



P 02 6248 7995
F 02 6248 7774
E office@pedalpower.org.au
W pedalpower.org.au
A GPO 581, Canberra ACT 2601

ABN: 98 440 716 821

Belconnen town centre and University of Canberra campus cordon count

on

Thursday 3rd March 2016

undertaken by Pedal Power ACT for Roads ACT

Report on cordon count and data collected

Table of Contents

1. Belconnen cordon count.....	1
2. Cordon count data.....	1
4. Cordon count procedures.....	1
5. Weather during the cordon count.....	2
6. Quality assurance.....	2
Appendix A – Cordon count data summary.....	3
A1. People crossing the cordon at each count site.....	3
A2. People crossing the cordon during each time period.....	8
A3. Comparison of 2016 and 2015 cordon count data.....	12
Appendix B – Cordon count locations.....	17
Appendix C – Data collection procedures.....	20
Appendix D – Counting rules.....	22

Cordon count managed, audited and report prepared by:

Report reviewed by:

1. Belconnen cordon count

Pedal Power ACT undertook a cordon count of all people walking and riding bikes into and out of the Belconnen town centre and the University of Canberra campus on Wednesday 2nd March 2016 during two counting session – from 7:00 am to 10:00 am and from 4:00 pm to 7:00 pm.

This report outlines the cordon count details and procedure, gives the location of the count sites, resulting data and summarises the data collected.

2. Cordon count data

The cordon count data gives the time people (separated between male and female) walked or rode bikes in each direction (into the town centre or out of the town centre) across the cordon at each cordon count location (Appendix B).

The data is reported in a separate spreadsheet file with file name:

cordon-count-2016-data-Belconnen-V1

Appendix A contains a summary of the cordon count data reported as:

- A1. The number of people that crossed the cordon during the morning and afternoon counting sessions (separated into cyclists and pedestrians).
- A2. The number of people that crossed the cordon at each count site during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A3. The number of people that crossed the cordon during each fifteen minute period during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A4. A comparison of the number of people riding or walking across the cordon at each location in 2016 and 2015.

Data collectors recorded their data using the 'cordon count App' supplied by Roads ACT or if for some reason the App could not be used (eg, their phone stopped working) then the data was collected on prepared data collection sheets and subsequently entered into the data sets. Appendix C outlines the counting procedure and Appendix D gives the 'rules' for counting people crossing the cordon.

4. Cordon count procedures

Appendix C contains a map of the cordon around the Belconnen town centre and details of the cordon count locations.

There are twenty four cordon count locations designated B01 to B23 with B10 split into B10a and B10b as given in that appendix.

All the count sites are the same locations as used in the 2015 and previous cordon counts.

We stationed people (data collectors) at each cordon count location and they counted the people walking and riding bikes (separately) into and out of the town centre (across the cordon line) during the counting sessions using the 'cordon count App' supplied by Roads ACT.

The definitions of a person walking and riding a bike are (the same as in previous years):

- *People riding bikes* are those on pedal bicycles, recumbents, trikes, power-assisted bicycles (not motorbikes), or on link-bikes (tag-alongs), or on pavement tricycles, or walking their bikes. A couple on a tandem are two people. Children in trailers or seats are not riding bikes.
- *People walking* are those walking, on roller skates, kick scooters or mobility scooters and children riding in prams and trailers.

Appendix D contains the data collection 'rules' observed by the data collectors. They are the same as used in previous cordon counts.

5. Weather during the cordon count

The weather was fine on the day of the count.

- Temperature range (°C): 13 to 35
- Precipitation (mm): there was severe storm for about half an hour from 5 pm but Bureau of Meteorology has zero rainfall recorded at the Airport

6. Quality assurance

To ensure that we were collecting and recording the correct data and that we had entered that data correctly into the database, we undertook the following checks:

- We checked that a person (the data collector) was in place at each cordon count location at the start of each session (an auditor visited each count location within the first fifteen minutes of each session).
- When visiting a data collector, the auditor checked that they were counting and recording the data correctly – the correct count location and the correct definition of inbound and outbound and of people walking and riding bikes.
- The auditors visited the data collectors again during each counting session to ensure they were still in place and counting.
- The data transmitted by the App was checked and any data outside of the designated counting time was removed (typically such data, when it occurred, was a test data entry).
- Each paper data collection sheet used (when the App failed) was completed and signed (as a true record) by the data collector.
- A person, who was not involved in the data entry, independently checked the data from the paper data collection sheet records entered into the database.

Appendix A – Cordon count data summary

A1. People crossing the cordon at each count site

Belconnen 2016 Cordon Count AM – Numbers by count site

Belconnen AM Site	Direction	Cyclist			Pedestrian		
		Total	Male	Female	Total	Male	Female
B01	Inbound	9	6	3	27	11	16
	Outbound	1	1	0	3	0	3
	Both	10	7	3	30	11	19
B02	Inbound	20	18	2	20	12	8
	Outbound	8	7	1	3	3	0
	Both	28	25	3	23	15	8
B03	Inbound	77	54	23	233	104	129
	Outbound	40	31	9	62	38	24
	Both	117	85	32	295	142	153
B04	Inbound	109	82	27	102	52	50
	Outbound	19	16	3	83	34	49
	Both	128	98	30	185	86	99
B05	Inbound	4	2	2	11	5	6
	Outbound	1	1	0	8	3	5
	Both	5	3	2	19	8	11
B06	Inbound	17	14	3	14	8	6
	Outbound	2	2	0	2	2	0
	Both	19	16	3	16	10	6
B07	Inbound	54	37	17	9	4	5
	Outbound	3	3	0	0	0	0
	Both	57	40	17	9	4	5
B08	Inbound	18	11	7	84	48	36
	Outbound	2	2	0	0	0	0
	Both	20	13	7	84	48	36
B09	Inbound	17	14	3	104	55	49
	Outbound	9	7	2	17	9	8
	Both	26	21	5	121	64	57
B10a	Inbound	17	13	4	17	12	5
	Outbound	13	8	5	17	11	6
	Both	30	21	9	34	23	11
B10b	Inbound	5	2	3	260	117	143
	Outbound	5	2	3	79	32	47
	Both	10	4	6	339	149	190

Continued ...

B11	Inbound	6	5	1	11	8	3
	Outbound	3	3	0	2	2	0
	Both	9	8	1	13	10	3
B12	Inbound	1	1	0	76	44	32
	Outbound	0	0	0	8	8	0
	Both	1	1	0	84	52	32
B13	Inbound	19	9	10	72	43	29
	Outbound	15	13	2	12	6	6
	Both	34	22	12	84	49	35
B14	Inbound	4	4	0	101	47	54
	Outbound	2	1	1	23	7	16
	Both	6	5	1	124	54	70
B15	Inbound	18	10	8	199	131	68
	Outbound	17	15	2	105	68	37
	Both	35	25	10	304	199	105
B16	Inbound	80	58	22	357	201	156
	Outbound	47	35	12	37	19	18
	Both	127	93	34	394	220	174
B17	Inbound	9	8	1	134	87	47
	Outbound	10	8	2	27	20	7
	Both	19	16	3	161	107	54
B18	Inbound	8	7	1	2	2	0
	Outbound	3	3	0	2	2	0
	Both	11	10	1	4	4	0
B19	Inbound	12	6	6	30	19	11
	Outbound	5	5	0	2	2	0
	Both	17	11	6	32	21	11
B20	Inbound	11	11	0	44	25	19
	Outbound	3	3	0	3	2	1
	Both	14	14	0	47	27	20
B21	Inbound	11	9	2	34	16	18
	Outbound	1	0	1	12	4	8
	Both	12	9	3	46	20	26
B22	Inbound	1	1	0	12	8	4
	Outbound	2	2	0	11	9	2
	Both	3	3	0	23	17	6
B23	Inbound	29	27	2	171	90	81
	Outbound	4	3	1	23	13	10
	Both	33	30	3	194	103	91
All sites	Inbound	556	409	147	2124	1149	975
	Outbound	215	171	44	541	294	247
	Both	771	580	191	2665	1443	1222

Belconnen 2016 Cordon Count PM – Numbers per count site

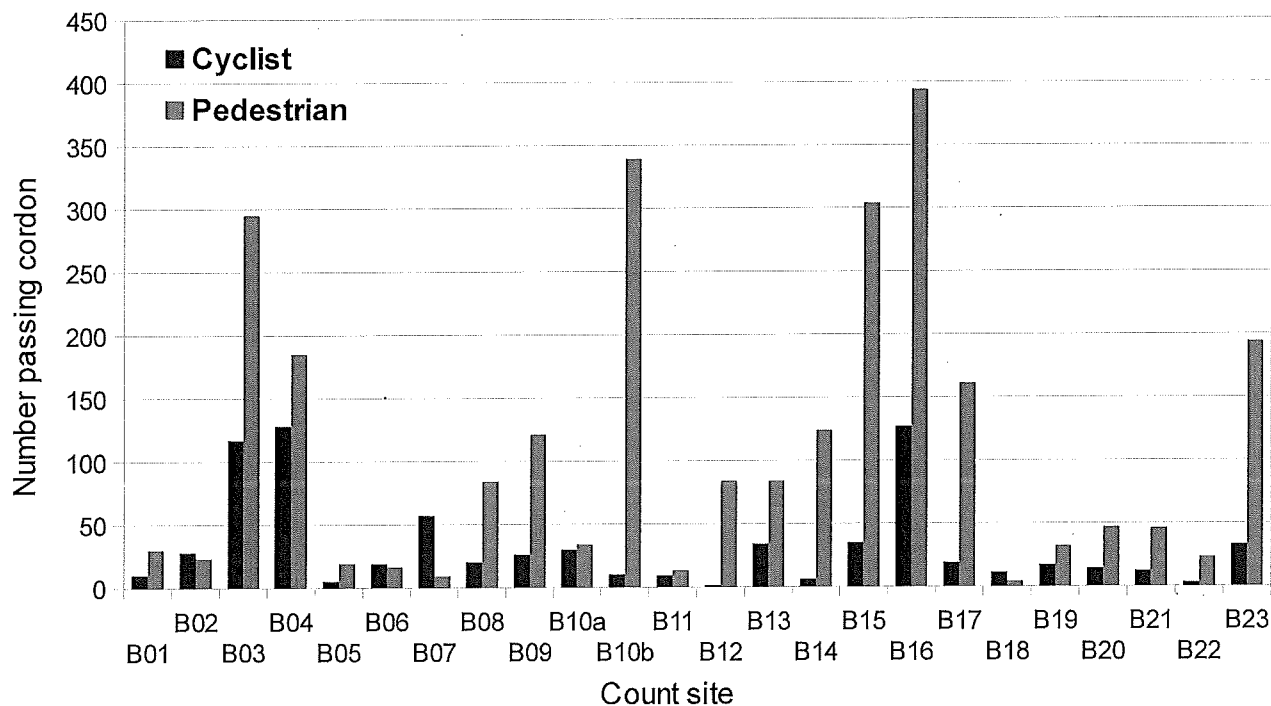
Belconnen PM		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
B01	Inbound	0	0	0	6	1	5
	Outbound	3	2	1	35	12	23
	Both	3	2	1	41	13	28
B02	Inbound	1	1	0	2	1	1
	Outbound	5	5	0	15	9	6
	Both	6	6	0	17	10	7
B03	Inbound	12	10	2	45	25	20
	Outbound	61	40	21	139	68	71
	Both	73	50	23	184	93	91
B04	Inbound	4	4	0	24	14	10
	Outbound	54	42	12	36	25	11
	Both	58	46	12	60	39	21
B05	Inbound	0	0	0	6	5	1
	Outbound	3	2	1	5	3	2
	Both	3	2	1	11	8	3
B06	Inbound	2	2	0	2	2	0
	Outbound	14	11	3	7	3	4
	Both	16	13	3	9	5	4
B07	Inbound	3	2	1	2	2	0
	Outbound	27	22	5	3	1	2
	Both	30	24	6	5	3	2
B08	Inbound	4	4	0	34	26	8
	Outbound	16	13	3	64	33	31
	Both	20	17	3	98	59	39
B09	Inbound	12	7	5	21	15	6
	Outbound	14	9	5	51	36	15
	Both	26	16	10	72	51	21
B10a	Inbound	16	14	2	14	8	6
	Outbound	8	8	0	14	11	3
	Both	24	22	2	28	19	9
B10b	Inbound	4	4	0	143	62	81
	Outbound	12	8	4	224	118	106
	Both	16	12	4	367	180	187
B11	Inbound	3	3	0	2	2	0
	Outbound	5	4	1	11	8	3
	Both	8	7	1	13	10	3
B12	Inbound	0	0	0	9	4	5
	Outbound	0	0	0	70	45	25
	Both	0	0	0	79	49	30

Continued ...

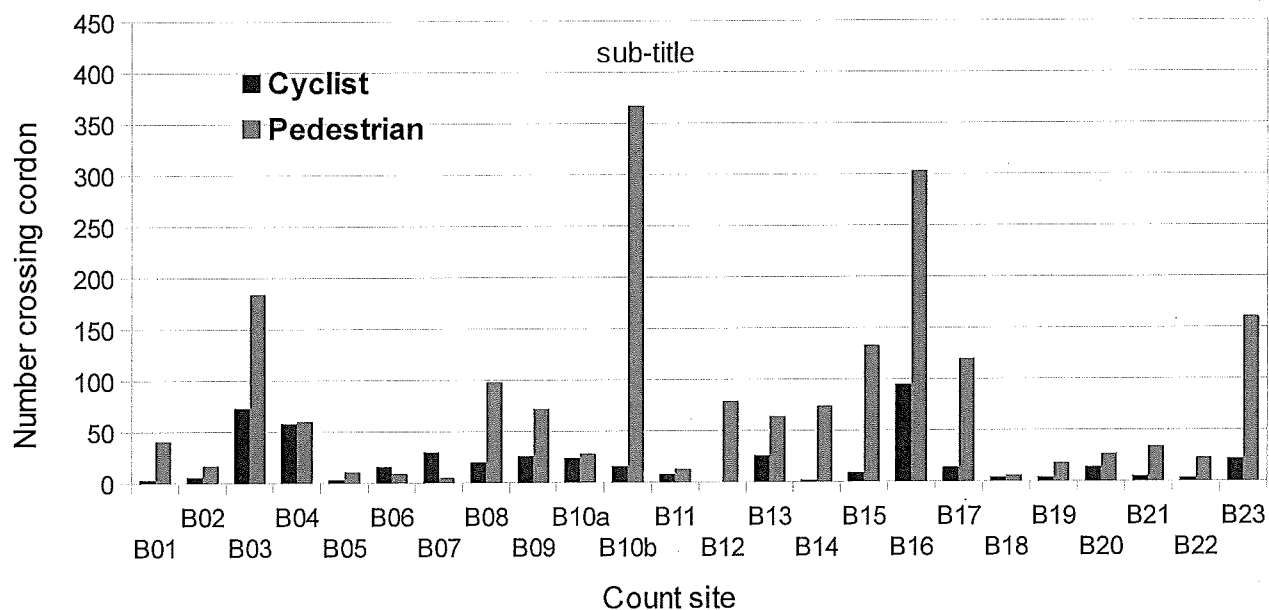
B13	Inbound	8	7	1	19	13	6
	Outbound	18	13	5	45	30	15
	Both	26	20	6	64	43	21
B14	Inbound	1	1	0	13	5	8
	Outbound	1	1	0	61	28	33
	Both	2	2	0	74	33	41
B15	Inbound	4	4	0	23	13	10
	Outbound	5	5	0	110	70	40
	Both	9	9	0	133	83	50
B16	Inbound	25	18	7	17	8	9
	Outbound	70	54	16	286	168	118
	Both	95	72	23	303	176	127
B17	Inbound	4	3	1	17	12	5
	Outbound	10	9	1	103	63	40
	Both	14	12	2	120	75	45
B18	Inbound	0	0	0	3	1	2
	Outbound	4	2	2	3	1	2
	Both	4	2	2	6	2	4
B19	Inbound	0	0	0	5	4	1
	Outbound	4	3	1	13	7	6
	Both	4	3	1	18	11	7
B20	Inbound	1	1	0	6	6	0
	Outbound	13	13	0	21	13	8
	Both	14	14	0	27	19	8
B21	Inbound	1	1	0	8	5	3
	Outbound	4	3	1	26	12	14
	Both	5	4	1	34	17	17
B22	Inbound	1	1	0	12	8	4
	Outbound	2	2	0	11	9	2
	Both	3	3	0	23	17	6
B23	Inbound	4	4	0	21	14	7
	Outbound	18	15	3	140	83	57
	Both	22	19	3	161	97	64
All sites	Inbound	110	91	19	454	256	198
	Outbound	371	286	85	1493	856	637
	Both	481	377	104	1947	1112	835

Belconnen 2016 Cordon Count – Numbers per count site

Belconnen Cordon Count 2016 AM 7am to 10 am



Belconnen Cordon Count 2016 PM 4 pm to 7 pm



A2. People crossing the cordon during each time period

Belconnen 2016 Cordon Count AM – Numbers per time interval

Belconnen 2016 AM		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
07:00 – 07:15	Inbound	30	17	13	76	43	33
	Outbound	22	17	5	31	19	12
	Both	52	34	18	107	62	45
07:15 – 07:30	Inbound	25	19	6	75	39	36
	Outbound	14	8	6	40	22	18
	Both	39	27	12	115	61	54
07:30 – 07:45	Inbound	42	26	16	117	63	54
	Outbound	14	8	6	31	19	12
	Both	56	34	22	148	82	66
07:45 – 08:00	Inbound	48	41	7	153	85	68
	Outbound	21	16	5	31	14	17
	Both	69	57	12	184	99	85
08:00 – 08:15	Inbound	53	39	14	171	98	73
	Outbound	12	10	2	58	32	26
	Both	65	49	16	229	130	99
08:15 – 08:30	Inbound	80	58	22	269	139	130
	Outbound	28	20	8	46	27	19
	Both	108	78	30	315	166	149
08:30 – 08:45	Inbound	66	50	16	268	140	128
	Outbound	14	11	3	69	38	31
	Both	80	61	19	337	178	159
08:45 – 09:00	Inbound	65	53	12	261	144	117
	Outbound	32	30	2	46	29	17
	Both	97	83	14	307	173	134
09:00 – 09:15	Inbound	35	22	13	213	122	91
	Outbound	14	13	1	53	26	27
	Both	49	35	14	266	148	118
09:15 – 09:30	Inbound	54	40	14	228	130	98
	Outbound	22	18	4	56	24	32
	Both	76	58	18	284	154	130
09:30 – 09:45	Inbound	23	20	3	173	86	87
	Outbound	12	12	0	48	29	19
	Both	35	32	3	221	115	106
09:45 – 10:00	Inbound	35	24	11	120	60	60
	Outbound	10	8	2	32	15	17
	Both	45	32	13	152	75	77
					Continued ...		

07:00 – 10:00	Inbound	556	409	147	2124	1149	975
	Outbound	215	171	44	541	294	247
	Both	771	580	191	2665	1443	1222

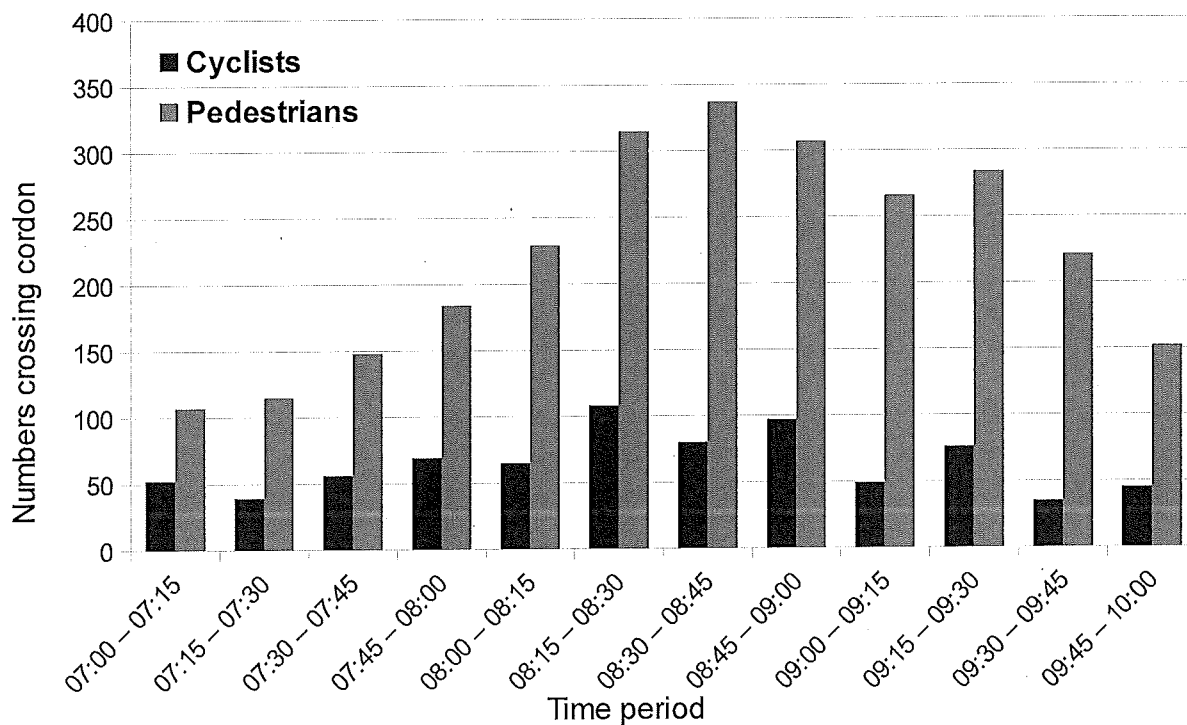
Belconnen 2016 Cordon Count PM – Numbers per time interval

Belconnen 2016 PM		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
16:00 – 16:15	Inbound	10	7	3	53	31	22
	Outbound	28	19	9	119	69	50
	Both	38	26	12	172	100	72
16:15 – 16:30	Inbound	8	5	3	52	30	22
	Outbound	36	29	7	105	53	52
	Both	44	34	10	157	83	74
16:30 – 16:45	Inbound	10	8	2	41	24	17
	Outbound	30	21	9	172	97	75
	Both	40	29	11	213	121	92
16:45 – 17:00	Inbound	19	15	4	51	32	19
	Outbound	44	35	9	150	98	52
	Both	63	50	13	201	130	71
17:00 – 17:15	Inbound	9	8	1	56	29	27
	Outbound	48	48	0	187	103	84
	Both	57	56	1	243	132	111
17:15 – 17:30	Inbound	16	13	3	42	18	24
	Outbound	43	30	13	152	80	72
	Both	59	43	16	194	98	96
17:30 – 17:45	Inbound	9	9	0	36	20	16
	Outbound	28	23	5	139	79	60
	Both	37	32	5	175	99	76
17:45 – 18:00	Inbound	4	3	1	23	10	13
	Outbound	36	33	3	132	76	56
	Both	40	36	4	155	86	69
18:00 – 18:15	Inbound	11	11	0	38	29	9
	Outbound	28	20	8	104	70	34
	Both	39	31	8	142	99	43
18:15 – 18:30	Inbound	6	6	0	30	15	15
	Outbound	18	14	4	103	53	50
	Both	24	20	4	133	68	65
18:30 – 18:45	Inbound	3	2	1	20	9	11
	Outbound	19	16	3	76	45	31
	Both	22	18	4	96	54	42
Continued ...							

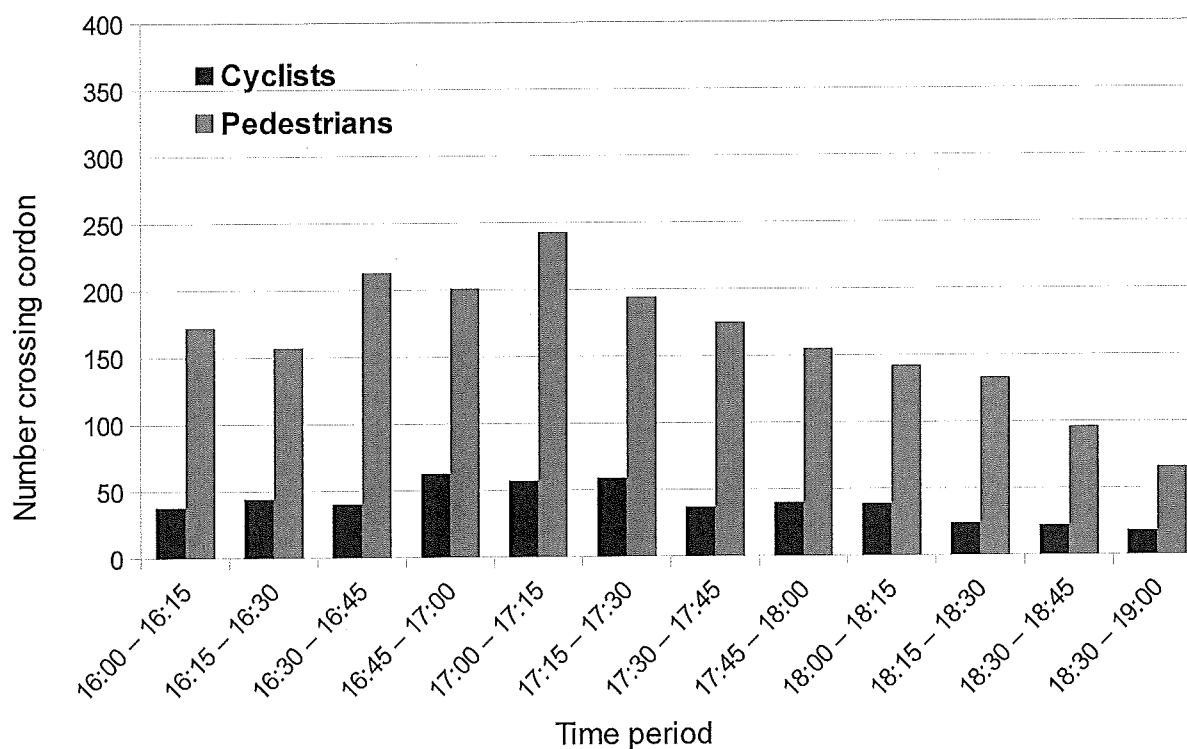
18:45 – 19:00	Inbound	5	4	1	12	9	3
	Outbound	13	11	2	54	33	21
	Both	18	15	3	66	42	24
16:00 – 19:00	Inbound	110	91	19	454	256	198
	Outbound	371	299	72	1493	856	637
	Both	481	390	91	1947	1112	835

Belconnen 2016 Cordon Count – Numbers per time interval

Belconnen Cordon Count 2016 AM 7 am to 10 am



Belconnen Cordon Count 2016 PM 4 pm to 7 pm



A3. Comparison of 2016 and 2015 cordon count data

This section contains a comparison of the cordon counts at Belconnen for 2016 and 2015

Both counts were undertaken on a Thursday – 3 March 2016 and 5 March 2015.

The differences between the 2016 and the 2015 figures are the increase (or decrease shown as a negative) in the number from 2015 expressed as a percentage.

Belconnen 2016/2015 cyclists & pedestrian comparison									
Session	2016			2015			Difference % 2016/2015		
	Cyclist	Pedestrian	Total	Cyclist	Pedestrian	Total	Cyclist	Pedestrian	Total
Morning AM	771	2665	3436	669	2580	3249	15.2%	3.3%	5.8%
Afternoon PM	481	1947	2428	702	2677	3379	-31.5%	-27.3%	-28.1%

Belconnen 2016/2015 cyclists AM comparison

Belconnen 2016/2015 cyclists AM comparison										
Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
B01	Both	10	7	3	7	4	3	42.9%	75.0%	0.0%
B02	Both	28	25	3	20	15	5	40.0%	66.7%	-40.0%
B03	Both	117	85	32	101	77	24	15.8%	10.4%	33.3%
B04	Both	128	98	30	120	81	39	6.7%	21.0%	-23.1%
B05	Both	5	3	2	8	6	2	-37.5%	-50.0%	0.0%
B06	Both	19	16	3	27	22	5	-29.6%	-27.3%	-40.0%
B07	Both	57	40	17	54	34	20	5.6%	17.6%	-15.0%
B08	Both	20	13	7	7	7	0	185.7%	85.7%	n.a.
B09	Both	26	21	5	1	1	0	2500.0%	2000.0%	n.a.
B10a	Both	30	21	9	19	14	5	57.9%	50.0%	80.0%
B10b	Both	10	4	6	15	12	3	-33.3%	-66.7%	100.0%
B11	Both	9	8	1	3	2	1	200.0%	300.0%	0.0%
B12	Both	1	1	0	7	5	2	-85.7%	-80.0%	-100.0%
B13	Both	34	22	12	37	27	10	-8.1%	-18.5%	20.0%
B14	Both	6	5	1	7	7	0	-14.3%	-28.6%	n.a.
B15	Both	35	25	10	12	11	1	191.7%	127.3%	900.0%
B16	Both	127	93	34	119	99	20	6.7%	-6.1%	70.0%
B17	Both	19	16	3	21	19	2	-9.5%	-15.8%	50.0%
B18	Both	11	10	1	5	4	1	120.0%	150.0%	0.0%
B19	Both	17	11	6	9	3	6	88.9%	266.7%	0.0%
B20	Both	14	14	0	15	10	5	-6.7%	40.0%	-100.0%
B21	Both	12	9	3	12	8	4	0.0%	12.5%	-25.0%
B22	Both	3	3	0	5	4	1	-40.0%	-25.0%	-100.0%
B23	Both	33	13	14	38	26	12	-13.2%	-50.0%	16.7%
All sites	Both	771	563	202	669	498	171	15.2%	13.1%	18.1%

Belconnen 2016/2015 pedestrians AM comparison

Belconnen 2016/2015 pedestrians AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
B01	Both	30	11	19	37	19	18	-18.9%	-42.1%	5.6%
B02	Both	23	15	8	32	18	14	-28.1%	-16.7%	-42.9%
B03	Both	295	142	153	284	129	155	3.9%	10.1%	-1.3%
B04	Both	185	86	99	188	73	115	-1.6%	17.8%	-13.9%
B05	Both	19	8	11	19	8	11	0.0%	0.0%	0.0%
B06	Both	16	10	6	16	6	10	0.0%	66.7%	-40.0%
B07	Both	9	4	5	10	5	5	-10.0%	-20.0%	0.0%
B08	Both	84	48	36	101	61	40	-16.8%	-21.3%	-10.0%
B09	Both	121	64	57	79	39	40	53.2%	64.1%	42.5%
B10a	Both	34	23	11	27	16	11	25.9%	43.8%	0.0%
B10b	Both	339	149	190	315	134	181	7.6%	11.2%	5.0%
B11	Both	13	10	3	10	5	5	30.0%	100.0%	-40.0%
B12	Both	84	52	32	79	41	38	6.3%	26.8%	-15.8%
B13	Both	84	49	35	81	46	35	3.7%	6.5%	0.0%
B14	Both	124	54	70	99	51	48	25.3%	5.9%	45.8%
B15	Both	304	199	105	180	105	75	68.9%	89.5%	40.0%
B16	Both	394	220	174	442	244	198	-10.9%	-9.8%	-12.1%
B17	Both	161	107	54	221	136	85	-27.1%	-21.3%	-36.5%
B18	Both	4	4	0	4	4	0	0.0%	0.0%	n.a.
B19	Both	32	21	11	26	17	9	23.1%	23.5%	22.2%
B20	Both	47	27	20	43	25	18	9.3%	8.0%	11.1%
B21	Both	46	20	26	50	28	22	-8.0%	-28.6%	18.2%
B22	Both	23	17	6	37	25	12	-37.8%	-32.0%	-50.0%
B23	Both	194	103	91	200	102	98	-3.0%	1.0%	-7.1%
All sites	Both	2665	1443	1222	2580	1337	1243	3.3%	7.9%	-1.7%

Belconnen 2016/2015 cyclists PM comparison

Belconnen 2016/2015 cyclists PM comparison										
Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
B01	Both	3	2	1	2	1	1	50.0%	100.0%	0.0%
B02	Both	6	6	0	22	20	2	-72.7%	-70.0%	-100.0%
B03	Both	73	50	23	136	102	34	-46.3%	-51.0%	-32.4%
B04	Both	58	46	12	112	92	20	-48.2%	-50.0%	-40.0%
B05	Both	3	2	1	1	1	0	200.0%	100.0%	n.a.
B06	Both	16	13	3	27	19	8	-40.7%	-31.6%	-62.5%
B07	Both	30	24	6	59	43	16	-49.2%	-44.2%	-62.5%
B08	Both	20	17	3	19	12	7	5.3%	41.7%	-57.1%
B09	Both	26	16	10	0	0	0	n.a.	n.a.	n.a.
B10a	Both	24	22	2	22	16	6	9.1%	37.5%	-66.7%
B10b	Both	16	12	4	10	6	4	60.0%	100.0%	0.0%
B11	Both	8	7	1	7	5	2	14.3%	40.0%	-50.0%
B12	Both	0	0	0	4	3	1	-100.0%	-100.0%	-100.0%
B13	Both	26	20	6	25	17	8	4.0%	17.6%	-25.0%
B14	Both	2	2	0	7	7	0	-71.4%	-71.4%	n.a.
B15	Both	9	9	0	8	6	2	12.5%	50.0%	-100.0%
B16	Both	95	72	23	130	95	35	-26.9%	-24.2%	-34.3%
B17	Both	14	12	2	27	21	6	-48.1%	-42.9%	-66.7%
B18	Both	4	2	2	8	5	3	-50.0%	-60.0%	-33.3%
B19	Both	4	3	1	10	5	5	-60.0%	-40.0%	-80.0%
B20	Both	14	14	0	14	11	3	0.0%	27.3%	-100.0%
B21	Both	5	4	1	12	7	5	-58.3%	-42.9%	-80.0%
B22	Both	3	3	0	5	4	1	-40.0%	-25.0%	-100.0%
B23	Both	22	19	3	35	22	13	-37.1%	-13.6%	-76.9%
All sites	Both	481	377	104	702	520	182	-31.5%	-27.5%	-42.9%

