

# Greymouth Parking Strategy

Prepared by Opus Consultants Limited

Adopted by Grey District Council on 14 August 2017  
and reviewed on 13 August 2018 following  
consideration of public submissions

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# 1 Executive Summary

The Greymouth Urban Design Framework ("the Framework"), adopted in August 2015, identified a robust parking strategy as being integral to the success of the revitalisation of the Greymouth Central Business District (CBD). Following the adoption of this Framework, Opus International Consultants was commissioned to carry out a strategic study of parking provision in the Greymouth CBD by Grey District Council (GDC).

The Framework was undertaken to contribute to ensuring "*economic growth and wellbeing in the Grey District*" by being "*a desirable place to live, study, work and invest*". It has arisen from and is consistent with the Grey District Economic Development Strategy.

A key feature of the Framework was that community engagement was embedded at its heart throughout all stages, with a range of channels used to involve the public. It proposed several improvement projects throughout the CBD, including streetscape enhancements, a shared street, town square, town entrance gateways and pedestrian links. A parking strategy was identified as a key requirement to supporting this CBD renewal.

The goal of developing this parking strategy is to produce:

*A parking strategy that contributes to revitalising the Greymouth CBD, through stimulating economic growth.*

Key objectives have been defined as:

1. Make it as easy as possible for customers to access local businesses:
  - a) through available parking spaces close to destinations; and
  - b) through improved facilities for alternative modes of transport.
2. Make it as easy as possible for staff to access their workplaces:
  - a) through available parking spaces close to destinations; and
  - b) through improved facilities for alternative modes of transport.
3. Ensure appropriate provision of parking spaces for speciality users (mobility impaired, taxis, buses, motorcycles and service vehicles).
4. Improve pedestrian amenity and safety through streetscape enhancement and on-street parking rationalisation.
5. Reduce unnecessary vehicle trips within the CBD.
6. Encourage increased tourist volumes and length of stay.

Investigations into current parking supply and demand have been completed, including parking surveys undertaken on Wednesday 9<sup>th</sup> December 2015 and Saturday 12 December 2015. The overall trends were that on-street parking in the central and eastern streets of the CBD was well utilised on both Wednesday and Saturday, with occupancy rates generally within the desired range of 70%-90%. In contrast, on-street parking in the western streets of the CBD was under-utilised on both the Wednesday (38-55%) and the Saturday (15%-22%). Public off-street parking was well utilised throughout most of the Wednesday (47%-87%) but under-utilised on the Saturday (18%-39%). Utilisation of private off-street parking varied significantly between different areas, although overall was under-utilised on both the Wednesday (47%-57%) and the Saturday (21%-29%).

High numbers of vehicles not complying with time restrictions were recorded in the surveys. On Wednesday, the majority (68 out of 77) of time restricted parking areas in the study area had at least one vehicle stay for longer than permitted. In most of these areas at least one vehicle was recorded staying for longer than 4 hours. Likewise on Saturday the majority (60 of 77) of time restricted parking areas in the study area had at least one vehicle stay for longer than permitted, although fewer vehicles stayed for long durations. The central and eastern CBD had more non-complying vehicles than the western CBD.

These overall trends identified in the parking surveys are summarised in Table 1, with green shaded cells representing occupancy rates within the generally desired 70-90% range, and blue shaded cells representing occupancy rates below this.

**Table 1: Summary of Parking Survey Results**

		Central and Eastern On-Street Areas	Western On-Street Areas	Public Off-Street Areas	Private Off-Street Areas
Wednesday	Average Occupancy	72%	48%	69%	51%
	Peak Occupancy	87%	55%	87%	57%
	Areas with Non-Compliance	45/51	23/26	1/1	-
Saturday	Average Occupancy	80%	19%	28%	26%
	Peak Occupancy	85%	22%	39%	29%
	Areas with Non-Compliance	46/51	15/26	1/1	-

Parking demand from local residents and employees is predicted to remain stable for the foreseeable future, while parking demand from tourists is predicted to grow. The increased impact on parking demand is expected to be in the order of 0.5-1.1% per annum. Over 10 years this would equate to an additional 38-83 tourist vehicles parking in the CBD at peak times.

Projects proposed in the Framework are expected to reduce the parking supply by approximately 66 on-street spaces and 6 off-street spaces, which needs to be addressed to mitigate any negative impacts. These proposals will be implemented in a staged programme over several years. Proposed projects which are expected to have an impact on parking provision are shown in Table 4.

Table 2: Estimated impact on car parking provision of developments proposed in Framework

Proposed Development	Estimated Car Parking Loss	Estimated Completion
Tainui Street North streetscape upgrade	12 fewer on-street spaces	<2 years
Market Square	6 fewer off-street spaces for rental cars	5 years
Māwhera Quay streetscape upgrade	10 fewer on-street spaces	10 years
Mackay Street East streetscape upgrade	12 fewer on-street spaces	10 years
Tainui Street South streetscape upgrade	8 fewer on-street spaces	10 years
Mackay Street West	24 fewer on-street spaces	10 years

The Framework proposes several other developments, which are not currently expected to have an impact on existing parking provision including the Town Square, a mixed use development, a civic building and a new hotel.

The investigations identified five key issues, summarised below:

- High utilisation of on-street parking in the central and eastern CBD;
- Non-compliant long term parking occurring in short-term on-street spaces in the CBD;
- Low utilisation of public off-street parking areas;
- Low utilisation of private off-street parking areas; and
- Reductions to parking associated with projects proposed in the Framework.

Ten options were assessed for addressing these issues, to achieve the key objectives. It was concluded that a combination of seven options would most effectively achieve this, comprising:

1. Provision of an additional off-street public parking facility (potentially charged);
2. Reconfigured on-street parking restrictions;
3. Coordinated sharing of off-street private parking;
4. Targeted parking enforcement;
5. Directional parking signage to public off-street parking;
6. Improved pedestrian and cycling facilities; and a
7. District Plan review (rules relating to off-street parking in the CBD, and requirements to provide facilities for pedestrians and cyclists).

Options 2-7 were all rated to have a low to medium cost. Option 1 (an additional off-street parking facility) would be a very effective option, particularly if sharing of private parking cannot be achieved, but may be more difficult to implement due to the high cost and large area of land required. To be effective it would need to be located convenient to central destinations, as well as being easy to access from the town gateways. It would be limited to public parking given the under-utilisation of private off-street parking. Parking charges could be included at this facility. These would be an effective method of ensuring availability of spaces, and recouping the costs of providing the facility. The effectiveness would be highly dependent on the facility being targeted primarily for tourists, being located conveniently, having ongoing enforcement and high quality of urban design.

The following actions regarding speciality users are also recommended:

1. Three mobility spaces (two on Guinness Street and one Mawhera Quay) had no use recorded over the survey periods. These could be relocated to more useful locations, identified in consultation with the relevant mobility impaired stakeholders.
2. Cycle parking provision is limited in the Greymouth CBD. It is recommended that some cycle parking facilities are provided in the CBD.

3. GDC has previously investigated the feasibility of relocating rental car parking further from the railway station. Consultation should continue until a detailed arrangement that benefits all parties can be agreed on.

It is recommended that details regarding timeframes, funding and Detailed Design for each component of the programme are developed further.

## **1.1 Outcome of consultation**

Council consulted on the draft Parking Strategy in April/May 2017. Following hearing and considering submissions made, Council decided to:

### **14 August 2017**

*“that –*

1. *Council thanks the submitters for submissions made.*
2. *Council accepts the late submission.*
3. *Council confirms the Greymouth Parking Strategy as consulted on with the following amendment:*
  - a) *allow a 30-minute time limit for five parks on the southern side to the street along Guinness Street (at the Tainui Street end).*
4. *Council reviews the Parking Strategy no later than 2020.”*

***Motion Carried***

## 2 Introduction

Opus International Consultants has been commissioned to carry out a strategic study of car parking provision in the Greymouth Central Business District (CBD) by Grey District Council (GDC) to accompany the Greymouth Urban Design Framework (“the Framework”).

### 2.1 Study Area

This Parking Strategy considers the area of the Greymouth CBD bounded by Mawhera Quay to the north, the railway line to the south, and Johnston Street, Guinness Street, Herbert Street, Leonard Street and Tarapuhi Street to the west.

The study area is shown in Figure 2-1.

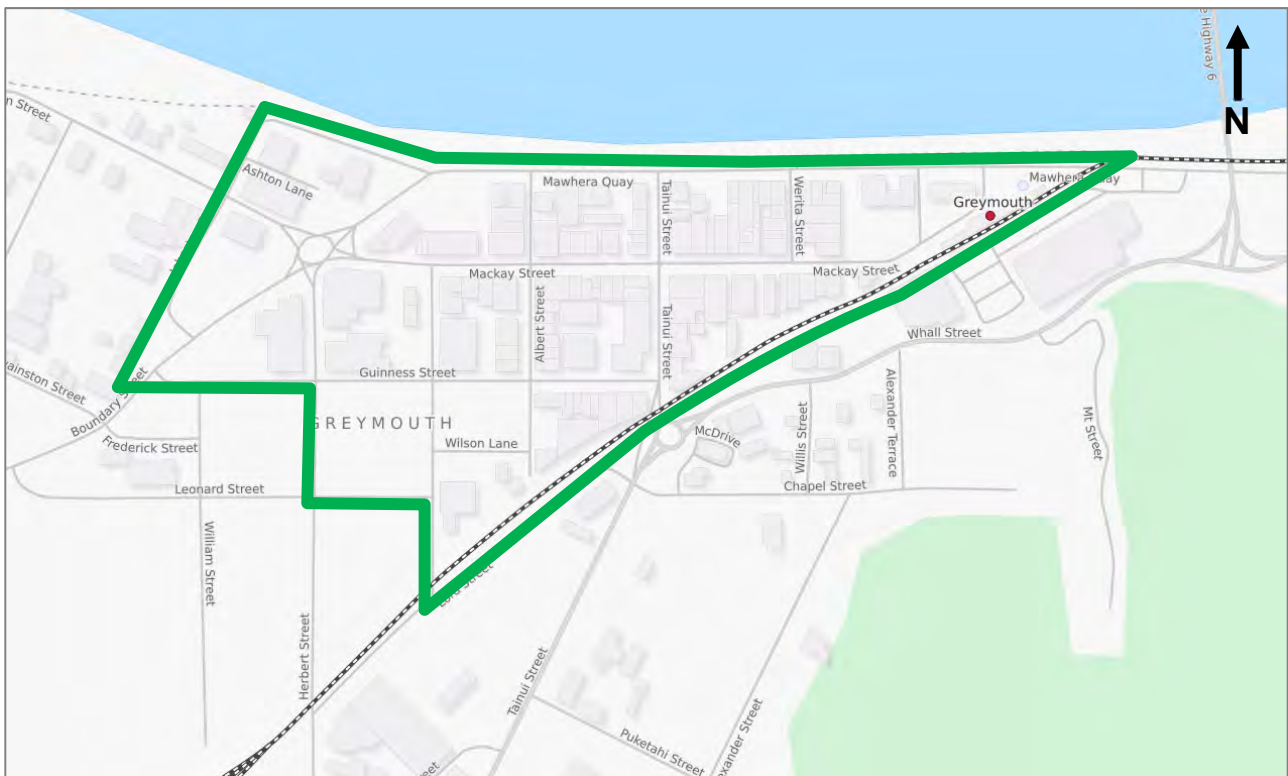


Figure 2-1: Greymouth Parking Strategy study area (Source: OpenStreetMap)



## 2.2 Goals and Objectives

The goal of developing this parking strategy is to produce:

*A parking strategy that contributes to revitalising the Greymouth CBD, through stimulating economic growth.*

Key objectives have been defined as:

1. Make it as easy as possible for customers to access local businesses:
  - a) through available parking spaces close to destinations; and
  - b) through improved facilities for alternative modes of transport.
2. Make it as easy as possible for staff to access their workplaces:
  - a) through available parking spaces close to destinations; and
  - b) through improved facilities for alternative modes of transport.
3. Ensure appropriate provision of parking spaces for speciality users (mobility impaired, taxis, buses, motorcycles and service vehicles).
4. Improve pedestrian amenity and safety through streetscape enhancement and on-street parking rationalisation.
5. Reduce unnecessary vehicle trips within the CBD.
6. Support and encourage increased tourist numbers to the CBD.

These objectives are discussed in more detail throughout this report.

## 2.3 Stimulating Economic Growth

Managing car parking to ensure convenience for customers and visitors near to their destinations can make a contribution to stimulating economic growth. Removal of on-street parking in conjunction with streetscape enhancements can contribute to high amenity urban design, which can make the CBD more attractive and encourage more visitors. It is therefore important that a well-balanced level of car parking facilities distributed across the CBD is provided, taking into account the need to consider future parking demands.

### 2.3.1 Short Term Parking

Short term parking, controlled through enforceable time restrictions, contributes to economic growth by allowing customers and visitors easy access to destinations by private vehicle. It ensures a high turnover of vehicles, and subsequent availability of spaces in locations of strategic importance. Short-term parking is generally located on-street, although it can be located in public off-street parking areas as well. The majority of the short term parking in the Greymouth CBD will be used by the following groups:

1. Local residents, from within the Greymouth urban area, shopping or accessing services;
2. Local residents, from the wider Greymouth rural area, shopping or accessing services;
3. Motorists travelling through Greymouth on SH6, taking a break; or
4. Tourists visiting Greymouth.

### 2.3.2 Long Term Parking

Long term parking contributes to economic growth by allowing staff easy access to their workplaces. Providing off-street parking in close vicinity allows customers and visitors to use the more easily accessible on-street short term parking. If there is a lack of off-street parking within a reasonable distance to staff destinations they may park all day in strategically important on-street space throughout the day regardless of the time restrictions. Alternatively they may park on-street in the periphery of the CBD in unrestricted spaces which leads to a less attractive environment and impacts on footpath usability where kerb arrangements are not well formed.

### 2.3.3 Alternative Travel Modes

Alternative travel modes to access these destinations by private vehicle include walking and cycling. These are more likely to be taken up by local residents from within the Greymouth urban area, rather than rural residents, travellers or tourists.

The following recommendations have been made in the Framework to provide improved facilities for walking and cycling:

- SH6/ Tainui Street traffic signals, providing a better connection across the State Highway;
- SH6/ Herbert Street traffic signals, providing a better connection across the State Highway;
- Tainui Street/ Mackay Street traffic signals, providing a safer and more controlled environment than the existing zebra crossings in the centre of the CBD;
- Cobden cycle/pedestrian link; and
- Streetscape enhancements at multiple locations.

## 2.4 Existing Transportation Environment

### 2.4.1 Background

Greymouth is a service centre for a large rural hinterland. It is also visited by high volumes of tourists, and serves as a refreshment stop for through traffic. State Highways 6 and 7 intersect at the eastern extent of the town. The Midland Railway Line travels through the town with the railway station located at the eastern end of the CBD.

Greymouth and the Grey District are shown in Figure 2-2.



Figure 2-2: Location of Greymouth within the Grey District (source: [google.co.nz/maps](https://www.google.co.nz/maps))

The 2013 census recorded the mode by which people travelled to work. The results for the Grey District are shown in Table 3, together with the national average for comparison.

**Table 3: 2013 Census Travel to Work Figures**

<b>Travel Mode</b>	<b>Grey District</b>	<b>National Average</b>
Cars, trucks or vans	81%	78%
Walked or jogged	8%	7%
Bicycled	3%	3%
Motorcycled	2%	2%
Other or did not specify	6%	11%

The Grey District has higher than average proportions of people travelling to work in vehicles and walking/jogging, and lower than average proportions of people travelling to work by “Other” modes. This possibly reflects the absence of public transport.

Tourists travel to and from Greymouth in private vehicles, rental vehicles, buses, the TranzAlpine train, or bicycle via the West Coast Wilderness Trail. Within the Greymouth CBD they may drive, walk, cycle or taxi.

### **2.4.2 Public Transport**

No public transport is provided internally within Greymouth. Several regional connections are provided from Nelson, Christchurch, and Franz Josef. The TranzAlpine train operates a daily return service between Christchurch and Greymouth.

### **2.4.3 Weather**

Greymouth has higher rainfall than most areas of New Zealand, receiving approximately double the national average of 1,360mm per year. This is a discouraging factor on people’s willingness to travel by active modes.

### **2.4.4 Parking Restrictions**

On-street parking in the CBD includes a range of time restrictions, including:

- P5/Loading Zone;
- P15;
- P30;
- P60;
- P120; and
- P180.

There is also a range of vehicle type restrictions for parking or loading, including:

- Bus stops;
- Taxi stands;
- Mobility impaired parking spaces; and
- Loading Zones.

Parking restrictions are signposted immediately adjacent to the space. No directional parking information signs are provided in the wider area.

The locations of on-street parking areas and their restrictions are shown in Appendix A.

## 2.5 Greymouth Māwhera CBD Urban Design Framework

In August 2015, GDC approved the Greymouth Māwhera CBD Urban Design Framework developed by Opus. This document emerged from the recommendations of GDC's Economic Development Strategy (2013), and used a community led approach to develop a spatial plan.

The Framework identified a robust parking strategy as being integral to the success of the revitalisation of the Greymouth CBD. It is desirable that parking strategies are integrated with wider transportation and urban design objectives. This parking strategy has therefore been prepared following the adoption of the Framework.

### 2.5.1 Proposed Projects

The Greymouth Māwhera CBD Urban Design Framework proposes a series of developments to be implemented over the next 25 years. Proposed developments which may potentially impact on existing parking are shown in Table 4, together with an approximate estimate of their impact on parking numbers and opening year (Appendix B contains a plan showing the locations of these projects).

Table 4: Estimated impact on car parking provision of developments proposed in Framework

Proposed Development	Estimated Car Parking Loss	Estimated Completion
Tainui Street North streetscape upgrade	12 fewer on-street spaces	2 years
Town Square	No changes to existing parking currently anticipated	5 years
Mixed Use Development	No changes to existing parking currently anticipated	5 years
Market Square	6 fewer off-street spaces for rental cars	5 years
Potential Civic Building	No changes to existing parking currently anticipated	5 years
Potential New Hotel	No changes to existing parking currently anticipated	5 years
Māwhera Quay streetscape upgrade	10 fewer on-street spaces	10 years
Mackay Street East streetscape upgrade	12 fewer on-street spaces	10 years
Tainui Street South streetscape upgrade	8 fewer on-street spaces	10 years
Mackay Street West	24 fewer on-street spaces	10 years

The on-street parking supply in the Greymouth CBD is expected to reduce by a total of approximately 66 spaces, while the off-street parking supply is expected to reduce by approximately 6 spaces as a result of the proposed developments. These changes will occur in a staged manner over a number of years.

In addition, there may be other developments which have impacts on off-street parking, but which need further design before this impact can be quantified, e.g. the proposed Discovery Centre. The impact of such developments on parking provision should be assessed individually as each project is progressed.

At the time of writing, the Tainui Street North streetscape upgrade is undergoing Detailed Design. The latest available plans show the retention of 6 on-street parking spaces (2 on the east side of the street and 4 on the west side).

## 2.6 Strategic Background

### 2.6.1 Greymouth Town Development Strategy 2010

The Greymouth Town Development Strategy 2010 indicated the need for a parking/ vehicle management strategy for Greymouth. The findings of this strategy will be used in the development of the Greymouth Parking Strategy. GDC initially worked with the Grey District Business and Promotion Association to produce the 2010 strategy for the development of the core commercial area of Greymouth. Many other agencies and groups provided input and resources during the writing of the document and the public notification and submission process resulted in further input from agencies, stakeholders and the community. The 2010 strategy stated the following:

*GDC has done a lot of work to create on-street and off-street car parking facilities. Feedback about the issue of town parking is that the number of car parks now seem to be adequate but other matters still need to be addressed. The priority action is that a Strategy be developed so that the wider issue about vehicle management is considered so as to achieve an overall effective outcome for the town. The topic "Parking" infers a need for parking spaces however the benefits of reducing people's desire to want to park their vehicles in the town centre also need to be considered. Vehicle management in a town centre is not just about the number of car park spaces that are available.*

*There are stakeholders that want to be involved in identifying problems and providing options for solutions. Expert advice may also need to be sought. Evidence based solutions are sought as there is a lot of good research and information that is available about vehicle management in towns; in particular the benefits of not providing parking in the centre of town but instead in periphery areas. Additionally the Council holds information about many matters already. A good vehicle management strategy can add economic, social, safety and design benefits to a town.*

*Parking enforcement measures have improved the turnover rate and availability of on-street parking spaces in town however feedback suggests that the current layout of some existing car park facilities may need to be reconfigured in order to provide a better range of facilities for targeted user groups e.g. pay and display for short term users, free parking for long term users, larger car parks for tourist vans and buses. The location of the facilities and directional and on-site signage will be important factors in ensuring success in attracting the targeted users. Parking and vehicle management needs to be considered in relation to other town development initiatives such as investigating a one-way street layout, the provision of trees and open space areas and signage and information initiatives. There are opportunities for integrating outcomes. The following matters need to be considered when formulating the Parking Strategy:*

- *How best to inform people about the type and location of parking that is already available throughout the town*
- *The number and location of bus stops*
- *Catering for different parking needs (customers, staff, visitors, campervans, buses, motorbikes, cyclists)*
- *Evidence based reasons for providing on and off-street parking facilities in specific locations*
- *Alternatives to the provision of car parks*
- *The effect of parking enforcement measures*
- *The potential to mix free parking and pay/display*

- The feasibility of reconfiguring the existing parking layout on streets and of introducing one-way traffic movement
- Loading zones and facilities
- How landscaping elements can be incorporated into parking facilities
- How parking facilities can create connections between retail areas & other attractions
- The lighting of on-street and off-street parking facilities
- Upgrading of the directional signage to off-street parking areas
- The costs and benefits of the above initiatives.

GDC has previously investigated many of the matters that have been re-identified by stakeholders as needing to be addressed, so the previous work that has done will form the basis for taking any further action e.g. in regard to addressing loading issues, re-considering the one-way street configuration idea and introducing angle parking into the main streets of town.

## 2.6.2 Grey District Plan

### 2.6.2.1 Planning Map

The Grey District Plan shows the designated land use for properties in the Greymouth CBD. A partial section of Planning Map No. 31 is shown in Figure 2-3, which shows that all of the study area is classified as a commercial zone.

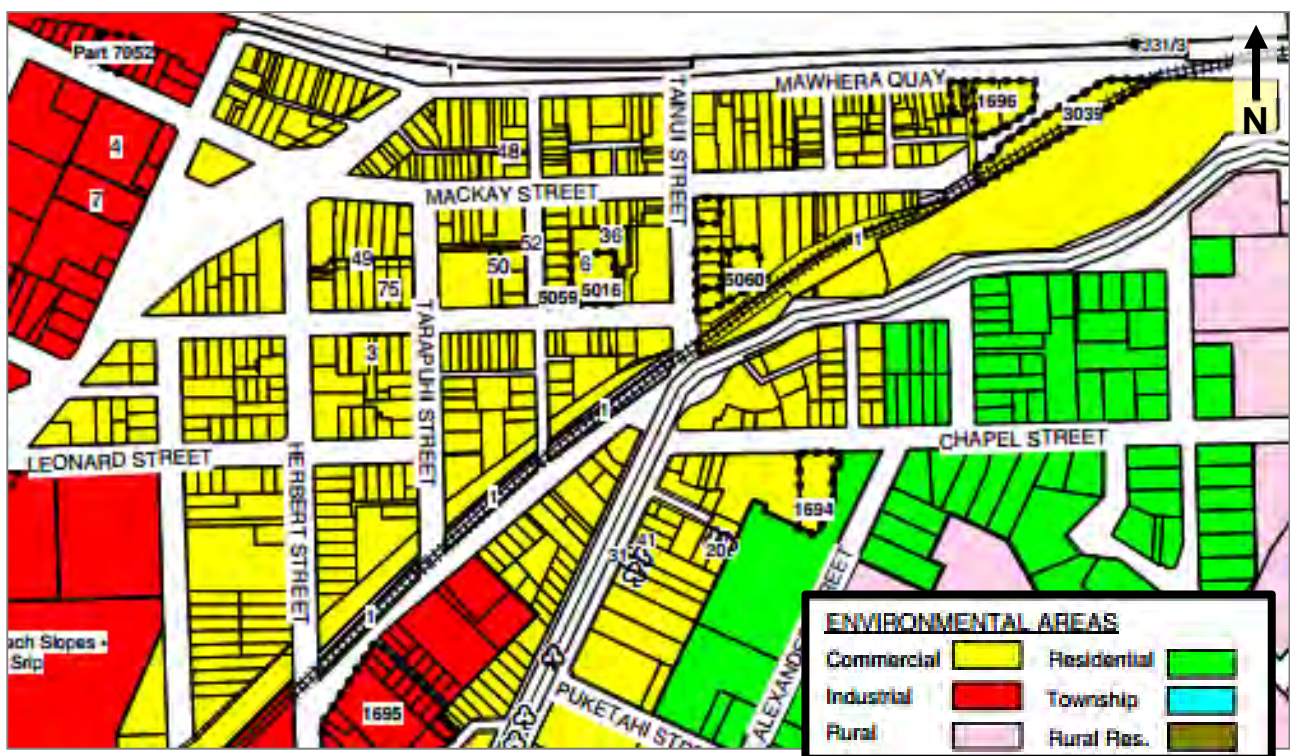


Figure 2-3: District Plan Zoning

The Grey District Plan specifies several issues, policies and rules which relate to parking in the Greymouth CBD, as discussed below.

### 2.6.2.2 Relevant Issues

Extracts highlighting the relevant issues identified in the District Plan include:

#### Section 12.2.1

Transport networks have obvious advantages to the community in convenience, mobility and the ability to distribute people and goods but can have the following adverse effects on the environment:

- Demands on land for transport routes and parking areas, and potential disruption to land uses and habitats.

#### Section 12.2.2

The safe and efficient operation of the District's transport infrastructure can be affected by:

- The traffic generating potential of land uses.
- The function of the road in terms of its importance in providing for access to property or through movement of traffic.

#### Section 20.2.1

In providing for commercial and industrial activities there is a need to ensure they will not have unreasonable adverse effects beyond the boundaries of their sites, particularly as it relates to residential environments. These effects include:

- Compromising of road safety and the efficient flow of traffic caused by high traffic generating activities, poor access and on-site parking provision, and visual distractions such as advertising signs.

#### Section 20.2.1.4

Insufficient parking, loading, manoeuvring and access can restrict the efficiency of the commercial and industrial areas.

Commercial and industrial areas are characterised by high volumes of vehicles including heavy trucks. A safe and efficient transport network requires:

- Off-street parking and limited access to avoid conflict between traffic associated with a particular property and through traffic.

### **2.6.2.3 Relevant Policies**

Relevant policies specified in the District Plan include:

#### Section 12.4.1

Access, off-street parking and loading, and the intensity of activities should not adversely affect vehicle and pedestrian safety and efficiency.

#### Section 20.4.2

Activities should not create adverse effects beyond the boundaries of the commercial and industrial areas particularly in respect of residential environments.

#### Section 20.4.3

Activities in the commercial and industrial area should not be adversely affected by a shortfall in parking, loading or access.

### **2.6.2.4 Relevant Rules**

Relevant rules specified in the District Plan include:

#### Section 20.7

Item 11: Parking, Loading and Access

- i. Parking, loading and access of vehicles and transport matters associated with any activity shall be in accordance with Appendix 4. In addition the following shall apply in the Commercial Core Area:
  - a. No on-site carparking shall be provided except carparking for the convenience of persons working onsite may be provided to the rear of any building at a rate of one space per 100m<sup>2</sup> gross floor area.  
**Note:** Within the Commercial Core Area on-site parking shall be required on a cash in lieu basis based on the actual cost of providing 25m<sup>2</sup> for a carpark calculated at the current market value of the land and construction costs required by NZS 4404:1981. This amount being to a maximum of \$1,500.00 plus GST per carpark.
  - b. Where available all vehicle access is to be from service lanes.

