Absolutely Positively Wellington City Council

Me Heke Ki Pōneke

WCC Transitional Cycleway Parking Management Plan

Kilbirnie Connections

07 March 2023

Absolutely Positively **Wellington** City Council

Me Heke Ki Pōneke

Version	Date	Description	Author	Approver
6	07 March 2023	FINAL ISSUED	MJ	DS

1	Introduction	4
	1.1 Study Area	5
	1.2 Future Improvements	7
2	Parking Policy	8
	2.1 Wellington Parking Policy 2020	8
	2.2 Parking Occupancy Threshold	9
3	Measuring Parking Impact	10
4	Existing Parking	11
	4.1 Parking Assessment Report	.11
	4.2 Off Street Parking	.11
	4.3 Impacts of COVID-19	.13
5	Section 1 Tacy Street	14
	5.1 About the Area	.14
	5.2 Current Parking and Usage	.14
	5.2.1 Off-Street Parking	15
	5.3 Impact of Transitional Project	.16
	5.4 Parking Impact Analysis	.17
	5.4.1 Occupancy Analysis	17
	5.4.2 Accessibility Analysis	19
	5.5 Mitigation of Parking Impact	.22
	5.5.1 Additional measures and initiatives	22
6	Section 2 Coutts Street	23
	6.1 About the Area	.23
	6.2 Current Parking and Usage	.25
	6.2.1 Off-Street Parking	25
	6.3 Impact of Transitional Project	
	6.4 Parking Impact Analysis	.28
	6.4.1 Occupancy Analysis	
	6.4.2 Accessibility Analysis	
	6.5 Mitigation of Parking Impact	
7	Section 3 Onepu Road Centre	34
	7.1 About the Area	
	7.2 Current Parking and Usage	
	7.2.1 Off-Street Parking	
	7.3 Impact of Transitional Project	
	7.4 Parking Impact Analysis	
	7.4.1 Occupancy Analysis	
	7.4.2 Accessibility Analysis	
	7.5 Mitigation of Parking Impact	
-	7.5.1 Additional measures and initiatives	
8		
	8.1 About the Area	
	8.2 Current Parking and Usage	
	8.2.1 Off-Street Parking	48

	8.3 Impact of Transitional	Project	49
	8.4 Parking Impact Analys	sis	51
	8.4.1 Occupancy Analysis	3	51
	8.4.2 Accessibility Analys	is	
	8.4.3 Overnight Occupand	су	56
	8.5 Mitigation of Parking Ir	mpact	56
	8.5.1 Additional measures	s and initiatives	57
9	9 Summary and Recomm	nendations	58
0			

1 Introduction

The purpose of this report is to develop a Parking Management Plan for the Kilbirnie Connections study area as part of the Transitional Cycleways Programme.

The Transitional Cycleways Programme, led by Wellington City Council (WCC) and alongside Let's Get Wellington Moving (LGWM), will take a new approach to community engagement and installation to help increase the pace of change. By using lower-cost materials that can be adjusted once they are in place, the city can install an interim bike network and gain feedback in real time. This will also inform future permanent changes while gaining benefits earlier.

For the project this route has been split into four distinct sections: Tacy Street (from Rongotai Road to ASB car park); Coutts Street (from Te Whiti Street to Tirangi Road) and Tirangi Road (from Coutts Street to Leonie Gill Pathway); Onepu Road (from Rongotai Road to Coutts Street); and Onepu Road (from Coutts Street to Lyall Parade). These sections are shown in Figure 1. The parking study areas are based on land use/ parking demand drivers as outlined in Section 2.

A Parking Assessment Report (PAR) has been undertaken, informed by parking surveys of the transitional cycleway corridors and adjacent streets. The PAR analysed parking demand data to identify parking behaviour and key parking demand drivers across the study area through duration of stay analysis and occupancy analysis.

This report considers the impact of the proposed improvements on the number of parking spaces available and the ability of users to access local destinations using these parking spaces, both before and after mitigation. Accessibility is measured as a function of the time taken to walk to available car parking spaces should current spaces no longer be available.

The Transitional Cycleways Programme includes options that remove on-street parking spaces and reallocates on-street road space to support active transport, 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. The mitigation measures presented in this report minimise the impact of parking removal on the ability of users 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 document¹.

¹ National parking management guidance – Waka Kotahi (2021)

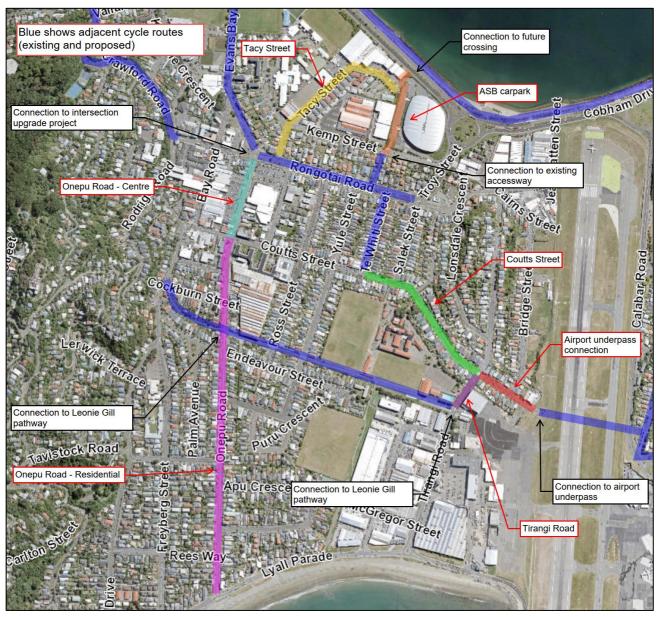


Figure 1 Extent of the transitional cycleway project sections. Purple lines indicate existing network.

1.1 Study Area

Kilbirnie is a residential suburb in the eastern suburbs of Wellington. There is a large shopping precinct, many commercial areas, multiple recreation facilities and schools in the area. Kilbirnie is widely considered to be the commercial hub of the eastern suburbs, having the largest retail/ commercial space on the eastern side of the Mt Victoria tunnel. The area is predominantly flat. The parking in this area is typically unrestricted on-street parking. There are large off-street parking facilities associated with the businesses/ facilities; however, these are typically only to be used by visitors to these locations.

This assessment has been broken down into four areas: Tacy street (includes the Tacy Street and ASB car park sections of the transitional cycleway project), Coutts St (includes the Coutts St, Airport underpass connection and Tirangi Road section of the transitional cycleway project), Onepu Road - Centre (includes the Onepu Road – Centre section of the transitional cycleway project), and Onepu Road – Residential (includes the Onepu Road – Residential section of the transitional section of the transitional cycleway project). These sections are shown in Figure 2.

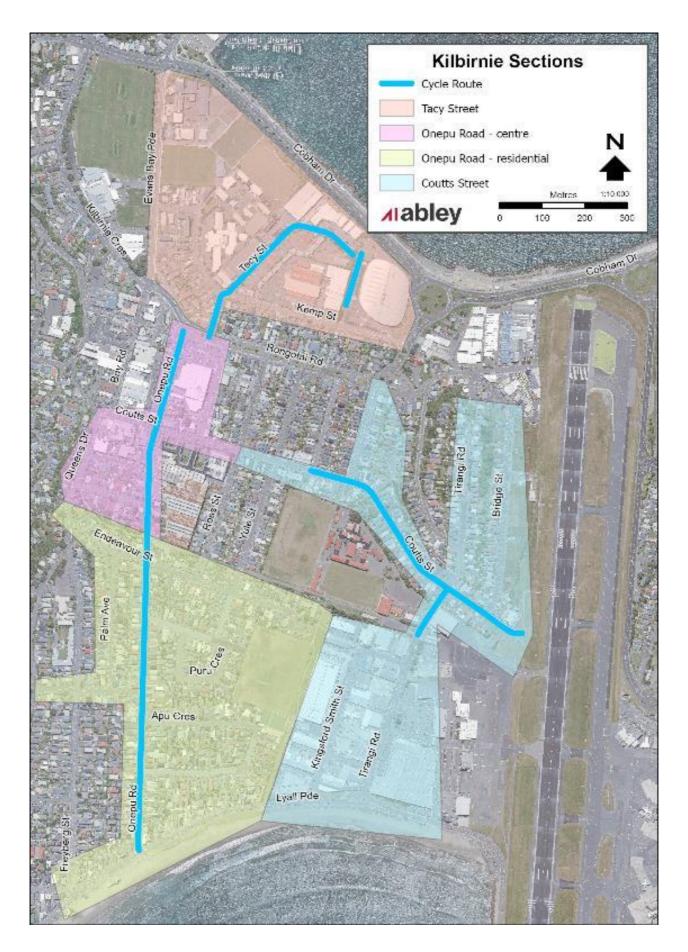


Figure 2 Sections analysed in this parking assessment (with proposed transitional cycleway project sections shown)

1.2 Future Improvements

The proposed scheme has been designed to 90% draft design. The 90% design is the final design however it is still subject to traffic resolution which is the formal record of a decision made by Wellington City Council to change how a road or traffic is managed. For this reason, the 90% design can be used to inform the Parking Management Plan.

Table 1 90% Design Description by Section

Section	Description
Section 1 – Tacy Street	Neighbourhood greenway from Tacy Street cul-de-sac to Rongotai Road. Minimal changes to parking detailed in Section 5.
Section 2 – Coutts Street	Separated/ buffered cycleway in both directions on Coutts Street. Separated/ buffered cycleway in both directions on Tirangi Road. Some on-street parking retained on Coutts Street (detailed in Section 6).
Section 3 – Onepu Road Centre	Separated/buffered cycleways in both directions on Onepu Road. No parking is retained on Onepu Road (more details in Section 7).
Section 4 – Onepu Road Residential	Separated cycleways on Onepu Road in both directions with some sections of shared traffic lanes. Some parking is retained, further details can be found in Section 8.

2 Parking Policy

2.1 Wellington Parking Policy 2020

Wellington City Council adopted an updated Parking Policy in August 2020. The parking policy sets the objectives and principles for the management of Council-controlled on-street and off-street parking, and how parking supports achieving the vision for Wellington.

The Council's vision for Wellington is built around people and communities. The future city will be a place where people and goods can easily move to and through the city, based on a transport system that can accommodate moving more people using fewer vehicles. The city has also set a goal to be a zero-carbon capital by 2050 and transport will play a key role in achieving this goal.

The policy acknowledges that Wellington needs a more efficient transport system that makes better use of limited road space. This means moving more people using fewer vehicles; using public transport more; more people walking and on bikes, and fewer people driving and parking in busy areas. Achieving this will mean removing some on-street parking spaces on key transport routes, reallocating on-street road space to support active and public transport, and re-prioritising the remaining on-street space.

The policy establishes a parking space hierarchy for different parts of the city to ensure that limited parking supply is prioritised appropriately. The parking space hierarchy describes which types of parking have the highest and lowest priorities in different areas. It also sets out the priority level for each type of parking space, rather than the number of spaces.

The hierarchy for outer residential areas applies to the Kilbirnie Transitional Cycleway project and is shown in Table 2.

Priority	Suburban Centres	Outer Residential Areas
Highest priority	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
	Urban design features Bicycle/micro- mobility	Residents
	Short stay (car & motorcycle)	
	Car share	
Medium priority	Loading zones SPSV*/taxi stands	Car share
	Electric-vehicle charging	Mobility
		Electric vehicle
		charging
		Coach and bus (Short Stay)
Low priority	Coach and bus (Short Stay)	Short-stay parks (car & motorcycle)
		Loading zones
Lower priority	Residents	Bicycle/micromobility
	Commuter (car & motorcycle)	Small passenger service vehicle (SPSV)/taxi stands
	Coach and bus (long stay)	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

Table 2 Parking space hierarchy for Outer Residential Areas

2.2 Parking Occupancy Threshold

The Wellington City Parking Policy has multiple references to implementing measures as a tool to restrict parking occupancy of residual on-street parking to no more than 85%. Parking occupancies in excess of 85% can be supported in some situations subject to effective parking management measures which prioritises need based on the parking hierarchy in the Wellington Parking Policy, as well as an ongoing commitment to reducing private vehicle travel demand and corresponding parking demand in the future. This can be achieved through providing high quality public transport and dedicated infrastructure for safe walking and cycling.