Belconnen 2016/2015 pedestrians PM comparison

Belconnen 2016/2015 pedestrians PM comparison										
Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
B01	Both	41	13	28	48	21	27	-14.6%	-38.1%	3.7%
B02	Both	17	10	7	31	18	13	-45.2%	-44.4%	-46.2%
B03	Both	184	93	91	387	176	211	-52.5%	-47.2%	-56.9%
B04	Both	60	39	21	218	99	119	-72.5%	-60.6%	-82.4%
B05	Both	11	8	3	13	8	5	-15.4%	0.0%	-40.0%
B06	Both	9	5	4	8	1	7	12.5%	400.0%	-42.9%
B07	Both	5	3	2	5	4	1	0.0%	-25.0%	100.0%
B08	Both	98	59	39	88	49	39	11.4%	20.4%	0.0%
B09	Both	72	51	21	86	41	45	-16.3%	24.4%	-53.3%
B10a	Both	28	19	9	31	23	8	-9.7%	-17.4%	12.5%
B10b	Both	367	180	187	406	168	238	-9.6%	7.1%	-21.4%
B11	Both	13	10	3	10	7	3	30.0%	42.9%	0.0%
B12	Both	79	49	30	74	42	32	6.8%	16.7%	-6.3%
B13	Both	64	43	21	79	47	32	-19.0%	-8.5%	-34.4%
B14	Both	74	33	41	118	59	59	-37.3%	-44.1%	-30.5%
B15	Both	133	83	50	194	115	79	-31.4%	-27.8%	-36.7%
B16	Both	303	176	127	308	188	120	-1.6%	-6.4%	5.8%
B17	Both	120	75	45	183	114	69	-34.4%	-34.2%	-34.8%
B18	Both	6	2	4	2	2	0	200.0%	0.0%	n.a.
B19	Both	18	11	7	26	15	11	-30.8%	-26.7%	-36.4%
B20	Both	27	19	8	52	30	22	-48.1%	-36.7%	-63.6%
B21	Both	34	17	17	40	19	21	-15.0%	-10.5%	-19.0%
B22	Both	23	17	6	32	19	13	-28.1%	-10.5%	-53.8%
B23	Both	161	97	64	238	121	117	-32.4%	-19.8%	-45.3%
All sites	Both	1947	1112	835	2677	1386	1291	-27.3%	-19.8%	-35.3%

Count locations descriptions

Site B1 – On Joynton Smith Drive and adjacent footpaths and the old bus way to the north of Emu Bank junction (but not along Emu Bank)

Site B2 – On Luxton Street and adjacent footpaths to the north of Emu Bank junction (but not along Emu Bank)

Site B3 – On Beissel Street and adjacent footpaths to the north of Emu Bank junction (but not along Emu Bank)

Site B4 – On the community path around and to the east of Lake Ginninderra north of Lake Ginninderra College and opposite the exercise park

Site B5 – On the community path between the community path tunnel under Aikman Drive and John Knight Park – between Lake Ginninderra and Aikman Drive north of Lake Ginninderra College

Site B6 – On Aikman Drive and adjacent footpaths south of Townsend Place to the north of the community path underpass (to the north of Lake Ginninderra College)

Site B7 – On Allawoona Street (entrance to University of Canberra campus) and adjacent footpaths to the south of Ginninderra Drive junction (but not along Ginninderra Drive)

Site B8 – On University Drive (entrance to University of Canberra campus) and adjacent footpaths to the south of Haydon Drive junction and on the adjacent path from Haydon Drive to the adjacent car park (but not along Haydon Drive) – this site includes counting people entering and leaving buses at the bus stop to the north of the junction

Site B9 – On the path between College Street and Pinnaroo Street near the pedestrian traffic lights to the west of the Haydon Street junction and to the east of Radford College entrance (but not along College Street) – this site includes counting people entering and leaving buses at the bus stop to the east of the traffic lights

Site B10a – On College Street and adjacent footpaths at the western end of the Canberra university car park to the west of Cooina Street (entrance to University of Canberra campus) and across the verge into the university car park – includes people getting on and off buses at bus stops in that area and entering or leaving the university

Site B10b – On Cooina Street (entrance to University of Canberra campus) and adjacent paths and verges to the limits of sites B9 and B10a

Site B11 – On Whelan Street and adjacent footpaths to the south of the junction with College Street (but not along College Street)

Site B12 – On the path between College Street and Crisp Circuit to the east of the junction between College Street and Eastern Valley Way (but not along College Street) – this site includes counting people entering and leaving buses at the bus stop near where the community path joins College Street

Site B13 – On Eastern Valley Way (both carriageways) and adjacent footpaths to the south of the junction with College Street (but not along College Street)

Site B14 – On Hennessy Street and adjacent footpaths to the south of the junction with College Street (but not along College Street) and into and from the apartments to the west of Hennessy Street to the crest on College Street

Site B15 – On Condell Street and adjacent footpaths to the south of the junction with College Street (but not along College Street) and into and from the apartments to the east of Hennessy Street to the crest on College Street

Site B16 – On Benjamin Way (both carriageways) and adjacent footpaths to the south of the junction with College Street (but not along College Street)

Site B17 – On Lathlain Street (both carriageways) and adjacent footpaths to the south of the junction with College Street and the entrance to the adjacent car park (but not along College Street)

Site B18 – On the community path joining Belconnen Way (between Lathlain Street and Coulter Drive) and

Nettlefold Street (but not along Belconnen Way)

Site B19 – On the two community path joining Belconnen Way (near the junction with Coulter Drive) and Moubray Place (but not along Belconnen Way)

Site B20 – On the community path between Keene Place and Egan Court to the east of the underpass Coulter Drive (between Belconnen way and Lathlain Street)

Site B21 – On Nettlefold Street and adjacent footpaths to the east of the junction with Coulter Drive (but not along Coulter Drive)

Site B22 – On Josephson Street (both carriageways) and adjacent footpaths to the south of the junction with Luxton Street (but not along Luxton Street)

Site B23 – On Lathlain Street (both carriageways) and adjacent footpaths to the south of the junction with Luxton Street (but not along Luxton Street)

Pertinent features relating to count locations when the count was undertaken

There were no pertinent features relating to the count sites on the day of the count.

Appendix C – Data collection procedures

The 'instructions' given to the cordon count data collectors is summarised in this appendix.

Data collection procedures

1. Set up the data collection App

Download the Roads ACT 'cordon count App' to use for recording the count data on your smart phone or tablet.

Test that the App is working on your device:

- Enter some trial data in the App and 'send data' – your data will be delivered to the Cordon Count Manager
- Send an email to the Cordon Count Manager advising that you have sent some trial data
- The Cordon Count Manager will confirm that the data was or was not received
- If the data was not received, re load the App and enter some trial data and send it and an email to the Cordon Count Manager

2. Have the data collections sheets available

Print out some paper data collection sheet for use if necessary to record the data if the App can not be used (eg, if your phone fails).

3. Read and understand the counting rules

The counting rules (Appendix D) are to be followed when counting people walking and riding

4. Go to allocated counting site

Arrive at your allocated count location in time to start the count at the scheduled start time.

Locate yourself safely so that you can clearly see everyone who crosses your count location.

Make yourself comfortable – you will be there for three hours.

Take with you:

- Your smart phone or tablet with the Roads ACT Cordon Count App loaded and working
- Two paper data collection sheet (printed out) – for use if the App or your smart phone or tablet does not work
- Pens or pencils for recording your counts on paper (when required)
- A clipboard or something similar to hold the paper data collection sheets when recording your counts
- Count location details and counting instructions for your count location
- A watch or other time piece – for use if your smart phone or tablet does not work
- A chair if you want to sit on it during the count – you can stand or sit on the ground and at some

locations you can sit in your car

- Water and snacks (if desired)
- A hat and sun screen if it's a sunny day, warm clothes if it is likely to be cold and/or wet weather gear if rain is likely.

5. Undertake the cordon count

Count all the pedestrians and cyclists crossing the cordon at your location as per the counting rules (Appendix D) and record the data on the App or on the paper data collection sheets.

6. At the end of each counting session

Submit your data via the App 'Send Data' button – that sends the data via email to designated people for future use (please do not send data during the count session as that generates multiple files for your count data).

Complete and sign any paper data collection sheets used and deliver the sheets to the supervisor.

Appendix D – Counting rules

The 'rules' used by the cordon count counters when collecting data on people walking and riding bikes across the cordon are give in this appendix.

Counting rules

1. Count people walking and riding bikes across the cordon count location (as given to each counter) – count there and nowhere else, regardless of if you think people have or have not been counted elsewhere. (The count locations make a complete cordon.)
2. People riding bikes (cyclists) are those on pedal bicycles, recumbents, trikes, electric assist bicycles (not motorbikes), or link bikes (tag-alongs), or on tricycles, or walking their bikes. A couple on a tandem are two people riding bikes. Children in trailers or in child seats are not riding bikes and are pedestrians for count purposes.
3. People walking (pedestrians) are those walking (not pushing a bike), jogging or running, or on roller skates, skis, kick scooters or mobility scooters and children riding in prams, child seats and trailers.
4. Males and females are designated by your best estimate (it is likely any errors will cancel out).
5. Start on time at exactly 7 am or 4 pm as appropriate.
6. Finish on time at exactly 10 am or 7 pm as appropriate.
7. Do not count people in sight who cross the count location before the start time or after finish time.
8. Do not count yourself or anyone else associated with the count (ie, the supervisor and quality assurance checkers).
9. Lookout for well intentioned, but misinformed, people who think they are helping by repeatedly crossing the cordon count location to inflate the count. If you see one, only count them once and advise the supervisor.
10. Do not advertise that you are counting people walking and riding (but do explain what you are doing if asked).
11. We are only counting people who enter or leave the cordon area via public roads, paths and spaces, not via residential or business premises – people who emerge from private property are NOT counted. There is one exception to this rule – when you know for certain that the someone has approached along 'your' road or path, and only cut the corner via private property just before reaching your control. For this reason, the cordon counting point on each road or path is some distance away from the intersections with the roads that form the cordon boundary.
12. We are not trying to count as many people as possible – we are trying to count as accurately as possible.



P 02 6248 7995
F 02 6248 7774
E office@pedalpower.org.au
W pedalpower.org.au
A GPO 581, Canberra ACT 2601

ABN: 98 440 716 821

Civic town centre and ANU campus cordon count

on

Wednesday 24 February 2016

undertaken by Pedal Power ACT for Roads ACT

Report on cordon count and data collected

Table of Contents

1. Civic cordon count.....	1
2. Cordon count data.....	1
4. Cordon count procedures.....	1
5. Weather during the cordon count.....	2
6. Quality assurance.....	2
Appendix A – Cordon count data summary.....	3
A1. People crossing the cordon at each count site.....	3
A2. People crossing the cordon during each time period.....	10
A3. Comparison of 2016 and 2015 cordon count data.....	13
Appendix B – Cordon count locations.....	18
Appendix C – Data collection procedures.....	25
Appendix D – Counting rules.....	27

Cordon count managed, audited and report prepared by:

Report reviewed by:

[Redacted signature]

[Redacted signature]

1. Civic cordon count

Pedal Power ACT undertook a cordon count of all people walking and riding bikes into and out of the Civic town centre and ANU campus on Tuesday 2 March 2016 (the first Tuesday in March) during two counting sessions – from 7:00 am to 10:00 am and from 4:00 pm to 7:00 pm.

This report outlines the cordon count details and procedure, gives the location of the count sites and resulting data and summarises the data collected.

2. Cordon count data

The cordon count data gives the time people (separated between male and female) walked or rode bikes in each direction (into the town centre or out of the town centre) across the cordon at each cordon count location (Appendix B).

The data is reported in two separate spreadsheet files, one for the morning count and one for the afternoon count, with file name:

cordon-count-2016-data-CIVIC-V1

Appendix A contains a summary of the cordon count data reported as:

- A1. The number of people that crossed the cordon during the morning and afternoon counting sessions (separated into cyclists and pedestrians).
- A2. The number of people that crossed the cordon at each count site during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A3. The number of people that crossed the cordon during each fifteen minute period during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A4. A comparison of the number of people riding or walking across the cordon at each location in 2016 and 2015.

Data collectors recorded their data using the 'cordon count App' supplied by Roads ACT or if for some reason the App could not be used (eg, their phone stopped working) then the data was collected on prepared data collection sheets and subsequently entered into the data sets. Appendix C outlines the counting procedure and Appendix D gives the 'rules' for counting people crossing the cordon.

4. Cordon count procedures

Appendix C contains a map of the cordon around the Civic town centre and ANU campus and details of the cordon count locations.

There are thirty one cordon count locations designated C01 to C31 as given in that appendix. These are all the same locations as used in the 2015 and previous cordon counts.

We stationed people (data collectors) at each cordon count location and they counted the people walking and riding bikes (separately) into and out of the town centre (across the cordon line) during the counting sessions using the 'cordon count App' supplied by Roads ACT.

The definitions of a person walking and riding a bike are (the same as used in previous years):

- *People riding bikes* are those on pedal bicycles, recumbents, trikes, power-assisted bicycles (not

motorbikes), or on link-bikes (tag-alongs), or on pavement tricycles, or walking their bikes. A couple on a tandem are two people. Children in trailers or seats are not riding bikes.

- *People walking* are those walking, on roller skates, kick scooters or mobility scooters and children riding in prams and trailers.

Appendix D contains the data collection 'rules' observed by the data collectors. They are the same as used in previous cordon counts.

5. Weather during the cordon count

The weather was fine on the day of the count.

- Temperature range (°C): 14 to 31
- Precipitation (mm): 0

6. Quality assurance

To ensure that we were collecting and recording the correct data and that we had entered that data correctly into the database, we undertook the following checks:

- We checked that a person (the data collector) was in place at each cordon count location at the start of each session (an auditor visited each count location within the first fifteen minutes of each session).
- When visiting a data collector, the auditor checked that they were counting and recording the data correctly – the correct count location and the correct definition of inbound and outbound and of people walking and riding bikes.
- The auditors visited the data collectors again during each counting session to ensure they were still in place and counting.
- The data transmitted by the App was checked and any data outside of the designated counting time was removed (typically such data, when it occurred, was a test data entry).
- Each paper data collection sheet used (when the App failed) was completed and signed (as a true record) by the data collector.
- A person, who was not involved in the data entry, independently checked the data from the paper data collection sheet records entered into the database.

Appendix A – Cordon count data summary

A1. People crossing the cordon at each count site

Civic 2016 Cordon Count AM – Numbers by count site

Morning 7 am to 10 am		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
C01	Inbound	449	351	98	36	11	25
	Outbound	70	48	22	10	2	8
	Both	519	399	120	46	13	33
C02	Inbound	0	0	0	0	0	0
	Outbound	5	5	0	0	0	0
	Both	5	5	0	0	0	0
C03	Inbound	10	9	1	0	0	0
	Outbound	1	1	0	0	0	0
	Both	11	10	1	0	0	0
C04	Inbound	0	0	0	0	0	0
	Outbound	9	6	3	1	1	0
	Both	9	6	3	1	1	0
C05-06	Inbound	204	143	61	125	56	69
	Outbound	33	28	5	19	12	7
	Both	237	171	66	144	68	76
C07	Inbound	82	60	22	89	53	36
	Outbound	7	2	5	13	4	9
	Both	89	62	27	102	57	45
C08	Inbound	120	76	44	87	38	49
	Outbound	6	3	3	6	3	3
	Both	126	79	47	93	41	52
C09	Inbound	27	20	7	29	19	10
	Outbound	3	2	1	8	4	4
	Both	30	22	8	37	23	14
C10	Inbound	561	324	237	148	80	68
	Outbound	52	32	20	16	6	10
	Both	613	356	257	164	86	78
C11	Inbound	651	420	231	319	165	154
	Outbound	38	18	20	21	11	10
	Both	689	438	251	340	176	164
C12	Inbound	5	4	1	205	82	123
	Outbound	5	2	3	12	9	3
	Both	10	6	4	217	91	126

Continued ...

Civic 2016 Cordon Count AM – Numbers by count site

Morning 7 am to 10 am		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
C13	Inbound	283	164	119	528	267	261
	Outbound	19	13	6	44	28	16
	Both	302	177	125	572	295	277
C14a	Inbound	21	12	9	136	74	62
	Outbound	36	27	9	36	22	14
	Both	57	39	18	172	96	76
C14b	Inbound	374	247	127	515	285	230
	Outbound	9	8	1	51	41	10
	Both	383	255	128	566	326	240
C15	Inbound	140	88	52	834	472	362
	Outbound	25	18	7	177	105	72
	Both	165	106	59	1011	577	434
C16	Inbound	112	78	34	627	343	284
	Outbound	28	26	2	229	149	80
	Both	140	104	36	856	492	364
C17	Inbound	61	32	29	482	228	254
	Outbound	7	5	2	60	35	25
	Both	68	37	31	542	263	279
C18	Inbound	66	43	23	291	150	141
	Outbound	6	3	3	22	16	6
	Both	72	46	26	313	166	147
C19	Inbound	32	17	15	132	83	49
	Outbound	6	5	1	11	8	3
	Both	38	22	16	143	91	52
C20	Inbound	28	16	12	231	116	115
	Outbound	10	7	3	71	40	31
	Both	38	23	15	302	156	146
C21	Inbound	86	53	33	171	97	74
	Outbound	3	2	1	29	11	18
	Both	89	55	34	200	108	92
C22	Inbound	23	14	9	62	27	35
	Outbound	1	0	1	6	2	4
	Both	24	14	10	68	29	39
C23	Inbound	26	13	13	50	25	25
	Outbound	5	3	2	4	4	0
	Both	31	16	15	54	29	25
C24	Inbound	9	6	3	37	18	19
	Outbound	3	3	0	24	12	12
	Both	12	9	3	61	30	31

Continued ...

Civic 2016 Cordon Count AM – Numbers by count site

Morning 7 am to 10 am		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
C25	Inbound	2	2	0	181	86	95
	Outbound	5	4	1	403	197	206
	Both	7	6	1	584	283	301
C26	Inbound	13	7	6	162	77	85
	Outbound	17	11	6	51	30	21
	Both	30	18	12	213	107	106
C27	Inbound	0	0	0	0	0	0
	Outbound	1	1	0	0	0	0
	Both	1	1	0	0	0	0
C28	Inbound	15	12	3	14	6	8
	Outbound	3	1	2	19	7	12
	Both	18	13	5	33	13	20
C29	Inbound	147	100	47	257	120	137
	Outbound	217	171	46	114	61	53
	Both	364	271	93	371	181	190
C30	Inbound	139	101	38	140	58	82
	Outbound	349	236	113	244	110	134
	Both	488	337	151	384	168	216
C31	Inbound	360	262	98	60	24	36
	Outbound	195	134	61	35	20	15
	Both	555	396	159	95	44	51
All sites	Inbound	4046	2674	1372	5948	3060	2888
	Outbound	1174	825	349	1736	950	786
	Both	5220	3499	1721	7684	4010	3674

Civic 2016 Cordon Count PM – Numbers by count site

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
C01	Inbound	72	55	17	12	5	7
	Outbound	426	6	420	33	13	20
	Both	498	61	437	45	18	27
C02	Inbound	1	1	0	0	0	0
	Outbound	4	4	0	0	0	0
	Both	5	5	0	0	0	0
C03	Inbound	1	1	0	0	0	0
	Outbound	2	2	0	0	0	0
	Both	3	3	0	0	0	0
C04	Inbound	9	3	6	5	4	1
	Outbound	0	0	0	0	0	0
	Both	9	3	6	5	4	1
C05-06	Inbound	20	17	3	13	7	6
	Outbound	136	107	29	53	33	20
	Both	156	124	32	66	40	26
C07	Inbound	7	6	1	23	15	8
	Outbound	60	44	16	73	44	29
	Both	67	50	17	96	59	37
C08	Inbound	15	12	3	9	5	4
	Outbound	72	46	26	94	51	43
	Both	87	58	29	103	56	47
C09	Inbound	3	3	0	11	6	5
	Outbound	26	19	7	35	25	10
	Both	29	22	7	46	31	15
C10	Inbound	70	46	24	27	19	8
	Outbound	562	345	217	105	64	41
	Both	632	391	241	132	83	49
C11	Inbound	63	39	24	49	25	24
	Outbound	605	379	226	244	111	133
	Both	668	418	250	293	136	157
C12	Inbound	2	2	0	11	4	7
	Outbound	4	2	2	141	57	84
	Both	6	4	2	152	61	91

Continued ...

Civic 2016 Cordon Count PM – Numbers by count site

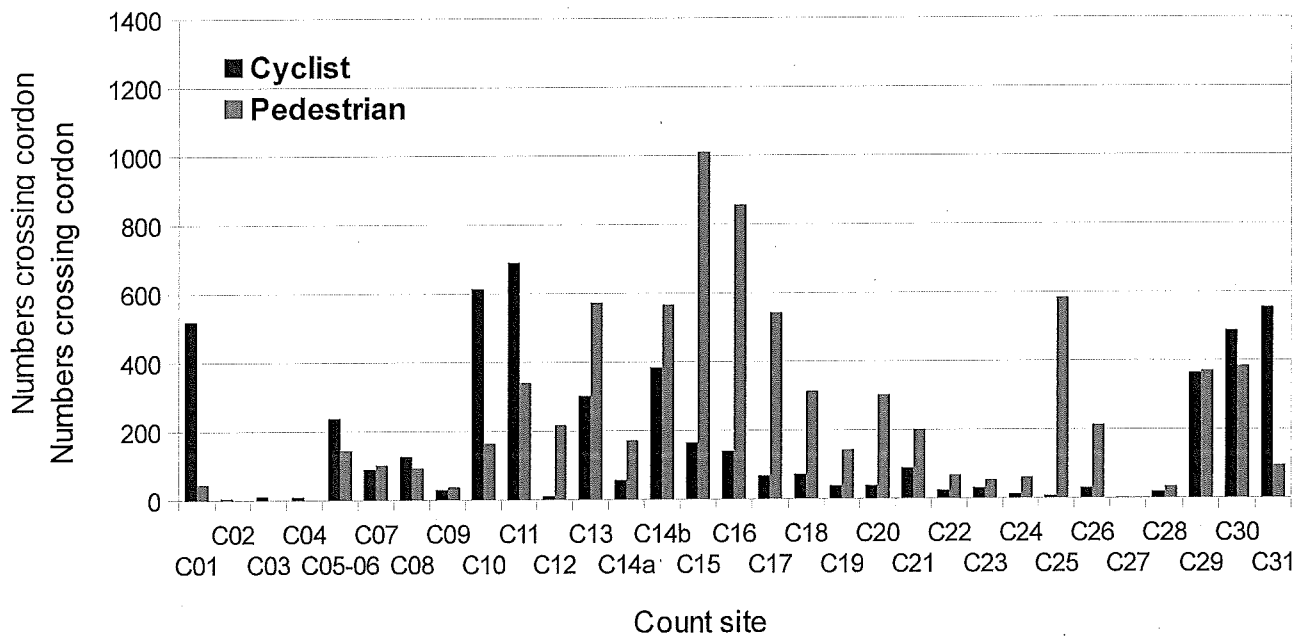
Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
C13	Inbound	28	14	14	101	59	42
	Outbound	216	120	96	422	215	207
	Both	244	134	110	523	274	249
C14a	Inbound	7	5	2	48	27	21
	Outbound	316	235	81	174	90	84
	Both	323	240	83	222	117	105
C14b	Inbound	44	32	12	161	111	50
	Outbound	33	19	14	301	166	135
	Both	77	51	26	462	277	185
C15	Inbound	41	29	12	424	251	173
	Outbound	194	113	81	807	450	357
	Both	235	142	93	1231	701	530
C16	Inbound	39	26	13	300	204	96
	Outbound	150	97	53	747	421	326
	Both	189	123	66	1047	625	422
C17	Inbound	19	13	6	126	60	66
	Outbound	52	23	29	443	216	227
	Both	71	36	35	569	276	293
C18	Inbound	7	4	3	77	51	26
	Outbound	49	35	14	244	138	106
	Both	56	39	17	321	189	132
C19	Inbound	9	8	1	68	42	26
	Outbound	39	22	17	158	93	65
	Both	48	30	18	226	135	91
C20	Inbound	25	15	10	135	78	57
	Outbound	54	34	20	328	182	146
	Both	79	49	30	463	260	203
C21	Inbound	14	11	3	42	26	16
	Outbound	78	47	31	202	127	75
	Both	92	58	34	244	153	91
C22	Inbound	2	1	1	13	7	6
	Outbound	26	16	10	52	26	26
	Both	28	17	11	65	33	32
C23	Inbound	14	7	7	9	8	1
	Outbound	15	8	7	33	18	15
	Both	29	15	14	42	26	16
C24	Inbound	0	0	0	0	0	0
	Outbound	0	0	0	0	0	0
	Both	0	0	0	0	0	0

Continued ...

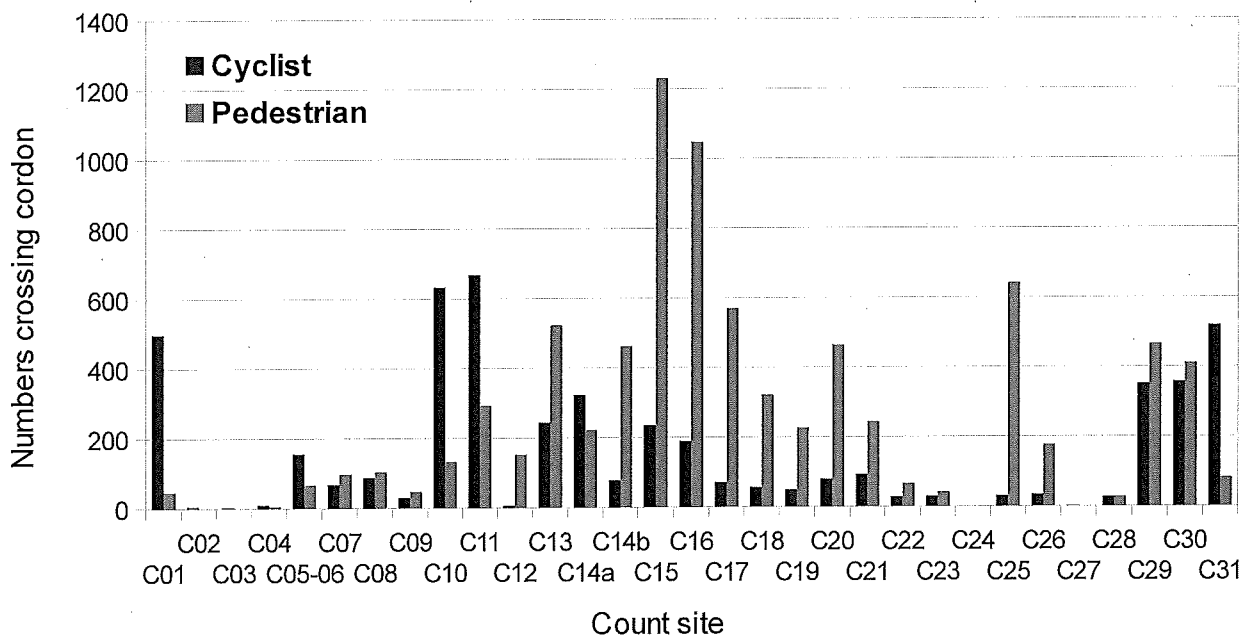
Civic 2016 Cordon Count PM – Numbers by count site

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
C25	Inbound	14	6	8	248	124	124
	Outbound	16	12	4	394	188	206
	Both	30	18	12	642	312	330
C26	Inbound	21	18	3	48	36	12
	Outbound	13	8	5	128	62	66
	Both	34	26	8	176	98	78
C27	Inbound	0	0	0	0	0	0
	Outbound	1	1	0	0	0	0
	Both	1	1	0	0	0	0
C28	Inbound	5	4	1	14	8	6
	Outbound	22	15	7	12	9	3
	Both	27	19	8	26	17	9
C29	Inbound	197	165	32	213	115	98
	Outbound	155	120	35	253	118	135
	Both	352	285	67	466	233	233
C30	Inbound	106	66	40	214	97	117
	Outbound	252	186	66	197	93	104
	Both	358	252	106	411	190	221
C31	Inbound	338	238	100	41	27	14
	Outbound	181	129	52	41	23	18
	Both	519	367	152	82	50	32
All sites	Inbound	1193	847	346	2442	1421	1021
	Outbound	3759	2194	1565	5714	3033	2681
	Both	4952	3041	1911	8156	4454	3702

Civic 2016 Cordon Count AM 7 am to 10 am



Civic 2016 Cordon Count PM 4 pm to 7 pm



A2. People crossing the cordon during each time period

Civic 2016 Cordon Count AM – Numbers per time interval

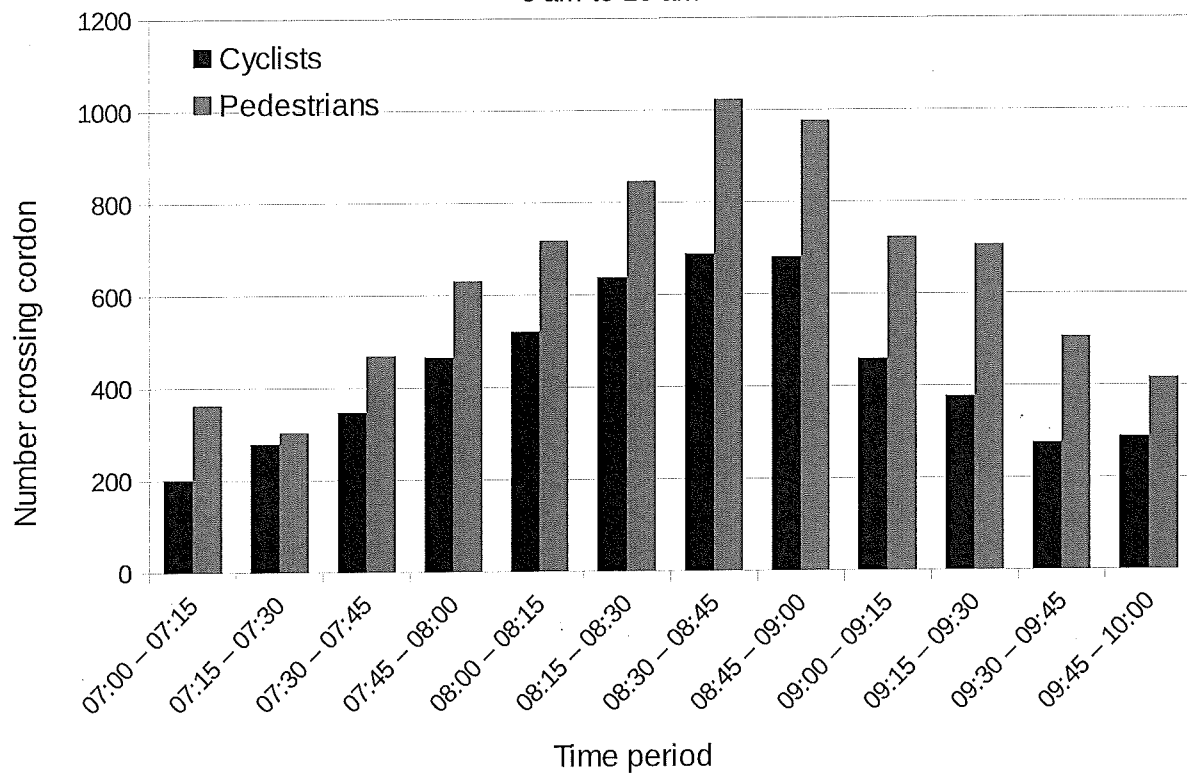
Morning 7 am to 10 am		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
07:00 – 07:15	Inbound	128	106	22	233	122	111
	Outbound	73	53	20	130	62	68
	Both	201	159	42	363	184	179
07:15 – 07:30	Inbound	196	144	52	230	126	2
	Outbound	83	59	24	74	44	30
	Both	279	203	76	304	170	32
07:30 – 07:45	Inbound	256	174	82	353	174	179
	Outbound	91	66	25	116	63	53
	Both	347	240	107	469	237	232
07:45 – 08:00	Inbound	345	234	111	501	259	242
	Outbound	121	80	41	130	74	56
	Both	466	314	152	631	333	298
08:00 – 08:15	Inbound	387	246	141	610	320	290
	Outbound	134	98	36	108	60	48
	Both	521	344	177	718	380	338
08:15 – 08:30	Inbound	491	331	160	725	341	384
	Outbound	146	106	40	122	74	48
	Both	637	437	200	847	415	432
08:30 – 08:45	Inbound	542	348	194	838	423	415
	Outbound	146	100	46	185	101	84
	Both	688	448	240	1023	524	499
08:45 – 09:00	Inbound	568	357	211	770	412	358
	Outbound	113	92	21	207	121	86
	Both	681	449	232	977	533	444
09:00 – 09:15	Inbound	391	251	140	563	284	279
	Outbound	68	49	19	161	90	71
	Both	459	300	159	724	374	350
09:15 – 09:30	Inbound	302	204	98	502	259	243
	Outbound	75	45	30	204	107	97
	Both	377	249	128	706	366	340
09:30 – 09:45	Inbound	216	136	80	336	175	161
	Outbound	60	36	24	170	80	90
	Both	276	172	104	506	255	251
09:45 – 10:00	Inbound	224	144	80	287	165	122
	Outbound	64	41	23	129	74	55
	Both	288	185	103	416	239	177
07:00 – 10:00	Inbound	4046	2675	1371	5948	3060	2786
	Outbound	1174	825	349	1736	950	786
	Both	5220	3500	1720	7684	4010	3572

