

**THE ECONOMIC IMPACTS AND BENEFITS
OF INDUSTRIAL LAND DEVELOPMENT
IN ASHBURTON**

October 2006

Executive Summary

1. Analysis of rating data suggest that there is a shortage of industrial land in Ashburton and advice from Wing Valuations supports this view. Enterprise Ashburton and existing Ashburton businesses believe that there is a shortage of industrial land in Ashburton and that this is discouraging investment.
2. Industrial land typically generates 15 – 20 jobs per Ha directly and associated with this is business and personal income of \$1.2 - \$1.6 million per year. Multiplier effects increase the total effect on Ashburton District of making 1 Ha of industrial land available to 21 – 28 jobs and \$1.8 - \$2.4 million per year of business and personal income. If the proposed North East industrial estate is established, then this is likely to enable the generation of up to 1,650 additional jobs in the district over the next 25 years. Associated with these jobs will be business and personal income which by year 25 will be \$139 million per year.

Summary Table 1. Employment and Business and personal Income Over Time.

Year	0	1	2	3	5	10	15	20	25
Employment (FTEs)									
Direct in Manufacturing	0	113	225	270	360	585	810	1,035	1,185
Flow-on Manufacturing	0	45	89	107	143	233	322	412	471
Total Construction-related	137	109	65	26	26	26	26	26	0
Total FTEs	137	266	380	403	529	844	1,158	1,473	1,656
Business & personal Inc (\$m/yr)									
Direct in Manufacturing	0	9	18	22	29	48	66	84	97
Flow-on Manufacturing	0	4	8	10	13	21	29	37	43
Total Construction-related	8	6	3.8	1.5	1.5	1.5	1.5	1.5	0
Total (\$m / yr)	8	19	30	33	44	70	97	123	139

3. These impacts will only occur if business would not otherwise establish in Ashburton because of a shortage of suitable industrial land.

The proposed development of Industrial land in Ashburton is likely to represent an efficient use of resources in terms of section 7 of the Resource Management Act. It is expected to generate a commercial benefit of \$3.7 million, but this is highly dependent on assumptions about the costs of development, the value of the developed land and the rate at which business takes up the new land for productive purposes. It also assumes there is no net cost of shifting the rail yards.

Summary Table 2. Net Present Value of NorthEast Industrial Land Development under Varying Assumptions

	5 % discount rate			7.5 % discount rate		
	2 Ha / yr	3 Ha / yr	5 Ha / yr	2 Ha / yr	3 Ha / yr	5 Ha / yr
Rate of Sales (all assume 7.5 Ha in year 1 and 2)						
Base Case	- 2.2	+ 3.7	+ 7.6	- 5.4	- 0.7	+ 3.5
Capital Costs + 10 %	- 5.8	+ 0.1	+ 3.9	- 9.0	- 4.4	- 0.2
- 10 %	+ 1.2	+ 7.1	+10.9	- 2.0	+ 2.7	+ 6.8
Land Values + 10 %	+0.0	+ 6.4	+10.6	- 3.6	+1.5	+ 6.1
- 10 %	- 4.3	+ 1.0	+ 4.5	- 7.2	- 3.0	+ 0.8

4. Negative effects on the environment are expected to be minor, and there are potential advantages from a transfer of traffic away from the centre of town and increased use of rail transport by at least one of the intending purchasers of the land.
5. Development of the proposed site is likely to be a more efficient use of resources than other potential sites, primarily because it will reduce traffic in urban areas compared to other sites.

1. BACKGROUND

Ashburton District is growing steadily and indications are that more land is needed for commercial and industrial purposes. Ashburton District Council has acquired a 118 Ha block of land on the northern edge of the township to the East of State Highway 1 and the main rail line and wishes to rezone the land from rural to industrial. The site will yield a net 93 Ha of industrial land with the balance being taken up by internal roads and buffer strips to reduce noise impacts on adjoining properties.

Significant expenditure on reticulation of potable water, storm water, phones electricity and sewer will be required, but there will be no requirement to upgrade the existing water and sewage treatment facilities since these both have significant spare capacity. Current expectations are that the entire site will be developed at the same time, although some of the roading may be delayed.

Council has asked Butcher Partners Ltd (BPL) to advise on:

- the level of economic activity (employment, household income and value added) that might be associated with development of such an area of land if it were used for the suggested purposes;
- Whether rezoning of the land represents an efficient use of resources (in RMA Section 7 terms); and
- Whether this location is a relatively efficient location (RMA section 32 terms).

A number of businesses have expressed interest in buying part of the land and 37 Ha of the remaining 79 Ha has been provisionally allocated to these businesses. In broad terms one quarter of this 37 Ha is related to industry which is new to Ashburton, one half is related to industry which exists in Ashburton but needs space to expand, and one quarter is related to industry which simply wants to locate from elsewhere in Ashburton, primarily to take advantage of less congested or cheaper sites. It is also anticipated that Toll will shift its container handling facilities to the site. This will use 14 Ha of the available 93 Ha and will free up 1.5 Ha of land in the middle of town.

Source of Economic Impacts

Impacts will arise from capital development and from expansion of business operations. The capital development impacts will be relatively short term while the operation impacts will be ongoing for as long as the businesses remain commercially viable.

Data Sources

Estimated costs of infrastructure construction have been provided by Opus¹. Estimates of levels of economic activity associated with various forms of land use have been drawn from the “Eco Link” project² and from information obtained by BPL for an Environment Court Hearing on industrial land zoning in Dunedin in 2004. Estimates of economic impact multipliers associated with construction and business operation have been estimated by BPL using an economic model of the Ashburton District which has been developed for this project. Land values for the new site were provided by Wing Valuations (see Appendix).

