TOWNSVILLE: A REGIONAL DEVELOPMENT CASE STUDY¹

Les Tyrell

Mayor, Townsville City Council Townsville City Council, PO Box 1268, Townsville OLD 4810

Peter Mellor

Queensland Department of Employment, Economic Development and Innovation, DEEDI Northern Directorate, PO Box 5671, Townsville Qld 4810

Richard Monypenny

School of Business, James Cook University, Townsville Qld 4811

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 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.

1. INTRODUCTION

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 (a) the growth in private and public sector physical infrastructure in Townsville, and (b) the drivers of Townsville's regional development growth.

The paper proceeds as follows: Section 2 outlines Townsville as a context for regional development as background to understanding the results of the

¹ Earlier versions of this paper were (a) presented in the Plenary Keynotes: New frontiers of regional development at the 13th National Sustainable Economic Growth for Regional Australia (SEGRA) Conference held from 27–29 October 2009 in Kalgoorlie-Boulder, WA; and (b) published as a refereed paper in Cockfield, G., and Charters, K., (eds.) (2009) Regional Australia: exploring new frontiers. Proceedings of the 13th SEGRA Conference, ISBN: 978 -0-9802833-6-5.

interviews; Section 3 is a review of some of the relevant literature; Section 4 presents the methodology; Section 5 presents the results of the interviews conducted and discusses these results and, finally, Section 6 provides some concluding remarks.

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.

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 1960s, late 1970s, late 1980s, late 1990s and current. See Figure 1.²

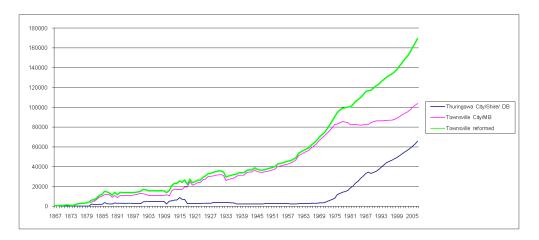


Figure 1. Population by Townsville city, Thuringowa City and Townsville

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, 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. http://www.archivessearch.qld.gov.au/Search/AgencyDetails.aspx?AgencyId=287.

reformed (based on 2008 ASGC), 1887 - 2007³

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 percent 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 percent to \$11.871 Billion. Mining and manufacturing (31 percent) are significant contributors to the regions economy, followed by government administration and defence (8 percent) and construction (8 percent).

Townsville's population reached 175,700 in 2008, with average growth of 3 percent per annum over the past five years – well above the growth of 2.4 percent recorded for Queensland. Growth is expected to continue at around 3.0 percent 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 2008.⁵

Townsville Airport handled 1,485,000 passengers to 30 June 2008, with most passengers originating from domestic sources, particularly within Queensland. Between 2006/07 and 2007/08 Townsville Airport experienced a 7.2 percent growth in passengers. Over the past six years the Airport has seen an 11.6 percent average annual growth rate.⁶

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 percent of Townsville's exports and 75 percent of imports,

http://www.townsvilleonline.com.au/__data/assets/pdf_file/0009/88848/Make_the_Move_Final_PDF.pdf.

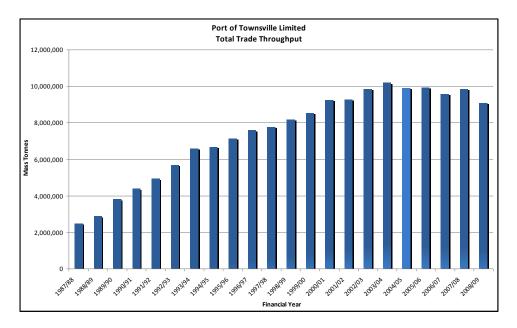
³ To 1900, Registrar-General's Office, Statistics of the Colony of Queensland, various years. From 1901 to 1935, Government Statistician, Statistics of the State of Queensland. For 1936 to 1990, Australian Bureau of Statistics, Queensland Year Book, various years, and Government Statistician's Office, 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://archivessearch.qld.gov.au, and also Statistics of the of Queensland, http://en.wikipedia.org/wiki/, http://www.atsip.qld.gov.au/communities/, and other sites. This data was provided by Office of Economic and Statistical Research (OESR), Further information is available from annette.giess@treasury.qld.gov.au.

Source:

⁵ Source: http://www.stateland.com.au/shaw3a.pdf (page 3).

⁶ Source: http://www.townsvilleairport.com.au/statistics.php.

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. The throughput of the Townsville Port is indicated in Figure 2.

