Tarneit Junction Development – Economic Benefits Assessment

5 December 2013

Prepared for Kumar Investments International Pty Ltd

MacroPlan Australia

Quality Assurance

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Contents

List of Figures

List of Tables

1 Executive Summary

MacroPlan Dimasi has been commissioned by Kumar Investments International Pty Ltd to undertake an economic benefit assessment of the proposed mixed use development referred to as Tarneit Junction.

This economic benefits study has considered the extent of both construction and operational related economic and triple bottom line benefits that will be generated as a result of the planned mixed use development.

The proposed Tarneit Junction development is a mixed use development comprising a range of integrated uses. The development is expected to assist in creating a transit oriented development (TOD) precinct around the proposed future Tarneit rail station.

A range of economic benefits will be produced throughout the five (5) year construction phase for the project during which time it is estimated that up to $260 million will be generated in construction costs. This includes construction related employment with an average of 152 EFT jobs supported per annum during this five (5) year period.

On completion and based on the proposed scale and mix of land uses for Tarneit Junction, it is estimated that up to 740 EFT jobs will be supported onsite. On completion there will also be an increase in expenditure generated as a result of the additional residents, visitors and workers onsite. This increase in expenditure is expected to support up to an additional 275 EFT jobs throughout the surrounding local area.

The construction and operational employment related to Tarneit Junction will provide a valuable economic contribution to the Western suburbs of Melbourne which currently has an above average level of unemployment (9.6%).

In addition to the employment created by the project, the other significant economic impact will be the increase in expenditure. This will initially be related to the construction expenditure of the project however on completion there will also be significant expenditure related to the additional residents, visitors and employees onsite. MacroPlan Dimasi estimates that, over the period 2015 to 2025, the expenditure benefit of the proposed development will total approximately $435 million or approximately $284 million in NPV terms.

The proposed Tarneit Junction development will also produce synergies with and benefit for the proposed Tarneit rail station and Rose Grange Shopping Centre. The development onsite will produce an increased scale and density of residential population as well as a greater level of local activity overall. These attributes will all have flow on effects and positive impacts for that planned investment in the local area.

The multiplier effects of a large catalyst project such as Tarneit Junction will also generate a range of triple bottom line impacts and benefits. A summary of the triple bottom line benefits related to Tarneit Junction include:

- Induce further investment in the region;
- Produce a high level of synergies for uses onsite and throughout the local area;
- Support a range of triple bottom line outcomes;

- Provide added walkability, employment self-containment and public transport usage;
- Reduce the need for private transportation;
- Deliver added employment diversity and economic capacity; and
- Promote ESD built form outcomes in an area of high development activity showcasing its benefits in a high activity node.

2 Introduction

MacroPlan Dimasi has been commissioned by Kumar Investments International Pty Ltd to undertake an economic benefit assessment of the proposed mixed use development referred to as Tarneit Junction. This report provides an outline of the economic benefits of the proposed development and its importance to the surrounding Tarneit area, including various direct and indirect economic outcomes related to the proposed development. Further, our assessment quantifies construction related benefits and impacts as well as the ongoing benefits and impacts related to the future operation of the planned development.

2.1 Proposed Development

The proposed Tarneit Junction development is a mixed use development comprising a range of integrated uses. The development is expected to assist in creating a transit oriented development (TOD) precinct around the proposed future Tarneit rail station.

The proposed development is expected to generate construction costs of approximately $260 million.

The following provides an overview of the planned scale and mix of land uses within the proposed Tarneit Junction development.

- Hotel / Serviced Apartments – 92 rooms
- Office / IT Cluster / Medical – 8,000m2
- Child Care – 800m2
- Education and Training – 1,500m2
- Student Accommodation – 105 rooms
- Convenience Retail – 2,000m2
- Food and Drink / Restaurant – 900m2
- Apartments – 410 dwellings
- Live / Work Terrace – 23 dwellings
- Townhouse – 80 dwellings
- Aged Care – 140 dwellings
- Car Parking – 1,600 spaces
- Community Buildings – TBC

The economic benefits determined in this report have been analysed based on the construction costs and scale and mix of land uses indicated above.

2.2 Disclaimer

This study has been prepared by MacroPlan Dimasi and is intended for the purpose described in this report and not for any other purpose. The contents of this paper should not be reproduced without the express permission of MacroPlan Dimasi.