Error Margins

The estimates produced here are realistic averages for the land use proposed, but the Ecolink data sets and other work have demonstrated that any particular land development could generate impacts which differ by a factor of up to 4 from these averages. Hence these figures are no more than a reasonable estimate of what might occur. The actual outcome could be significantly different. Notwithstanding this, the economic impacts are likely to vary by less than the rate of uptake of land³.

The timing of industrial output growth is also very uncertain. We have assumed an immediate take up of 25 Ha by businesses which are either new to the district or which would otherwise expand outside the district or transfer completely outside the district

¹ No one has yet made an estimate of the costs of shifting Rail operations.

² McDermott Fairgray Group Ltd and Massey University in 2000 / 2001

³ Forecasts of land use are driven by forecasts of employment growth. If we were to double the employment intensity of land use, then we would halve the rate of growth of industrial land.

with this increasing net land use by 15 Ha⁴. We have assumed that the balance of land will be used for net additional development in Ashburton township, and that this will occur at the same rate as has been experienced in the last 5 years (50 jobs per year or 3 Ha per year). These assumptions affect not only the timing of economic impacts but also whether the development represents an efficient use of resources.

The transfer of the rail yards and container handling yard has a net commercial cost which could be of the order of \$3.5 million. However, the desire of council, and possibly central government, to support this move implies that there is some net economic benefit. The base case analysis conservatively assumes there is zero net benefit on the grounds that if there is a net disbenefit, then the transfer of rail services can be dropped from the project so that the net disbenefit is removed. There could be significant benefits which would improve the economic efficiency of this project from an RMA perspective, but these have not yet been demonstrated.

⁴ 10 Ha by a new business and 10 – 15 Ha by businesses which will transfer to this site and expand, generating new employment which will occupy the equivalent of 5 Ha of that 15 Ha. Hence the net increase is 10 Ha + 5 Ha = 15 Ha. We anticipate a further 5 – 10 Ha of the new development will be occupied by businesses which will transfer to this site from elsewhere in Ashburton without expanding.

2. Economic Impacts Associated with Industrial Land

Economic impacts are driven by the emergence of new industries. For the proposed development to have an impact, it needs to be demonstrated that a shortage of industrial and commercial land is now, or is likely to in future be, inhibiting investment in new business in Ashburton. In this section we consider whether land availability is a constraint on industrial development in Ashburton, estimate the economic impacts associated with industrial land, estimate the likely rate of up-take of new industrial land and estimate the total economic impacts associated with the development and operation of new businesses over the next 25 years.

We conclude that there is evidence of a shortage of suitable industrial land, and estimate that the proposed development of industrial land could facilitate the generation of about 1700⁵ jobs in Ashburton within 25 years. Associated with these jobs would be business and personal income of \$140 million per year. We emphasise that the development of industrial land will not create these jobs, but will enable them to be created provided other aspects of the social and economic environment are conducive to investment in Ashburton and provided that a shortage of industrial zoned land will otherwise inhibit industrial development in Ashburton.

2.1 Evidence of Industrial Land Shortage

We have investigated the question of land availability by taking advice from a valuer (see attached report), seeing what land currently zoned industrial or commercial is vacant in town, talking to the head of the Ashburton Enterprise organisation about barriers perceived by potential investors, and talking to the managers of some of those businesses which have indicated an interest in taking up land at the new site. We have also looked at the rate of growth in industrial employment in Ashburton over the last five years and

⁵ The estimate in Table 2 is 1,656 jobs, but to use this figure implies a spurious level of accuracy.

have related this to growth in demand for industrial land using average figures of employment per Ha.

Valuer's Report:

There are a number of small pockets of vacant land available for industrial development, but few large sites. All sites in the Riverside estate are now occupied or have short term plans for their development. A good example of the demand for light commercial land is the McNally Street Development which subdivided 2.5 hectares of land into 10 lots of sizes from 1,000 square metres to 5,120 square metres. All lots sold or were accounted for sale in less than 12 months.

Council

The rating records reveals 9.9 – 16.5 Ha of vacant industrial land⁶ in the district including 7.2 – 9.1 Ha in the town. There is one vacant site of 5.5 Ha and the next largest vacant site is 0.31 – 0.5 Ha. There is less than 1 Ha of vacant commercial land in Ashburton.

Enterprise Ashburton

The manager of Enterprise Ashburton advises that the two greatest barriers to companies looking to locate in Ashburton are skilled labour and land. While there are parcels of industrial land available both at Riverside and elsewhere, they are not particularly attractive to new business because of their restricted size and relatively poor access. This is particularly true for potential clients who would like to use Ashburton as a distribution centre and for whom immediate access to rail it likely to be a significant benefit.

Business Owners

We have contacted two of the business owners who want to move to the site. Neither can find an alternative site that suits their needs in Ashburton. One will set up a new operation in Ashburton employing perhaps 80 staff and there is no other site in Ashburton

⁶ We get different answers depending on whether we use the "land use" or the "land category" classification system, both of which are included in council records

which meets his needs. A second is already in Ashburton and has expanded rapidly in recent years, but has been forced to split his operations amongst several sites. This reduces production efficiency and increases transport costs. He needs more space to expand and is unable to find an alternative site in Ashburton. He is already actively looking for a farm to purchase and to seek resource consent to undertake industrial activity on that site, and is also considering expansion on an alternative site out of Ashburton. Another operator in Ashburton has gone to a lot of trouble to gain additional land next to his existing factory, and believes that a shortage of industrial land makes expansion in Ashburton very difficult. He contrasts Ashburton unfavourably with his experience in another major centre where finding suitable land was much easier.

2.2 Direct Economic Impacts per Ha Associated with Industrial Land Use.

This analysis draws on information provided by Dunedin City Council on the density of industrial output in terms of direct employment per Ha, and on data from the Eco-Link project, which looked at the relationship between various environmental and economic factors. The results of this analysis can be no more than indicative because different industries have different employment densities (employment per Ha), and because employment densities for a given industry also vary considerably between regions.