Civic 2016 Cordon Count – Numbers per time interval PM

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
16:00 – 16:15	Inbound	48	30	18	156	87	69
	Outbound	189	128	61	317	183	134
	Both	237	158	79	473	270	203
16:15 – 16:30	Inbound	59	48	11	194	120	74
	Outbound	171	109	62	314	163	151
	Both	230	157	73	508	283	225
16:30 – 16:45	Inbound	79	56	23	191	99	92
	Outbound	183	121	62	429	221	208
	Both	262	177	85	620	320	300
16:45 – 17:00	Inbound	106	79	27	188	107	81
	Outbound	247	176	71	480	243	237
	Both	353	255	98	668	350	318
17:00 – 17:15	Inbound	115	81	34	235	149	86
	Outbound	48	39	9	664	120	544
	Both	163	120	43	899	269	630
17:15 – 17:30	Inbound	170	120	50	191	100	91
	Outbound	467	318	149	663	330	333
	Both	637	438	199	854	430	424
17:30 – 17:45	Inbound	139	98	41	181	92	89
	Outbound	470	308	162	696	383	313
	Both	609	406	203	877	475	402
17:45 – 18:00	Inbound	131	90	41	220	137	83
	Outbound	461	309	152	596	336	260
	Both	592	399	193	816	473	343
18:00 – 18:15	Inbound	108	80	28	219	140	79
	Outbound	358	250	108	517	306	211
	Both	466	330	136	736	446	290
18:15 – 18:30	Inbound	89	61	28	215	99	116
	Outbound	319	209	110	371	211	160
	Both	408	270	138	586	310	276
18:30 – 18:45	Inbound	93	67	26	241	165	76
	Outbound	258	180	78	401	120	281
	Both	351	247	104	642	285	357
18:30 – 19:00	Inbound	57	38	19	211	126	85
	Outbound	195	118	77	266	147	119
	Both	252	156	96	477	273	204
16:00 – 19:00	Inbound	1194	848	346	2442	1421	1021
	Outbound	3366	2265	1101	5714	2763	2951
	Both	4560	3113	1447	8156	4184	3972

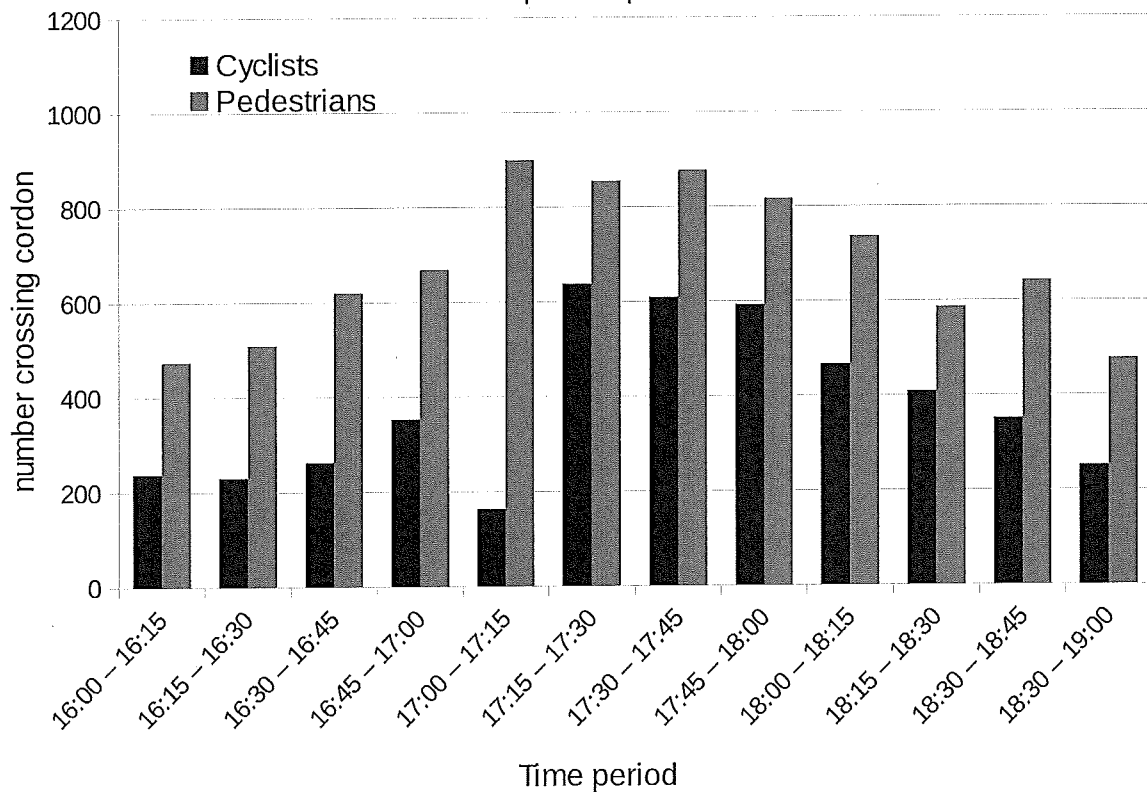
Civic 2016 Cordon Count AM

6 am to 10 am



Civic 2016 Cordon Count PM

4 pm to 7 pm



A3. Comparison of 2016 and 2015 cordon count data

This section contains a comparison of the cordon counts at Civic town centre and ANU campus for 2016 and 2015

Both counts were undertaken on a Tuesday – 1 March 2016 and 3 March 2015.

The differences between the 2016 and the 2015 figures are the increase (or decrease shown as a negative) in the number from 2015 expressed as a percentage.

Civic 2016/2015 cyclists & pedestrian comparison									
Session	2016			2015			Difference % 2016/2015		
	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total
Morning (AM)	5220	7684	12904	5412	7198	12610	-3.5%	6.8%	2.3%
Afternoon (PM)	5220	7684	12904	4505	8117	12622	15.9%	-5.3%	2.2%

Civic 2016/2015 cyclists AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
C01	Both	519	399	120	506	374	132	0.25%	0.48%	-0.23%
C02	Both	5	5	0	0	0	0	0.10%	0.10%	0.00%
C03	Both	11	10	1	3	2	1	0.15%	0.15%	0.00%
C04	Both	9	6	3	21	17	4	-0.23%	-0.21%	-0.02%
C05-06	Both	237	171	66	216	159	57	0.40%	0.23%	0.17%
C07	Both	89	62	27	105	65	40	-0.31%	-0.06%	-0.25%
C08	Both	126	79	47	151	104	47	-0.48%	-0.48%	0.00%
C09	Both	30	22	8	34	17	17	-0.08%	0.10%	-0.17%
C10	Both	613	356	257	652	388	264	-0.75%	-0.61%	-0.13%
C11	Both	689	438	251	674	427	247	0.29%	0.21%	0.08%
C12	Both	10	6	4	11	5	6	-0.02%	0.02%	-0.04%
C13	Both	302	177	125	312	184	128	-0.19%	-0.13%	-0.06%
C14a	Both	57	39	18	71	50	21	-0.27%	-0.21%	-0.06%
C14b	Both	383	255	128	380	285	95	0.06%	-0.57%	0.63%
C15	Both	165	106	59	152	96	56	0.25%	0.19%	0.06%
C16	Both	140	104	36	156	113	43	-0.31%	-0.17%	-0.13%
C17	Both	68	37	31	69	37	32	-0.02%	0.00%	-0.02%
C18	Both	72	46	26	57	40	17	0.29%	0.11%	0.17%
C19	Both	38	22	16	17	7	10	0.40%	0.29%	0.11%
C20	Both	38	23	15	59	34	25	-0.40%	-0.21%	-0.19%
C21	Both	89	55	34	100	55	45	-0.21%	0.00%	-0.21%
C22	Both	24	14	10	34	23	11	-0.19%	-0.17%	-0.02%
C23	Both	31	16	15	25	13	12	0.11%	0.06%	0.06%
C24	Both	12	13	14	30	23	7	-0.34%	-0.19%	0.13%
C25	Both	7	6	1	18	11	7	-0.21%	-0.10%	-0.11%
C26	Both	30	18	12	37	30	7	-0.13%	-0.23%	0.10%
C27	Both	1	1	0	0	0	0	0.02%	0.02%	0.00%
C28	Both	18	13	5	16	13	3	0.04%	0.00%	0.04%
C29	Both	364	271	93	404	330	74	-0.77%	-1.13%	0.36%
C30	Both	488	337	151	508	344	164	-0.38%	-0.13%	-0.25%
C31	Both	555	396	159	594	428	166	-0.75%	-0.61%	-0.13%
All sites	Both	5220	3503	1732	5412	3674	1738	-3.68%	-3.28%	-0.11%

Civic 2016/2015 pedestrians AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
C01	Both	46	13	33	91	45	46	-0.59%	-0.42%	-0.17%
C02	Both	0	0	0	1	0	1	-0.01%	0.00%	-0.01%
C03	Both	0	0	0	0	0	0	0.00%	0.00%	0.00%
C04	Both	1	1	0	0	0	0	0.01%	0.01%	0.00%
C05-06	Both	144	68	76	97	53	44	0.61%	0.20%	0.42%
C07	Both	102	57	45	107	62	45	-0.07%	-0.07%	0.00%
C08	Both	93	41	52	86	58	28	0.09%	-0.22%	0.31%
C09	Both	37	23	14	28	18	10	0.12%	0.07%	0.05%
C10	Both	164	86	78	225	115	110	-0.79%	-0.38%	-0.42%
C11	Both	340	176	164	235	116	119	1.37%	0.78%	0.59%
C12	Both	217	91	126	174	77	97	0.56%	0.18%	0.38%
C13	Both	572	295	277	518	276	242	0.70%	0.25%	0.46%
C14a	Both	172	96	76	198	133	65	-0.34%	-0.48%	0.14%
C14b	Both	566	326	240	514	270	244	0.68%	0.73%	-0.05%
C15	Both	1011	577	434	945	517	428	0.86%	0.78%	0.08%
C16	Both	856	492	364	867	525	342	-0.14%	-0.43%	0.29%
C17	Both	542	263	279	378	196	182	2.13%	0.87%	1.26%
C18	Both	313	166	147	318	169	149	-0.07%	-0.04%	-0.03%
C19	Both	143	91	52	96	68	28	0.61%	0.30%	0.31%
C20	Both	302	156	146	361	210	151	-0.77%	-0.70%	-0.07%
C21	Both	200	108	92	187	106	81	0.17%	0.03%	0.14%
C22	Both	68	29	39	81	35	46	-0.17%	-0.08%	-0.09%
C23	Both	54	29	25	62	30	32	-0.10%	-0.01%	-0.09%
C24	Both	61	30	31	56	29	27	0.07%	0.01%	0.05%
C25	Both	584	283	301	381	169	212	2.64%	1.48%	1.16%
C26	Both	213	107	106	405	206	199	-2.50%	-1.29%	-1.21%
C27	Both	0	0	0	2	2	0	-0.03%	-0.03%	0.00%
C28	Both	33	13	20	29	12	17	0.05%	0.01%	0.04%
C29	Both	371	181	190	331	159	172	0.52%	0.29%	0.23%
C30	Both	384	168	216	335	144	191	0.64%	0.31%	0.33%
C31	Both	95	44	51	90	39	51	0.07%	0.07%	0.00%
All sites	Both	7684	4010	3674	7198	3839	3359	6.32%	2.23%	4.10%

Civic 2016/2015 cyclists PM comparison

Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
C01	Both	519	399	120	451	353	98	12.3%	8.3%	4.0%
C02	Both	5	5	0	1	1	0	0.7%	0.7%	0.0%
C03	Both	11	10	1	0	0	0	2.0%	1.8%	0.2%
C04	Both	9	6	3	25	22	3	-2.9%	-2.9%	0.0%
C05-06	Both	237	171	66	156	110	46	14.6%	11.0%	3.6%
C07	Both	89	62	27	69	44	25	3.6%	3.2%	0.4%
C08	Both	126	79	47	100	66	34	4.7%	2.3%	2.3%
C09	Both	30	22	8	50	31	19	-3.6%	-1.6%	-2.0%
C10	Both	613	356	257	567	344	223	1.0%	0.3%	0.8%
C11	Both	689	438	251	20	16	4	14.9%	9.4%	5.5%
C12	Both	10	6	4	16	8	8	-0.1%	0.0%	-0.1%
C13	Both	302	177	125	304	184	120	0.0%	-0.2%	0.1%
C14a	Both	57	39	18	299	227	72	-5.4%	-4.2%	-1.2%
C14b	Both	383	255	128	92	62	30	6.5%	4.3%	2.2%
C15	Both	165	106	59	186	119	67	-0.5%	-0.3%	-0.2%
C16	Both	140	104	36	208	151	57	-1.5%	-1.0%	-0.5%
C17	Both	68	37	31	87	49	38	-0.4%	-0.3%	-0.2%
C18	Both	72	46	26	53	32	21	0.4%	0.3%	0.1%
C19	Both	38	22	16	56	37	19	-0.4%	-0.3%	-0.1%
C20	Both	38	23	15	72	51	21	-0.8%	-0.6%	-0.1%
C21	Both	89	55	34	101	52	49	-0.3%	0.1%	-0.3%
C22	Both	24	14	10	27	17	10	-0.1%	-0.1%	0.0%
C23	Both	31	16	15	28	16	12	0.1%	0.0%	0.1%
C24	Both	12	9	3	27	15	12	-0.3%	-0.1%	-0.2%
C25	Both	7	6	1	23	19	4	-0.4%	-0.3%	-0.1%
C26	Both	30	18	12	48	34	14	-0.4%	-0.4%	0.0%
C27	Both	1	1	0	1	1	0	0.0%	0.0%	0.0%
C28	Both	18	13	5	28	22	6	-0.2%	-0.2%	0.0%
C29	Both	364	271	93	397	329	68	-0.7%	-1.3%	0.6%
C30	Both	488	337	151	450	327	123	0.8%	0.2%	0.6%
C31	Both	555	396	159	563	404	159	-0.2%	-0.2%	0.0%
All sites	Both	5220	3499	1721	4505	3143	1362	15.9%	7.9%	8.0%

Civic 2016/2015 pedestrians PM comparison

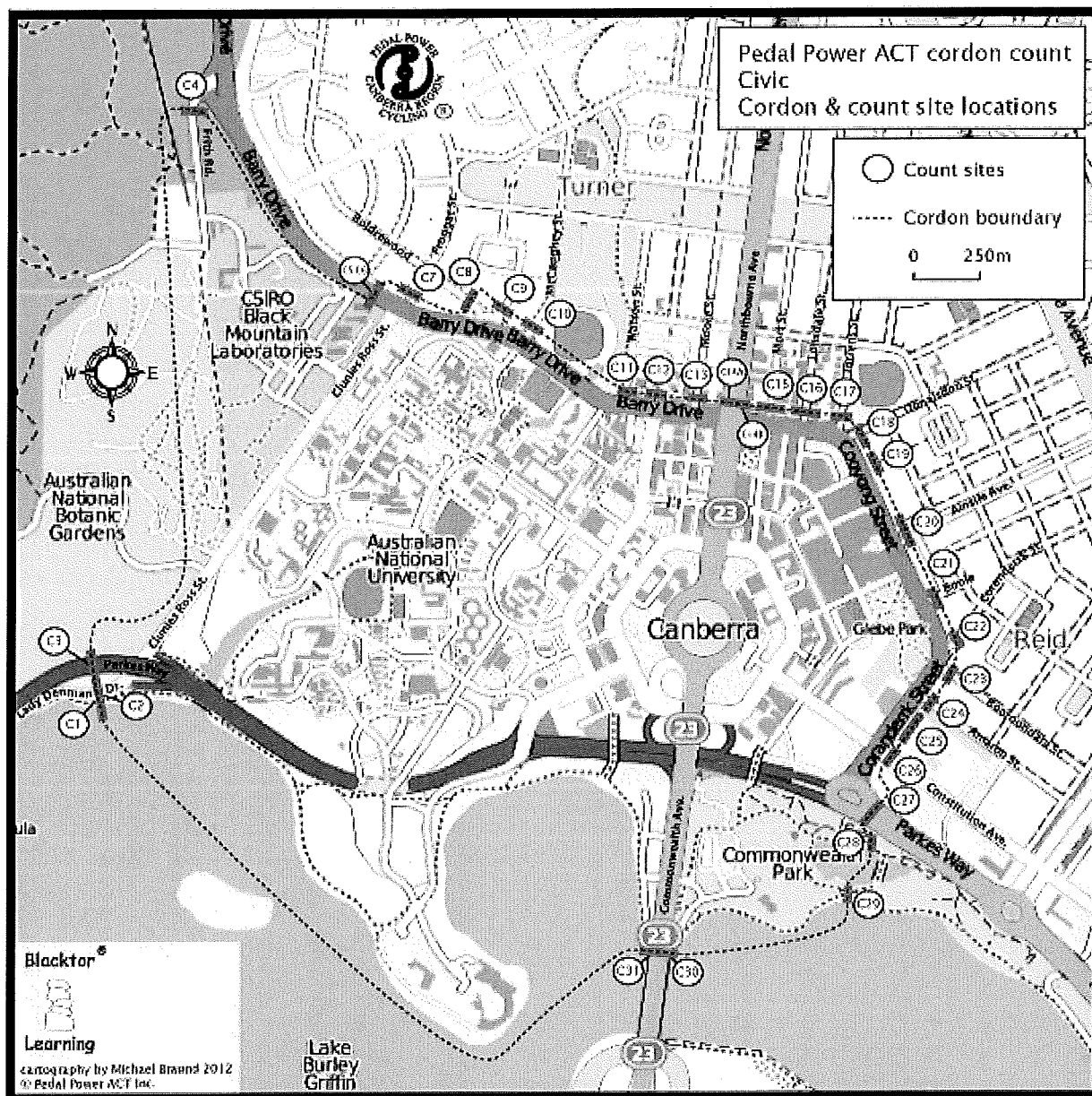
Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
C01	Both	46	13	33	172	105	67	-1.64%	-1.20%	-0.44%
C02	Both	0	0	0	6	2	4	-0.08%	-0.03%	-0.05%
C03	Both	0	0	0	0	0	0	0.00%	0.00%	0.00%
C04	Both	1	1	0	5	5	0	-0.05%	-0.05%	0.00%
C05-06	Both	144	68	76	80	44	36	0.83%	0.31%	0.52%
C07	Both	102	57	45	111	71	40	-0.12%	-0.18%	0.07%
C08	Both	93	41	52	133	74	59	-0.52%	-0.43%	-0.09%
C09	Both	37	23	14	53	34	19	-0.21%	-0.14%	-0.07%
C10	Both	164	86	78	212	110	102	-0.62%	-0.31%	-0.31%
C11	Both	340	176	164	20	11	9	4.16%	2.15%	2.02%
C12	Both	217	91	126	138	55	83	1.03%	0.47%	0.56%
C13	Both	572	295	277	489	243	246	1.08%	0.68%	0.40%
C14a	Both	172	96	76	300	182	118	3.54%	1.47%	2.07%
C14b	Both	566	326	240	539	329	210	-4.78%	-3.03%	-1.74%
C15	Both	1011	577	434	1153	639	514	-7.64%	-4.07%	-3.57%
C16	Both	856	492	364	990	544	446	0.27%	0.43%	-0.16%
C17	Both	542	263	279	418	230	188	5.70%	3.41%	2.29%
C18	Both	313	166	147	330	188	142	2.76%	0.98%	1.78%
C19	Both	143	91	52	314	192	122	-0.01%	-0.34%	0.33%
C20	Both	302	156	146	542	300	242	-5.19%	-2.72%	-2.47%
C21	Both	200	108	92	204	121	83	1.28%	0.46%	0.82%
C22	Both	68	29	39	75	40	35	1.63%	0.88%	0.74%
C23	Both	54	29	25	67	32	35	0.01%	-0.04%	0.05%
C24	Both	61	30	31	55	24	31	-0.01%	0.07%	-0.08%
C25	Both	584	283	301	282	142	140	-2.88%	-1.46%	-1.42%
C26	Both	213	107	106	313	165	148	3.53%	1.54%	1.99%
C27	Both	0	0	0	0	0	0	2.77%	1.39%	1.38%
C28	Both	33	13	20	11	5	6	2.63%	1.33%	1.30%
C29	Both	371	181	190	465	196	269	-6.05%	-2.55%	-3.50%
C30	Both	384	168	216	537	225	312	-6.56%	-2.76%	-3.80%
C31	Both	95	44	51	103	49	54	3.49%	1.72%	1.77%
All sites	Both	7684	4010	3674	8117	4357	3760	-5.64%	-4.52%	-1.12%

Appendix B – Cordon count locations

The map below shows the cordon around the Civic town centre and ANU campus and the locations of the count locations. Descriptions of the locations are given below the map.

The cordon count locations were the same as in 2015 (and previous years with one amalgamation of two sites (C05-06) and one split (C14a and C14b)).

Pertinent features relating to count locations when the count was undertaken in 2016 are given below the site descriptions.



Count locations descriptions

- **C01**

Shared path: On north shore of Lake Burley Griffin, on west side of junction with shared path onto Clunnies Ross Street.

This control includes:

This path, east of the path junction

This control does not include:

Lady Denman Drive or Parkes Way

- **C02**

Lady Denman Drive: On west side of junction with shared path onto Clunnies Ross Street.

This control includes:

Lady Denman Drive

This control does not include:

Any paths

Parkes Way

- **C03**

Parkes Way: On west side of bridge over Clunnies Ross Street.

This control includes:

Parkes Way

This control does not include:

Any paths

Lady Denman Drive

- **C04**

Frith Road, Acton: Immediately south of junction with Barry Drive

This control includes:

Firth Rd, south of the junction

This control does not include:

Barry Drive (including slip-lanes)

The bridge underneath Barry Drive

- **C05-C06**

Barry Drive, Acton/Turner: Immediately west of junction with Clunies Ross Street and east of the path that leads from Nicholson Crescent to Barry Drive

This control includes:

Barry Drive and path on northern side of Barry Drive

This control does not include:

The path on the south side of Barry Drive, on the corner with Clunies Ross Street

The path from Froggat Street to Barry Drive opposite Clunies Ross Street

- **C07**

Froggat Street, Turner: Between Barry Drive and Boldrewood Street.

This control includes:

Froggat Street, both on-road and footpaths

The bush land and unofficial dirt paths immediately east of Froggat Street

This control does not include:

Barry Drive

Boldrewood Street

- **C08**

Boldrewood Street, Turner: Immediately north-west of junctions with Barry Drive and Hackett Gardens.

This control includes:

Boldrewood Street, both on-road and footpaths
 This control does not include:
 Hackett Gardens
 Barry Drive

- **C09**

Hackett Gardens, Turner: Immediately north of junction with Boldrewood Street and Barry Drive.
 This control includes:
 Hackett Gardens, both on-road and footpaths
 This control does not include:
 Boldrewood Street
 Barry Drive

- **C10**

McCaughey Street, Turner: Immediately north of junction with Barry Drive.
 This control includes:
 McCaughey Street, both on-road and footpaths
 The shared trunk path alongside McCaughey Street
 The driveway and all informal dirt paths into the sports ground on the east (Civic) side of McCaughey Street
 This control does not include:
 The footpath from the western side leading to the cul-de-sac near Hackett Gardens
 Barry Drive

- **C11**

Watson Street, Turner: Between the junctions with Barry Drive and Mackay Lane.
 This control includes:
 Watson Street, both on-road and footpaths
 The shared trunk path alongside Watson Street
 The public space and dirt paths immediately on the west side of Watson Street, as far as the Sullivan's Creek floodway.
 This control does not include:
 Barry Drive
 Mackay Lane
 The separate footpath between Mackay Lane and Barry Drive approximately 75m east of Watson Street, opposite Marcus Clarke Street

- **C12**

Footpath between Mackay Lane and Barry Drive, Turner: Approximately 75 m east of Watson St, opposite Marcus Clarke Street.
 This control includes:
 That footpath only
 This control does not include:
 Barry Drive

- **C13**

Moore Street, Turner: Immediately north of Barry Drive.
 This control includes
 Moore St, both on-road and footpaths
 This control does not include:
 Barry Drive
 The separate footpath between Mackay Lane and Barry Drive approximately 125 m west of Moore St, opposite Marcus Clarke Street

- **C14a**

Northbourne Avenue west carriageway, Turner/Braddon: Immediately north of Barry Drive/Cooyong Street

This control includes:

Northbourne Avenue west carriageway, both on-road and footpaths

Northbourne Avenue median to centre

This control does not include:

Barry Drive/ Cooyong Street

- **C14b**

Northbourne Avenue east carriageway, Turner/Braddon: Immediately north of Barry Drive/Cooyong Street

This control includes:

Northbourne Avenue east carriageway and adjacent path, both on-road and footpaths

Northbourne Avenue median to centre

This control does not include:

Barry Drive/ Cooyong Street

- **C15**

Mort Street, Braddon: Immediately north of Cooyong Street

This control includes:

Mort Street, both on-road and footpaths

This control does not include:

Cooyong Street

- **C16**

Lonsdale Street, Braddon: Immediately north of Cooyong Street

This control includes

Lonsdale Street, both on-road and footpaths

This control does not include:

Cooyong Street

- **C17**

Torrens Street, Braddon :Immediately north of Cooyong Street

This control includes:

Torrens Street, both on-road and footpaths

This control does not include:

Cooyong/Ballumbir Streets

People who travel from Torrens St directly into Donaldson St (or vice versa) even if they are momentarily inside the cordon area.

- **C18**

Donaldson Street, Braddon: Immediately east of Ballumbir Street

This control includes:

Donaldson Street, both on-road and footpaths

This control does not include:

Ballumbir/Cooyong Streets

People who travel from Torrens Street directly into Donaldson Street (or vice versa) even if they are momentarily inside the cordon area.

The footpath between Favier House and Allawah Flats, approximately 120 m south of Donaldson Street

- **C19**

Footpath between Favier House and Allawah Flats, approximately 120 m south of Donaldson Street, Braddon:

This control includes:

That footpath
This control does not include:
Ballumbir Street

- **C20**

Ainslie Avenue, Braddon/Reid: Immediately east of Ballumbir Street

This control includes:

Ainslie Avenue, both on-road and footpaths

This control does not include:

Ballumbir Street

- **C21**

Boolee Street, Reid: Immediately east of Ballumbir Street

This control includes:

Boolee Street, both on-road and footpaths

This control does not include:

Ballumbir Street

- **C22**

Coranderrk Street (northern residential section), Reid: Immediately north-east of junction with Ballumbir Street (Note: Coranderrk Street changes from an arterial road to a residential street at this point, with arterial traffic continuing north directly into Ballumbir Street)

This control includes:

Coranderrk Street (northern residential section only), both on-road and footpaths

This control does not include:

Coranderrk Street (southern arterial section) or Ballumbir Street

People who travel from Coranderrk Street (northern residential section only) directly into

Booroondara Street (or vice versa) even if they are momentarily inside the cordon area

- **C23**

Booroondara Street, Reid: Immediately east of Coranderrk Street

This control includes:

Coranderrk Street (northern residential section only), both on-road and footpaths

This control does not include:

Coranderrk Street (southern arterial section)

People who travel from Coranderrk Street (northern residential section only) directly into

Booroondara Street (or vice versa) even if they are momentarily inside the cordon area

- **C24**

Amaroo Street, Reid: Immediately east of Coranderrk Street

This control includes:

Amaroo Street, both on-road and footpaths

This control does not include:

Coranderrk Street

- **C25**

Entire western boundary of Reid CIT College

This control includes:

All driveways, paths etc on western boundary of college

The overhead footbridge

This control does not include:

Amaroo Street or footpath along Amaroo Street

Constitution Avenue or footpath along Constitution Avenue

People who have clearly been travelling along Amaroo Street or Constitution Avenue, even if they cut the corner slightly across the college grounds.

- **C26**

Constitution Avenue, Reid : Immediately east of Coranderrk Street

This control includes:

Constitution Avenue, both on-road and footpaths

People who have clearly been travelling along Amaroo Street or Constitution Avenue, even if they cut the corner slightly across the college grounds.

This control does not include:

Coranderrk Street

- **C27**

Parkes Way: Immediately east of roundabout intersection with Coranderrk Street

This control includes:

Parkes Way, east of roundabout, including anyone riding on verges

This control does not include:

Parkes Way, west of roundabout, or Coranderrk Street

- **C28**

The community path to the north of Nerang Pool (in Commonwealth Park) and the adjacent park land between Nerang Pool and the Park boundary to Parkes Way

This control includes:

The path

The park land between Nerang Pool and the northern boundary of Commonwealth Park

This control does not include:

The verge of Parkes Way, or Parkes Way itself

The bridge on the south side of Nerang Pool, next to the lake shore

Any paths to the east or west of Nerang Pool

- **C29**

The bridge on Menzies Walk across the entrance to Nerang Pool (in Commonwealth Park) adjacent to Lake Burley Griffin

This control includes:

This bridge only

This control does not include:

The bridges on the north side of Nerang Pool

Any paths to the east or west of the bridge itself

- **C30**

Commonwealth Avenue Bridge over Lake Burley Griffin – eastern span only.

This control includes:

The shared path on the eastern (Central Basin) side of the bridge

The southbound (towards Parliament) carriageway of the road.

This control does not include:

Any person who does not actually cross the lake

The northbound (towards Civic) carriageway of the road

The shared path on the western (Western Basin) side of the bridge

- **C31**

Commonwealth Avenue Bridge over Lake Burley Griffin – western span only.

This control includes:

The shared path on the western (Western Basin) side of the bridge

The northbound (towards Civic) carriageway of the road.

This control does not include:

Any cyclist who does not actually cross the lake

The southbound (towards Parliament) carriageway of the road

The shared path on the eastern (Central Basin) side of the bridge

Pertinent features relating to count locations when the count was undertaken in 2016

Construction work was in progress on Commonwealth Avenue and could have affected the people using that road and the counts at siteC26.

Appendix C – Data collection procedures

The 'instructions' given to the cordon count data collectors is summarised in this appendix.

Data collection procedures

1. Set up the data collection App

Download the Roads ACT 'cordon count App' to use for recording the count data on your smart phone or tablet.

Test that the App is working on your device:

- Enter some trial data in the App and 'send data' – your data will be delivered to the Cordon Count Manager
- Send an email to the Cordon Count Manager advising that you have sent some trial data
- The Cordon Count Manager will confirm that the data was or was not received
- If the data was not received, re load the App and enter some trial data and send it and an email to the Cordon Count Manager

2. Have the data collections sheets available

Print out some paper data collection sheet for use if necessary to record the data if the App can not be used (eg, if your phone fails).

3. Read and understand the counting rules

The counting rules (Appendix D) are to be followed when counting people walking and riding

4. Go to allocated counting site

Arrive at your allocated count location in time to start the count at the scheduled start time.

Locate yourself safely so that you can clearly see everyone who crosses your count location.

Make yourself comfortable – you will be there for three hours.

Take with you:

- Your smart phone or tablet with the Roads ACT Cordon Count App loaded and working
- Two paper data collection sheet (printed out) – for use if the App or your smart phone or tablet does not work
- Pens or pencils for recording your counts on paper (when required)
- A clipboard or something similar to hold the paper data collection sheets when recording your counts
- Count location details and counting instructions for your count location
- A watch or other time piece – for use if your smart phone or tablet does not work
- A chair if you want to sit on it during the count – you can stand or sit on the ground and at some locations you can sit in your car

- Water and snacks (if desired)
- A hat and sun screen if it's a sunny day, warm clothes if it is likely to be cold and/or wet weather gear if rain is likely.

5. Undertake the cordon count

Count all the pedestrians and cyclists crossing the cordon at your location as per the counting rules (Appendix D) and record the data on the App or on the paper data collection sheets.

