



**BICYCLE  
NETWORK®**

**More people out on  
bicycles: Recreational  
activity surveys during  
COVID-19 and comparison  
with pre-lockdown  
activity levels**

**May 2020**



# Measuring recreational activity in unprecedented times



## Lockdown in Victoria

On 30 March 2020, the Minister for Health and Medical Research signed an Order for stage 3 lockdown measures to be put in place across Australian states, following a national outbreak of the novel coronavirus. The Order, which in Victoria falls under section 200 of the *Public Health and Wellbeing Act (2008)*<sup>1, 2</sup>, places legally enforceable restrictions on all non-essential gatherings, as a means of minimising the spread of the deadly virus.

During the stage 3 restrictions, there are only four reasons for Victorian residents to be outside:

- purchasing food and essential supplies;
- medical, care or compassionate needs;
- exercise; and
- work and study if they cannot be undertaken remotely<sup>2</sup>.

## How has this affected our recreational activities?

An arising question is how these restrictions have affected the recreational needs of residents in Victoria and elsewhere. A recent survey by Bicycle Network<sup>3</sup> found that, in response to stage 3 restrictions across Australian states:

- 73 per cent [of respondents] are planning to use a bicycle to access essential services (shops, healthcare, work and education) in the coming weeks and months;
- 84 per cent of healthcare workers said they would ride bicycles more or the same amount; and
- Most respondents (39 per cent) said that they will be riding a bicycle outdoors to get their daily exercise.

In addition, emerging data suggests an increase in bicycle purchases during lockdown restrictions<sup>4</sup>. These findings suggest that, given these increased needs for bicycle-related transport, exercise and recreation; Australian roads and shared paths may be exhibiting major deviations from normal bicycle traffic volumes.

## What this report provides

This report offers preliminary insights into the current volumes of bicycle riders, walkers, runners and dog-walkers on Victorian shared paths, with the intention of understanding how recreational activity has changed during stage 3 lockdown restrictions.

The data provided here offers one of the first surveys of recreational user traffic during stage 3 restrictions in Victoria, and how this compares to normal volumes. This data offers insights into our recreational needs during the restrictions, and the capacity of our shared path infrastructure to meet the user demand.

<sup>1</sup> 'Coronavirus (COVID-19) restrictions Victoria', Department of Health and Human Services: <https://www2.health.vic.gov.au/about/legislation/public-health-and-wellbeing-act>

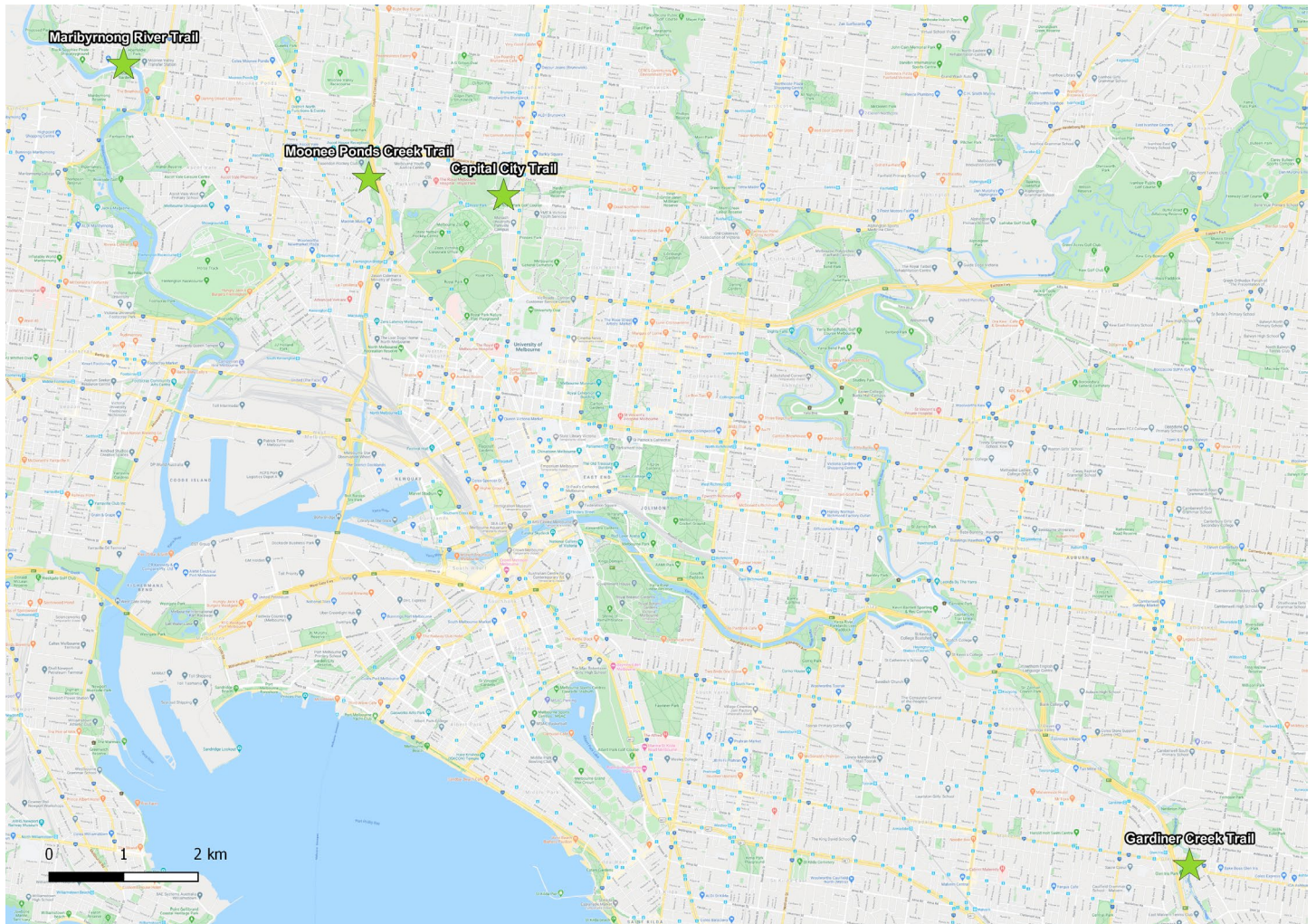
<sup>2</sup> 'Stay At Home Directions - Public Health and Wellbeing Act (2008)', Department of Health and Human Services: - <https://www.dhhs.vic.gov.au/sites/default/files/documents/202003/Stay%20at%20Home%20Directions%20.pdf>