3 Benefit Assessment Methodology

This section provides a description of the approach and methodology for the benefit assessment.

An Economic Benefit Assessment (EBA) applies a model that measures the potential range of impacts of a proposed change / development. An EBA considers spending through an economy and measures the cumulative effects of that spending, be it nationwide or in a small local area.

For the purpose of this EBA, a single scenario has been assumed based upon the proposal development composition outlined in Section 2.1 of this report. The key assumptions with respect to timing and relevant economic factors are outlined in Section 4.1 to follow.

The types of impacts associated with this development scenario can be measured as direct, indirect and induced.

- **Direct Impacts** are the initial, immediate economic activities (jobs and income) generated by a project or development. Direct impacts are usually calculated with industry averages, benchmark examples or commercially confidential information.
- **Indirect Impacts** are the economic changes occurring in other businesses / industries that may supply inputs to the project or otherwise be impacted by the project. Indirect impacts can be increasingly difficult to measure, particularly when there is a lack of reliable data to base economic predictions.
- **Induced Impacts** are the effects of spending in the local economy as the result of direct and indirect effects from the project. For example, construction employees purchasing goods and services in the project area. Induced impacts are very difficult to calculate reliably, and are therefore generally noted rather than quantified.

To capture these outcomes, MacroPlan has adopted an integrated project evaluation framework to identify indicative quantitative benefits of the proposed Tarneit Junction mixed use development at the intersection of Leakes Road and Derrimut Road in Tarneit. The key elements addressed in this analysis are:

- Identification of economic, social and environmental benefits
- Quantification of indicators by assigning a monetary value (Net Present Value (NPV).

This approach considers all impacts associated with a project and, where possible identifies benefits in monetary terms, so that all benefits can be reduced to a common unit (namely dollars) and thus aggregated. Quantitative outcomes are also considered using a triple bottom line approach.

- Quantitative outcomes: incorporating Benefit Analysis, taking into account direct economic benefit items of the proposed development; and
- Qualitative outcomes: rated according to a range of sustainability based Key Performance Indicators (KPIs), including separate interpretive analyses of economic, environmental and sociological considerations/ impacts. The outcome of this analysis takes the form of a chart illustrating the actual ratings of each

indicator and a chart that compares the average of indicator ratings for each of the bottom lines - economic, social and environmental.

The aim is to encompass all scenario outcomes by interconnecting the outputs from these complementary assessments. These assessment frameworks are described in further detail in the following sections, including an outline of indicator measurement processes and limitations.

The benefit assessment technique used for the quantitative assessment takes into consideration, in an environment of inherently limited resources what is gained in terms of the quantifiable net economic outcome of making a decision.

Assessment Limitations

The quantitative assessments include a number of social and environmental benefits and costs where these can be valued. However, there are a number of social and environmental aspects that cannot be valued due to:

- Limited information about valuations of social and environmental benefits and costs (i.e. the value of the new environmental asset); and
- Insufficient research in the field to make authoritative assumptions as to the induced social and environmental benefit or cost associated with certain elements of the project.

To provide for these aspects, this study has attempted to separately identify, in a qualitative way, the full range of economic, social, and environmental costs and benefits. This is outlined in qualitative assessment, which measures the relative positive or negative net change in indicators (i.e. a negative effect is considered a 'cost' and a positive effect considered a 'benefit').

A key advantage of this approach is the ability to include non-market based costs and benefits, for which contingent valuation studies have not been conducted, proxy measures cannot be identified, and an NPV analysis have not been undertaken. The net outcomes of this analysis are intended to clarify the differences between the proposed development and the base case.

4 Economic Benefit Assessment

MacroPlan Dimasi has undertaken an EBA to determine the value and range of benefits associated with the proposed Tarneit Junction mixed-use development in Tarneit. This assessment has been based on those various integrated land use components indicated in the previous section. The benefits assessment also takes into consideration those benefits generated throughout the construction phase for the development as well as the ongoing benefits once the development is complete.

4.1 Assumptions

The EBA and forecasts have been developed based on a number of assumptions related to the proposed land uses, timing of the development, ongoing operation of the development and relevant economic factors. A number of the main assumptions utilised for the assessment are detailed below.