The “Commercial Core Area” referred to in this rule is shown in Figure 2-4 below.

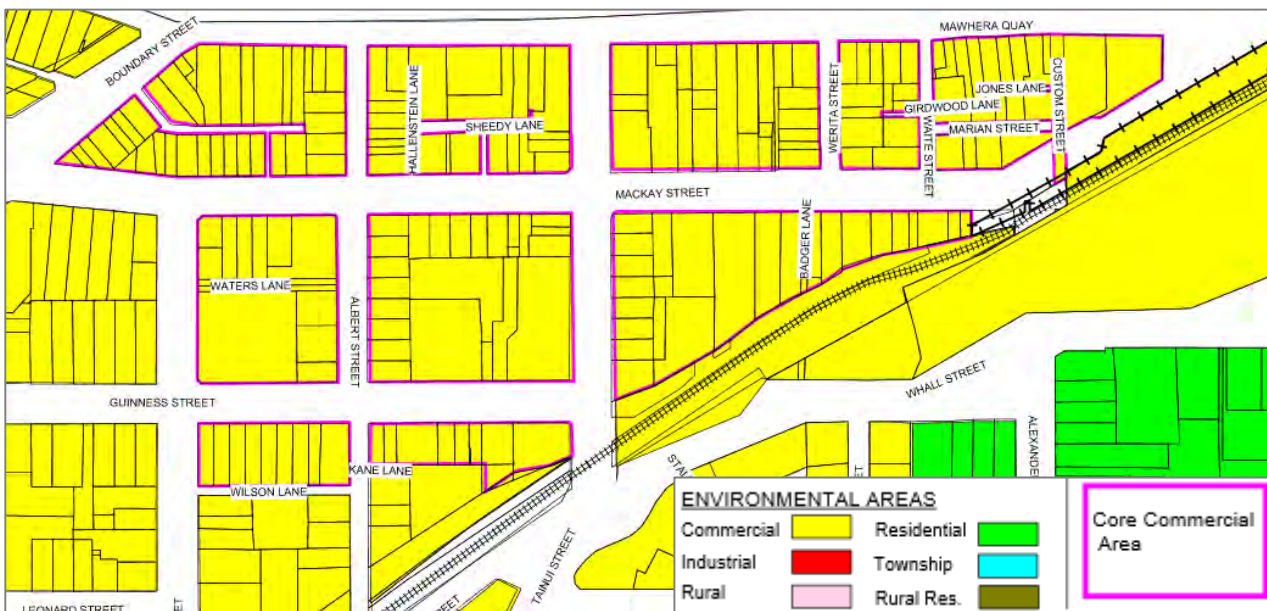


Figure 2-4: Plan showing Commercial Core Area

This plan shows that most of the study area is classified as Commercial Core Area, and therefore subject to this rule restricting on-site parking from being used by customers.

This rule is particularly important to this parking strategy. It restricts businesses from being able to provide customer parking on their sites, which may be resulting in higher demand for on-street parking than is necessary. Discussions with GDC planners indicate that this rule has not generated the revenue that was originally expected.

Appendix 4 - 24.2 Parking and Loading

Table 24.1 sets out minimum parking space requirements to be provided with different activity types. It also sets out requirements for disabled parking as follows:

Car parking areas shall include spaces for people with disabilities provided at the rate of:

- 1 for up to 10 total spaces provided;
- 2 for up to 100 total spaces provided; and
- Plus 1 more for every additional 50 spaces.



Carparking for people with disabilities shall be located as close as practical to the building entrance. The spaces should be on a level surface and be clearly signed.

Table 24.2 and other clauses set out dimensions for parking spaces.

#### Appendix 4 - 24.9 Grey District Roading Hierarchy

The District Arterials in the study area are Mawhera Quay, Boundary Street, Tainui Street, and Herbert Street. No other hierarchy classifications are given for minor roads in the Greymouth CBD.

### **2.6.3 Property Land Use Plan**

Appendix C includes a plan which shows the land use type for each of the properties within the study area, based on a combination of a desktop study, local knowledge and site visits in 2015. Land uses were summarised according to the main uses on a site, and have been classified into broad categories as below:

- Car Park (off-street parking areas located throughout the study area);
- Industrial (located mostly to the south of Guinness Street and west of Boundary Street);
- Commercial (located throughout the study area);
- Hospitality (largest hospitality area at east end of Mawhera Quay, other areas scattered);
- Accommodation;
- Government (located mostly on Guinness Street);
- Retail (located on most streets with largest number on Mackay Street and Tainui Street);
- Retail/ Cinema (on corner of Mackay Street and Herbert Street);
- Retail/ Commercial;
- Retail/ Hospitality;
- Education/ Health;
- Religious ;
- Residential (corner of Boundary Quay and Guinness Street); and
- Vacant (two areas on Mawhera Quay).

The plan shows a broad range of land uses throughout the study area. Some distinct precincts are noticeable, such as the hospitality area at the east end of Mawhera Quay, the government buildings on Guinness Street (Police, Courthouse, Inland Revenue), and retail and commercial centred along Mackay Street. Other land uses have less distinct clusters, including accommodation, education/health, industry, carparking and religious uses.

### **2.6.4 GDC Traffic and Parking Enforcement Bylaw 2015**

The GDC Traffic and Parking Enforcement Bylaw 2015 has been developed "to assist with traffic and parking control in respect of roads, parking areas and other areas under Council's control." This replaces the previous Traffic & Parking Enforcement Bylaw 2008.

Relevant extracts from Part III: Parking include:

#### **"7.0 Hours of Parking**

- 7.1 Every parking space other than in Council carparks may be occupied for only the time limit as specified between the following hours:
- a) Mondays to Sundays between 8:30am and 5:30pm
  - b) On any later shopping nights between 5:30pm and 8:30pm

The above hours may be amended by resolution of Council depending on the changes in shopping habits.

## **8.0 Provision of Parking Areas and Fixation of Fees**

8.1 The Council may from time to time, by resolution – which may from time to time be altered, amended or rescinded by further resolution of the Council:

- a) Declare any land owned by the Council, leased by the Council, or otherwise vested in the Council, to be a parking area.
- b) Declare the times and periods for parking in parking spaces.
- c) Fix the fees payable for the parking of vehicles within parking spaces through its annual planning and budgetary processes.
- d) Provide for and regulate the operation, maintenance, control, protection, use or discontinuance of parking spaces.
- e) Ensure that appropriate signage is displayed in all parking areas”

It is noted that, despite this provision for fees to be charged, no fees currently are charged for any on-street parking in Greymouth. Some off-street parking areas are leased with associated fees.

## **“9.0 Parking Places for Motorcycles or other Specified Vehicles**

9.1 Council may set apart areas solely for the parking of motorcycles or other specified vehicles and no vehicle apart from those specified may park in such parking spaces identified by appropriate signage.

9.2 Specified Vehicle Stands

Council may, by resolution, publicly notified, designate and mark parking spaces to be public stands for specified passenger service vehicles, including buses, shuttle buses, passenger vans and rental cars, and may fix fees for the use of such stands by resolution of Council.

9.3 Mobility Parking

- a) Council may reserve any parking space for the exclusive use of vehicles driven by or carrying disabled persons and displaying a current mobility parking permit issued by CCS Disability Action or their successors. Such parking shall be appropriately sign posted.
- b) Vehicles displaying a current mobility card that are driven by able bodied persons are not eligible to park in disabled parking spaces unless the disabled passenger/s alights from the vehicle.
- c) Vehicles displaying a current mobility card and being used at the time for the carriage of a disabled passenger/s may park as follows:
  - Up to 30 minutes extra in time restricted parking zones with the exception of P5 parking zones.
  - Stopping only for the disabled person/s to get in or out of the vehicle:
    - On a Goods Loading Zone
    - At the rear of a bus stop
    - At the rear of a taxi stand
    - Double park if no other available parking is available in the immediate vicinity

## **10.0 Method of Parking**

10.1 This clause shall not apply to Council off-street carpark areas.

- 10.2 a) No driver or person in charge of any vehicle shall stop, stand or park a vehicle –
- iii) so as to exceed the specified time limit in any parking space for longer than the maximum period allowed.

- c) No person shall use any designated parking area or parking space for any purpose other than for motor vehicle parking unless authorised by the Council.
- d) No person shall place, stand, stop, park or keep any bicycle on any parking space situated in a street unless such bicycle is placed, stood, stopped, parked, left or kept against and parallel to the kerb of such street.

10.5 The Council may, from time to time, review all car parking fees with the exception of parking infringement fees which are set by central government. The fees shall be set by resolution of the Council and shall be payable in the manner specified in that resolution.

#### **11.0 Parking in Council Off-Street Carpark Areas**

11.1 No driver or person in charge of a vehicle shall park that vehicle in a Council carpark without paying the prescribed fee to cover the period of parking.

11.2 The driver or person in charge of a vehicle shall park the vehicle so that it is contained wholly within a parking space.

11.3 The driver or person in charge of the vehicle shall give to any authorised officer or official appointed by the Council, their full name and address if requested to do so when that official has reasonable grounds to suspect a breach of this clause.

11.4 No person shall park any vehicle in any aisle, egress or ingress lane of any Council carpark.

11.5 The Council may licence such a space to any person upon payment of a fee which shall be prescribed from time to time by resolution of the Council. The licensee shall be subject to such conditions as the Council thinks fit and the licence may be terminated by the Council for any breach of those conditions.

11.6 The Council shall have the right to move or have moved, at the owner's risk and expense, any vehicle which is stopped, standing or parked in contravention of any provisions of this part of this bylaw, provided however that in the case of a reserved space, the licensee of that space shall also have these powers."

## 3 Parking Survey

### 3.1 Methodology

Parking surveys were undertaken to quantify existing parking occupancy and duration of stay for vehicles throughout the study area. This involved recording details for all vehicles parking in on-street spaces, public off-street parking areas, and private off-street parking areas where possible without accessing the car park.

The study area was divided into four areas, each of which was covered by one surveyor. Each surveyor walked a route around their area, recording parked vehicles. They repeated the same route every 30 minutes. Vehicles were recorded by writing down the last 3 digits of their number plate. In some off-street parking areas surveyors took photographs instead.

The surveys were carried out at the following times:

- Wednesday 9<sup>th</sup> December 2015, 9:00am – 5:00pm
- Saturday 12<sup>th</sup> December 2015, 10:00am – 2:00pm

Wednesday the 9<sup>th</sup> December had mixed weather, with sunny periods and scattered showers. Saturday the 12<sup>th</sup> December was dry and overcast in the morning, with rain developing after 1:00pm.

The demand for parking in early December (summer) is expected to be higher than average, without yet reaching the peak levels typical in late December. This is considered a reasonable basis for further design, as it represents approximately 85<sup>th</sup> - 95<sup>th</sup> percentile parking demand (excludes extreme public holiday conditions). No special events that would have significantly affected parking occurred on these days.

As surveys recorded vehicles every 30 minutes, all durations calculated are accurate to  $\pm 30$  minutes.

### 3.2 Parking Profile

Figure 3-1 shows the total number of parked vehicles recorded throughout the Wednesday. It is noted that speciality vehicle parking such as loading zones, bus stops and mobility impaired parking spaces have been excluded.

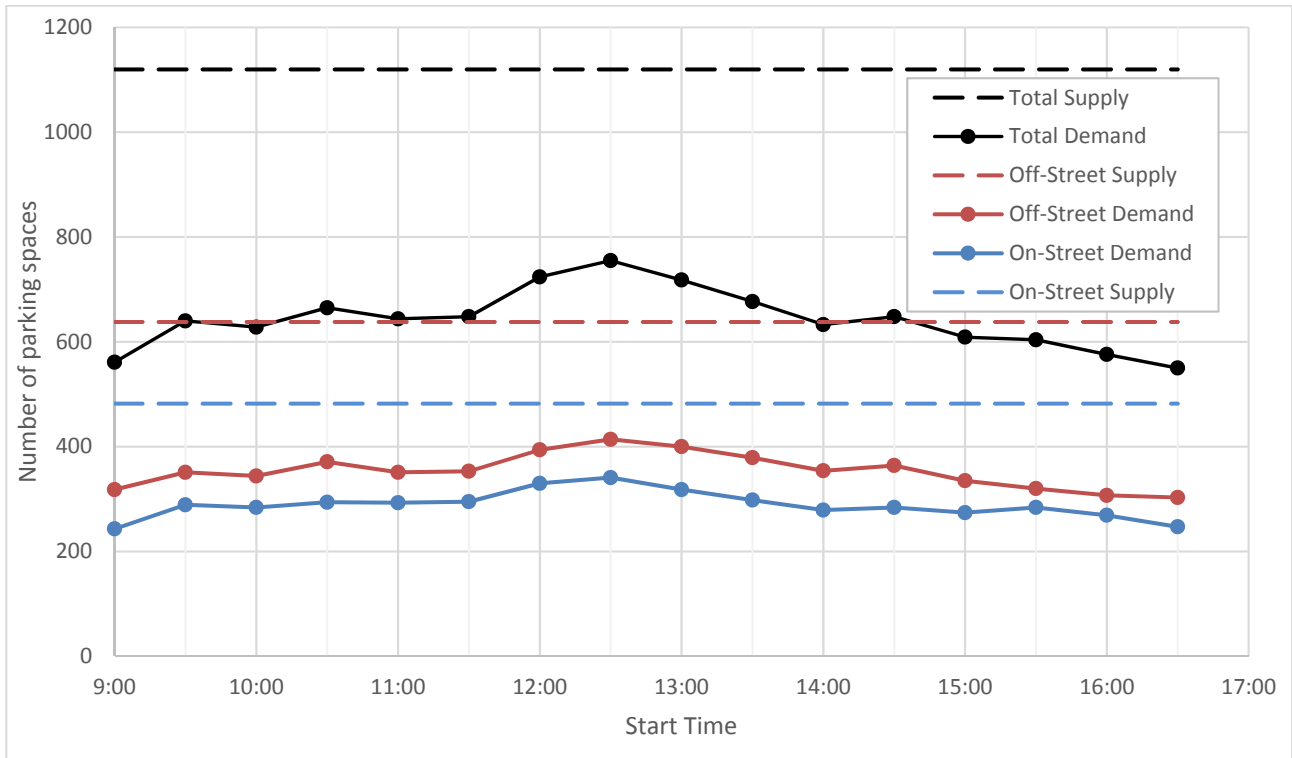


Figure 3-1: Wednesday parking profile for the study area (9<sup>th</sup> December 2015)

It can be seen that a total of 561 parked vehicles were recorded at 9:00am, increasing throughout the morning to a peak of 755 parked vehicles at 12:30pm. Parking then decreased throughout the afternoon to 550 parked vehicles at 4:30pm.

This represents a total occupancy rate of 67% at the busiest time of the day, when on-street parking was 71% occupied and off-street parking was 65% occupied.

There were consistently slightly more vehicles parked off-street than on-street in the study area. Both types of parking areas followed similar profiles.

The total supply of parking spaces in the study area of 1120 spaces was not reached at any time of the day.

Figure 3-2 shows the corresponding graph for the Saturday survey.

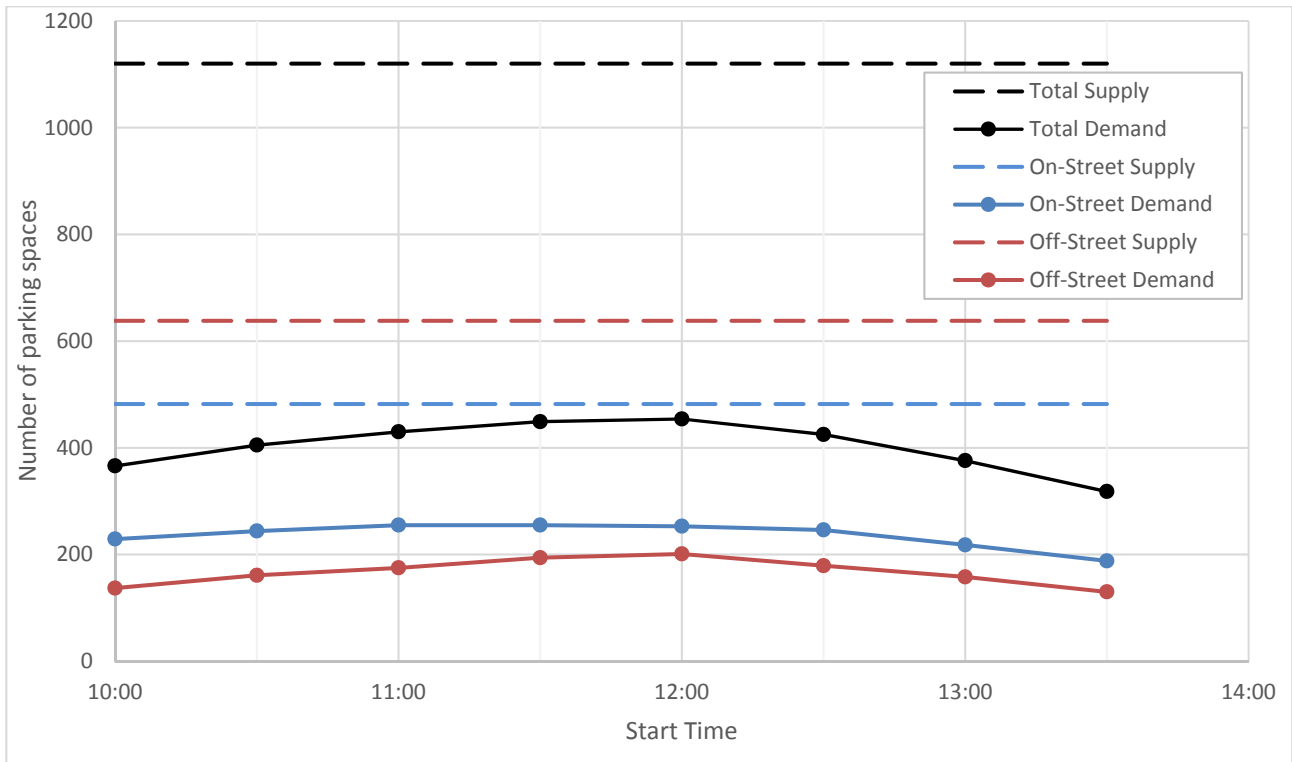


Figure 3-2: Saturday parking profile for the study area (12<sup>th</sup> December 2015)

The number of vehicles recorded on Saturday were significantly lower than Wednesday. Parking peaked at 12:00pm with 454 parked vehicles. In contrast to the Wednesday, more vehicles were recorded parked on-street than off-street.

This represents a total occupancy rate of 41% at the busiest time of the day, when on-street parking was 52% occupied and off-street parking was 32% occupied.

### 3.3 On-Street Parking

#### 3.3.1 Existing Parking

Appendix A includes a plan showing existing on-street parking areas and restrictions within the study area, based on council parking plans and on-site survey data.

Each parking area is labelled with a reference which may be cross-referenced with the more detailed results later in this report.

#### 3.3.2 Occupancy

Occupancy rates have been calculated for each parking area. The instantaneous occupancy rate of each parking area has been calculated by dividing the number of parked vehicles at a specific time by the number of parking spaces in that area. This was done for every half-hour period.

The daily average occupancy was calculated by averaging these instantaneous occupancy rates over the survey period (eight hours on Wednesday, four hours on Saturday).

The peak occupancy was calculated as the highest instantaneous occupancy rate recorded during the survey period.

### 3.3.2.1 Daily Average Occupancy

Appendix D includes plans showing the daily average occupancy levels of on-street parking for the Wednesday and Saturday, as well as the same data in table form.

The Wednesday plan shows that on-street parking in the main shopping areas typically had relatively high daily average occupancy in excess of 60%, with some areas in excess of 90%. Fringe areas to the west and southwest tended to have lower daily average occupancies below 60%.

The Saturday plan shows higher daily average occupancy rates in the main shopping areas, with many areas in excess of 90%, but lower daily average occupancy rates in the west and southwest fringe with many areas having less than 10% daily average occupancy.

### 3.3.2.2 Occupancy Profile

Figures 3-3 and 3-4 show the occupancy profile (instantaneous occupancy rates) for on-street parking in the study area on Wednesday and Saturday respectively. They have been grouped into three areas; the total study area, the western area, and the central and eastern areas (using Tarapuhi Street and Boundary Street as the divide). This was done to reflect the observable variation between the two geographic areas' parking patterns. It is noted that speciality vehicle parking such as loading zones, bus stops and mobility impaired parking spaces have been excluded when calculating these rates.

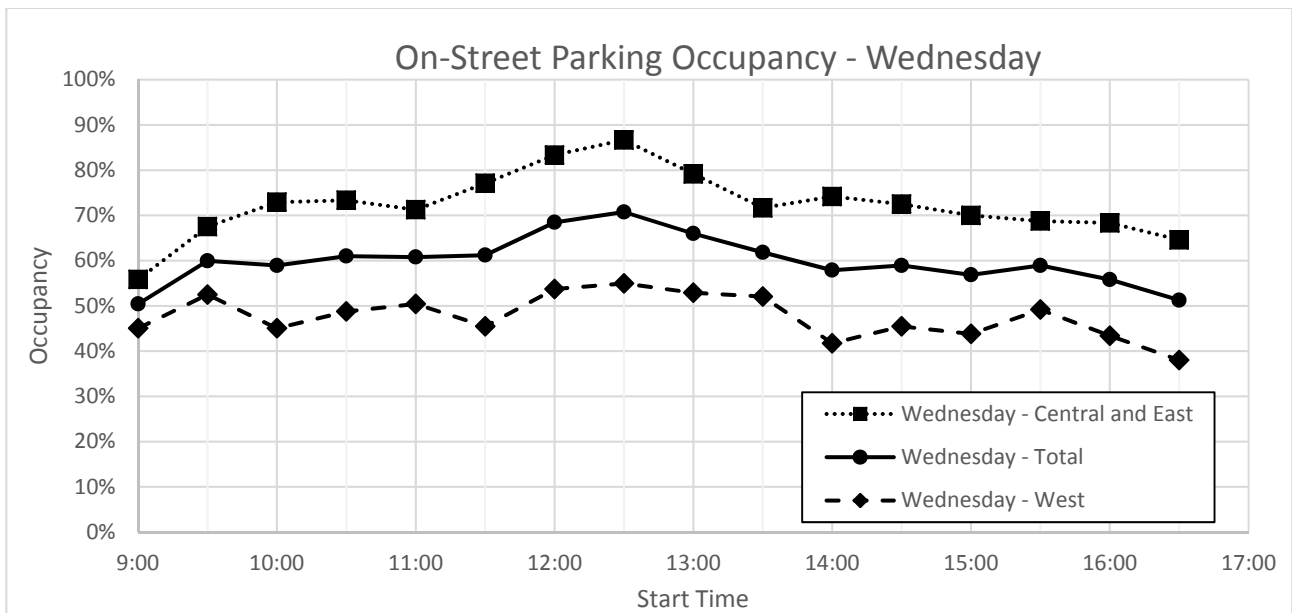


Figure 3-3: On-street parking occupancy profile (Wednesday 9<sup>th</sup> December)

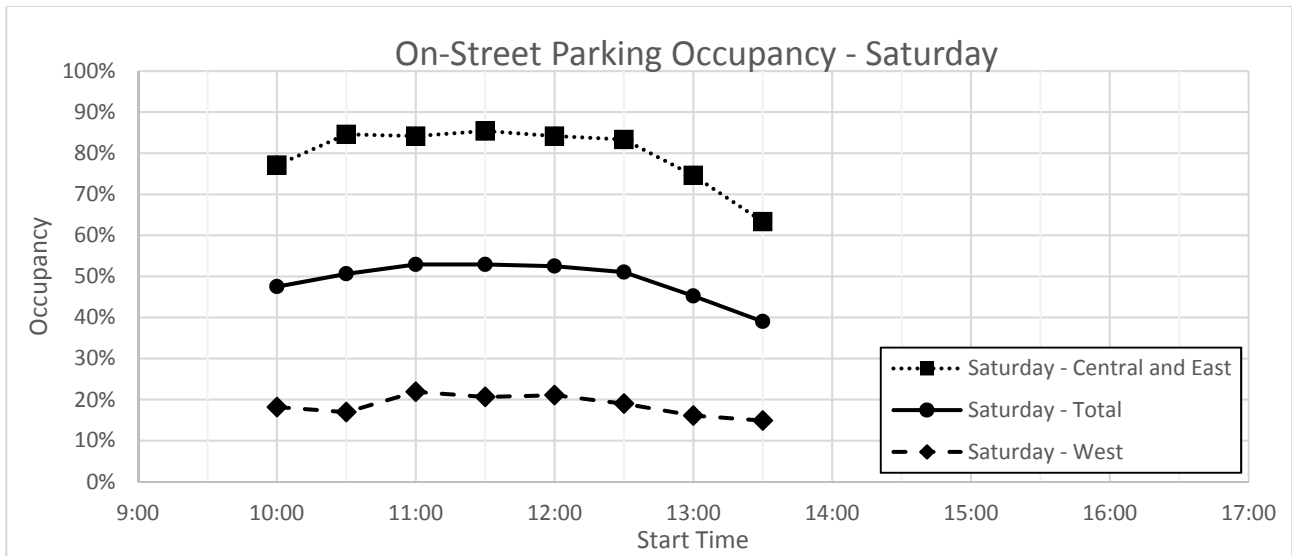


Figure 3-4: On-street parking occupancy profile (Saturday 12<sup>th</sup> December)

These graphs show that the instantaneous occupancy rates of the central and eastern areas were relatively high throughout the Wednesday, peaking at 87% at 12:30pm. The instantaneous occupancy rates of the western area were lower, peaking at 55% at 12:30pm.

This geographical difference is even more pronounced on Saturday. The central and eastern areas experienced similar instantaneous occupancy rates to the Wednesday, but the western area experienced low instantaneous occupancy rates peaking at 22%.

Instantaneous occupancy rates of the total study area were higher on Wednesday than Saturday, peaking at 71% on Wednesday compared to 53% on Saturday.

### 3.3.2.3 Peak Occupancy

The peak parking occupancy recorded during the surveys has been determined for each area. This has been calculated as the highest instantaneous occupancy rate recorded throughout the survey period. Plans showing peak occupancy levels are included in Appendix E.

These plans show that on the Wednesday most on-street parking areas throughout the study area had an instantaneous occupancy rate exceeding 90% at least once during the day. The exceptions were generally either speciality vehicle spaces, or areas in the western part of the study area.

On Saturday a similar pattern was observed in the central and eastern CBD, with most on-street parking areas having an instantaneous occupancy rate exceeding 90% at least once during the day. In the western part of the study area more on-street parking areas recorded low peak occupancy levels, with many areas not reaching 10% instantaneous occupancy rate at any time of the day.

### 3.3.3 Duration of Stay

Durations of stay have been calculated by analysing the vehicles recorded in each parking space during each half hour circuit. If the same vehicle was recorded in the same parking space in consecutive circuits, it was assumed that that vehicle remained parked throughout the time that it was recorded.

The average duration of stay was calculated by averaging all vehicles' durations of stay in each parking area over the survey period.

The peak duration of stay was calculated as the longest duration of stay recorded in each parking area during the survey period.



### **3.3.3.1 Average Duration of Stay**

Appendix F includes plans showing the average duration of stay in on-street parking spaces for the Wednesday and Saturday, together with the same data in table form.

On Wednesday vehicles tended to stay for shorter durations in the central and eastern area, and longer durations to the west and southwest. This reflects the general time restriction strategy adopted, and staff parking all day in the on-street areas to the west and southwest.

On Saturday the central area had similar durations to Wednesday, but parking areas in the west and southwest tended to have either no vehicles recorded in them, or vehicles staying for only short durations.

### **3.3.3.2 Non Compliance Areas - Average Duration of Stay**

Durations have been investigated to determine levels of compliance with the designated time restrictions.

Appendix G shows the average duration of stay, in locations where this exceeded the parking restriction. It is noted that although the duration of each individual vehicle was recorded only to an accuracy of  $\pm 30$  minutes, when this is averaged over a whole day it is expected that the resulting trends will be reasonably accurate.