<sup>3</sup> 'Australians keen to ride out coronavirus', Bicycle Network: <https://www.bicyclenetwork.com.au/newsroom/2020/04/06/australians-keen-to-ride-out-coronavirus/>

<sup>4</sup> 'Inside the coronavirus bicycle boom', Australian Financial Review: <https://www.afr.com/policy/health-and-education/inside-the-virus-bicycle-boom-20200413-p54jea>



## 📍 Analysis 1: Comparing recreational users before and during lockdown restrictions



### SURVEY SITES

In this first section, we present data on recreational user volumes on shared paths, derived from sites where historical data is available for comparison. Bicycle Network selected four key sites within the Melbourne metropolitan area:

- Maribyrnong River Trail (Moonee Valley City Council)
- Moonee Ponds Creek Trail (Moonee Valley City Council)
- Capital City Trail (City of Yarra)
- Gardiners Creek Trail (City of Stonnington)

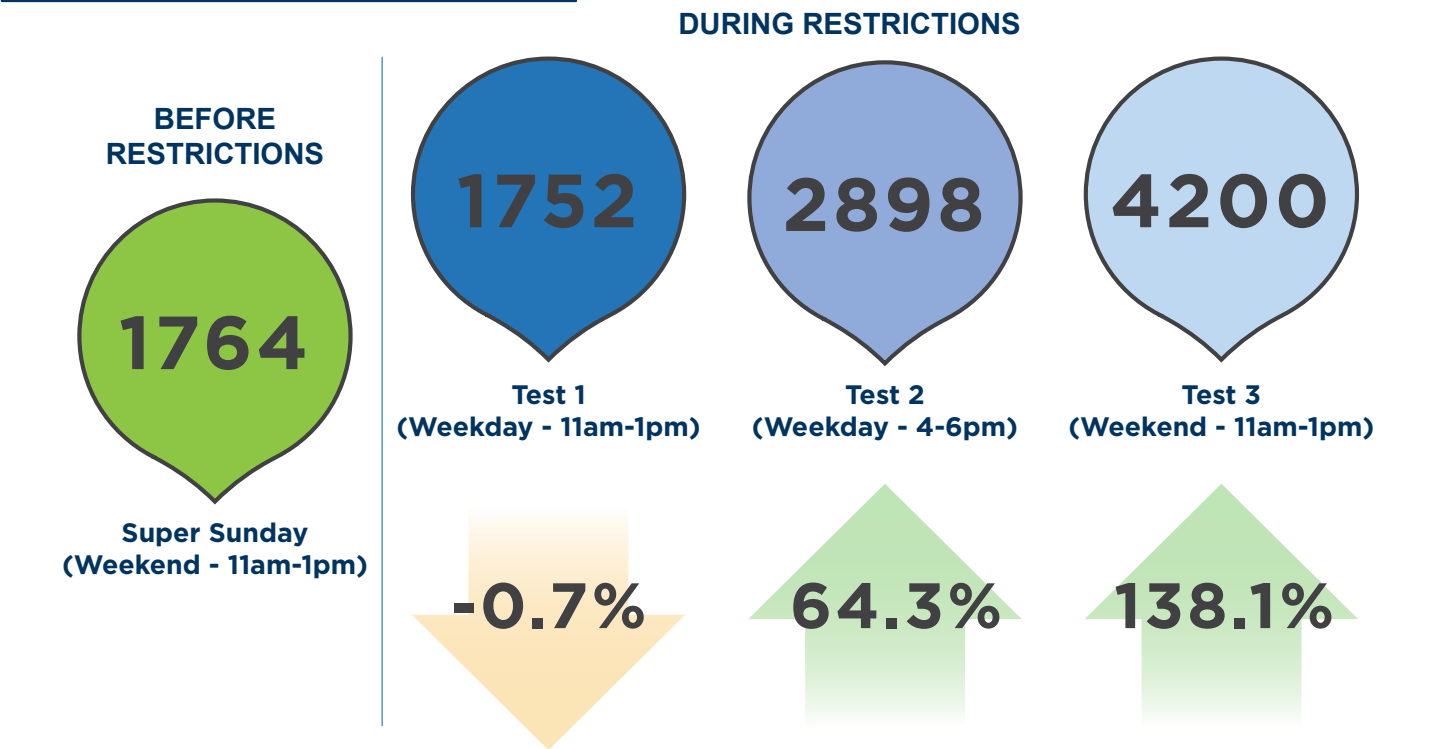
These sites were surveyed during the recent **Super Sunday** count, an annual volunteer-based count organised by Bicycle Network on November 10th, 2019. The results of this count are used here as an approximation of normal recreational volumes on weekends.

Current recreational user volumes were measured at these sites on three separate ‘test days’:

- Test 1 - Wednesday, April 15th, 11am-1pm
- Test 2 - Tuesday, April 28th, 4-6pm
- Test 3 - Saturday, April 25th, 11am-1pm

For each of the surveys, a counter at each site made tallies of the number of bicycle riders, walkers, runners and dog-walkers entering and exiting the path during the nominated time period.

