

PROPERTY **E**CONOMICS



ROTOKAURI SWALE

FAST TRACK ECONOMIC

IMPACT ASSESSMENT OVERVIEW

Client: Hounsell Holdings Ltd

Project No: 52238

Date: November 2022



SCHEDULE

Code	Date	Information / Comments	Project Leader
52238.3	November 2022	Report	Phil Osborne

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1. SWALE DEVELOPMENT AND APPROACH– ROTOKAURI

Property Economics have been engaged to summarise the economic impacts that will flow from the application by Hounsell Holdings Ltd (HHL) for resource consents relating to the construction of a greenway corridor / swale and arterial road at Rotokauri (“the Project”).

The proposed project for which a fast-track application under the **COVID-19 Recovery (Fast-track Consenting) Act 2020** is being applied for is the consenting and construction of:

- the Rotokauri Greenway;
- the Minor Arterial;
- the bulk watermain under the Minor Arterial and other roads;
- the wastewater rising main, and
- strategic wastewater pipeline and pump station.

The purpose of this project is to provide the necessary infrastructure pertaining to stormwater management and discharge along with critical roading connectivity to enable the residential development of the Rotokauri, a ‘live’ zoned residential growth cell in Hamilton north.

The Rotokauri growth cell has a planned capacity of approximately 7,000 homes for approximately 20,000 people (noting this could increase with the recent proposed changes under HCC’s Plan Change 12). Appropriate and necessary infrastructure is required to enable the balance of this growth cell. The key objective of this project is to design, consent and enable high-quality infrastructure that supports well-functioning urban development that can provide for the social, cultural and economic well-being of the community and wider Waikato region.

As highlighted above, there are two key components to this proposal, the Greenway and the Minor Arterial, which integrate and need to be designed and consented in parallel. Both pieces of infrastructure are critical features of the existing Rotokauri Structure Plan contained in the Hamilton City District Plan and certified Rotokauri Integrated Catchment Management Plan (ICMP).

The Greenway is a multi-functioning ecological corridor that will provide for stormwater management, open space and an active transport network, traverses a range of adjacent land use and offering a range of opportunities including ecological restoration, water runoff treatment recreational activities and cultural re-instatement. The Greenway will include a fluvial system of swales, artificial wetlands and ponds, with extensive planting of indigenous species along the length of the corridor. The approximately 4.7km length corridor will run between Lake Waiwhakareke (high point) and Lake Rotokauri (low point) to effectively manage and attenuate stormwater within the area, treating stormwater prior to discharge to enhance the water quality and surrounding natural environments and ecosystems.

The overarching purpose of the Greenway is to provide treatment, conveyance and storage of flows from Lake Waiwhakareke at the upper extent of the catchment) to Lake Rotokauri approximately 4km north. Construction of the Greenway includes major re-alignment and re-contouring of the existing Rotokauri Drain, as well as an upgrade to the culvert below Exelby Road and the construction of check dams in the lower reaches to assist in managing flows. The Greenway includes a 5 metre wide shared path on the southern side and a 3 metre wide secondary path on the north side.

The Minor Arterial is a key piece of enabling infrastructure that promotes a housing development within Rotokauri. The Minor Arterial extends 3.8km in length from Te Wetini Drive to the northern boundary of Hounsell Holdings land, including the collector road to the Chalmers Road underpass and the northern boundary of Hounsell Holdings land to the underpass that links to Te Kowhai East Road. Supporting three water infrastructure which is sized to cater for the wider catchment is also proposed which includes:

- the bulk watermain under the Minor Arterial;
- wastewater rising main;
- strategic wastewater pipeline, and
- pump station will also be included in the project.

The Minor Arterial will prioritise and enable active transportation with wide footpaths and separated cycleways, supported by planted medians to improve safety. There will be public transport connections provided, which will connect to the Rotokauri Transport Hub (1 kilometre east of Rotokauri), with bus stops along the length of the corridor.

While the development of the corridor / swale and road themselves will result in a significant level of direct economic injection into the local and regional economies the more significant contribution of the proposed project is as a necessary precursor to the further development of the Rotokauri growth cell, i.e., the project will catalyse development and unlock short-, medium-, and long-term residential capacity within the wider Rotokauri growth cell. As such this report also focusses on the development potential and economic activity facilitated by this crucial project.

