

2015 Auckland Region Manual Cycle Monitor

- Regional Summary -





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1. INTRODUCTION

1.1 The Need For Reliable Cycle Trip Data

Monitoring cycle movements and cycle traffic is important to Auckland Transport, to identify where investment may be needed to improve infrastructure for cycling. Cycle traffic data will also help Auckland Transport prioritise future funding through the Auckland Land Transport Programme¹.

This cycle monitoring gives precise cycle traffic information for a number of locations across the region, which can guide investment in infrastructure and other programmes. It also allows Auckland Transport to track progress against a quality baseline over the coming decade.

Manual Cycle Monitoring

Historically, manual cycle monitoring had been carried out in four of the seven Auckland region Territorial Authorities (TAs). However, each monitor had been undertaken using a different methodology² and conducted at different times of the year. This variability prevented the possibility of comparing the relative popularity of different sites across TA boundaries.

Through the Regional Cycle Monitoring Plan, it was proposed that these manual counts be regionally aligned to ensure better regional consistency. Ideally, cycle count monitoring would be carried out at the same time each year across the region, applying a standard methodology.

This report provides a regional summary of the results of manual cycle monitoring conducted at 85 pre-determined sites throughout the Auckland region. Site-by-site results and ward summaries for each of the twelve³ wards in the Auckland region have been provided in separate documents. Readers should refer to these documents for ward and site-level detail.

¹ Auckland Regional Transport Authority (2006) *Regional Cycle Monitoring Plan (Provisional Guidelines)*

² For example, Manukau and North Shore cities' monitors took place at the same morning and evening peak times, while Auckland city's differed by one hour for the evening peak, and Waitakere's differed for both peaks.

³ Note that there were no monitoring sites in the Rodney ward.



1.2 Cycle Monitoring Locations

Eighty-five sites were monitored across the Auckland region in 2015. Note that where sites lie on the border between two wards, they have been included in the reports for both wards. Site numbers (which correspond to the numbering in Figure 1.1) appear in brackets after the site name.

Albany

- Whangaparaoa Road (near Red Beach intersection), Red Beach (59)
- Whangaparaoa Road (near Hibiscus Coast Highway intersection), Silverdale (60)
- D'Oyly Reserve cycleway, Stanmore Bay (61)
- Gulf Harbour Drive/Laurie Southwick Parade, Gulf Harbour (63)
- Hibiscus Coast Highway/Jelas Road (82)
- Behind Auckland Council Building, Centreway Road, Orewa (84)
- Beach Road/Browns Bay Road, Browns Bay (45)
- Rosedale Road/East Coast Road, Rosedale (38)
- Upper Harbour Drive/Albany Highway, Greenhithe (39)
- Oteha Valley Road/SH17/Albany Highway, Oteha (40)
- Rosedale Road/Bush Road, Albany (46)
- Oteha Valley Road/East Coast Road, Northcross (47)
- Squadron Drive/Buckley Avenue, Greenhithe (70)
- Luckens Road/Hobsonville Road, West Harbour (51)
- Sunnynook Road/East Coast Road, Sunnynook (89)

North Shore

- Lake Road by Takapuna Grammar, Takapuna (35)
- Hurstmere Road/Killarney Street, Takapuna (36)
- Taharoto Road/Northcote Road, Northcote (37)
- Wairau Road/Glenfield Road, Glenfield (41)
- Shakespeare Road/East Coast Road, Milford (42)
- Glenfield Road/Coronation Road, Hillcrest (43)
- Birkenhead Avenue/Mokoia Road, Birkenhead (44)
- Sunnynook Road/East Coast Road, Sunnynook (89)



Waitakere

- Henderson Creek, Henderson (48)
- Triangle Road/Don Buck Road, Massey (49)
- Lincoln Road/Fairdene Ave, Henderson (50)
- Luckens Road/Hobsonville Road, West Harbour (51)
- Central Park Drive, Henderson (52)
- 326 Te Atatu Road, Te Atatu (53)
- Te Atatu Road/Elcoat Eve, Te Atatu (54)
- Swanson Road/Ranui Station Road/Armada Drive, Ranui (55)
- West Coast Road/Rosier Road, Glen Eden (57)
- North Western Cycleway (near Te Atatu off-ramp), Te Atatu (58)
- Te Atatu Road/Old Te Atatu Road, Te Atatu (72)
- Rathgar Road/Pomaria Road, Henderson (85)
- Triangle Road/Huruhuru Road, Henderson (87)

Waitemata and Gulf

- Victoria Street/Wellesley Street, CBD (1)
- Ponsonby Road/Karangahape Road/Newton Road/Great North Road, Newton (2)
- Symonds Street/Karangahape Road/Grafton Road, Grafton (8)
- Karangahape Road/Queen Street, CBD (9)
- Tamaki Drive/The Strand, Mechanics Bay (10)
- Auckland Ferry Terminal, CBD (22)
- Stanley Street/Grafton Road/Wellesley Street East, CBD (75)
- Ian McKinnon Drive/Newton Road, Eden Terrace (13)
- Jervis Road/Wallace Street/Kelmarna Ave, Herne Bay (16)
- Broadway/Khyber Pass Road, Newmarket (90)

Albert-Eden–Roskill

- Great North Road/Carrington Road/Point Chevalier Road, Point Chevalier (3)
- Dominion Road/Balmoral Road, Balmoral (5)
- North Western Cycleway/Great North Road, Waterview (6)
- North Western Cycleway/St Lukes Road, St Lukes (7)
- Manukau Road/Greenlane West, Epsom (12)
- Mount Albert Road/New North Road, Mt Albert (14)
- Keith Hay Park, Sandringham (88)
- Great South Road/Campbell Road/Main Highway, Ellerslie (21)
- Blockhouse Bay Road/Great North Road, Avondale (73)



- Richardson Road/Maioro Street, New Windsor (15)
- Broadway/Khyber Pass Road, Newmarket (90)
- Upper Dominion Road, Eden Terrace (92)

Whau

- 3 Rankin Ave, New Lynn (56)
- Blockhouse Bay Road/Great North Road, Avondale (73)
- Patiki Road/Rosebank Road, Avondale (4)
- Richardson Road/Maioro Street, New Windsor (15)

Orakei

- St Heliers Bay Road/West Tamaki Road, Glendowie (20)
- Remuera Road/Orakei Road, Remuera (11)
- Orakei Basin Boardwalk, Orakei (91)

Maungakiekie-Tamaki

- Ellerslie Panmure Highway/Lunn Ave, Panmure (19)
- Great South Road/Campbell Road/Main Highway, Ellerslie (21)
- Apirana Avenue/Pilkington Road/Tripoli Road, Glen Innes (74)
- Waikaraka Cycleway, Onehunga (76)
- Onehunga Harbour Road, Onehunga (17)
- Lagoon Drive/Church Crescent, Panmure (78)
- St Heliers Bay Road/West Tamaki Road, Glendowie (20)

Howick

- Bucklands Beach Road/Pakuranga Road, Howick (33)
- Te Irirangi Drive/Ti Rakau Drive, Botany (34)
- Pakuranga Road/Ti Rakau Drive, Pakuranga (80)
- Harris Road/Smales Road, East Tamaki (79)
- Te Irirangi Drive/Ormiston Road, Flat Bush (81)



Manukau

- Great South Road/Bairds Road, Papatoetoe (23)
- Great South Road/Te Irirangi Drive/Cavendish Drive, Manukau (24)
- Massey Road/Buckland Road, Mangere (28)
- Te Irirangi Drive/Ormiston Road, Flat Bush (81)
- Tom Pearce Drive/George Bolt Memorial Drive, Mangere (25)
- Great South Road/East Tamaki Road, Papatoetoe (30)
- Wyllie Avenue/Puhinui Road, Papatoetoe (31)
- McKenzie Road/Coronation Road/Walmsley Road, Mangere (32)
- Highbrook Drive, Highbrook (71)
- Great South Road/High Street/Atkinson Avenue, Otahuhu (18)

Manurewa-Papakura

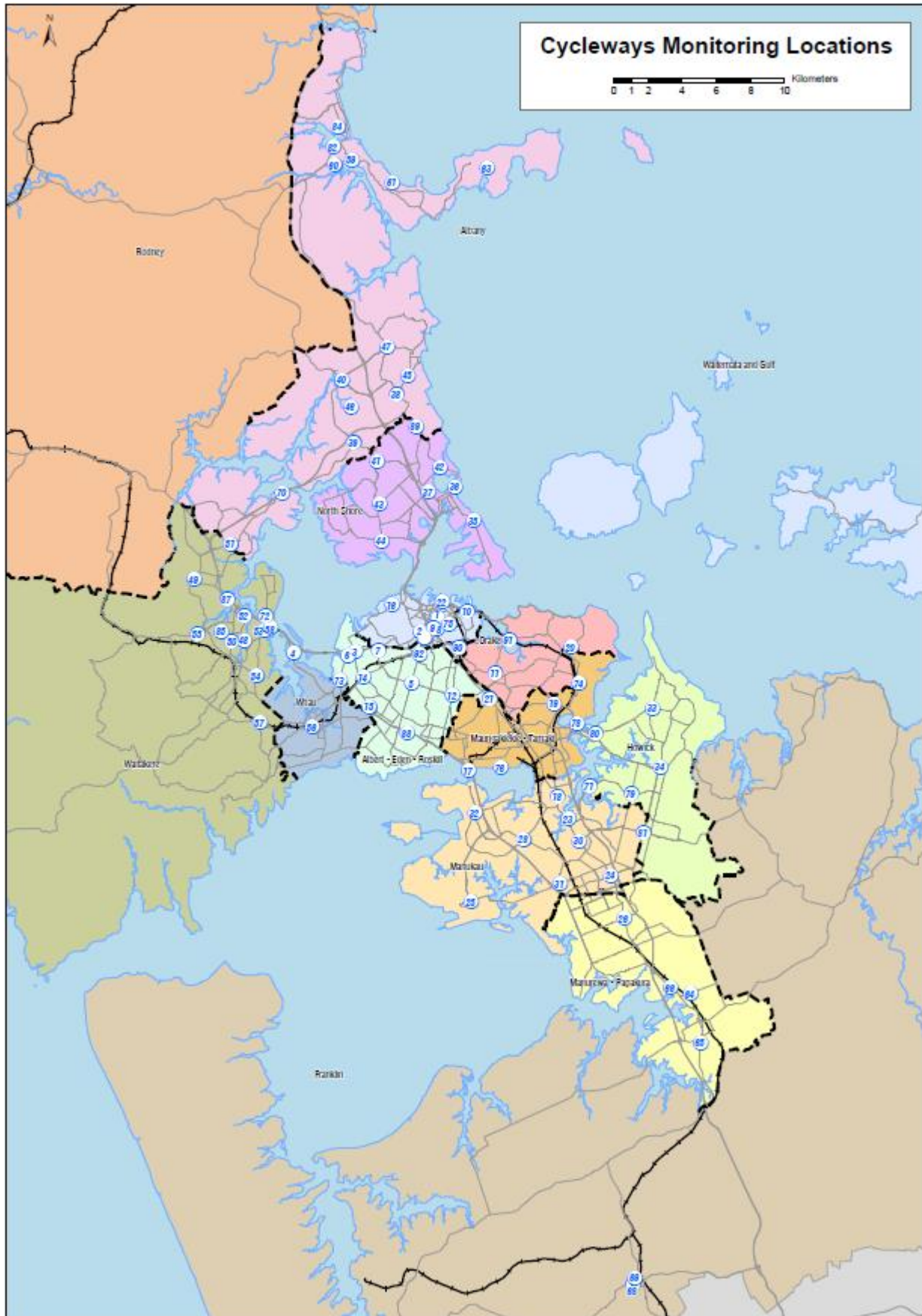
- Great South Road/Taka Street, Takanini (66)
- Porchester Road/Walters Road, Takanini (64)
- Great South Road/Rosehill Drive, Papakura (65)
- Great South Road/Browns Road/Orams Road, Manurewa (26)

Franklin

- Queen Street/Harris Street, Pukekohe (68)
- Edinburgh Street/Tobin Street, Pukekohe (69)

Note that there are no cycle monitoring sites in the Rodney ward.

Figure 1.1: 2015 Cycle Monitoring Locations in the Auckland Region





2. REGIONAL SUMMARY OF RESULTS

2.1 Aggregated Total

Total Movements

- Overall, a total of 15,382 cyclist movements⁴ were recorded across the 85 sites monitored in 2015. This figure represents a **19 per cent increase** when compared with 2014 (12,877 movements).
- Across the 60 sites monitored since the manual cycle monitor began in 2007, in 2015 cyclist movements have **increased by 38 per cent**.
- Of the sites monitored in both 2014 and 2015, the average number of cycle movements in the region across the morning and evening periods has increased (181 per site in 2015, compared with 151 per site in 2014 - an increase of 20 per cent).

⁴ It is important to note that this figure represents individual cyclist movements rather than total cyclist numbers. Due to the close proximity of sites to one another (particularly in the Auckland CBD), it is possible for the same cyclist to be counted at more than one site. It is also possible to 'double count' cyclists if they use the same intersection more than once during a shift. At the same time, there will be many cycle trips that will not be counted at all by this methodology if a cyclist's route does not pass through a monitoring location. Because of these limitations, it cannot be said that 15,382 different cyclists were counted on the Auckland region's roads using these sites; the actual number of cyclists, and the number of cycle trips they take, may be higher or lower than the number of cycle movements counted through this methodology.



**Table 2.1: Total Cyclist Movements in the Auckland Region
2007-2015 (n)**

<i>Locations</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	Change 14-15	Change 07-15
Total (60 sites since 2007)	8417	8783	8427	10659	10917	10275	11405	10004	11657	17%	38%
<i>Annual change</i>		4%	-4%	26%	2%	-6%	11%	-12%	17%		
Total (67 sites since 2008)	-	9255	8965	11336	11517	10949	12130	10598	12316	16%	-
<i>Annual change</i>			-3%	26%	2%	-5%	11%	-13%	16%		
Total (78 sites in 2009)	-	-	9969	12646	12970	12215	13587	11850	14031	18%	-
<i>Annual change</i>				27%	3%	-6%	11%	-13%	18%		
Total (80 sites in 2010)	-	-	-	12836	13160	12439	13799	11929	14177	19%	-
<i>Annual change</i>					3%	-5%	11%	-14%	19%		
Total (82 sites in 2011)	-	-	-	-	13406	12638	13991	12071	14390	19%	-
<i>Annual change</i>						-6%	11%	-14%	19%		
Total (83 sites in 2012)	-	-	-	-	-	13215	14628	12594	15015	19%	-
<i>Annual change</i>							11%	-14%	19%		
Total (85 sites since 2013)	-	-	-	-	-	-	14864	12877	15382	19%	-
<i>Annual change</i>								-13%	19%		



Figure 2.1: Average and Range of Total Cyclist Movements by Ward in 2015 (All 85 Sites)

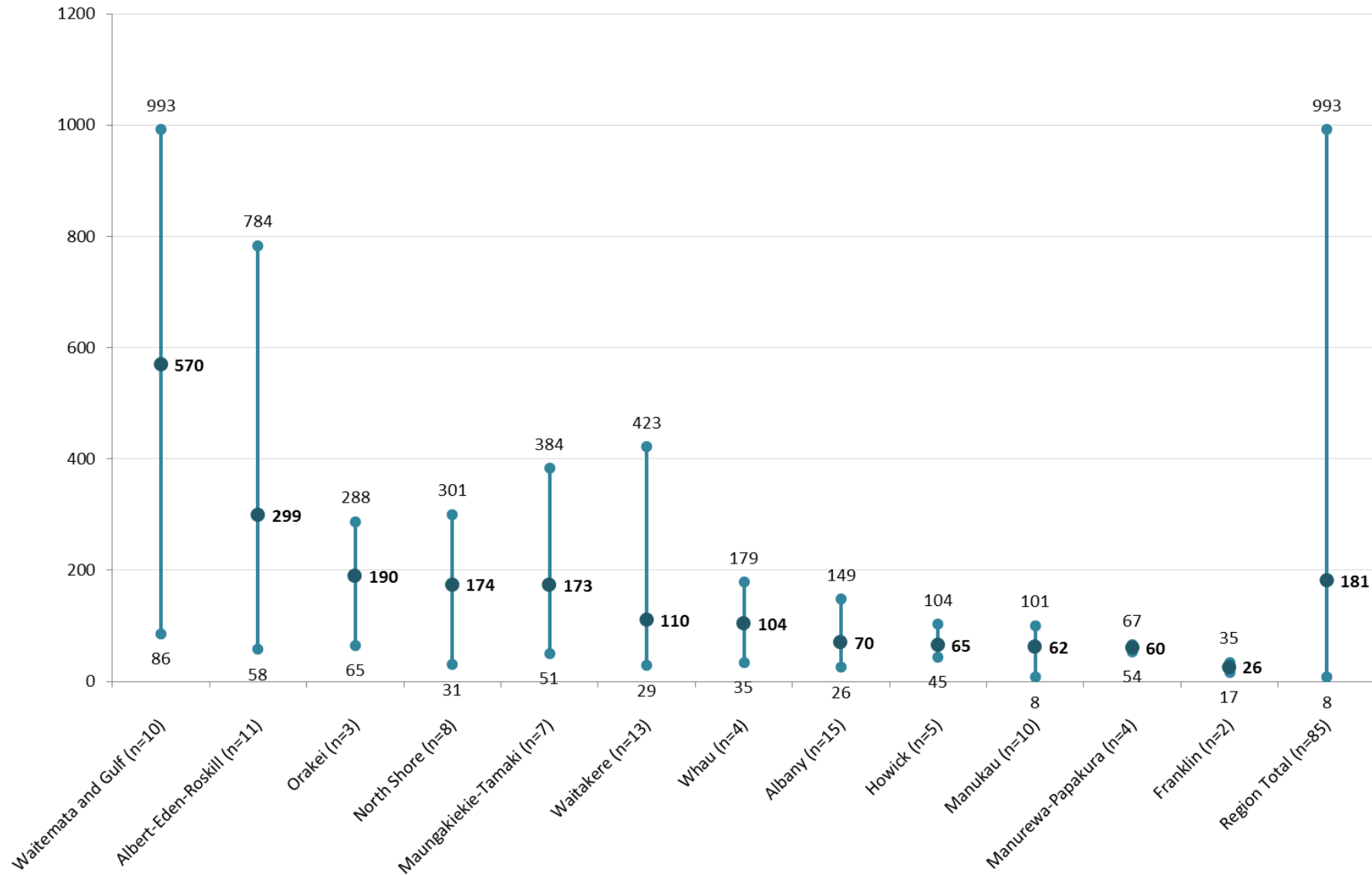
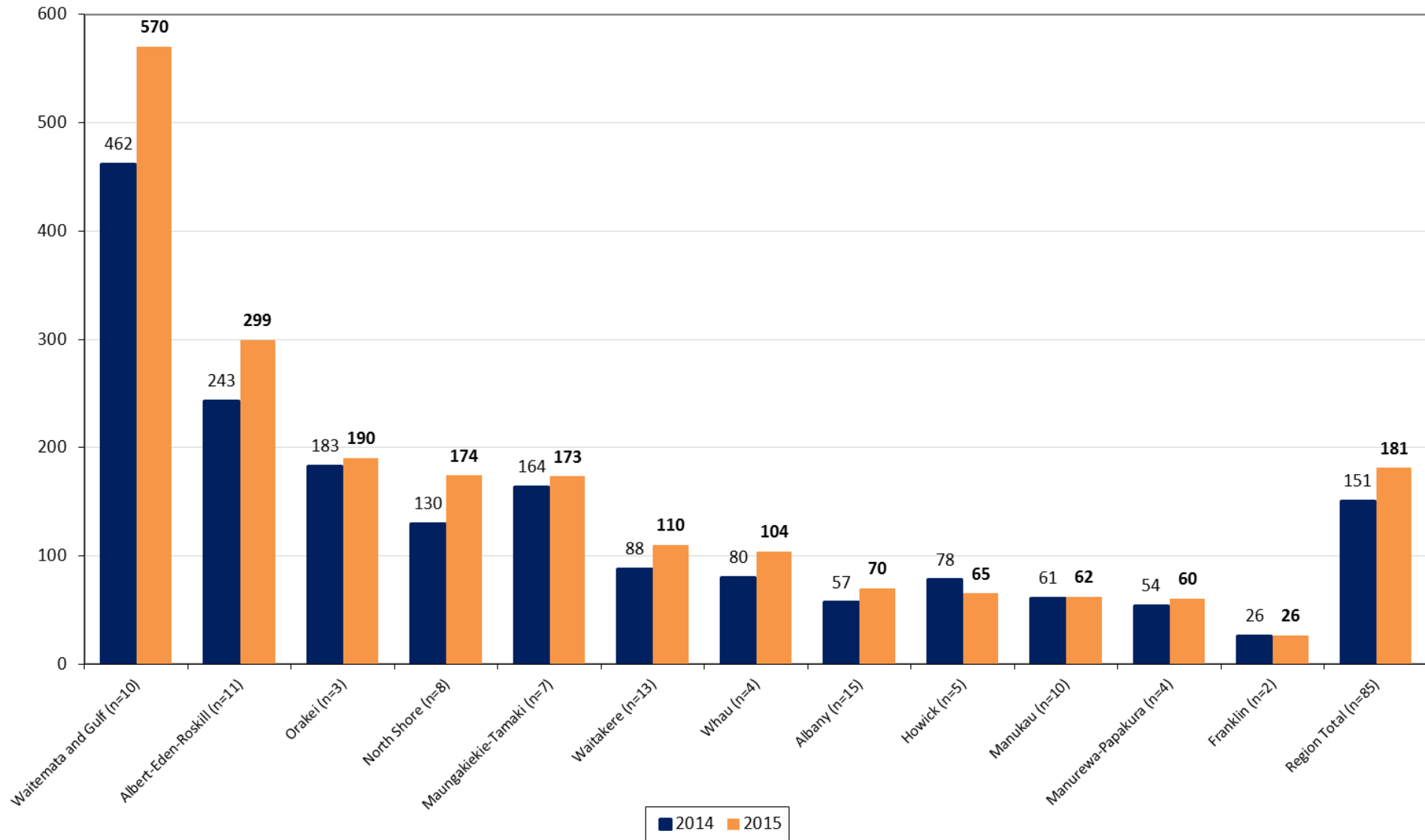




Figure 2.2: Average Cyclist Movements by Ward - 2014-2015 (n)





- Of the 85 sites monitored in Auckland this year, the busiest was the Symonds Street/Karangahape Road intersection in Waitemata and Gulf with a total of 993 movements (up from 832 movements last year).
- In contrast, Tom Pearce Drive/George Bolt Memorial Drive, Manukau ward had the lightest cyclist traffic (8 movements, down from 33 movements last year).
- The majority of the sites (62 of the 85 sites monitored in 2014 and 2015; 73 per cent) have recorded higher cycle volumes than last year. The most notable increases were at:
 - Triangle Road/Don Buck Road (Waitakere ward) – up from 40 to 79 movements (98 per cent);
 - Richardson Road/Maioro Street (Albert-Eden-Roskill ward) – up from 41 to 80 movements (95 per cent);
 - Ian McKinnon Drive/Newton Road (Waitemata and Gulf ward) – up from 496 to 929 movements (87 per cent); and
 - Whangaparaoa Road, near Hibiscus Coast Highway intersection (Albany ward) – up from 15 to 28 movements (87 per cent).
- Twenty-two per cent of the sites (19 out of the 85 sites monitored in 2014 and 2015) have recorded decreases in total cyclist numbers over the last 12 months. The most notable decreases occurred at:
 - Tom Pearce Drive/George Bolt Memorial Drive (Manukau ward) – down from 33 to 8 movements (76 per cent);
 - 3 Rankin Avenue (Whau ward) – down from 47 to 35 movements (26 per cent);
 - Te Irirangi Drive/Ormiston Road (Howick/Manukau ward) – down from 61 to 45 movements (26 per cent);
 - Harris Road/Smales Road (Howick ward) – down from 64 to 49 movements (23 per cent); and
 - Beach Road/Browns Bay Road (Albany ward) – down from 70 to 54 movements (23 per cent).