3 Measuring Parking Impact

This report considers the impact of the proposed cycleway upgrades on the number of car parks available and the ability of users to access local destinations using these car parks, both before and after mitigation.

A six-point scale is used to assess the level of impact, as outlined in Table 3. This table is used to assess the ability of displaced users to find a similar parking space within a certain walking timeframe. This scale of impact considers the occupancy of the alternative parking spaces.

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 in the vicinity of their destination. Alternative parking spaces of the same type are not available within walking distance.
HighRemoval of parking spaces has a high impact on the ability of us find a parking space in the vicinity of their destination. 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 in the vicinity of their destination. 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 in the vicinity of their destination. 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 in the vicinity of their destination. 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.

4 Existing Parking

4.1 Parking Assessment Report

The Kilbirnie Parking Assessment report (PAR) was developed to analyse the parking demand and behaviour in Kilbirnie as part of the wider Transitional Cycleways Programme. The survey methodology is summarised below, and more details can be found in the full report in Appendix A.

Parking surveys were undertaken from 9am to 5pm on Saturday 28th May and Wednesday 15th June 2022. A survey was undertaken on two days to understand the parking behaviour during both a weekday (predominantly to understand commuter parking behaviour) and a weekend (where resident, shopping and recreational parking behaviour is more prevalent).

The weather on both survey days was fine. The weather is not expected to have significant implications on the 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 Kilbirnie. In addition, a weekday and weekend overnight snapshot survey was undertaken to assess the level of occupancy in the area after working hours.

This survey involved assessing the occupancy of parking within the study area. Duration of stay data has been taken for all vehicles parked on the streets where the cycle improvements are proposed, and in any areas of time restrictions. The duration of stay and occupancy was recorded by recording the first four characters of the license plates of vehicles parked on-street or within Council controlled parking areas each hour during the survey. This involved recording vehicles on both the roads where cycle improvements are proposed, and the surrounding streets to attain an overall picture of parking behaviour.

For the purpose of reporting in the PAR, the parking occupancy was reported to a maximum of 100% occupied; however, the full demand has been considered when assessing the removal of parking in this report.

During the original surveys, road construction caused disruption to the Tirangi Road and Bridge Street surveys. These locations were re-surveyed on Thursday 9th February 2023 and Saturday 11th February 2023.

4.2 Off Street Parking

The parking survey is concerned with on-street parking within the study area only. This is because the Transitional Cycleway proposes to remove on-street parking, and in-line with the Wellington Parking Policy, mitigation should consider alternative on-street parking supply.

Notwithstanding, off-street parking has been identified in the area. Figure 3 illustrates the off-street parking locations within the study area. In addition to the off-street car parking areas, many residential dwellings have access to off-street parking.

The Ākau Tangi Sports Centre (previously ASB Sports Centre) highlighted within Section 1 Tacy Street, provides 323 car parking spaces (as detailed in the Parking Assessment Report Appendix A).

Section 3 Onepu Road Centre contains off-street parking for the commercial area. Across the PAK'nSAVE and Countdown car parks, there are approximately 134 spaces (excluding underground parking). The off-street parking in Section 3 has been surveyed and is discussed in Section 7.

Whilst off-street parking is available throughout the wider Kilbirnie study area, 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 residential and commercial parking has been considered as part of the wider package of mitigation.



Figure 3 Off-street parking locations in the study area

4.3 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. The largest impact this setting has on the survey results is that people are encouraged to work from home where possible. Therefore, it is expected that there is less commuter demand into the city, and the demand for parking by residents may be higher than anticipated as there is more working from home. This effect is difficult to quantify, so the data obtained has not been modified to account for this.

5 Section 1 Tacy Street

5.1 About the Area

The Tacy Street area is a residential section which also includes industrial/commercial space and the Ākau Tangi Sports Centre and associated car park at its eastern end. There are multiple commercial businesses (Placemakers, Resene etc.) as well as a police station, motel, two schools and multiple recreation facilities. The area is shown as Figure 4.

The council is considering cycle improvements on Tacy Street and alongside the Sports Centre carpark to Kemp Street. The sports centre is typically well utilised, with a variety of different sports happening on different days (both during the daytime and night-time) throughout the week.



Figure 4 Section 1 Tacy Street study area

5.2 Current Parking and Usage

Most of the parking in Section 1 is unrestricted on-street parking, however time restricted parking can be found on Tacy Street.

Table 4 shows the parking inventory in Section 1 (by restriction). This table also shows the number of spaces along the proposed transitional cycleway route. The ASB centre car park is not included in this table; however, there are 323 car parks available on-site.

It is worth noting that 20 of the perpendicular parking spaces outside of the netball courts are unrestricted during the weekdays but have a P90 restriction imposed on weekends between 08:00 - 18:00.

The parking restrictions in this section are shown on Figure B1 in Appendix B.

Restriction	On-street capacity across all of Section 1 (Weekday)	On-street capacity across all of Section 1 (Weekend)	On-street capacity on the proposed Transitional Cycleway route within Section 1 (Weekday)	On-street capacity on the proposed Transitional Cycleway route within Section 1 (Weekend)
NL	289	269	99	79
P5	1	1	1	1
P30	3	3	3	3
P60	7	7	7	7
P90	19	39	19	39
P120	20	20	20	20
Total	339	339	149	149

Table 4 Tacy Street section on-road parking inventory

The analysis undertaken in Section 2 of the Parking Assessment Report (Appendix A) can be summarised as follows:

- The surveys indicated occupancy on Tacy Street is higher on a typical weekend than a typical weekday.
- The surveys indicated occupancy on Tacy Street does not exceed 85% threshold on either a typical weekday or weekend.
- The surveys indicated the overall Section occupancy is below the 85% threshold on a typical weekday.
- The surveys indicated the overall Section occupancy during the weekend exceeds the 85% threshold throughout the day except for 13:00 and after 15:00. The occupancy reaches 100% between 11:00 13:00.
- The surveys indicated the largest proportion of unrestricted parking users stayed 4+ hours during the typical weekdays but less than one hour during weekends.

5.2.1 Off-Street Parking

The sports centre car park was surveyed three times on each survey day; 9am, 12pm and 2:30pm. Table 5 shows the parking inventory of the sports centre. There are three defined parking areas, an outdoor public space, a covered public/ staff space and an outdoor staff facility.

The data indicates the off-street car park has availability during the weekday however during the weekend, the occupancy reaches almost 100%.

Table 5	ASB	Sports	Centre	parking	inventory
---------	-----	--------	--------	---------	-----------

Parking area	Public unrestricted spaces	Mobility spaces	Staff spaces	Carpool spaces
Outdoor	145	6	0	0
Covered	115	6	6	15
Staff	0	0	30	0

Table 6 shows the occupancy of the sports centre in each of the survey times on both survey days.

Time	Wednesday	Saturday
9am	11%	95%
12pm	11%	96%
2:30pm	16%	79%

Table 6 ASB Sports Centre occupancy summary

5.3 Impact of Transitional Project

It is proposed to remove a total of two P120 spaces on Tacy Street. The spaces are proposed to be removed from the perpendicular parking outside of the netball courts to provide for cycle parking. This is approximately 10% of the P120 spaces in Section 1. The transitional cycleway will also result in the formalisation of no-parking on the Tacy Street cul-de-sac. This will reduce the parking inventory by seven spaces in that area, reducing the number of unrestricted spaces in Section 1 from 99 to 92 during the weekdays and 79 to 72 during the weekends.

The location of retained parking can be seen in the transitional project design drawings.

Street Name	Existing Parking	Proposed Parking	Expected Parking Users	Potential Impacts
Tacy Street	Supply Unrestricted – 99 / 79 P5 - 1 P30 - 3 P60 - 7 P90 – 19 / 39 P120 - 20	Supply Unrestricted – 92/72 P5 – No proposed changes P30 – No proposed changes P60 – No proposed changes P90 – No proposed changes	Users The northern most section of Tacy Street lies within a WCC Local Plan Business 1 Zone. The expected users are short-stay visitors to the commercial area and sporting facilities. This is supported by duration of stay data set out within the PAR (Appendix A)	Lack of parking near facilities may result in illegal parking.
Kemp Street	Unrestricted - 125	P120 - 18 No proposed changes	Kemp Street is located within a WCC Local Plan Medium Density Residential Area zone. The main users of this area are residents; however, the area does experience short-stay trips from visitors.	Lack of parking on Tacy Street may result in an increase in occupancy on Kemp Street. This could result in reduced on- street parking for residents.
Evans Bay Parade	Unrestricted - 65	No proposed changes	Evans Bay Parade provides residential parking for housing within the WCC Local Plan Medium Density Residential Area zone that borders the road. The main users of parking on this road are weekend visitors to Kilbirnie Park & facilities during sports matches.	Lack of parking on Tacy Street may result in an increase in occupancy on Evans Bay Parade.

Table 7 Impact of Transitional Cycleways on Section 1

5.4 Parking Impact Analysis

The level of impact can be quantified by how easily displaced users can find equivalent parking nearby. The removed parking supply on Tacy Street comprises 2 P120 spaces, therefore the availability and proximity of nearby P120 spaces or unrestricted spaces should be understood. The transitional cycleway will also remove seven unrestricted spaces from Tacy Street; this section will seek to understand the availability and proximity of unrestricted spaces in Section 1.

The number of P120 spaces in the area will reduce from 20 to 18. The number of unrestricted spaces on Tacy Street will reduce from 99 to 92 on weekdays and from 79 to 72 parking spaces on weekends. The overall number of P120 plus Unrestricted spaces in the area would reduce from 289 to 280 on the weekdays and from 269 to 260 on weekends.

5.4.1 Occupancy Analysis

Figure 5 shows the occupancy of P120 spaces during the weekday, before and after the removal of P120 parking. The data indicates occupancy would increase to 100% occupancy at 09:00, however for the rest of the survey period, occupancy remains below the 85% threshold.

Figure 6 shows the occupancy of P120 and Unrestricted (NL) spaces on Tacy Street during a typical weekday before and after the removal of P120 and unrestricted spaces. The occupancy remains below the 85% threshold when parking is removed on Tacy Street. The data indicates the

existing capacity of P120 and unrestricted spaces is able to accommodate the removal of two P120 and seven unrestricted spaces.

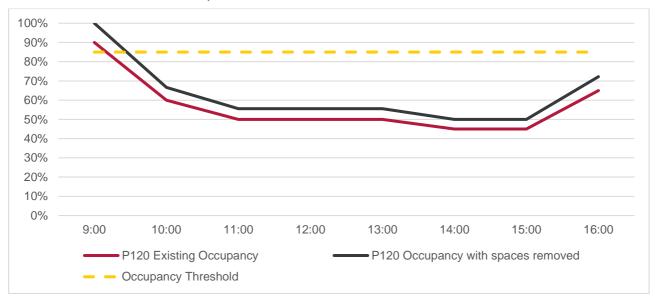


Figure 5 Section 1 P120 occupancy with proposed parking removed (weekday)

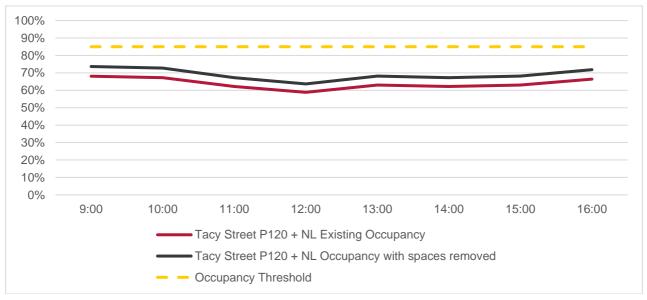


Figure 6 Section 1 Tacy Street P120 + NL occupancy with proposed parking removed (weekday)

Analysis was undertaken of the occupancy of existing P120 spaces compared to remaining P120 spaces. The data indicates occupancy would increase beyond 100% until 13:00 where occupancy reduces below the 85% threshold. The survey data indicates there is illegal parking between 09:00 – 13:00 which results in the occupancy greater than the available capacity.