Employment Density Estimates

For a 2004 Environment Court hearing, Dunedin City Council provided data from businesses which had indicated a desire to locate on newly developed land. The range of direct employment densities for those businesses was 9 to 100 jobs per Ha, with the average being 36 direct jobs per Ha. The lowest figure was for wood processing and the highest figure was for engineering, while a bio-technology company would have generated 51 jobs per Ha.

The “Ecolink” model suggests that over the five urban TLA and nine industry groupings for which data is available, employment density ranges from 8 to 61 jobs per Ha and averages 21 jobs per Ha. Data from this model is only available for TLAs within

Auckland, Northland and Waikato. The land area data is based on rating data-bases, and because this includes vacant land it understates employment per Ha of land actually used. It could also be expected that employment per Ha will decrease with land prices, which is more likely where land is in plentiful supply.

Dunedin census employment data suggests that there were some 6,300 people employed in manufacturing in 2001, and Dunedin City Council planning department advises that there is 393 Ha of land zoned for manufacturing and in use. This suggests employment per Ha of 16 FTEs, although this assumes that all land is being used for manufacturing whereas some of it will be used for commercial and residential purposes. On the other hand, some of the manufacturing employment will probably take place on land not zoned for manufacturing. We have not been able to obtain similar information for Ashburton.

The combined data sources suggest that every Ha of industrial land will support on average approximately 20 direct jobs in manufacturing. This is much higher than the average employment density for the two specific industries which we know are likely to locate in the new industrial zone in Ashburton. One of these employs approximately 10 people per Ha and the other expects to initially employ about 8 people per Ha, although this is expected to increase over time. However, it is important to realise that the businesses which are shifting to the new site are freeing up smaller sites in the existing industrial areas, and these sites are likely to be taken up by smaller businesses which may well have more labour per Ha than those businesses which want large sites. On balance we think it is realistic to assume that every Ha of land will permit the generation of 15 – 20 direct manufacturing and distribution jobs in Ashburton. Which is the correct figure does not materially alter the economic impacts in our analysis because we have estimated the impacts on the basis of likely employment growth with the availability of land providing an eventual limit to this growth. If the job density per Ha is higher than we have estimated, then it will be even longer before the shortage of land again limits industrial growth.

Regional Income Densities

Regional income (household and other business income) per FTE in manufacturing varies enormously by industry type. However, the existing mix of industrial activity in Ashburton District has associated business and personal income estimated at \$82,000 per job including household income estimated at \$59,000 per job⁷.

On this basis, every Ha of industrial land will permit the direct generation of \$1.2 – \$1.6 million per year of business and personal income, including \$0.9 - \$1.2 million per year of household income.

2.3 Multipliers and Total Regional Economic Impacts of Manufacturing Land per Ha and of Construction

2.3.1 Economic Impacts of Manufacturing (per Ha)

Economic activity in manufacturing and transport will have flow-on effects through the rest of the district economy. We have estimated multipliers⁸ for manufacturing other than meat processing (which we do not expect to occur at the new site), and found them to be of the order of 1.3 for household income, 1.44 for value added and 1.4 for employment. On this basis we estimate that every Ha of industrial land will permit the generation in Ashburton district of 21 – 28 jobs and \$1.8 – \$2.4 million per year of business and personal income, including \$1.2 - \$1.6 million per year of household income.

We emphasise that the rezoning of land from rural to industrial will only generate these economic impacts if it is solely a lack of industrial land that will inhibit future investment and growth in manufacturing industry in Ashburton. These impacts

⁷ Source: Regional Economic Model for Ashburton District 2003-04 developed by Butcher Partners Ltd, and based on Statistics New Zealand national ratios. Updated to 2006-07 prices. Household income is wages, salaries and income of self-employed.

⁸ The multipliers used are quite low. This reflects our exclusion from multiplier calculations of the purchases by firms from other manufacturing industries. To have included these would have been to double-count industrial employment growth since trend employment growth figures already include both direct and multiplier effects.

should be seen as the potential impacts of removing a restriction on industrial growth in Ashburton.

2.3.2 Economic Impacts of Construction

We understand that initial development of the site will cost \$15 million for site works and related infrastructure and at this stage we assume a further \$5.75 million for the intersection upgrade with SH 1 (\$0.75 million in year 0 and \$5 million in year 9) and \$5 million for the rail siding. We do not know what construction will be undertaken by those who purchase the sites, but initial indications are that it could be of the order of \$1 million per Ha for buildings and possibly half as much again for fit out. It is impossible to assess what proportion of either construction or fit out will be done by companies from within Ashburton district, but for the purpose of providing indicative estimates we assume that \$1 million of the work will be done by local companies.

Total⁹ district economic impacts per \$1 million of construction are 8.7 job-years of work and \$500,000 of business and personal income, including \$370,000 of household income. On this basis, and assuming that infrastructure development including intersection of upgrading of \$0.75 million takes place in one year, that the first 15 Ha of land are taken up and developed in the next two years and the full \$5 million intersection is not constructed until year 9, there will be around 104 jobs created for the next 3 years. Associated with this will be business and personal income of \$6 million per year. Subsequently, impacts will drop to 40 jobs and \$2.5 million per year of business and personal income until the site is fully developed.

⁹ Direct and flow-on impacts.