- Construction commencement date: beginning of 2016
- Construction Period: five (5) year construction period was based on client advice for the development.
- Assessment Period: the assessment period used was 10 years – this gives a theoretical end date of 2025.
- Operational Period: the operational period used was five (5) years after the construction phase – this gives a theoretical end date of 2025.
- Construction cost(s): estimated at $260 million
- Operational Maintenance Cost(s): assumed at 4.5% per annum based on industry standards.
- Employment Multipliers: based on the 2008-09 ABS Input Output tables.
- Net Present Value (NPV): compares the value of a project in the future with the value of the project today. A discount rate of 7% has been used in this assessment. The NPV is brought back to 2013 in this assessment.
- Average Employee Rates: based on average employment densities for relevant land uses.
- Employee expenditure: based on market levels of employee expenditure for similar projects.
- Resident Retail Expenditure: based on ABS 2011 Census data for Tarneit local area.

4.2 Economic Benefits

The proposed Tarneit Junction development will yield several economic related benefits including the following:

- Expenditure impacts (including direct private investment)
- Employment generation (temporary and permanent)
- Induced Private Investment

4.2.1 Expenditure Impacts

The proposed Tarneit Junction development is expected to generate construction costs of approximately $260 million over a period of five (5) years.

Between 2020 and 2025 a range of other expenditure benefits are expected to be generated related to maintenance costs, onsite employee and resident expenditure, and hotel visitor expenditure. The breakdown of the total direct expenditure benefits of the proposed development are outlined in the following table.

Expenditure Impacts – Proposed Tarneit Junction Development

Expenditure Impacts	Proposed Development ($m)	
	Nominal	**NPV**
Construction Expenditure	$260.0	$174.0
Maintenance Expenditure	$58.5	$27.9
Employee/Resident Expenditure	$90.7	$43.3
Hotel Visitor Expenditure	$26.2	$21.5
Total Expenditure	**$435.4**	**$266.8**

Source: MacroPlan Australia (2013)

A key contributor to expenditure in addition to the initial construction costs is that expenditure from onsite employees, residents and guests. Estimates of the annual expenditure benefits related to these categories are outlined in the following table. It is noted that tourist expenditure is based on Tourism Research Australia national datasets and expenditure has not been itemised, i.e. includes accommodation costs, as such expenditure is likely to be inflated for hotel guests.

Annual Expenditure during Operational Phase – Proposed Tarneit Junction Development

Operational Expenditure Per Annum	Proposed Development
Hotel Guests:	
Total Visitor Nights ('000)	40,296
Total Guest Expenditure (p.a.)	**$5,238,480**
Residents and Onsite Employees:	
Total Residents	1,516
Total Onsite Employees	740
Total Employee and Residential Expenditure (p.a.)	**$18,148,800**
Residents	$16,372,800
Office	$1,341,176
Retail	$278,400
Child Care	$48,000
Hotel	$108,424
Aged Care	$11,040
Maintenance Expenditure (p.a.)	**$11,700,000**
Total Operational Expenditure	**$35,087,280**

Source: MacroPlan Australia (2013)

MacroPlan Dimasi estimates that, over the period 2015 to 2025, the expenditure benefit of the proposed development will total approximately $435 million or approximately $284 million in NPV terms. This comprises the following:

- **Construction Expenditure** – The proposed development will provide approximately $260 million ($174 million in NPV) in construction economic benefits. This benefit is based on the scale of construction.
- **Maintenance Expenditure** – The proposed development will provide approximately $59 million ($28 million in NPV) in maintenance economic benefits. This benefit is based on the scale of construction.
- **Employee/Resident Expenditure** – The proposed development will provide approximately $91 million ($43 million in NPV) in employee and resident economic benefits.
- **Hotel Visitor Expenditure** – The proposed development will provide approximately $26 million ($22 million in NPV) in tourist economic benefits.

4.2.2 Employment Impacts

A key economic benefit that will be generated by the development of Tarneit Junction is the additional employment. The employment generated will include construction related employment throughout the estimated five (5) year construction phase as well as ongoing operational employment once the development is complete.

The western suburbs of Melbourne recorded an unemployment rate of 9.6% at June 2013. This equated to 4,012 unemployed persons compared with a total workforce of 47,451 persons. This unemployment rate is substantially higher than both the state-wide and national rates of unemployment which were recorded at 5.6% and 5.4% respectively.