Figure 7 shows the occupancy of P120 and Unrestricted (NL) spaces on Tacy Street during a typical weekend day, before and after the removal of P120 and unrestricted spaces. The occupancy remains above the 85% threshold until 13:00, however the occupancy does not exceed 100%. This indicates the existing capacity of P120 and Unrestricted spaces summed, is able to accommodate the removal of P120 and unrestricted spaces during the weekend.

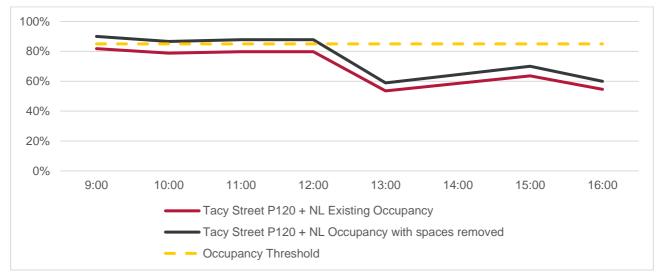


Figure 7 Section 1 Tacy Street P120 + NL occupancy with proposed parking removed (weekend)

As stated in Section 5.3, there are 20 spaces perpendicular to the netball courts on Tacy Street which are unrestricted during weekdays but have a P90 restriction imposed on weekends between 08:00 - 18:00. Additional analysis has been undertaken to understand the occupancy of these 20 spaces during the weekend when demand is higher as shown in Figure 8.

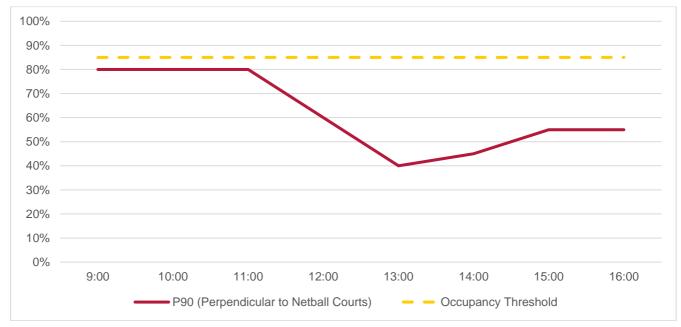


Figure 8 Occupancy of P90 spaces perpendicular to netball courts (weekend)

5.4.2 Accessibility Analysis

Figure 9 illustrates walking isochrones with an origin at the location of the proposed removed P120 spaces on Tacy Street and unrestricted spaces at the cul-de-sac.



Figure 9 Walking Isochrone from proposed removed parking, Section 1

Figure 9 can be used to understand how far users need to walk to find alternative equivalent parking. For P120 spaces, alternative equivalent parking are other P120 spaces or unrestricted spaces.

By subtracting the existing average occupancy of streets with alternative parking from the capacity, it is possible to understand how much availability there is to accommodate displaced users. Table 8 uses the impact definitions set out in

Table 3 to define the impact to users. The table summarises the walking distance to find an alternative parking space from the location of the proposed removed P120 spaces on Tacy Street. During the weekday, users are likely to find alternative parking for both P120 spaces within a one-minute walk from the original P120 spaces. During the weekend, on average users are expected to be able to find an alternative P120 parking space within 3 to 5 minutes from the original P120 spaces.

During both the weekday and weekend, users are likely to be able to find an alternative unrestricted space within a 1 to 3 minute walk from the original unrestricted parking location in Tacy Street cul-de-sac.

Table 8 Impact to users by removing spaces in Section 1

Day Type	Parking Type	Number of spaces removed	Total remaining spaces	No Impact	Very Low (Alternative spaces within 0-1 minutes' walk)	Low (Alternative spaces within 1-3 minutes' walk)	Moderate (Alternative spaces within 3-5 minutes' walk)	High (Alternative spaces within 5-10 minutes' walk)	Very High (Alternativ e spaces outside of the section area)
Weekday	P120	2			2				
Weekuay	Unrestricted	7	330			7			
Weekend	P120	2					2		
vveekenu	Unrestricted	7		7					

5.5 Mitigation of Parking Impact

Wellington City Council (WCC) parking policy provides a process to identify and mitigate parking issues based on parking space hierarchies, which justify the removal or reallocation of spaces.

Section 1 Tacy Street lies within WCC Suburban Centre parking management area. Table 9 sets out the WCC Parking Policy parking management issues in Section 1. The corresponding WCC Parking Policy management tool for each issue is also detailed in the table.

The Section 1 weekday occupancy is consistently below the 85% threshold with and without the proposed parking removal, therefore the mitigation discussed in Table 9 seeks to address the high demand seen during a typical weekend.

Parking Management Issue	Comments	Parking Management Tools	Comments	Parking Hierarchy Considerations
Demand for parking continues to increase, (occupancy of spaces is consistently over 85 percent, turnover is low, duration of stay regularly exceeds	Demand during the weekends is consistently above 85% threshold until 13:00. This is likely attributed to sporting events and retail visitors. Additionally,	Introduce charges when parking occupancy is high.	There are currently no parking charges on Tacy Street. This parking management tool would manage the high demand during weekends at peak times.	The removal of parking reallocates space to the highest priority by supporting the efficient movement of people and goods through cycle lanes.
current time restriction, and non- compliance is high).	the greatest proportion of users are staying for less than one hour resulting in high turnover.			Short-stay car and motorcycle parking, and car-share spaces are high priority in this parking management area. Further mitigation could include changing unrestricted spaces into short stay parking spaces/ car share parking spaces to accommodate higher demand on weekends.

Table 9 Parking Management Issues for Section 1 Tacy Street

5.5.1 Additional measures and initiatives

It is recommended that WCC work with private landowners of the leisure facilities within Section 1 to manage parking and travel demand by promoting travel behaviour change through a range of initiatives.

It is also recommended that WCC provide cycle parking to support the use of cycling as a mode to the land uses in the area.

6 Section 2 Coutts Street

6.1 About the Area

This area is a primarily residential section which also includes the commercial centres around Kingsford Smith Street (See Figure 10). This section connects the existing cycleway on Coutts St and Te Whiti St to the airport underpass and the Leonie Gill pathway. There are three sections of this area being looked at for cycle improvements: the Coutts Street section (which connects the existing cycleway to the intersection of Tirangi Road and Coutts Street), the Airport underpass connection (which connects the intersection of Tirangi Road and Coutts St to the airport underpass tunnel), and Tirangi Road (which connects the intersection of Coutts St and Tirangi Road to the Leonie Gill Pathway).

This section has pockets of small shops (dairy, takeaway, etc.) as well as the airport retail park, big box retail and various other commercial areas. The southern end of this section connects to Lyall Bay Beach, a popular recreation spot.

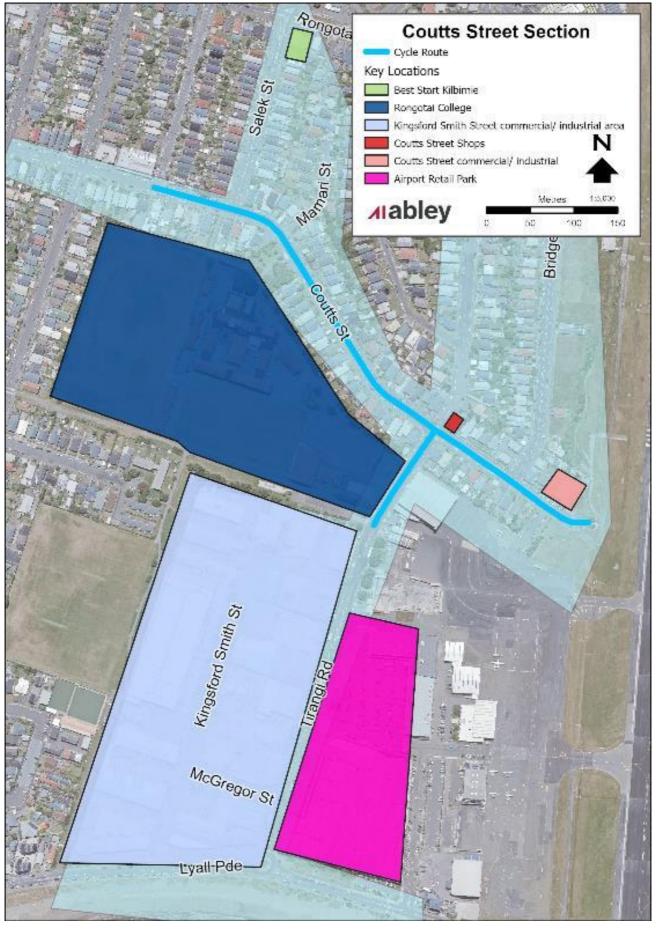


Figure 10 Section 2 Coutts Street study area

6.2 Current Parking and Usage

Most of the parking in this area is unrestricted on-street parking. There are small sections of time restricted spaces for shops/takeaways. There is a large off-street parking area for the airport retail park, as well as Bunnings. Table 10 shows the parking inventory in this section, noting that unlike Tacy Street the inventory is the same on weekends as weekdays. It also indicates the number of existing parking spaces along the route where the transitional cycleway project is proposed. The parking restrictions in this section are shown on Figure B2 in Appendix B and a breakdown of the parking inventory by street and restriction is provided in Table 11.

Table 10 Section 2 on-street	t parking inventory
------------------------------	---------------------

Restriction	On-street capacity across all of Section 2	On-street capacity on the proposed Transitional Cycleway route within Section 2
NL	707	130
Mobility	1	0
Loading	1	0
P10	5	1
P20	3	0
P30	2	0
P60	6	0
P120	11	0
P600	7	7
Total	743	138

The analysis undertaken in Section 3 of the Parking Assessment Report (Appendix A) can be summarised as follows:

- The surveys indicate the overall occupancy on the cycleway corridor and entire section is below the 85% threshold on a typical weekday and weekend.
- The surveys indicate Kingsford Smith Street peak occupancy is between 81-100% during the weekday.
- The surveys indicate the peak occupancy is between 81-100% during a typical weekend on Salek Street, Mamari Street and parts of Tirangi Road and Coutts Street.
- The surveys indicate the highest proportion of time restricted parking space users stay for less than one hour.
- The surveys indicate the unrestricted spaces are most commonly occupied for less than one hour or greater than four hours.

6.2.1 Off-Street Parking

A high-level survey was undertaken to understand the residential off-street parking supply on Coutts Street between Te Whiti Street and Tirangi Road. The survey indicated 97% of dwellings

have access to off-street parking in the form of a garage or private driveway. The data 2 is illustrated in Figure 11.



Figure 11 Coutts Street residential off-street parking

² Note due to rounding this does not add up to 100% in the figure.

6.3 Impact of Transitional Project

It is proposed to remove a total of 70 of the 123 parking spaces on Coutts Street where the transitional cycleway is proposed, and all 15 of the parking spaces on Tirangi Road where the transitional cycleway is proposed. This is approximately 9% of the total spaces in Section 2.

Most of the spaces which are proposed to be removed on Coutts Street are located in the eastbound direction between Te Whiti Street and the roundabout with Tirangi Road.

The angle parking between the roundabout with Tirangi Road, and the cul-de-sac, will also be removed and replaced with parallel parking. This will result in an overall decrease in parking on this section of Coutts Street.

The location of retained parking can be seen in the transitional project design drawings.