6. At the end of each counting session

Submit your data via the App 'Send Data' button – that sends the data via email to designated people for future use (please do not send data during the count session as that generates multiple files for your count data).

Complete and sign any paper data collection sheets used and deliver the sheets to the supervisor.

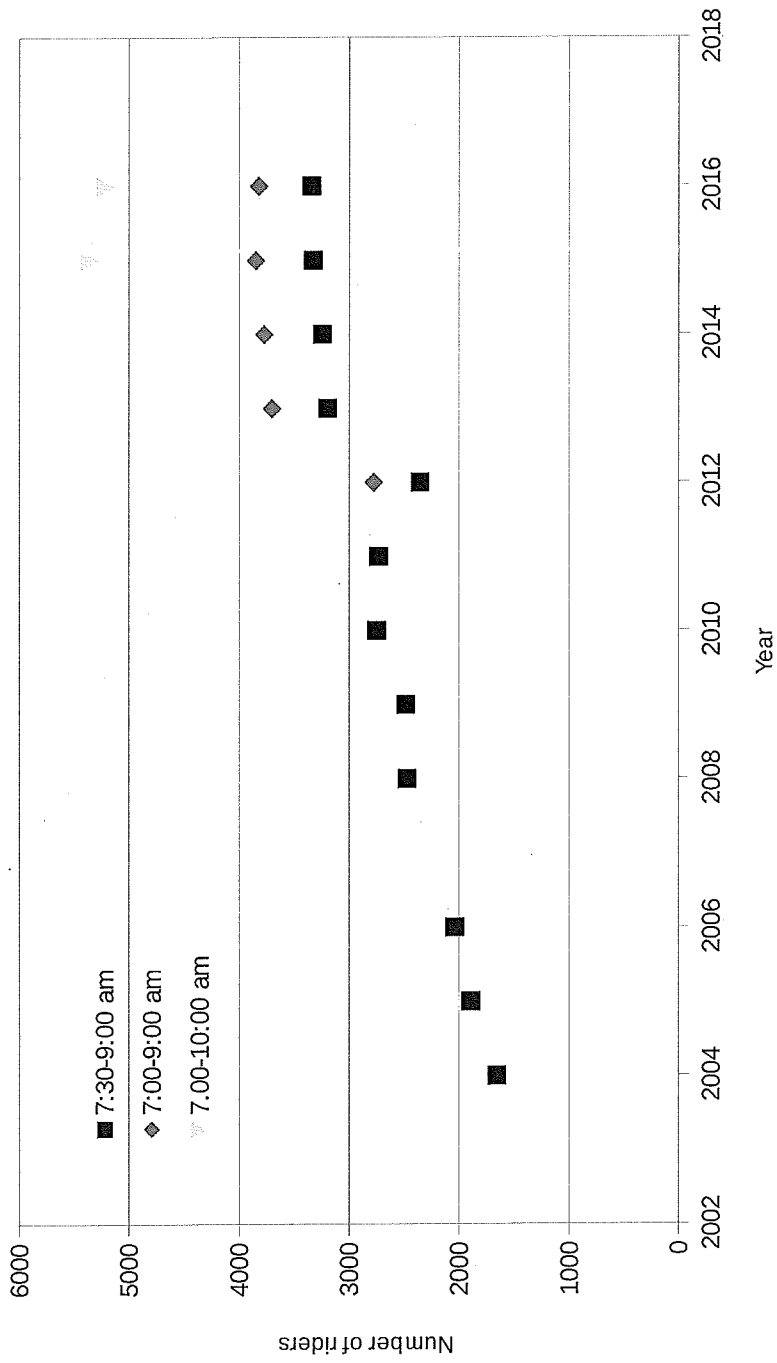
Appendix D – Counting rules

The 'rules' used by the cordon count counters when collecting data on people walking and riding bikes across the cordon are given in this appendix.

Counting rules

1. Count people walking and riding bikes across the cordon count location (as given to each counter) – count there and nowhere else, regardless of if you think people have or have not been counted elsewhere. (The count locations make a complete cordon.)
2. People riding bikes (cyclists) are those on pedal bicycles, recumbents, trikes, electric assist bicycles (not motorbikes), or link bikes (tag-alongs), or on tricycles, or walking their bikes. A couple on a tandem are two people riding bikes. Children in trailers or in child seats are not riding bikes and are pedestrians for count purposes.
3. People walking (pedestrians) are those walking (not pushing a bike), jogging or running, or on roller skates, skis, kick scooters or mobility scooters and children riding in prams, child seats and trailers.
4. Males and females are designated by your best estimate (it is likely any errors will cancel out).
5. Start on time at exactly 7 am or 4 pm as appropriate.
6. Finish on time at exactly 10 am or 7 pm as appropriate.
7. Do not count people in sight who cross the count location before the start time or after finish time.
8. Do not count yourself or anyone else associated with the count (ie, the supervisor and quality assurance checkers).
9. Lookout for well intentioned, but misinformed, people who think they are helping by repeatedly crossing the cordon count location to inflate the count. If you see one, only count them once and advise the supervisor.
10. Do not advertise that you are counting people walking and riding (but do explain what you are doing if asked).
11. We are only counting people who enter or leave the cordon area via public roads, paths and spaces, not via residential or business premises – people who emerge from private property are NOT counted. There is one exception to this rule – when you know for certain that someone has approached along 'your' road or path, and only cut the corner via private property just before reaching your control. For this reason, the cordon counting point on each road or path is some distance away from the intersections with the roads that form the cordon boundary.
12. We are not trying to count as many people as possible – we are trying to count as accurately as possible.

People riding into and out of Civic on first Tuesday in March





P 02 6248 7995
F 02 6248 7774
E office@pedalpower.org.au
W pedalpower.org.au
A GPO 581, Canberra ACT 2601

ABN: 98 440 716 821

Gungahlin town centre cordon count
on
Thursday 25th February 2016
undertaken by Pedal Power ACT for Roads ACT
Report on cordon count and data collected

Table of Contents

1. Gungahlin cordon count.....	1
2. Cordon count data.....	1
4. Cordon count procedures.....	1
5. Weather during the cordon count.....	2
6. Quality assurance.....	2
Appendix A – Cordon count data summary.....	3
A1. People crossing the cordon at each count site.....	3
A2. People crossing the cordon during each time period.....	7
A3. Comparison of 2016 and 2015 cordon count data.....	10
Appendix B – Cordon count locations.....	13
Appendix C – Data collection procedures.....	15
Appendix D – Counting rules.....	17

Cordon count managed, audited and report prepared by:

Report reviewed by:

<div style="background-color: black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100px; height: 20px;"></div>	<div style="background-color: black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100px; height: 20px;"></div>
--	--

1. Gungahlin cordon count

Pedal Power ACT undertook a cordon count of all people walking and riding bikes into and out of the Gungahlin town centre on Thursday 25th February 2016 during two counting sessions – from 7:00 am to 10:00 am and from 4:00 pm to 7:00 pm.

This report outlines the cordon count details and procedure, gives the location of the count sites, resulting data and summarises the data collected.

2. Cordon count data

The cordon count data gives the time people (separated between male and female) walked or rode bikes in each direction (into the town centre or out of the town centre) across the cordon at each cordon count location (Appendix B).

The data is reported in two separate spreadsheet files, one for the morning count and one for the afternoon count, with file name:

cordon-count-2016-data-GUNGAHLIN-V1

Appendix A contains a summary of the cordon count data reported as:

- A1. The number of people that crossed the cordon during the morning and afternoon counting sessions (separated into cyclists and pedestrians).
- A2. The number of people that crossed the cordon at each count site during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A3. The number of people that crossed the cordon during each fifteen minute period during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A4. A comparison of the number of people riding or walking across the cordon at each location in 2016 and 2015.

Data collectors recorded their data using the 'cordon count App' supplied by Roads ACT or if for some reason the App could not be used (eg, their phone stopped working) then the data was collected on prepared data collection sheets and subsequently entered into the data sets. Appendix C outlines the counting procedure and Appendix D gives the 'rules' for counting people crossing the cordon.

4. Cordon count procedures

Appendix C contains a map of the cordon around the Gungahlin town centre and details of the cordon count locations.

There are thirteen cordon count locations designated G01 to G13 as given in that appendix. These are all the same locations as used in the 2015 and previous cordon counts.

We stationed people (data collectors) at each cordon count location and they counted the people walking and riding bikes (separately) into and out of the town centre (across the cordon line) during the counting sessions using the 'cordon count App' supplied by Roads ACT.

The definitions of a person walking and riding a bike are (the same as in previous years):

- *People riding bikes* are those on pedal bicycles, recumbents, trikes, power-assisted bicycles (not motorbikes), or on link-bikes (tag-alongs), or on pavement tricycles, or walking their bikes. A couple on a tandem are two people. Children in trailers or seats are not riding bikes.
- *People walking* are those walking, on roller skates, kick scooters or mobility scooters and children riding in prams and trailers.

Appendix D contains the data collection 'rules' observed by the data collectors. They are the same as used in previous cordon counts.

5. Weather during the cordon count

The weather was fine on the day of the count.

- Temperature range (°C): 15 to 38
- Precipitation (mm): 0

6. Quality assurance

To ensure that we were collecting and recording the correct data and that we had entered that data correctly into the database, we undertook the following checks:

- We checked that a person (the data collector) was in place at each cordon count location at the start of each session (an auditor visited each count location within the first fifteen minutes of each session).
- When visiting a data collector, the auditor checked that they were counting and recording the data correctly – the correct count location and the correct definition of inbound and outbound and of people walking and riding bikes.
- The auditors visited the data collectors again during each counting session to ensure they were still in place and counting.
- The data transmitted by the App was checked and any data outside of the designated counting time was removed (typically such data, when it occurred, was a test data entry).
- Each paper data collection sheet used (when the App failed) was completed and signed (as a true record) by the data collector.
- A person, who was not involved in the data entry, independently checked the data from the paper data collection sheet records entered into the database.

Appendix A – Cordon count data summary

A1. People crossing the cordon at each count site

Gungahlin 2016 Cordon Count AM – Numbers by count site

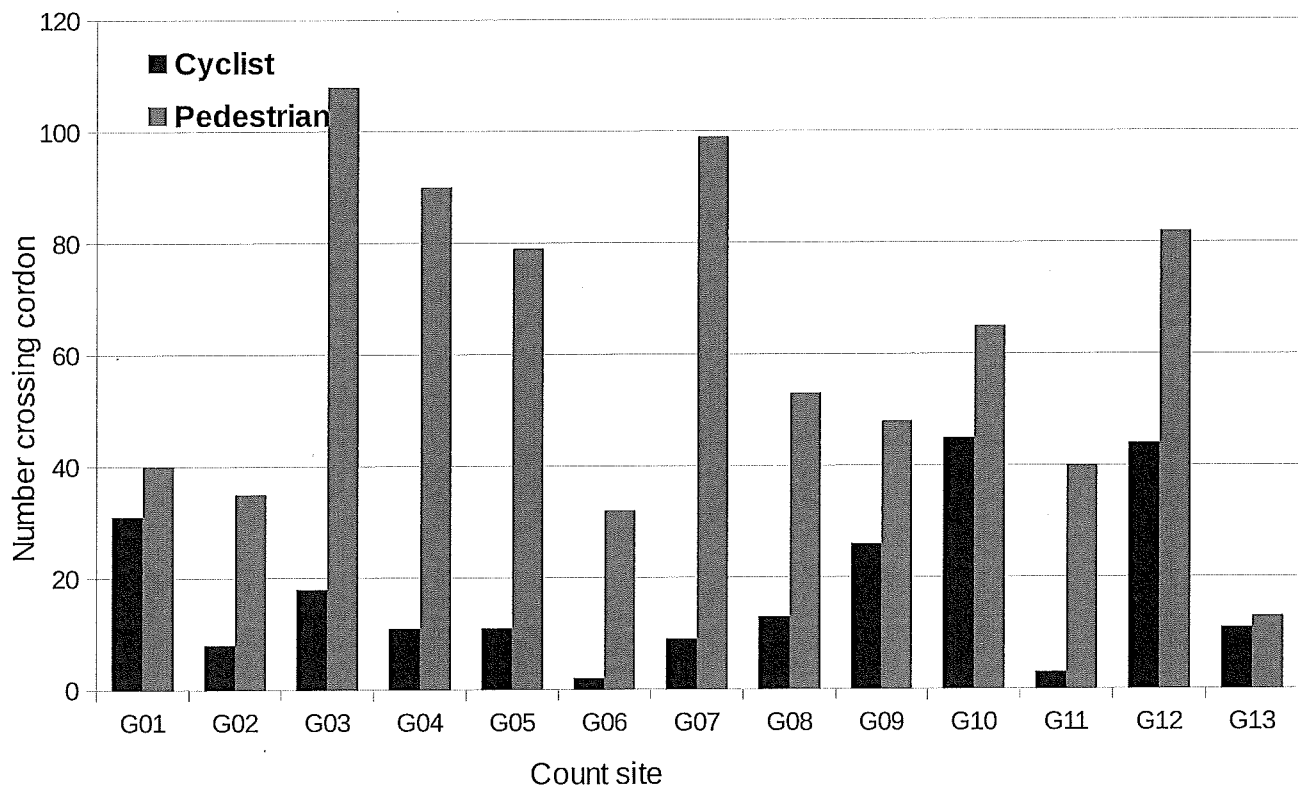
2016 AM		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
G01	Inbound	24	23	1	34	19	15
	Outbound	7	7	0	6	2	4
	Both	31	30	1	40	21	19
G02	Inbound	8	7	1	18	7	11
	Outbound	0	0	0	17	6	11
	Both	8	7	1	35	13	22
G03	Inbound	12	7	5	84	41	43
	Outbound	6	4	2	24	9	15
	Both	18	11	7	108	50	58
G04	Inbound	10	8	2	78	39	39
	Outbound	1	1	0	12	4	8
	Both	11	9	2	90	43	47
G05	Inbound	4	3	1	21	10	11
	Outbound	7	5	2	58	36	22
	Both	11	8	3	79	46	33
G06	Inbound	2	2	0	30	16	14
	Outbound	0	0	0	2	0	2
	Both	2	2	0	32	16	16
G07	Inbound	6	6	0	83	34	49
	Outbound	3	2	1	16	10	6
	Both	9	8	1	99	44	55
G08	Inbound	13	11	2	49	23	26
	Outbound	0	0	0	4	2	2
	Both	13	11	2	53	25	28
G09	Inbound	10	7	3	41	23	18
	Outbound	16	12	4	7	3	4
	Both	26	19	7	48	26	22
G10	Inbound	26	21	5	49	19	30
	Outbound	19	16	3	16	8	8
	Both	45	37	8	65	27	38
G11	Inbound	0	0	0	29	9	20
	Outbound	3	2	1	11	6	5
	Both	3	2	1	40	15	25

Continued ...

G12	Inbound	32	23	9	48	31	17
	Outbound	12	10	2	34	19	15
	Both	44	33	11	82	50	32
G13	Inbound	10	9	1	7	4	3
	Outbound	1	1	0	6	5	1
	Both	11	10	1	13	9	4
All sites	Inbound	157	127	30	571	275	296
	Outbound	75	60	15	213	110	103
	Both	232	187	45	784	385	399

Gungahlin Cordon Count 2016 AM

6 am to 10 am



Gungahlin 2016 Cordon Count PM – Numbers per count site

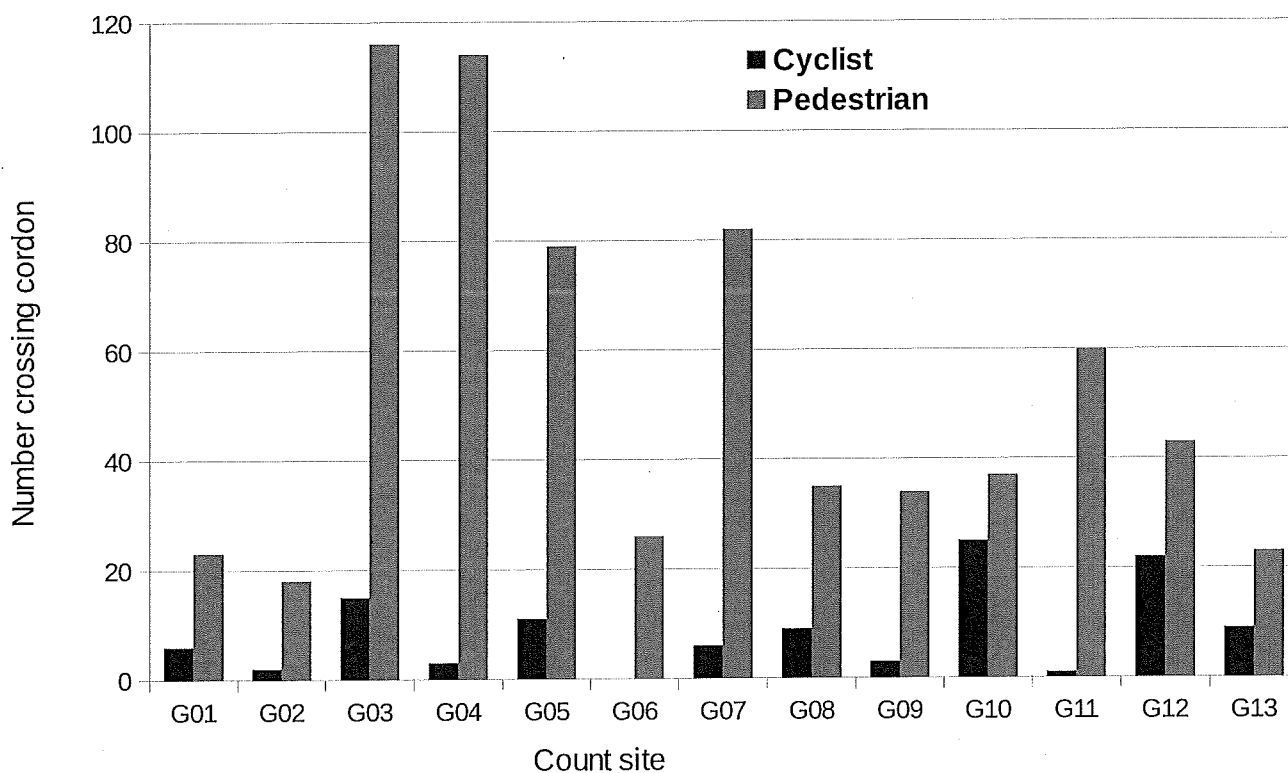
2016 PM		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
G01	Inbound	0	0	0	10	6	4
	Outbound	6	3	3	13	5	8
	Both	6	3	3	23	11	12
G02	Inbound	1	0	1	5	3	2
	Outbound	1	1	0	13	8	5
	Both	2	1	1	18	11	7
G03	Inbound	7	7	0	56	36	20
	Outbound	8	6	2	60	39	21
	Both	15	13	2	116	75	41
G04	Inbound	0	0	0	44	16	28
	Outbound	3	2	1	70	43	27
	Both	3	2	1	114	59	55
G05	Inbound	4	3	1	21	10	11
	Outbound	7	5	2	58	36	22
	Both	11	8	3	79	46	33
G06	Inbound	0	0	0	7	5	2
	Outbound	0	0	0	19	8	11
	Both	0	0	0	26	13	13
G07	Inbound	2	2	0	26	12	14
	Outbound	4	4	0	56	30	26
	Both	6	6	0	82	42	40
G08	Inbound	0	0	0	12	7	5
	Outbound	9	9	0	23	13	10
	Both	9	9	0	35	20	15
G09	Inbound	1	1	0	7	2	5
	Outbound	2	1	1	27	14	13
	Both	3	2	1	34	16	18
G10	Inbound	15	9	6	19	11	8
	Outbound	10	8	2	18	10	8
	Both	25	17	8	37	21	16
G11	Inbound	0	0	0	23	8	15
	Outbound	1	1	0	37	16	21
	Both	1	1	0	60	24	36
G12	Inbound	8	6	2	16	12	4
	Outbound	14	12	2	27	20	7
	Both	22	18	4	43	32	11
G13	Inbound	4	3	1	10	7	3
	Outbound	5	3	2	13	8	5
	Both	9	6	3	23	15	8

Continued ...

All sites	Inbound	42	31	11	256	135	121
	Outbound	70	55	15	434	250	184
	Both	112	86	26	690	385	305

Gungahlin Cordon Count 2016 PM

4 pm to 7 pm



A2. People crossing the cordon during each time period

Gungahlin 2016 Cordon Count AM – Numbers per time interval

Morning 7 am to 10 am		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
07:00 – 07:15	Inbound	9	8	1	21	11	10
	Outbound	3	3	0	9	3	6
	Both	12	11	1	30	14	16
07:15 – 07:30	Inbound	12	11	1	43	22	21
	Outbound	5	3	2	10	5	5
	Both	17	14	3	53	27	26
07:30 – 07:45	Inbound	14	12	2	31	11	20
	Outbound	9	6	3	9	8	1
	Both	23	18	5	40	19	21
07:45 – 08:00	Inbound	17	17	0	57	32	25
	Outbound	15	12	3	15	7	8
	Both	32	29	3	72	39	33
08:00 – 08:15	Inbound	33	25	8	73	34	39
	Outbound	12	10	2	28	14	14
	Both	45	35	10	101	48	53
08:15 – 08:30	Inbound	23	20	3	71	42	29
	Outbound	12	9	3	20	9	11
	Both	35	29	6	91	51	40
08:30 – 08:45	Inbound	13	10	3	65	23	42
	Outbound	7	7	0	26	14	12
	Both	20	17	3	91	37	54
08:45 – 09:00	Inbound	14	7	7	59	19	40
	Outbound	3	3	0	17	5	12
	Both	17	10	7	76	24	52
09:00 – 09:15	Inbound	10	8	2	45	29	16
	Outbound	3	2	1	20	9	11
	Both	13	10	3	65	38	27
09:15 – 09:30	Inbound	9	7	2	33	2	31
	Outbound	2	2	0	24	14	10
	Both	11	9	2	57	16	41
09:30 – 09:45	Inbound	1	1	0	28	14	14
	Outbound	1	0	1	14	9	5
	Both	2	1	1	42	23	19
09:45 – 10:00	Inbound	2	1	1	45	21	24
	Outbound	3	3	0	21	10	11
	Both	5	4	1	66	31	35
07:00 – 10:00	Inbound	157	127	30	571	260	311
	Outbound	75	60	15	213	107	106
	Both	232	187	45	784	367	417

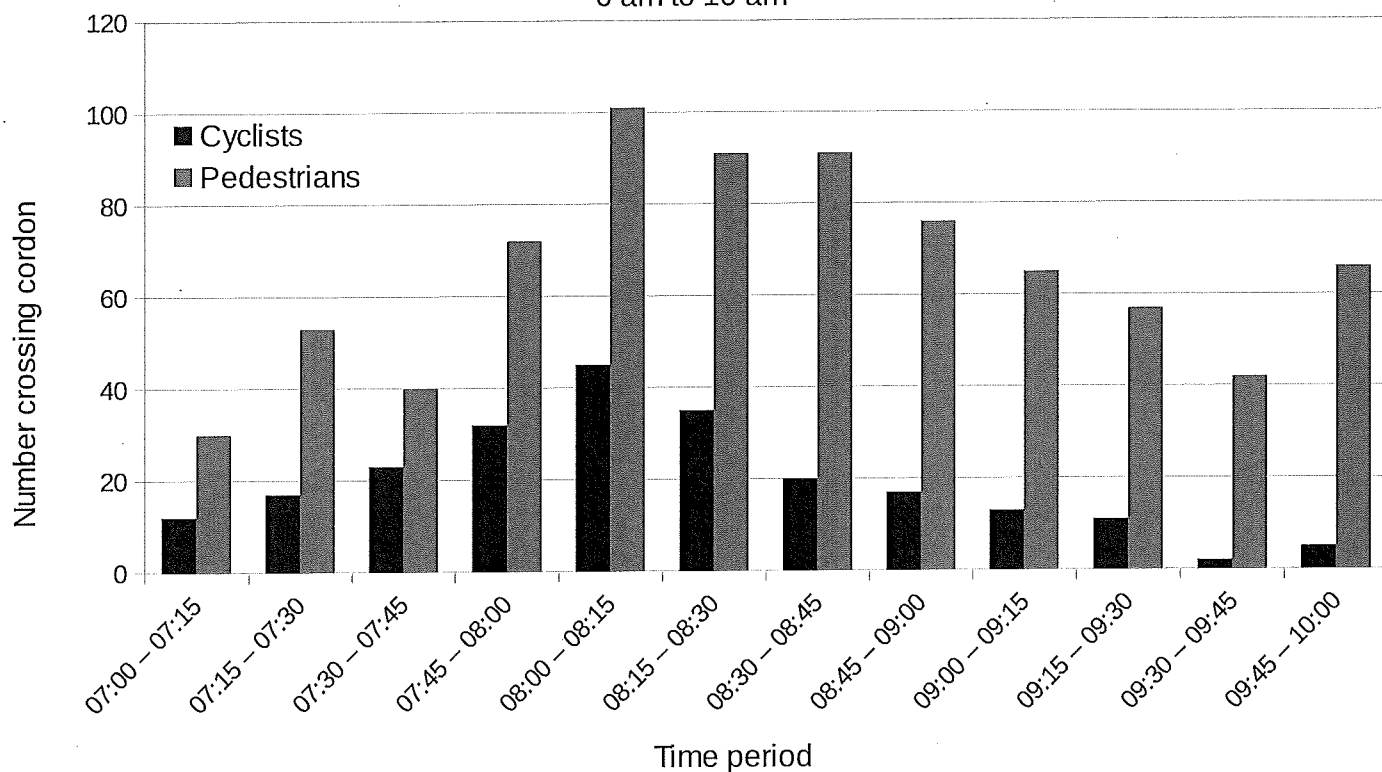
Gungahlin 2016 Cordon Count PM – Numbers per time interval

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
16:00 – 16:15	Inbound	2	2	0	18	10	8
	Outbound	6	5	1	27	21	6
	Both	8	7	1	45	31	14
16:15 – 16:30	Inbound	3	2	1	14	14	0
	Outbound	5	3	2	34	22	12
	Both	8	5	3	48	36	12
16:30 – 16:45	Inbound	5	5	0	13	8	5
	Outbound	9	7	2	29	18	11
	Both	14	12	2	42	26	16
16:45 – 17:00	Inbound	8	6	2	27	15	12
	Outbound	7	6	1	24	14	10
	Both	15	12	3	51	29	22
17:00 – 17:15	Inbound	4	4	0	16	12	4
	Outbound	4	3	1	56	31	25
	Both	8	7	1	72	43	29
17:15 – 17:30	Inbound	3	3	0	39	19	20
	Outbound	5	3	2	44	33	11
	Both	8	6	2	83	52	31
17:30 – 17:45	Inbound	2	2	0	25	13	12
	Outbound	5	5	0	44	24	20
	Both	7	7	0	69	37	32
17:45 – 18:00	Inbound	4	2	2	28	12	16
	Outbound	5	4	1	37	13	24
	Both	9	6	3	65	25	40
18:00 – 18:15	Inbound	3	1	2	16	6	10
	Outbound	7	3	4	45	26	19
	Both	10	4	6	61	32	29
18:15 – 18:30	Inbound	2	2	0	17	13	4
	Outbound	4	4	0	30	17	13
	Both	6	6	0	47	30	17
18:30 – 18:45	Inbound	2	2	0	26	13	13
	Outbound	4	4	0	31	18	13
	Both	6	6	0	57	31	26
18:45 – 19:00	Inbound	4	3	1	17	8	9
	Outbound	9	8	1	33	13	20
	Both	13	11	2	50	21	29
16:00 – 19:00	Inbound	42	34	8	256	143	113
	Outbound	70	55	15	434	250	184
	Both	112	89	23	690	393	297

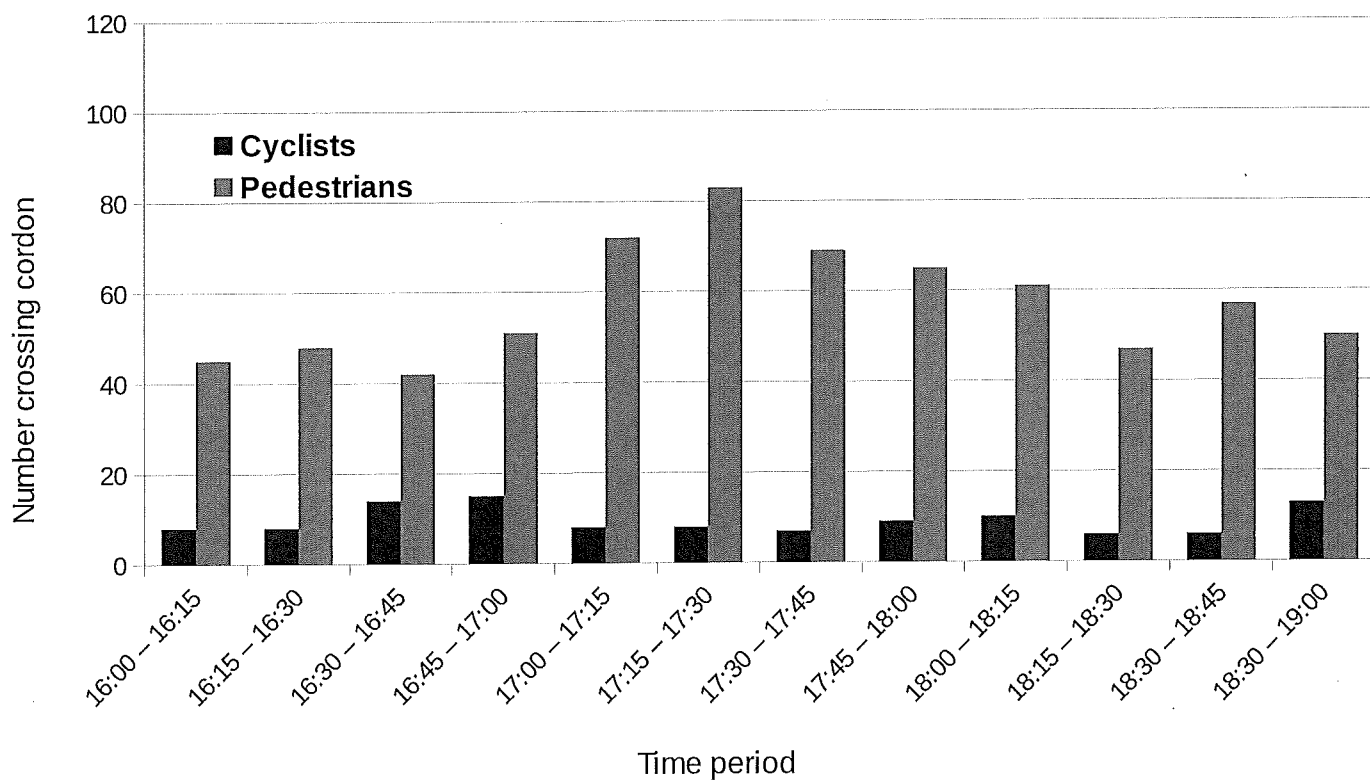
Gungahlin 2016 Cordon Count – Numbers per time interval

Gungahlin Cordon Count 2016 AM

6 am to 10 am

**Gungahlin Cordon Count 2016 PM**

4 pm to 7 pm



A3. Comparison of 2016 and 2015 cordon count data

This section contains a comparison of the cordon counts at Gungahlin for 2016 and 2015

Both counts were undertaken on a Thursday – 25 February 2016 and 26 February 2015.

The differences between the 2016 and the 2015 figures are the increase (or decrease shown as a negative) in the number from 2015 expressed as a percentage.

