

# Townsville: A Regional Development Case Study

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## Abstract

Townsville (including the adjacent Burdekin Shire (Ayr), Dalrymple Shire (Charters Towers) and Hinchinbrook Shire (Ingham) in North Queensland) has had significant regional development growth in population and in private and public sector physical infrastructure over the last 20 years.

**The project:** The question that interests us in this paper is: What can we learn, with the benefit of hindsight, about the drivers of the growth in private and public sector physical infrastructure in Townsville, over the last 20 years?

This paper is based on primary data from open-ended-question interviews of regional development practitioners and policy makers in Townsville. We focus on:

- What has, and what has not worked; and we attempt to explain why we think that the successes have worked.
- What we think is only applicable to Townsville and what we think is more widely applicable; and we attempt to explain why we think that this is so.

**Outcomes of the project:** The results from the open-ended-question interviews are a treasure-trove of high quality soft empirical data. Thus, we have a considerable opportunity to expand this exploratory study to consider a range of issues of relevance to the success in Townsville but also of possible interest to other regions in Australia.

**Learning experiences from the project:** The most valuable learning from this project is that this sort of open-ended-question interviews, while very time consuming to undertake and to evaluate, provide a very insightful understanding of the wisdom acquired over time and with the benefit both of hindsight and of purposeful reflection.

**Planned future directions and actions:** We hope that the results from the interviews will be used to help Townsville respond to its current challenges and perhaps they could be used to compare Townsville with other regional centres in Australia.

**Potential spillovers identified:** The most useful spillovers are expected to be when practitioners and policy makers explore how they can use these sorts of open-ended-question interviews to capture insightful understanding of the wisdom acquired over time in their own specific context.

## 1. - Introduction

Townsville (including the adjacent Burdekin Shire (Ayr), Dalrymple Shire (Charters Towers) and Hinchinbrook Shire (Ingham) in North Queensland) has had significant regional development growth in population and in private and public sector physical infrastructure over the last 20 years.

This paper is the first in a planned series of papers with the research aim to improve our understanding of the range of issues, elements and aspects of this regional development growth; and to identify what we can learn from this improved understanding to help Townsville tackle its current challenges.

This first paper is an exploratory study that aims to improve our understanding of:

- The growth in private and public sector physical infrastructure in Townsville.
- The drivers of Townsville's regional development growth.

This paper is based on primary data from open-ended-question interviews of regional development practitioners and policy makers in Townsville.

The paper proceeds as follows: Section 2, outlines Townsville as a context for regional development as background to understanding the results of the interviews. Section 3 is a review of some of the relevant literature. Section 4, is the methodology. Section 5, the results of the interviews. Section 6, is discussion and Section 7, is the conclusions.

## 2. - Townsville as a context for regional development

The current city of Townsville came about following the Queensland State government amalgamation of the former Townsville and Thuringowa City Councils in March 2008. This section of the paper provides some context for the research reported in this paper; it is only a small sample and the data reported is the latest publically available.

There has been significant general change in Townsville over time that largely confirms and reinforces the regional development growth in Townsville. The overall case is the population growth. This long term population data can give the context for other data over the last 20 years or even better perhaps differences between values in every ten years since say for the late 1960's, late 1970's, late 1980's, late 1990's and current. (See Figure 1).

North Queensland has one of the fastest growing economic regions in Queensland and its capital, Townsville, has one of the fastest population growth rates in Australia. North Queensland is the largest economy outside of South East Queensland and in the 2006/07 year accounted for 6.8% of Queensland's Gross State Product. During 2006/07 Gross Regional Product maintained its high growth rate of the past five years, growing 7.8% to \$11.871 Billion. Mining and manufacturing (31%) are significant contributors to the regions economy, followed by government administration and defence (8%) and construction (8%).

[http://www.townsvilleonline.com.au/\\_data/assets/pdf\\_file/0009/88848/Make\\_the\\_Move\\_Final\\_PDF.pdf](http://www.townsvilleonline.com.au/_data/assets/pdf_file/0009/88848/Make_the_Move_Final_PDF.pdf)

Townsville's population reached 175,700 in 2008, with average growth of 3% per annum over the past five years – well above the growth of 2.4% recorded for Queensland. Growth is expected to continue at around 3.0% per annum into the foreseeable future, with a population of over 200,000 by 2013. By 2031 Townsville's population is forecast to be 270,000, an additional 95,000 people compared to 2008. <http://www.stateland.com.au/shaw3a.pdf> (page 3).

Townsville Airport handled 1,485,000 passengers to 30 June 2008, with most passengers originating from domestic sources, particularly within Queensland. Between 06/07 and 07/08 Townsville Airport experienced a 7.2% growth in passengers. Over the past six years the Airport has seen an 11.6% Average Annual Growth Rate. <http://www.townsvilleairport.com.au/statistics.php>

The Port of Townsville provides North Queensland with a world-class gateway for commerce and trade. It continues to be one of the State's fastest growing ports and services both the North East and North West Minerals Provinces of North Queensland. The local resources sector represents approximately 50% of Townsville's exports and 75% of imports, with these figures forecast to grow significantly over the coming years. Port of Townsville Limited prides itself on providing the highest level of service to its customers. The suite of services provided by the Corporation includes the provision of safe navigation within the harbour through maintenance dredging, strategically located lands for development through reclamation works, transport infrastructure, and timely, reliable and effective Port services. The Port community comprises the Port of Townsville Limited, Commonwealth and Queensland Government agencies and privately-owned and operated facilities and functions - making it a vibrant and ever-growing commercial hub.

[http://www.townsville-port.com.au/files/publications/annual\\_reports/POT-2008-2009\\_Annual\\_Report\\_Web.pdf](http://www.townsville-port.com.au/files/publications/annual_reports/POT-2008-2009_Annual_Report_Web.pdf) The throughput of the Townsville port is indicated in Figure 2.

One of Townsville's strengths is its status as a garrison city. There is a significant spending in Defence -- almost \$180 million in 2009-2010 -- mostly to upgrade Lavarack Barracks and to provide for the relocation of the 3 Royal Australian Regiment battalion from Sydney to Townsville from late 2011. This will provide an immediate and direct population increase of more than eleven hundred people. Townsville Bulletin WED 13 MAY 2009, Page 025 One aspect of this growth is the detached dwelling approvals as indicated in Figure 3.

Townsville's CBD is undergoing a massive transformation. The plans for Flinders Street include significant upgrades to the three city blocks that contain the current pedestrian mall and the historic Flinders Street East. The new design will recapture Flinders Street's historic role as the principal 'high street' of Townsville. Flinders Street will be a lifestyle precinct for the community that continues in the tradition of signature Townsville developments like The Strand, Riverway and Palmer Street. Flinders Street is our front door to tourism in the region. The CBD captures 73% of tourist retail expenditure in North Queensland. It is estimated the investment in Flinders Street will stimulate an additional \$81 million per annum in economic activity – revitalising retail and business interests, stimulating new investment and creating jobs.

<http://www.townsville.qld.gov.au/council/initiatives/cbd/index>

Townsville currently has over \$1 billion dollars of infrastructure investment underway or proposed for the region.

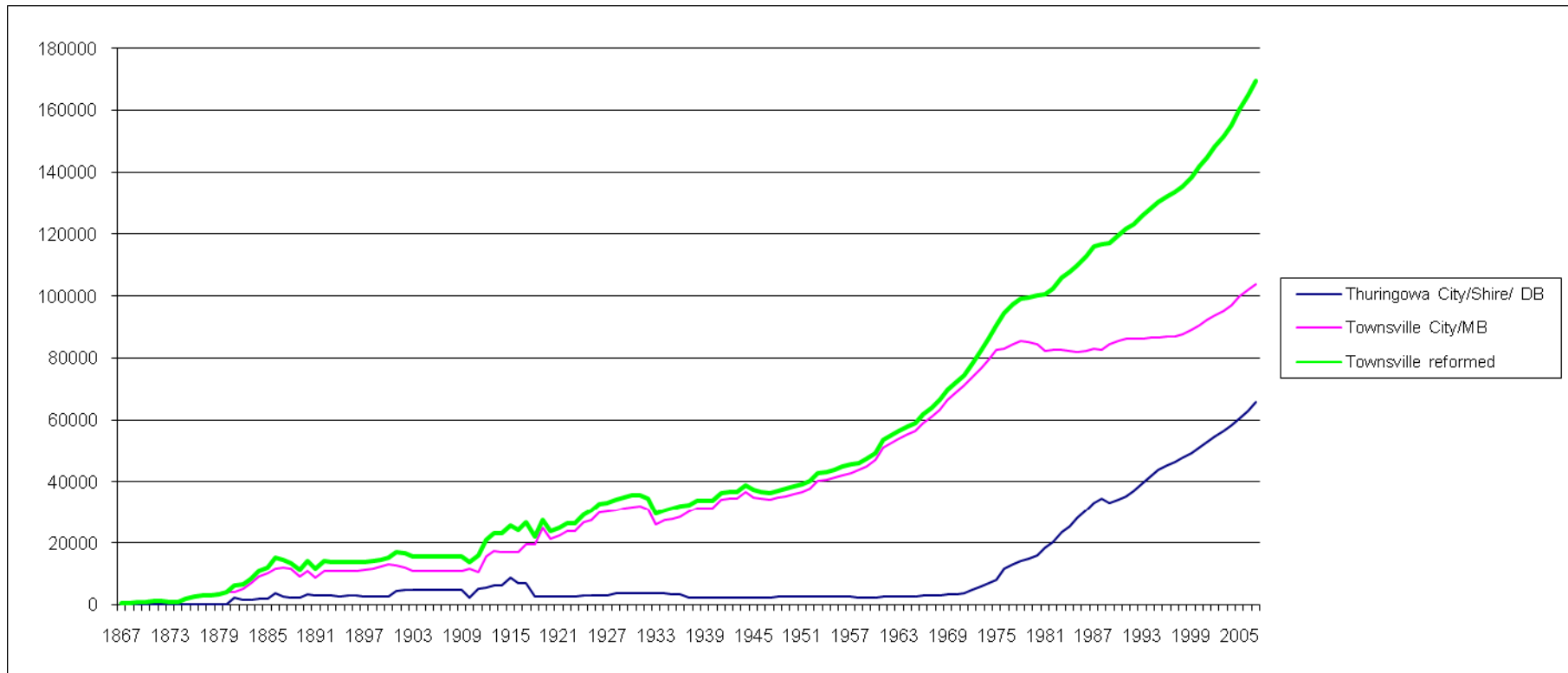
- Commercial Infrastructure projects valued at \$600 million, including: Townsville Port Access road (\$190 million); Rail projects (\$175 million); Energy supply upgrades (\$100 million). Bruce Highway upgrade (\$50 million).
- Social Infrastructure projects valued at over \$200 million, including: Education and training (\$100 million).
- Defence projects valued at around \$250 million, including: Lavarack Barracks redevelopment (\$210 million); Multi-role helicopter facilities (\$34 million).

<http://www.stateland.com.au/shaw3a.pdf> (Page 3)

In the 2006 Census the most common industries of employment for people aged 15 years and over in Townsville were: Public Administration and Safety 12.6%, Retail Trade 11%, Health care and Social Assistance 10.9%, Construction 9.9%, Manufacturing 8.2% and Education and Training 8%. <http://www.townsville.qld.gov.au/resources/2138.pdf> (page 12).

Figure 1

Population by Townsville city, Thuringowa City and Townsville reformed (based on 2008 ASGC), 1887 - 2007



**Footnotes to places**

Thuringowa Division was established on 11 November 1879; became Thuringowa Shire on 31 March 1903; part of it was transferred to Townsville City in 1918; became Thuringowa City on 1 January 1986; was abolished on 15 March 2008 and became part of Townsville City.

Townsville Municipality was established on 15 February 1866; became Townsville City on 31 March 1903; gained part of Thuringowa Shire in 1918; Thuringowa Shire merged into it on 15 March 2008.

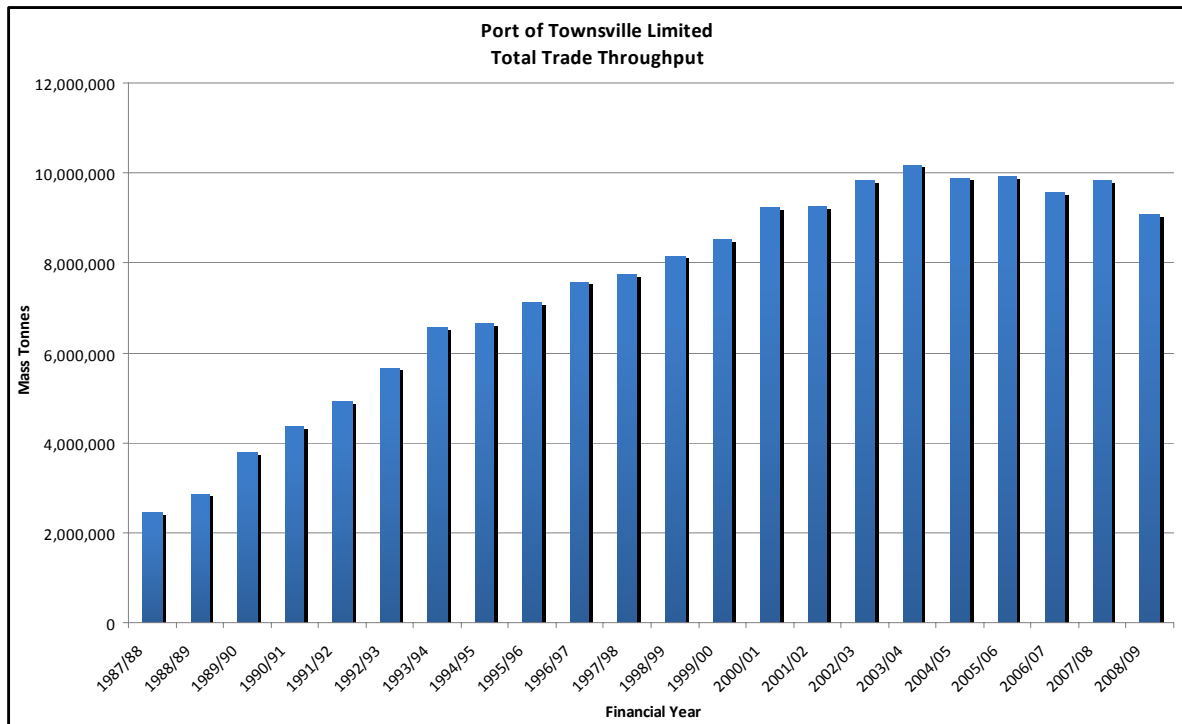
For more information on local government areas held by the Queensland State Archives, go to <http://www.archivessearch.qld.gov.au/> and click on 'Search our database', 'Start your Search', and enter the name of the local government authority or put <http://www.archivessearch.qld.gov.au/Search/AgencyDetails.aspx?AgencyId=> into your address bar and add the QSA id number, e.g. <http://www.archivessearch.qld.gov.au/Search/AgencyDetails.aspx?AgencyId=287>, as below.

<http://www.archivesearch.qld.gov.au/Search/AgencyDetails.aspx?AgencyId=287>

Sources:

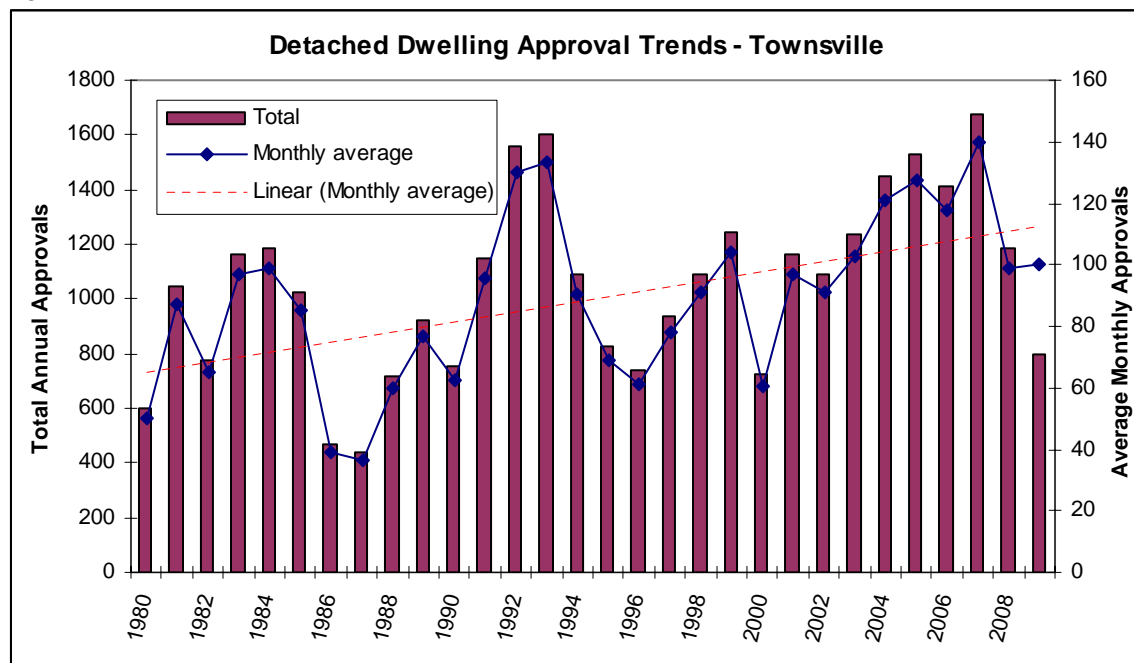
To 1900, Registrar-General's Office, Statistics of the Colony of Queensland, various years. From 1901 to 1935, Government Statistician, Statistics of the State of Queensland. For 1936 to 1990, Australian Bureau of Statistics, Queensland Year Book, various years, and Government Statistician's Office, Queensland Year Book, various years (data were the earliest appearing in a publication); from 1991, ABS, Regional Population Growth, Australia and New Zealand, cat. no. 3218.0, including in the Queensland Regional Statistical Information System (QRSIS) database maintained by the Office of Economic and Statistical Research (OESR); Projections: Department of Local Government and Planning, Queensland's Future Population, 2006 edition, in the Queensland Regional Statistical Information System (QRSIS) database maintained by the Office of Economic and Statistical Research (OESR); shire details such as incorporation dates, amalgamations and other changes: primarily <http://archivesearch.qld.gov.au>, and also Statistics of the State of Queensland, <http://en.wikipedia.org/wiki/>, <http://www.atsip.qld.gov.au/communities/>, and other sites

Figure 2



This data was provided by Port of Townsville Limited. Further information is available from [http://www.townsville-port.com.au/trade\\_stats](http://www.townsville-port.com.au/trade_stats)

Figure 3



This data were provided by Mr Craig Stack, of the real estate office of Knight Frank Townsville. Recent updates are available from [craig@knightfranktownsville.com.au](mailto:craig@knightfranktownsville.com.au)

### 3. - Literature review

There is a wide range of literature around the variables (economic, environmental, organisational, entrepreneurial etc) and the relationships between these variables that theory, a priori, would suggest that they could be considered as possible drivers of regional development success.

One of the most important findings from the regional development literature is that each community needs to start with what they already have and then progress gradually towards achieving their objectives (Dollahite et al. 2005; Greenfields and Home 2006; and Salinger, Sivakumar and Motha 2005).

The key take home messages from the literature on the drivers of regional development, following Coombs, (2001) are:

- Sustainable development in small regional economies is like a combination lock, certain factors need to be in place before it happens.
- Regions should do what comes naturally to the region.
- There are opportunities in all regions; they have not all been picked up through arbitrage.
- Regional development is about more than just economic development. Sustainable regional development in economic, environmental, organisational, entrepreneurial, social, technological and political terms is what is needed.
- Regional development critically depends on regions themselves leading the process of developing strategies and plans for realizing their region's potential.
- There is nothing unique about the general drivers of sustainable regional development. Small regional economies (like all economies) grow or decline according to the supply and demand of natural and human resources to which they have access, and also the investments that businesses are prepared to make (in the region).
- Institutions, policies, social and cultural values of the community, the way in which firms and individuals organize to work together, and the way firms and individuals relate with the external environment are fundamental factors that form the structure or framework within which incentives are created for bad or good local economic, environmental, organisational, entrepreneurial, social, technological and political behaviour.

However, one of the gaps in the literature are studies based on primary data from open-ended-question interviews of regional development practitioners and policy makers similar to this study about Townsville. One explanation for this gap is that the literature is largely based on available secondary data rather than the primary data from open-ended-question interviews of regional development practitioners and policy makers. Thus, we appear to have an opportunity to make a small contribution to the literature with this study.

#### **4. - Methodology**

Our overall research methodology is a facilitated, cooperative and collaborative action research process, that is, plan, act, observe, reflect; and then, in the light of this, plan for the next cycle. For a general coverage of this literature see for example Dick, (2009, 2006 and 2004).

The fact that the regional development practitioners and policy makers who have been directly involved in the growth over the last 20 years are still active provides an opportunity to get primary data to obtain insights into these 20 years.

This paper is based on primary data from open-ended-question interviews of regional development practitioners and policy makers in Townsville. We started with a short-list of about 20 names from which to select individuals to be interviewed. The criteria used were:

1. Individually, having been personally actively involved in the economic development of Townsville in their own industry.
2. Individually having been involved at least since about the late 1980's.
3. Collectively being from a range of different industries.

After doing the interviews we found that the following criteria also applied:

4. Individually having also contributed a significant amount of their own time to activities outside their own industry.

People interviewed (Old timers) are:

1. Mr John Bearne, Chairperson TEL (Townsville Enterprise Limited) and experienced Industry Representative
2. Mr Eddie Gilbert, Director Regional Services (North) DPI (Queensland Department of Primary Industries and Fisheries)
3. Mr Barry Holden, CEO, Port of Townsville Limited
4. Councillor, Lyn McLaughlin, Chair, Northern Alliance and Mayor Burdekin Shire Council
5. Councillor Les Tyrell, Mayor Townsville City Council
6. Mr Craig Stack, President Townsville Chamber of Commerce
7. Mr Geoff Plante, Director, PlanPac Group
8. The Honourable Lindy Nelson-Carr, MP (Queensland), Member for Mundingburra
9. Dr Russel Reichelt, Chairman and Chief Executive GBRMPA (Great Barrier Reef Marine Park Authority)
10. Neil Weekes, Brigadier (Retired) 1990-93 Commander District Group, 1995-98 Commander 11 Brigade, 1993-2003 Executive Officer to Vice-Chancellor James Cook University

People interviewed (Relatively new) are:

11. Professor Sandra Harding, Vice-Chancellor James Cook University
12. Mr Trevor Goldstone - CEO TEL (Townsville Enterprise Limited).

An explanatory cover note and the specific questions were e-mailed to each interviewee at least one week in advance. All those interviewed indicated that they had given considerable thought in preparing for the actual interview.

Content analysis (see for example Schutt, 2006 p 428-435) is used to analyse the answers to the interview questions. The interview records were content analysed to extract the main themes from the responses to each question. In many cases an answer contained more than one theme and all were recorded. The analysis to extract the main themes was repeated twice in order to take account of the revision and refining of the themes as the analysis progressed.

The results presented in this paper are based on two analyses. The first was to identify the growth in infrastructure. The common themes were listed in chronological order. Their relative frequencies and their rank order of importance were not calculated because only the chronological order was of interest.

The second analysis was to identify what those interviewed think were the drivers in achieving the growth in infrastructure. The common themes were grouped together and relative frequencies and percentages were calculated.

Each interview lasted 1 hour. The open-ended-questions asked in each interview were:

Question 1

- a) What do you think has worked?
- b) Why do you think it has worked or what do you think were the drivers that made it work?

Question 2

- a) What has NOT worked?
- b) Why do you think it has NOT worked or what do you think were the drivers that made it NOT work?

Question 3

- a) What do you think is only applicable to Townsville and why?

Question 4

- What do you think is more widely applicable and why?

## **5. - Results**

There are two sets of results from those interviewed, first the infrastructure and second the drivers in achieving the infrastructure.

The infrastructure identified by those interviewed is divided into those prior to the late 1980's and those in the last 20 years.

<b>Infrastructure Projects in Townsville prior to the late 1980's</b>	<b>Timing</b>
Australia's first medical research centre, the Anton Breinl Centre was established in Townsville	1910
QDPIF (Queensland Department of Primary Industries and Fisheries) opened in Townsville	Early 1920's
Mining copper in Mount Isa	Mid 1920's
Paluma dam for urban consumption completed	Late 1950's
The Townsville University College of the University of Queensland opened in Townsville	1960
Army moved to Townsville	Late 1960's
Refining copper in Townsville	Late 1950's
CSIRO (Commonwealth Scientific and Industrial Research Organisation) opened in Townsville	Late 1960's
JCU (James Cook University) opened in Townsville	1970
Ross River Dam was constructed for the purposes of flood mitigation and water storage	1971
Refining nickel at Yabulu (in Townsville)	Early 1970's
Establishment of the Great Barrier Reef Marine Park	Mid 1970's
Air force moved to Townsville	Mid 1970's
AIMS (Australian Institute of Marine Science) and GBRMPA (Great Barrier Reef Marine Park Authority) head quarters opened in Townsville	Late 1970's

<b>Infrastructure Projects in Townsville over the past 20 years</b>	<b>Timing</b>
Perc Tucker Regional Gallery officially opened	1981
Significant expansion in the air force	Late 1980's
Burdekin dam mainly for irrigation completed	Late 1980's
Townsville Local Government decision to use water for the greening of public space in Townsville	Early 1990's
Delfin the first high profile national land developer arrived in Townsville	1995
Pipeline for urban consumption from Burdekin dam to Townsville	Late 1990's
Opening of Sun Metals Zinc Refinery	Late 1990's
Re-development of the part of the Townsville foreshore called the Strand that significantly increased its recreation use	1999-2000
New public hospital completed	Early 2000's
Approval of the pricing of water for the greening of public space in Townsville by National Competition Council	Early 2000's
Significant re-development of the Army's Lavarack barracks	On-going since 2002
Expansion of the mining industry Fly in Fly out workforce	Mid 2000's
Upgrade of Ross River Dam completed	Late 2007
Emergence of Palmer Street as an accommodation and hospitality precinct that is very close to the city centre	1998 - 2008

### Content Analysis of driver themes

Interviewees	Driver Themes			
	1 Resources and decisions	2 On-going commitment	3 Positive outcomes	4 Proactive engagement
1	yes	yes	yes	yes
2	NO	yes	yes	yes
3	NO	yes	NO	yes
4	yes	NO	yes	yes
5	yes	NO	yes	yes
6	NO	yes	yes	yes
7	yes	yes	yes	yes
8	yes	yes	yes	yes
9	yes	NO	NO	yes
10	NO	yes	NO	yes
11	yes	yes	yes	yes
12	yes	NO	yes	yes
Frequency	8/12	8/12	9/12	12/12
Percentage	66	66	75	100

	Theme	Sample phrase
<b>Interviewees</b>		
1	4	We have moved to speech with one voice.
2	3	National exposure via sports.
3	4	Engaged passionate people.
4	3	The best point is: the will to make it work.
5	1, 3	Strong industry (sugar and beef) that survive ups and downs.
6	2	Swimming against the tide because yes we can.
7	4	The City has strong community involvement that gives power to engage strong leaders and strong business. People give their time and expertise.
8	2	A cooperative city administration.
9	1	The high quality life-style is good; including cultural capital (See Creative Class and read Richard Florida).
10	4	Vision and community consultation.
11	2, 3, 4,	Townsville has great diversity we have survived; like for example the pilots' strike.
12	1	We need to get back to our sugar and core; we need to be more focused.

## **6. - Discussion**

The aim of this exploratory study is to improve our understanding of:

- The growth in private and public sector infrastructure in Townsville.
- The drivers of Townsville's regional development growth.

This discussion section proceeds as follows:

- Discuss the growth in private and public sector physical infrastructure in Townsville
- Discuss the drivers of Townsville's regional development growth.
- Discuss a few bits and pieces.

### **Discuss the growth in private and public sector infrastructure in Townsville**

The items on the list of infrastructure are relatively easy to explain in that most of them are largely directly productive in producing local goods and services. However, those that are not directly productive, like the opening of the Perc Tucker Regional Gallery, the re-development of the part of the Townsville foreshore called the Strand to significantly increase its recreation use and the approval of the pricing of water for the greening of public space in Townsville by the National Competition Council, all contribute to making Townsville a more attractive place to live. This in turn encourages people to move to Townsville and thus continue the growth.

### **Discuss the drivers of Townsville's regional development growth**

The terminology used in the interview questions was: "What has worked for Townsville". In terms of the regional development literature the term would be "What are the drivers of growth in Townsville" For this paper what has worked for Townsville is taken as that perceived by those interviewed and triangulated across those interviewed.

Fundamentally, what has worked are all the separate, but complementary, aspects, elements, complementarities, and bits and pieces that have come together to make up the current very diversified Townsville economy. In regards to the answers to the question on what has not worked, all those interviewed indicated a lack of interest in the answer. This suggests that what has not worked is largely lost in the past because the stakeholders have moved on to their next project.

Based on the results from the interviews, the authors of this paper think that Townsville's regional development growth has worked for four reasons. These reasons were extracted from the common themes from the second content analysis.

- First: Resources and decisions in which local regional development practitioners and policy makers had little or no involvement: For example: The climate, the natural environment and the geographical location; abundance of mineral resources in the hinterland and early decisions like for example locating a significant port in Townsville (rather than in Bowen) building the railway from Mount Isa to Townsville and the move of the army and air force to Townsville. Local regional development practitioners and policy makers were not involved in these decisions because they were largely taken elsewhere.
- Second: On-going commitment by locals to proactively drive endeavours by contributing their own time, skills and resources and by "stepping up to the plate" both individually and collectively, in business, in local government and in the wider community. This on-going commitment included formal and informal consultation and collaboration with each other but was certainly not coordinated over all.

- Third: Positive outcomes (rather than failures) from early local proactive endeavours in response to locally perceived problems. These positive outcomes are more than just good luck. These positive outcomes then encouraged an increase in locals' canvassing for other gaps and opportunities and seeing some of the advantages or need for local leadership and for local collaboration; as helping to achieve successful private and social outcomes.
- Fourth: Proactive engagement. In the past 20 years there have been a number of regional community champion teams that were formally or informally created to drive key economic projects. These teams were initiated from key strategies developed by the Townsville or Thuringowa City Councils, by organisations including Townsville Enterprise Ltd. or Townsville Chamber of Commerce or by strategies created from formal planning processes including the Townsville Thuringowa Strategy Plan.