The construction and operational employment generated by the development of Tarneit Junction will assist in reducing unemployment in the region. The economic benefit for employment from this development has been quantified below based on the construction and operational phases of the development.

Employment Benefit: Construction Phase

As previously stated, the proposed development is expected to generate construction costs of approximately $260 million over a five (5) year period. Much of this expenditure will be related to labour costs and generate employment both onsite (direct benefit) and offsite (indirect benefit) employment.

Using input-output analysis, it is estimated that value of the project will support an average of 152 equivalent fulltime (EFT) jobs per annum during the five (5) year construction phase as direct employment. This relates to onsite employment opportunities and benefit. In addition, it is estimated that up to 577 EFT jobs will be generated per annum as indirect employment. This relates to offsite employment opportunities and benefits in construction related industries.

Employment Benefit: Operational Phase

There is a broad mix of commercial land uses proposed onsite that will support a mix of employment opportunities. The employment benefit from these uses has been calculated based on the scale of each proposed land uses type and the relevant average employment densities for these types of uses. Note: This employment benefit reflects the number of jobs accommodated on site following construction and are not necessarily induced by the development itself (i.e. they represent new local employment opportunities as compared to a direct economic impact).

At completion and based on the proposed scale and mix of integrated land uses onsite, it is estimated that up to 740 EFT jobs will be supported onsite per annum. This is representative of the direct and long term employment benefit.

The onsite uses are also expected to generate additional indirect or offsite population serving employment related to growth (i.e. additional retail, health and education employment). There is estimated to be up to an additional 275 EFT jobs generated throughout western suburbs and the surrounding region.

The total estimated employment benefit generated during the operational phase is therefore 1,015 EFT jobs.

4.2.3 Induced Private Investment

The proposed development will result in strong positive expenditure benefits from the construction phase as well as the supporting residents and tourists. This in turn will create flow-through employment impacts onsite as well as throughout the surrounding local and regional economy.

These modelled impacts do not however account for the 'catalyst' impact that the proposed development could potentially achieve. The proposed development is intended to provide a scale and mix of uses that would support the establishment of a TOD precinct surrounding the proposed Tarneit rail station. The development of Tarneit Junction could assist in increasing the rate of development in the area and 'activate' other potential developments within the local area.

It is also noted that the development will generate an increased scale of employment and population in proximity to the rail station, which will be a substantial public sector investment.

The potential 'catalyst benefit' or 'induced private investment' would be in the form of expedited growth and development throughout the local area, particularly within proximity to the proposed Tarneit rail station. This benefit has the potential to relate to both residential and non-residential development and growth.

As an example of induced private investment, it is understood that the proposed Tarneit Junction development has attracted a number of expressions of interest from private businesses based on the planned mix of commercial uses.

5 Community Benefits Assessment

This section provides a triple bottom line (TBL) assessment which provides qualitative assessment of the proposed development, to illustrate the wide mix of benefits for the community of the mixed use development in terms of jobs, financial investment and self-containment of activity.

This assessment considers more broadly how the proposed development will benefit and contribute to the surrounding community in terms of other planned developments and growth (including the future activity centre and proposed rail station) and the Wyndham growth corridor generally.

5.1 Qualitative Assessment

To analyse the range of the benefits and costs associated with the proposed development options that cannot be assigned a value, a comparative rating matrix was developed to provide a prognostic measure of changes in a number of indicators. Each performance indicator has been chosen to assist in identifying the TBL benefits (i.e. economic, social and environmental impacts) of the proposed development.

5.1.1 Economic

Economic Capacity

The proposed development will increase economic capacity locally as well as throughout the broader growth corridor by generating both onsite and offsite employment growth and opportunities. The additional employment activity will generate benefits for a range of surrounding commercial uses by way of day to day retail and service needs.

The additional economic capacity includes value adding economic and business growth based on the planned information and technology, medical and education business activities onsite.

The onsite hotel component also has the potential to support additional tourism activity in the local area. This type of use will also generate activity and expenditure that will support a greater level of opportunity offsite throughout the surrounding region.

These various benefits will create lasting impacts and growth throughout the region and has the potential to accelerate development opportunities elsewhere throughout the surrounding area.