Street Name	Existing Parking Supply	Proposed Parking Supply	Expected Parking Users	Potential Impacts	
Bridge Street	Unrestricted – 122 P20 – 2	No proposed changes	Bridge Street lies within the WCC Outer Residential zone. The survey indicates the users of Bridge Street are residents and visitors.	Increased occupancy from visitors and residents of Coutts Street unable to find parking.	
Coutts Street	Unrestricted – 135	Unrestricted – 68	Between Ross Street and	Reduced on-street	
	Loading – 1 P10 – 1 P600 – 7	ng - 1Loading - no proposed changesthe cul-de-sac, Coutts Street sits within WCC Outer Residential zon1P10 - will be removed but retained elsewhereThe main users of this area are residents and		parking for residents, long-stay and short-stay visitors. This may result in users parking further away from their destination. The lack of	
		in the study area P600* – 5	There are also local	marked parking may	
*Any remaining P600 spaces will change to P240 restrictions.		shops and businesses along Coutts Street which will attract short- stay visitors.	result in illegal parking manoeuvres.		
Kingsford	Unrestricted – 128	No proposed changes	Kingsford Smith Street is	The removal of on-street	
Smith Street	P20 – 3		located within the WCC Business 1 zone. The	parking on Coutts Street is unlikely to have an	
	P60 - 6 key users		key users on this street	impact on Kingsford	
	P120 – 11		are short-stay visitors to the commercial area and commuters to the employment locations. This street could also be used by visitors to Lyall Bay.	Smith Street.	
Lyall Parade	Unrestricted – 59	No proposed changes	Lyall Parade primarily provides parking for those visiting Lyall Bay for leisure purposes. These trips can vary in length from short-stay to long-stay day trips.	The removal of on-street parking on Coutts Street is unlikely to have an impact on Lyall Parade.	
Mamari Street	Unrestricted – 19	It is proposed to reallocate two unrestricted spaces to P10 spaces to serve the nearby Fish and Chip shop.	Mamari Street lies within the WCC Outer Residential Zone. The primary parking users of this street are residents.	Increased occupancy from visitors and residents of Coutts Street unable to find parking.	

Table 11 Impact of Transitional Cycleways on Section 2
--

Street Name	Existing Parking Supply	Proposed Parking Supply	Expected Parking Users	Potential Impacts
McGregor Street	Unrestricted – 29	No proposed changes	McGregor Street is located within the WCC Business 1 zone. The key users on this street are short-stay visitors to the commercial area and commuters to employment locations. This street could also be used by visitors to Lyall Bay.	The removal of on-street parking on Coutts Street is unlikely to have an impact on McGregor Street.
Salek Street	Unrestricted – 45 Mobility – 1 P10 – 2	No proposed changes	Salek Street is located within WCC Outer Residential zone. The primary parking users of this street are residents and visitors.	Increased occupancy from visitors and residents of Coutts Street unable to find parking.
Tirangi Road	Unrestricted – 170 P10 – 2	Unrestricted – 155 P10 – no proposed changes	Tirangi Road borders two WCC zones; Business 1 and Airport. The key users on this road are short-stay visitors to the commercial area and commuters to employment locations. This street could also be used by visitors to Lyall Bay. Where the Transitional Cycleways are proposed, the users could also be residents.	Residents, long-stay and short-stay visitors unable to find parking. This may result in users parking further away from their destination. The lack of marked parking may result in illegal parking manoeuvres.

6.4 Parking Impact Analysis

The level of impact can be quantified by how easily displaced users can find equivalent parking nearby. The removed parking supply on Coutts Street comprises 67 unrestricted spaces, one P10 space and 2 P600 spaces. An additional 15 spaces will be removed from Tirangi Road. The availability and proximity of nearby unrestricted spaces in Section 2 should be understood.

6.4.1 Occupancy Analysis

It is proposed to retain the P10 space outside the dairy at 227 Coutts St by reallocating an adjacent unrestricted space on Coutts Street.

Figure 12 seeks to understand whether the side streets can accommodate the displaced demand as a result of the reduced parking supply on Coutts Street and Tirangi Road. The exercise calculated the overall occupancy on Coutts Street, Salek Street, Mamari Street Tirangi Road and Bridge Street for the weekday and weekend.

The survey data indicates the displaced demand from Coutts Street can be accommodated in the wider Coutts Street area on the weekday and weekend, with occupancy below the 85% threshold throughout the surveyed day.

Additionally, it is expected that residents will utilise off-street residential parking where this is available.

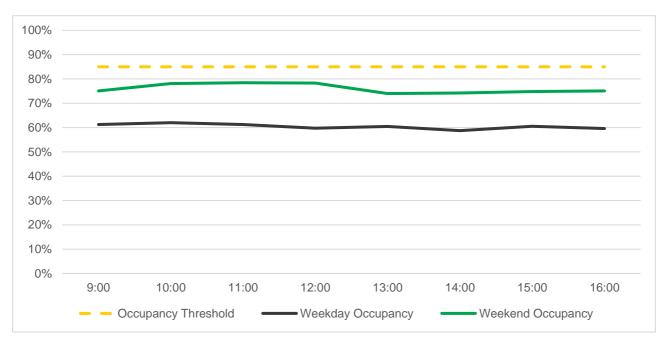


Figure 12 Occupancy of Coutts Street + key surrounding streets after cycleway implementation

6.4.2 Accessibility Analysis

Figure 13 illustrates walking isochrones from three general origin points where parking is proposed to be removed along Coutts Street.

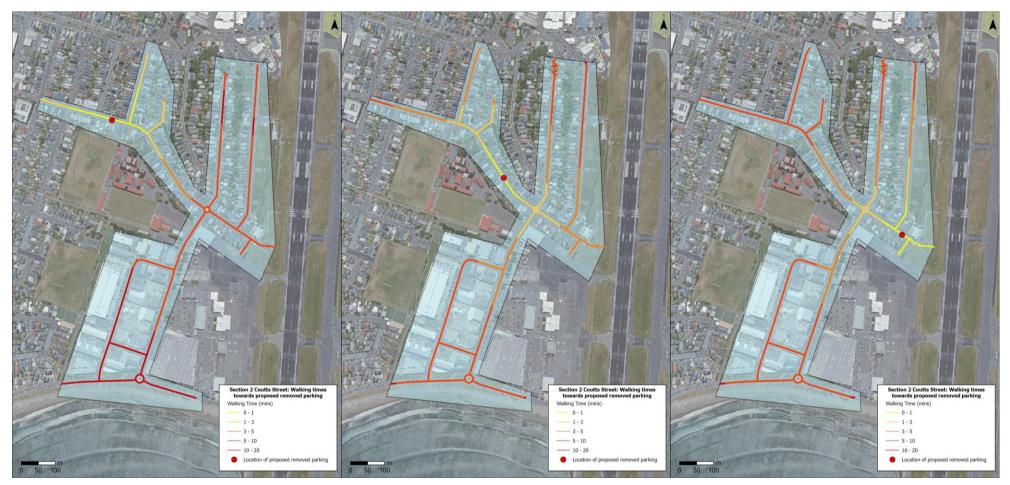


Figure 13 Walking Isochrone from proposed removed parking (three origin points) Section 2

Figure 13 can be used to understand how far users need to walk to find alternative equivalent parking. For unrestricted and P600 spaces, alternative equivalent parking are unrestricted spaces. For P10 spaces, any parking space with an equivalent or greater time restriction is classified as an alternative space. Although, it would be beneficial to find capacity in a nearby short-stay space to ensure the parking space is fit for purpose for the intended user (visitors to the dairy).

By subtracting the existing average occupancy of streets with alternative parking from the capacity, it is possible to understand how much availability there is to accommodate displaced users.

Table 12 uses the impact definitions set out in

Table 3 to define the impact to users. The table summarises a high-level exercise which has been undertaken to determine the walking distance to find an alternative parking space from the locations of removed parking on Coutts Street. The exercise is based on average occupancy across the day and professional judgement has been applied to determine which spaces will be preferred from each origin point.

The data indicates all displaced demand will likely find a parking space within a 3 to 5 minute walk from their original parking location³

It is also expected that some displaced demand will be accommodated by resident off-street parking where this is available.

³ This exercise has assumed the fifteen spaces on Tirangi Road can be accommodated on Tirangi Road (north of Coutts Street) or Bridge Street.

Table 12 Impact to users by removing spaces in Section 2

Day Туре	Parking Type	Number of spaces removed	Total remaining spaces	No Impact	Very Low (Alternative spaces within 0-1 minutes' walk)	Low (Alternative spaces within 1-3 minutes' walk)	Moderate (Alternative spaces within 3-5 minutes' walk)	High (Alternative spaces within 5-10 minutes' walk)	Very High (Alternative spaces outside of the section area)
	Unrestricted	82			20	46	16		
Weekday	P10	1 (reallocated)	-		1				
	P600	2	658			2			
	Unrestricted	82	-		20	38	24		
Weekend	P10	1 (reallocated)	-		1				
	P600	2	- 			2			

6.5 Mitigation of Parking Impact

Wellington City Council (WCC) parking policy provides a process to identify and mitigate parking issues based on parking space hierarchies, which justify the removal or reallocation of spaces.

Section 2 Coutts Street sits within an Outer Residential Parking Management Area.

Table 13 sets out the WCC Parking Policy parking management issues in Section 2: Coutts Street. The corresponding WCC Parking Policy management tool for each issue is also detailed in the table.

Parking Management Issue	Comments	Parking Management Tools	Comments	Parking Hierarchy Considerations
Overspill activity has a moderate effect on parking in neighbouring streets	Removing parking will result in increased occupancy on neighbouring streets. The exact impact will differ throughout the day as demand fluctuates. The survey data indicates the overall section will still remain within 100% occupancy throughout a typical weekday and weekend.	Increase monitoring and enforcement to discourage illegal parking activity. Introduce time restrictions.	As the removed parking and surrounding streets are primarily used by residents, it may not be appropriate to place time restrictions on parking as this could further reduce the supply for residents.	The removal of parking reallocates space to the highest priority by supporting the efficient movement of people and goods through cycle lanes. Residents are a high priority in outer residential areas. If occupancy regularly exceeded 100%, a resident's scheme may be considered to ensure the local residents are able to park within reasonable proximity to their homes.
		Short-stay parks are low priority in this area, however as this Section contains a dairy and take-away, it is recommended that any short-stay parking spaces are retained.		

Table 13 Parking Management Issues for Section 2 Coutts Street

Parking for Airport Commuters

In 2017, Council introduced parking restrictions in the Strathmore area to reduce airport commuters parking on residential streets in the area. Continued monitoring of parking in this area is proposed; if monitoring indicates a similar issue is impacting residents and other short stay parking users in the Coutts Street Section, further restrictions could be investigated to disincentivise airport parking in Kilbirnie.

7 Section 3 Onepu Road Centre

7.1 About the Area

This area is part of the central commercial hub of Kilbirnie and has a significant number of nonresidential businesses and centres. This area has two supermarkets and multiple takeaway/ retail shops. This section includes the northern part of the proposed Onepu Road cycle improvements. This section is shown as Figure 14. This section has been separated from the residential section at the Coutts Street and Onepu Road intersection



Figure 14 Section 3 Onepu Road Centre study area

7.2 Current Parking and Usage

Most of the parking in this area is unrestricted on-street parking. There is a significant section of time-restricted on-street parking on the northern end of Onepu Road. There are two major car parks in this section, for the PAK'nSAVE and Countdown supermarkets. These car parks have not been surveyed; however, the inventory has been determined from aerial photography. The PAK'nSAVE car park also includes an underground facility; however, the inventory of this is not included in this report. Off-street parking analysis within the Kilbirnie commercial area has been undertaken and is discussed in Section 7.6.

Table 14 shows the on-street inventory of parking spaces in this section by restriction. This also details the number of car parks on the section where cycle improvements are proposed.

The parking restrictions in this section are shown on Figure B3 in Appendix B and a breakdown of the parking inventory by street and restriction is provided in Table 19.

Table 14 Section 3 On-street parking inventory

Restriction

On-street capacity across all of Section 3 On-street capacity on the proposed Transitional Cycleway route within Section 3

NL	79	0
Mobility	1	0
P30	5	0
P60	82	31
Total	167	31

The analysis undertaken in Section 4 of the Parking Assessment Report (Appendix A) can be summarised as follows:

- The surveys indicate Section 3 time restricted parking has an occupancy profile that peaks at midday on both the weekdays and weekends.
- The surveys indicate Section 3 unrestricted parking has a flatter occupancy profile which indicates commuter parking.
- The surveys indicate occupancy on Onepu Road remains above the 85% threshold during the weekday and most of the weekend.
- The surveys indicate the overall Section 3 occupancy exceeds the 85% threshold between 11:00 14:00 on both the weekday and weekends.
- The duration of stay data indicates the largest proportion of trips are parked for less than one hour. This is true on both the weekday and weekends.
- Overnight parking in the entire section is low; less than 20% on Onepu Road.

