

**REVIEW OF PROPOSED RETAIL FLOOR SPACE  
AT THREE PARKS WANAKA**

**PREPARED FOR QUEENSTOWN LAKES  
DISTRICT COUNCIL**

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## **EXECUTIVE SUMMARY**

Philip Donnelly and Associates were engaged by the Queenstown District Council to review the assumptions that led to the amount of retail provided for the Three Parks Plan Change and to comment on some related issues. This meant reviewing the conclusions of the report titled “Wanaka Land Demands” and, in particular, the report prepared by RCG Ltd titled “Wanaka’s Future Retail Land Needs At Three Parks”. This was the RCG report prepared in support of Three Parks Plan Change, which was a key influence on the report Wanaka Land Demands.

The review focuses on the appropriateness of the RCG report’s retail modelling methodology and stated assumptions, having regard to alternatives. However, it was not possible to check RCG report estimates and projections due to insufficient data.

Retail models are based on simplistic assumptions that do not have regard to generally accepted applied economic theory while no financial assessment is undertaken to back up the commercial viability of the floor space estimates.

The RCG report is primarily aimed at estimating the floor space required at Three Parks over the period 2006 to 2026. The RCG report, states that its modelling is based on the expenditure methodology. While not stated in the report, an alternative approach was to undertake the forecasts based on the sales method which is far less problematic to apply. However, the required retail sales data is not available for Wanaka and, therefore, the sales method is probably not a realistic alternative forecasting option.

The RCG reports expenditure estimates and projections are based on RCG’s retail model. In theory, the expenditure methodology requires estimating four components of spend on retail stores, namely, resident household, resident non-household (referred to as business), visitor and mail order/internet expenditure. However, the RCG estimates and forecasts are confined to resident households and visitor-spend. Mail order and internet-spend at Wanaka’s retail sector is likely to be insignificant.

While total business-spend by store type is not projected, the RCG report estimates and forecasts one component of it, namely spend by the construction sector in respect to the building of new households and commercial buildings and the alteration and additions to them.

The principal source of information for estimating catchment household spend is SNZ’s household expenditure survey (HES). However, it was necessary for RCG to convert national published HES data into retail spend by the 13 retail store types

used in the RCG report. The RCG report had to address three problems to do that, namely, apportioning HES category-spend between retail and non-retail-spend, deriving spend for Wanaka's primary and secondary catchment by store type from national average data and apportioning retail-spend across the adopted store types. The RCG report either does not explain or does not explain in sufficient detail to form an opinion on the methods used to overcome those problems. However, the estimates of household expenditure by store type appear reasonable.

The 2006 household expenditure by store type is projected using the council's household growth forecasts. In addition, a 1.5 percent per annum increase is assumed for non-population factors that cause retail spend to increase (e.g. increased real household incomes) which is considered reasonable over the forecast period as a whole.

Visitors' 2006 retail-spend at Wanaka is estimated using the Ministry of Tourism estimates of the total spend of domestic and international visitors (i.e. retail and non-retail combined). SNZ's Tourism Satellite Accounts are used to estimate the retail component of that total spend and to apportion it across the store types categories used in the RCG report. While there are technical problems associated with that approach, essentially relating to inadequate data and assuming national ratios are applicable to Wanaka, there is no better alternative method to estimate Wanaka visitor-spend by store type. The results, however, should be treated as indicative as there is potential for substantial estimation error.

Visitor retail-spend estimates are projected out to 2026 using Ministry of Tourism domestic (and international) spend forecasts (i.e. for New Zealand) for the period 2006 to 2012. The RCG report states that the Ministry of Tourism forecast 2.77 percent increase per annum for domestic spend and 6.27 percent increase per annum for international visitors. The assumed annual rate of increase in spend for domestic and international visitors is questionable as it is extrapolated out to 2026.

The RCG report estimates and forecasts the construction sector's spend on Wanaka's retail sector as this is perceived as being an important component of total business-retail expenditure. Based on those estimates, the RCG report concludes that 20,000m<sup>2</sup> of floor space will be required at Three Parks by 2026 to accommodate building supplies/hardware spend as well as spend on furniture, appliances and home ware. However, for a number of reasons, the estimates are considered to substantially overstate the retail floor space requirements at Three Parks to support construction activity.

Those reasons include the assumption that all building materials will be supplied by the retail sector and ignoring the substantial supplies by manufacturers and wholesalers. This includes the total estimated non-residential building construction and alteration and additions activity, rather than the marginal change in value and assumes a questionable one percent per annum increase in the cost of real construction.

In respect to the estimates of additional expenditure on furniture, appliances and home ware, there appears to be an element of double-counting by the RCG report incorrectly assuming that households' expenditure on those items is not fully accounted for in SNZ's Household Expenditure Survey. In addition, no allowance is made for the likelihood that retailers in the larger urban markets will compete with local retailers to supply the products of those store types.

Based on the household and visitor forecasts, the RCG report concludes that, excluding accommodation, an additional 6788m<sup>2</sup> of floor space is required between 2006 and 2011, an additional 14151m<sup>2</sup> between 2006 and 2016, an additional 21896m<sup>2</sup> between 2006 and 2021 and an additional 30540m<sup>2</sup> up to 2026. Those figures are marginally adjusted for the estimated 2006 leakage. However, I consider the RCG methodology for estimating leakage is both problematic and technically flawed.

The floor space projections are considered improbable as they assume that all the growth in retail-spend that occurs in the primary and secondary catchment will be captured by Wanaka's retail sector. In fact, local capture will be quite low for some store types, such as appliance retailing, department stores, furniture and floor coverings, other stores, footwear clothing and soft goods and recreational goods, as a large percentage of total catchment expenditure will be spent outside Wanaka.