# VOLUME COMPARISON



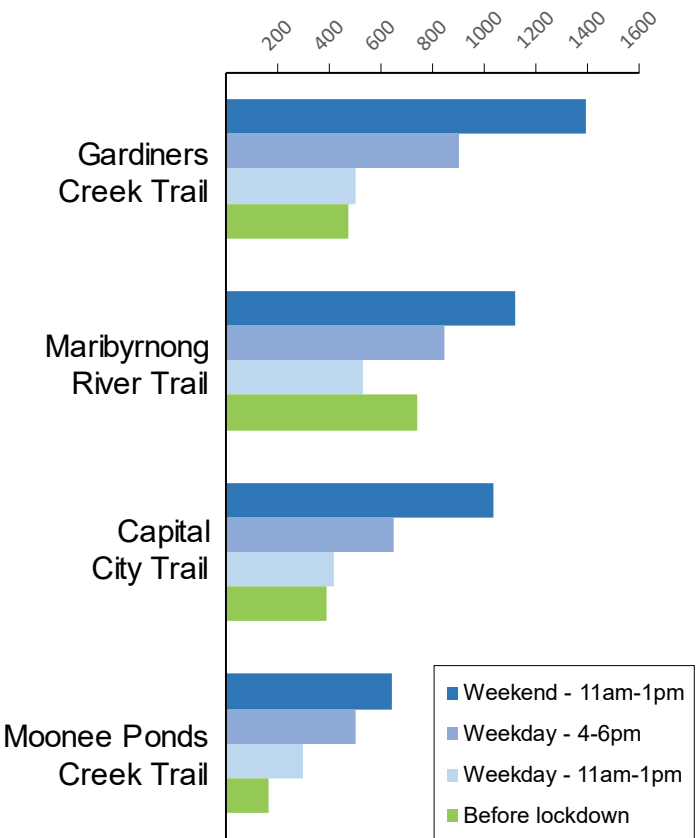
When compared with pre-restriction surveys, Bicycle Network has found that there are more people out engaging in recreational activities. The total volume of recreational users across the four sites was either equal to or higher than the normal weekend volumes (1764 users). In particular, weekends have experienced **138%** growth in recreational users compared to normal weekend volumes without lockdown restrictions.

## SITE BY SITE

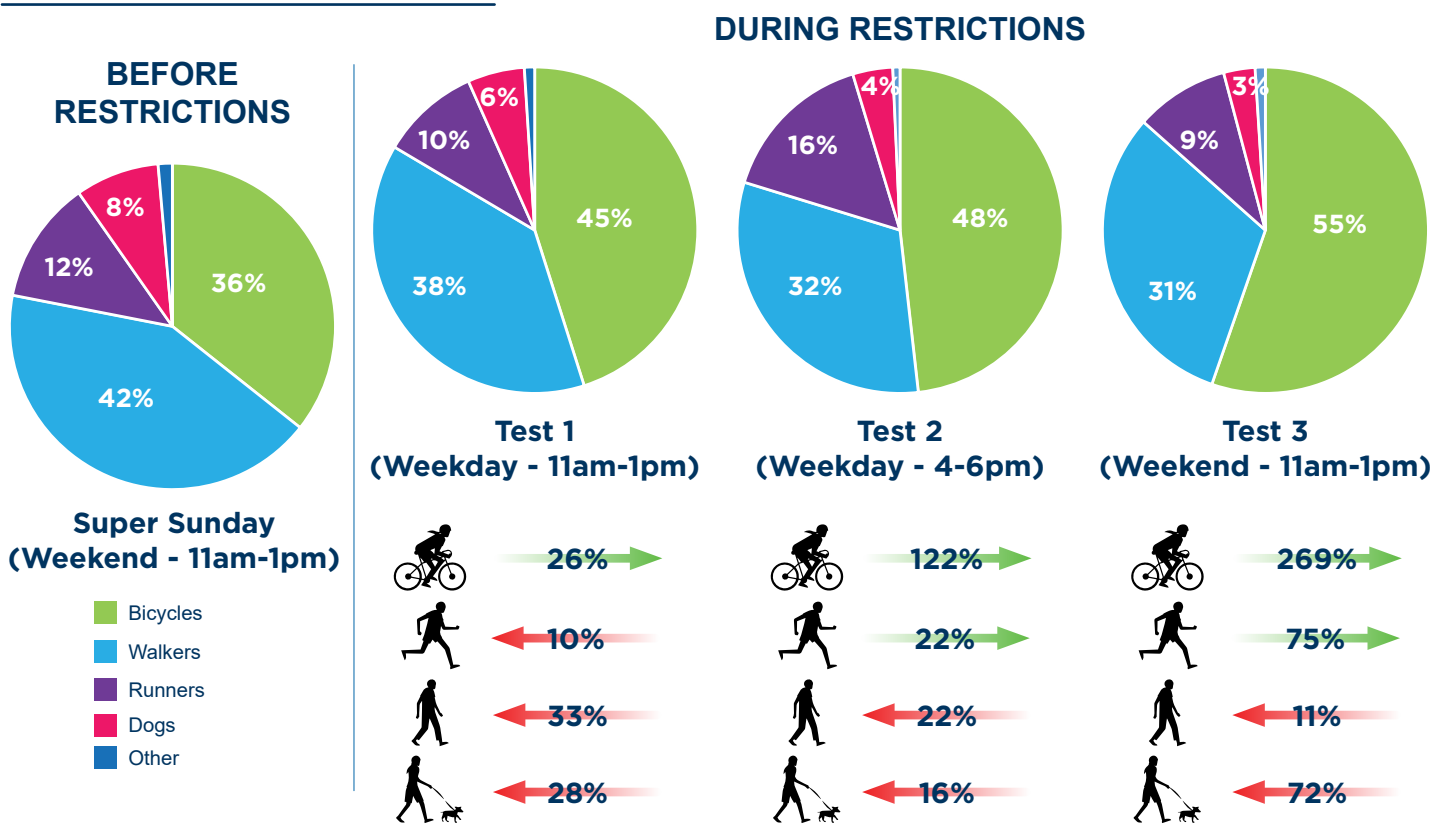
Across all sites, recreational user volumes was markedly higher per test day compared to normal weekend volume. One exception is the Maribyrnong River Trail, which experienced less weekday (11am-1pm) traffic.