7.2.1 Off-Street Parking

A parking survey of the off-street car parking areas in Kilbirnie Centre was undertaken on Wednesday 22nd June 2022 and Saturday 25th June 2022 between 09:00 and 17:00. An evening survey was also undertaken on Wednesday 25th January between 17:00 and 19:00. The surveys capture the hourly occupancy of the off-street car parks in Section 3.

The surveyed parking areas serve the following:

- 1. Pak n Save
- 2. Countdown, Unichem Pharmacy and Chemist Warehouse
- 3. Resident parking
- 4. Pak n Save fuel refilling station

The location of the off-street parking can be seen in Figure 15.



Figure 15 Section 3 off-street parking locations

Off-Street Parking 1 – Pak n Save

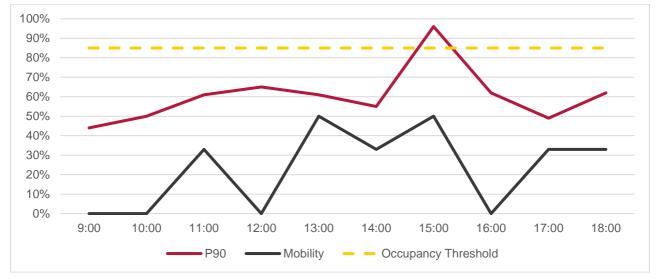
Off-street parking that serves the Pak n Save comprises P90 and Mobility restrictions. Table 15 sets out the parking inventory.

Parking Restriction	Inventory
P90	202
Mobility	6
Total	208

Table 15 Off-Street Parking 1 Inventory

Figure 16 and Figure 17 illustrate the occupancy of off-street parking 1 throughout the surveyed weekday and weekend respectively. During the weekday, the P90 spaces in this car park is shown to be below 85% for most of the day, however between 15:00 – 16:00 the occupancy increases to 96%. During the weekend, the occupancy steadily increases throughout the day and remains below 85% until 15:00-16:00 when occupancy reaches 85%.

The data indicates the supply of Mobility parking is able to accommodate demand during the weekday, however occupancy is 100% during the weekend between 14:00-15:00.



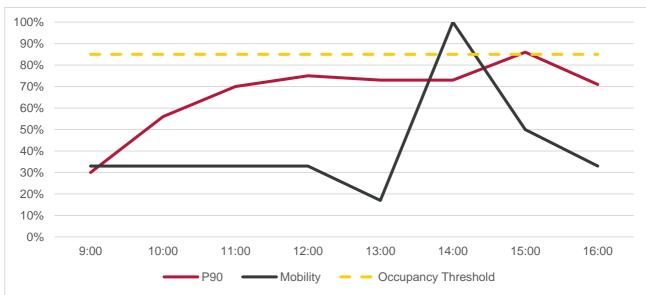


Figure 16 Off-Street Parking 1, Weekday Occupancy

Figure 17 Off-Street Parking 1, Weekend Occupancy

Off-Street Parking 2 – Countdown, Unichem Pharmacy and Chemist Warehouse

Off-street parking that serves the Countdown, Unichem Pharmacy and Chemist Warehouse comprises P90, P60, Unrestricted and Mobility parking spaces. Table 16sets out the parking inventory.

Parking Restriction	Inventory
P90	119
P60	30
Mobility	5
Unrestricted	22
Total	176

Figure 18 and Figure 19 illustrate the occupancy of off-street parking area 2 throughout the surveyed weekday and weekend respectively. The data indicates all parking spaces remain below the 85% threshold throughout both the weekday and weekend.

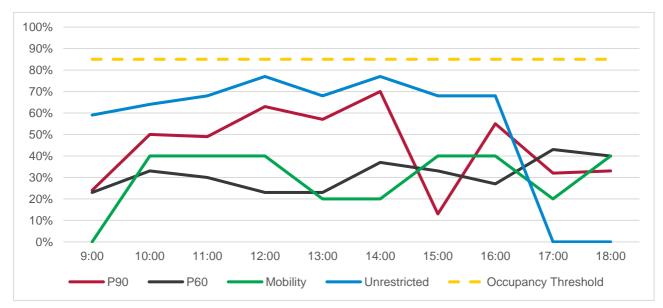


Figure 18 Off-Street Parking 2, Weekday Occupancy

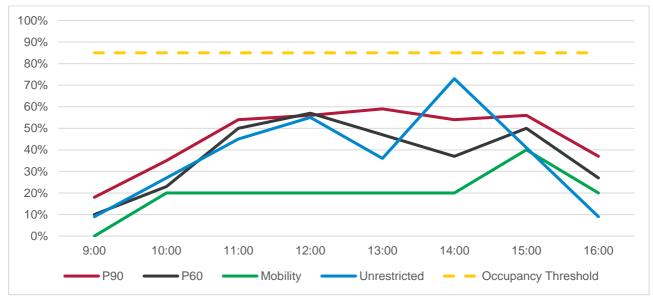


Figure 19 Off-Street Parking 2, Weekend Occupancy

Off-Street Parking 3 – Resident Parking

Off-street parking that serving the residents parking area between 35 and 39 Onepu Road comprises Resident and Unrestricted parking spaces. Table 17 sets out the parking inventory.

Table 17 Off-Street Parking 3 Inventory

Parking Restriction	Inventory
Resident	10
Unrestricted	15
Total	25

Figure 20 Figure 21 illustrate the occupancy throughout the surveyed weekday and weekend respectively. The weekday data indicates both the Resident and Unrestricted spaces have the highest occupancy in the morning, which gradually decreases throughout the day.

The data indicates that during the weekend, the Unrestricted spaces are not occupied at all and the Resident spaces remain below 85% occupied.

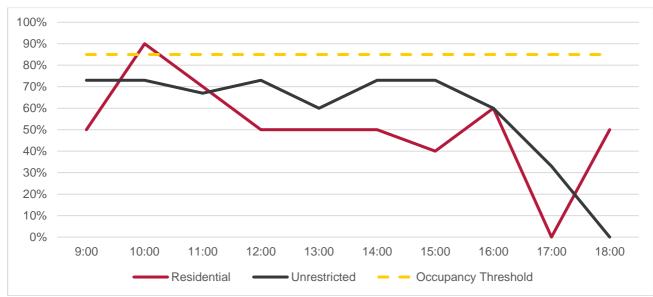


Figure 20 Off-Street Parking 3, Weekday Occupancy

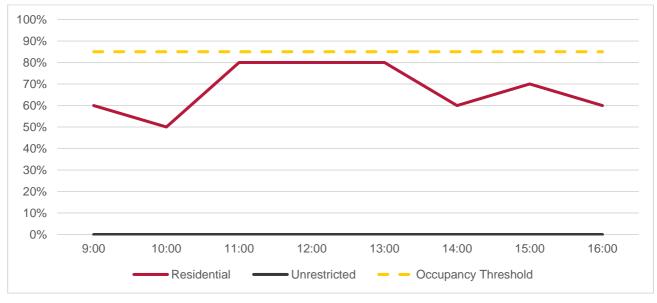


Figure 21 Off-Street Parking 3, Weekend Occupancy

Off-Street Parking 4 – Pak n Save Fuel

Off-street parking that serving the Pak n Save fuel refilling station comprises Unrestricted parking spaces. Table 18 sets out the parking inventory.

Table 18 Off-Street Parking 4 Inventory

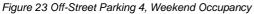
Parking Restriction	Inventory
Unrestricted	7
Total	7

Figure 22 and Figure 23 illustrate the occupancy of the surveyed weekday and weekend respectively. The data indicates the occupancy of the Unrestricted spaces remains below 85% on both a weekday and weekend.



Figure 22 Off-Street Parking 4, Weekday Occupancy





7.3 Impact of Transitional Project

It is proposed to remove a total of 31 P60 spaces on Onepu Road. This is 100% of the parking on Onepu Road in Section 3, and approximately 37% of the P60 parking in the overall section. The overall section inventory will reduce from 167 to 136 parking spaces.

The location of retained parking can be seen in the transitional project design drawings.

Street Name	Existing Parking Supply	Proposed Parking Supply	Expected Parking Users	Potential Impacts
Coutts Street	Unrestricted – 25 Mobility – 1 P60 – 46	No proposed changes	Users of the commercial centre. A mix of short- stay visitors and commuters.	Increased occupancy. High occupancy possibly leading to illegal parking on Coutts Street.
Mahora Street	Unrestricted – 54 P30 – 5 P60 – 5	No proposed changes	Users of the commercial centre. A mix of short- stay visitors and commuters. Some residential users and associated visitors.	Increased occupancy. High occupancy possibly leading to illegal parking on Coutts Street.
Onepu Road	P60 – 31	P60 – 0	Users of the commercial centre. A mix of short- stay visitors and commuters.	Users unable to find parking close to their destination. Users parking illegally on Onepu Road.

Table 19 Impact of Transitional Cycleways on Section 3

7.4 Parking Impact Analysis

The level of impact can be quantified by how easily displaced users can find equivalent parking nearby. The removed parking supply on Onepu Road comprises 31 P60 parking spaces. There is no parking supply proposed on Onepu Road. This analysis should seek to understand the occupancy of and accessibility to equivalent parking spaces.

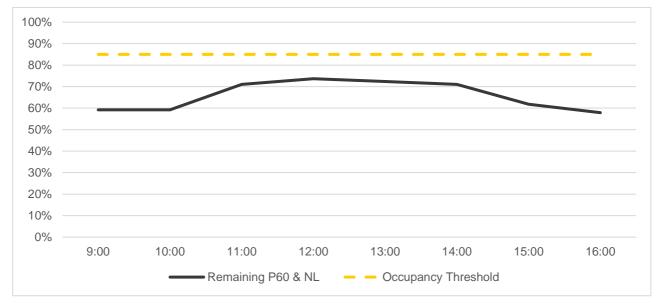
7.4.1 Occupancy Analysis

Analysis was undertaken to compare occupancy of the existing P60 vs the remaining P60 spaces. The data indicates occupancy would exceed 100% and that the remaining 51 P60 spaces cannot accommodate the displaced demand from Onepu Street P60 spaces.

Figure 24 and Figure 25 illustrate the occupancy of displaced P60 spaces combined with the remaining P60 and unrestricted demand in Section 3, for the weekday and weekend respectively.

When comparing the displaced P60 demand against the remaining P60 supply and the unrestricted parking spaces on Coutts Street, the data indicates the displaced demand can be accommodated during the weekday without exceeding the 85% threshold. The displaced demand can also be accommodated during the weekend; however occupancy exceeds the 85% threshold during the peak period between 11:00-14:00.

The users of the P60 spaces are likely visitors of the commercial centre. It is noted that these users also have access to off-street parking areas which serve the commercial area, as an alternative to the on-street P60 spaces. The off-street parking locations and analysis within Onepu Road Centre can be found in Section 7.2.1.



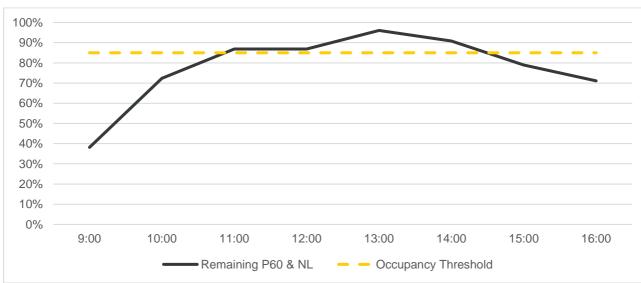


Figure 24 Occupancy of remaining P60 and NL spaces (weekday)

Figure 25 Occupancy of remaining P60 and NL spaces (weekend)

7.4.2 Accessibility Analysis

Figure 26 illustrates walking isochrones from a centre origin point where the P60 parking is proposed to be removed along Onepu Road.



Figure 26 Walking Isochrone from proposed removed parking, Section 3

Figure 26 can be used to understand how far users need to walk to find alternative equivalent parking. For P60 spaces, alternative equivalent parking are other P60 parking spaces or unrestricted spaces.

By subtracting the existing average occupancy of streets with alternative parking from the capacity, it is possible to understand how much availability there is to accommodate displaced users.