Thus, while it is very likely that significant new retail space will be required in Wanaka over the period 2006 to 2026 if the growth projection assumed by the RCG report proves to be correct, the report's estimates are optimistic. Nevertheless, some of the optimism will be accommodated by the introduction of new competition in the supply of retail goods and services and retail floor space, as the new competition will stimulate demand for and supply of retail goods/services and retail floor space in Wanaka.

Due to the forecasting uncertainty associated with retail modelling, the best approach is to enable the market to determine the appropriate supply of space, but to limit the amount of new space that can be built at any given period without review, In this

respect, I fully support the proposed enabling of 12,000m<sup>2</sup> of retail floor space at Three Parks as I consider it a reasonable first-up allocation that will not cause trade competition effects on the town centre that are more than minor while creating a number of positive economic effects.

Wanaka Town Centre rentals are the outcome of market transactions between willing landlords and tenants and, therefore, they cannot be too high in that sense. However, imposing limits on the town centre and location of business activity through land use zoning has undoubtedly inflated town centre property and rental values, especially for waterfront property.

However, the recent economic boom is likely to have inflated town centre land prices faster than rents creating a paradox where developers claim rents are too low while existing tenants claim the opposite. Capital gains expectations will have reduced the incentive of existing town centre property owners to sell their land further fuelling business land inflation relative to rents. Ultimately, lack of adequate commercial property development will force rents to rise to the level required to induce adequate development.

Inflation is very destructive of the Wanaka community's economic well-being. Approval of the Three Parks Plan Change, will reduce the potential for property and rental values to become detached, and lower the potential for welfare-reducing land inflation. A less constrained situation will also aid the development and redevelopment of existing town centre land by reducing the incentive of existing landowners to sit on land in the expectation of substantial capital gains. It will also reduce the incentive for town centre tenants to want to escape to the industrial zoned land at Anderson Heights to avoid high rents.

Supermarkets can vary substantially in size from a few 100m<sup>2</sup> to 8000m<sup>2</sup> and, therefore, there is no reason why Wanaka could not support two supermarkets. However, a supermarket of around 3000m<sup>2</sup> would undoubtedly cause considerable pressure on the existing New World, especially as its car-parking situation is less than ideal. However, household growth over the 2011 to 2016 period should help rectify the competition effect. Depending on the rate of growth in supermarket-spend the existing supermarket could be downgraded in size, but competition between the two supermarket chains is unlikely to cause it to close, as they are likely to be aware of Wanaka's future growth prospects.

## **1 INTRODUCTION**

Queenstown Lakes District Council engaged Philip Donnelly and Associates Limited (PDL) to review the assumptions that led to the amount of retail provided for the Three Parks Plan Change and to comment on some related issues. This meant reviewing the conclusions of the report titled “Wanaka Land Demands” and, in particular, the report prepared by RCG Ltd titled “Wanaka’s Future Retail Land Needs At Three Parks” (the RCG report) in support of Three Parks Plan Change.

The council’s brief in respect to the review was as follows:

- (i) A full review of the report by RGG Ltd “Wanaka’s Future Retail Land Needs At Three Parks” with particular focus on the appropriateness of the projected demand concluded
- (ii) Consideration of the nature of the demand projected
- (iii) Consideration of the current rental levels in Wanaka and whether the conclusions of RCG are appropriate, namely, are they too high, especially as some people maintain that they are set so low as to make redevelopment unattractive in Wanaka Town Centre.
- (iv) Given that a new supermarket is assumed for Three Parks, is retention of the existing supermarket in the Town Centre likely and could a town of Wanaka’s size maintain more than one supermarket?
- (v) To establish what is an appropriate amount of retail to enable at Three Parks.

Inadequate information is generally provided in the RCG report to verify the estimates and projection of expenditure, while no independent estimates have been made. Thus, this report focuses on the appropriateness of the methodology and stated assumptions. Where it is considered relevant, alternative methodologies to those used by RCG are discussed.

## **2 GENERAL COMMENT ON ADEQUACY OF RETAIL MODELLING**

Before undertaking the requested review it is relevant to comment on the usefulness of retail models, especially as this issue is not discussed in the RCG report

Contrary to what is frequently assumed, retail models are not economic models, that is, they do not have regard to relevant economic theory. Nor do retail models undertake any financial analysis to back up their floor space forecasts. Consequently, retail models are underpinned by some (implicit) simplistic assumptions.

Ideally, forecasts of retail demand and supply should be part of a wider general equilibrium model of the wider economy (i.e. a dynamic economic model of the Wanaka economy) which included forecasts of industry growth and the relationship between such factors as product prices, interest rates, tax rates and so forth. However, the data requirements for general equilibrium models are enormous and far exceed the potentially available data sources. As a consequence, simplistic retail modelling is used as a substitute for sophisticated economic modelling.

Retail models implicitly adopt a “fixed cake” assumption. This assumption assumes that total retail spend is fixed at any point in time, but that spend increases over time as a restricted number of factors that influence retail spend grow. It is assumed that the “retail cake” is divided amongst retailers depending on the number of competitors in the market. Therefore, new retailers that enter the market result in existing retailers receiving smaller slices of the “retail cake” as the total retail spend has to be shared amongst an increased number of retailers. The aim of retail models is generally to determine whether the retail cake is growing fast enough to avoid or mitigate the potential for the smaller slices to drive existing retailers out of business.

The fixed cake assumption is devoid of any underpinning applied economic theory in relation to the effect of new competition on retail supply and demand and, consequently, greatly overstates the competition impact on existing retailers. This is because total retail-spend is not fixed at any point in time as assumed by the fixed cake theory. New retail entrants help to expand the size of the total spend on retail (i.e. the size of the cake) as the unavoidable effect is to lower average retail prices.<sup>1</sup> The budget travel market highlights the effect of increased competition in helping to expand the size of the domestic and international travel market. Thus, depending on the quantum of new retail competition, potentially, retail models understate the likely increase in retail demand (for goods and services and new floor space) and overstate the potential competition effects.

