

METHOD SUMMARY – MĀNGERE CLICK COUNTS





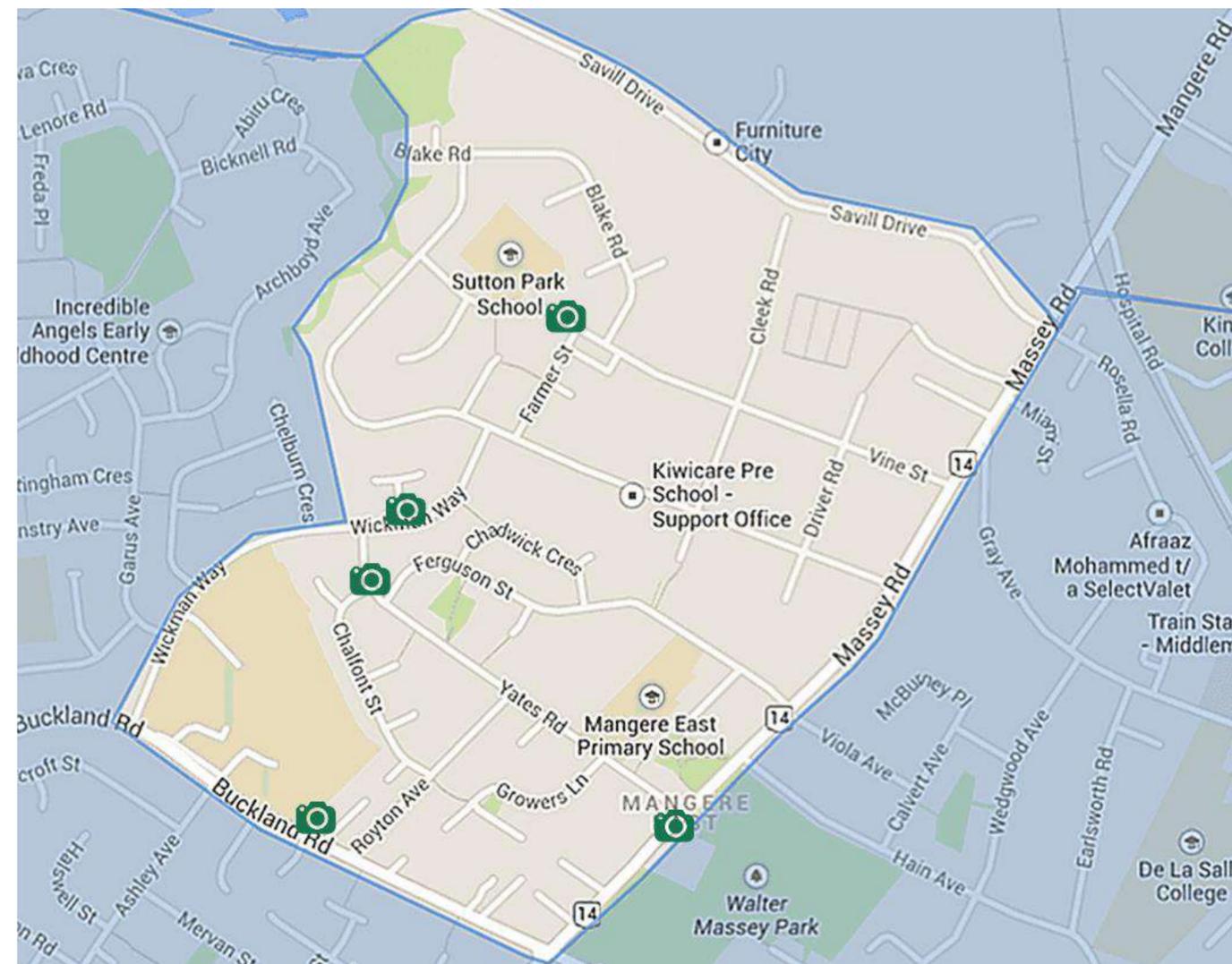
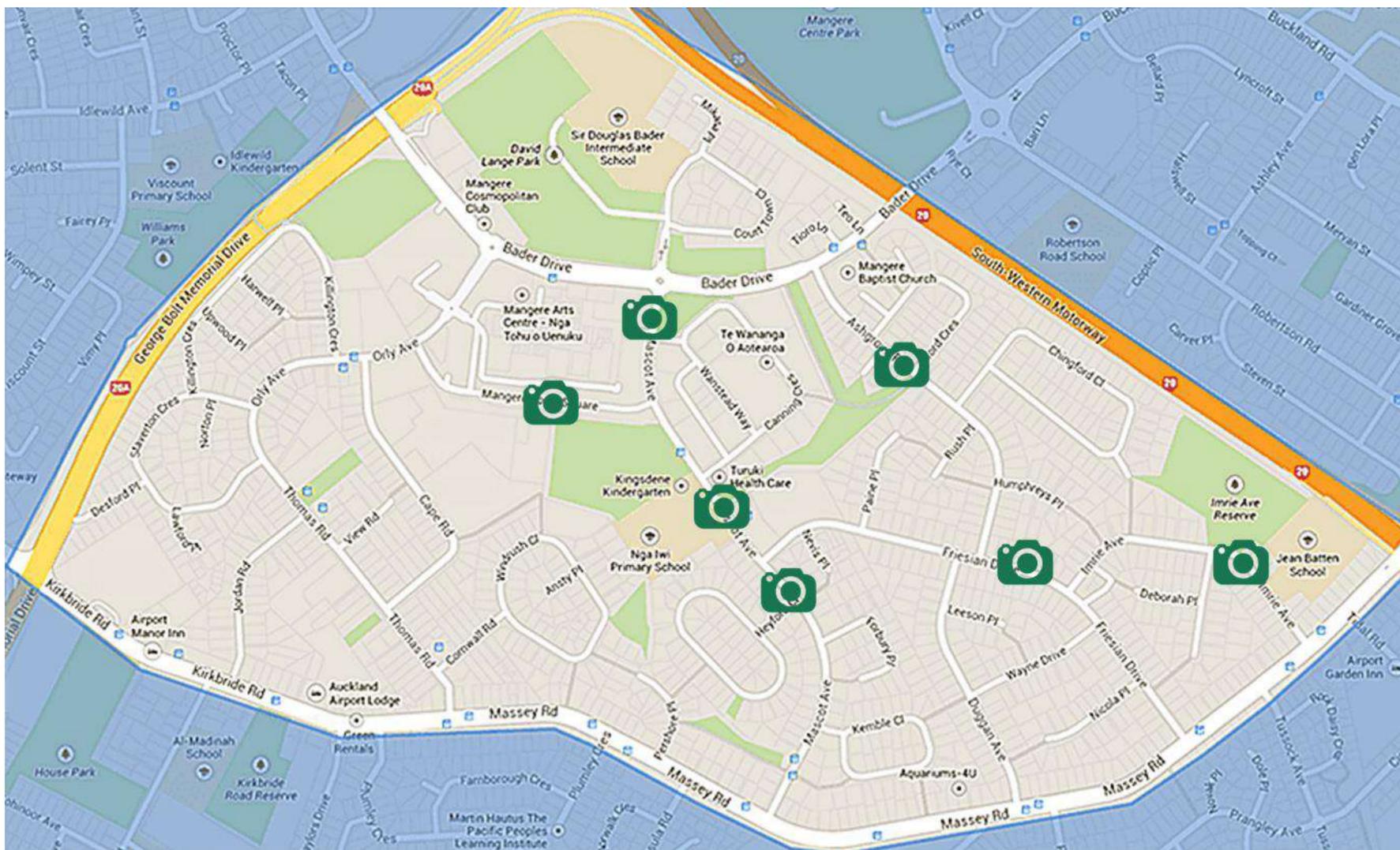
VIDEO COLLECTION



