

**Absolutely Positively
Wellington City Council**

Me Heke Ki Pōneke

WCC Transitional Programme Parking Management Plan

Thorndon Connections

8 March 2023



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DRAFT

1. Introduction

This document is the draft Parking Management Plan for the Thorndon Connections transitional walk, bike and bus improvements project.

The Transitional Programme takes a new approach to community engagement and installation to help increase the pace of transport improvements. By using lower-cost materials that can be adjusted once they are in place, the city can install an interim bike network, and walking and bus improvements, and gain feedback in real time. This will also inform future permanent changes while gaining benefits earlier.

For parking impact analysis, the project has been split into 5 sections: Molesworth Area, Murphy/Mulgrave Area, Bunny Street Area, Hill Street and Tinakori Road, and Aitken Street.

The parking study areas are based on land use/parking demand drivers.

This report is informed by parking surveys and sensor data from those streets affected by the proposed transitional walk, bike and bus improvements. The surveys analysed parking duration of stay and occupancy data to identify parking demand drivers and behaviour across the study area.

This report considers the impact of the proposed improvements on parking availability and the ability of users to access local destinations, both before and after mitigation.

The Transitional Programme reallocates on-street parking spaces to provide active and public transport options, supporting Wellington's vision of moving more people using fewer vehicles. This parking management plan re-prioritises the remaining on-street parking spaces, in line with the parking space hierarchy for different parts of the city established in Wellington City Council's Parking Policy ¹

The mitigation measures presented in this report seek to minimise the impact of parking removal on users' ability to find a parking space and visit the area. The methodology followed in this report is in line with that as outlined in the National Parking Management Guidance document².

¹ <https://wellington.govt.nz/-/media/your-council/plans-policies-and-bylaws/plans-and-policies/a-to-z/parking/files/parking-policy-adopted-august-2020.pdf>

² <https://nzta.govt.nz/assets/resources/national-parking-management-guidance/national-parking-management-guidance.pdf>

1.1 Study area



Figure 1 Transitional Programme Thorndon connection scope and extent

Thorndon is an inner-city suburb adjacent to the central business district. It has inner-city residents, large workplaces, historical and cultural sites of importance including the Parliamentary precinct, Tinakori village, the Cathedral, and key destinations like a large supermarket and community pool. It is also home to six schools, with over 3000 students travelling in and out twice daily on weekdays. There is a motorway on and off ramp in the area, the Wellington Train Station, and the Wellington bus terminal.

The area is located across a moderate incline. The parking in the area is predominately restricted to P120 (two hour) paid parking, with provisions for residents, coupon parking, mobility and diplomatic parking spaces. As well as paid on-street parking facilities, there are off-street parking facilities available for visitors to associated business/facilities. There are also private paid parking facilities in the area.

As seen in Figure 2, this assessment has been broken down into five areas: The Molesworth Area including Hawkestone Street, Pipitea Street, and Kate Sheppard Place; the Murphy/Mulgrave Area, including Halswell and Turnbull Street; the Bunny Area, including part of Lambton Quay and Stout Street; the Hill Street/Tinakori Area; and the Aitken Area.

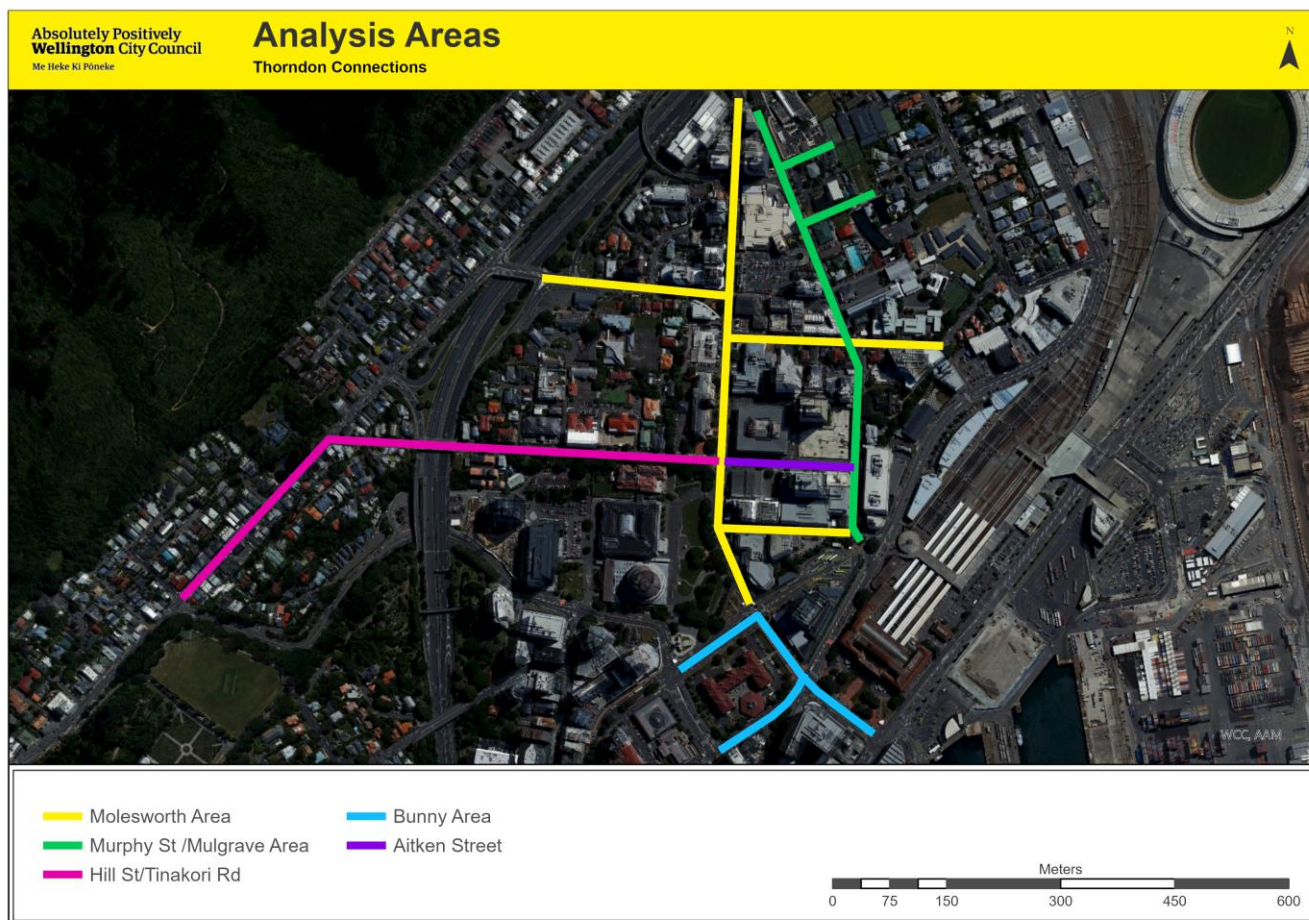


Figure 2 Thorndon Analysis Areas

1.2 Future Improvements

The proposed bike, walking and bus improvements have been drafted to 90% design which is sufficient to inform this draft Parking Management Plan. The design however is still subject to change as part of the traffic resolution process which is the formal record of a decision made by Wellington City Council to change how a road or traffic is managed, involving consultation and potential amendments to the design.

Table 1 90% design description by Area

Section	Description
Molesworth Area	Separated bike lane on the right-hand side of Molesworth Street, including a small section of two-way cycleway between Lambton Quay and Aitken Street removing all parking on this side. Parking on the left-hand side to remain and minimum changes to parking on side streets.
Murphy/Mulgrave Area	Separated bike lane on the right-hand side of Murphy and Mulgrave Street removing all parking on this side. Parking on the left-hand side and side streets to have minimal changes.

Section	Description
Bunny Area	Separated two-way cycle way on Lambton Quay, resulting in relocation of bus layover to Stout Street. Stout Street is proposed to have a significant reduction of metered parking spaces changing parking from angled to parallel with bus layover during peak hours. Minimal changes to Bunny Street.
Hill Street/Tinakori Road	Traffic calming and lower speed limits. Majority of parking is retained, minimal changes to parking only.
Aitken Street	Separated cycleway westbound only, significant reduction to metered parking changing from angled to parallel parks.

2 Wellington Parking Policy 2020

In June 2019, Wellington City Council declared a climate emergency as a response to Wellingtonians' concerns about climate change.

Road transport accounts for 34% of Wellington City's emissions. Therefore, addressing how we move around the city plays a key role in helping meet the goal of becoming a carbon net zero capital by 2050.

The Wellington City Council's vision for the city is built around people and the community, where a safe, resilient, reliable, and efficient transport system can move more people using fewer vehicles. This will help to reach our goal of net zero carbon emissions by 2050.

The Wellington City Council updated and adopted a new Parking Policy in August 2020. The Parking Policy sets the objectives and principles for management of Council-controlled on-street and off-street parking. The Parking Policy acknowledges that Wellington needs a more efficient transport system that makes better use of our limited road space.

Achieving this vision for Wellington will mean rebalancing our existing road space to support active and public transport, removing some on-street parking spaces on key transport routes, and re-prioritising the remaining on-street space.

Within the Parking Policy 2020, a parking space hierarchy is established. The parking space hierarchy supports our transport priorities, to guide decision-making about the provision and allocation of car parking spaces. Essentially, the parking space hierarchy describes which types of parking have the highest and lowest priorities within classified areas; the priority level does not mean the amount of parking spaces.

The hierarchy for Key Transport Routes, Central City and Inner-City Suburbs applies for Thorndon Transitional walk, bike and bus improvements and is shown in Table 2.

Table 2 Parking Policy 2020 hierarchy

Priority	Key Transport Routes	Central City (does not include bus interchange)	City Fringe and inner-City Suburbs
Highest Priority	Safe and efficient movement of people and goods	Safe and efficient movement of people and goods	Safe and efficient movement of people and goods
High Priority	Bus stops	Bus stops Mobility Urban design features Bicycle/micro-mobility Loading zone Short-stay (car & motorcycle) Car share	Bus stops Urban design features Residents Bicycle/micro-mobility Car share

Priority	Key Transport Routes	Central City (does not include bus interchange)	City Fringe and inner-City Suburbs
Medium Priority		SPSV*/taxi stands Electric-vehicle charging	Electric vehicle charging Mobility Short-stay (car & motorcycle)
Low Priority	Urban design features Mobility Loading zones Bicycle/micro-mobility Car share Electric vehicle charging Short-stay (car & motorcycle) SPSV*/taxi stands Coach and bus (Short-stay)	Coach and bus (short-stay) Coach and bus (long-stay)	Loading zones Coach and bus (short-stay)
Lower Priority	Residents Commuter (car & motorcycle) Coach and bus (long stay)	Residents Commuter (car & motorcycle)	SPSV*/taxi stands Commuter (car & motorcycle) Coach and bus (long stay)
Lowest Priority	Long stay parking of private non-motorised vehicles	Long stay parking of private non-motorised vehicles	Long stay parking of private non-motorised vehicles

2.1 Parking Occupancy Threshold

The Wellington City Parking Policy has multiple references to implementing measures to restrict residual on-street parking to no more than 85% occupancy.

Parking occupancy in excess of 85% can be supported in some situations subject to effective parking management measures which prioritise need based on the parking hierarchy in the Wellington Parking Policy, and to an ongoing commitment to reducing parking demand in the future. This can be achieved through providing high quality public transport and dedicated infrastructure for safe walking and cycling.

2.2 Measuring Parking Impact

This report considers the impact of the proposed street changes on the number of car parks available and the ability for people to park close to local destinations before and after mitigation measures are applied. The six-point scale shown in Table 3 defines and assesses impact.

Table 3 Six-point scale is used to assess the level of impact

Level of Impact	Definition
Very High	Removal of parking spaces has a very high impact on the ability of users to find a parking space and visit the area. Alternative parking spaces of the same type are not available within walking distance.

High	Removal of parking spaces has a high impact on the ability of users to find a parking space and visit the area. Alternative parking spaces of the same type are available within a 10-minute walking distance.
Moderate	Removal of parking spaces has a moderate impact on the ability of users to find a parking space and visit the area. Alternative parking spaces of the same type are available within a 5-minute walking distance.
Low	Removal of parking spaces has a low impact on the ability of users to find a parking space and visit the area. Alternative parking spaces of the same type are available within a 3-minute walking distance.
Very Low	Removal of parking spaces has a very low impact on the ability of users to find a parking space and visit the area. Alternative parking spaces of the same type are available within a 1-minute walking distance.
None or N/A	No impact on the ability of users to park and access local destinations or not applicable because this type of parking is not present.

2.3 Methodology

Occupancy and duration of stay data was provided by Smart Parking where parking meters were present. Smart parking data was analysed using occupancy and session times data of each parking user. In other areas, data was collected through manual surveys.

Both data sources are referred to as 'surveys' throughout this document.

Table 4 Date and type of data collected per street

Date	Type of data	Street
02/06 – 26/06/2022	Smart Parking	Molesworth Street
02/06 – 26/06/2022	Smart Parking	Murphy Street
02/06 – 26/06/2022	Smart Parking	Mulgrave Street
02/06 – 26/06/2022	Smart Parking	Aitken Street
02/06 – 26/06/2022	Smart Parking	Pipitea Street
02/06 – 26/06/2022	Smart Parking	Kate Sheppard Place
02/06 – 26/06/2022	Smart Parking	Bunny Street
02/06 – 26/06/2022	Smart Parking	Lambton Quay
02/06 – 26/06/2022	Survey	Tinakori Rd/Hill St
08/11 – 12/11/22	Survey	Hawkstone St
08/11 – 12/11/22	Survey	Turnbull St
08/11 – 12/11/22	Survey	Halswell St

Manual parking survey data was recorded hourly between 9am to 5pm on a weekday (Tuesday, Wednesday, and Thursday) and during a weekend day (Saturday, Sunday). Every hour, the first four digits of each car was recorded to analyse duration of stay and occupancy.

Manual parking surveys were undertaken on streets without parking sensors - Hawkestone Street, Halswell Street, Turnbull Street, and Tinakori Road/Hill Street.

Data was collected on a weekday and a weekend day to understand commuter parking behaviour (weekdays) and resident, shopping and recreational parking behaviour (weekends).

In addition, a weekday and weekend overnight snapshot survey was undertaken to assess the level of occupancy in the area after work hours (6:30pm – 6:30am). This overnight survey involved assessing the occupancy of parking in the study area.

The weather during surveys was mainly fine, with a heavy shower during a weekend survey from 10am-11am. The weather is not expected to have significant effect on the survey results.

This survey does not measure any differences in behaviour during different seasons; however, it is considered to provide an accurate picture of typical parking demand and characteristics in Thorndon.

All survey data was not surveyed during school holidays or public holidays.

2.4 Off-Street Parking

This parking assessment is primarily concerned with on-street parking within the study area only.

This is because the proposed changes remove on-street parking, and in line with the Wellington Parking Policy, mitigation should consider alternative on-street parking supply. However, to understand the parking context more fully in the area, Figure 4 identifies buildings within the Thorndon study area with off-street parking. Off-street data is sourced from Wellington City Council, updated August 2022.

Thorndon area contains off-street parking including private paid-parking facilities (E.g. Wilson operated), customer/visitor-only carparks, and private parking for residents and tenants.

Publicly accessible off-street private paid parking facilities are available throughout the wider Thorndon study area; initial surveys capture over 500 paid parking spaces available to the public within 10 minutes' walk from the Thorndon area. Just outside this catchment there is also the Sky Stadium facilities which include a large number of additional car parks.

Customer/ Visitor-only carparks are available at Thorndon New World carpark which contains approximately 271 spaces. Thorndon Pool provides 19 car parks for pool visitors during the summer season which become paid P120 parking the rest of the year.

This parking management plan seeks to understand the impact of displaced demand to on-street parking only and has not included any off-street parking within the impact assessments. However, off-street parking has been considered as part of the wider package of mitigations.

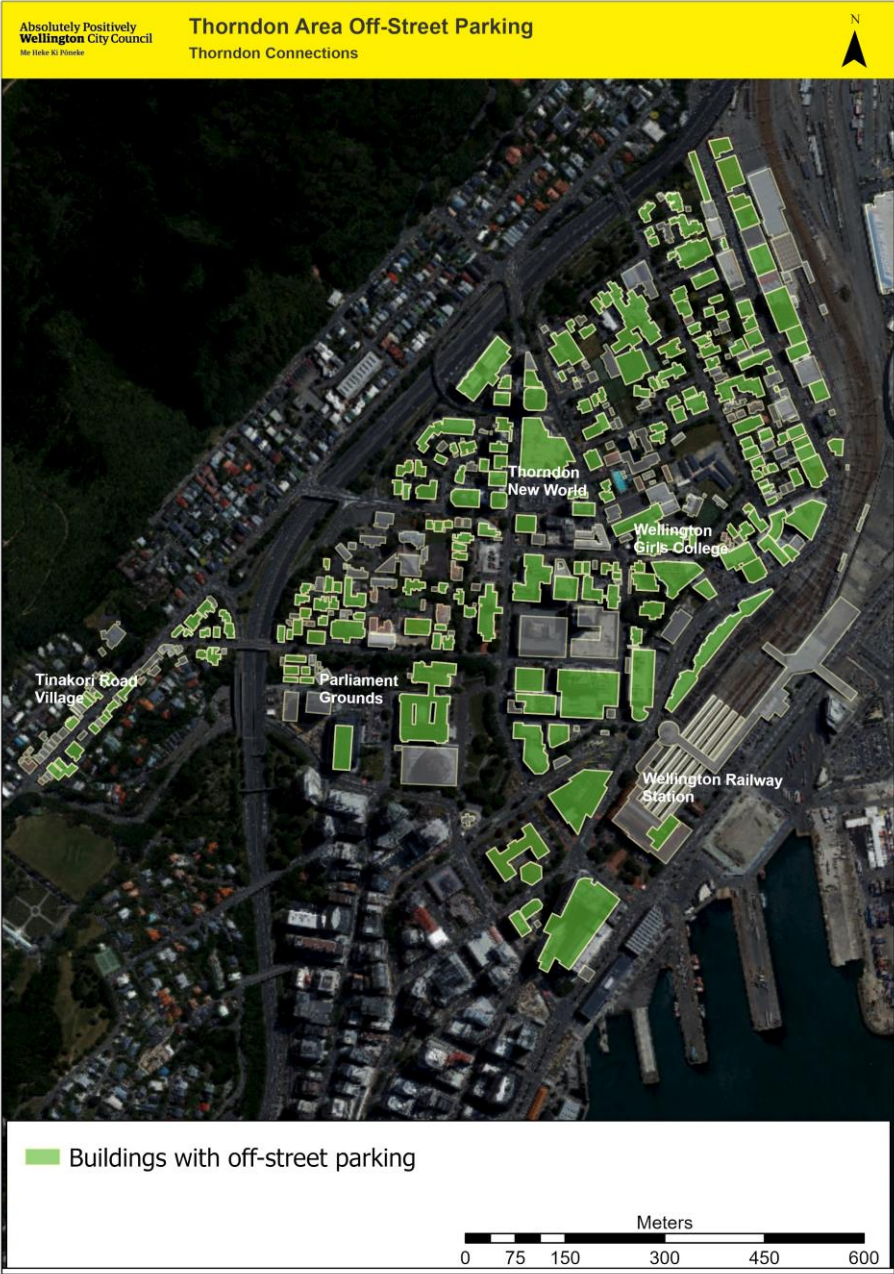


Figure 3 Thorndon Area Off-Street Parking



Figure 4 Publicly available paid off-street carparks

2.5 Impacts of COVID-19

During the time of the survey occurring, New Zealand was in the orange traffic-light setting of the COVID-19 protection framework. During this setting, people are encouraged to work from home where possible. It is therefore possible that there was less commuter demand for parking spaces, and more residential demand during the survey period. Because this potential impact is difficult to quantify, the data obtained has not been modified.

3 Molesworth Area

The Molesworth Area includes Molesworth Street, Hawkestone Street, Pipitea Street, and Kate Sheppard Place:



Figure 5 Molesworth Survey Area: Key Locations

3.1 About the area

The Molesworth Area is largely a business and government zone. This area includes apartments, businesses, cafes, and shops - notably New World, Wellington Cathedral of St Paul, the National Library, government and diplomatic offices, including the Ministry of Health, the Court of Appeal, the Police National Headquarters and Parliament grounds. There is also a new development occurring at 61 Molesworth Street that is due for completion in 2025.

The transitional walk, bike, and bus improvements include a separated bike lane on the right-hand side of Molesworth Street heading uphill, with a small section of two-way cycleway between Lambton Quay and Aitken Street removing all parking on this side. Parking on the left-hand side is proposed to remain, with minimum changes to parking on side streets.

Pipitea Street connects Molesworth Street and Mulgrave Street, with minimum proposed changes. The adjacent land use is mainly diplomatic facilities and a large high school including the Royal Thai Embassy, High Commission of India, Fiji High Commission, Cook Islands Commission, Department of Internal Affairs – Head Office, New Zealand Rugby Union and Wellington Girls' College.

Kate Sheppard Place connects Molesworth St and Mulgrave St and can only be entered from the Molesworth Street end currently. It is proposed to become one way only in the direction from Molesworth Street to Mulgrave Street. The general land use of the street is government facilities, apartments, and cafes/pubs. More widely, this section houses Ministry of Justice, Wellington High Court/New Zealand Law Society Library, Kate Sheppard Apartments, Thistle Inn, The Backbencher and various cafes. There is also a new office development on this street due for completion in 2025.

3.2 Current Parking Inventory

On-street parking in Molesworth Area is mainly P120 paid parking.

For analysis of occupancy and duration of stay, only P120 paid parking spaces are included due to data being provided primarily from smart parking. P120 paid parking makes up 96% of parking in this area, therefore is representative of on-street parking use.

Refer to Appendix B for a map of parking restriction types, and for a map of the current paid parking scheme.

Table 5 Molesworth Area: Parking Inventory

Parking type	Current inventory in area	Current inventory on transitional route
Coupon	25	25
Resident	5	5
P10	1	1
P120 Paid Parking Spaces	186	75
Paid Mobility	1	1
Motorbike	23m	17m
Diplomatic	2	2
Loading Zone	3	2

Car Share	0	0
Total	223	110

3.3 Occupancy and duration of stay

Occupancy and duration of stay data was collected for each street in the Molesworth Area.

