

A CONTRACTOR

Timaru District Growth Strategy 2015

Issues and Options Report



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EXECUTIVE SUMMARY

This report principally investigates the issues and options for all landuse growth sectors in the Timaru District and the strategic options for managing growth over the next 30 years.

In October 2014 Council resolved that a Growth Strategy (GS) be prepared for the district. The purpose of the GS is to provide an overarching framework for managing growth, inform landuse zoning and integrate landuse planning and infrastructure provision, including the staging of infrastructure. It is considered that a GS is required for the district for a number of reasons including: to cater for projected demand for new households resulting from falling household formation rates (number of persons per dwelling); significant levels of rural residential development; continuing requests for private plan changes and to ensure land is supplied at sustainable levels to avoid land price escalations. The GS will inform other Council documents, such as the District Plan Review, Activity Management Plans, Annual Plan and the Long Term Plan.

This report is the first step in developing a GS for the Timaru District. It is intended that the report will be used as a basis for consultation, to stimulate debate and to inform the GS. This report sets out:

- the policy, legislative, demographic and economic context to landuse growth;
- reviews the existing location and availability of urban and rural zoned land;
- estimates future residential, rural-residential, commercial, rural and industrial growth;
- describes the potential growth issues;
- identifies options for managing growth.

In terms of the policy and legislative context, whilst the development of a GS is not a legislative requirement, it is supported by national legislation and by the Canterbury Regional Policy Statement (RPS) and by the Timaru District Council Long Term Plan (LTP).

The demographic and economic context includes an ageing population with almost all growth occurring in the 65+ and more specifically the 75+ age group. Future dwelling demand will predominantly be driven by "one-person" and "couples without children" households. The district's economy is performing above the national average with the food manufacturing, agriculture, telecommunication and construction services sectors being the biggest contributors to GDP and

employment. Considerable activity at the Port of Timaru, industrial activities at Washdyke, dairy factory expansions and general intensification in dairy, freight and forestry are also contributing to a growing economy.

The issues associated with growth are varied, however they can be generally summarised as the need to accommodate further growth in appropriate locations which are effectively and efficiently serviced whilst avoiding significant adverse environmental effects.

Four strategic growth options have been outlined, these being: Status Quo; Peripheral Expansion; Consolidation and Managed Growth. Each of these four strategic growth options have been assessed against evaluation criteria developed from the RPS. This assessment found that the Managed Growth option best meets the evaluation criteria.

1.0 INTRODUCTION

1.1 PURPOSE OF REPORT

A review of the Timaru District Plan commenced in late 2014. In the Council meeting of 28 October 2014 Council resolved *"That a Growth Strategy is prepared to inform the District Plan Review."*

This issues and options report is the first major step in the development of the Timaru District Growth Strategy. This report outlines the relevant context; identifies the issues with urban growth in our district; and sets out and assesses the strategic options for managing growth.

The report is intended to provide a basis for public consultation on this matter, to stimulate debate and ultimately inform the development of a GS for the district.

A separate report titled 'Timaru District Growth Strategy Issues and Options Report – Supporting Documents' contains a number of documents referred to in this Issues and Options report and is available on Council's website: www.timaru.govt.nz.

1.2 PURPOSE OF THE GROWTH STRATEGY

The purpose of the GS is to manage growth, inform landuse zoning and integrate landuse planning and infrastructure provision and consequently assist to control infrastructure expenditure. The GS will be a strategic document that:

- focuses on the longer term development of the district;
- guides the location and timing of development and infrastructure in accordance with the adopted growth projections;
- is evidence based;
- aligns with best practice principles for managing growth;
- gives effect to growth provisions in the RPS;
- will inform the District Plan Review and future Activity Management Plans.

The benefits of growth strategies are that they:

• foster economic development by identifying long term development opportunities;

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- save money by integrating landuse and infrastructure so that infrastructure is provided efficiently;
- make other plans easier to prepare because growth issues are clarified e.g. District Plan Review, outline development plans, infrastructure plans, and Activity Management Plans;
- help control land value by ensuring an adequate supply of land;
- lower the administration costs of the District Plan by spending less time processing resource consents for certain types of development.

Despite the District's historically low population growth, it is considered there is still a need for a GS. There are a number of reasons for this:

- Falling household formation rates continue to drive demand for additional housing, including a range of housing typologies. Demand for new housing may mean demand for new housing areas, which should be decided in a strategic manner.
- Significant levels of rural residential development continue to occur which creates demand for new and upgraded infrastructure. It may also lead to pressure for existing low density residential areas to be intensified in an ad hoc manner.
- Private plan change requests for rezoning new land continue to be received. These requests can lead to sub-optimal urban forms and are very difficult to address without a GS.
- To ensure land is supplied at sustainable levels to avoid land price escalations.
- Other Council documents e.g. Activity Management Plans rely on growth projections, which are uncertain if there is no GS.
- A strategic priority of the LTP is to promote integrated, highly liveable communities.

1.3 REPORT FORMAT

The remainder of this report has been set out as follows:

Section 2 Summarises the legislative and policy framework, growth trends and projections and timeframe for the GS.

Section 3 Identifies growth issues.

Section 4 Provides criteria for assessing strategic growth options.

Section 5 Identifies strategic growth options.

Section 6 Provides an assessment of each strategic growth option.