This economic impact overview relates to the application to have the Project referred to the FastTrack process.

This economic impact estimates the total additional gross economic output¹ into the Waikato economy that would be facilitated about by the Project. The initial specifications and details have been provided by the applicant and represent the development's configuration and costings at this point in time.

It is important to note that this is not site specific (i.e., a key consideration may be that the swale / green corridor and arterial road cannot be replicated elsewhere). It is assumed the Rotokauri area represents an efficient location for future growth and therefore the associated infrastructure is location specific. Additionally, the assessment has not endeavoured to identify the extent to which particular parts of the Waikato Region will benefit economically. It assesses the likely economic impacts upon aggregate Waikato business activity given the composition of activities proposed.

The economic impacts likely to be experienced as a result of the Project are broken down by the development phase which includes the construction costs (CAPEX²) of the facilitated activities and the proportion of those costs that are retained within the Region.

The direct economic impacts are derived from the actual spending / expenses incurred through the operation of the facilitated development.

Indirect economic impacts are the increased spending brought about by those firms / households and their employees / occupants, who supply the development, while induced economic benefits are measured in terms of the additional income that will be spent in the area due to increased business activity.

¹ For example, this has not taken into account the short-term loss of any operational employment currently on site.

² CAPEX – Capital Expenditure

2. ECONOMIC CONTEXT

In assessing the potential economic impacts, it is important to firstly establish the context in which they will be assessed. For the purposes of this assessment the three important parameters are:

- 1) The geospatial extent of the economic impact. While facilitation of additional housing provision is likely to have a national economic impact, the majority of impacts are likely to be retained within the Waikato Region. As identified, for the purposes of this assessment, the extent of economic impacts is focussed on the retention of activity within this area.
- 2) The economic impacts are divided into two aspects. Firstly, the economic impacts resulting from the development of the greenway corridor / swale and arterial road themselves, and secondly the economic impacts resulting from the development facilitated by the aforementioned development over a ten-year period.
- 3) In terms of the statutory considerations the RMA provides context in terms of the utilisation of resources and the resulting impact on the price and provision of these resources. It calls for the "*efficient use and development of natural and physical resources*", with economic efficiency being defined as "*the effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs*"; Part II section 7 (b) RMA.

As identified the proposed swale, arterial road and facilitated development is likely to have economic impacts that are felt beyond the specific costs and benefits within the region. Additionally, there are likely to be non-economic effects, such as environmental. While these effects may result in economic impacts for the most part they have not been addressed here.

3. THE ROTOKAURI GROWTH CELL

The Rotokauri Growth Cell is located primarily in Hamilton City forming a significant proportion of housing demand within the Future Proof Area. The Growth Cell itself has been identified to provide capacity for the approximately 7,000 new homes that will be required to meet growth within this over the short-, medium-, and long term.

The Rotokauri Cell, encompassing 955 hectares, has specifically been identified in the Hei Awarua ki te Oranga – Corridor for Wellbeing report as a priority location in the Hamilton to Auckland corridor. Stage 1 of the growth cell provides for between an indicative potential of 2,857 new homes as well as a gross floor area yield of 14.53ha for employment.

The key restrictive issue in relation to provision of this capacity is the substantive level of infrastructure required to unlock the area's development potential. The priority bulk infrastructure required has been identified as stormwater and arterial infrastructure (identified as regionally significant in the RPS). Given that the water and wastewater infrastructure is already in place, the provision of this stormwater and roading is likely to have an immediate impact on releasing the residential capacity within this area.