**Table 2.2: Summary Of Total Cyclist Movements
2007-2015 (n) – 6:30am to 9:00am and 4:00pm to 7:00pm**

Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
8	Symonds Street/Karangahape Road	Waitemata and Gulf	639	621	528	597	690	732	902	832	993	19%	55%
10	Tamaki Drive/The Strand	Waitemata and Gulf	900	786	603	936	1059	944	921	799	957	20%	6%
13	Ian McKinnon/Newton Road	Waitemata and Gulf	-	-	291	374	560	503	582	496	929	87%	-
7	North Western Cycleway/St Lukes	Albert-Eden-Roskill	324	331	310	432	513	429	547	659	784	19%	142%
6	North Western Cycleway/Great North Road	Albert-Eden-Roskill	232	369	286	485	486	405	519	542	713	32%	207%
9	Karangahape Road/Queen Street	Waitemata and Gulf	507	424	459	582	554	573	654	613	678	11%	34%
2	Ponsonby/Karangahape Road	Waitemata and Gulf	487	415	370	559	511	498	595	558	643	15%	32%
90	Broadway/Khyber Pass	Waitemata and Gulf	-	-	-	-	-	577	637	523	625	20%	-
58	North Western Cycleway/near Te Atatu Road off-ramp	Waitakere	232	272	355	388	345	425	454	304	423	39%	82%
22	Ferry Terminal	Waitemata and Gulf	380	316	248	395	391	389	417	355	421	19%	11%
17	Onehunga Harbour Road	Maungakiekie-Tamaki	249	220	180	257	310	323	426	442	384	-13%	54%
92	Upper Dominion Road	Albert-Eden-Roskill	-	-	-	-	-	-	204	231	302	31%	-
42	Shakespeare/East Coast Road	North Shore	137	250	310	305	286	238	266	194	301	55%	120%
5	Dominion/Balmoral Road	Albert-Eden-Roskill	237	201	183	205	197	188	235	235	288	23%	22%
11	Remuera/Orakei Road	Orakei	195	189	187	244	280	213	348	278	288	4%	48%
35	Lake Road, by Takapuna Grammar	North Shore	192	297	295	327	316	321	266	220	273	24%	42%
3	Great North/Carrington Road	Albert-Eden-Roskill	235	231	193	314	232	206	228	227	266	17%	13%
37	Taharoto/Northcote Road	North Shore	162	270	202	229	307	218	234	170	264	55%	63%
36	Hurstmere Road/Killarney Street	North Shore	121	252	318	302	304	262	271	192	242	26%	100%
12	Manukau Road/Greenlane West	Albert-Eden-Roskill	225	205	176	257	227	205	199	217	239	10%	6%
1	Victoria/Wellesley/Halsey Street	Waitemata and Gulf	160	136	124	162	225	192	176	224	228	2%	43%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
20	St Heliers Bay/West Tamaki Road	Maungakiekie-Tamaki/Orakei	208	167	108	170	224	135	248	219	216	-1%	4%
21	Great South Road/Campbell Road/Main Highway	Albert-Eden-Roskill/Maungakiekie-Tamaki	174	114	151	171	138	132	146	149	201	35%	16%
14	Mount Albert/New North Road	Albert-Eden-Roskill	156	164	142	209	201	170	170	169	181	7%	16%
78	Lagoon Drive/Church Crescent	Maungakiekie-Tamaki	-	-	129	195	163	137	182	155	180	16%	-
73	Blockhouse Bay/Great North Road	Albert-Eden-Roskill/Whau	-	117	119	141	129	129	141	142	179	26%	-
52	Central Park Drive	Waitakere	127	157	212	200	212	246	273	125	161	29%	27%
89	Sunnynook/East Coast Road	Albany/North Shore	-	-	-	-	174	155	149	97	149	54%	-
47	Oteha Valley/East Coast Road	Albany	59	114	138	168	129	137	106	103	146	42%	147%
16	Jervois Road/Wallace Street	Waitemata and Gulf	-	-	111	167	148	141	136	132	144	9%	-
72	Te Atatu/Old Te Atatu Road/Tatau Way	Waitakere	-	111	134	207	141	193	192	126	142	13%	-
53	326 Te Atatu Road, near Covil Avenue	Waitakere	87	107	138	127	127	135	153	124	141	14%	62%
4	Patiki/Rosebank Road	Whau	82	79	72	90	121	95	105	91	120	32%	46%
19	Ellerslie Panmure Highway/Lunn Ave	Maungakiekie-Tamaki	118	94	82	100	77	79	94	66	104	58%	-12%
38	Rosedale/East Coast Road	Albany	76	98	159	152	143	118	112	85	104	22%	37%
80	Pakuranga Road/Ti Rakau Drive	Howick	-	-	123	162	124	127	134	118	104	-12%	-
23	Great South/Bairds Road	Manukau	68	56	57	71	89	81	103	60	101	68%	49%
48	Henderson Creek	Waitakere	46	30	73	84	66	116	86	87	101	16%	120%
46	Rosedale/Bush Road	Albany	31	73	72	109	85	63	100	80	93	16%	200%
84	Behind Auckland Council Building, Orewa	Albany	-	-	86	95	138	89	89	75	92	23%	-
87	Triangle/Huruhuru Road	Waitakere	-	-	-	137	121	177	153	66	88	33%	-
39	Upper Harbour/Albany Highway	Albany	25	98	138	158	148	187	134	75	87	16%	248%
41	Wairau/Glenfield Road	North Shore	64	73	80	91	93	105	69	79	86	9%	34%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
75	Stanley Street/Grafton Road	Waitemata and Gulf	-	65	96	93	74	94	117	92	86	-7%	-
30	Great South/East Tamaki Road	Manukau	73	51	63	65	89	86	96	72	85	18%	16%
15	Richardson Road/Maioro Street	Albert-Eden-Roskill/Whau	-	-	21	39	37	53	48	41	80	95%	-
32	McKenzie/Coronation/Walmsley Road	Manukau	70	57	52	87	93	48	90	82	80	-2%	14%
49	Triangle Road/Don Buck Road	Waitakere	67	61	56	90	88	83	87	40	79	98%	18%
33	Bucklands Beach/Pakuranga Road	Howick	140	130	94	114	107	85	71	90	77	-14%	-45%
76	Waikaraka Cycle Way	Maungakiekie-Tamaki	-	54	51	42	65	52	83	73	77	5%	-
70	Squadron Drive/Buckley Avenue*	Albany	-	35	68	94	83	110	106	65	74	14%	-
26	Great South/Browns/Orams Road	Manurewa-Papakura	60	55	39	58	70	44	49	70	67	-4%	12%
55	Swanson/Ranui Station Road/Armada Drive	Waitakere	62	86	103	102	132	115	116	81	66	-19%	6%
91	Orakei Basin Boardwalk	Orakei	-	-	-	-	-	-	32	52	65	25%	-
18	Great South Road/High Street/Atkinson/Park Avenue	Manukau	84	60	49	61	71	75	79	61	64	5%	-24%
28	Massey/Buckland Road	Manukau	43	31	39	45	53	48	58	58	64	10%	49%
64	Porchester Road/Walters Road	Manurewa-Papakura	50	46	49	-	72	44	43	45	64	42%	28%
31	Wyllie Avenue/Puhinui Road	Manukau	38	33	35	57	75	47	95	60	63	5%	66%
24	Great South Road/Te Irirangi Drive/Cavendish Drive	Manukau	73	51	41	72	94	78	119	72	60	-17%	-18%
40	Oteha Valley Road/SH17/Albany Highway	Albany	19	48	72	91	82	128	85	60	59	-2%	211%
88	Keith Hay Park	Albert-Eden-Roskill	-	-	-	53	69	47	59	58	58	0%	-
45	Beach/Browns Bay Road	Albany	19	45	59	77	75	61	60	70	54	-23%	184%
65	Great South Road/Rosehill Drive	Manurewa-Papakura	53	72	59	62	73	57	71	51	54	6%	2%
66	Great South Road/Taka Street	Manurewa-Papakura	58	58	36	43	60	49	55	51	54	6%	-7%
85	Rathgar/Pomaria Road	Waitakere	-	-	85	99	68	73	68	55	53	-4%	-
34	Te Irirangi Drive/Ti Rakau Drive	Howick	81	75	59	78	76	86	107	55	52	-5%	-36%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
51	Luckens/Hobsonville Road	Albany/Waitakere	32	41	77	95	52	112	104	41	52	27%	63%
74	Apirana Avenue/Pilkington/Tripoli Road	Maungakiekie-Tamaki	-	61	32	60	55	46	39	47	51	9%	-
57	West Coast/Rosier Road	Waitakere	48	37	62	60	60	38	56	33	50	52%	4%
71	Highbrook Drive	Manukau	-	29	38	40	53	50	47	49	50	2%	-
79	Harris/Smales Road	Howick	-	-	60	62	75	44	57	64	49	-23%	-
43	Glenfield/Coronation Road	North Shore	28	75	78	93	52	73	58	58	47	-19%	68%
81	Te Irirangi Drive/Ormiston Road	Howick/Manukau	-	-	33	66	56	50	85	61	45	-26%	-
50	Lincoln Road/Fairdene Avenue	Waitakere	40	55	43	56	54	67	68	30	42	40%	5%
56	3 Rankin Avenue	Whau	31	38	38	32	42	38	40	47	35	-26%	13%
68	Queen/Harris Street	Franklin	101	83	95	57	67	44	47	35	35	0%	-65%
63	Gulf Harbour Drive/Laurie Southwick Parade	Albany	56	44	22	37	39	33	40	29	32	10%	-43%
44	Birkenhead Ave/Mokoia Road	North Shore	40	49	57	75	45	52	61	31	31	0%	-23%
82	Hibiscus Coast Highway/Jelas Road	Albany	-	-	38	39	30	34	43	22	31	41%	-
54	Te Atatu Road/Elcoat Avenue	Waitakere	50	45	69	52	48	57	44	35	29	-17%	-42%
60	Whangaparaoa Road, near Hibiscus Coast Highway intersection	Albany	28	20	12	23	22	20	19	15	28	87%	0%
61	D'Oyly Reserve cycleway	Albany	24	103	9	44	58	35	27	24	28	17%	17%
59	Whangaparaoa Road, near Red Beach Intersection	Albany	29	31	26	29	26	28	25	18	26	44%	-10%
69	Edinburgh/Tobin Street	Franklin	35	40	34	28	28	28	21	17	17	0%	-51%
25	Tom Pearce/George Bolt Memorial Drive	Manukau	-	-	27	12	54	15	33	33	8	-76%	-
Total (60 sites since 2007)^			8417	8783	8427	10659	10917	10275	11405	10004	11657	17%	28%
Total (67 sites since 2008)^			-	9255	8965	11336	11517	10949	12130	10598	12316	16%	-
Total (78 sites in 2009)			-	-	9969	12646	12970	12215	13587	11850	14031	18%	-



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
	Total (80 sites in 2010)		-	-	-	12836	13160	12439	13799	11929	14177	19%	-
	Total (82 sites in 2011)		-	-	-	-	13406	12638	13991	12071	14390	19%	-
	Total (83 sites in 2012)		-	-	-	-	-	13215	14628	12594	15015	19%	-
	Total (85 sites since 2013)		-	-	-	-	-	-	14864	12877	15382	19%	-

^Note that the evening count for D'Oyly Reserve cycleway (site 61) in 2008 is considered as an outlier, so the total figures exclude this outlier for more accurate comparison.

**Note that the Squadron Drive/Buckley Avenue (site 70) is the relocated site from previous Upper Harbour Drive/Buckley Avenue, so previous results are not directly comparable.*



- Overall, 92 per cent of cyclists in the Auckland region were adults in 2015 (unchanged since 2013). Of the 12 wards monitored, the Waitemata and Gulf ward had the highest proportion of adult cyclists (99 per cent) whilst the Franklin ward had the greatest share of cyclists identified as school children (50 per cent).
- Almost all cyclists were wearing a helmet (93 per cent, stable from 92 per cent last year). The North Shore ward had the highest proportion of cyclists who were wearing a helmet (98 per cent) whilst the Manukau ward had the greatest share of cyclists who did not wearing helmets (24 per cent).
- Eighty per cent of all cyclists observed in the Auckland region throughout the monitoring periods were male (stable from 81 per cent in 2014) and 18 per cent were female (stable from 17 per cent from last year). The Whau and Howick wards had the highest proportion of male cyclists (each with 88 per cent), while the Orakei ward had the greatest share of female cyclists (21 per cent).
- More than half of the cyclists were riding on the road (56 per cent, stable from 57 per cent last year). The other cyclists either rode on an off-road cycleway (27 per cent, up from 22 per cent) or on the footpath (17 per cent, down from 20 per cent). Orakei ward continued to have the highest share of cyclists riding on the road (82 per cent, stable from 83 per cent last year), while Waitakere ward had the greatest share of cyclists using an off-road cycleway (51 per cent). Franklin ward had the highest proportion of footpath riders (71 per cent).



Table 2.3: Aggregate Totals of Cyclist Characteristics 2007-2015 (%)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Cyclist Type									
Adult	89	87	88	89	90	90	92	92	92
School child	11	13	12	11	10	10	8	8	8
Helmet Wearing									
Helmet on head	90	90	91	91	91	91	92	92	93
No helmet	10	10	9	9	9	9	8	8	7
Gender									
Male	-	-	-	-	79	82	83	81	80
Female	-	-	-	-	16	15	15	17	18
Can't tell	-	-	-	-	5	3	2	2	2
Where Riding									
Road	68	72	61	62	61	61	60	57	56
Footpath	21	21	25	25	21	18	20	20	17
Off-road cycleway	10	7	14	13	18	21	20	22	27
Don't know	0	0	0	0	0	0	0	1	1
Base:	8417	9255	9969	12836	13406	13215	14864	12877	15382



Table 2.4: Summary of Cyclist Characteristics by Ward in 2015

	<i>Albany</i>	<i>North Shore</i>	<i>Waitakere</i>	<i>Waitemata and Gulf</i>	<i>Albert/Eden/Roskill</i>	<i>Whau</i>	<i>Orakei</i>	<i>Maungakiekie-Tamaki</i>	<i>Howick</i>	<i>Manukau</i>	<i>Manurewa-Papakura</i>	<i>Franklin</i>
Cyclist Type												
Adult	79	86	87	99	95	94	94	87	87	86	81	50
School child	21	14	13	1	5	6	6	13	13	14	19	50
Helmet Wearing												
Helmet on head	94	98	90	93	95	90	97	94	90	76	79	85
No helmet	6	2	10	6	4	10	3	6	10	24	21	15
Can't tell	0	0	0	1	1	0	0	0	0	0	0	0
Gender												
Male	84	80	85	78	80	88	79	77	88	85	87	87
Female	14	18	14	20	18	12	21	15	11	14	13	12
Can't tell	2	2	1	2	2	0	0	8	1	1	0	2
Where Riding												
Road	64	77	25	68	42	56	82	47	62	51	49	29
Footpath	17	14	24	14	13	33	7	15	38	41	51	71
Off-road cycleway	19	9	51	18	44	11	11	38	0	8	0	0
Can't tell	0	0	0	1	1	0	0	0	0	0	0	0
Base:	1055	1393	1427	5704	3291	414	569	1213	327	620	239	52

Note: Orange highlighting denotes the ward with the highest proportion of a particular characteristic when compared to the other wards. Also, base sizes add to more than total number of cycle movements as sites on ward boundaries have been included in both wards.



2.2 Morning Peak

Key Points

- A total of 7,671⁵ morning cyclist movements were recorded across the 85 sites monitored in 2015. This represents a **25 per cent increase** from 2014 (6,150 movements).
- As shown in Figure 2.3, the average volume of morning cyclist movements across all 85 sites in the Auckland region is 90, up from 72 in 2014. Of the 12 wards, the average number of morning cyclists is highest in the Waitemata and Gulf ward (279 movements) and lowest in Franklin ward (13 movements).
- Figure 2.4 compares the average morning cycle volume of each ward over the last 12 months. All but one ward recorded higher averages, the most notable increases in the Waitemata and Gulf (up from 227 to 279) and North Shore (up from 66 to 105) wards. The average morning cycle movements for Orakei ward decreased from 126 in 2014 to 118.

⁵ It is important to note that this figure represents individual cyclist movements rather than total cyclist numbers. Due to the close proximity of sites to one another (particularly in Auckland City's CBD), it is possible for the same cyclist to be counted at more than one site. It is also possible to 'double count' cyclists if they use the same intersection more than once during a shift. At the same time, there will be many cycle trips that were not counted at all by this methodology if a cyclist's route does not pass through a monitoring location. Because of these limitations, it cannot be said that 7,671 different cyclists were counted on the Auckland region's roads using these sites; the actual number of cyclists, and the number of cycle trips they take, may be higher or lower than the number of cycle movements counted through this methodology.



Figure 2.3: Average and Range of Morning Cyclist Movements by Ward in 2015 (All 85 Sites)

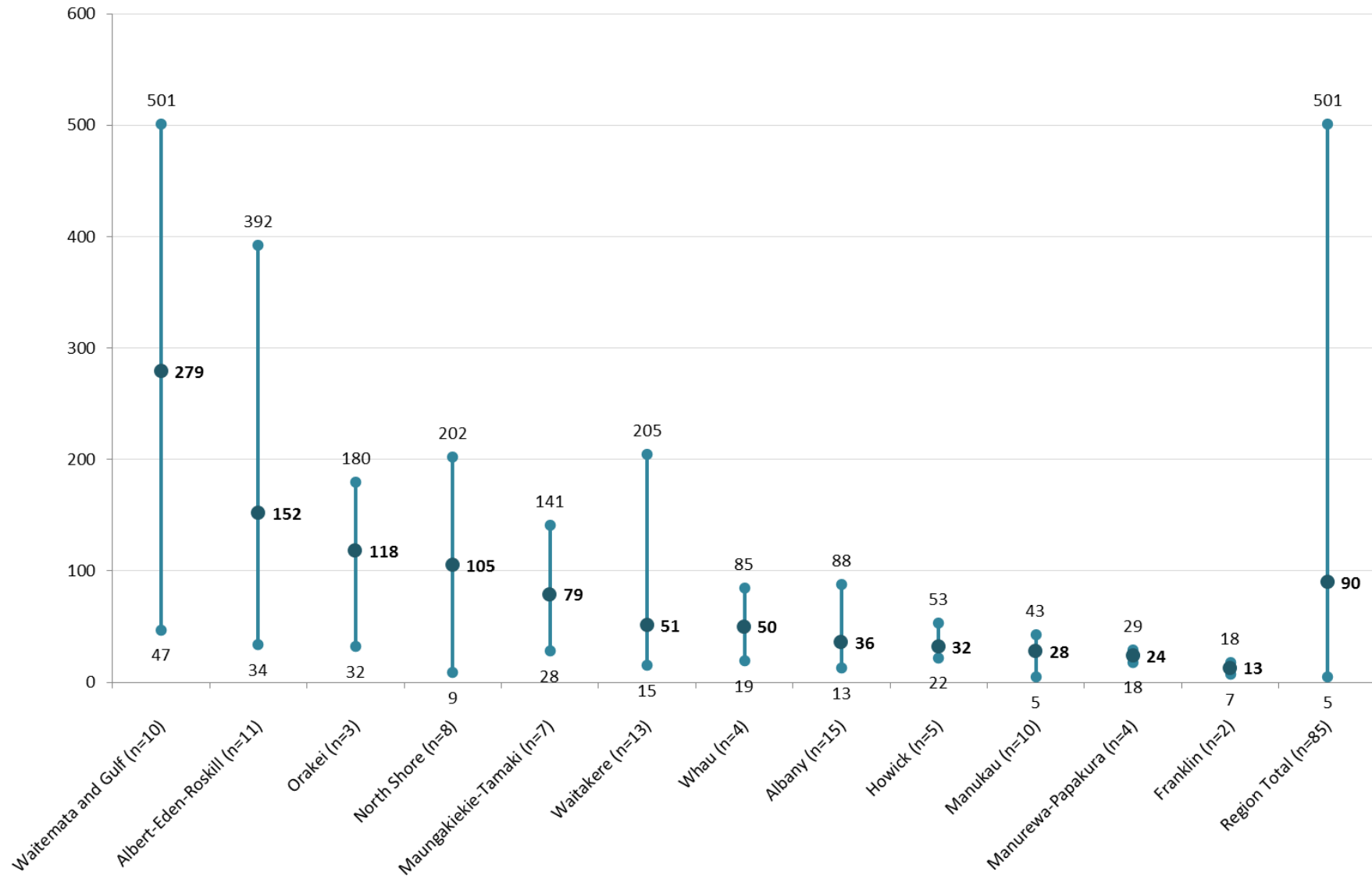
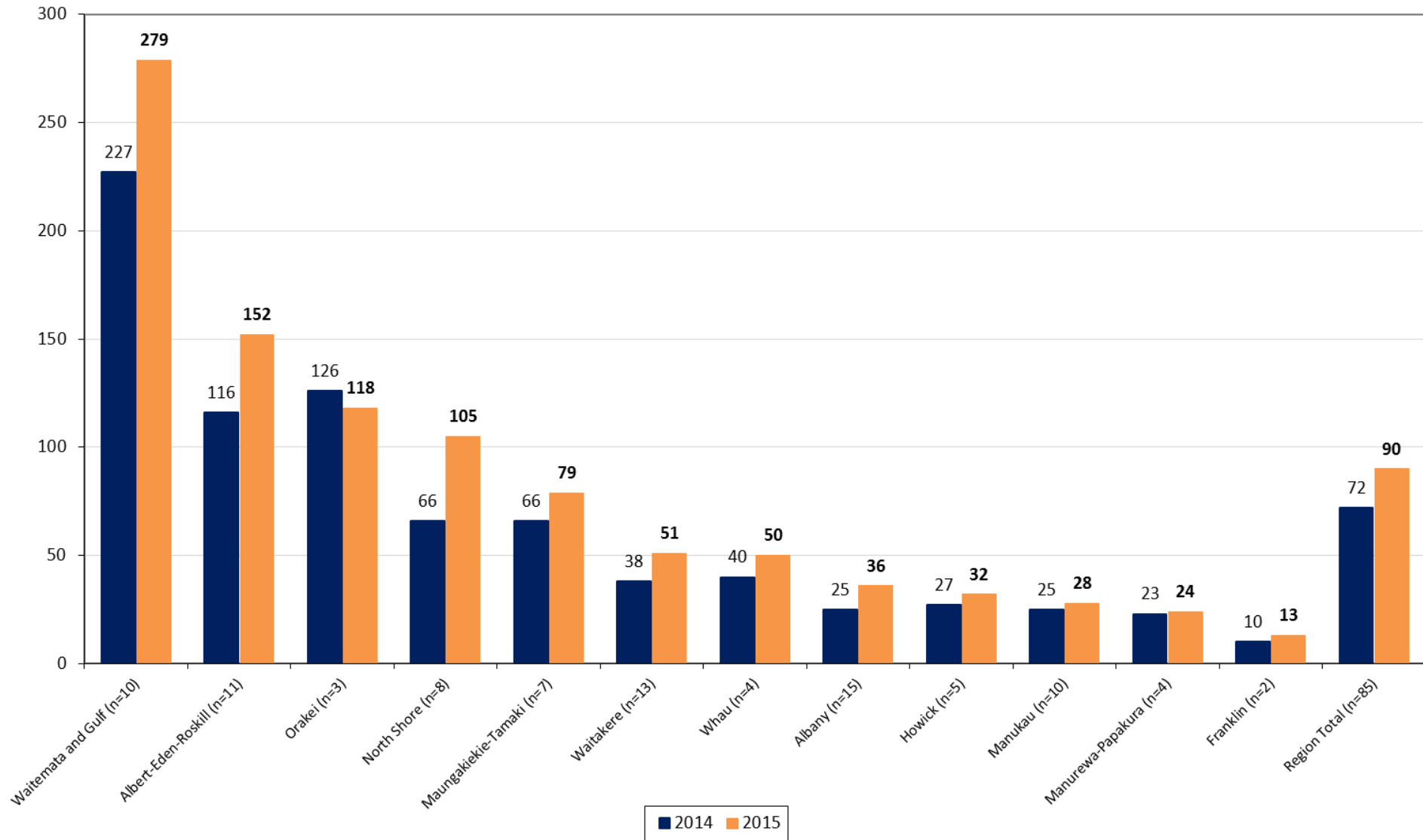




Figure 2.4: Average Morning Cyclist Movements by Ward - 2014-2015 (n)





- The busiest site out of the 85 sites in the morning peak was the intersection of Tamaki Drive and The Strand from the Waitemata and Gulf ward (501 movements, up from 411 movements in 2014), while the lowest level of morning cyclist traffic was observed at the intersection of Tom Pearce Drive and George Bolt Memorial Drive in the Manukau ward (5 movements, down from 13 movements last year).
- Eighty per cent of the sites (68 out of the 85) have experienced higher morning peak cycle volumes than last year. The most notable increases occurred at:
 - Triangle Road/Don Buck Road (Waitakere ward) – up from 12 to 26 movements (117 per cent);
 - Whangaparaoa Road, near Hibiscus Coast Highway intersection (Albany ward) – up from 6 to 13 movements (117 per cent);
 - Shakespeare Road/East Coast Road (North Shore ward) – up from 97 to 202 movements (108 per cent);
 - Sunnynook Road/East Coast Road (Albany and North Shore wards) – up from 45 to 88 movements (96 per cent); and
 - Ian McKinnon Drive/Newton Road (Waitemata and Gulf ward) – up from 230 to 448 movements (95 per cent).
- In contrast, 14 per cent of the sites (12 out of the 85) have recorded decreases in total morning cyclist numbers this year compared with 2014. The most notable decreases occurred at:
 - Tom Pearce Drive/George Bolt Memorial Drive (Manukau ward) – down from 13 to 5 movements (62 per cent);
 - McKenzie Road/Coronation Road/Walmsley Road (Manukau ward) – down from 50 to 31 movements (38 per cent);
 - Onehunga Harbour Road (Maungakiekie-Tamaki wards) – down from 189 to 119 movements (37 per cent); and
 - Harris Road/Smales Road (Howick wards) – down from 33 to 24 movements (27 per cent).
- Five sites registered no change in morning cycle volumes over the last 12 months.