The Wednesday plan shows that in many areas in the central and eastern streets, durations exceeded the time restrictions, but by relatively small margins of 30 - 60 minutes. The western areas tended to have higher margins of non-compliance; P60 parking on Boundary Street had an average duration exceeding 4 hours, as did P180 parking on Herbert Street, and P60 areas on Mackay Street and Tarapuhi Street had average durations between 2 and 4 hours.

On Saturday non-compliant vehicles parking in the central and eastern streets parked for similar durations to Wednesday. Average durations in the western area were shorter than observed on Wednesday and there was minimal non-compliance.

### **3.3.3.3 Non Compliance Areas - Peak Duration of Stay**

Appendix H shows the duration of stay of the vehicle which stayed the longest, in locations where this duration exceeded the parking restriction.

It can be seen that on Wednesday almost every parking area had at least one vehicle recorded that stayed longer than is permitted, many by substantial margins.

Likewise on Saturday almost every parking area had at least one vehicle stay longer than permitted, many by substantial margins, although durations were not as long as on the Wednesday.

## **3.4 Off-Street Parking**

### **3.4.1 Existing Parking**

Appendix I includes a plan showing existing off-street parking areas within the study area, based on council parking plans and on-site survey data. It clarifies whether they operate as private or public parking. It is noted that some parking areas are owned by Council but leased to private users. For the purposes of this analysis these areas have been classified as private.

Each parking area is labelled with a reference, which may be used with the more detailed results tabled detailed later in this report.

### 3.4.2 Occupancy

Occupancy rates have been calculated for each parking area. The instantaneous occupancy rate of each parking area has been calculated by dividing the number of parked vehicles at a specific time by the number of parking spaces in that area. This was done for every half-hour period.

The daily average occupancy was calculated by averaging these instantaneous occupancy rates over the survey period (eight hours on Wednesday, four hours on Saturday).

The peak occupancy was calculated as the highest instantaneous occupancy rate recorded during the survey period.

#### 3.4.2.1 Daily Average Occupancy

Appendix J includes plans showing the daily average occupancy levels of off-street parking for the Wednesday and Saturday, together with the same data in table form.

Off-street parking areas had generally lower daily average occupancy rates than on-street parking. On the Wednesday the two public car parks (on Mackay Street and Tarapuhi Street) had daily average occupancy rates between 60-80%. Daily average occupancy rates of private parking areas varied widely, with some areas less than 10% and others up to 80%.

On Saturday, daily average occupancy rates were significantly lower. The two public car parks had daily average occupancy rates between 20-40%. Daily average occupancy rates of private parking areas varied widely, with some areas less than 10% and others up to 70%, although overall they tended to have lower daily average occupancy rates on the Saturday than the Wednesday.

#### 3.4.2.2 Occupancy Profile

Figures 8 and 9 shows the occupancy profile (instantaneous occupancy rates) for all off-street parking in the study area on Wednesday and Saturday respectively. They have been grouped into three categories; all off-street parking areas, public off-street parking areas (Wilson Lane carpark and Mackay Street carpark), and private off-street parking areas.

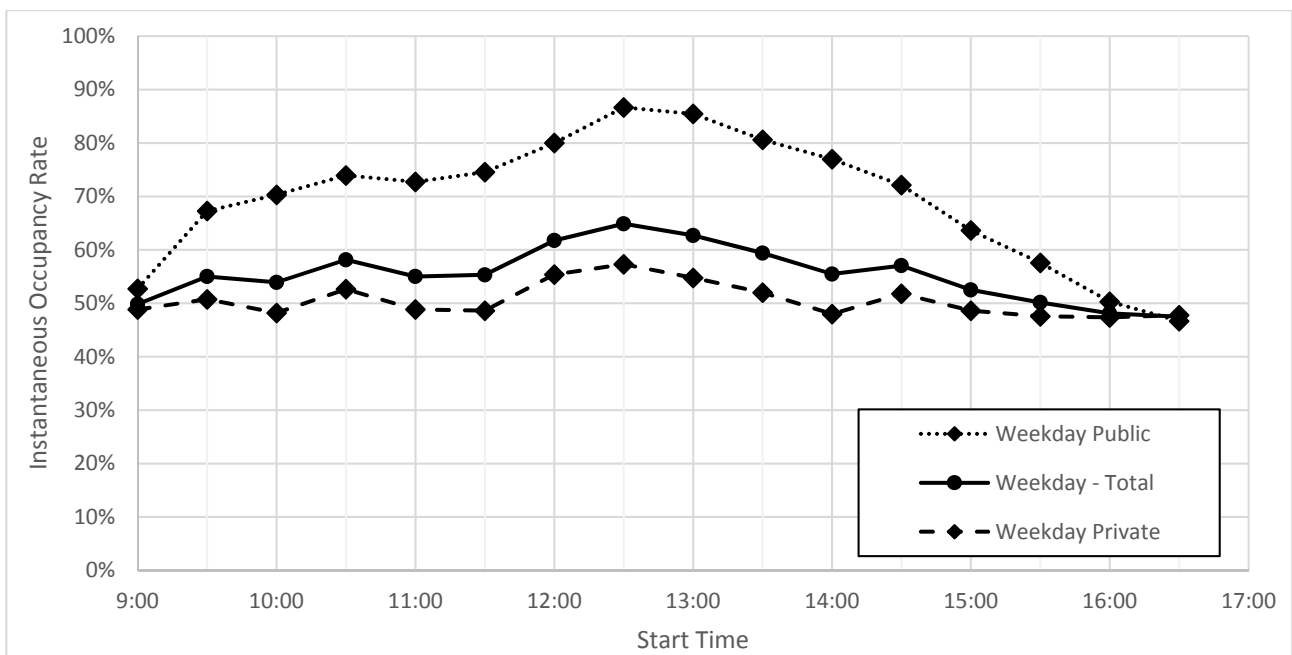


Figure 3-5: Off-street parking occupancy profile (Wednesday 9<sup>th</sup> December)

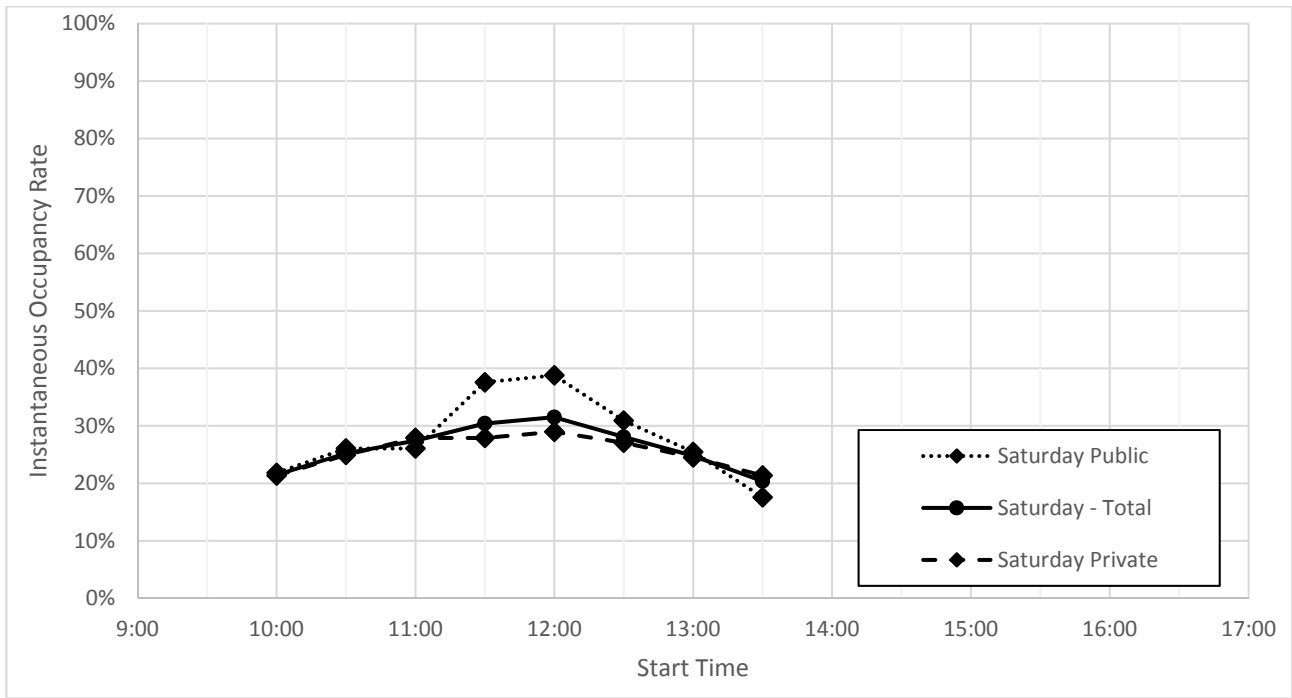


Figure 3-6: Off-street parking occupancy profile (Saturday 12th December)

Figure 3-5 shows that public parking areas had relatively high instantaneous occupancy rates throughout the Wednesday, peaking at 87% at 12:30pm. Private parking areas had lower instantaneous occupancy rates, peaking at 57% at 12:30pm.

Figure 3-6 shows that on Saturday, both the public and private car parks experienced much lower instantaneous occupancy rates, remaining below 40% for the duration of the survey.

### 3.4.2.3 Peak Occupancy

The peak parking occupancy recorded during the surveys has been determined for each area. This has been calculated as the highest instantaneous occupancy rate recorded throughout the survey period. Plans showing peak occupancy levels are included in Appendix K.

Off-street parking areas varied considerably in their peak occupancy rates. On Wednesday private peak occupancy rates ranged from less than 10% to over 90%. The Mackay Street and Wilsons Lane public parking areas had peak occupancy rates of 78% and 88% respectively.

Peak occupancy rates were significantly lower on Saturday, with most private off-street car parks not exceeding 40% occupancy at any time during the surveys. The Mackay Street and Wilsons Lane public parking areas had peak occupancy rates of 63% and 36% respectively.

### 3.4.3 Duration of Stay

Durations of stay have been calculated by analysing the vehicles recorded in each parking space during each half hour circuit. If the same vehicle was recorded in the same parking space in consecutive circuits, it was assumed that that vehicle remained parked throughout the time that it was recorded.

The average duration of stay was calculated by averaging all vehicles' durations of stay in each parking area over the survey period.

The peak duration of stay was calculated as the longest duration of stay recorded in each parking area during the survey period.

### 3.4.3.1 Average Duration of Stay

Appendix L includes plans showing the average duration of stay in off-street parks for the Wednesday and Saturday, together with the same data in table form.

Off-street parking areas tended to be used for longer duration than on-street parking. Most areas had average durations exceeding 4 hours on Wednesday. Exceptions included the public carpark on Mackay Street, which has a P120 restriction, and carparks targeted at specific, non-staff, uses, such as the ones at Smiths City, the Kingsgate Hotel, the Courthouse and the Speights Alehouse.

Lower durations were recorded at most off-street parks on Saturday, typically between 1 and 4 hours. Both public carparks had average durations of 1-2 hours.

Analysis of compliance has been undertaken for the Mackay Street off-street public parking area as this is the only one which has time restrictions. The Mackay Street public parking area, which has a time restriction of 120 minutes, had an average duration of stay of 188 minutes on Wednesday with several vehicles recorded as staying in excess of 4 hours. On Saturday it had an average duration of 72 minutes, with the longest recorded duration being 3 hours.

## 3.5 Desired Parking Occupancy

The level of desired parking occupancy can be defined. A low occupancy means drivers can find a parking space easily, but represents an inefficient use of land in the CBD. A high occupancy represents an efficient use of land, but will mean it is not so easy for users to find a parking space.

Other regions in New Zealand have adopted target occupancy levels as follows:

- The Auckland Transport Parking Strategy has a target of between 70% to 90%
- The Whangarei Parking Management Strategy has a target of between 70% to 90%
- The Hamilton Parking Management Action Plan has a target of between 70% to 85%
- Rotorua District Council has a target of 70% to 90%

It is recommended that Greymouth adopts 70-90% as a target for parking occupancy. The occupancy graphs shown earlier demonstrate that on-street parking in the central and east areas of the study area had occupancy rates within this target range between 10:00am and 2:30pm. On-street parking in the western areas of the study area was significantly lower than this range.

On the Saturday on-street parking in the central and east areas of the study area had occupancy rates within the target range between 10:30am and 12:30pm. On-street parking in the western areas of the study area was significantly lower than this range.

Figure 3-5 and Figure 3-6 shown earlier demonstrate that off-street parking on Wednesday in the public parking areas was within the target range between 10:00am and 2:30pm. Private off-street parking was significantly lower than this range.

On the Saturday, both public and private off-street parking areas had occupancy rates significantly lower than the target range.

## 3.6 Summary of Results

The overall trends emerging from the surveys were that on-street parking in the central and eastern areas were operating at desirable levels of occupancy (70-90%) throughout most of the survey period on both the Wednesday and the Saturday. On-street parking in the western part of the study area was operating at lower occupancy rates for the entire duration of the Wednesday survey (38-55%), and extremely low occupancy rates for the entire duration of the Saturday (15%-22%).

Public off-street parking was operating at desirable levels throughout the middle of the day on the Wednesday (10:00am – 2:30pm), but had low occupancy rates early and late in the day. It also had lower than desirable occupancy rates on the Saturday (18%-39%).

Private off-street parking was operating at lower than desirable occupancy for the entire duration of both the Wednesday (48%-57%) and Saturday (21%-29%) surveys.

High numbers of vehicles parking for longer than the restrictions were recorded throughout the study area. In the central and east on-street areas, 45 of the 51 time restricted areas had non-complying vehicles observed on both the Wednesday and Saturday. In the western on-street areas, 23 of the 26 time restricted areas had non-complying vehicles observed on the Wednesday, reducing to 15 areas on the Saturday. The only public off-street parking area with time restrictions was the Mackay Street carpark. Vehicles parking for longer than the restriction were recorded here on both Wednesday and Saturday.

These trends are summarised in Table 5. Green shaded cells represent occupancy rates within the generally desired 70-90% range, and blue shaded cells representing occupancy rates below this.

**Table 5: Summary of parking survey results**

		Central and Eastern On-Street Areas	Western On-Street Areas	Public Off-Street Areas	Private Off-Street Areas
Wednesday	Average Occupancy	72%	48%	69%	51%
	Peak Occupancy	87%	55%	87%	57%
	Areas with Non-Compliance	45/51	23/26	1/1	-
Saturday	Average Occupancy	80%	19%	28%	26%
	Peak Occupancy	85%	22%	39%	29%
	Areas with Non-Compliance	46/51	15/26	1/1	-

## 4 Future Parking Demand

The future parking demand in the Greymouth CBD will depend on a range of factors, including population growth, changes to land use and tourism growth. Other factors such as technological advances (e.g. self-driving cars, electric vehicles) and environmental changes (e.g. climate change) may impact on future demands, but have not been explicitly reported on due to the high levels of uncertainty involved; however these are still acknowledged as potential risks.

### 4.1 Population Predictions

Population growth estimates have been analysed for the Grey District and the wider West Coast Region to determine the likely change to parking demand in the future.

Statistics New Zealand has population figures for the Grey District based on census results and combined with other factors. The estimated resident population of the Grey District is shown in Figure 4-1.

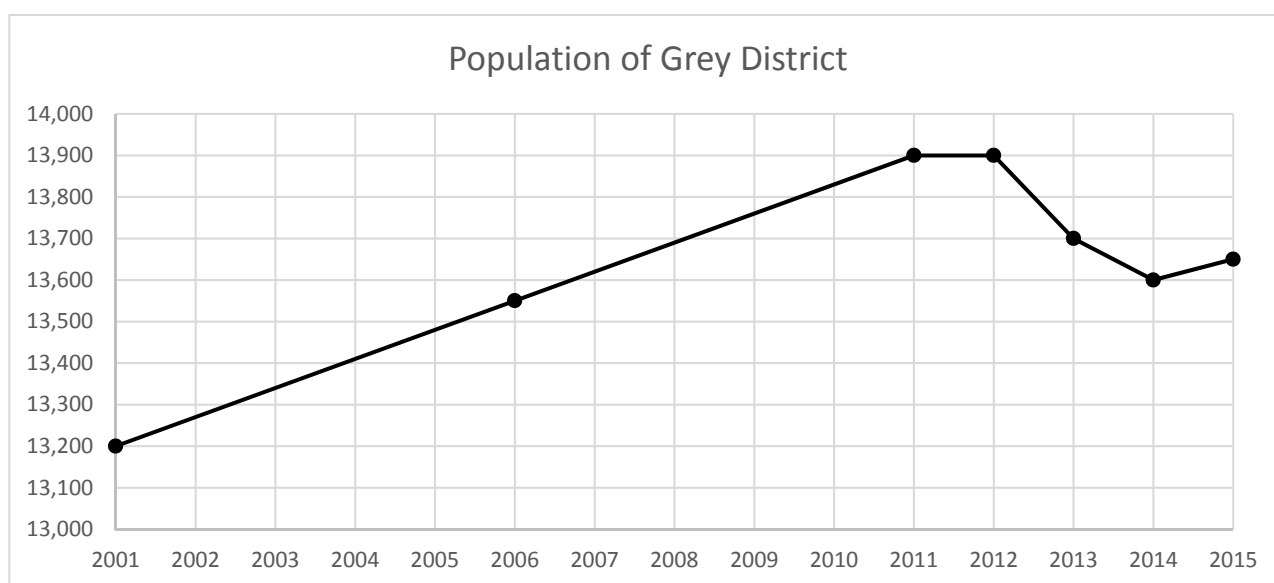


Figure 4-1: Estimated Resident Population for Grey District 2001 to 2015 (Source – Population Estimates, Statistics New Zealand)

The graph shows that the population rose steadily from 2001 to 2011, before a decline to 2014, then a small growth in 2015.

The population projections for the Grey District from 2016 (current) to 2031 are shown in Table 6.

Table 6: Population projections for Grey District (Statistics New Zealand)

Year	Grey District
2016 (Current)	13,371
2021	13,800
2026	13,650
2031	13,350

The Statistics New Zealand projection in Table 6 shows that the population in the Grey District is likely to remain relatively stable over the next 15 years.

The GDC Long Term Plan 2015 – 2025 contains information about population projections from 2016 through to 2031. Part 7.2 states that “the projections for the Grey District and the West Coast are mostly static.”

## 4.2 Tourism Predictions

At a national level, tourism is a growing industry. The Ministry of Business, Innovation and Employment (MBIE) publication *New Zealand Tourism Forecasts 2016-2022* states that visitor arrivals to New Zealand grew 9.6% in 2015, and their projection for 2016-2022 is for this growth to continue at 5.4% per annum, as shown in Figure 4-2.

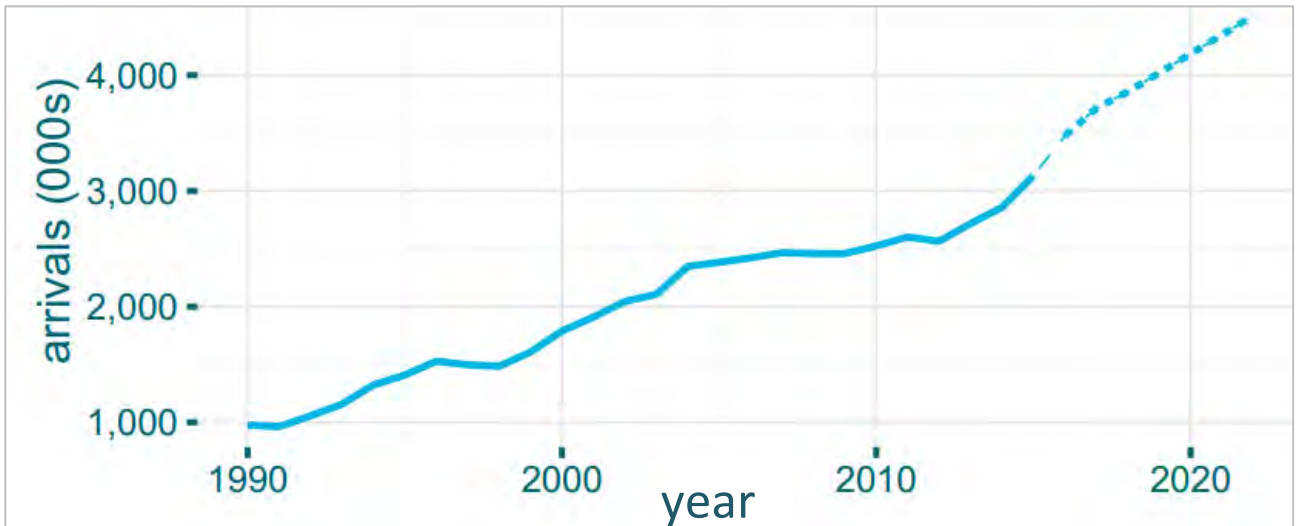


Figure 4-2: Total Visitor Arrivals in New Zealand

Statistics New Zealand publish the number of guest nights of accommodation, which provides a useful indication of tourist numbers at a regional level. The number of guest nights reported in the Grey District is shown in Figure 4-3, together with the number of guest nights reported nationally for comparison.

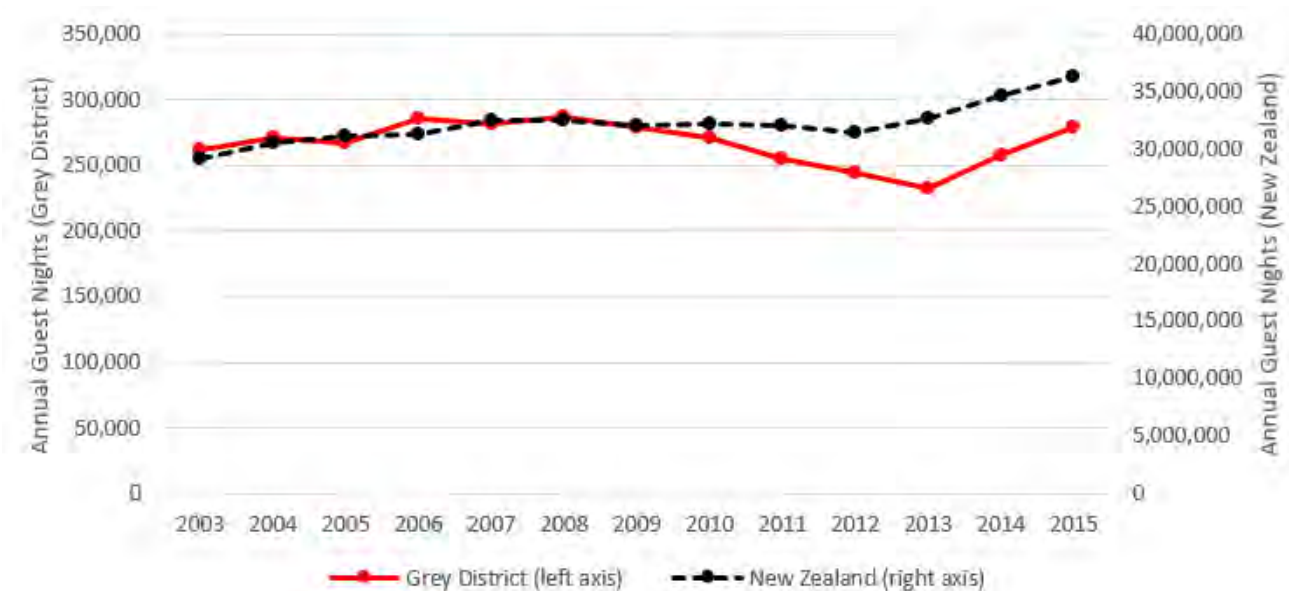


Figure 4-3: Annual Guest Nights

This shows that the number of guest nights in the Grey District was relatively steady prior to 2008, following a pattern similar to the national figure (although with more year-to-year variation). It became less well aligned from 2008 and 2013, with guest nights reducing in the Grey District faster than they were reducing nationally.

Since 2013 this gap has been closing, with guest nights in the Grey District growing faster than the national figure. This graph suggests that if the number of guest nights reported nationally continues to increase, then the number of guest nights reported in the Grey District can be expected to also increase.

Based on these two graphs, it is reasonable to expect visitor numbers in Greymouth to increase at a rate similar to the nationally forecast rate, which is 5.4% per annum.

The proportion of parked vehicles in the Greymouth CBD, which are associated with tourists is not currently known. It is estimated that during the peak time, visitor vehicles might make up 10-20% of the total number of vehicles parked in public parking areas (excluding hotel/motel parking areas). Assuming this is the case, then a 5.4% per annum increase in visitor numbers would correspond to a 0.5-1.1% increase in parking demand per annum.

### 4.3 Land Use

The Grey District Plan has no future projection plans for the area of the Greymouth CBD.

The GDC Long Term Plan 2015 – 2025 states that “council is not predicting any substantial change to the make-up of the District over the ten year period of this Plan” and suggests that land use is unlikely to change in the Greymouth CBD (Section 7.2, Part A).

The Framework proposes several changes to the CBD. These were discussed in Section 2.5 of this report.

### 4.4 District Plan Changes

There are no changes proposed to the Grey District Plan as at January 2016.

### 4.5 Summary

Greymouth is predicted to retain a relatively stable population, and have no substantial change in land use throughout the district in the next 10-15 years. It is predicted to have some annual growth in tourist volumes, which is expected to result in parking demand increasing at a rate in the order of 0.5-1.1% per annum.

If this growth were to continue for 10 years, there would be expected to be a 5-11% increase in total parking demand, which equates to an additional 38-83 vehicles at peak times. The approximate occupancy rates that can be expected in 2025 (10 years from 2015) are shown in Table 7 (lower bounds based on 5% growth, upper bounds based on 11% growth). Green shaded cells represent occupancy rates within the generally desired 70-90% range, and blue shaded cells representing occupancy rates below this.

Table 7: Effect of predicted tourist growth on parking occupancy rates

			Central and Eastern On-Street Areas	Western On-Street Areas	Public Off-Street Areas	Private Off-Street Areas
Surveyed 2015	Wednesday	Average Occupancy	72%	48%	69%	51%
		Peak Occupancy	87%	55%	87%	57%
	Saturday	Average Occupancy	80%	19%	28%	26%



		Peak Occupancy	85%	22%	39%	29%
Predicted 2025	Wednesday	Average Occupancy	80%	48-62%	78-80%	51%
		Peak Occupancy	90%	65-84%	90%	57%
	Saturday	Average Occupancy	80%	19%	39-54%	26%
		Peak Occupancy	90%	22%	46-63%	29%

This table shows that the occupancy rates in the central and eastern on-street parking areas would continue to be high. The western on-street parking areas would increase on Wednesdays, but would remain low on Saturdays. Public off-street parking areas would continue to be high on Wednesdays, and would increase somewhat on Saturdays, although still be significantly below capacity. Private off-street parking areas would generally not be used by tourists so are not expected to change significantly.

The growth in tourist numbers is expected to result in higher parking demand, which would be mostly accommodated through higher occupancy rates within on-street parking in the central and eastern area, and the two public off-street parking areas. At the busiest times, there would also be higher occupancy of on-street parking in the western areas.

# 5 Speciality Vehicle Parking

## 5.1 Mobility Impaired Users

There are currently 9 parking spaces in the Greymouth CBD reserved for use by mobility impaired users. Figure 5-1 shows the locations of these spaces.