Molesworth Street

Figure 7 shows current on-street parking occupancy on Molesworth St during the week and weekend. Only P120 paid parking is included in this analysis (119 spaces). Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

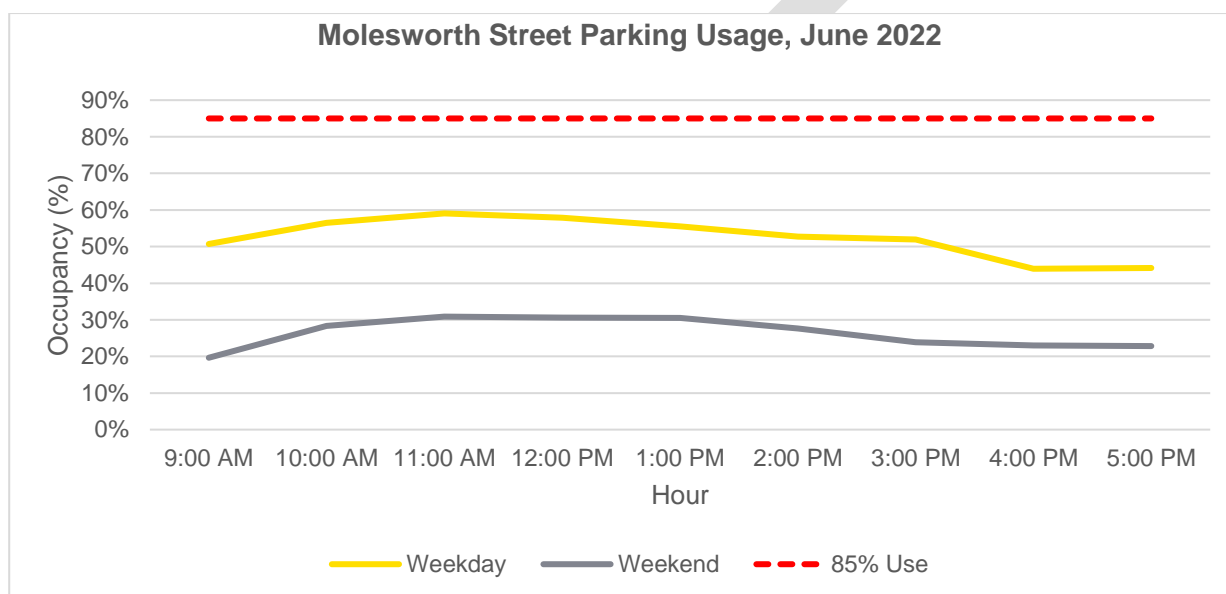


Figure 6 Molesworth Street parking usage 14/06, 18/06/2022

Key observations:

- 83% of the parking in this street is short-stay and compliance with the P120 restrictions is high (93%)
- Both weekday and weekend occupancy is under 85% overall.
 - The weekday survey has higher parking occupancy overall than the weekend survey.
- Occupancy during the weekend survey is consistently below 50%.

Hawkestone Street

Figure 8 shows current on-street parking occupancy on Hawkestone during a weekday and weekend. Hawkestone is composed of 25 coupon and 5 residential parking within the Clifton Resident Permit Scheme.

Note: During the weekend survey, it was raining heavily from 10am -12pm.

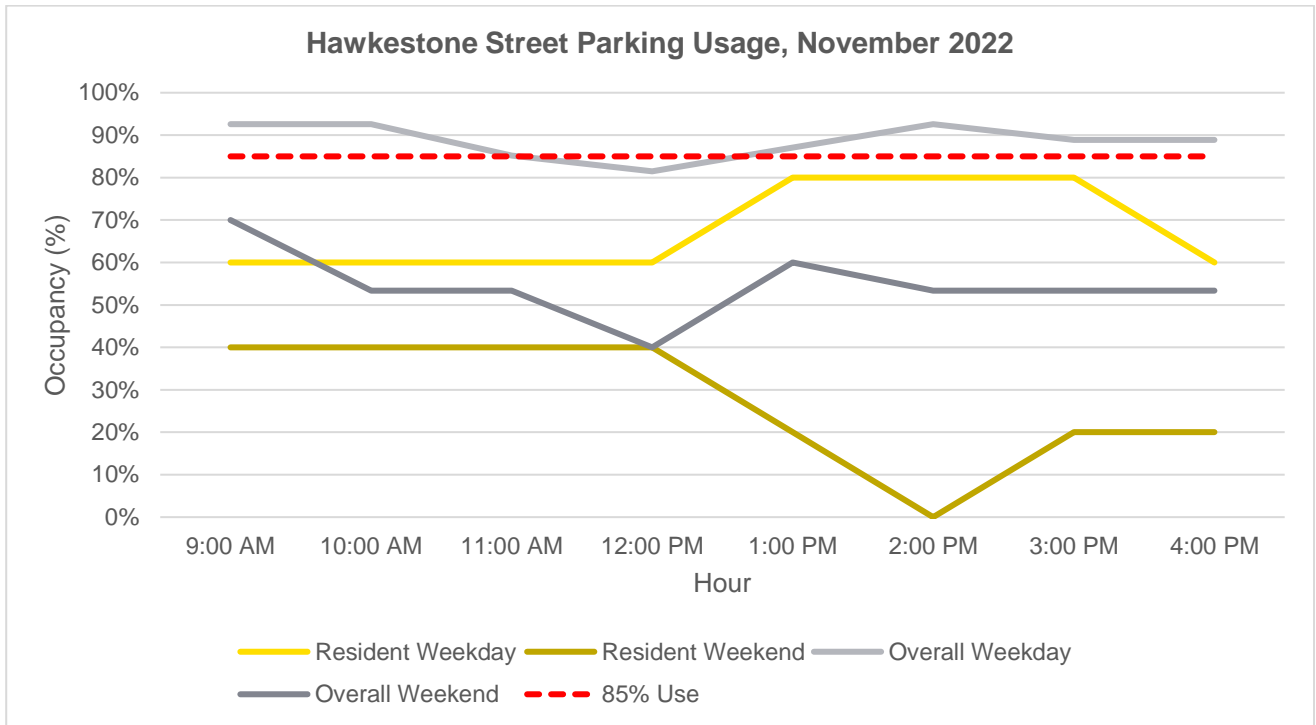


Figure 7 Hawkestone Street parking usage 8/11/22, 12/11/22 (Overall data includes residents parking)

Key Observations:

- During the weekday survey, occupancy peaks above 85% from 9am to around 11am, and then again from 1pm onwards.
- During the weekday, resident parking is consistent from 9am to midday at 60% before increasing to 80% at 3pm.
- During the weekend, parking occupancy is consistently below 85%.
- The overall parking occupancy pattern on Hawkestone Street is almost entirely influenced by the coupon park users due to coupon parking being around 83% of parking in the space.

Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

Note: due to low number of resident spaces, numbers are highly variable.

Key observations:

- During the weekday survey, short-stay visitors make up 45% of users compared to long-stay commuters at 31%.
- Weekday surveys have a relatively higher proportion of short-stay use on Hawkestone St compared to the weekend counts.
 - Short-stay behaviour on the weekend is recorded at a lower proportion of 21% compared to long-stay behaviour at 73%.
- All resident space users parked for over two hours on the weekend.
 - Some of the coupon spaces may be used by resident users with coupon exempt permits.

Pipitea Street

Figure 9 shows current on-street parking occupancy on Molesworth St during a weekday and weekend. Only P120 paid parking is included in this street survey (29 spaces).

During the time of the survey, construction in the area did not affect the use of on-street car parks. Duration of stay data was used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

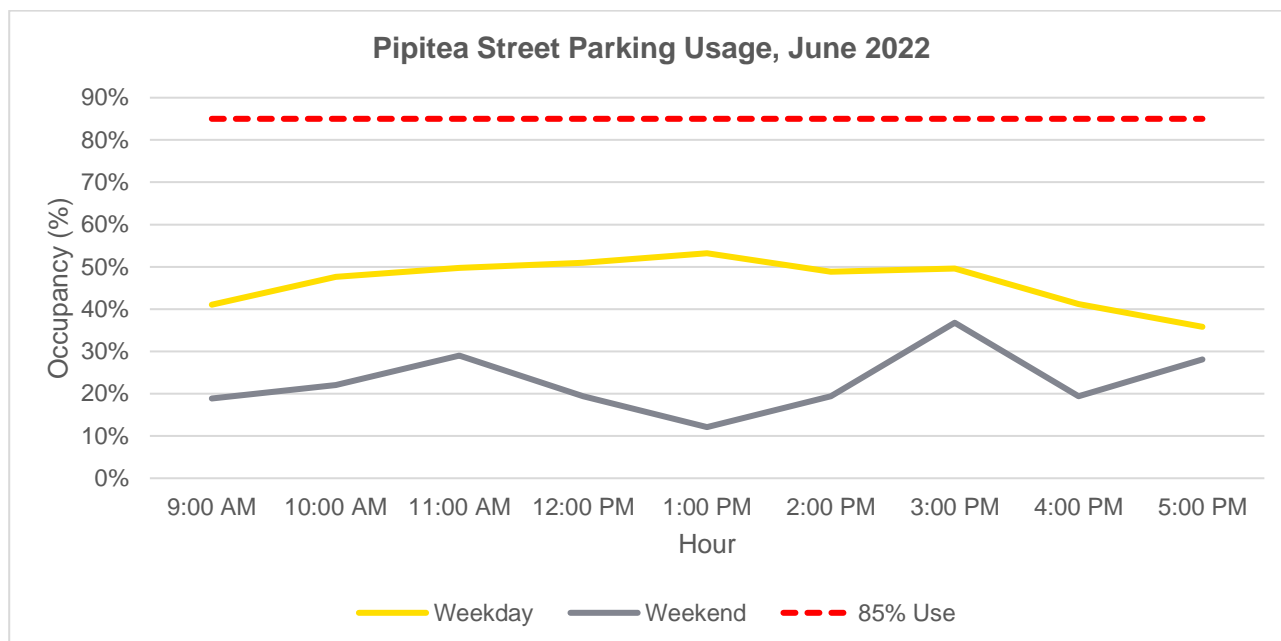


Figure 8 Pipitea Street parking usage 14/06, 18/06/2022

Key observations:

- Both weekdays and weekends during the survey days are consistently well below 85% occupancy.
- Most of the parking behaviour is compliant with P120 parking restrictions (96% of parking users).

Kate Sheppard Place

Figure 10 shows current on-street parking occupancy on Kate Sheppard Place during a weekday and weekend. Only P120 paid parking is included in this street survey (38 spaces).

During the time of the survey conducted, there was no construction occurring along the street to impact survey results. Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

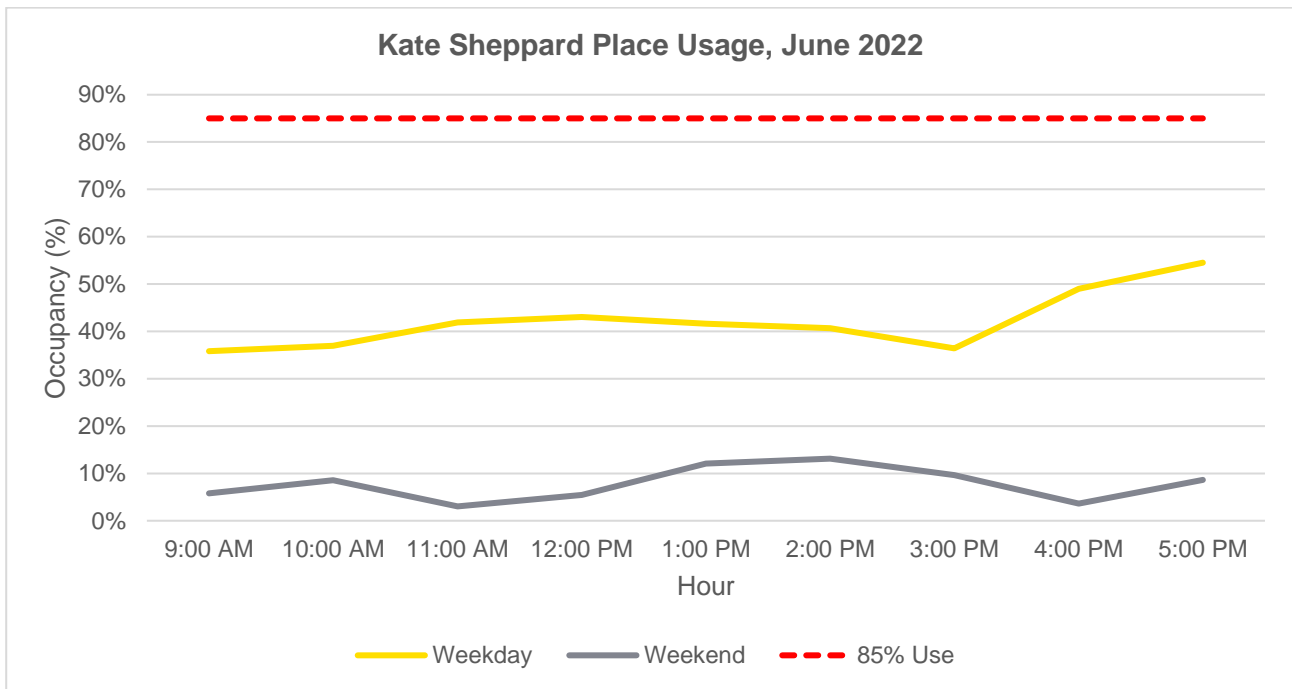


Figure 9 Kate Sheppard Place Parking Usage 2/06 - 26/06/2022

Key observations:

- During both survey periods, occupancy is well below 85% occupancy.
- During the weekday survey, occupancy stays below 50% until around 4pm.
- Occupancy during the weekend survey does not peak above 20% for the whole survey period.
- Most of the parking behaviour is compliant with P120 parking restrictions (91% of parking users).

3.4 Impacts of Thorndon Connections project: Molesworth Area

The proposed changes in the Molesworth Area will primarily remove all parking on the right-hand side heading up Molesworth Street. This will result in a 32% reduction in paid on-street parking in the Molesworth Area. The changes proposed for Pipitea Street will result in the change of six P120 spaces. Hawkestone Street and Kate Shepard Place have no proposed changes to parking.

The table below captures these changes and discusses their possible impacts on various user groups.

Refer to Figure 27 for map of impacted parking.

Table 6 Proposed on-street parking changes in Molesworth Area

Street	Existing parking	Proposed parking remaining	Expected parking users	Potential impacts
Molesworth Street	P10 - 1 P120 Paid – 119 Mobility - 1 Motorbike – 17m Loading Zone – 1	P10 - 1 P120 Paid – 46 Mobility – 1 Motorbike – 12m Loading zone – 1 Taxi parking – 2	The expected users are short stay visitors to business and other facilities in the area.	Reduction of short-stay parking may result in people needing to walk further to their destination. Motorbike parking is also reduced and relocated further away from current location; demand shows the proposed space should be sufficient but there may be impact on

		Car Share – 2		these users as they may have more difficulty finding a park or need to walk further to their destination.
Hawkestone Street	Coupon – 25 Resident - 5	No proposed changes	The expected users are residents and commuter coupon permit holders.	Reduction of short-stay parking on Molesworth St may result in more demand for coupon parking on Hawkestone Street
Pipitea Street	P120 Paid – 29 Diplomat – 2	P120 Paid – 23 Diplomat – 5 Mobility – 1	Expected users to Pipitea St are short-stay visitors and diplomats accessing the embassies and other facilities.	Reduction of short-stay parking on Pipitea St during weekdays may result in higher use of the remaining short-stay parking in the area. Some visitors may need to walk further to their destination. Diplomatic visitors and mobility park users will find it easier to park in this area.
Kate Sheppard Place	P120 Paid – 38 Loading Zone – 2 Motorbike – 6m	No proposed changes	Expected users are short-stay visitors to the area. The predominantly P120 paid on-street parking available to the public supports this user type.	Reduction of short-stay parking on Molesworth St may result in more demand for P120 spaces on Kate Sheppard Place.
Total	223	152		

The effects of these changes on people currently parking in this area can be assessed by looking at parking occupancy of the area and the ease with which nearby alternative parking can be found.

As Molesworth Street is the primary street being proposed for parking reductions in this section, understanding the availability of other parking options and how the displaced demand could affect these areas is key.

The occupancy data below refers to peak hours of demand. Depending on the street use, each street may have a different peak period. However generally these are between 1pm and 3pm on weekdays, in this area.

Figure 11 shows the current use of all these spaces during the weekday and weekend survey. The “85% After” dotted light red line shows the number of spaces available at the 85% occupancy threshold after parking changes are implemented.

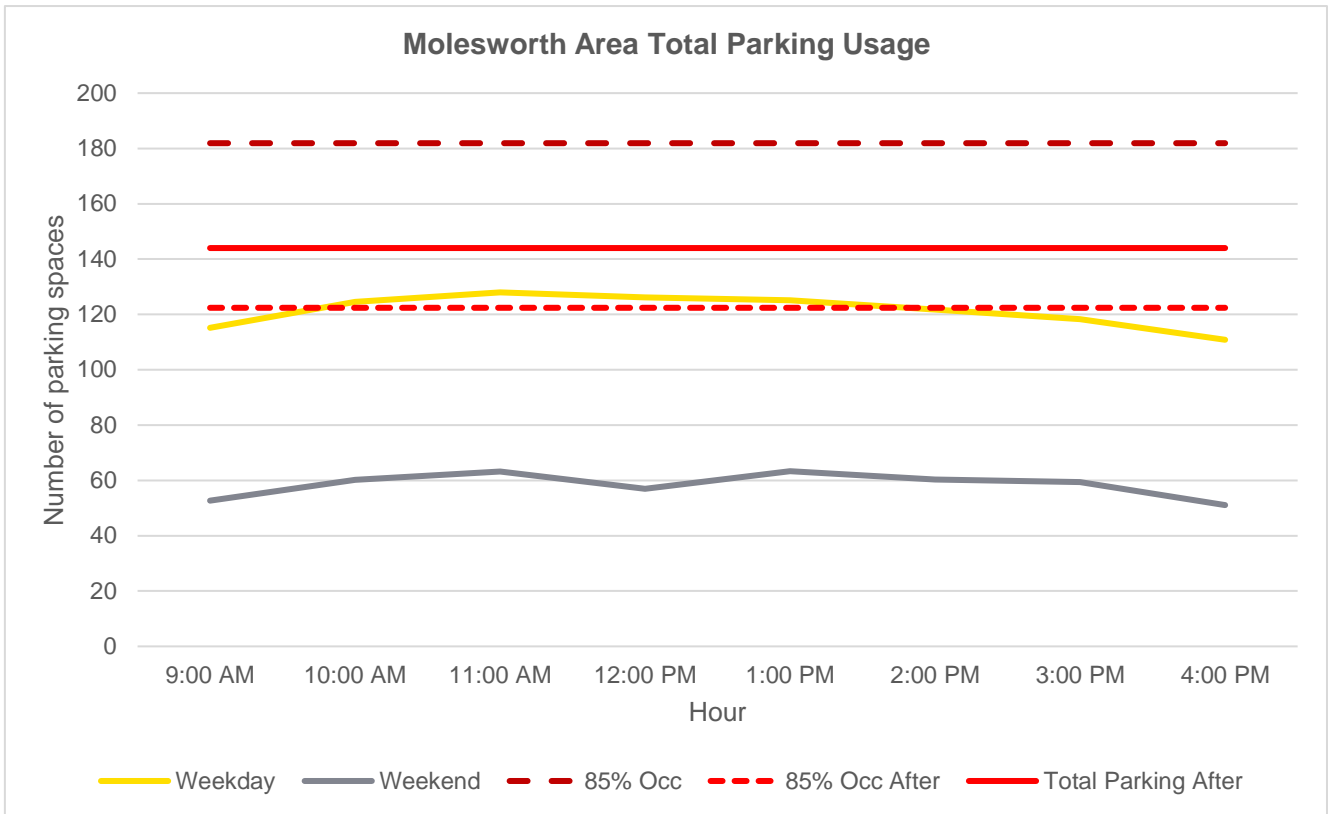


Figure 10 Molesworth Area Total Parking Usage

Key observations:

- After proposed parking changes are made, weekday occupancy is expected to be at 85%, and slightly above during peak hours from around 10am to 2pm. Therefore, short-stay users may find it harder than at present to find a park during peak hours on a weekday.
- Weekend occupancy after proposed changes are made is well below 85%. Therefore, users are expected to easily find a park on weekends after changes are made.

3.5 Mitigation of Impact: Molesworth Area

The parking being removed in this section is P120 paid parking and motorbike parking.

Prioritisation of Mitigation

Table 7 shows the parking inventory of the area both currently and after parking changes are complete. It also shows the expected average occupancy of each parking type after mitigation, based on the higher weekday survey.

Inline with the WCC Parking Policy 2020 hierarchy for prioritising 'City Fringe and Inner-City Suburbs', in this area residents and car share parking are high priority spaces, and mobility and short-stay (car and motorcycle) are medium priority.

Addressing priority parking needs:

- Two **Car Share** spaces will be introduced outside 85 Molesworth St to introduce options for accessing vehicles without needing to store privately owned vehicles.
- Expected occupancy of **residents parking** on Hawkestone St is still well below 85% after the proposed changes. Therefore, residents aren't expected to be affected after installation.
- The **Mobility** space removed on Molesworth St will be relocated to Pipitea St for continued access to facilities within the area. An extra Mobility Park will be introduced at the Parliament end of Molesworth St as well.
- **Short-stay** parking occupancy is expected to be around 89% during peak times only. This is above the 85% threshold. Therefore, finding short-term parking after installation is expected to become more difficult during the weekday peak demand period.
- One **motorbike** space is proposed for removal on Molesworth Street. To mitigate the impact of this, motorbike parking outside 150 Molesworth St will be extended by one current car parking space, resulting in no overall impact to motorbike parking availability.
- **Diplomatic parking** is not addressed in the parking hierarchy. However, it has been identified as high demand in this area. Therefore, an additional three diplomatic parking spaces will be introduced in Pipitea Street.

Table 7 Molesworth Area parking inventory

Parking type	Current inventory	Inventory after installation	Net changes	Current Average Occupancy	Average expected occupancy
Coupon	25	25	No change	83%	83%
Resident	5	5	No change	66%	66%
P10	1	1	No change	N/A	N/A
P120 Paid Parking Spaces	189	109	- 80	57%	99%
Paid Mobility	1	2	+1	N/A	N/A
Motorbike	(23m)	(18m)	(-5m)	80%	80%
Diplomatic	2	5	+3	N/A	N/A
Loading Zone	3	3	No change	N/A	N/A
Car Share	0	2	+2	N/A	N/A

Parking type	Current inventory	Inventory after installation	Net changes	Current Average Occupancy	Average expected occupancy
Taxi stand	0	2	+2	N/A	N/A

Mitigation and impacts for parking user type

Table 8 describes the proposed mitigation and level of impact for each parking user type after the proposed transitional walk, bike and bus improvements in the Molesworth Area.

Table 8 Mitigation and impacts on parking user types.

Parking user type	Level of impact after	Assessment of impact	Proposed mitigation
Visitor (short-stay) (P10, P120 Paid Parking and Coupon)	Moderate	Overall occupancy for visitor space is expected to rise above 85%. Users may find it harder to find a park during the peak times.	Short-stay visitors will be encouraged to use other modes of transport where possible or redirected to similar parking on side streets and nearby off-street paid parking. Additional bike parking will be provided to cater for uptake in bike users in this area.
Commuter (Coupon)	None	Only 25 coupon parks exist within the area and no proposed changes are planned.	No mitigation required
Resident (Resident Parking)	None	No change is being made to residents' parking.	No mitigation required
Mobility (Mobility Parking)	Very Low (Positive)	The relocation of the mobility space will still allow users to access facilities maintained within a reasonable distance. A new mobility parking space on Molesworth St will provide an additional opportunity for parking.	Redirect mobility park users to relocated park on Pipitea St or new park on Molesworth St
Diplomat (DC Parking)	None (Positive)	After installation, demand for parking on Pipitea St is expected to rise. Further prioritising diplomatic space will ensure access after installation.	Additional three diplomat spaces on Pipitea St.
Motorbike	Very Low	The relocation of motorbike parking results in continued access however may be a small increase in the distance users may need to travel to reach their destination.	Relocate motorbike parking on 150 Molesworth St to near 127 Molesworth Street, extending existing motorbike park.

