10.7	56.7	5,222	2015	4.1	0	4	16	1	1	8	75	80
81	Chippindall Cct	Braddon	Beasley St	Ainsworth St	Maj C	60	0.2	8.9	53.1	6,384	2015	5.0	0	0	2	1	3	8	75	81
82	Chippindall Cct	Braddon	Beasley St	Dookie St	Maj C	60	1.9	6.0	64.1	2,197	2015	3.3	0	3	7	4	6	8	75	82
83	Chippindall Cct	Braddon	Lawrence Wackett Cr	Chippindall Cct	Min C	50	1.7	5.4	65.9	2,269	2014	11.9	0	1	6	1	1	2	74	83
84	Coyne St	Fadden	Northbourne Av	Limestone Av	Maj C	60	0.6	10.6	54.7	5,231	2013	3.7	0	4	20	1	2	5	74	84
85	Coyne St	Fadden	Isabella Dr	Buggden Av	Maj C	60	1.1	6.0	61.9	5,503	2015	4.9	0	6	49	1	1	2	74	85

2016 ACT TRAFFIC WARRANT SYSTEM

- 1 Crash statistics for period 1/1/2010 to 31/12/2014
- 2 Activity generators amended to reflect school and shopping centre closures.
- 3 # Major collector roads with a speed limit of 50 introduced as part of Local Area Traffic Management treatments. Speed points adjusted accordingly.
- 4 * new streets added to the database in 2016

2016 Rank	Street	Suburbs	From	To	Road Class	Speed Limit (km/hr)	Road Length (km)	Verge Width (m)	85th %ile Speed (km/hr)	24hr Traffic Vol. (vpd)	Speed, Vol, HV Data Year	Heavy Vehicles (%)	No. of Fatal crashes	No. of Injury crashes	No. of Property Damage crashes	Activity Generators	Final Total Points Score	2016 Rank		
86	Groom St	Hughes	Carruthers St	Kent St	Min C	50	1.2	6.0	57.1	2,595	2015	3.1	0	0	6	2	4	6	74	86
87	Blamey Cr	Campbell	Anzac Pde	Constitution Av	Maj C	60	1.8	11.0	61.4	3,601	2015	3.2	0	1	20	2	4	6	73	87
88	La Perouse St (south)	Red Hill	Dalrymple St	Mugga Way	Maj C	60	2.1	10.0	61.6	2,907	2015	5.9	0	2	15	4	6	8	73	88
89	Katherine Av	Anaroo	Horse Park Dr	Horse Park Dr	Maj C	60	0.4	8.0	54.3	2,639	2015	8.1	0	3	16	2	5	8	72	89
90	Fremantle Dr	Stirling	Streeton Dr	Streeton Dr	Min C	50	1.3	6.0	62.5	2,283	2015	5.1	0	0	2	2	5	8	72	90
91	Abena Avenue*#	Grace	Gundaroo Dr	Galore St	Maj C	50	0.5	12.0	59.4	4,888	2014	7.1	0	0	4	2	6	9	72	91
92	William Webb Dr	Evatt	Ginninderra Dr	Owen Dixon Dr	Maj C	60	2.3	6.0	66.5	5,322	2015	4.2	0	5	32	1	2	3	71	92
93	Dalley Cr (north)	Latham	Onslow St	Macrossan Cr	Min C	50	1.0	5.0	61.6	1,553	2013	10.3	0	0	1	2	6	8	71	93
94	Donaldson St	Braddon	Ballumbir St	Limestone Av	Maj C	60	0.8	11.0	55.1	2,591	2013	2.2	0	10	23	2	5	8	71	94
95	Beasley St	Mawson	Yamba Dr	Athlon Dr	Maj C	60	1.5	17.0	66.8	5,720	2015	1.8	0	3	14	2	8	8	71	95
96	Marr St	Pearce	Hodgson Cr	Beasley St	Min C	50	0.8	8.3	54.2	2,042	2015	3.7	0	0	7	5	5	8	71	96
97	Bugden Av (north)	Fadden	Sternberg Cr	Larcombe Cr (south)	Maj C	60	3.3	5.0	56.5	3,095	2015	4.4	0	4	59	1	2	8	70	97
98	Railway St	Oaks Estate	Norse Rd	McEwan Av	Min C	50	1.8	6.7	61.4	4,113	2013	7.1	0	2	6	1	1	1	70	98
99	Masson St (east)	Turner	Northbourne Av	McCaughey St	Maj C	60	0.6	10.5	59.5	5,564	2013	2.6	0	5	19	1	2	9	70	99
100	Thynne St	Bruce	Kinloch Circuit	Paget Street	Min C	50	0.7	10.7	59.4	3,376	2014	3.1	0	1	23	1	3	8	70	100