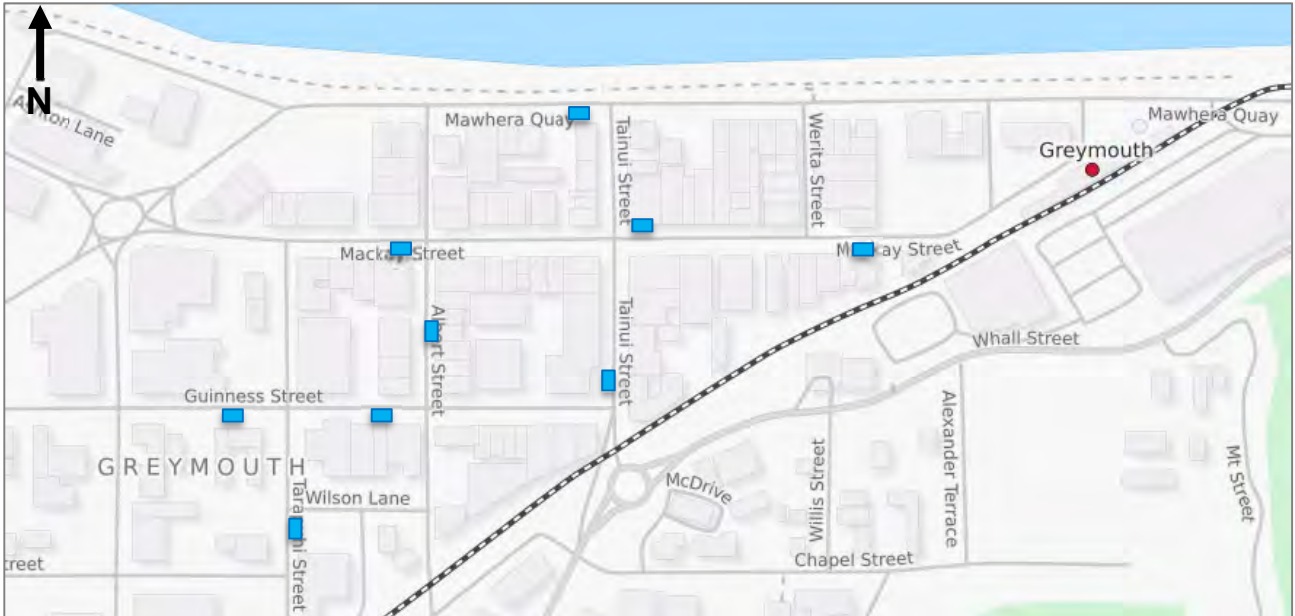


Figure 5-1: Locations of mobility impaired parking spaces

Based on a current total of 482 on-street parking spaces, as shown earlier in Section 2, nine mobility impaired parking spaces represents provision at a rate of 1 mobility impaired parking space per 54 total on-street parking spaces. This is a similar rate to the District Plan requirement for developments to provide 1 mobility impaired parking space per 50 parking spaces in off-street parking areas.

The mobility impaired parking spaces tended to have lower average occupancy than adjacent standard car parks. Table 8 below shows the average parking occupancy rate (averaged over the duration of the survey) for each mobility impaired parking space on the Wednesday and Saturday.

Table 8: Average occupancy rates of mobility impaired parking spaces

Mobility Space Location	Average Occupancy Rate	
	Wednesday	Saturday
Mawhera Quay	0%	0%
Mackay St between Tarapuhi St and Albert St	31%	44%
Mackay St between Tainui St and Werita St	19%	0%
Mackay St between Werita St and Waite St	38%	75%
Albert St	38%	75%
Tainui St	25%	25%
Guinness St between Herbert St and Tarapuhi St	0%	0%
Guinness St between Herbert St and Albert St	0%	0%
Tarapuhi St	0%	13%

Average occupancy rates varied widely across the different mobility impaired parking spaces. Spaces located on the periphery of the CBD, such as those on Mawhera Quay and Guinness Street had low average occupancy rates. Those more centrally located on Mackay Street and Albert Street had higher average occupancy rates. Occupancy rates tended to be higher on the Saturday than on the Wednesday. These occupancy rates suggest that the overall number of mobility impaired parking spaces provided in the CBD is sufficient to accommodate demand.

Mobility impaired parking spaces are relatively evenly spread geographically across the CBD. Due to mobility issues, it is essential that these spaces are close to desirable locations. Mobility impaired parking spaces on the periphery of the CBD had low average occupancies recorded. It is recommended that the three spaces that were not used (two on Guinness Street and one on Mawhera Quay) are relocated to locations identified in consultation with the relevant mobility impaired stakeholders.

## 5.2 Taxis

There is an on-street taxi stand located on Mackay Street between Albert Street and Tainui Street. It does not have individual spaces marked, but is approximately 15m long which is sufficient to accommodate 2-3 taxis.

This location in the centre of the CBD is appropriate as it provides a clear and understandable focal point for customers wishing to use taxi services.

## 5.3 Cycles

Cycle parking provision is limited in the Greymouth CBD. No cycle parking spaces were observed in the study area. The District Plan has no requirements for developments to provide cycle parking.

The absence of cycle parking is a discouraging factor on demand for people to travel to and from the CBD by cycle. The provision of safe and secure cycle parking would encourage modal shift towards cycling, which would reduce the vehicle parking demand. Cycle parking requires less space than vehicle parking. It is recommended that cycle parking facilities are provided in the CBD and alterations to the District Plan for private cycle parking are considered.

## 5.4 Motorcycles

Dedicated motorcycle parking is provided on Mackay Street, opposite Tarapuhi Street. One car parking space has been marked as motorcycle parking only, and can accommodate three motorcycles. This space had an

average occupancy of 31% on the Wednesday and 50% on the Saturday. It is noted that motorcycles can also use standard car parking spaces.

This level of provision for motorcycle parking is considered appropriate.

## 5.5 Campervans

No specific areas for campervan parking are provided in the Greymouth CBD. During the surveys, several campervans were observed occupying car parking spaces. Several holiday parks and campsites are located in the wider region, but there is no facility in the Greymouth CBD to accommodate campervans. Anecdotal evidence suggests that some off-street parking areas are used overnight by campervans.

Campervans vary considerably in size. Smaller campervans can use standard car parking spaces, but larger campervans and house buses require larger parking spaces with more manoeuvring room.

Provision of short-term campervan parking in the CBD would encourage parking in appropriate locations; however, given that this issue has not been highlighted as a problem by the community it is not considered to be a priority.

It is noted that GDC are currently investigating the feasibility of providing overnight campervan parking facilities in two areas on the outskirts of the CBD (both outside the study area); the carpark on Whall Street adjacent to the Z petrol station, and the riverside (Coal Heritage Park) carpark on Johnston Street. Allowing freedom camping close to the CBD will have wider social and economic implications, which are outside the scope of this parking strategy.

## 5.6 Buses

There are four on-street bus parking areas in the study area:

- Mawhera Quay, outside the Kingsgate Hotel;
- Mackay Street, near the train station;
- Herbert Street, between Boundary Street Guinness Street; and
- Tainui Street, between Mackay Street and Guinness Street (close to Revingtons Hotel).

Off-street bus parking is provided adjacent to the railway station which is located on Mackay Street.

Some bus services are coordinated with the TranzAlpine train. The daily service runs throughout the year and stops at Greymouth for an hour, arriving at 12:45pm and departing at 1:45pm.

Five buses were observed at the train station around 1:00pm (some using off-street parking spaces). Two buses were observed to be using the bus parking area on the corner of Mackay Street and Herbert Street after 2:00pm.

The bus services that connect Greymouth to other areas are described below.

### West Coast Shuttle

- Daily service that departs Greymouth at 7:30am, arrives Christchurch at 12:00pm, departs Christchurch at 2:15pm, and arrives Greymouth at 6:30pm.
- Uses on-street bus parking area on the corner of Mackay Street and Herbert Street.

### Intercity Bus

- Daily service from Franz Josef to Nelson (arrives Greymouth at 1:15pm, departs Greymouth at 1:30pm).
- Daily service from Nelson to Franz Josef (arrives Greymouth at 1:15pm, departs Greymouth at 1:30pm).
- Uses the on-street bus parking area at 164 Mackay Street.

## Atomic Travel

- Daily service that departs Christchurch at 7:30am, and arrives Greymouth at 11:15am, departs Greymouth at 1:30pm and arrives Christchurch at 5:15pm.
- Atomic Travel has routes that pass through Greymouth (between Nelson and Franz Josef) run by Intercity.
- Uses off-street bus parking area at the railway station (corner of Mackay Street and Mawhera Quay).

## Nakedbus

The Nakedbus timetable is released 6 to 8 weeks ahead of time. The services as at January 2016 are as follows:

- Alternating daily one-way service between Nelson and Queenstown, passing through Greymouth.
- On Mondays, Thursdays and Saturdays the northbound service operates. This stops in Greymouth between 1:10pm and 1:15pm.
- On Wednesdays, Fridays and Sundays, the southbound service operates. This stops in Greymouth between 1:30pm and 1:35pm.
- Uses off-street bus parking area at the railway station (corner of Mackay Street and Mawhera Quay).

Locations of bus parking areas are shown in Figure 5-2.

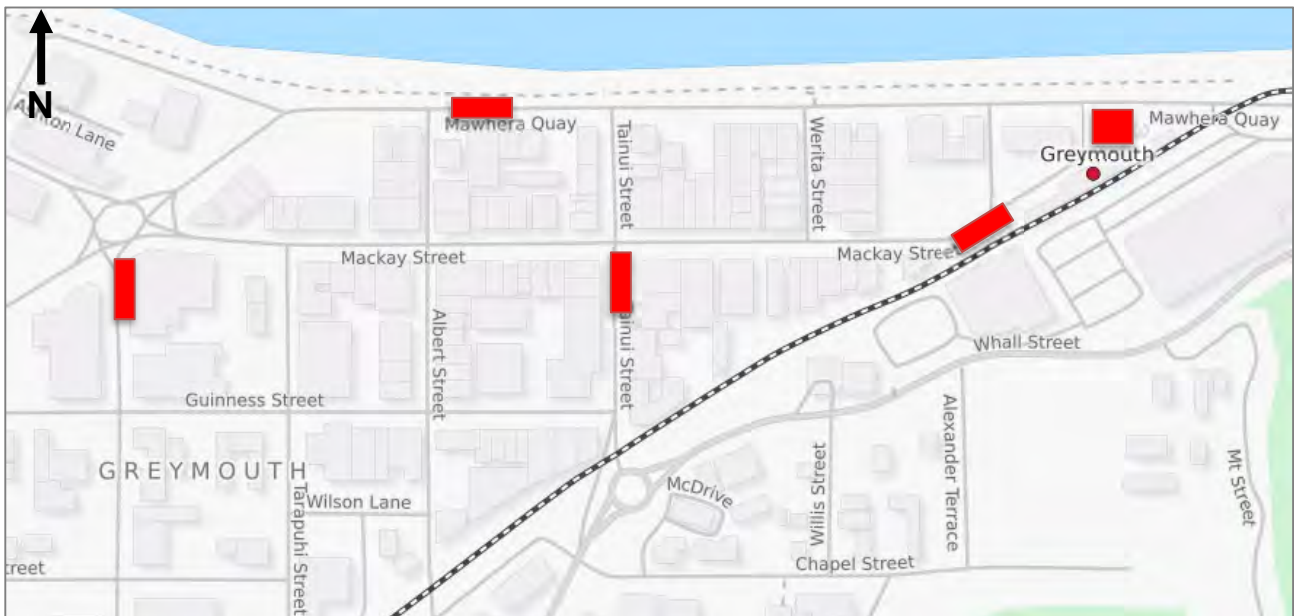


Figure 5-2: Bus parking locations

Bus parking areas are located adjacent to specific origins and destinations, and as such should not be relocated unless there is a significant requirement for this. Some projects proposed in the Framework may impact on these locations, in which case relocation of bus parking should be investigated as part of the design process.

## 5.7 Rental Cars

There are several rental car companies that operate in Greymouth. A large number of on-street and off-street parking spaces near the railway station are reserved by rental car companies. There is also an off-street parking area on Richmond Quay, with surplus vehicles spilling over into on-street parking.

The Framework proposes a Market Square which will affect the main rental car off-street parking area near the railway station (off Mackay Street). It is currently estimated that off-street rental car parking provision would be reduced by 6 spaces as part of this project.

GDC has previously investigated the feasibility of relocating rental car parking further from the railway station. This would allow land in the east end of the CBD to be repurposed to more attractive uses, and encourage departing train passengers to walk through the CBD before they collect their rental car (luggage could be shuttled directly to the rental cars). GDC has commenced discussions with rental car companies over this idea, who indicated a willingness for further investigations. This is considered to be a promising possibility, but is dependent on having the full backing of the rental car companies to work. Consultation should therefore continue until a detailed arrangement that benefits all parties can be agreed on.

## 6 Consultation

Public consultation is an opportunity to collect stakeholder input on matters affecting them. Effective consultation will improve the efficiency, transparency and public involvement in a project that will potentially affect all members of the community.

It is recommended that a two stage consultation process is implemented. Firstly GDC would identify key stakeholders for participation in a two way exchange of information and opinions. This will provide the opportunity for the recommendations of this report to be assessed by the stakeholders that will be most seriously affected by any proposed changes. GDC will then have the opportunity to revise any of the recommendations should there be new information that will influence the decision making process.

The second stage would involve the provision of information to the wider community through an appropriate media format to ensure the proposed alterations and the reasons for them are understood. This could be combined with consultation on the wider Framework projects.

Potential key stakeholders that could be consulted are listed below; however the appropriate stakeholders would be at the discretion of GDC:

- Automobile Association;
- Bus companies;
- Business operators;
- CCS Disability Action;
- Community Public Health;
- Greymouth Business & Promotions Association;
- Mawhera Incorporated;
- Local motorbike organisations;
- NZ Transport Agency;
- NZ Police;
- Rental car companies ;
- Taxis companies; and
- Tourism West Coast.

## 7 Parking Strategy Options

### 7.1 Summary of Issues

Based on investigation of existing facilities, the results of the parking surveys, and future proposals, the main issues that need to be address have been identified. These are shown in Table 9, together with the negative effects of the issue, and some of the contributing causes.

Table 9: Identified Issues, their negative effects and causes

Identified Issue	Negative Effects	Causes
High utilisation of on-street parking in the central and eastern CBD.	More difficult for customers to find convenient parking	<ul style="list-style-type: none"> <li>High demand for convenient parking</li> <li>Limited supply of convenient parking</li> </ul>
Non-compliant long term parking occurring in short-term spaces in the central CBD.	More difficult for customers to find convenient parking	<ul style="list-style-type: none"> <li>Staff desire for the most convenient parking</li> <li>Customers wanting to stay longer than the permitted time</li> <li>Limited enforcement</li> </ul>
Low utilisation of public off-street parking areas.	Valuable land is not being used efficiently. Higher demands for on-street parking.	<ul style="list-style-type: none"> <li>Off-street parking not located as conveniently as on-street parking</li> <li>Possibly tourists do not know it is there due to lack of directional signage</li> </ul>
Low utilisation of private off-street parking areas.	Valuable land is not being used efficiently. Higher demands for on-street parking.	<ul style="list-style-type: none"> <li>Private parking has demands only at certain times.</li> <li>Private parking is limited to specific users</li> </ul>
Reductions to parking associated with projects proposed in the Framework	Reduces on-street supply which may make it more difficult for customers to find convenient parking	<ul style="list-style-type: none"> <li>Desire to improve pedestrian amenity and safety.</li> </ul>

### 7.2 Options Assessed

There are a number of options that could address these issues. These are not mutually exclusive and a combination of these will likely provide the best outcomes. Options that have been considered are:

- Additional off-street public parking;
- Additional on-street parking (angle parking);
- Reconfigured on-street parking restrictions;
- Coordinated sharing of off-street private parking for public parking;
- Targeted parking enforcement;
- Directional parking signage to public off-street parking;
- District Plan review;
- Parking charges;
- Improved pedestrian and cycling facilities; and
- Public transport facilities.



### 7.3 Additional Off-Street Public Parking

The high demand for public parking, which will increase with the removal of an estimated 72 spaces proposed in the Urban Design Framework, could be provided for through the addition of one or more off-street public parking areas in strategic locations.

Several off-street parking areas in the CBD are owned by GDC or Māwhera but are leased to private parties to use exclusively. At the time of writing, demand for these spaces was low, with 22 spaces unleased. These GDC-owned off-street parking areas could potentially be made available for short-term shoppers/customers rather than private leaseholders. Areas that are currently occupied by buildings could also be considered for change to off-street parking areas. Six areas which may be able to be made available for short-term public parking are shown in Figure 7-1.

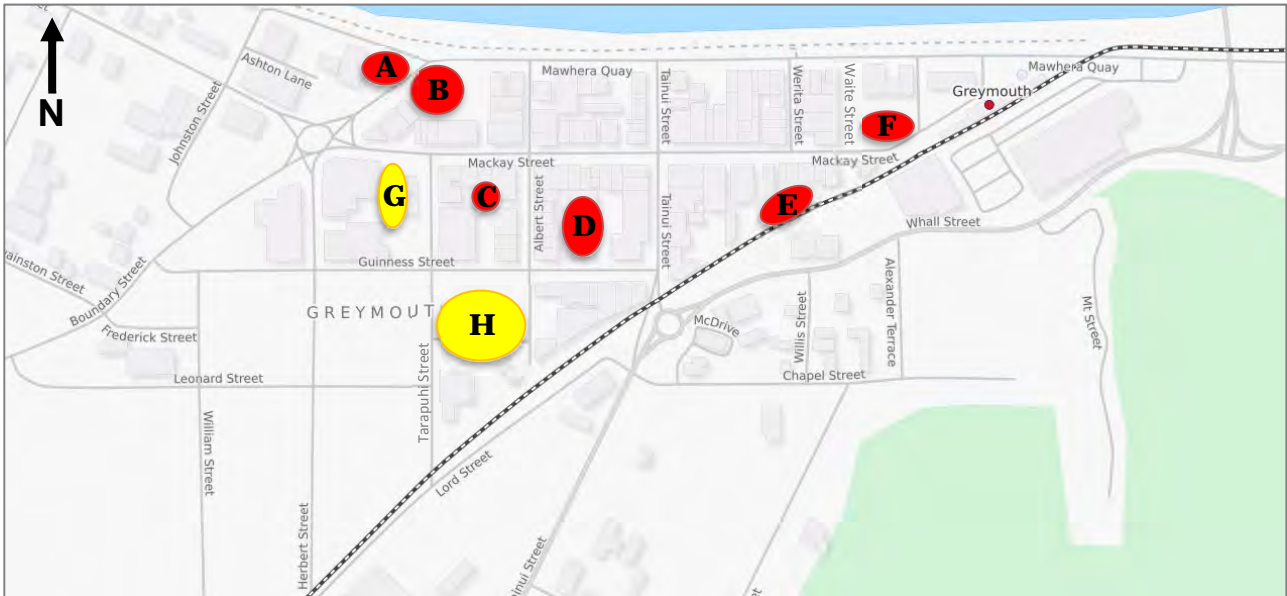


Figure 7-1: Potential locations for short term public off-street parking

Each of these areas is described further in Table 10.

Table 10: Potential sites for short term public off-street parking

Location	Current Land Use	Comments
A: Western corner Mawhera Quay and Richmond Quay	Vacant – recently demolished building	Relatively inconvenient to central and east destinations. Relatively poor access from State Highway town gateways.
B: Eastern corner Mawhera Quay and Richmond Quay	GDC carpark – leased to private users	Relatively inconvenient to central and east destinations. Relatively poor access from State Highway town gateways.
C: Waters Lane between Tarapuhi Street and Albert Street	GDC carpark – leased to private users	Reasonably convenient to central and east destinations. Reasonable access from State Highway town gateways. GDC operated parking is only a very small portion of the carpark (approximately 4 spaces)
D: Guinness Street	Old courthouse building	Convenient to central and east destinations. Good access from State Highway town gateways.
E: Behind Mackay Street shops	GDC carpark: leased to private users	Convenient to central and east destinations. Good access from State Highway town gateways. Not visible from street – would require high quality signage. Would require integration with adjacent private parking.
F: Eastern corner Mackay Street and Waite Street	GDC carpark – leased to private users (several rental car companies)	Convenient to central and east destinations. Reasonable access from State Highway town gateways.
G: Mackay Street behind Herbert Street and Tarapuhi Street	GDC public carpark	Already operated as a public carpark, 2 hour time restriction.
H: Wilsons Land between Tarapuhi Street and Albert Street	GDC public. 112 spaces for public use, 26 spaces leased to private users	Already operated as a public carpark, no time restriction.

If additional off-street parking is provided then location, funding, and on-street parking management are critical issues to be addressed:

- Any additional off-street parking area needs to be more convenient for a significant proportion of users than the on-street parking alternatives. It should be easily accessible from the town gateways, without requiring vehicle movements through streets where pedestrian amenity and safety is a key focus.
- The provision and maintenance of parking facilities has an associated cost. Parking charges could be applied to recover this money, but this would likely encourage the use of free on-street parking alternatives.
- If the location of any off-street parking is inconvenient, then drivers are likely to park in the available on-street parking. Time restrictions in on-street parking areas will help to reduce this issue; however, this may lead to excessive non-compliance and a requirement for additional enforcement which has a related cost. An alternative to time restrictions is streetscape improvements, which involves the removal of parking spaces and the conversion into other space, such as gardens or paving which have significant aesthetic and pedestrian safety benefits.
- One of the existing public off-street parking areas in a less convenient location could be sold, leased or converted to a different use (in whole or partially) to offset the financial cost of a new facility.

## 7.4 Additional On-Street Parking (Angle Parking)

Most of the parking spaces in the Greymouth CBD are parallel to the kerb. Additional spaces may be able to be created by installing angle parking in some locations.

There are four locations where on-street angle parking already exists in the study area:

- Mackay Street, outside the railway station (13 spaces);
- Boundary Street, between Mackay Street and Mawhera Quay (28 spaces);
- Tarapuhi Street, between Guinness Street and Lord Street (23 spaces); and
- Johnston Street, between Boundary Street and Gresson Street (17 spaces).

Parking spaces can be placed on different angles, requiring different widths and lengths as shown in Table 11 (dimensions taken from the Standard AS2890.5.1993 Parking Facilities, Part 5: On-street parking).

**Table 11: Widths and lengths required for different angle parking spaces**

Type of Space	Road width required	Kerb length per space
Parallel spaces	2.1 - 2.3m	5.4 - 6.7m
30°	5.3m	5.0m
45°	6.7m	3.7m
60°	7.8m	3.0m
90°	8.3m	2.6m

Angle parking presents a greater hazard to through traffic including cyclists, and typically result in more crashes than parallel kerbside spaces (Austroads, 2010).

Angle parking would be difficult to accommodate in the busier shopping streets as they generally do not have sufficient width. Some of the periphery streets may have sufficient width to accommodate angle parking, for example Boundary Street or the Herbert Street south of Leonard Street. However the surveys show that the demand for parking in the periphery areas is currently low.

Angle parking could be provided to offset the loss of 72 spaces through development of some of the projects proposed as part of the Framework. The conversion of Mawhera Quay from a two-way street to a one-way eastbound street may create opportunities for angle parking to be included. The removal of a traffic lane would create the additional width required, and conflicts between manoeuvring vehicles and through

vehicles/cyclists is reduced when there is only one direction of flow. Although this parking would be located conveniently to destinations, it would be difficult for tourists to access easily from the town gateways.

## 7.5 Reconfigured On-Street Parking Restrictions

Existing on-street parking restrictions have been reviewed to ensure they provide the best outcomes for local businesses.

The Austroads Guide to Traffic Management Part 11: Parking and the Traffic Controlling Devices Manual includes recommended time restrictions for different activities. These are shown in Table 12.

**Table 12: Parking Restrictions and Uses According to Austroads and Traffic Control Devices Manual**

<b>Parking Restriction</b>	<b>Austroads Guide to Traffic Management – Part 11: Parking (Section 7.9.1 Linear Parking Control)</b>	<b>Traffic Controlling Devices Manual – Part 13: Parking Control (Table 4.2 Examples of parking durations and use)</b>
5 minutes	For areas with high arrival rates and where some waiting is likely.  Examples: cinemas, post offices and hotels	Used at locations where people are likely to be picked up and dropped off.  Examples: hotels, movie theatres, airports, schools
10 or 15 minutes	For high turnover outside commercial facilities that provides a high level of convenience. Only appropriate for users accessing the one address  Examples: banks, post offices, and dairies	Used at locations where people exit the car for short-duration visits.  Examples: Single land use facilities such as a dairy or bank
30 minutes	Located directly outside shops that require a reasonably high level of convenience and maintains a competitive market position. This allows users to access two or three shops with the time restriction.  Examples: local shops	Locations with a high turnover of shoppers due to demand.  Examples: small shops or multi-use shops
1 hour	Appropriate in locations where there is a demand for parking and the activity is likely to take at least half an hour.  Examples: commercial developments, businesses providing professional and personal services	Where there is a high turnover of shoppers and major demand for parking.  Examples: shopping centres, professional services
2 hours	Appropriate in areas where professional or personal services are required and commuter parking is to be removed.  Examples: businesses providing professional and personal services	Major demand for parking  Examples: shopping centres, professional services
4 hours	Appropriate to stop all day commuter parking and allow parking by other local people  No specific examples	Used for those areas where all day parking is not desirable.  Examples: shopping centres, professional services

Parking Restriction	Austrroads Guide to Traffic Management – Part 11: Parking Management (Section 7.9.1 Linear Parking Control)	Traffic Controlling Devices Manual – Part 13: Parking Control (Table 4.2 Examples of parking durations and use)
Unlimited (All day)	Usually for employees and occurs across all types of development.  No specific examples	Not specifically mentioned.

The Greymouth CBD contains a mixture of most of these activities. Many visitors to the CBD would want to access several different activities in each trip.

In tension with the desire to match parking duration to the land use immediately adjacent to the space, there are benefits to keeping time restrictions across the CBD as consistent as possible, to ensure drivers understand the restrictions. This is particularly important as a high proportion of drivers are visitors to Greymouth.

Currently the study area provides a wide variety of different time restrictions, with parking targeted at the land uses it is immediately adjacent to. There are 6 different time restrictions (as detailed in the plan in Appendix A):

- P5/Loading Zones are distributed throughout the study area;
- P15 is provided in 7 locations, outside land uses including a bakery/café, cinema and library;
- P30 is provided in the busy shopping areas of Mackay Street, Tainui Street and Guinness Street;
- P60 is provided in the area immediately surrounding this busy shopping area;
- P120 is provided in only 1 location on Mawhera Quay near the railway station; and
- P180 is provided in only 1 location on Herbert Street outside a car yard and several retail/industrial activities.

The existing variation in time restrictions is considered to be relatively well-structured. There are three broad tiers of restrictions, located approximately as shown in the simplified diagram in Figure 7-2.

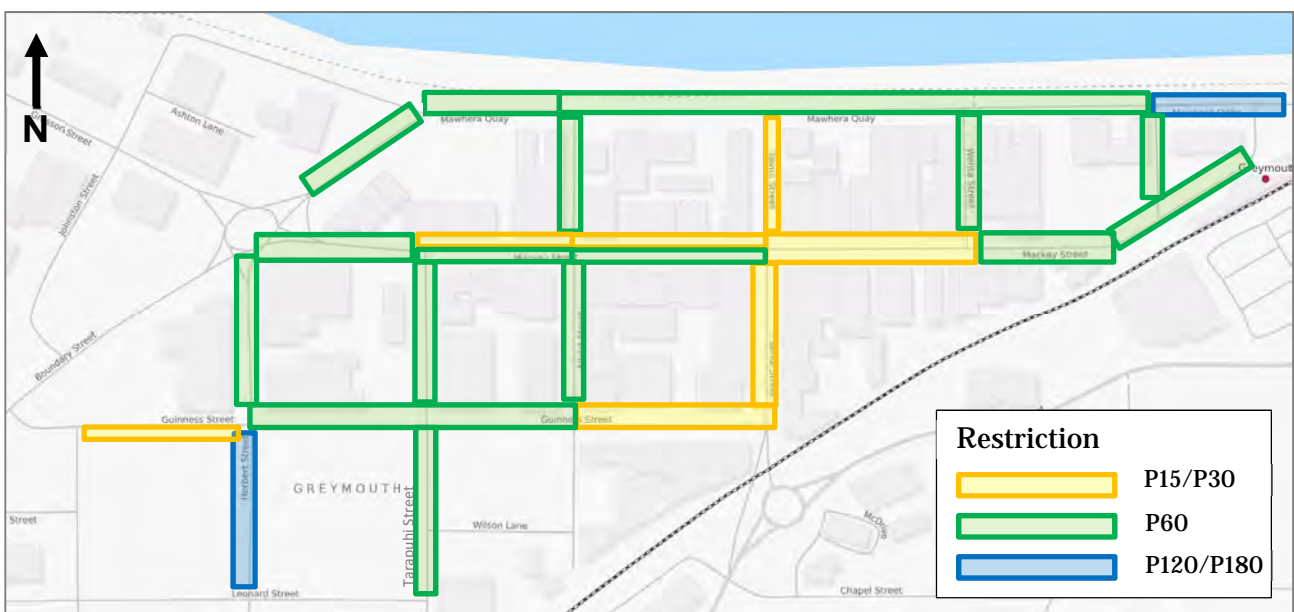


Figure 7-2: Diagrammatic existing parking restriction plan

Short-term restrictions are provided on Mackay Street, Tainui Street and Guinness Street, in the busiest retail areas. Beyond this core is a large area of P60 restrictions. Two areas beyond have longer P120 or P180 restrictions, and one area has shorter P30 restrictions.