An associated problem with retail modelling is that it is based on static rather than dynamic analysis of the retail market. For example, retail modelling assumes many factors that determine the required floor space at any time are fixed when in fact those factors are variable. For instance, sales/m<sup>2</sup> ratios used to convert retail spend forecasts into floor space requirements are assumed to be fixed, e.g. \$10,000 of food store spend is required to support 1m<sup>2</sup> of floor space. In fact, ratios are underpinned

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<sup>1</sup> This is because, in economic jargon, new competition will change the point at which retail supply (curve) intersects retail demand (curve). The net effect is to lower average price and to increase the total quantity of retail goods and services demanded and supplied. In turn this impact will increase the quantum of supportable retail floor space.

by a whole range of variables such as rents, commercial land values, and retailers' costs of purchase, as well as competitive strategies of retailers and/or retail property owners.

Retail models depend on published data sources that are very deficient, i.e. in respect to the end use. As a consequence and depending on the methodology, many assumptions and data manipulations, some of dubious statistical validity, are required in the modelling process to try and make up for those deficiencies. It is notable that there is no general consensus amongst retail modellers on the appropriate methodology for undertaking retail assessments. Nor is there any consensus on the value of retail assessments, given that they do not have regard to universally accepted relevant applied economic theory or undertake any form of financial assessment of commercial viability.

### **3 SUMMARY OF RCG'S METHODOLOGY**

In summary, RCG's methodology involves the following steps:

- selection of primary and secondary catchments that will provide the main source of resident demand
- estimation and projection of the total household-spend generated by those catchments on retail store types,
- estimation and projection of visitor-spend in Wanaka
- estimation of one element of resident non-household spend (i.e. the construction sector)
- conversion of the various estimates and projections of spend into retail floor space by store type
- estimation of leakage of existing spend expressed in floor space terms
- determination of the total projected retail floor space that can be supported in Wanaka town centre and Three Parks.

The review comments on each of those steps.

#### **4 SELECTION OF CATCHMENTS**

RCG selects both primary and secondary catchments. I agree with the catchment areas as shown in the map in the RCG report.<sup>2</sup>

#### **5 RETAIL EXPENDITURE ESTIMATES**

##### **5.1 RCG report approach and alternative options**

Section 5: Retail expenditure projections (2006 – 2026) of the RCG report outlines RCG's methodology for and provides estimates of household-spend and visitor-spend for the period 2006 to 2026. The RCG report does not explain the alternative methodologies available for estimating and projecting retail spend. Obviously, the alternatives are relevant in evaluating the merits of the reports estimates and projections.

In this respect, there are two generic approaches, namely, the expenditure and sales methods. The expenditure and sales methods of estimating retail spend are effectively mirror images of each other as consumer expenditure on retail sales equals retail sales.

It is noteworthy that retail spend is made up of four categories, namely, resident catchment household spend, visitor spend, resident non-household spend (i.e. non-private households, business and government) and mail order/internet spend. Each category needs to be estimated, usually separately, under the expenditure method. The expenditure method is generally used to forecast up to three of the four different categories that make up retail spend. The mail order/internet category is ignored in retail modelling if the expenditure method is used. This is due to estimation problems and an assumption that this category of expenditure is small.

There are a number of inherent problems with the expenditure method of estimating and forecasting retail demand which will be explained in more detail later in this report. Generally, however, the problems stem from the lack of the detailed data required to make the spend estimates and to project those estimates.

As previously stated, the sales method forecasts actual retail sales (i.e. spend), which inherently includes all four categories of spend and, therefore, those elements do not require individual estimation. Potentially, the sales method is far less problematic while its methodology is simpler to apply. Generally, it involves determining retail sales for an area broken down by store type groups and then

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<sup>2</sup> Refer page 8.

extrapolating the estimated sales by accepted statistical methods (e.g. exponential forecasting).

The lack of sales data can rule out the use of the sales method while it is best applied to mature retail markets (i.e. markets that have a full range of product and services and a high level of competition). If the retail market is immature, as it is in Wanaka, there is likely to be substantial spend outside the catchment (i.e. leakage). Consequently, the sales method may understate the future level of growth, as the forecast will not allow for the ability of a growing population to support a greater depth of retail. That is, it is better applied to large urban areas than small towns such as Wanaka.

The sales method relies on SNZ supplying information by retail store type for the relevant catchments from its National Retail Trade Survey (NRTS) database as that is the only significant source of information. In the case of Wanaka the required information is not available. This is because the NRTS is based on a sample survey that is designed to be accurate at the national level. For small areas, such as Wanaka, the survey error is too great and SNZ will not release the required data.

## **5.2 RCG estimates and forecasts of household spend**

The RCG report's projections are based on RCG's expenditure model. The RCG report states: "The expenditure model uses the Statistics New Zealand (SNZ) Household Expenditure Survey to estimate current and future household expenditure. Ministry of Tourism Forecasts and Statistics New Zealand's Tourism Satellite Account are used to estimate and forecast visitor expenditure within the catchment areas". The report indicates that the model does not take into account spending from business and government. It also states that some respondents to the Household Expenditure Survey may have omitted some types of expenditure such as spend on cigarettes and alcohol and larger purchases such as furniture and appliances.<sup>3</sup>

Thus, the RCG methodology estimate two of the four expenditure components as it has not attempted to assess "total" business retail spend or estimate mail order or internet spend. The latter is likely to be very insignificant for Wanaka's retail sector. The report refers generally to resident non-household spend as business spend.