**Table 2.5: Summary Of Morning Cyclist Movements
2007-2015 (n) – 6:30am to 9:00am**

Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
10	Tamaki Drive/The Strand	Waitematā and Gulf	480	416	321	498	630	503	507	411	501	22%	4%
8	Symonds Street/Karangahape Road	Waitematā and Gulf	290	285	246	283	317	338	410	385	462	20%	59%
13	Ian McKinnon/Newton Road	Waitematā and Gulf	-	-	139	190	236	219	303	230	448	95%	-
7	North Western Cycleway/St Lukes	Albert-Eden-Roskill	152	156	155	222	240	222	277	315	392	24%	158%
6	North Western Cycleway/ Great North Road	Albert-Eden-Roskill	98	156	145	244	204	201	258	261	343	31%	250%
9	Karangahape Road/Queen Street	Waitematā and Gulf	246	212	238	272	256	266	315	343	340	-1%	38%
2	Ponsonby/Karangahape Road	Waitematā and Gulf	226	199	176	242	222	204	253	257	297	16%	31%
90	Broadway/Khyber Pass	Waitematā and Gulf	-	-	-	-	-	292	322	255	294	15%	-
58	North Western Cycleway/near Te Atatu Road off-ramp	Waitakere	102	121	157	179	155	187	218	125	205	64%	101%
42	Shakespeare/East Coast Road	North Shore	82	127	177	146	181	145	172	97	202	108%	146%
22	Ferry Terminal	Waitematā and Gulf	195	158	137	198	205	189	205	177	201	14%	3%
11	Remuera/Orakei Road	Orakei	86	100	107	149	173	142	232	196	180	-8%	109%
35	Lake Road, by Takapuna Grammar	North Shore	127	200	166	186	220	175	159	126	172	37%	35%
92	Upper Dominion Road	Albert-Eden-Roskill	-	-	-	-	-	-	97	113	158	40%	-
36	Hurstmere Road/Killarney Street	North Shore	76	134	186	180	191	154	176	97	155	60%	104%
5	Dominion/Balmoral Road	Albert-Eden-Roskill	114	90	85	91	99	97	128	123	151	23%	32%
37	Taharoto/Northcote Road	North Shore	111	160	98	117	202	141	152	90	147	63%	32%
20	St Heliers Bay/West Tamaki Road	Maungakiekie-Tamaki/Orakei	139	107	61	98	150	86	177	154	141	-8%	1%
3	Great North/Carrington Road	Albert-Eden-Roskill	114	95	97	150	103	112	112	97	138	42%	21%
12	Manukau Road/Greenlane West	Albert-Eden-Roskill	103	92	84	130	120	110	99	92	120	30%	17%
1	Victoria/Wellesley/Halsey Street	Waitematā and Gulf	70	57	59	82	116	82	103	107	120	12%	71%
17	Onehunga Harbour Road	Maungakiekie-Tamaki	93	88	74	98	139	171	178	189	119	-37%	28%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
21	Great South Road/Campbell Road/Main Highway	Albert-Eden-Roskill/ Maungakiekie-Tamaki	89	53	64	69	60	68	77	79	111	41%	25%
14	Mount Albert/New North Road	Albert-Eden-Roskill	75	68	59	91	97	94	70	62	98	58%	31%
89	Sunnynook/East Coast Road	Albany/North Shore	-	-	-	-	81	95	96	45	88	96%	-
47	Oteha Valley/East Coast Road	Albany	42	40	69	87	53	68	60	56	87	55%	107%
73	Blockhouse Bay/Great North Road	Albert-Eden-Roskill/Whau	-	57	57	66	56	60	73	72	85	18%	-
72	Te Atatu/Old Te Atatu Road/Tatau Way	Waitakere	-	56	66	105	63	103	88	58	79	36%	-
16	Jervois Road/Wallace Street	Waitematā and Gulf	-	-	60	88	73	62	70	67	79	18%	-
52	Central Park Drive	Waitakere	61	68	91	94	100	112	135	56	76	36%	25%
78	Lagoon Drive/Church Crescent	Maungakiekie-Tamaki	-	-	57	100	65	66	72	70	74	6%	-
53	326 Te Atatu Road, near Covil Avenue	Waitakere	44	52	79	65	73	75	76	63	69	10%	57%
84	Behind Auckland Council Building, Orewa	Albany	-	-	75	73	72	61	66	59	67	14%	-
38	Rosedale/East Coast Road	Albany	54	52	105	93	73	67	65	37	54	46%	0%
4	Patiki/Rosebank Road	Whau	37	34	38	38	56	52	46	48	54	13%	46%
80	Pakuranga Road/Ti Rakau Drive	Howick	-	-	46	70	59	51	55	39	53	36%	-
75	Stanley Street/Grafton Road	Waitematā and Gulf	-	36	49	47	27	38	55	39	47	21%	-
87	Triangle/Huruhuru Road	Waitakere	-	-	-	59	52	71	73	25	45	80%	-
19	Ellerslie Panmure Highway/Lunn Ave	Maungakiekie-Tamaki	52	42	31	44	31	40	41	33	45	36%	-13%
30	Great South/East Tamaki Road	Manukau	36	24	33	25	44	40	49	30	43	43%	19%
48	Henderson Creek	Waitakere	14	11	27	38	24	39	30	32	41	28%	193%
41	Wairau/Glenfield Road	North Shore	34	39	42	38	41	36	32	37	41	11%	21%
15	Richardson Road/Maioro Street	Albert-Eden-Roskill/Whau	-	-	8	14	15	29	25	21	40	90%	-
23	Great South/Bairds Road	Manukau	32	27	29	34	40	39	50	25	40	60%	25%
46	Rosedale/Bush Road	Albany	15	36	26	48	29	22	43	22	39	77%	160%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
33	Bucklands Beach/Pakuranga Road	Howick	68	53	51	45	43	40	26	31	39	26%	-43%
39	Upper Harbour/Albany Highway	Albany	14	54	63	65	57	51	55	27	38	41%	171%
88	Keith Hay Park	Albert-Eden-Roskill	-	-	-	28	29	28	45	43	34	-21%	-
24	Great South Road/Te Irirangi Drive/Cavendish Drive	Manukau	34	25	19	28	41	28	42	26	33	27%	-3%
76	Waikaraka Cycle Way	Maungakiekie-Tamaki	-	13	18	7	29	28	29	22	32	45%	-
91	Orakei Basin Boardwalk	Orakei	-	-	-	-	-	-	14	27	32	19%	-
31	Wyllie Avenue/Puhinui Road	Manukau	18	8	12	23	13	8	17	18	31	72%	72%
55	Swanson/Ranui Station Road/Armada Drive	Waitakere	15	21	37	34	47	27	49	28	31	11%	107%
32	McKenzie/Coronation/Walmsley Road	Manukau	28	21	22	38	32	19	48	50	31	-38%	11%
18	Great South Road/High Street/Atkinson/Park Avenue	Manukau	38	30	21	25	20	34	34	25	30	20%	-21%
45	Beach/Browns Bay Road	Albany	11	26	29	50	47	28	43	27	30	11%	173%
65	Great South Road/Rosehill Drive	Manurewa-Papakura	29	42	22	29	30	30	33	29	29	0%	0%
74	Apirana Avenue/Pilkington/Tripoli Road	Maungakiekie-Tamaki	-	22	12	30	14	19	20	22	28	27%	-
26	Great South/Browns/Orams Road	Manurewa-Papakura	25	32	21	21	29	24	26	30	27	-10%	8%
49	Triangle Road/Don Buck Road	Waitakere	24	29	21	27	35	30	46	12	26	117%	8%
40	Oteha Valley Road/SH17/Albany Highway	Albany	4	20	25	29	26	40	29	19	26	37%	550%
70	Squadron Drive/Buckley Avenue*	Albany	-	17	23	37	34	28	46	19	26	37%	-
43	Glenfield/Coronation Road	North Shore	16	36	36	37	27	35	33	28	26	-7%	63%
28	Massey/Buckland Road	Manukau	12	11	19	16	18	14	24	26	25	-4%	108%
85	Rathgar/Pomaria Road	Waitakere	-	-	32	53	33	38	36	30	24	-20%	-
79	Harris/Smales Road	Howick	-	-	35	25	35	20	27	33	24	-27%	-
81	Te Irirangi Drive/Ormiston Road	Howick/Manukau	-	-	13	25	24	18	31	15	23	53%	-
57	West Coast/Rosier Road	Waitakere	19	18	28	31	25	19	24	17	23	35%	21%
34	Te Irirangi Drive/Ti Rakau Drive	Howick	36	36	30	30	37	30	41	19	22	16%	-39%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
71	Highbrook Drive	Manukau	-	13	20	27	23	21	24	20	22	10%	-
64	Porchester Road/Walters Road	Manurewa-Papakura	22	19	19	-	33	18	27	17	20	18%	-9%
56	3 Rankin Avenue	Whau	16	17	21	12	16	20	15	17	19	12%	19%
68	Queen/Harris Street	Franklin	44	31	27	18	14	11	20	15	18	20%	-59%
82	Hibiscus Coast Highway/Jelas Road	Albany	-	-	15	24	19	20	28	15	18	20%	-
66	Great South Road/Taka Street	Manurewa-Papakura	18	19	12	15	23	18	21	17	18	6%	0%
50	Lincoln Road/Fairdene Avenue	Waitakere	13	19	21	21	26	34	31	18	18	0%	38%
51	Luckens/Hobsonville Road	Albany/Waitakere	20	25	26	41	14	42	44	17	17	0%	-15%
54	Te Atatu Road/Elcoat Avenue	Waitakere	26	27	37	30	30	34	20	12	15	25%	-42%
61	D'Oyly Reserve cycleway	Albany	14	19	5	31	13	14	13	10	14	40%	0%
63	Gulf Harbour Drive/Laurie Southwick Parade	Albany	17	14	5	14	12	13	24	14	14	0%	-18%
60	Whangaparaoa Road, near Hibiscus Coast Highway intersection	Albany	11	9	6	13	7	10	10	6	13	117%	18%
59	Whangaparaoa Road, near Red Beach Intersection	Albany	13	15	15	21	11	15	15	7	13	86%	0%
44	Birkenhead Ave/Mokoia Road	North Shore	20	20	27	29	22	17	29	9	9	0%	-55%
69	Edinburgh/Tobin Street	Franklin	17	16	15	17	11	7	9	5	7	40%	-59%
25	Tom Pearce/George Bolt Memorial Drive	Manukau	-	-	6	5	15	3	4	13	5	-62%	-
	Total (60 sites since 2007)^		4109	4192	4135	5119	5370	4969	5726	4798	5826	21%	42%
	Total (67 sites since 2008)^		-	4406	4380	5438	5616	5266	6061	5050	6145	22%	-
	Total (78 sites in 2009)		-	-	4866	6105	6262	5853	6778	5642	7000	24%	-
	Total (80 sites in 2010)		-	-	-	6192	6343	5952	6896	5693	7079	24%	-
	Total (82 sites in 2011)		-	-	-	-	6457	6065	7019	5755	7187	25%	-
	Total (83 sites in 2012)		-	-	-	-	-	6357	7341	6010	7481	24%	-
	Total (85 sites since 2013)		-	-	-	-	-	-	7452	6150	7671	25%	-

^Note that the evening count for D'Oyly Reserve cycleway (site 61) in 2008 is considered as an outlier, so the total figures exclude this outlier for more accurate comparison.

*Note that the Squadron Drive/Buckley Avenue (site 70) is the relocated site from previous Upper Harbour Drive/Buckley Avenue, so previous results are not directly comparable.



Total morning cyclist characteristics are shown in Table 2.6 below.

- Overall, 92 per cent of morning cyclists in the Auckland region were adults in 2015 (stable from 91 per cent last year). Of the 12 wards monitored, the Waitemata and Gulf ward again had the highest proportion of adults cyclists (99 per cent, unchanged from last year) whilst the Franklin ward had the greatest share of cyclists identified as school children (36 per cent).
- The majority of cyclists were wearing a helmet (94 per cent, unchanged from 2014). Orakei ward had the highest proportion of cyclists who are wearing a helmet (99 per cent) whilst the Manurewa-Papakura ward had the greatest share of cyclists not wearing helmets (23 per cent).
- Eighty percent of all morning cyclists were identified as male (stable from 82 per cent in 2014). Manurewa-Papakura ward had the highest proportion of male cyclists (90 per cent), while North Shore ward had the highest share of female cyclists (21 per cent).
- In the morning, 58 per cent of all cyclists were riding on the road (stable from 59 per cent last year). Twenty-five per cent of cyclists were riding on an off-road cycleway and the remaining 17 per cent rode on the footpath. Orakei ward had the highest share of cyclists riding on the road (86 per cent), while Waitakere ward (51 per cent) had the greatest share of cyclists using an off-road cycleway. Franklin ward had the highest proportion of footpath riders (68 per cent).

Table 2.6: Aggregate Totals of Morning Cyclist Characteristics - 2007-2015 (%)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Cyclist Type									
Adult	86	86	85	87	88	88	90	91	92
School child	14	14	15	13	12	12	10	9	8
Helmet Wearing									
Helmet on head	93	93	93	93	93	92	95	94	94
No helmet	7	7	7	7	7	8	5	6	6
Gender									
Male	-	-	-	-	77	80	82	82	80
Female	-	-	-	-	16	15	16	16	18
Can't tell	-	-	-	-	7	5	2	2	2
Where Riding									
Road	69	73	63	63	65	62	61	59	58
Footpath	21	20	23	23	19	17	20	20	17
Off-road cycleway	9	7	14	14	16	21	19	21	25
Base:	4109	4406	4866	6192	6457	6357	7452	6150	7671



Table 2.7: Summary of Morning Cyclist Characteristics by Ward in 2015

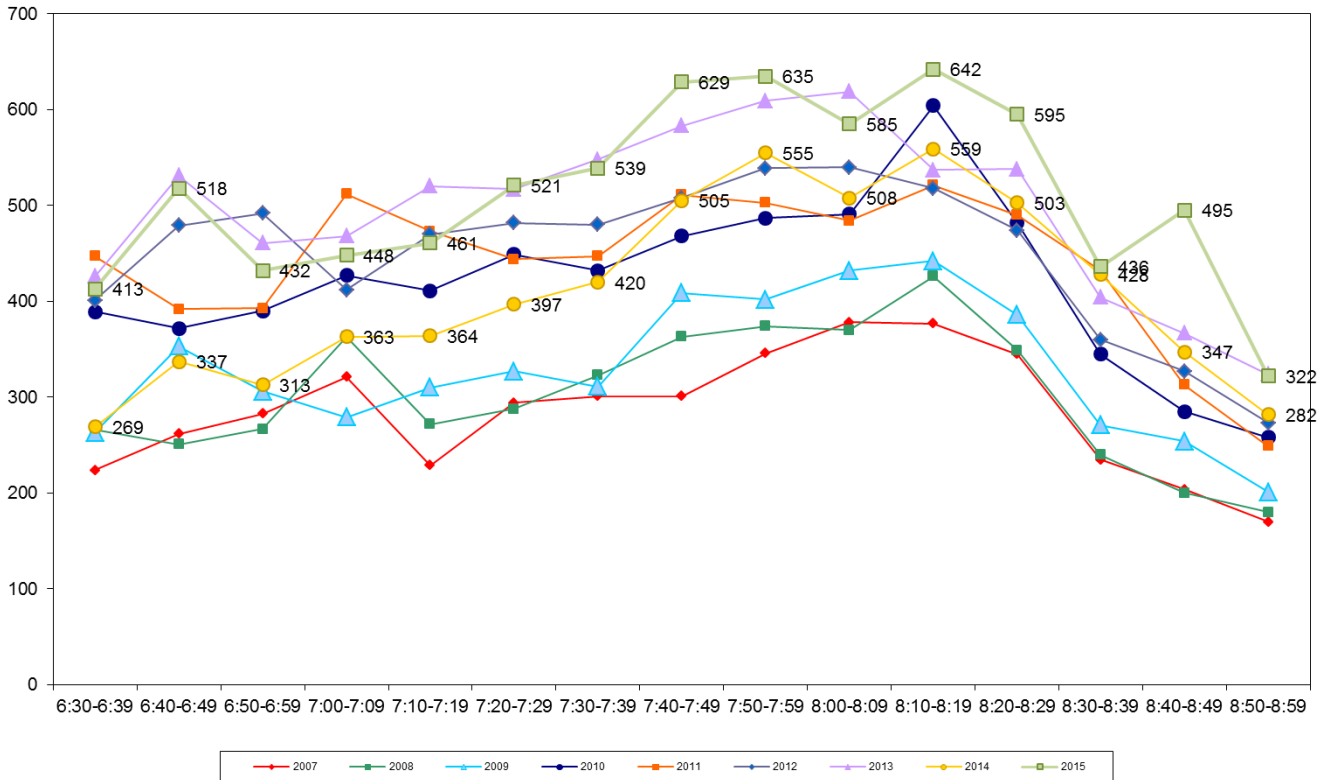
	<i>Albany</i>	<i>North Shore</i>	<i>Waitakere</i>	<i>Waitemata and Gulf</i>	<i>Albert/Eden/Roskill</i>	<i>Whau</i>	<i>Orakei</i>	<i>Maungakiekie-Tamaki</i>	<i>Howick</i>	<i>Manukau</i>	<i>Manurewa-Papakura</i>	<i>Franklin</i>
Cyclist Type												
Adult	73	83	85	99	93	93	96	91	84	87	81	64
School child	27	18	15	1	7	7	4	8	16	13	19	36
Helmet Wearing												
Helmet on head	96	98	91	94	96	89	99	97	91	84	77	84
No helmet	4	1	9	5	4	11	1	3	9	16	23	16
Can't tell	0	0	0	1	0	0	0	0	0	0	0	0
Gender												
Male	84	77	86	77	79	89	81	84	89	87	90	80
Female	13	21	13	20	18	11	18	13	11	11	10	16
Can't tell	3	3	1	3	2	0	0	3	1	2	0	4
Where Riding												
Road	63	77	24	69	44	53	86	58	60	55	53	32
Footpath	16	13	25	14	12	34	5	15	40	37	46	68
Off-road cycleway	21	11	51	16	43	14	9	27	0	8	1	0
Can't tell	1	0	0	1	1	0	0	0	0	0	0	0
Base:	544	840	669	2789	1670	198	353	550	161	283	94	25

Note: Orange highlighting denotes the ward with the highest proportion of a particular characteristic when compared to the other wards. Also, base sizes add to more than total number of cycle movements as sites on ward boundaries have been included in both wards.



- Figure 2.5 shows the overall pattern of total morning cyclist volumes recorded at the 85 sites monitored in the Auckland region. Morning cyclist numbers remained steady over the monitoring period, increasing to a peak of 642 movements between 8:10am and 8:19am. The trend was consistent with previous years.

**Figure 2.5: Total Cyclist Frequency – Morning Peak
2007-2015 (n)**





2.3 Evening Peak

Key Points

- A total of 7,711⁶ cyclist movements were recorded in the evening peak period across the 85 sites monitored in 2015. This represents a **15 per cent increase** from 2014 (6,727 movements).
- As shown in Figures 2.6, in 2015 the average volume of evening cyclists across all 85 sites in the Auckland region is 91 cycle movements. Of the 12 wards, the average number of evening cyclists is highest in the Waitemata and Gulf ward (292 movements) and lowest in Franklin (14 movements).
- Figure 2.7 compares the average evening cycle volume of each ward over the last twelve months. All but three wards recorded higher averages compared to last year, the most notable increase being at Waitemata and Gulf (up from 235 to 292) and Albert-Eden-Roskill (up from 127 to 147). However, decreases were observed at Howick (down from 50 to 33), Manukau (down from 36 to 34) and at Franklin (down from 16 to 14).

⁶ It is important to note that this figure represents individual cyclist movements rather than total cyclist numbers. Due to the close proximity of sites to one another (particularly in Auckland City's CBD), it is possible for the same cyclist to be counted at more than one site. It is also possible to 'double count' cyclists if they use the same intersection more than once during a shift. At the same time, there will be many cycle trips that were not counted at all by this methodology if a cyclist's route does not pass through a monitoring location. Because of these limitations, it cannot be said that 7,711 different cyclists were counted on the Auckland region's roads using these sites; the actual number of cyclists, and the number of cycle trips they take, may be higher or lower than the number of cycle movements counted through this methodology.