Section 7 Provides a brief conclusion.

Acronyms used throughout the report include:

- Growth Strategy (GS);
- District Plan Review (DPR);
- Timaru District Plan (TDP);
- Canterbury Regional Policy Statement (RPS);
- Resource Management Act 1991 (RMA);
- Local Government Act 2002 (LGA);
- Long Term Plan 2015-2025 (LTP).

2.0 CONTEXT

2.1 LEGISLATIVE AND POLICY FRAMEWORK

Councils (other than Auckland City Council) are not required by law to prepare Growth Strategies. Despite this a large number of Councils, both regional and territorial authorities, have completed, or are currently preparing Growth Strategies. Although Growth Strategies are not specifically required by law, there is legislation and policy at a national, regional and local level that supports their preparation.

For instance, at a national level the RMA requires councils to have regard to the *"efficient use and development of natural and physical resources"*¹. Similarly, the LGA, requires councils to *"ensure prudent stewardship and the efficient and effective use of its resources in the interests of its district or region, including by planning effectively for the future management of its assets"*².

At a regional level, the RPS requires territorial authorities to "establish an approach for the integrated management of urban and zoned rural residential development" including "ensuring consolidated, well-designed and more sustainable urban patterns" and "consideration as to how new land use will be appropriately serviced by transport and other infrastructure"³. In addition, the RPS also requires Councils to "establish a comprehensive approach to the management of the location of urban and rural-residential development."⁴

At a local level, a strategic priority of the Long Term Plan 2015-2025 is to "promote integrated, highly liveable communities". The LTP promotes "integrated planning to meet future challenges and ensure wise investment of resources." The LTP states that this is to be achieved by undertaking a "comprehensive District Plan Review", an "integrated planning approach" and "growth management"⁵.

Having regard to the above, it is considered that the GS would enable much improved landuse and infrastructure integration by setting out the preferred location and form of growth over the next 30

¹ Resource Management Act 1991, Part 2, Section 7(b)

² Local Government Act 2002, Section 14(1)(g)

³ Canterbury Regional Policy Statement, Policy 5.3.1, Pg. 33

⁴ Canterbury Regional Policy Statement, Policy 5.3.2, Pg. 34

⁵ "Long Term Plan Strategic Directions 2015-2025" prepared by Timaru District Council and dated April 2015

years. This will facilitate more effective and efficient infrastructure planning and better management of Council's assets. The development of a GS will also help Council create communities which are liveable, attractive and located to take advantage of infrastructure and community facilities. As such, the development of a District Growth Strategy aligns with the requirements of the RMA, LGA, RPS and LTP.

2.2 GROWTH TRENDS AND PROJECTIONS

The supporting documents⁶ to this report outline the future growth trends and predictions for the Timaru District in regards to population and demographics, households and the economy. The following is a summary of this information:

Population and demographics:

- Historical population growth rates are approximately 0-1%.
- The population is projected to increase from 43,929 in 2013 to a peak of 49,041 in 2038 and decline thereafter to 2045.
- The 65+ age group is projected to increase from 20.1% of the population in 2013 to 33% in 2045.
- Virtually all growth will occur in the 65+ age group, and more specifically in the 75+ age group.

Households and dwellings:

- The number of households is projected to increase from 18,660 in 2013 to a peak of 21,438 in 2043 and decline thereafter to 2045.
- The number of one-person households is likely to increase 31% between 2013 and 2045.
- Future dwelling demand will be predominantly driven by "one-person" and "coupleswithout-children" households.

Economy:

- Gross Domestic Product (GDP) growth in the past ten years is above the national average.
- The largest contributors to GDP are food manufacturing, agriculture and telecommunications.
- Employment growth in the past ten years is above the national average.
- The largest contributors to employment are food manufacturing, agriculture and construction services.

⁶ Available at www.timaru.govt.nz

• The Port of Timaru, industrial activities at Washdyke, dairy factory expansions and general intensification in diary, freight and forestry are expected to be major drivers and contributors to the local economy.

2.3 TIMEFRAME

It is considered that 30 years (2015-2045) is an appropriate timeframe for this GS. This 30-year time frame will mean that the GS will be relevant for the next two District Plan periods. Furthermore, this 30-year timeframe is consistent with Council's Infrastructure Strategy. However, it is important to note that the 30-year timeframe for the GS will not mean that growth management will be static throughout this period. It is crucial that the GS is periodically reviewed and updated during this period to ensure that it can be responsive to trends and opportunities. GS reviews will likely be timed taking into account District Plan Reviews; Council's Long Term Plan cycle; any updated demographic and/or economic projections; or when any unexpected economic and/or demographic changes occur.

3.0 ISSUES IDENTIFICATION

3.1 RESIDENTIAL

Residential zoned land is located in each of the existing settlements across the district including in the larger settlements of Timaru, Geraldine, Temuka and Pleasant Point, as well as in the smaller settlements of Woodbury, Cave, Winchester, Orari, Peel Forest, and Pareora.