VIDEO COLLECTION

- Cameras were secured to poles
- Video footage collected on two weekdays and two Saturdays in late Feb to early April each year
- Video collected from 7am to 7pm

CAMERA PLACEMENT



12 SITES USED

Intervention

	2014	2017	2018	2019
Ashgrove (not treated)				
Friesian				
Imrie				
Mascot Bader				
Mascot Canning				
Mascot Friesian				
Town Centre				

Control

	2014	2017	2018	2019
Buckland				
Massey Yates (2014 only had 3 days)				
Vine				
Wickman				
Yates (2018 only has 3 days)				

SITES NOT USED... and why

- **Orly:** Power pole moved, dramatic change in field of view, therefore not viable
- **Tennessee Cleek:** Footage from a car dashboard, not viable
- **Tennessee Fleming:** Footage from a car dashboard, not viable
- **Buckland:** Used 2014 and 2017 footage. Following this there was construction at the school, likely to influence counts beyond the effect of Future Streets
- **Yates (outside school):** Large Countdown opened 6 August 2015, influence beyond the effect of Future Streets changes
- **Windrush Reserve:** Camera stolen (twice!)
- **Massey Rd shops:** Crossing upgrade not sufficiently completed

A photograph of a cobblestone street. In the upper center, a white bicycle symbol is painted on the pavement. The image is framed by a white border. The text 'SPREADSHEET SET-UP AND RANDOMISATION' is centered in the lower half of the frame.