Gungahlin 2016/2015 cyclists & pedestrian comparison									
Session	2016			2015			Difference % 2016/2015		
	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total
Morning (AM)	232	784	1016	167	671	838	38.9%	16.8%	21.2%
Afternoon (PM)	112	690	802	124	696	820	-9.7%	-0.9%	-2.2%

Gungahlin 2016/2015 cyclists AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
G01	Both	31	30	1	14	10	4	7.3%	8.6%	-1.3%
G02	Both	8	7	1	7	4	3	0.4%	1.3%	-0.9%
G03	Both	18	11	7	13	8	5	2.2%	1.3%	0.9%
G04	Both	11	9	2	1	1	0	4.3%	3.4%	0.9%
G05	Both	11	8	3	17	10	7	-2.6%	-0.9%	-1.7%
G06	Both	2	2	0	7	7	0	-2.2%	-2.2%	0.0%
G07	Both	9	8	1	6	1	5	1.3%	3.0%	-1.7%
G08	Both	13	11	2	15	13	2	-0.9%	-0.9%	0.0%
G09	Both	26	19	7	10	9	1	6.9%	4.3%	2.6%
G10	Both	45	37	8	33	24	9	5.2%	5.6%	-0.4%
G11	Both	3	2	1	4	3	1	-0.4%	-0.4%	0.0%
G12	Both	44	33	11	36	34	2	3.4%	-0.4%	3.9%
G13	Both	11	10	1	4	3	1	3.0%	3.0%	0.0%
All sites	Both	232	187	45	167	127	40	28.0%	25.9%	2.2%

Gungahlin 2016/2015 pedestrians AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
G01	Both	40	21	19	61	19	42	-9.1%	0.9%	-9.9%
G02	Both	35	13	22	16	3	13	8.2%	4.3%	3.9%
G03	Both	108	50	58	88	55	33	8.6%	-2.2%	10.8%
G04	Both	90	43	47	59	24	35	13.4%	8.2%	5.2%
G05	Both	79	46	33	100	40	60	-9.1%	2.6%	-11.6%
G06	Both	32	16	16	56	22	34	-10.3%	-2.6%	-7.8%
G07	Both	99	44	55	57	26	31	18.1%	7.8%	10.3%
G08	Both	53	25	28	27	13	14	11.2%	5.2%	6.0%
G09	Both	48	26	22	42	12	30	2.6%	6.0%	-3.4%
G10	Both	65	27	38	54	30	24	4.7%	-1.3%	6.0%
G11	Both	40	15	25	17	9	8	9.9%	2.6%	7.3%
G12	Both	82	50	32	78	30	48	1.7%	8.6%	-6.9%
G13	Both	13	9	4	16	14	2	-1.3%	-2.2%	0.9%
All sites	Both	784	385	399	671	297	374	48.7%	37.9%	10.8%

Gungahlin 2016/2015 cyclists PM comparison

Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
G01	Both	6	3	3	18	12	6	7.3%	8.6%	-1.3%
G02	Both	2	1	1	2	2	0	0.4%	1.3%	-0.9%
G03	Both	15	13	2	4	3	1	2.2%	1.3%	0.9%
G04	Both	3	2	1	5	4	1	4.3%	3.4%	0.9%
G05	Both	11	8	3	13	7	6	-2.6%	-0.9%	-1.7%
G06	Both	0	0	0	1	1	0	-2.2%	-2.2%	0.0%
G07	Both	6	6	0	16	4	12	1.3%	3.0%	-1.7%
G08	Both	9	9	0	9	7	2	-0.9%	-0.9%	0.0%
G09	Both	3	2	1	8	8	0	6.9%	4.3%	2.6%
G10	Both	25	17	8	28	18	10	5.2%	5.6%	-0.4%
G11	Both	1	1	0	1	1	0	-0.4%	-0.4%	0.0%
G12	Both	22	18	4	19	18	1	3.4%	-0.4%	3.9%
G13	Both	9	6	3	0	0	0	3.0%	3.0%	0.0%
All sites	Both	112	86	26	124	85	39	28.0%	25.9%	2.2%

Gungahlin 2016/2015 pedestrians PM comparison

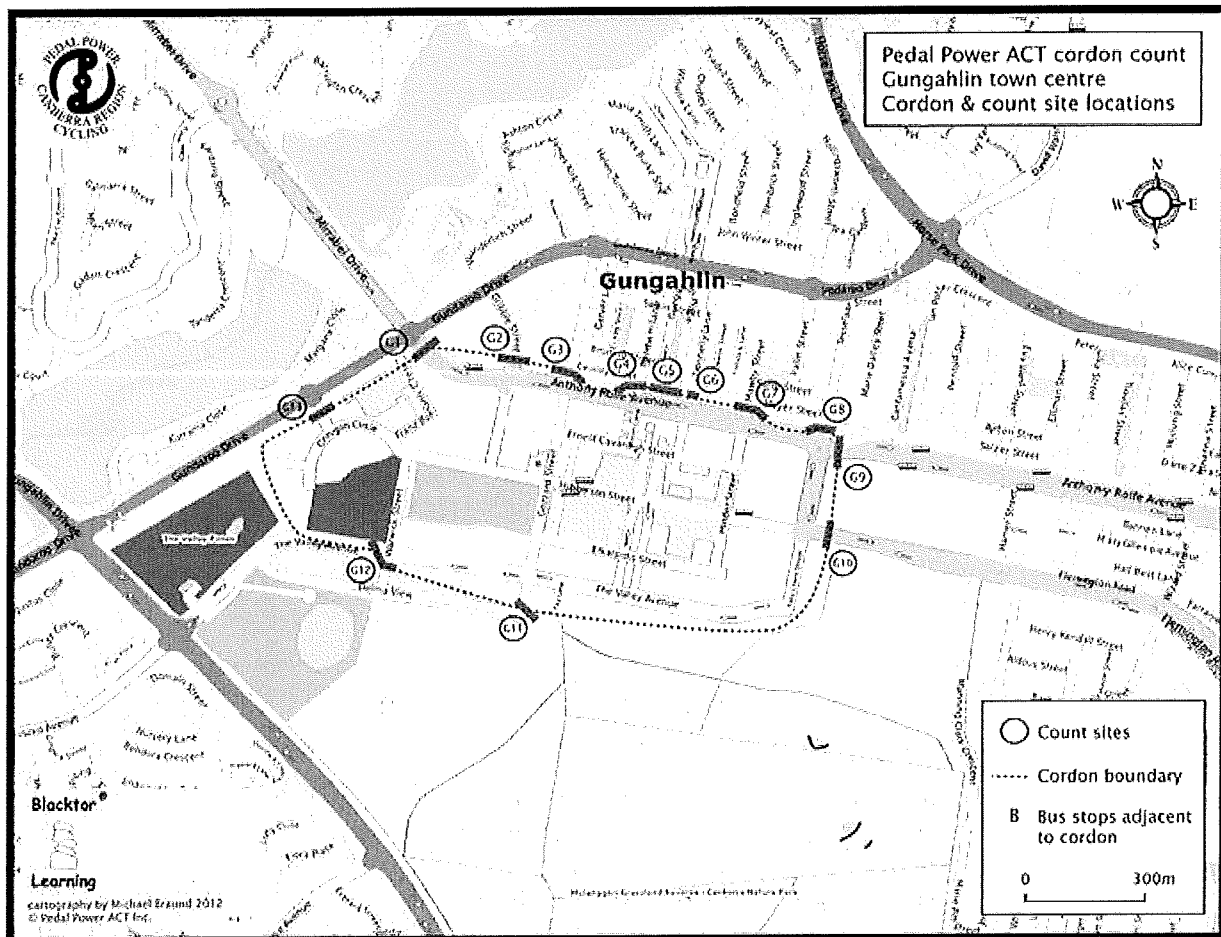
Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
G01	Both	23	11	12	69	36	33	-9.1%	0.9%	-9.9%
G02	Both	18	11	7	19	9	10	8.2%	4.3%	3.9%
G03	Both	116	75	41	99	48	51	8.6%	-2.2%	10.8%
G04	Both	114	59	55	37	13	24	13.4%	8.2%	5.2%
G05	Both	79	46	33	124	51	73	-9.1%	2.6%	-11.6%
G06	Both	26	13	13	51	25	26	-10.3%	-2.6%	-7.8%
G07	Both	82	42	40	56	32	24	18.1%	7.8%	10.3%
G08	Both	35	20	15	21	12	9	11.2%	5.2%	6.0%
G09	Both	34	16	18	41	19	22	2.6%	6.0%	-3.4%
G10	Both	37	21	16	81	33	48	4.7%	-1.3%	6.0%
G11	Both	60	24	36	6	3	3	9.9%	2.6%	7.3%
G12	Both	43	32	11	73	48	25	1.7%	8.6%	-6.9%
G13	Both	23	15	8	19	10	9	-1.3%	-2.2%	0.9%
All sites	Both	690	385	305	696	339	357	48.7%	37.9%	10.8%

Appendix B – Cordon count locations

The map below shows the cordon around the Gungahlin town centre and the locations of the count locations. Descriptions of the locations are given below the map.

The cordon count locations were the same as in 2015 (and previous years).

Pertinent features relating to count locations when the count was undertaken in 2016 are given below the site descriptions.



Count locations descriptions

- **Site G1** – On Anthony Rolf Avenue and the adjacent footpaths to the south east of roundabout with Gundaroo Drive (not along Gundaroo Drive)
- **Site G2** – on Gribble Street and the adjacent footpaths to the north of Anthony Rolf Avenue (not along Anthony Rolf Avenue)
- **Site G3** – on Gozzard Street and the adjacent footpaths to the north of Anthony Rolf Avenue (not along Anthony Rolf Avenue) and on the Anthony Rolf Avenue service road to the east of Gozzard Street
- **Site G4** – on Boreham Lane and the adjacent footpaths to the north of Anthony Rolf Avenue (not along Anthony Rolf Avenue) and on the Anthony Rolf Avenue service road to the west

of Gozzard Street

- **Site G5** – on Gungahlin Place (both carriageways) and the adjacent footpaths to the north of Anthony Rolf Avenue (not along Anthony Rolf Avenue)
- **Site G6** – on Donnelly Lane and the adjacent footpaths to the north of Anthony Rolf Avenue (not along Anthony Rolf Avenue)
- **Site G7** – on Mawby Street and the adjacent footpaths to the north of Anthony Rolf Avenue (not along Anthony Rolf Avenue) and on the Anthony Rolf Avenue service road to the east of Gozzard Street
- **Site G8** – on Tesselaar Street (both carriageways) and the adjacent footpaths to the north of Anthony Rolf Avenue roundabout (not along Anthony Rolf Avenue) and on the Anthony Rolf Avenue service road to the west of Gozzard Street
- **Site G9** – On Anthony Rolf Avenue (both carriageways) and the adjacent footpaths to the east of roundabout with Tesselaar Street (not along Tesselaar Street)
- **Site G10** – On Flemington Road (both carriageways) and the adjacent footpaths to the east of roundabout with Tesselaar Street and Kate Grace Street (not along Tesselaar Street or Kate Grace Street)
- **Site G11** – on Gozzard Street and the adjacent footpaths to the south of The Valley Avenue (not along The Valley Avenue) and on the lane way leading to Fay lane
- **Site G12** – on The Valley Avenue and the adjacent footpaths to the west of Warrick Street junction (not along Warrick Street)
- **Site G13** – On Ginn Street and the adjacent footpaths to the south east of roundabout with Gundaroo Drive (not along Gundaroo Drive)

Pertinent features relating to count locations when the count was undertaken

None

Appendix C – Data collection procedures

The 'instructions' given to the cordon count data collectors is summarised in this appendix.

Data collection procedures

1. Set up the data collection App

Download the Roads ACT 'cordon count App' to use for recording the count data on your smart phone or tablet.

Test that the App is working on your device:

- Enter some trial data in the App and 'send data' – your data will be delivered to the Cordon Count Manager
- Send an email to the Cordon Count Manager advising that you have sent some trial data
- The Cordon Count Manager will confirm that the data was or was not received
- If the data was not received, re load the App and enter some trial data and send it and an email to the Cordon Count Manager

2. Have the data collections sheets available

Print out some paper data collection sheet for use if necessary to record the data if the App can not be used (eg, if your phone fails).

3. Read and understand the counting rules

The counting rules (Appendix D) are to be followed when counting people walking and riding

4. Go to allocated counting site

Arrive at your allocated count location in time to start the count at the scheduled start time.

Locate yourself safely so that you can clearly see everyone who crosses your count location.

Make yourself comfortable – you will be there for three hours.

Take with you:

- Your smart phone or tablet with the Roads ACT Cordon Count App loaded and working
- Two paper data collection sheet (printed out) – for use if the App or your smart phone or tablet does not work
- Pens or pencils for recording your counts on paper (when required)
- A clipboard or something similar to hold the paper data collection sheets when recording your counts
- Count location details and counting instructions for your count location
- A watch or other time piece – for use if your smart phone or tablet does not work
- A chair if you want to sit on it during the count – you can stand or sit on the ground and at some

locations you can sit in your car

- Water and snacks (if desired)
- A hat and sun screen if it's a sunny day, warm clothes if it is likely to be cold and/or wet weather gear if rain is likely.

5. Undertake the cordon count

Count all the pedestrians and cyclists crossing the cordon at your location as per the counting rules (Appendix D) and record the data on the App or on the paper data collection sheets.

6. At the end of each counting session

Submit your data via the App 'Send Data' button – that sends the data via email to designated people for future use (please do not send data during the count session as that generates multiple files for your count data).

Complete and sign any paper data collection sheets used and deliver the sheets to the supervisor.

Appendix D – Counting rules

The 'rules' used by the cordon count counters when collecting data on people walking and riding bikes across the cordon are given in this appendix.

Counting rules

1. Count people walking and riding bikes across the cordon count location (as given to each counter) – count there and nowhere else, regardless of if you think people have or have not been counted elsewhere. (The count locations make a complete cordon.)
2. People riding bikes (cyclists) are those on pedal bicycles, recumbents, trikes, electric assist bicycles (not motorbikes), or link bikes (tag-alongs), or on tricycles, or walking their bikes. A couple on a tandem are two people riding bikes. Children in trailers or in child seats are not riding bikes and are pedestrians for count purposes.
3. People walking (pedestrians) are those walking (not pushing a bike), jogging or running, or on roller skates, skis, kick scooters or mobility scooters and children riding in prams, child seats and trailers.
4. Males and females are designated by your best estimate (it is likely any errors will cancel out).
5. Start on time at exactly 7 am or 4 pm as appropriate.
6. Finish on time at exactly 10 am or 7 pm as appropriate.
7. Do not count people in sight who cross the count location before the start time or after finish time.
8. Do not count yourself or anyone else associated with the count (ie, the supervisor and quality assurance checkers).
9. Lookout for well intentioned, but misinformed, people who think they are helping by repeatedly crossing the cordon count location to inflate the count. If you see one, only count them once and advise the supervisor.
10. Do not advertise that you are counting people walking and riding (but do explain what you are doing if asked).
11. We are only counting people who enter or leave the cordon area via public roads, paths and spaces, not via residential or business premises – people who emerge from private property are NOT counted. There is one exception to this rule – when you know for certain that someone has approached along 'your' road or path, and only cut the corner via private property just before reaching your control. For this reason, the cordon counting point on each road or path is some distance away from the intersections with the roads that form the cordon boundary.
12. We are not trying to count as many people as possible – we are trying to count as accurately as possible.



P 02 6248 7995
F 02 6248 7774
E office@pedalpower.org.au
W pedalpower.org.au
A GPO 581, Canberra ACT 2601

ABN: 98 440 716 821

Tuggeranong town centre cordon count
on
Wednesday 24 February 2016
undertaken by Pedal Power ACT for Roads ACT
Report on cordon count and data collected

Table of Contents

1. Tuggeranong cordon count.....	1
2. Cordon count data.....	1
4. Cordon count procedures.....	1
5. Weather during the cordon count.....	2
6. Quality assurance.....	2
Appendix A – Cordon count data summary.....	3
A1. People crossing the cordon at each count site.....	3
A2. People crossing the cordon during each time period.....	5
A3. Comparison of 2016 and 2015 cordon count data.....	8
Appendix B – Cordon count locations.....	10
Appendix C – Data collection procedures.....	12
Appendix D – Counting rules.....	14

Cordon count managed, audited and report prepared by:

Report reviewed by:




1. Tuggeranong cordon count

Pedal Power ACT undertook a cordon count of all people walking and riding bikes into and out of the Tuggeranong town centre on Wednesday 24 February 2016 during two counting sessions – from 7:00 am to 10:00 am and from 4:00 pm to 7:00 pm.

This report outlines the cordon count details and procedure, gives the location of the count sites, resulting data and summarises the data collected.

2. Cordon count data

The cordon count data gives the time people (separated between male and female) walked or rode bikes in each direction (into the town centre or out of the town centre) across the cordon at each cordon count location (Appendix B).

The data is reported in two separate spreadsheet files, one for the morning count and one for the afternoon count, with file name:

cordon-count-2016-data-TUGGERANONG-V1

Appendix A contains a summary of the cordon count data reported as:

- A1. The number of people that crossed the cordon during the morning and afternoon counting sessions (separated into cyclists and pedestrians).
- A2. The number of people that crossed the cordon at each count site during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A3. The number of people that crossed the cordon during each fifteen minute period during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A4. A comparison of the number of people riding or walking across the cordon at each location in 2016 and 2015.

Data collectors recorded their data using the 'cordon count App' supplied by Roads ACT or if for some reason the App could not be used (eg, their phone stopped working) then the data was collected on prepared data collection sheets and subsequently entered into the data sets. Appendix C outlines the counting procedure and Appendix D gives the 'rules' for counting people crossing the cordon.

4. Cordon count procedures

Appendix C contains a map of the cordon around the Tuggeranong town centre and details of the cordon count locations.

There are eight cordon count locations designated T1 to T8 as given in that appendix. These are all the same locations as used in the 2015 and previous cordon counts.

We stationed people (data collectors) at each cordon count location and they counted the people walking and riding bikes (separately) into and out of the town centre (across the cordon line) during the counting sessions using the 'cordon count App' supplied by Roads ACT.

The definitions of a person walking and riding a bike are (the same as in previous years):

- *People riding bikes* are those on pedal bicycles, recumbents, trikes, power-assisted bicycles (not motorbikes), or on link-bikes (tag-alongs), or on pavement tricycles, or walking their bikes. A couple on a tandem are two people. Children in trailers or seats are not riding bikes.
- *People walking* are those walking, on roller skates, kick scooters or mobility scooters and children riding in prams and trailers.

Appendix D contains the data collection 'rules' observed by the data collectors. They are the same as used in previous cordon counts.

5. Weather during the cordon count

The weather was fine on the day of the count.

- Temperature range (°C): 14 to 36
- Precipitation (mm): 0

6. Quality assurance

To ensure that we were collecting and recording the correct data and that we had entered that data correctly into the database, we undertook the following checks:

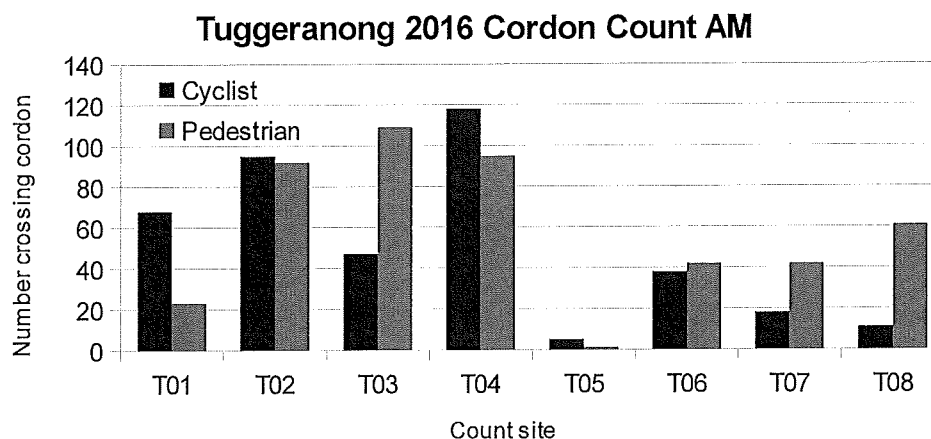
- We checked that a person (the data collector) was in place at each cordon count location at the start of each session (an auditor visited each count location within the first fifteen minutes of each session).
- When visiting a data collector, the auditor checked that they were counting and recording the data correctly – the correct count location and the correct definition of inbound and outbound and of people walking and riding bikes.
- The auditors visited the data collectors again during each counting session to ensure they were still in place and counting.
- The data transmitted by the App was checked and any data outside of the designated counting time was removed (typically such data, when it occurred, was a test data entry).
- Each paper data collection sheet used (when the App failed) was completed and signed (as a true record) by the data collector.
- A person, who was not involved in the data entry, independently checked the data from the paper data collection sheet records entered into the database.

Appendix A – Cordon count data summary

A1. People crossing the cordon at each count site

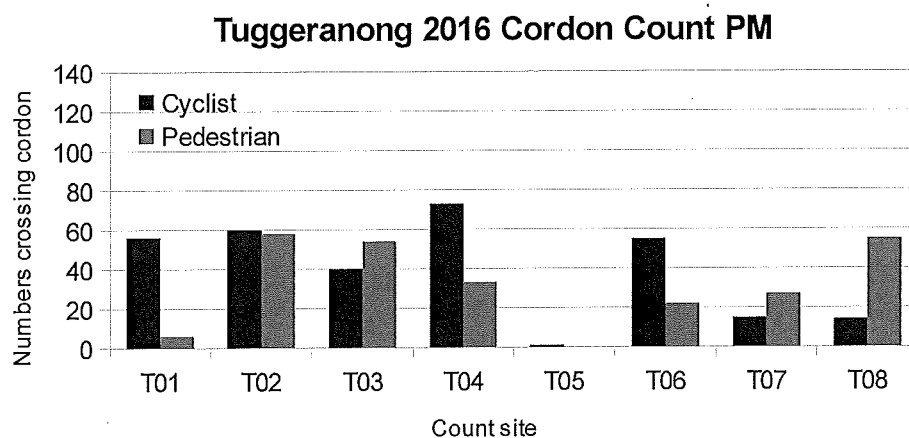
Tuggeranong 2016 Cordon Count AM – Numbers by count site

Morning 7 am to 10 am		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
T01	Inbound	55	41	14	15	10	5
	Outbound	13	11	2	8	5	3
	Both	68	52	16	23	15	8
T02	Inbound	70	56	14	50	25	25
	Outbound	25	13	12	42	19	23
	Both	95	69	26	92	44	48
T03	Inbound	38	34	4	80	50	30
	Outbound	9	5	4	29	13	16
	Both	47	39	8	109	63	46
T04	Inbound	74	56	18	52	32	20
	Outbound	44	35	9	43	17	26
	Both	118	91	27	95	49	46
T05	Inbound	5	4	1	1	0	1
	Outbound	0	0	0	0	0	0
	Both	5	4	1	1	0	1
T06	Inbound	25	20	5	36	20	16
	Outbound	13	4	9	6	4	2
	Both	38	24	14	42	24	18
T07	Inbound	17	12	5	33	25	8
	Outbound	1	1	0	9	4	5
	Both	18	13	5	42	29	13
T08	Inbound	7	6	1	51	31	20
	Outbound	4	3	1	10	5	5
	Both	11	9	2	61	36	25
All sites	Inbound	291	229	62	318	193	125
	Outbound	109	72	37	147	67	80
	Both	400	301	99	465	260	205



Tuggeranong 2016 Cordon Count PM
Numbers by count site

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
T01	Inbound	8	8	0	1	0	1
	Outbound	48	40	8	5	2	3
	Both	56	48	8	6	2	4
T02	Inbound	22	20	2	27	10	17
	Outbound	38	32	6	31	13	18
	Both	60	52	8	58	23	35
T03	Inbound	6	5	1	15	12	3
	Outbound	34	29	5	39	31	8
	Both	40	34	6	54	43	11
T04	Inbound	20	18	2	10	6	4
	Outbound	53	47	6	23	15	8
	Both	73	65	8	33	21	12
T05	Inbound	1	1	0	0	0	0
	Outbound	0	0	0	0	0	0
	Both	1	1	0	0	0	0
T06	Inbound	11	11	0	4	3	1
	Outbound	44	38	6	18	9	9
	Both	55	49	6	22	12	10
T07	Inbound	1	1	0	6	3	3
	Outbound	14	11	3	21	14	7
	Both	15	12	3	27	17	10
T08	Inbound	1	1	0	6	3	3
	Outbound	13	13	0	49	33	16
	Both	14	14	0	55	36	19
All sites	Inbound	70	65	5	69	37	32
	Outbound	244	210	34	186	117	69
	Both	314	275	39	255	154	101



A2. People crossing the cordon during each time period

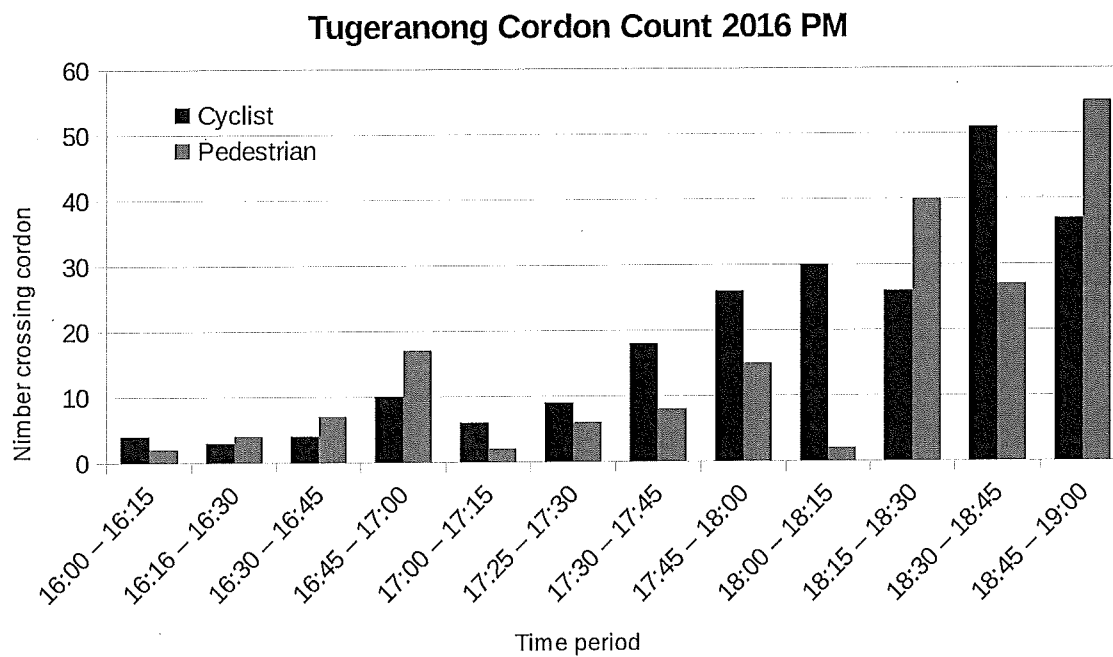
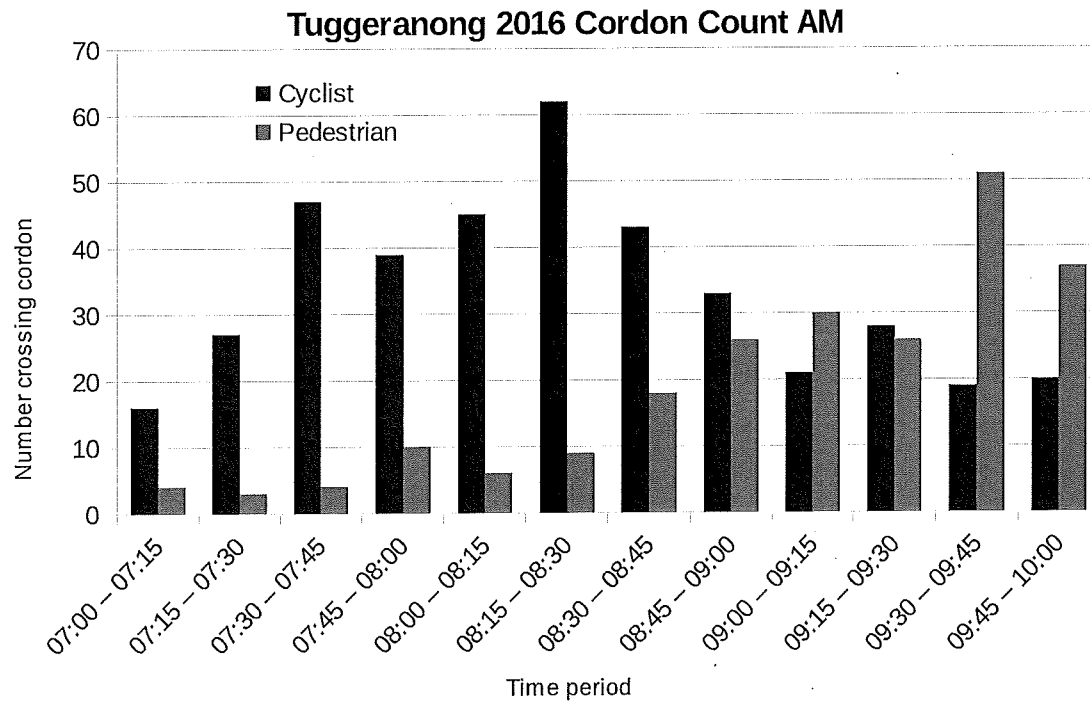
Tuggeranong 2016 Cordon Count AM Numbers per time interval

Morning 7 am to 10 am		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
07:00 – 07:15	Inbound	10	8	2	13	5	8
	Outbound	6	6	0	14	7	7
	Both	16	14	2	27	12	15
07:15 – 07:30	Inbound	17	15	2	13	4	9
	Outbound	10	8	2	6	4	2
	Both	27	23	4	19	8	11
07:30 – 07:45	Inbound	32	27	5	26	12	14
	Outbound	15	13	2	13	4	9
	Both	47	40	7	39	16	23
07:45 – 08:00	Inbound	34	24	10	49	33	16
	Outbound	5	1	4	12	6	6
	Both	39	25	14	61	39	22
08:00 – 08:15	Inbound	32	25	7	36	23	13
	Outbound	13	7	6	12	7	5
	Both	45	32	13	48	30	18
08:15 – 08:30	Inbound	49	37	12	24	17	7
	Outbound	13	10	3	12	6	6
	Both	62	47	15	36	23	13
08:30 – 08:45	Inbound	34	27	7	46	31	15
	Outbound	9	5	4	17	5	12
	Both	43	32	11	63	36	27
08:45 – 09:00	Inbound	27	21	6	20	16	4
	Outbound	6	3	3	15	5	10
	Both	33	24	9	35	21	14
09:00 – 09:15	Inbound	16	12	4	34	22	12
	Outbound	5	3	2	12	6	6
	Both	21	15	6	46	28	18
09:15 – 09:30	Inbound	19	16	3	21	13	8
	Outbound	9	4	5	17	10	7
	Both	28	20	8	38	23	15
09:30 – 09:45	Inbound	10	6	4	20	11	9
	Outbound	9	6	3	5	3	2
	Both	19	12	7	25	14	11
09:45 – 10:00	Inbound	11	11	0	16	6	10
	Outbound	9	6	3	12	4	8
	Both	20	17	3	28	10	18
07:00 – 10:00	Inbound	291	229	62	318	193	125
	Outbound	109	72	37	147	67	80
	Both	400	301	99	465	260	205

Tuggeranong 2016 Cordon Count PM
Numbers per time interval

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
16:00 – 16:15	Inbound	3	3	0	7	5	2
	Outbound	14	11	3	5	2	3
	Both	17	14	3	12	7	5
16:16 – 16:30	Inbound	2	2	0	3	2	1
	Outbound	13	11	2	7	6	1
	Both	15	13	2	10	8	2
16:30 – 16:45	Inbound	3	3	0	5	4	1
	Outbound	16	15	1	10	7	3
	Both	19	18	1	15	11	4
16:45 – 17:00	Inbound	7	7	0	5	4	1
	Outbound	16	16	0	7	6	1
	Both	23	23	0	12	10	2
17:00 – 17:15	Inbound	5	5	0	1	0	1
	Outbound	28	25	3	14	9	5
	Both	33	30	3	15	9	6
17:25 – 17:30	Inbound	6	5	1	4	2	2
	Outbound	35	29	6	18	14	4
	Both	41	34	7	22	16	6
17:30 – 17:45	Inbound	12	11	1	5	3	2
	Outbound	32	26	6	23	11	12
	Both	44	37	7	28	14	14
17:45 – 18:00	Inbound	3	3	0	10	2	8
	Outbound	18	14	4	21	12	9
	Both	21	17	4	31	14	17
18:00 – 18:15	Inbound	5	4	1	1	1	0
	Outbound	17	12	5	24	9	15
	Both	22	16	6	25	10	15
18:15 – 18:30	Inbound	4	4	0	11	6	5
	Outbound	15	15	0	16	13	3
	Both	19	19	0	27	19	8
18:30 – 18:45	Inbound	13	12	1	4	1	3
	Outbound	22	19	3	15	9	6
	Both	35	31	4	19	10	9
18:45 – 19:00	Inbound	7	6	1	13	7	6
	Outbound	18	17	1	26	19	7
	Both	25	23	2	39	26	13
16:00 – 19:00	Inbound	70	65	5	69	37	32
	Outbound	244	210	34	186	117	69
	Both	314	275	39	255	154	101

Tuggeranong 2016 Cordon Count
Numbers per time interval



A3. Comparison of 2016 and 2015 cordon count data

This section contains a comparison of the cordon counts at Tuggeranong for 2016 and 2015

Both counts were undertaken on a Wednesday – 24 February 2016 and 25 February 2015.

The differences between the 2016 and the 2015 figures are the increase (or decrease shown as a negative) in the number from 2015 expressed as a percentage.

