

# **Invercargill Central Car Parking Reassessment**

Prepared for: HWCP Management Ltd

Job Number: HML-J001

Issue Date: 30 September 2019

Prepared by: Ravindu Fernando, Transportation EngineerReviewed by: Jay Baththana, Senior Transportation Engineer

### 1.1 Introduction

Resource consent was granted in March 2019 for a proposal by HWCP Management Limited to establish and operate a mixed-use development in the centre of Invercargill city. The proposed development consists an array of retail, hospitality and entertainment activities supported by a multi-storey parking building which was proposed to accommodate 859 car parking spaces. The proposal has now been amended to downsize the proposed car park to 700 parking spaces, however no changes are proposed to the type and the scale of the consented activities.

Abley prepared an Integrated Transport Assessment (ITA) dated 11 February 2019 in support of the original resource consent application. This technical note is an addendum to the ITA and analyses the proposed changes to the parking supply.

## 1.2 Parking Demand Assessment

The ITA concluded that the overall development requires approximately 840 car parking spaces. However, it is important to note that due to the lack of empirical data around the trip generation and parking demand of mixed-use developments, a number of highly conservative assumptions were made to ensure the robustness of the assessment. This means the peak parking demand of 840 is likely to be an overestimation of the realistic parking demand.

The rates used for the parking demand assessment in the ITA sourced through Trip Database Bureau, NZ Transport Agency Research Report 453 and other similar sources are based on a number of surveys that had been undertaken in widely different transport environments. For example, the parking demand generated by a large-scale retail activity in a suburban shopping mall and that within a central city area can be vastly different. However, filtering the available data to best match the transport environment of the subject site is always impractical due the limited sample size and related information.

Accordingly, whilst the use of the rates from the aforementioned industry accepted sources can provide indicative high-level approximation of the parking demand, it is important to understand the limitations of this approach and make adjustments based on qualitative judgements where appropriate. Listed below are a number of reasons why the peak parking demand noted in the ITA is likely to be higher than what is anticipated.

#### The central city environment

A relatively high level of linked trips is typically observed in central city environments. This means parking is likely to be complementary between individual establishments. For example, a person parking on street and visiting a nearby activity briefly visiting Invercargill Central, is likely to walk rather than getting back in the car and driving into the Invercargill Central car park. This is also likely with employees in nearby commercial establishments who are unlikely to drive into Invercargill Central if they, for example, want to go there for lunch. Complimentary parking of this nature is further encouraged by the pedestrianised environment within the city centre which the proposed development itself is anticipated to enhance.

#### Alternative modes of transport

Being located within the central city, the site is well serviced by public transport with reasonable connectivity to the residential areas of Invercargill. Cycle parking also has been provided for both visitors and staff within the development. Accordingly, a high proportion of non-car based trips are anticipated, which consequently results in a lower demand for parking. This is reflected within certain district plans in New Zealand, where a parking reduction factor is allowed on the





basis of accessibility to alternative transport modes. For example, Christchurch District Plan allows the following parking reduction factors;

- Public transport accessibility Reduction of up to 16% based on the site's proximity to a bus stop, the number of bus routes that the subject bus stop is serviced by and the frequency of the bus routes.
- Public parking facility Reduction of up to 10% based on the proximity to a public parking facility
- Walking accessibility Reduction up to 15% based on the proximity to a defined Commercial Core Zone
- . Access to major Cycle routes Reduction up to 15 % based on the proximity to a Major cycle route
- Cycle Parking Reduction up to 10% based on the extent that the proposed cycle parking exceeds the District plan's minimum requirements

As such it is evident that good accessibility to alternative transport modes can result in a parking demand that is notably lower than the typically expected average demand.

#### Mixed used nature of the development

The peak parking demand of a mixed-use facility is almost always lower than the sum of peak parking demand of individual activities within the subject mixed-use development. This is due to two key reasons which are,

- The peak of the individual activities is unlikely to coincide, for example, the peak period for a cinema is early evening whereas that for a food and beverage type activity is typically around midday
- There is a high proportion of linked trips between activities, for example, a high portion of visitors to the food and beverage section of the development are likely to be visitors to the retail activities as well.

Whilst the former of these two factors have been considered to an extent in the parking demand assessment within the ITA, the latter was not due to the lack of empirical data to quantify this effect. However, in reality this can result in a substantial reduction of the actual parking demand. Similar to active transport modes, this as well is reflected in some district plans where a parking reduction factor is allowed for mixed use developments. Christchurch District plan allows a parking reduction of up to 5% for Mixed use developments that contains a mix of residential activities and activities where people are employed at the site.

## 1.3 Potential Mitigation

The peak parking demand of 840 noted in the ITA included a 5% parking allocation exclusively for staff. It is likely that following the establishment of the development, if undesirably high levels of parking occupancies are noted, specific parking allocations will not be made for staff. Fully noting that the parking rates used in the ITA account for staff parking. This is anticipated to increase the parking availability for customers and hence mitigate any potential overflow of parking.

Given the scale of the development, we acknowledge the importance of providing an appropriate level of on-site car parking. However, it is important to note that the Invercargill District Plan does not require any car parking to be provided for developments within the City Centre Priority Redevelopment Precinct. This signifies that the district plan itself acknowledges the parking availability within the central city environment and that some reliance on on-street parking by developments within this zone is accepted. We are also not aware of any significant parking pressure within the Invercargill City Centre. As such, if parking from the development occasionally overflow on to the adjoining streets it is not considered to be detrimental to the safe and efficient operation of the road network in the vicinity of the development or the operation of the proposed development itself.

#### 1.4 Conclusion

This technical note concludes that the central location and the mixed use nature of the development means that there are number of factors, which are no necessarily quantifiable, but will contribute to a notably low parking demand than that would be typically expected when the individual activities within the development are considered separately. It is also noted that, whilst highly unlikely, any occasional overflow of parking onto the adjacent streets is unlikely to result in any significant adverse impact in a traffic and transport perspective.

This document has been produced for the sole use of our client. Any use of this document by a third party is without liability and you should seek independent traffic and transportation advice. © No part of this document may be copied without the written consent of either our client or Abley Ltd. Please refer to <a href="http://www.abley.com/output-terms-and-conditions-1-0/">http://www.abley.com/output-terms-and-conditions-1-0/</a> for our output terms and conditions.