4 Murphy/Mulgrave Area

The Murphy/Mulgrave Area includes Murphy Street, Mulgrave Street, Halswell Street, and Turnbull Street:

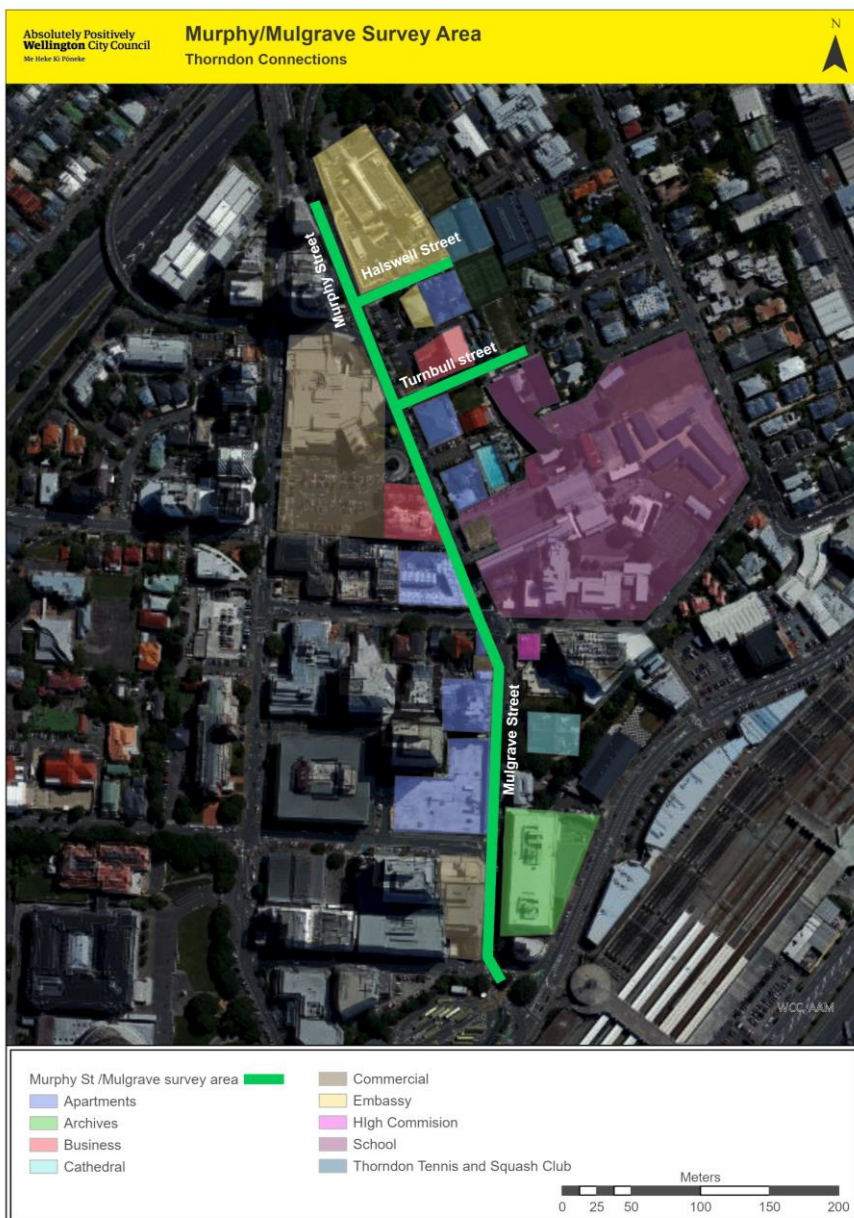


Figure 11 Murphy/Mulgrave Area: Key Locations

4.1 About the Area

The transitional walk, bike, and bus improvements include a separated bike lane on the right-hand side of Murphy and Mulgrave street heading downhill to the intersection of Aitken street, removing all parking on this side of the road. Parking on the left-hand side is proposed to remain in place however there will be some reduction, there is no changes to parking on side streets.

The northern end of the area connects State Highway 1 to Murphy Street, and the southern end connects to Thorndon Quay.

This Area includes the Embassy of the United States, Consular (Visa) Section – Embassy of the People’s Republic of China, Embassy of Argentina, Embassy of Turkey, Cook Islands High Commission, Fiji High Commission, Archives New Zealand Te Rua Maha o te Kāwanatanga, Ministry of Justice, Old St Paul’s, Wellington Region Emergency Management Office, New Zealand

Police Headquarters, New World, Thorndon Pool, Wellington Girls' College, Thorndon School & Community Emergency Hub, and various other businesses and shops.

Note: During the time the surveys were conducted, there was construction on a new business site, south of the Cook Islands High Commission office that may have impacted parking directly outside the site. Refer to Appendix C for a map of construction location.

Halswell St and Turnbull St intersect with the proposed improvements on Murphy Street. On these streets are embassies, educational institutes and sports/recreational areas.

Key agencies and organisations on these streets include the Embassy of the United States, Consular (Visa) Section – Embassy of the People's Republic of China, Royal Society of New Zealand, Wellington Region Emergency Management Office, Thorndon Tennis and Squash Club, Thorndon School and Pipitea Childcare Centre.

Figure 12 shows some of these key locations.

For a map of parking restrictions and of the current paid parking scheme refer to Appendix B.

4.2 Current Parking Inventory

Parking in this Area on Mulgrave Street is predominantly P120 paid parking/Clearway (Mon-Fri, 7-9am), and all parking on Murphy is P120 paid parking.

Table 9 shows the total on-street parking within the Murphy and Mulgrave Area and whether the street is on the Thorndon Connections route.

Table 9 Murphy/Mulgrave Area total parking inventory

Parking type	Current inventory in area	Current inventory on transitional route
Coupon/P120	13	0
Resident	5	0
W.E.M.O	5	0
P120 Paid Parking Spaces	21	14
P120 Paid parking/Clearway (Mon-Fri 7am-9am)	17	17
Bus stop (Mon-Fri 7am-9am, 3pm, 4pm)/P10 Loading zone (Mon-Fri 9am-3pm)/P60 (other times)	1	1
Bus stop (Mon-Fri 7am-9am 3pm, 4pm)/P60 (other times)	1	1
Total	63	33

4.3 Occupancy and duration of stay

Murphy and Mulgrave

For analysis of occupancy and duration of stay, only P120 paid parking spaces are included for these streets due to data being provided primarily from smart parking. P120 paid parking makes up to 95% of parking within this area and is therefore representative of on-street parking use.

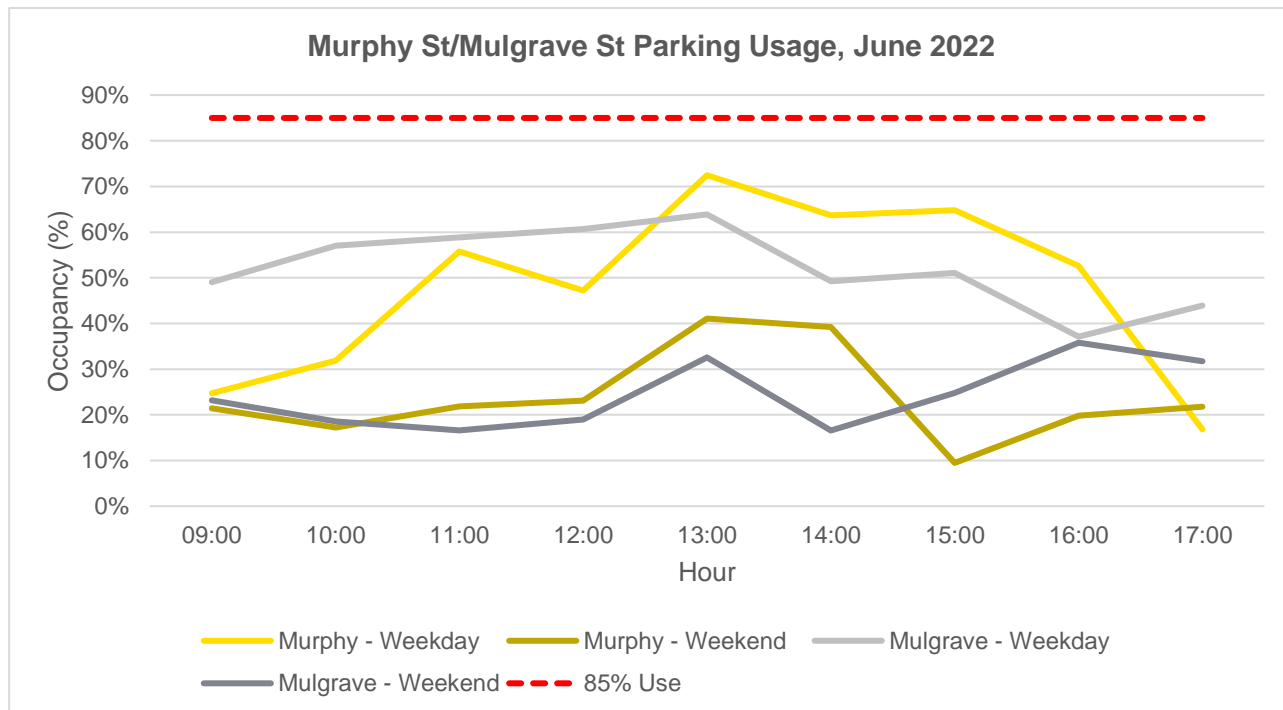


Figure 12 Murphy Street and Mulgrave Street parking usage 2/06 - 26/06/2022

All parking on the western side of the roads and six spaces on the eastern side are proposed to be removed due to the installation of the Thorndon Connections transitional project.

Key observations:

- On both weekend and weekday survey days, occupancy is below 85%.
 - Occupancy during the weekend survey days is consistently lower than 50%.
- During the weekday, Murphy Street peaks above 60% around 1pm - 3pm, before dropping dramatically below 20%.
- Mulgrave Street is consistently above 50% from around 10am - 1pm before decreasing to below 50% for the rest of the survey period.
- During the weekend, occupancy is well below 50%. Therefore, in line with the WCC Parking Policy 2020, parking here is considered inefficiently used.

Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

Key observations:

- During both the weekday and weekend survey, short-stay users (less than 2 hours) are the highest proportion of users, at 89%, on Murphy Street and Mulgrave Street.
- Murphy Street was only used for short-stay parking during the weekend survey.

Halswell Street and Turnbull Street

For analysis of occupancy and duration of stay, coupon and P120, Resident and W.E.M.O spaces on Halswell and Turnbull were considered.

During the period of the survey completed, there was no construction occurring that affected the outcome of the parking survey.

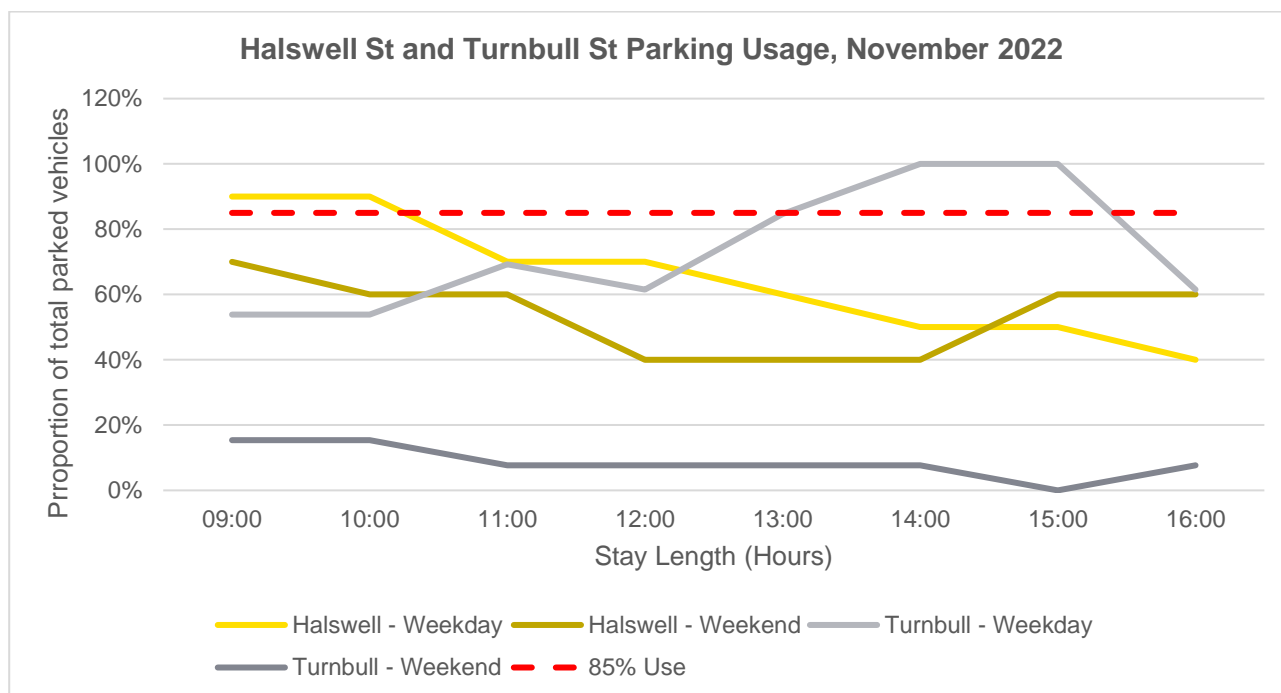


Figure 13 Halswell St and Turnbull St parking usage 8/11 - 12/11/2022

Key observations:

- During the weekday surveys, average parking occupancy is below 85%.
- The weekday survey shows occupancy on Halswell St peaking above 85% from 9am - 10am, before a general decreasing trend for the rest of the survey period.
- During the weekday survey, occupancy on Turnbull St peaks above 85% in the afternoon around 1pm, before decreasing after 3pm.
- During the weekend, Halswell St has a relatively higher general occupancy compared to Turnbull St.
- During the weekend, Turnbull St occupancy doesn't exceed 20%.

4.4 Impacts of Thorndon Connections project: Murphy/Mulgrave Area

Proposed changes would remove 40% of the maximum available P120 parking in the area, with no effect on other parking types. During peak clearway hours, the available P120 parking decreases by 62%.

Refer to Figure 27 for a map of impacted parking.

Table 10 Proposed on-street parking changes on Murphy/Mulgrave Area

Street	Existing parking	Proposed parking remaining	Expected parking users	Potential impacts
Murphy Street	P120 Paid – 14 Bus Stop/Loading	P120 Paid – 1 Bus Stop/Loading	The expected users are short-stay visitors to the area for school and to	Lack of short-stay parking may result in people needing to walk

Street	Existing parking	Proposed parking remaining	Expected parking users	Potential impacts
	Zone/P60 – 1 Bus Stop/P60 - 1	Zone/P60 – 1 Bus Stop/P60 – 1 P10 pick up and drop off – 4 within the Thorndon Pool parking area	other facilities.	further to their destination or use paid parking facilities.
Mulgrave Street	P120 Paid – 7 P120 Paid/Clearway – 17	P120 Paid – 7 P120/Clearway - 5	The expected users are short-stay visitors to the area for school and to other facilities.	Lack of short-stay parking on Murphy St and reduced short-stay parking may result in more demand for P120 spaces.
Halswell Street	Coupon/P120 - 10	No proposed changes	Expected users are short-stay visitors to the embassies and other facilities. As well as commuters with coupon permits.	Lack of short-stay parking on Murphy St may result in more demand for Coupon/P120 spaces.
Turnbull Street	Coupon/P120 - 3 Resident – 5 W.E.M.O – 5	No proposed changes	Expected users are short-stay visitors for school and to other facilities. As well as Resident and W.E.M.O staff.	Lack of short-stay parking on Murphy St may result in more demand for the Coupon/P120 spaces.
Total	63	44		

Figure 15 shows both the current and expected use of all these spaces during the weekday and weekend. The “85% After” dotted light-red line shows the number of spaces available at the 85% occupancy threshold after parking changes are implemented.

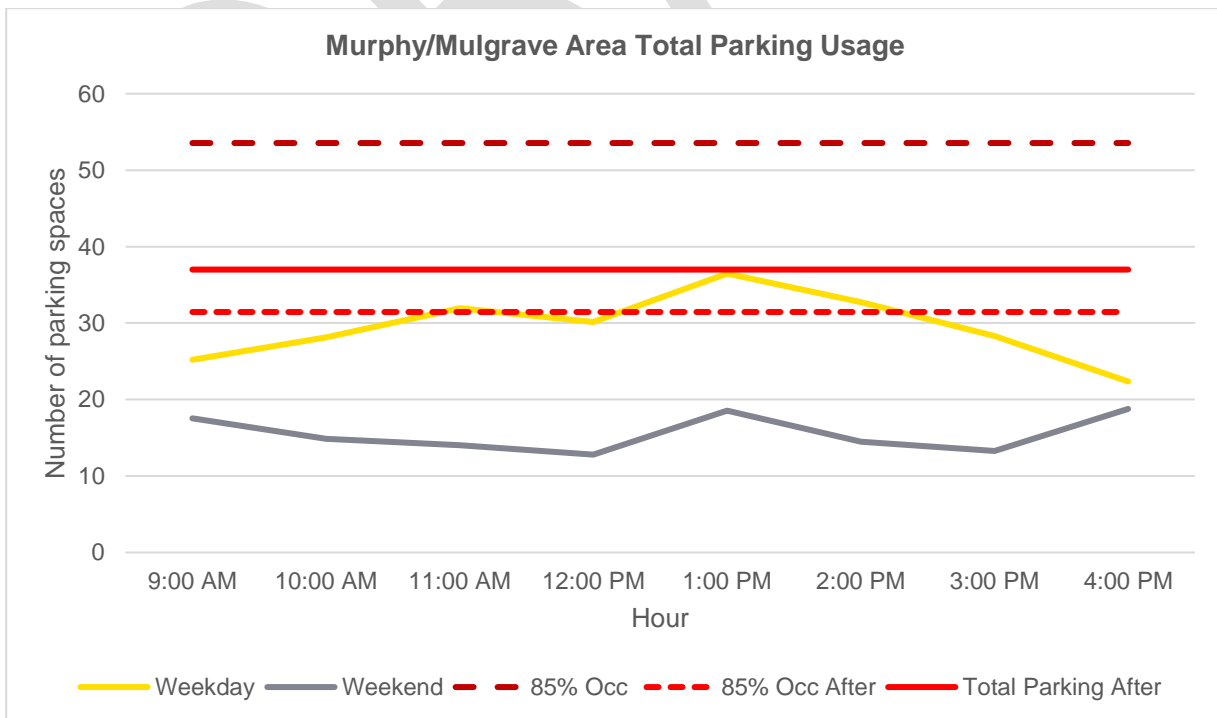


Figure 14 Murphy St and Mulgrave Area total parking usage

Key observations:

- Weekday occupancy is expected to peak above 85% after installation between around 12pm to 3pm.
- Weekend occupancy is expected to remain well below the 85% after installation.

4.5 Mitigation of Impact: Murphy/Mulgrave Area

The parking being removed in this section is all P120 paid parking.

Prioritisation of Mitigation

Table 11 shows the inventory for the area currently, after installation, and after mitigation measures are implemented. Table 20 also shows the expected average occupancy of each parking type after mitigation, based on the higher occupancy weekday survey.

In line with the WCC Parking Policy 2020 hierarchy for prioritising 'City Fringe and inner-City Suburbs', in this area - resident and car share parking are high priority spaces, and mobility and short-stay (car and motorcycle) are medium priority.

Addressing priority parking needs:

- Expected **resident parking** occupancy on Turnbull St is currently at 100% on average. However, residential properties on Turnbull, Halswell and Mulgrave streets are not eligible for resident or coupon exempt permits so this usage is likely from residents living elsewhere in Thorndon.
- **Short-stay parking** is expected to be above 100% occupancy after parking removal. Short-stay users will need to find alternative short-stay parking within a 3-5 minute walk from the area or find alternative off-street parking.
- **Four P10** (8:30am-9:15am and 2:30pm-3:30pm Mon to Fri) pick up and drop off spaces at Thorndon Pool carpark will be introduced to help with peak occupancy hours within the school term outside of summer when this parking is for Pool customer use only.

Table 11 Murphy/Mulgrave Area parking inventory

Parking type	Current inventory	Inventory after installation	Net changes	Current Average Occupancy	Average expected occupancy
P120/Coupon	13	13	No change	74%	74%
Resident	5	5	No change	100%	100%
P10	0	4	+4	N/A	N/A
P120 Paid Parking Spaces	38	12	-26	47%	100%
W.E.M.O	5	5	No change	0%	0%

Mitigation and impacts for parking user type

Table 12 describes the proposed mitigation and level of impact for each parking user after the proposed transitional walk, bike and bus improvements for the Murphy/Mulgrave Area.

Table 12 Mitigation and impacts on Murphy/Mulgrave Area parking user types

Parking user type	Level of impact after	Assessment of impact	Proposed mitigation
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Visitor (short-stay)	Moderate	Occupancy for short-stay visitors' spaces is expected to reach full capacity after parking reduction in this area.	<p>Short-stay visitors will be encouraged to use other modes of transport where possible, redirected to similar parking on side streets, or off-street parking. Introduce four P10 spaces to assist with surrounding school pick up and drop offs.</p> <p>As residents of Turnbull, Halswell and Mulgrave St are not eligible for residents or coupon exempt permits, monitoring is recommended with potential to re-allocate current resident parking to short-stay parking in the future.</p>
Commuter	None	Commuter None. No proposed changes. No mitigation required	No mitigation proposed. Commuters low in parking hierarchy and encouraged to use alternative modes of transport or off-street parking facilities.
Resident	Very low	Current resident parking is above 85% occupancy. Users will continue to park out of area or in front of own driveways as currently observed. Residential properties on Turnbull, Halswell and Mulgrave are not eligible for residents or coupon exempt permits.	Encourage residents to use off-street parking where available or consider carshare.

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5 Bunny Area

The Bunny area includes Bunny Street, Lambton Quay, and Stout Street.