SPREADSHEET SET-UP AND
RANDOMISATION

DATA RANDOMISATION

- Each site/ year combination allocated a site number
- Each day was split into three time sections: 7am-10:30am; 10:30am-2:30pm; 2:30pm-6pm
- All combinations were allocated a random number (MS Excel random number generator)
- Random numbers were sorted smallest to largest
- Each coder was allocated X lines based on their availability
- The same process was followed for 2019. These counts were done separately as the data were recorded *after* the 14-18 counts were complete

	A	B	C	D	E	F	G	H
1	Random numb	Site numb	Site	Year	Day	Date	Hours	Coder
2	0.002323339	9	Imrie	2014	Sat	29/03/2014	10:30-14:30	Rosie
3	0.00351301	21	Massey/ Yates	2017	Sat	25/03/2017	14:30-18:00	Rosie
4	0.005587132	38	Wickman	2017	Sat	18/03/2017	7:00-10:30	Rosie

DATA RANDOMISATION

- All site/ year/ time combinations were randomly assigned to coders
- This method ensured that the effect of learning or fatigue was minimised



SPREADSHEET SET-UP



SPREADSHEET SET-UP

- All video files (except Mascot Friesian) were received as 15min timestamped files with 4 per hour
- Each row in the coding spreadsheet represented 15 minutes
- This meant that coders easily knew which video matched to which row

SPREADSHEET SET-UP

Site numb	Site	Coder	Date code	Date	Day	hour	from	to	Cyclist	Pedestrian	Other p	Describe	Comments
7	Friesian			25/03/2017	Saturday	14	45	60					
7	Friesian			25/03/2017	Saturday	15	0	15					
7	Friesian			25/03/2017	Saturday	15	15	30					
7	Friesian			25/03/2017	Saturday	15	30	45					
7	Friesian			25/03/2017	Saturday	15	45	60					
7	Friesian			25/03/2017	Saturday	16	0	15					
7	Friesian			25/03/2017	Saturday	16	15	30					
7	Friesian			25/03/2017	Saturday	16	30	45					
7	Friesian			25/03/2017	Saturday	16	45	60					
7	Friesian			25/03/2017	Saturday	17	0	15					
7	Friesian			25/03/2017	Saturday	17	15	30					
7	Friesian			25/03/2017	Saturday	17	30	45					
7	Friesian			25/03/2017	Saturday	17	45	60					



INTERRATER TESTING
AND THE CODERS

INTERRATER TESTING (2014-18)

- Prior to the full coding, all coders were given the same representative selection of site/ year combinations to code
- The results were compared between the coders
- In cases where the agreement was less than 80%, the screen-set up was reviewed. Some changes to the protocol were made based on the interrater
- A second interrater test was conducted once these parameters were changed. The agreement for pedestrians averaged 84% and the agreement for cyclists averaged 96%

INTERRATER TESTING (2019)

- An interrater test was conducted prior to the 2019 counts
- Based on the testing, it was determined that one coder could not be accurate enough and they were not asked to continue work

THE CODERS

- Four coders undertook the coding for the 2014-2018 footage
- Three different coders undertook the coding for the 2019 counts



SCREEN SET-UP



CODING AREA AT EACH SITE

- The field of view at each site changed each year, mostly due to changing camera technology
- A consistent section of each site's field of view was identified across the years
- This coding area was also based on what coders could *reasonably* identify on their screens
- Coders were given a print-out showing the coding area for each site and year