Table 20 uses the impact definitions set out in

Table 3 to define the impact to users. The table summarises a high-level exercise which has been undertaken to determine the walking distance to find an alternative parking space from the locations of removed parking on Coutts Street. The exercise is based on average occupancy across the day and professional judgement has been applied to determine which spaces will be preferred from each origin point.

The data indicates all displaced demand will likely find a parking space within a 1-3 minute walk from their original parking location.

Table 20 Impact to users by removing spaces in Section 3

Day Type	Parking Type	Number of spaces removed	Total remaining Spaces	No Impact	Very Low (Alternative spaces within o- 1 minutes' walk)	Low (Alternative spaces within 1- 3 minutes' walk)	Moderate (Alternative spaces within 3- 5 minutes' walk)	High (Alternative spaces within 5- 10 minutes' walk)	Very High (Alternative spaces outside of the section area)
Weekday	P60	31	136 (plus off- street parking			31			
Weekend	P60	31	 which is not included in this assessment) 			31			

7.5 Mitigation of Parking Impact

Wellington City Council (WCC) parking policy provides a process to identify and mitigate parking issues based on parking space hierarchies, which justify the removal or reallocation of spaces.

Section 3 Onepu Road Centre sits within the WCC Suburban Area Parking Management Area.

Table 21 sets out the WCC Parking Policy parking management issues in Section 3: Onepu Road Centre. The corresponding WCC Parking Policy management tool for each issue is also detailed in the table.

The Section 2 weekday displaced demand results in occupancy that is consistently below the 85% threshold, therefore the mitigation discussed in Table 21 seeks to address the higher demand seen during a typical weekend.

Parking Management Issue	Comments	Parking Management Tools	Comments	Parking Hierarchy Considerations
Demand for parking is high (occupancy of spaces is often over 85 percent, turnover is low, and non- compliance is high).	The demand for parking during the weekend is high, above 85% between 11:00-14:00 on a typical weekend day. However, the duration of stay data indicates turnover is high with the majority of users staying for less than one hour; in line with the P60 restrictions.	Introduce or reduce (if in place) time limit restrictions. Increase enforcement to ensure compliance.	At the point of implementation, monitoring and evaluation is the best mitigation to understand whether non-compliance will increase. Whilst this assessment does not consider off-street parking as a solution to reduce on-street parking supply, it is proposed that further monitoring and evaluation of the off- street parking within Section 3 is undertaken to understand whether displaced users have chosen to and can	The removal of parking reallocates space to the highest priority by supporting the efficient movement of people and goods through cycle lanes. Short-stay car and motorcycle parking, and car-share spaces are high priority in this parking management area. Further mitigation could include changing unrestricted spaces into short stay parking spaces/ car share parking spaces to accommodate higher demand on
			be accommodated there.	weekends.

Table 21 Parking Management Issues for Section 3 Onepu Road Centre

7.5.1 Additional measures and initiatives

It is recommended that WCC provide cycle parking to support the use of cycling as a mode to the land uses in the area.

8 Section 4 Onepu Road Residential

8.1 About the Area

This area is a primarily residential section with small areas of shops (cafes, dairies, etc.). The NZ Bus depot is also currently located in this area. The cycle route being looked at in this area would connect the commercial centre of Kilbirnie with Lyall Bay Beach. There are no significant publicly available off-street parking areas in this section, however residential off-street parking is analysed in Section 8.2.1. This section, and the key locations are shown Figure 27.



Figure 27 Section 4 Onepu Road Residential study area

8.2 Current Parking and Usage

Most of the parking in this area is unrestricted on-street. There are small sections of parking restrictions around the small shopping centres. Table 22 shows the parking inventory for the different restrictions in this area as well as the number of spaces on Onepu Road where the cycle improvements are proposed. The parking restrictions in this section are shown on Figure B4 in Appendix B and a breakdown of the parking inventory by street and restriction is provided in Table 23.

Restriction	On-street capacity across all of Section 4	On-street capacity on the proposed Transitional Cycleway route within Section 4
NL	829	147
Mobility	2	1
P10	6	3
P30	11	5
Total	848	156

Table 22 Section 4 On-street parking inventory

The analysis undertaken in Section 4 of the Parking Assessment Report (Appendix A) can be summarised as follows:

- The surveys indicate the overall occupancy on the cycleway corridor and entire section is below the 85% threshold on a typical weekday and weekend.
- The survey indicates weekend peak occupancy is highest towards the south of Section 4 towards Lyall Bay.
- The duration of stay data indicates unrestricted spaces are most commonly occupied for greater than four hours, indicating commuter parking due to the proximity to the suburban centre.
- The overnight survey observed a high proportion of the study area where users parked illegally over driveways. It is likely that users parked over their driveways overnight. The overnight survey indicated many residents park in this area overnight and leave during the day in their vehicles.

8.2.1 Off-Street Parking

A high-level survey was undertaken to understand the residential off-street parking supply on Onepu Road between Rongotai Road and Lyall Parade.

The survey indicated 67% of the parking on Onepu Road is Residential with access to off-street parking in the form of a garage or private driveway. This is illustrated in Figure 28 by the green markers. The data also indicates 9% of the on-street parking on Onepu Road is Residential without access to off-street parking – illustrated by the purple markers. The dwellings without access to off-street parking are distributed throughout Onepu Road.

Overall, the data indicates there is a high proportion of residents with access to off-street resident parking on Onepu Road along the transitional cycleways route.

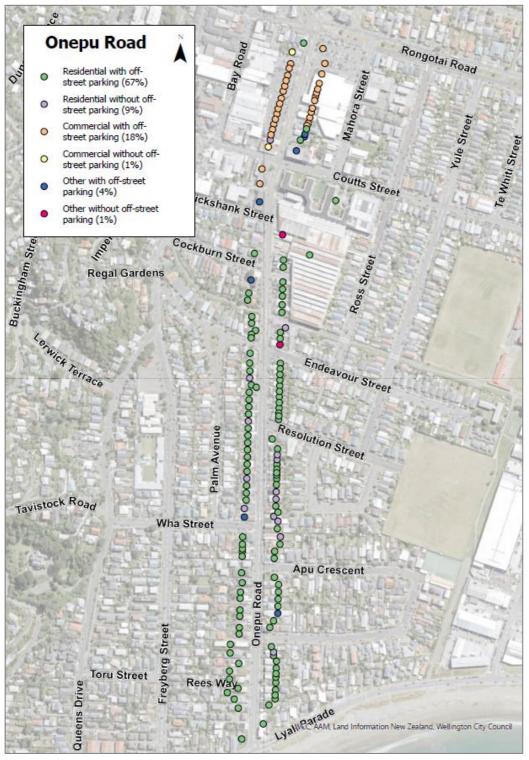


Figure 28 Off-street parking Onepu Road

8.3 Impact of Transitional Project

It is proposed to remove a total of 113 of the 156 parking spaces on Onepu Road. This is approximately 18% of the total spaces in Section 4. Most of the spaces which are proposed to be removed are located in the southbound direction on Onepu Road.

The location of retained parking can be seen in the transitional project design drawings.

Street Name	Existing Parking Supply	Proposed Parking Supply	Expected Parking Users	Potential Impacts
Apu Crescent	Unrestricted – 132	Unrestricted – 129 P10 - 3	Apu Crescent lies within WCC Outer Residential Zone.	Increased occupancy from Onepu Road displaced demand.
			Residents and visitors are expected users of parking on this street.	
			This location may also be used by visitors to Lyall Bay Beach.	
Cockburn Street	Unrestricted – 28	No proposed changes	Cockburn Street is located within WCC Medium Density Residential Area (MDRA). It is expected that a mix of residents, commuters and visitors will use this road due to the proximity to the local centre.	Increased occupancy from Onepu Road displaced demand. Reduced on-street parking for residents due to higher occupancy.
Cruickshank Street	Unrestricted – 38 P30 – 6	No proposed changes	Cruickshank Street borders WCC MDRA and Centre zones. It is expected that a mix of residents, commuters and visitors will use this road due to the proximity to the local centre.	Increased occupancy from Onepu Road displaced demand. Reduced on-street parking for residents due to higher occupancy.
Endeavor Street	Unrestricted – 104	No proposed changes	Endeavour Street lies within the WCC Outer Residential zone. The expected users are residents and visitors.	Increased occupancy from Onepu Road displaced demand. Reduced on-street parking for residents due to higher occupancy.
Lyall Parade	Unrestricted – 119 Mobility – 1	No proposed changes	Lyall Parade mainly serves Lyall Bay Beach, a WCC Open Space B zone. The parking provides for those visiting Lyall Bay for leisure purposes. These trips can vary in length from short-stay to long-stay day trips.	Increased demand from displacement of leisure trips which currently park on Onepu Road. This could lead to illegal parking on Lyall Parade.
Onepu Road	Unrestricted – 147 Mobility – 1 P10 – 3 P30 – 5	Unrestricted – 35 P10 – 2 P30 Loading – 1	Onepu Road lies across WCC Centre, MDRA and Outer Residential Zones. The road length is almost 1km in length and serves a variety of users including residents, commuters and short & long stay visitors.	The reduction in parking supply may result in illegal parking where marked parking used to be.
Palm Avenue	Unrestricted – 86	No proposed changes	Palm Avenue lies within WCC Outer residential zone. The likely users	Increased occupancy from Onepu Road displaced demand.

Table 23 Impact of Transitional Cycleways on Section 4

Street Name	Existing Parking Supply	Proposed Parking Supply	Expected Parking Users	Potential Impacts
			are residents and visitors.	Reduced on-street parking for residents due to higher occupancy.
Puru Crescent	Unrestricted – 48	No proposed changes	Puru Crescent lies within WCC Outer residential zone. The likely users	Increased occupancy from Onepu Road displaced demand.
			are residents and visitors.	Reduced on-street parking for residents due to higher occupancy.
Resolution Street	Unrestricted – 43	No proposed changes	Resolution Street lies within WCC Outer residential zone. The	Increased occupancy from Onepu Road displaced demand.
			likely users are residents and visitors.	Reduced on-street parking for residents due to higher occupancy.
Wha Street	Unrestricted – 45	Unrestricted – 43 P10 – 3 (the existing 2 P10 spaces are proposed to be extended to 3 spaces)	Wha Street lies across WCC Outer Residential	Increased occupancy from Onepu Road
	P10 – 2		and Centre zones. The	displaced demand.
			users of parking on this road are a mix of residents and visitors to the local centre.	Reduced on-street parking for residents due to higher occupancy.
		P60 – 2		This may result in illegal parking by those who wish to park nearby the local centre.
Yule Street	Unrestricted – 39	No proposed changes	Yule Street lies within WCC Outer residential zone. The likely users	Increased occupancy from Onepu Road displaced demand.
			are residents and visitors.	Reduced on-street parking for residents due to higher occupancy.

8.4 Parking Impact Analysis

The level of impact can be quantified by how easily displaced users can find equivalent parking nearby. The removed parking supply on Onepu Road comprises 110 unrestricted spaces, one P10 space and 2 P30 spaces. Whilst some short-stay parking remains, the restrictions of the remaining spaces are undetermined, therefore the availability and proximity of nearby unrestricted spaces in Section 4 should be understood for all removed supply.

8.4.1 Occupancy Analysis

The Transitional Cycleway will remove one P10 space from Onepu Road. The impact of removing these spaces cannot be assessed, however it is noted that short-stay parking is retained on Onepu Road and side streets. If ongoing monitoring determines more short-stay parking is required, it is possible to reallocate unrestricted parking near local centres to provide for this.

Figure 29 illustrates the occupancy of unrestricted spaces with the existing demand and proposed reduction of supply on Onepu Road. The demand also accounts for P30 demand. The supply considers all unrestricted parking in Section 4 with the exception of Lyall Bay Parade.

The figure indicates there is enough unrestricted supply in Section 4 to accommodate the displaced demand from Onepu Road. The surveys indicate the overall Section demand should remain beneath the 85% threshold during the day.