Tuggeranong 2016/2015 cyclists & pedestrians (both directions) comparison

Session	2016			2015			Difference % 2016/2015		
	Cyclists	Pedestrians	Total	Cyclists	Pedestrians	Total	Cyclists	Pedestrians	Total
Morning (AM)	400	465	865	331	403	734	20.8%	15.4%	17.8%
Afternoon (PM)	314	255	569	331	394	725	-5.1%	-35.3%	-21.5%
Total	714	720	1434	662	797	1459	7.9%	-9.7%	-1.7%

Tuggeranong 2016/2015 cyclists AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Site	Direction									
T01	Both	68	52	16	69	54	15	-1.4%	-3.7%	6.7%
T02	Both	95	69	26	66	47	19	43.9%	46.8%	36.8%
T03	Both	47	39	8	42	31	11	11.9%	25.8%	-27.3%
T04	Both	118	91	27	75	61	14	57.3%	49.2%	92.9%
T05	Both	5	4	1	3	3	0	66.7%	33.3%	n.a
								-		
T06	Both	38	24	14	49	38	11	-22.4%	36.8%	27.3%
T07	Both	18	13	5	16	12	4	12.5%	8.3%	25.0%
T08	Both	11	9	2	11	9	2	0.0%	0.0%	0.0%
All sites	Both	400	301	99	331	255	76	20.8%	18.0%	30.3%

Tuggeranong 2016/2015 pedestrians AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Site	Direction									
								200.0		
T01	Both	23	15	8	15	5	10	53.3%	%	-20.0%
T02	Both	92	44	48	107	34	73	-14.0%	29.4%	-34.2%
T03	Both	109	63	46	90	44	46	21.1%	43.2%	0.0%
T04	Both	95	49	46	79	31	48	20.3%	58.1%	-4.2%
T05	Both	1	0	1	0	0	0	n.a	n.a	n.a
T06	Both	42	24	18	35	20	15	20.0%	20.0%	20.0%
								100.0	163.6	
T07	Both	42	29	13	21	11	10	%	%	30.0%
								-		
T08	Both	61	36	25	56	40	16	8.9%	10.0%	56.3%
All sites	Both	465	260	205	403	185	218	15.4%	40.5%	-6.0%

Tuggeranong 2016/2015 cyclists PM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
T01	Both	56	48	8	60	51	9	-6.7%	-5.9%	-11.1%
T02	Both	60	52	8	69	60	9	-13.0%	13.3%	-11.1%
T03	Both	40	34	6	59	47	12	-32.2%	27.7%	-50.0%
T04	Both	73	65	8	69	62	7	5.8%	4.8%	14.3%
T05	Both	1	1	0	13	12	1	-92.3%	91.7%	n.a
T06	Both	55	49	6	35	30	5	57.1%	63.3%	20.0%
T07	Both	15	12	3	14	8	6	7.1%	50.0%	-50.0%
T08	Both	14	14	0	12	12	0	16.7%	16.7%	n.a
All sites	Both	314	275	39	331	282	49	-5.1%	-2.5%	-20.4%

Tuggeranong 2016/2015 pedestrians PM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
T01	Both	6	2	4	32	15	17	-81.3%	86.7%	-76.5%
T02	Both	58	23	35	91	36	55	-36.3%	36.1%	-36.4%
T03	Both	54	43	11	111	56	55	-51.4%	23.2%	-80.0%
T04	Both	33	21	12	61	32	29	-45.9%	34.4%	-58.6%
T05	Both	0	0	0	0	0	0	n.a	n.a	n.a
T06	Both	22	12	10	23	16	7	-4.3%	25.0%	42.9%
T07	Both	27	17	10	31	11	20	-12.9%	54.5%	-50.0%
T08	Both	55	36	19	45	29	16	22.2%	24.1%	18.8%
All sites	Both	255	154	101	394	195	199	35.3%	21.0%	-49.2%

- **Site T01** – On Athllon Drive and the adjacent footpaths (but not the adjacent community path –site T01) some 100 m south of Lake Tuggeranong spillway bridge (adjacent to site T02)
- **Site T02** – On the around Lake Tuggeranong community path near the Lake Tuggeranong spillway bridge
- **Site T03** – On Soward Way bridge over Lake Tuggeranong including the footpaths on the bridge
- **Site T04** – On the community path footbridge over Lake Tuggeranong to the south east of Soward Way
- **Site T05** – On Athllon Drive and the adjacent footpaths (but not the adjacent community path –site T06) between Drakeford Drive and Anketell Street (adjacent to site T06)
- **Site T06** – On the community path adjacent to Athllon Drive between Drakeford Drive and the Drakeford Drive under pass near Anketell Street (adjacent to site T05)
- **Site T07** – On Barr Smith Avenue and the adjacent footpaths between Helpmann Street and Athllon Drive (but not on or along Athllon Drive)
- **Site T08** – On Don Dunstan Drive and the adjacent footpaths between Pine Island Road and Athllon Drive (but not on or along Athllon Drive)

Pertinent features relating to count locations when the count was undertaken

At Site T05 '*On Athllon Drive and the adjacent footpaths (but not the adjacent community path) between Drakeford Drive and Anketell Street*' the verges were closed when the count was undertaken so people could not use the informal paths adjacent to the carriageway and, if wishing to use that corridor, had to walk or ride on the carriageway.

Appendix C – Data collection procedures

The 'instructions' given to the cordon count data collectors is summarised in this appendix.

Data collection procedures

1. Set up the data collection App

Download the Roads ACT 'cordon count App' to use for recording the count data on your smart phone or tablet.

Test that the App is working on your device:

- Enter some trial data in the App and 'send data' – your data will be delivered to the Cordon Count Manager
- Send an email to the Cordon Count Manager advising that you have sent some trial data
- The Cordon Count Manager will confirm that the data was or was not received
- If the data was not received, re load the App and enter some trial data and send it and an email to the Cordon Count Manager

2. Have the data collections sheets available

Print out some paper data collection sheet for use if necessary to record the data if the App can not be used (eg, if your phone fails).

3. Read and understand the counting rules

The counting rules (Appendix D) are to be followed when counting people walking and riding

4. Go to allocated counting site

Arrive at your allocated count location in time to start the count at the scheduled start time.

Locate yourself safely so that you can clearly see everyone who crosses your count location.

Make yourself comfortable – you will be there for three hours.

Take with you:

- Your smart phone or tablet with the Roads ACT Cordon Count App loaded and working
- Two paper data collection sheet (printed out) – for use if the App or your smart phone or tablet does not work
- Pens or pencils for recording your counts on paper (when required)
- A clipboard or something similar to hold the paper data collection sheets when recording your counts
- Count location details and counting instructions for your count location
- A watch or other time piece – for use if your smart phone or tablet does not work
- A chair if you want to sit on it during the count – you can stand or sit on the ground and at some

locations you can sit in your car

- Water and snacks (if desired)
- A hat and sun screen if it's a sunny day, warm clothes if it is likely to be cold and/or wet weather gear if rain is likely.

5. Undertake the cordon count

Count all the pedestrians and cyclists crossing the cordon at your location as per the counting rules (Appendix D) and record the data on the App or on the paper data collection sheets.

6. At the end of each counting session

Submit your data via the App 'Send Data' button – that sends the data via email to designated people for future use (please do not send data during the count session as that generates multiple files for your count data).

Complete and sign any paper data collection sheets used and deliver the sheets to the supervisor.

Appendix D – Counting rules

The 'rules' used by the cordon count counters when collecting data on people walking and riding bikes across the cordon are give in this appendix.

Counting rules

1. Count people walking and riding bikes across the cordon count location (as given to each counter) – count there and nowhere else, regardless of if you think people have or have not been counted elsewhere. (The count locations make a complete cordon.)
2. People riding bikes (cyclists) are those on pedal bicycles, recumbents, trikes, electric assist bicycles (not motorbikes), or link bikes (tag-alongs), or on tricycles, or walking their bikes. A couple on a tandem are two people riding bikes. Children in trailers or in child seats are not riding bikes and are pedestrians for count purposes.
3. People walking (pedestrians) are those walking (not pushing a bike), jogging or running, or on roller skates, skis, kick scooters or mobility scooters and children riding in prams, child seats and trailers.
4. Males and females are designated by your best estimate (it is likely any errors will cancel out).
5. Start on time at exactly 7 am or 4 pm as appropriate.
6. Finish on time at exactly 10 am or 7 pm as appropriate.
7. Do not count people in sight who cross the count location before the start time or after finish time.
8. Do not count yourself or anyone else associated with the count (ie, the supervisor and quality assurance checkers).
9. Lookout for well intentioned, but misinformed, people who think they are helping by repeatedly crossing the cordon count location to inflate the count. If you see one, only count them once and advise the supervisor.
10. Do not advertise that you are counting people walking and riding (but do explain what you are doing if asked).
11. We are only counting people who enter or leave the cordon area via public roads, paths and spaces, not via residential or business premises – people who emerge from private property are NOT counted. There is one exception to this rule – when you know for certain that the someone has approached along 'your' road or path, and only cut the corner via private property just before reaching your control. For this reason, the cordon counting point on each road or path is some distance away from the intersections with the roads that form the cordon boundary.
12. We are not trying to count as many people as possible – we are trying to count as accurately as possible.



P 02 6248 7995
F 02 6248 7774
E office@pedalpower.org.au
W pedalpower.org.au
A GPO 581, Canberra ACT 2601

ABN: 98 440 716 821

Woden town centre cordon count
on
Wednesday 2nd March 2016
undertaken by Pedal Power ACT for Roads ACT
Report on cordon count and data collected

Table of Contents

1. Woden cordon count.....	1
2. Cordon count data.....	1
4. Cordon count procedures.....	1
5. Weather during the cordon count.....	2
6. Quality assurance.....	2
Appendix A – Cordon count data summary.....	3
A1. People crossing the cordon at each count site.....	3
A2. People crossing the cordon during each time period.....	8
A3. Comparison of 2016 and 2015 cordon count data.....	12
Appendix B – Cordon count locations.....	17
Appendix C – Data collection procedures.....	20
Appendix D – Counting rules.....	22

Cordon count managed, audited and report prepared by:

Report reviewed by:




1. Woden cordon count

Pedal Power ACT undertook a cordon count of all people walking and riding bikes into and out of the Woden town centre on Wednesday 2nd March 2016 during two counting sessions – from 7:00 am to 10:00 am and from 4:00 pm to 7:00 pm.

This report outlines the cordon count details and procedure, gives the location of the count sites, resulting data and summarises the data collected.

2. Cordon count data

The cordon count data gives the time people (separated between male and female) walked or rode bikes in each direction (into the town centre or out of the town centre) across the cordon at each cordon count location (Appendix B).

The data is reported in a separate spreadsheet file with file name:

cordon-count-2016-data-Woden-V1

Appendix A contains a summary of the cordon count data reported as:

- A1. The number of people that crossed the cordon during the morning and afternoon counting sessions (separated into cyclists and pedestrians).
- A2. The number of people that crossed the cordon at each count site during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A3. The number of people that crossed the cordon during each fifteen minute period during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A4. A comparison of the number of people riding or walking across the cordon at each location in 2016 and 2015.

Data collectors recorded their data using the 'cordon count App' supplied by Roads ACT or if for some reason the App could not be used (eg, their phone stopped working) then the data was collected on prepared data collection sheets and subsequently entered into the data sets. Appendix C outlines the counting procedure and Appendix D gives the 'rules' for counting people crossing the cordon.

4. Cordon count procedures

Appendix C contains a map of the cordon around the Woden town centre and details of the cordon count locations.

There are twenty cordon count locations designated W01 to W19 and W02a as given in that appendix.

This year data was not collected at:

- Site W02a (on the pathway between Irving Street and the path along Melrose Drive near the Southern Cross Club Health Club) as that path was closed (due to construction in the area) and it appears that the path may not be reopened
- Site W19 (on Corinna Street and adjacent footpaths to the east of Melrose Drive junction but not along Melrose Drive) as that area was fenced off due to construction activity and people could not

cross the cordon there.

All the other count sites are the same locations as used in the 2015 and previous cordon counts.

We stationed people (data collectors) at each cordon count location and they counted the people walking and riding bikes (separately) into and out of the town centre (across the cordon line) during the counting sessions using the 'cordon count App' supplied by Roads ACT.

The definitions of a person walking and riding a bike are (the same as in previous years):

- *People riding bikes* are those on pedal bicycles, recumbents, trikes, power-assisted bicycles (not motorbikes), or on link-bikes (tag-alongs), or on pavement tricycles, or walking their bikes. A couple on a tandem are two people. Children in trailers or seats are not riding bikes.
- *People walking* are those walking, on roller skates, kick scooters or mobility scooters and children riding in prams and trailers.

Appendix D contains the data collection 'rules' observed by the data collectors. They are the same as used in previous cordon counts.

5. Weather during the cordon count

The weather was fine on the day of the count.

- Temperature range (°C): 14 to 34
- Precipitation (mm): 0

6. Quality assurance

To ensure that we were collecting and recording the correct data and that we had entered that data correctly into the database, we undertook the following checks:

- We checked that a person (the data collector) was in place at each cordon count location at the start of each session (an auditor visited each count location within the first fifteen minutes of each session).
- When visiting a data collector, the auditor checked that they were counting and recording the data correctly – the correct count location and the correct definition of inbound and outbound and of people walking and riding bikes.
- The auditors visited the data collectors again during each counting session to ensure they were still in place and counting.
- The data transmitted by the App was checked and any data outside of the designated counting time was removed (typically such data, when it occurred, was a test data entry).
- Each paper data collection sheet used (when the App failed) was completed and signed (as a true record) by the data collector.
- A person, who was not involved in the data entry, independently checked the data from the paper data collection sheet records entered into the database.

Appendix A – Cordon count data summary

A1. People crossing the cordon at each count site

Woden 2016 Cordon Count AM – Numbers by count site

Morning 7 am to 10 am		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
W01	Inbound	29	18	11	121	42	79
	Outbound	1	1	0	2	2	0
	Both	30	19	11	123	44	79
W02	Inbound	26	20	6	142	64	78
	Outbound	4	2	2	10	6	4
	Both	30	22	8	152	70	82
W03	Inbound	37	25	12	15	5	10
	Outbound	59	51	8	15	13	2
	Both	96	76	20	30	18	12
W04	Inbound	15	8	7	2	1	1
	Outbound	14	11	3	7	2	5
	Both	29	19	10	9	3	6
W05	Inbound	34	25	9	103	50	53
	Outbound	27	15	12	190	84	106
	Both	61	40	21	293	134	159
W06	Inbound	10	9	1	3	2	1
	Outbound	0	0	0	17	14	3
	Both	10	9	1	20	16	4
W07	Inbound	21	16	5	279	105	174
	Outbound	4	4	0	81	51	30
	Both	25	20	5	360	156	204
W08	Inbound	1	0	1	34	27	7
	Outbound	0	0	0	36	22	14
	Both	1	0	1	70	49	21
W09	Inbound	13	7	6	56	33	23
	Outbound	2	2	0	22	7	15
	Both	15	9	6	78	40	38
W10	Inbound	5	5	0	230	115	115
	Outbound	5	4	1	53	19	34
	Both	10	9	1	283	134	149
W11	Inbound	1	0	1	49	24	25
	Outbound	1	1	0	12	17	-5
	Both	2	1	1	61	41	20

Continued ...

W12	Inbound	6	6	0	29	18	11
	Outbound	7	7	0	22	12	10
	Both	13	13	0	51	30	21
W13	Inbound	2	2	0	30	14	16
	Outbound	2	2	0	9	7	2
	Both	4	4	0	39	21	18
W14	Inbound	2	2	0	85	49	36
	Outbound	0	0	0	17	10	7
	Both	2	2	0	102	59	43
W15	Inbound	3	3	0	138	59	79
	Outbound	5	4	1	12	7	5
	Both	8	7	1	150	66	84
W16	Inbound	3	3	0	142	79	63
	Outbound	1	1	0	21	15	6
	Both	4	4	0	163	94	69
W17	Inbound	3	3	0	66	35	31
	Outbound	0	0	0	11	8	3
	Both	3	3	0	77	43	34
W18	Inbound	81	50	31	287	141	146
	Outbound	1	1	0	25	12	13
	Both	82	51	31	312	153	159
All sites	Inbound	292	202	90	1811	863	948
	Outbound	133	106	27	562	308	254
	Both	425	308	117	2373	1171	1202

Woden 2016 Cordon Count PM – Numbers per count site

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
W01	Inbound	0	0	0	6	2	4
	Outbound	11	11	0	107	44	63
	Both	11	11	0	113	46	67
W02	Inbound	4	4	0	27	16	11
	Outbound	32	22	10	115	54	61
	Both	36	26	10	142	70	72
W03	Inbound	1	1	0	3	2	1
	Outbound	6	6	0	11	7	4
	Both	7	7	0	14	9	5
W04	Inbound	2	1	1	0	0	0
	Outbound	29	24	5	2	0	2
	Both	31	25	6	2	0	2
W05	Inbound	18	14	4	10	5	5
	Outbound	23	16	7	55	26	29
	Both	41	30	11	65	31	34
W06	Inbound	12	8	4	3	2	1
	Outbound	4	4	0	2	1	1
	Both	16	12	4	5	3	2
W07	Inbound	3	3	0	29	15	14
	Outbound	18	14	4	228	82	146
	Both	21	17	4	257	97	160
W08	Inbound	0	0	0	11	5	6
	Outbound	0	0	0	8	5	3
	Both	0	0	0	19	10	9
W09	Inbound	1	1	0	28	12	16
	Outbound	33	23	10	69	37	32
	Both	34	24	10	97	49	48
W10	Inbound	6	5	1	64	29	35
	Outbound	9	6	3	214	118	96
	Both	15	11	4	278	147	131
W11	Inbound	9	7	2	23	13	10
	Outbound	11	8	3	45	29	16
	Both	20	15	5	68	42	26
W12	Inbound	8	7	1	23	9	14
	Outbound	7	7	0	17	9	8
	Both	15	14	1	40	18	22

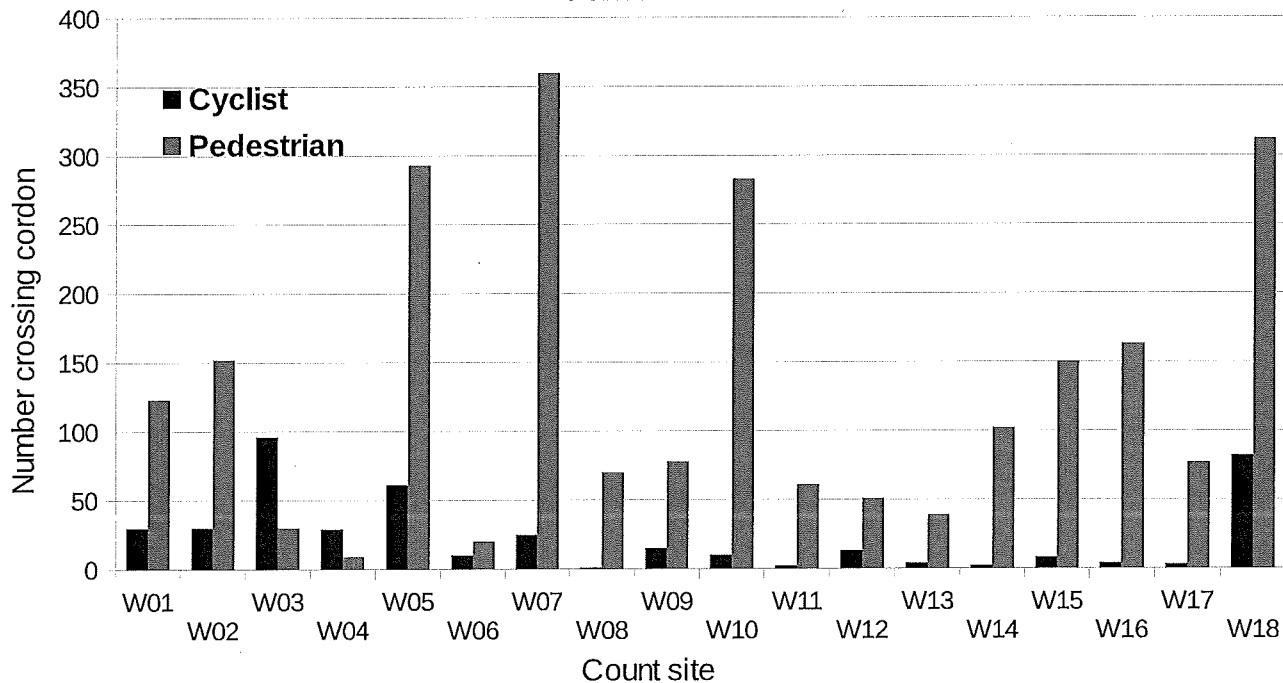
Continued ...

W13	Inbound	7	7	0	21	14	7
	Outbound	3	2	1	32	13	19
	Both	10	9	1	53	27	26
W14	Inbound	1	0	1	12	10	2
	Outbound	2	2	0	94	41	53
	Both	3	2	1	106	51	55
W15	Inbound	2	2	0	38	21	17
	Outbound	3	2	1	133	49	84
	Both	5	4	1	171	70	101
W16	Inbound	0	0	0	21	14	7
	Outbound	8	7	1	96	54	42
	Both	8	7	1	117	68	49
W17	Inbound	0	0	0	27	17	10
	Outbound	2	1	1	91	51	40
	Both	2	1	1	118	68	50
W18	Inbound	11	9	2	44	18	26
	Outbound	59	39	20	222	109	113
	Both	70	48	22	266	127	139
All sites	Inbound	85	69	16	390	204	186
	Outbound	260	194	66	1541	729	812
	Both	345	263	82	1931	933	998

Woden 2016 Cordon Count – Numbers per count site

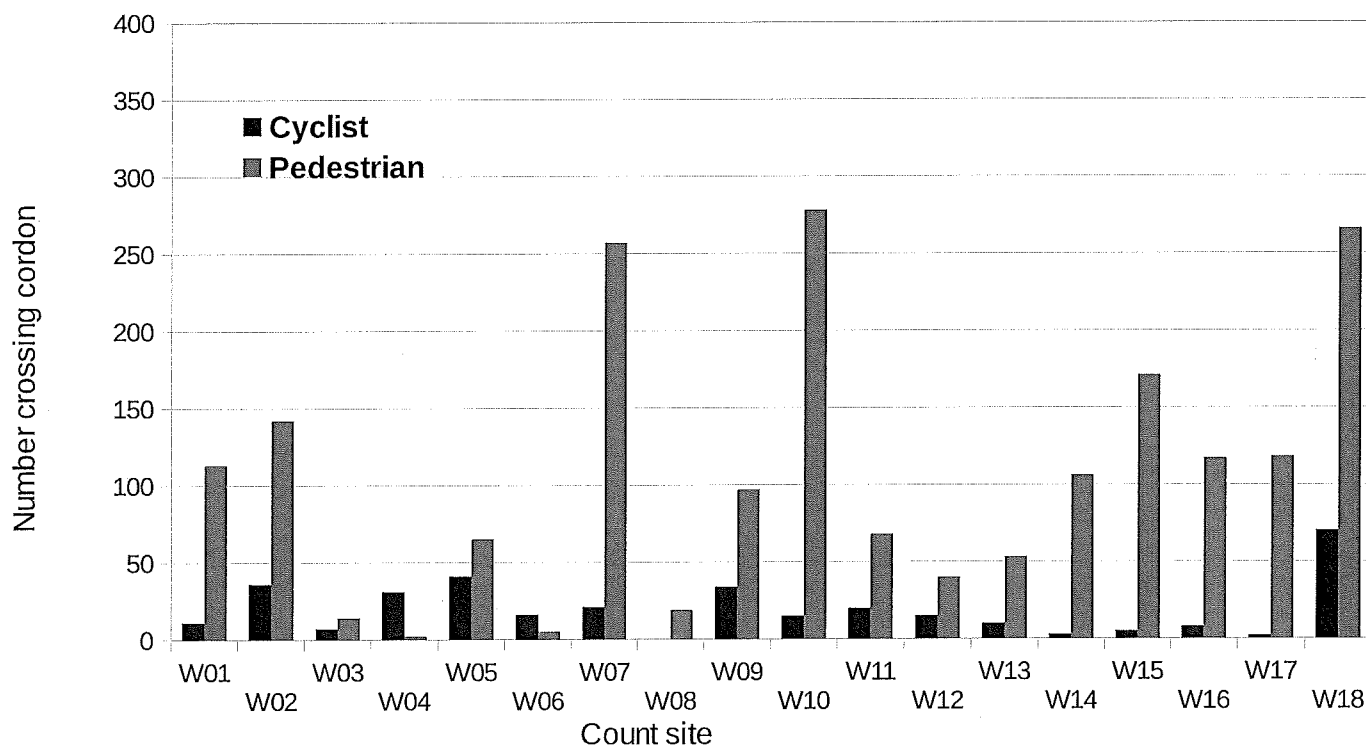
Woden Cordon Count 2016 AM

6 am to 10 am



Woden Cordon Count 2016 PM

4 pm to 7 pm



A2. People crossing the cordon during each time period

Woden 2016 Cordon Count AM – Numbers per time interval

Morning 7 am to 10 am		Cyclist			Pedestrian		
		Total	Male	Female	Total	Male	Female
07:00 – 07:15	Inbound	10	7	3	53	27	26
	Outbound	14	13	1	5	3	2
	Both	24	20	4	58	30	28
07:15 – 07:30	Inbound	13	10	3	48	26	22
	Outbound	13	13	0	21	17	4
	Both	26	23	3	69	43	26
07:30 – 07:45	Inbound	21	18	3	106	53	53
	Outbound	17	10	7	18	11	7
	Both	38	28	10	124	64	60
07:45 – 08:00	Inbound	25	17	8	163	64	99
	Outbound	25	23	2	13	7	6
	Both	50	40	10	176	71	105
08:00 – 08:15	Inbound	28	19	9	184	90	94
	Outbound	7	7	0	38	20	18
	Both	35	26	9	222	110	112
08:15 – 08:30	Inbound	45	30	15	243	111	132
	Outbound	7	7	0	88	38	50
	Both	52	37	15	331	149	182
08:30 – 08:45	Inbound	31	20	11	253	126	127
	Outbound	35	21	14	129	67	62
	Both	66	41	25	382	193	189
08:45 – 09:00	Inbound	39	24	15	242	126	116
	Outbound	5	5	0	50	22	28
	Both	44	29	15	292	148	144
09:00 – 09:15	Inbound	36	22	14	167	72	95
	Outbound	0	0	0	43	25	18
	Both	36	22	14	210	97	113
09:15 – 09:30	Inbound	13	10	3	130	60	70
	Outbound	2	1	1	43	20	23
	Both	15	11	4	173	80	93
09:30 – 09:45	Inbound	13	11	2	101	48	53
	Outbound	4	2	2	66	37	29
	Both	17	13	4	167	85	82
09:45 – 10:00	Inbound	18	14	4	121	60	61
	Outbound	4	4	0	48	27	21
	Both	22	18	4	169	87	82
		Continued ...					

07:00 – 10:00	Inbound	292	202	90	1811	863	948
	Outbound	133	106	27	562	294	268
	Both	425	308	117	2373	1157	1216

Woden 2016 Cordon Count PM – Numbers per time interval

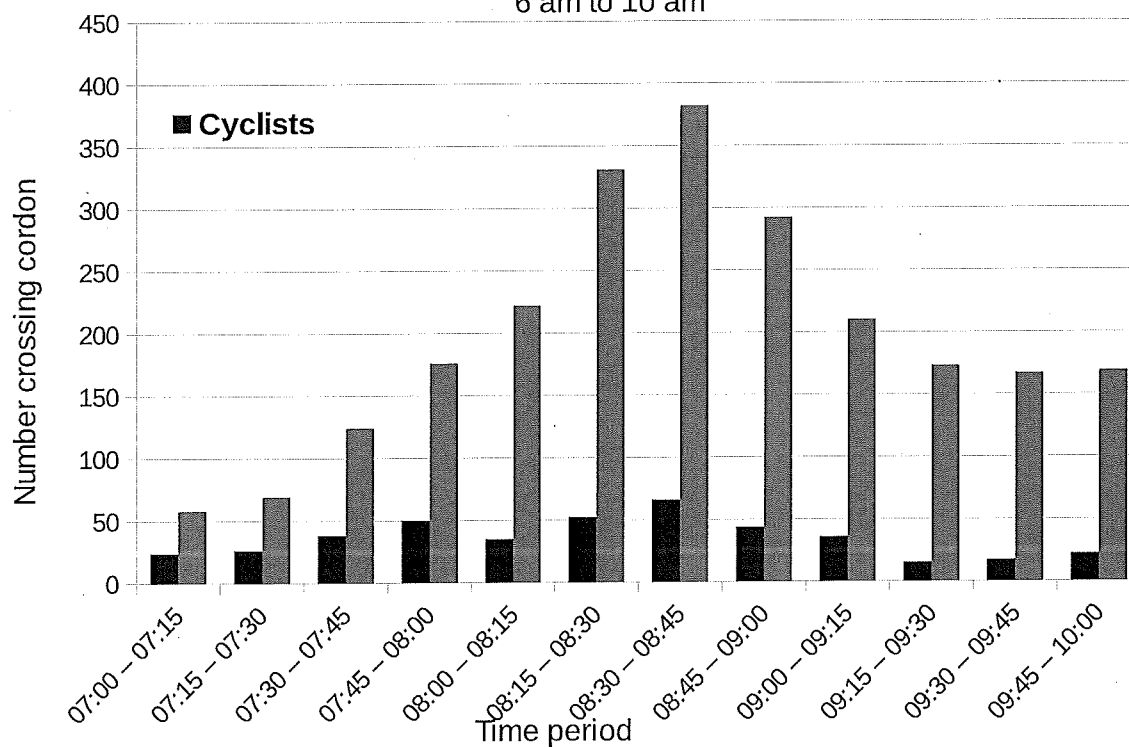
Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
16:00 – 16:15	Inbound	9	7	2	44	23	21
	Outbound	22	20	2	116	61	55
	Both	31	27	4	160	84	76
16:15 – 16:30	Inbound	10	10	0	19	9	10
	Outbound	22	14	8	119	46	73
	Both	32	24	8	138	55	83
16:30 – 16:45	Inbound	8	8	0	33	20	13
	Outbound	22	17	5	142	53	89
	Both	30	25	5	175	73	102
16:45 – 17:00	Inbound	12	11	1	53	31	22
	Outbound	23	17	6	133	58	75
	Both	35	28	7	186	89	97
17:00 – 17:15	Inbound	8	7	1	39	22	17
	Outbound	33	25	8	216	102	114
	Both	41	32	9	255	124	131
17:15 – 17:30	Inbound	5	3	2	31	17	14
	Outbound	36	27	9	172	84	88
	Both	41	30	11	203	101	102
17:30 – 17:45	Inbound	5	5	0	28	10	18
	Outbound	33	21	12	191	92	99
	Both	38	26	12	219	102	117
17:45 – 18:00	Inbound	5	4	1	41	18	23
	Outbound	16	12	4	143	69	74
	Both	21	16	5	184	87	97
18:00 – 18:15	Inbound	3	2	1	34	20	14
	Outbound	14	10	4	106	56	50
	Both	17	12	5	140	76	64
18:15 – 18:30	Inbound	6	3	3	26	11	15
	Outbound	13	10	3	88	45	43
	Both	19	13	6	114	56	58
18:30 – 18:45	Inbound	9	7	2	26	12	14
	Outbound	15	13	2	68	41	27
	Both	24	20	4	94	53	41
					Continued ...		

18:45-19:00	Inbound	5	2	3	16	11	5
	Outbound	11	8	3	47	22	25
	Both	16	10	6	63	33	30
07:00 – 10:00	Inbound	85	69	16	390	204	186
	Outbound	260	194	66	1541	729	812
	Both	345	263	82	1931	933	998

Woden 2016 Cordon Count – Numbers per time interval

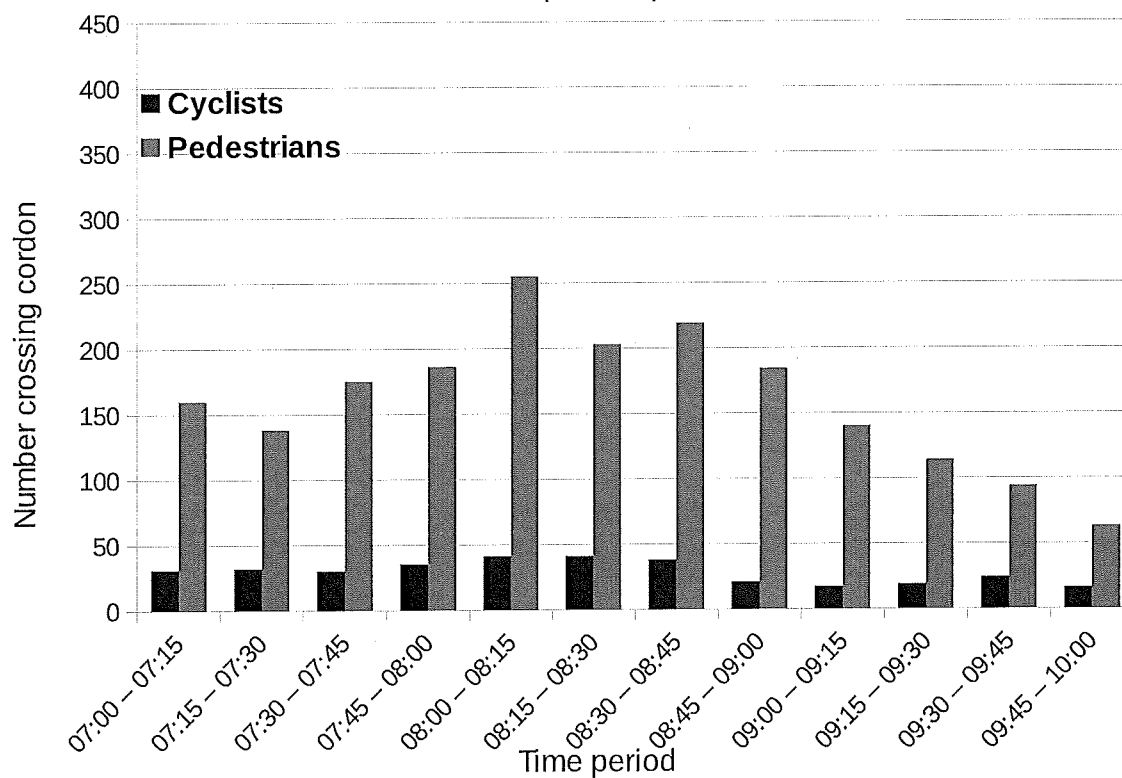
Woden 2016 Cordon Count AM

6 am to 10 am



Woden 2016 Cordon Count PM

4 pm to 7 pm



A3. Comparison of 2016 and 2015 cordon count data

This section contains a comparison of the cordon counts at Woden for 2016 and 2015

Both counts were undertaken on a Wednesday – 2 March 2016 and 4 March 2015.