Figure 2.6: Average and Range of Evening Cyclist Movements by Ward in 2015 (All 85 Sites)

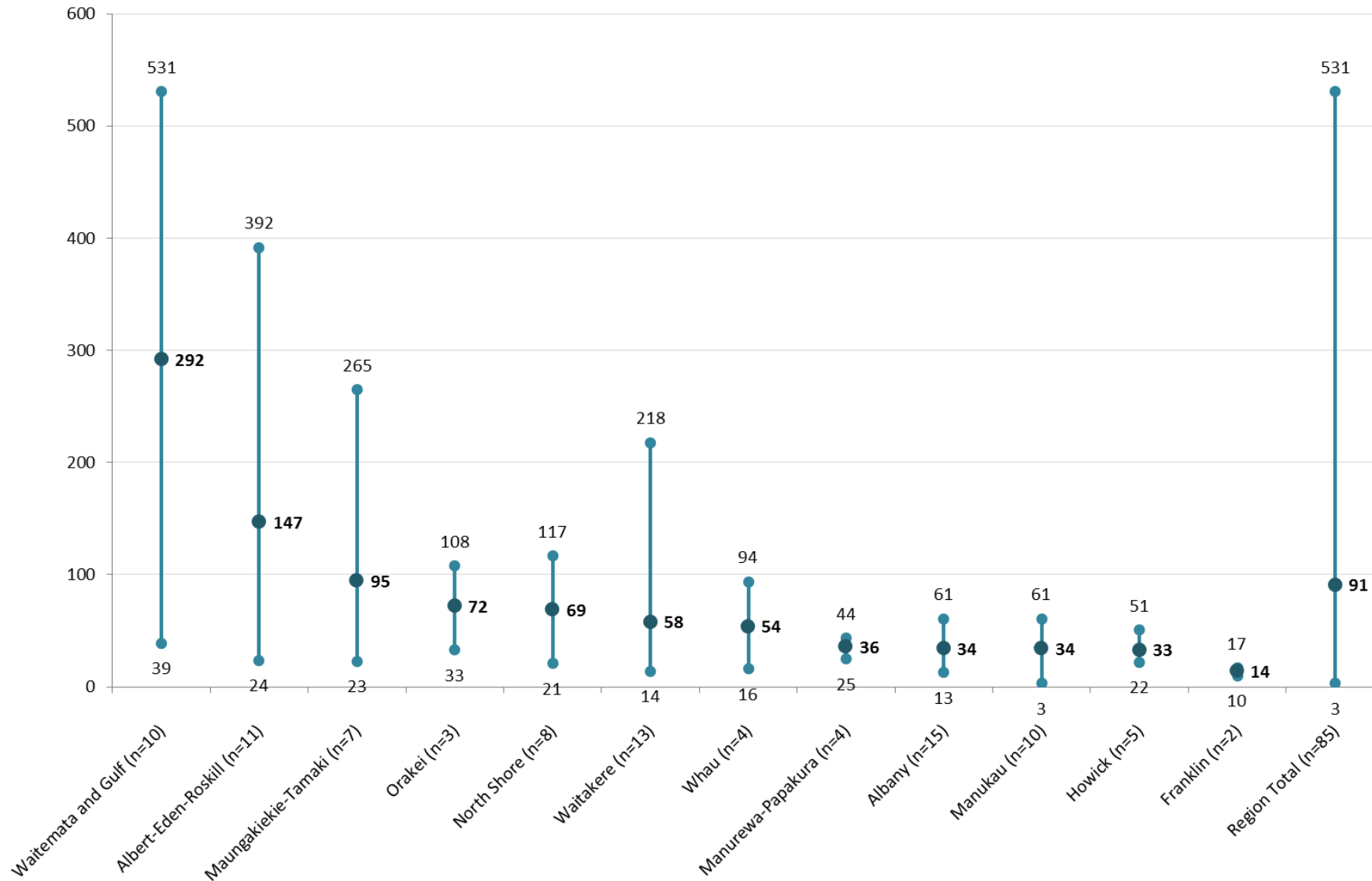
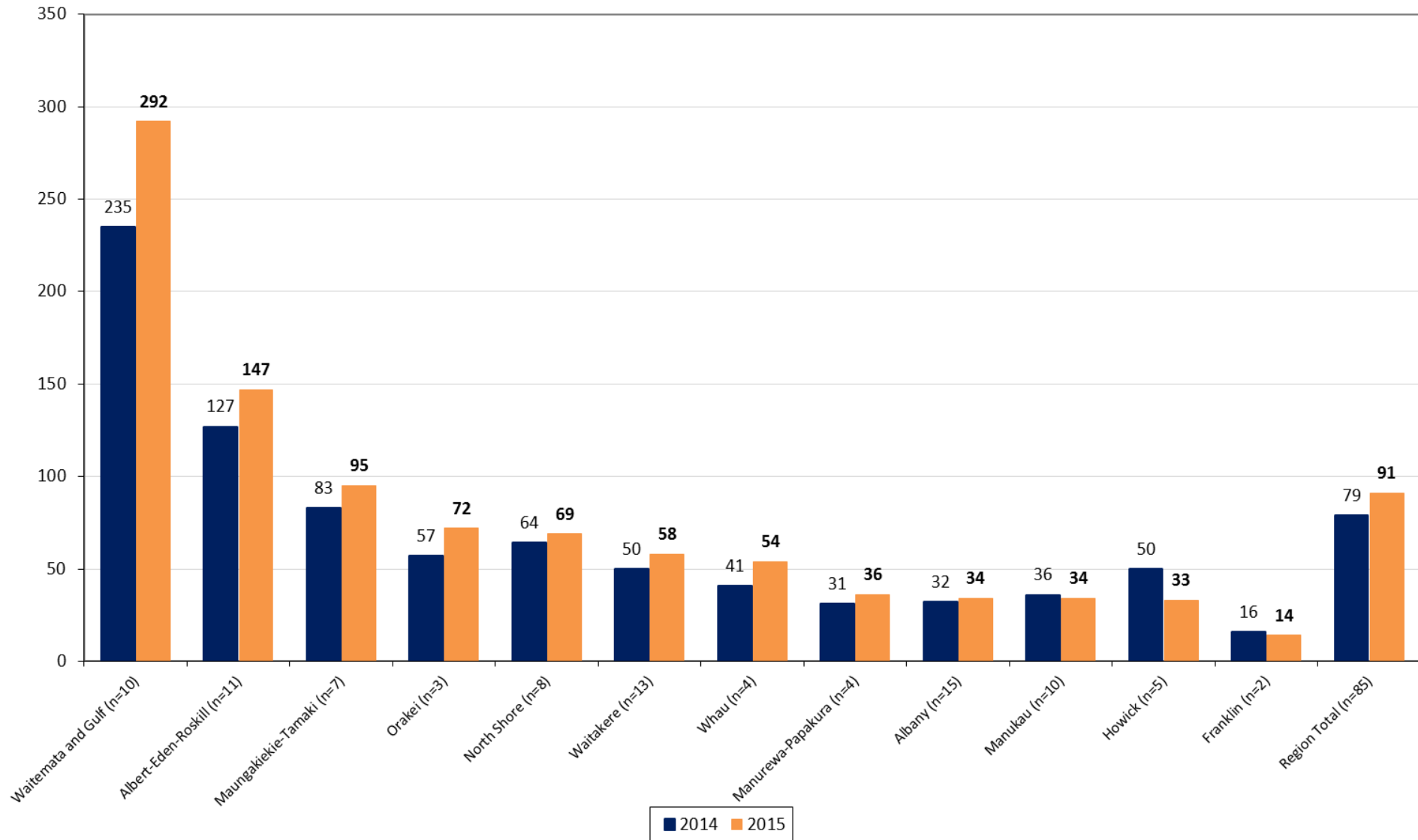




Figure 2.7: Average Evening Cyclist Movements by Ward 2014-2015 (n)





- The busiest site of the 85 monitored in the evening period this year was the intersection of Symonds Street and Karangahape Road in Waitemātā and Gulf ward (531 movements, up from 447 movements in 2014). The lowest level of evening cyclist traffic was observed at Tom Pearce Drive/George Bolt Memorial Drive in Manukau ward (3 movements, down from 20 movements last year).
- Sixty-one per cent (52 of the 85 sites monitored in 2014 and 2015) have experienced higher cycle volumes in the evening than last year. The most notable increases occurred at:
 - Richardson Road/Maioro Street (Albert-Eden-Roskill and Whau ward) – up from 20 to 40 movements (100 per cent);
 - Lincoln Road/Fairdene Avenue (Waitakere ward) - up from 12 to 24 movements (100 per cent);
 - Triangle Road/Don Buck Road (Waitakere ward) – up from 28 to 53 movements (89 per cent);
 - Hibiscus Coast Highway/Jelas Road (Albany ward) – up from 7 to 13 movements (86 per cent); and
 - Ian McKinnon Drive/Newton Road (Waitemātā and Gulf ward) – up from 266 to 481 movements (81 per cent).
- In contrast, 33 per cent of the sites (28 of the 85 sites monitored in 2014 and 2015) have recorded decreases in evening cyclist numbers. The most notable decreases occurred at:
 - Tom Pearce Drive/George Bolt Memorial Drive (Manukau ward) - down from 20 to 3 movements (85 per cent);
 - Te Irirangi Drive/Ormiston Road (Howick and Manukau wards) – down from 46 to 22 movements (52 per cent);
 - 3 Rankin Avenue (Whau ward) – down from 30 to 16 movements (47 per cent);
 - Beach Road/Browns Bay Road (Albany ward) – down from 43 to 24 movements (44 per cent); and
 - Great South Road/Te Irirangi Drive/Cavendish Drive (Manukau ward) – down from 46 to 27 movements (41 per cent).
- Five sites registered no change in evening cycle volumes over the last 12 months.



**Table 2.8: Summary of Evening Cyclist Movements
2007-2015 (n) – 4:00pm to 7:00pm**

Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
8	Symonds Street/Karangahape Road	Waitematā and Gulf	349	336	282	314	373	394	492	447	531	19%	52%
13	Ian McKinnon/Newton Road	Waitematā and Gulf	-	-	152	184	324	284	279	266	481	81%	-
10	Tamaki Drive/The Strand	Waitematā and Gulf	420	370	282	438	429	441	414	388	456	18%	9%
7	North Western Cycleway/St Lukes	Albert-Eden-Roskill	172	175	155	210	273	207	270	344	392	14%	128%
6	North Western Cycleway/Great North Road	Albert-Eden-Roskill	134	213	141	241	282	204	261	281	370	32%	176%
2	Ponsonby/Karangahape Road	Waitematā and Gulf	261	216	194	317	289	294	342	301	346	15%	33%
9	Karangahape Road/Queen Street	Waitematā and Gulf	261	212	221	310	298	307	339	270	338	25%	30%
90	Broadway/Khyber Pass	Waitematā and Gulf	-	-	-	-	-	285	315	268	331	24%	-
17	Onehunga Harbour Road	Maungakiekie-Tamaki	156	132	106	159	171	152	248	253	265	5%	70%
22	Ferry Terminal	Waitematā and Gulf	185	158	111	197	186	200	212	178	220	24%	19%
58	North Western Cycleway/near Te Atatu Road off-ramp	Waitakere	130	151	198	209	190	238	236	179	218	22%	68%
92	Upper Dominion Road	Albert-Eden-Roskill	-	-	-	-	-	-	107	118	144	22%	-
5	Dominion/Balmoral Road	Albert-Eden-Roskill	123	111	98	114	98	91	107	112	137	22%	11%
3	Great North/Carrington Road	Albert-Eden-Roskill	121	136	96	164	129	94	116	130	128	-2%	6%
12	Manukau Road/Greenlane West	Albert-Eden-Roskill	122	113	92	127	107	95	100	125	119	-5%	-2%
37	Taharoto/Northcote Road	North Shore	51	110	104	112	105	77	82	80	117	46%	129%
1	Victoria/Wellesley/Halsey Street	Waitematā and Gulf	90	79	65	80	109	110	73	117	108	-8%	20%
11	Remuera/Orakei Road	Orakei	109	89	80	95	107	71	116	82	108	32%	-1%
78	Lagoon Drive/Church Crescent	Maungakiekie-Tamaki	-	-	72	95	98	71	110	85	106	25%	-
35	Lake Road, by Takapuna Grammar	North Shore	65	97	129	141	96	146	107	94	101	7%	55%
42	Shakespeare/East Coast Road	North Shore	55	123	133	159	105	93	94	97	99	2%	80%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
73	Blockhouse Bay/Great North Road	Albert-Eden-Roskill/Whau	-	60	62	75	73	69	68	70	94	34%	-
21	Great South Road/Campbell Road/Main Highway	Albert-Eden-Roskill/Maungakiekie Tamaki	85	61	87	102	78	64	69	70	90	29%	6%
36	Hurstmere Road/Killarney Street	North Shore	45	118	132	122	113	108	95	95	87	-8%	93%
52	Central Park Drive	Waitakere	66	89	121	106	112	134	138	69	85	23%	29%
14	Mount Albert/New North Road	Albert-Eden-Roskill	81	96	83	118	104	76	100	107	83	-22%	2%
20	St Heliers Bay/West Tamaki Road	Maungakiekie-Tamaki/Orakei	69	60	47	72	74	49	71	65	75	15%	9%
53	326 Te Atatu Road, near Covil Avenue	Waitakere	43	55	59	62	54	60	77	61	72	18%	67%
4	Patiki/Rosebank Road	Whau	45	45	34	52	65	43	59	43	66	53%	47%
16	Jervois Road/Wallace Street	Waitematā and Gulf	-	-	51	79	75	79	66	65	65	0%	-
72	Te Atatu/Old Te Atatu Road/Tatau Way	Waitakere	-	55	68	102	78	90	104	68	63	-7%	-
23	Great South/Bairds Road	Manukau	36	29	28	37	49	42	53	35	61	74%	69%
89	Sunnynook/East Coast Road	Albany/North Shore	-	-	-	-	93	60	53	52	61	17%	-
48	Henderson Creek	Waitakere	32	19	46	46	42	77	56	55	60	9%	88%
19	Ellerslie Panmure Highway/Lunn Ave	Maungakiekie-Tamaki	66	52	51	56	46	39	53	33	59	79%	-11%
47	Oteha Valley/East Coast Road	Albany	17	74	69	81	76	69	46	47	59	26%	247%
46	Rosedale/Bush Road	Albany	16	37	46	61	56	41	57	58	54	-7%	238%
49	Triangle Road/Don Buck Road	Waitakere	43	32	35	63	53	53	41	28	53	89%	23%
80	Pakuranga Road/Ti Rakau Drive	Howick	-	-	77	92	65	76	79	79	51	-35%	-
38	Rosedale/East Coast Road	Albany	22	46	54	59	70	51	47	48	50	4%	127%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
32	McKenzie/Coronation/Walmsley Road	Manukau	42	36	30	49	61	29	42	32	49	53%	17%
39	Upper Harbour/Albany Highway	Albany	11	44	75	93	91	136	79	48	49	2%	345%
70	Squadron Drive/Buckley Avenue*	Albany	-	18	45	57	49	82	60	46	48	4%	-
41	Wairau/Glenfield Road	North Shore	30	34	38	53	52	69	37	42	45	7%	50%
76	Waikaraka Cycle Way	Maungakiekie-Tamaki	-	41	33	35	36	24	54	51	45	-12%	-
64	Porchester Road/Walters Road	Manurewa-Papakura	28	27	30	-	39	26	16	28	44	57%	57%
87	Triangle/Huruhuru Road	Waitakere	-	-	-	78	69	106	80	41	43	5%	-
30	Great South/East Tamaki Road	Manukau	37	27	30	40	45	46	47	42	42	0%	14%
15	Richardson Road/Maioro Street	Albert-Eden-Roskill/Whau	-	-	13	25	22	24	23	20	40	100%	-
26	Great South/Browns/Orams Road	Manurewa-Papakura	35	23	18	37	41	20	23	40	40	0%	14%
28	Massey/Buckland Road	Manukau	31	20	20	29	35	34	34	32	39	22%	26%
75	Stanley Street/Grafton Road	Waitematā and Gulf	-	29	47	46	47	56	62	53	39	-26%	-
33	Buckland Beach/Pakuranga Road	Howick	72	77	43	69	64	45	45	59	38	-36%	-47%
66	Great South Road/Taka Street	Manurewa-Papakura	40	39	24	28	37	31	34	34	36	6%	-10%
51	Luckens/Hobsonville Road	Albany/Waitakere	12	16	51	54	38	70	60	24	35	46%	192%
55	Swanson/Ranui Station Road/Armada Drive	Waitakere	47	65	66	68	85	88	67	53	35	-34%	-26%
18	Great South Road/High Street/Atkinson/Park Avenue	Manukau	46	30	28	36	51	41	45	36	34	-6%	-26%
40	Oteha Valley Road/SH17/Albany Highway	Albany	15	28	47	62	56	88	56	41	33	-20%	120%
91	Orakei Basin Boardwalk	Orakei	-	-	-	-	-	-	18	25	33	32%	-
31	Wyllie Avenue/Puhinui Road	Manukau	20	25	23	34	62	39	78	42	32	-24%	60%
34	Te Irirangi Drive/Ti Rakau Drive	Howick	45	39	29	48	39	56	66	36	30	-17%	-33%
85	Rathgar/Pomaria Road	Waitakere	-	-	53	46	35	35	32	25	29	16%	-



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
71	Highbrook Drive	Manukau	-	16	18	13	30	29	23	29	28	-3%	-
24	Great South Road/Te Irirangi Drive/Cavendish Drive	Manukau	39	26	22	44	53	50	77	46	27	-41%	-31%
57	West Coast/Rosier Road	Waitakere	29	19	34	29	35	19	32	16	27	69%	-7%
65	Great South Road/Rosehill Drive	Manurewa-Papakura	24	30	37	33	43	27	38	22	25	14%	4%
79	Harris/Smales Road	Howick	-	-	25	37	40	24	30	31	25	-19%	-
84	Behind Auckland Council Building, Orewa	Albany	-	-	11	22	66	28	23	16	25	56%	-
45	Beach/Browns Bay Road	Albany	8	19	30	27	28	33	17	43	24	-44%	200%
50	Lincoln Road/Fairdene Avenue	Waitakere	27	36	22	35	28	33	37	12	24	100%	-11%
88	Keith Hay Park	Albert-Eden-Roskill	-	-	-	25	40	19	14	15	24	60%	-
74	Apirana Avenue/Pilkington/Tripoli Road	Maungakiekie-Tamaki	-	39	20	30	41	27	19	25	23	-8%	-
44	Birkenhead Ave/Mokoia Road	North Shore	20	29	30	46	23	35	32	22	22	0%	10%
81	Te Irirangi Drive/Ormiston Road	Howick/Manukau	-	-	20	41	32	32	54	46	22	-52%	-
43	Glenfield/Coronation Road	North Shore	12	39	42	56	25	38	25	30	21	-30%	75%
63	Gulf Harbour Drive/Laurie Southwick Parade	Albany	39	30	17	23	27	20	16	15	18	20%	-54%
68	Queen/Harris Street	Franklin	57	52	68	39	53	33	27	20	17	-15%	-70%
56	3 Rankin Avenue	Whau	15	21	17	20	26	18	25	30	16	-47%	7%
60	Whangaparaoa Road, near Hibiscus Coast Highway intersection	Albany	17	11	6	10	15	10	9	9	15	67%	-12%
54	Te Atatu Road/Elcoat Avenue	Waitakere	24	18	32	22	18	23	24	23	14	-39%	-42%
61	D'Oyly Reserve cycleway	Albany	10	84	4	13	45	21	14	14	14	0%	40%
59	Whangaparaoa Road, near Red Beach Intersection	Albany	16	16	11	8	15	13	10	11	13	18%	-19%
82	Hibiscus Coast Highway/Jelas Road	Albany	-	-	23	15	11	14	15	7	13	86%	-
69	Edinburgh/Tobin Street	Franklin	18	24	19	11	17	21	12	12	10	-17%	-44%



Site No.	Location	Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 14-15	Change 07-15
25	Tom Pearce/George Bolt Memorial Drive	Manukau	-	-	21	7	39	12	29	20	3	-85%	-
	Total (60 sites since 2007)^		4308	4591	4292	5540	5547	5306	5679	5206	5831	12%	35%
	Total (67 sites since 2008)^		-	4849	4585	5898	5901	5683	6069	5548	6171	11%	-
	Total (78 sites in 2009)		-	-	5103	6541	6708	6362	6809	6208	7031	13%	-
	Total (80 sites in 2010)		-	-	-	6644	6817	6487	6903	6236	7098	14%	-
	Total (82 sites in 2011)		-	-	-	-	6949	6573	6972	6316	7203	14%	-
	Total (83 sites in 2012)		-	-	-	-	-	6858	7287	6584	7534	14%	-
	Total (85 sites since 2013)		-	-	-	-	-	-	7412	6727	7711	15%	-

^Note that the evening count for D'Oyly Reserve cycleway (site 61) in 2008 is considered as an outlier, so the total figures exclude this outlier for more accurate comparison.

*Note that the Squadron Drive/Buckley Avenue (site 70) is the relocated site from previous Upper Harbour Drive/Buckley Avenue, so previous results are not directly comparable.



Evening cyclist characteristics are shown in Table 2.9 below.

- Overall, 93 per cent of evening cyclists in the Auckland region were adults in 2015 (unchanged from 2013). Of the 12 wards monitored, the Waitemata and Gulf ward had the highest proportion of adult cyclists (99 per cent) whilst Franklin ward had the greatest share of cyclists identified as school children (63 per cent).
- Almost all cyclists were wearing a helmet (92 per cent, stable from 91 per cent last year). North Shore ward had the highest proportion of cyclists who were wearing a helmet (97 per cent) whilst the Manukau ward had the greatest share of cyclists who were not wearing helmets (30 per cent).
- Eighty per cent of evening cyclists were male (stable from 81 per cent last year). Franklin ward has the highest share of male cyclists (93 per cent), while Orakei ward had the highest proportion of female cyclists (24 per cent).
- In the evening, 54 per cent of all cyclists were riding on the road (stable from 56 per cent last year). Twenty-eight per cent of cyclists were riding on an off-road cycleway (up from 23 per cent in 2014). North Shore ward had the highest share of cyclists riding on the road (78 per cent), while Waitakere ward had the greatest share of cyclists using an off-road cycleway (51 per cent). Franklin ward had the highest proportion of footpath riders (74 per cent).



**Table 2.9: Aggregate Totals of Evening Cyclist Characteristics
2007-2015 (%)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Cyclist Type									
Adult	92	88	90	91	91	92	93	93	93
School child	8	12	10	9	9	8	7	7	7
Helmet Wearing									
Helmet on head	87	87	89	88	88	89	90	91	92
No helmet	13	13	11	12	12	11	10	9	8
Gender									
Male	-	-	-	-	82	83	84	81	80
Female	-	-	-	-	15	14	15	17	18
Can't tell	-	-	-	-	3	3	1	2	2
Where Riding									
Road	67	71	60	60	58	60	59	56	54
Footpath	22	21	26	27	22	19	21	20	18
Off-road cycleway	11	8	14	13	20	21	20	23	28
Don't know	0	0	0	0	0	0	0	1	0
Base:	4308	4849	5103	6644	6949	6858	7412	6727	7711



Table 2.10: Summary of Evening Cyclist Characteristics by Ward in 2015

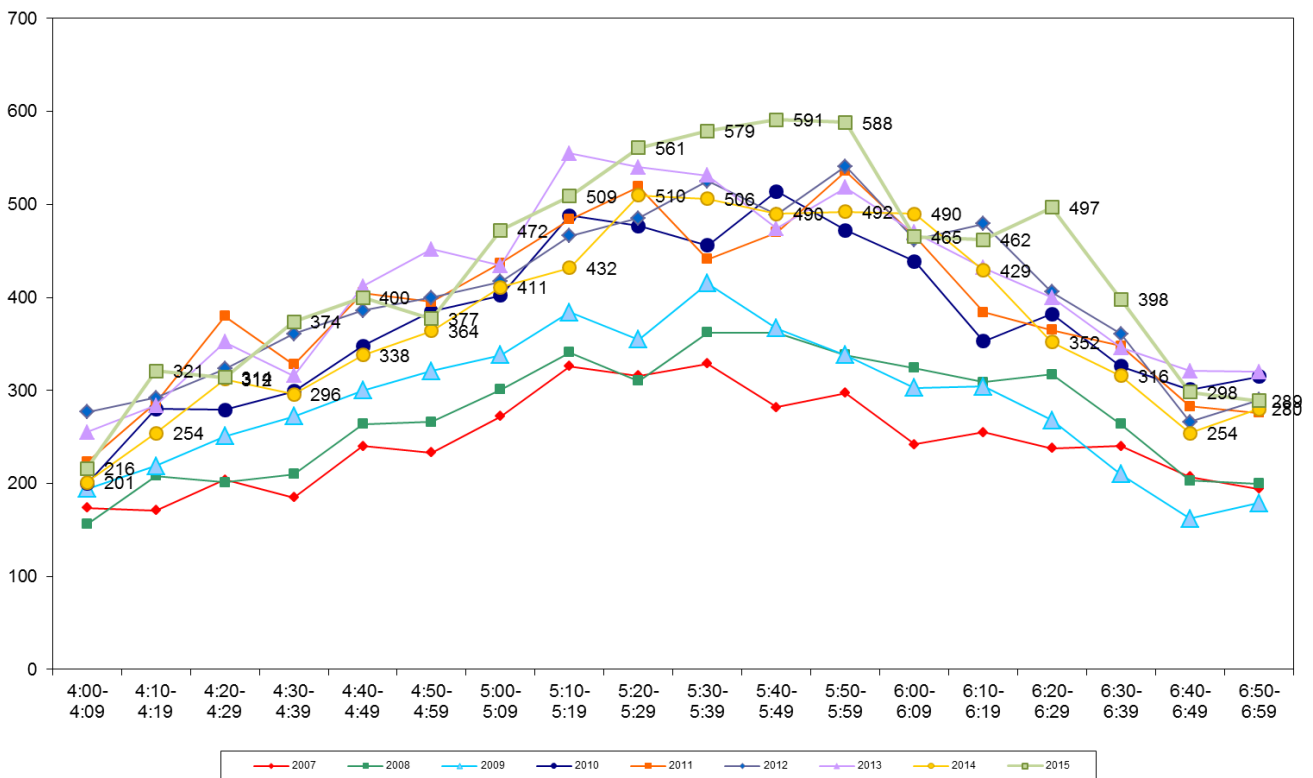
	<i>Albany</i>	<i>North Shore</i>	<i>Waitakere</i>	<i>Waitemata and Gulf</i>	<i>Albert/Eden/Roskill</i>	<i>Whau</i>	<i>Orakei</i>	<i>Maungakiekie-Tamaki</i>	<i>Howick</i>	<i>Manukau</i>	<i>Manurewa-Papakura</i>	<i>Franklin</i>
Cyclist Type												
Adult	86	92	90	99	96	94	90	83	90	84	81	37
School child	14	8	10	1	4	6	10	17	10	16	19	63
Can't tell	0	0	0	0	0	0	0	0	0	0	0	0
Helmet Wearing												
Helmet on head	92	97	89	92	94	90	92	93	89	70	81	85
No helmet	8	3	11	7	5	10	8	7	11	30	19	15
Can't tell	0	0	0	1	1	0	0	0	0	0	0	0
Gender												
Male	84	85	84	78	80	87	76	72	88	83	84	93
Female	16	14	15	21	18	13	24	16	11	17	15	7
Can't tell	0	0	1	1	2	0	0	12	1	0	1	0
Where Riding												
Road	66	78	26	67	40	59	74	38	63	48	46	26
Footpath	18	16	23	13	13	32	11	15	37	44	54	74
Off-road cycleway	16	6	51	19	45	9	15	47	0	8	0	0
Can't tell	0	0	0	1	2	0	0	0	0	0	0	0
Base:	511	553	758	2915	1621	216	216	663	166	337	145	27

Note: Orange highlighting denotes the ward with the highest proportion of a particular characteristic when compared to the other wards. Also, base sizes add to more than total number of cycle movements as sites on ward boundaries have been included in both wards.