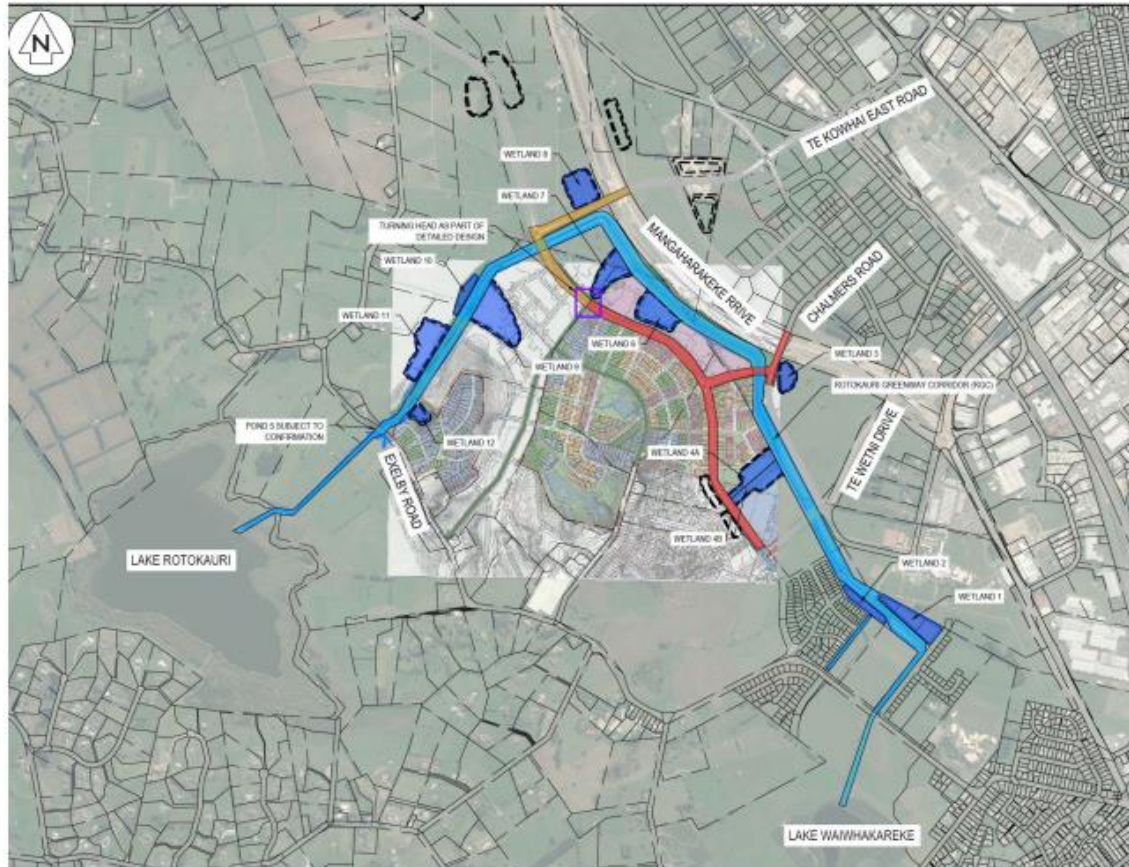
A number of financing and costing options for infrastructure have been assessed with the most immediate development option (2027) costing s 9(2)(b)(iii) to complete, with s 9(2)(b)(iii) this spent within the first 10 years. This option provides for 2,109 homes and is estimated to accommodate over 3,000 employees.

Rotokauri Stage 1 development is well under way with 1,360 subdivision consents lodged, 402 granted and 138 houses completed.






In terms of the identified project the provision of both the stormwater floodway and arterial roads have been identified by Council as critical to facilitate an efficient community development. An economic cost benefits assessment provided as part of the 'Accelerating Bulk Housing Infrastructure for Rotokauri Stage 1 (August 2020), found that early delivery of infrastructure and resulting residential and business development resulted in the highest Benefit Cost Ratio for the community.

Figure 1 illustrates the geospatial context and extent of the greenway and arterial roading.

FIGURE 1 : ROTOKAURI GREENWAY AND ARTERIAL SCOPE PLAN



Legend

-  EX BDY
-  ARTERIAL - DETAILED DESIGN
-  ROAD - CONCEPT DESIGN
-  ROTOKAURI GREENWAY CORRIDOR (RGC) - DETAILED DESIGN
-  WETLANDS - DETAILED DESIGN

4. TOTAL ECONOMIC ACTIVITY

This section assesses the potential economic activity generated within the Waikato Region specifically attributable to the Project through spending on the greenway and arterial road.

This includes construction costs, which have been valued for the overall development.

The impact of this injection on the initial business cycle has been calculated. This 'construction multiplier' was based on the national input-output tables produced by Statistics New Zealand (based on 48 sectors), which were then assessed at a district level based on Waikato economic activity, composition and productivities.