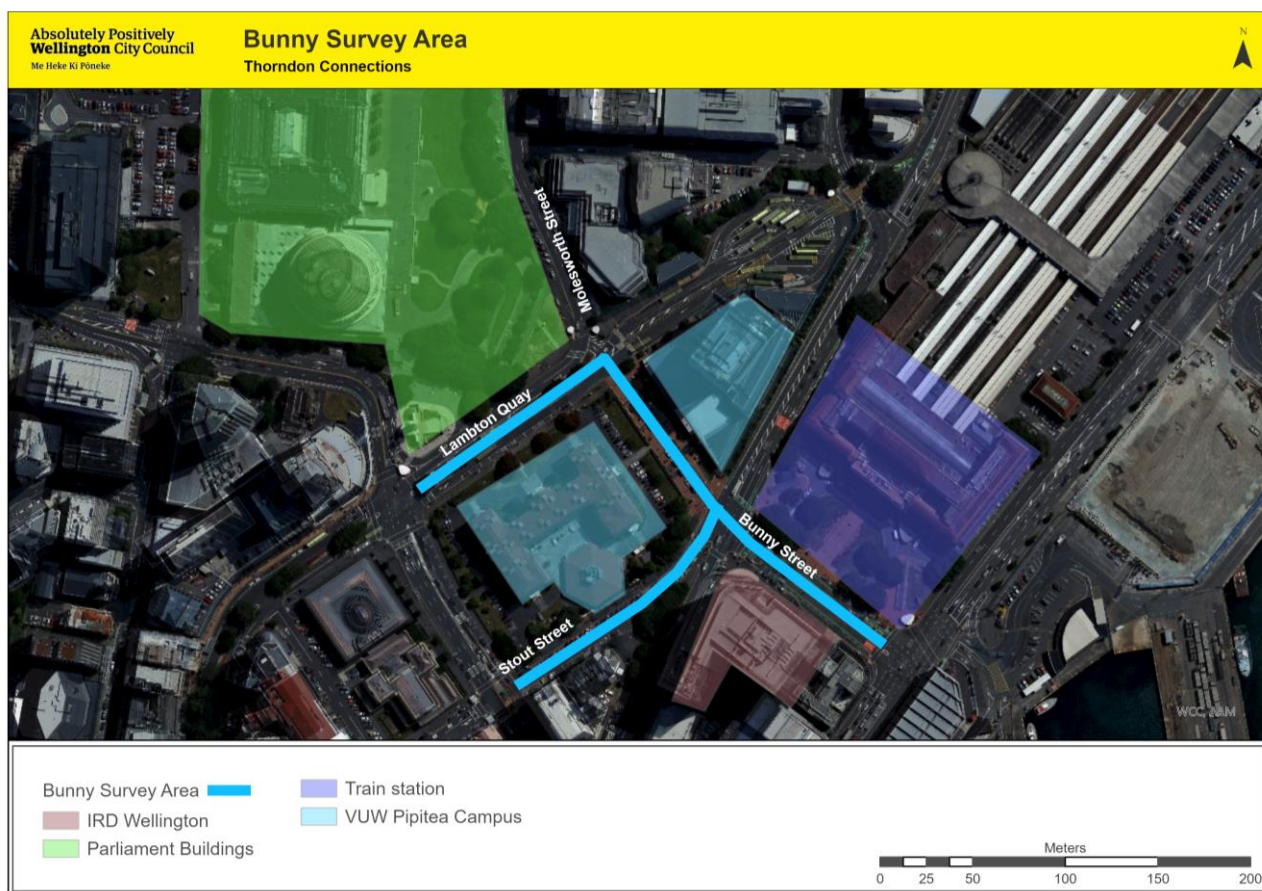


Figure 15 Bunny Area: Key Locations

5.1 About the Area

The transitional walk, bike, and bus improvements include a separated two way bike lane on the south side of Lambton Quay between Whitmore Street and Bunny Street removing all parking in this section. Bunny Street is proposed to have traffic calming measures and the bus stop relocated to the western side to allow for safer counter flow biking. Proposed parking changes on Stout St include changing from angled to parallel parks and a relocation of a bus stop from Lambton Quay. This area has a range of uses and a variety of parking behaviour is observed.

This area includes the Wellington Station, Victoria University, Parliament grounds and various businesses. The southern end of Bunny St connects to Waterloo Quay and the waterfront. The southern end of Lambton Quay connects to the business and the commercial zone of Lambton Quay.

There was no construction occurring when the survey was conducted. However, the bus interchange upgrade is now under construction and all previous paid parking on the north end of Lambton Quay has been temporarily removed.

Stout St does not have walk or bike improvements planned but parking will be impacted by the proposed changes to accommodate the bus stop it has therefore been considered on the route. Key locations on Stout St include Victoria University of Wellington Pipitea Campus. No construction was occurring during the survey period.

5.2 Current Parking Inventory

Table 13 shows the total on-street parking within the Bunny Area and on the Thorndon Connections route.

Table 13 Total on-street parking – Bunny Area

Parking type	Current inventory in area	Current inventory on transitional route
P120 Paid Parking Spaces	49	49
Paid Mobility	5	5
Loading Zone	2	2
Bus Stop	1	1
Taxi Stand	6	6
Total	57	57

5.3 Occupancy and duration of stay

Within Bunny Street and Lambton Quay, all parking is predominantly paid parking spaces with a small section of mobility spaces and two loading zones.

Bunny Street

Lambton Quay isn't included in current parking occupancy analysis due to spaces already removed during this report's data collection period for the use of temporary bus stops. Mobility spaces are included in overall occupancy analysis.

Note: due to a low number of smartparking spaces within the survey area, numbers are highly variable (14 parking spaces).

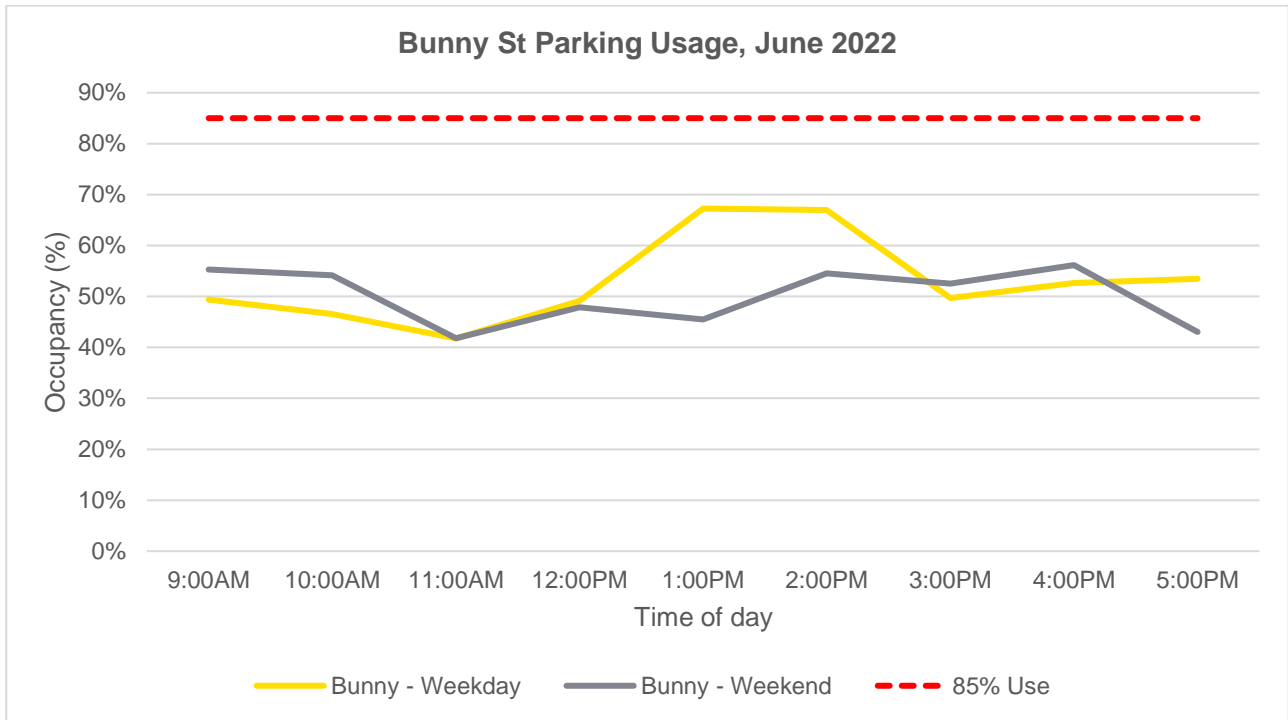


Figure 16 Bunny St parking usage 2/06 - 26/06/2022

Key observations:

- On both survey days, overall occupancy is below 85%.
- During the weekend survey, occupancy peaks around 67% from 1pm to 2pm before decreasing to around 50%.
- The weekend survey has a relatively consistent occupancy trend (between 40% and 60%) compared to the weekday survey.

Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

- Overall, these profiles show Bunny St parking users are mainly short-stay visitors.
- During the weekday, the space is used for relatively longer stays.
- No vehicles parked for more than four hours during the weekend.

Stout Street

On Stout Street, all parking is P120 paid parking spaces and taxi stands that have been relocated as a result of the Botanic Gardens to City project (Installed February 2023).

Figure 18 shows parking usage during the weekday and weekend survey on Stout St. All parking included in analysis is a paid parking space.

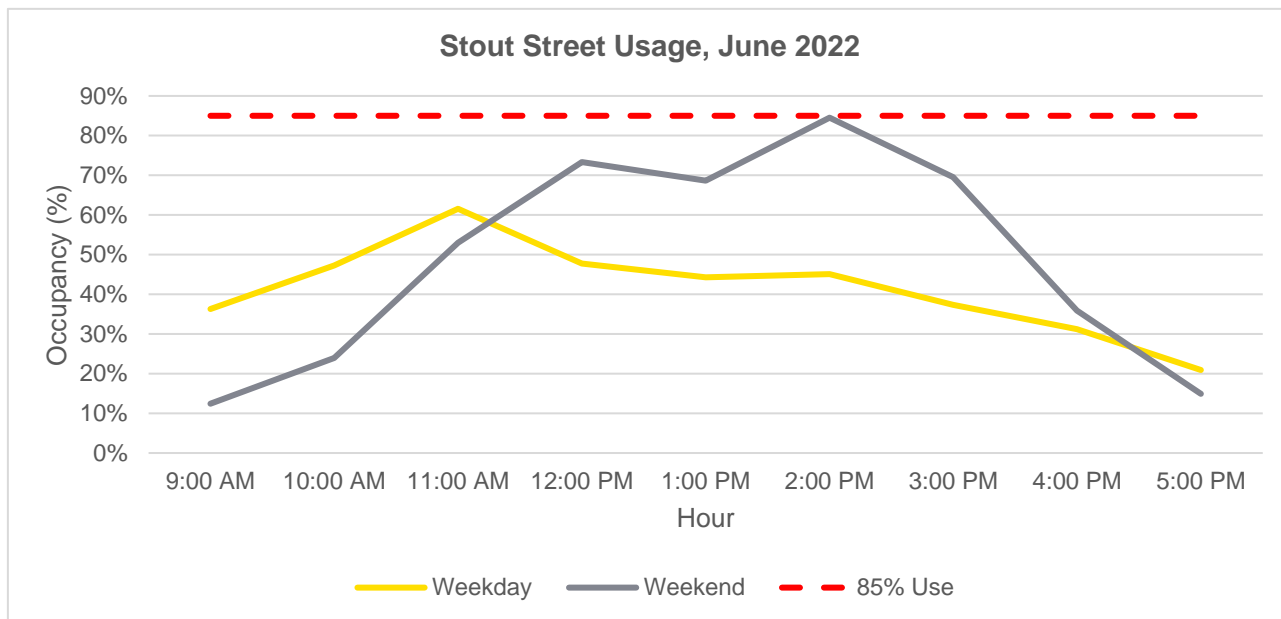


Figure 17 Stout Street parking usage profile 14/06, 18/02/2022

Key observations:

- On both survey days, overall occupancy is below 85%.
- During the weekend survey, occupancy peaks around 85% at 2pm then drops significantly to below 20% by 5pm.
- The weekday survey peaks around 11am at just above 60% before steadily decreasing to around 20% by 5pm.
- Overall, these profiles show Stout St parking users are mainly short-stay visitors.

Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

- Compliance with P120 restrictions is at 90% during the week, and 81% during the weekend survey.
- Both the weekday and weekend 2% of users are long-stay (4+ hours).

5.4 Impacts of Thorndon Connections project: Bunny Area

The primary effects of the Thorndon Connections project on the Bunny Street area will be the adjustment and reduction of parking in Stout Street. During 7:00am-9:00am and 3.30pm-6:00pm Monday – Friday, the majority (75%) of parking here will be used for bus stop with P120 parking retained at other times. Other parking users will see no effect.

Refer to Figure 27 for map of impacted parking.

Table 14 Proposed on-street parking changes on Bunny Area

	Existing parking	Proposed parking remaining	Expected parking users	Potential impacts
Bunny Street	P120 Paid – 9 Loading Zone – 2	No Changes Proposed, however there will be a reduction in the loading zone and bus stop	The expected users are short-stay visitors to the area to access Victoria University campus or	The reduction of short-stay parking on Stout St may put more demand on Bunny St P120

	Mobility – 5 Bus Stop - 1	hours which is reduced from at all times to bus stop 7:00am-9:00am and 3.30pm-6:00pm Monday – Friday and loading zone at all other times.	Mobility Park users.	parking. The reduction loading zone times may impact on delivery drivers.
Stout Street	P120 Paid – 31 Taxi stand – 6	P120 Paid – 20 (Between 9am-3:30pm Monday – Friday, At all times Saturday and Sunday) Taxi stand – 6	The expected users are short-stay visitors to the area to access business and commercial facilities.	Lack of short-stay parking may result in people needing to walk further to their destination or use paid parking facilities.
Total	57	47		

Figure 19 shows the current use of all these spaces during the weekday and weekend survey. The “85% After” dotted light-red line shows the number of spaces available at the 85% occupancy threshold after parking changes are implemented.

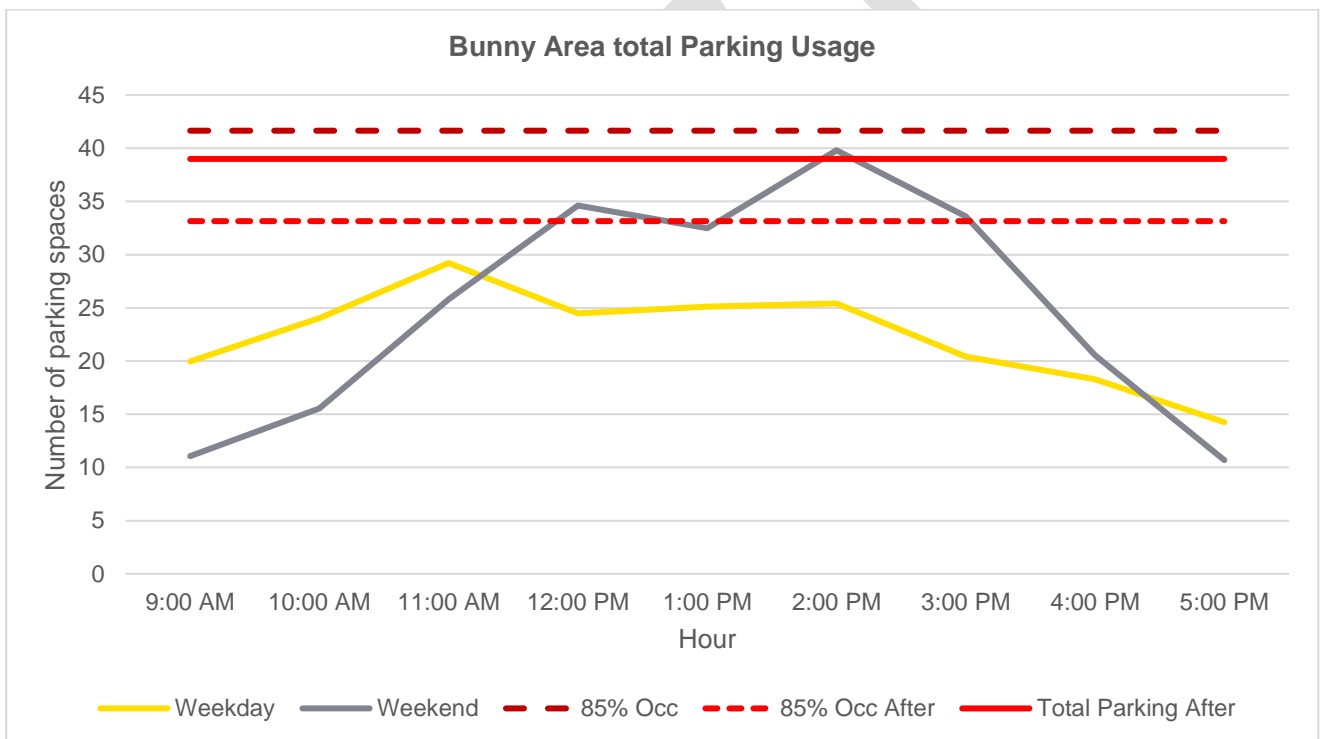


Figure 18 Bunny Area total parking usage

Key observations:

- Weekday parking occupancy is expected to be under 85% after installation.
- Weekend parking occupancy is expected to peak above 85% between 1pm - 3pm and exceed 100% at 2pm.
- Parking in the Bunny area is expected to be easy for users to find vacant spaces during weekdays but difficult on weekends between 1pm-3pm.

5.5 Mitigation of Impact: Bunny Area

P120 paid parking, bus stops and a loading zone are being changed or removed in this section.

Prioritisation of Mitigation

Table 15 shows the inventory for the area currently, after installation, and after mitigation measures are implemented. It also shows the expected average occupancy of each parking type after mitigation, based on the higher occupancy weekend survey.

Inline with the WCC Parking Policy 2020 hierarchy for prioritising 'Central City', within this Area short-stay (car and motorcycle), loading zones, and mobility spaces are high priority.

Table 15 Bunny Area parking inventory

Parking type	Current inventory	Inventory after installation	Net changes	Current Average Occupancy	Average expected occupancy
P120 Paid Parking Spaces	49	39	-10	63%	79%
Loading Zone	3	3	No change (Reduction in hours)	N/A	N/A
Mobility	5	5	No Change	N/A	N/A
Taxi stands	6	6	No Change	N/A	N/A

Mitigation and impacts for parking user type

Table 16 describes the proposed mitigation and level of impact for each parking user type after the Thorndon Connections installation for the Bunny Area.

Table 16 Bunny Area Mitigation and impacts on parking user types

Parking user type	Level of impact after	Assessment of impact	Proposed mitigation
Visitor (short-stay)	Low	Average current short-stay parking is expected to stay below 85% occupancy after installation	Short-stay visitors will be encouraged to use other modes of transport where possible, redirected to similar parking on side streets or to use off-street parking. Additional bike parking will be provided outside Victoria University to cater for uptake in bike users in this area.
Commuter	None	Commuter None Current parking within the scope area doesn't accommodate commuter parking. No mitigation required.	No mitigation required.
Mobility	None	No changes proposed.	No mitigation required.
Loading Zones	None	Loading Zones will not be affected by proposed changes, only a reduction in hours	No mitigation proposed

6 Hill Street and Tinakori Road

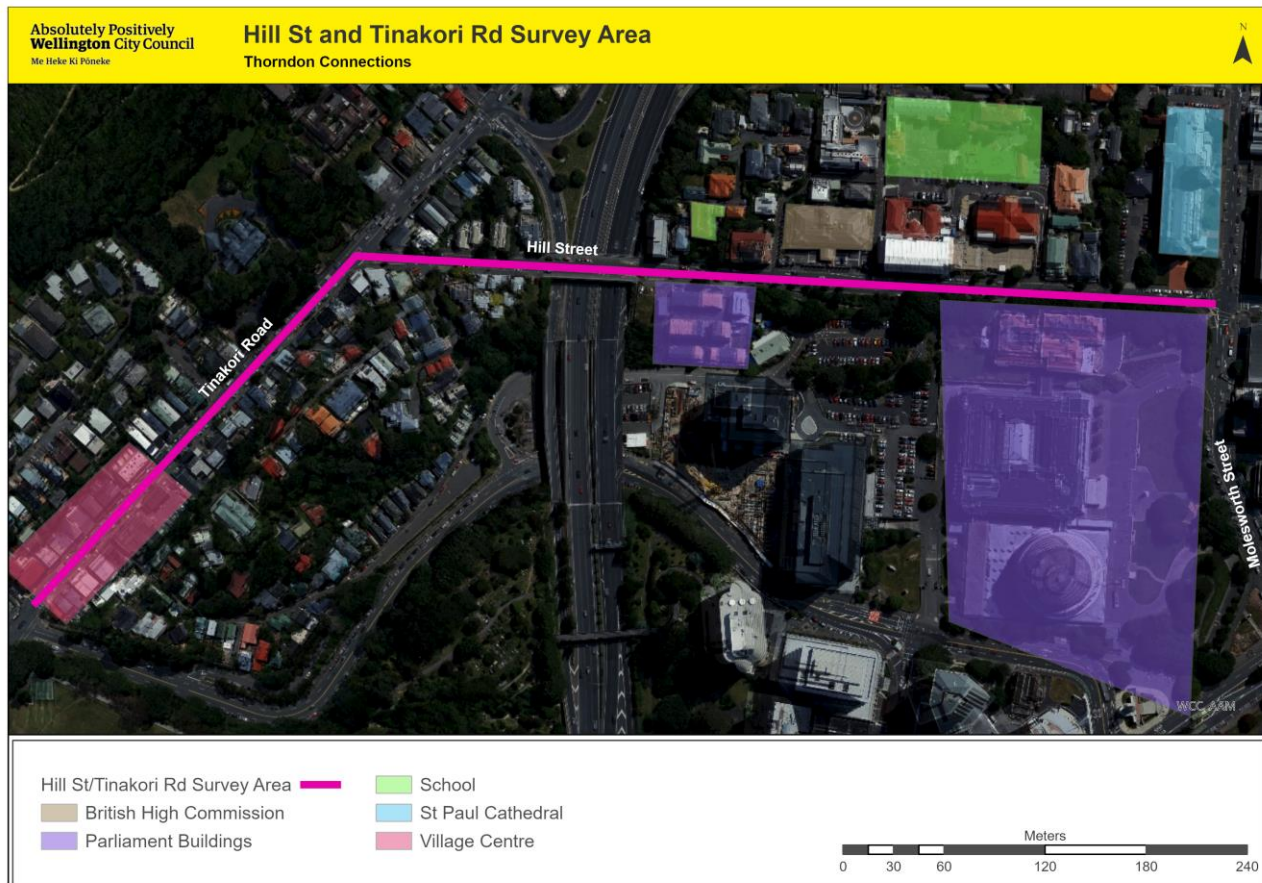


Figure 19 Hill Street and Tinakori Road: Key Locations

6.1 About the Area

The transitional walk, bike, and bus improvements include only minor safety improvements to Hill Street and Tinakori Road including speed humps, and extension of the 30km/hr zone. There will be minor changes to parking only, the majority of the parking will remain. On Tinakori Rd, the predominant land use is for retail and café/food in and near the Tinakori Rd village centre.

West of the Hill Street bridge, street land use is mainly residential. East of the bridge, land use is notably educational, diplomatic and places of worship. Key locations along this section are the Wellington Cathedral of St Paul, Parliament Grounds, Sacred Heart Cathedral School, British High Commission Wellington, Hill Street Early Childhood Centre, and Tinakori Village Centre. The southern end of Tinakori Road connects to the Transitional Botanical Gardens to City project.

6.2 Current Parking Inventory

Parking within this section is mainly resident, coupon and P120 paid parking. Most parking in the village centre is P60/P120. Table 17 shows the on-street parking inventory in the two streets.

For a map of parking restrictions, refer to Appendix B.