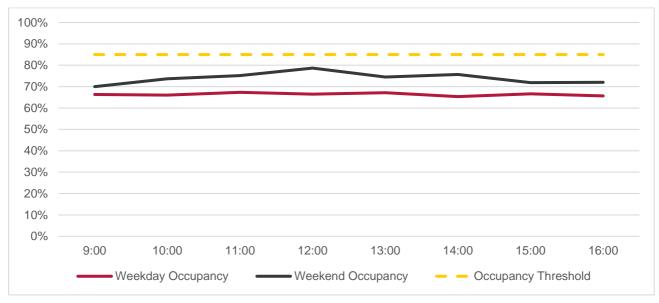


Figure 29 Occupancy of unrestricted and P30 spaces with reduced capacity

8.4.2 Accessibility Analysis

Figure 30 illustrates walking isochrones from four general origin points where parking is proposed to be removed along Onepu Road.



Figure 30 Walking Isochrone from proposed removed parking (four origin points) Section 4

Figure 30 can be used to understand how far users need to walk to find alternative equivalent parking. For unrestricted spaces, alternative equivalent parking are unrestricted spaces. For P10 and P30 spaces, any parking space with an equivalent or greater time restriction is classified as an alternative space. Although, it would be beneficial to find capacity in a nearby short-stay space to ensure the parking space is fit for purpose for the intended user (visitors to the dairy/ commercial).

By subtracting the existing average occupancy of streets with alternative parking from the capacity, it is possible to understand how much availability there is to accommodate displaced users.

Table 24 uses the impact definitions set out in Table 3 to define the impact to users. The table summarises a high-level exercise which has been undertaken to determine the walking distance to find an alternative parking space from the locations of removed parking on Onepu Road. The exercise is based on average occupancy across the day and professional judgement has been applied to determine which spaces will be preferred from each origin point.

The data indicates all displaced demand from unrestricted spaces will likely find a parking space within a 3 to 5 minute walk from their original parking location. For short-stay parking spaces (P10 and P30) and mobility parking, alternative spaces can be found less than a one minute walk from the original parking location.

Table 24 Impact to users by removing spaces in Section 4

Day Туре	Parking Type	Number of spaces removed	Total remaining spaces	No Impact	Very Low (Alternative spaces within o- 1 minutes' walk)	Low (Alternative spaces within 1- 3 minutes' walk)	Moderate (Alternative spaces within 3- 5 minutes' walk)	High (Alternative spaces within 5- 10 minutes' walk)	Very High (Alternative spaces outside of the section area)
	Unrestricted	110	_			50	60		
	P10	3	_		1				
Weekday	P30	4	_		2				
	Mobility (unmarked)	1	- 735		1				
	Unrestricted	110	- 735			50	60		
	P10	3	_		1				
Weekend	P30	4	_		2				
	Mobility (unmarked)	1	-		1				

8.4.3 Overnight Occupancy

The overnight occupancy in Section 4 was notably higher than the rest of the Kilbirnie study area.

The overnight occupancy has been assessed and the following sections are likely to be over capacity during a typical weeknight if parking is removed for the transitional project:

 Onepu Road – Onepu Road Dairy (142 Onepu Road) to the intersection with Cockburn Street

The following road sections are likely to be above capacity during a typical weekend night if parking on Onepu Road is removed for the transitional project. These sections are as follows:

- Onepu Road Onepu Road Dairy (142 Onepu Road) to the intersection with Cockburn Street
- Onepu Road Lyall Bay Minimart (155 Onepu Road) to the intersection with Lyall Parade

The survey indicates that there is availability during the weekdays and weekends on side streets such as Palm Avenue, Wha Street, Endeavour Street (west of Onepu Road) and Apu Crescent. The unrestricted parking supply in the overall section is able to accommodate the overnight parking ded during a weeknight (67% occupied) and a weekend night (64% occupied), however this is likely to require residents without off-street parking to park further away from their home locations.

Figure 30 indicates that from Onepu Road, all areas within Section 4 can be reached within a 10minute walk. It is expected that the displaced demand can be accommodated within a 3-5 minute walk of the original location as is expected during the day time.

It is also expected that some displaced demand will be accommodated by resident off-street parking where this is available.

8.5 Mitigation of Parking Impact

Wellington City Council (WCC) parking policy provides a process to identify and mitigate parking issues based on parking space hierarchies, which justify the removal or reallocation of spaces.

Table 21 Parking Management Issues for Section 3 Table 9 sets out the WCC Parking Policy parking management issues in Section 4: Onepu Road Residential. The corresponding WCC Parking Policy management tool for each issue is also detailed in the table.

Whilst the northern road network of Section 4 does include parking demand for the suburban centre, the overall area is an outer residential parking management area and mitigation has been suggested on this basis.

Parking Management Issue	Comments	Parking Management Tools	Comments	Parking Hierarchy Considerations
Overspill activity has a minor effect on parking in neighbouring streets.	The survey data indicates the overall section occupancy is below 85% during the weekdays and weekends, and the overall Section 4 supply is able to accommodate any displaced demand from Onepu Road.	Accept overspill	The proposed next steps include monitoring and evaluation once the scheme is in place. The data indicates the supply will be able to accommodate the displaced demand, however parking demand and behaviour may change. This exercise should be revisited once the scheme is in place, to reflect real-world parking observations and data.	The removal of parking reallocates space to the highest priority by supporting the efficient movement of people and goods through cycle lanes. Residents are a high priority in outer residential areas. If ongoing monitoring indicates residents are unable to find parking, mitigation should be considered to ensure residents are able to park within reasonable proximity to their homes.
Overspill activity has a significant effect on parking in neighbouring streets. Overspill parking is creating a safety hazard, preventing access for emergency and service vehicles. Illegal parking activity is high (such as parking on the footpath).	Analysis indicates the overnight occupancy in Section 4 is high and this will increase on side streets with the proposed parking removal on Onepu Road.	Introduce parking restrictions and clearways. Introduce a charging regime to manage demand.	Encourage residents to use their own off-street parking where available. Consider implementing a residents parking scheme.	Residents are high priority in outer residential areas. If the removal of parking on Onepu Road results in illegal parking, it is suggested that a resident parking scheme is implemented to assist residents without access to off-street parking to find on-street parking.

Table 25 Parking Management Issues for Section 4 Onepu Road Residential

8.5.1 Additional measures and initiatives

It is recommended that WCC work with major employers within Section 4 Onepu Road Residential area to reduce the commuter parking demand on Onepu Road.

9 Summary and Recommendations

This report assesses the effects of the proposed Transitional Cycleway on the Kilbirnie study area and Transitional Cycleway routes. The Transitional Cycleway re-prioritises the spaces where onstreet parking is located along Tacy Street, Coutts Street and Onepu Road for movement of people, resulting in the removal of parking in the study area. This will result in an initial increase in parking demand on roads within the study area that surround the Transitional Cycleway routes.

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 cycleway and wider transport and infrastructure improvements is expected to incite mode shift away from single car use to active or public transport modes. With the implementation of the transitional cycleway, the overall parking demand in the area is expected to reduce and less parking mitigation required.

A summary of key issues and recommendations are described below:

Section 1: Tacy Street

- A total of two P120 and seven unrestricted spaces are proposed to be removed from Tacy Street.
- The data indicates the remaining unrestricted and P120 parking spaces on Tacy Street will be able to accommodate the displaced demand.
- No mitigation is currently proposed, however ongoing monitoring and evaluation once the scheme is in place is advised.

Section 2: Coutts Street

- A total of 70 spaces are proposed to be removed from Coutts Street comprising 67 unrestricted spaces, one P10 parking space and two P600 spaces. An additional 15 spaces will be removed from Tirangi Road.
- It is proposed to reallocate one unrestricted parking space on Coutts Street to retain the P10 space that is currently outside the dairy (#227 Coutts St).
- The data indicates the displaced unrestricted and P600 demand can be accommodated by the surrounding streets on both weekdays and weekends.
- No mitigation is currently required, however ongoing monitoring is advised to ensure residents, as a high priority user, are able to find paring within proximity to their homes.

Section 3: Onepu Road Centre

- A total of 31 P60 spaces are proposed to be removed on Onepu Road.
- The data indicates the remaining P60 and unrestricted parking spaces in Section 3 are able to accommodate the displaced demand.
- No mitigation is currently proposed, however ongoing monitoring and evaluation once the scheme is in place is advised.

Section 4: Onepu Road Residential

- A total of 66 parking spaces will be removed from the eastern side of Onepu Road and no parking spaces will remain. On the western side, approximately 52 spaces (including one unmarked mobility space) will be removed. 38 parking spaces will remain which include one P30 loading space and two P10 spaces. Additionally, three unrestricted spaces on Apu Crescent will be reallocated as P10 spaces; the existing P10 on Wha Street will be extended to create 3 P10 spaces; and two existing unrestricted spaces on What Street will be reallocated as P60 spaces.
- It is proposed to monitor the requirement for short-stay parking near to the local centres. If
 more short-stay parking is required, WCC could consider reallocating more unrestricted
 parking spaces.

- The data indicates the displaced unrestricted and P30 demand can be accommodated by the surrounding streets on both weekdays and weekends.
- The data indicates the retained parking supply on Onepu Road will not be able to accommodate the existing overnight parking demand, however the survey data indicates the demand can be accommodated within the wider study area within a five minute walk or via residential off-street parking.
- No mitigation is currently required, however ongoing monitoring is advised to ensure residents, as a high priority user, are able to find parking within proximity to their homes. Monitoring is particularly important overnight as the data indicates on-street demand on Onepu Road is high however it is expected that some of this demand will be accommodated by residential off-street parking.
- Implementation of a residents parking scheme may be required to ensure residents without access to off-street parking are able to find parking overnight.

Wider measures and initiatives

- It is recommended that WCC work with private landowners of the leisure facilities within Section 1 to manage parking and travel demand by promoting travel behaviour change through a range of initiatives.
- It is recommended that WCC provide cycle parking to support the use of cycling as a mode to the land uses in the overall study area.
- It is recommended that WCC work with major employers within Section 4 Onepu Road Residential area to reduce the commuter parking demand on Onepu Road.



Appendix A – Parking Assessment Report

Refer to the document titled "Kilbirnie Connections Parking Assessment" issued on 2nd September 2022.

Appendix B – Parking Restrictions Maps

WELLINGTON CITY COUNCIL Kilbirnie Connections Transitional Cycleways Parking Management Plan