This estimates the 'leakage' from the regional economy (within specified sectors), and therefore the overall regional production (within a given business cycle) for each \$1 injected.

This was performed for the general and commercial construction sectors. These multipliers are based on 'net' flows by broad sector type and are therefore approximations.

Total output impacts to the Waikato catchment for the proposed developments include:

- Direct Construction Cost x 'Construction Multiplier' +
- Direct Development Cost x 'Development Multiplier' +
- Direct Increased Commercial Spending x 'Commercial Multiplier' +
- Indirect Business Spend x 'Commercial Multiplier' +
- Induced Retail Spending x 'Retail Multiplier'

Each identified multiplier relates simply to the economic sector from which the activity is generated.

4.1. ASSUMPTIONS

The following assumptions have been applied in this impact analysis in order to assess the level of economic injection into the overall economy at this time. This has some (limited) impact on the distributional effects of the costs and benefits but can be quickly adjusted to accommodate more specific construction and on-going costs and injections.

1. For the purposes of this Economic Impact Assessment, it has been assumed that the construction costs will fall within the definition of the following categories (based on a standard 'special' commercial ratio): 'non-residential construction', 'non-building construction', 'other construction services'.

2. Financial or loan costs on capital primarily fall outside of the local catchment and impact the national economy. This is assumed given the uncertainty of funding either through HHC, IFF, or a private development agreement fund.
3. The origin of labour has been assessed based on regional labour movements furnished by Statistics NZ based on 2018 data. However, employment data has been updated as per the Statistics NZ Business Frame data³ to March 2022.
4. This report deals with the economic impact of proposed development on Waikato. These are specifically the direct impacts related to the operation and construction of the proposed development.
5. The economic activity generated is based on the development's gross activity and does not consider this redirecting growth opportunities from elsewhere in the catchments. As stated, this assessment is not site specific.
6. For the purposes of this report a 6% discount rate has been applied.
7. Labour movements are based on average retention rates rather than specific company locations.
8. The proportion of materials and labour internalised in direct benefits to Waikato are based on standardised labour movements as well as employment and production composition within the Region. The amount of each 'flow-on' dollar retained in Waikato are based on the movement of resources (including labour) between other districts and regions.

Table 1 following outlines the resulting impacts on the Waikato economy as a result of the development.

³ *Business Frame Data – provides Statistics NZ measure of employment in an area by ANZSIC sector.*

4.2. TOTAL WAIKATO ECONOMIC ACTIVITY

TABLE 1: TOTAL GROSS WAIKATO ECONOMIC INJECTION OF PROJECT (FAST TRACK)

	2022	2023	2024	2025	Total	
Direct Expenditure (\$m)						
Land		s 9(2)(b)(ii)				
Earthworks / Civil Works						
Civil Consultants						
Levies						
Infrastructure						
Total Direct Expenditure (excl. land)						
Level 2 Multiplier Impacts						
Total Waikato Output NPV (48 sector multipliers)**						
Employment (FTE Years)						
Development Employment		285	341	18	644	
Construction Employment			0	0	0	
Other Employment		64	130	4	198	
Total Employment (FTE years)		349	471	22	842	

Source: Property Economics

** The impacts on Waikato as a result of direct, indirect and induced activities.

The preceding table illustrates that the total impact on business activity within Waikato as a result of the swale / greenway and arterial road development at Rotokauri over a 3-year period is estimated to be just under \$110 million.

In terms of employment multipliers this would contribute 470⁴ jobs during the peak development year within Waikato, with a total number of FTE years at approximately 840 over the period.