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<sup>3</sup> In this respect the reference is to SNZ understatement of expenditure on items that may be perceived as undesirable to health and recall problems in respect to larger infrequently purchased items such as home appliances and floor coverings. The latter problem is largely not one of omission, but rather recall as precisely when the purchase occurred. The tendency is include expenditure that should not be included due to it occurred outside of the survey period, i.e. rather than omitting the expenditure altogether, as implied in the RCG report.

While the RCG report omits an estimate of “total” business spend, Section 6 estimates a component of retail sales to business, namely, spend by the construction sector on retail as this is perceived as a major source of total retail sales to business and, hence, demand for retail floor space.

Thus, due to the lack of data to apply the sales approach, RCG report’s use of the expenditure approach is acceptable. However, the RCG report does not explain how some of the inherent problems in applying the expenditure approach were overcome. Those inherent problems include:

In applying the expenditure approach to household spend it is necessary to convert national “Household Expenditure Survey” (HES) data as published by SNZ into retail spend by the 13 retail store types used in the RCG report. The store types used by RCG are based on SNZ’s National Retail Trade Survey. There are, essentially, three problems that the RCG report had to address, but it does not explain how those problems were overcome.

First, the household expenditure data is for all New Zealand households and all categories of expenditure. That is, it is not concerned with retail expenditure per se. Because of this the HES publishes data by expenditure categories (e.g. food, household contents and services, alcoholic beverages) rather than the store type categories used in the RCG report. No information is provided on how the expenditure model converts the HES expenditure data by category into spend data by store type.

Second, the HES data used in the RCG report is based on a national sample survey and SNZ does not release sub-national estimates. The RCG report does provide some explanation as to how it addressed this problem. It states that household expenditure in the subject catchments is estimated using New Zealand household expenditure patterns adjusted for each catchment’s level of household income relative to New Zealand. While this approach is supported in general terms, no explanation is provided in the RCG report on precisely how that adjustment was made. Some retail analysts make a simple percentage adjustment based on comparison of the subject catchments and national median (e.g. the primary catchment is 10 percent greater than the national median). However, a simple adjustment can significantly under or over-state household spend on retail store types compared to an income category by income category adjustment.

Third, households spend on a range of retail and non-retail store types. For example, consumers purchase clothing from retail and wholesale stores while food is

purchased from a range of stores and not just food stores. However, no information is provided in the RCG report on how household spend is apportioned between retail and non-retail stores or how the HES categories are apportioned within the adopted retail store types.

The RCG report gives a full explanation as to the method by which its base-year 2006 household spend estimates are projected. Growth in real household spend is projected using growth in the number of households and a 1.5 percent allowance for non-population factors that cause retail spend to increase (e.g. increased real household incomes), Growth in household numbers are based on the council's population forecasts while the justification for the 1.5 percent increase is outlined on page 32 of the RCG report. I agree with the 1.5 percent adjustment, as I consider it reasonable over the analysis period, but not the supporting analysis.<sup>4</sup>

### **5.3 RCG estimates and forecasts of visitor spend**

There are no published statistics on visitor spend on retail by store type. Consequently, the RCG report relies on its own estimates using two unrelated sources of information. First, it uses the Ministry of Tourism estimates of the total spend of domestic and international visitors (i.e. retail and non-retail combined). Second, it uses information derived from the SNZ's Tourism Satellite Accounts to estimate the retail spend component and to apportion it across the store types categories used in the RCG report. The council's visitor forecasts were used to project the estimated 2006 visitor spend.

While the Tourism Satellite Accounts provide some useful information in respect to average national spend, it is not necessarily applicable at the sub-national level, especially to a small town like Wanaka. In addition, there are problems in matching up the Tourism Satellite Accounts spend categories with the store type categories used by RCG. That is, there is no information in the Tourism Satellite Accounts that enables an apportionment to be made for some store types. The RCG report does not explain how it has dealt with those matching problems.

### **5.4 RCG estimates and forecasts of business spend**

As previously stated, RCG's expenditure method does not directly account for business spend on retail. This is because there is no data on spend by non-households by retail store types. Nevertheless, it is possible to estimate the ratio of

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<sup>4</sup> This is because the analysis, which is set out in page 32, combined figures covering the period 1992 to 2006. However, the survey was rebased in 1995 and again in 2003 and, statistically the periods before and after those dates cannot be compared with the period from 1995 to 2003. The survey rebasing probably explains some of the extreme year-on-year movements in Figure 5.1.

national household spend to total national retail sales by store type especially for the 2007 HES year. However, those ratios would not necessarily apply to the smaller sub-national areas such as Wanaka.

However, as previously stated, the RCG approach is to provide an indicative estimate of the construction sectors spend on building supplies, furniture, appliances and home ware. This estimate is provided in Section 6: Business to Business Demand of the RCG report.

Effectively, the RCG report is concerned with estimating the potential supply of retail spend and floor space that could be accommodated in the 'Commercial Core' subzone of the Three Parks Zone. However, much of the estimated construction spend will be spent on wholesale stores, including wholesale building supplies, and not retail hardware stores and, therefore, from a statistical perspective some of the estimated spend is questionable, i.e. in respect to justifying the amount of retail proposed at Three Parks.

I have a number of concerns with RCG's estimates of construction sector business spend on retail stores, namely:

First, the RCG report assumes that 65 percent of total residential construction cost is materials and 35 percent is labour and 50 percent of commercial and industrial construction cost is materials and the same percentage is labour. The RCG report then assumes that construction materials effectively comprise building materials and/or hardware and that these will be supplied by the retail sector. However, construction materials includes a large amount of products supplies by manufacturing industries. For example, building materials include ready mix concrete, pre cut framing, tilt slab walls, wooden and aluminum joinery, garage doors and in some cases kitset and factory constructed houses.