The Gardiners Creek Trail experienced the highest traffic volume across the sites during the weekend count (Test 2; 1396 users). Recreational activity at this site was 196% higher than normal weekend volumes.

These findings suggest that these major elevations in recreational activity is not a site-specific phenomenon. All shared paths across the Melbourne metropolitan area may be experiencing unprecedented growth in recreational users. Traffic volumes for additional sites (without comparative data) are presented in the succeeding section.



# USER COMPARISON

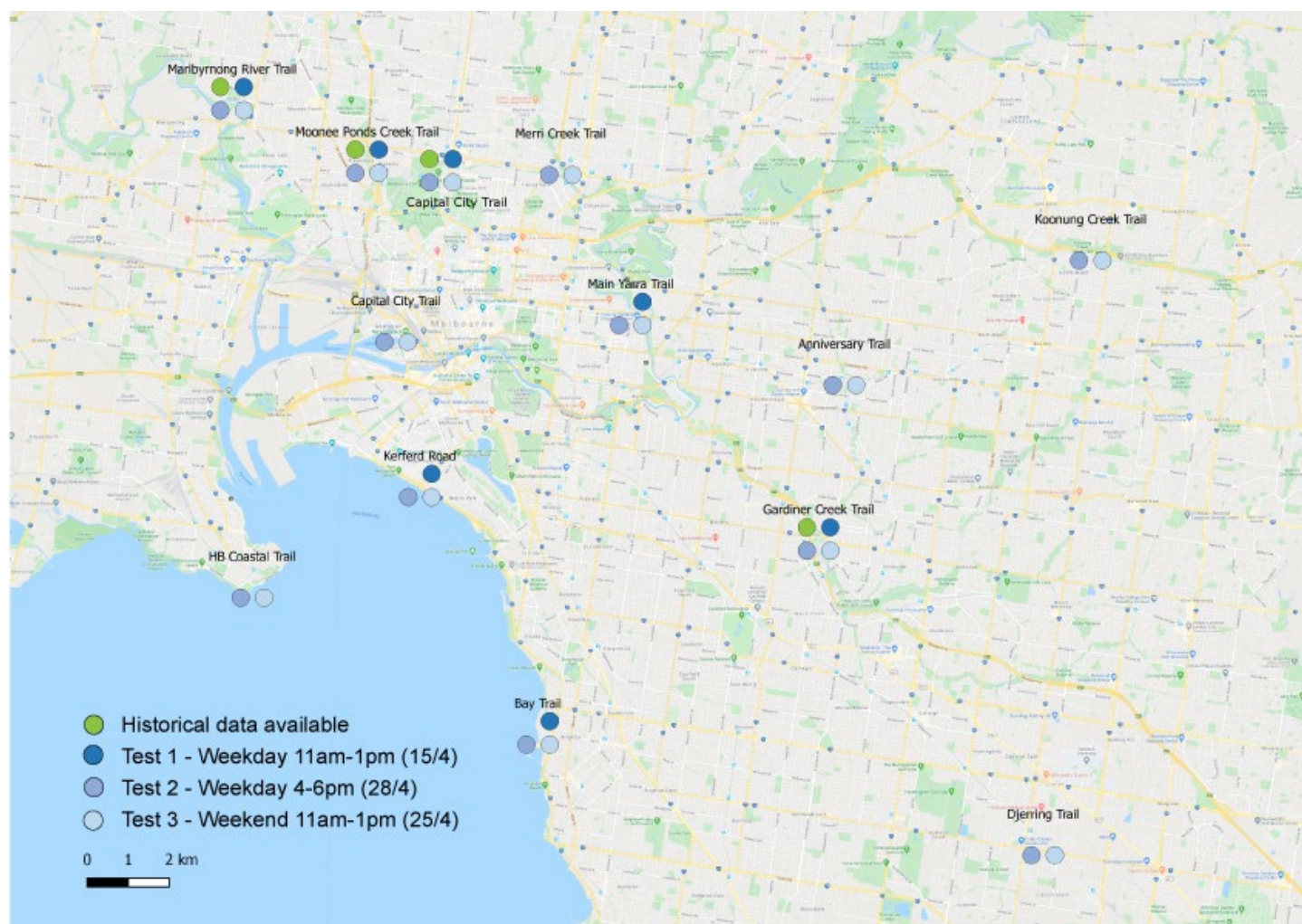


As demonstrated in the previous section, surveys conducted during stage 3 lockdown restrictions found that recreational activity on shared paths has increased by up to 138%. This increase is due predominantly to more people riding bicycles. In all test scenarios, bicycle riders comprised the highest proportion of users (45-55%), followed by walkers (31-38%) and runners (9-16%).

Comparison with the historical data (Super Sunday) reveals a marked increase in bicycle use on these shared paths across all of the test days. In particular, weekend bicycle use has increased by **269%** compared to normal volumes. These findings suggest an unprecedented change in the predominant users accessing these shared paths, from walkers (36%) to bicycle riders (>45%).