Dispersed throughout these simplified areas are small pockets of P15 spaces and speciality parking spaces located to service specific land uses.

Table 12 shows that a time restriction of 30 minutes allows users to access two or three shops, and is suitable for local shops or multi-use shops. This is an appropriate time restriction for the busiest retail streets in the study area. It is noted that the section of Mackay Street between Tarapuhi Street and Tainui Street has P30 restrictions on the north side of the road but P60 restrictions on the south side. This is inconsistent with the zonal approach, and could lead to confusion and lower compliance with restrictions. It is recommended that the south side of Mackay Street is changed to a P30 restriction to match the north side.

A time restriction of 60 minutes is suitable for people accessing shops, as well as people accessing professional services such as banks, lawyers, accountants etc. where the activity may exceed 30 minutes. This duration is appropriate for the streets surrounding the busiest retail streets, as there are a number of professional service activities located in these streets.

A time restriction of 2 hours is appropriate for combinations of shopping and professional services. It is unclear what land use the P120 parking opposite the railway station is intended to service. It is understood that this was historically reserved for rental cars, but was recently changed to P120. The average duration of stay was approximately 2 hours on the Wednesday and approximately 1.5 hours on the Saturday. This suggests the restriction is appropriate for the demand.

The P180 restrictions on Herbert Street are adjacent to car sales yards, retail uses (Stihl Shop and Hammer Hardware) and Arthritis New Zealand. Table 12 shows that a 1 hour time restriction is appropriate for retail uses and professional/personal services. A 1 hour restriction would be more in keeping with the zones outlined in Figure 7-2 above. The average occupancy of the P180 spaces was 61% (averaged over the duration of the surveys) on Wednesday and 42% on Saturday. These occupancy rates are lower than the target rate of 70-90%. Reducing the restriction from P180 to P60 would increase turnover of vehicles, but would be expected to further reduce the occupancy rate of these parking spaces as they will be useful to a smaller number of users ie. only those wanting to park for 60 minutes or less. It is therefore recommended that the P180 restriction be retained, unless there is a specific request from the adjacent businesses for shorter restrictions.

In the busier central and eastern area the average duration typically exceeded the restriction by 60 minutes or less. This suggests that the majority of the non-compliant parking could relocate to the surrounding P60 zone with only a slightly longer walk to achieve the same purpose.

In some areas in the western part of the study area, recorded durations significantly exceeded the time restriction. This included P15 parking on Gresson Street, P60 parking on Boundary Street, and P30 parking on Guinness Street (as shown in the plans in Appendix F). Each of these areas is discussed further below:

- It is understood that the P15 restriction on Gresson Street historically serviced a bakery that has now relocated and been replaced with industrial land uses. This P15 restriction should be reviewed, and unrestricted on-street parking may now be more in keeping with this area. Other restrictions in areas where land uses have recently changed should also be reviewed, especially when it is a P15 restriction.
- The P60 parking on Boundary Street (adjacent to Smiths City) had an average parking duration in excess of 4 hours on the Wednesday. It is not particularly close to any busy shopping land uses (apart from Smiths City which has a large off-street parking area). Removing this restriction may be appropriate.
- The P30 parking on Guinness Street (between William Street and Herbert Street) is adjacent to industrial uses and a car sales yard. It had an average duration of 1-2 hours on both the Wednesday and the Saturday. Increasing the time restriction to P60 may be appropriate.

Time restrictions which are too short may be encouraging locals accessing several different activities in the CBD to drive and repark between each activity, resulting in unnecessarily high vehicle movements around the CBD. Increasing the length of parking restrictions in the above areas would provide a restriction more closely suited to demand; however this is not recommended as it is likely to reduce availability in strategic locations and discourage visitors.

Restrictions for speciality parking should be reviewed. As discussed in Section 5, it is considered that current provision for buses, taxis and motorcycles is appropriate. Campervans are not specifically catered for. Small campervans can use standard carparks; however, consideration could be given to providing dedicated spaces for larger campervans. There appears to be potential to improve provision for rental car parking in collaboration with rental car companies. The locations of some mobility impaired parking spaces should be reviewed, in light of low occupancy rates recorded in the mobility impaired parking spaces around the periphery of the study area.

In summary, the majority of time restrictions are considered to be appropriate. The general approach of using a zone of P30 parking in the busiest retail streets, a P60 zone surrounding this, and areas of P120 and P180 beyond this, generally matches the land uses well. Minor changes are recommended where recorded durations were significantly different to the restriction, or where restrictions did not correspond well to adjacent land uses.

## **7.6 Coordinated Sharing of Private Off-Street Parking**

The surveys showed that many private off-street parking areas had high occupancy rates on the Wednesday, but were relatively empty on the Saturday. There were other carparks that were relatively empty during the Wednesday and Saturday, which are likely to be well used at other times (church carparks for example).

There is therefore an opportunity to facilitate sharing of these areas, which would result in more efficient use of land and lower demand for on-street parking. This would be beneficial if the carpark is centrally located, providing more convenient parking spaces than on-street alternatives.

GDC leasing of private parking areas could be investigated during off peak times. Some businesses may be supportive of customers being able to use parking close to their business. This may require a change to the District Plan rules in the Commercial Core Area, which currently restricts provision of customer parking on-site as was described earlier in Section 1.6.2.

## **7.7 Targeted Parking Enforcement**

The surveys show that compliance with parking restrictions is low in most streets in the study area. Many vehicles are exceeding the time restriction by a relatively small margin; less than 60 minutes. Stricter enforcement could encourage customers to either return to their vehicles and repark between activities, or leave the CBD before they have completed all their activities. Neither of these outcomes is desirable. Alternatively they would park closer to the periphery of the CBD where time restrictions are longer, or they would make better utilisation of off-street parking, which are desirable outcomes.

The surveys showed that a small proportion of people are parking for long durations (over 4 hours), in P30 and P60 areas. These people are likely staff, and stricter enforcement will result in them relocating their vehicle to the all-day parking around the periphery of the CBD or private off-street parking, freeing short-term parking spaces for use by customers as intended. Stricter enforcement to reduce long-stay parking, particularly in the P30 and P60 zones, is desirable.

The plans shown in Appendix H shows that most streets in the study area had at least one vehicle parked for over 4 hours, irrespective of the time restrictions in place.

Greymouth currently have one parking enforcement officer operating for 20 hours per week. They are only permitted to operate between 10am and 4pm on weekdays. This is when parking is the busiest and is considered to have the most impact. The methodology that this officer follows should be reviewed to ensure it is achieving the aim of keeping the high-demand short-term parking spaces available for use by customers, rather than being occupied all-day by staff vehicles.

If the current level of enforcement provision needs to be increased to achieve this aim of freeing up short-term parking spaces, the additional cost of increased parking enforcement could be offset to some extent by the income received from fines.

## 7.8 Directional Parking Signage to Public Off-Street Parking

Greymouth currently has signage immediately adjacent to on-street carparks informing users of any restrictions, and signs at the entrances to off-street public carparks. However, there is no signage throughout the wider town directing visitors to appropriate parking. Better signage could improve visitor's experience by allowing them to drive directly to off-street public parking areas and reduce on-street parking occupancy.

Town entrance gateways have been identified in the Urban Design Framework. Most visitors to Greymouth driving vehicles would enter the CBD at one of these three intersections:

- Tainui Street / State Highway 6;
- Mawhera Quay / Omoto Road; or
- Boundary Street / Mackay Street.

Signage directing visitors to public off-street parking areas could begin at these gateways, with interim signage at each turn.

## 7.9 Improved Pedestrian and Cycle Facilities

Making the CBD more attractive to walk and cycle around has the potential to reduce the number of internal CBD trips being made in vehicles. Improving walking and cycling routes to and from the CBD has the potential to reduce vehicles trips to and from the CBD, and parking demand within the CBD. This in turn will increase amenity, improve public health, and reduce emissions and air pollution.

The New Zealand Transport Strategy (NZTS), updated Land Transport Management Act (uLTMA), and Government Policy Statement (GPS) promote the use of alternative modes of transport. This includes cycling, walking, and public transport. Many aspects of these modes will contribute to the following objectives of the LTMA:

- Protecting and promoting public health; and
- Ensuring environmental sustainability.

Improved walking and cycling facilities is outside the scope of this strategy; however, it has relevant benefits. Reducing on-street parking is generally accepted to improve pedestrian safety and amenity.

### 7.9.1 Walking

Measures to increase the attractiveness of walking include:

- Streetscape improvements and shared zones;
- Improved intersection and mid-block crossing facilities;
- Narrower carriageways for pedestrians to cross; and
- Slower speeds through the introduction of traffic calming, speed restrictions or visual urban design.

### 7.9.2 Cycling

There is currently limited cycling infrastructure in Greymouth. Cyclists travelling to the CBD must generally share traffic lanes with vehicles, with the exception of the West Coast Wilderness Trail and the cycle lanes recently marked on SH6 south of the CBD. There are several busy roundabouts which are known to be less safe for cyclists (Austroads, 2010) than other intersection types. Cycle parking in the CBD is limited as described in Section 5.3.

There is no requirement in the Greymouth District Plan for developments to provide cycle parking or end of trip facilities. As a comparison, the Ashburton District Plan states that 'All developments, other than residential and farming, are to provide cycle parking at a rate of 1 cycle space for every 20 car parking spaces required'.



The Christchurch City Plan goes further, specifying requirements for end of trip facilities such as showers and lockers.

### 7.9.3 Summary

Some of the projects proposed in the Urban Design Framework will contribute directly to making walking and cycling more attractive, in the form of streetscape improvements, town gateways, the pedestrian rail link and the Cobden cycle/pedestrian link. Further infrastructure improvements, together with soft measures such as education and promotion, could be investigated by Council.

### 7.10 District Plan Review

Activities within the study area are subject to the rules in the Grey District Plan. These rules significantly influence the provision of parking in the study area.

Section 20.7 restricts permitted activities in the Commercial Core Area (shown earlier in Figure 2-4) from providing customer parking on-site, and specifies a rate at which staff car parking can be provided. In light of the generally low utilisation of private off-street parking in this area, consideration should be given to altering this restriction. The environmental results anticipated from the rules in this section include:

- Adequate parking, loading and vehicular access in relation to business activities, to preserve road safety and efficiency in traffic flows; and
- Pedestrian areas with minimal exposure to traffic danger, noise and fumes.

Allowing businesses to make their on-site parking available for their customers would contribute positively to provision of adequate parking. It would have the potential to increase the number of vehicles crossing footpaths and affecting pedestrians, although this could be mitigated with good design, or discretion used in some circumstances if customer parking is deemed inappropriate.

Additional requirements for activities to provide facilities for alternative modes of travel should be considered. These could include requirements for safe and secure cycle parking and end of trip facilities like showers, as have been introduced in other District Plans around New Zealand.

Minimum parking requirements are specified in Section 24.2.1. Because the central and eastern CBD is currently classified as “Commercial Core Area”, these requirements have a direct impact only on a small section in the western part of the study area. The surveys included seven off-street private parking areas in this western region which these minimum parking requirements apply to. Table 13 shows the recorded average occupancy rates of these seven private off-street parking areas.

**Table 13: Average occupancy rates of private off-street parking areas subject to minimum parking requirements**

Private Off-Street Parking Area	Average Occupancy - Wednesday	Average Occupancy - Saturday
Westland Engineering Products, Boundary Street	44%	26%
Super Liquor, Boundary Street	40%	39%
Smiths City, Boundary Street	57%	64%
Marac, Mackay Street	70%	28%
New Life Church, Leonard Street	4%	4%
Davis Ogilvie, Tarapuhi Street	41%	0%

With the exception of the Marac parking area on the Wednesday survey, these parking areas were operating at relatively low occupancy rates. Revising or removing the rates of minimum parking required would give these landowners/tenants more freedom in how they use their land, which would be beneficial to these businesses. This would then contribute towards the overall goal of “revitalising the Greymouth CBD, through stimulating economic growth”.

Changes to these rules could have significant impacts on the quantity and manner in which private off-street car parking in the Greymouth CBD is provided. District plan reviews are typically long processes occurring over several years. A District Plan review is currently scheduled to occur in 2-5 years. This review should include investigation into the effects of different policies related to parking as described above.

## 7.11 Parking Charges

Currently public parking in Greymouth is provided free of charge. Some off-street GDC parking is leased to specific businesses for private use. It is noted that currently demand for these is low, with 22 spaces unleased.

Parking provision requires land, and investment in construction and maintenance of the surface. Currently this cost is borne by the local community as a whole, through their rates and fuel excise. Charging the users of the parking spaces directly is an alternative method to generate revenue to cover this cost.

### 7.11.1 Financial Justification

Litman (2015, Victoria Transport Policy Institute) stated that the high cost of collection of parking charges generally becomes worthwhile *“in commercial centres with more than about 5,000 employees, since beyond this size surface lots cannot satisfy total parking demand, requiring costly structured parking facilities”*. The 2013 census (Statistics NZ, 2013) recorded 2,720 employees in Greymouth Central which is smaller than this threshold.

This philosophy suggests that parking charges are only financially beneficial if a parking structure is provided, which could not be justified for the Greymouth level of demand.

Above a certain size, most urban centres in New Zealand charge a fee for parking, including Nelson (population of 65,000), Blenheim (31,000), Ashburton (20,000), Timaru (37,000) and Oamaru (14,000). However, all these centres are larger than Greymouth (10,000).

Different options exist for implementing parking charges:

1. On-street parking meters throughout the CBD;
2. On-street parking meters in one distinct, well-signed area of the CBD; or
3. Off-street pay and display car park in one distinct, well-signed area convenient to the CBD.

Based on the recommendation above, and looking at other New Zealand centres, Greymouth is considered currently too small for Option 1 (on-street parking meters throughout the CBD) to be an economically efficient option.

Option 2 or option 3 would provide a small area of parking, which would have an associated fee but would provide high quality, convenient, easy to find parking spaces which will generally have some availability. This may be an attractive option for tourists who are unfamiliar with the CBD and have less concern regarding a one off payment, and some local residents who value being able to find a parking space quickly and easily.

Option 2 would need to be provided in a highly desirable location. The parking surveys suggest Mackay Street and Tainui Streets are the most desirable. It would however carry a high element of risk. If the demand for paid parking was lower than expected, then the adjacent businesses would suffer.

Option 3 could be implemented in one of the two existing public off-street parking areas, although their locations are not as conveniently located as ideally desired, as evidenced by their low occupancy on the Saturday. A more conveniently located off-street parking facility would need to be developed (as discussed earlier in Section 6.3). It would be critical that the facility be located close to destinations (ideally closer than alternative free parking), well signposted, designed to a high level of urban design, and almost always have some spaces available, to make it sufficiently attractive for tourists to be willing to pay the fee.

Robust estimates of demand at different fee levels would need to be completed. Parking charges can be used as a demand management tool. Fees can be set higher or lower depending on the desired level of occupancy. A higher fee will result in fewer people parking there, meaning parking spaces will be easier to find for those willing to pay the fee. A lower fee will result in more people parking there, meaning parking spaces will be more difficult to find. Litman (2015) recommends parking charges are set to a level that results in 85-90% occupancy.

The main goal of introducing parking charges is to ensure convenient parking spaces are available for tourists in order to increase the economic benefits they provide. Therefore the charges would need to be enough to discourage the spaces to be occupied by others but with a set fee and an allowance for long durations of stay without increasing fees.

### 7.11.2 On-Street Parking Meters in a Specific Area

Local residents and tourists/visitors will react to charging differently. Overseas tourists (and some domestic visitors) will likely be used to paying parking charges and will be more willing to pay, especially if it means they can find a convenient space more easily. It is expected that local residents would be more resistant to paying parking charges, especially if they know they can park nearby on the periphery of the CBD for free. The positive and negative impacts are listed below:

#### 7.11.2.1 Positive Impacts

- Ensuring parking availability in the most convenient areas can be controlled through ticket prices. This will subsequently encourage:
  - » Short term parking having a higher turnover, encouraging more visits to businesses in key areas;
  - » Better availability of spaces for tourists willing to pay for it, increasing volumes of tourists, length of stay and expenditure;
  - » Less non-compliant staff parking;
- Non-compliance revenue can be used to partly self-fund meters and enforcement;
- Prioritisation of the most important parking spaces, which will be reduced in volume due to the master plan streetscape changes;
- Charging the users directly is an inherently fairer approach, as members of the community who do not use the parking are not made to pay the costs of it through rates, which may assist in community acceptance of the changes; and
- Less driving and may influence people to choose walking and cycling more often, bringing associated health, environmental, safety and amenity benefits.

#### 7.11.2.2 Negative Impacts

- Parking charges can have a high cost of collection. It requires infrastructure such as parking meters, and a higher level of ongoing management and enforcement. Therefore the income collected may not exceed the cost of collecting it;
- Enforcement of parking restrictions is likely to be more necessary as non-compliance will be regarding non-payment as opposed to the existing length of stay non-compliance;
- If parking charges are not considered worthwhile due to surplus free parking available a short distance away this will significantly impact on businesses and services that will have reduced users parking close by;
- Introducing parking charges can result in undesirable behaviour such as:

- » Significant relocation of parking from areas that require payment, to peripheral areas which are free having a negative impacts on the amenity of those areas;
- » Some people choosing not to visit the CBD as often and looking to alternatives (shops and services outside the CBD, in other towns, or online);
- Negative publicity due to locals having to park in less convenient locations; and
- May need to be redesigned in conjunction with the proposed streetscape upgrades.

### 7.11.3 Off-Street Pay and Display Car Park

There will be no negative impact on existing on street parking provision as a result of a new parking area other than on the immediate site that is used. Users are likely to react in a similar way to parking charges whether they are on-street or an off-street car parking area. The differentiating factors would be:

- Proximity to destination;
- Security of the car park; and
- Ease of access.

Providing a high level of service of these three attributes can be achieved the positive and negative impacts are listed below:

#### 7.11.3.1 Positive Impacts

- Ensuring parking availability in the most convenient areas can be controlled through ticket prices. This will subsequently encourage tourists willing to pay for it, increasing volumes of tourists, length of stay and expenditure;
- Long term convenient parking can be provided for tourists without reducing existing short term on street parking opportunities;
- Non-compliance revenue can be used to partly self-fund meters and enforcement; however it is likely to be much lower than on street parking meters;
- Charging the users directly is an inherently fairer approach, as members of the community who do not use the parking are not made to pay the costs of it through rates, which may assist in community acceptance of the changes; and

#### 7.11.3.2 Negative Impacts

- Capital funding of a new parking area is likely to be expensive;
- Parking charges can have a high cost of collection. It requires infrastructure such as parking meters, and a higher level of ongoing management and enforcement. Therefore the income collected may not exceed the cost of collecting it;

### 7.11.4 Conclusion

An off-street pay and display car park with parking charges is expected to achieve the goal of encouraging increased tourist volumes and length of stay, provided it is designed, located and charged appropriately. As such it is recommended that it is investigated further.

On-street parking charges in a specific area is considered a riskier option with more positive and negative benefits. As such it is recommended that it is not investigated further until the streetscape changes are completed and supply is significantly reduced in the most convenient areas.

## 7.12 Public Transport Facilities

The introduction of a public transport network would allow for residents to travel into the Greymouth CBD without the use of a private motor vehicle. This would reduce demand for car parking.

Conversations with GDC suggest this is highly unlikely to occur in the foreseeable future.

## 8 Option Assessment

Each of the proposed options would have positive and negative impacts. These are summarised in Table 14.

Table 14: Option assessment

Option	Positive Impacts	Negative Impacts
Additional off-street public parking – free of charge	<ul style="list-style-type: none"> <li>Provides alternative to on-street parking</li> <li>Amenity and safety benefits through reduced on-street parking</li> </ul>	<ul style="list-style-type: none"> <li>High cost (but could sell/ lease/ repurpose existing off-street parking area)</li> <li>Requires large area of land</li> </ul>
Additional off-street public parking – with parking charges	<ul style="list-style-type: none"> <li>Provides a convenient high quality parking option for those willing to pay which should always have availability</li> <li>Supports increased tourist volumes to the CBD</li> <li>Cost could be partially offset by the revenue generated</li> <li>Amenity and safety benefits through reduced on-street parking</li> </ul>	<ul style="list-style-type: none"> <li>High cost for infrastructure and operation</li> <li>Requires large area of land</li> <li>Cost to parkers</li> </ul>
Additional on-street parking (angle parking)	<ul style="list-style-type: none"> <li>Provides additional on-street parking capacity</li> </ul>	<ul style="list-style-type: none"> <li>Cost</li> <li>Amenity impacts</li> <li>Safety impacts</li> </ul>
Reconfigured on-street parking restrictions	<ul style="list-style-type: none"> <li>Longer time restrictions in some areas would better match supply and demand</li> <li>This could reduce unnecessary vehicle movements in the CBD as customers don't have to re-park between activities</li> </ul>	<ul style="list-style-type: none"> <li>Longer time restrictions in some areas will result in lower turnover of spaces, which will make it more difficult for customers to find convenient spaces.</li> </ul>
Coordinated sharing of private/parking off-street parking	<ul style="list-style-type: none"> <li>Provides alternative to on-street parking</li> <li>More efficient use of off-street parking</li> <li>Low cost</li> <li>No additional land required</li> </ul>	<ul style="list-style-type: none"> <li>Potential for security issues</li> <li>Potential for confusion around who can use spaces</li> <li>May require more enforcement</li> <li>Requires agreement from businesses</li> </ul>
Targeted parking enforcement	<ul style="list-style-type: none"> <li>Increased level of compliance with parking restrictions</li> <li>Easier for short-term customers to find spaces</li> <li>Businesses benefit from higher turnover of spaces</li> <li>Revenue from fines will help offset costs</li> </ul>	<ul style="list-style-type: none"> <li>Cost of parking enforcement (dependent on fine revenue)</li> <li>Negative publicity</li> <li>May encourage more internal CBD vehicle trips</li> <li>May encourage trips to alternative destinations</li> </ul>
Directional parking signage to public off-street parking areas	<ul style="list-style-type: none"> <li>Better legibility for tourists</li> <li>Fewer vehicles circulating while searching for a space</li> <li>Fewer vehicles parking in spaces which are not appropriate for them</li> </ul>	<ul style="list-style-type: none"> <li>Cost</li> </ul>
Improved pedestrian and cycle facilities	<ul style="list-style-type: none"> <li>Reduced demand for parking</li> <li>Reduced congestion</li> <li>Increased public health</li> <li>Increased amenity</li> <li>Lower emissions/pollution</li> </ul>	<ul style="list-style-type: none"> <li>Cost</li> <li>May require reallocation of road space and reduced on-street parking provision</li> </ul>

Option	Positive Impacts	Negative Impacts
District Plan review	<ul style="list-style-type: none"> <li>• More efficient use of off-street parking by allowing customer parking</li> <li>• More efficient use of land by better aligning parking requirements with demand</li> <li>• Better facilities for cyclists</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Long timeframe for implementation</li> </ul>
Public Transport facilities	<ul style="list-style-type: none"> <li>• Reduced demand for parking</li> <li>• Reduced congestion</li> </ul>	<ul style="list-style-type: none"> <li>• High ongoing cost</li> <li>• Long timeframe</li> </ul>

Each option has been assessed in regards to its ability to address each of the five issues detailed earlier in Table 9, along with a conceptual cost impact of each option. This is shown in Table 15.

Table 15: Option assessment in regards to identified issues

Colour Code	Strongly addresses issue	Addresses issue	Does not address issue	Negatively addresses issue		
	Conceptual Cost	High utilisation of on-street parking	Long term parking in short term spaces	Low utilisation of public off-street parking	Low utilisation of private off-street parking	Proposed reductions to parking
Additional off-street public parking – free of charge	\$\$\$					
Additional off-street public parking – with charges	\$\$\$					
Additional on-street parking (angle parking)	\$\$					
Reconfigured on-street parking restrictions	\$					
Coordinated sharing of off-street parking	\$					
Targeted parking enforcement	\$					
Directional parking signage to public off-street parking areas	\$					
Improved pedestrian and cycling facilities	\$\$					
District Plan review	\$					
Public transport facilities	\$\$\$					

Table 15 is not intended to be a comprehensive decision making tool as it does not capture all the positive and negative effects of each option, and does not take into account the key objectives defined in Table 9. It does provide a useful representation showing how options address the five identified issues, which should be read in conjunction with the assessments carried out in Sections 6 and 7 of this report.

## 8.1 Preferred Options

A combination of the options will be required to effectively address the five identified issues, while achieving the five key objectives defined in Section 2.2, and contribute towards the overall goal of “a parking strategy that contributes to revitalising the Greymouth CBD, through stimulating economic growth”. The combination of options which is considered to most affectively do this, comprises:

1. Provision of an additional off-street public parking facility;
2. Reconfigured on-street parking restrictions;
3. Coordinated sharing of off-street private parking;
4. Targeted parking enforcement;
5. Directional parking signage to public off-street parking;
6. Improved pedestrian and cycling facilities; and a
7. District Plan review (rules relating to off-street parking in the CBD, and requirements to provide facilities for pedestrians and cyclists).

Options 2-7 were all rated to have a low to medium cost. Option 1 and 2 (additional off-street parking facility) would be very effective options, particularly if sharing of private parking cannot be achieved, but may be more difficult to implement due to the high cost and large area of land required. If a site in an optimal location is available, it is considered to offer the greatest benefits provided it is implemented in conjunction with the rest of the programme. If this opportunity arises, further analysis should be conducted including details of costs, size and location with respect to both destinations and accessibility. Parking charges could be included in this parking area. These would be an effective method of ensuring availability of spaces, and recouping the costs of providing the facility. Their effectiveness would be highly dependent on the facility being located conveniently, having ongoing operation and enforcement, and a high level of urban design.

Additional angled on-street parking is generally unable to be accommodated within the width of roads in the areas of highest demand, i.e. the central and eastern areas of the CBD. It could be considered within the proposed Mawhera Quay one-way streetscape conversion, which could result in additional parking located close to key destinations. However, issues with access between the town gateways and this parking would need to be resolved, particularly in regards to conflicts with the one-way direction, and conflicts with encouraging traffic to use Tainui Street North which has a proposal to be converted to a shared pedestrian space.

A public transport network has not been included as it is considered that the costs would outweigh the benefits.



## 8.2 Strategic Fit

In Section 2.2 of this report, the key objectives of this parking strategy were defined as:

1. Make it as easy as possible for customers to access local businesses:
  - a) through available spaces close to destinations; and
  - b) through improved facilities for alternative modes of transport.
2. Make it as easy as possible for staff to access their workplaces:
  - a) through available spaces close to destinations; and
  - b) through improved facilities for alternative modes of transport.
3. Ensure appropriate provision of parking spaces for speciality users (mobility impaired, taxis, buses, motorcycles and service vehicles).
4. Improve pedestrian amenity and safety through streetscape enhancement.
5. Reduce unnecessary vehicle trips within the CBD.
6. Encourage increased tourist volumes and length of stay.