2.4 Demand for Land and Likely Rates of Uptake

2.4.1 Analysis of Employment Data

We have reviewed employment data from Statistic New Zealand. This reveals rapid growth in employment in recent years, particularly in non-food manufacturing. We will not be able to state how fast the growth was in Ashburton township itself until the 2006 census results are available, but it is likely to be similar to the rate for the district. We know, however, that at the 2001 census, manufacturing employment in Ashburton township (including Fairton) was about 85 % of employment in Ashburton district, and hence the implication is that total manufacturing employment in the township is growing by about 105 jobs per year and non-food manufacturing employment is growing by about 50 jobs per year.

Table 1 Growth in Manufacturing Employment 2000 – 2005

Industry	2000	2001	2002	2003	2004	2005	growth 2000-2005		Annual Increase	
							Number	%	District	Town (est)
All Industry	2,310	2,270	2,340	2,730	2,740	2,930	620	27	124	105
Non-Food Industry	920	1,023	1,115	1,220	1,135	1,210	290	32	58	50
Trans. & Storage	410	350	350	330	390	410	0	0	0	0

2.4.2 Ashburton District Development Plan

The plan, prepared by Boffa Miskell, suggested the need for an additional 17 Ha of industrial land for the 16 years to 2021 or about 1 Ha per year. Advice from Boffa Miskell is that this estimate was not based on a detailed analysis of likely demand growth or of any existing shortages.

We believe that this figure is probably too low. Based on the earlier cited employment density of around 15 - 20 jobs per Ha, the Boffa Miskell proposal would cater for the employment of a further 15 – 20 people per year in manufacturing industries, whereas the last 5 years has seen growth in Ashburton of 50 people per year in non-food industries alone and in excess of 100 people per year in total manufacturing including food industries. On this basis the estimate of 17 Ha over the next 16 years considerably

understates likely demand, which is likely to be closer to 3 Ha per year¹⁰ and could be as high as 7 Ha per year¹¹. Our discussion focuses on the lower number because we think any growth in meat processing could well be on the existing site at Fairton or some extension to this site and is unlikely to take place on the proposed North East site.

Not only does the demonstrated increase in employment suggest a demand for at least 3 Ha of industrial land per year, but we also need to recognise that a shortage of supply may have already inhibited industrial development and employment growth, in which case employment growth and demand for land could have been considerably higher. We are aware that one of the applicants for a 10 ha site at the proposed estate is a new business to the area and will not come if a large suitably-zoned site is not available, while other existing operators are frustrated at their inability to acquire land and might have grown faster in recent years if suitable land had been more readily available.

2.5 Economic Impacts over Time

We believe that there is an immediate suppressed latent demand for around 15 Ha of industrial zoned land and the development of this land will lead to increased economic activity in Ashburton. A further 14 Ha of the site is presumed to be taken up for rail, but we do not anticipate that this will generate any net economic activity because it will change the location rather than the level of activity. The remaining 64 Ha of industrial land is presumed to be taken up at a rate of 3 Ha net¹² per year.

Economic impacts associated with use of the land and associated construction activities are shown in Table 2, Table 3 and Table 4. In the first year of development (year 0), the only activity is related to construction at the site, but by year 2 when 15 Ha of the site is being used for net additional manufacturing activity in Ashburton, there are 225 additional jobs in manufacturing, 89 additional related flow-on jobs in the rest of the district, and 65 jobs related to construction. Hence total employment in the district has

¹⁰ 50 jobs / (15 – 20 jobs per Ha) = 2.5 – 3.5 Ha per year

¹¹ 100 jobs / (15 jobs per Ha) = 7 Ha per year.

¹² There may be more than 3 Ha per year taken up at the North East site, but some of this will be a transfer from other sites and hence will not be a net increase in economic activity in the district.

increased by 380 jobs over what it would have done if there had been no land available for industrial activity. Associated with those additional jobs is an additional \$30 million per year of additional business and personal income including \$20 million per year of household income. By year 25, when the entire site is occupied, there will be an additional 1,656 jobs in the Ashburton economy beyond what there would have been if industry had not been able to establish because of a lack of industrial land. Associated with this extra employment is an additional \$139 million per year of business and personal income including \$92 million per year of household income.

Table 2 Employment Over Time. (Full Time Equivalent jobs)

Year	0	1	2	3	5	10	15	20	25
Area developed in yr	0.0	7.5	7.5	3.0	3.0	3.0	3.0	3.0	0.0
Area utilised (excl rail)	0	7.5	15	18	24	39	54	69	79
Direct in Manufacturing FTEs	0	113	225	270	360	585	810	1,035	1,185
Flow-on Manufacturing FTEs	0	45	89	107	143	233	322	412	471
Total Construction-related FTEs	137	109	65	26	26	26	26	26	0
Total FTEs	137	266	380	403	529	844	1,158	1,473	1,656

Note: Operational impacts of rail assumed to be zero since it is a transfer from an alternative site

Table 3 Regional Business and Personal Income Over Time (\$m / yr)

Year	0	1	2	3	5	10	15	20	25
Direct in Manufacturing	0	9	18	22	29	48	66	84	97
Flow-on Manufacturing	0	4	8	10	13	21	29	37	43
Total Construction-related	8	6	3.8	1.5	1.5	1.5	1.5	1.5	0
Total (\$m / yr)	8	19	30	33	44	70	97	123	139

Table 4 Regional Household Income Over Time (\$m / yr)

Year	0	1	2	3	5	10	15	20	25
Direct in Manufacturing	0	7	13	16	21	34	48	61	70
Flow-on Manufacturing	0	2	4	5	7	11	15	20	22
Total Construction-related	6	5	3	1.1	1.1	1.1	1.1	1.1	0
Total (\$m / yr)	6	13	20	22	29	47	64	81	92

3. EFFICIENCY OF RESOURCE USE

Section 7 of the resource management act advocates the efficient use of resources. A prima facie demonstration of efficiency is that the commercial benefits of a project exceed the commercial costs. One must then take into account any non-commercial impacts of the project in deciding whether it is overall an efficient use of resources.