During the period of the survey, no construction was occurring that could have altered the results of the analysis.

Table 17 Tinakori Road and Hill Street current on-street parking inventory

Parking type	Total current parking	Current parking on route
P5 (Mon-Fri, 8 to 9am, 2 to 3pm)/P120 at other times	3	3
P30	5	5
P60/P120	27	27
P60/P120 (Clearway, Mon-Fri, 7-9am)	11	11
Resident	45	45
Coupon	11	11
P120 Paid	21	21
Diplomatic vehicles only (Mon-Fri, 8am to 6pm)	1	1
Taxi Stand	5	5
Bus Stops (8am – 4pm Mon – Fri)	2	2
Total	131	131

6.3 Occupancy and duration of stay

Figure 21 shows parking use during the weekday and weekend manual survey on Tinakori Road and Hill Street.

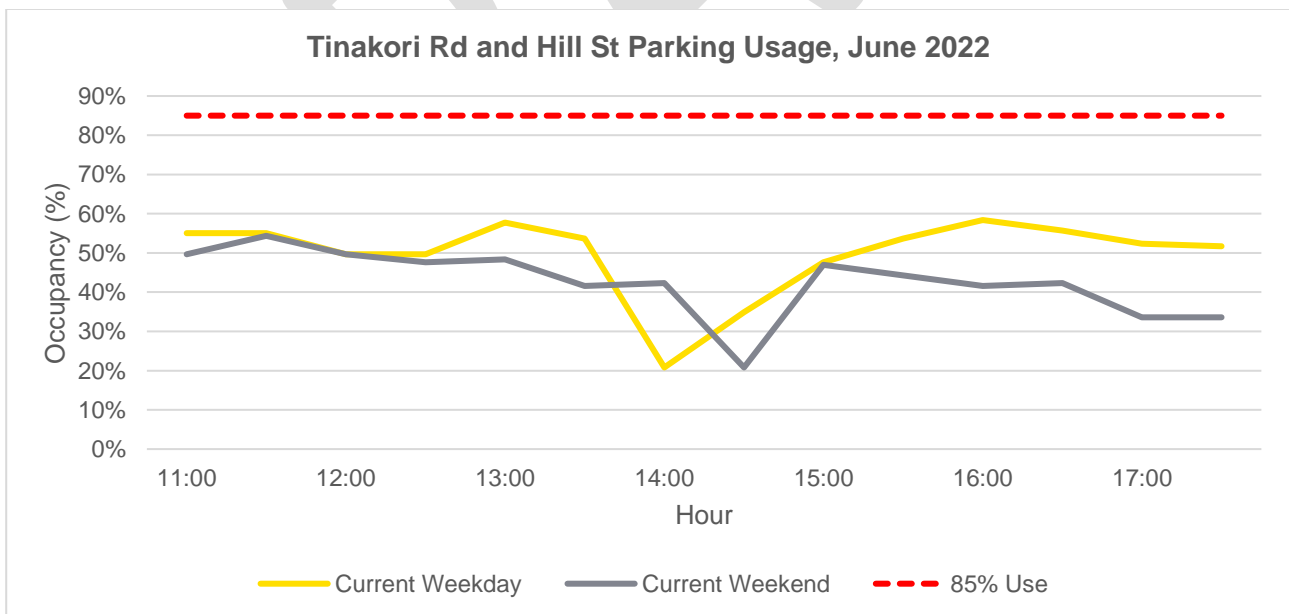


Figure 20 Tinakori Road and Hill Streets parking usage 2/06 - 26/06/2022

Key observations:

- During both survey days, overall occupancy is well below 85%.
- Average occupancy during the weekday is higher than the weekend at 50% and 43% respectively.

Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

- The highest proportion on both survey days is of short-stay users (less than 2 hours). The proportion of short-stay users during the weekday is 67% and during the weekend is 62%.

6.4 Impacts of Thorndon Connections project: Tinakori Rd/ Hill St

The parking changes along Tinakori Rd are minimal with two P120 spaces lost for a parklet, 1 P120 for improved visibility of the pedestrian crossing and one reallocated as a mobility park. Hill Street will have one resident park removed and changes to the bus stop to allow more pick up and drop off spaces. This maintains 96% of existing parking on Tinakori Rd, and 97% of the parking on Hill St.

Refer to Figure 27 for map of impacted parking.

Table 18 Proposed on-street parking changes on Hill Street and Tinakori Road

	Existing parking	Proposed parking remaining	Expected parking users	Potential impacts
Hill Street	Resident – 30 Coupon – 11 P30 – 5 P5/P120 – 3 P120 Paid - 21 Taxi Stand - 5 Diplomatic – 1 Bus Stops - 2	Resident – 29 Coupon – 11 P30 – 5 P5/P120 – 3 P120 Paid - 21 Taxi Stand - 5 Diplomatic – 1 Bus Stops/P5 – 2	The expected users are short-stay visitors, residents and commuters with parking coupons.	Changing the bus stop to P5 intended for school pick up and drop off will accommodate for peak demand.
Tinakori Street	P60/P120 – 27 P60/P120 Clearway - 11 Resident – 15	P60/P120 – 25 P60/P120 Clearway – 10 Resident – 15 Mobility – 1	The expected users are short-stay visitors and residents to the area to access commercial facilities and residential houses.	Reduce in short-stay parking may slightly raise demand for similar spaces.
Total	131	130		

Tinakori Rd and Hill Street in total have 131 spaces. Figure 22 shows the current use of all these spaces during the weekday and weekend survey. The “85% After” dotted light-red line shows the number of spaces available at the 85% occupancy threshold after parking changes.

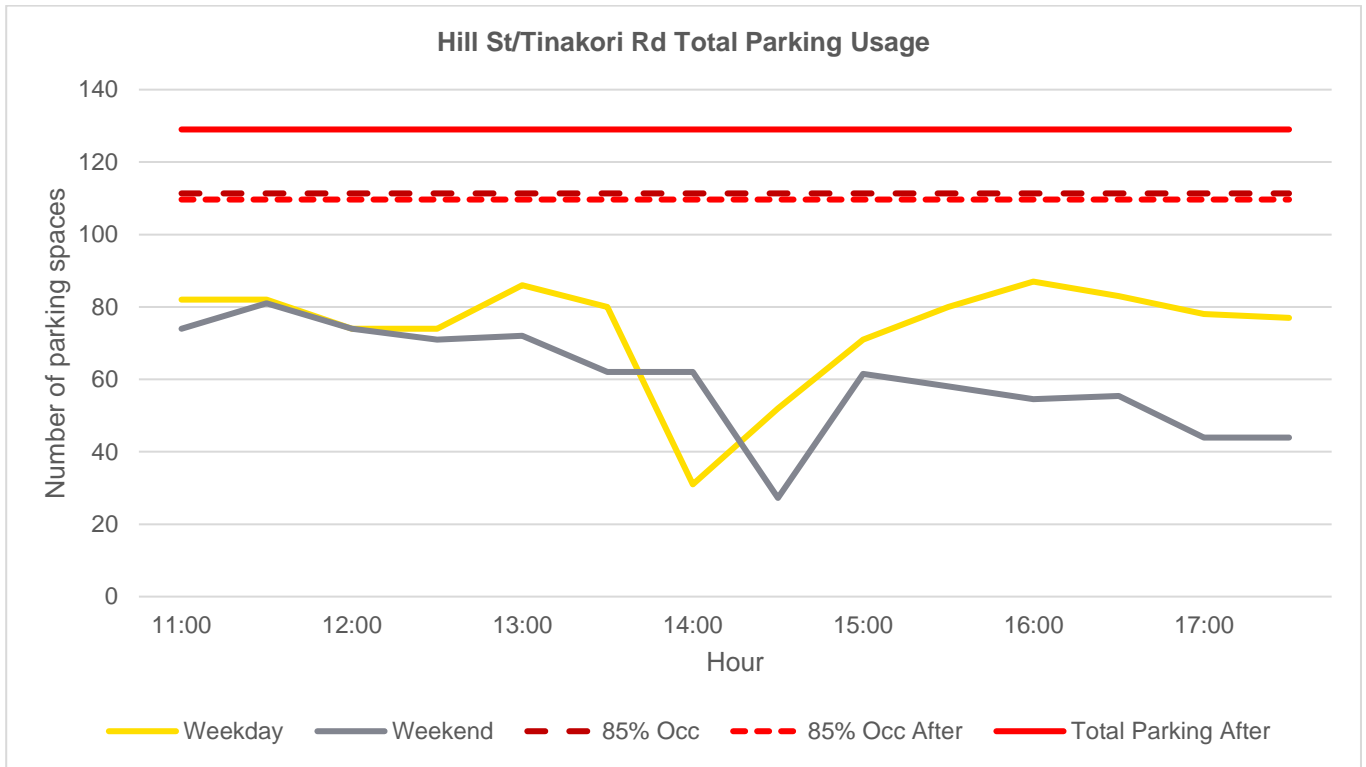


Figure 21 Tinakori Rd and Hill Street total parking usage

Key observations:

- Due to parking removal within this area being minimal, parking demand is not expected to change significantly after project installation.

6.5 Mitigation of Impact: Tinakori Road/Hill Street

Parking being removed and changed in this section is one resident parking space and two P120 spaces.

Mitigation and impacts for parking user type

Table 19 describes the proposed mitigation and level of impact for each parking user type for the Hill Street and Tinakori Rd Area after the Thorndon Connections project has been installed.

Table 19 Hill Street and Tinakori Rd Mitigation and impacts on parking user types

Parking user type	Level of impact after	Assessment of impact	Proposed mitigation
Visitor (short-stay)	Very low	Average current short-stay parking is expected to stay below 85% occupancy after installation	No mitigation proposed. Additional bike parking will be provided in Tinakori Village to cater for uptake in bike users in this area.

Parking user type	Level of impact after	Assessment of impact	Proposed mitigation
Commuter	None	No change to Coupon parking proposed.	No mitigation proposed.
Resident	Very low	Minimal change to resident parking (one resident parking space removed outside 99 Hill Street)	No mitigation required
Mobility	None (Positive)	The introduction of a mobility space will allow access for high priority mobility users.	N/A

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7 Aitken Street



Figure 22 Aitken Street Survey Area

7.1 About the Area

The transitional walk, bike, and bus improvements include a separated bike lane in the direction of Mulgrave to Molesworth Street to ensure continuity of separation along the route to the CBD. The parking on Aitken St will be altered from angled to parallel.

The street is predominantly used for government facilities, apartments and various café/food stores. Notably, the National Library of New Zealand, Court of Appeal, Freyberg House and Ministry of Justice. Figure 23 highlights these key locations.

7.2 Current Parking Inventory

Table 22 shows current on-street parking on Aitken St. The majority of on-street parking is P120 paid parking spaces. There is notably a relatively significant space allocated for motorbike parking as well.

During the period of the survey, construction was occurring on Aitken Street, however this was not observed to impact any on-street parking during the survey period.

Table 20 Aitken Street current on-street parking inventory

Parking type	Total current parking
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Parking type	Total current parking
P10 Paid parking spaces	6
P120 Paid parking spaces	28
Motorbike	16m
Mobility Paid parking spaces	1
Tour bus stop (time)	1
Total	36

7.3 Occupancy and duration of stay

Figure 24 shows parking usage within Aitken St on a weekday and weekend. Duration of stay data can be used to determine the turnover behaviour of the parking in this section (Refer to Appendix D for graph).

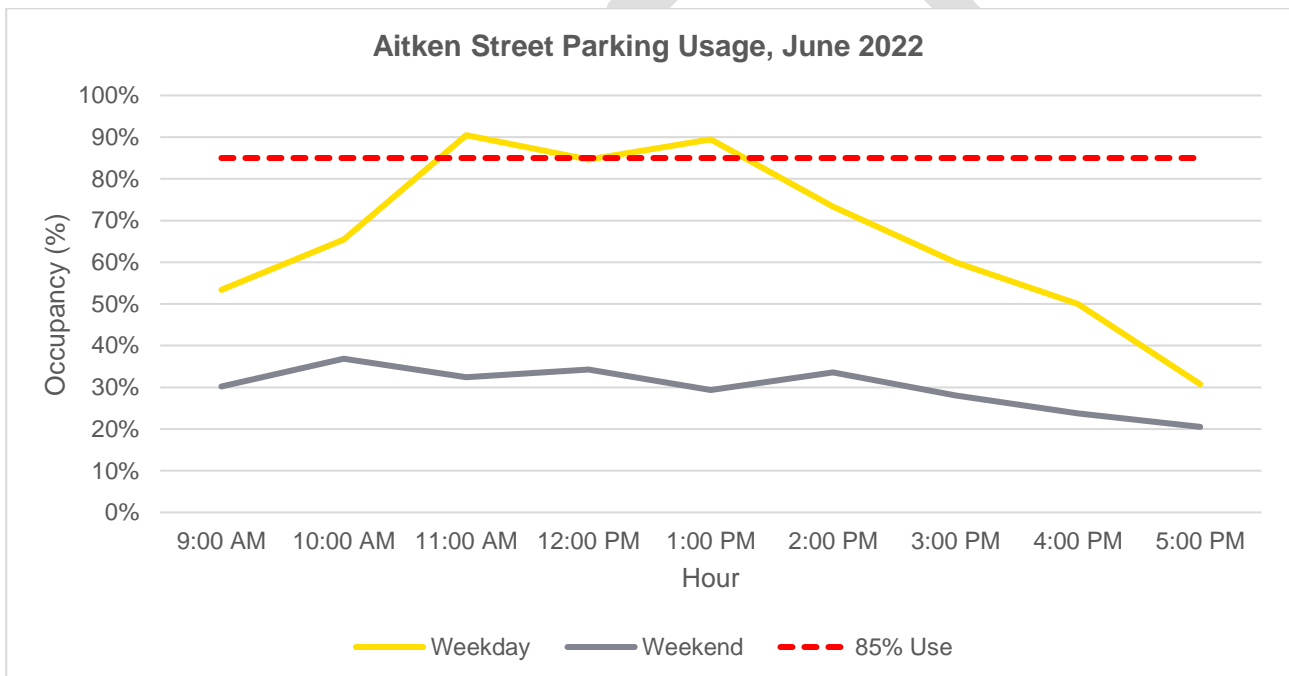


Figure 23 Aitken Street parking usage 02/06 - 26/06/2022

Key observations:

- During the weekday survey, occupancy peaks above 85% from 11am - 1pm before decreasing to below 40% at 5pm.
- Parking occupancy during the weekend survey is consistently under 40%.
- Of parking users recorded on the weekday is 84% compliant.

7.4 Impacts of Thorndon Connections project: Aitken Street

The Thorndon Connections project will affect the Aitken area primarily by removing 64% of the P120 parking spaces in the area. Other parking types are maintained or in the case of mobility, increased.

Refer to Figure 27 for map of impacted parking.

Table 21 Proposed on-street parking changes on Hill Street and Tinakori Road

	Existing parking	Proposed parking remaining	Expected parking users	Potential impacts
Aitken Street	P10 – 6 P120 Paid – 28 Motorbike – 16m Mobility Paid – 1 Tour bus stop - 1	P10 – 4 P120 Paid – 10 Motorbike – 11m Mobility paid – 2 Tour bus stop - 1	The expected users are short-stay visitors to access facilities in the area. Motorbike users are also expected in this area.	Lack of short-stay parking may result in people needing to walk further to their destination or use paid parking facilities. Motorbike parking has been surveyed and currently underutilised therefore the space is proposed to be reduced to allow for additional paid parking, this may result in more difficulty for motorbike users to find a park and may need to use alternative motorbike parking spaces in the area.
Total	36	17		

Currently, Aitken Street occupancy peaks over the 85%. It is expected that after the proposed changes, occupancy will reach 100%. Overnight occupancy is expected to stay below 85%.

There is a total of 41 paid parking spaces within Aitken Street currently. Figure 25 shows the current use of all these spaces during the weekday and weekend survey. The “85% After” dotted light-red line shows the number of spaces available at the 85% occupancy threshold after parking changes are implemented.

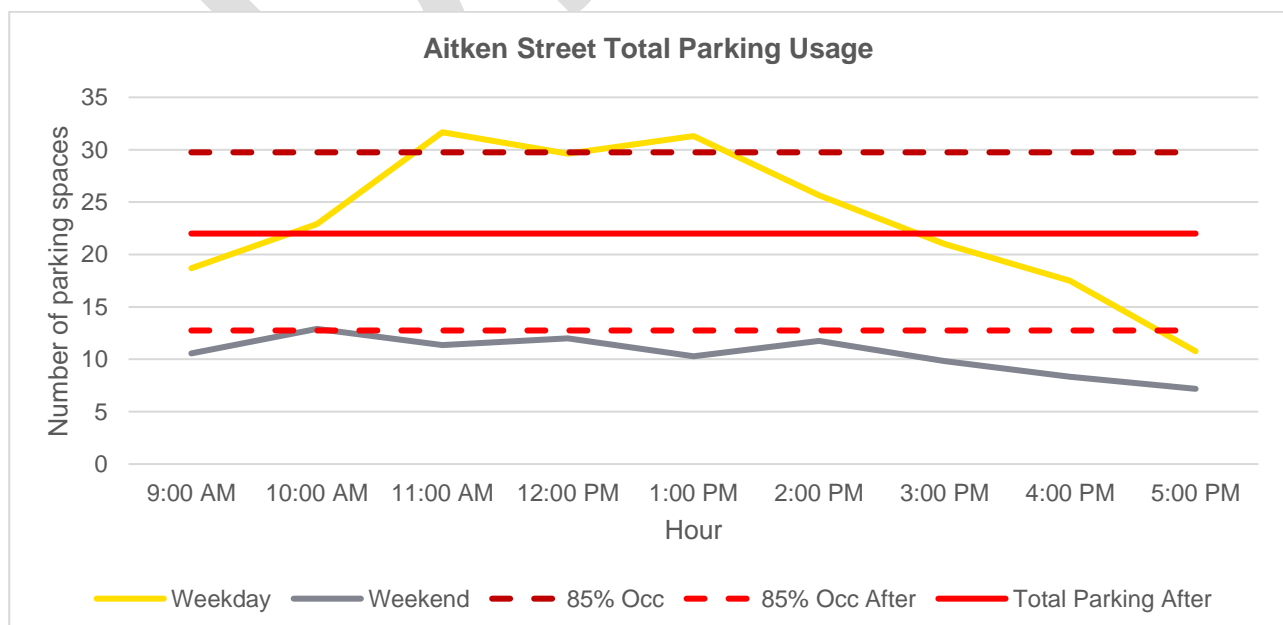


Figure 24 Aitken Street total parking usage

Key observations:

- After proposed changes, weekday occupancy is expected to rise above 85% for most of the day.
- Weekend occupancy is expected to stay well below 85% after removal.

Due to the reduction of motorbike parking on Aitken Street an analysis of impact is highlighted in figure 26. The “85% After” red dotted line shows the approximate 85% threshold after motorbike parking is reduced.

Key observations:

- After installation, there is expected to generally be sufficient motorbike parking to meet demand, although it may be relatively more difficult to find a park between 10am and 1pm.

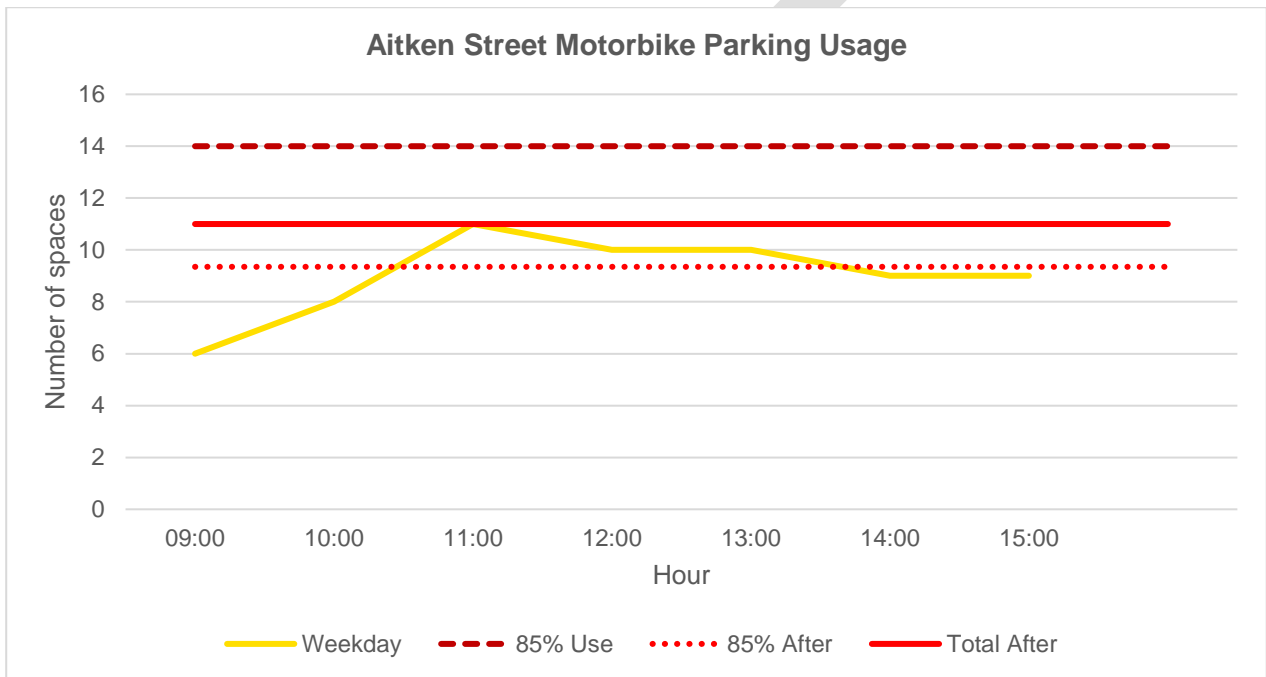


Figure 25 Aitken Street motorbike parking usage

7.5 Mitigation of Impact: Aitken Street

Table 24 shows the inventory for the area currently, after installation and after mitigation measures are implemented. Table 24 also shows the expected average occupancy of each parking type after mitigation based on the higher weekday survey.

In line with the WCC Parking Policy 2020 hierarchy for prioritising 'City Fringe and Inner-City Suburbs', within this space, short-stay (car and motorcycle) and mobility are medium priority.

Addressing priority parking needs:

- Short-stay visitor occupancy is expected to rise above 100% after parking removal. Short-stay users will be redirected to parking within a 1-3min walking distance (Kate Sheppard Place and Hill Street) and to off-street parking facilities.
- Average motorbike occupancy is expected to be slightly under 85%. Therefore, it is expected that motorbike parking users will be able to find parking relatively easily after installation. Overflow will be redirected to Kate Sheppard Place motorbike parking or Molesworth Street.
- Mobility users will be able to access existing parking and have access to an additional park.

Table 22 Aitken Street prioritisation of mitigation

Parking type	Current inventory	Inventory after installation	Net changes	Current Average Occupancy	Average expected occupancy
Paid Parking Spaces	28	10	-18	90%	100%
P10	6	4	-2		
Mobility	1	2	+1	N/A	N/A
Motorbike	16m	11m	-5m	56%	82%

Mitigation and impacts for parking user type

Table 25 describes the proposed mitigation and level of impact for each parking user type after the Thorndon Connections installation for Aitken St.