- Figure 2.8 shows the overall pattern of total evening cyclist volumes recorded at the 85 sites monitored in the Auckland region. Evening cyclist numbers increased over the monitoring period to a peak of 591 cyclist movements between 5:40pm and 5:49pm, then declined until the end of the shift. This compares with the peak of 510 movements between 5:20pm and 5:29pm last year. The overall trend was consistent with previous years.

**Figure 2.8: Total Cyclist Frequency – Evening Peak
2007-2015 (n)**





2.4 Annual Average Daily Traffic (AADT) Estimates

Note: A full description of the Annual Daily Traffic tool, the calculation used, and the limitations of the estimates, are provided in Appendix Two. Readers are encouraged to review this section in conjunction with the data presented here.

- Table 2.11 provides the comparative AADT estimates for each site, based on the average of morning and evening peak AADT calculations.
- The highest AADT was at the Symonds Street/Karangahape Road intersection (1,438 daily trips, up from 1,205 daily trips last year) and the lowest was at Tom Pearce Drive/George Bolt Memorial Drive (12 daily trips).
- Seventy-five per cent of the sites monitored (64 out of 85) have recorded increases in total AADT estimates this year compared with last year. The most notable increases were at:
 - Triangle Road/Don Buck Road (Waitakere ward) – up from 57 to 113 daily trips (98 per cent);
 - Richardson Road/Maioro Street (Albert-Eden-Roskill and Whau wards) – up from 60 to 116 daily trips (94 per cent);
 - Ian McKinnon Drive/Newton Road (Waitemata and Gulf ward) – up from 718 to 1348 daily trips (88 per cent); and
 - Whangaparaoa Road, near Hibiscus Coast Highway intersection (Albany ward) – up from 22 to 41 daily trips (84 per cent).
- In contrast, AADT estimates at 20 out of 85 sites are lower than last year. The most notable declines occurred at:
 - Tom Pearce Drive/George Bolt Memorial Drive (Manukau ward) – down from 47 to 12 daily trips (75 per cent);
 - 3 Rankin Avenue (Whau ward) – down from 67 to 51 daily trips (24 per cent);
 - Te Irirangi Drive/Ormiston Road (Howick and Manukau wards) – down from 86 to 65 daily trips (24 per cent);
 - Harris Road/Smales Road (Howick ward) – down from 93 to 71 daily trips (23 per cent); and
 - Beach Road/Browns Bay Road (Albany ward) – down from 101 to 79 daily trips (22 per cent).
- The Birkenhead Avenue/Mokoia Road site (North Shore ward) registered no change in AADT over the last 12 months.



Table 2.11: AADT Estimates Based on Morning and Evening Cyclist Movements 2007-2015 (n)

Site No.	Locations	Area	AADT 2007	AADT 2008	AADT 2009	AADT 2010	AADT 2011	AADT 2012	AADT 2013	AADT 2014	AADT 2015	Change 14-15	Change 07-15
8	Symonds Street/Karangahape Road	Waitematā and Gulf	924	899	765	865	999	1060	1305	1205	1438	19%	56%
10	Tamaki Drive/The Strand	Waitematā and Gulf	1313	1146	880	1365	1555	1377	1346	1163	1395	20%	6%
13	Ian McKinnon/Newton Road	Waitematā and Gulf	-	-	422	544	807	726	848	718	1348	88%	-
7	North Western Cycleway/St Lukes	Albert-Eden-Roskill	469	480	451	629	743	625	796	956	1140	19%	143%
6	North Western Cycleway/Great North Road	Albert-Eden-Roskill	335	532	416	705	701	589	754	786	1034	32%	209%
9	Karangahape Road/Queen Street	Waitematā and Gulf	736	616	669	843	802	830	949	897	986	10%	34%
2	Ponsonby/Karangahape Road	Waitematā and Gulf	705	602	536	807	738	717	858	808	931	15%	32%
90	Broadway/Khyber Pass	Waitematā and Gulf	-	-	-	-	-	839	927	759	906	19%	-
58	North Western Cycleway/near Te Atatu Road off-ramp	Waitakere	335	393	513	562	499	614	659	438	614	40%	83%
22	Ferry Terminal	Waitematā and Gulf	553	459	363	574	570	565	606	516	611	18%	10%
17	Onehunga Harbour Road	Maungakiekie-Tamaki	357	316	259	369	448	471	614	636	547	-14%	53%
42	Shakespeare/East Coast Road	North Shore	314	364	454	442	422	350	393	282	445	58%	42%
92	Upper Dominion Road	Albert-Eden-Roskill	-	-	-	-	-	-	296	335	440	31%	-
11	Remuera/Orakei Road	Orakei	282	276	274	359	412	315	515	413	424	3%	50%
5	Dominion/Balmoral Road	Albert-Eden-Roskill	344	291	265	296	286	274	343	342	420	23%	22%
35	Lake Road, by Takapuna Grammar	North Shore	444	440	432	479	469	469	391	322	402	25%	-9%
3	Great North/Carrington Road	Albert-Eden-Roskill	341	333	281	455	335	301	331	327	387	18%	14%
37	Taharoto/Northcote Road	North Shore	375	396	293	333	454	322	346	248	386	56%	3%
36	Hurstmere Road/Killarney Street	North Shore	279	368	466	443	448	384	400	279	357	28%	28%
12	Manukau Road/Greenlane West	Albert-Eden-Roskill	326	296	255	374	331	299	289	313	348	11%	7%
1	Victoria/Wellesley/Halsey Street	Waitematā and Gulf	231	196	180	236	328	277	258	325	332	2%	44%
20	St Heliers Bay/West Tamaki Road	Maungakiekie-Tamaki/Orakei	308	246	158	249	331	199	369	325	319	-2%	4%



Site No.	Locations	Area	AADT 2007	AADT 2008	AADT 2009	AADT 2010	AADT 2011	AADT 2012	AADT 2013	AADT 2014	AADT 2015	Change 14-15	Change 07-15
21	Great South Road/Campbell Road/Main Highway	Albert-Eden-Roskill/ Maungakiekie-Tamaki	253	165	218	246	199	192	213	217	294	35%	16%
14	Mount Albert/New North Road	Albert-Eden-Roskill	226	236	205	302	292	249	245	242	264	9%	17%
73	Blockhouse Bay/Great North Road	Albert-Eden-Roskill/ Whau	-	170	173	204	186	187	205	207	260	26%	-
78	Lagoon Drive/Church Crescent	Maungakiekie-Tamaki	-	-	186	284	234	199	262	224	259	16%	-
52	Central Park Drive	Waitakere	184	227	306	290	307	356	397	181	233	29%	27%
89	Sunnynook/East Coast Road	Albany/North Shore	-	-	-	-	252	228	220	140	219	56%	-
47	Oteha Valley/East Coast Road	Albany	137	163	201	245	186	199	155	150	214	43%	56%
16	Jervois Road/Wallace Street	Waitematā and Gulf	-	-	162	243	215	204	198	192	210	9%	-
72	Te Atatu/Old Te Atatu Road/Tatau Way	Waitakere	-	161	195	301	204	282	278	182	208	14%	-
53	326 Te Atatu Road, near Covil Avenue	Waitakere	127	155	202	185	186	197	222	180	205	14%	61%
4	Patiki/Rosebank Road	Whau	119	114	105	130	175	139	152	133	174	31%	46%
38	Rosedale/East Coast Road	Albany	176	143	235	224	208	173	164	123	151	23%	-14%
80	Pakuranga Road/Ti Rakau Drive	Howick	-	-	176	234	180	183	193	168	151	-10%	-
19	Ellerslie Panmure Highway/Lunn Ave	Maungakiekie-Tamaki	170	136	118	144	111	115	136	96	150	56%	-12%
48	Henderson Creek	Waitakere	65	43	105	121	95	166	123	125	145	16%	124%
23	Great South/Bairds Road	Manukau	99	81	83	103	129	118	150	86	145	69%	47%
84	Behind Auckland Council Building, Orewa	Albany	-	-	130	142	201	132	133	112	137	22%	-
46	Rosedale/Bush Road	Albany	70	106	103	157	121	90	144	114	134	18%	91%
87	Triangle/Huruhuru Road	Waitakere	-	-	-	198	175	255	222	95	128	35%	-
75	Stanley Street/Grafton Road	Waitematā and Gulf	-	95	140	135	106	135	170	133	126	-5%	-
39	Upper Harbour/Albany Highway	Albany	57	143	200	228	213	265	193	107	126	18%	120%
41	Wairau/Glenfield Road	North Shore	93	107	117	131	134	150	100	114	125	10%	34%



Site No.	Locations	Area	AADT 2007	AADT 2008	AADT 2009	AADT 2010	AADT 2011	AADT 2012	AADT 2013	AADT 2014	AADT 2015	Change 14-15	Change 07-15
30	Great South/East Tamaki Road	Manukau	106	74	92	93	129	125	140	104	124	19%	17%
15	Richardson Road/Maioro Street	Albert-Eden-Roskill/Whau	-	-	30	56	53	77	70	60	116	93%	-
32	McKenzie/Coronation/Walmsley Road	Manukau	101	82	75	126	133	69	131	121	115	-5%	14%
49	Triangle Road/Don Buck Road	Waitakere	96	88	80	128	127	119	127	57	113	98%	17%
33	Bucklands Beach/Pakuranga Road	Howick	203	187	137	164	154	123	102	129	112	-13%	-45%
76	Waikaraka Cycle Way	Maungakiekie-Tamaki	-	76	73	59	94	76	119	104	111	7%	-
70	Squadron Drive/Buckley Avenue*	Albany	-	51	97	135	120	156	153	92	106	15%	-
26	Great South/Browns/Orams Road	Manurewa-Papakura	86	81	57	83	101	64	71	101	96	-5%	12%
55	Swanson/Ranui Station Road/Armada Drive	Waitakere	88	122	148	146	189	162	167	116	96	-17%	9%
91	Orakei Basin Boardwalk	Orakei	-	-	-	-	-	-	46	76	94	24%	-
18	Great South Road/High Street/Atkinson/Park Avenue	Manukau	121	87	71	88	101	108	114	88	93	6%	-23%
28	Massey/Buckland Road	Manukau	61	44	57	64	76	68	84	84	92	10%	51%
31	Wyllie Avenue/Puhinui Road	Manukau	55	47	50	82	105	66	133	85	92	8%	66%
64	Porchester Road/Walters Road	Manurewa-Papakura	72	66	70	-	104	63	63	65	91	40%	27%
24	Great South Road/Te Irirangi Drive/Cavendish Drive	Manukau	106	74	59	103	136	112	170	103	88	-15%	-17%
40	Oteha Valley Road/SH17/Albany Highway	Albany	42	69	103	130	117	182	121	86	85	-1%	103%
88	Keith Hay Park	Albert-Eden-Roskill	-	-	-	77	99	69	88	86	85	-1%	-
45	Beach/Browns Bay Road	Albany	44	66	86	114	110	88	89	101	79	-22%	79%
65	Great South Road/Rosehill Drive	Manurewa-Papakura	77	106	85	90	105	83	103	75	79	5%	2%
66	Great South Road/Taka Street	Manurewa-Papakura	83	83	51	62	86	70	79	73	77	5%	-7%
85	Rathgar/Pomaria Road	Waitakere	-	-	122	144	99	106	99	80	77	-4%	-
34	Te Irirangi Drive/Ti Rakau Drive	Howick	117	109	86	112	110	123	154	79	75	-5%	-36%
74	Apirana Avenue/Pilkington/Tripoli Road	Maungakiekie-Tamaki	-	87	46	87	78	66	57	68	75	10%	-



Site No.	Locations	Area	AADT 2007	AADT 2008	AADT 2009	AADT 2010	AADT 2011	AADT 2012	AADT 2013	AADT 2014	AADT 2015	Change 14-15	Change 07-15
51	Luckens/Hobsonville Road	Albany/Waitakere	47	60	110	137	74	161	150	59	74	25%	58%
57	West Coast/Rosier Road	Waitakere	69	54	90	87	86	55	81	48	72	50%	5%
71	Highbrook Drive	Manukau	-	42	55	59	77	72	68	71	72	1%	-
79	Harris/Smales Road	Howick	-	-	88	89	109	64	83	93	71	-24%	-
43	Glenfield/Coronation Road	North Shore	64	109	113	134	76	106	85	84	69	-18%	7%
81	Te Irirangi Drive/Ormiston Road	Howick/Manukau	-	-	47	95	81	72	122	86	65	-24%	-
50	Lincoln Road/Fairdene Avenue	Waitakere	57	79	62	80	78	97	98	44	61	39%	6%
56	3 Rankin Avenue	Whau	45	55	56	46	60	55	57	67	51	-24%	14%
68	Queen/Harris Street	Franklin	146	119	135	81	94	62	68	50	51	2%	-65%
63	Gulf Harbour Drive/Laurie Southwick Parade	Albany	80	63	31	53	56	47	59	42	46	10%	-42%
82	Hibiscus Coast Highway/Jelas Road	Albany	-	-	55	57	44	50	64	33	45	36%	-
44	Birkenhead Ave/Mokoia Road	North Shore	58	71	83	108	65	74	88	44	44	0%	-24%
54	Te Atatu Road/Elcoat Avenue	Waitakere	73	66	101	76	71	84	64	50	42	-16%	-42%
61	D'Oyly Reserve cycleway	Albany	35	145	13	65	82	50	39	35	41	17%	16%
60	Whangaparaoa Road, near Hibiscus Coast Highway intersection	Albany	40	29	17	34	31	29	28	22	41	86%	1%
59	Whangaparaoa Road, near Red Beach Intersection	Albany	42	45	38	43	37	41	37	26	38	46%	-10%
69	Edinburgh/Tobin Street	Franklin	51	58	49	41	40	40	30	24	24	0%	-52%
25	Tom Pearce/George Bolt Memorial Drive	Manukau	-	-	38	17	77	21	46	47	12	-74%	-
	Total (60 sites since 2007)^		12940	12740	12243	15461	15856	14910	16585	14510	16946	17%	31%
	Total (67 sites since 2008)^		-	13422	13022	16441	16721	15884	17635	15367	17902	16%	-
	Total (78 sites in 2009)		-	-	14478	18346	18821	17718	19753	17182	20395	19%	-
	Total (80 sites in 2010)		-	-	-	18621	19095	18042	20063	17298	20608	19%	-
	Total (82 sites in 2011)		-	-	-	-	19199	18333	20346	17503	20918	20%	-

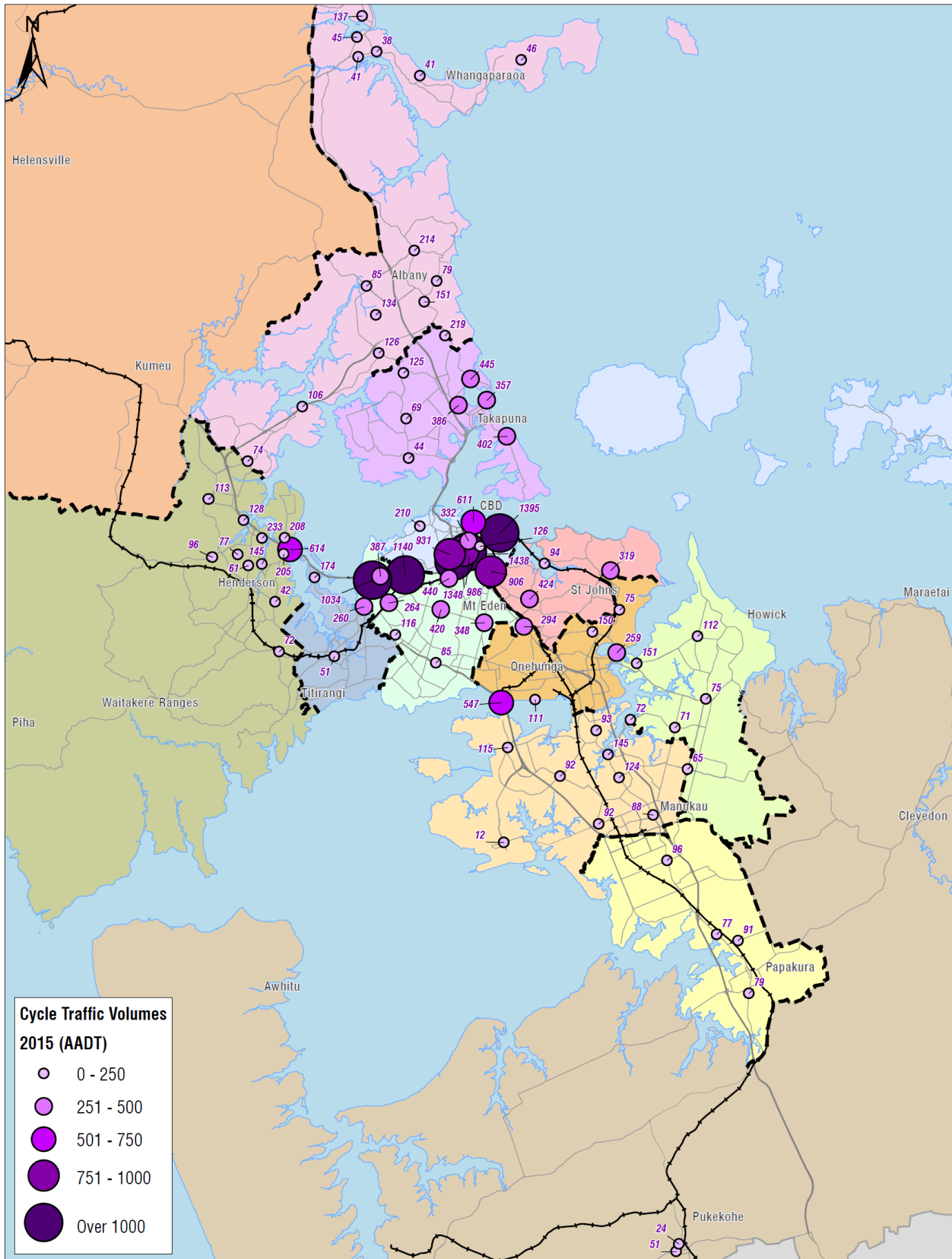


Site No.	Locations	Area	AADT 2007	AADT 2008	AADT 2009	AADT 2010	AADT 2011	AADT 2012	AADT 2013	AADT 2014	AADT 2015	Change 14-15	Change 07-15
	Total (83 sites in 2012)		-	-	-	-	-	19172	21273	18263	21824	19%	-
	Total (85 sites since 2013)		-	-	-	-	-	-	21615	18674	22358	20%	-

^Note that the evening count for D'Oyly Reserve cycleway (site 61) in 2008 is considered as an outlier, so the total figures exclude this outlier for more accurate comparison.

*Note that the Squadron Drive/Buckley Avenue (site 70) is the relocated site from previous Upper Harbour Drive/Buckley Avenue, so previous results are not directly comparable.

Figure 2.9: AADT Cycle Volumes in the Auckland Region – 2015



**Cycle Traffic Volumes
2015 (AADT)**

- 0 - 250
- 251 - 500
- 501 - 750
- 751 - 1000
- Over 1000

This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Transport. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Transport gives no warranty as to the accuracy and completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information.
Height datum: Auckland 1946.

Legend

- Territorial Authority Boundary
- Railway
- Motorway
- Arterial Roads
- Major Roads

**Cycle Traffic Volume
By Annual Average Daily
Cycle Traffic 2015 (AADT)**

0 2.5 5
Kilometers
Scale 1:270,000 @ A4

Date: 23/04/2015
Job Code: AT13061

Auckland Transport
An Auckland Council Organisation



2.5 Ferry Wharf Count Summary

- In 2015, counts of stationary cycles at the following ferry wharves were conducted by Gravitas prior to, and at the conclusion of, the morning and evening monitoring periods (on the same day as other sites in the ward).
 - Auckland Downtown (Waitematā and Gulf ward);
 - Devonport (North Shore ward);
 - Half Moon Bay (Howick ward); and
 - Hobsonville (Albany ward).
- A single count of stationary cycles at the following ferry wharves was conducted by Auckland Transport during the morning monitoring period (on the same day as other sites in the ward).
 - Bayswater (North Shore ward);
 - Birkenhead (North Shore ward);
 - Beachhaven (North Shore ward);
 - Matiatia (Waitematā and Gulf ward);
 - Northcote Point (North Shore ward);
 - Pine Harbour (Franklin ward); and
 - Stanley Bay (North Shore ward).

Key Points

- In the morning, eight cycles were observed at the **Devonport Ferry Terminal** at 6.10am and 51 were observed at 9.10am, suggesting 43 ferry passengers rode to the ferry in the morning peak. In the afternoon, 64 cycles were recorded at the Devonport Ferry Terminal at 3.30pm and 15 were observed at 7.10pm, suggesting 49 ferry passengers cycled home after disembarking in the evening peak.
- At the **Half Moon Bay Terminal**, no cycles were observed at 6.10am and two cycles were observed at 9.10am in the morning peak, suggesting two passengers cycled to the ferry. In the evening, three cycles were observed at 3:30pm and none at 7:30pm, suggesting three ferry passengers cycled home after disembarking in the evening peak.
- At the **Downtown Ferry Terminal**, 26 cycles were observed at 6.10am and at 9.10am in the morning peak. In the evening, 37 cycles were observed at 3:30pm and 32 at 7:10pm.
- At the **Hobsonville Terminal**, no cycles were observed at 6.10am and two cycles were observed at 9.10am in the morning peak, suggesting two passengers cycled to the ferry. In the evening, two cycles were observed at 3:30pm and one at 7:30pm, suggesting one ferry passenger cycled home after disembarking in the evening peak.
- For ferry terminals that had a single count of stationary cycles, most experienced an increase from last year's results, most notable being the **Matiatia Ferry Terminal** (up from six cycles to 16



cycles). **Bayswater** and **Pine Harbour** both registered a decrease in the number of stationary cycles.