Benefits will only be generated as the land is taken up by users, and we have assumed that 15 Ha will be taken up in the first two years of the project (representing current unsatisfied demand) and the remaining 64 Ha will be taken up at the rate of 3 Ha per year. We have also assumed that the 14 Ha which is assumed to be used by Toll for rail purposes will generate no net benefit to Toll or the community at large. Presumably it will generate a benefit to the community which is at least equivalent to the community cost involved¹³ in shifting the Toll operation to the new site less the value of the existing site, so our assumption probably leads to understatement of the resource efficiency of the change in zoning.

3.1 Costs

The costs of the project are still being estimated, but the figures below represent best current estimates of developing the land to a stage suitable for buyers to establish their own industrial operations.

The value of the land as farmland was established by the market at the time of purchase as \$3.0 million. The cost of providing infrastructure is estimated to be \$15 million. This includes internal roading and services (power, water, waste water, storm water and phone) and upgrading of services to the site from the existing termination points. The cost of upgrading the intersection onto State Highway 1 is hugely dependent on the chosen form of intersection, and could be anything from \$0.4 million to \$10 million.

¹³ Toll has stated that at this stage it sees no commercial benefit to the move and will only move if there is no net cost to it from moving. Presumably any net cost will be met by the community including local, and possibly central, government.

This cost is to ensure that costs to existing traffic of new traffic from the proposed development are minor, and are unlikely to exceed the costs associated with traffic coming from some alternative industrial site. The figure currently used in this efficiency analysis is \$0.75 million in year 0 of the project and a major upgrading costing \$5 million in year 9.

3.2 Benefits

The benefits are best measured by the value which buyers are willing to pay for the land at the new site. Initial indications from the valuer are that the land is likely to be worth anything from \$30 – \$120 per m² depending on the size and location of the site. Small sites tend to be worth much more per m² and there are also substantial premiums for any given site size depending on the access, location and configuration. Given the expected size of sites and after some discussion with the valuer we have used an indicative figure of \$55 per m² as a base figure in this analysis.

We have assumed that there will be no net benefit to Toll Holdings from shifting rail operations to the new site. For the impact analysis we have assumed a financial cost of \$5 million for transferring rail facilities to the new site and on the basis of advice from the valuer we assume that the current 1.5 Ha rail container handling site has a value of \$200 / m² and hence a market value of \$3 million. From a financial perspective then there is a net \$2 million disbenefit from shifting rail. However, the whole purpose of shifting rail is that it is perceived to generate a net social benefit. It will be extremely difficult to quantify this benefit, but it is reasonable to assume that the rail shift will not occur unless there is some benefit. We have adopted the conservative assumption that the rail shift will generate no net benefit or cost to the project.

3.3 Discounting

We take into account the fact that the costs of development will be met at the start of the project, but the benefits will be realised only as the land is taken up by industrial users.

We have assumed that the opportunity cost of capital is 5.0 %, which is the nominal weighted average cost of capital (WACC) for Ashburton District Council adjusted for an expected long term average of 2.5 % inflation. We have done sensitivity testing at 7.5 % which is the non-adjusted cost of capital for the council.

3.4 Net Present Value

The figures (see Table 5) suggest that the commercial value of the project is \$3.7 million, but this is significantly affected by the rate of land sales, the discount rate and the various capital costs. Note that the rate of sales could conceptually be different from the rate assumed in the economic impact assessment because the land may be sold to a transferring business which is presumably benefiting from the cheaper price while the owner of the original site believes his benefit is maximised by retaining the section vacant to maintain options for future tenants.

Table 5 Net Present Value of Project

Assumptions				
Discount Rate		5.0 %		
Land Values per m ² at new site		\$55		
Land, Site works and infrastructure		\$18		
Cost of Intersection with SH1		\$ 5.75		
Land sales years 1 & 2 (Ha)		7.5		
Land sales subsequent years (Ha / yr)		3.0		
	Cost (\$m)		Benefits	Net Benefit
		Land Sales	Value	
Year		Ha	\$m	
0	(18.75)	0.0	\$ -	
1 & 2	0	7.5	\$ 4.1	
3 – 8 and 10 – 23		3.0	\$ 1.7	
9	(5.0)	3.0	\$ 1.7	
Net Present Values	(23.3)		\$ 27.0	+ \$3.7

3.5 Sensitivity Testing

As is shown in Table 6 below, the commercial returns are highly dependent on the capital costs, land values and rates of land sales. At a 5 per cent discount rate and 3 Ha of land

sales per year after the first 2 years, the net commercial benefits of the project are \$3.7 million. We believe that on the basis of current information this is a best estimate of the outcome.

An increase in the rate of land sales to 5 Ha per year and a 10 per cent reduction in capital costs would increase the net benefits to \$10.9 million, while maintaining the land sales and capital costs but increasing the industrial land prices by 10 per cent would increase net benefits to \$6.4 million.

Conversely, increasing the capital costs by 10 per cent, dropping the rate of sales to 2 Ha per year and increasing the discount rate to 7.5 per cent would see the net benefits become - \$9.0 million. A combination of this low sales rate and high discount rate with a 10 per cent price reduction for industrial land would reduce the net benefit to - \$7.2 million.