The supply of residential zoned land is an important issue for residential growth in the district. An undersupply of residential zoned land may lead to an artificial increase in land prices and subsequently lead to unaffordable housing and land. An undersupply of land could also limit population growth, reduce market choice or force development into less preferred areas. Conversely, an oversupply of residential zoned land can lead to deflated property prices and inefficient infrastructure provision. As noted in the Productivity Commission's report *"Using Land for Housing"*⁷, *"A responsive housing market facilitates labour market mobility, allowing people to move to take up job opportunities, enhancing the productivity of the economy."* As such, providing an adequate supply of land for residential use is important as it will support economic growth.

Having regard to the above, the supporting documents include a comprehensive assessment of residential land supply and demand for the four major settlements in the district. This assessment concluded that there is sufficient residential zoned land to accommodate projected residential growth in Timaru, Temuka and Pleasant Point over the next 30 years. Geraldine may require some additional residential zoned land. In regards to the smaller settlements in the district, it is considered that there is sufficient residential zoned land to cater for any growth in these areas. It is also noted that infrastructure in many of these smaller settlements is often limited and as such, opportunities for additional residential development in these areas is constrained by an absence of available service infrastructure.

Housing choice is also an important issue for residential growth. "Making sure a choice of housing types is available at different price points, to cater for a range of income levels, is critically important to the effective functioning of the housing market, the economy and the wellbeing of New

⁷ "Using Land for Housing – Draft Report" prepared by New Zealand Productivity Commission and dated June 2015

Zealanders."⁸ Providing for a range of housing typologies in the district will ensure that the diverse needs of the residents of the district are met. The district currently provides a reasonable range of housing typologies from low density rural residential choices to medium-high density townhouses. However, to met the growing demand for smaller houses, driven by the ageing population, more high density housing choices such as apartments, particularly in mixed use locations, may be desirable.

A further issue for residential growth is the changing demographic of the district. The ageing population and falling household formation rates will likely lead to an increase in demand for smaller dwellings on smaller sites within close proximity to town centres and other services. It is also noted that there will be sustained, but not increasing demand, for family-type households, being larger dwellings on larger allotments.

Residential growth is constrained by infrastructure availability. For both infill and greenfield development, infrastructure capacity is a critical consideration. Without adequate infrastructure, residential growth cannot be facilitated. Some locations can be more efficiently and affordably serviced than others depending on the capacity and location of the existing network (if any).

In regards to infill development, land supply can be "unlocked" by enabling growth in areas where there is spare capacity within existing infrastructure networks. *"The potential gains from unlocking spare capacity within existing infrastructure networks and using infrastructure more efficiently can be substantial"*⁹. This will require Council to have a deep understanding of existing infrastructure assets, the current and future network demand and planning rules that allow intensification to occur in areas where capacity exists.

In regards to greenfield development, releasing land that is not serviced with infrastructure does little to improve housing supply. Land that is not serviced takes more time to develop and is often more costly for developers. Land that is zoned and serviced, "shovel-ready", will contribute more quickly to housing supply as it is more readily available for housing construction.

As such, infrastructure and landuse integration is critical for residential growth.

⁸ "Using Land for Housing – Draft Report" prepared by New Zealand Productivity Commission and dated June 2015
⁹ As above

Risk associated with natural hazards is a further issue for residential growth. The district is potentially vulnerable to widespread flooding. Residential growth in hazard prone areas puts lives and property at risk and can result in expensive mitigation measures including the on-going maintenance of stop banks. In addition, Regional Council requirements to build above predicted flood levels in particular areas can add additional cost to building.

The location and form of residential growth is also a significant issue for the district. Residential growth that occurs in inappropriate locations can lead to amenity effects on neighbouring sites, reverse sensitivity effects on existing rural productive activities and a reduction in the availability of productive soils. An expanded and low density urban form can result in inefficient public transport and roading networks, increased dependence on private vehicles and fragmented communities. As such, if residential growth is allowed to occur on an ad hoc basis, resulting development patterns are likely to produce adverse environmental effects and increasing economic and social costs to the community.

3.2 RURAL RESIDENTIAL

Rural residential development has historically occurred on an ad hoc basis resulting in "poppy seed" development across the district's Rural zones. In order to address this type of development in the Geraldine Downs the Rural Residential (Geraldine Downs) Zone was introduced by Council. A private plan change has also introduced a Rural Residential zone on Brookfield Road, south of Timaru¹⁰.

The supporting documents include a comprehensive assessment of rural residential growth in the district. The issues identified in the assessment are summarised in turn below.

RPS policy 5.3.1 specifically seeks to limit rural residential development and that where it does occur it is limited to areas attached to existing urban settlements and capable of integrating with existing infrastructure. As such, the concentration of rural residential development in locations close to existing urban centres is an important issue for rural residential growth in the district.

Loss of rural amenity is also an issue for rural residential growth. A proliferation of built form as a result of increased rural residential development can result in adverse amenity effects, particularly in areas which are otherwise predominantly rural in nature.

¹⁰ Private Plan Change 20 (Brookfield Road) is now treated as operative as per Section 86F RMA.

Rural residential growth can also result in a loss of the productive soils in the district. The district's economy is very reliant on the agricultural sector and any reduction in soil resources as a result of encroachment from unfettered rural residential development may impact on this sector.

Rural residential growth is constrained by infrastructure availability in so far as provision of public infrastructure is often not available and as such, private servicing, e.g. on-site wastewater disposal systems are required, which are often costly. Some locations can be more efficiently and affordably serviced than others. Water supply is the most significant infrastructural constraint for rural residential development in the district.