Employment Creation and Diversity

The development comprises a mix of IT, medical, office, retail, education, retirement, accommodation, hotel, and child care uses. This type of mixed use development will generate a significant amount of additional employment (estimated at 740 EFT jobs onsite) and will provide a boost to the local economy.

The diversity of employment generated onsite will appeal to a broad socio-demographic mix supporting white collar and service industry employment which will encourage residential and population growth throughout the surrounding growth corridor. The scale, mix and diversity of employment proposed onsite will also assist in creating amenity within the local area that will encourage other businesses to establish locally.

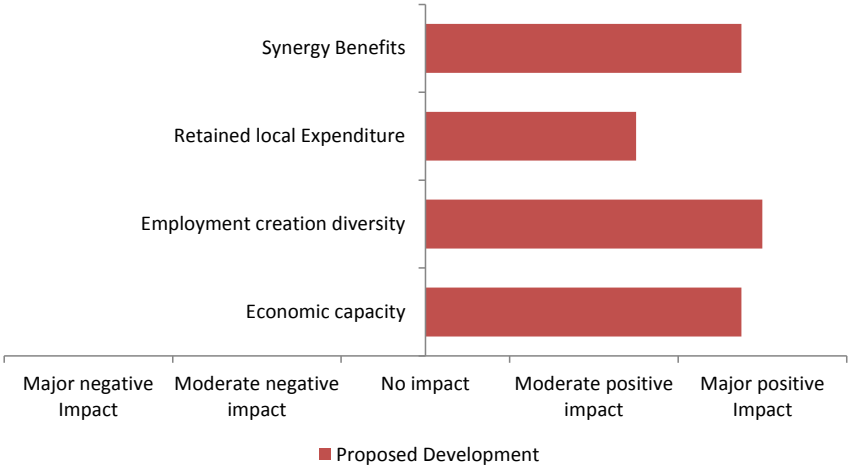
Retained Local Expenditure

The proposed development will increase the offer of local convenience retail, restaurant and service uses. This mix of uses will provide a local alternative and therefore assist in increasing local retention of resident generated retail and service related expenditure.

Synergy Benefits

The Tarneit Junction development proposes a broad mix of uses that will produce a high level of integration and synergy onsite. These synergies relate to business activities onsite (such as potential for vertical integration) as well as synergies with the needs of the surrounding community. For example, the proposed convenience retail and restaurant uses onsite will have synergies with the residential and other employment uses onsite because of the core and convenience offer that they provide. Other uses such as the child care facility will also create these synergies, which it is important to note will apply to other surrounding developments as well that development and activity planned onsite.

Figure 1. Economic Benefit Assessment Summary



MacroPlan Dimasi (2013)

5.1.2 Social

Activity Generation / Community Cohesion

A key benefit of the proposed development is the activity and community cohesion that will be generated in close proximity to the proposed future rail station and future activity centre. The type and scale of activity that will be delivered by Tarneit Junction will be conducive to and very supportive of the patronage and type of activity required for the rail station and activity centre developments.

The strategic location of the proposed development will create opportunity for linked trips and increased visitation as well as attract a greater scale and diversity of people into the local precinct.

Accessibility

A key localised community benefit from the proposal is the improved access to services and amenity. The new development will contain a mix of local and convenience services and facilities that produce a much greater level of access and amenity for residents and workers. The accessibility for the planned local services and facilities will be further enhanced by the proximity and connection to the proposed Tarneit rail station.

