

# PROPERTY **E**CONOMICS



**PC14 PUBLIC TRANSPORT**

**ACCESSIBILITY QFM**

**ECONOMIC OVERVIEW**

Client: Christchurch City Council

Project No: 52156

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## ECONOMIC MEMORANDUM

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To: Peter Eman

Principal Advisor Planning

Christchurch City Council

RE: PC14 Public Transport Accessibility QFM – Economic CBA Overview

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### INTRODUCTION

Property Economics has been engaged by Christchurch City Council (CCC) to provide a high level overview of economic costs and benefits for a potential Qualifying Matter (QFM) correlated to an area's level of Public Transport Accessibility (PT) as part of Plan Change 14 (PC14).

### OBJECTIVE

It is understood that the aim of the PT QFM is to facilitate development around the most efficient locations within Christchurch.

### APPROACH

As outlined in the Enabling Housing Supply and Other Matters Amendment Act 2021 (HSAA) Tier 1 and 2 councils are directed to implement the Medium Density Residential Standards (MDRS) as a minimum in all urban residential zones.

Limitations or exclusions to these standards can be directly identified at Qualifying Matters where appropriate assessments indicate there are mitigating impacts that would lead to effects that are considered to 'outweigh' the benefits of development enablement. CCC has proposed that one of these QFM's is the provision of high accessibility to public transport.

In identifying the geospatial extent of these impacts CCC has identified an 800m radius around core public transport routes. Further PC14 seeks to adopt this approach in RS / RH / RSDT zones only within this area, and the RBP zone in Lyttelton. It is within these zones to this geospatial extent that PC14 seeks to adopt MDRS development standards. Essentially, this limits residential development capacity (enabled) outside this area (identified as an 'intensification zone'), to the existing zone provisions.

The approach itself can be considered through two perspectives:

1. PC14 implements MDRS across all appropriate residential zones and applies a limiting QFM for geospatial areas that currently have (with no planned changes) low accessibility to public transport.
2. PC14 implements MDRS to appropriate residential zones that have identified 'high' accessibility to public transport both now, and in terms of future planning.

## POTENTIAL IMPACTS

There are likely to be an array of economic / market impacts resulting from this QFM to PC 14 in the Christchurch District Plan, including:

1. The ability and extent of choice for residential housing is likely to be reduced outside current and future high accessibility areas to transport routes.
2. Residential land value (per square metre) is likely to rise with access to these routes (within 800m).
3. There is, essentially, a competitive advantage provided for residential development within this 'intensification zone'.
4. Given the advantage afforded through this provision there is likely to be increased competition (and pressure) to plan for these 'routes' in expanded / new areas.
5. In terms of implementation and potential wider (outside transportation efficiencies) economic 'benefits' the impacts have the potential to be 'upstream' (resulting from associated or coinciding factors) rather than 'downstream' (resulting from the provision of high accessibility to public transportation).

## POTENTIAL ECONOMIC COSTS AND BENEFITS

As the impacts themselves would suggest there are a number of potential economic costs and benefits associated with the implementation of this QFM to PC14. It is important, when outlining the extent of these to consider whether these are a direct result of the level of accessibility to public transport or are the result of where this accessibility has been geospatially provided (typically as a result of previously existing zones and networks). These potentially include:

### 1. Potential Economic Benefits:

*Direct (as a result of increased residential development within existing and proposed transport routes)*

- a) Improved transport efficiency. This is likely to lead to reduced transportation infrastructure costs for the community.
- b) Reduced public transport marginal costs, viability, and reliability. As a result of an increased population within a smaller geospatial extent, this generally leads to higher utilisation and improved coverage.
- c) Increased community accessibility. PC14 is likely to lead to a greater proportion of residential development and therefore population growth being accommodated within 800m of a core public transport route. This provides greater access to employment, amenity services, and community facilities (including healthcare).
- d) Reduced carbon emissions.

*Indirect (as a result of facilitating increased residential density around the current geospatial extent of transport nodes).*

*These benefits are potentially the result of the location of transport nodes rather than economics benefits accruing from the provision and accessibility of public transport inherently.*

- e) Increased efficiency relating to other forms of infrastructure. The resulting intensification of residential development is likely to increase the utilisation of existing infrastructure capacity (lower marginal costs) and also reduce the marginal (long-term) costs of infrastructure provision and maintenance.
- f) Increased Amenity. The resulting intensification of residential growth and lowering of marginal costs is likely to lead to greater amenity benefits through improved service provision and access.
- g) Improved diversity and choice. This relates to both housing as well as providing for a greater 'critical mass' that supports greater level of diverse goods and services.
- h) Improved accessibility and equality of opportunity.
- i) Improved function and vitality of centres.
- j) Increased housing affordability. Greater residential density options within an area are likely to have impacts on residential land prices. The first is to increase the value of land per square metre, the second impact is that more intensified development is likely to reduce the average site value (inherently when a site is subdivided, all things being equal, while the sum of the whole is considerably more, typically around 70% although highly dependent on the location, the individual sites are less than the originally larger site). This has the potential to reduce housing development costs and thus impact upon affordability.

## 2. Potential Economic Costs

- a) Reduced residential capacity. This is potentially a key economic cost associated with the identified QFM. This restriction has the potential to impact upon the sufficiency of capacity, overall housing affordability, and locational choices. In determining the extent of this cost CCC have assessed the potential impact of this QFM through both their open and constrained (based on age of improvement). While the resulting impact was nominally significant (up to 70,800 feasible dwelling reduction, approximately 26% of city total), the remaining level of sufficiency is wholly sufficient. Based on this output the

potential for this to materially impact the Christchurch housing market is significantly reduced.

- b) Reduced extent of locational choice.
- c) Crowding out effects such as congestion. This relates to the capacity of existing infrastructure and the relative cost of upgrading this infrastructure to meet greater levels of capacity.
- d) Reduced market signals. This cost relates to the introduction of public transportation access as a predetermination of locational efficiency for increased residential density. As outlined below this factor is unlikely to be the dynamic factor behind efficient locations.

Overall, there is economic merit within the Plan Change to facilitate the intensification of residential development.

## COMMENTS

While the geospatial extent of the 'intensification zone' resulting from an 800m radius around core public transport routes overlays with (what is considered to be) an appropriate area for intensification, there are two key concerns from an economic viewpoint.

1. Rather than enabling all directed urban residential zones to MDRS and 'upzoning' locations considered more efficient and appropriate, PC14 essentially seeks to 'downzone' areas outside the 'intensification zone'.

While it is acknowledged (as the benefits above would suggest) that a clear difference (or in economic terms a competitive advantage) is required in these more appropriate locations, it is the establishment of a relative baseline (in this case the MDRS) that would allow for greater density provisions (at potentially varying degrees) within the 'intensification zone'.

This has the potential to generate the same relative outcome as above in terms of development distribution that provides greater enablement (and market choice) while still providing greater certainty for infrastructure provision and accessibility.

2. The second concern is the utilisation of public transportation access as an indicator for the aforementioned intensification benefits. While it is agreed that the resulting geospatial extent of intensified zoning is likely to be an appropriate one, it is not in itself driven by access to public transport. For example, wastewater infrastructure in a given area is not more efficient because the area has a high degree of access to public transport.

A potential risk with this approach is that 'downstream' provisions lead 'upstream' policies. This is to say that factors that lead to public transport efficiencies are generally independent of these networks, at least initially, such as existing centres, and existing densities. The provision of high accessibility to public transport will not in itself result in these outcomes.



If you have any queries, please give me a call.

Kind Regards

Phil Osborne