Risk associated with natural hazards is also an issue for rural residential growth. The district is widely affected by potential flooding. Rural residential growth should be avoided in these areas.

Rural residential development can result in reverse sensitivity effects on existing rural productive activities. This can occur if rural residential growth is located in areas subject to the effects of existing (or permitted) rural productive activities. This can place a significant constraint on the operation of rural productive activities.

A further issue for rural residential growth is that this type of development can limit or even prohibit both future urban and rural growth. Where existing urban settlements are surrounded by rural residential development further expansion of these settlements may not be possible, unless the rural residential areas are intensified, which is invariably difficult to achieve in an integrated manner. Residential, commercial and industrial growth in these urban settlements is therefore potentially 'ring-fenced' by low density lifestyle properties. The growth of rural productive activities can also be constrained by the presence of rural residential development. Rural productive activities are not able to be sustained in areas accommodating rural residential development.

An additional issue is that some rural residential landowners expect the provision of urban services, such as sealed roads, waste collection, footpaths, sewer and urban water supply in these areas. The provision of these public services in rural areas is often costly and inefficient for Council to provide.

3.3 RURAL

A further issue in regards to rural growth includes intensification of rural activities, including dairy, sheep/beef and cropping. This intensification can adversely affect water quality and increase pressure on existing water supply schemes. In addition, intensification in the rural sector results in increased heavy vehicle movements and adverse effects on the existing transport network. Intensification can also increase built form and consequently result in adverse effects on rural landscapes.

3.4 COMMERCIAL

Commercial zoned land is located in the town centres of Timaru, Geraldine, Temuka and Pleasant Point and in some out-of-CBD areas such as Ashbury, Church Street, Highfield and Show Grounds Hill.

Retail activities, e.g. supermarkets, department stores, food and beverage services and specialist retailers constitute the vast majority of activity which takes place on commercial zoned land.

A report prepared by Property Economics¹¹ regarding retail in the district concludes that, in regards to the supply of commercial zoned land: "between the current on-the-ground provision and the yet to be developed resource consents, there is considered to be enough retail GFA [gross floor area] to meet [the] current and anticipated requirements of the district over the foreseeable future when considered as a whole."¹² Given this, it is considered that there is sufficient commercial zoned land in the district to cater for existing and likely future demand.

A study of the District's Town Centres¹³ is currently being completed by Council and identifies a number of issues with the District's Town Centres. Those issues relevant to the GS include: high vacancy and a lack of activity in some areas of the district's town centres and retail expenditure leakage and underperformance overall. This study also identifies the main opportunities for the District's Town Centres. Those relevant to the GS include consolidating retail activities to a core area

¹¹ Heath, T. "Timaru Retail Market Assessment, Timaru District Council, February 2015" prepared by Property Economics for Timaru District Council, dated February 2015 and available at www.timaru.govt.nz

¹² Heath, T. "Timaru Retail Market Assessment, Timaru District Council, February 2015" prepared by Property Economics for Timaru District Council, dated February 2015, page 39

¹³ Conlon, G. Geddes, M. "District Town Centres Study 2015" prepared for Timaru District Council and unpublished

and encouraging residential development in the town centres to capture retail leakage and expenditure from outlying areas.

Non-retail activities which are undertaken within commercial zones primarily consist of visitor accommodation and offices. The supporting documents include an assessment of these activities in the district.

In regards to visitor accommodation it is concluded that growth in this sector has been historically low (some 3% per annum), however, the year ended March 2015 has shown more significant growth, some 20%. At this stage it is unclear what has contributed to this growth and whether it is likely to be sustained.

The demand for offices is driven by economic performance in general. Given that the district's economy is performing well it is likely that recent demand for office space will continue. However, it is likely that much of this demand will be met by refurbishment of buildings within Timaru's CBD as opposed to new builds.

3.5 INDUSTRIAL

At present industrial zoned land is located in various locations across the district including in the Timaru CBD, Port of Timaru, Washdyke, Redruth, Geraldine and Temuka.

The supporting documents contain an assessment of industrial zoned land supply and demand for the district. This assessment concludes that additional industrial zoned land will be required in Geraldine, Temuka and Timaru over the next 30 years. Pleasant Point has sufficient industrial zoned land to accommodate industrial growth.

Demand for industrial zoned land is primarily being driven by significant increases in the dairy, forestry and freight sectors and increased activity at the Port of Timaru and Washdyke.

The most significant issue for industrial growth in the district is the availability of affordable, well serviced land in appropriate locations (away from sensitive land uses) with good links to local, regional and national transport networks, in particular State Highway 1 and the Port of Timaru.

3.6 COMMUNITY FACILITIES AND SOCIAL INFRASTRUCTURE

A key aspect in providing for future growth and change is the efficient development and maintenance of community facilities and social infrastructure. These facilities and services help individuals, families, groups and communities in the district to meet their social needs, maximise their potential for development and enhance community wellbeing. These facilities/services are discussed in turn below.

RESERVES AND OPEN SPACE

Reserves and open spaces are located throughout the district and generally cover holiday settlements e.g. Milford Huts, Rangitata and Opihi Huts, and recreation land and open space along the coast, within existing urban settlements, adjacent to residential zones and in rural areas.