Perceptions of Safety

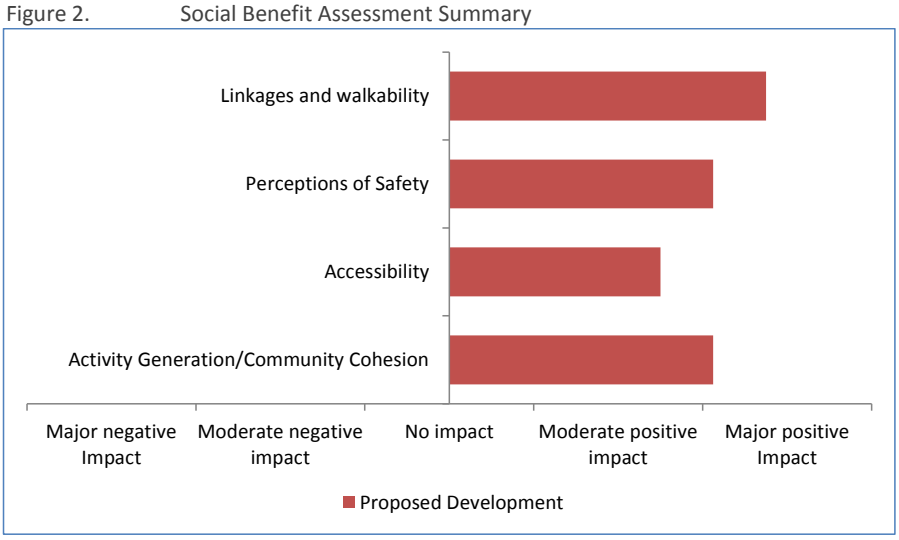
The scale of the planned development as well as the mix of residential and non-residential uses is expected to create a high level of passive surveillance and security. This will be delivered through lighting onsite, the level of activity onsite and installed surveillance and security. Given the proximity of the site to the proposed rail station this will be of significant benefit for the local area.

Linkages and Walkability

The development will contain active pedestrian movement throughout, thereby improving the level of permeability and connectivity in the area. With good infrastructure, public transport linkages and access to services, the site enhance movement patterns for residents and workers onsite and provide strong connectivity to the proposed rail station.

It is understood that there will be a signalised intersection created Wilandra Drive as a result of the proposed Tarneit Junction development. This will further enhance walkability and linkages to and from the subject site.

Figure 2. Social Benefit Assessment Summary



MacroPlan Dimasi (2013)

5.1.3 Environmental

Building Design

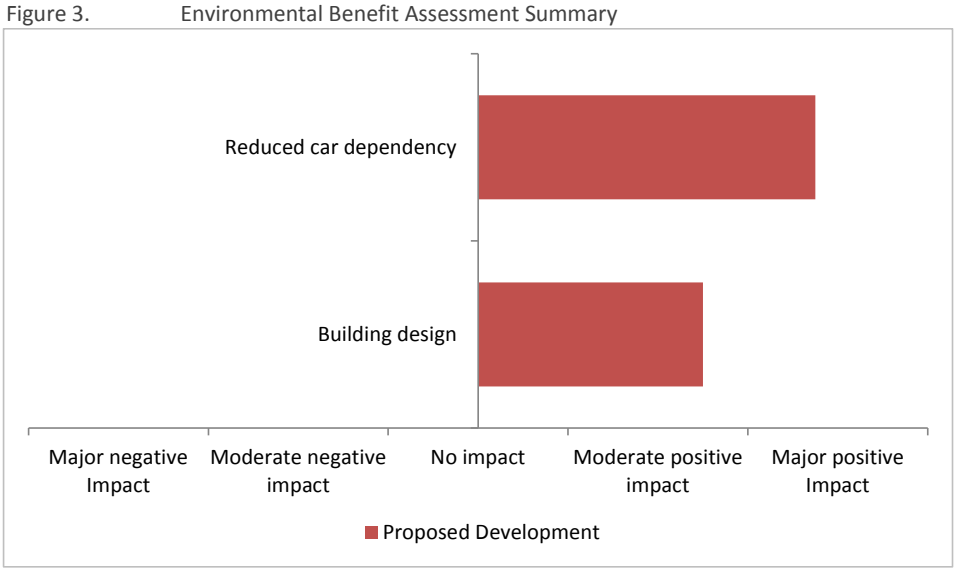
The proposed development is planned to incorporate a number of environmentally sensitive building design elements. These include One Planet buildings, green walls and space for large trees to reduce any 'heat island' effect. Overall the project aims to achieve an aspirational 7-star energy rating.

Reduced Car Dependency

The location of the proposed development with high activity levels near public transport will increase the attractiveness of usage of public transport and therefore reduce vehicle trips. This means there will be a reduction in pollution levels from vehicle emissions, water pollution and noise pollution. The multiplier effect is improved health and amenity (through reduced pollution) for a large proportion of the community. The project will increase local jobs for local people within walking distance to a rail station.

The development comprises mixed use buildings across a condensed urban footprint, therefore improving the opportunity for site visitors to maximise their utility onsite and reduce their number of trips.