Table 2.12: Stationery Cycle Counts at Ferry Wharves (n)

	<i>Devonport</i>					<i>Half Moon Bay</i>				
	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Morning Peak										
6:10am	5	3	4	7	8	2	0	0	0	0
9:10am	47	43	61	50	51	0	0	2	0	2
Evening Peak										
3:30pm	79	26	57	62	64	1	0	0	0	3
7:10pm	11	4	12	13	15	0	0	0	0	0

	<i>Downtown</i>		<i>Bayswater</i>		<i>Stanley Bay</i>		<i>Northcote Point</i>		<i>Birkenhead</i>		<i>Matiatia</i>	
	<i>2014</i>	<i>2015</i>	<i>2014</i>	<i>2015</i>	<i>2014</i>	<i>2015</i>	<i>2014</i>	<i>2015</i>	<i>2014</i>	<i>2015</i>	<i>2014</i>	<i>2015</i>
Morning Peak												
6:10am	18	26	1	-	0	-	0	-	0	-	-	-
9:10am	17	26	20	14	0	4	0	0	0	2	6	16
Evening Peak												
3:30pm	19	37	22	-	1	-	1	-	0	-	-	-
7:10pm	23	32	15	-	0	-	0	-	0	-	-	-

	<i>Beachhaven</i>			<i>Hobsonville</i>			<i>Pine Harbour</i>					
	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2014</i>	<i>2015</i>	
Morning Peak												
6:10am	0	-	-	1	0	0	-	-	-	-	-	-
9:10am	0	-	2	1	0	2	4	12	7	7	2	2
Evening Peak												
3:30pm	2	-	-	1	0	2	-	-	-	-	-	-
7:10pm	0	-	-	1	0	1	-	-	-	-	-	-



2.6 School Bike Shed Count Summary

Cycle Count Background Information

- A total of 314 full primary, intermediate, secondary and composite schools throughout the Auckland region were contacted by Gravitas. Of the 201 schools that responded to the survey (64 per cent⁷), most have no policies that restrict students cycling to school.⁸
- Most schools conducted their count on Tuesday the 3rd of March, 2015.

Cycle Count Key Points

- Of those students from the surveyed schools eligible to cycle, on average two per cent are cycling to their schools. This result is unchanged since 2007.
- This year, 11 schools (5 per cent) reported at least 10 per cent of students cycling to school. This compares with 4 per cent in 2014. The following schools reported 20 per cent or more of students cycling to school:
 - Beachlands School (Franklin ward) (35 per cent)
 - Belmont Intermediate School (North Shore ward) (32 per cent)
 - Takapuna Normal Intermediate School (North Shore ward) (23 per cent)
 - Lincoln Heights School (Waitakere ward) (23 per cent)
 - Hobsonville Point School (Albany ward) (20 per cent)
 - Pasadena Intermediate School (Albert-Eden-Roskill ward) (20 per cent)
- Of the 184 schools that participated in the count in both 2014 and 2015:
 - Forty-three schools (23 per cent) had increased their share of students cycling
 - Thirty-five schools (19 per cent) had decreased their share of students cycling
 - 106 schools (58 per cent) remain unchanged.
- The most notable increases are at Lincoln Heights Primary School (up from 4 per cent from 2014 to 23 per cent in 2015) and Beachlands Primary School (up from 17 per cent in 2014 to 35 per cent in 2015).
- Of the 184 schools that participated in the count in both 2014 and 2015, 69 (38 per cent) had no students cycling to school. This compares with 49 per cent of these schools in 2014.
- Tables 2.14 and 2.15 illustrate the rates of cycling to school at different school levels in 2015 and in previous years. Rates of cycling to school continue to be highest among intermediate schools surveyed (6 per cent, up from 4 per cent in 2014).

⁷ Compared with 87 per cent in 2014.

⁸ These exceptions are detailed in the ward level reports. Most relate to full primary schools restricting younger students from cycling.



**Table 2.14: Average Cycling Rates by School Level
2015 (n)**

<i>Year Levels</i>	<i>Number of Schools Responded (n)</i>	<i>Average School Roll Eligible To Cycle</i>	<i>Average Number of Cycles Counted</i>	<i>Average Cycling Rate per School</i>
Intermediate	24	501	28	6%
Full Primary	100	238	5	2%
Intermediate/Secondary	14	773	15	2%
Composite	25	429	4	1%
Secondary	38	1232	10	1%
Regional Total	201	518	9	2%

**Table 2.15: Summary Table of Average Cycling Rates by School Level
2007-2015**

<i>Year Levels</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Intermediate	5%	4%	4%	5%	4%	4%	4%	4%	6%
Full Primary	-	-	-	-	2%	1%	2%	2%	2%
Intermediate/Secondary	2%	2%	1%	2%	1%	1%	1%	1%	2%
Composite	1%	1%	<1%	1%	1%	1%	1%	1%	1%
Secondary	1%	1%	1%	1%	1%	1%	1%	1%	1%
Regional Total	2%	2%	2%	2%	2%	2%	2%	2%	2%



Table 2.16 illustrates the rates of cycling to school within each of the Auckland wards. Rates of cycling to school are highest among schools in North Shore ward (4 per cent, unchanged since 2010). Rates of cycling among North Shore Ward intermediate schools are particularly high (19 per cent of students cycling). By comparison, at less than one per cent, Manukau ward has the lowest rate of cycling – unchanged since 2009.

**Table 2.16: Summary Table of School Bike Count by Ward
2007-2015 (n)**

Ward	2015			Average Cycle Rate Per Ward								
	Number of Schools Responding (n)	Average School Roll Eligible To Cycle	Average Number of Cycles Counted	2007	2008	2009	2010	2011	2012	2013	2014	2015
North Shore	10	888	36	3%	3%	3%	4%	4%	4%	4%	4%	4%
Orakei	10	457	12	1%	1%	2%	1%	2%	2%	2%	2%	3%
Albany	16	757	17	2%	1%	1%	1%	1%	1%	2%	2%	2%
Albert-Eden-Roskill	17	812	14	2%	1%	1%	21%	2%	2%	2%	2%	2%
Franklin	21	211	5	1%	1%	1%	<1%	3%	2%	3%	2%	2%
Manurewa-Papakura	23	514	8	<1%	1%	<1%	1%	1%	1%	2%	1%	2%
Rodney	17	237	4	2%	1%	<1%	0%	1%	1%	1%	<1%	2%
Waitakere	19	507	12	1%	1%	1%	1%	1%	2%	2%	1%	2%
Howick	9	868	12	1%	2%	3%	2%	1%	1%	1%	1%	1%
Maungakiekie-Tamaki	15	258	3	<1%	0%	<1%	0%	<1%	0%	1%	1%	1%
Waitemata & Gulf	8	397	4	1%	1%	2%	2%	2%	2%	2%	2%	1%
Whau	11	573	6	1%	1%	1%	<1%	1%	2%	1%	1%	1%
Manukau	25	567	1	0%	0%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Regional Total	201	520	9	2%	2%	2%	2%	2%	2%	2%	2%	2%



Table 2.17: Summary Table of Average Cycling Rates by School Level and Ward 2015

<i>Ward</i>	<i>School Type</i>					<i>All School Levels</i>
	<i>Composite</i>	<i>Full Primary</i>	<i>Intermediate</i>	<i>Intermediate/ Secondary</i>	<i>Secondary</i>	
North Shore	-	-	19%	1%	<1%	4%
Franklin	1%	3%	-	-	2%	3%
Orakei	1%	2%	6%	2%	<1%	3%
Albany	1%	10%	1%	4%	<1%	2%
Albert-Eden-Roskill	<1%	<1%	5%	0%	2%	2%
Rodney	0%	2%	-	-	0%	2%
Waitakere	1%	3%	6%	1%	1%	2%
Manurewa-Papakura	2%	4%	4%	-	1%	2%
Howick	2%	2%	3%	3%	1%	1%
Maungakiekie-Tamaki	-	<1%	-	-	4%	1%
Waitemata & Gulf	1%	1%	-	4%	0%	1%
Whau	0%	1%	2%	-	1%	1%
Manukau	<1%	<1%	0%	<1%	<1%	<1%
Regional Total	1%	2%	6%	2%	1%	2%

Note: A dash indicates no schools of this type responded to the survey within a ward.

The following table ranks the 201 schools from the highest share of cyclists to the lowest.



Table 2.18: School Bike Count by School

School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
Beachlands School	Franklin	Full Primary	187	65	35%	17%	24%	6%	7%	-	-	-	-
Belmont Intermediate School	North Shore	Intermediate	560	178	32%	32%	25%	31%	30%	33%	22%	26%	3%
Takapuna Normal Intermediate School	North Shore	Intermediate	601	138	23%	11%	17%	8%	-	-	-	-	-
Lincoln Heights School	Waitakere	Full Primary	184	42	23%	4%	2%	0%	0%	-	-	-	-
Hobsonville Point Primary School	Albany	Full Primary	150	30	20%	24%	31%	-	-	-	-	-	-
Pasadena Intermediate School	Albert-Eden-Roskill	Intermediate	222	44	20%	9%	11%	12%	22%	26%	17%	12%	18%
Silverdale Primary School	Albany	Full Primary	230	31	13%	24%	6%	2%	8%	-	-	-	-
Te Atatu Intermediate	Waitakere	Intermediate	340	44	13%	-	8%	9%	8%	8%	9%	7%	10%
Huapai District School	Rodney	Full Primary	420	48	11%	-	10%	3%	5%	-	-	-	-
Glendowie Primary School	Orakei	Full Primary	205	23	11%	1%	1%	1%	1%	1%	1%	-	-
Hingaia Peninsula School	Manurewa-Papakura	Full Primary	157	16	10%	-	81%	29%	-	-	-	-	-
Conifer Grove School	Manurewa-Papakura	Full Primary	550	47	9%	7%	6%	3%	4%	-	-	-	-
Orewa College	Albany	Intermediate/Secondary	1556	114	7%	8%	5%	2%	4%	7%	5%	5%	6%
View Road School	Franklin	Full Primary	138	9	7%	2%	5%	5%	3%				
St Mary's Catholic School (Papakura)	Manurewa-Papakura	Full Primary	113	7	6%	2%	1%	1%	2%	-	-	-	-
Remuera Intermediate	Orakei	Intermediate	942	52	6%	6%	6%	6%	6%	5%	7%	5%	9%
Paparimu School	Franklin	Full Primary	19	1	5%	0%	5%	-	8%	-	-	-	-
Rangeview Intermediate	Waitakere	Intermediate	590	31	5%	1%	4%	3%	-	-	-	-	-
Waitoki School	Rodney	Full Primary	99	5	5%	2%	5%	-	-	-	-	-	-

⁹ This share is calculated by averaging the number of cycles counted over the total number of students eligible to cycle. The figure obtained is rounded to zero decimal places.



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
Rosehill Intermediate School	Manurewa-Papakura	Intermediate	421	21	5%	6%	7%	6%	6%	6%	6%	-	-
Ellerslie School	Maungakiekie-Tamaki	Full Primary	170	8	5%	2%	1%	0%	1%	-	-	-	-
Auckland Normal Intermediate	Albert-Eden-Roskill	Intermediate	699	32	5%	10%	3%	4%	7%	7%	6%	5%	7%
Waikowhai Intermediate School	Albert-Eden-Roskill	Intermediate	355	16	5%	5%	4%	6%	5%	3%	4%	3%	3%
Tamaki College	Maungakiekie-Tamaki	Secondary	570	25	4%	1%	0%	-	-	0%	0%	<1%	<1%
Wellsford School	Rodney	Full Primary	114	5	4%	-	9%	-	-	-	-	-	-
The Rise Up Academy	Manukau	Full Primary	70	3	4%	-	-	-	-	-	-	-	-
Waiheke High School	Waitemata & Gulf	Intermediate/Secondary	540	23	4%	5%	4%	6%	4%	4%	3%	2%	3%
Henderson Intermediate	Waitakere	Intermediate	512	21	4%	-	3%	4%	-	-	-	-	-
Waiau Pa School	Franklin	Full Primary	175	7	4%	3%	0%	2%	-	-	-	-	-
Papakura Normal Primary School	Manurewa-Papakura	Full Primary	285	11	4%	4%	3%	3%	2%	-	-	-	-
Bruce McLaren Intermediate	Waitakere	Intermediate	215	8	4%	2%	2%	1%	<1%	3%	4%	2%	2%
Auckland Grammar School	Albert-Eden-Roskill	Secondary	2505	79	3%	4%	3%	3%	4%	4%	4%	3%	2%
Pakuranga Intermediate School	Howick	Intermediate	265	8	3%	3%	1%	3%	-	-	-	-	-
KingsGate School	Franklin	Full Primary	67	2	3%	0%	0%	0%	0%	-	-	-	-
Mission Heights Junior College	Howick	Composite	840	25	3%	4%	0%	2%	1%	5%	3%	-	-
Elim Christian Character - Junior Campus	Howick	Full Primary	855	25	3%	1%	-	1%	-	-	-	-	-
Wesley Intermediate School	Whau	Intermediate	109	3	3%	3%	4%	1%	-	-	-	-	-
Titirangi Rudolf Steiner School	Waitakere	Full Primary	77	2	3%	0%	0%	0%	0%	0%	0%	0%	0%
Northcote Intermediate School	North Shore	Intermediate	273	7	3%	4%	<1%	2%	3%	5%	2%	3%	2%
Liston College	Waitakere	Intermediate/Secondary	750	19	3%	4%	1%	3%	-	-	-	-	-
Greenmeadows Intermediate School	Manurewa-Papakura	Intermediate	367	9	2%	1%	2%	3%	4%	2%	0%	5%	3%



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹									
					2015	2014	2013	2012	2011	2010	2009	2008	2007	
Mt Hobson Middle School	Orakei	Intermediate/Secondary	41	1	2%	4%	7%	6%	-	-	-	-	-	
Albany Junior High School	Albany	Intermediate/Secondary	1125	27	2%	2%	2%	5%	-	-	-	-	-	
Wairau Intermediate School	North Shore	Intermediate	297	7	2%	4%	4%	3%	4%	6%	5%	7%	4%	
Tamaki Primary School	Maungakiekie-Tamaki	Full Primary	255	6	2%	1%	1%	-	-	-	-	-	-	
Taupaki School	Rodney	Full Primary	85	2	2%	1%	4%	-	<1%	-	-	-	-	
Kowhai Intermediate School	Albert-Eden-Roskill	Intermediate	472	11	2%	2%	2%	3%	5%	5%	6%	6%	6%	
Henderson High School	Waitakere	Secondary	650	15	2%	3%	1%	1%	-	-	-	-	-	
ACG Strathallan	Manurewa-Papakura	Composite	1023	23	2%	2%	2%	1%	-	-	-	-	-	
Rutherford College	Waitakere	Secondary	1380	29	2%	2%	3%	4%	-	-	-	-	-	
Blockhouse Bay Intermediate	Whau	Intermediate	810	17	2%	3%	3%	5%	3%	-	3%	4%	4%	
Selwyn College	Orakei	Secondary	1030	21	2%	2%	3%	2%	2%	2%	2%	1%	-	
Waiuku College	Franklin	Secondary	885	18	2%	2%	1%	<1%	-	-	-	-	-	
Somerville Intermediate	Howick	Intermediate	970	19	2%	2%	-	-	-	-	-	-	-	
Holy Cross School (Papatoetoe)	Manukau	Full Primary	154	3	2%	1%	1%	0%	-	-	-	-	-	
St Heliers School	Orakei	Full Primary	732	14	2%	2%	1%	2%	-	-	-	-	-	
St Dominic's Catholic School (Blockhouse Bay)	Whau	Full Primary	223	4	2%	-	-	-	1%	-	-	-	-	
Awhitu District School	Franklin	Full Primary	122	2	2%	0%	5%	0%	2%	-	-	-	-	
Parnell District School	Waitemata & Gulf	Full Primary	198	3	2%	<1%	2%	3%	1%	-	-	-	-	
Wentworth College	Albany	Intermediate/Secondary	202	3	1%	-	1%	1%	2%	3%	4%	<1%	3%	
Green Bay Primary	Whau	Full Primary	274	4	1%	4%	5%	2%	3%	-	-	-	-	
Rosmini College	North Shore	Intermediate/Secondary	1058	15	1%	2%	3%	3%	5%	3%	3%	4%	3%	



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
Our Lady Sacred Heart School (Epsom)	Albert-Eden-Roskill	Full Primary	217	3	1%	1%	3%	-	-	-	-	-	-
Kristin School	Albany	Composite	1532	21	1%	1%	<1%	<1%	<1%	<1%	1%	-	-
Clevedon School	Franklin	Full Primary	367	5	1%	2%	0%	1%	-				
Albany Senior High School	Albany	Secondary	775	10	1%	1%	<1%	1%	1%	2%	-	-	-
Mount Albert Grammar School	Albert-Eden-Roskill	Secondary	2650	32	1%	1%	1%	2%	-	-	-	-	-
Kelston Intermediate	Whau	Intermediate	250	3	1%	0%	-	1%	-	-	-	-	-
Murray's Bay Intermediate	Albany	Intermediate	1025	12	1%	1%	-	1%	2%	3%	2%	2%	5%
Papatoetoe High School	Manukau	Secondary	1550	17	1%	1%	-	-	-	-	-	-	-
Rosehill College	Manurewa-Papakura	Secondary	1800	19	1%	1%	1%	2%	1%	1%	1%	1%	<1%
Michael Park School	Orakei	Composite	384	4	1%	1%	-	-	-	-	-	-	-
Pukekohe Christian School	Franklin	Composite	192	2	1%	0%	1%	<1%	-				
Mt Roskill Intermediate School	Albert-Eden-Roskill	Intermediate	578	6	1%	1%	2%	3%	2%	4%	-	2%	2%
Drury School	Manurewa-Papakura	Full Primary	195	2	1%	2%	1%	2%	4%	-	-	-	-
ACG Sunderland	Waitakere	Composite	293	3	1%	1%	3%	2%	<1%	4%	2%	1%	-
Papakura High School	Manurewa-Papakura	Secondary	696	7	1%	1%	<1%	1%	<1%	1%	0%	<1%	<1%
Glenavon School	Whau	Full Primary	206	2	1%	0%	0%	0%	0%	-	-	-	-
Birdwood School	Waitakere	Full Primary	211	2	1%	<1%	2%	0%	0%	-	-	-	-
Hebron Christian College	Albert-Eden-Roskill	Composite	213	2	1%	2%	5%	1%	-	-	-	-	-
Whangaparaoa College	Albany	Intermediate/Secondary	1355	12	1%	-	1%	1%	1%	-	1%	2%	4%
Kelston Boys' High School	Whau	Secondary	838	7	1%	<1%	<1%	<1%	<1%	<1%	0%	1%	1%
ACG Parnell College	Waitemata & Gulf	Composite	750	6	1%	<1%	<1%	-	1%	1%	-	0%	-
Macleans College	Howick	Secondary	2564	20	1%	1%	1%	1%	<1%	-	2%	1%	-



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
Churchill Park School	Orakei	Full Primary	130	1	1%	2%	10%	6%	2%	-	-	-	-
Avondale College	Whau	Secondary	2800	20	1%	1%	1%	-	-	-	1%	1%	-
Kedgley Intermediate	Manukau	Intermediate	711	5	1%	1%	1%	1%	1%	2%	2%	-	-
Massey High School	Waitakere	Secondary	2012	13	1%	<1%	1%	-	-	<1%	1%	1%	1%
Sancta Maria College	Howick	Secondary	1000	6	1%	1%	<1%	1%	1%	1%	1%	1%	2%
West Harbour School	Waitakere	Full Primary	347	2	1%	1%	0%	-	-	-	-	-	-
Edgewater College	Howick	Secondary	729	4	1%	0%	1%	1%	2%	2%	2%	2%	-
Pinehurst School	Albany	Composite	740	4	1%	<1%	1%	1%	<1%	1%	0%	1%	1%
Glenfield College	North Shore	Secondary	1131	6	1%	<1%	1%	-	-	1%	1%	-	-
Destiny School	Manurewa-Papakura	Composite	192	1	1%	0%	0%	0%	0%	-	-	-	-
St Joseph's School (Pukekohe)	Franklin	Full Primary	400	2	1%	1%	1%	0%	2%				
Saint Mary's School (Avondale)	Whau	Full Primary	400	2	1%	0%	-	0%	0%	-	-	-	-
Alfriston College	Manurewa-Papakura	Secondary	1487	7	<1%	0%	1%	1%	1%	1%	1%	2%	-
Al-Madinah School	Manukau	Composite	540	1	<1%	0%	0%	0%	0%	0%	0%	0%	-
Birkenhead College	North Shore	Secondary	710	1	<1%	<1%	<1%	<1%	<1%	1%	-	-	-
Carmel College	North Shore	Intermediate/Secondary	1030	2	<1%	<1%	<1%	<1%	<1%	0%	0%	<1%	0%
Diocesan School for Girls	Albert-Eden-Roskill	Composite	1318	4	<1%	<1%	<1%	<1%	<1%	<1%	0%	<1%	0%
James Cook High School	Manurewa-Papakura	Secondary	1250	5	<1%	<1%	<1%	<1%	-	-	-	-	-
Lynfield College	Albert-Eden-Roskill	Secondary	1800	6	<1%	1%	<1%	<1%	<1%	<1%	1%	<1%	1%
Mahurangi Christian School	Rodney	Full Primary	1320	5	<1%	0%	0%	-	-	-	-	-	-
Mangere Central School	Manukau	Full Primary	714	2	<1%	0%	0%	0%	-	-	-	-	-
Manurewa High School	Manurewa-Papakura	Secondary	2019	2	<1%	0%	<1%	0%	<1%	1%	0%	1%	2%



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹									
					2015	2014	2013	2012	2011	2010	2009	2008	2007	
Northcote College	North Shore	Secondary	1102	2	<1%	1%	1%	1%	<1%	<1%	0%	-	-	
Ormiston Senior College	Howick	Secondary	460	2	<1%	-	-	-	-	-	-	-	-	
Otahuhu College	Manukau	Secondary	1200	2	<1%	0%	0%	0%	0%	-	0%	0%	0%	
Rangitoto College	Albany	Secondary	2870	8	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	1%	
St Thomas School	Orakei	Full Primary	751	1	<1%	-	<1%	-	<1%	-	-	-	-	
Te Kura Kaupapa Māori a Rohe o Mangere	Manukau	Composite	210	1	<1%	0%	1%	0%	1%	-	-	-	-	
Westlake Girls' High School	North Shore	Secondary	2120	6	<1%	<1%	<1%	<1%	<1%	<1%	0%	<1%	<1%	
Ahuroa School	Rodney	Full Primary	71	0	0%	0%	0%	0%	0%	-	-	-	-	
Alfriston School	Manurewa-Papakura	Full Primary	289	0	0%	<1%	0%	0%	-	-	-	-	-	
Aorere College	Manukau	Secondary	1498	0	0%	0%	0%	0%	0%	0%	0%	-	-	
Ararimu School	Franklin	Full Primary	148	0	0%	0%	0%	0%	0%					
Ardmore School	Franklin	Full Primary	338	0	0%	0%	0%	0%	0%					
Auckland Girls' Grammer School	Waitemata & Gulf	Secondary	1374	0	0%	0%	0%	<1%	<1%	0%	0%	0%	<1%	
Auckland International College	Whau	Secondary	300	0	0%	<1%	1%	0%	0%	0%	0%	0%	-	
Auckland Seventh Day Adventist High School	Manukau	Secondary	202	0	0%	1%	0%	1%	<1%	-	-	-	-	
Bailey Road School	Maungakiekie-Tamaki	Full Primary	435	0	0%	0%	0%	0%	0%	-	-	-	-	
Bombay School	Franklin	Full Primary	345	0	0%	0%	0%	0%	0%					
Brookby School	Franklin	Full Primary	123	0	0%	0%	0%	0%	-	-	-	-	-	
Christ the King Catholic School	Albert-Eden-Roskill	Full Primary	154	0	0%	0%	0%	0%	0%	-	-	-	-	
City Impact Church School	Albany	Composite	138	0	0%	0%	0%	0%	0%	-	-	-	-	