Second, a large percentage of the materials used in buildings are supplied by wholesalers such as plumbing supplies, electrical supplies and heating supplies. Many of those suppliers are trade only.

Third, the suppliers of building supplies will be predominantly wholesalers rather than retailers. For example, Placemakers and Carters are almost certainly wholesale building supplies rather than retail stores, as their predominant sales are trade sales. Conversely, Mitre 10 and Bunnings are more likely to be classified as retail stores by SNZ.

The important point, however, is that building supply store operations may not necessarily be compatible with the amenity requirements of the Commercial Core subzone. This is because wholesale building supply stores have large outdoor areas for storing timber and other building materials (e.g. concrete pavers, builders mix, and mortar). Vehicles visiting wholesale builders suppliers will be dominated by trucks and cars with trailers, while the parking needs may be inconsistent with that required by large format retailing (LFR). The latter will tend to accommodate family cars and few trucks and cars with trailers while typically parking is common with LFR or conventional retailing while more emphasis on drive through and yard parking is required with wholesale building supplies. The point is that genuine wholesale building floor space may not be compatible with the retail space required in the 'Commercial Core' subzone.

Fourth, wholesale building suppliers floor space requirements are likely to be less sensitive to sales growth as they tend to make more use of yard space and may service their customers indirectly. That is, some large orders may be supplied directly by the wholesaler's supplier to the construction site, thus, bypassing storage at the wholesalers' store/yard.

Last, while the RCG report correctly focuses on the "marginal change" from the base year in new construction with respect to new houses, i.e. compared to the current estimated total spend, it does not appear to do this in terms of alterations to existing dwellings and the cost of commercial and industrial construction. That is, in respect to the latter, it includes existing total spend, rather than the incremental change in construction over the analysis period, which is already accommodated by the building supply industry. It is unlikely that new capacity is required to handle the existing level of capacity.

The RCG report also makes indicative estimates of spend on furniture, appliances and home ware. However, those estimates include some double counting. This is because the HES already accounts for some of the expenditure by households on those items, i.e. to the extent that the expenditure is made by households rather than the construction sector. This is because the HES surveys daily household expenditure over a two-week period using a diary system. Households are also surveyed on their expenditure over the last 12 months on major items such as furniture and appliances. Thus, the HES already accounts for one-off major household expenditure items, including where it relates to furnishing new residential dwellings.

Regardless, only a percentage (probably small) of those items are likely to be purchased from Wanaka retail stores as retailers in the larger urban markets will compete with local retailers.

The RCG report states: "It is important to note that a one percent per year increase in construction cost net of inflation have been allowed to account for increases in labour costs and the use of new materials. However, increase in labour costs is a component of inflation in the construction industry. The analysis should be based on real and not nominal price changes, and, therefore, the one percent per annum adjustment of construction costs should be excluded. Regardless, increasing labour costs are not relevant to material costs estimates per se.

There is some justification for allowing for products not previously included in buildings which may add to real cost. However, in general, building material costs are likely to fall in real terms due to the advent of technology. For example, over the years there has been a notable trend for an increasing share of construction activity to occur offsite because it is quicker and cheaper (e.g. pre-sawn and pre-nailed framing, tilt slabs, pre-hung doors, premixed concrete). There is probably a greater argument for allowing a one percent per annum fall in the real price of building materials than an increase.

RCG's construction sector spend forecasts have regard to the prolonged period of economic growth in the economy generally and in the construction sector. High construction sector growth was associated with higher inward migration into New Zealand. It is debatable whether construction sector growth will continue at the same rate over the period 2006 to 2026, e.g. because building construction tends to be cyclical in nature and, therefore, a period of more subdued growth can be expected.

Thus, in my opinion and for the preceding reasons, the analysis probably substantially overstates the level of retail activity that is appropriate to the Commercial Core subzone at Three Parks from the construction sector and, therefore, I do not agree with the RCG report estimate that 20,000m<sup>2</sup> of floor space will be required to accommodate construction sector activity. I consider that the report 'Wanaka Land Demands' as attached to the Section 32 report was correct not to assume that this aspect of projected demand would be realised in the 'Commercial Core' Zone. However, there will be business demand from businesses, although, I expect that demand to be proportionally less than it is in more developed sub-national economies.

## 6 FLOOR SPACE DEMAND PROJECTIONS

Section 7: Floor space demand projections convert the estimates in Section 5: Retail Expenditure Projections and Section 6: Business to Business Demand, into retail floor space required to accommodate the projected retail spend generated by households in the primary and secondary catchments. The floor space projections are split into “LFR” and “other” retail based on the assumptions contained in Table 7.1. In addition, various sales/m<sup>2</sup> ratios are assumed for the 13 store types as set out in Table 7.2.

Based on those assumptions the RCG report concludes that, excluding accommodation, an additional 6788m<sup>2</sup> of floor space is required between 2006 and 2011, an additional 14151m<sup>2</sup> between 2006 and 2016 and an additional 21896m<sup>2</sup> between 2006 and 2021 and an additional 30540m<sup>2</sup> up to 2026. In addition, it is estimated that an additional 20000m<sup>2</sup> is required in Wanaka to cater for business demand.

The RCG report notes that its estimates are based on the assumption that there is adequate retail space in 2006 to service demand.

The RCG report's floor space projections assume that all the growth in retail spend that occurs in the primary and secondary catchment will be supplied by Wanaka's retailer sector. I consider that is a highly improbable assumption. The retail sector in a small economy like Wanaka's will only capture, for the foreseeable future, a proportion of total household and business spend. Local capture will be quite low for some store types such as, appliance retailing, department stores, furniture and floor coverings, other stores, footwear clothing and soft goods and recreational goods as a large percentage of total catchment expenditure will be spent outside Wanaka.