Figure 3. Environmental Benefit Assessment Summary

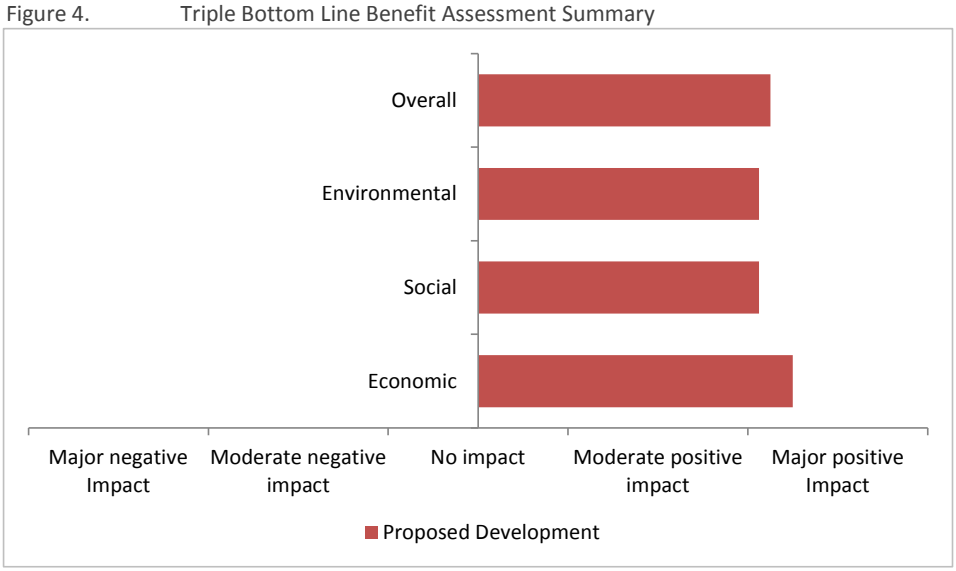


MacroPlan Dimasi (2013)

5.1.4 Summary

The triple bottom line benefits of the proposed Tarneit Junction are summarised below. The scale and mix of proposed land uses onsite, particularly given the proximity to planned developments and growth throughout the local area and broader Wyndham growth corridor, will generate strong positive benefits across in terms of economics, social and environmental factors. The figure below demonstrates that the proposed development is expected to generate moderate to major positive impacts across all factors.

Figure 4. Triple Bottom Line Benefit Assessment Summary



MacroPlan Dimasi (2013)

6 Conclusion

This assessment illustrates that the proposed development will provide a major benefit to the local economy, community and environment.

The unique mixed use offering of office, convenience retail, accommodation and other facilities onsite will provide a significant benefit throughout the construction and operational phases of the project including a significant increase in local expenditure. MacroPlan Dimasi has estimated that over a 10-year assessment period the various expenditure factors would provide a direct economic benefit of $284 million in net present value terms.

A significant proportion of this expenditure will be spent in the local economy as retail and construction impacts will be realised and serviced locally. This will provide an ongoing source of economic stimulus to keep pace with the rapid residential growth of Melbourne's Western Suburbs.

This localised expenditure will translate into a positive employment outcome for the Western suburbs of Melbourne which has an above average level of unemployment (9.6%). An average of 152 EFT construction jobs will be generated per annum during the five (5) year development phase whilst the scale and mix of uses proposed onsite will support an additional 740 EFT jobs locally. Post construction the resident, visitor and employee expenditure is estimated to generate some 275 EFT positions ongoing.

The proposed Tarneit Junction development will also produce synergies with and benefit for the proposed Tarneit rail station and Rose Grange Shopping Centre. The development onsite will produce an increased scale and density of residential population as well as a greater level of local activity overall. These attributes will all have flow on effects and positive impacts for that planned investment in the local area.

The multiplier effects of a large catalyst project such as Tarneit Junction will also:

- Induce further investment in the region;
- Produce a high level of synergies for uses onsite and throughout the local area;
- Support a range of triple bottom line outcomes;
- Provide added walkability, employment self-containment and public transport usage;
- Reduce the need for private transportation;
- Deliver added employment diversity and economic capacity; and
- Promote ESD built form outcomes in an area of high development activity showcasing its benefits in a high activity node.

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