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
Dairy Flat School	Rodney	Full Primary	250	0	0%	0%	0%	0%	0%	-	-	-	-
Dilworth School	Albert-Eden-Roskill	Full Primary	628	0	0%	0%	-	0%	-	-	-	-	-
Don Buck Primary School	Waitakere	Full Primary	231	0	0%	0%	0%	0%	0%	-	-	-	-
Drury Christian School	Manurewa-Papakura	Composite	30	0	0%	0%	0%	0%	-	-	-	-	-
Edmund Hillary School	Manurewa-Papakura	Full Primary	130	0	0%	0%	0%	0%	0%	-	-	-	-
Ferguson Intermediate School	Manukau	Intermediate	447	0	0%	0%	0%	0%	0%	-	-	0%	-
Ficino School	Albert-Eden-Roskill	Full Primary	32	0	0%	0%	0%	0%	0%	-	-	-	-
Glen Taylor School	Orakei	Full Primary	151	0	0%	0%	1%	0%	-	-	-	-	-
Glenbrook School	Franklin	Full Primary	230	0	0%	0%	0%	0%	0%				
Golden Grove School	Maungakiekie-Tamaki	Full Primary	40	0	0%	0%	0%	0%	0%	-	-	-	-
Hare Krishna School	Rodney	Full Primary	79	0	0%	0%	0%	0%	0%	-	-	-	-
Hunua School	Franklin	Full Primary	55	0	0%	0%	0%	0%	-				
Immanuel Christian School	Whau	Composite	95	0	0%	4%	0%	2%	0%	-	2%	1%	1%
Kaipara College	Rodney	Secondary	636	0	0%	0%	0%	-	0%	0%	-	0%	<1%
Kaitoke School (Claris)	Waitemata & Gulf	Full Primary	31	0	0%	0%	8%	-	-	-	-	-	-
Karaka School	Franklin	Full Primary	235	0	0%	0%	0%	0%	-	-	-	-	-
Kaukapakapa School	Rodney	Full Primary	117	0	0%	0%	0%	0%	0%	-	-	-	-
Kereru Park Campus	Manurewa-Papakura	Full Primary	105	0	0%	-	3%	0%	0%	-	-	-	-
Kia Aroha College	Manukau	Intermediate/Secondary	311	0	0%	0%	<1%	1%	0%	-	-	0%	-
Koru School	Manukau	Full Primary	545	0	0%	0%	0%	0%	-	-	-	-	-
Living Way Learning Centre	Rodney	Composite	19	0	0%	0%	0%	0%	5%	3%	9%	3%	24%
Mangere East School	Manukau	Full Primary	524	0	0%	-	-	-	-	-	-	-	-



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
Marcellin College	Albert-Eden-Roskill	Intermediate/Secondary	592	0	0%	0%	0%	0%	<1%	0%	0%	1%	-
Massey Primary School	Waitakere	Full Primary	410	0	0%	0%	<1%	-	-	-	-	-	-
McAuley High School	Manukau	Secondary	775	0	0%	0%	0%	0%	0%	0%	0%	0%	0%
Mt Richmond School	Manukau	Composite	136	0	0%	-	-	-	-	-	-	-	-
Mulberry Grove School	Waitemata & Gulf	Full Primary	10	0	0%	-	8%	0%	-	-	-	-	-
Ngā Kakano Christian Reo Rua Kura	Waitakere	Composite	85	0	0%	0%	0%	6%	2%	-	6%	7%	7%
Okiwi School	Waitemata & Gulf	Full Primary	20	0	0%	29%	26%	-	-	-	-	-	-
Orere School	Franklin	Full Primary	11	0	0%	0%	0%	-	-	-	-	-	-
Pacific Christian School	Manukau	Full Primary	31	0	0%	0%	0%	-	0%	-	-	-	-
Paerata School	Franklin	Full Primary	87	0	0%	0%	0%	-	-	-	-	-	-
Panmure Bridge School	Maungakiekie-Tamaki	Full Primary	210	0	0%	0%	0%	-	-	-	-	-	-
Panmure District School	Maungakiekie-Tamaki	Full Primary	130	0	0%	0%	0%	0%	1%	-	-	-	-
Pt England School	Maungakiekie-Tamaki	Full Primary	598	0	0%	0%	0%	0%	0%	-	-	-	-
Redhill Primary School	Manurewa-Papakura	Full Primary	77	0	0%	4%	5%	<1%	<1%	-	-	-	-
Redoubt North School	Manukau	Full Primary	700	0	0%	0%	0%	-	0%	-	-	-	-
Robertson Road School	Manukau	Full Primary	531	0	0%	0%	0%	-	-	-	-	-	-
Rodney College	Rodney	Secondary	360	0	0%	0%	0%	0%	0%	0%	0%	0%	2%
Royal Road School	Waitakere	Full Primary	279	0	0%	0%	0%	0%	0%	-	-	-	-
Ruapotaka School	Maungakiekie-Tamaki	Full Primary	175	0	0%	0%	0%	0%	-	-	-	-	-
St Kentigern School for Girls (Corran School)	Orakei	Full Primary	203	0	0%	1%	1%	-	1%	-	1%	1%	-
Sir Edmund Hillary Collegiate	Manukau	Composite	1200	0	0%	0%	-	0%	0%	-	-	-	-



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹								
					2015	2014	2013	2012	2011	2010	2009	2008	2007
South Auckland SDA School	Manukau	Composite	292	0	0%	0%	0%	0%	-	-	-	-	-
St Anne's Catholic School	Manurewa-Papakura	Full Primary	130	0	0%	0%	<1%	0%	0%	-	-	-	-
St Cuthbert's College	Albert-Eden-Roskill	Intermediate/Secondary	1251	0	0%	0%	4%	<1%	-	-	-	-	-
St Dominic's College	Waitakere	Intermediate/Secondary	900	0	0%	0%	0%	0%	0%	-	<1%	<1%	<1%
St Joseph's School (Grey Lynn)	Waitemata & Gulf	Full Primary	252	0	0%	2%	0%	-	0%	-	-	-	-
St Joseph's School (Grey Lynn)	Maungakiekie-Tamaki	Full Primary	252	0	0%	0%	-	0%	-	-	-	-	-
St Mary's School (Ellerslie)	Maungakiekie-Tamaki	Full Primary	350	0	0%	-	-	0%	1%	-	-	-	-
St Patrick's School (Panmure)	Maungakiekie-Tamaki	Full Primary	105	0	0%	0%	0%	0%	-	-	-	-	-
St Pius X School (Glen Innes)	Maungakiekie-Tamaki	Full Primary	114	0	0%	0%	0%	0%	1%	-	-	-	-
St Therese School (Three Kings)	Albert-Eden-Roskill	Full Primary	120	0	0%	0%	0%	-	0%	-	-	-	-
Stanhope Road Primary	Maungakiekie-Tamaki	Full Primary	209	0	0%	1%	<1%	0%	<1%	-	-	-	-
Sylvia Park School	Maungakiekie-Tamaki	Full Primary	261	0	0%	0%	0%	-	0%	-	-	-	-
Tangaroa College	Manukau	Secondary	900	0	0%	0%	<1%	-	0%	0%	-	0%	-
Tapora School	Rodney	Full Primary	30	0	0%	7%	8%	0%	0%	-	-	-	-
Tauhoa School	Rodney	Full Primary	45	0	0%	0%	0%	0%	0%	-	-	-	-
Te Hihi School	Franklin	Full Primary	178	0	0%	0%	0%	-	0%	-	-	-	-
Te Kura Akonga O Manuwera	Manurewa-Papakura	Full Primary	58	0	0%	0%	-	-	-	-	-	-	-
Te Kura Kaupapa Māori o Hoani Waititi Marae	Waitakere	Composite	168	0	0%	2%	0%	0%	2%	2%	0%	0%	-
Te Wharekura O Manurewa	Manurewa-Papakura	Secondary	28	0	0%	0%	-	-	-	-	-	-	-
The Corelli International Academic School of the Arts	Albany	Composite	40	0	0%	0%	0%	0%	-	-	-	-	-



School Name	Ward	School Type	School Roll Eligible To Cycle	No. of Cycles Counted	Cyclists as share of those eligible ⁹									
					2015	2014	2013	2012	2011	2010	2009	2008	2007	
Timatanga Community School	Albany	Full Primary	19	0	0%	5%	0%	-	-	-	-	-	-	-
Tomarata School	Rodney	Full Primary	80	0	0%	1%	0%	0%	0%	-	-	-	-	-
Tyndale Park Christian School	Howick	Composite	125	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vanguard Military School	Albany	Secondary	144	0	0%	-	-	-	-	-	-	-	-	-
Viscount School	Manukau	Full Primary	640	0	0%	0%	0%	-	-	-	-	-	-	-
Wainui School	Rodney	Full Primary	210	0	0%	0%	0%	1%	0%	-	-	-	-	-
Waioneke School	Rodney	Full Primary	100	0	0%	0%	0%	0%	0%	-	-	-	-	-
Waipipi School	Franklin	Full Primary	134	0	0%	0%	0%	0%	-					
Westminster Christian School	Albany	Full Primary	215	0	0%	0%	0%	0%	0%	-	-	-	-	-
Westmount School	Manukau	Composite	176	0	0%	0%	-	-	-					
Zayed College for Girls	Manukau	Intermediate/Secondary	108	0	0%	0%	0%	0%	0%	-	-	-	-	-
Wiri Central School	Manurewa-Papakura	Full Primary	0	0	-	0%	0%	-	0%	-	-	-	-	-



2.7 School Scooter Count Summary

Scooter Count Background Information

- A total of 314 full primary, intermediate, secondary and composite schools throughout the Auckland region were contacted by Gravitas. Of the 185 schools that responded to the survey (59 per cent), most have no policies that restrict students scooting to school.¹⁰
- Most schools conducted their count on Tuesday the 3rd of March, 2015.

Scooter Count Key Points

- Of those students from the surveyed schools eligible to scooter, on average one per cent are scooting to their schools. This share is unchanged from 2014.
- This year, 10 schools (6 per cent) reported at least 10 per cent of students scooting to school. This compares with 5 schools (3 per cent) in 2014. The following schools reported more than 15 per cent of students scooting to school:
 - Beachlands School (Franklin ward) (20 per cent)
 - Hobsonville Point Primary School (Albany ward) (19 per cent)
 - Hingaia Peninsula School (Manurewa-Papakura ward) (18 per cent)
 - Lincoln Heights School (Waitakere ward) (16 per cent)
- Of the 168 schools that participated in the count in both 2014 and 2015:
 - Thirty-six schools (22 per cent) had increased their share of students scooting
 - Nineteen schools (11 per cent) had decreased their share of students scooting
 - 113 schools (67 per cent) remain unchanged.
- The most notable increases are at Lincoln Heights Primary School (up from 4 per cent from 2014 to 16 per cent in 2015) and Glendowie College (up from no scooters in 2014 to 11 per cent in 2015).
- Of the 168 schools that participated in the count in both 2014 and 2015, 120 (71 per cent) had no students scooting to school. This compares with 74 per cent of these schools in 2014.

¹⁰ These exceptions are detailed in the ward level reports. Most relate to full primary schools restricting younger students from scooting or having scooters banned from school.



Table 2.19 illustrates the rates of scooting to school at different school levels in 2015. Rates of scooting to school were the highest at intermediate and full primary schools (an average of 2 per cent). Secondary and composite schools reported the lowest number of students scooting to schools (an average of less than 1 per cent).

**Table 2.19: Average Scooting Rates by School Level
2015 (n)**

<i>Year Levels</i>	<i>Number of Schools Responded (n)</i>	<i>Average School Roll Eligible To Scooter</i>	<i>Average Number of Scooters Counted</i>	<i>Average Scooting Rate per School</i>
Intermediate	23	460	11	2%
Full Primary	93	271	6	2%
Intermediate/Secondary	12	805	5	1%
Composite	27	428	1	<1%
Secondary	30	1084	<1	<1%
Regional Total	185	484	5	1%

**Table 2.20: Average Scooting Rates by School Level
2014-2015 (n)**

<i>Year Levels</i>	<i>2014</i>	<i>2015</i>
Intermediate	3%	2%
Full Primary	2%	2%
Intermediate/Secondary	1%	1%
Composite	<1%	<1%
Secondary	<1%	<1%
Regional Total	1%	1%



- Table 2.21 illustrates the rates of cycling to school within each of the Auckland wards. Rates of scooting to school are highest among schools in Franklin ward (4 per cent, unchanged from 2014).

**Table 2.21: Summary Table of School Scooter Count by Ward
2014-2015 (n)**

<i>Ward</i>	<i>2015</i>			<i>Average Scooter Rate Per Ward</i>	
	<i>Number of Schools Responding (n)</i>	<i>Average School Roll Eligible To Scooter</i>	<i>Average Number of Scooters Counted</i>	<i>2015</i>	<i>2014</i>
Franklin	21	4138	145	4%	4%
Orakei	9	5016	110	2%	1%
Waitemata & Gulf	7	2868	48	2%	<1%
Albert-Eden-Roskill	15	10939	149	1%	2%
Albany	14	10026	64	1%	1%
Manurewa-Papakura	20	10730	87	1%	1%
Waitakere	18	8575	124	1%	1%
Howick	8	5387	72	1%	<1%
Rodney	17	3974	49	1%	<1%
Whau	11	6367	39	1%	<1%
Manukau	23	11879	6	<1%	<1%
Maungakiekie-Tamaki	14	3973	10	<1%	<1%
North Shore	8	5631	21	<1%	<1%
Regional Total	185	89503	924	1%	1%



**Table 2.22: Summary Table of Average Scooting Rates by School Level and Ward
2015**

<i>Ward</i>	<i>School Type</i>					<i>All School Levels</i>
	<i>Composite</i>	<i>Full Primary</i>	<i>Intermediate</i>	<i>Intermediate/ Secondary</i>	<i>Secondary</i>	
Franklin	0%	5%	-	-	0%	4%
Orakei	0%	3%	2%	5%	0%	2%
Waitemata & Gulf	1%	7%	-	-	0%	2%
Albert-Eden-Roskill	0%	0%	6%	0%	0%	1%
Albany	<1%	6%	0%	<1%	0%	1%
Manurewa-Papakura	<1%	3%	1%	-	<1%	1%
Waitakere	1%	3%	3%	<1%	0%	1%
Howick	2%	0%	2%	5%	0%	1%
Rodney	5%	1%	-	-	0%	1%
Whau	0%	2%	1%	-	<1%	1%
Manukau	0%	<1%	<1%	0%	0%	<1%
Maungakiekie-Tamaki	-	<1%	-	-	-	<1%
North Shore	-	-	1%	<1%	<1%	<1%
Regional Total	<1%	2%	2%	1%	<1%	1%

Note: A dash indicates no schools of this type responded to the survey for a ward.



The following table ranks the 185 schools from the highest share of scooters to the lowest.

Table 2.23: School Scooter Count by School

School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Beachlands School	Franklin	Full Primary	542	110	20%	40%
Hobsonville Point Primary School	Albany	Full Primary	150	28	19%	17%
Hingaia Peninsula School	Manurewa-Papakura	Full Primary	157	29	18%	-
Lincoln Heights School	Waitakere	Full Primary	400	64	16%	4%
Bruce McLaren Intermediate	Waitakere	Intermediate	215	25	12%	6%
Kowhai Intermediate	Albert-Eden-Roskill	Intermediate	472	56	12%	12%
Auckland Normal Intermediate	Albert-Eden-Roskill	Intermediate	699	79	11%	7%
Glendowie College	Orakei	Full Primary	581	63	11%	0%
Huapai District School	Rodney	Full Primary	420	45	11%	-
Paerata School	Franklin	Full Primary	87	10	11%	2%
Papakura Normal School	Manurewa-Papakura	Full Primary	285	26	9%	5%
Parnell District School	Waitemata & Gulf	Full Primary	463	38	8%	2%
Orere School	Franklin	Full Primary	42	3	7%	0%
View Road School	Franklin	Full Primary	138	10	7%	4%
Nga Kakano Christian Reo Rua Kura	Waitakere	Composite	85	5	6%	0%
Living Way Christian School	Rodney	Composite	19	1	5%	0%
Mission Heights Junior College	Howick	Intermediate/Secondary	840	43	5%	5%

¹¹ This share is calculated by averaging the number of scooters counted over the total number of students eligible to scooter. The figure obtained is rounded to zero decimal places.



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Mt Hobson Middle School	Orakei	Intermediate/Secondary	41	2	5%	10%
Pasadena Intermediate	Albert-Eden-Roskill	Intermediate	222	11	5%	9%
Silverdale School	Albany	Full Primary	520	24	5%	2%
Conifer Grove School	Manurewa-Papakura	Full Primary	550	24	4%	4%
Green Bay Primary School	Whau	Full Primary	548	20	4%	1%
St Joseph's School (Grey Lynn)	Waitemata & Gulf	Full Primary	68	3	4%	0%
Glen Taylor School	Orakei	Full Primary	151	4	3%	0%
KingsGate School	Franklin	Full Primary	67	2	3%	0%
Northcote Intermediate	North Shore	Intermediate	273	8	3%	6%
Te Atatu Intermediate	Waitakere	Intermediate	340	10	3%	-
Elim Christian College	Howick	Composite	998	23	2%	2%
Henderson Intermediate	Waitakere	Intermediate	512	8	2%	-
Kelston Intermediate	Whau	Intermediate	250	5	2%	0%
Pakuranga Intermediate	Howick	Intermediate	265	6	2%	3%
Remuera Intermediate	Orakei	Intermediate	942	18	2%	2%
Royal Road School	Waitakere	Full Primary	279	5	2%	0%
St Joseph's School (Pukekohe)	Franklin	Full Primary	400	6	2%	7%
St Thomas School (Auckland)	Orakei	Full Primary	751	14	2%	-
Tamaki Primary School	Maungakiekie-Tamaki	Full Primary	255	4	2%	2%
Waitoki School	Rodney	Full Primary	99	2	2%	2%
ACG Parnell College	Waitemata & Gulf	Composite	870	7	1%	<1%
Belmont Intermediate School	North Shore	Intermediate	560	8	1%	1%



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Blockhouse Bay Intermediate	Whau	Intermediate	810	8	1%	2%
Clevedon School	Franklin	Full Primary	367	4	1%	1%
Glenavon School	Whau	Full Primary	206	3	1%	5%
Greenmeadows Intermediate	Manurewa-Papakura	Intermediate	367	3	1%	<1%
Kedgley Intermediate	Manukau	Intermediate	711	5	1%	1%
Liston College	Waitakere	Intermediate/Secondary	750	4	1%	1%
Massey Primary School	Waitakere	Full Primary	410	3	1%	0%
Mt Roskill Intermediate School	Albert-Eden-Roskill	Intermediate	578	3	1%	0%
Orewa College	Albany	Intermediate/Secondary	1556	9	1%	2%
St Heliers School	Orakei	Full Primary	732	7	1%	4%
Stanhope Road School	Maungakiekie-Tamaki	Full Primary	462	3	1%	0%
Sylvia Park School	Maungakiekie-Tamaki	Full Primary	261	2	1%	<1%
The Rise Up Academy	Manukau	Full Primary	70	1	1%	-
Wairau Intermediate School	North Shore	Intermediate	297	3	1%	0%
Wesley Intermediate	Whau	Intermediate	109	1	1%	0%
ACG Strathallan College	Manurewa-Papakura	Composite	1023	1	<1%	0%
Alfriston College	Manurewa-Papakura	Secondary	1487	1	<1%	0%
Avondale College	Whau	Secondary	2800	1	<1%	0%
Birkenhead College	North Shore	Secondary	710	1	<1%	0%
Churchill Park School	Orakei	Full Primary	404	2	<1%	3%
Ellerslie School	Maungakiekie-Tamaki	Full Primary	586	1	<1%	0%
Kelston Boys' High School	Whau	Secondary	838	1	<1%	0%



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Mahurangi Christian School	Rodney	Full Primary	1320	1	<1%	0%
Pinehurst School	Albany	Composite	740	3	<1%	<1%
Rosehill College	Manurewa-Papakura	Secondary	1800	3	<1%	-
Rosmini College	North Shore	Intermediate/Secondary	1058	1	<1%	0%
ACG Sunderland	Waitakere	Composite	293	0	0%	0%
Ahuroa School	Rodney	Full Primary	71	0	0%	0%
Albany Junior High School	Albany	Intermediate/Secondary	1125	0	0%	0%
Albany Senior High School	Albany	Secondary	775	0	0%	0%
Alfriston School	Manurewa-Papakura	Full Primary	289	0	0%	0%
Al-Madinah School	Manukau	Composite	540	0	0%	0%
Aorere College	Manukau	Secondary	1498	0	0%	0%
Ararimu School	Franklin	Full Primary	148	0	0%	0%
Ardmore School	Franklin	Full Primary	338	0	0%	0%
Auckland Girls' Grammar School	Waitemata & Gulf	Secondary	1374	0	0%	0%
Auckland Grammar School	Albert-Eden-Roskill	Secondary	0	0	0%	0%
Auckland International College	Whau	Secondary	300	0	0%	0%
Auckland Seventh Day Adventist High School	Manukau	Secondary	202	0	0%	0%
Awhitu District School	Franklin	Full Primary	122	0	0%	0%
Bailey Road School	Maungakiekie-Tamaki	Full Primary	435	0	0%	0%
Birdwood School	Waitakere	Full Primary	211	0	0%	0%
Bombay School	Franklin	Full Primary	345	0	0%	0%
Brookby School	Franklin	Full Primary	123	0	0%	0%



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Carmel College	North Shore	Intermediate/Secondary	1030	0	0%	0%
Christ the King Catholic School	Albert-Eden-Roskill	Full Primary	154	0	0%	0%
City Impact Church School	Albany	Composite	138	0	0%	0%
Dairy Flat School	Rodney	Full Primary	250	0	0%	0%
Destiny School	Manurewa-Papakura	Composite	192	0	0%	0%
Dilworth School	Albert-Eden-Roskill	Composite	628	0	0%	0%
Diocesan School for Girls	Albert-Eden-Roskill	Composite	1318	0	0%	0%
Don Buck School	Waitakere	Full Primary	231	0	0%	0%
Drury Christian School	Manurewa-Papakura	Composite	30	0	0%	0%
Edgewater College	Howick	Secondary	729	0	0%	0%
Edmund Hillary School	Manurewa-Papakura	Full Primary	130	0	0%	0%
Ferguson Intermediate	Manukau	Intermediate	447	0	0%	0%
Ficino School	Albert-Eden-Roskill	Full Primary	100	0	0%	0%
Glenbrook School	Franklin	Full Primary	230	0	0%	0%
Golden Grove School	Maungakiekie-Tamaki	Full Primary	40	0	0%	0%
Hare Krishna School	Rodney	Full Primary	79	0	0%	0%
Henderson High School	Waitakere	Secondary	650	0	0%	0%
Holy Cross School (Papatoetoe)	Manukau	Full Primary	580	0	0%	0%
Hunua School	Franklin	Full Primary	111	0	0%	0%
Immanuel Christian School	Whau	Composite	95	0	0%	0%
James Cook High School	Manurewa-Papakura	Secondary	1250	0	0%	0%
Kaipara College	Rodney	Secondary	636	0	0%	0%