Figure B1

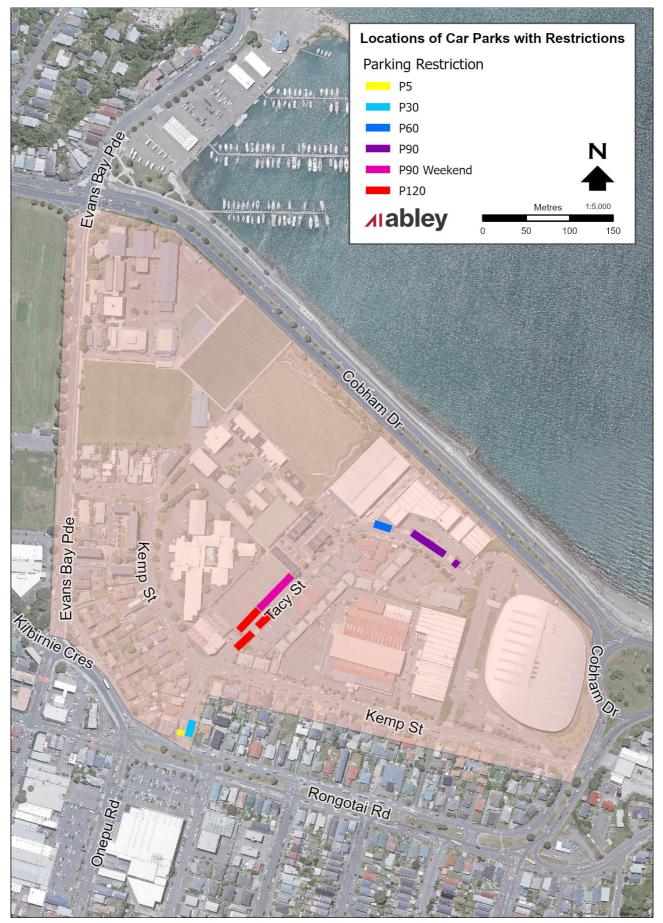


Figure B2

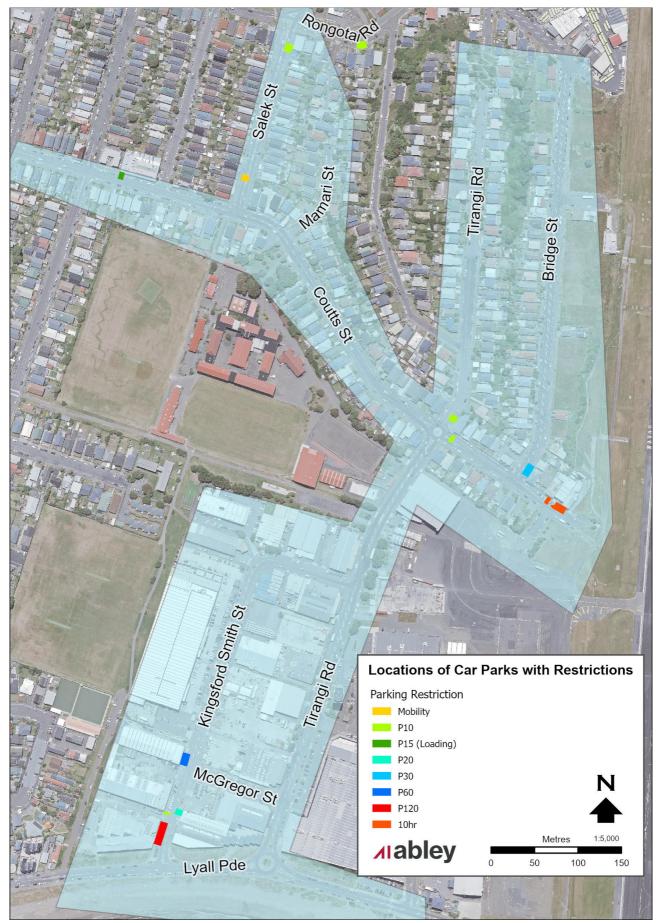
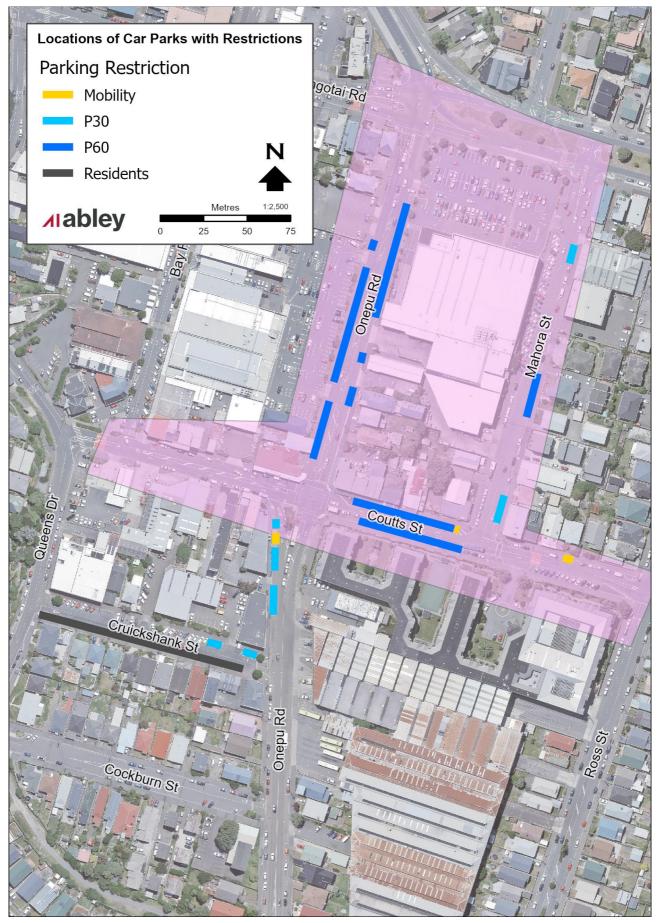


Figure B3



```
Figure B4
```



Appendix C – Walking Isochrone Maps

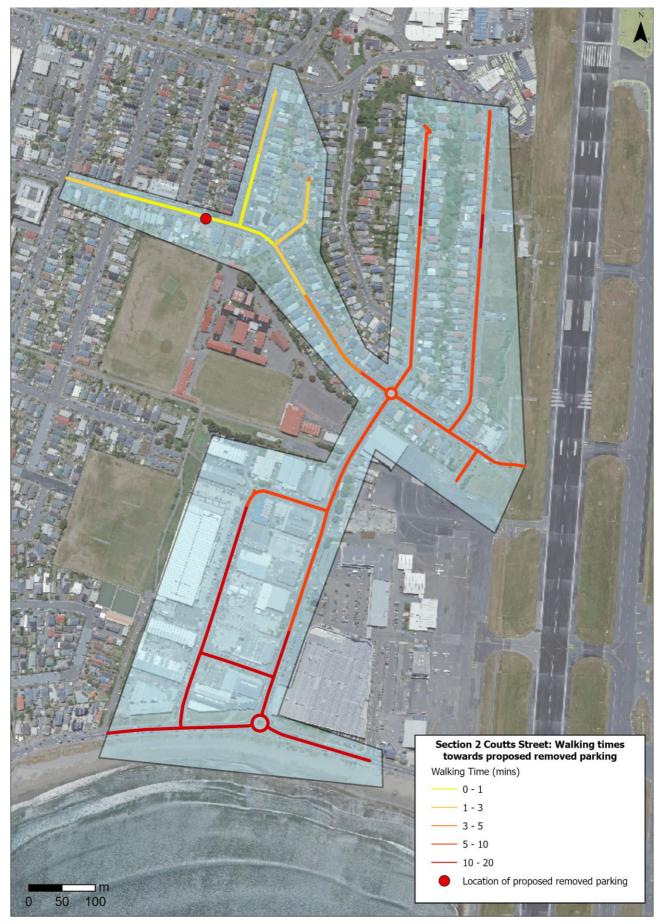
Section 1 Origin A



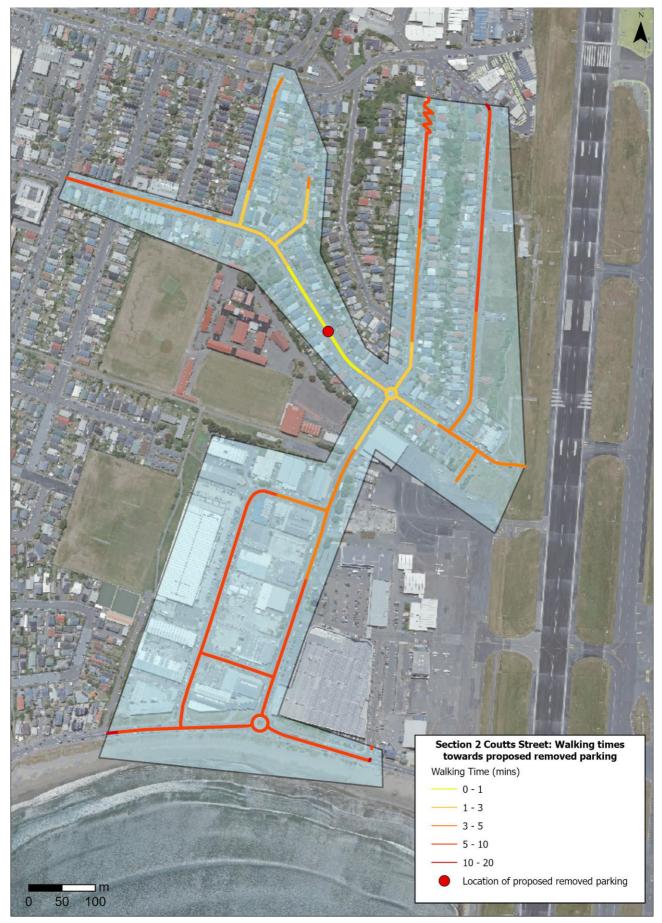
Section 1 Origin B



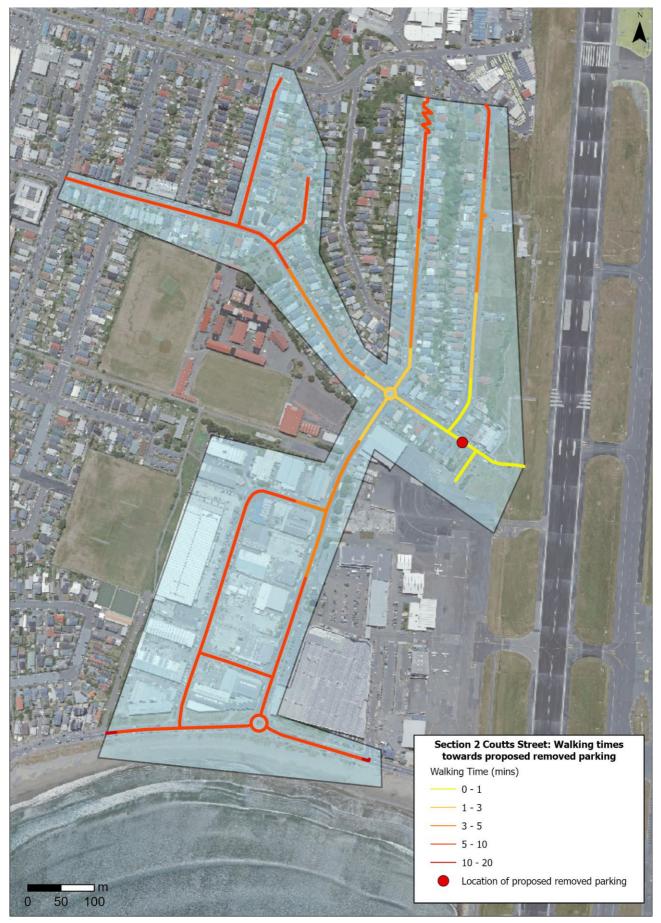
Section 2 Origin A



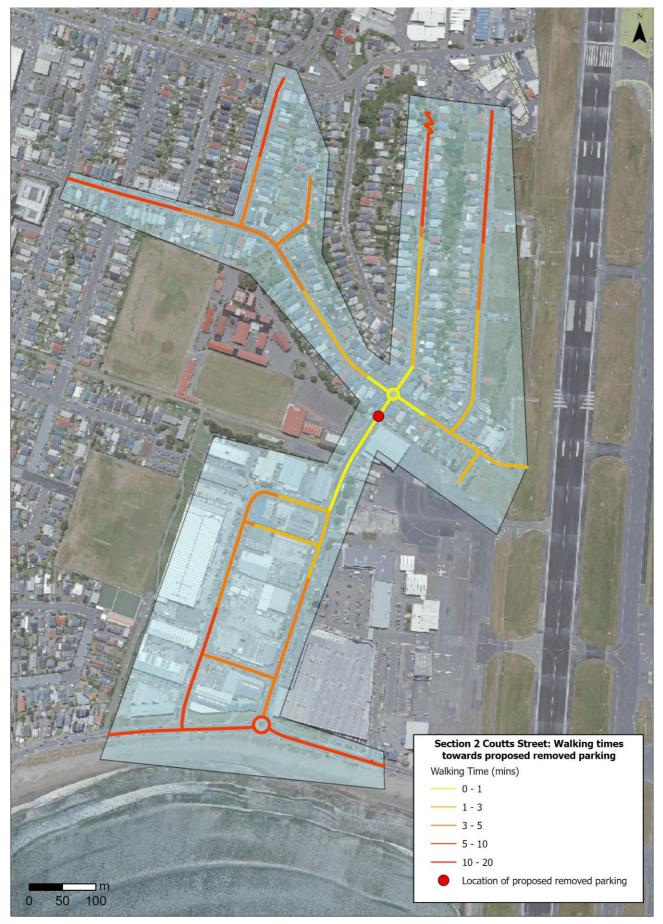
Section 2 Origin B



Section 2 Origin C



Section 2 Origin D



Section 3 Origin A



Section 4 Origin A



Section 4 Origin B



Section 4 Origin C



Section 4 Origin D



Absolutely Positively **Wellington** City Council

Me Heke Ki Pōneke

https://wellington.govt.nz/parking-roads-andtransport/transport/cycling