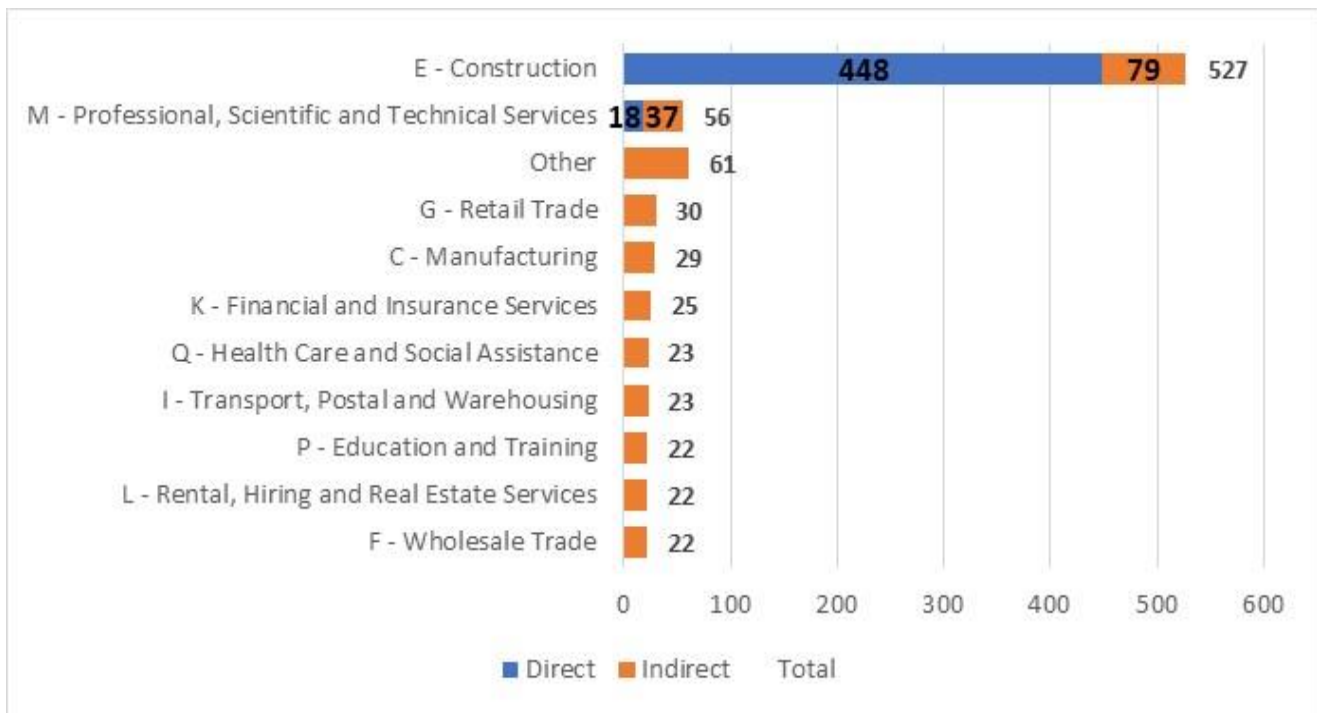
⁴ NB These are all jobs created through the direct development phase including indirect and induced employment through all business sectors (not solely development jobs).

4.3. TOTAL WAIKATO DIRECT AND INDIRECT EMPLOYMENT

Figure 2 following disaggregates employment generated by sector and Direct and Indirect (including induced) FTE employment over the identified period. It illustrates the significant direct impact on the Construction sector (as well as Construction Services).

The graphic illustrates the sectors associated with direct employment measure approximately 467 FTE years with the remaining around 375 FTE years resulting from indirect and induced activity

FIGURE 2: WAIKATO EMPLOYMENT GENERATION BY SECTOR (DIRECT AND INDIRECT)



Source: Property Economics

5. OTHER ECONOMIC COSTS AND BENEFITS

Due to the nature of the Project assessed, there are a range of potential economic costs and benefits that are likely to be achieved within the market beyond the direct economic activity (employment and economic output) generated.

ECONOMIC BENEFITS

1. **Facilitation of Additional Residential and Business Capacity:** The development of the greenway and arterial roading facilities up to 2,109 houses within the first 10 years (under the 'Building Communities scenario within the Rotokauri Stage 1 business case). Additionally, there would be the development of business land that would accommodate up to 3,000 employees. This would be accompanied by a further ^{s 9(2)(b)(ii)} in infrastructure development within this first 10 years.
 - a. **Overall Economic Injection:** With the development of the additional infrastructure provision and the construction of (only) the residential dwellings, it is estimated (Table 2) that the provision of critical bulk infrastructure within Rotokauri Stage 1 would contribute in excess of \$2b to the Waikato economy over the identified 10-year period and support an average of 1,500 jobs per annum.