Table 23 Mitigation and impacts on parking user types

Parking user type	Level of impact after	Assessment of impact	Proposed mitigation
Visitor (short-stay)	Moderate	Occupancy for short-stay visitors' spaces is expected to reach full capacity after parking removal within	Short-stay visitors will be encouraged to use other modes of transport where possible. Redirected to similar parking

		this area. During weekdays, it will be relatively harder to find a park on this street.	on side streets or off-street parking.
Commuter	None	No change to commuter parking	No mitigation required
Mobility	None (Positive)	The introduction of a mobility space will allow additional access for high priority mobility permit users.	NA
Motorbike	Low	It is expected that motorbike parking users will be able to find parking relatively easily after installation.	No mitigation required as current space should provide for the existing users. Motorbike parking is also available on Kate Sheppard Place (1-3min walk) or Molesworth St (3-5min walk) in cases of high demand.

8 Summary and Conclusions

This report assesses the effects of the proposed transitional walk, bike and bus improvements as part of the Thorndon Connections project which re-prioritises on-street parking primarily on Molesworth, Murphy, Mulgrave and Aitken streets and the northern end of Lambton Quay to deliver the Wellington Bike Network.

These changes will result in the removal of car parking in the area and are likely to result in an initial increase in parking demand on streets within the study area covered by this Parking Management Plan. Figure 27 shows a summary of the proposed changes to carparking after installation.

The analysis that has informed the conclusions of this PMP has been calculated based on existing observed parking demand. The analysis does not account for any modal shift and is therefore a worst-case scenario. In reality, the implementation of the transitional walk, bike and bus improvements, in combination with adjacent projects in the area such as the Golden Mile and Thorndon Quay/Hutt Road upgrades, is expected to result in a mode shift away from private vehicles to active and public modes of transport. With the implementation of the Thorndon Connections project, the overall parking demand in the area is expected to reduce over time with less parking mitigation required.



Figure 26 Thorndon Parking After Installation

A summary of key issues and recommendations are described below:

- A total of 128 parking spaces, predominantly P120, would be removed as part of delivering the proposed walk, bike and bus improvements for Thorndon Connections. This represents 29% of the on-street parking available in the area and will result in some vehicles which currently use these P120 paid parking spaces shifting to adjacent side streets or off-street parking facilities.

- In the initial period after installation, it will be relatively harder for short-stay visitors arriving by car to find a carpark on the streets where parking is removed.
- There is limited impact on residents or commuters from the proposed changes as the parking being removed is not serving these users.
- Additional mobility parking proposed as part of the changes reflects the priority of these users.
- The relocation of motorbike spaces is proposed to mitigate the impact of a reduction in some areas. Occupancy surveys of motorbike parks indicated that some reduction in capacity could be sustained, for the benefit of retaining as many P120 short stay parks as possible.
- The introduction of short-stay pickup and drop off zones near schools acknowledges the needs for short-stay parking near these facilities during peak times.
- Additional diplomatic parking has been incorporated into the proposed parking arrangements, reflecting the high demand in this area resulting from a large number of embassies being present.
- The Murphy/Mulgrave, Molesworth and Aitken areas are expected to have a peak occupancy over 85%, but the overall Thorndon area is expected to remain under 85% occupancy at peak times.
- The south-end of the Thorndon Area is next to the city's main bus interchange and central railway station. These public transport hubs serve a large catchment of people travelling to the area and offer an alternative transport option for people considering how to get to Thorndon.
- Over 500 publicly accessible off-street parking spaces are available throughout the wider Thorndon study area within 10 minutes walk. Just outside this catchment there is also the Sky Stadium facilities which include a large number of additional car parks.
- If approved and the changes are installed, it is recommended that parking behaviour in this area is monitored and tweaks are made to the configuration of the retained parking spaces, based on which user types have the highest demand.
- Additional bike parking will also be installed in Tinakori Village, top of Molesworth Street, at the Cathedral and Victoria University campus to cater for those who may choose to bike to the destinations in this area.
- Addition of taxi stand and car share spaces in the area provides additional opportunities for those to travel to and from this area without the reliance on private cars.

Appendix A – Impacted Parking Due to Construction: Maps

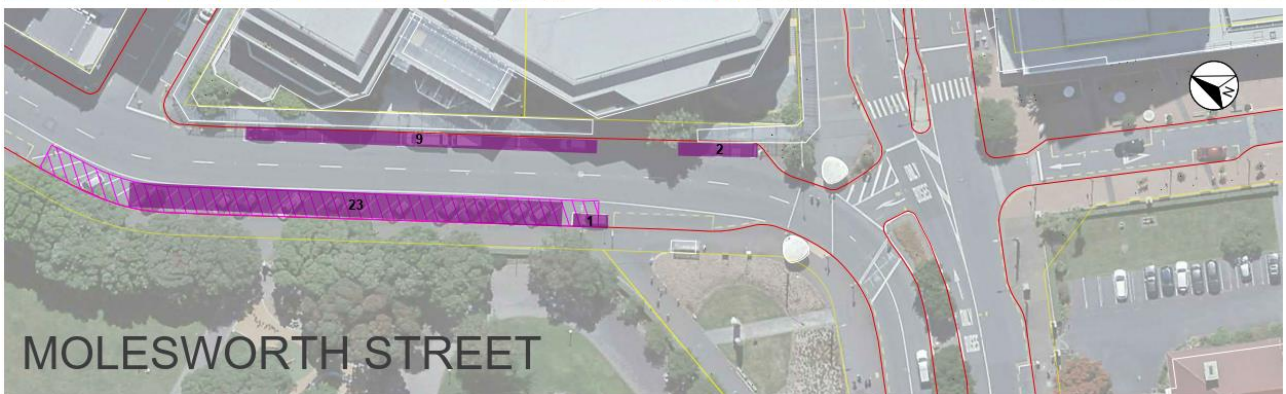
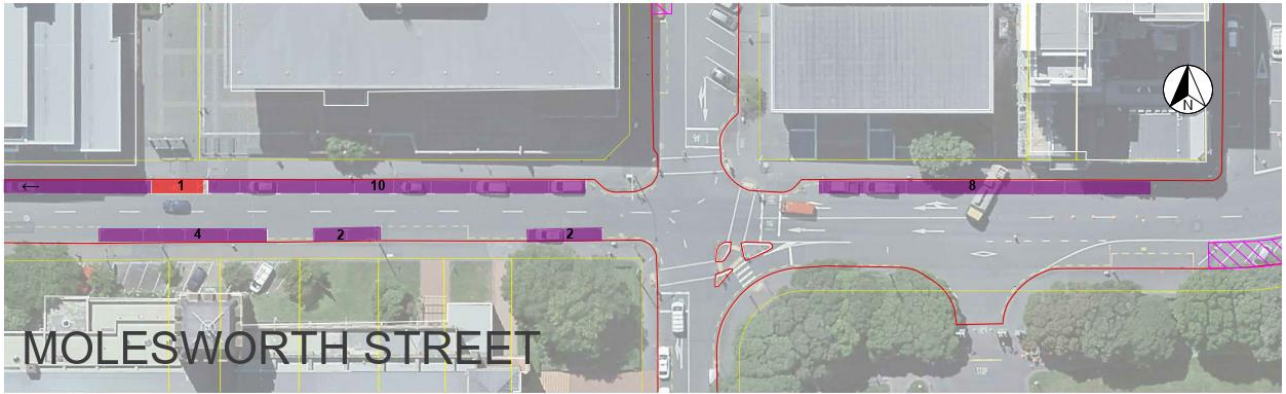
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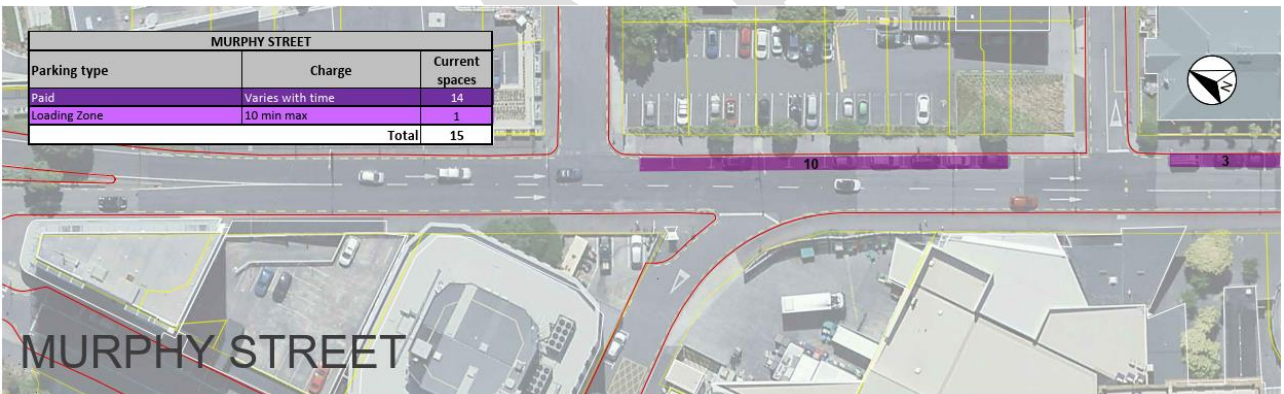
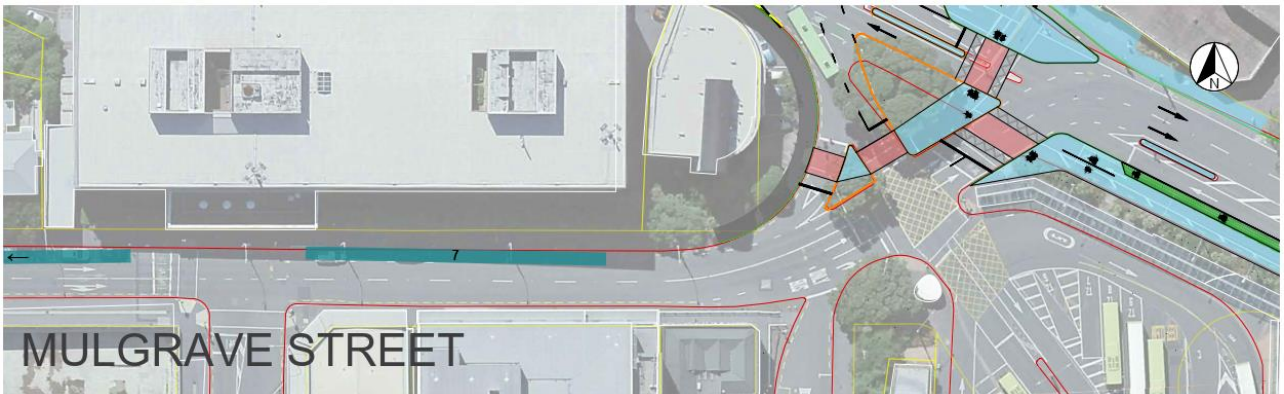




Appendix B – On-Street Inventory Maps

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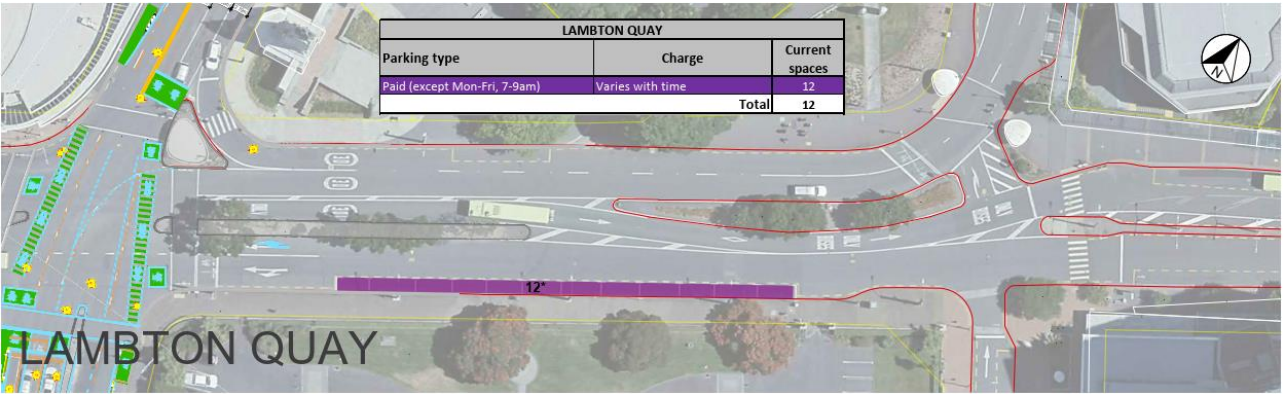
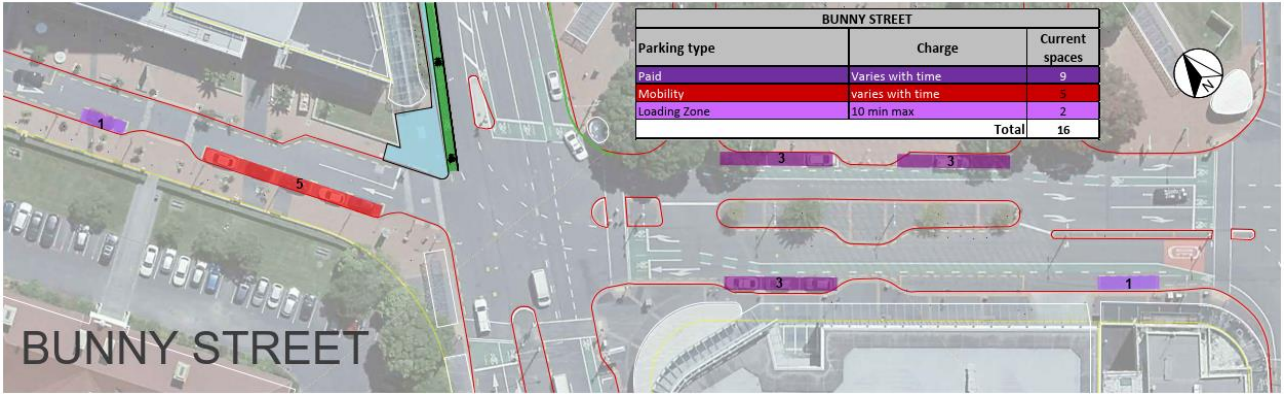


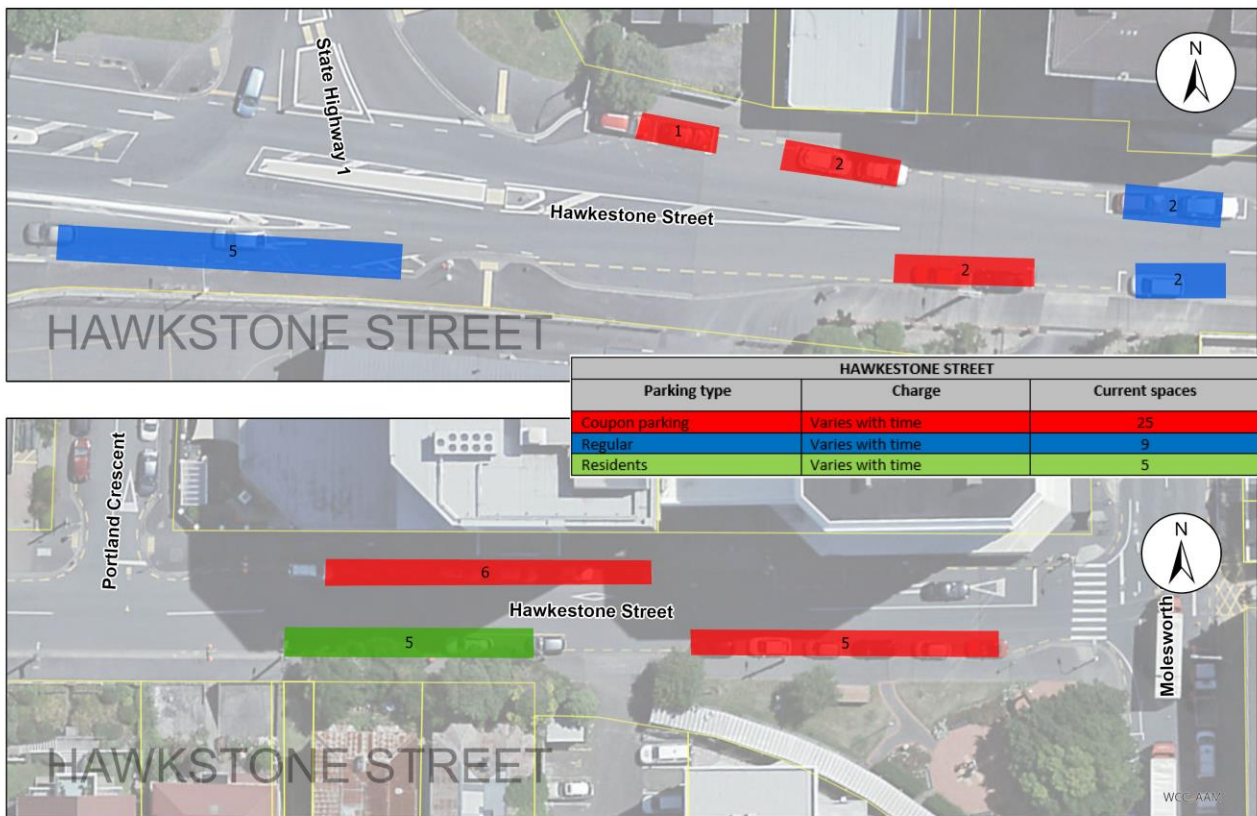
TINAKORI ROAD		
Parking type	Charge	Current spaces
Resident	\$51.00 (3-month permit) OR \$195.00 (12-month permit)	15
P60/P120	Free	27
P60/P120 (Clearway, Mon-Fri, 7-9am)	Free	11
Total		53

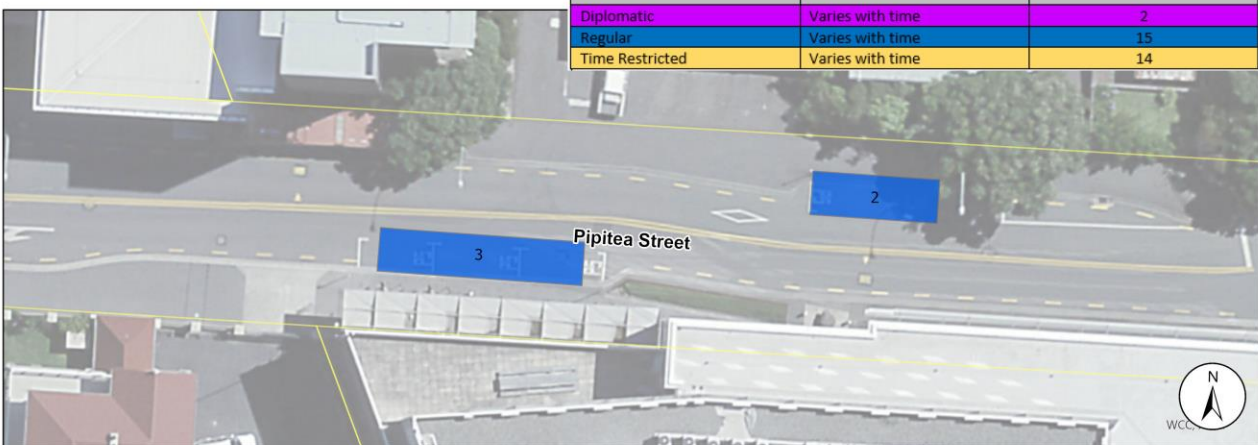
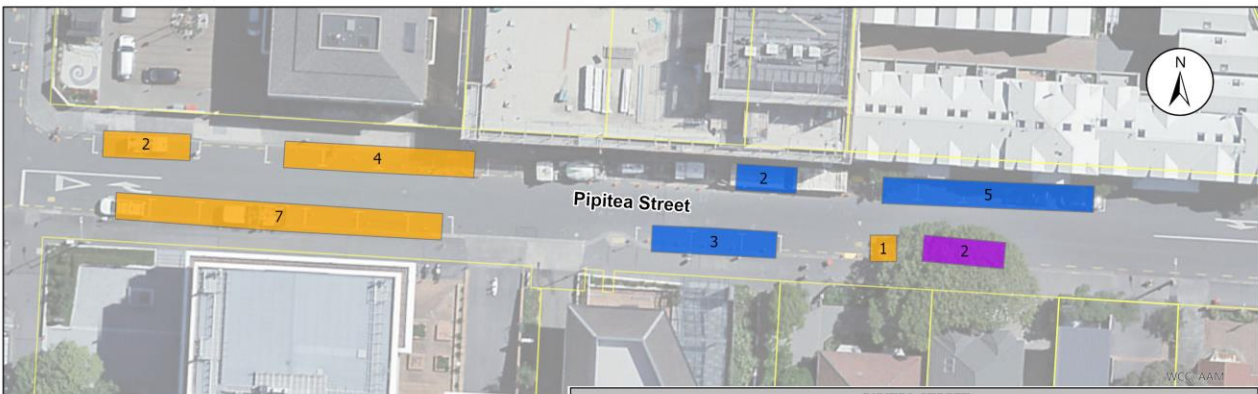
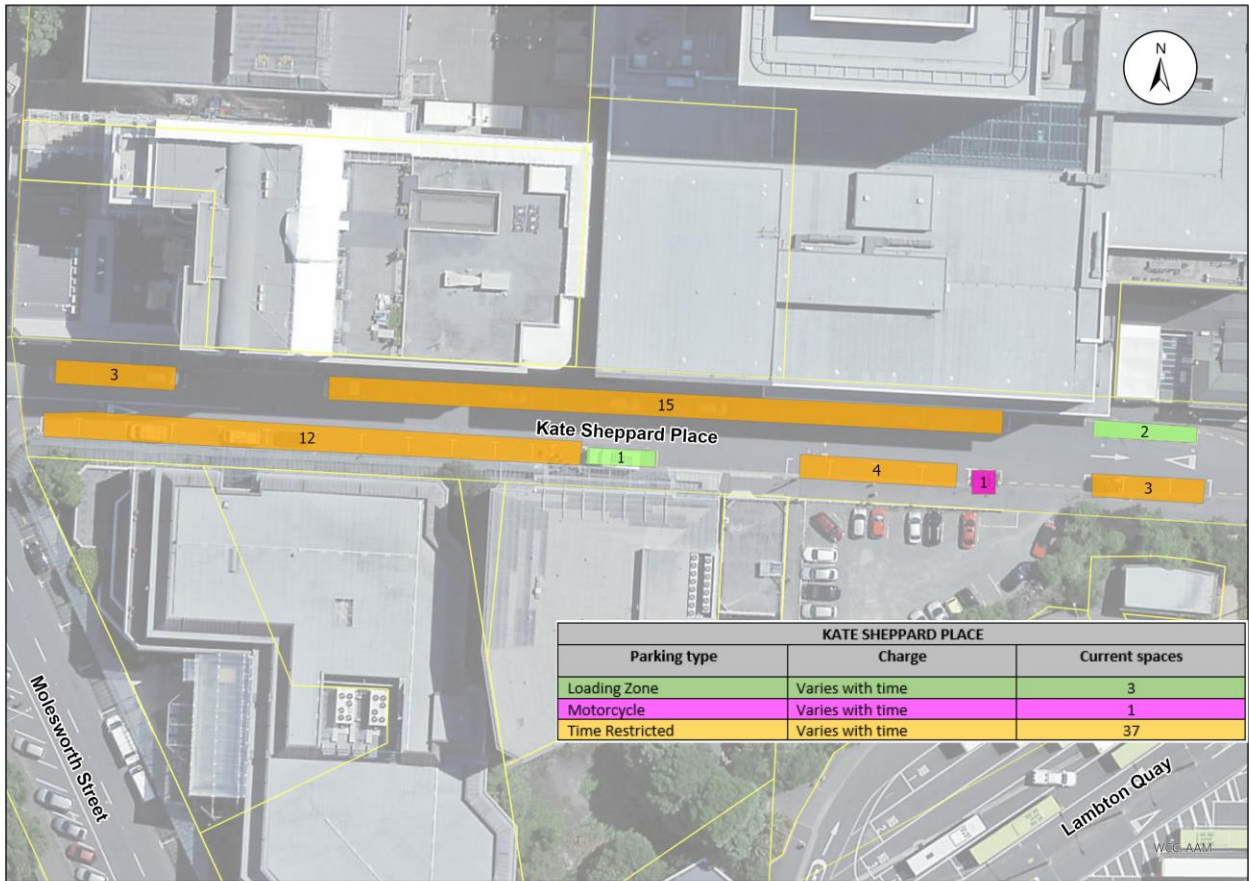