The percentage spend outside Wanaka will be far higher for the secondary catchment than the primary catchment. This is because, by definition, the secondary catchment comprises those households that will consider some other shopping area to be their primary catchment (e.g. Queenstown) and, therefore, by comparison shopping visits to Wanaka's retail stores will be far less frequent.

Nevertheless, while significant retail leakage is unavoidable, I consider that it is important to the local community's economic well-being to have a strategy to reduce the relative level of leakage out of Wanaka relative to total resident spend by enabling retail development in Wanaka.

Thus, regardless of other criticisms, I consider that it is unrealistic to allow adequate floor space in Wanaka to accommodate the total projected increase in household retail spend as much of it will occur outside Wanaka.

## **7 RETAIL LEAKAGE ASSESSMENT**

Section 8: Retail leakage and net demand for retail space examines the current level of primary and secondary catchment spend or leakage that occurs outside the catchment. The RCG report states that one method of determining retail leakage is to compare how much retail space can be sustained by retail spending from households and visitors in the Wanaka catchment and to compare this estimate with the actual floor space.

The RCG report asserts that if the amount of floor space sustainable in the area is greater than total retail floor space in the area that it suggests that local consumers are shopping outside the catchment. Alternatively if the amount sustainable in the area is less than the actual floor space it implies that some sales are being generated from outside the catchment.<sup>5</sup>

The RCG report states that while “it is not possible to stop all out of area shopping by residents, it is important to make sure that any under or over supply of retail space is identified so that the local community has the opportunity to retain as much as possible of the community’s spend”. And: “It is important, therefore, from the planning perspective, that any future under-supply of retail space is mitigated through careful planning|.”<sup>6</sup>

Section 8 provides estimates of retail floor space in Wanaka Town Centre and Anderson Heights Business Centre. It compares the total of those two estimates with the estimated supportable floor space in 2006. From that comparison, the RCG report estimates whether there is an under or over supply of retail floor space. It concludes that: “Altogether Wanaka has an over supply of 2021m<sup>2</sup> of retail space.” The individual store type under or over supply of floor space is added to the projections of demand for floor space to provide an estimate of Wanaka’s “net” additional floor space required for the period 2006 to 2026 by LFR and “other” retail. From those calculations the RCG report concludes: “Wanaka will require approximately 4767m<sup>2</sup> of additional retail space between 2006 and 2011, 12130m<sup>2</sup> between 2006 and 2016, 19875m<sup>2</sup> between 2006 and 2021 and 28519m<sup>2</sup> between 2006 and 2026.

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<sup>5</sup> Page 60.

<sup>6</sup> Page 60.

Because the total estimate of oversupplied floor space was relatively small, the calculations in Section 8 of the report are not of particular importance, although the RCG report did conclude that LFR space was undersupplied (2538m<sup>2</sup>) and other retail oversupplied (4796m<sup>2</sup>). As previously stated, it is unrealistic to allow for total capture of spend by catchment households and business, especially for Wanaka.

Regardless, I have problems with the suggested way of determining leakage as outlined in Section 8 of the RCG report. It is problematic due to expressing leakage (a monetary phenomena) in floor space terms, as there is significant subjectivity involved in the RCG report approach. First, it involves converting expenditure into spend/m<sup>2</sup> which involves a level of subjectivity.

Second, and more importantly, the leakage calculation should be concerned with measuring the difference between the total catchment expenditure by resident households and business at all retail locations and the amount spent at Wanaka's retail stores. However, the methodology adopted by RCG does not measure this as total 2006 actual Wanaka floor space is deducted from total estimated floor space that could be supported by catchment expenditure and tourists. That is, the visitor component of the calculation should have been left out of the leakage calculation altogether. This is easy to do in respect to estimating the total floor space required to support existing spend, but it is problematic in respect to estimating current Wanaka floor space that supports sales to existing resident catchment households. This is because it is necessary to estimate the percentage of total Wanaka floor space by store type that supports local spend vís a vís tourists, but this I subjective.

Third, the RCG report's methodology does not measure resident business spend. Consequently, the RCG report's leakage estimates are under or overstated as a consequence by the level of actual floor space required to support or the amount actually supporting business spend. For example, apparent inward leakage may represent the unaccounted for business spend, while outward leakage will be understated by the amount of resident business spend.

## **8 SECTION 9: ECONOMIC IMPACT AND LAND REQUIREMENT**

Section 9: Economic impact and land requirement investigates the staging of the proposed Three Parks retail development and the economic impact the proposal could have on Wanaka's town centre.

The RCG report states: "In summary, due to the significant amount of additional retail space required in Wanaka over the 2006-2026 period, a new retail centre, namely, the proposed Three Parks retail centre, would be required." While it is very likely that

significant new retail space will be required in Wanaka over this period if the growth projection assumed by the RCG report proves to be correct, the report's estimates should be optimistic for the reason I have already stated. Notwithstanding, some of the optimism in RCG's retail modelling will be accommodated by the introduction of new competition in the supply of retail goods and services and retail floor space, i.e. the competition will stimulate demand for and supply of retail goods/services and retail floor space in Wanaka.