The recommended options are considered to be the most effective way to achieve these objectives. All of the eight options would contribute to making it as easy as possible for customers to access local businesses. Supply of short-term spaces for customers would be increased through;

- Allowing off-street private parking to be used by customers;
- Targeted enforcement reducing the number of long-term vehicles in strategically important parking spaces; and
- Additional off-street parking provision.

Walking and cycling would become more attractive options due to improved crossing facilities, streetscape enhancements and the Cobden cycle/pedestrian link.

Access for staff would be improved through better cycling and walking networks. Any additional off-street parking would increase the parking supply for staff.

The provision for speciality users would be improved through revising locations of under-utilised mobility impaired parking spaces. Improvements to rental car parking would be investigated as part of the Market Square development proposed in the Framework.

Pedestrian amenity and safety would be improved through better crossing facilities, streetscape enhancements, and the Cobden cycle/pedestrian link proposed in the Framework.

The need for unnecessary CBD vehicle trips would be reduced by increased supply of unrestricted off-street parking spaces in convenient locations and reduced demand.

Tourists driving to the CBD would be better informed through directional signage, especially if it was combined with a new off-street parking facility targeted at tourists. They would also be supported by better enforcement of the existing short-term spaces.

## 9 Conclusions

Investigations into current parking supply and demand have been completed, including parking surveys undertaken on both a Wednesday and a Saturday. Greymouth currently experiences high utilisation of on-street parking in the central and eastern streets of the CBD. This is in part due to all-day illegal parking. Contrastingly, on-street parking in the western CBD was under-utilised, as were most off-street parking areas, especially on the Saturday. For the foreseeable future, parking demand from local residents and workers is expected to remain stable, while parking demand from tourists is likely to grow. Projects proposed in the Framework will reduce the supply by approximately 72 spaces, which needs to be addressed to mitigate any negative impacts.

Ten options were investigated to address these issues and achieve the key objectives and overall goal. A combination of seven options is considered the most effective way to achieve this. The most effective programme is considered to comprise:

1. Provision of an additional off-street public parking facility;
2. Reconfigured on-street parking restrictions;
3. Coordinated sharing of off-street private parking;
4. Targeted parking enforcement;
5. Directional parking signage to public off-street parking;
6. Improved pedestrian and cycling facilities; and a
7. District Plan review (rules relating to off-street parking in the CBD, and requirements to provide facilities for pedestrians and cyclists).

## 10 Recommendations

It is recommended that the combination of seven options described in Section 9 is implemented, comprising:

1. Provision of an additional off-street public parking facility (potentially charged);
2. Reconfigured on-street parking restrictions;
3. Coordinated sharing of off-street private parking;
4. Targeted parking enforcement;
5. Directional parking signage to public off-street parking;
6. Improved pedestrian and cycling facilities; and a
7. District Plan review (rules relating to off-street parking in the CBD, and requirements to provide facilities for pedestrians and cyclists).

The following actions regarding speciality users are also recommended:

1. Three mobility spaces (two on Guinness Street and one Mawhera Quay) had no use recorded over the survey periods. These could be relocated to more useful locations, identified in consultation with the relevant mobility impaired stakeholders.
2. Cycle parking provision is limited in the Greymouth CBD. It is recommended that some cycle parking facilities are provided in the CBD.
3. GDC has previously investigated the feasibility of relocating rental car parking further from the railway station. Consultation should continue until a detailed arrangement that benefits all parties can be agreed on.

It is recommended that details regarding timeframes, funding and Detailed Design for each option are developed further.

# 11 References

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- Standards Australia. (1993). Parking Facilities Part 5: On-street Parking.
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- Whangarei District Council. (2011). Parking Management Strategy.

## 12 Council Amendments

Council has made the following amendments as part of the adoption and review processes of this Parking Strategy.

### **12.1 14 August 2017 - Adoption of Parking Strategy**

“Council confirms the Greymouth Parking Strategy as consulted on with the following amendment:

- Allow a 30-minute time limit for five parks on the southern side to the street along Guinness Street (at the Tainui Street end).”

### **12.2 13 August 2018 – Review of Parking Strategy**

“Council confirms and approves the reviewed Greymouth Parking Strategy as consulted on with the following amendment:

- Substituting the existing unused bus stop in Tainui Street (outside Into Jeans shop) for a minor increase in available car parking and continued enforcement of parking non-compliance.
- Making the mobility park in Tarapuhi Street the same duration as other parks in the street.”

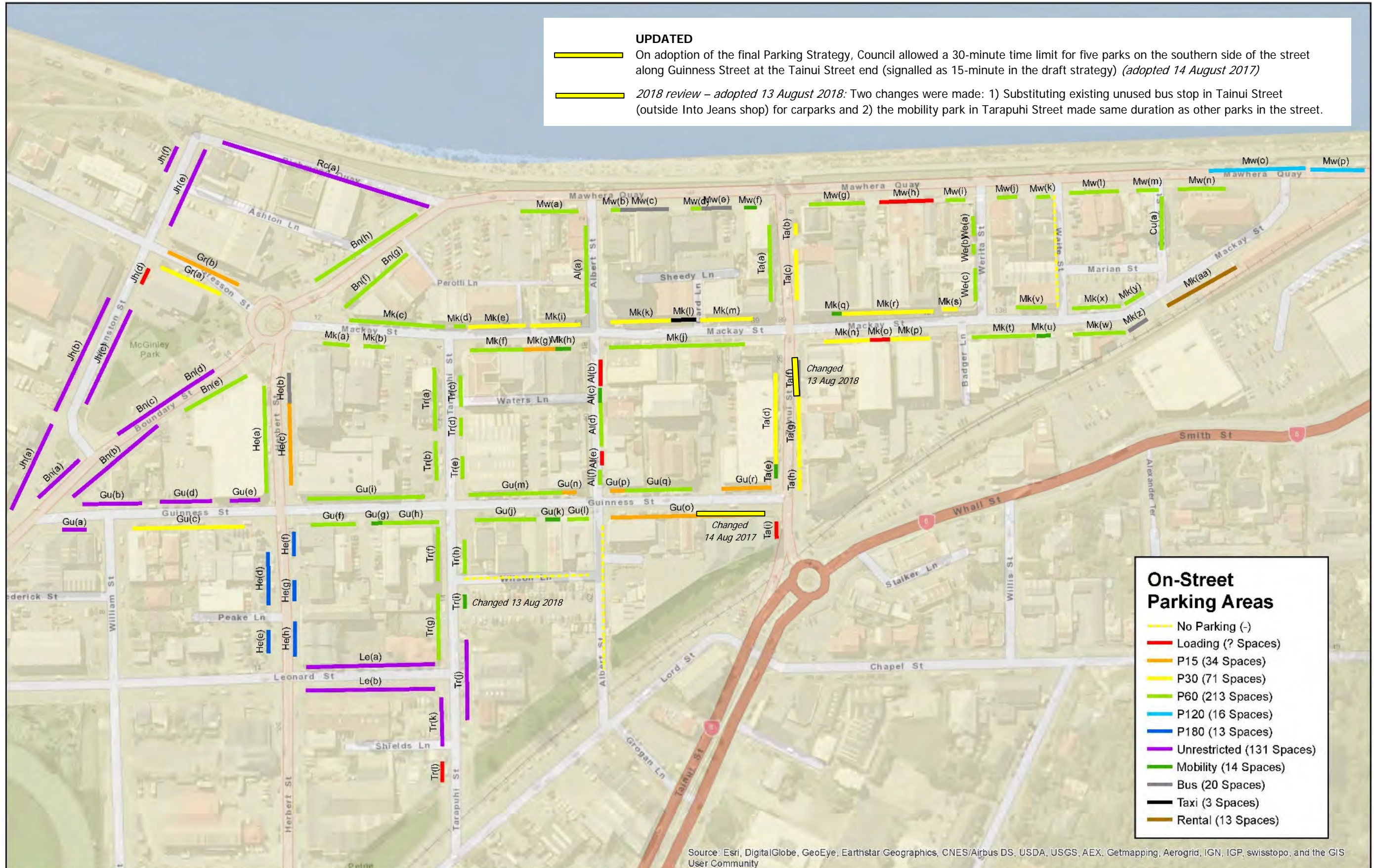
The above changes are marked on Appendix A.

# Appendix A – On-Street Parking Areas

**UPDATED**

On adoption of the final Parking Strategy, Council allowed a 30-minute time limit for five parks on the southern side of the street along Guinness Street at the Tainui Street end (signalled as 15-minute in the draft strategy) (*adopted 14 August 2017*)

2018 review – adopted 13 August 2018: Two changes were made: 1) Substituting existing unused bus stop in Tainui Street (outside Into Jeans shop) for carparks and 2) the mobility park in Tarapuhi Street made same duration as other parks in the street.



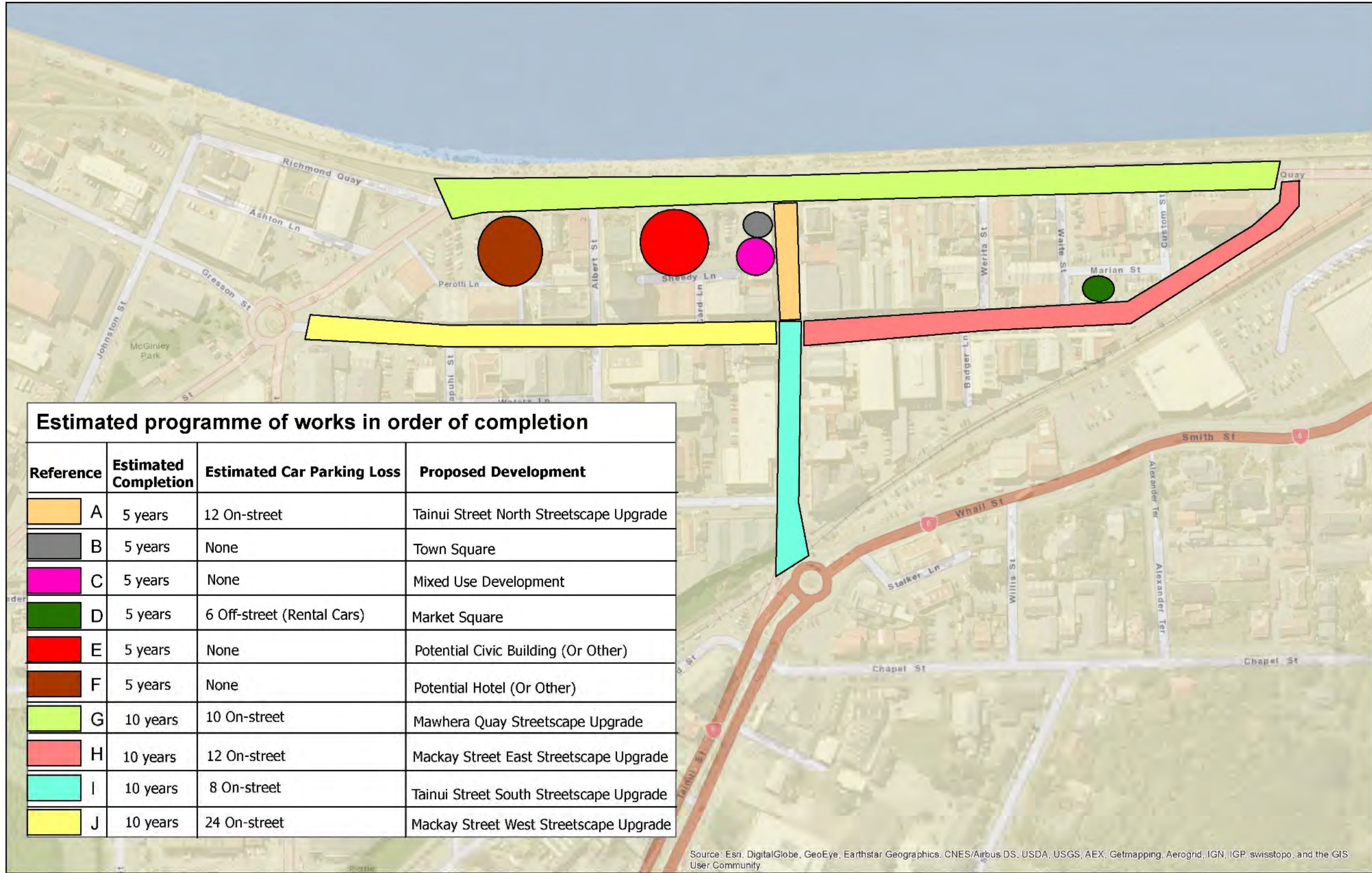
### On-Street Parking Areas

- No Parking (-)
- Loading (? Spaces)
- P15 (34 Spaces)
- P30 (71 Spaces)
- P60 (213 Spaces)
- P120 (16 Spaces)
- P180 (13 Spaces)
- Unrestricted (131 Spaces)
- Mobility (14 Spaces)
- Bus (20 Spaces)
- Taxi (3 Spaces)
- Rental (13 Spaces)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

 Christchurch Office, 12 Moorhouse Avenue Tel (03) 363 6400 Fax (03) 365 1838 <small>This document and its contents are the property of Greymouth District Council. Any unauthorised reproduction or use of this document is prohibited.</small>		<h2>Greymouth Parking Strategy</h2>	<h2>On-Street Parking Areas</h2>	Project No: E-DHLF4.00	Scale: 1:2,000 @A3
				Designed: CM	 Date: 04/03/2016
				Drawn: MT	Approved: JD
				Revision:	Revision Date:

# Appendix B – Urban Design Framework: Proposed Projects Impacting on Parking Provision



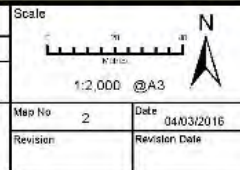
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



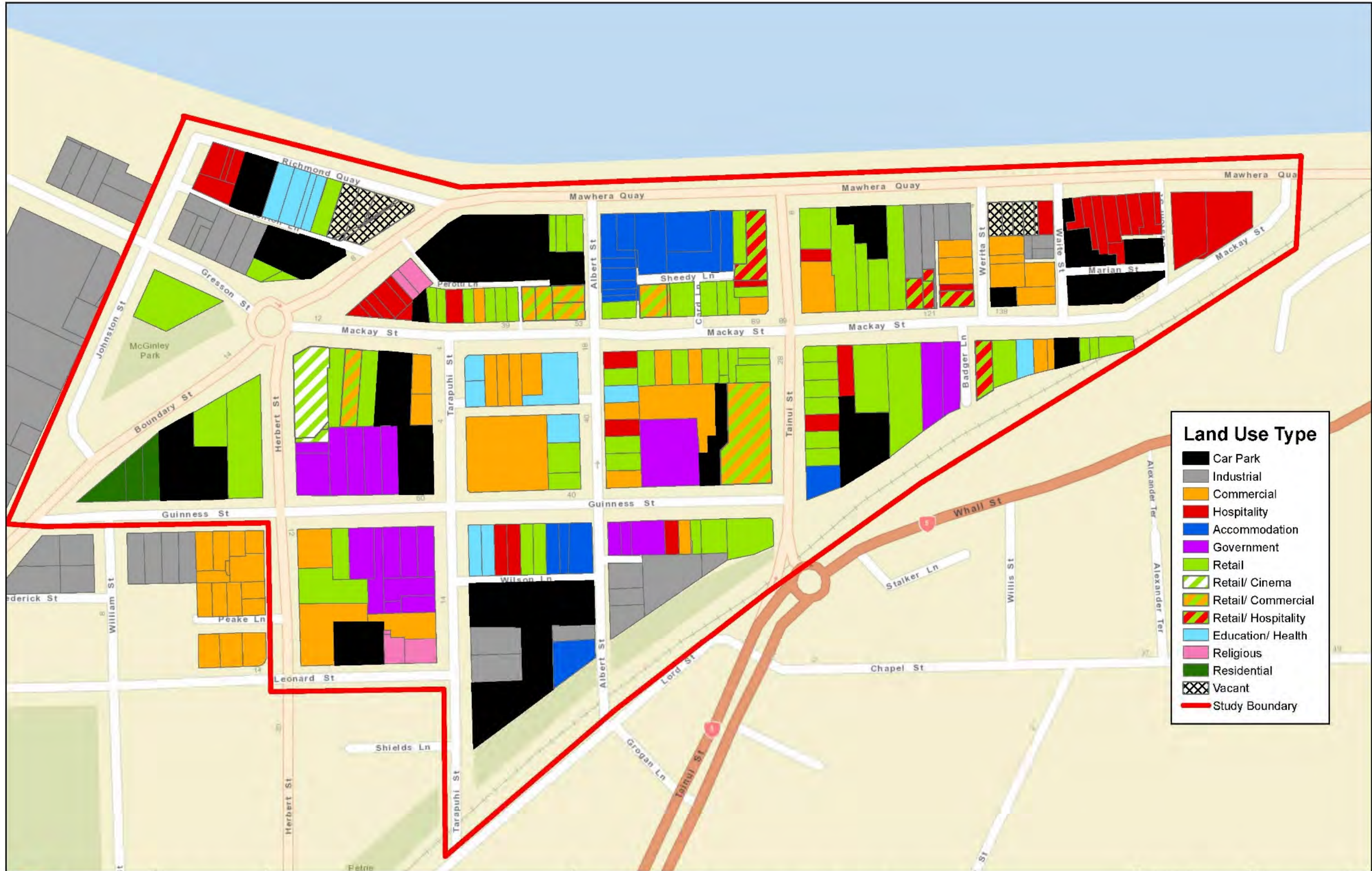
**Greymouth Parking Strategy**

**Proposed Projects Impacting on Parking Provision**

Project No: 6-DHLF4.00	Scale
Designed: CM	1:2,000 @A3
Drawn: MT	Approved: JD
Note:	Map No 2 Date 04/03/2016
	Reviser: Reviser Date



# Appendix C –Property Land Use Plan



**Land Use Type**

- Car Park
- Industrial
- Commercial
- Hospitality
- Accommodation
- Government
- Retail
- Retail/ Cinema
- Retail/ Commercial
- Retail/ Hospitality
- Education/ Health
- Religious
- Residential
- Vacant
- Study Boundary

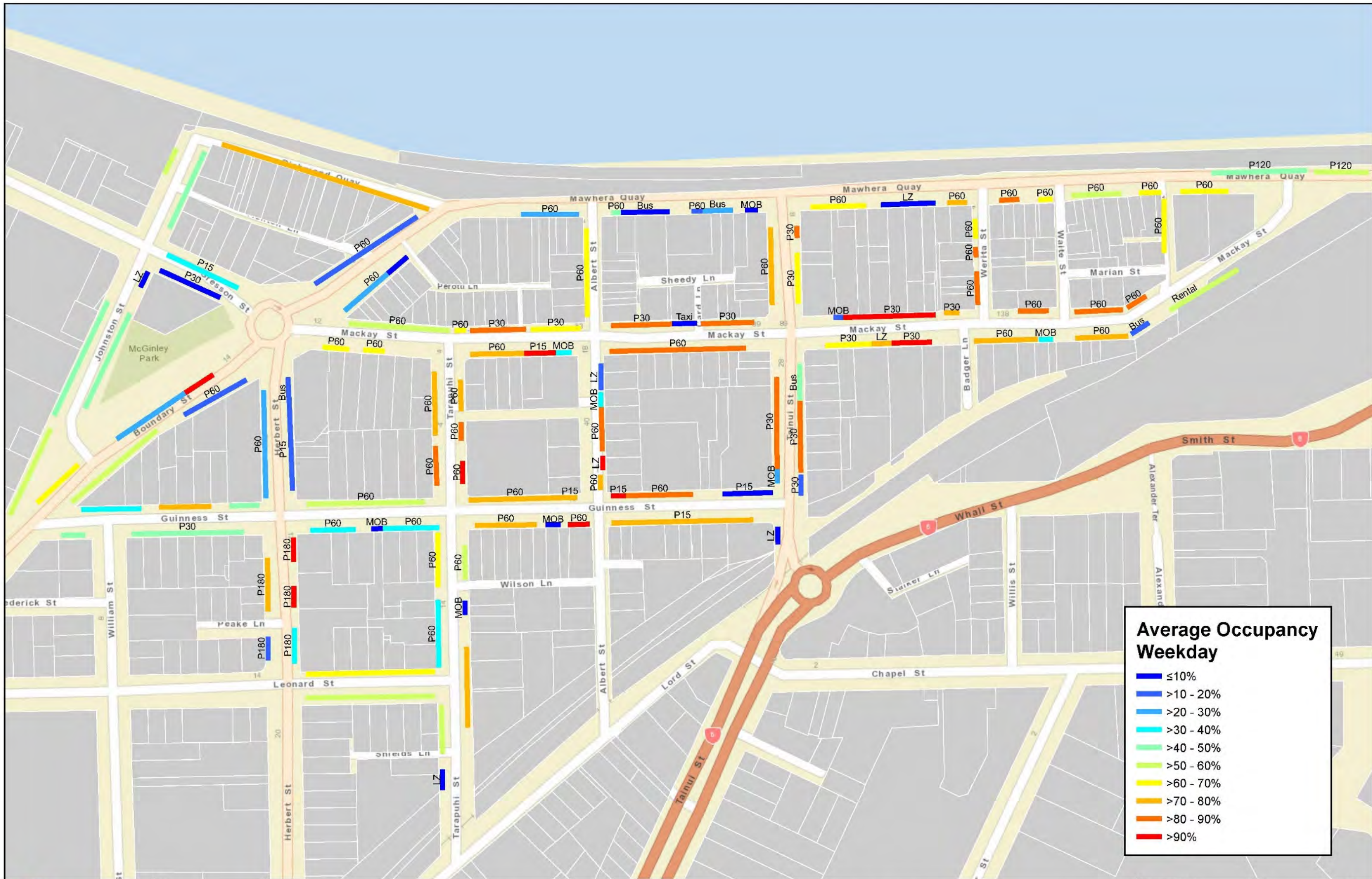
 <small>Christchurch Office, 12 Meehan Avenue Tel (03) 363 6400 Fax (03) 366 7858</small> <small>This document and its contents are the property of Opus Infrastructure Company Limited. Any unauthorised employment or reproduction in whole or part is prohibited.</small>	<small>Client</small>  <b>MĀWHERA GREY DISTRICT COUNCIL</b>	<h2>Greymouth Parking Strategy</h2>	<h2>Individual Property Land Uses Map</h2>	<small>Project No: 6-DHLF4.00</small> <small>Designed: CM</small> <small>Drawn: MT</small> <small>Approved: JD</small> <small>Note:</small>	<small>Scale</small>  <small>1:2,000 @A3</small> <small>Map No 3</small> <small>Date 04/03/2016</small> <small>Reviser:</small> <small>Reviser Date</small>
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# Appendix D – On Street Parking Average Occupancy

## Average Occupancy of On-Street Parking Areas

Parking Area	Average Occupancy (%)		Parking Area	Average Occupancy (%)	
	Wednesday	Saturday		Wednesday	Saturday
Al(a)	65	94	Mk(j)	85	81
Al(b)	15	63	Mk(k)	84	90
Al(c)	38	75	Mk(l)	2	25
Al(d)	84	72	Mk(m)	83	94
Al(e)	94	0	Mk(n)	69	66
Al(f)	75	0	Mk(o)	75	88
Bn(a)	61	15	Mk(p)	94	88
Bn(b)	56	0	Mk(q)	19	0
Bn(c)	22	0	Mk(r)	90	96
Bn(d)	100	0	Mk(s)	78	100
Bn(e)	14	0	Mk(t)	76	83
Bn(f)	25	42	Mk(u)	38	75
Bn(g)	6	56	Mk(v)	90	96
Bn(h)	11	7	Mk(w)	78	78
Cu(a)	69	63	Mk(x)	84	75
Gr(a)	2	4	Mk(y)	84	94
Gr(b)	40	28	Mk(z)	13	25
Gu(a)	47	0	Mk(aa)	56	75
Gu(b)	39	3	Mw(a)	29	65
Gu(c)	42	6	Mw(b)	50	63
Gu(d)	73	0	Mw(c)	4	31
Gu(e)	45	0	Mw(d)	19	100
Gu(f)	33	38	Mw(e)	21	54
Gu(g)	0	0	Mw(f)	0	0
Gu(h)	38	16	Mw(g)	63	97
Gu(i)	51	17	Mw(h)	0	0
Gu(j)	71	85	Mw(i)	75	69
Gu(k)	0	0	Mw(j)	81	88
Gu(l)	100	94	Mw(k)	69	81
Gu(m)	73	66	Mw(l)	53	60
Gu(n)	80	84	Mw(m)	69	46
Gu(o)	77	87	Mw(n)	63	73
Gu(p)	91	88	Mw(o)	47	81
Gu(q)	86	93	Mw(p)	54	15
Gu(r)	0	92	Rc(a)	76	61
He(a)	25	0	Ta(a)	75	94
He(b)	13	44	Ta(b)	88	88
He(c)	14	0	Ta(c)	67	84
He(d)	72	69	Ta(d)	81	89
He(e)	13	44	Ta(e)	25	25
He(f)	94	38	Ta(f)	42	75
He(g)	94	25	Ta(g)	83	95
He(h)	35	21	Ta(h)	13	31
Jh(a)	51	60	Ta(i)	0	0
Jh(b)	45	3	Tr(a)	78	53
Jh(c)	43	14	Tr(b)	81	47
Jh(d)	0	0	Tr(c)	79	79
Jh(e)	41	0	Tr(d)	81	88
Jh(f)	53	5	Tr(e)	91	56
Le(a)	69	3	Tr(f)	66	10
Le(b)	56	10	Tr(g)	40	4
Mk(a)	69	31	Tr(h)	58	48
Mk(b)	63	63	Tr(i)	0	13
Mk(c)	65	89	Tr(j)	79	33
Mk(d)	31	50	Tr(k)	58	25
Mk(e)	79	86	Tr(l)	0	0
Mk(f)	75	95	We(a)	69	100
Mk(g)	91	94	We(b)	88	75
Mk(h)	31	44	We(c)	88	100
Mk(i)	83	100			



**Average Occupancy Weekday**

- ≤10%
- >10 - 20%
- >20 - 30%
- >30 - 40%
- >40 - 50%
- >50 - 60%
- >60 - 70%
- >70 - 80%
- >80 - 90%
- >90%

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Notes: This map is a representation of the information contained in the Council's records. It is not intended to be used as a legal document. Any third party who relies on this map does so at their own risk.