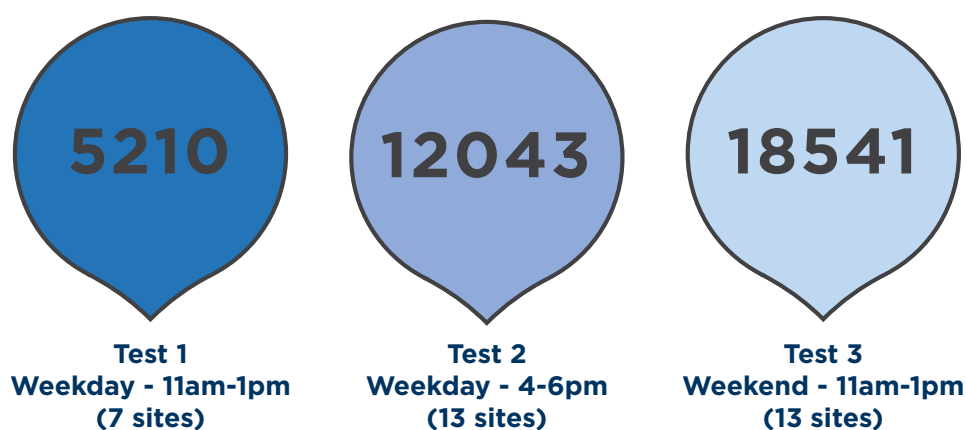


## 📍 Analysis 2: Exploring recreational activity across the wider Melbourne metropolitan area



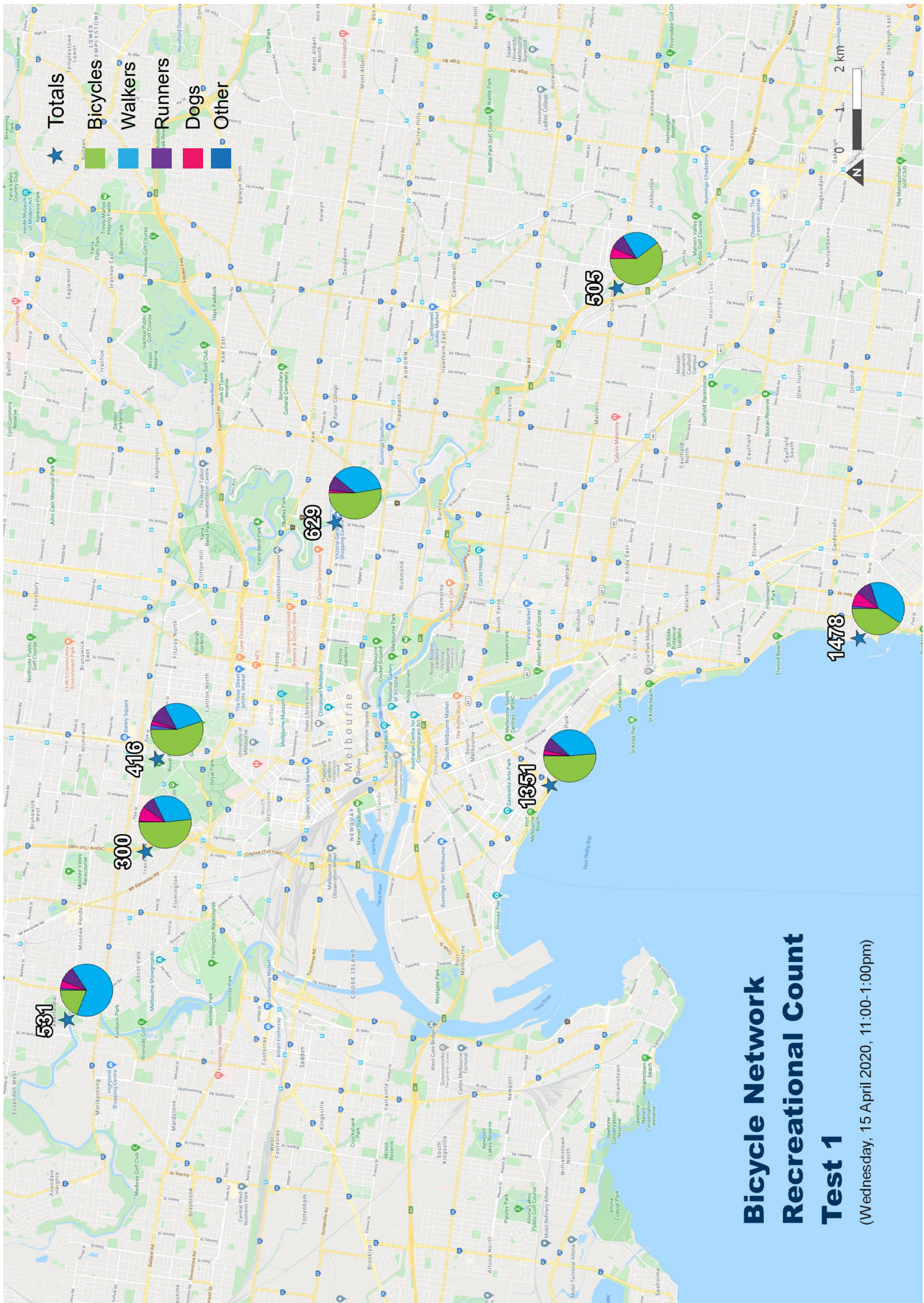
Complementary to the comparative analyses detailed in the previous section, Bicycle Network undertook counts at **9 additional roads and shared paths** during the predefined dates and time periods (above). In this section, we combine the total user volumes collected across each of the **13 sites** in a series of maps. This is followed by a tabulated summary of the raw data.