Table 6 Net Present Value under Varying Assumptions

	5 % discount rate			7.5 % discount rate		
	2 Ha / yr	3 Ha / yr	5 Ha / yr	2 Ha / yr	3 Ha / yr	5 Ha / yr
Rate of Sales (all assume 7.5 Ha in year 1 and 2)						
Base Case	- 2.2	+ 3.7	+ 7.6	- 5.4	- 0.7	+ 3.5
Capital Costs						
+ 10 %	- 5.8	+ 0.1	+ 3.9	- 9.0	- 4.4	- 0.2
- 10 %	+ 1.2	+ 7.1	+10.9	- 2.0	+ 2.7	+ 6.8
Land Values						
+ 10 %	+0.0	+ 6.4	+10.6	- 3.6	+1.5	+ 6.1
- 10 %	- 4.3	+ 1.0	+ 4.5	- 7.2	- 3.0	+ 0.8

4. PROVIDING FOR SOCIAL AND ECONOMIC WELL BEING

The community needs to generate employment opportunities to provide for its social and economic well-being, and this requires that there be available land which is suitable for industrial activity. In our view there is a demonstrated shortage of land in Ashburton for industrial activity and this generates considerable down-side risk to the economic and social well-being of Ashburton. Unless there are considerable societal disbenefits associated with re-zoning of an adequate supply of land for industrial purposes, then the rezoning should be permitted.

We have demonstrated the number of jobs that can realistically be expected to be created in manufacturing and supporting industries over the next 25 years provided that there is sufficient industrial land available for businesses to establish in Ashburton. We emphasise that providing industrial land is no guarantee that new businesses will locate in Ashburton or that existing businesses will grow, but the removal of a constraint on land availability will enable growth.

It could be argued that in the absence of more land being zoned, existing industrial land will be used more intensively and hence the increases in economic activity described here will occur even if no more land is zoned industries. It is our view that some of the increase would probably happen on existing land, but a significant part of the increase would almost certainly not occur if there is no additional land zoned for industrial use. Moreover, we have been somewhat conservative in estimating the demand for land by excluding any growth related to meat processing and by not allowing for employment growth having been suppressed in recent years by a lack of suitably zoned industrial land. A shortage of industrial land appears to currently be inhibiting industrial activity, in spite of the current existence of pockets of undeveloped or under-developed land, and any costs of zoning and developing more industrial land than is necessary are likely to be minor.

Caution

These results are necessarily speculative in that the final land use is not known. The results assume:

- a typical mix of industrial uses for this land;
- Typical multipliers for industrial activity in Ashburton, but excluding any feedback effects on farming or other manufacturing industry;
- employment densities which are similar to other less-developed districts in New Zealand;
- Employment on the new site will not be by existing businesses transferring away from existing sites in the District¹⁴.
- Trend employment growth in Ashburton of recent years continues, provided that land is available.

¹⁴ This assumption is consistent with the very slow uptake of 3 Ha per year which we have assumed as our base case.

5. Comparative Efficiency of Site

It is possible that alternative sites may be developed rather than the proposed North East site. The prime contender is to the north of the existing Riverside site, but there may be other potential sites on the south or east sides of Ashburton. In our view the main identified issues which need to be considered when comparing the relative efficiency of the two sites relate to traffic, impacts on adjacent residents and net water pollution.

5.1 Traffic

Heavy traffic through Ashburton causes noise, air pollution and congestion – particularly at the intersection of SH1 and the road to the Riverside Industrial Estate. If traffic through town can be reduced, this will provide social benefits.

Toll Holdings advise that they shift around 6,000 containers per year through their container handling facility, and advise that around 80 per cent of their containers go either to the north or the west of Ashburton. Transfer of the container yard to the NorthEast site would hence mean that these 80 per cent of containers would avoid town, while the other 20 per cent would travel through town as at present plus an extra distance from the current container handling site to the proposed new site.

One potential user of the new site would shift an existing operation which has extensive road freight in and out, including up to 40 truck and trailer units in during the peak season and about 1,000 containers per year out by road and an increasing number by rail.

Having this operator and rail on adjacent sites at the proposed Northeast industrial estate would take up to 850 containers per year off the road compared to the traffic between an alternative site and the existing rail container terminal. The majority (probably 60 – 70 per cent) of this user's inwards truck and trailer movements come from north and west of town and would avoid town if travelling to the North East site, whereas an alternative site would probably involve travel through town. Finally, almost 90 per cent of the outwards road freight from this user travels to destinations North of Ashburton. Again, the proposed North East site would avoid this traffic travelling through Ashburton whereas an alternative site would probably involve this freight travelling through Ashburton.

A second potential user of the site will have large volumes of inward raw material from the West of the town, and the vast majority of their output is likely to go to destinations north of Ashburton. Likely traffic volumes are 15 heavy vehicles per day. This operator considers that having rail adjacent to their site will provide freight mode flexibility, and it is likely that the company will use more rail transport for outward goods than it would use if their site was not adjacent to a rail line. This will reduce freight on SH1. An alternative site for this operator would involve the existing heavy traffic going through Ashburton and would make less likely the transfer of freight to rail and the associated reduction on freight on SH 1.

5.2 Impacts on Adjacent Residents

It is intended that the Northeast site will have bunds and vegetation to provide visual and noise separation from adjacent properties. The large site makes this a practical proposition, whereas alternative sites at, for example, Riverside North, may not be able to provide this degree of mitigation. The Northeast site is adjacent to rural lifestyle blocks of 2 Ha or more, so the number of residents affected at any particular distance will be less than at any alternative site which has a more densely settled periphery. Reports from noise experts and other consultants will address this issue in more detail in due course.

5.3 Environmental Improvement

One of the potential tenants hope so use poor quality waste water from the meat processing work at Fairton and to improve its quality before discharging it. This environmental bonus may not be feasible at alternative sites.

Detailed Impacts by year

Detailed Impacts by year

Valuation Report
to accompany
The Butcher and Partners Ltd
report on
" The Economic Impacts and Benefits of
Industrial Land Development in
Ashburton"

Wing Valuations Limited
October 2006

SUMMARY

Minimal Vacant land available for immediate development on a medium scale -
2 plus hectares)

"North East Site" Value expectations

Depending on size of the site and its locality, based on today's values I foresee the following values to be realistic.