The Timaru District Council Parks Strategy 2012 to 2022¹⁴ (Parks Strategy) outlines the current supply of recreation land in the district and estimates future demand. The Parks Strategy concludes that in comparison with other local authorities in New Zealand, the district has a low provision of Sport and Recreation, Neighbourhood and Natural Parks and low provision of recreation land overall at only 10.9 hectares per 1000 residents. The national average is 20.9 hectares per 1000 residents.

In regards to future demand, the Parks Strategy recommends that a provision of 12.5hectares per 1000 residents be achieved and maintained in the district. As such, additional recreation zoned land is likely to be required over the next 30 years. Recreation and open space land should be provided in tandem with residential development and provided in accordance with an agreed strategy.

The Parks Strategy notes that the changing pattern of demographics, particularly the ageing population, is likely to have an impact on recreation land use. In particular, it is likely that the demand for active sports fields may diminish over time, particularly in ten years plus. It is likely that the recreation demand and park use will shift to other activities such as gardens, walking or demand for sports facilities more popular with older age groups.

A further issue for the GS is that the Timaru Cemetery is likely to reach capacity in the next 10-15 years. Therefore, a further cemetery site will be required.

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¹⁴ Kelly, J. "Timaru District Park Strategy 2012 to 2022". Report commissioned by Timaru District Council. July 2011. Jayson Kelly, Director, Xyst.

COMMUNITY FACILITIES

The provision of community facilities, such as libraries, recreation facilities and schools is another important issue for growth management. Any growth planning should include consideration of these facilities.

3.7 **HEALTH AND WELLBEING**

Health and wellbeing are important issues for growth. Patterns of growth which require vehicle reliance contribute to unhealthy, physically inactive lifestyles with less engaged communities. Denser patterns of urban growth, with shorter commuting times, encourage more physical activity, have more social connectedness and civic engagement and visible vitality. In addition, mixed use developments can help to widen social options and provision of easily accessible community, education and recreation facilities and services provide opportunities for local residents to connect.

3.8 **INFRASTRUCTURE**

One of the issues relevant to all infrastructure suppliers is the need to know where growth is likely to occur in the district in the future. In other words, infrastructure provision should be integrated with landuse. Without this integration, infrastructure suppliers find it difficult to accurately plan for the future and to achieve efficiency in infrastructure provision and costs.

A further issue for infrastructure in general is reverse sensitivity effects. Growth which occurs in close proximity to existing networks and facilities can result in adverse reverse sensitivity effects on this infrastructure, thereby constraining its operation.

Another common issue is that the more elongated an infrastructure asset is e.g. road, water supply network, the more expensive it is to maintain and renew. Further, the lower the density of an urban form the higher the infrastructure cost will be to those residents. Therefore, consolidated urban forms are generally more cost effective than dispersed patterns of growth.

In terms of issues specific to each infrastructure supplier, these are outlined below:

STORMWATER

Future demand for stormwater may come from communities not currently connected to the reticulated system or infill development within existing settlements. This will increase the cost of services and have dual impacts of increasing impervious areas in the district and degrading secondary flow paths for stormwater. Infill and new residential development increases the impervious footprint of the existing urban areas, and will subsequently increase the rate of stormwater runoff, potentially requiring infrastructure upgrades.

WASTEWATER

If future demand for wastewater services comes from communities not currently connected to the existing Inland Towns pipeline, such as Winchester and Seadown, or from rural residential development, this would be costly. The extension of urban services at the periphery of residential zones will increase the cost of services, compared to infill development. Industrial and commercial growth is expected to remain gradual. However, if a major 'wet' industry left Timaru District, the impact could be significant either on wastewater quantities or maintaining the affordability of the scheme.

WATER

Land use change and industry growth may potentially have major impacts in terms of the quantity of water required. In addition, intensification in rural areas places increased pressure on rural water schemes that were principally designed for stock water.

TRANSPORTATION

An increase in freight from the dairy, forestry and logistics sectors is likely to impact on the existing transport network in terms of maintenance and the suitability of roads. In terms of rural roads, increased traffic results in deterioration of rural roads where traffic mass and volumes exceed design standards.

A further issue for transportation is the effect growth can have on the district's transportation corridors. Transport corridors are key routes used by heavy vehicles. These corridors are vitally important to ensure efficient movement within urban settlements, across the district and access to the State Highway network and port. Landuse and infrastructure integration is important to ensure the efficient use of these transportation corridors is not undermined.

There is also likely to be a significant increase in traffic flows and higher traffic movements from outlying areas north of Timaru due to industrial growth in Washdyke. Existing roads in the Washdyke expansion area and western areas have not been historically constructed to industrial standards. As such, parts of the roading network will require upgrading with widening, new kerb and channel and strengthening. Council has begun to undertake this upgrade work. There is also potential for congested traffic flows on the northern corridor of State Highway 1 and related issues arising from direct access onto the State Highway.

An ageing population is expected to result in increased demand for public transport and pedestrian movements. In addition, and as discussed under Section 3.6 above, the district has seen and is likely to see a continued demand for cycling, and in particular recreational cycling.

Peripheral expansion of urban areas would require further extension of the existing road network.

WASTE MINIMISATION

Increased growth may lead to increased solid waste, however Redruth, Pleasant Point, Temuka and Geraldine transfer stations each have sufficient capacity for at least the next 30 years. In fact, the most significant issue for solid waste disposal would be a reduction in solid waste, particularly commercial waste, to the point where the district's landfill is no longer efficient.