### TOTAL MOVEMENTS

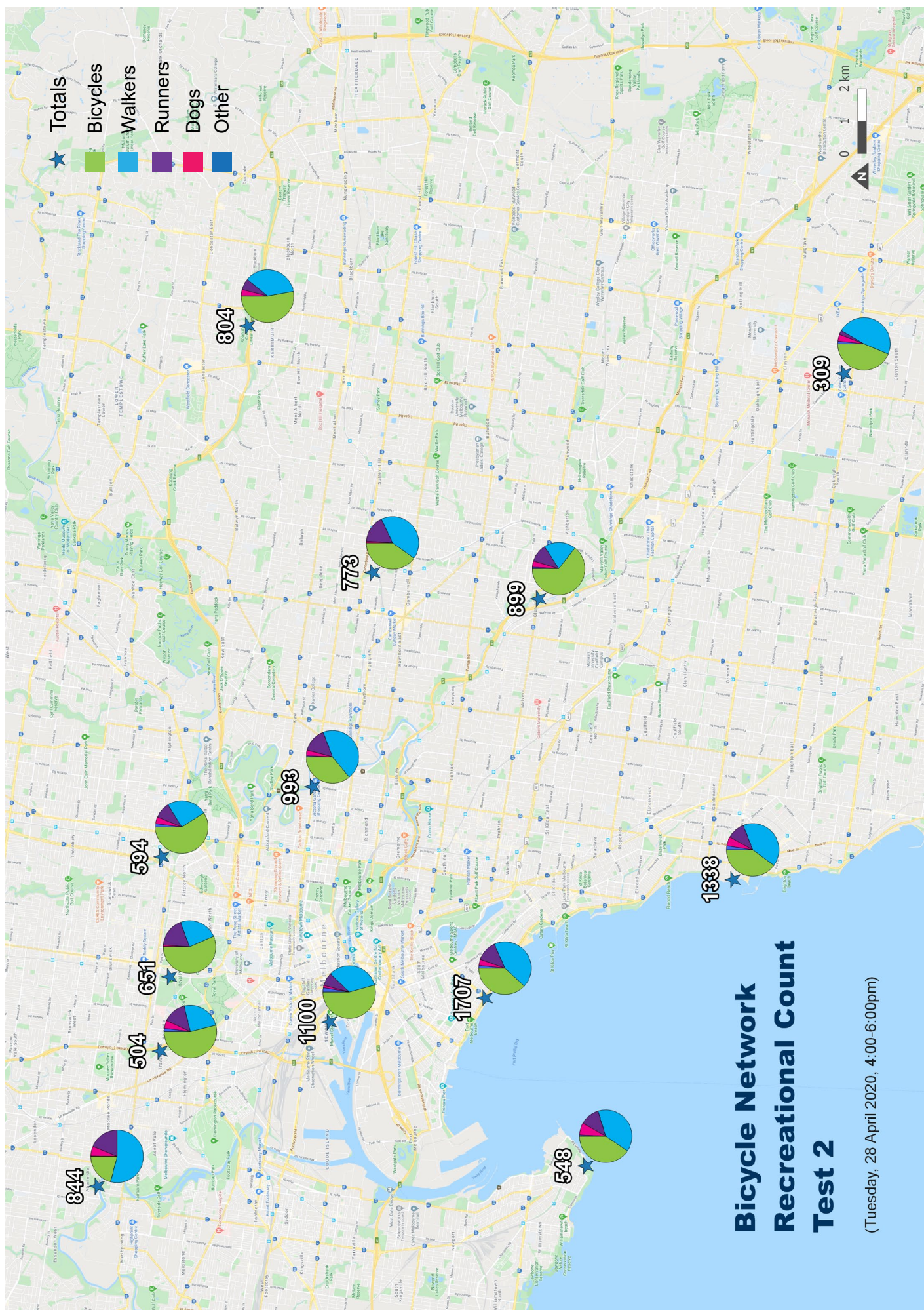


A total of **35794** movements were counted across the 13 sites. The majority of these movements occurred during the weekend count (Test 3). **Note that only 7 sites were counted during Test 1.**