Wickman 2014

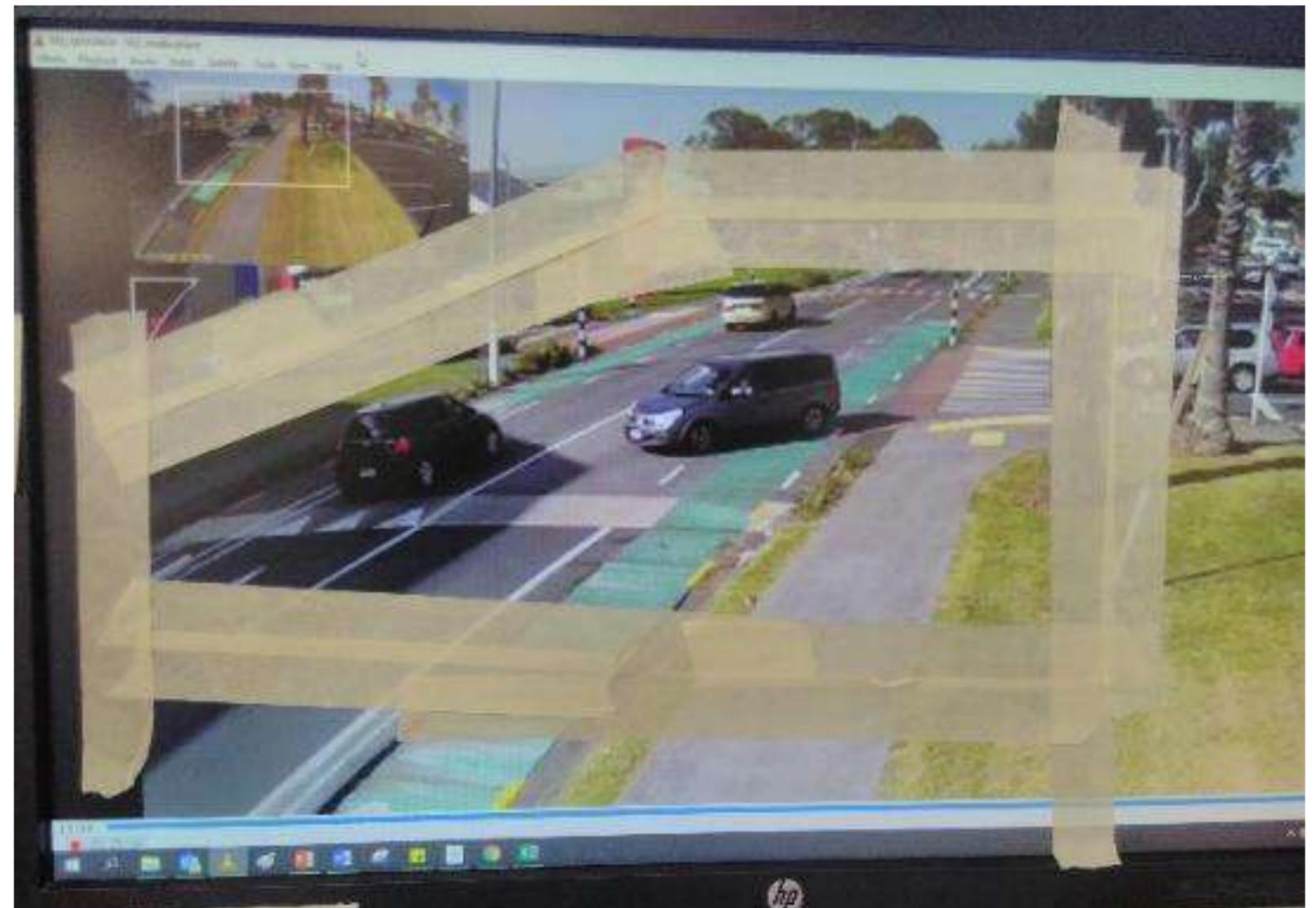


Wickman 2018

SCREEN SET-UP

Screen set-up at Mascot Bader 2018

- Based on the coding area, coders applied tape to their screens
- This was particularly useful at busy sites as it helped them to determine who to code and who not to code





CODING PROTOCOL



CODING PROTOCOL

- All coders had access to the videos on a hard drive
- VLC was used to view the videos by all coders
- Coders were given two 'clickers', one for cyclists and one for pedestrians. 'Other' pedestrians were noted on paper or directly into the spreadsheet
- Coders watched the video no faster than 2.5 times



CYCLISTS

- Count (one click each) all cyclists who enter the designated coding area
- If they enter the coding area twice (i.e. strong evidence they are hanging around – riding up and down the footpath/ street), don't count them again.

PEDESTRIANS

- Count all pedestrians who enter the coding area. The aim is to get an idea of individual “trips”
- If they enter the coding area twice (i.e. strong evidence they are hanging around – pacing up and down etc), don’t count them again.
- However, if for example they park their car and go into a house and come back a little while later, count them twice.
- Some sites were located near schools and at certain times of the day these sites got very busy. There may be 200 people in a 15-minute segment. Coders slowed down this video to view it. They counted these segments twice and took an average

'OTHER' PEDESTRIANS

- We gave a separate category to people who require a mobility aid, or who use something with wheels or other assistance to get around
- They were NOT included in the pedestrian count
- The number of 'other' pedestrians was coded in their own column, and they were also described

E-scooter

Push scooter

Mobility scooter

Walking frame

Pushing a pram
(counted as 2 people)

Skateboard

Lawnmower

Walking a bike

Motorised wheelchair

Walking a dog

Walking stick

Shopping trolley

COMMENTS COLUMN

- The comment column was used:
 - If they do something interesting (i.e. having a fight, pacing up and down the street, standing and talking)
 - If the weather is wet or windy
 - If something is wrong with the footage