TABLE 2: TOTAL GROSS WAIKATO ECONOMIC INJECTION ROTOKAURI STAGE 1 (FIRST 10 YEARS)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Direct Expenditure (\$m)												
Land	s 9(2)(b)(ii)											
Demolition	s 9(2)(b)(ii)											
Earthworks / Civil Works	s 9(2)(b)(ii)											
Civil Consultants	s 9(2)(b)(ii)											
Levies	s 9(2)(b)(ii)											
Infrastructure	s 9(2)(b)(ii)											
Total Development Costs (excl. land)	s 9(2)(b)(ii)											
Construction	s 9(2)(b)(ii)											
Total Construction and Development Costs (excl. Land)	s 9(2)(b)(ii)											
Increased Local Spend*	s 9(2)(b)(ii)											
Total Direct Expenditure (excl. land)	s 9(2)(b)(ii)											
Level 2 Multiplier Impacts	s 9(2)(b)(ii)											
Total Waikato Output NPV (48 sector multipliers)**	s 9(2)(b)(ii)											
Employment (FTE Years)												
Development Employment		285	341	229	649	586	599	607	572	164	123	4,154
Construction Employment			0	0	778	1,251	1,635	1,126	1,077	1,435	1,372	8,674
Other Employment		64	130	4	412	457	495	321	226	352	352	2,812
Total Employment (FTE years)		349	471	233	1,839	2,294	2,729	2,054	1,875	1,951	1,847	15,640

Source: Property Economics

- b. **Price Impacts and Affordability:** The potential provision of additional feasible residential development capacity (with dwellings at an average of 130sqm) within the wider area is likely to have the impact on reducing counterfactual land values. The addition of over 2,000 residential units is likely to assist in the provision of more affordable / serviceable properties, with lower land costs per dwelling due to land and development costs able to be amortised over a higher number of homes.

This provides not only the ability for the area to improve its responsiveness to growth demands but will itself facilitate further growth within the area with an increase in overall competitiveness and efficiency due to the intensity of the proposed development. This is in keeping with one of the key purposes of the FastTrack Act⁵ of increasing overall housing supply (s19(d)(ii)).

A significant contributor to residential property values is the underlying land values impact by growth expectations and supply. The identification of additional residential land areas and residential densities suitable for development is likely to reduce price pressure in the local and surrounding markets.

- c. **Greater Housing Choice:** A development of an additional 2,000 dwellings offers with it the opportunity for greater residential choice in terms of location, accessibility and typology.
 - d. **Improved Travel Efficiency:** The provision of additional business land will also facilitate less travel and greater local employment opportunities.
2. **Decreased Marginal Infrastructure Costs:** Once again the opportunity to masterplan an area has the potential to bring with it, economies of scales and lower marginal infrastructure costs. The provision of strategic infrastructure not only allows for its provision in a comprehensive and efficient manner but also avoids piecemeal development that is likely to result in lower levels of economic and social wellbeing for the future communities.
 3. **Impact on Current Employment Levels:** While Covid-19 has had a less significant impact on the general economy than was initially estimated, it is clear that the next few years represent uncertain times with several crucial sectors likely to experience significant downturns and considerable restricting.

⁵ COVID-19 Recovery (Fast-track Consenting) Act 2020

More recently construction sectors have been materially impacted by the wider economic implementations of Covid and the responses by financial institutions and government monetary policies. These sectors benefit directly from the proposed development, safeguarding sector specific capital and will support greater spend and general economic activity that in turn supports greater activity in the affected sectors.

This supports a key FastTrack Act purpose of resulting in a public benefit through generating additional employment (s19(d)(i)). Additional employment opportunities contribute positively to improving income levels of many households in the Waikato Region, and therefore improve the economic, social and cultural wellbeing of both current and future generations (s19(b) of the Act).

6. SUMMARY

Overall, the proposed swale / greenway and arterial road project represents a significant opportunity for the local economies to protect, sustain and grow jobs and income, provide additional job opportunities and income, while also providing additional competitive residential opportunities.

This development also positively contributes to the outcomes sought in the NPS UD⁶ by providing additional housing capacity across a range of typologies and providing more choice in the market in relation to price points and location.

It is important to note that these benefits exist within a timeframe that is likely to see significant uncertainty in development opportunities and a lower appetite for risk, impacting on both the construction and productive base of the localised and regional economies.

⁶ *National Policy Statement on Urban Development 2020*