## **9 WANAKA RENTAL LEVELS**

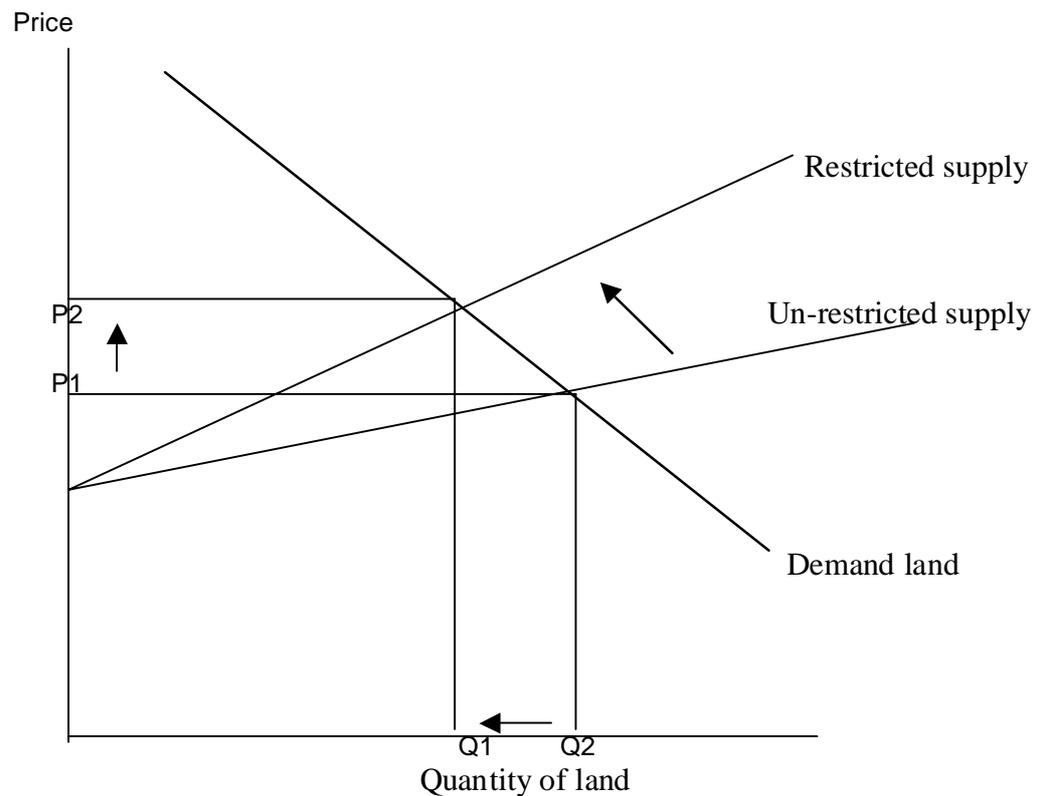
The brief requested that I comment on current Wanaka rental levels in respect to whether they are too high. In this respect, the concern is that there are conflicting claims with some people asserting they are too high while others claim they are too low to make redevelopment in the Wanaka Town Centre attractive.

My comments are generic from the perspective of an economist and based on the information contained in the RCG report relating to town centre rents. It is noteworthy that the rents quoted in the RCG report were established prior to the onset of the worldwide recession which has affected New Zealand and lowered property prices generally.

The question of whether Wanaka Town Centre rentals are too high has to be related to a benchmark. That is, too high relative to what? From an economic perspective rents are the outcome of market forces in respect to supply of and demand for town centre properties. Rentals that are set by market forces (that is, willing landlord, willing tenant) cannot be too high, although rentals being sort for vacant properties or set during rent reviews can be too high or too low relative to what they would fetch if re-let.

However, market-determined rents might be too high compared to a different supply scenario. For example, the zoning of land may reduce the potential supply of business land due to imposing limits on where business activities may locate. Restricting the land supply will inflate land prices and rents compared to an unrationed supply situation. The impact of rationing land supply on price is demonstrated hypothetically in Figure 1.

**Figure 1: Impact of restricted land supply on price and quantity demanded and supplied**



The zoning of Wanaka Town Centre land has restricted the supply of prime land that immediately fronts on to Lake Wanaka. Compared to an unconstrained supply situation, property and rental values are almost certainly substantially higher for lakeside properties. However, it is likely that lakeside properties will always command premium prices and rental values compared to land further back from the lakes edge.

The affect of zoning on town centre land further back from the lake is less clear as the supply is relatively more abundant relative to demand. Non-lake front town centre land will command a premium for two reasons. First, tenants who cannot afford the rentals immediately adjacent to lakeside land may pay a premium to be located close to the optimum location. Second, foot traffic is likely to be far higher close to the lakefront than further back which will add to the rents that can be demanded. It is highly likely that the rents for land close to but not adjacent to the lake have also been inflated compared to an unconstrained town centre supply situation.

Businesses that are not foot traffic-dependent and do not benefit from lakeside locations (e.g. the supermarket) will opt for town centre land that is in greater supply and is less sought after. This land will be cheaper to buy and rent. The inflationary effect on land value caused by confining the supply of land will be less than it is with

lake-front land and town centre land that is in close proximity to the lake with high foot traffic, but it is still likely to be considerably above that of an unconstrained supply situation, especially during economic boom periods.

In boom periods, land values generally will be inflated as they will trade having regard to expected future values rather than what they are currently worth to actual or potential new uses. In those periods, the expectation of capital gains from holding land will be high and buyers are likely to pay a premium (demanded by sellers) for the ability to earn the capital gain. Capital gain expectations will reduce the incentive of existing town centre property owners to sell any of their land, which adds to any land inflation caused by restricting the supply of business land.

In high inflationary periods land values and rental values are likely to become detached and to not necessarily reflect the real income earning capacity of town centre property. That is, land prices will increase at a much faster rate than commercial rents. Consequently, yields from rents will tend to become very low relative to the risk associated with commercial property. This distortion will cause land prices to inflate the cost of development and/or redevelopment to such an extent that it is uneconomic relative to the net rents that can be charged. New development will stall. This phase will give rise to the paradox where developers claim rents are too low while existing tenants claim the opposite

The lack of town centre development and increasing demand for new space due to growth in retail spend will exert upward pressure on existing rents. This situation will continue until such time as the disparity between movement in land and rental prices is corrected.