Smaller sites near entrance to industrial park.

1,000 - 2,500 sqm \$85 - 120/sqm

Larger sites in more preferred area.

1.00 - 2.00 ha \$45 - 85/sqm

Larger sites in less preferred area.

2.00 - 5.00 ha \$30 - 60/sqm

Sale price determined/ influenced by past sales and competition/ alternatives at Rolleston
(\$60 to \$100 per square metre

Conclusion from Sales Analysis

Ashburton

Riverside Industrial \$ 95 - 160 / sqm

Commercial Area \$ 200 - 300 / sqm

Main Road Location \$ 175 - 220 / sqm

Rolleston

Confirmed sales \$59 - \$62/ sqm

Current Market \$60 - \$100 / sqm

Hornby

Sales Range \$ 115 to 268 / sqm

i) Current state of Industrial and Land Market in Ashburton

Availability

Minimal Vacant land available for immediate development on a medium scale -
(2 plus hectares)

Areas identified for possible development

1. There are two partially used and undeveloped sites off South Street towards the Ashburton River which total area 4.7 ha.
2. Similarly there is a larger area to the west of S.H.1 and the Ashburton River Bridge.

In both cases these are owned by or leased by individual companies and used, albeit partially, by the owners or occupiers for their own business uses.

3. Range Street - Riverside area - Area of 3.46ha owned by Ashburton District Council and leased to Electricity Ashburton for the storage of power-poles and equipment.
4. McNally Street / Riverside area - An area of 2.3ha has recently been developed into 10 lots varying in range from 1000sqm to 5120sqm with 9 lots sold.
5. West Street - An area of approximately 1.00ha behind existing commercial buildings and is currently available for redevelopment in conjunction with current owners.
6. North End Ashburton (North of Cemetery) - Currently well utilised by various businesses with minimal land available for redevelopment. Adjacent to this area is land owned/occupied by Ashburton Meat Processors on a large tract of land (in excess of 37ha) but currently fully utilised for their current operations and would require a zoning change.
7. Tinwald - Ribbon development to the west of the railway line and southern end of Tinwald - offers limited area for redevelopment.
8. Alford Forest Road - ribbon development and only small parcels of land

ii) Land Values

Current Rail Container Transfer Terminal

Assuming the current Container Transfer Terminal was vacant and available for sale, I would expect the value to be in the range of \$185 to \$220 per square metre. This would be dependent on Transit ingress / egress requirements.

This value range could also vary according to the size of the parcel of land and any use limitations.

iii) Land Value Expectations "North East Site"

Depending on size of the site and its locality, based on today's values I foresee the following values to be realistic.

Smaller sites near entrance to industrial park.

1,000 - 2,500 sqm \$85 - 120/sqm

Larger sites in more preferred area.

1.00 - 2.00 ha \$45 - 85/sqm

Larger sites in less preferred area.

1.00 - 2.00 ha \$35 - 70/sqm

Larger sites in more preferred area.

2.00 - 5.00 ha \$35 - 70/sqm

Larger sites in less preferred area.

2.00 - 5.00 ha \$30 - 60/sqm

Refer Appendix 1 for sales analysis.

Sale price determined by market demand and other alternatives. Influenced by past sales and smaller areas at Riverside \$95 - \$165 /sqm and competition from near by Rolleston where asking price is in the \$60 to \$100 per square metre range Ref Appendix 2

iv) Riverside Area

If a suggested development was undertaken to the west of the existing Riverside Industrial Area, I believe the value per square metre would be similar as in (iii) although sites larger than 2 hectares would more likely be in the 1-2.00 hectare range i.e. \$45-85/sqm.

v) Impact of Future Development on Land Values

I believe that over the past two years the market for commercial land has become out of sync with realistic commercial returns/yields.

There were a number of high non bona fide sales connected to the Mitre 10 Mega Store development which saw sales of land value apportioned from \$225 per sqm to \$500 per sqm. This established a "perceived" market value range in the market place of above \$200 per sqm for any parcel of commercial land.

Added to this is the apparent shortage of vacant commercial land ready for commercial development. To my knowledge all sites in the Riverside estate are now occupied or have short term plans for their development. A good and recent example of the demand for light commercial land is the McNally Street Development which subdivided 2.5 hectares of land into 10 lots of sizes from 1000 square metres to 5120 square metres. All lots sold or were accounted for sale in less than 12 months. Sale prices here varied from \$110 to \$160 per square metre land value.

I perceive that there is an inherent problem with these higher land values for these light commercial areas. Some of the smaller parcels of land have been purchased by owner/operators for their own business use and on this basis a real commercial return is only part of the equation. The commercial reality is, an investor cannot get a realistic commercial return from their investment if they are paying \$160-170 per square metre and then build a commercial property and expect 8-9% market rental returns. This assumption is based on accepted market returns from light commercial buildings/premises in the Ashburton light commercial area (non-retail). This indicates that there could be a lack of commercial investors at present land values because of the inability to attract tenants that will pay sufficient return for them to get an acceptable commercial return.

In general terms, I believe that land values have been influenced by the high value paid by the Mitre 10 Mega Store development and the general lack of light commercial land available for development.

Whilst any further or new development of light commercial land may not see an immediate drop in values in the existing area, realistically priced land will encourage further development that will give a commercial balance. *ie a realistic return to an investor and a realistic rental for a lessee.* Unless economic prosperity for the business sector improves significantly in the Ashburton area, I cannot see sustainable growth and commercial reality being maintained by both property owners and lessees if land prices coupled with higher building costs continue to increase.

The north east site development should encourage new industry to the district but will also encourage relocation of existing business within the district to the locality (in many cases they have had little alternative locations). This will free some sites in the current commercial areas for redevelopment. Riverside will most likely tend to be more akin to smaller service type operations that may prefer a locality in closer proximity to the central Ashburton business area.