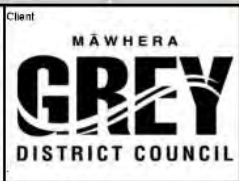
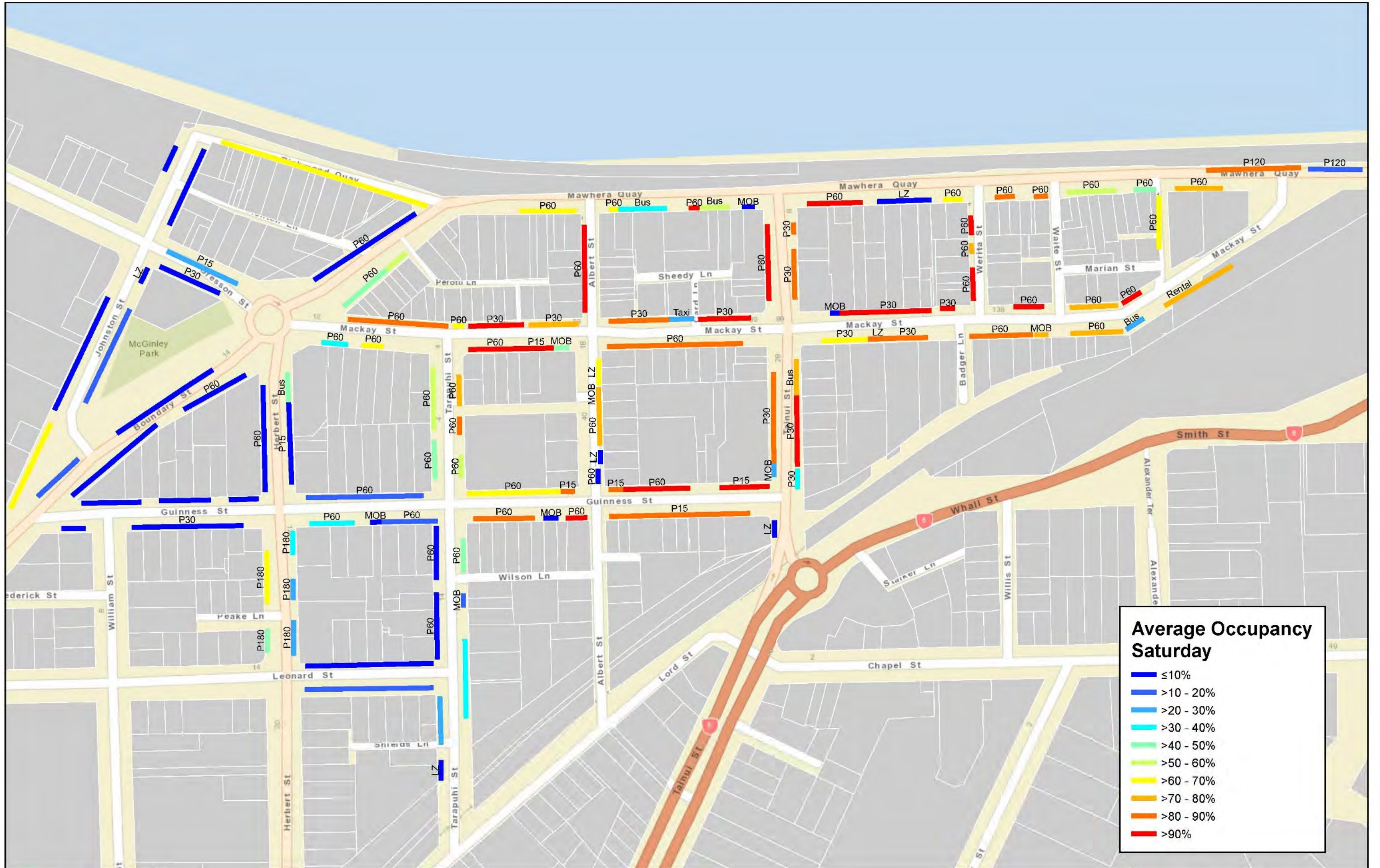
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**Greymouth Parking Strategy**

**On-Street Parking - Average Occupancy Weekday**

Project No: 6-DHLP4.00	Scale
Designed: CM	1:2,000 @A3
Drawn: MT	Approved: JD
Note:	Map No: 4 Date: 22/02/2016
	Revision: Revision Date

Scale  
 0 20 40  
 Meters  
 1:2,000 @A3  
 Date: 22/02/2016  
 Revision: Revision Date

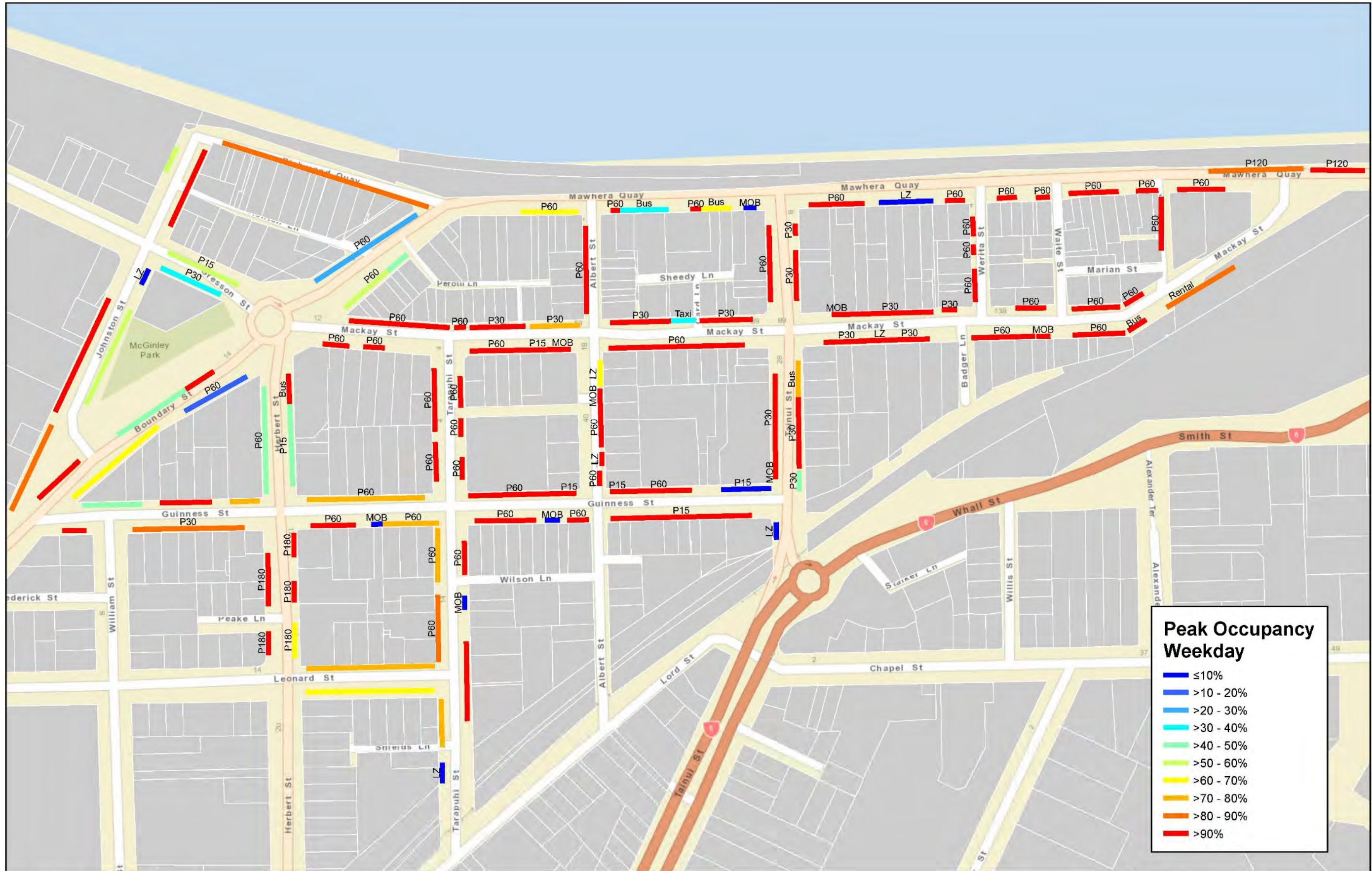


**Greymouth Parking Strategy**

**On-Street Parking - Average Occupancy Saturday**

Project No: 6-DHLF4.00	Scale	
Designed: CM	1:2,000 @A3	
Drawn: MT	Approved: JD	Map No: 5
<b>Note:</b>		Date: 22/02/2016
Revision		Revision Date

# Appendix E – On Street Parking Peak Occupancy



**Peak Occupancy Weekday**

- ≤10%
- >10 - 20%
- >20 - 30%
- >30 - 40%
- >40 - 50%
- >50 - 60%
- >60 - 70%
- >70 - 80%
- >80 - 90%
- >90%

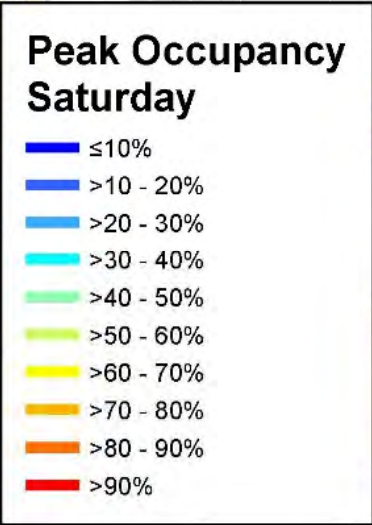
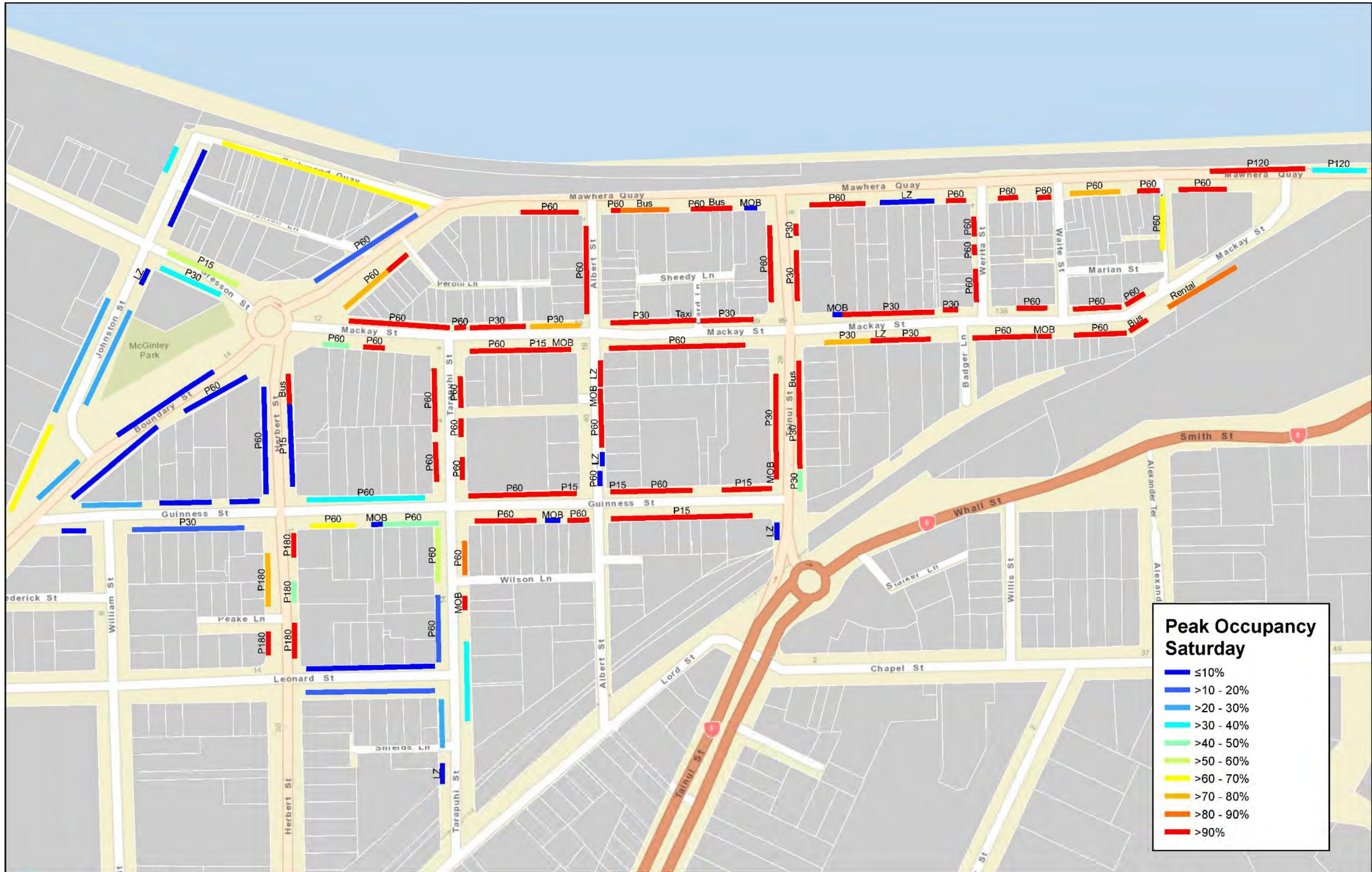
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## Greymouth Parking Strategy

## On-Street Parking - Peak Occupancy Weekday

Project No: 6-DH/F4.00		Scale	
Designed: CM		1:2,000 @A3	
Drawn: MT	Approved: JD	Map No: 6	Date: 22/02/2016
Note:		Revision:	Revision Date:



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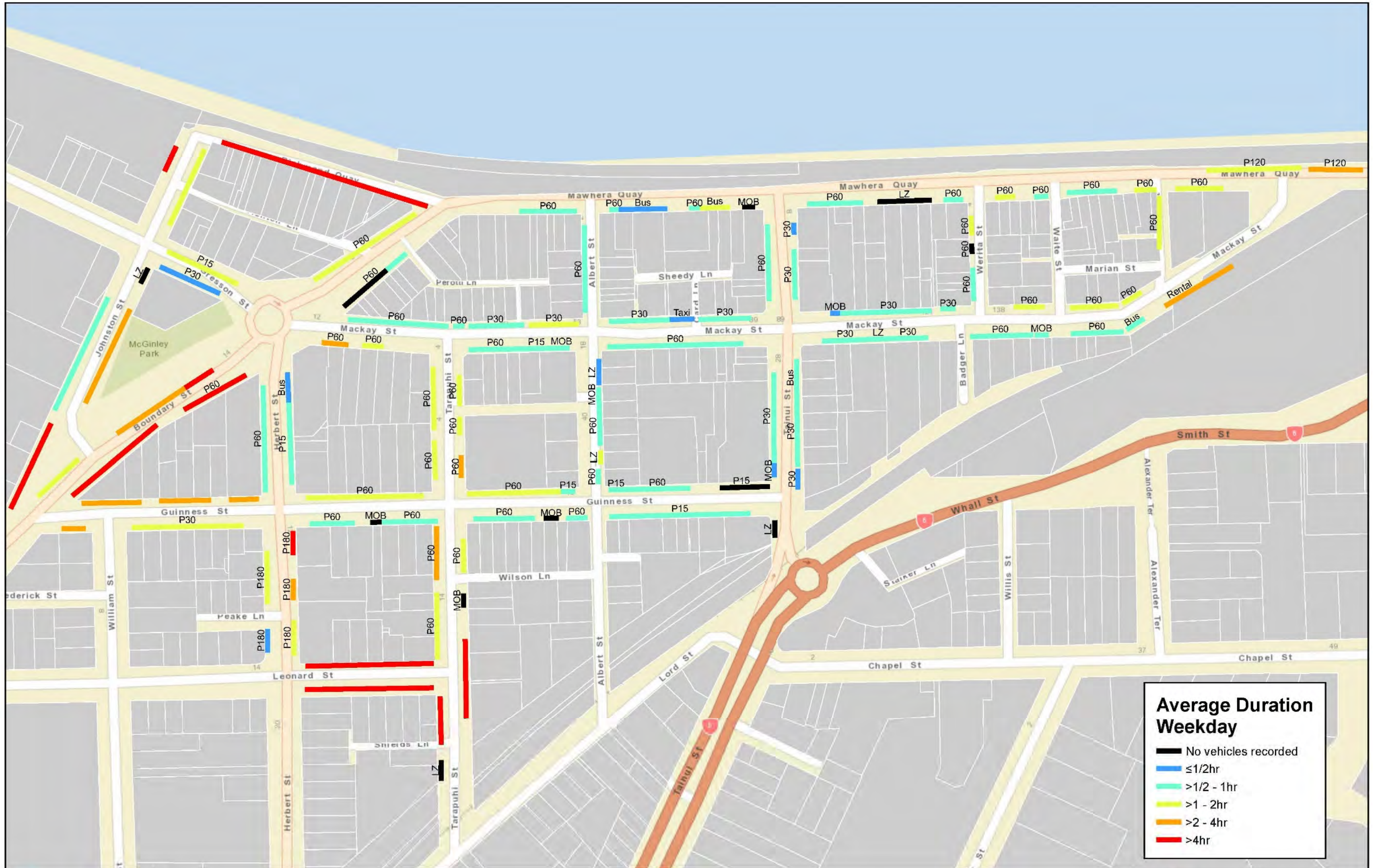
**On-Street Parking - Peak Occupancy Saturday**

Project No: 6-DHLP4.00	Scale	
Designed: CM	1:2,000 @A3	
Drawn: MT	Approved: JD	Map No: 7
Note:	Revision	Date: 22/02/2016
		Revised Date

# Appendix F – On-Street Parking Average Duration

## Average Duration of Stay of On-Street Parking Areas

Parking Area	Average Duration of Stay (minutes)		Parking Area	Average Duration of Stay (minutes)	
	Wednesday	Saturday		Wednesday	Saturday
Al(a)	49	180	Mk(j)	53	51
Al(b)	30	41	Mk(k)	39	48
Al(c)	45	45	Mk(l)	30	30
Al(d)	43	86	Mk(m)	35	47
Al(e)	64	0	Mk(n)	40	48
Al(f)	60	0	Mk(o)	33	35
Bn(a)	112	120	Mk(p)	40	42
Bn(b)	424	0	Mk(q)	30	0
Bn(c)	126	0	Mk(r)	47	54
Bn(d)	480	0	Mk(s)	39	48
Bn(e)	330	0	Mk(t)	44	50
Bn(f)	0	0	Mk(u)	60	60
Bn(g)	60	68	Mk(v)	108	43
Bn(h)	66	68	Mk(w)	52	55
Cu(a)	94	225	Mk(x)	62	45
Gr(a)	30	30	Mk(y)	68	64
Gr(b)	96	41	Mk(z)	60	60
Gu(a)	150	0	Mk(aa)	166	135
Gu(b)	150	30	Mw(a)	47	58
Gu(c)	68	120	Mw(b)	40	75
Gu(d)	150	0	Mw(c)	30	75
Gu(e)	145	0	Mw(d)	45	240
Gu(f)	60	135	Mw(e)	75	98
Gu(g)	0	0	Mw(f)	0	0
Gu(h)	42	50	Mw(g)	52	103
Gu(i)	103	90	Mw(h)	0	0
Gu(j)	57	95	Mw(i)	45	66
Gu(k)	0	0	Mw(j)	78	70
Gu(l)	60	75	Mw(k)	35	56
Gu(m)	61	48	Mw(l)	57	65
Gu(n)	51	54	Mw(m)	76	55
Gu(o)	43	45	Mw(n)	75	87
Gu(p)	40	105	Mw(o)	77	152
Gu(q)	54	79	Mw(p)	215	60
Gu(r)	0	41	Rc(a)	395	204
He(a)	60	0	Ta(a)	47	68
He(b)	30	70	Ta(b)	30	53
He(c)	54	0	Ta(c)	42	51
He(d)	115	165	Ta(d)	34	45
He(e)	30	42	Ta(e)	30	30
He(f)	300	45	Ta(f)	35	42
He(g)	225	40	Ta(g)	36	67
He(h)	64	38	Ta(h)	30	30
Jh(a)	294	62	Ta(i)	0	0
Jh(b)	44	30	Tr(a)	98	53
Jh(c)	124	71	Tr(b)	115	54
Jh(d)	0	0	Tr(c)	63	63
Jh(e)	98	0	Tr(d)	78	42
Jh(f)	420	30	Tr(e)	145	54
Le(a)	416	60	Tr(f)	227	30
Le(b)	249	150	Tr(g)	104	30
Mk(a)	132	150	Tr(h)	62	35
Mk(b)	67	33	Tr(i)	0	30
Mk(c)	36	44	Tr(j)	251	180
Mk(d)	75	120	Tr(k)	370	240
Mk(e)	36	72	Tr(l)	0	0
Mk(f)	58	54	We(a)	73	240
Mk(g)	44	50	We(b)	0	0
Mk(h)	43	30	We(c)	60	80
Mk(i)	59	87			



**Average Duration Weekday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

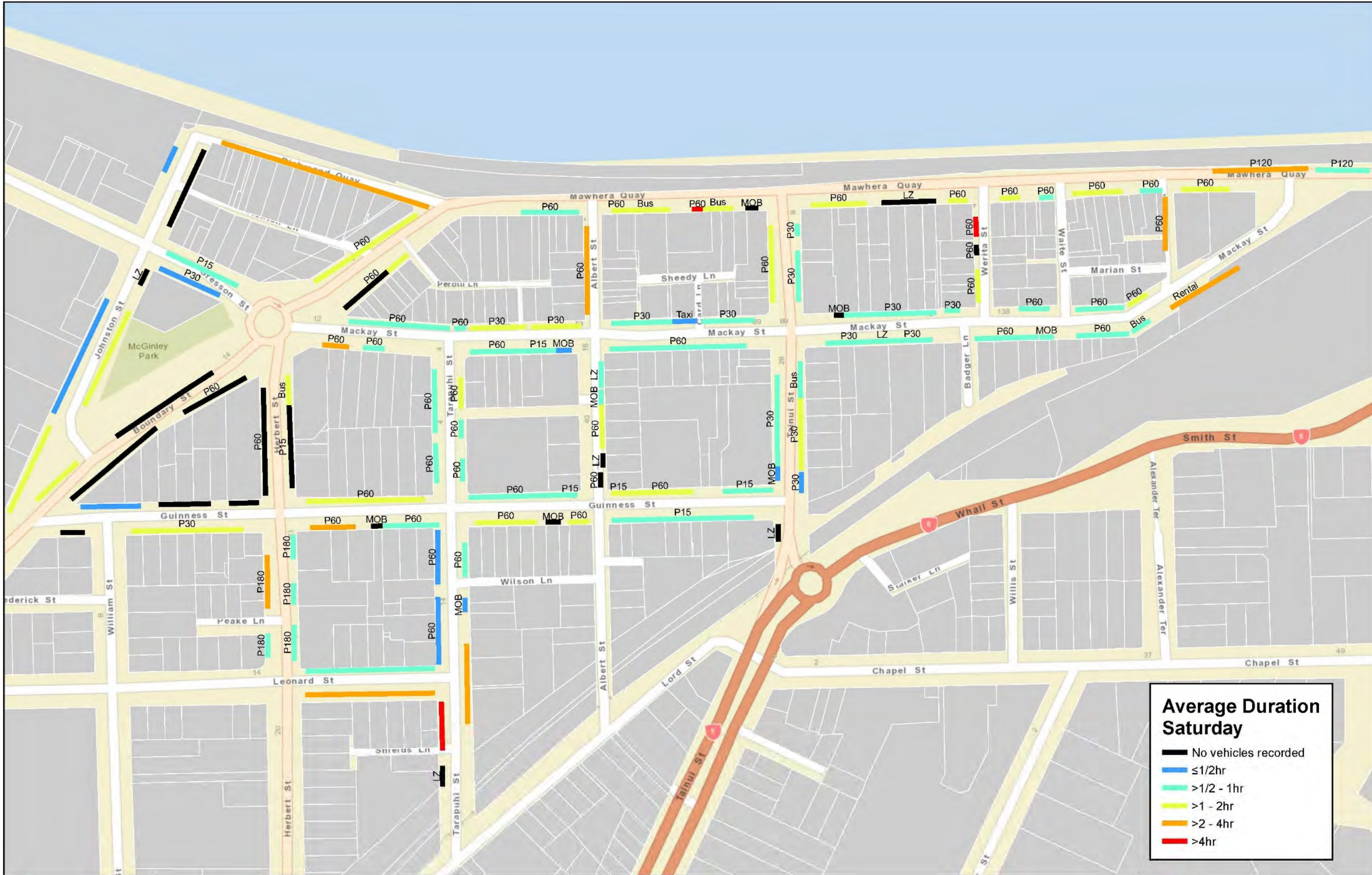
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**Greymouth Parking Strategy**

**On-Street Parking - Average Duration Weekday**

Project No: 6-DHLF4.00	Scale
Designed: CM	1:2,000 @A3
Drawn: MT	Approved: JD
Note:	Map No: 8 Date: 22/02/2016
	Revision: Revision Date



**Average Duration Saturday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

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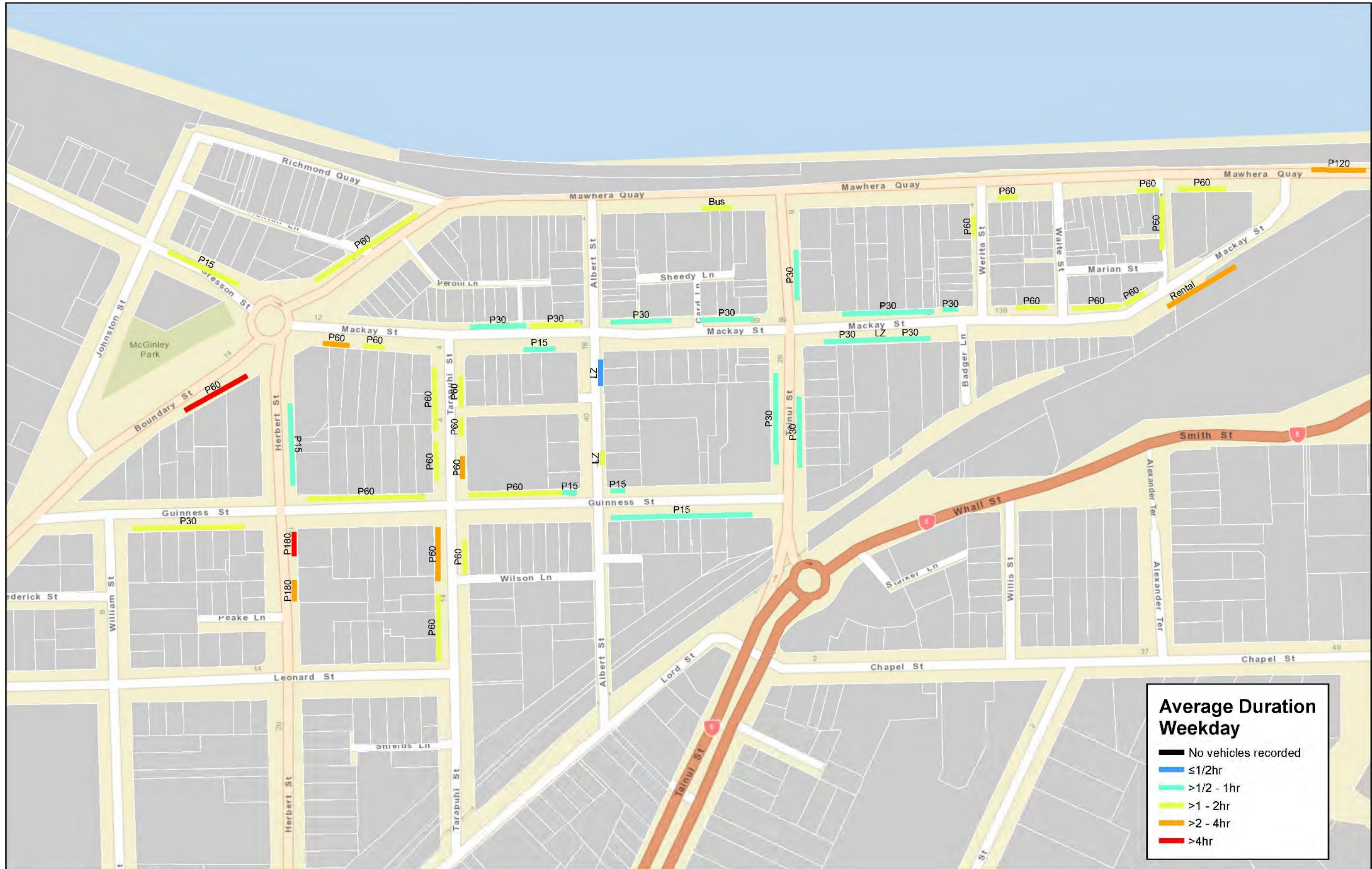
**On-Street Parking - Average Duration Saturday**

Project No: 6-DHLP4.50	Scale
Designed: CM	1:2,000 @A3
Drawn: MT	Approved: JD
Note:	Map No: 9 Date: 22/02/2016
Revision	Revision Date

Scale  
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 1:2,000 @A3  
 Note: 9 Date: 22/02/2016