In terms of solid waste collection services, infill development would likely lead to increased efficiencies. Peripheral expansion would require extension of existing collection services, though this is generally easily catered for.

ELECTRICITY/TELECOMMUNICATIONS

In regards to electricity, a significant increase in future demand in South Canterbury as a whole is predicted due to developments at Oceania Gold's Glenavy Factory and the proposed Hunter Downs irrigation scheme. This in turn may affect supply and or asset provision in the Timaru District. In order to more accurately plan and provide for this potential increase in demand, electricity suppliers need to know where growth is likely occur in the district. Furthermore, infill development in some existing urban areas e.g. parts of Geraldine, may be problematic in terms of electricity infrastructure due to the limited ability of the existing network to expand.

As with all other infrastructure suppliers, telecommunication suppliers need to know where growth is likely to occur in order to more accurately plan network provision.

4.0 GROWTH OPTIONS EVALUATION CRITERIA

4.1 SELECTION OF CRITERIA

In order to assess the strategic growth options for the Timaru District, it is first necessary to develop evaluation criteria. The evaluation criteria in Table 1 below have been derived with specific reference to the RPS. The RPS has been developed in accordance with the RMA and with significant consultative input from the public and local authorities. The RPS gives an overview of the significant resource management issues facing the region and sets out objectives, policies and methods to resolve those issues and achieve integrated management of natural and physical resources. Territorial authorities, including Timaru District Council, must give effect to the RPS. The criteria in Table 1 reference only those parts of the RPS policy which are most pertinent to growth in the Timaru District.

4.2 WEIGHTING

It is acknowledged that some criteria should, and will, have a more significant part to play in the selection of the preferred strategic growth option than others. This is because in reality some factors, like the ability to efficiently service an area, may have more significant impact than others, like reverse sensitivity on telecommunications infrastructure.

As such the criteria in Table 1 below are allocated different weighting factors with 1 being the lowest and 3 being the highest. The score that a strategic growth option will achieve will be multiplied by the weighting factor. For example, a score of 2 for a criterion that is weighted with a 3 would mean an ultimate score of 6 for that criteria.

Table 1 - Assessment Criteria and Weighting

RPS	CRITERIA	DESCRIPTION	WEIGHTING	COMMENT
POLICY				
Policy 5.3.1- Regional growth	Integrated management of growth	Integrated landuse and infrastructure in a coordinated pattern.	3	This criterion must be met to avoid environmental effects and control infrastructure costs.
Policy 5.3.1- Regional growth	Compact urban form	Promote a consolidated form of urban and rural-residential development within and attached to existing towns and villages.	3	This criterion must be met asaprimaryfocusonconsolidationmeanstheefficientformanddevelopmentofexistingsettlementswillnotbecompromised.
Policy 5.3.1- Regional growth	Choice	Encourage a range of choice within urban areas for residential and business development including housing choice, recreation and community facilities and business opportunities.	2	This criterion should be met to provide lifestyle choices to meet market demand and flexibility for commercial development.
Policy 5.3.2 - Development conditions	Productive soils	Avoid further reduction in the district's soil resources through fragmentation of rural land.	2	This criterion should be met as the protection of productive soils will sustain their life supporting capacity and recognises the significance of agriculture to the district's economy.
Policy 5.3.2 - Development conditions	Incompatible land uses	Direct sensitive residential growth away from incompatible land uses such as those which produce noise and odour emissions including rural activities which may result in reverse sensitivity effects.	2	This criterion should be met in order to avoid reverse sensitivity effects on existing or permitted land uses.
Policy 5.3.2 - Development conditions	Natural hazards	Residential growth, and where appropriate commercial and industrial growth, is directed away from areas subject to natural hazards.	2	This criterion should be met to avoid risk to human life, and where appropriate, property.

RPS POLICY	CRITERIA	DESCRIPTION	WEIGHTING	COMMENT
Policy 5.3.5 - Servicing development Policies	Servicing Reverse sensitivity	Ensure any development can be efficiently and effectively served for the collection, treatment and disposal of sewage and stormwater, and the provision of potable water. Avoid land uses which may result in	3	This criterion must be met to achieve integrated landuse and infrastructure. This criterion should be
5.3.6/5.3.8/5.3.9/ 5.3.10 - Effects on Infrastructure	effects on infrastructure	reverse sensitivity effects on transportation, telecommunication, sewerage, water and stormwater infrastructure.	1	considered in order to avoid reverse sensitivity effects on existing infrastructure.
Policy 5.3.7 - Strategic Land Transport Network and arterial roads	Effects on strategic transport network	Ensure new development does not compromise the existing capacity or functioning of the strategic land transport network and supports public transport services.	3	This criterion must be achieved to protect the strategic land transport network and support public transport.
Policy 5.3.8 - Land use and transport integration	Land use and transportation integration	Promotion of accessibility, modal choice and transport modes.	2	This criterion should be met to ensure the use of transport modes which have low adverse environmental effects.
Policy 5.3.12 - Rural production	Effects on rural productive activities	Ensure appropriate separation between land uses which may result in reverse sensitivity effects on rural productive activities.	2	This criterion should be met to ensure the continued operation of rural productive activities and to recognise the significance of agriculture to the district's economy.
Policies 14.3.2/16.3.1 - Emissions and Efficient use of Energy	Emissions/Trip distances	Encourage patterns and forms of urban settlement and infrastructure which decrease production of motor vehicle emissions and decrease trip distances.	1	This criterion should be considered in order to avoid adverse effects resulting from forms of development which require heavy reliance on private vehicles.