If the Riverside area was to be developed further to the west, I foresee that this would be more akin to the existing usage of the area and would have an initial slower growth rate if both North east site and the Riverside were both to be developed.

MITRE 10 MEGA DEVELOPMENT

There have been a number of sales associated with the Mitre 10 Mega Store Development. Some of these sales are listed below.

33 Kermode Street	Sold Aug 2005	\$ 500,000
Free holding Glasgow lease		
2024 sqm = \$247/sqm		

24 Moore Street	Sold Feb 2005	\$ 506,250
Purchase as part of development programme at a highly inflated sale price.		
1012 sqm = \$500/sqm		

Kermode Street	Sold Jan 2005	\$ 675,000
3,000 sqm vacant land.		
Land Value \$225/ha		

At the time these sales distorted the market value of land in the vicinity. It created a hype in the market and established a perceived market value of land in the area even though the sales were not bona fide.

APPENDIX 2

Address	Site Area sqm	Sale Date	Sale Price	Sale Price sqm	Comments
36 Anchorage Road	2124	Jun-06	\$ 425,000	\$200	Regular front site
67 Halwyn Drive	4895	May-06	\$ 1,035,000	\$211	Rear site
17 Halwyn Drive	4891	May-06	\$ 920,000	\$188	Regular front site
69 Nazareth Ave	2256	Apr-06	\$ 564,000	\$250	Rear lot previously sold for \$144 psm in Feb 05
Washbornes Road	3975	Feb-06	\$ 752,000	\$189	Large site area
92 Russely Road	27895	Feb-06	\$ 5,000,000	\$179	Large isolated block of land
98 Treffers Road	2638	Jan-06	\$ 410,000	\$162	Corner Wigram Road
68 Columbia Ave	7861	Dec-05	\$ 1,022,000	\$130	No exit road off Halswell Junction Road
62 Waterloo Road	2023	Aug-05	\$ 410,000	\$203	Regular inside allotment
85 Columbia Ave	12310	Jan-05	\$ 1,440,000	\$117	Limited frontage, cul-de-sac
3 Lowther Street	9670	Mar-05	\$ 2,525,000	\$261	Main South Road intersection
303-307 319-323 Blenheim Road	9747	Aug-05	\$ 2,615,000	\$268	Vacant rear land over five titles
114 Wigram Road	1802	Apr-05	\$ 212,918	\$118	Regular site.

Hornby Sites of Less than 1 ha

Sale Date	Address	Land Area m ²	Totals	\$/m2
09-Aug-06	77 COLUMBIA AV	7800	\$ 2,215,000	\$ 284
14-Jun-06	35 ANCHORAGE RD	2124	\$ 425,000	\$ 200
17-May-06	23 KLONDYKE DR	1800	\$ 400,000	\$ 222
16-May-06	17 HALWYN DR	4891	\$ 620,000	\$ 188
05-May-06	67 HALWYN DR	4895	\$ 1,035,000	\$ 211
02-Feb-06	199 SPRINGS RD	905	\$ 250,000	\$ 276
28-Dec-05	68 COLUMBIA AV	7861	\$ 1,022,000	\$ 130
09-Oct-05	37 FOREMANS RD	4834	\$ 384,522	\$ 83
09-Aug-05	52 WATERLOO RD	2023	\$ 481,250	\$ 228
02-May-05	709 HALSWELL JUCTION RD	4999	\$ 700,000	\$ 140
29-Apr-05	22 YUKON PL	1440	\$ 284,082	\$ 194
14-Mar-05	4 CHINOOK PL	1200	\$ 132,000	\$ 110
20-Dec-04	10 CALAGRY PL	1351	\$ 135,000	\$ 100
15-Dec-04	65 FOREMANS RD	5416	\$ 482,500	\$ 87
06-Dec-04	746 HALSWELL JUCTION RD	1101	\$ 151,000	\$ 137

Hornby Sites of Greater than 1 ha					
Sale Date	Address		Land Area m ²	Totals	\$/m2
26-Oct-04	704	HALSWELL JUNCTION RD	34008	\$ 2,485,000	\$ 73
09-Aug-05	85	COLUMBIA AV	12310	\$ 2,215,000	\$ 180
31-Mar-05	27	FOREMANS RD	10159	\$ 1,624,210	\$ 160
20-Jan-05	85	COLUMBIA AV	12310	\$ 1,440,000	\$ 117

Rolleston Sites (All Around 1 ha or less)					
Sale Date	Address		Land Area m ²	Totals	\$/m2
02-Feb-06		IZONE DR	5091	\$ 300,000	\$ 59
28-Jul-05		IZONE DR	5091	\$ 300,000	\$ 59
18-Sep-04		IZONE DR	11548	\$ 720,000	\$ 62
13-Sep-04	1058	IZONE DR	5429	\$ 315,000	\$ 60
21-Jul-04	864	JONES RD	4046	\$ 225,000	\$ 56

Ref. Ford Baker Valuation Ltd.

Conclusion from Christchurch Sales Analysis

Hornby

Sales Range \$ 115 to 268 per square metre

Analysis

State Highway \$ 115 - 268 / sqm

Main Road Location \$ 180 - 260 / sqm

Lot size 9,500 sqm to 10,000 sqm

Secondary Road Locations \$ 115 - 180 / sqm

Rolleston

Past Sales \$59 - \$62 / sqm

Izone Southern Business Hub - New industrial/commercial development west of Rolleston. No written confirmation of sales in Stage III but indications are that sale prices are in the \$60-100 per square metre range. -as per the asking price

Lower end \$ 60/sqm for 7 ha lot.

Higher end \$ 100/sqm for 2,000 sqm lot