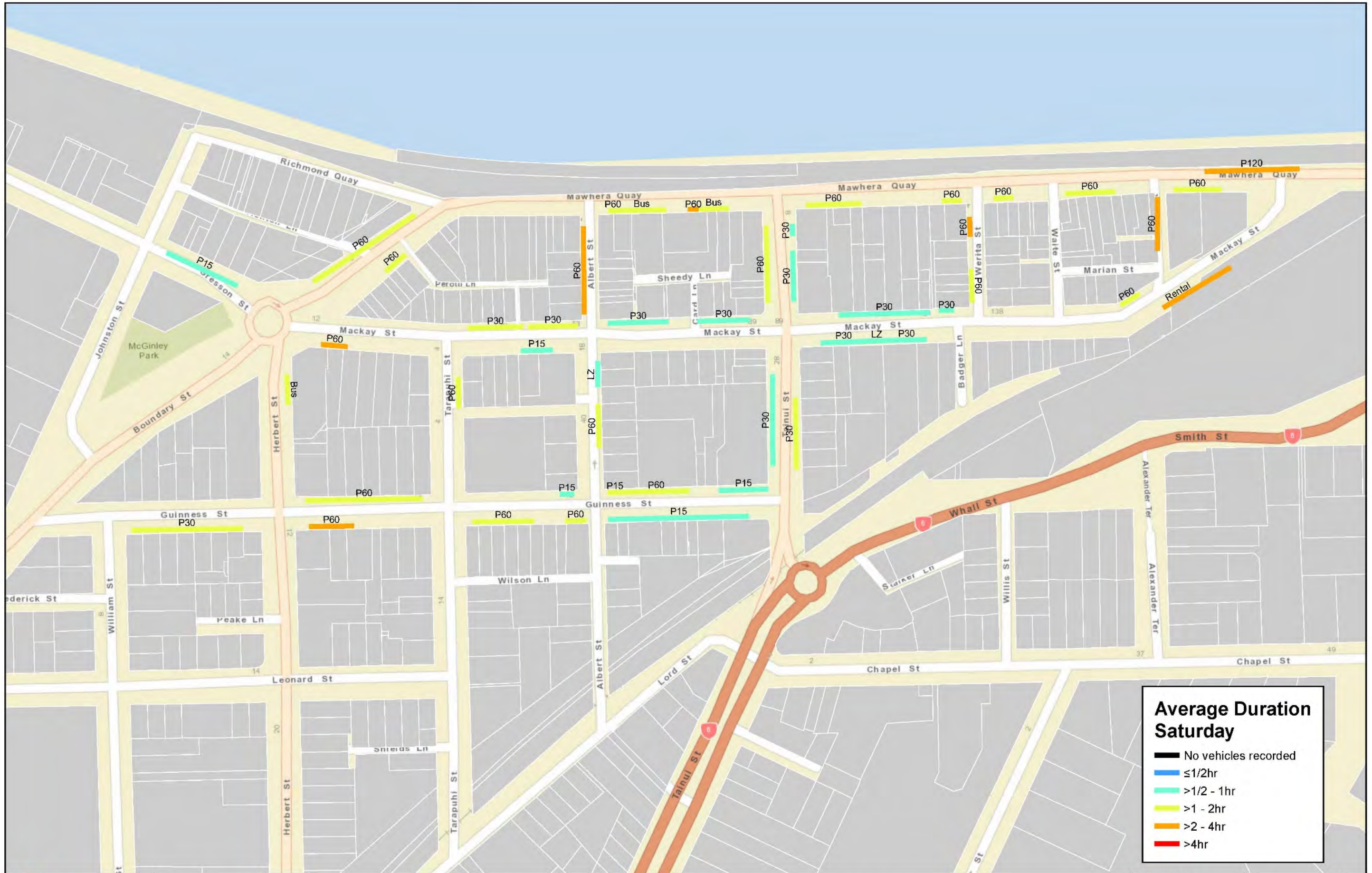
# Appendix G – On-Street Parking Average Duration, Non-Compliance Areas



**Average Duration Weekday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

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**Average Duration Saturday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

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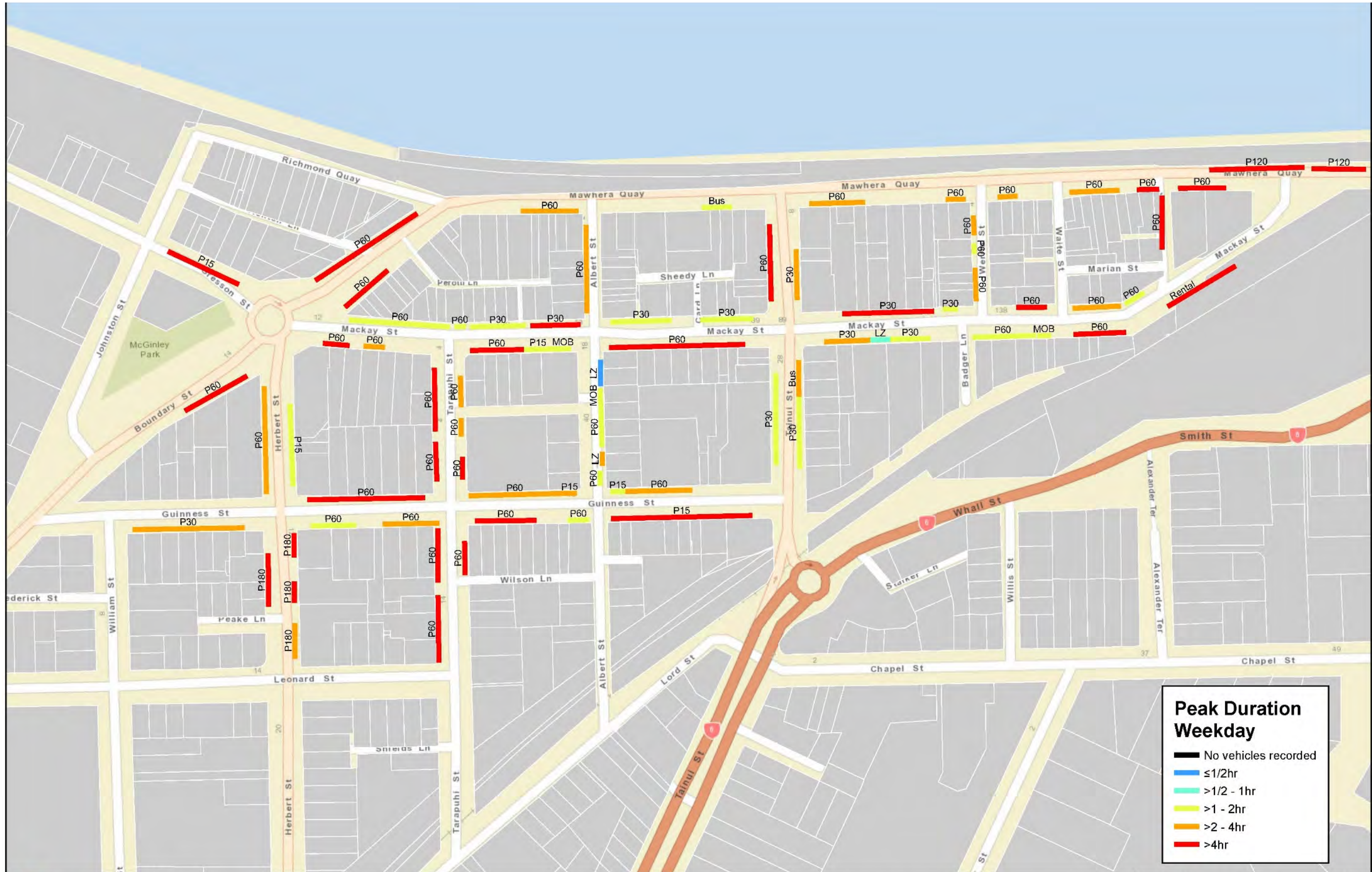
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**Greymouth Parking Strategy**

**On-Street Parking - Average Duration Non-compliance Areas - Saturday**

Project No: 6-DHLF4.00	Scale
Designed: CM	1:2,000 @A3
Drawn: [ ]	Approved: [ ]
MT: [ ]	ID: [ ]
Note:	Map No 11 Date 22/02/2016
	Revision [ ] Revision Date [ ]

# Appendix H – On-Street Parking Peak Duration, Non-Compliance Areas



**Peak Duration Weekday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

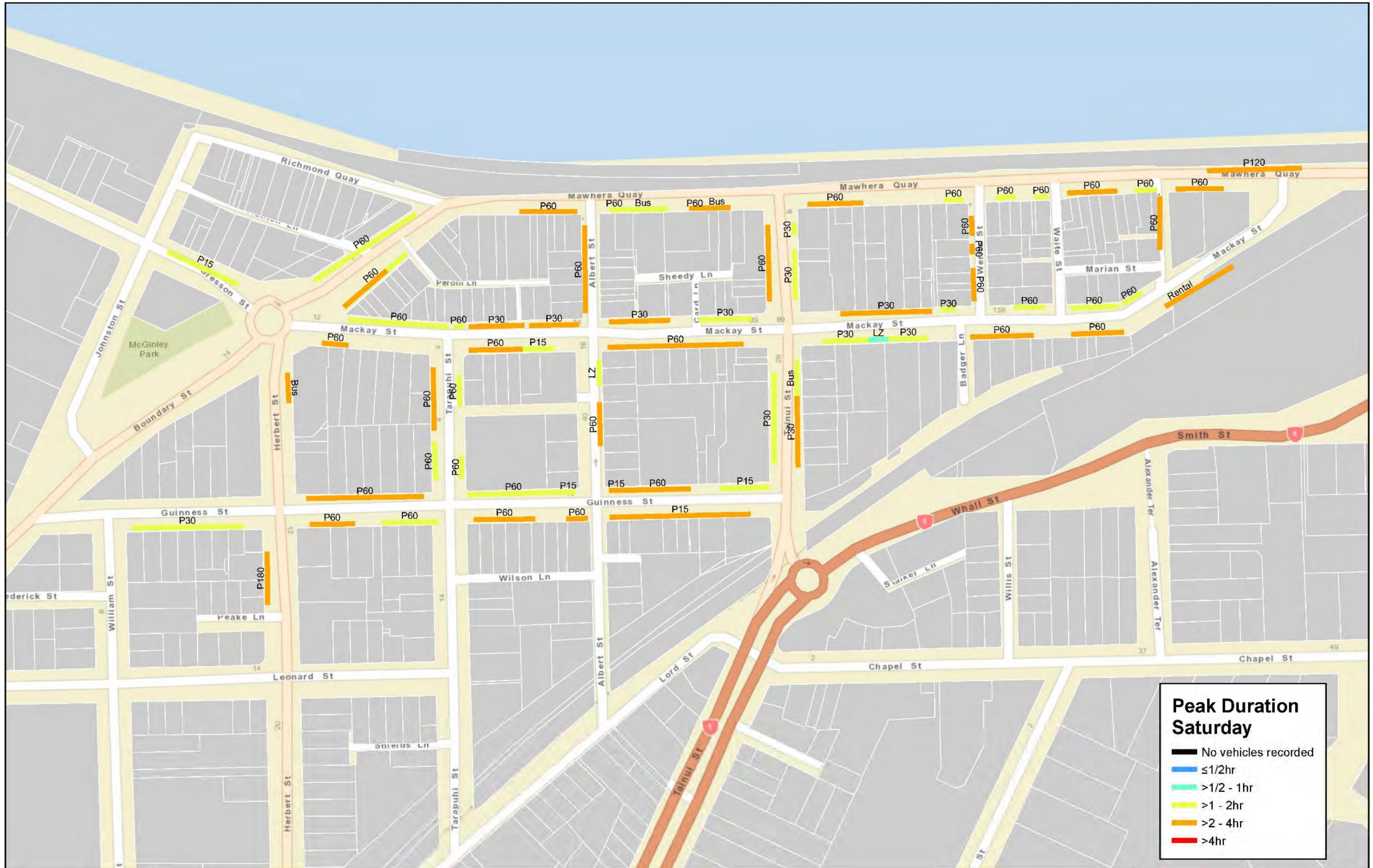
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## Greymouth Parking Strategy

## On-Street Parking - Peak Duration Non-compliance Areas - Weekday

Project No: 6-DHLP4.00		Scale	
Designed: CM	Approved:	1:2,000 @A3	
Drawn: MT	ID:	Map No: 12	Date: 22/02/2016
Note:		Revision:	Revision Date:



**Peak Duration Saturday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

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**On-Street Parking - Peak Duration Non-compliance Areas - Saturday**

Project No: 6-DHLF4.00	Scale: 1:2,000 @A3
Designed: CM	Map No: 13
Drawn: MT	Date: 22/02/2016
Approved: JD	Revision: Revision Date
Note:	

# Appendix I – Off-Street Parking Areas



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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## Greymouth Parking Strategy

## Off-Street Parking Areas

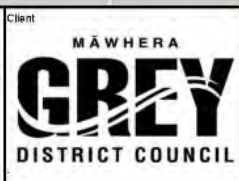
Project No: 6-DHLF4.00	
Designed: CM	Approved:
Drawn: MT	JD
Note:	

Scale	
1:2,000 @A3	
Map No: 14	Date: 04/03/2016
Revision:	Revision Date:

# Appendix J – Off-Street Parking Average Occupancy

## Average Occupancy of Off-Street Parking Areas

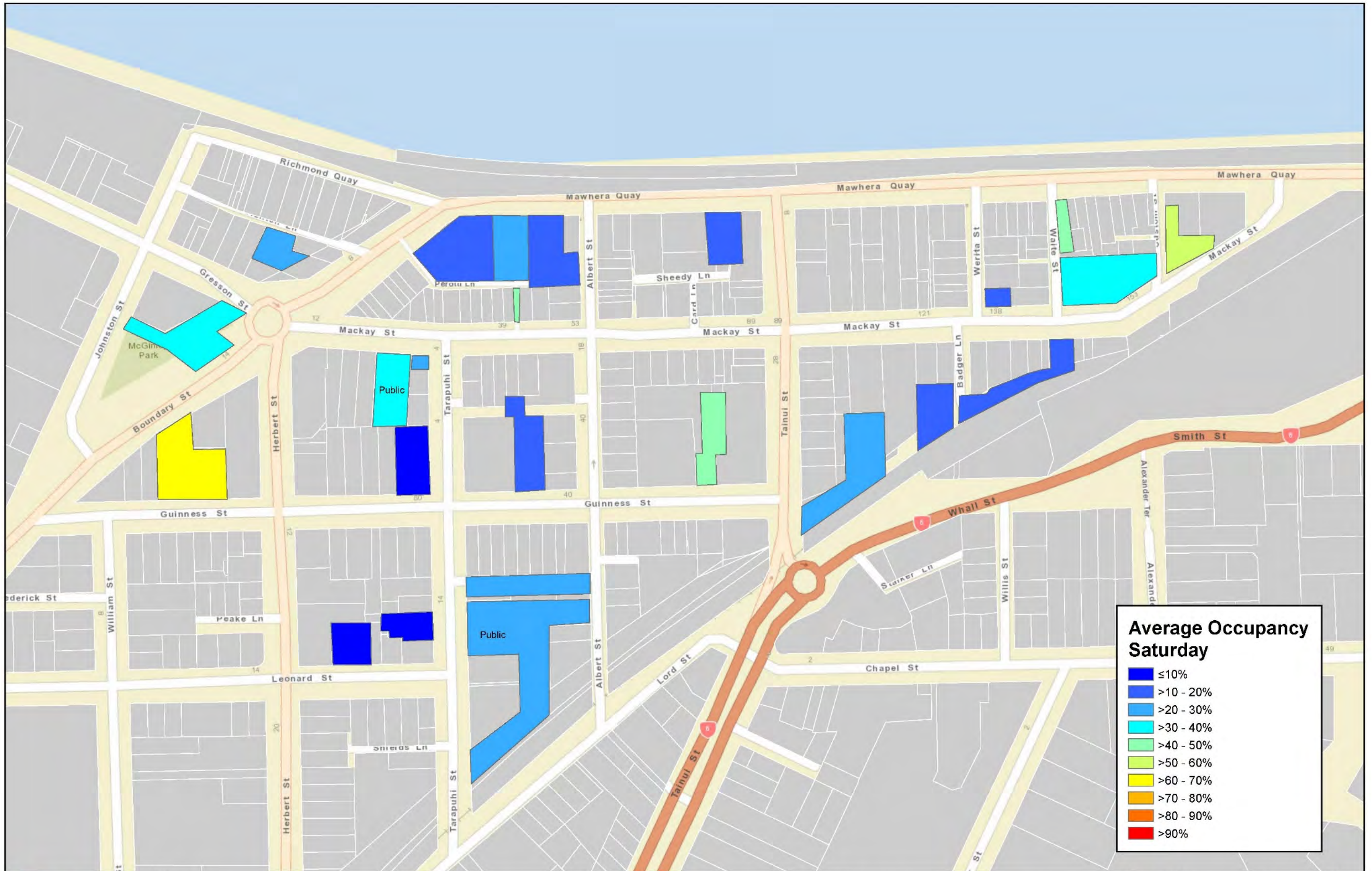
Parking Area	Average Occupancy (%)		Parking Area	Average Occupancy (%)	
	Wednesday	Saturday		Wednesday	Saturday
Bn(1)	40	39	Mk(5)	53	18
Bn(2)	44	26	Mk(6)	74	20
Bn(3)	48	20	Mk(7)	54	39
Gu(1)	57	64	Mk(8)	41	52
Gu(2)	21	7	Mw(1)	40	25
Gu(3)	66	14	Mw(2)	80	15
Gu(4)	89	46	Mw(3)	24	13
Le(1)	4	4	Mw(4)	53	47
Mk(1)	63	30	Ta(1)	64	28
Mk(2)	70	28	Tr(1)	41	0
Mk(3)	39	43	Tr(2)	71	28
Mk(4)	45	10	WI(1)	11	21



**Greymouth Parking Strategy**

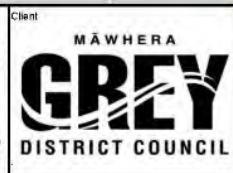
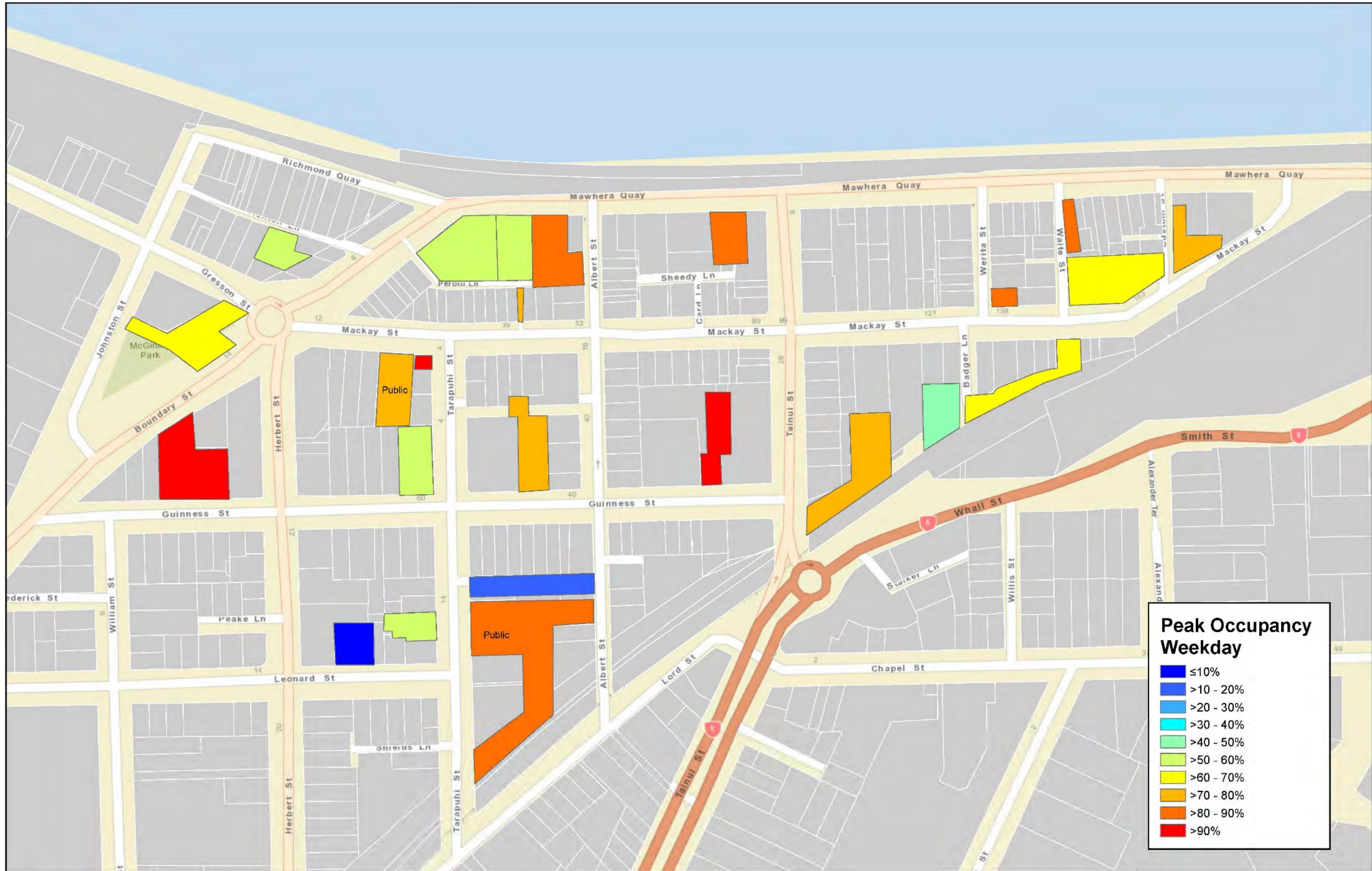
**Off-Street Parking - Average Occupancy Weekday**

Project No: 6-DHLF4.00		Scale	
Designed: CM		1:2,000 @A3	
Drawn: MT	Approved: JD	Map No: 15	Date: 22/02/2016
Note:		Revision	Revision Date





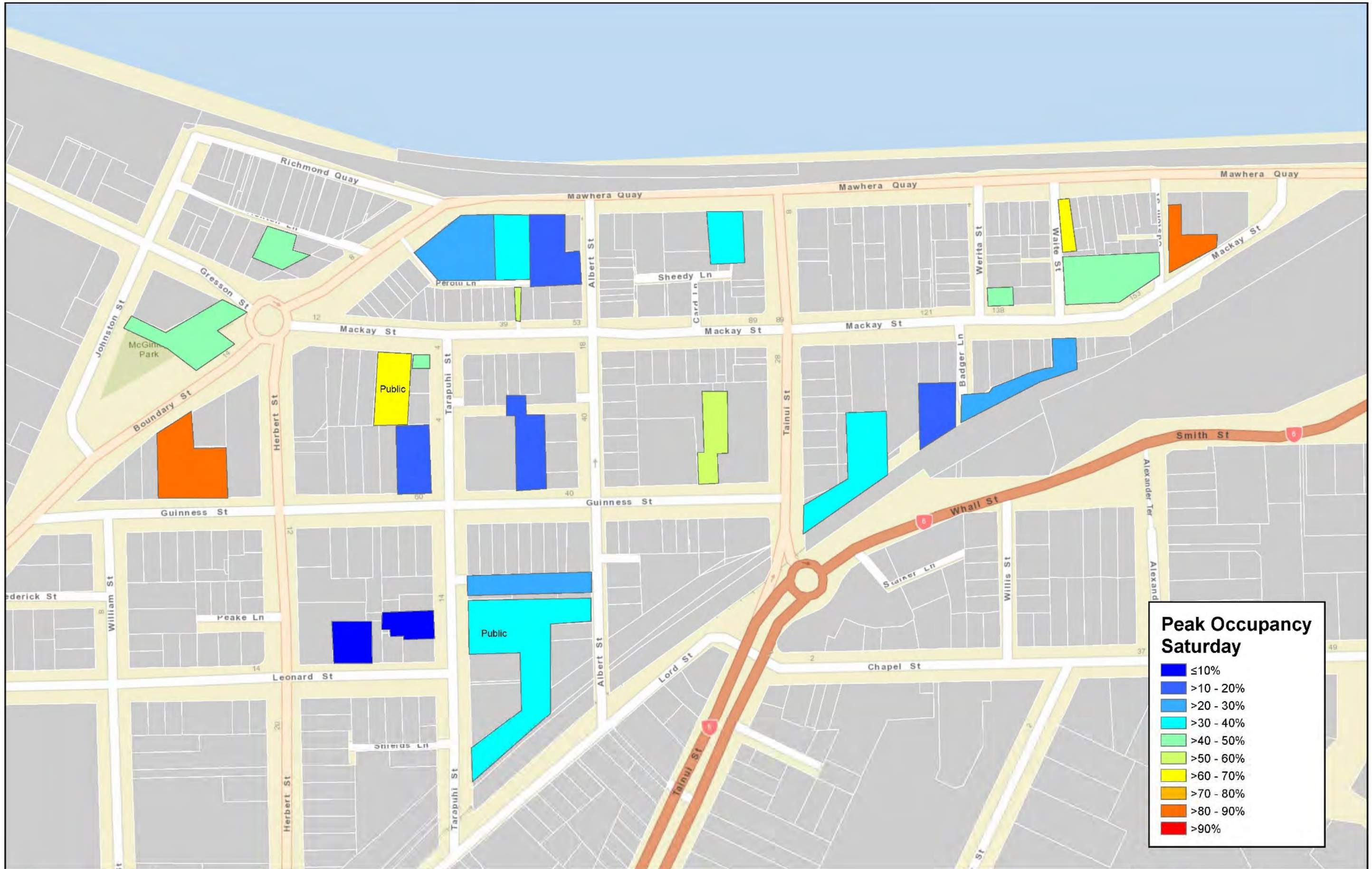
# Appendix K – Off-Street Parking Peak Occupancy



**Greymouth Parking Strategy**

**Off-Street Parking - Peak Occupancy Weekday**

Project No: 6-DHLF4.00	Scale
Designed: CM	1:2,000 @A3
Drawn: MT	Approved: JD
Note:	Map No: 17
	Date: 22/02/2016
	Revision:      Revision Date:



**Peak Occupancy Saturday**

- ≤10%
- >10 - 20%
- >20 - 30%
- >30 - 40%
- >40 - 50%
- >50 - 60%
- >60 - 70%
- >70 - 80%
- >80 - 90%
- >90%

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**Off-Street Parking - Peak Occupancy Saturday**

Project No: 6-DHLP4.00	Scale: 1:2,000 @A3
Designed: CM	Approved: [Signature]
Drawn: MT	JD
Note:	Map No: 18 Date: 22/02/2016
	Revision: [ ] Revision Date: [ ]

# Appendix L – Off-Street Parking Average Duration

## Average Duration of Stay for Off-Street Parking Areas

Parking Area	Average Duration of Stay (minutes)		Parking Area	Average Duration of Stay (minutes)	
	Wednesday	Saturday		Wednesday	Saturday
Bn(1)	174	49	Mk(5)	436	175
Bn(2)	126	114	Mk(6)	238	55
Bn(3)	260	156	Mk(7)	300	153
Gu(1)	86	39	Mk(8)	184	148
Gu(2)	135	120	Mw(1)	297	191
Gu(3)	313	220	Mw(2)	358	157
Gu(4)	354	166	Mw(3)	89	45
Le(1)	480	240	Mw(4)	168	91
Mk(1)	188	72	Ta(1)	268	183
Mk(2)	94	135	Tr(1)	293	0
Mk(3)	109	170	Tr(2)	268	119
Mk(4)	475	200	WI(1)	215	176



**Average Duration Weekday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

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**Off-Street Parking - Average Duration Weekday**

Project No: 6-DHLP4.00		Scale	
Designed: CM	Approved	1:2,000 @A3	
Drawn: JMT	JD	Map No: 19	Date: 22/02/2016
<b>Note:</b>		Revision	Revision Date



**Average Duration Saturday**

- No vehicles recorded
- ≤1/2hr
- >1/2 - 1hr
- >1 - 2hr
- >2 - 4hr
- >4hr

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**Off-Street Parking - Average Duration Saturday**

Project No: 6-DHLP4.00		Scale	
Designed: CM		1:2,000 @A3	
Drawn: MT	Approved: JD	Map No: 20	Date: 22/02/2016
Note:		Revision:	Revision Date: