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# **Social Impact Assessment: Townsville Ocean Terminal Project Volume 2**

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Document Authors: Geoffrey Muldoon & Warwick Powell

Document Approval: 17/08/2007 2:52 PM - Warwick Powell

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Transpac Consulting Contact: Warwick Powell 0411 628 084

Client Contact: Moya Steele, MacDonnell's Lawyers

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## >> EXECUTIVE SUMMARY

This is Volume II of a two-volume Social Impact Assessment report for the proposed integrated Townsville Ocean Terminal and residential and marina development.

A community survey of 409 randomly selected adult residents of greater Townsville was conducted to evaluate the present state of play of attitudes towards social identity and 'sense of place' and, subsequently, gauge public reactions to possible impacts of the TOT on Townsville's social character.

The survey was conducted as part of a broader assessment of social impacts. The survey findings are relevant to a number of elements of the project Terms of Reference, set out in Section 4.13 of the TOR document prepared by the Queensland Government.

The key conclusions of the survey, as they relate to relevant TOR are summarised below.

**TOR: Community severance (if any) in relation to sense of place, identity and service delivery, for example schools, shops, churches, recreational, entertainment and cultural facilities, social links, health and other community centres and open space**

Results from this survey suggest a mixed but generally positive outcome in terms of potential community severance aspects of the proposed integrated development. The majority of respondents believed that the TOT project would result in improvements to their sense of place and identity. Overall, based on survey findings 55% of residents are favourable towards the proposed TOT with a further 20.5% indifferent. Net favourability for the integrated project is +34.2%.

**TOR: The impacts on the community networks and quality of life**

The results of this survey suggest the proposed integrated Ocean Terminal and residential and marina development will have a positive impact on the Twin Cities lifestyle and the sense of place of its inhabitants. The proposed development is seen as enhancing social capital and social cohesion through its contribution to increasing diversity and multi-culturalism and the cosmopolitan nature of the city and through its recognising the newfound maturity and sophistication that prevails in the City.

The proposed development is also regarded as having a positive impact in terms of contributing to the growth of Townsville, but without impinging on the positive lifestyle aspects of the Twin Cities. It is expected the proposed development will augment existing recreational assets and opportunities but not at the expense of being "out of character with existing lifestyles" or "at odds with the goals of balancing growth and lifestyle".

Lastly, the integrated development and its various components are seen in the community as being able to deliver economic benefits through investment and additional jobs and economic well-being and stability in the local economy through increased tourism expenditure. More importantly the development is seen as being capable of doing so without compromising lifestyle benefits of the local area.



**TOR: The interaction of the various proposed uses (e.g. residential, tourism, maritime) within the Project site and adjoining areas including the impacts on future residents of the Breakwater Cove precinct from operations within the TOT precinct and other surrounding land uses such as the Port of Townsville**

The positive economic impact on Townsville of the integrated proposal (32.6%) and the Ocean Terminal (32.2%) and the residential and marina complex (37.6%) as components of it, was the most consistent driver of support for the project. Furthermore, the potential boost to tourism was nominated as the main driver of support for the integrated proposal (34.1%) and the Ocean Terminal (39.1%) as a component of it.

The potential negative impact on the environment was the most recurrent reason given for opposing the integrated proposal (31.7%) and both the Ocean Terminal (29.0%) and the residential and marina complex (26.7%) as components of it. An increase in traffic congestion in the Strand precinct and increased pressure on essential services and infrastructure also figured prominently as reasons for opposing the integrated development and each of its components. Community concerns about conflict between the proposed TOT and the existing Port infrastructure was raised by no more than approximately 12% of those that opposed the integrated project. More significantly, no more than 6.5% of respondents that opposed the residential development per se (i.e. not including the Ocean Terminal facility) nominated conflict with operations at the Port as their reason for their unfavourable view.

When asked specifically about the compatibility of the Ocean Terminal development with the Port, the survey found that 68% of respondents believed that the proposed TOT would complement the Townsville port infrastructure.

Thus, while there are some in the community that have concerns about the interaction between the proposed TOT and the existing port infrastructure, the majority of residents believe that the project will be complementary and will, in fact, be a key driver of future economic growth and prosperity especially in relation to boosting the region's tourism sector.

**TOR: Implications (real and perceived) for public amenity as a result of the development**

The overall tenor of the survey results indicate that the majority of residents believe that the TOT project will lead to improvements in public amenity, particularly in term of enhanced recreational facilities accessible to the public.

At a broader level, improvements that the project is expected to bring to general economic wellbeing and 'quality of life' would contribute to enhanced amenity in terms of how residents experience their lives in Townsville.



**TOR: The Impacts which may lead to any reduction to the amenity and sustainability of the local communities and in particular losses to community facilities and reduced accessibility**

The survey found that the majority of respondents believed that the TOT project would improve and sustain the quality of life in Townsville through the creation of new jobs (67.2%), contribute positively to quality of life in the city by increasing the recreational opportunities available to its residents (59.1%) and complement the redeveloped Strand (64.5%), which is already a widely used recreational asset.

**TOR: Impacts on people who live, recreate, travel along, or work near the areas affected by the Project during the construction phase of the development**

The results from this survey suggest that overall, the proposed development will have minimal impact on people's use of either the Strand or the Breakwater precinct. In both cases less than 20% of respondents anticipated either a significant or slight impact on their use of these areas during construction. Approximately 50% of all respondents were of the opinion that their use of the area would remain unaffected by the construction activities of the integrated development and its various components.

**TOR: Recreational, leisure and sporting activities which may be affected, particularly relating to recreational fishing, boat users and public open space on The Strand**

The survey found that the majority of residents did not believe the project would have any impact on their current usage of the Strand and breakwater recreational areas, either during or after construction.



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# 1 INTRODUCTION

This is a **draft** report. It is Volume II of a two-volume *Social Impact Assessment* report for the proposed integrated Ocean Terminal and residential and marina development (TOT). This Volume presents the findings from primary data gathered via a telephone survey of residents of Thuringowa and Townsville cities. It should be read in conjunction with Volume I, which presents the overall evaluation of potential impacts.

## 1.1 TERMS OF REFERENCE

As the TOT has been deemed a project of State Significance under the *State Development and Public Works Organisation Act (1971)*, the terms of references (TOR) for the EIA were drawn up by the Queensland State Government's Department of State Development (2006) with required levels of community input. Broadly the TOR requires an social impact analysis, including a description of environmental values and potential impacts.

This community attitude survey aims to explicitly address the following issues as highlighted by the TOR:

- The Population and demographics of the affected community;
- Local community values, vitality and lifestyles;
- Recreational cultural, leisure and sporting facilities and activities in relation to the affected area; and
- The integrity of social conditions, including amenity and livability, harmony and well-being sense of place and access to recreation.

Furthermore, in line with the TOR, this community attitude survey aims to address the following:

- The interaction of the various proposed uses (eg residential, tourism, maritime) within the Project site and adjoining areas including the impacts on future residents of the Breakwater Cove precinct from operations within the TOT precinct and other surrounding land uses such as the Port of Townsville;
- Impacts on people who live, recreate, travel along, or work near the areas affected by the Project during the construction phase of the development;
- Impacts which may lead to any reduction to the amenity and sustainability of the local communities and in particular losses to community facilities and reduced accessibility;
- Community severance (if any) in relation to sense of place, identity and service delivery, for example schools, shops, churches, recreational, entertainment and cultural facilities, social links, health and other community centres and open space;
- The impacts on the community networks and quality of life;
- Recreational, leisure and sporting activities which may be affected, particularly





- relating to recreational fishing, boat users and public open space on The Strand;
- The impact of increased shipping frequency; and
- Implications (real and perceived) for public amenity as a result of the development.

## 1.2 REPORT STRUCTURE

The report is structured as follows:

- **Section 2** describes the proposed TOT project;
- **Section 3** describes the methodology used for the community survey and analysis of survey data;
- **Section 4** presents the detailed findings of the survey; and
- **Section 5** is a conclusion that draws the findings together and relates them to the TOR.

**Appendix 1** provides details on the demographic composition of the survey sample.



## 2 THE PROPOSED TOWNSVILLE OCEAN TERMINAL PROJECT

### 2.1 OVERVIEW OF THE PROJECT

The TOT project is being developed as a joint venture between TABCORP and City Pacific Limited. Contractual arrangements between these parties and the State were executed in June 2006. However, post approval the development will be entirely managed by City Pacific Limited.

The TOT project involves the development of the following:

- A dedicated *cruise terminal and wharf* located on the Port Western Breakwater, adjacent to the Port of Townsville, to attract cruise ships and military vessels to Townsville;
- An integrated *residential and tourism development* providing residential land parcels of mixed density for development;
- Extended *public access to the Breakwater*, with future open space areas to be reclaimed to the North of the existing Townsville Hotel and Casino Complex, and the Townsville Entertainment Centre; and
- Additional *marina berths for the marine industry*, general recreational vessels and berthing facilities for superyachts.

Image 1 shows the Master Plan for the proposed development.

#### IMAGE 1: MASTER PLAN



Source: City Pacific Limited



## 2.2 SITE LOCATION

The project is located in Townsville. Townsville is a city of approximately 164,000 persons located in North Queensland. It is approximately 1,200km from the State's capital of Brisbane. As the largest urban centre in North Queensland, Townsville effectively serves as the administrative hub for the region.

The project site is located on and adjacent to the existing Townsville foreshore. It incorporates the existing Port Western Breakwater and the Northern (offshore) Breakwater, the existing perimeter of the land around the Townsville Hotel and Casino Complex and the Townsville Entertainment Centre.

The project is specifically located to the north-east of Sir Leslie Thiess Drive and Entertainment Drive. Vehicular access for future residential areas will be from Entertainment Drive. The project site is in close proximity to the Strand foreshore, and is directly connected to the Strand precinct for pedestrian access.

To the south of the project site is the existing Townsville Port, separated by Ross Creek. Proximity to the Port and, therefore, impacts on current and future Port economic activities is considered an important element of the Environmental Impact Assessment process. Image 2 presents an aerial montage of the overall project in its context. In the background is Castle Hill; to the left is the Port of Townsville.

**IMAGE 2: MONTAGE VIEW TO EAST**



*Source: City Pacific Limited*

On either side of Ross Creek are located a number of commercial operations that use maritime infrastructure, namely Sunferries (located at Breakwater Terminal, Sir Leslie Thiess Drive) and Fantasea – operators of cruise tours. Slipways for boat repairs also operate from the south bank of Ross Creek.



### 2.3 PROJECT PROPONENTS

The project is being developed by City Pacific Limited.

City Pacific Limited is a diversified financial services company, providing finance and investment products.

City Pacific is one of Australia's largest non-bank loan providers. City Pacific Limited has \$5 billion in mortgage assets under advice, comprising over \$1 billion funds under management in the City Pacific Mortgage Trust, City Pacific Income Fund, City Pacific Managed Fund and City Pacific Private Fund, a residential loan book of \$3 billion and commercial mortgage assets under management of approximately \$1 billion. City Pacific originates nearly \$3 billion per annum in loans to fund residential property, property development, commercial property investment, plant & equipment and business finance.

City Pacific Limited is an Australian based public company that listed on the Australian Stock Exchange in 2001 (ASX Code: CIY).

As a publicly listed company, members of the community that wish to gain equity in the proposed development are able to do so indirectly through the acquisition of shares in City Pacific Limited.



## 2.4 CRUISE TERMINAL AND WHARF DEVELOPMENT

The development of the cruise terminal and wharf precinct will involve the following key elements:

- Indentation of the Port Western Breakwater and the construction of a dedicated berth;
- Construction of the wharf and the terminal building;
- Land reclamation; and
- Associated road works, car parking and infrastructure services.

### 2.4.1 DEDICATED BERTH

The TOT berth will be designed for both military and cruise vessels. The project proponents (City Pacific Limited, 2006) indicated that the operation of the berth will be conducted to minimise disruptions/interruptions to the normal commercial port operations of the Townsville Port.

The berth will be able to accommodate vessels of a size up to the 'Wasp' class naval vessel (overall length = 258m, beam = 32.3m, deck beam = 42m, draft = 8.3m). This includes vessels such as the USS Boxer, Essex and Bonhomme Richard.

As well, the berth will be able to accommodate the State's 'Benchmark Cruise Ship' identified in the *Queensland Shipping Plan* (overall all length = 238m, beam = 33m) on a regular basis.

### 2.4.2 WHARF INFRASTRUCTURE AND SERVICES

The proposed wharf structure will be 200m in length and 30m wide. The wharf will have the capacity for military tanks up to 65 tonnes and tank/truck trailer combinations up to 95 tonnes. The wharf will provide a range of services, including:

- Electricity;
- Potable water;
- Flood lighting; and
- Sewage and grey water storage and disposal.

### 2.4.3 TERMINAL BUILDING

A single-storey terminal building with a gross floor area of 1,000m<sup>2</sup> will be constructed, and will provide space for the following:

- An area for Australian Quarantine Inspection Service (AQIS), Australian Customs Service (Customs) and Department of Immigration and Multicultural Affairs;
- A general arrivals and departure hall area; and
- Space for meeting, greeting and farewelling activities.

The building will also provide offices for operational staff and management, AQIS and



Customs. A small café, of approximately 20m<sup>2</sup>, will be provided in the main hall area for visitors and friends. It is envisaged that the café may be licensed.

The future operation of this terminal facility will be undertaken by Townsville Port Authority.

#### 2.4.4 TRANSPORT ACCESS AND PARKING

*Vehicle* access to the TOT precinct will be via Entertainment Drive, which will be upgraded to a two-lane roadway. The road will cater for public, private and service vehicles. This roadway will also provide access to the precinct for *cyclists*.

Separate set-down areas will be provided for *buses* and *taxis*.

*Pedestrian* access will be strictly controlled. The precinct will be fully fenced and gated, which will control pedestrian access to the area on non-ship days or as required by the terminal operator. Relevant security arrangements as required by the type of vessel will govern pedestrian access during operational (ship) days.

The development will involve the provision of a range of carparking facilities, including:

- 10 onsite parking spaces for tour and shuttle buses;
- The bus parking area also will provide parking for up to 8 heavy trucks in the event of visitations by navy vessels;
- 100 onsite car-parks for visitors in a designated parking area;
- Reserved uncovered parking for 12 official vehicles; and
- 20 uncovered spaces for VIP and hire vehicles in close proximity to the TOT terminal.



## 2.5 BREAKWATER COVE PRECINCT

The Breakwater Cove development, to be undertaken on reclaimed land, will provide a residential waterfront community comprising of a mixture of dwelling types. It will include detached and attached dwellings, multiple dwellings and associated uses that relate to each other and service local residential requirements.

The key elements of the Breakwater Cove Precinct are as follows:

- Perimeter Breakwaters;
- Open space areas for public access;
- Approximately 200 detached dwelling sites on the 'fingers', each with access to a private marina berth;
- Approximately 500 residential apartments;
- A 375 berth marina (including 10 superyacht berths); and
- Approximately 1,500m<sup>2</sup> of retail and commercial space.

As well, the development concept includes the construction of a 500 space public car park to the rear of the Townsville Entertainment Centre. This car park effectively replaces public parking space lost as a result of the development of Surplus Casino Land associated with the adjacent residential development being undertaken by Resort Corp.

Image 3 shows an artist impression of the marina, looking north. Also depicted are the residential apartments around the eastern and southern perimeters of the marina.

**IMAGE 3: ARTIST IMPRESSION OF MARINA**



Source: City Pacific Limited



## 2.6 CONSTRUCTION TIMEFRAME

The construction of the TOT project as described is expected to take 3 years. This does not include the construction of the residential dwellings (apartments or detached). It is expected that the major earth works and engineering associated with the project will be completed in approximately 12 months (refer to Hyder Consulting, August 2007a *Townsville Ocean Terminal Construction Methodology Report – Section 2.4*).

The consultants understand that as these sites are ready, City Pacific Limited will sell them for development. We are not aware of any specific timeframes in relation to this procedure, and acknowledge that the timing of any residential construction activity will be conditional on the timing of the sale of available developable land, and prevailing market conditions.





### 3 METHODOLOGY

This section presents the methodology used for the quantitative survey and subsequent analysis of the data.

#### 3.1 QUANTITATIVE SURVEY

An extensive *quantitative* telephone survey of 409 residents from Townsville and Thuringowa Cities was carried out by Transpac Consulting. The survey was administered in July 2007 by trained interviewees in accordance with industry IQCA Standards.

The survey was conducted to gather primary data to measure community attitudes on a range of issues relevant to the proposed TOT project development. These issues were:

- Awareness of proposed integrated development;
- Attitudes toward the proposed integrated development; .
- Perceptions of Townsville as a City and perceived impacts of the proposed integrated development on sense of place and quality of life considerations; and
- Current usage of the Townsville Port precinct and anticipated impacts on respondent activities during the construction phase of the proposed integrated development.

Demographic variables were used in the analysis and included questions on the respondent's gender, age, household income, family status and suburb and city of residence.

#### 3.2 SAMPLING PROCEDURE

For this survey the relevant *population* was defined to be the following:

- Extent and Sample Units: Adults aged 18 or over;
- Place: Townsville City LGA and Thuringowa City LGA; and
- Time: July, 2007.

The *sample frame* from which the sample was selected included all suburbs within the above two (2) LGAs. A *stratified random sampling procedure* was adopted to align with the distribution of respondents within these LGAs such that proportional numbers of respondents, relative to population, were drawn from each suburb of these LGAs. Survey respondents were *spatially classified* according to their LGA of residence. The breakdown of the sample by these zones is shown in Table 1.



**TABLE 1: BREAKDOWN OF ZONAL AREAS BY LOCAL GOVERNMENT AREA AND RESPONDENT STRATIFICATION**

Zone	Postcodes	Suburb	Proportion Respondents
Zone 1 – Townsville City	4810 – 4812, 4819	Belgian Gardens Currajong Gulliver Hermit Park Hyde Park Mundingburra Mysterton North Ward Pallarenda Pimlico Railway Estate Rosslea Rowes Bay South Townsville Stuart Townsville City West End (Townsville) Wulguru Magnetic Island	27.4%
	4814	Aitkenvale Vincent Heatley Cranbrook Annandale Mount Louisa Oonoonba Cluden Idalia Douglas Garbutt Julago	22.5%
Zone 2 – Thuringowa	4815 - 4818	Bushland Beach Condon Deeragun Jensen Kelso Kirwan Mount Low Rangewood Rasmussen Thuringowa City Toolakea	50.1%
<b>TOTAL</b>			<b>100.0%</b>

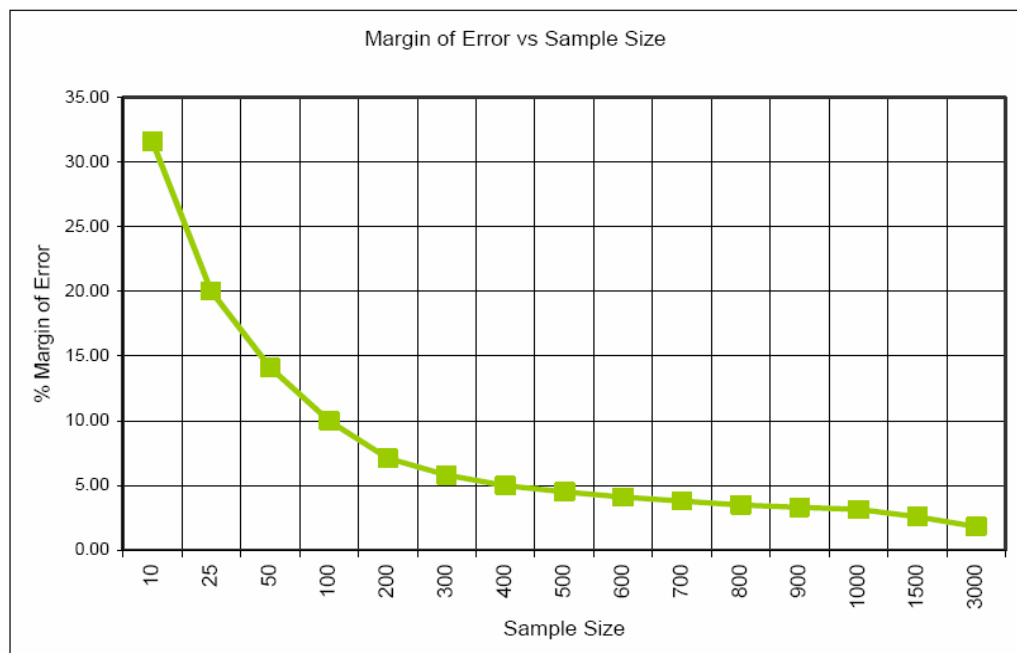


### 3.3 SAMPLE SIZE AND MARGIN OF ERROR

From an efficacy standpoint, it is important that survey results provide an accurate reflection of community sentiment toward the issues in question. The accuracy of survey results are usually described in terms of the 'confidence' the consultant has that the results as presented will fall within a given range or error margin for the community as a whole. It is standard practice to use a 95% confidence interval.

The margin of error will decline as sample size increases but at an increasing cost in terms of administering the survey. The stratification procedure used in this survey, in concert with a sample size of 400, will yield an estimated maximum margin of sampling error of +/- 4.8 at 95% confidence interval (Figure 2).

**FIGURE 2: DECLINING MARGIN OF ERROR FROM AN INCREASE IN SAMPLE SIZE**



### 3.4 QUESTIONNAIRE DESIGN

Questionnaire design is by nature an iterative process, involving a number of iterations based on in-house work-shopping to identify critical issues and demographics of interest, client and interviewer feedback and our professional judgments.

A preliminary final draft was piloted through the call centre to evaluate wording, clarity and length. Issues raised by interviewers during the pilot process were considered during preparation of the final draft for internal approval.



### 3.5 DATA CLEANING AND ENTRY

Data collected by telephone interviews was automatically uploaded into a database via the CATI system, and was subsequently cleaned and imported into SPSS for analysis.

### 3.6 ANALYSIS

SPSS software was used to analyse all survey data. Tests for statistical differences were conducted using the Cross-tabulation procedures.

#### 3.6.1 CROSS-TABULATION ANALYSIS

The SPSS Crosstab procedure was used to test for variations in respondents' attitudes and preferences across a number of comparative variables such as demographics. This procedure uses two-way and multi-way tables to provide for a variety of tests and measures of association. The Chi-square statistic produced by the Crosstab procedure was used to test for significant differences across comparative variables. Effects were considered significant if  $p \leq 0.05$ . The Chi-square test compares the observed and expected frequencies in each category (i.e. combination of attitudes and preferences and comparative variable) to test either that all categories contain the same proportion of values or that each category contains a user-specified proportion of values.

Results of these statistical tests were included only where they were significant ( $p \leq 0.05$ ) and where no more than 30% of the categories had expected frequencies of  $<5$ . Where more than 30% of categories had expected frequencies of  $<5$ , but results were highly significant ( $p \leq 0.001$ ), these results were included on the judgement that they revealed additional information that would be useful and insightful to the client's decision-making processes. *These results have been asterisked (\*) for the reader's benefit.*



### 3.6.2 FACTOR ANALYSIS

Factor analysis was also undertaken.

Factor analysis is technique widely used to describe the relationships among variables through a few underlying, but unobservable, quantities or *factors*. Each factor is represented by a unique set of variables that are highly correlated among themselves and exhibit small correlations with variables in other factors. The correlation between variables and factors is expressed as a weight or *factor loading*. In notational form, factor analysis expresses  $p$  observed random variables as  $x$  linear functions of  $m$  ( $< p$ ) unobserved variables or factors (Jolliffe 1986). If  $x_1, x_2, \dots, x_p$  are the variables and  $f_1, f_2, \dots, f_m$  the unobserved factors, then:

$$\begin{aligned} x_1 &= \lambda_{11} f_1 + \lambda_{12} f_2 + \dots + \lambda_{1m} f_m + e_1 \\ x_2 &= \lambda_{21} f_1 + \lambda_{22} f_2 + \dots + \lambda_{2m} f_m + e_2 \\ &\cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ &\cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ x_p &= \lambda_{p1} f_1 + \lambda_{p2} f_2 + \dots + \lambda_{pm} f_m + e_p \end{aligned} \tag{5}$$

Where;  $\lambda_{jk}, j = 1, 2, \dots, p; k = 1, 2, \dots, m$  are loadings of variables on each factor and  $e_j, j = 1, 2, \dots, p$  are error terms specific to each variable.

Initial factor loadings will be imprecise as variables load highly against more than one factor. A process of orthogonal rotation is used to secure a less ambiguous association between variables and factors, while leaving covariance estimates unchanged.

In terms of factor selection, Kaiser (1960) recommends retaining those factors with an eigenvalue of greater than 1. This criterion is based on notion that eigenvalues represent the variance explained by that factor and that an eigenvalue  $> 1$  represents a considerable amount of variation, and hence a statistically important factor. Another method of factor selection is to use a *scree plot* with the cut-off point for selection being at, or one station beyond, the point of inflexion of the curve (Cattell, 1966). When the samples size is greater than 200, the scree plot approach becomes a reliable criterion for factor selection (Stevens, 1992).

The SPSS statistical package was used to analyse responses from telephone surveys. Exploratory factor analysis (using Principal Component Analysis and Varimax rotation) was applied to the Likert scale response variables to generate hypothesised dimensional structures for the factor model. Only factors with Eigenvalues greater than 1.0 were extracted. Eigenvalue scree plots were also used to aid in the determination of an appropriate number of factors to use.



### 3.7 CONFIDENTIALITY

Transpac Consulting Pty Ltd subscribes to the ICC/ESOMAR Industry Code of Ethics and Professional Conduct. This Code proscribes a commitment to ensuring the confidentiality of research participants including interview respondents and the client organisation.

The confidentiality of telephone survey respondents has been guaranteed. This is also consistent with the requirements of the *Privacy Act 2001*.



## 4 RESULTS

This section presents the results of the community survey.

### 4.1 AWARENESS OF INTEGRATED TOWNSVILLE OCEAN TERMINAL DEVELOPMENT

Surveys of Townsville and Thuringowa residents carried out in April 2006 and April 2007 by Transpac Consulting revealed that 82.3% and 85.5% respectively of all survey respondents had an awareness of proposals to develop a deep-water Ocean Terminal at the mouth of the Ross Creek. Results from the present survey (July 2007) indicate that a similar proportion of respondents (83.4%) are aware of the integrated project that includes the Ocean Terminal and residential and marina development [Figure 1].

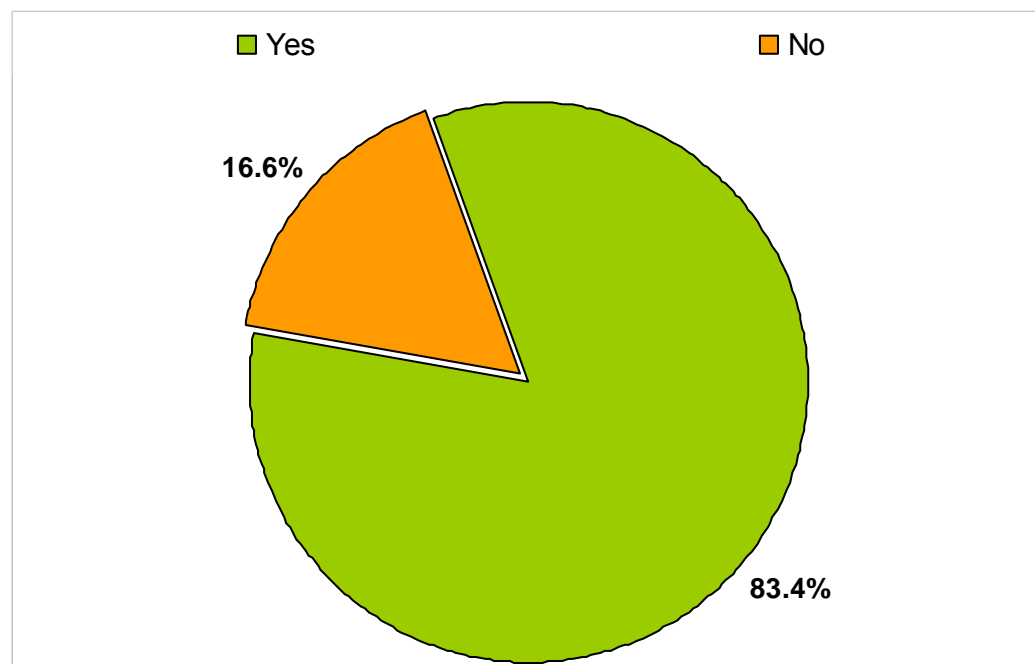
On this basis it can be confidently said that respondents' attitudes is at the very least based on a reasonable level of awareness of the project.

Although there is a high awareness of the integrated project in general terms, slightly less than half (48.2%) of all respondents had seen the master plan for the integrated Ocean Terminal and residential and marina development [Figure 2].

Significantly more females (23.1%) than males (10.5%) were not aware of the integrated Ocean Terminal development project ( $\chi^2_{0.05, 1} = 11.776, p = 0.001$ ) [Figure 3].

Comparisons by respondent age indicated awareness of the integrated Ocean Terminal development increased significantly with age ( $\chi^2_{0.05, 4} = 14.910, p = 0.005$ ). More than 80% of all respondents aged 30–39 were aware of the development as compared with 67.9% of those aged 18–29 [Figure 4].

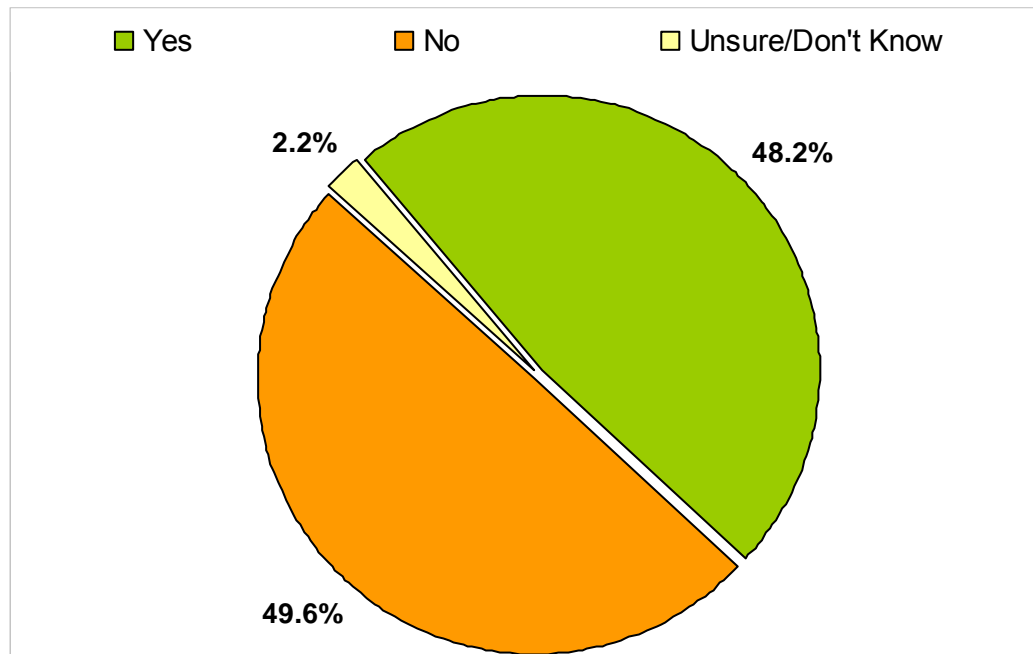
**FIGURE 1: AWARENESS OF INTEGRATED OCEAN TERMINAL PROJECT AND RESIDENTIAL AND MARINA DEVELOPMENT (N = 409)**



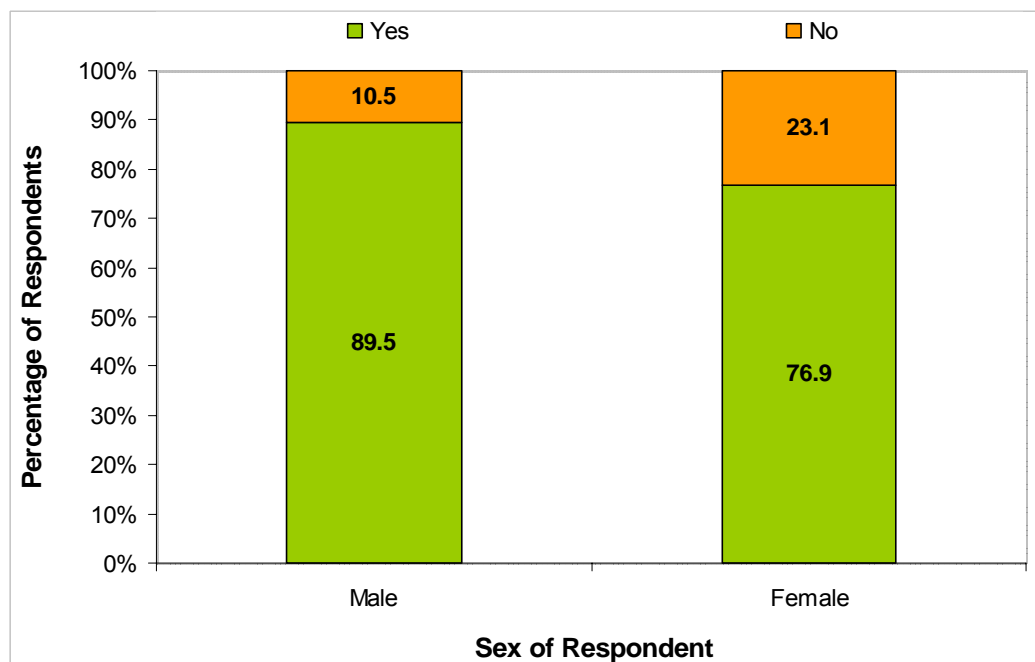


Lastly, significantly more females (60.4%) than males (37.3%) had seen the proposed master plan for the integrated development ( $\chi^2_{0.05, 1} = 21.288, p < 0.001$ ) [Figure 5].

**FIGURE 2: RESPONDENT HAS VIEWED THE PROPOSED MASTER PLAN (N = 409)**



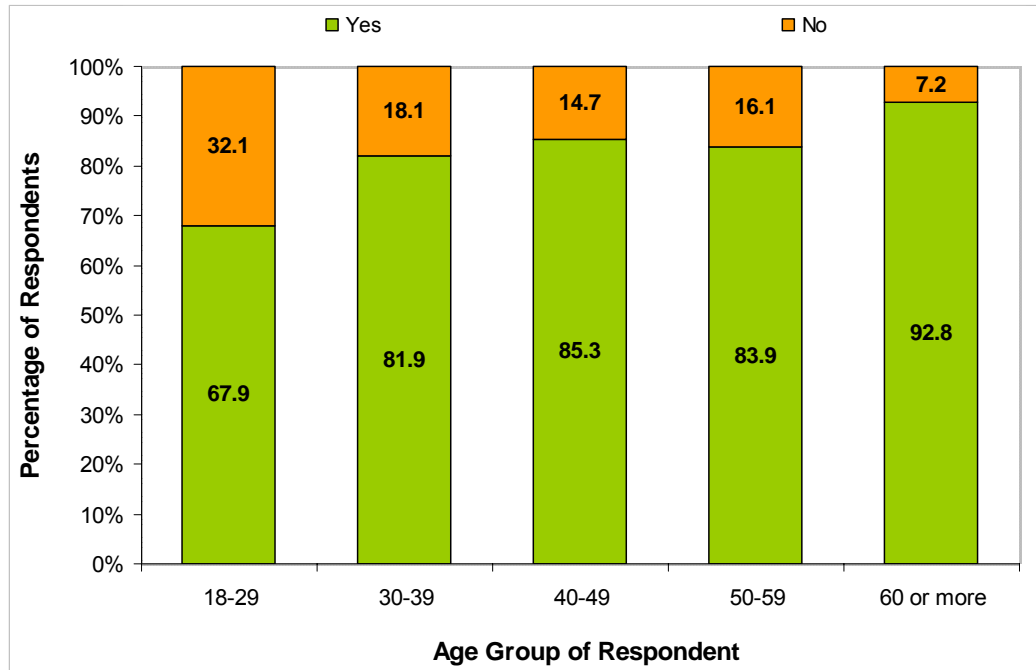
**FIGURE 3: AWARENESS OF THE INTEGRATED OCEAN TERMINAL AND RESIDENTIAL AND MARINA DEVELOPMENT PROJECT BY RESPONDENT GENDER (N = 409)**



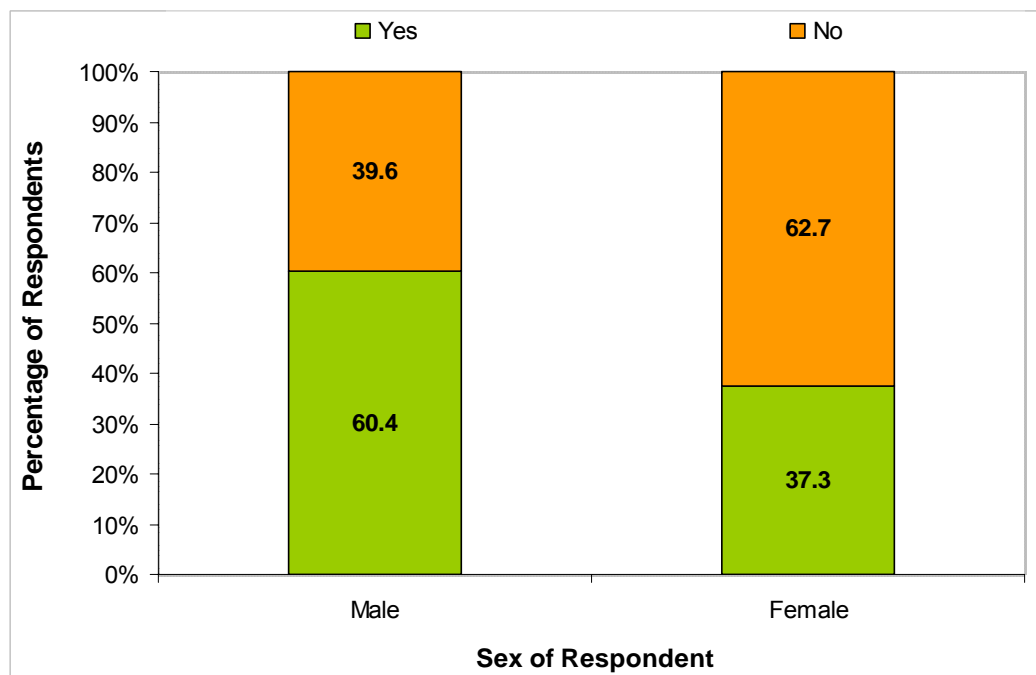




**FIGURE 4: AWARENESS OF THE INTEGRATED OCEAN TERMINAL AND RESIDENTIAL AND MARINA DEVELOPMENT PROJECT BY RESPONDENT AGE (N = 407)**



**FIGURE 5: RESPONDENT HAS VIEWED THE PROPOSED MASTER PLAN BY RESPONDENT GENDER (N = 400)**





## 4.2 ATTITUDES TOWARD THE INTEGRATED OCEAN TERMINAL DEVELOPMENT

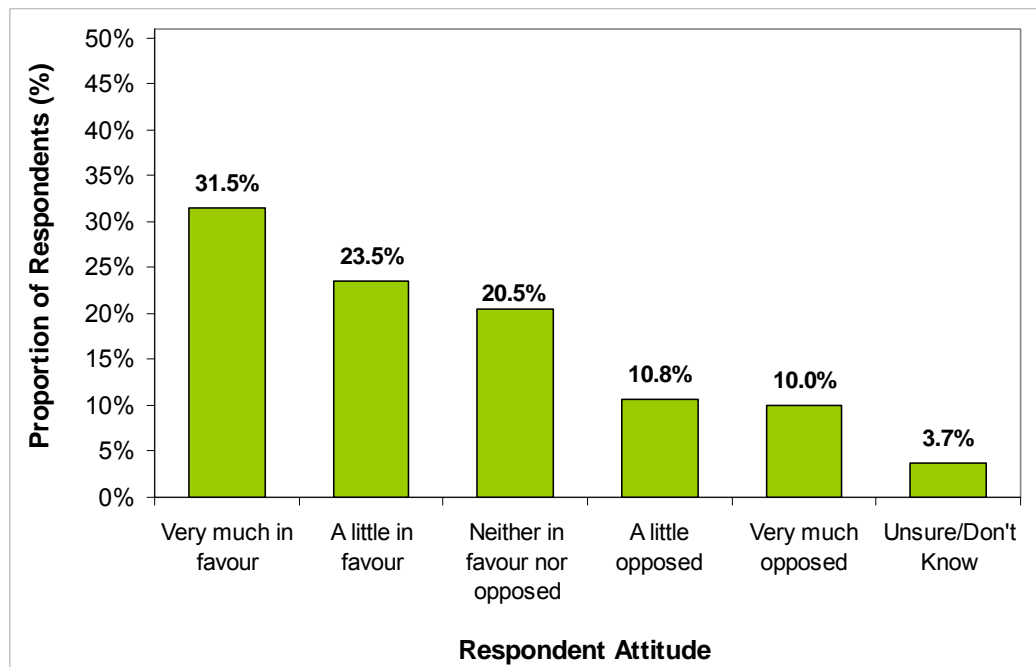
Respondents were asked to indicate their attitude, favourable or unfavourable, to the overall integrated proposal and to each of the major components of the proposal; that is, the Ocean Terminal and the residential and marina development.

More than half of all respondents (55.0%) indicated they were either very much or a little in favour of the overall proposal to develop an integrated Ocean Terminal and residential and marina complex, while 20.5% were neither in favour nor opposed to the development [Figure 6]. As such, *net favourability* was +34.2%.

Of those respondents who very much in favour, 34.1% nominated a boost in tourism as the main reason for their position, while a further 32.6% nominated the positive economic impact the development would have on the Twin Cities as their main reason [Figure 7].

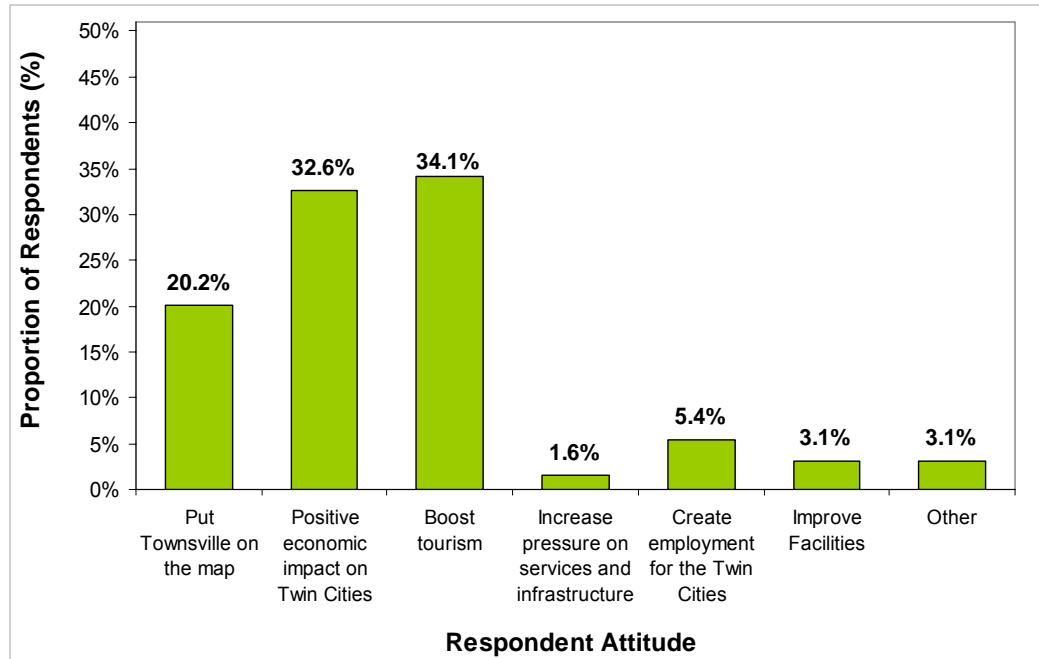
Of those respondents who very much opposed, 31.7% nominated the negative environmental impacts of the project as the main reason for their position, while 22.0% and 19.5% nominated increased pressure on essential services and infrastructure and increased traffic congestion respectively as their main reason for opposition [Figure 8].

**FIGURE 6: ATTITUDE TO THE OVERALL PROPOSAL TO DEVELOP AN INTEGRATED OCEAN TERMINAL AND RESIDENTIAL AND MARINA COMPLEX (N = 409)**

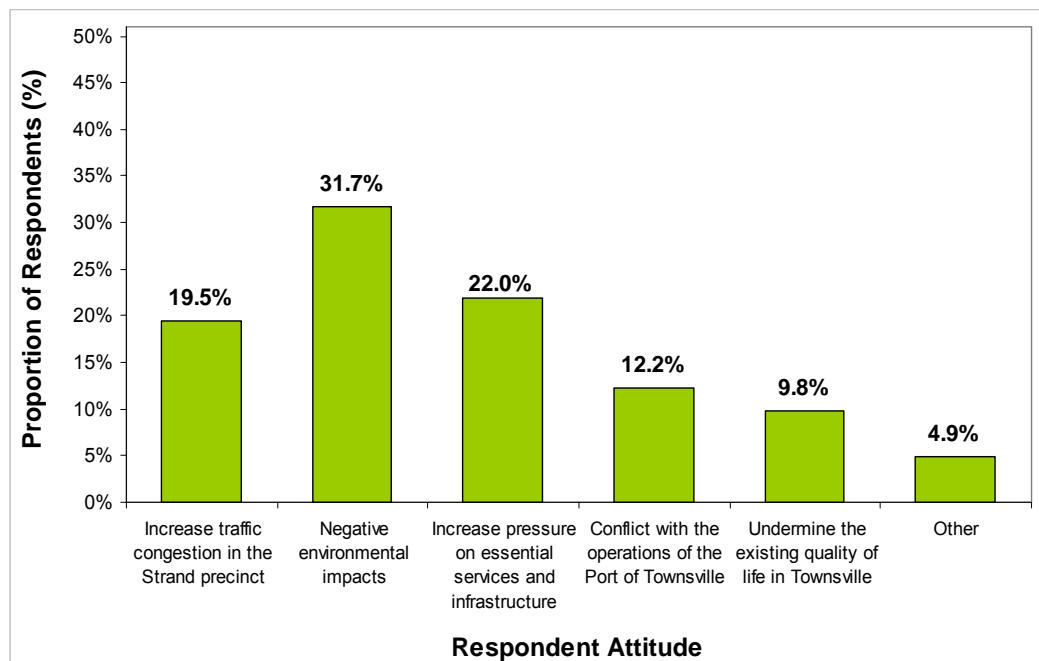




**FIGURE 7: SINGLE MAIN REASON FOR RESPONDENTS' HIGHLY FAVOURABLE RESPONSE (N = 129)**



**FIGURE 8: SINGLE MAIN REASON FOR RESPONDENTS' HIGHLY UNFAVOURABLE RESPONSE (N = 42)**



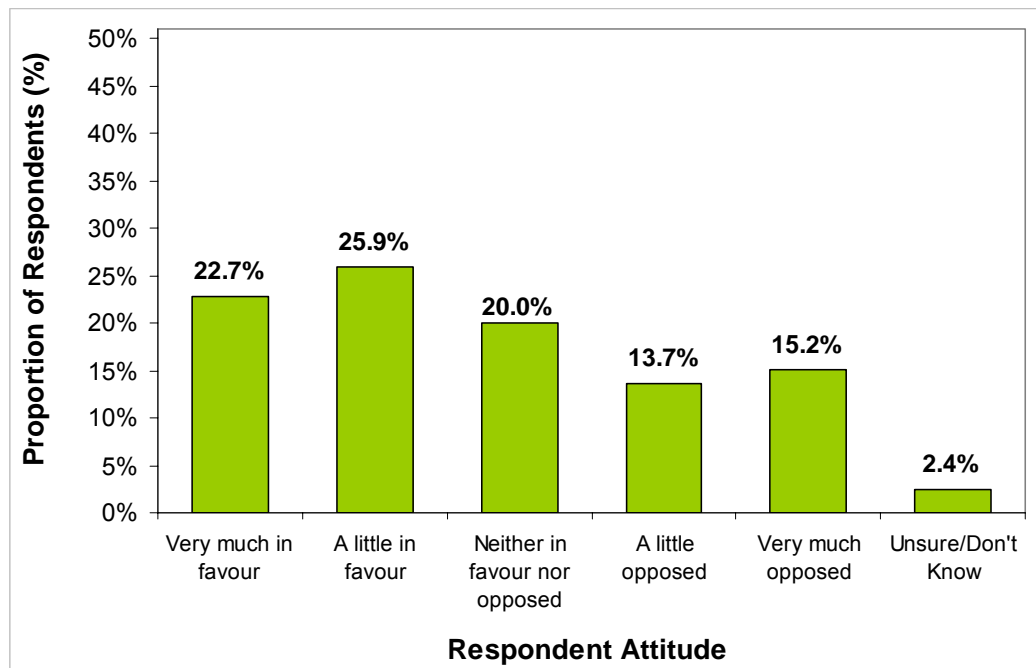


Survey results on respondent attitudes toward the residential and marine complex showed slightly less than half of all respondents (48.7%) had an overall favourable attitude to this component of the overall project with 29% of all respondents having an overall unfavourable attitude [Figure 9]. *Net favourability was +19.8%.*

Of those respondents who very much in favour, 37.6% nominated the positive economic impact the development would have on the Twin Cities as their main reason for their viewpoint while a further 22.6% felt that the prospect this project would “put Townsville on map” was reason enough for their favourable position [Figure 10].

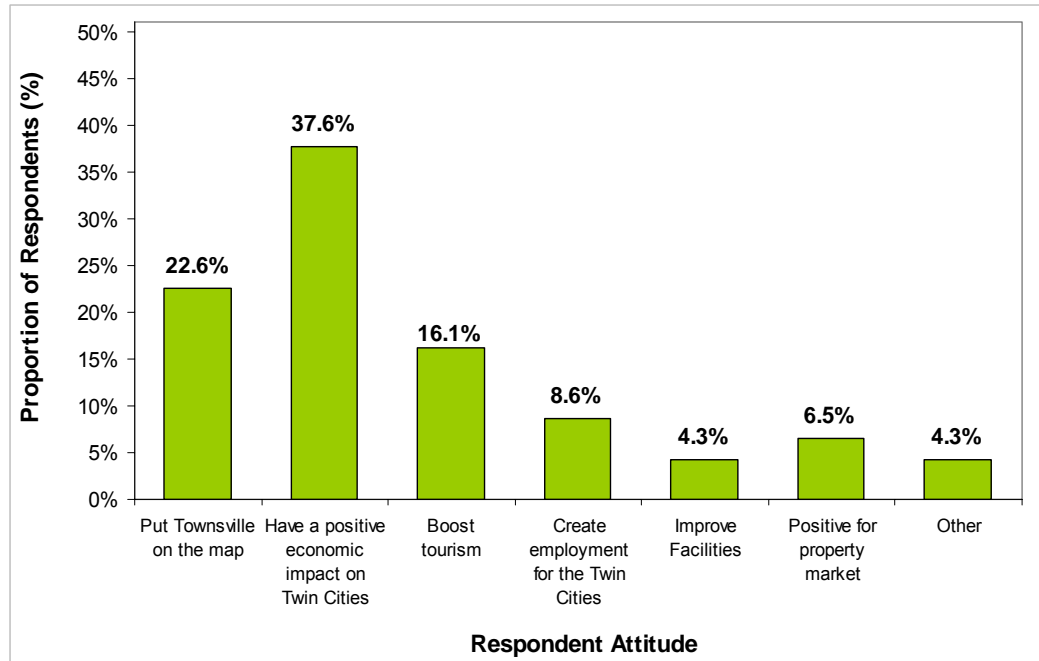
Of those respondents who were very much opposed, 29.0% nominated the negative environmental impacts of the project as the main reason for their position, while 22.6% and 19.4% nominated increased pressure on essential services and infrastructure and increased traffic congestion respectively as their main reason for opposition. One of the main concerns voiced by a number of stakeholders about the residential and marine complex has been the possibility for conflict with the general operations of the Townsville Port. This was a view shared by only 6.5% of respondents who nominated it as the main reason for their opposition to this component of the development [Figure 11].

**FIGURE 9: ATTITUDE TO THE PROPOSAL TO DEVELOP A RESIDENTIAL AND MARINA COMPLEX ON RECLAIMED LAND IN FRONT OF JUPITERS CASINO (N = 409)**

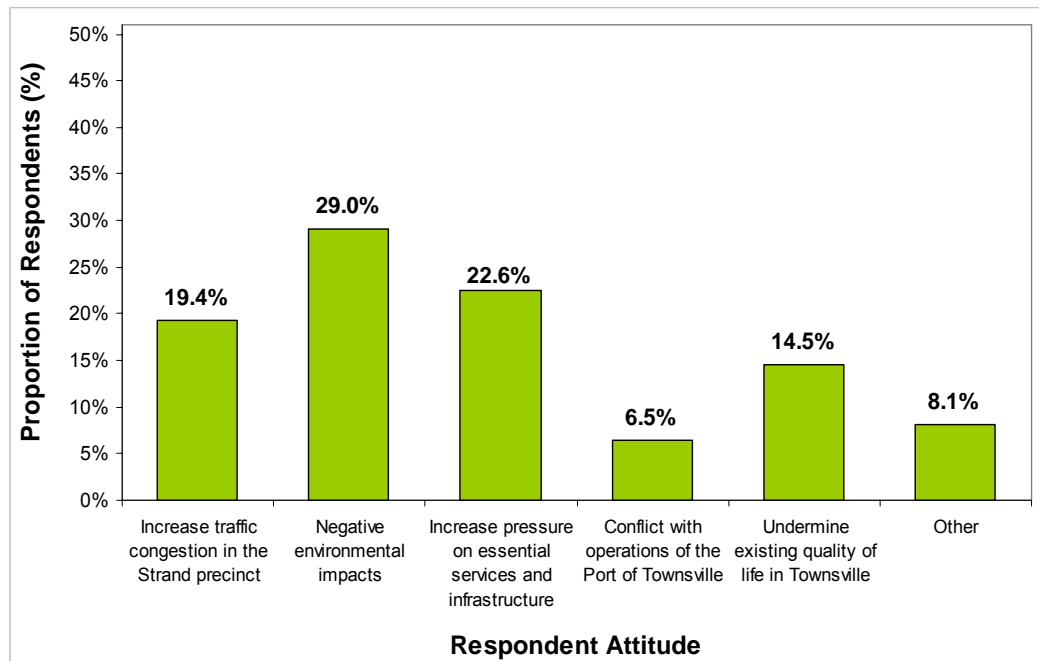




**FIGURE 10: SINGLE MAIN REASON FOR RESPONDENTS HIGHLY FAVOURABLE RESPONSE (N = 93)**



**FIGURE 11: SINGLE MAIN REASON FOR RESPONDENTS HIGHLY UNFAVOURABLE RESPONSE (N = 62)**



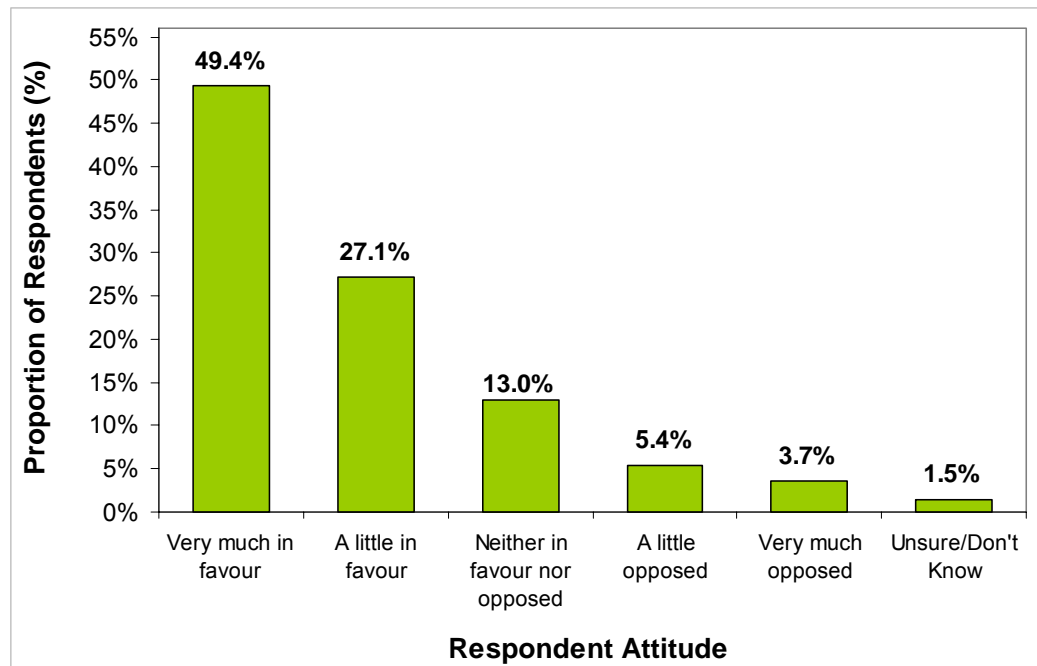


Overall, respondents were much more favourable toward the proposed Ocean Terminal development than the residential and marina development component of the overall project. More than three-quarters of all respondents (76.5%) were favourable towards proposed Ocean Terminal with 9.1% of all respondents having an overall unfavourable attitude [Figure 12]. *Net favourability was therefore +67.4%.*

Of those respondents who very much in favour, 39.1% nominated a boost in tourism as the main reason for their stance, while a further 32.2% nominated the positive economic impact the development would have on the Twin Cities as their main reason [Figure 13].

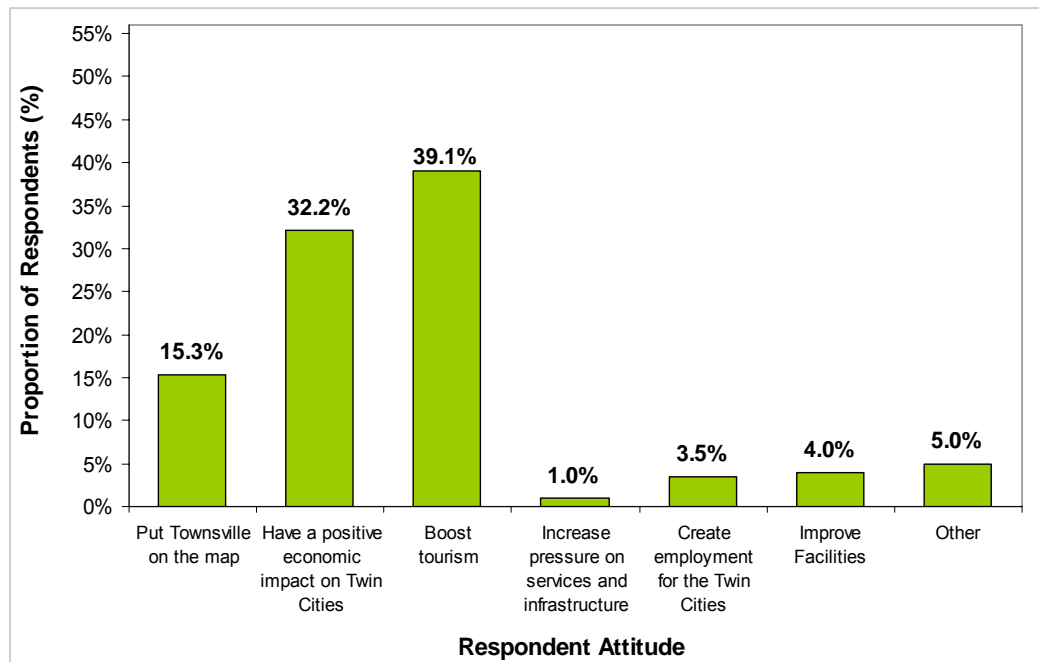
Of those respondents who very much opposed, 26.7% cited the negative environmental impacts of the project as the main reason for their position. In terms of one the major concerns voiced by opponents of the project, increased traffic congestion, a relatively small percentage of respondents (13.3%) nominated it as the main reason for their opposition to the Ocean Terminal development [Figure 14].

**FIGURE 12: ATTITUDE TO THE PROPOSAL TO DEVELOP THE OCEAN TERMINAL (N = 409)**

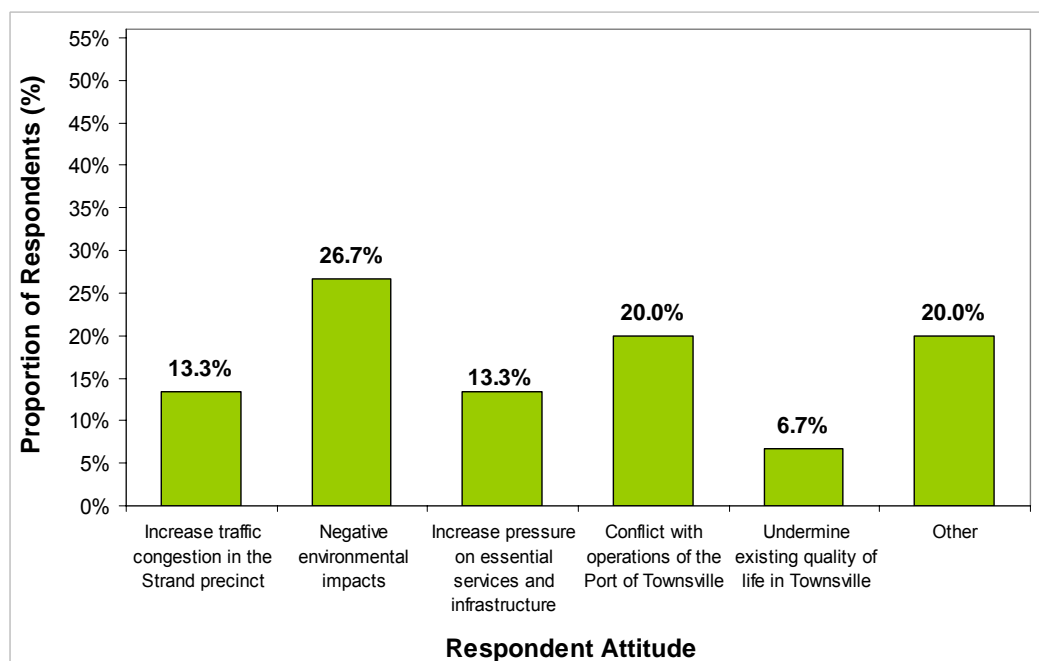




**FIGURE 13: SINGLE MAIN REASON FOR RESPONDENTS' HIGHLY FAVOURABLE RESPONSE (N = 202)**



**FIGURE 14: SINGLE MAIN REASON FOR RESPONDENTS' HIGHLY UNFAVOURABLE RESPONSE (N = 15)**





Respondent attitudes toward the overall proposal to develop an integrated Ocean Terminal and residential and marina complex differed significantly across respondent age groups ( $\chi^2_{0.05, 16} = 38.252, p = 0.001$ ) with a higher proportion of older respondents in the 60+ years (40.8%) and 50–59 years (28.7%) age group either a little or very much opposed. While fewer respondents in the 18–29 years (7.7%) and 30–39 years (11.3%) and 40–49 years (13.1%) age groups were either a little or very much opposed, a higher proportion of respondents in these age groups were neither in favour nor opposed to the integrated Ocean Terminal and residential and marina development [Figure 15].

Attitudes toward the overall integrated Ocean Terminal and residential and marina development also differed significantly across city of residence ( $\chi^2_{0.05, 4} = 11.272, p = 0.024$ ) with a higher proportion of Townsville residents (27.4%) either a little or very much opposed to the integrated development than Thuringowa residents (15.7%). Overall, Townsville residents held stronger views either way with 18.3% neither in favour of nor opposed to the development as compared with 24.7% of Thuringowa residents [Figure 16].

In terms of the proposal to develop a residential and marine complex on reclaimed land in front of Jupiter's Casino, older respondents were significantly more opposed to this aspect of the integrated development ( $\chi^2_{0.05, 16} = 35.749, p = 0.003$ ). Almost half (46.4%) of respondents aged 60+ and 39.1% of respondents aged 50–59 years were either a little or very much opposed to this aspect of the proposal as compared to 10.5% of 18–29 year olds, 23.2% of 30–39 year olds and 20.4% of 40–49 year olds. Of those respondents aged 40–49 and below, between 52% and 60% of respondents were either a little or very much in favour of this element of the overall integrated project [Figure 17].

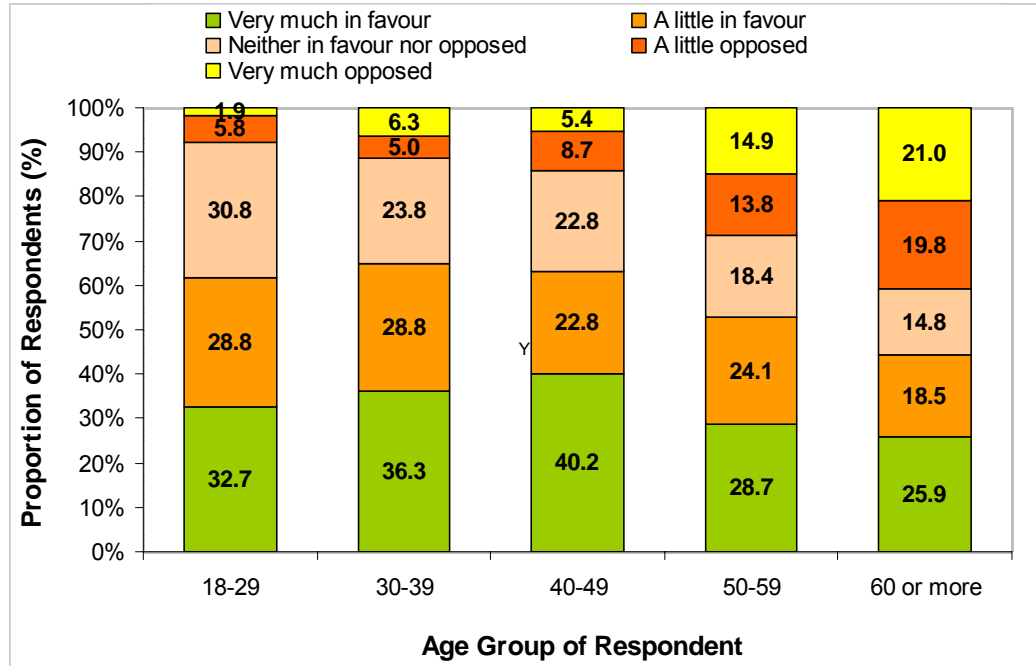
Respondent attitudes to the proposal to develop a residential and marine complex on reclaimed land in front of Jupiter's Casino, also differed significantly by respondent household income ( $\chi^2_{0.05, 28} = 50.277, p = 0.006$ ). In general favorability increased with household income, with less than half of respondents earning less than \$54,999 either a little or very much in favour of this element of the overall integrated project as compared with 57.3% of households earning \$80,000–99,999, 60.3% of households earning \$100,000–149,999 and 57.1% of households earning \$150,000–199,999 who were either a little or very much in favour [Figure 18].

It should be noted that there were no significant differences across any demographic variables in respect of attitudes toward the Ocean Terminal proposal. This is result worthy of note in the sense that people of all ages, incomes, family types and places of residence were strongly supportive of this component of the overall integrated development.

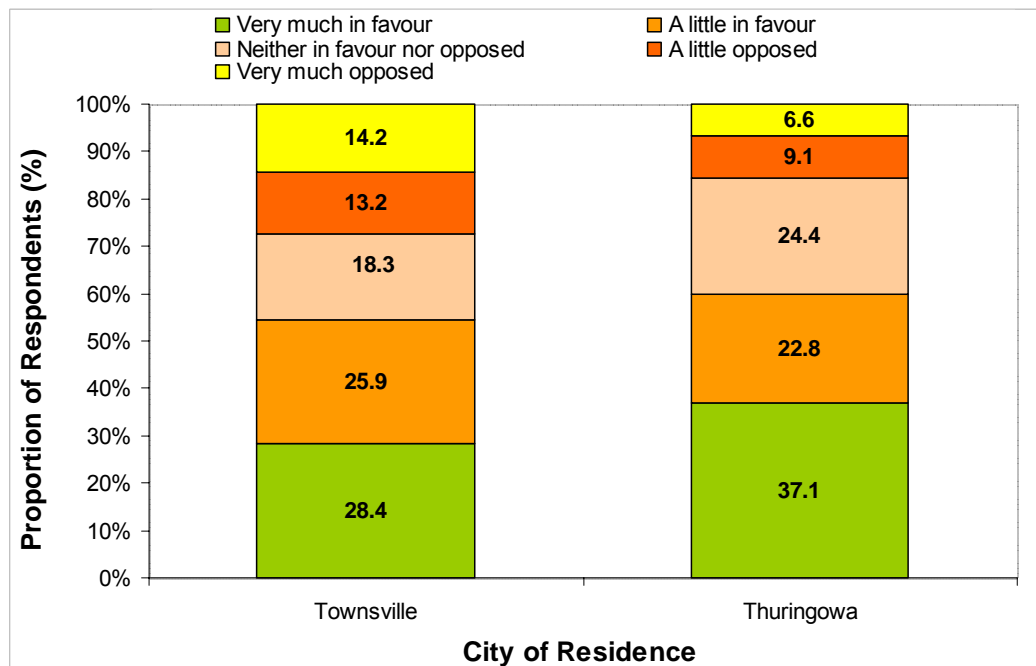




**FIGURE 15: ATTITUDE TO THE OVERALL PROPOSAL TO DEVELOP AN INTEGRATED OCEAN TERMINAL AND RESIDENTIAL AND MARINA COMPLEX BY RESPONDENT AGE (N = 392)**

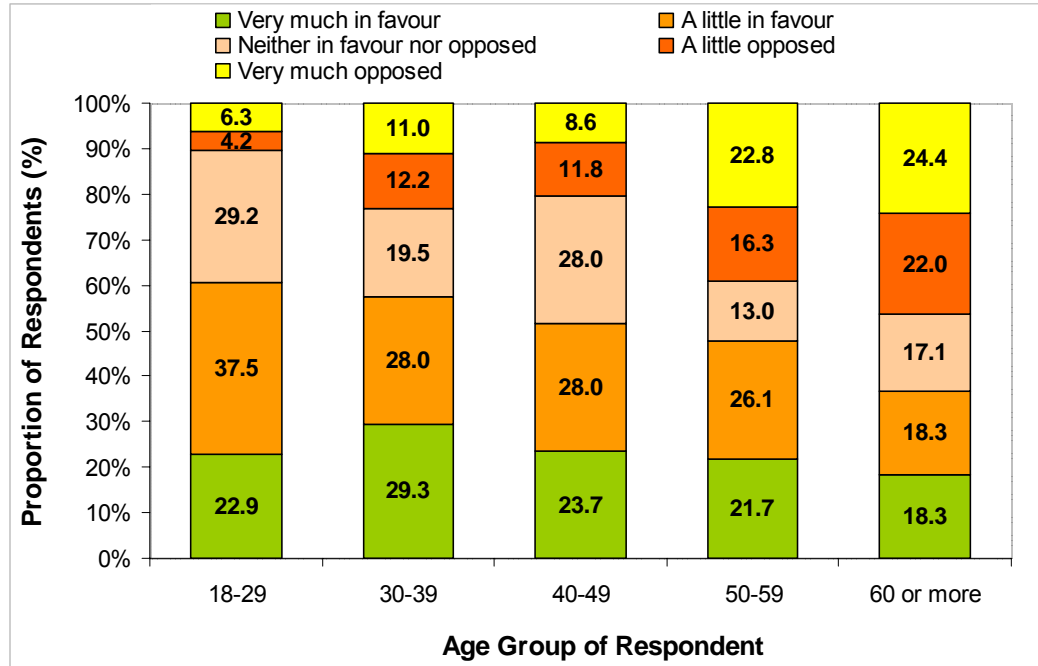


**FIGURE 16: ATTITUDE TO THE OVERALL PROPOSAL TO DEVELOP AN INTEGRATED OCEAN TERMINAL AND RESIDENTIAL AND MARINA COMPLEX BY CITY OF RESIDENCE (N = 394)**

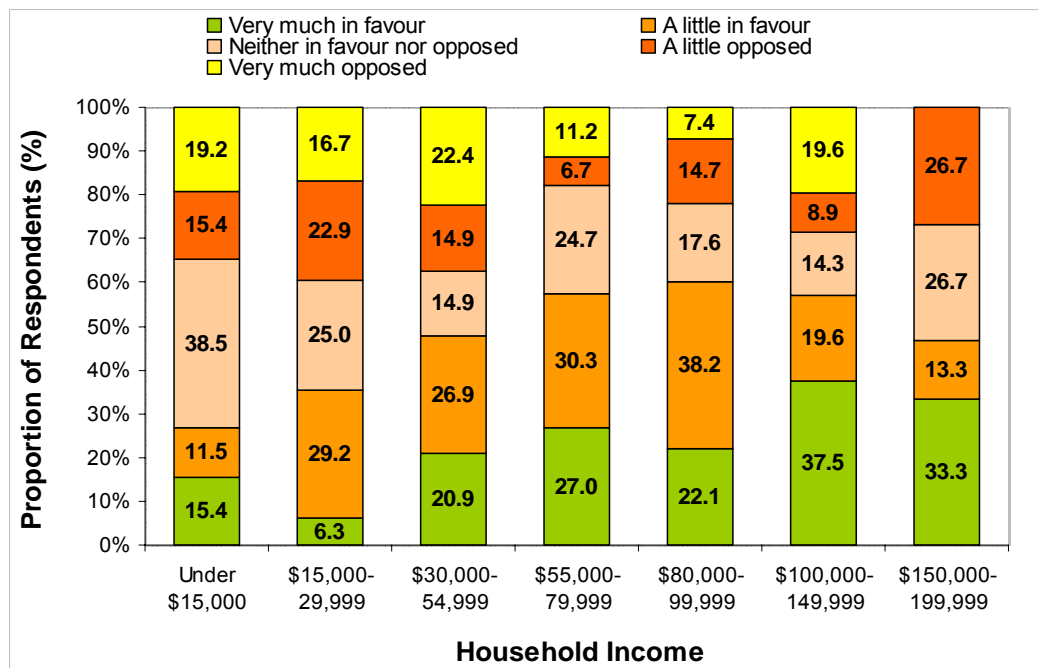




**FIGURE 17: ATTITUDE TO THE PROPOSAL TO DEVELOP A RESIDENTIAL AND MARINA COMPLEX ON RECLAIMED LAND IN FRONT OF JUPITERS CASINO BY RESPONDENT AGE (N = 397)**

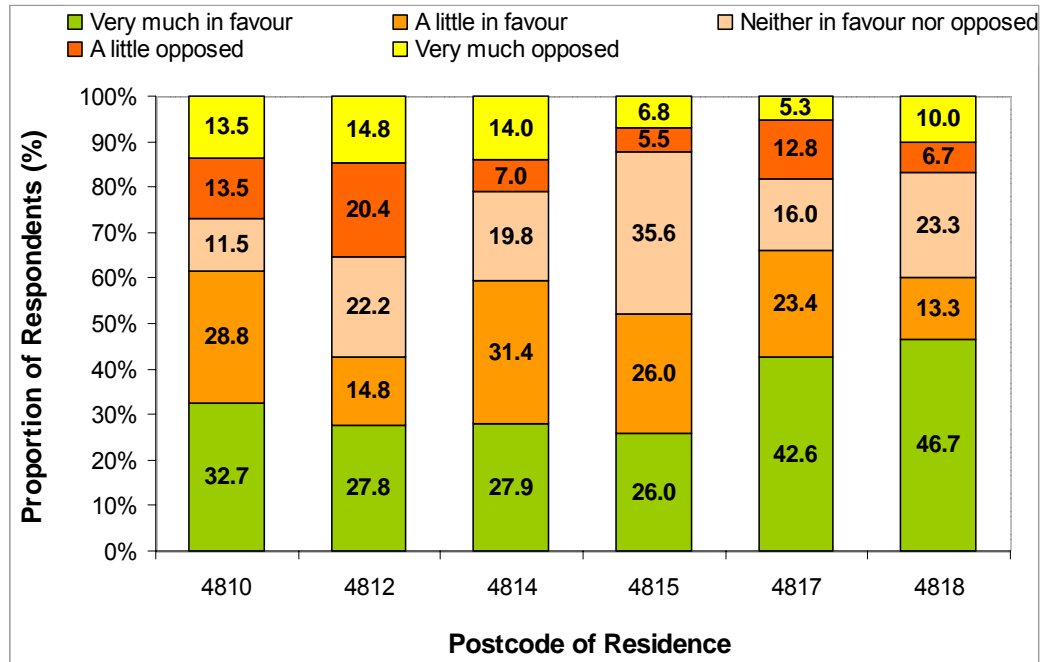


**FIGURE 18: ATTITUDE TO THE PROPOSAL TO DEVELOP A RESIDENTIAL AND MARINA COMPLEX ON RECLAIMED LAND IN FRONT OF JUPITERS CASINO BY HOUSEHOLD INCOME (N = 369)**





**FIGURE 19: ATTITUDE TO THE OVERALL PROPOSAL TO DEVELOP AN INTEGRATED OCEAN TERMINAL AND RESIDENTIAL AND MARINA COMPLEX BY RESPONDENT POSTCODE (N = 394)**



**FIGURE 20: ATTITUDE TO THE PROPOSAL TO DEVELOP A RESIDENTIAL AND MARINA COMPLEX ON RECLAIMED LAND IN FRONT OF JUPITERS CASINO BY RESPONDENT POSTCODE (N = 394)**





### 4.3 PERCEPTIONS OF TOWNSVILLE CITY

Respondents were presented with a number of descriptive statements about the lifestyle, opportunities and growth and development within the Twin Cities and were asked to indicate their level agreement or disagreement with these statements. These characteristics of the Twin Cities were:

- Townsville is a relaxed and friendly place that welcomes its visitors to the City;
- Townsville is a confident and dynamic city;
- There are many opportunities for those who are willing to work hard;
- Townsville is a great place to live and raise a family;
- There are plenty of accessible public spaces and facilities for residents to enjoy;
- The Twin Cities have achieved a good balance between economic growth, and social and environmental sustainability;
- The current rate of growth in the Twin Cities is threatening the traditional lifestyle benefits of living here;
- The Twin Cities future economic growth must balance traditional heavy industry with emerging opportunities in tourism; and
- Townsville has many of the benefits of a large city without the associated downsides.

These statements of identity and values about Townsville were derived from a combination of qualitative research activities (focus group), review of secondary literature (e.g. Townsville City Council *Futures Roundtable Report 2007*) and internal workshops.

#### 4.3.1 FACTOR ANALYSIS

In terms of factor selection, by default, the SPSS program uses the Kaiser criterion (eigenvalue > 1) to extract factors (see section 3.7), which in the case of this analysis was the retention of four (4) factors. The scree plot method, which was used to aid in the determination of an appropriate number of factors to use for this model supported the Kaiser selection process.

The results of the exploratory factor analysis are summarised in Table 3. The underlying latent structure is best described by the four hypothesised attributes. These attributes have been labelled; *Lifestyle, Balance, Opportunity and Sustainability*.

The factor model explains 66% of the variance between the fitted and sample correlation matrices. Varimax rotation ensured none of the four factors extracted was significantly correlated to one another. The Kaiser-Meyer-Ohlin measure of sampling adequacy, although relatively low (KMO = 0.569), suggests the correlation matrix is appropriate for factoring (Sharma, 1996). The Bartlett Test of Sphericity (BTS = 417.421,  $p < 0.001$ ), whereby a significant score ( $p < 0.05$ ) implies that the model is appropriate for factoring (Sharma, 1996), supports the appropriateness of the factor model. Based on the minimum reliability coefficients proposed by Nunnally (1978) of 0.6 – 0.7, the Cronbach's alpha estimates were sufficiently high for all factors with multiple items.



**TABLE 3: FACTOR LOADING<sup>A</sup> PATTERN OF RESPONDENTS PERCEPTIONS OF TOWNSVILLE CITY**

Townsville City Characteristic	Lifestyle	Balance	Opportunity	Sustainability
Townsville is a confident and dynamic city inclusiveness	0.820			
Townsville is a great place to live and raise a family	0.845			
Plenty of accessible public spaces and facilities for all residents to enjoy	0.642			
Current rate of growth in the Twin Cities is threatening the traditional lifestyle benefits of living here		0.759		
Cities' future economic growth must balance traditional heavy industry with emerging opportunities in tourism		0.728		
Townsville has many of the benefits of larger cities without the downsides associated with big cities		0.649		
Townsville is a relaxed and friendly place that welcomes visitors to the City			0.848	
There are many opportunities for those who are willing to work hard			0.850	
Has achieved a good balance between economic growth and social harmony and environmental sustainability				0.924
Eigenvalue:	1.846	1.532	1.450	1.054
Cronbach's alpha:	0.651	0.611	0.599	n/a
Variance explained (%):	20.506	17.017	16.106	11.713

<sup>A</sup> Only the factor upon which each variable loaded most strongly has been included in the table.

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization



#### 4.3.2 RESPONDENT PERCEPTIONS

The mean scores for each of the descriptive statements are shown in Table 4 and have been ordered to reflect the hypothetical factor structure. The means show the overall agreement levels with of each characteristic, such that a mean score of > 5 indicates an overall agreement with the statement.

**TABLE 4: MEAN SCORES FOR COMMUNITY CHARACTERISTICS**

Townsville City Characteristic	Mean
Townsville is a confident and dynamic city	7.71
Townsville is a great place to live and raise a family	8.75
There are plenty of public spaces and facilities for residents to enjoy	7.58
The current rate of growth in the Twin Cities is threatening the traditional lifestyle benefits of living here	5.33
The Twin Cities' future economic growth must balance traditional heavy industry with emerging opportunities in tourism	7.44
Townsville has many of the benefits of a large city without the associated downsides	7.53
Townsville is a relaxed and friendly place that welcomes visitors to the City	8.28
There are many opportunities for those who are willing to work hard	8.40
The Twin Cities have achieved a good balance between economic growth, and social and environmental sustainability	6.99

Overall, more than two-thirds of all respondents were in either general or strong agreement with each of the statements as presented, with the exception of the statement, *the current rate of growth in the Twin Cities is threatening the traditional lifestyle benefits of living here*, with 36.2% of respondents in either general or strong agreement.

The statement, *Townsville is a great place to live and raise a family*, had the strongest support with 91.2% of respondents in either general or strong agreement [Figure 21(d)]. From the factor analysis model, this statement loaded against two other high scoring statements, *Townsville is a confident and dynamic city* [Figure 21(b)] and *there are plenty of public spaces and facilities for residents to enjoy* [Figure 21(e)] with 78.5% and 77.5% of respondents respectively being in either general or strong agreement with these statements. These statements “loaded” against the factor 1 within the factor analysis model, which was deemed to represent the lifestyle benefits of the city in terms of family and recreational opportunities.

Two statements with the next strongest level of agreement were *Townsville is a relaxed and friendly place that welcomes visitors to the City* [Figure 21(a)] and *there are many opportunities for those who are willing to work hard* [Figure 21(c)] and with, 85.1% and 88.1% of respondents respectively being in either general or strong agreement with these statements. Under the factor analysis model, these statements “loaded” against the factor 3 which was deemed to represent the opportunity for the community and prosper.

The exploratory factor analysis identified a further grouping comprising development related statements; *the current rate of growth in the Twin Cities is threatening the traditional lifestyle benefits of living here* [Figure 21(g)], *the Twin Cities future economic*



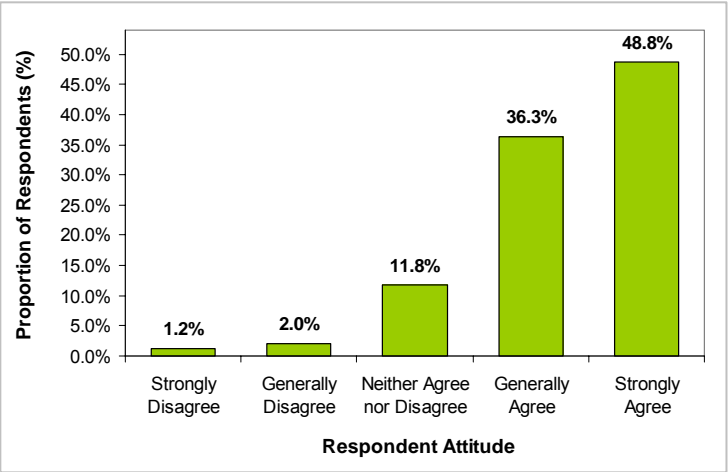
*growth must balance traditional heavy industry with emerging opportunities in tourism* [Figure 21(h)] and Townsville has many of the benefits of a large city without the associated downsides [Figure 21(i)]. The latter two scored highly among respondents with 73.6% and 74.9% of respondents respectively being in either general or strong agreement with these statements. For the other statement within this grouping, 36.2% of respondents were in either general or strong agreement, while 38.1% were in either general or strong disagreement. These statements which “loaded” against the factor 2 within the model, were seen as capturing respondents’ perceptions of the need to achieve growth and development but not at the expense of lifestyle benefits or of an inappropriate industry mix.

An interesting outcome of the survey was the fact that there were no significant differences across any demographic variables in respect of respondent’s perceptions of Townsville City as defined by multiple descriptive statements.

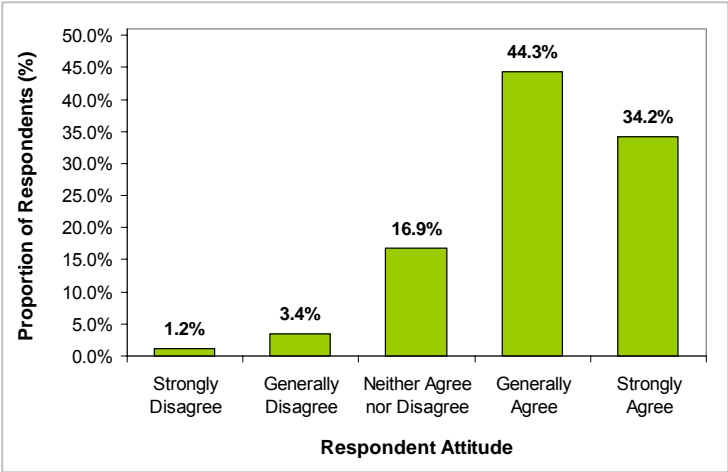
The conclusion based on the analysis is that the majority of Townsville residents are comfortable about the city’s growth (it is ‘not too fast’) and growth and development was not seen by the majority as threatening the present lifestyle and amenity benefits of the city.

**FIGURE 21: PERCEPTIONS OF TOWNSVILLE AND THURINGOWA IN TERMS OF LIFESTYLE BENEFITS, OPPORTUNITIES AND GROWTH AND DEVELOPMENT**

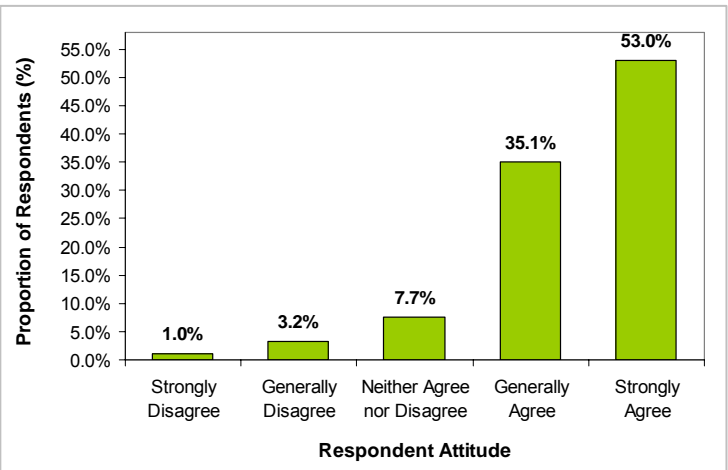
**(a) Relaxed and friendly place that welcomes visitors**



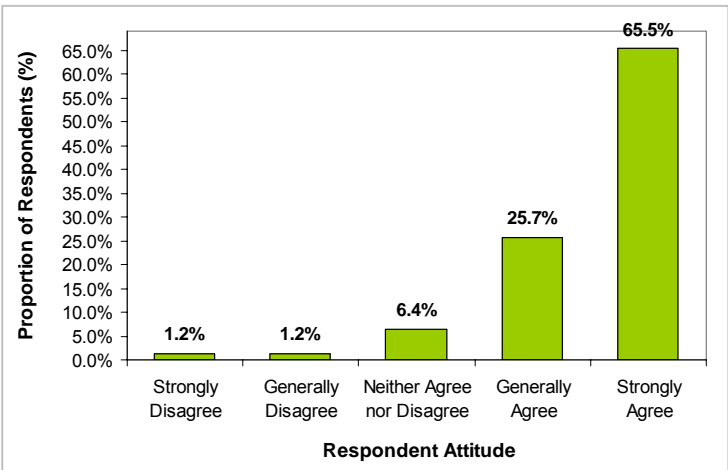
**(b) Confident and dynamic city**



**(c) Opportunities for those who are willing to work hard**



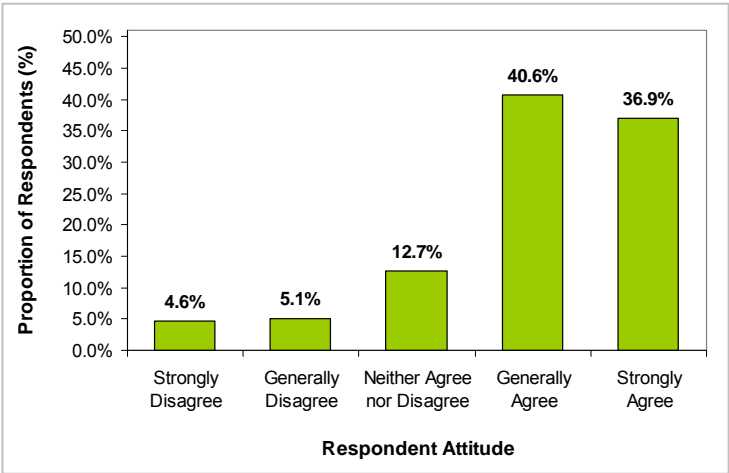
**(d) Great place to live and raise a family**



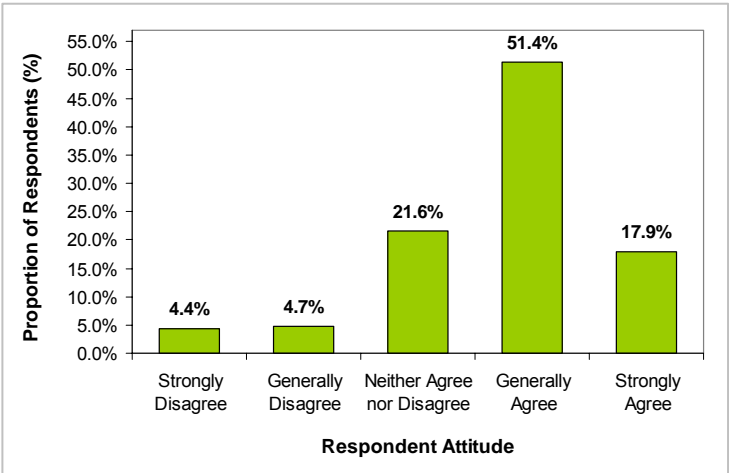


**FIGURE 21 (cont): PERCEPTIONS OF TOWNSVILLE AND THURINGOWA IN TERMS OF LIFESTYLE BENEFITS, OPPORTUNITIES AND GROWTH AND DEVELOPMENT**

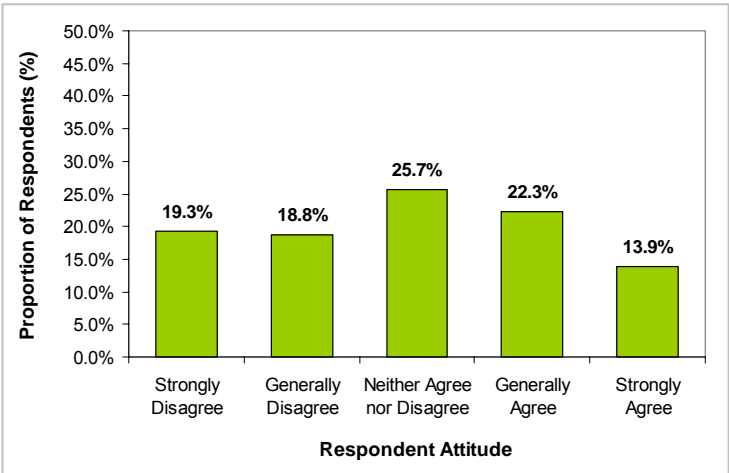
**(e) Plenty of accessible public places for residents**



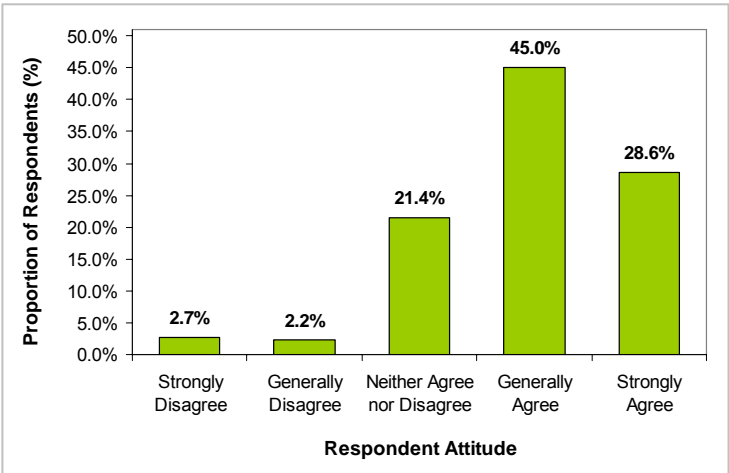
**(f) Balance between economic growth and sustainability**



**(g) Rate of growth threatening the lifestyle benefits**

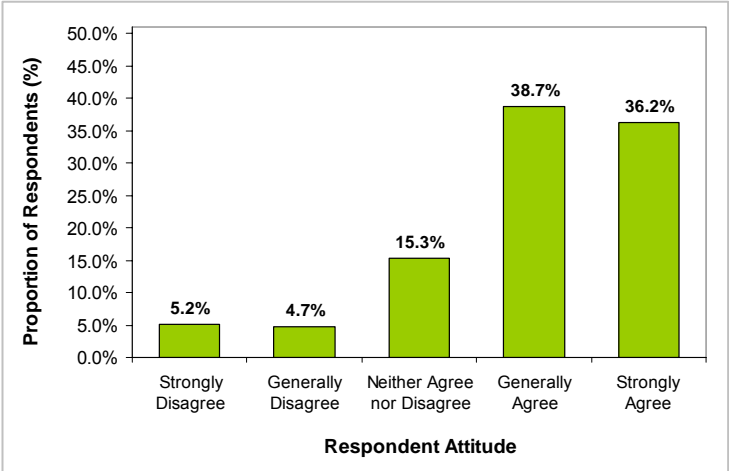


**(h) Economic growth must balance industry with tourism**



**FIGURE 21 (cont): PERCEPTIONS OF TOWNSVILLE AND THURINGOWA IN TERMS OF LIFESTYLE BENEFITS, OPPORTUNITIES AND GROWTH AND DEVELOPMENT**

**(i) Benefits of large city without associated downsides**





#### 4.4 PERCEIVED IMPACT OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES

Respondents were presented with a number of descriptive statements about how the integrated ocean Terminal and residential and marina development may impact on the “sense of place” and the “quality of life” in Townsville and Thuringowa and were asked to express their level of agreement or disagreement with these statements. These statements were:

- Townsville is a relaxed tropical city and the Ocean Terminal will enhance this reputation;
- Townsville has always been less of a tourist destination than Cairns or the Whitsunday's and the Ocean Terminal will boost Townsville as a tourism destination;
- This integrated development is evidence of Townsville's maturity and makes me feel proud to be a part of this growing city;
- This integrated project is right for Townsville at a time when the city is becoming more sophisticated;
- An increase in international tourists from more cruise ships will be good for the city in terms of diversity and multiculturalism;
- This integrated development will become an iconic asset for the region;
- This integrated development will complement the redeveloped Townsville Strand;
- The Ocean Terminal development will complement the Townsville Port infrastructure;
- This integrated development will improve and sustain the quality of life in the Twin Cities by bringing in investment and creating a large number of jobs;
- The Ocean Terminal development will inject substantial tourism dollars into the region and will enhance the Cities long term economic health and well-being;
- This integrated development will contribute positively to quality of life in Townsville by increasing the recreational opportunities available to its residents such as walking along and fishing off the new the breakwater wall;
- This integrated development will benefit Townsville by making it more cosmopolitan;
- The integrated development will strengthen the connection between Townsville and Cleveland Bay and Magnetic Island;
- The residential and marina development is out of character with the relaxed and friendly lifestyle of the Twin Cities;
- This integrated development is at odds with the need to balance economic growth with maintaining our relaxed lifestyle;
- An increase in numbers of visitors arising from the Ocean Terminal



development will impact negatively on the day-to-day life of the Twin Cities residents;

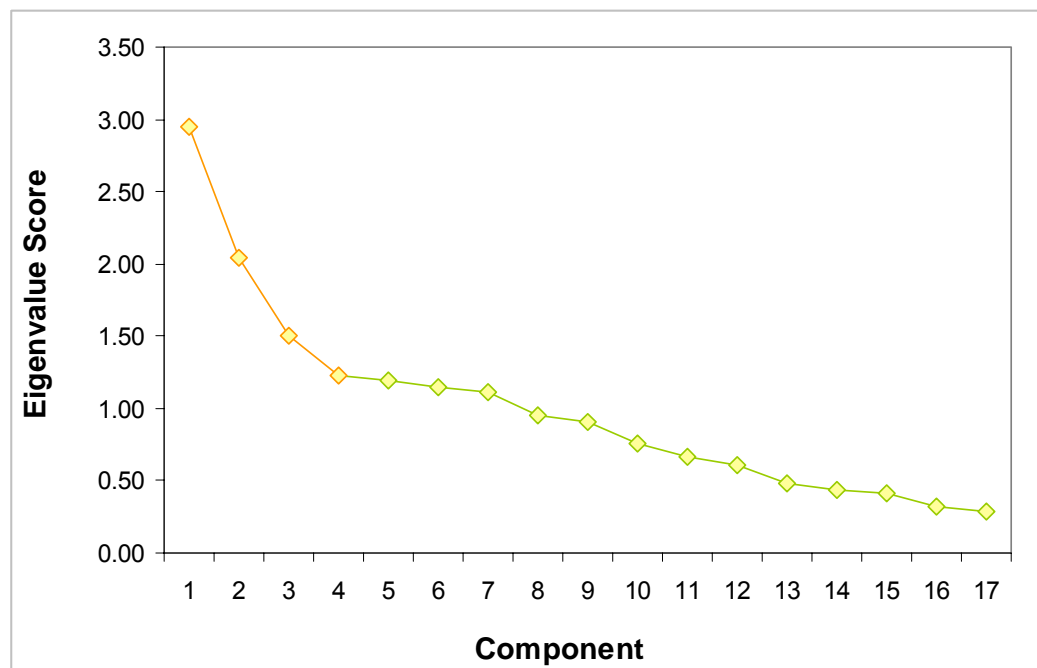
- This residential and marina development is at odds with the Twin Cities lifestyle and is a sign the place is becoming too big too fast;
- This mixed residential and marina development will contribute to increased boating traffic in Cleveland Bay and lead to a loss of boating amenity; and
- The residential and marina project is a development for the wealthy.

The statements – being a mixture of positive and negative propositions – were presented to respondents on random order to minimize sequencing related biases.

#### 4.4.1 FACTOR ANALYSIS

In terms of factor selection, by default, the SPSS program uses the Kaiser criterion (eigenvalue > 1) to extract factors (see section 3.7), which in the case of this analysis was the retention of seven (7) factors. The scree plot method was subsequently used to aid in the determination of an appropriate number of factors to use for this model (Figure 3

**FIGURE 3: SCREE PLOT OF FACTOR STRUCTURE FOR PERCEIVED SOCIAL IMPACTS OF INTEGRATED DEVELOPMENT**



Using the scree plot, a determination was made that the underlying latent structure was best described by the four hypothesised attributes.

In the process of refining the factor structure, some variable were deleted to enhance *construct* validity and explanatory power of the factor models. Construct validity refers to whether the factor dimensions are consistent with theoretical or empirical expectations, while deletion of variables that do not augment explanatory power is considered acceptable (Carmines and Zeller, 1979). After running the factor model with all statement



included but restricted to four (4) hypothesised attributes based on the scree plot, three statements were identified that did not load against any of the hypothesised four (4) attributes these being: *This residential and marina development is at odds with the Twin Cities lifestyle and is a sign the place is becoming too big too fast*, *The residential and marina project is a development for the wealthy* and *This mixed residential and marina development will contribute to increased boating traffic in Cleveland Bay and lead to a loss of boating amenity*. These statements were subsequently removed as part of the factor model development and the factor model re-run, albeit again restricted to four (4) hypothesised attributes.

These hypothesised attributes or factors have been labelled; *Diversity and Openness*, *Growth and Balance*, *Economic Benefits* and *Tourism Destination*. The results of the exploratory factor analysis are summarised in Table 5.

The factor model explains 49% of the variance between the fitted and sample correlation matrices. Varimax rotation ensured none of the five factors extracted was significantly correlated to one another. The Kaiser-Meyer-Ohlin measure of sampling adequacy, although relatively low (KMO = 0.582), suggests the correlation matrix is appropriate for factoring (Sharma, 1996). The Bartlett Test of Sphericity (BTS = 1280.146.,  $p < 0.001$ ), whereby a significant score ( $p < 0.05$ ) implies that the model is appropriate for factoring (Sharma, 1996), supports the appropriateness of the factor model. Based on the minimum reliability coefficients proposed by Nunnally (1967, 1978) of 0.6 – 0.7, the Cronbach's alpha estimates were sufficiently high for all factors with the exceptions of factor 4, *Tourism Destination*.

**TABLE 5: FACTOR LOADING<sup>A</sup> PATTERN FOR PERCIEVED IMPACTS OF INTEGRATED DEVELOPMENT**

Perceived Impacts of Integrated Ocean Terminal and residential development	Diversity/ Openness	Economic Benefits	Growth & Balance	Tourism Destination
An increase in international tourists from more cruise ships will be good for the city in terms of diversity and multiculturalism	<b>0.804</b>			
This integrated project is right for Townsville with the city becoming more sophisticated	<b>0.710</b>			
This integrated development is evidence of Townsville's maturity and makes me feel proud to be a part of this growing city	<b>0.616</b>			
This integrated development will benefit Townsville by making it more cosmopolitan	<b>0.653</b>			
This integrated development will improve and sustain the quality of life in the Twin Cities by bringing in investment and creating a large number of jobs		<b>0.708</b>		
The Ocean Terminal development will inject substantial tourism dollars into the region and will enhance the Cities. long term economic health and well-being		<b>0.669</b>		
This integrated development will become an iconic asset for the region		<b>0.556</b>		
This integrated development will contribute positively to quality of life in Townsville by increasing the recreational opportunities available to its residents			<b>0.622</b>	
The Ocean Terminal development will complement the Townsville Port infrastructure			<b>0.633</b>	
This integrated development will complement the redeveloped Townsville Strand			<b>0.608</b>	
The residential / marina development is out of character with the Twin Cities relaxed and friendly lifestyle			<b>0.651</b>	
This integrated development is at odds with the need to balance economic growth with maintaining our relaxed lifestyle			<b>0.454</b>	
An increase in numbers of visitors arising from the Ocean Terminal development will impact negatively on the day-to-day life of the Twin Cities residents				<b>0.680</b>
Townsville has always been less of a tourist destination than Cairns or the Whitsunday's and the Ocean Terminal will boost Townsville as a tourism destination				<b>0.627</b>
The Ocean Terminal project will enhance Townsville's reputation as a relaxed tropical city				<b>0.392</b>
The integrated development will strengthen the connection between Townsville and Magnetic Island				<b>0.591</b>
Eigenvalue:	2.2968	1.980	1.954	1.490
Cronbach's alpha	0.678	0.599	0.607	0.506
Cronbach's alpha	14.350	12.374	12.213	9.314

<sup>A</sup> Only the factor upon which each variable loaded most strongly has been included in the table.  
 Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization



#### 4.4.2 RESPONDENT PERCEPTIONS

These statements about the respondents perceived impacts of the integrated development on sense of place and quality of life in the Twin Cities can be segregated into those which address potential positive impacts and those which potential address negative impacts. For the majority of statements considered to be of a positive nature, at least two-thirds of all respondents were in either general or strong agreement with them while for those which can be considered to be of a negative nature, roughly a quarter of respondents either generally or strongly agreed with the statement as presented.

The mean scores are shown in Table 6 and have been ordered to reflect the hypothetical factor structure. The means show the overall agreement levels with of each characteristic, such that a mean score of > 5 indicates an overall agreement with the statement.

**TABLE 6: MEAN SCORES FOR PERCEIVED IMPACTS OF INTEGRATED DEVELOPMENT**

Townsville City Characteristic	Mean
An increase in international tourists from more cruise ships will be good for the city in terms of diversity and multiculturalism	7.66
This integrated project is right for Townsville at a time when the city is becoming more sophisticated	6.89
This integrated development is evidence of Townsville's maturity and makes me feel proud to be a part of this growing city	6.97
This integrated development will benefit Townsville by making it more cosmopolitan	6.31
This integrated development will improve and sustain the quality of life in the Twin Cities by bringing in investment and creating a large number of jobs	7.11
The Ocean Terminal development will inject substantial tourism dollars into the region and will enhance the Cities. long term economic health and well-being	7.65
This integrated development will become an iconic asset for the region	6.89
This integrated development will contribute positively to quality of life in Townsville by increasing the recreational opportunities available to its residents	6.62
The Ocean Terminal development will complement the Townsville Port infrastructure	7.14
This integrated development will complement the redeveloped Townsville Strand	6.75
The residential and marina development is out of character with the relaxed and friendly lifestyle of the Twin Cities	4.80
This integrated development is at odds with the need to balance economic growth with maintaining our relaxed lifestyle	4.93
An increase in numbers of visitors arising from the Ocean Terminal development will impact negatively on the day-to-day life of the Twin Cities residents	3.78
Townsville has always been less of a tourist destination than Cairns or the Whitsunday's and the Ocean Terminal will boost Townsville as a tourism destination	7.58
The Ocean Terminal project will enhance Townsville's reputation as a relaxed tropical city	7.02
The integrated development will strengthen the connection between Townsville and Cleveland Bay and Magnetic Island	5.87
The residential and marina project is a development for the wealthy	7.46
This residential and marina development is at odds with the Twin Cities' lifestyle and is a sign the place is becoming too big too fast	4.57
This mixed residential and marina development will contribute to increased boating traffic in Cleveland Bay and lead to a loss of boating amenity	5.57



Of the four (4) statements which loaded highly against factor 1, which was deemed to represent *Diversity and Openness*, the statement, *an increase in international tourists from more cruise ships will be good for the city in terms of diversity and multiculturalism*, had the strongest support with 77.7% of respondents in either general or strong agreement [Figure 22(a)]. Two other statements within this factor generated overall strong agreement, these being *This integrated project is right for Townsville at a time when the city is becoming more sophisticated* [Figure 22(b)] and *This integrated development is evidence of Townsville's maturity and makes me feel proud to be a part of this growing city* [Figure 22(c)] with 63.2% and 65.5% of respondents respectively being in either general or strong agreement. For the final statement that “loaded” against the factor 1, *This integrated development will benefit Townsville by making it more cosmopolitan*, slightly more than half (53.7%) were in either general or strong agreement, while 28% of respondents neither agreed nor disagreed with this statement [Figure 22(d)].

The second factor within the factor model was deemed to represent the *Economic Benefits* of the integrated development, including the Ocean Terminal. Each of the three statements that comprised this factor generated a high level of support. More than two-thirds (67.2%) of respondents either generally or strongly agreed with the statement *This integrated development will improve and sustain the quality of life in the Twin Cities by bringing in investment and creating a large number of jobs* [Figure 22(j)] while more than three-quarters (77.3%) either generally or strongly agreed that *The Ocean Terminal development will inject substantial tourism dollars into the region and will enhance the Cities' long term economic health and well-being* [Figure 22(k)]. Lastly, 63.9% were in either general or strong agreement with the statement *This integrated development will become an iconic asset for the region* [Figure 22(l)].

The third factor within the overall factor model which was deemed to represent growth and balance contained a mix of positive and negative statements. Of the three (3) positive statements, *the Ocean Terminal development will complement the Townsville Port infrastructure* [Figure 22(f)] and *this integrated development will complement the redeveloped Townsville Strand* [Figure 22(g)] were most strongly supported with 68.4% and 64.5% of respondents respectively in either general or strong agreement. For the two negative statements that “loaded” against this factor, *The residential and marina development is out of character with the relaxed and friendly lifestyle of the Twin Cities* [Figure 22(h)] and *This integrated development is at odds with the need to balance economic growth with maintaining our relaxed lifestyle* [Figure 22(i)], only 28.0% and 25.9% respectively were in either general or strong agreement.

The exploratory factor analysis identified a further grouping comprising statements which the consultants considered to relate to Townsville as a *Future Tourism Destination*. Two statements; *Townsville has always been less of a tourist destination than Cairns or the Whitsunday's and the Ocean Terminal will boost Townsville as a tourism destination* [Figure 22(m)] and *The Ocean Terminal project will enhance Townsville's reputation as a relaxed tropical city* [Figure 22(p)] garnered strong support with 74.6% and 66.3% of respondents respectively either generally or strongly agreeing with these statements. In terms of perceived negative tourism impacts, 70.0% of respondents either generally or strongly disagreed with the statement *An increase in numbers of visitors arising from the Ocean Terminal development will impact negatively on the day-to-day life of the Twin Cities residents* [Figure 22(o)]. Respondents were generally ambivalent to the statement *The integrated development will strengthen the connection between Townsville and*



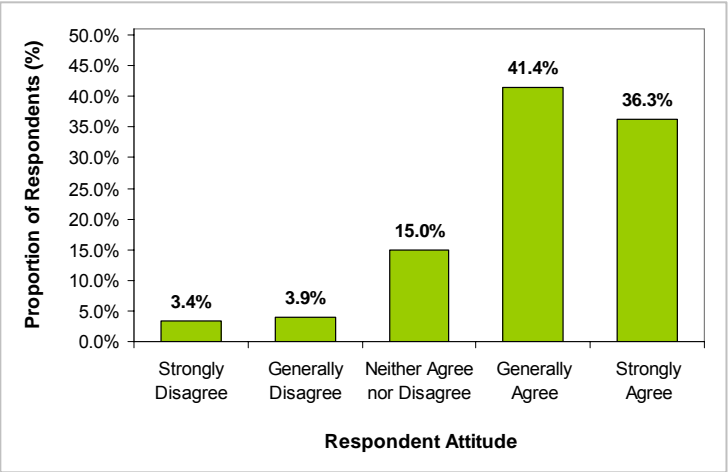


*Cleveland Bay and Magnetic Island*, with the majority (30.8%) of respondents neither agreeing nor disagreeing with this statement [Figure 22(n)].

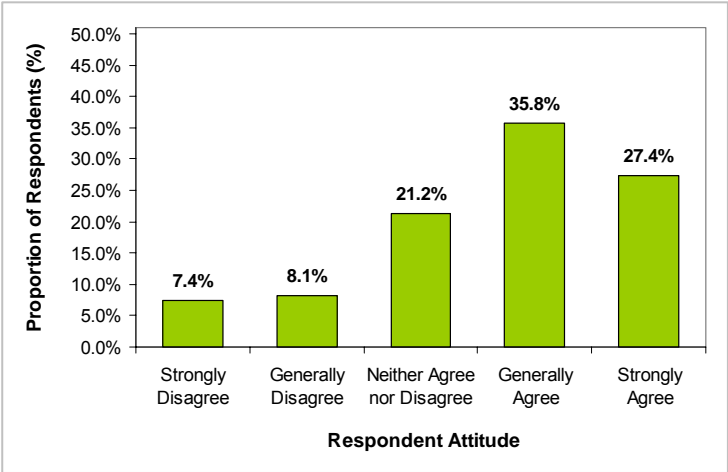
The remaining three (3) statements were excluded from the overall factor model on the basis of the shape of the scree plot and their inconsistency with the factor structure there was strong support for the one statement of a positive nature and poor or ambivalent support for those of a negative nature. Almost three-quarters (71.2%) of respondents either generally or strongly agreed with the statement *The residential and marina project development will attract the wealthy* [Figure 22(q)]. Almost 55% of respondents either generally or strongly disagreed that *This residential and marina development is at odds with the Twin Cities' lifestyle and is a sign the place is becoming too big too fast* [Figure 22(r)]. Lastly, there was an overall neutral attitude to the statement *the development will contribute to increased boating traffic* [Figure 22(s)] with 30.1% of respondents in either general or strong disagreement and 34.3% in either general or strong agreement with this statement. The remainder neither agreed nor disagreed with the statement as presented.

**FIGURE 22: PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES**

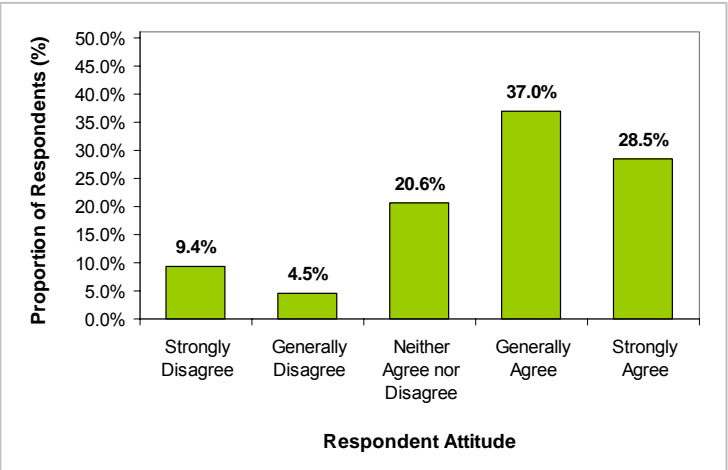
**(a) International tourism will promote multiculturalism/diversity**



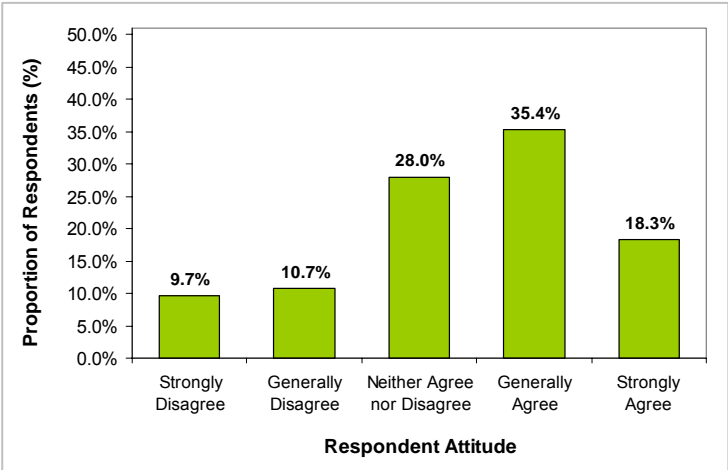
**(b) This integrated project is right for Townsville at this time**



**(c) Integrated development evidence of Townsville's maturity**

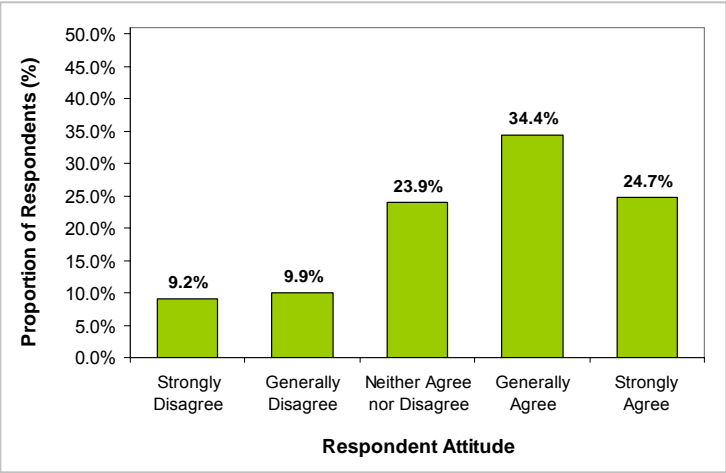


**(d) Integrated development will add to cosmopolitanism**

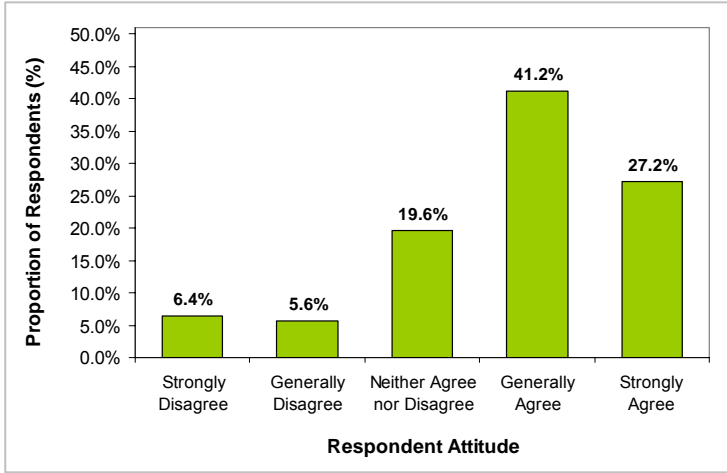


**FIGURE 22 (cont): PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES**

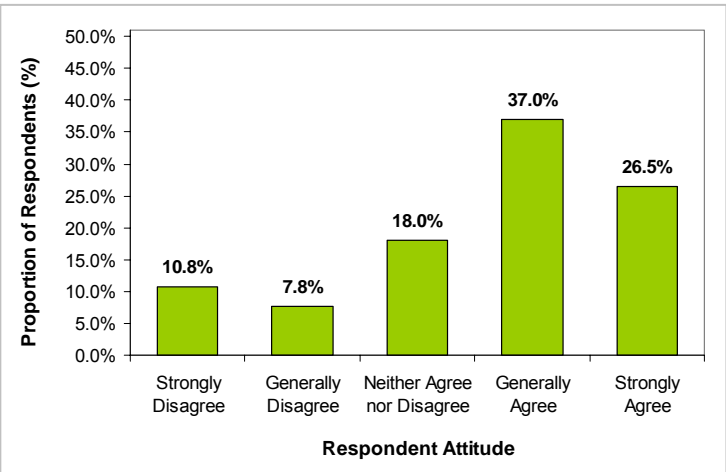
**(e) Development will contribute positively to recreation**



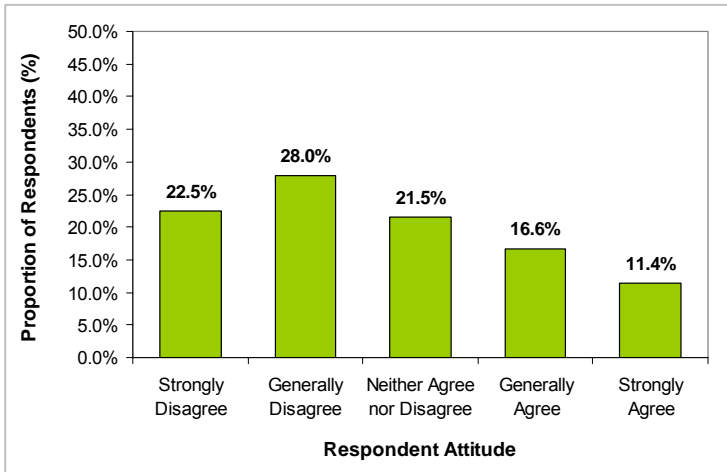
**(f) The Ocean Terminal will complement Townsville Port**



**(g) Integrated development will complement the Strand**

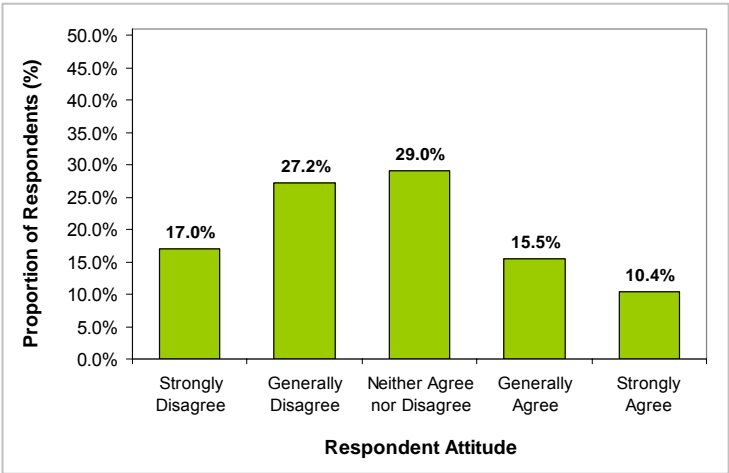


**(h) Development is out of character with Twin Cities lifestyle**

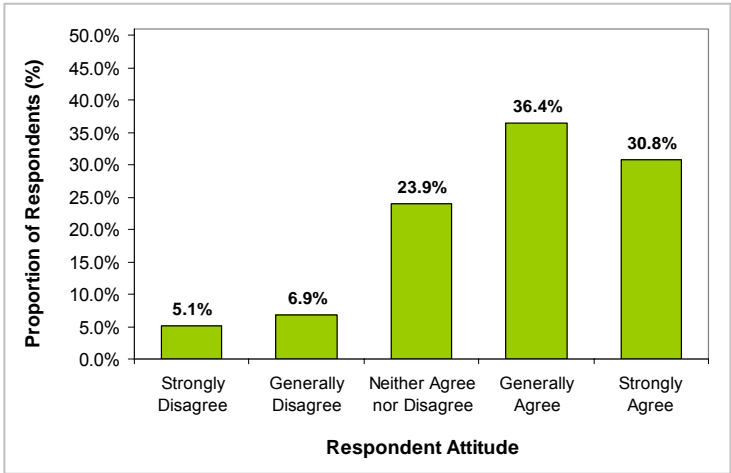


**FIGURE 22 (cont): PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES**

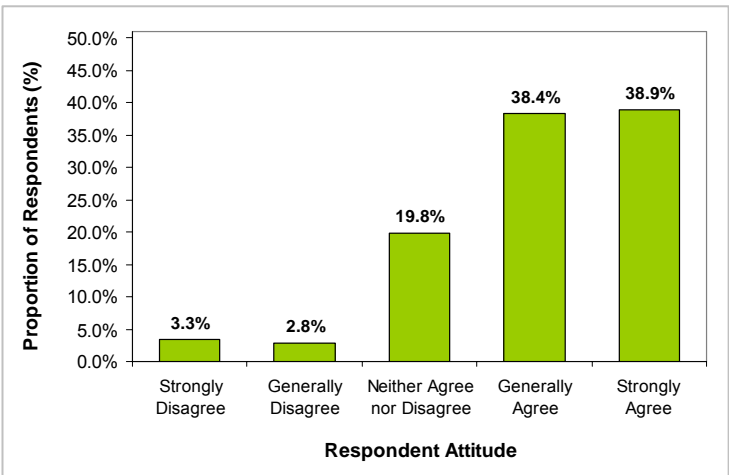
**(i) Development ignores balance between growth & lifestyle**



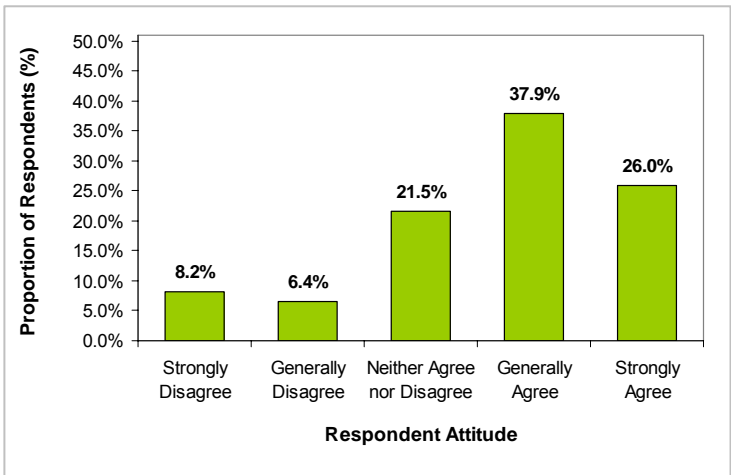
**(j) Integrated development will attract investment and jobs**



**(k) Ocean Terminal will enhance economy through tourism**

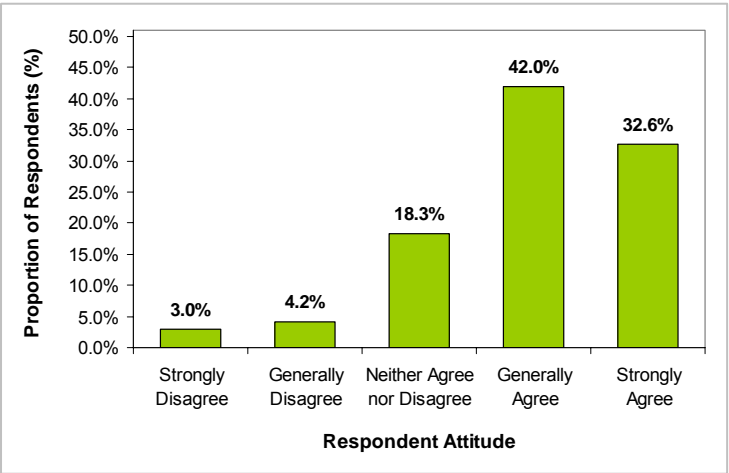


**(l) Integrated development will become an iconic asset**

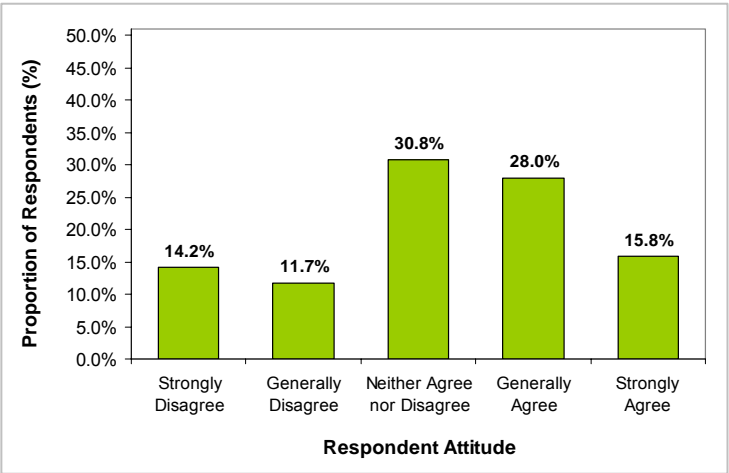


**FIGURE 22 (cont): PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES**

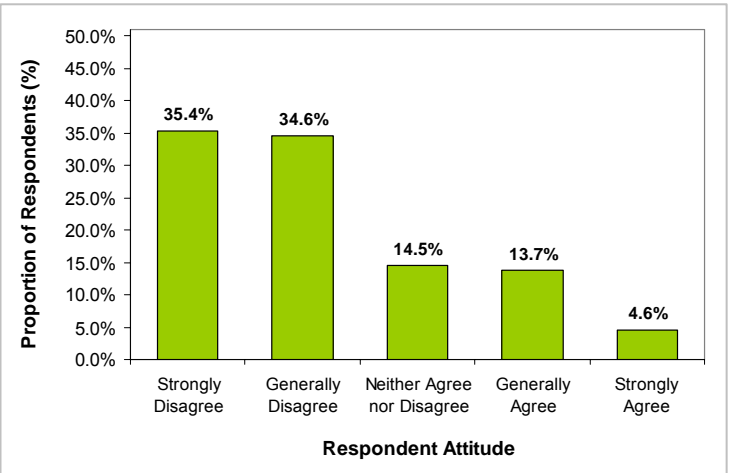
**(m) Ocean Terminal will boost tourism in Townsville**



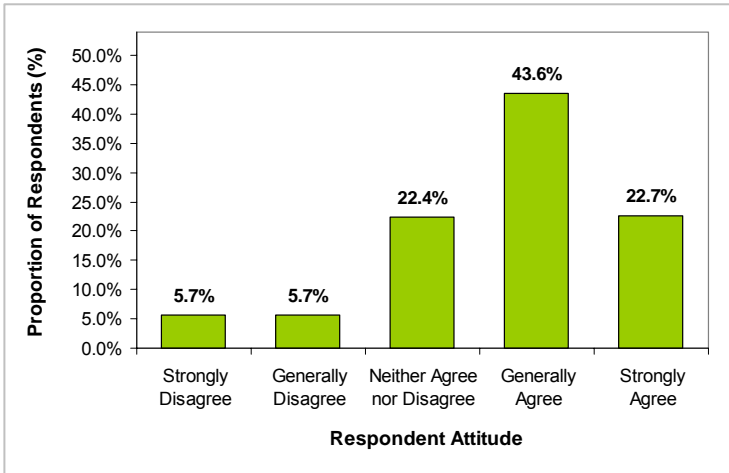
**(n) Integrated development will strengthen the sea connection**



**(o) Increase in tourist numbers will have negative impacts**

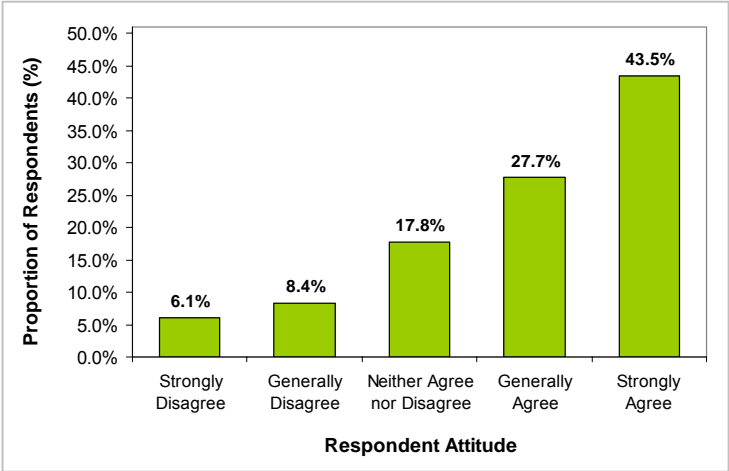


**(p) Ocean Terminal will enhance reputation as relaxed city**

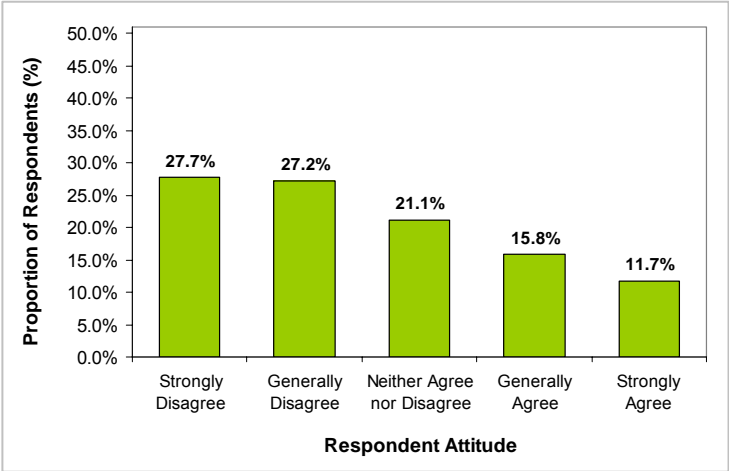


**FIGURE 22 (cont): PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES**

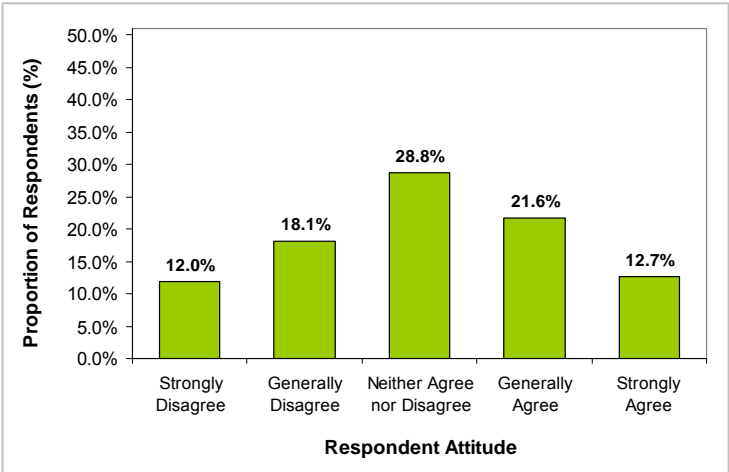
**(q) Residential and marina development is for the wealthy**



**(r) Residential and marina development at odds with**



**(s) Development will contribute to increased boating traffic**





Comparisons by demographic variables indicated a number of perceived impacts of the integrated development on sense of place and quality of life in the Twin Cities for which there were significant differences between age groups and across the respondents' zone of residence.

Of those statements that differed significantly across age groups, two loaded highly against the factor deemed to represent *Openness and Diversity*, while a further three loaded highly against the factor representing *Growth and Balance* within the Twin Cities.

For Factor 1, *Open and Diversity*, responses to the perception that *This integrated development is evidence of Townsville's maturity and makes me feel proud to be a part of this growing city* ( $\chi^2_{0.05, 16} = 30.833$ ,  $p = 0.014$ ) and *This integrated development will benefit Townsville by making it more cosmopolitan* ( $\chi^2_{0.05, 16} = 41.431$ ,  $p < 0.001$ ), both differed significantly across age groups.

In terms of the former statement, a higher proportion of respondents in the 60+ years (22.0%) and the 50–59 years (22.3%) age groups were either in general or strong disagreement with this statement than were 18–29 years (0.0%), 30–39 years (9.6%) and 40–49 years (8.6%) age groups [Figure 23(a)].

For the latter statement, a higher proportion of respondents in the 60 years + age group (39.2%) either generally or strongly disagreed with this statement than did the 18–29 years (15.0%), 30–39 years (17.1%), 40–49 years (15.9%) or 50–59 years (13.2%) age groups [Figure 23(b)].

For Factor 2, *Growth and Balance*, responses to the perception that *The residential and marina development is out of character with the relaxed and friendly lifestyle of the Twin Cities* ( $\chi^2_{0.05, 16} = 31.707$ ,  $p = 0.047$ ), *This integrated development will complement the redeveloped Townsville Strand* ( $\chi^2_{0.05, 16} = 26.145$ ,  $p = 0.050$ ) and *This integrated development will contribute positively to Townsville's quality of life by increasing recreational opportunities available to residents* ( $\chi^2_{0.05, 16} = 46.356$ ,  $p < 0.001$ ) all differed significantly across age groups.

For the first statement, older respondents were significantly more in agreement with the perceived negative impacts of the development on lifestyle. In general agreement increased with respondent age with the 20.7% of 18–29 year olds, 21.0% of 30–39 years olds and 23.4% of 40–49 years olds either generally or strongly agreed with this statement. In contrast almost twice as many 60+ year olds (41.4%) were in general or strong agreement with the negative impacts of this statement [Figure 23(c)].

In terms of this integrated development's complementarity with the Townsville Strand, the 18–29 years olds (75.5%) were most in agreement with this statement. This agreement declining with respondent age with 69.1% of 30–39 year olds, 65.3% of 40–49 year olds, 58.9% of 50–59 year olds and 53.7% of 60+ year olds in age groups in either general or strong agreement with this statement [Figure 23(d)].

With regard the last statement presented above, a similar pattern emerges whereby agreement declines with respondent age. While 67.9% of 18–29 year olds and 65.5% of 30–39 year olds either generally or strongly agreed that the integrated development would contribute positively to recreation opportunities, fewer 50–59 year olds (50.0%) and 60+ year olds (52.3%) either generally or strongly agreed with this statement [Figure 23(e)]. This result is borne out by current usage patterns by age described below [see Figure 31].



Of those statements that differed significantly across City of residence, two, loaded highly against the factor deemed to represent *Openness and Diversity*, while a further two loaded highly against the factor representing *Growth and Lifestyle/Balance* within the Twin Cities.

For Factor 1, *Open and Diversity*, the two statements that differed significantly across City of residence were; *This integrated development is evidence of Townsville's maturity and makes me feel proud to be a part of this growing city* ( $\chi^2_{0.05, 4} = 8.545$ ,  $p = 0.057$ ) and *This integrated project is right for Townsville at a time when the city is becoming more sophisticated* ( $\chi^2_{0.05, 4} = 13.455$ ,  $p = 0.009$ ).

In terms of the former, a higher proportions of Thuringowa residents (68.8%) than Townsville residents (61.2%) either generally or strongly agreed with this statement while for the latter the outcome was consistent with 67.5% of Thuringowa residents as opposed to 58.9% of Townsville residents either generally or strongly agreeing with that statement [Figure 24(a) and Figure 24(b)].

For Factor 2, *Growth and Lifestyle/Balance*, responses to the statements *This integrated development is at odds with the need to balance economic growth with maintaining our relaxed lifestyle* ( $\chi^2_{0.05, 4} = 15.769$ ,  $p = 0.003$ ) and *This integrated development will complement the redeveloped Townsville Strand* ( $\chi^2_{0.05, 4} = 11.868$ ,  $p = 0.018$ ) both differed significantly across age groups.

In terms of the former, the responses were similar to those statements above with a higher proportions of Thuringowa residents (71.8%) than Townsville residents (56.5%) either generally or strongly agreeing with this statement [Figure 24(c)]. For the latter statement, despite a more overall favourable attitude amongst Thuringowa residents to the perceived benefits of this integrated development, slightly more Thuringowa-based respondents 29.5% than Townsville-based respondents (23.5%) perceived the integrated development top ignore the balance between growth and lifestyle.

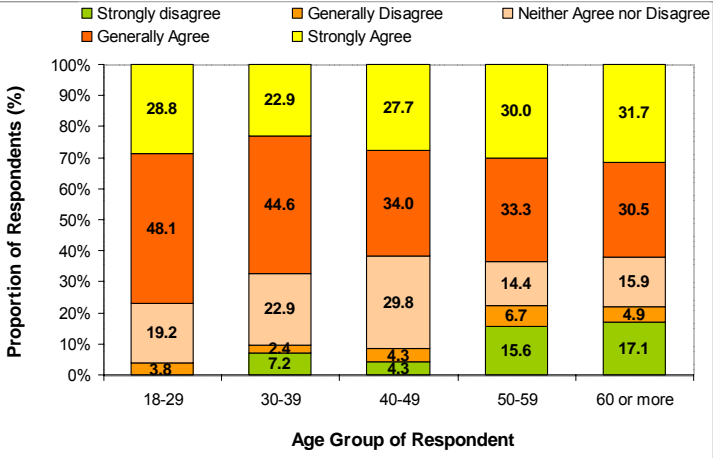
Interestingly, despite the integrated developments proximity to them, significantly fewer Townsville-based respondents were agreed that this *integrated development would (sic) become an iconic asset* ( $\chi^2_{0.05, 20} = 34.334$ ,  $p = 0.024$ ). While between 55–60% of respondents in Townsville postcodes either generally or strongly agreed with this statement, from 68% up to 84% of respondents in Thuringowa postcodes either generally or strongly agreed [Figure 24(f)].

In terms of the respondent's City of residence, a higher proportion of Thuringowa residents (70.5%) either generally or strongly agreed that the integrated development would become an iconic asset that did Townsville residents (57.4%) [Figure 24(e)].

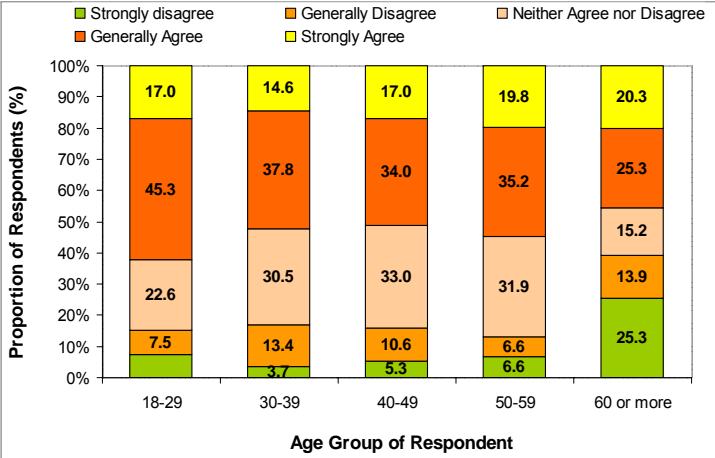


**FIGURE 23: PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES BY RESPONDENT AGE GROUP**

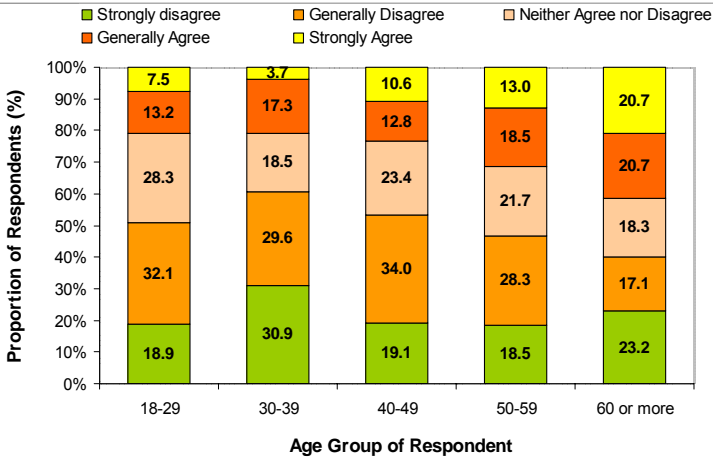
**(a) Integrated development evidence of Townsville's maturity**



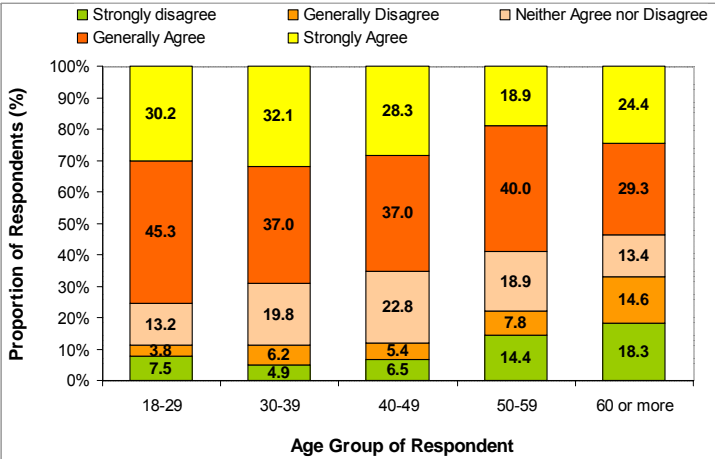
**(b) Integrated development will add to cosmopolitanism**



**(c) Development is out of character with Twin Cities lifestyle**

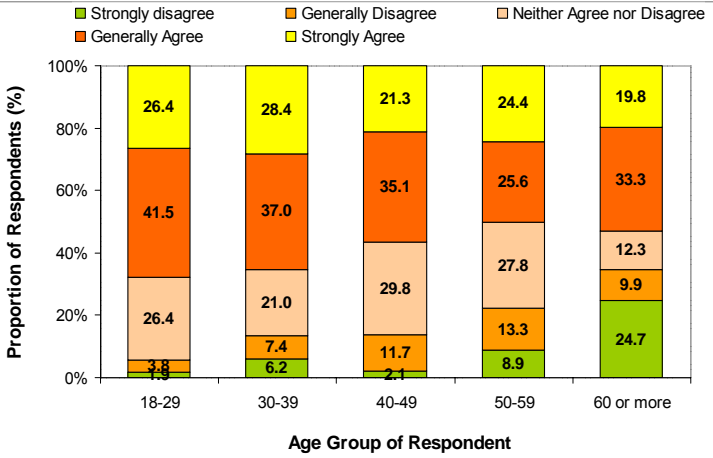


**(d) Integrated development will complement the Strand**



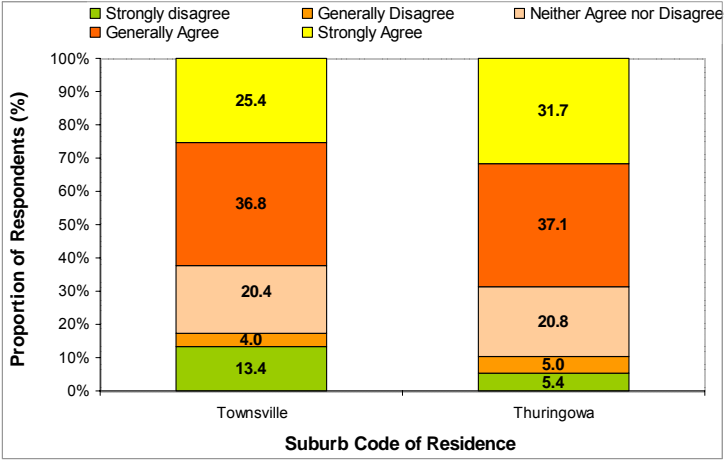
**FIGURE 23 (cont): PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES BY RESPONDENT AGE GROUP**

**(e) Development will contribute positively to recreation**

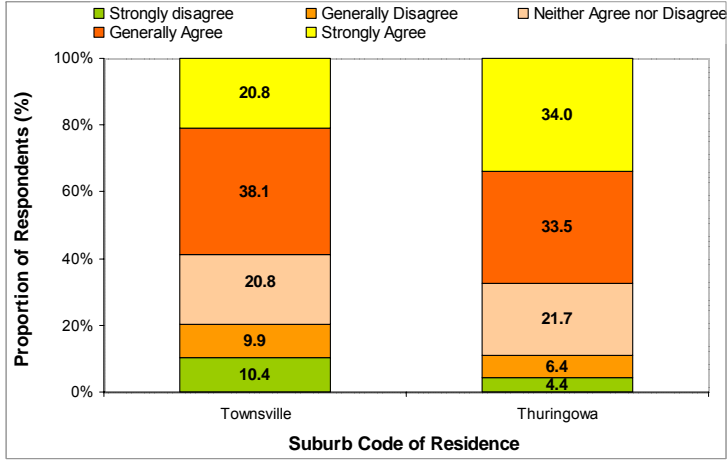


**FIGURE 24: PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES BY RESPONDENT CITY OF RESIDENCE**

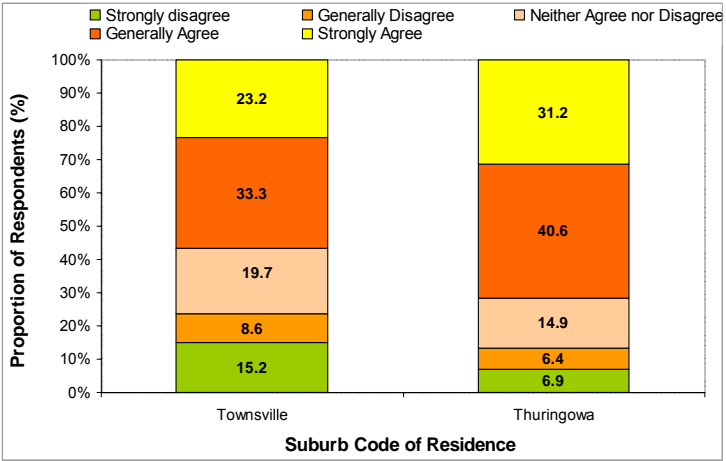
**(a) Integrated development evidence of Townsville's maturity**



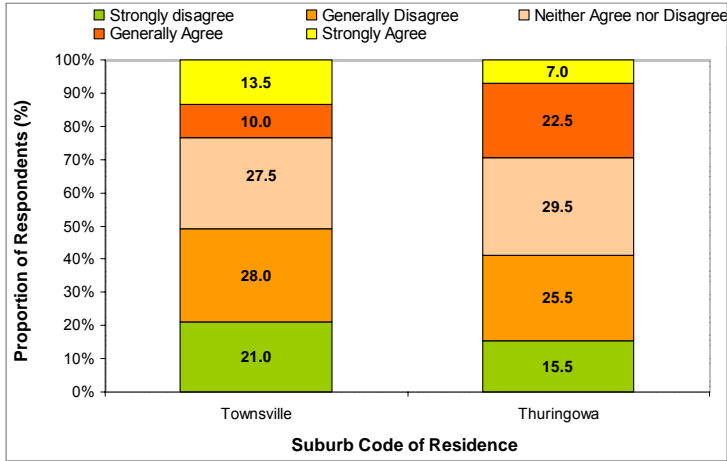
**(b) This integrated project is right for Townsville at this time**



**(c) Integrated development will complement the Strand**

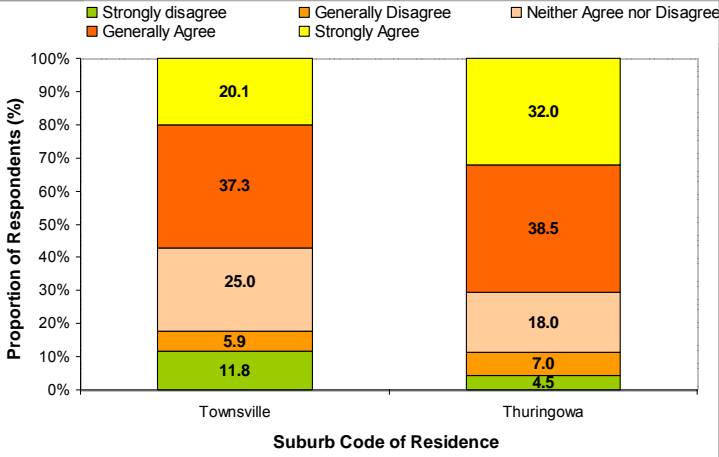


**(d) Development ignores balance between growth & lifestyle**

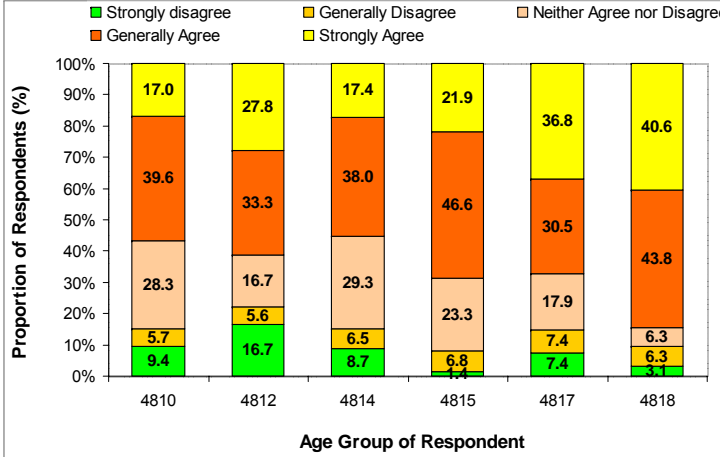


**FIGURE 24 (cont): PERCEIVED IMPACTS OF THE INTEGRATED DEVELOPMENT ON SENSE OF PLACE AND QUALITY OF LIFE IN THE TWIN CITIES BY RESPONDENT CITY AND POSTCODE OF RESIDENCE**

**(e) Integrated development will become an iconic asset**



**(f) Integrated development will become an iconic asset**



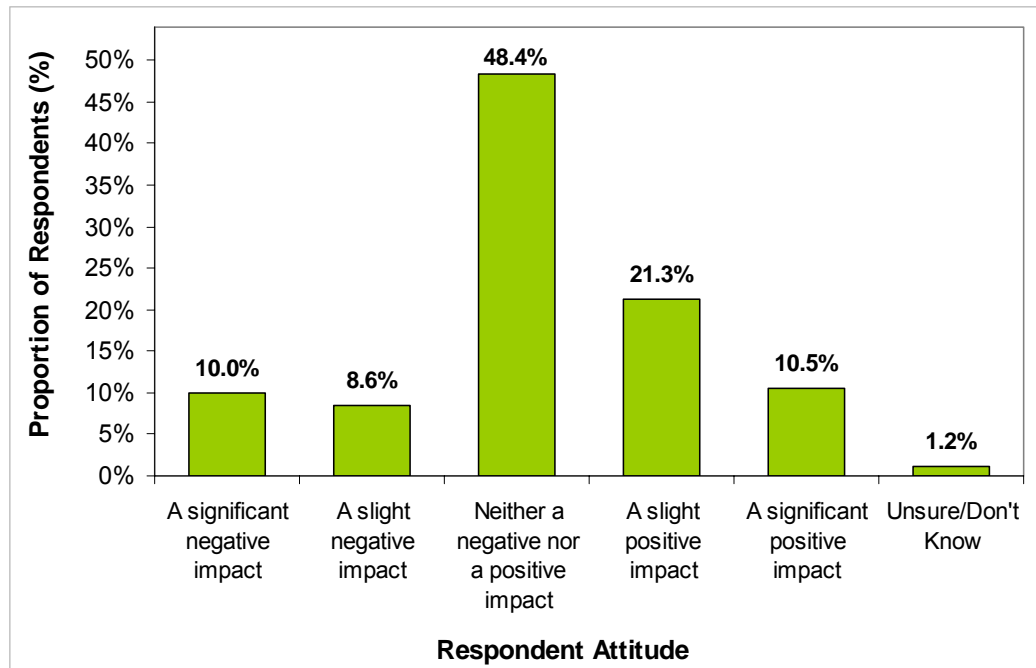


#### 4.5 ONSITE IMPACTS DURING CONSTRUCTION

Respondents were asked to indicate the potential impact of the proposed Ocean Terminal and residential and marina development on their use of the Strand and the Breakwater Precinct. Overall, the large majority of respondents felt this integrated development would have none or a slightly positive impact on their use of these areas.

In terms of the perceived impacts on the respondents use of the Strand during construction, almost half of all respondents (48.4%) felt the integrated development would have no impact on usage while a further one-third (31.8%) thought their would be a slight positive impact on their use of the Strand [Figure 25].

**FIGURE 25: IMPACT OF PROPOSED OCEAN TERMINAL AND INTEGRATED RESIDENTIAL AND MARINA DEVELOPMENT ON RESPONDENT USE OF THE STRAND (N = 409)**

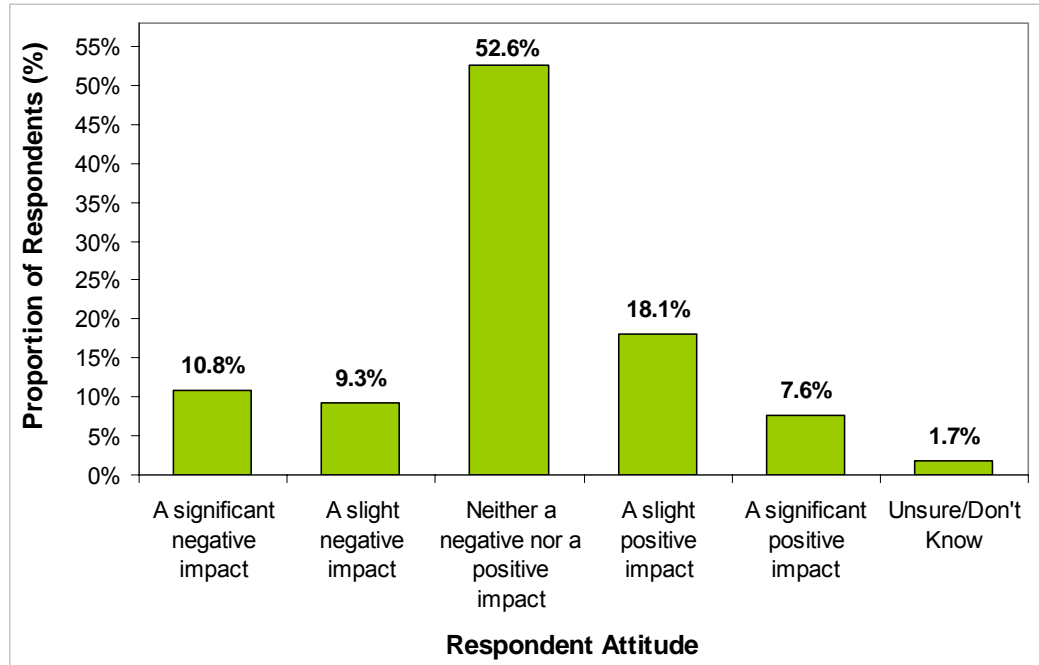


A similar impact was reported by respondents in respect of perceived impacts of construction of the integrated development on the respondents use of the Breakwater Precinct with more than half of all respondents (52.6%) of the opinion there would be neither a negative nor positive impact and a further quarter of all respondents (25.7%) indicating they believed there would be a slight positive impact on their use of the Breakwater Precinct during this construction phase [Figure 26].

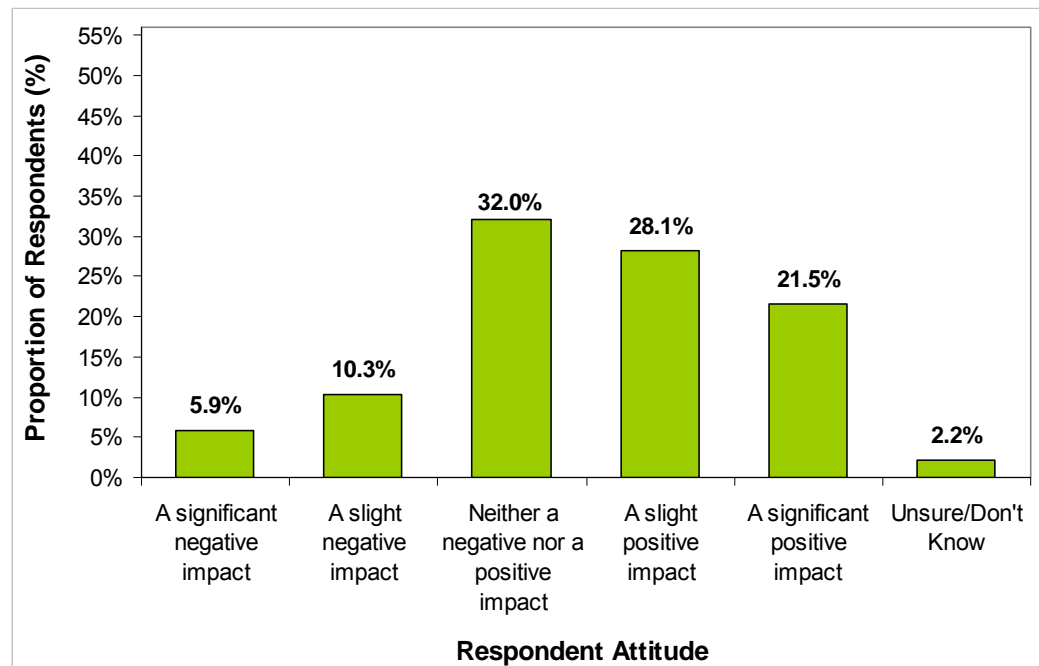
A small proportion of respondents (16.2%) felt that onsite construction activities associated with the integrated development would have either a slight or significant negative impact on the Townsville Strand as a place for recreating and socialising while 32% of respondents felt there would be no impact during the construction phase [Figure 27].



**FIGURE 26: IMPACT OF PROPOSED OCEAN TERMINAL AND INTEGRATED RESIDENTIAL AND MARINA DEVELOPMENT ON THE RESPONDENTS USE OF BREAKWATER PRECINCT (N = 409)**



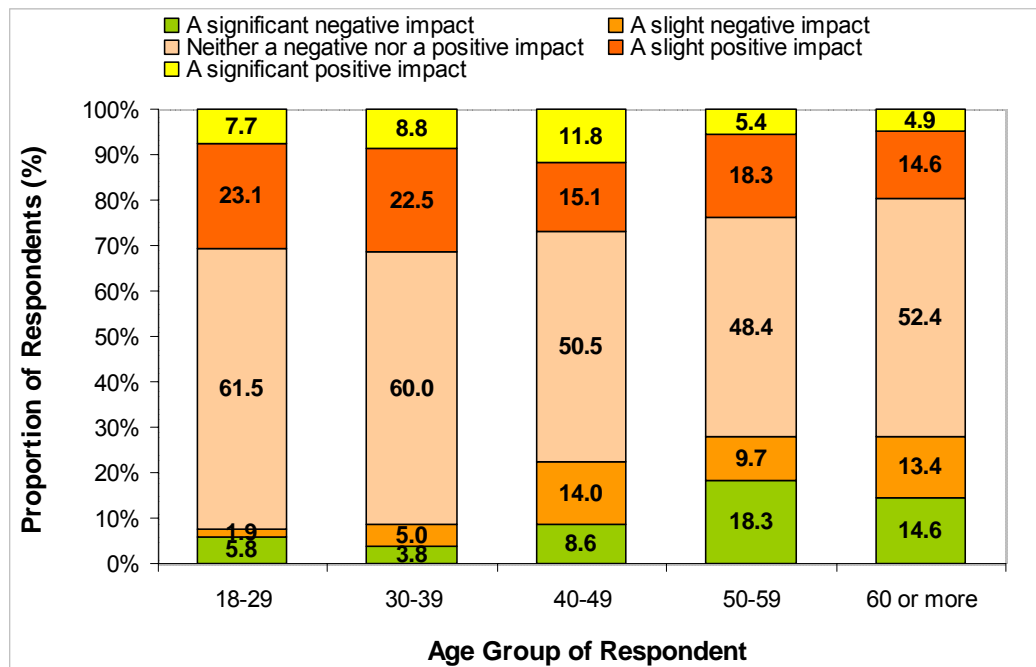
**FIGURE 27: IMPACT OF PROPOSED OCEAN TERMINAL AND INTEGRATED RESIDENTIAL AND MARINA DEVELOPMENT ON THE RECREATIONAL AND SOCIAL ACTIVITIES ON THE TOWNSVILLE STRAND (N = 409)**





Respondents' views of the on-site impacts of the proposed Ocean Terminal and integrated residential and marina development on their use of the Breakwater precinct differed significantly across respondent age groups ( $\chi^2_{0.05, 16} = 27.520, p = 0.036$ ) with younger respondents more inclined to regard the development as having a positive impact on their use. While 30.8% of 18–29 year olds and 31.3% of 30-39 year olds saw the development as having either a slight or significant positive impact on use of the area, 23.7% of 50–59 year olds and 19.5% of 60+ year olds held this same view. The most interesting result from the survey was that between 50% and 60% of respondents from all age groups saw this integrated development as having neither a negative nor a positive impact on their use of the Breakwater precinct area [Figure 28].

**FIGURE 28: IMPACT OF PROPOSED OCEAN TERMINAL AND INTEGRATED RESIDENTIAL AND MARINA DEVELOPMENT ON THE RESPONDENTS USE OF BREAKWATER PRECINCT BY RESPONDENT AGE (N = 400)**



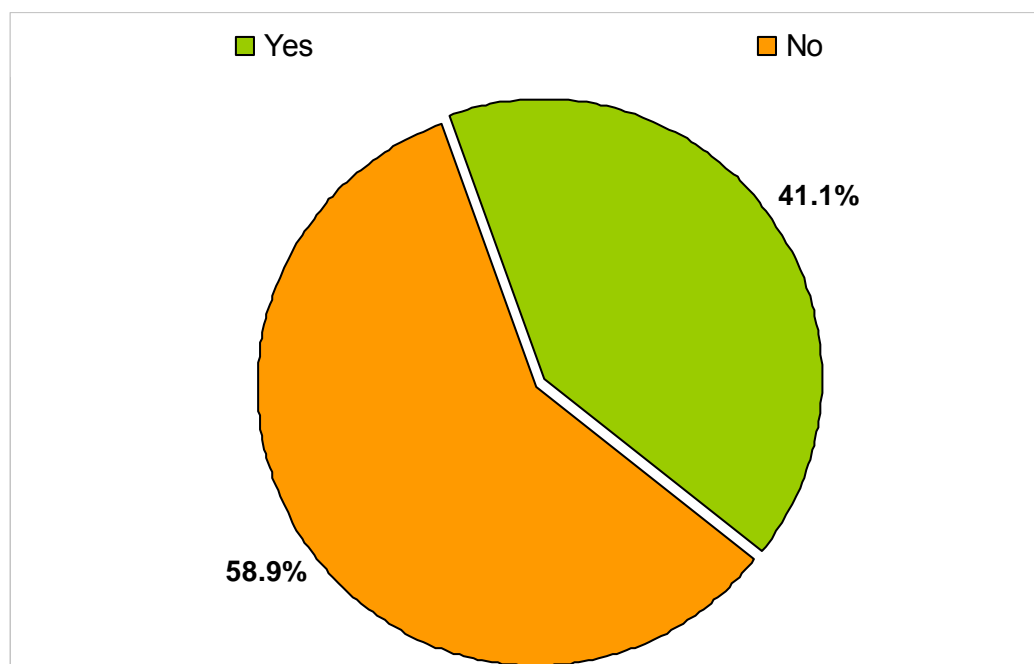


#### 4.6 CURRENT PORT USAGE

Respondents were asked to indicate their usage patterns on the existing Townsville Port breakwater wall and reclaimed land near Jupiter's Casino.

The survey found that 41.1% of respondents indicated they had used the Townsville Port Breakwater Wall and reclaimed land as a recreation space over the previous 12 months [Figure 29].

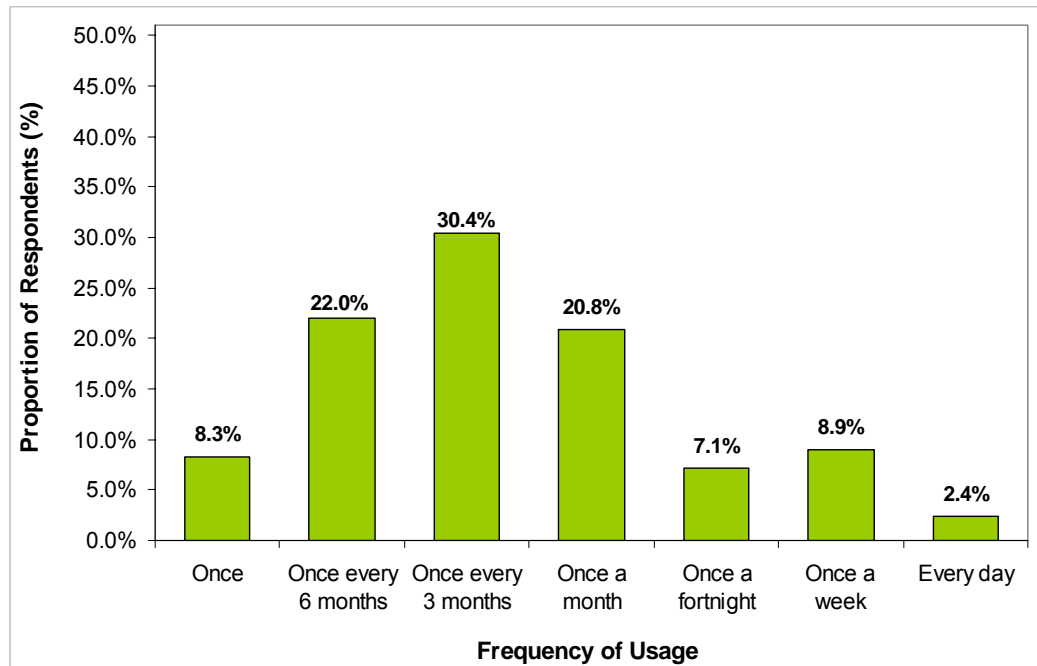
**FIGURE 29: RESPONDENTS' USE THE TOWNSVILLE PORT BREAKWATER WALL AND THE RECLAIMED LAND NEAR JUPITER'S CASINO AS A RECREATION SPACE DURING THE PREVIOUS 12 MONTHS (N =409)**



Roughly 39% of those respondents who indicated they had used Townsville Port Breakwater Wall and reclaimed land as a recreation space over the previous 12 months claimed they did so at least once a month. Almost one-third (31.1%) of these same respondents indicated they had used these areas only once or twice over the past year [Figure 30].



**FIGURE 30: RESPONDENTS' FREQUENCY OF USE OF TOWNSVILLE PORT BREAKWATER WALL AND RECLAIMED LAND FOR RECREATIONAL PURPOSES DURING THE PAST 12 MONTHS (N =168)**



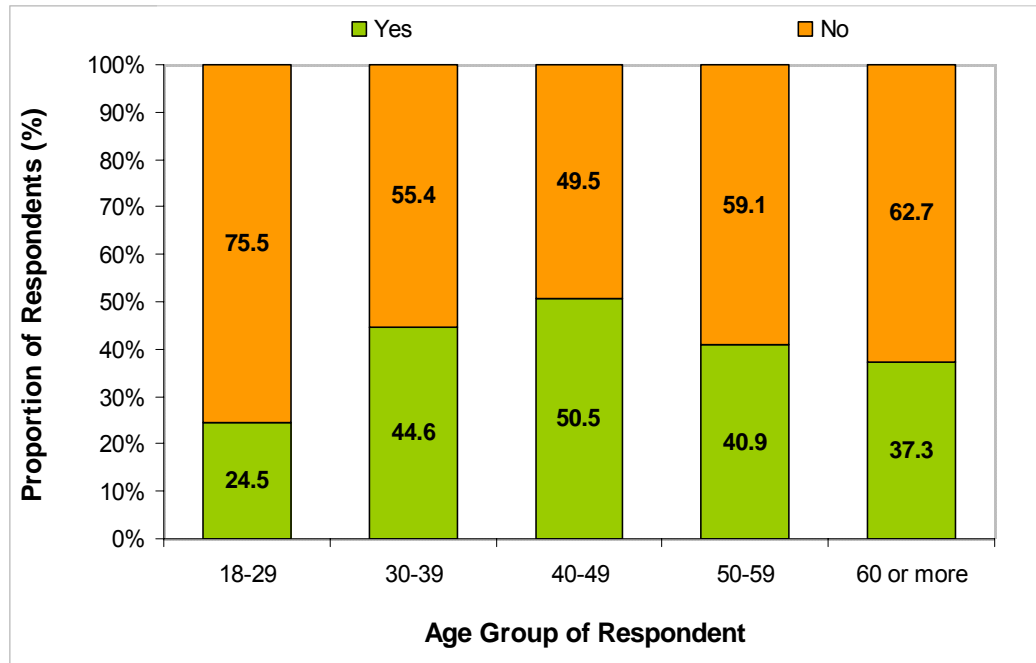
It is likely that these usage patterns, whereby there are a high number of regular users, are indicative of respondents using these areas as part of their recreational and exercise (walking, running, cycling) programs linking to the Strand.

Comparisons by respondent age shows respondent usage of the Breakwater Wall to vary significantly with age ( $\chi^2_{0.05, 4} = 10.403, p = 0.034$ ), with the both the younger and older age groups being the most frequent users. More than three-quarters (75.5%) of all respondents aged 18–29 claimed they had used the Breakwater Wall in the previous 12 months while 62.7% of 60+ year olds had likewise used the Breakwater Wall over this period. These results compare with 55.5% of 30–39 year olds and 49.5% of 40–49 year olds [Figure 31].

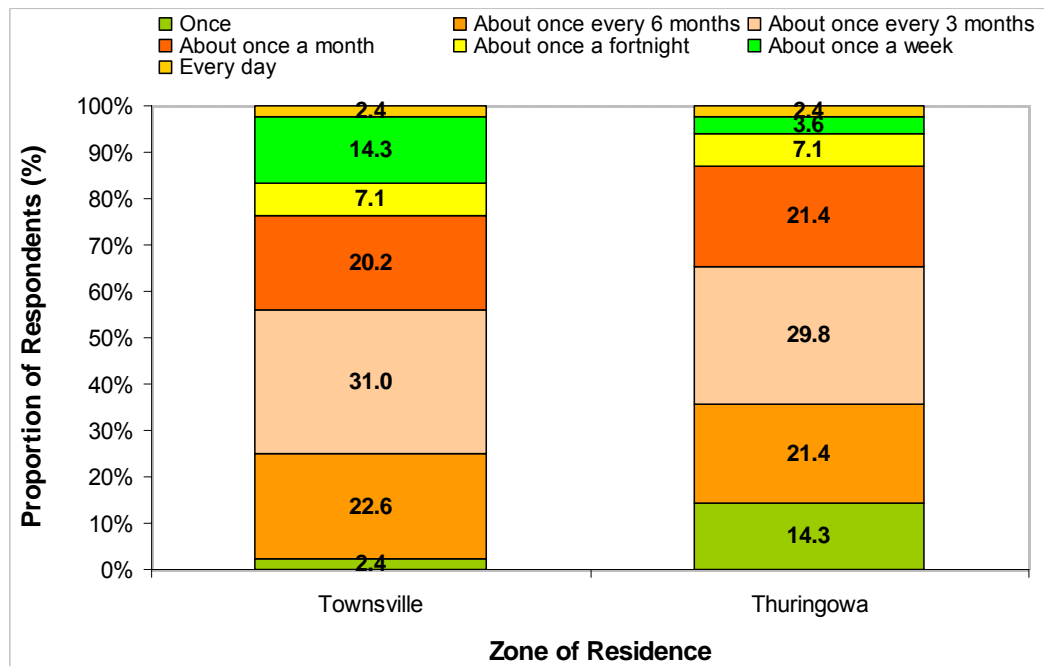
Not unsurprisingly, Townsville residents used the Breakwater Wall more frequently than did Thuringowa residents ( $\chi^2_{0.05, 6} = 12.618, p = 0.050$ ). While 23.8% of Townsville residents used the Breakwater Wall at least once a fortnight lonely 13.1% of Thuringowa residents did so [Figure 32].



**FIGURE 31: RESPONDENTS' USE THE TOWNSVILLE PORT BREAKWATER WALL AND THE RECLAIMED LAND NEAR JUPITER'S CASINO AS A RECREATION SPACE DURING THE PREVIOUS 12 MONTHS BY RESPONDENT AGE (N = 407)**



**FIGURE 32: RESPONDENTS' FREQUENCY OF USE OF TOWNSVILLE PORT BREAKWATER WALL AND RECLAIMED LAND FOR RECREATIONAL PURPOSES DURING THE PAST 12 MONTHS BY CITY OF RESIDENCE (N = 168)**





#### 4.6.1 PORT PRECINCT VISITATION

An estimate of the total number of people visiting Breakwater precinct was made using primary survey response data. Respondents were asked to indicate whether or not they had used the Townsville Port Breakwater Wall as a recreation space during the past twelve months. Those respondents who answered affirmatively to this question were then asked to nominate the frequency with which they made use of the Breakwater Wall for recreational purposes.

The calculation required several steps:

1. Estimate the total number of persons from both Townsville and Thuringowa who visited the Breakwater Wall annually from primary survey data [Table 7]; and
2. Multiply the percentage of respondents within a given frequency of use category by number of yearly visits associated with that category (i.e. monthly = 12 visits per year) [Table 8].

The total number of visitations, including repeat visitations, to the Townsville Port Breakwater Wall over the course of 2006 was estimated to be 1,276,316 [Table 8].

**TABLE 7: ESTIMATES OF TOTAL ANNUAL VISITORS TO THE TOWNSVILLE PORT BREAKWATER WALL.**

City of Residence	Population <sup>1</sup>	% of Population Visiting per year	Number Persons Visiting per year
Townsville	95500	41.2%	39,346
Thuringowa	59164	41.0%	24,257
<b>Total Visitors</b>			<b>63,603</b>

<sup>1</sup> Population estimates are based on (reference)

**TABLE 8: ESTIMATES OF TOTAL ANNUAL VISITATIONS TO THE TOWNSVILLE PORT BREAKWATER WALL. FOR RECREATIONAL USES**

Frequency	Townsville		Thuringowa	
	% of Visitors	No. of Visits	% of Visitors	No. of Visits
Once	2.4	937	14.3	3,465
Once every 6 months	22.6	17,799	21.4	10,396
Once every 3 months	31.0	48,714	29.8	28,878
Once a month	20.2	95,555	21.4	62,376
Once a fortnight	7.1	73,071	7.1	45,049
Once a week	14.3	292,285	3.6	45,049
Every day	2.4	341,935	2.4	210,807
<b>Visitations by City</b>		<b>870,296</b>		<b>406,020</b>
<b>Total</b>				<b>1,276,316</b>



## 5 SUMMARY AND RECOMMENDATIONS

The community attitude survey aimed to address a number specific requirement as per the project Terms of Reference, specifically:

1. Community severance (if any) in relation to sense of place, identity and service delivery, for example schools, shops, churches, recreational, entertainment and cultural facilities, social links, health and other community centres and open space;
2. Implications (real and perceived) for public amenity as a result of the development;
3. The impacts on the community networks and quality of life;
4. The interaction of the various proposed uses (e.g. residential, tourism, maritime) within the Project site and adjoining areas including the impacts on future residents of the Breakwater Cove precinct from operations within the TOT precinct and other surrounding land uses such as the Port of Townsville;
5. Impacts which may lead to any reduction to the amenity and sustainability of the local communities and in particular losses to community facilities and reduced accessibility;
6. Impacts on people who live, recreate, travel along, or work near the areas affected by the Project during the construction phase of the development;
7. Recreational, leisure and sporting activities which may be affected, particularly relating to recreational fishing, boat users and public open space on The Strand; and
8. The impact of increased shipping frequency.

The approach adopted in this survey study to assess requirements 1 to 5, was twofold. The logic of the approach was to establish a baseline of existing attitudes and then gauge public reactions to possible impacts of the TOT project. As such, the approach was as follows:

- Firstly, survey respondents were asked a series of Likert Scale type questions to evaluate how they characterise Townsville in terms of its growth and planning direction, its livability, and its success in achieving a balance between economic, social and environmental sustainability; and
- Secondly, survey respondents were asked a series of Likert Scale type questions to evaluate their perceptions of how the proposed integrated Ocean Terminal and residential and marina development would impact on social values, usually defined as sense of place and quality of life characteristics.

In terms of both the community characterisations of Townsville and the perceived impacts of the project on community social values, responses were assessed using two complementary analysis techniques. The first of these, Factor Analysis, has been used to identify commonalities among specific statements that can jointly describe a) how respondents characterise the city they live in and b) the typology of impacts associated with the integrated development. Secondly, Crosstabulation Analysis was applied to each



of the statements to identify any significant differences across a range of demographic variables. Subsequent to these independent analyses, any significant differences in demographic variables was presented in the context of the hypothetical factor structure.

## 5.1 PERCEPTIONS AND ATTITUDES IN THE CONTEXT OF THE PROPOSED FACTOR STRUCTURE

### 5.1.1 COMMUNITY CHARACTERISTICS OF TOWNSVILLE

From the factor analyses undertaken on the community characteristics of Townsville, four underlying attributes were hypothesized, which have been described as follows: *Lifestyle*, *Balance*, *Opportunity* and *Sustainability*.

More than three-quarters of all respondents were favourably disposed toward those statements that comprised the *Lifestyle* attribute, with respondents believing Townsville to be a great place to live and raise a family and to offer ample public spaces and facilities for recreational enjoyment.

In terms of Townsville balancing the priorities of economic growth and lifestyle, the overall feeling was that Townsville was doing a reasonable job of achieving this balance. While almost three-quarters of respondents (74.9%) regarded the city as offering big city benefits without the associated downsides, respondents were more-or-less equally divided on the issue of whether the current rate of growth in the Twin Cities was threatening its lifestyle benefits. This latter challenge was further emphasized by the fact that almost three-quarters of respondents (73.6%) felt it important to attain a balance between industry and tourism for future economic development.

While there was recognition of the need to balance lifestyle with economic growth, respondents still felt that Townsville was a city of opportunity in terms of employment, and social interaction and inclusiveness.

A result worthy of note was that there were no significant differences among any of the demographic variables in terms of how respondents characterised the city. In this sense that people of all ages, incomes, family types and places of residence were consistent in their view of the lifestyle benefits, opportunities and direction of growth and development within the Twin Cities, there are clearly some core values that underpin a common appreciation of the city as a place to 'live, work and play'.

### 5.1.2 PERCEIVED IMPACTS OF THE PROPOSED DEVELOPMENT

From the factor analyses undertaken on the perceived impacts of the proposed integrated development, four underlying attributes were hypothesized; *Diversity and Openness*, *Growth and Balance*, *Economic Benefits* and *Tourism Destination*.

Interestingly, these overlap to some extent with the hypothesized factor structure of statements characterising Townsville. For example *Diversity and Openness* might be seen to reinforce the perception of Townsville as a place of opportunity while *Growth and Balance* might equally capture respondents' views that Townsville offers both a great lifestyle and at the same time is achieving economic growth but not at the expense of compromising those lifestyle benefits.

Overall, respondents see the integrated development as enhancing the city's existing



social capital and social cohesion. In terms of diversity and multiculturalism, more the three-quarters of respondents (77.7%) felt the TOT development would contribute positively while around two-thirds were of the view that the city was becoming more mature (63.2%) and more sophisticated (65.5%). Slightly more than half (53.3%) felt the project would enhance the cosmopolitan nature of the city.

In terms of how the proposed integrated development related to expectations of maintaining a balance between growth and lifestyle, overall respondents were of the view that the development would not threaten the lifestyle benefits of greater Townsville. This was borne out by the fact that about two-thirds of all respondents saw the development as complementary toward existing significant recreational (i.e. the Strand) and infrastructure (i.e. Townville Port) assets. Moreover, 59.1% of respondents saw this development as augmenting the city's existing recreational resources. Respondents overall satisfaction that the development did not impinge negatively on social values (i.e. quality of life and sense of place), was further borne out by their overall rejection of the contention that development was "out of character" with greater Townsville's lifestyle and "at odds" with the need to balance growth with lifestyle. Approximately a quarter of all respondents were of the view that this development would compromise this growth/lifestyle balance.

Support for both the Ocean Terminal project separately and the overall integrated development was driven by the perceived economic benefits that would flow from the project both during construction phase and when completed. More than two-thirds of respondents saw the project as bringing additional jobs and investment that would improve the quality of life in the city while more than three-quarters saw the city's long-term economic well-being as being enhanced through increased tourism expenditure directly associated with improved cruise terminal facilities.

Following on from this latter view, was the overall positive perception held by respondents in relation to tourism benefits whereby more than three-quarters of respondents agreed that the Ocean Terminal project would enable Townsville to make up ground on Cairns and the Whitsunday's as recognised tourist destinations while less than 20% foresaw any negative impacts arising from the increase in numbers of cruise-related tourists arriving in the city.

#### **5.1.2.1 Demographic differences with respect to the Proposed Development**

Comparisons by demographic variables indicated a number of perceived impacts of the integrated development for which there were significant differences between age groups and across the respondents' zone of residence. For both demographic variables, these differences fell under the umbrella of the *Diversity and Openness* and *Growth and Balance* attributes identified from the factor analysis.

In terms of *Diversity and Openness*, respondents aged 50 years and over disagreed more strongly that this was a benefit the integrated development would bring to the city, with the greatest proportion of respondents who saw this as evidence of the city's maturity being those in the 18–29 and 30–39 year age groups.

In terms of *Growth and Balance*, older respondents agreed more strongly with the statements intended to capture the potential negative impacts of the integrated development and less strongly with those intended to capture the positive aspects of the development. For example, while 40% of respondents aged 60 and over saw this



*development as out of character with the Twin Cities' lifestyle*, only around 20% of respondents aged between 18 and 49 were of this opinion. Conversely, while roughly half of all respondents aged 50 years and over saw the development as complementing the Strand or as enhancing recreation opportunities, between two-thirds and three-quarters of respondents aged 18 to 39 saw this integrated development as contributing positively to these recreational assets and opportunities.

In terms of *Diversity and Openness*, respondents who resided in Thuringowa were slightly more likely to see the integrated development as evidence of the city's increasing maturity and sophistication. This result suggests that Townsville-based respondents perceive their current levels of maturity and sophistication to be higher than those respondents residing in Thuringowa.

Lastly, in terms of *Growth and Balance*, Thuringowa residents held significantly different views to Townsville residents for both the potential negative and positive impacts arising from the proposed integrated development. While slightly less than three-quarters of Thuringowa-based respondents agreed the development would complement the Strand slightly more than half of the Townsville-based respondents thought so. In contrast while 50% of Townsville-based respondents disagreed that the integrated development would be "at odds" with the need to balance growth with lifestyle, only 40% of Thuringowa-based respondents were of the same view.

The diversity of opinion (especially its spatial manifestation) as to how this integrated development would contribute positively to social capital (i.e. diversity) and lifestyle opportunities and recreational assets (i.e. social cohesion) suggests there currently exists a level of social disconnectedness across some groups that may be bridged through components of the integrated development (i.e. the Ocean Terminal). Similarly based on the survey findings, a valid argument may be that the integrated development will generate a sense of improved access to social infrastructure for a greater reach of residents across the city at large.



## 5.2 ATTITUDES TOWARD AND IMPACTS OF THE PROPOSED INTEGRATED DEVELOPMENT

The survey questions that addressed attitudes toward impacts of the proposed integrated development were used to assess the requirements 5 to 7 of the Terms of Reference, as listed above.

While a majority (55.0%) of respondents have a favourable attitude toward the integrated Ocean Terminal and residential and marina development, a much higher proportion of respondents were favorably disposed toward the Ocean Terminal component (76.5%) than were in favour of the residential and marina complex component (48.7%) of the development.

Those respondents who were either very much in favour or very much opposed to the integrated development and each of its components were asked to nominate a single main reason for this attitude.

The positive economic impact of the integrated proposal (32.6%) and the Ocean Terminal (32.2%) and the residential and marina complex (37.6%) as components of it on Townsville was the most consistent driver of support for the project. The potential boost to tourism, however, was nominated as the main driver of support for the integrated proposal (34.1%) and the Ocean Terminal (39.1%) as a component of it.

The potential negative impact on the environment was the most recurrent reason given for opposing the integrated proposal (31.7%) and both the Ocean Terminal (29.0%) and the residential and marina complex (26.7%) as components of it. An increase in traffic congestion in the Strand precinct and increased pressure on essential services and infrastructure also figured prominently as reasons for opposing the integrated development and each of its components.

The strongest support for the integrated proposal came from respondents aged 49 or less, with roughly between 60–65% of respondents in these age groups either very much or a little in favour, as compared with 44.4% of respondent aged 60 and over. Thuringowa-based respondents, with 60.0% either very much or a little in favour were also slightly more favorably disposed toward the integrated development than were Townsville-based respondents (54.3%). A similar picture emerges with respect to the proposed residential and marina complex with 39.1% of respondents aged 50–59 and 46.4% of respondents aged 60 and over either very much or a little opposed to this aspect of the development as compared with 10–20% of respondents aged from 18 to 49 years.

In terms of impacts on use of the surrounding areas during the construction phase of the development, a majority of respondents saw the development as having neither a negative nor a positive impact on their use of either the Strand (48.4%) or the Breakwater precinct (52.6%). In the case of respondent use of the Strand, 18.6% of respondents anticipated either a significant or slight impact arising as a result of onsite construction activities while 20.1% of respondents anticipated either a significant or slight impact on their use of the Breakwater precinct during the construction phase.

More than two-fifths (41.1%) of persons surveyed claimed they had used either the Townsville Port Breakwater wall or reclaimed land near Jupiter's Casino during the last twelve months, with 39% of these users indicating they used these areas at least once a month.





Based on the population of both Townsville and Thuringowa Cities and the nominated frequency of usage, there were nearly 1.3 million visitations, including repeat visitations, to the Breakwater wall and reclaimed land areas in the previous twelve months. While this number seems quite high, the consultants have suggested that those respondents who claimed they were regularly using the Townsville Port Breakwater Wall were doing so for recreational purposes and were in fact traversing through the precinct as part of their recreation activity along the Strand (e.g. running, walking, bicycling).



### 5.3 RELEVANCE TO TERMS OF REFERENCE

Each of the identified elements of the Terms of Reference has been dealt with separately.

**TOR: Community severance (if any) in relation to sense of place, identity and service delivery, for example schools, shops, churches, recreational, entertainment and cultural facilities, social links, health and other community centres and open space**

Results from this survey suggest a mixed but generally positive outcome in terms of potential community severance aspects of the proposed integrated development.

Older respondents (generally those aged 60 and over) were more likely to be disaffected by this development and to feel a sense of loss in terms of lifestyle and/or sense of place.

Thuringowa residents were more likely to regard this development as evidence of the city becoming more mature and sophisticated and more likely to see positive recreational compatibilities. The diversity of opinion as to how this integrated development would contribute positively to social capital (i.e. diversity) and lifestyle opportunities and recreational assets (i.e. social cohesion) suggests there currently exists a level of social disconnectedness that may be bridged through components of the integrated development (i.e. the Ocean Terminal). Similarly a valid argument may be that the integrated development will generate a sense of improved access to social infrastructure.

**TOR: The impacts on the community networks and quality of life**

The results of this survey suggest the proposed integrated Ocean Terminal and residential and marina development will have a positive impact on the Twin Cities lifestyle and the sense of place of its inhabitants. The proposed development is seen as enhancing social capital and social cohesion through its contribution to increasing diversity and multi-culturalism and the cosmopolitan nature of the city and through its recognising the newfound maturity and sophistication that prevails in the City.

The proposed development is also regarded as having a positive impact in terms of contributing to the growth of Townsville, but without impinging on the positive lifestyle aspects of the Twin Cities. It is expected the proposed development will augment existing recreational assets and opportunities but not at the expense of being “out of character with existing lifestyles” or “at odds with the goals of balancing growth and lifestyle”.

Lastly, the integrated development and its various components are seen in the community as being able to deliver economic benefits through investment and additional jobs and economic well-being and stability in the local economy through increased tourism expenditure. More importantly the development is seen as being capable of doing so without compromising lifestyle benefits of the local area.

**TOR: The interaction of the various proposed uses (e.g. residential, tourism, maritime) within the Project site and adjoining areas including the impacts on future residents of the Breakwater Cove precinct from operations within the TOT precinct and other surrounding land uses such as the Port of Townsville**

The positive economic impact on Townsville of the integrated proposal (32.6%) and the Ocean Terminal (32.2%) and the residential and marina complex (37.6%) as components



of it was the most consistent driver of support for the project. Furthermore, the potential boost to tourism was nominated as the main driver of support for the integrated proposal (34.1%) and the Ocean Terminal (39.1%) as a component of it.

The potential negative impact on the environment was the most recurrent reason given for opposing the integrated proposal (31.7%) and both the Ocean Terminal (29.0%) and the residential and marina complex (26.7%) as components of it. An increase in traffic congestion in the Strand precinct and increased pressure on essential services and infrastructure also figured prominently as reasons for opposing the integrated development and each of its components. Community concerns about conflict between the proposed TOT and the existing Port infrastructure was raised by no more than approximately 12% of those that opposed the integrated project. More significantly, no more than 6.5% of respondents that opposed the residential development per se (i.e. not including the Ocean Terminal facility) nominated conflict with operations at the Port as their reason for their unfavourable view.

When asked specifically about the compatibility of the Ocean Terminal development with the Port, the survey found that 68% of respondents believed that the proposed TOT would complement the Townsville port infrastructure.

Thus, while there are some in the community that have concerns about the interaction between the proposed TOT and the existing port infrastructure, the majority of residents believe that the project will be complementary and will, in fact, be a key driver of future economic growth and prosperity especially in relation to boosting the region's tourism sector.

**TOR: Implications (real and perceived) for public amenity as a result of the development**

The overall tenor of the survey results indicate that the majority of residents believe that the TOT project will lead to improvements in public amenity, particularly in term of enhanced recreational facilities accessible to the public.

At a broader level, improvements that the project is expected to bring to general economic wellbeing and 'quality of life' would contribute to general amenity improvement to how residents experience their lives in Townsville.

**TOR: The Impacts which may lead to any reduction to the amenity and sustainability of the local communities and in particular losses to community facilities and reduced accessibility**

The survey found that the majority of respondents believed that the TOT project would improve and sustain the quality of life in Townsville through the creation of new jobs (67.2%), contribute positively to quality of life in the city by increasing the recreational opportunities available to its residents (59.1%) and complement the redeveloped Strand (64.5%), which is already a widely used recreational asset.

**TOR: Impacts on people who live, recreate, travel along, or work near the areas affected by the Project during the construction phase of the development**

The results from this survey suggest that overall, the proposed development will have minimal impact on people's use of either the Strand or the Breakwater precinct. In both cases less than 20% of respondents anticipated either a significant or slight impact on their use of these areas during construction. Approximately 50% of all respondents were



of the opinion that their use of the area would remain unaffected by the construction activities of the integrated development and its various components.

**TOR: Recreational, leisure and sporting activities which may be affected, particularly relating to recreational fishing, boat users and public open space on The Strand**

The survey found that the majority of residents did not believe the project would have any impact on their current usage of the Strand and breakwater recreational areas, either during or after construction.



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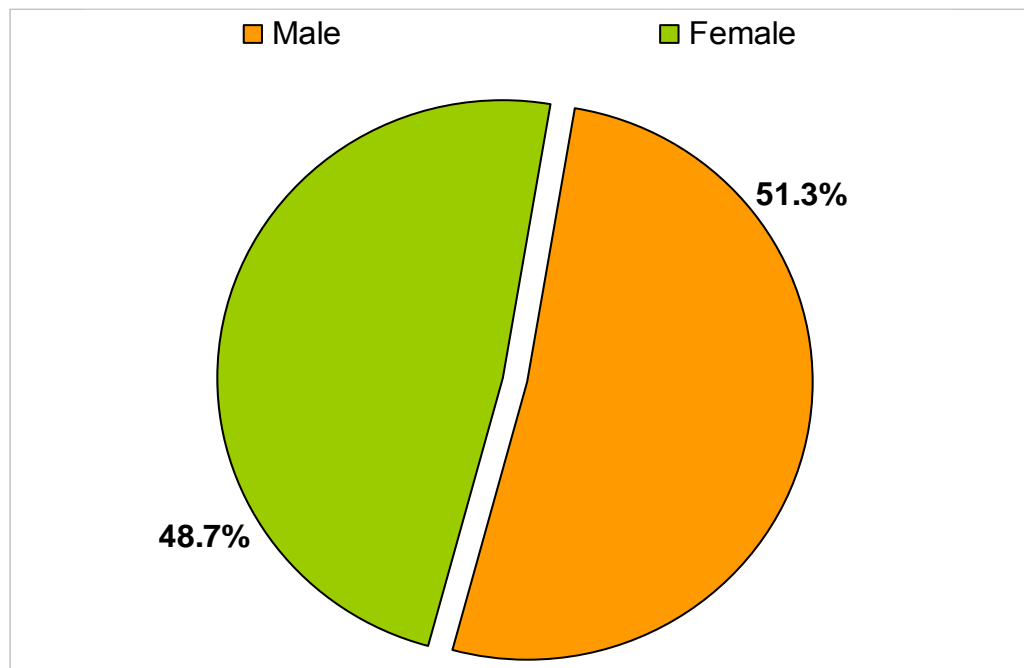
## >> APPENDIX 1: DEMOGRAPHICS

This section presents summary data on respondent demographics.

### A1-1. GENDER

Composition of respondents by gender was sufficiently robust for use in descriptive analysis and statistical tests with females comprising 48.7% and males 51.3% of survey respondents [Figure 33].

**FIGURE 33: RESPONDENT PARTICIPATION BY GENDER (N = 409)**

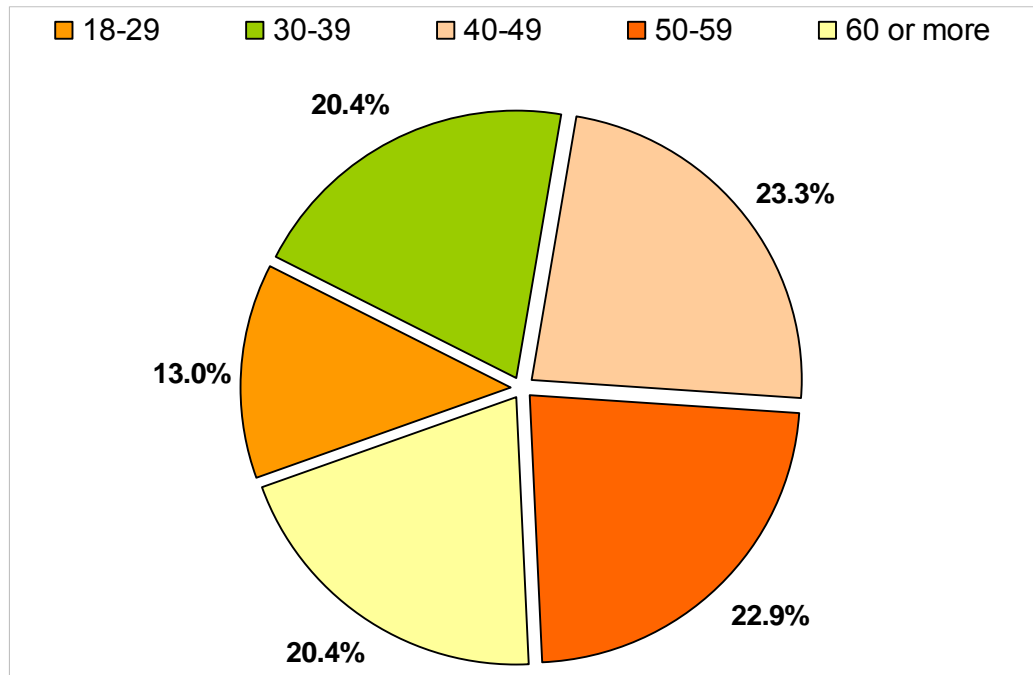




### A1-2. AGE

A cross section of respondents in terms of age groups was interviewed and was sufficiently robust for use in descriptive analysis and statistical tests [Figure 34].

**FIGURE 34: RESPONDENT PARTICIPATION BY AGE (N = 407).**

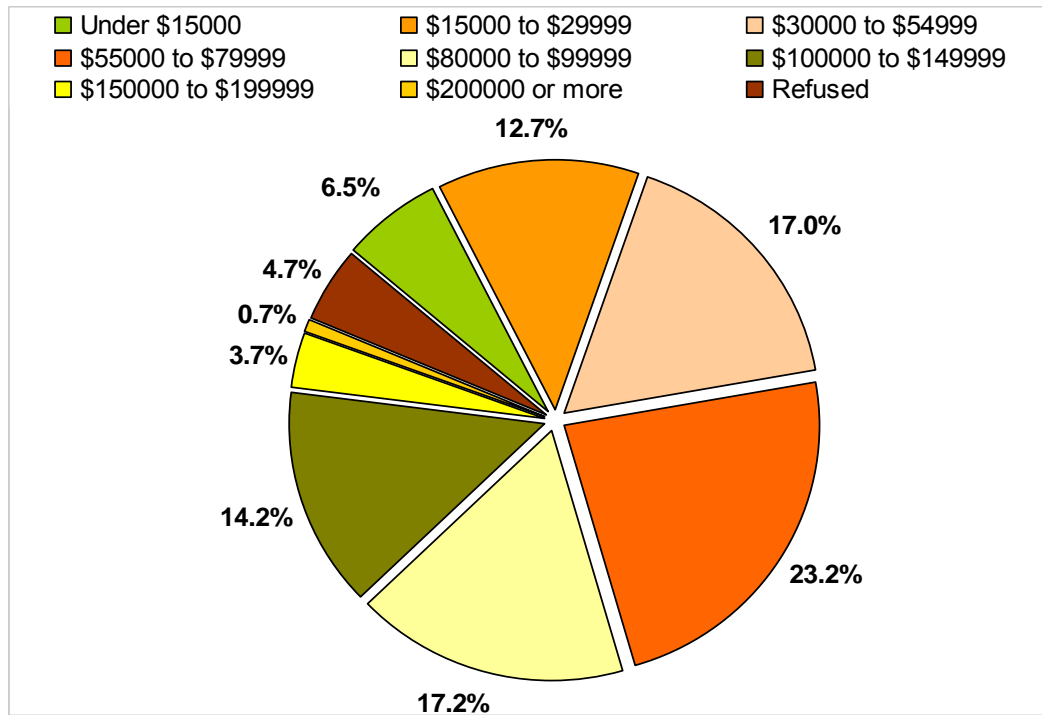




### A1-3. HOUSEHOLD INCOME

A cross section of respondents in terms of household income was interviewed and was regarded as sufficiently robust for use in descriptive analysis and statistical tests [Figure 35].

**FIGURE 35: RESPONDENT PARTICIPATION BY HOUSEHOLD INCOME (N = 401)**



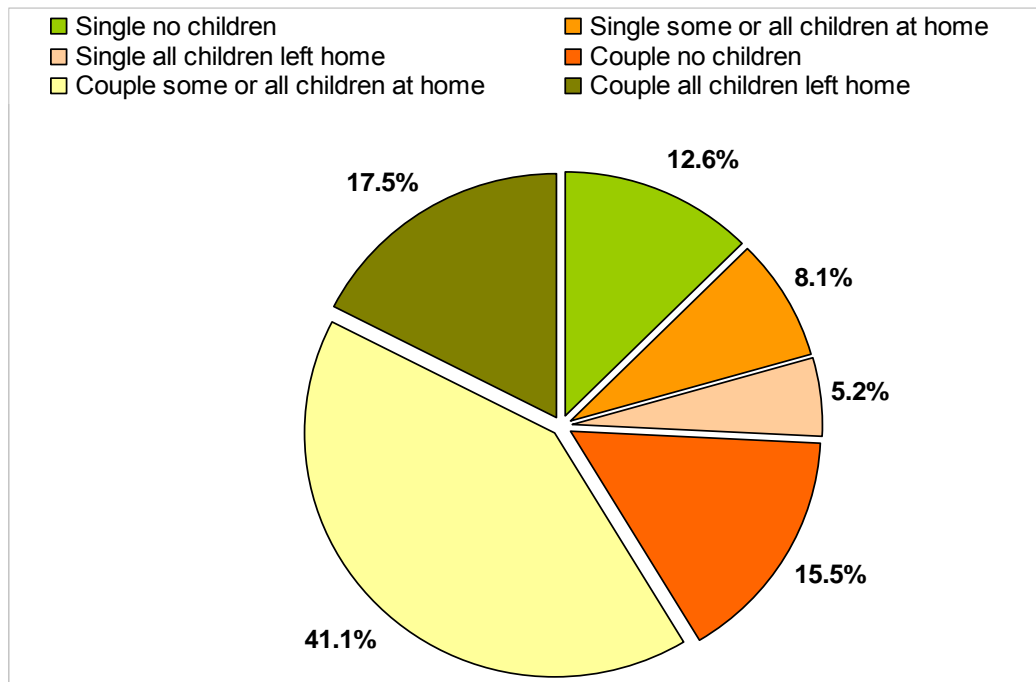




### A1-4. FAMILY TYPE

A cross section of respondents in terms of family type was interviewed and was regarded as sufficiently robust for use in descriptive analysis and statistical tests [Figure 36].

**FIGURE 36: RESPONDENT PARTICIPATION BY FAMILY TYPE (N = 406)**





### A1-5. LOCATION OF RESIDENCE

A cross section of respondents in terms of location (suburb or City) of residence was interviewed and was regarded as sufficiently robust for use in descriptive analysis and statistical tests [Figure 37].

**FIGURE 37: RESPONDENT PARTICIPATION BY CITY OF RESIDENCE (N = 409)**