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Kaitoke School (Claris)	Waitemata & Gulf	Full Primary	31	0	0%	0%
Karaka School	Franklin	Full Primary	235	0	0%	0%
Kaukapakapa School	Rodney	Full Primary	256	0	0%	0%
Kereru Park Campus	Manurewa-Papakura	Full Primary	105	0	0%	-
Kia Aroha College	Manukau	Intermediate/Secondary	311	0	0%	0%
Koru School	Manukau	Full Primary	545	0	0%	0%
Kristin School	Albany	Composite	1532	0	0%	<1%
Lynfield College	Albert-Eden-Roskill	Secondary	1800	0	0%	<1%
Mangere College	Manukau	Secondary	714	0	0%	0%
Mangere East School	Manukau	Full Primary	524	0	0%	-
Manurewa High School	Manurewa-Papakura	Secondary	2019	0	0%	0%
Marcellin College	Albert-Eden-Roskill	Intermediate/Secondary	592	0	0%	0%
Massey High School	Waitakere	Secondary	2012	0	0%	0%
McAuley High School	Manukau	Secondary	775	0	0%	0%
Michael Park School	Orakei	Composite	384	0	0%	1%
Mt Albert Grammar School	Albert-Eden-Roskill	Secondary	2650	0	0%	0%
Mt Richmond School	Manukau	Composite	136	0	0%	0%
Mulberry Grove School	Waitemata & Gulf	Full Primary	29	0	0%	-
Northcote College	North Shore	Secondary	1102	0	0%	<1%
Okiwi School	Waitemata & Gulf	Full Primary	33	0	0%	0%
Ormiston Senior College	Howick	Secondary	460	0	0%	-
Pacific Christian School	Manukau	Full Primary	69	0	0%	0%



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Panmure Bridge School	Maungakiekie-Tamaki	Full Primary	210	0	0%	0%
Panmure District School	Maungakiekie-Tamaki	Full Primary	130	0	0%	0%
Paparimu School	Franklin	Full Primary	19	0	0%	0%
Pt England School	Maungakiekie-Tamaki	Full Primary	598	0	0%	0%
Pukekohe Christian School	Franklin	Composite	192	0	0%	0%
Rangeview Intermediate	Waitakere	Intermediate	590	0	0%	0%
Rangitoto College	Albany	Secondary	2870	0	0%	0%
Red Hill School	Manurewa-Papakura	Full Primary	192	0	0%	0%
Redoubt North School	Manukau	Full Primary	700	0	0%	0%
Robertson Road School	Manukau	Full Primary	531	0	0%	0%
Rodney College	Rodney	Secondary	0	0	0%	0%
Rosehill Intermediate	Manurewa-Papakura	Intermediate	0	0	0%	0%
Ruapotaka School	Maungakiekie-Tamaki	Full Primary	175	0	0%	0%
Sancta Maria College	Howick	Secondary	1000	0	0%	0%
Selwyn College	Orakei	Secondary	1030	0	0%	0%
Sir Edmund Hillary Collegiate	Manukau	Composite	1200	0	0%	0%
Somerville Intermediate School	Howick	Intermediate	970	0	0%	0%
South Auckland SDA School	Manukau	Composite	292	0	0%	0%
St Anne's School (Manurewa)	Manurewa-Papakura	Full Primary	560	0	0%	0%
St Cuthbert's College	Albert-Eden-Roskill	Intermediate/Secondary	1251	0	0%	0%
St Dominics College	Waitakere	Intermediate/Secondary	900	0	0%	0%
St Dominic's Catholic School (Blockhouse Bay)	Whau	Full Primary	223	0	0%	-



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
St Joseph's School (Onehunga)	Maungakiekie-Tamaki	Full Primary	252	0	0%	0%
St Mary's School (Avondale)	Whau	Full Primary	188	0	0%	0%
St Mary's School (Ellerslie)	Maungakiekie-Tamaki	Full Primary	350	0	0%	-
St Mary's Catholic School (Papakura)	Manurewa-Papakura	Full Primary	266	0	0%	0%
St Patrick's School (Panmure)	Maungakiekie-Tamaki	Full Primary	105	0	0%	0%
St Pius X School (Glen Innes)	Maungakiekie-Tamaki	Full Primary	114	0	0%	0%
St Therese School (Three Kings)	Albert-Eden-Roskill	Full Primary	120	0	0%	0%
Takapuna Normal Intermediate School	North Shore	Intermediate	601	0	0%	3%
Tangaroa College	Manukau	Secondary	900	0	0%	0%
Tapora School	Rodney	Full Primary	30	0	0%	0%
Tauhoa School	Rodney	Full Primary	45	0	0%	0%
Taupaki School	Rodney	Full Primary	280	0	0%	0%
Te Hihi School	Franklin	Full Primary	178	0	0%	0%
Te Kura Kaupapa Maori O Hoani Waititi	Waitakere	Composite	168	0	0%	1%
Te Kura Kaupapa Maori A Rohe O Mangere	Manukau	Composite	210	0	0%	0%
Te Wharekura o Manurewa	Manurewa-Papakura	Composite	28	0	0%	0%
The Corelli International Academic School of the Arts	Albany	Composite	40	0	0%	0%
Timatanga Community School	Albany	Full Primary	19	0	0%	21%
Titirangi Rudolf Steiner School	Waitakere	Full Primary	182	0	0%	0%
Tomarata School	Rodney	Full Primary	159	0	0%	0%
Tyndale Park Christian School	Howick	Composite	125	0	0%	0%



School Name	Ward	School Type	School Roll Eligible To Scooter	No. of Scooters Counted	Scooters as share of those eligible ¹¹	
					2015	2014
Vanguard Military School	Albany	Secondary	144	0	0%	-
Viscount School	Manukau	Full Primary	640	0	0%	0%
Waiau Pa School	Franklin	Full Primary	320	0	0%	0%
Waikowhai Intermediate	Albert-Eden-Roskill	Intermediate	355	0	0%	-
Wainui School	Rodney	Full Primary	210	0	0%	0%
Waioneke School	Rodney	Full Primary	100	0	0%	0%
Waipipi School	Franklin	Full Primary	134	0	0%	0%
Waiuku College	Franklin	Secondary	0	0	0%	0%
Wellsford School	Rodney	Full Primary	0	0	0%	-
Wentworth College	Albany	Intermediate/Secondary	202	0	0%	-
West Harbour School	Waitakere	Full Primary	347	0	0%	0%
Westminster Christian School	Albany	Full Primary	215	0	0%	1%
Westmount School (Exclusive Brethren)	Manukau	Composite	176	0	0%	0%
Wiri Central School	Manurewa-Papakura	Full Primary	0	0	0%	0%
Zayed College For Girls	Manukau	Composite	108	0	0%	0%



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APPENDICES

Appendix One: Methodology

Appendix Two: Annual Average Daily Traffic (AADT) Calculation



APPENDIX ONE: METHODOLOGY

Manual cycle counts have been conducted using a standardised methodology across all sites. This methodology is outlined below.

1. Choice of Sites

Decisions as to which sites were chosen for cycle counts were guided by the planned developments for the Regional Cycle Network.

Manual counts were undertaken at 85 different sites throughout the region. Sites were distributed by ward as follows:

- Albany 15 sites
- Albert-Eden–Roskill 11 sites
- Franklin 2 sites
- Howick 5 sites
- Manukau 10 sites
- Manurewa-Papakura 4 sites
- Maungakiekie-Tamaki 7 sites
- North Shore 8 sites
- Orakei 3 sites
- Waitakere 13 sites
- Waitemata and Gulf 10 sites
- Whau 4 sites

(Note: Eight sites lie on the border of two wards. These sites have been included in both ward reports).

2. Monitoring Times

Time Of Day

Manual counts in the morning peak were conducted between 6:30 and 9:00 am, with manual counts in the evening peak conducted between 4:00pm and 7:00pm.

Day Of Week

Previous experience conducting cycle and other traffic manual counts has found that these counts are best undertaken on either a Tuesday, Wednesday or Thursday as travel patterns on Mondays and Fridays tend to be more variable.



Time Of Year

To ensure consistency throughout the region, standard monitoring days were selected and agreed upon by Auckland Transport. In selecting the days, consideration was given to:

- the timing of school and tertiary holidays/the commencement of term time for tertiary institutions;
- the timing of statutory holidays (particularly Easter);
- the timing of Bikewise Month; and
- daylight saving times.

It was agreed that manual counts would commence on Tuesday the 3rd of March and be conducted on the first three fine days of the 3rd, 4th, 5th, 10th, 11th or 12th of March.

Counts were conducted on the following days:

- Tuesday 3rd March Albert-Eden-Roskill, Orakei, Manurewa-Papakura, Maungakiekie-Tamaki, Whau
- Wednesday 4th March Howick, Franklin, Manukau, Waitemata & Gulf
- Thursday 5th March Albany, North Shore, Waitakere

Note: Counts in the morning and evening peaks took place on the same day for each site.

Weather and Daylight Conditions

To reduce the impact of weather conditions on cycle numbers, manual counts were conducted on predominantly fine days. In addition, if it rained during the morning peak, monitoring in the evening peak on that same day was also postponed, irrespective of the weather (as it can be assumed that cyclists' travel behaviour in the evening peak will have been influenced by decisions they made earlier in the day – for example, the decision to leave their bike at home and use public transport instead). Care was taken to ensure that all manual counts were conducted prior to the conclusion of daylight saving.

The weather on the three count days in 2015 was as follows:

Tuesday 3rd March

- Sunrise: 7:08am; Sunset: 7:58pm.
- Highest temperature: 25 degrees Celsius. Lowest temperature: 17 degree Celsius.
- Mostly fine weather with scattered cloud throughout the day.

Wednesday 4th March

- Sunrise: 7:09am; Sunset: 7:57pm.
- Highest temperature: 26 degrees Celsius. Lowest temperature: 19 degree Celsius.



- Fine with cloud throughout the morning shift. Cloudy in the evening with light rain recorded at some sites from 6:00pm.

Thursday 5th March

- Sunrise: 7:09am; Sunset: 7:55pm.
- Highest temperature: 27 degrees Celsius. Lowest temperature: 17 degree Celsius.
- Fine weather in the morning and evening shifts.

3. Conducting The Manual Counts

Scoping Visit

Gravitas visited each of the sites prior to the first monitoring shift. This scoping visit was used to map the roading network and to identify and map the range of directions that cyclists could travel through the site. This visit was also used to identify any particular features (such as designated cycle ways) or potential hazards that surveyors needed to be aware of when monitoring at the site. As part of the scoping visit, a recommended observation point was identified and mapped (this point chosen on the basis of offering the best trade-off between visibility and safety). The maps prepared for each site have been included in this report – just prior to the count results for each site.

As part of the scoping visit, a small number of sites were identified as requiring two or more surveyors to accurately capture all cycle movements (due predominantly to the complexity of the roading/cycleway network at the site or poor visibility at the intersection). Two surveyors were used at:

- Great South Road/Campbell Road/Main Highway, Greenlane (Site 21; Maungakiekie-Tamaki/Albert-Eden-Roskill wards).
- Beach Road/Browns Bay Road, Mairangi Bay (Site 45; Albany ward).
- Onehunga Harbour Road (Site 17, Maungakiekie-Tamaki ward).

Three surveyors were used at the ferry terminal site (Site 22; Waitemata and Gulf ward).



Briefing Session

Prior to their monitoring shift, all surveyors participated in a briefing session. The session covered:

- the overall aims of the Regional Cycle Monitoring Plan and how the manual monitoring fits with this Plan;
- the aims and purpose of the cycle monitoring and the process to be used;
- review of all materials supplied – how to interpret and use the maps, how to accurately record data on count sheets etc;
- health and safety issues; and
- general administration – shift times, collection and return of materials etc.

This session was interactive, with surveyors being encouraged to ask questions and seek further explanation on issues they were unsure about. Surveyors were also provided with a copy of the briefing notes for reference during their shifts. During the briefing session, all surveyors were also required to conduct a “practice count” for 20 minutes at the Ponsonby Road/Karangahape Road site.

Conducting The Manual Counts

Each site was assigned to a surveyor, who was issued with a map that showed the range of movements a cyclist could make through that site. In addition to the map, surveyors were issued with a clipboard, a safety vest and a letter identifying them as a member of a Gravitas research team¹².

During their shift the surveyor collected data on:

- The total number of cyclists¹³ passing through the intersection;
- The direction in which cyclists are travelling (using the numbers on the map provided);
- The time at which cyclists pass through the intersection (to the nearest minute);
- Whether cyclists are school children or adults (determined by whether they are wearing a school uniform or clearly of school age);
- Whether cyclists are wearing a helmet;
- Gender of the cyclist (*collected for the first time in 2011*); and
- Whether cyclists are riding on the road, footpath or designated off- road cycleway¹⁴.

¹² This letter also contained contact details for Auckland Transport and Gravitas Research and Strategy for any member of the public or local business owners who had queries about the work being undertaken.

¹³ To ensure consistency across all surveyors, a “cycle” was defined as being non-motorised, with one or two wheels and requiring pedalling to make it move. Note that this definition did not include scooters.

¹⁴ Note: For the purpose of this project, an off-road cycleway is defined as designated off-road path for cycles. This includes exclusive cycle paths, separated paths (such as the footpath on Tamaki Drive) and shared-use paths (available to cyclists and pedestrians). It excludes on-road cycle lanes (that is, designated lanes marked on the road).



Since 2009, surveyors have been required to indicate those cyclists riding together in groups of three or more. To be consistent with previous years, each member of these 'pelotons' has been included in the site-level analysis as a separate cyclist movement. However, where pelotons were observed, the number of cyclists and the time they passed through the site has been given in the report, along with a percentage figure indicating what share of all cyclists at the site were riding as groups.

In addition, where cyclists were recognisable, surveyors were instructed to record each cyclist no more than three times during a single shift, irrespective of how many movements they actually made through the site. Surveyors noted where and when this occurred.

Data was collected on the weather and daylight conditions at the site. Surveyors were also encouraged to record any information that may have affected cycle numbers or cycle movements at the site – for example, construction or maintenance works being conducted on the cycle way or road works at the intersection.

A team of supervisors checked that surveyors were in the correct position and recording data accurately.

4. Data Analysis

Upon their return to Gravitas, all count sheets were checked for completeness. The raw data was then entered into Excel for logic checking, analysis and graphing.

5. Annual Average Daily Traffic (AADT) Analysis

It is acknowledged that the number of cyclists using a site varies by time of day, day of the week and week of the year, and therefore it is not valid to simply multiply manual count data collected over a certain (relatively brief) period out to represent a full day, week or year. However, according to Land Transport New Zealand¹⁵, Annual Average Daily Traffic (AADT) analysis can be used to estimate the average annual daily flow of cyclists from manual and automated cycle counts conducted at one point in time. The procedure involves deriving scale factors, which account for the time of day, day of the week, and week of the year (which varies with school holidays and season) as well as weather conditions on the count day. These scale factors are then applied to the count data collected to give an AADT estimate.

¹⁵ <http://www.ltsa.govt.nz/road-user-safety/walking-and-cycling/cycle-network/appendix2.html>



Using the manual count figures for each site, it has been possible to provide the average annual daily traffic flow of cyclists (cycling AADT) estimate for each site. AADT scale factors (morning and afternoon) were provided by ViaStrada¹⁶. By applying the scale factor to the manual count data for each morning and afternoon peak, and averaging the two figures, an average annual daily cyclist flow figure has been obtained for each site. *A more comprehensive overview of the methodology used for this analysis is provided in Appendix Two.*

Note: ViaStrada acknowledge that, as cycling volumes fluctuate from day to day depending on the weather, this method should be used with caution. They note that ideally an estimate should be achieved based on the average of the results of several counts, rather than counts from a single day, as in this study¹⁷.

6. School Bike Shed Counts

As stated above, manual cycle counts were undertaken during the morning (6:30am to 9:00am) and evening (4:00pm to 7:00pm) peaks. However, it was noted in the design phase of the project that the timing of the evening peak monitoring would mean that the greatest share of students cycling home from school will be excluded from the counts. This was identified as a potential weakness of the monitoring proposed.

Therefore, it was suggested that information on numbers of students cycling to and from intermediate and secondary schools across the region could be collected by counting the number of bikes in school bike sheds on a pre-determined day. Rates of cycling among students could also be assessed by calculating the number of bikes counted as a share of the school's total roll (or share of the school's roll eligible to cycle).

Initially it was decided that school bike shed monitoring would focus only on intermediate and secondary schools (and composite schools which included children of intermediate and secondary school age), since children travelling to primary schools are considered by many parents (and schools) as too young to cycle to school. Note however that, to ensure all children of intermediate school age cycling to school were captured, full primary schools (those catering for Years 1 to 8) were included in the school bike shed count from 2011.

Based on feedback from some schools in 2013, since 2014, a count of the number of students who use (non-motorised) scooters to get to and from school has been included in the school bike shed count.

¹⁶ ViaStrada is a traffic engineering and transport planning consultancy based in Christchurch, New Zealand.

¹⁷ Appendix 2 of the Cycle Network and Route Planning Guide (CNRPG) (Land Transport New Zealand, 2004)



Methodology

The following process was used to collect the school bike shed count data.

1. Gravitas designed an information sheet that was distributed to most full primary, intermediate, secondary and composite (Years 1 to 13) schools in the Auckland region via email (note a small number of schools were omitted due to the special nature of the students e.g. boarding schools, special needs schools). This sheet was designed in consultation with Auckland Transport to ensure all necessary information was collected.
2. This email was then sent to all eligible schools in Auckland region (n=306) to notify them of the bike shed count and to let them know what they would be required to do. Included in this email was a link to an online count form.
3. To enhance the comparability of the school bike shed data with that of the regional cycle monitor, Tuesday 3rd March was designated as the bike shed count day. (Most schools reported that they undertook the count on this day.)
4. Once the school bike shed count had been completed, schools completed the online count form and submitted it electronically to Gravitas. Gravitas contacted all participating schools who had not returned their sheets after five working days, first by email (two rounds) and then by telephone. All count forms were checked for completeness before being data-entered into Excel. In 2015, 185 responses were received, a response rate of 59 per cent. (This compares with 88 per cent in 2014.)

7. Reporting

The data from the manual counts has been presented at a site-by-site, TA and regional level.

Manual Counts - Site Level Reporting

The following results have been reported for each site:

- Total number of movements through the intersection during each peak;
- Total number of movements through the intersection during each ten-minute interval during each peak;
- Number of cyclists making each directional movement through the intersection during each peak; and
- Share of cyclists through the intersection during each peak who are:
 - adults/school children
 - wearing a helmet/not wearing a helmet
 - male/female
 - riding on the road/riding on the footpath/riding on an off-road path



Manual Counts - Aggregated Reporting

Results have also been reported at an aggregate level (that is, summing up all sites) – by ward and across the region – to show the total number of cycle movements recorded (both overall and by ten-minute intervals) and the characteristics of the cyclists.

Bike Shed Counts

Results have been provided by school (along with notes explaining why counts for some schools may not be representative), as well as at a ward and regional level. Raw cycle numbers and a “cyclists as a share of total school roll” figure have both been provided.



APPENDIX TWO: ANNUAL AVERAGE DAILY TRAFFIC (AADT) CALCULATION

Note: *This description of the calculation of the Annual Average Daily Traffic Flow of Cyclists has been provided by ViaStrada based on their May 2007 report for ARTA entitled “Development of a Cycle Traffic AADT Tool”.*

Purpose

The purpose of this appendix is to document the recommended procedure for estimating a cycling AADT¹⁸ in the Auckland region from any Gravitas manual count.

Method for Estimating AADT

The methodology is based on that published in Appendix 2 of the Cycle Network and Route Planning Guide (CNRPG)¹⁹, adjusted for Auckland conditions based on data collected during March 2007. The aim was to use the published methodology as much as possible, with any necessary departure from it documented below. The following equation yields the best estimate of a cycling AADT:

$$AADT_{Cyc} = Count \times \frac{1}{\sum H} \times \frac{1}{D} \times \frac{W}{7} \times \frac{1}{R}$$

where *Count* = result of count period

H = scale factor for time of day

D = scale factor for day of week

W = scale factor for week of year

R = scale factor for weather conditions on the count day

If more than one set of count data is available (for example, both a morning count and afternoon count), then **the calculation should be carried out for each set of data, and the estimates derived from each averaged.**

The values for the scale factors (*H*, *D*, *W* and *R*) have been deduced in the ViaStrada report and are included in this report in Figure 1. For the Gravitas counts, the following factors apply:

$\sum H_{AM} = 30\%$; $\sum H_{PM} = 33.3\%$; (AM and PM refer to morning and afternoon respectively)

$D = 14\%$

$W = 0.9$

$R_{DRY} = 100\%$; $R_{WET} = 64\%$ (DRY and WET refer to fine and rainy conditions respectively)

¹⁸ Annual average daily traffic

¹⁹ LTSA, 2004



These can be combined as a single multiplier to convert the manual count to an AADT estimate as follows:

	Morning	Afternoon
Dry weather	3.06	2.78
Wet weather	4.78	4.35

Worked Example

If morning and afternoon manual traffic counts are available at a site, the AADT can be calculated using the count summaries for each period. For example, a morning survey of 102 and an afternoon survey of 130 are suggested. It is assumed for this example that the weather was fine in both surveys.

- Thus the AADT from the morning survey is estimated as $3.06 \times 102 = 312$.
- The AADT from the afternoon survey is estimated as $2.78 \times 130 = 359$.
- The average of these two estimates is 335; this is the estimate of AADT for this site, based on the two surveys.



Figure 1: Scale Factors for Auckland Region

Period Starting	Period Ending	Interval (hours)	H _{Weekday}		H _{Weekend}	
			Mon to Fri	Sat & Sun		
0:00	6:30	6.50	5.5%		1.8%	
6:30	6:45	0.25	2.3%		0.8%	
6:45	7:00	0.25	2.6%		1.5%	
7:00	7:15	0.25	3.2%		1.4%	
7:15	7:30	0.25	3.7%		2.1%	
7:30	7:45	0.25	3.8%		2.8%	
7:45	8:00	0.25	4.0%		3.3%	
8:00	8:15	0.25	3.9%		3.2%	
8:15	8:30	0.25	3.1%		3.8%	
8:30	8:45	0.25	2.3%		3.5%	
8:45	9:00	0.25	1.3%		3.5%	
9:00	10:00	1.00	4.2%		13.6%	
10:00	11:00	1.00	3.4%		11.6%	
11:00	12:00	1.00	2.6%		9.1%	
12:00	13:00	1.00	2.7%		6.6%	
13:00	14:00	1.00	2.7%		5.0%	
14:00	14:15	0.25	0.7%		1.9%	
14:15	14:30	0.25	0.7%		1.3%	
14:30	14:45	0.25	0.6%		1.3%	
14:45	15:00	0.25	0.6%		1.2%	
15:00	15:15	0.25	0.8%		1.1%	
15:15	15:30	0.25	1.0%		0.9%	
15:30	15:45	0.25	1.3%		1.4%	
15:45	16:00	0.25	1.2%		1.3%	
16:00	16:15	0.25	2.1%		1.0%	
16:15	16:30	0.25	2.3%		1.7%	
16:30	16:45	0.25	2.1%		1.0%	
16:45	17:00	0.25	2.5%		1.2%	
17:00	17:15	0.25	3.3%		1.2%	
17:15	17:30	0.25	3.7%		1.2%	
17:30	17:45	0.25	4.0%		1.1%	
17:45	18:00	0.25	3.2%		1.1%	
18:00	18:15	0.25	3.0%		0.9%	
18:15	18:30	0.25	2.7%		0.7%	
18:30	18:45	0.25	2.4%		0.8%	
18:45	19:00	0.25	2.1%		0.6%	
19:00	20:00	1.00	5.6%		2.0%	
20:00	0:00	4.00	3.0%		1.5%	
24.00			100.0%		100.0%	

Day	D
Monday	14%
Tuesday	14%
Wednesday	14%
Thursday	14%
Friday	14%
Saturday	14%
Sunday	16%

Period	W
Summer holidays	1.0
Term 1	0.9
April holidays	1.0
Term 2	1.0
July holidays	1.2
Term 3	1.1
Sep/Oct holidays	1.2
Term 4	1.0

Weather	R
Fine	100%
Rain	64%