A less constrained commercial land supply situation, which will be the result of approval of the Three Parks Plan Change, will reduce the potential for property and rental values to become detached, as well as lower the potential for land inflation which is damaging to community well-being. An increased supply of commercial land will reduce the incentive for town centre tenants to want to escape to industrial zones with lower rents, e.g. Anderson Heights. A less constrained situation will also aid the development and redevelopment of existing town centre land by reducing the incentive of existing landowners to sit on land in the expectation of capital gains. Land will tend to trade on the basis of its current use rather than on expected future value.

## **10 CAN WANAKA SUPPORT MORE THAN ONE SUPERMARKET?**

The brief requests that I address the issue of whether Wanaka can sustain more than one supermarket, given that a new supermarket is assumed for Three Parks and, therefore, whether the existing supermarket in the town centre is likely to remain.

Supermarkets can vary substantially in size from a few 100m<sup>2</sup> to 8000m<sup>2</sup>. Wanaka's primary catchment population is estimated at 4839 at the 2006 census. A resident population of this size should be capable of sustaining a medium-size supermarket of around 3000m<sup>2</sup> or, alternatively, two small supermarkets of 1500m<sup>2</sup>.

A supermarket of around 3000m<sup>2</sup> would exert substantial pressure on the existing town centre supermarket and cause significant sales losses in the short to medium term. The pressure would be enhanced by the fact that the existing car-parking situation is less than ideal for a supermarket. It is noteworthy that supermarket investment is unavoidably lumpy and, therefore, new supermarkets will tend to create an oversupply situation when they first establish.

However, if population grows at the forecast rate, the situation should improve significantly in the 2011 to 2016 period. Under a worst-case scenario of much slower population and household growth, the loss of sales could cause the town centre supermarket to be downgraded to, say, a Four Square format with unused space sub-let to other activities. It is probably unlikely to close per se as the two supermarket chains are likely to be aware of future growth prospects in Wanaka. However, I consider that in the medium to long term the existing supermarket may want to relocate to improve the parking situation.

Regardless, if the supermarket did, in fact, close then the 7/11 store could well take its place due to the large number of visitors to Wanaka.

## **11 APPROPRIATE AMOUNT OF RETAIL TO ENABLE AT THREE PARKS**

The brief requires me to discuss what is an appropriate amount of retail to enable at Three Parks. Due to simplistic inherent assumptions and the data deficiencies implicit in the modelling process, that I have already discussed, retail modelling provides at best a very broad indication of the scale of retail that could be accommodated at Three Parks. The actual amount required could be significantly more or less than forecast.

In this respect, it is acknowledged that a number of sites exist on the fringes of the town centre where LFR could potentially locate. However, based on land value

information supplied by the council, I consider that the land prices are such that LFR generally is unlikely to locate on those sites as the land values are too high.

Due to the forecasting uncertainty, the best approach in my opinion is to enable the market to determine the appropriate supply of space. From an economic perspective, zoning far more space than may be required is likely to be highly beneficial in reducing inflationary pressure on commercial land prices and rents and, through this, the price of goods and services to consumers. It is likely to stimulate rather than suppress retail sales.

The only concern in leaving it totally to the market to determine the amount of new retail space that should be provided is the potential threat of wider social and economic effects on the town centre. An excessive supply of new space at Three Parks could in theory cause wider social and economic effects on the town centre. However, debatably there are no examples of it happening elsewhere in New Zealand to date, although a small town like Wanaka could be at more risk of this happening than in larger urban areas.

An excessive oversupply is more likely to occur if a large amount of new floor space is built on spec, i.e. without tenancy agreements in place. In the absence of speculation, the supply of new space is likely to be constrained by growth in demand.

However, from the council's perspective, a prudent policy would be to limit the amount of new space that can be built without review (e.g. by requiring a resource consent to build more space). Another limitation that is commonly used is to place floor space restrictions on new space. For example, "X" amount of floor space must be occupied by no less than "A" tenants and "Y" amount of floor space by no less than "B" tenants. Alternatively, a minimum floor space requirement is placed on individual shops/tenancies (e.g. 300m<sup>2</sup>) with an allowance for a set number of smaller shop/tenancy sizes. The latter restriction is more applicable to LFR centres rather than new business zones that allow for growth in other retailing.

Of course, any such restrictions must have regard to the Resource Management Act trade competition prohibitions while wider social and economic effects caused by trade competition can only be considered to the extent that the effects are significant.

## **12 CONCLUSION**

The RCG report's projections by store type provide an indication of future catchment household and visitor spend. However, the required level of floor space at Three

Parks is probably overstated due to the floor space forecasts effectively assuming 100 percent capture of the growth in spend. The estimate of new floor space required to support building construction spend on retail stores is considered significantly overstated.

Due to the forecasting uncertainty associated with modelling, the best approach is to enable the market to determine the appropriate supply of space while implementing sufficient controls to ensure that the town centre is not subjected to a level of trade competition that could give rise to significant adverse wider social and economic effects.

The proposed limits in the plan change of 12,000m<sup>2</sup> and five tenancies under 400m<sup>2</sup> before a consent is needed should ensure that trade competition effects are no more than minor while inducing strong positive economic effects on Wanaka's economy.

From an economic perspective, the proposed retail zoning at Three Parks is likely to be highly beneficial in reducing inflationary pressure on commercial land prices and rents, and, through this, the price of goods and services to consumers. It is likely to stimulate rather than suppress retail sales in the town centre.

Philip Donnelly  
28 August 2009