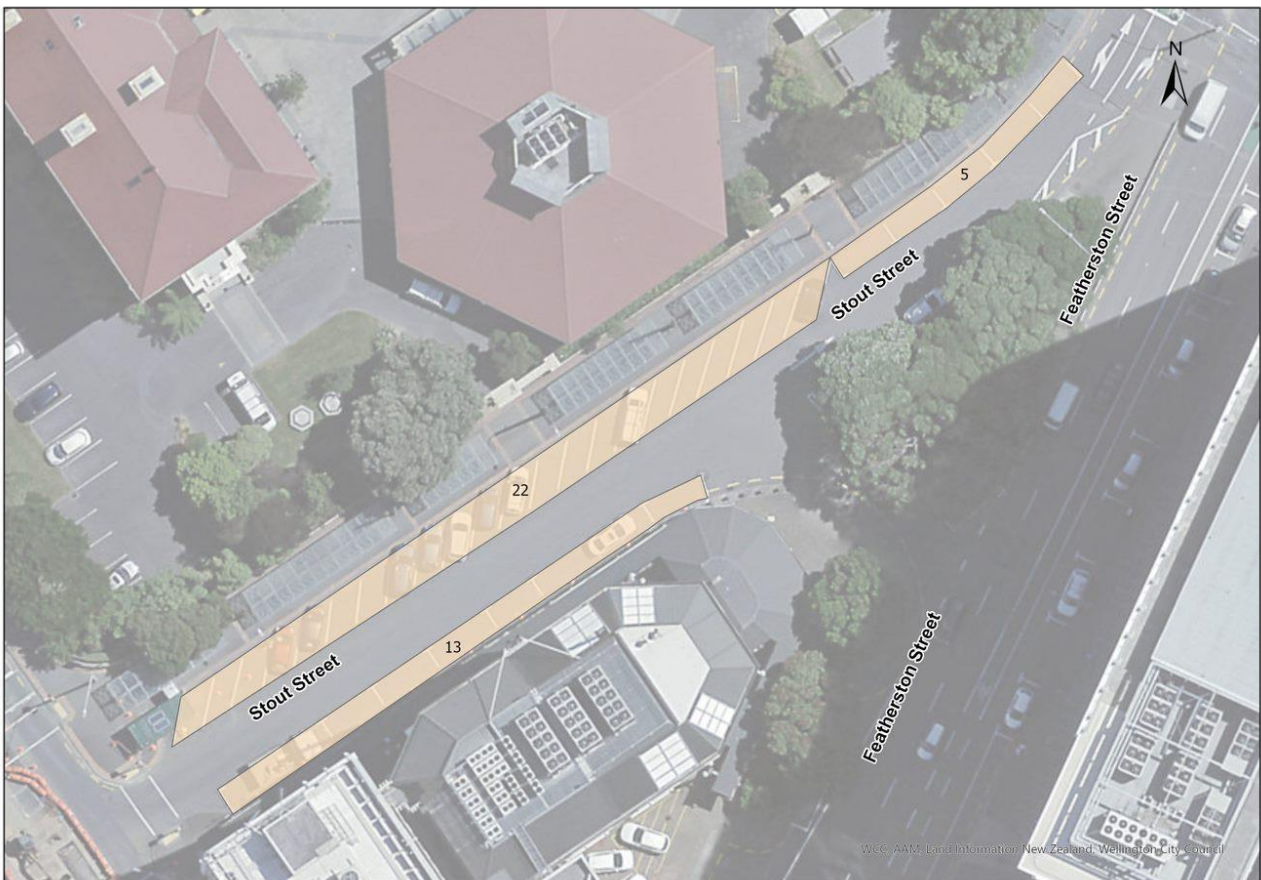
HILL STREET		
Parking type	Charge	Current spaces
Resident	\$51.00 (3-month permit) OR \$195.00 (12-month permit)	30
Coupon	18/\$18.00/day, first 2 hours free	33
P30	Free	5
P5 (Mon-Fri, 8-9am, 2-3pm) // P120 at other times	Free	3
Diplomatic vehicles only (Mon-Fri, 8am-6pm)	N/A	1
Taxi Stand	N/A	5
Total		77

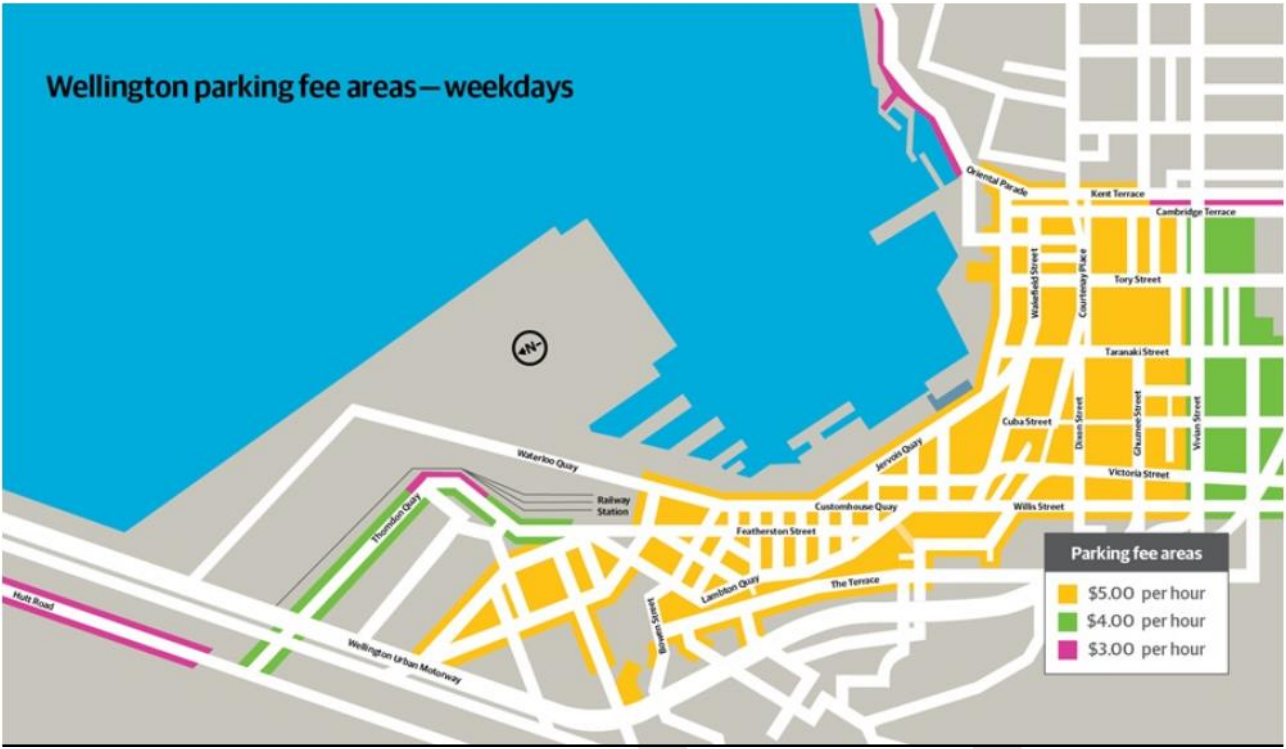




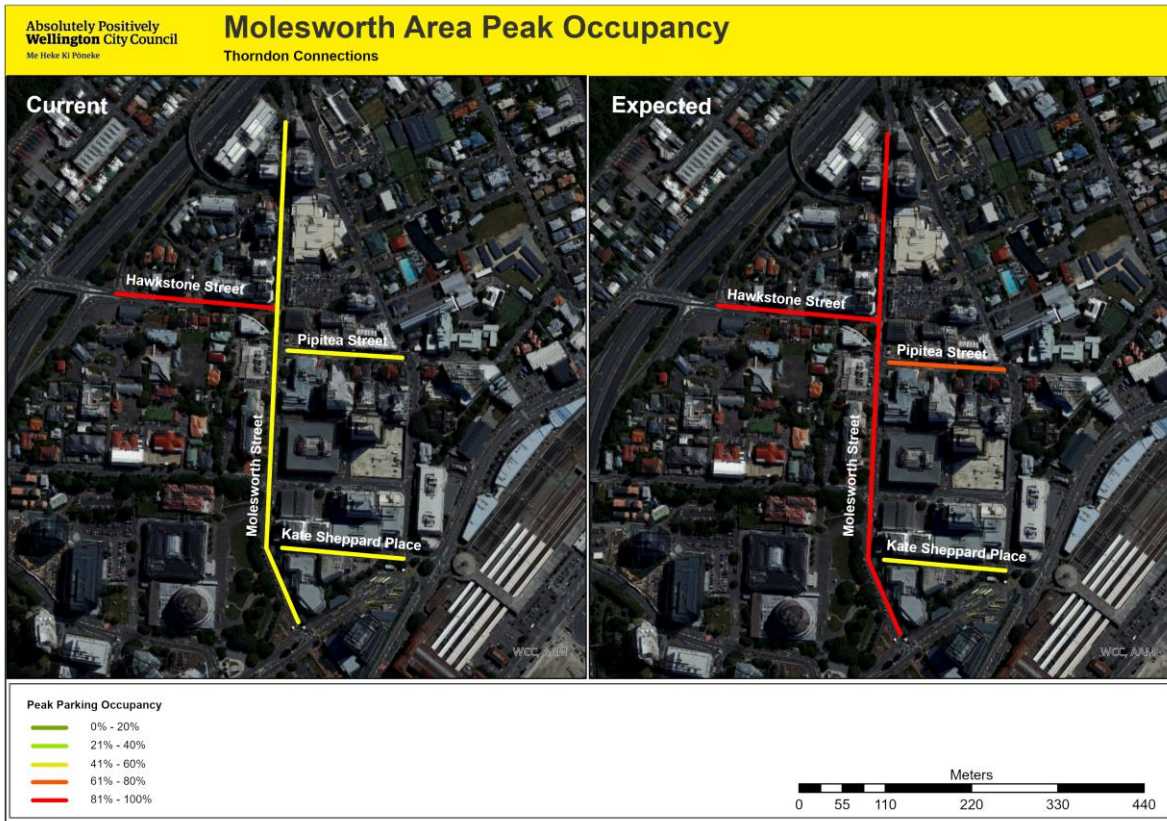






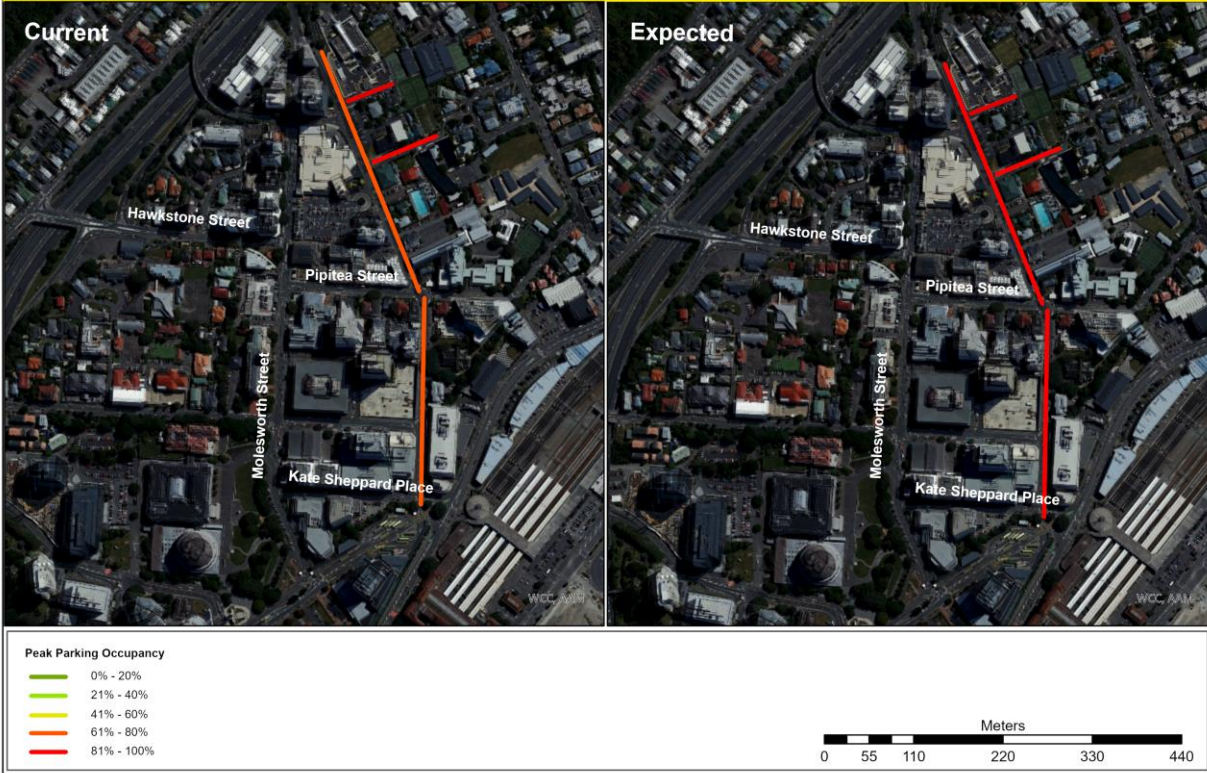


Appendix C – Parking Inventory Impacted by Proposed Cycleway



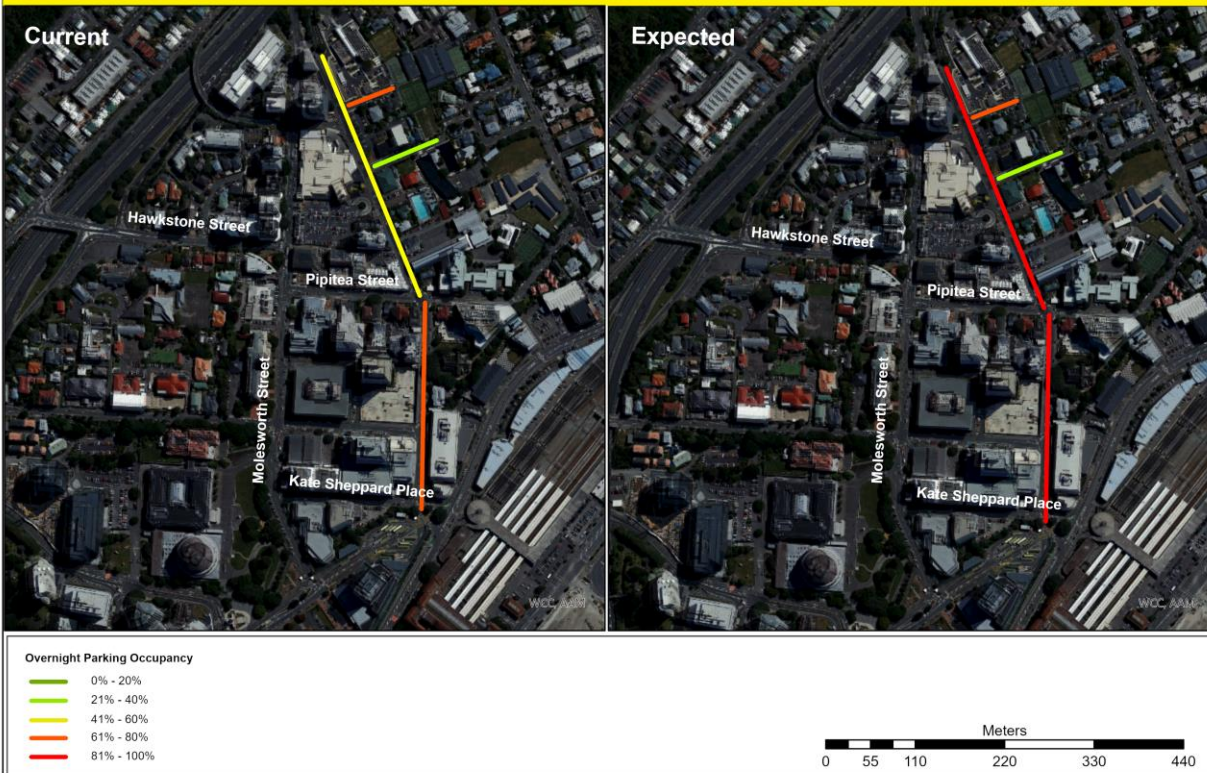
Murphy/Mulgrave Area Peak Occupancy

Thorndon Connections

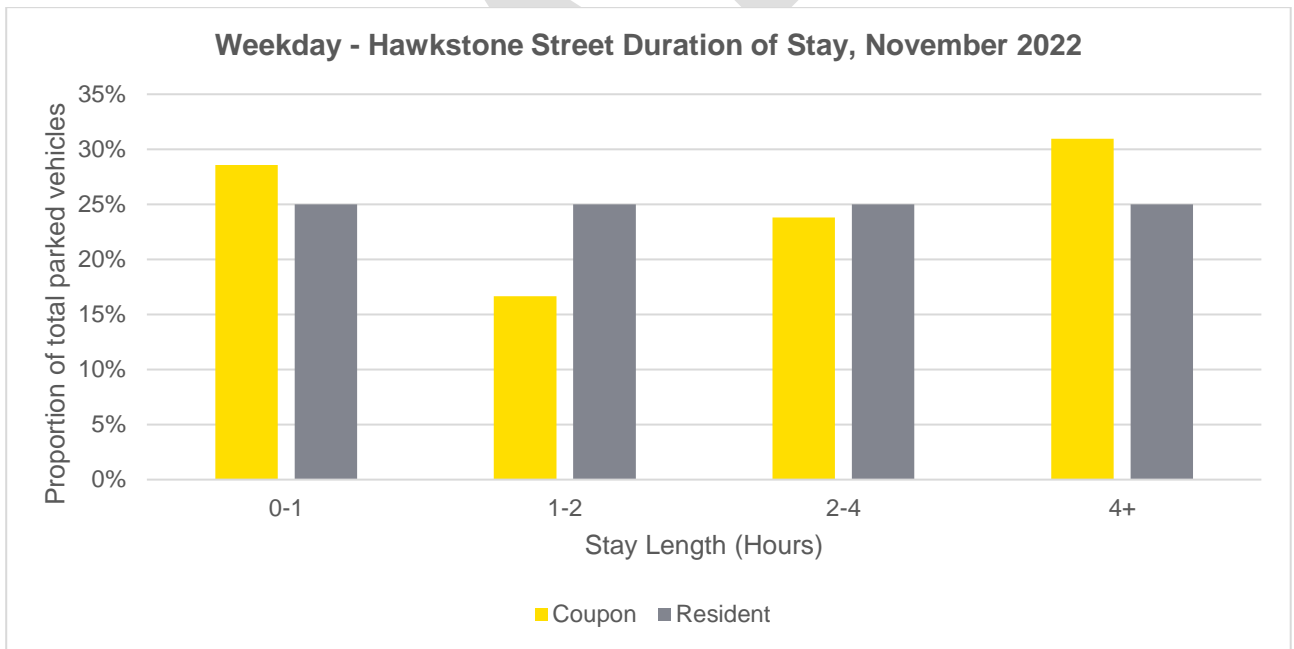
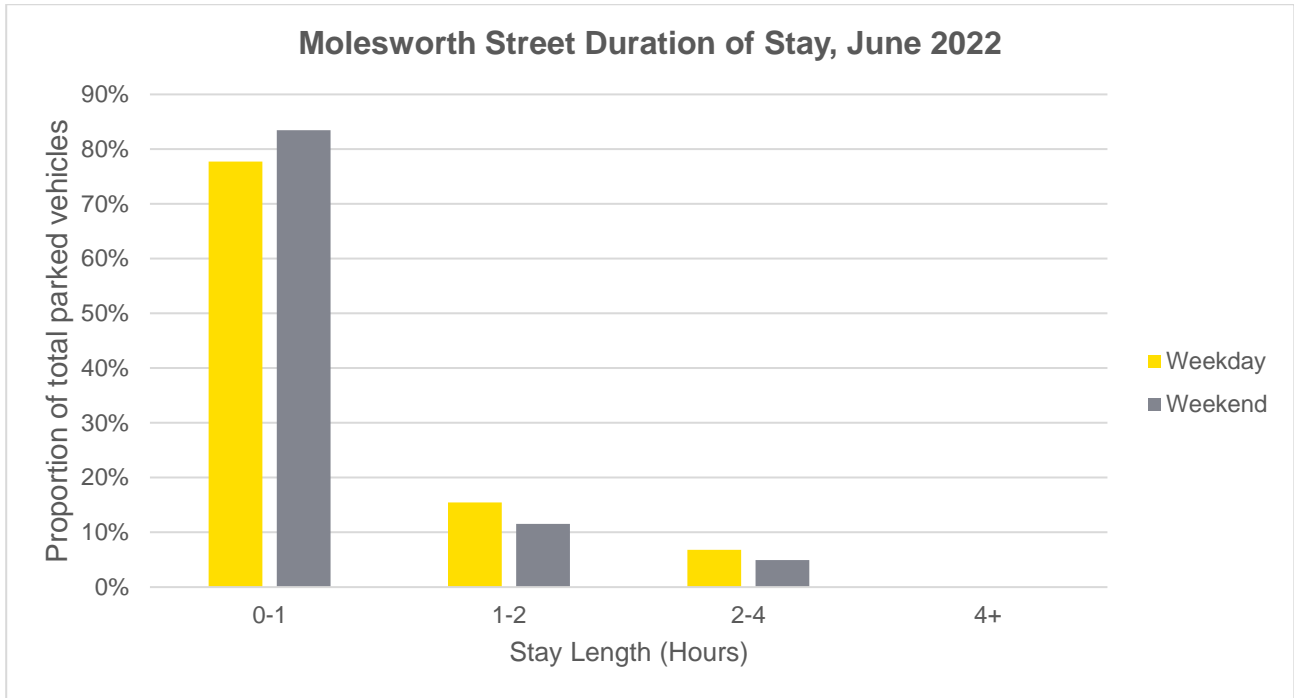