In addition, teams were also developed by champion individuals motivated to raise community and Government funding to support projects for the region. These hard working, self motivated teams created the development of major regional infrastructure including the Townsville Entertainment Centre, Museum of Tropical Queensland, the Strand redevelopment and the Thuringowa Riverway project.

This community based motivation also established national sporting teams in Basketball, Rugby League and Australian Football (Soccer) and the National / International V8 Supercar event. We could find no evidence in the literature to show that this sort of sporting achievement had been achieved by any other Regional City in Australia.

Community based motivation is important because the national sporting teams have been established nearly entirely by community contribution once the facility was provided by the Queensland government but the ongoing operation is now generally community based and they have harnessed a very strong sense of identity for the Townsville region.

The commitment and motivation of these proactive teams and individuals to achieve their goals has been a significant driver of economic sustainable growth and community lifestyle. Collaboration across the three levels of Government has also supported long term infrastructure development that has facilitated the creation of the Townsville State Development Area, expansion of the master-plan of the Townsville Port, the establishment of the Townsville Port Access Corridor and the construction of the Tropical Science and Innovation Precinct and Medical School at James Cook University. This infrastructure has been a catalyst for the economic growth in the Region's key priority industry sectors including minerals processing, tropical science and expertise, aviation and defence.

### **Discuss a few bits and pieces**

First, we think that both the list of Townsville's infrastructure and the four reasons why we think that the Townsville growth has worked are in fact more widely applicable.

The reasons why we think that regional development is successful are in reality largely generic but the manifestation and the naming of these reasons varies significantly between regions but still within the generic descriptions. However, the real challenge for each region is to identify the main local drivers and how to locally stimulate these main drivers.

Second, there are key similarities and differences in the answers from "old timers" and "recently arrived". Firstly, the similarities are largely that they both see the opportunities available in Townsville. The key difference is that the "old times" are experienced in taking up the opportunities while the "recently arrived" came, in part, because they can see the opportunities that are still available.

Third, in terms of what we can say from this first paper about our ability to implement the methodology used, especially in terms of the primary data collection we, the authors, found:

- That the open-ended-question interviews were time efficient to administer and they provided very rich data.
- That the interviewees' answers to the open-ended-questions had a much higher variability and unpredictability than expected compared to a more closed set of questions. However, the richness of the data was worthwhile. We can say now that in future interviews we expect to be surprised with the richness of the data.

To close this discussion, yes, it is nice to be aware of the drivers of the successes of regional development in Townsville however, what is more useful is a better understanding of the factors that locals have control over (and thus can work with) such as the last three of the above four reasons why we think Townsville successes have worked.

## 7. - Conclusions

The conclusions are:

First, in terms of the regional development growth in private and public sector physical infrastructure over the last 20 years:

- The perception of all those interviewed was very similar in terms of what were the main items in the growth in the physical infrastructure.
- However, there was significant difference as to which of these items were higher up the list and which were lower down in terms of the wider importance. The higher up items were largely determined by each interviewee's main interests.

Second, in terms of why we think that this growth in infrastructure has been achieved,

- The words used by those interviewed varied nearly from individual to individual.
- The words used were largely determined by each interviewee's background and interests. This was especially evident in terms of where the interviewee started to answer the questions and how they structured their answer.
- The words used in the paper are the authors' selection to represent the concepts expressed by those interviewed.

Third, in terms of what we think is more widely applicable than just for Townsville,

- The answers by those interviewed were very limited. But we, the authors, think that this could probably be explained by the fact that those interviewed were focused on their own firm/industry rather than focused on the impact on other regions.

To close this paper we would like to indicate a few possible next projects that we, the authors, are considering:

- The role played by social capital (as expressed in the on-going commitment and the proactive engagement by locals) in the successes in Townsville.
- The growth in private and public sector physical infrastructure indicates a level of regional development in Townsville over the last 20 years. However, the list in its self does not explain what makes the infrastructure individually or as a combined package “good” or “successful” regional development.
- What are the underlying processes (organizational etc) that brought about the achievement of this growth in infrastructure?
- What is the story behind significant decisions, for example the lobbying to establish Queensland's second University in Townsville and the research and teaching that is now in Townsville with CSIRO, AIMS, DPI and EPA.

- What does the literature say on methods of documenting and/or providing numerical evidence of claimed progress in regional development?
- What does the literature say on regional development strategies to manage brain-drain?

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