The differences between the 2016 and the 2015 figures are the increase (or decrease shown as a negative) in the number from 2015 expressed as a percentage.

Woden 2016/2015 cyclists & pedestrian comparison									
Session	2016			2015			Difference % 2016/2015		
	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total
Morning (AM)	425	2373	2798	406	2790	3196	4.7%	-14.9%	-12.5%
Afternoon (PM)	345	1931	2276	399	2595	2994	-13.5%	-25.6%	-24.0%
Total	770	4304	5074	805	5385	6190	-4.3%	-20.1%	-18.0%

Woden 2016/2015 cyclists AM comparison

Woden 2016/2015 cyclists AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	30	19	11	26	24	2	0.2%	-0.2%	0.4%
W02	Both	30	22	8	2	2	0	1.2%	0.8%	0.3%
W03	Both	96	76	20	24	12	12	3.0%	2.7%	0.3%
W04	Both	29	19	10	31	20	11	-0.1%	0.0%	0.0%
W05	Both	61	40	21	66	43	23	-0.2%	-0.1%	-0.1%
W06	Both	10	9	1	19	14	5	-0.4%	-0.2%	-0.2%
W07	Both	25	20	5	34	23	11	-26.5%	-13.0%	-54.5%
W08	Both	1	0	1	1	0	1	0.0%	0.0%	0.0%
W09	Both	15	9	6	24	14	10	-0.4%	-0.2%	-0.2%
W10	Both	10	9	1	12	8	4	-0.1%	0.0%	-0.1%
W11	Both	2	1	1	10	8	2	-0.3%	-0.3%	0.0%
W12	Both	13	13	0	9	8	1	0.2%	0.2%	0.0%
W13	Both	4	4	0	2	2	0	0.1%	0.1%	0.0%
W14	Both	2	2	0	3	3	0	0.0%	0.0%	0.0%
W15	Both	8	7	1	12	8	4	-0.2%	0.0%	-0.1%
W16	Both	4	4	0	9	9	0	-0.2%	-0.2%	0.0%
W17	Both	3	3	0	4	4	0	0.0%	0.0%	0.0%
W18	Both	82	51	31	109	73	36	-1.1%	-0.9%	-0.2%
W19	Both	n.a	n.a	n.a	9	7	2	n.a	n.a	n.a
All sites	Both	425	308	117	406	282	124	4.7%	9.2%	-5.6%

Note: Count site W19 was not counted in 2016

Woden 2016/2015 pedestrians AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	123	44	79	144	70	74	-0.9%	-1.1%	0.2%
W02	Both	152	70	82	1	0	1	6.4%	2.9%	3.4%
W03	Both	30	18	12	27	10	17	0.1%	0.3%	-0.2%
W04	Both	9	3	6	12	7	5	-0.1%	-0.2%	0.0%
W05	Both	293	134	159	243	131	112	2.1%	0.1%	2.0%
W06	Both	20	16	4	7	5	2	0.5%	0.5%	0.1%
W07	Both	360	156	204	506	228	278	-28.9%	-31.6%	-26.6%
W08	Both	70	49	21	234	176	58	-6.9%	-5.4%	-1.6%
W09	Both	78	40	38	110	62	48	-1.3%	-0.9%	-0.4%
W10	Both	283	134	149	252	122	130	1.3%	0.5%	0.8%
W11	Both	61	41	20	79	42	37	-0.8%	0.0%	-0.7%
W12	Both	51	30	21	82	40	42	-1.3%	-0.4%	-0.9%
W13	Both	39	21	18	48	24	24	-0.4%	-0.1%	-0.3%
W14	Both	102	59	43	137	64	73	-1.5%	-0.2%	-1.3%
W15	Both	150	66	84	186	99	87	-1.5%	-1.4%	-0.1%
W16	Both	163	94	69	197	111	86	-1.4%	-0.7%	-0.7%
W17	Both	77	43	34	107	57	50	-1.3%	-0.6%	-0.7%
W18	Both	312	153	159	323	138	185	-0.5%	0.6%	-1.1%
W19	Both	n.a	n.a	n.a	95	42	53	n.a	n.a	n.a
All sites	Both	2373	1171	1202	2790	1428	1362	-14.9%	-18.0%	-11.7%

Note: Count site W19 was not counted in 2016

Woden 2016/2015 cyclists PM comparison

Woden 2016/2015 cyclists PM comparison										
Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	11	11	0	9	6	3	0.2%	-0.2%	0.4%
W02	Both	36	26	10	28	20	8	1.2%	0.8%	0.3%
W03	Both	7	7	0	19	11	8	3.0%	2.7%	0.3%
W04	Both	31	25	6	47	35	12	-0.1%	0.0%	0.0%
W05	Both	41	30	11	53	45	8	-0.2%	-0.1%	-0.1%
W06	Both	16	12	4	14	12	2	-0.4%	-0.2%	-0.2%
W07	Both	21	17	4	20	15	5	5.0%	13.3%	-20.0%
W08	Both	0	0	0	1	1	0	0.0%	0.0%	0.0%
W09	Both	34	24	10	21	15	6	-0.4%	-0.2%	-0.2%
W10	Both	15	11	4	30	24	6	-0.1%	0.0%	-0.1%
W11	Both	20	15	5	14	7	7	-0.3%	-0.3%	0.0%
W12	Both	15	14	1	12	8	4	0.2%	0.2%	0.0%
W13	Both	10	9	1	4	4	0	0.1%	0.1%	0.0%
W14	Both	3	2	1	3	3	0	0.0%	0.0%	0.0%
W15	Both	5	4	1	9	7	2	-0.2%	0.0%	-0.1%
W16	Both	8	7	1	9	8	1	-0.2%	-0.2%	0.0%
W17	Both	2	1	1	5	4	1	0.0%	0.0%	0.0%
W18	Both	70	48	22	99	69	30	-1.1%	-0.9%	-0.2%
W19	Both	n.a	n.a	n.a	2	2	0	n.a	n.a	n.a
All sites	Both	345	263	82	399	296	103	-13.5%	-11.1%	-20.4%

Note: Count site W19 was not counted in 2016

Woden 2016/2015 pedestrians PM comparison

Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	113	46	67	84	39	45	-0.9%	-1.1%	0.2%
W02	Both	142	70	72	208	114	94	6.4%	2.9%	3.4%
W03	Both	14	9	5	5	5	0	0.1%	0.3%	-0.2%
W04	Both	2	0	2	7	3	4	-0.1%	-0.2%	0.0%
W05	Both	65	31	34	81	52	29	2.1%	0.1%	2.0%
W06	Both	5	3	2	1	1	0	0.5%	0.5%	0.1%
W07	Both	257	97	160	272	107	165	-5.5%	-9.3%	-3.0%
W08	Both	19	10	9	133	89	44	-6.9%	-5.4%	-1.6%
W09	Both	97	49	48	98	62	36	-1.3%	-0.9%	-0.4%
W10	Both	278	147	131	514	268	246	1.3%	0.5%	0.8%
W11	Both	68	42	26	81	41	40	-0.8%	0.0%	-0.7%
W12	Both	40	18	22	61	37	24	-1.3%	-0.4%	-0.9%
W13	Both	53	27	26	51	24	27	-0.4%	-0.1%	-0.3%
W14	Both	106	51	55	157	85	72	-1.5%	-0.2%	-1.3%
W15	Both	171	70	101	203	99	104	-1.5%	-1.4%	-0.1%
W16	Both	117	68	49	185	99	86	-1.4%	-0.7%	-0.7%
W17	Both	118	68	50	129	72	57	-1.3%	-0.6%	-0.7%
W18	Both	266	127	139	245	118	127	-0.5%	0.6%	-1.1%
W19	Both	n.a	n.a	n.a	80	34	46	n.a	n.a	n.a
All sites	Both	1931	933	998	2595	1349	1246	-25.6%	-30.8%	-19.9%

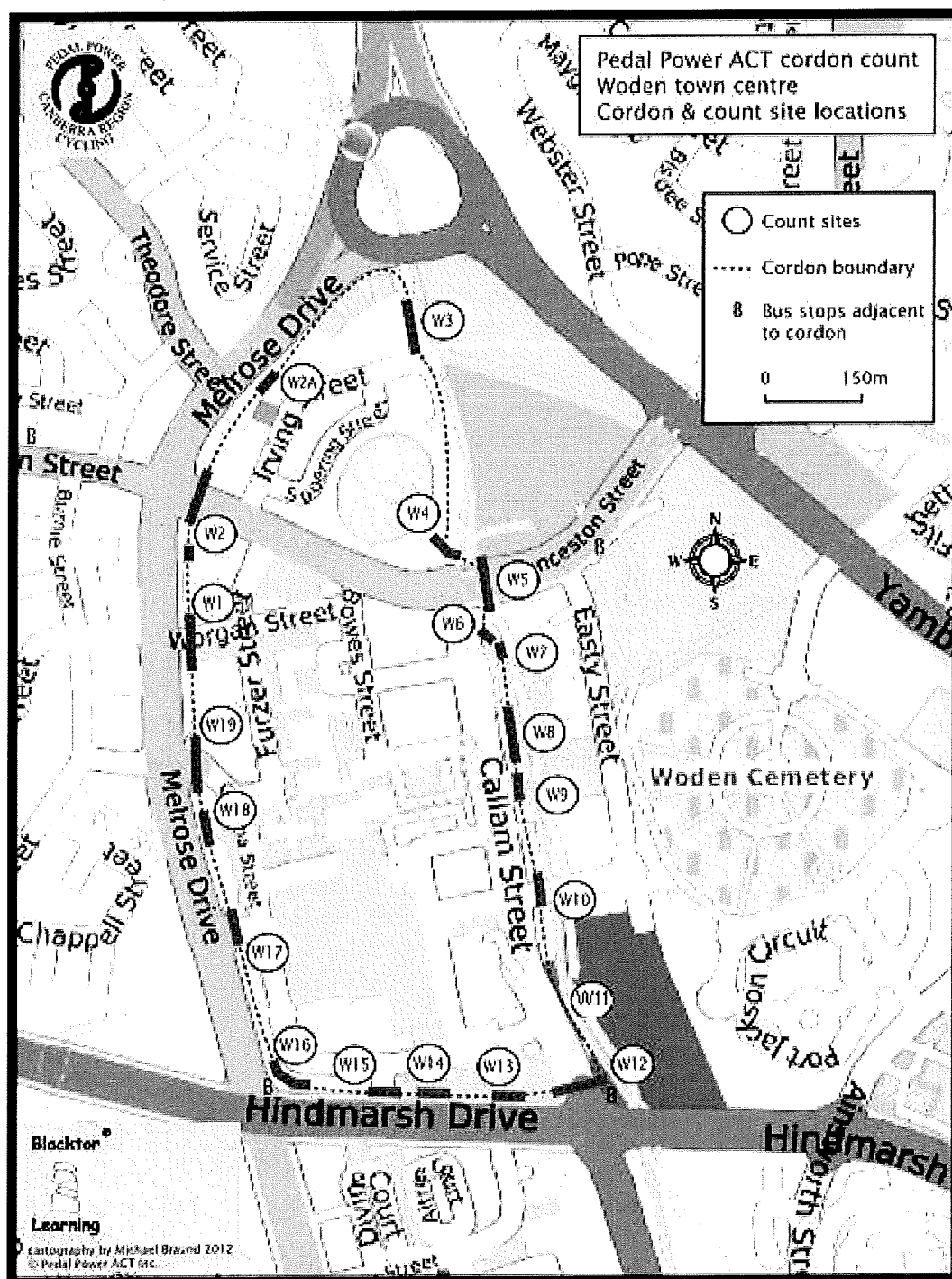
Note: Count site W19 was not counted in 2016

Appendix B – Cordon count locations

The map below shows the cordon around the Woden town centre and the locations of the count locations. Descriptions of the locations are given below the map.

The cordon count locations were the same as in 2015 (and previous years).

Pertinent features relating to count locations when the count was undertaken in 2016 are given below the site descriptions.



Count locations descriptions

Site W01 – On Worgan Street and adjacent footpaths to the east of Melrose Drive (but not along Melrose Drive) including the entrance to the Tradies hotel

Site W02 – On Launceston Street and adjacent footpaths to the east of Melrose Drive and on the entrance to the adjacent car park (but not along Melrose Drive)

Site W02a – On the pathway between Irving Street and the path along Melrose Drive near the Southern Cross Club Health Club

Site W03 – On the connecting path between Irving Street and the community path adjacent to and west of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Irving Street)

Site W04 – On the connecting community paths (two) between Launceston Street (to the north of the junction with Callam Street) and the adjacent car park and the community path adjacent to and west of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Launceston Street)

Site W05 – On Launceston Street and adjacent footpath to the east of the junction with Callam Street (on the bridge over Yarralumla Creek) to the east of Callam Street (but not along Callam Street or the community paths beside Yarralumla Creek)

Site W06 – On the connecting community path between Callam Street park (to the north of the community path bridge over Yarralumla Creek – site W7) and community path adjacent to and west of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street)

Site W07 – On the connecting path bridge over Yarralumla Creek between Callam Street park (to the north of the Callam Offices and south of site W6) and community path adjacent to and east of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street)

Site W08 – On the connecting bridge and footway (steps) between Callam Street park and the Callam Offices over Yarralumla Creek (but not along the park)

Site W09 – On the connecting path bridge over Yarralumla Creek between Callam Street park (to the south of the Callam Offices) and the community path adjacent to and east of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street park)

Site W10 – On Wilbow Street and adjacent footpaths to the east of Callam Street junction (but not along Callam Street)

Site W11 – On the community path bridge over Yarralumla Creek between Callam Street (between Wilbow Street and Hindmarsh Drive) and community path adjacent to and east of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street)

Site W12 – On Callam Street and adjacent footpaths to the north of Hindmarsh Drive junction (but not along Hindmarsh Drive)

Site W13 – On the community path between the buildings (between Callam Street and Ball Street) opposite Botany Street (but not along Hindmarsh Drive)

Site W14 – On the community path between the buildings (between Callam Street and Ball Street) some 70 m east of Ball Street (but not along Hindmarsh Drive)

Site W15 – On Ball Street and adjacent footpaths to the north of Callam Street junction (but not Callam Street)

Site W16 – On the community path to the north east of the junction of Hindmarsh Drive and Melrose Drive the car park to the north of Hindmarsh Drive and east of Melrose Drive (but not along Hindmarsh Drive or Melrose Drive)

Site W17 – On Brewer Street and adjacent footpaths to the east of Melrose Drive junction (but not along Melrose Drive)

Site W18 – On the community path where it emerges from the tunnel under Melrose Drive between Brewer Street and Corinna Street (but not along Melrose Drive)

Site W19 – On Corinna Street and adjacent footpaths to the east of Melrose Drive junction (but not along Melrose Drive)

Pertinent features relating to count locations when the count was undertaken

There were no counts undertaken at:

- Site W02a as the path at that location was closed due to construction – and it appears may never be reopened.
- Site W19 as that area was fenced off due to construction and people could not cross the cordon there.

Appendix C – Data collection procedures

The 'instructions' given to the cordon count data collectors is summarised in this appendix.

Data collection procedures

1. Set up the data collection App

Download the Roads ACT 'cordon count App' to use for recording the count data on your smart phone or tablet.

Test that the App is working on your device:

- Enter some trial data in the App and 'send data' – your data will be delivered to the Cordon Count Manager
- Send an email to the Cordon Count Manager advising that you have sent some trial data
- The Cordon Count Manager will confirm that the data was or was not received
- If the data was not received, re load the App and enter some trial data and send it and an email to the Cordon Count Manager

2. Have the data collections sheets available

Print out some paper data collection sheet for use if necessary to record the data if the App can not be used (eg, if your phone fails).

3. Read and understand the counting rules

The counting rules (Appendix D) are to be followed when counting people walking and riding

4. Go to allocated counting site

Arrive at your allocated count location in time to start the count at the scheduled start time.

Locate yourself safely so that you can clearly see everyone who crosses your count location.

Make yourself comfortable – you will be there for three hours.

Take with you:

- Your smart phone or tablet with the Roads ACT Cordon Count App loaded and working
- Two paper data collection sheet (printed out) – for use if the App or your smart phone or tablet does not work
- Pens or pencils for recording your counts on paper (when required)
- A clipboard or something similar to hold the paper data collection sheets when recording your counts
- Count location details and counting instructions for your count location
- A watch or other time piece – for use if your smart phone or tablet does not work
- A chair if you want to sit on it during the count – you can stand or sit on the ground and at some

locations you can sit in your car

- Water and snacks (if desired)
- A hat and sun screen if it's a sunny day, warm clothes if it is likely to be cold and/or wet weather gear if rain is likely.

5. Undertake the cordon count

Count all the pedestrians and cyclists crossing the cordon at your location as per the counting rules (Appendix D) and record the data on the App or on the paper data collection sheets.

6. At the end of each counting session

Submit your data via the App 'Send Data' button – that sends the data via email to designated people for future use (please do not send data during the count session as that generates multiple files for your count data).

Complete and sign any paper data collection sheets used and deliver the sheets to the supervisor.

Appendix D – Counting rules

The 'rules' used by the cordon count counters when collecting data on people walking and riding bikes across the cordon are give in this appendix.

Counting rules

1. Count people walking and riding bikes across the cordon count location (as given to each counter) – count there and nowhere else, regardless of if you think people have or have not been counted elsewhere. (The count locations make a complete cordon.)
2. People riding bikes (cyclists) are those on pedal bicycles, recumbents, trikes, electric assist bicycles (not motorbikes), or link bikes (tag-alongs), or on tricycles, or walking their bikes. A couple on a tandem are two people riding bikes. Children in trailers or in child seats are not riding bikes and are pedestrians for count purposes.
3. People walking (pedestrians) are those walking (not pushing a bike), jogging or running, or on roller skates, skies, kick scooters or mobility scooters and children riding in prams, child seats and trailers.
4. Males and females are designated by your best estimate (it is likely any errors will cancel out).
5. Start on time at exactly 7 am or 4 pm as appropriate.
6. Finish on time at exactly 10 am or 7 pm as appropriate.
7. Do not count people in sight who cross the count location before the start time or after finish time.
8. Do not count yourself or anyone else associated with the count (ie, the supervisor and quality assurance checkers).
9. Lookout for well intentioned, but misinformed, people who think they are helping by repeatedly crossing the cordon count location to inflate the count. If you see one, only count them once and advise the supervisor.
10. Do not advertise that you are counting people walking and riding (but do explain what you are doing if asked).
11. We are only counting people who enter or leave the cordon area via public roads, paths and spaces, not via residential or business premises – people who emerge from private property are NOT counted. There is one exception to this rule – when you know for certain that the someone has approached along 'your' road or path, and only cut the corner via private property just before reaching your control. For this reason, the cordon counting point on each road or path is some distance away from the intersections with the roads that form the cordon boundary.
12. We are not trying to count as many people as possible – we are trying to count as accurately as possible.



P 02 6248 7995
F 02 6248 7774
E office@pedalpower.org.au
W pedalpower.org.au
A GPO 581, Canberra ACT 2601

ABN: 98 440 716 821

Woden town centre cordon count
on
Wednesday 2nd March 2016
undertaken by Pedal Power ACT for Roads ACT
Report on cordon count and data collected

Table of Contents

1. Woden cordon count.....	1
2. Cordon count data.....	1
4. Cordon count procedures.....	1
5. Weather during the cordon count.....	2
6. Quality assurance.....	2
Appendix A – Cordon count data summary.....	3
A1. People crossing the cordon at each count site.....	3
A2. People crossing the cordon during each time period.....	8
A3. Comparison of 2016 and 2015 cordon count data.....	12
Appendix B – Cordon count locations.....	17
Appendix C – Data collection procedures.....	20
Appendix D – Counting rules.....	22

Cordon count managed, audited and report prepared by:

Report reviewed by:

[Redacted signature]

[Redacted signature]

1. Woden cordon count

Pedal Power ACT undertook a cordon count of all people walking and riding bikes into and out of the Woden town centre on Wednesday 2nd March 2016 during two counting sessions – from 7:00 am to 10:00 am and from 4:00 pm to 7:00 pm.

This report outlines the cordon count details and procedure, gives the location of the count sites, resulting data and summarises the data collected.

2. Cordon count data

The cordon count data gives the time people (separated between male and female) walked or rode bikes in each direction (into the town centre or out of the town centre) across the cordon at each cordon count location (Appendix B).

The data is reported in a separate spreadsheet file with file name:

cordon-count-2016-data-Woden-V1

Appendix A contains a summary of the cordon count data reported as:

- A1. The number of people that crossed the cordon during the morning and afternoon counting sessions (separated into cyclists and pedestrians).
- A2. The number of people that crossed the cordon at each count site during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A3. The number of people that crossed the cordon during each fifteen minute period during the morning and afternoon counting sessions (separated into cyclists and pedestrians and by direction of travel).
- A4. A comparison of the number of people riding or walking across the cordon at each location in 2016 and 2015.

Data collectors recorded their data using the 'cordon count App' supplied by Roads ACT or if for some reason the App could not be used (eg, their phone stopped working) then the data was collected on prepared data collection sheets and subsequently entered into the data sets. Appendix C outlines the counting procedure and Appendix D gives the 'rules' for counting people crossing the cordon.

4. Cordon count procedures

Appendix C contains a map of the cordon around the Woden town centre and details of the cordon count locations.

There are twenty cordon count locations designated W01 to W19 and W02a as given in that appendix.

This year data was not collected at:

- Site W02a (on the pathway between Irving Street and the path along Melrose Drive near the Southern Cross Club Health Club) as that path was closed (due to construction in the area) and it appears that the path may not be reopened
- Site W19 (on Corinna Street and adjacent footpaths to the east of Melrose Drive junction but not along Melrose Drive) as that area was fenced off due to construction activity and people could not

cross the cordon there.

All the other count sites are the same locations as used in the 2015 and previous cordon counts.

We stationed people (data collectors) at each cordon count location and they counted the people walking and riding bikes (separately) into and out of the town centre (across the cordon line) during the counting sessions using the 'cordon count App' supplied by Roads ACT.

The definitions of a person walking and riding a bike are (the same as in previous years):

- *People riding bikes* are those on pedal bicycles, recumbents, trikes, power-assisted bicycles (not motorbikes), or on link-bikes (tag-alongs), or on pavement tricycles, or walking their bikes. A couple on a tandem are two people. Children in trailers or seats are not riding bikes.
- *People walking* are those walking, on roller skates, kick scooters or mobility scooters and children riding in prams and trailers.

Appendix D contains the data collection 'rules' observed by the data collectors. They are the same as used in previous cordon counts.

5. Weather during the cordon count

The weather was fine on the day of the count.

- Temperature range (°C): 14 to 34
- Precipitation (mm): 0

6. Quality assurance

To ensure that we were collecting and recording the correct data and that we had entered that data correctly into the database, we undertook the following checks:

- We checked that a person (the data collector) was in place at each cordon count location at the start of each session (an auditor visited each count location within the first fifteen minutes of each session).
- When visiting a data collector, the auditor checked that they were counting and recording the data correctly – the correct count location and the correct definition of inbound and outbound and of people walking and riding bikes.
- The auditors visited the data collectors again during each counting session to ensure they were still in place and counting.
- The data transmitted by the App was checked and any data outside of the designated counting time was removed (typically such data, when it occurred, was a test data entry).
- Each paper data collection sheet used (when the App failed) was completed and signed (as a true record) by the data collector.
- A person, who was not involved in the data entry, independently checked the data from the paper data collection sheet records entered into the database.

Appendix A – Cordon count data summary

A1. People crossing the cordon at each count site

Woden 2016 Cordon Count AM – Numbers by count site

Morning 7 am to 10 am		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
W01	Inbound	29	18	11	121	42	79
	Outbound	1	1	0	2	2	0
	Both	30	19	11	123	44	79
W02	Inbound	26	20	6	142	64	78
	Outbound	4	2	2	10	6	4
	Both	30	22	8	152	70	82
W03	Inbound	37	25	12	15	5	10
	Outbound	59	51	8	15	13	2
	Both	96	76	20	30	18	12
W04	Inbound	15	8	7	2	1	1
	Outbound	14	11	3	7	2	5
	Both	29	19	10	9	3	6
W05	Inbound	34	25	9	103	50	53
	Outbound	27	15	12	190	84	106
	Both	61	40	21	293	134	159
W06	Inbound	10	9	1	3	2	1
	Outbound	0	0	0	17	14	3
	Both	10	9	1	20	16	4
W07	Inbound	21	16	5	279	105	174
	Outbound	4	4	0	81	51	30
	Both	25	20	5	360	156	204
W08	Inbound	1	0	1	34	27	7
	Outbound	0	0	0	36	22	14
	Both	1	0	1	70	49	21
W09	Inbound	13	7	6	56	33	23
	Outbound	2	2	0	22	7	15
	Both	15	9	6	78	40	38
W10	Inbound	5	5	0	230	115	115
	Outbound	5	4	1	53	19	34
	Both	10	9	1	283	134	149
W11	Inbound	1	0	1	49	24	25
	Outbound	1	1	0	12	17	-5
	Both	2	1	1	61	41	20

Continued ...

W12	Inbound	6	6	0	29	18	11
	Outbound	7	7	0	22	12	10
	Both	13	13	0	51	30	21
W13	Inbound	2	2	0	30	14	16
	Outbound	2	2	0	9	7	2
	Both	4	4	0	39	21	18
W14	Inbound	2	2	0	85	49	36
	Outbound	0	0	0	17	10	7
	Both	2	2	0	102	59	43
W15	Inbound	3	3	0	138	59	79
	Outbound	5	4	1	12	7	5
	Both	8	7	1	150	66	84
W16	Inbound	3	3	0	142	79	63
	Outbound	1	1	0	21	15	6
	Both	4	4	0	163	94	69
W17	Inbound	3	3	0	66	35	31
	Outbound	0	0	0	11	8	3
	Both	3	3	0	77	43	34
W18	Inbound	81	50	31	287	141	146
	Outbound	1	1	0	25	12	13
	Both	82	51	31	312	153	159
All sites	Inbound	292	202	90	1811	863	948
	Outbound	133	106	27	562	308	254
	Both	425	308	117	2373	1171	1202

Woden 2016 Cordon Count PM – Numbers per count site

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Site	Direction	Total	Male	Female	Total	Male	Female
W01	Inbound	0	0	0	6	2	4
	Outbound	11	11	0	107	44	63
	Both	11	11	0	113	46	67
W02	Inbound	4	4	0	27	16	11
	Outbound	32	22	10	115	54	61
	Both	36	26	10	142	70	72
W03	Inbound	1	1	0	3	2	1
	Outbound	6	6	0	11	7	4
	Both	7	7	0	14	9	5
W04	Inbound	2	1	1	0	0	0
	Outbound	29	24	5	2	0	2
	Both	31	25	6	2	0	2
W05	Inbound	18	14	4	10	5	5
	Outbound	23	16	7	55	26	29
	Both	41	30	11	65	31	34
W06	Inbound	12	8	4	3	2	1
	Outbound	4	4	0	2	1	1
	Both	16	12	4	5	3	2
W07	Inbound	3	3	0	29	15	14
	Outbound	18	14	4	228	82	146
	Both	21	17	4	257	97	160
W08	Inbound	0	0	0	11	5	6
	Outbound	0	0	0	8	5	3
	Both	0	0	0	19	10	9
W09	Inbound	1	1	0	28	12	16
	Outbound	33	23	10	69	37	32
	Both	34	24	10	97	49	48
W10	Inbound	6	5	1	64	29	35
	Outbound	9	6	3	214	118	96
	Both	15	11	4	278	147	131
W11	Inbound	9	7	2	23	13	10
	Outbound	11	8	3	45	29	16
	Both	20	15	5	68	42	26
W12	Inbound	8	7	1	23	9	14
	Outbound	7	7	0	17	9	8
	Both	15	14	1	40	18	22

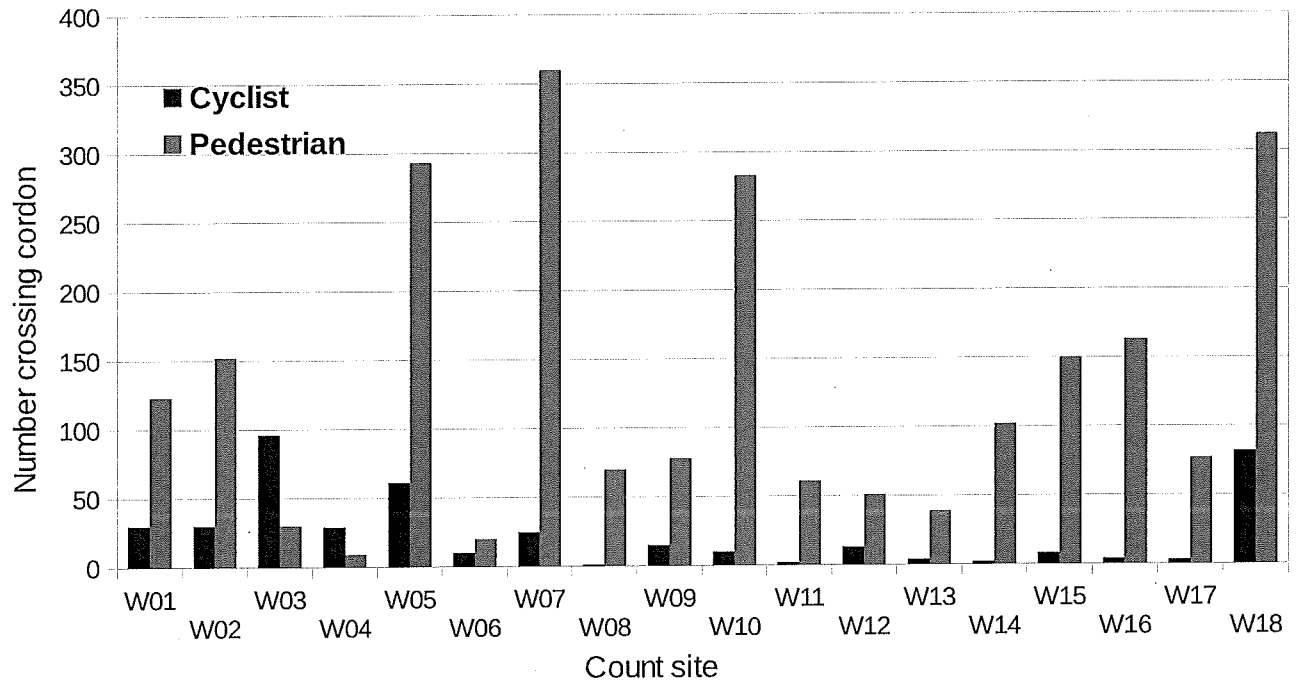
Continued ...