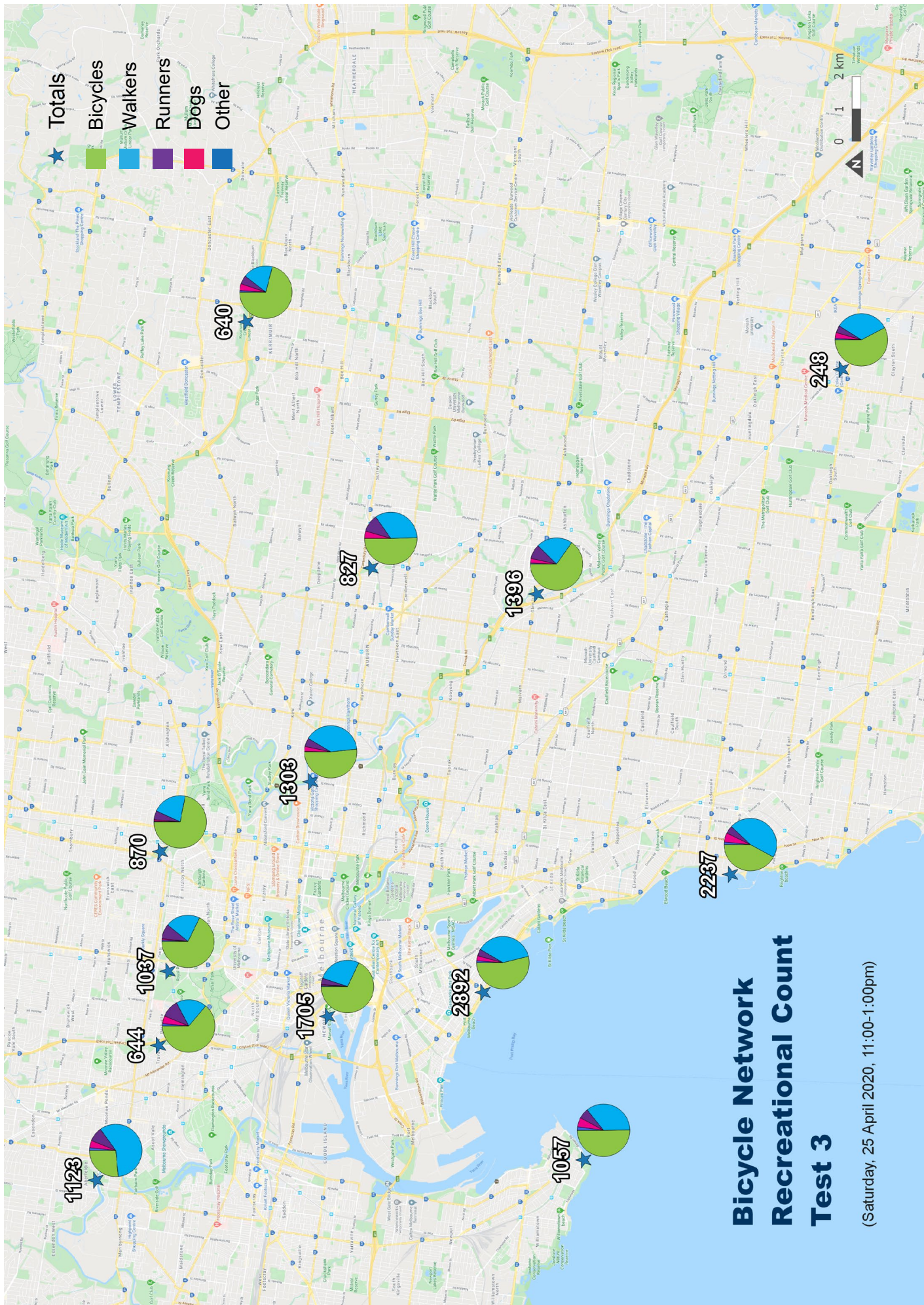














## Data summary

### Test 1: Weekday - 11am-1pm

Site ID	Street names	Latitude	Longitude	Volume			Additional characteristics						
				Total	Super Sunday	%	Bicycle	Walker	Runner	Dog	Other	11:00-12:00	12:00-1:00
4469	Moonee Ponds Creek Trail	-37.7780	144.9366	300	168	79%	155	92	24	28	1	141	159
4552	Kerferd Road	-37.8491	144.9513	1351	-	-	694	494	117	38	8	670	681
4687	Main Yarra Trail	-37.8114	145.0098	629	-	-	331	229	58	11	0	311	318
4878	Bay Trail	-37.9033	144.9841	1478	-	-	601	581	140	135	21	757	721
5621	Capital City Trail	-37.7801	144.9572	416	361	15%	229	116	49	11	11	183	233
6028	Gardiner Creek Trail	-37.8608	145.0619	505	473	7%	305	118	47	35	0	262	243
6985	Maribyrnong River Trail	-37.7643	144.8992	531	751	-29%	101	347	52	25	6	246	285

### Test 2: Weekday - 4-6pm

Site ID	Street names	Latitude	Longitude	Total	Super Sunday	%	Bicycle	Walker	Runner	Dog	Other	11:00-12:00	12:00-1:00
4433	Capital City Trail	-37.8151	144.9447	1100	-	-	598	368	89	16	29	471	629
4469	Moonee Ponds Creek Trail	-37.7780	144.9366	504	163	209%	272	125	72	25	10	241	263
4552	Kerferd Road	-37.8491	144.9513	1707	-	-	651	743	220	65	28	770	937
4687	Main Yarra Trail	-37.8114	145.0098	993	-	-	357	446	149	35	6	457	536
4878	Bay Trail	-37.9033	144.9841	1338	-	-	534	548	148	76	32	671	667
5620	Merri Creek Trail	-37.7784	144.9904	594	-	-	351	147	59	25	12	296	298
5621	Capital City Trail	-37.7801	144.9572	651	388	68%	369	156	119	6	1	291	360
5661	Koonung Creek Trail	-37.7972	145.1374	804	-	-	425	291	56	31	1	382	422
5668	Anniversary Trail	-37.8245	145.0691	773	-	-	310	324	131	8	0	310	463
6028	Gardiner Creek Trail	-37.8608	145.0619	899	472	90%	579	177	101	34	8	502	397
6982	HB Coastal Trail	-37.8711	144.9049	548	-	-	222	215	66	41	4	298	250
6985	Maribyrnong River Trail	-37.7643	144.8992	844	741	14%	177	456	159	50	2	391	453
7447	Djerring Trail	-37.9275	145.1242	309	-	-	135	148	8	13	5	146	163