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5.0 STRATEGIC GROWTH OPTIONS

Four strategic growth options are outlined below. These options describe how growth could be managed over the next 30 years in the Timaru District. These growth options are based at a high level and will each be assessed in Section 6.0 below.

5.1 OPTION 1: STATUS QUO

This could also be referred to as the "business as usual" option. This is what the future will look like if we continue to do things much as we do today. Some of the residential development within our urban settlements is within greenfield locations and typically represents 10 dwellings per hectare. Some infill development occurs but this is ad hoc and not necessarily in locations which are well serviced and close to transport nodes and other community services. Infill development occurs at medium rather than high density levels. Rezoning of additional residential, commercial and industrial zoned land occurs, but as and when required on the edges of existing settlements. This rezoning often reflects a "spot zoning" approach and is often developer, rather than council, led. There is limited control on residential development in rural areas. Rural residential development occurs on an ad hoc basis and rural residential zoning is implemented reactively as growth occurs in any particular area.

5.2 OPTION 2: PERIPHERAL EXPANSION

This option would see growth accommodated in greenfield areas on the edges of our existing settlements. Our existing settlements would expand outwards into surrounding rural areas. Infill development is limited and minimum lot sizes remain at medium density thresholds. Infill development and consolidation of our existing settlements is not actively encouraged or facilitated. Infrastructure is extended to reach areas of new growth.

5.3 OPTION 3: CONSOLIDATION

This option imagines much greater consolidation within the districts existing urban settlements. Consolidation is achieved through higher densities and facilitating greater levels of infill development anywhere within existing urban areas. The built form within our settlements is higher and denser than before. Units and townhouses are commonplace and often replace single dwellings on larger lots. Apartments would be located within and close to our town centres, particularly the Timaru CBD. A defined urban limit is in place around each of our existing settlements and no urban expansion beyond this occurs. No further rural residential development occurs. Industrial and commercial growth is accommodated within existing areas through increased densities and building heights and redevelopment of existing sites.

5.4 OPTION 4: MANAGED GROWTH

The principles underpinning this approach are that both consolidation and expansion should occur, but in specific strategically located areas.

Consolidation should be concentrated and specifically directed to areas around existing commercial and service centres which are well supported by public transport, walking and cycling networks and which have sufficient infrastructural capacity. Consolidation would be facilitated through allowing higher densities and taller buildings in these specific locations.

Peripheral expansion would be allowed to occur in a controlled manner only, in areas which are/can be well serviced and well connected to existing urban settlements.

Rural residential development would be directed to specific areas which: are well connected to existing urban settlements; capable of integrating with infrastructure; avoid productive land; minimise the potential for reverse sensitivity effects and avoid risk from natural hazards.

6.0 ASSESSMENT OF STRATEGIC GROWTH OPTIONS

This section now assesses each of the strategic growth options identified in Section 5.0 above.

6.1 CRITERIA ASSESSMENT

Table 2 shows the assessment of growth options against the criteria and weighting outlined in Section 4.0. In this assessment the identified options are weighted and scored, with comment provided. The scoring is based on:

- 0 = Does not meet criterion
- 1 = Partly meets criterion
- 2 = Fully meets criterion

Whilst this scoring is obviously simplistic and tends to generalise complex issues, it does provide a useful way of rating the strategic growth options when there are various factors to consider.

Table 2 – Assessment of growth options

STATUS QUO

CRITERIA	WEIGHTING	SCORE	WEIGHTED SCORE	COMMENT
Integrated management	3	0	0	No integrated management.
Compact urban form	3	1	3	Some consolidation.
Choice	2	1	2	Some choice, though higher density residential choices are limited.
Productive soils	2	0	0	Large reduction in productive soils occurs due to rural residential development.
Incompatible land uses	2	0	0	Reverse sensitivity effects occur.
Natural hazards	2	1	2	Natural hazard areas generally avoided.
Servicing	3	1	3	Some existing zoned land is not/cannot be effectively serviced.
Reverse sensitivity effects on infrastructure	1	1	1	Some reverse sensitivity effects occur.
Effects on strategic transport network	3	0	0	Rural residential development in particular, requires expansion of the existing road network and results in increased vehicular movements, reduced efficiency of public transportation modes and increased reliance on private cars.
Land use and transportation integration	2	1	2	Some consideration of this for new development.
Effects on rural productive activities	2	0	0	Rural residential development results in reverse sensitivity effects on rural productive activities.
Emissions/Trip Distances	1	0	0	Little or no consideration given to this.
	TOTAL SCORE			