W13	Inbound	7	7	0	21	14	7
	Outbound	3	2	1	32	13	19
	Both	10	9	1	53	27	26
W14	Inbound	1	0	1	12	10	2
	Outbound	2	2	0	94	41	53
	Both	3	2	1	106	51	55
W15	Inbound	2	2	0	38	21	17
	Outbound	3	2	1	133	49	84
	Both	5	4	1	171	70	101
W16	Inbound	0	0	0	21	14	7
	Outbound	8	7	1	96	54	42
	Both	8	7	1	117	68	49
W17	Inbound	0	0	0	27	17	10
	Outbound	2	1	1	91	51	40
	Both	2	1	1	118	68	50
W18	Inbound	11	9	2	44	18	26
	Outbound	59	39	20	222	109	113
	Both	70	48	22	266	127	139
All sites	Inbound	85	69	16	390	204	186
	Outbound	260	194	66	1541	729	812
	Both	345	263	82	1931	933	998

Woden 2016 Cordon Count – Numbers per count site

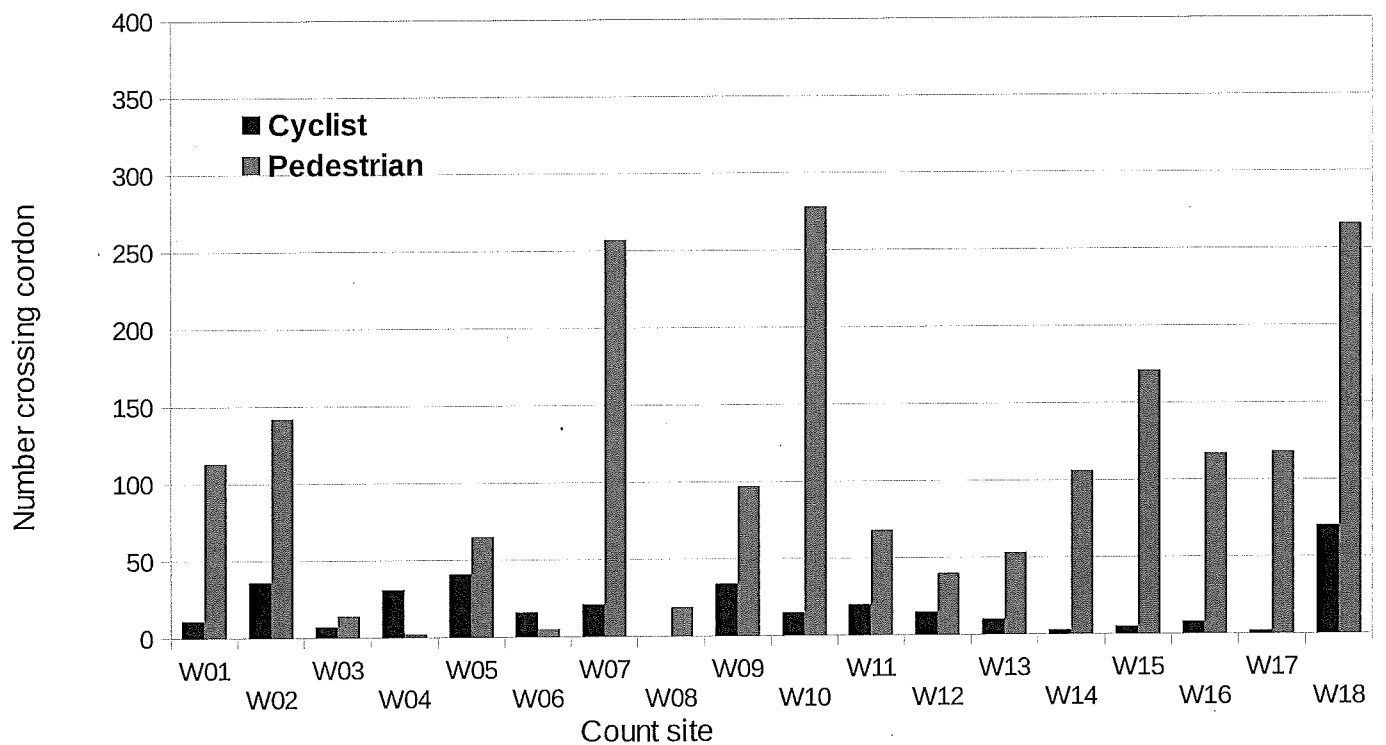
Woden Cordon Count 2016 AM

6 am to 10 am



Woden Cordon Count 2016 PM

4 pm to 7 pm



A2. People crossing the cordon during each time period

Woden 2016 Cordon Count AM – Numbers per time interval

Morning 7 am to 10 am		Cyclist			Pedestrian		
		Total	Male	Female	Total	Male	Female
07:00 – 07:15	Inbound	10	7	3	53	27	26
	Outbound	14	13	1	5	3	2
	Both	24	20	4	58	30	28
07:15 – 07:30	Inbound	13	10	3	48	26	22
	Outbound	13	13	0	21	17	4
	Both	26	23	3	69	43	26
07:30 – 07:45	Inbound	21	18	3	106	53	53
	Outbound	17	10	7	18	11	7
	Both	38	28	10	124	64	60
07:45 – 08:00	Inbound	25	17	8	163	64	99
	Outbound	25	23	2	13	7	6
	Both	50	40	10	176	71	105
08:00 – 08:15	Inbound	28	19	9	184	90	94
	Outbound	7	7	0	38	20	18
	Both	35	26	9	222	110	112
08:15 – 08:30	Inbound	45	30	15	243	111	132
	Outbound	7	7	0	88	38	50
	Both	52	37	15	331	149	182
08:30 – 08:45	Inbound	31	20	11	253	126	127
	Outbound	35	21	14	129	67	62
	Both	66	41	25	382	193	189
08:45 – 09:00	Inbound	39	24	15	242	126	116
	Outbound	5	5	0	50	22	28
	Both	44	29	15	292	148	144
09:00 – 09:15	Inbound	36	22	14	167	72	95
	Outbound	0	0	0	43	25	18
	Both	36	22	14	210	97	113
09:15 – 09:30	Inbound	13	10	3	130	60	70
	Outbound	2	1	1	43	20	23
	Both	15	11	4	173	80	93
09:30 – 09:45	Inbound	13	11	2	101	48	53
	Outbound	4	2	2	66	37	29
	Both	17	13	4	167	85	82
09:45 – 10:00	Inbound	18	14	4	121	60	61
	Outbound	4	4	0	48	27	21
	Both	22	18	4	169	87	82

Continued ...

07:00 – 10:00	Inbound	292	202	90	1811	863	948
	Outbound	133	106	27	562	294	268
	Both	425	308	117	2373	1157	1216

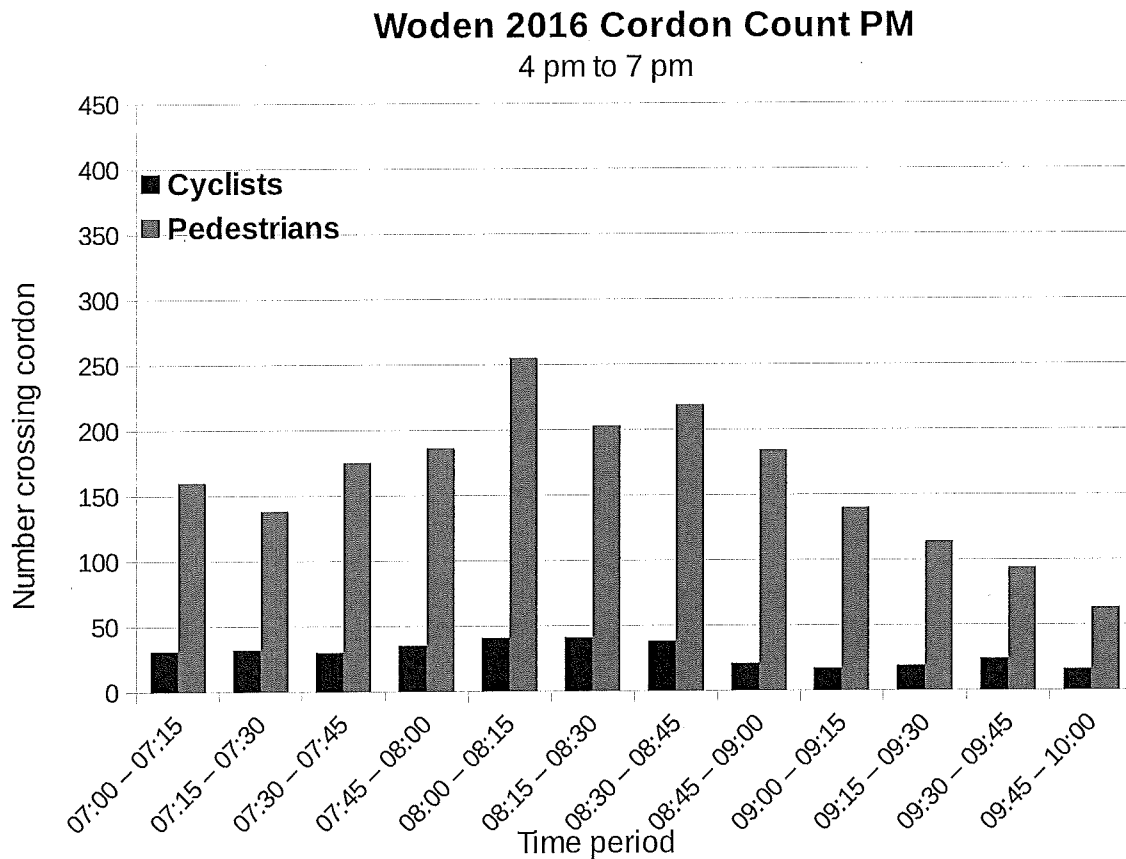
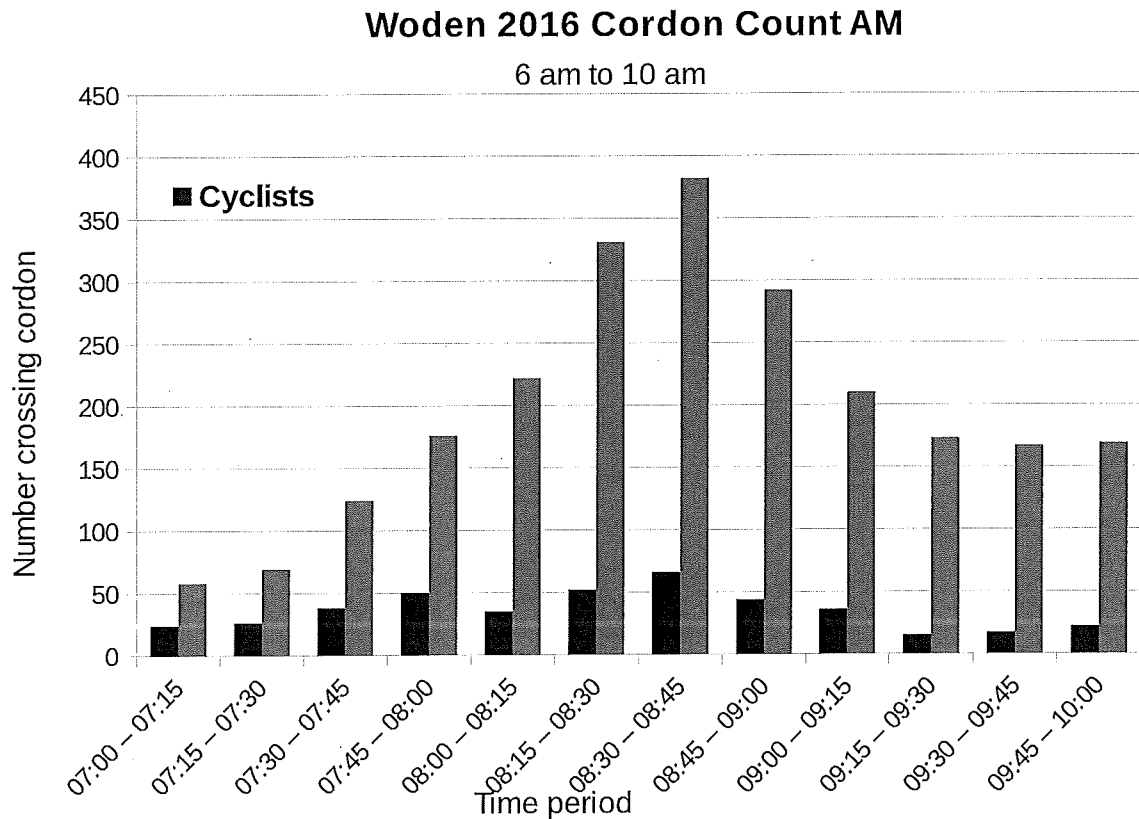
Woden 2016 Cordon Count PM – Numbers per time interval

Afternoon 4 pm to 7 pm		Cyclist			Pedestrian		
Time interval	Direction	Total	Male	Female	Total	Male	Female
16:00 – 16:15	Inbound	9	7	2	44	23	21
	Outbound	22	20	2	116	61	55
	Both	31	27	4	160	84	76
16:15 – 16:30	Inbound	10	10	0	19	9	10
	Outbound	22	14	8	119	46	73
	Both	32	24	8	138	55	83
16:30 – 16:45	Inbound	8	8	0	33	20	13
	Outbound	22	17	5	142	53	89
	Both	30	25	5	175	73	102
16:45 – 17:00	Inbound	12	11	1	53	31	22
	Outbound	23	17	6	133	58	75
	Both	35	28	7	186	89	97
17:00 – 17:15	Inbound	8	7	1	39	22	17
	Outbound	33	25	8	216	102	114
	Both	41	32	9	255	124	131
17:15 – 17:30	Inbound	5	3	2	31	17	14
	Outbound	36	27	9	172	84	88
	Both	41	30	11	203	101	102
17:30 – 17:45	Inbound	5	5	0	28	10	18
	Outbound	33	21	12	191	92	99
	Both	38	26	12	219	102	117
17:45 – 18:00	Inbound	5	4	1	41	18	23
	Outbound	16	12	4	143	69	74
	Both	21	16	5	184	87	97
18:00 – 18:15	Inbound	3	2	1	34	20	14
	Outbound	14	10	4	106	56	50
	Both	17	12	5	140	76	64
18:15 – 18:30	Inbound	6	3	3	26	11	15
	Outbound	13	10	3	88	45	43
	Both	19	13	6	114	56	58
18:30 – 18:45	Inbound	9	7	2	26	12	14
	Outbound	15	13	2	68	41	27
	Both	24	20	4	94	53	41

Continued ...

18:45-19:00	Inbound	5	2	3	16	11	5
	Outbound	11	8	3	47	22	25
	Both	16	10	6	63	33	30
07:00 – 10:00	Inbound	85	69	16	390	204	186
	Outbound	260	194	66	1541	729	812
	Both	345	263	82	1931	933	998

Woden 2016 Cordon Count – Numbers per time interval



A3. Comparison of 2016 and 2015 cordon count data

This section contains a comparison of the cordon counts at Woden for 2016 and 2015

Both counts were undertaken on a Wednesday – 2 March 2016 and 4 March 2015.

The differences between the 2016 and the 2015 figures are the increase (or decrease shown as a negative) in the number from 2015 expressed as a percentage.

Woden 2016/2015 cyclists & pedestrian comparison									
Session	2016			2015			Difference % 2016/2015		
	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total	Cyclist	Pedestrian	total
Morning (AM)	425	2373	2798	406	2790	3196	4.7%	-14.9%	-12.5%
Afternoon (PM)	345	1931	2276	399	2595	2994	-13.5%	-25.6%	-24.0%
Total	770	4304	5074	805	5385	6190	-4.3%	-20.1%	-18.0%

Woden 2016/2015 cyclists AM comparison

Woden 2016/2015 cyclists AM comparison										
Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	30	19	11	26	24	2	0.2%	-0.2%	0.4%
W02	Both	30	22	8	2	2	0	1.2%	0.8%	0.3%
W03	Both	96	76	20	24	12	12	3.0%	2.7%	0.3%
W04	Both	29	19	10	31	20	11	-0.1%	0.0%	0.0%
W05	Both	61	40	21	66	43	23	-0.2%	-0.1%	-0.1%
W06	Both	10	9	1	19	14	5	-0.4%	-0.2%	-0.2%
W07	Both	25	20	5	34	23	11	-26.5%	-13.0%	-54.5%
W08	Both	1	0	1	1	0	1	0.0%	0.0%	0.0%
W09	Both	15	9	6	24	14	10	-0.4%	-0.2%	-0.2%
W10	Both	10	9	1	12	8	4	-0.1%	0.0%	-0.1%
W11	Both	2	1	1	10	8	2	-0.3%	-0.3%	0.0%
W12	Both	13	13	0	9	8	1	0.2%	0.2%	0.0%
W13	Both	4	4	0	2	2	0	0.1%	0.1%	0.0%
W14	Both	2	2	0	3	3	0	0.0%	0.0%	0.0%
W15	Both	8	7	1	12	8	4	-0.2%	0.0%	-0.1%
W16	Both	4	4	0	9	9	0	-0.2%	-0.2%	0.0%
W17	Both	3	3	0	4	4	0	0.0%	0.0%	0.0%
W18	Both	82	51	31	109	73	36	-1.1%	-0.9%	-0.2%
W19	Both	n.a	n.a	n.a	9	7	2	n.a	n.a	n.a
All sites	Both	425	308	117	406	282	124	4.7%	9.2%	-5.6%

Note: Count site W19 was not counted in 2016

Woden 2016/2015 pedestrians AM comparison

Morning 7 am to 10 am		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	123	44	79	144	70	74	-0.9%	-1.1%	0.2%
W02	Both	152	70	82	1	0	1	6.4%	2.9%	3.4%
W03	Both	30	18	12	27	10	17	0.1%	0.3%	-0.2%
W04	Both	9	3	6	12	7	5	-0.1%	-0.2%	0.0%
W05	Both	293	134	159	243	131	112	2.1%	0.1%	2.0%
W06	Both	20	16	4	7	5	2	0.5%	0.5%	0.1%
W07	Both	360	156	204	506	228	278	-28.9%	-31.6%	-26.6%
W08	Both	70	49	21	234	176	58	-6.9%	-5.4%	-1.6%
W09	Both	78	40	38	110	62	48	-1.3%	-0.9%	-0.4%
W10	Both	283	134	149	252	122	130	1.3%	0.5%	0.8%
W11	Both	61	41	20	79	42	37	-0.8%	0.0%	-0.7%
W12	Both	51	30	21	82	40	42	-1.3%	-0.4%	-0.9%
W13	Both	39	21	18	48	24	24	-0.4%	-0.1%	-0.3%
W14	Both	102	59	43	137	64	73	-1.5%	-0.2%	-1.3%
W15	Both	150	66	84	186	99	87	-1.5%	-1.4%	-0.1%
W16	Both	163	94	69	197	111	86	-1.4%	-0.7%	-0.7%
W17	Both	77	43	34	107	57	50	-1.3%	-0.6%	-0.7%
W18	Both	312	153	159	323	138	185	-0.5%	0.6%	-1.1%
W19	Both	n.a	n.a	n.a	95	42	53	n.a	n.a	n.a
All sites	Both	2373	1171	1202	2790	1428	1362	-14.9%	-18.0%	-11.7%

Note: Count site W19 was not counted in 2016

Woden 2016/2015 cyclists PM comparison

Woden 2016/2015 cyclists PM comparison										
Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	11	11	0	9	6	3	0.2%	-0.2%	0.4%
W02	Both	36	26	10	28	20	8	1.2%	0.8%	0.3%
W03	Both	7	7	0	19	11	8	3.0%	2.7%	0.3%
W04	Both	31	25	6	47	35	12	-0.1%	0.0%	0.0%
W05	Both	41	30	11	53	45	8	-0.2%	-0.1%	-0.1%
W06	Both	16	12	4	14	12	2	-0.4%	-0.2%	-0.2%
W07	Both	21	17	4	20	15	5	5.0%	13.3%	-20.0%
W08	Both	0	0	0	1	1	0	0.0%	0.0%	0.0%
W09	Both	34	24	10	21	15	6	-0.4%	-0.2%	-0.2%
W10	Both	15	11	4	30	24	6	-0.1%	0.0%	-0.1%
W11	Both	20	15	5	14	7	7	-0.3%	-0.3%	0.0%
W12	Both	15	14	1	12	8	4	0.2%	0.2%	0.0%
W13	Both	10	9	1	4	4	0	0.1%	0.1%	0.0%
W14	Both	3	2	1	3	3	0	0.0%	0.0%	0.0%
W15	Both	5	4	1	9	7	2	-0.2%	0.0%	-0.1%
W16	Both	8	7	1	9	8	1	-0.2%	-0.2%	0.0%
W17	Both	2	1	1	5	4	1	0.0%	0.0%	0.0%
W18	Both	70	48	22	99	69	30	-1.1%	-0.9%	-0.2%
W19	Both	n.a	n.a	n.a	2	2	0	n.a	n.a	n.a
All sites	Both	345	263	82	399	296	103	-13.5%	-11.1%	-20.4%

Note: Count site W19 was not counted in 2016

Woden 2016/2015 pedestrians PM comparison

Afternoon 4 pm to 7 pm		2016			2015			Difference % 2016/2015		
Site	Direction	Total	Male	Female	Total	Male	Female	Total	Male	Female
W01	Both	113	46	67	84	39	45	-0.9%	-1.1%	0.2%
W02	Both	142	70	72	208	114	94	6.4%	2.9%	3.4%
W03	Both	14	9	5	5	5	0	0.1%	0.3%	-0.2%
W04	Both	2	0	2	7	3	4	-0.1%	-0.2%	0.0%
W05	Both	65	31	34	81	52	29	2.1%	0.1%	2.0%
W06	Both	5	3	2	1	1	0	0.5%	0.5%	0.1%
W07	Both	257	97	160	272	107	165	-5.5%	-9.3%	-3.0%
W08	Both	19	10	9	133	89	44	-6.9%	-5.4%	-1.6%
W09	Both	97	49	48	98	62	36	-1.3%	-0.9%	-0.4%
W10	Both	278	147	131	514	268	246	1.3%	0.5%	0.8%
W11	Both	68	42	26	81	41	40	-0.8%	0.0%	-0.7%
W12	Both	40	18	22	61	37	24	-1.3%	-0.4%	-0.9%
W13	Both	53	27	26	51	24	27	-0.4%	-0.1%	-0.3%
W14	Both	106	51	55	157	85	72	-1.5%	-0.2%	-1.3%
W15	Both	171	70	101	203	99	104	-1.5%	-1.4%	-0.1%
W16	Both	117	68	49	185	99	86	-1.4%	-0.7%	-0.7%
W17	Both	118	68	50	129	72	57	-1.3%	-0.6%	-0.7%
W18	Both	266	127	139	245	118	127	-0.5%	0.6%	-1.1%
W19	Both	n.a	n.a	n.a	80	34	46	n.a	n.a	n.a
All sites	Both	1931	933	998	2595	1349	1246	-25.6%	-30.8%	-19.9%

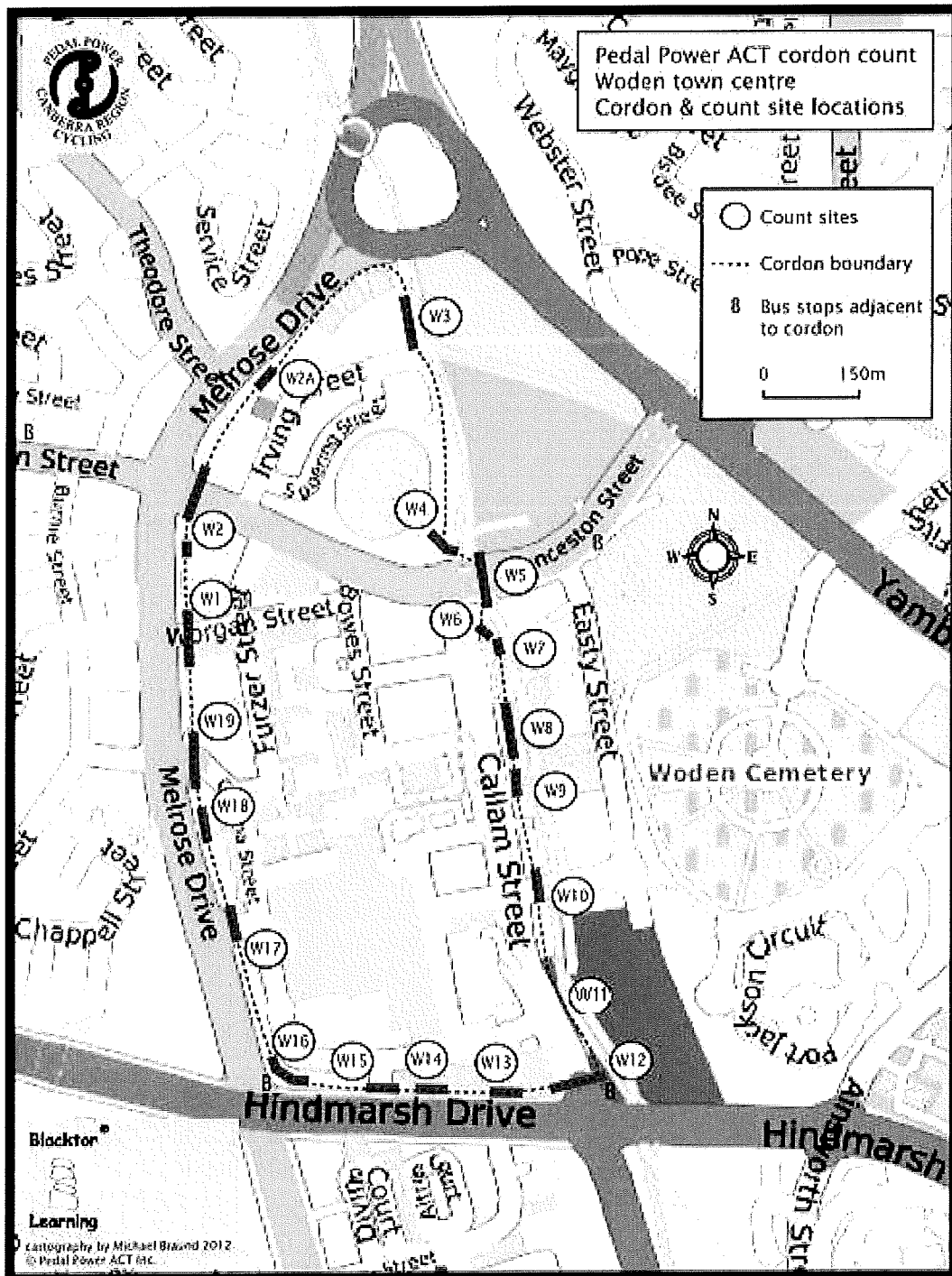
Note: Count site W19 was not counted in 2016

Appendix B – Cordon count locations

The map below shows the cordon around the Woden town centre and the locations of the count locations. Descriptions of the locations are given below the map.

The cordon count locations were the same as in 2015 (and previous years).

Pertinent features relating to count locations when the count was undertaken in 2016 are given below the site descriptions.



Count locations descriptions

Site W01 – On Worgan Street and adjacent footpaths to the east of Melrose Drive (but not along Melrose Drive) including the entrance to the Tradies hotel

Site W02 – On Launceston Street and adjacent footpaths to the east of Melrose Drive and on the entrance to the adjacent car park (but not along Melrose Drive)

Site W02a – On the pathway between Irving Street and the path along Melrose Drive near the Southern Cross Club Health Club

Site W03 – On the connecting path between Irving Street and the community path adjacent to and west of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Irving Street)

Site W04 – On the connecting community paths (two) between Launceston Street (to the north of the junction with Callam Street) and the adjacent car park and the community path adjacent to and west of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Launceston Street)

Site W05 – On Launceston Street and adjacent footpath to the east of the junction with Callam Street (on the bridge over Yarralumla Creek) to the east of Callam Street (but not along Callam Street or the community paths beside Yarralumla Creek)

Site W06 – On the connecting community path between Callam Street park (to the north of the community path bridge over Yarralumla Creek – site W7) and community path adjacent to and west of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street)

Site W07 – On the connecting path bridge over Yarralumla Creek between Callam Street park (to the north of the Callam Offices and south of site W6) and community path adjacent to and east of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street)

Site W08 – On the connecting bridge and footway (steps) between Callam Street park and the Callam Offices over Yarralumla Creek (but no along the park)

Site W09 – On the connecting path bridge over Yarralumla Creek between Callam Street park (to the south of the Callam Offices) and the community path adjacent to and east of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street park)

Site W10 – On Wilbow Street and adjacent footpaths to the east of Callam Street junction (but not along Callam Street)

Site W11 – On the community path bridge over Yarralumla Creek between Callam Street (between Wilbow Street and Hindmarsh Drive) and community path adjacent to and east of Yarralumla Creek (but not along the community path adjacent to and west of Yarralumla Creek or along Callam Street)

Site W12 – On Callam Street and adjacent footpaths to the north of Hindmarsh Drive junction (but not along Hindmarsh Drive)

Site W13 – On the community path between the buildings (between Callam Street and Ball Street) opposite Botany Street (but not along Hindmarsh Drive)

Site W14 – On the community path between the buildings (between Callam Street and Ball Street) some 70 m east of Ball Street (but not along Hindmarsh Drive)

Site W15 – On Ball Street and adjacent footpaths to the north of Callam Street junction (but not Callam Street)

Site W16 – On the community path to the north east of the junction of Hindmarsh Drive and Melrose Drive the car park to the north of Hindmarsh Drive and east of Melrose Drive (but not along Hindmarsh Drive or Melrose Drive)

Site W17 – On Brewer Street and adjacent footpaths to the east of Melrose Drive junction (but not along Melrose Drive)

Site W18 – On the community path where it emerges from the tunnel under Melrose Drive between Brewer Street and Corinna Street (but not along Melrose Drive)

Site W19 – On Corinna Street and adjacent footpaths to the east of Melrose Drive junction (but not along Melrose Drive)

Pertinent features relating to count locations when the count was undertaken

There were no counts undertaken at:

- Site W02a as the path at that location was closed due to construction – and it appears may never be reopened.
- Site W19 as that area was fenced off due to construction and people could not cross the cordon there.

Appendix C – Data collection procedures

The 'instructions' given to the cordon count data collectors is summarised in this appendix.

Data collection procedures

1. Set up the data collection App

Download the Roads ACT 'cordon count App' to use for recording the count data on your smart phone or tablet.

Test that the App is working on your device:

- Enter some trial data in the App and 'send data' – your data will be delivered to the Cordon Count Manager
- Send an email to the Cordon Count Manager advising that you have sent some trial data
- The Cordon Count Manager will confirm that the data was or was not received
- If the data was not received, re load the App and enter some trial data and send it and an email to the Cordon Count Manager

2. Have the data collections sheets available

Print out some paper data collection sheet for use if necessary to record the data if the App can not be used (eg, if your phone fails).

3. Read and understand the counting rules

The counting rules (Appendix D) are to be followed when counting people walking and riding

4. Go to allocated counting site

Arrive at your allocated count location in time to start the count at the scheduled start time.

Locate yourself safely so that you can clearly see everyone who crosses your count location.

Make yourself comfortable – you will be there for three hours.

Take with you:

- Your smart phone or tablet with the Roads ACT Cordon Count App loaded and working
- Two paper data collection sheet (printed out) – for use if the App or your smart phone or tablet does not work
- Pens or pencils for recording your counts on paper (when required)
- A clipboard or something similar to hold the paper data collection sheets when recording your counts
- Count location details and counting instructions for your count location
- A watch or other time piece – for use if your smart phone or tablet does not work
- A chair if you want to sit on it during the count – you can stand or sit on the ground and at some

locations you can sit in your car

- Water and snacks (if desired)
- A hat and sun screen if it's a sunny day, warm clothes if it is likely to be cold and/or wet weather gear if rain is likely.

5. Undertake the cordon count

Count all the pedestrians and cyclists crossing the cordon at your location as per the counting rules (Appendix D) and record the data on the App or on the paper data collection sheets.

6. At the end of each counting session

Submit your data via the App 'Send Data' button – that sends the data via email to designated people for future use (please do not send data during the count session as that generates multiple files for your count data).

Complete and sign any paper data collection sheets used and deliver the sheets to the supervisor.

Appendix D – Counting rules

The 'rules' used by the cordon count counters when collecting data on people walking and riding bikes across the cordon are give in this appendix.

Counting rules

1. Count people walking and riding bikes across the cordon count location (as given to each counter) – count there and nowhere else, regardless of if you think people have or have not been counted elsewhere. (The count locations make a complete cordon.)
2. People riding bikes (cyclists) are those on pedal bicycles, recumbents, trikes, electric assist bicycles (not motorbikes), or link bikes (tag-alongs), or on tricycles, or walking their bikes. A couple on a tandem are two people riding bikes. Children in trailers or in child seats are not riding bikes and are pedestrians for count purposes.
3. People walking (pedestrians) are those walking (not pushing a bike), jogging or running, or on roller skates, skis, kick scooters or mobility scooters and children riding in prams, child seats and trailers.
4. Males and females are designated by your best estimate (it is likely any errors will cancel out).
5. Start on time at exactly 7 am or 4 pm as appropriate.
6. Finish on time at exactly 10 am or 7 pm as appropriate.
7. Do not count people in sight who cross the count location before the start time or after finish time.
8. Do not count yourself or anyone else associated with the count (ie, the supervisor and quality assurance checkers).
9. Lookout for well intentioned, but misinformed, people who think they are helping by repeatedly crossing the cordon count location to inflate the count. If you see one, only count them once and advise the supervisor.
10. Do not advertise that you are counting people walking and riding (but do explain what you are doing if asked).
11. We are only counting people who enter or leave the cordon area via public roads, paths and spaces, not via residential or business premises – people who emerge from private property are NOT counted. There is one exception to this rule – when you know for certain that the someone has approached along 'your' road or path, and only cut the corner via private property just before reaching your control. For this reason, the cordon counting point on each road or path is some distance away from the intersections with the roads that form the cordon boundary.
12. We are not trying to count as many people as possible – we are trying to count as accurately as possible.