Murphy/Mulgrave Area Overnight Occupancy

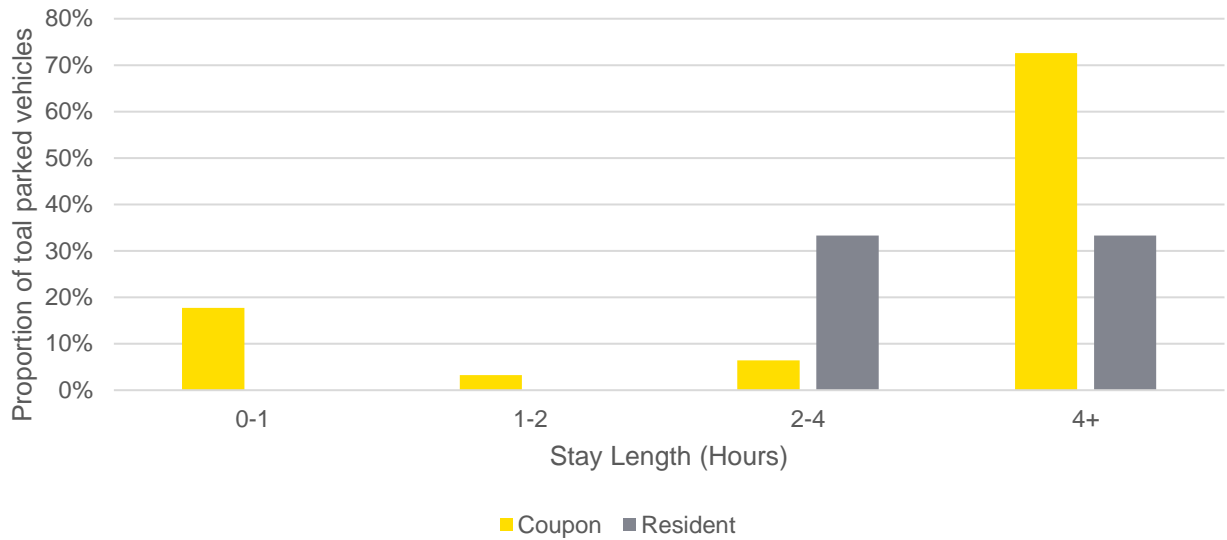
Thorndon Connections



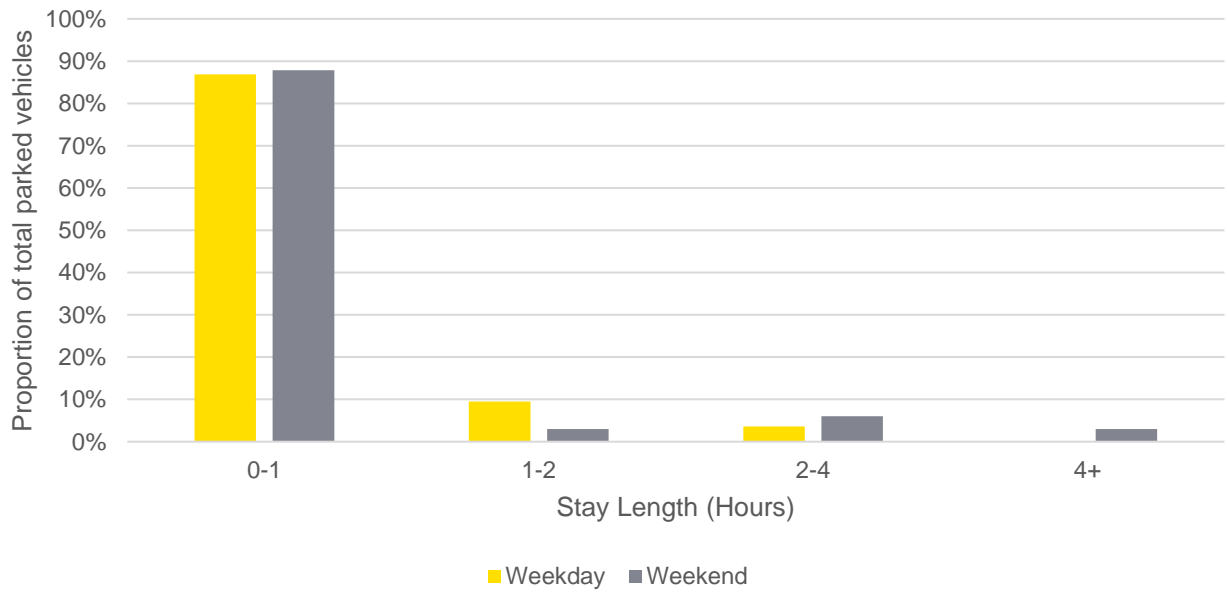
Appendix D – Duration of Stay Graphs



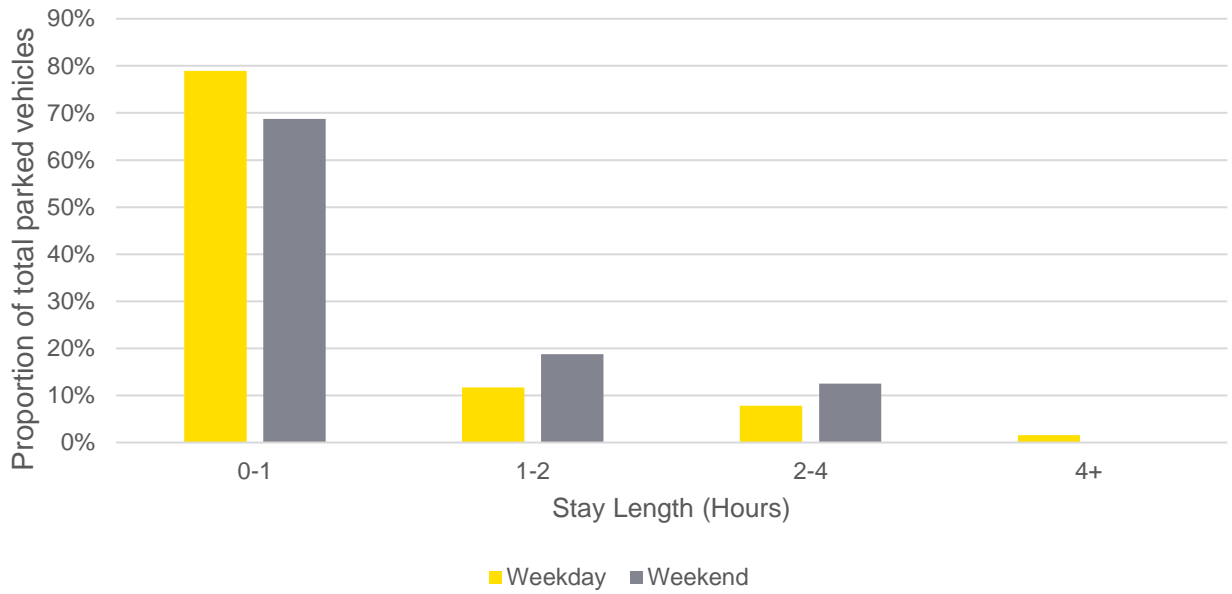
Weekend - Hawkstone Street Duration of Stay, November 2022



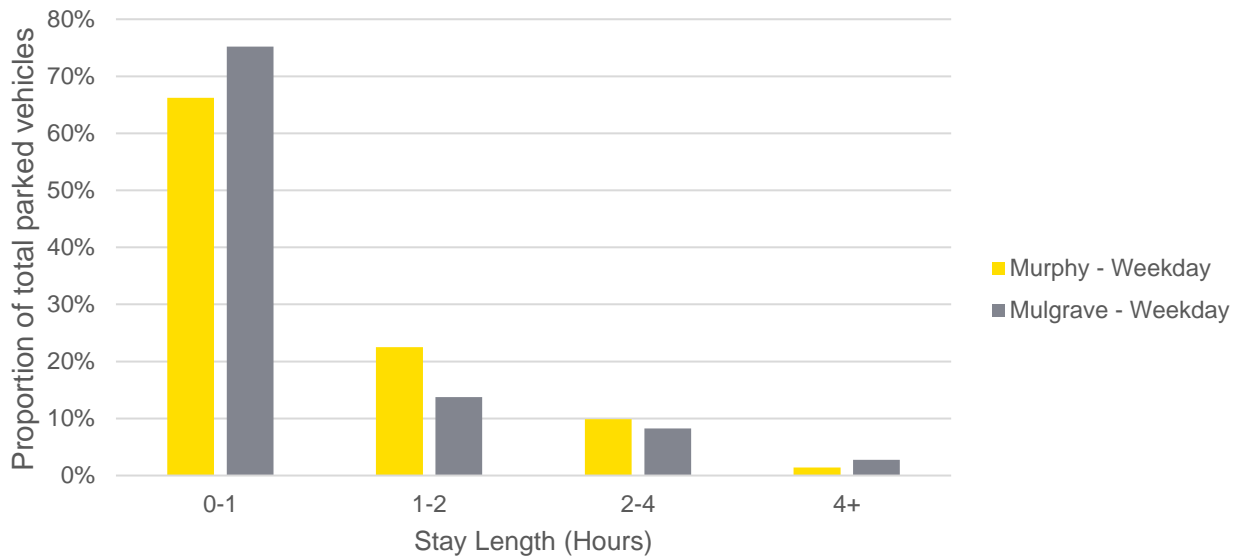
Pipitea Street Duration of Stay, June 2022



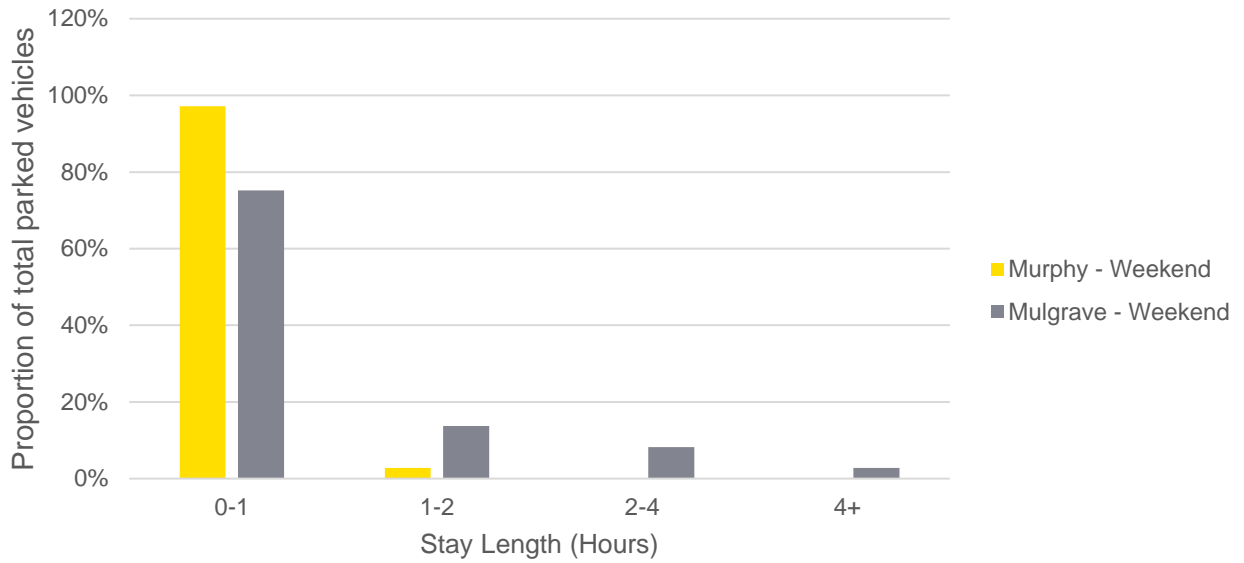
Kate Sheppard Place Duration of Stay, June 2022



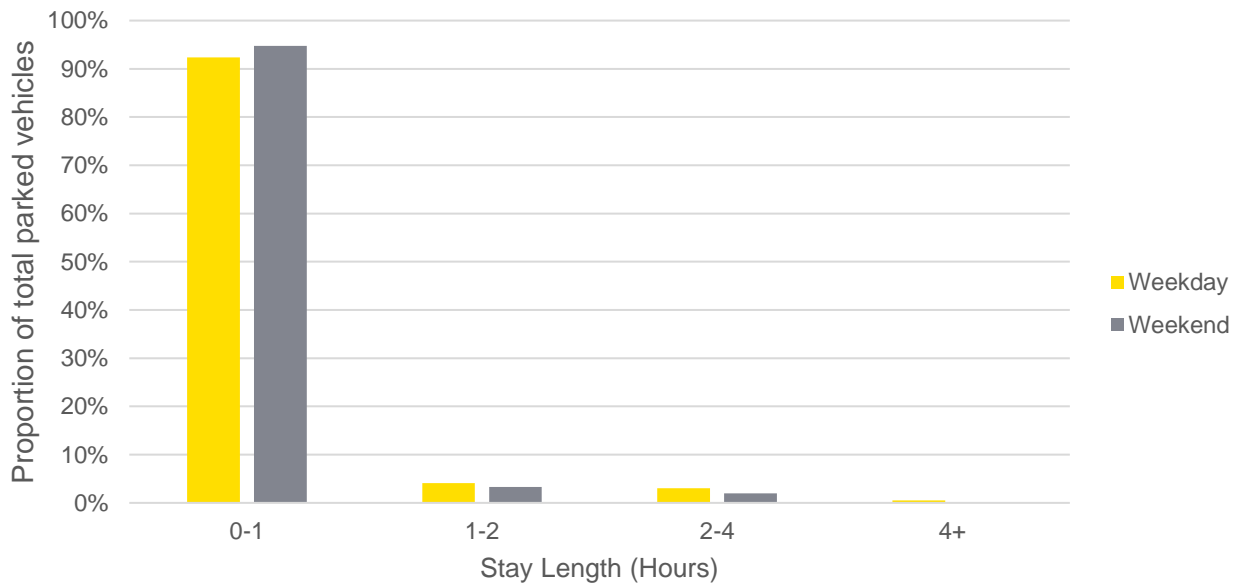
Weekday - Murphy St and Mulgrave St Duration of Stay, June 2022



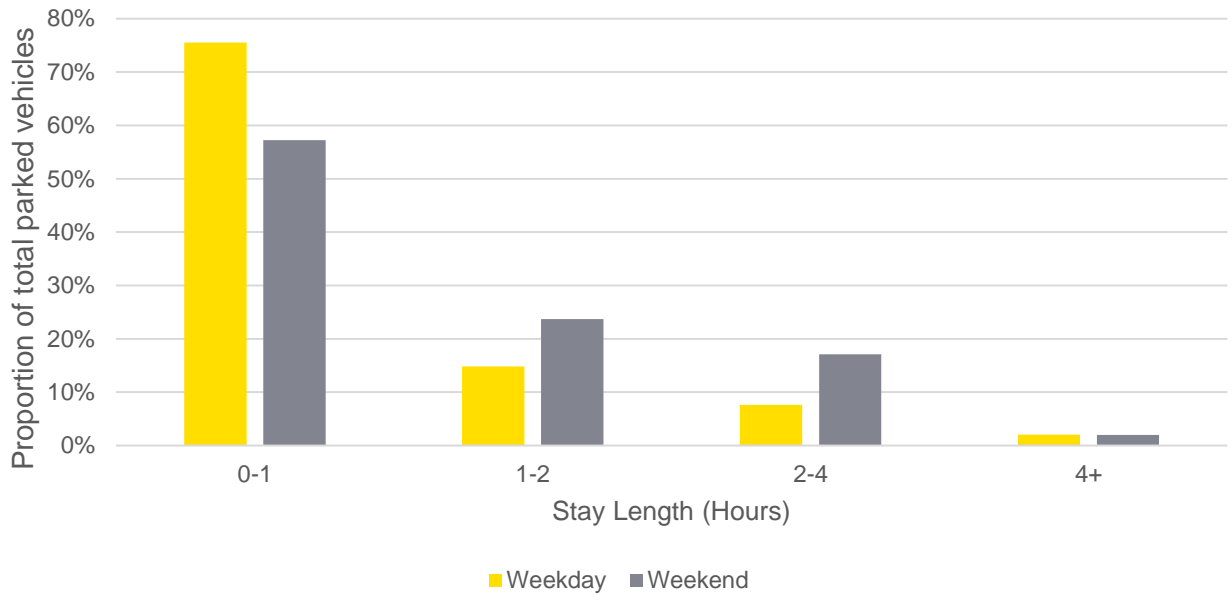
Weekend - Murphy St and Mulgrave St Duration of Stay, June 2022



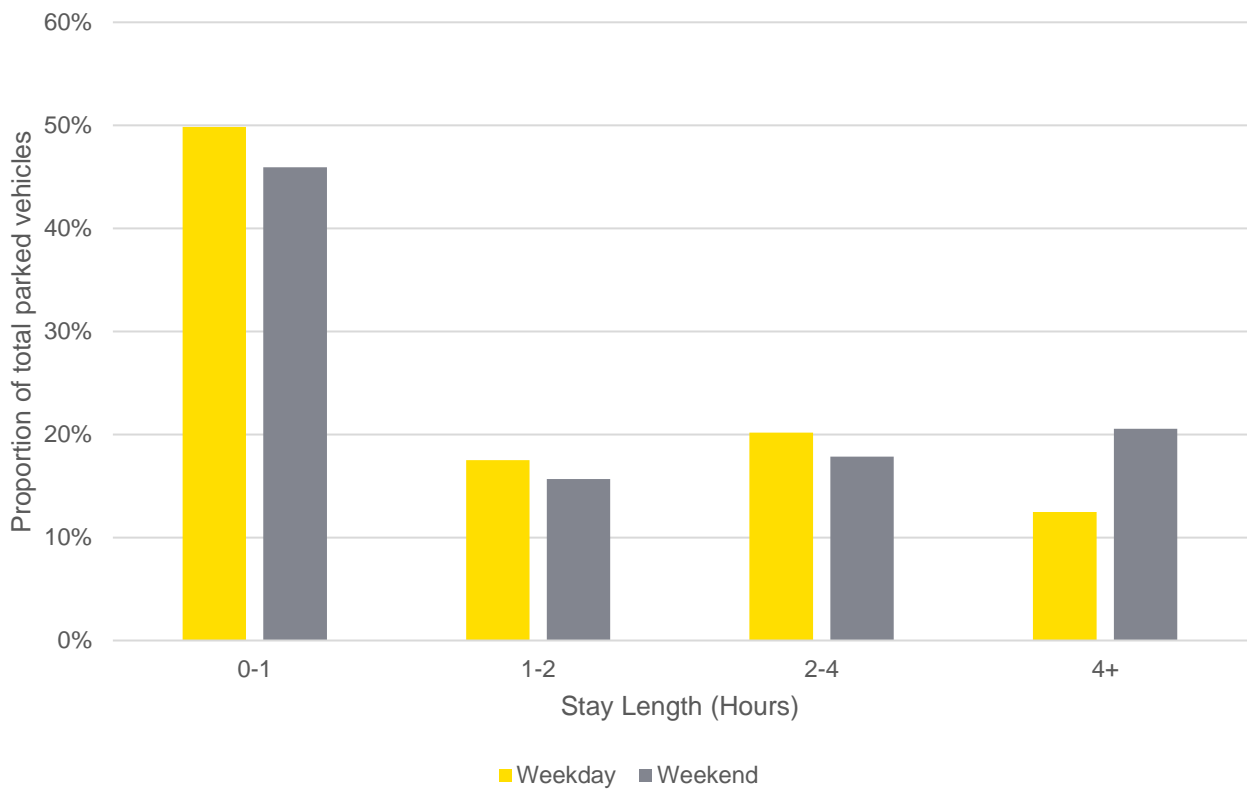
Bunny Street Duration of Stay, June 2022

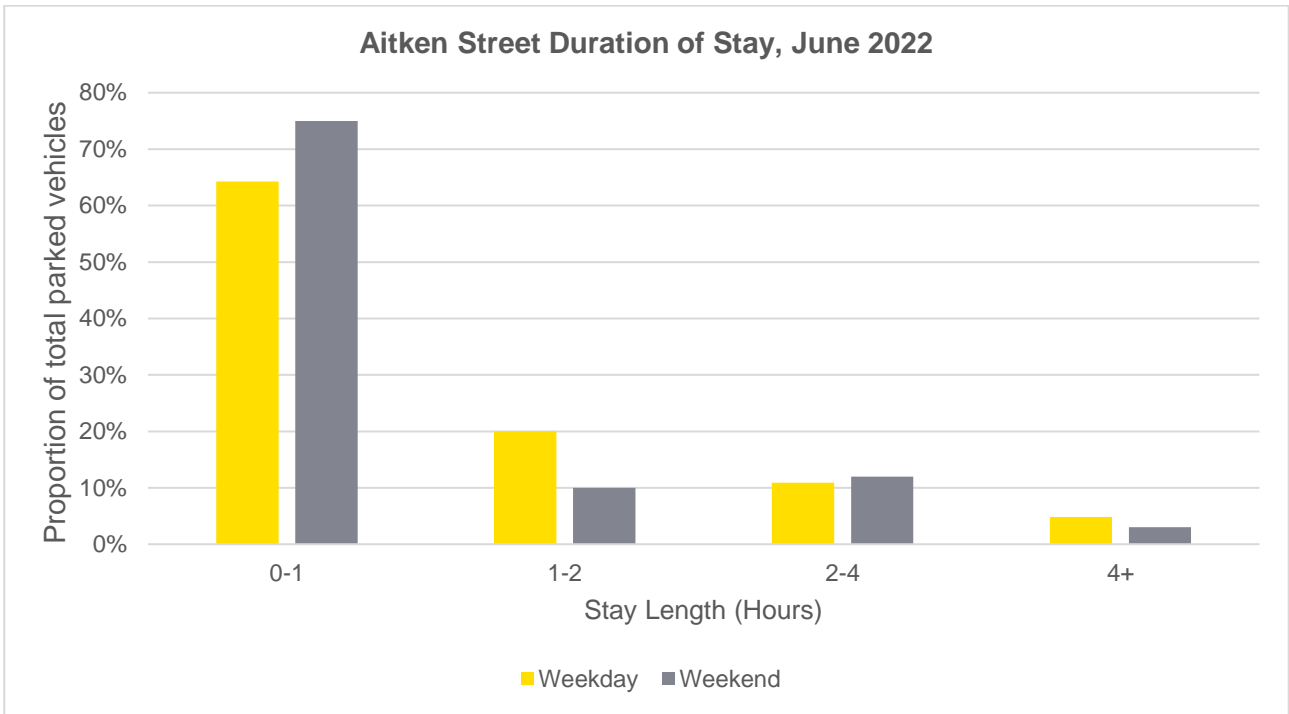


Stout Street Duration of Stay, June 2022



Hill St/Tinakori Rd Duration of Stay, June 2022





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Wellington City Council**

Me Heke Ki Pōneke