PERIPHERAL EXPANSION

CRITERIA	WEIGHTING	SCORE	WEIGHTED SCORE	COMMENT
Integrated management	3	0	0	Infrastructure is not integrated with landuse, new growth occurs anywhere on the periphery of existing settlements.
Compact urban form	3	0	0	Consolidation not encouraged.
Choice	2	1	2	Some choice, though higher density residential choices are limited.
Productive soils	2	0	0	New growth forecloses the use of productive soils.
Incompatible land uses	2	0	0	New growth occurs in sensitive existing rural areas.
Natural hazards	2	1	2	More chance of natural hazard risk for some settlements due to expansion. Additional stop banks required.
Servicing	3	1	3	Servicing can be costly and inefficient due to network expansions.
Reverse sensitivity effects on infrastructure	1	1	1	New growth may encroach into areas where infrastructure is located.
Effects on strategic transport network	3	0	0	Expansion of the existing roading network required resulting in increased vehicular movements, reduced efficiency of public transportation modes and increased reliance on private cars.
Land use and transportation integration	2	0	0	Reduced efficiency of public transportation modes and increased reliance on private cars.
Effects on rural productive activities	2	0	0	New growth in rural areas results in reverse sensitivity effects on rural productive activities.
Emissions/Trip Distances	1	0	0	This form of growth increases vehicular movements and emissions.
	тот	AL SCORE	8	

CONSOLIDATION

CRITERIA	WEIGHTING	SCORE	WEIGHTED SCORE	COMMENT
Integrated management	3	0	0	Infrastructure is not integrated with landuse, new growth occurs anywhere within existing settlements.
Compact urban form	3	2	6	Consolidation is promoted anywhere within existing urban settlements.
Choice	2	1	2	Some choice, though low density and rural residential choices are limited.
Productive soils	2	2	4	No further reduction in productive soils.
Incompatible land uses	2	1	2	There is no scope to locate noxious activities in remote locations therefore incompatible landuses may be located together.
Natural hazards	2	1	2	Existing urban areas subject to natural hazards may be further consolidated.
Servicing	3	1	3	In general, consolidation should lead to more efficient and affordable infrastructure, however, this may not be the case in areas where capacity is not available.
Reverse sensitivity effects on infrastructure	1	1	1	Land uses surrounding existing infrastructure may be consolidated, increasing the likelihood of reverse sensitivity effects.
Effects on strategic transport network	3	1	3	In general, consolidation leads to more efficient public transportation services. In regards to the capacity and functioning of the transport network, where consolidation occurs in areas with existing capacity limitations, the transport network may be compromised.
Land use and transportation integration	2	1	2	Consolidation would not be directed to specific areas, therefore, landuse may not be well integrated with transportation.
Effects on rural productive activities	2	3	6	No encroachment into existing rural areas.
Emissions	1	2	2	Consolidation should generally result in reduced motor vehicle dependence and consequently reduced emissions.
	TO	TAL SCORE	33	

MANAGED GROWTH

CRITERIA	WEIGHTING	SCORE	WEIGHTED SCORE	COMMENT
Integrated management	3	2	6	Integrated management approach established which promotes integration of landuse and infrastructure in a coordinated pattern of development.
Compact urban form	3	2	6	Consolidated development provided for in appropriate locations.
Choice	2	2	4	Range of choice provided in housing typologies, allotment sizes, location, recreation, community facilities and business opportunities.
Productive soils	2	1	2	Significant further reduction in soil resources is avoided by limiting rural residential development to areas close to existing urban settlements.
Incompatible land uses	2	2	4	Residential, industrial and commercial development is directed to appropriate areas with the ability for more noxious landuses to be located away from sensitive landuses.
Natural hazards	2	2	4	Residential growth, and where appropriate commercial and industrial growth, is directed away from areas subject to natural hazards.
Servicing	3	2	6	Growth is directed to areas which are/can be effectively and efficiently serviced.
Reverse sensitivity effects on infrastructure	1	2	2	Growth is directed away from infrastructure to avoid reverse sensitivity effects.
Effects on strategic transport network	3	2	6	Growth is directed to areas which will not compromise the capacity or functioning of the strategic land transport network and which support public transport.
Land use and transportation integration	2	2	4	Growth is directed to areas which allow for accessibility, modal choice and transport modes which have low adverse effects.
Effects on rural productive activities	2	2	4	Rural residential and residential growth is directed to areas where reverse sensitivity effects on rural productive activities can be avoided or managed.
Emissions/Trip Distances	1	2	2	Growth will be directed into areas that will reduce dependence on private vehicles and vehicle trips.
TOTAL SCORE			50	

The assessment above establishes that Option 4 (Managed Growth) is the option that best meets the evaluation criteria, followed by Option 3 (Consolidation). Option 1 (Status Quo) and Option 2 (Expansion) met very few of the evaluation criteria.

7.0 CONCLUSION

This paper has identified the issues and options arising from all growth sectors in the district, including identifying key growth constraints and trends in regards to residential, industrial, commercial, recreational, rural and rural residential landuse and infrastructure.

Four strategic growth options have been outlined, these being: Status Quo; Peripheral Expansion; Consolidation and Managed Growth. Each of these four strategic growth options have been assessed against evaluation criteria developed from the RPS. This assessment found that the Managed Growth option best met the evaluation criteria.

The issues associated with growth are varied, however, they can be generally addressed by directing growth into appropriate locations which are effectively and efficiently serviced whilst avoiding significant adverse environmental effects.

The issues and options discussed and assessed in this paper are intended to provide a basis for public consultation on this matter, to stimulate debate and ultimately inform the development of a GS for the district.

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