### Test 3: Weekend - 11am-1pm

Site ID	Street names	Latitude	Longitude	Total	Super Sunday	%	Bicycle	Walker	Runner	Dog	Other	11:00-12:00	12:00-1:00
4433	Capital City Trail	-37.8151	144.9447	1705	-	-	1158	460	66	10	11	787	918
4469	Moonee Ponds Creek Trail	-37.7780	144.9366	644	163	295%	411	122	71	31	9	313	331
4552	Kerferd Road	-37.8491	144.9513	2892	-	-	1558	1091	121	91	31	1552	1340
4687	Main Yarra Trail	-37.8114	145.0098	1303	-	-	673	519	69	39	3	648	655
4878	Bay Trail	-37.9033	144.9841	2237	-	-	942	1025	109	127	34	1291	946
5620	Merri Creek Trail	-37.7784	144.9904	870	-	-	626	185	48	8	3	460	410
5621	Capital City Trail	-37.7801	144.9572	1037	388	167%	703	222	95	9	8	491	546
5661	Koonung Creek Trail	-37.7972	145.1374	640	-	-	455	118	34	27	6	362	278
5668	Anniversary Trail	-37.8245	145.0691	827	-	-	417	284	89	37	0	398	429
6028	Gardiner Creek Trail	-37.8608	145.0619	1396	472	196%	911	312	125	40	8	753	643
6982	HB Coastal Trail	-37.8711	144.9049	1057	-	-	531	376	67	61	22	537	520
6985	Maribyrnong River Trail	-37.7643	144.8992	1123	741	52%	299	655	100	51	18	534	589
7447	Djerring Trail	-37.9275	145.1242	248	-	-	143	83	11	9	2	128	120

## Discussion

To understand how stage 3 lockdown restrictions has affected the recreational needs of residents in Victoria, Bicycle Network undertook surveys of recreational user traffic across 13 sites in the Melbourne metropolitan area during 2 hour periods.

A total of **35794** movements were counted across the three count periods, the majority of which occurred during the weekend period (11am-1pm; Saturday 25th April). Based on sites where historical data was available, Bicycle Network has found that the total volume of recreational users across the four sites was either equal to or higher than the normal weekend volumes (1764 users). In particular, weekends have experienced **138%** growth in recreational users compared to normal weekend volumes without lockdown restrictions.

Increased recreational activity on these shared paths is due predominantly to more people riding bicycles. During the weekend count period, bicycle use increased by **269%** compared to normal volumes. This observation is in good agreement with recent survey responses collected by Bicycle Network, and major increases in bicycle purchases across Australia. The observations also coincide with increased bicycle activity across the globe. Countries have been quick to incentivise active travel and the redistribution of space from cars to pedestrians and bicycles: pop-up cycleways are being installed in many major cities<sup>1-3</sup>, and government funded incentives are being implemented to promote active travel<sup>4</sup>.

These changes may be the new normal for Victoria and elsewhere. Media outlets have recently highlighted the essential role of urban space for physical and mental wellbeing<sup>5</sup>. Given the predictions that public transport capacity may be reduced following the lifting of lockdown restrictions<sup>6</sup>, commuters' preference for shared paths may continue to be high as lockdown restrictions relax across Australia. The results presented here provide a window into the current capacity of Victoria's shared pathway infrastructure when residents' recreational needs are substantially increased. A committed investment in shared paths and bike lanes could be beneficial across Australia to meet these unprecedented demands and to aid economic recovery.

<sup>1</sup> 'Paris To Create 650 Kilometers Of Post-Lockdown Cycleways ', Forbes: <https://www.forbes.com/sites/carltonreid/2020/04/22/paris-to-create-650-kilometers-of-pop-up-corona-cycleways-for-post-lockdown-travel/#3a98c50054d4><sup>2</sup> Stay At Home Directions - Public Health and Wellbeing Act (2008) - <https://www.dhhs.vic.gov.au/sites/default/files/documents/202003/Stay%20at%20Home%20Directions%20.pdf>

<sup>2</sup> 'New Zealand First Country To Fund Pop-Up Bike Lanes, Widened Sidewalks During Lockdown', Forbes: <https://www.forbes.com/sites/carltonreid/2020/04/13/new-zealand-first-country-to-fund-pop-up-bike-lanes-widened-sidewalks-during-lockdown/#184356ba546e>

<sup>3</sup> 'Milan announces ambitious scheme to reduce car use after lockdown', The Guardian: <https://www.theguardian.com/world/2020/apr/21/milan-seeks-to-prevent-post-crisis-return-of-traffic-pollution>

<sup>4</sup> Free bike repairs! France will cover €50 worth of shop work per person', Cyclingtips: <https://cyclingtips.com/2020/05/free-bike-repairs-france-will-cover-e50-worth-of-shop-work-per-person/>

<sup>5</sup> 'We can't let coronavirus kill our cities. Here's how we can save urban life ', The Conversation: [https://theconversation.com/we-cant-let-coronavirus-kill-our-cities-heres-how-we-can-save-urban-life-137063?fbclid=IwAR3JuQJf-RejAMQr74334HxIYk\\_2AZ8z\\_yJlkYWma7BVh758PhHVvmZZI](https://theconversation.com/we-cant-let-coronavirus-kill-our-cities-heres-how-we-can-save-urban-life-137063?fbclid=IwAR3JuQJf-RejAMQr74334HxIYk_2AZ8z_yJlkYWma7BVh758PhHVvmZZI)<sup>4</sup> 'Inside the coronavirus bicycle boom' - <https://www.afr.com/policy/health-and-education/inside-the-virus-bicycle-boom-20200413-p54jea>

<sup>6</sup> 'COVID-19 & Public Transport: From Response to Recovery', WSP: <https://www.wsp.com/en-AU/insights/covid-19-and-public-transport-from-response-to-recovery>

<sup>7</sup> 'Transurban revs up for coronavirus recovery investment spree ', The Age: [https://www.theage.com.au/business/companies/transurban-revs-up-for-coronavirus-recovery-investment-spre-20200504-p54pm8.html?fbclid=IwAR2l9faaG16SMMPKxGmZ0f6l4xmQWL\\_wmeMtf5tPBdPq4klDfQBzWieCs](https://www.theage.com.au/business/companies/transurban-revs-up-for-coronavirus-recovery-investment-spre-20200504-p54pm8.html?fbclid=IwAR2l9faaG16SMMPKxGmZ0f6l4xmQWL_wmeMtf5tPBdPq4klDfQBzWieCs)





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