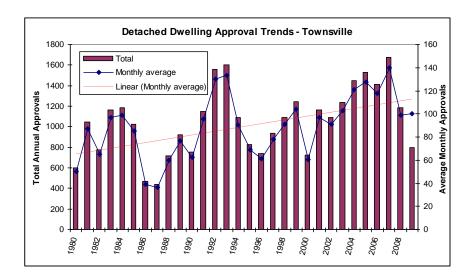


Source: This data underlying this figure was provided by Port of Townsville Limited. Further information is available from http://www.townsville-port.com.au/trade_stats.

Figure 2. Total Trade Throughput, Port of Townsville Limited.

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 Royal Australian Regiment battalion from Sydney to Townsville from late 2011. This provided an immediate and direct population increase of more than eleven hundred people (Townsville Bulletin WED 13 MAY 2009, Page 025d). One aspect of this growth is the detached dwelling approvals as indicated in Figure 3.

⁷ Source: http://www.townsville-port.com.au/files/publications/annual_reports/POT-2008-2009_Annual_Report_Web.pdf



Source: 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.

Figure 3. Detached Dwelling Approval Trends for Townsville.

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 percent 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.

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

⁸ Source: http://www.townsville.qld.gov.au/council/initiatives/cbd/index.

Barracks redevelopment (\$210 million); Multi-role helicopter facilities (\$34 million).⁹

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 percent, Retail Trade 11 percent, Health care and Social Assistance 10.9 percent, Construction 9.9 percent, Manufacturing 8.2 percent and Education and Training 8 percent.¹⁰

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, see for example Jain (2009).

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

_

⁹ Source: http://www.stateland.com.au/shaw3a.pdf (Page 3).

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

behaviour.

However, one of the gaps in the literature is 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:

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

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

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

People interviewed (Old timers) were: Mr John Bearne, Chairperson TEL (Townsville Enterprise Limited) and experienced Industry Representative; Mr Eddie Gilbert, Director Regional Services (North) DPI (Queensland Department of Primary Industries and Fisheries), Mr Barry Holden, CEO, Port of Townsville Limited, Councillor, Lyn McLaughlin, Chair, Northern Alliance and Mayor Burdekin Shire Council, Councillor Les Tyrell, Mayor Townsville City Council, Mr Craig Stack, President Townsville Chamber of Commerce, Mr Geoff Plante, Director, PlanPac Group, The Honourable Lindy Nelson-Carr, MP (Queensland), Member for Mundingburra, Dr Russel Reichelt, Chairman and Chief Executive GBRMPA (Great Barrier Reef Marine Park Authority), Neil Weekes, Brigadier 1990-93 Commander District Group, 1995-98 Commander 11 (Retired) Brigade, 1993-2003 Executive Officer to Vice-Chancellor James Cook People interviewed (Relatively new) were: Professor Sandra Harding, Vice-Chancellor James Cook University; and 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. Each interview lasted 1 hour. The open-ended-questions asked in each interview were:

- What do you think has worked? Why do you think it has worked or what do you think were the drivers that made it work?
- What has NOT worked? Why do you think it has NOT worked or what do you think were the drivers that made it NOT work?
- What do you think is only applicable to Townsville and why?
- What do you think is more widely applicable and why?

Content analysis (see for example Schutt, 2006 p 428-435) was 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.

5. RESULTS AND DISCUSSION

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 (Table 1) and those in the last 20 years (Table 2).

The items on the list of infrastructure (Tables 1 and 2) 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.

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 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. Content analysis of the drivers of growth is summarised in Tables 3 and 4.

Table 1. Infrastructure Critical to Townsville's Growth prior to Late 1980s

| Infrastructure Projects in Townsville prior to the late 1980's | Timing |
|--|-------------|
| Australia's first medical research centre, the Anton Breinl Centre | 1910 |
| was established in Townsville | |
| QDPIF (Queensland Department of Primary Industries and | Early 1920s |
| Fisheries) opened in Townsville | |
| Mining copper in Mount Isa | Mid 1920s |
| Paluma dam for urban consumption completed | Late 1950s |
| The Townsville University College of the University of Queensland | 1960 |
| opened in Townsville | |
| Army moved to Townsville | Late 1960s |
| Refining copper in Townsville | Late 1950s |
| CSIRO (Commonwealth Scientific and Industrial Research | Late 1960s |
| Organisation) opened in Townsville | |
| JCU (James Cook University) opened in Townsville | 1970 |
| Ross River Dam was constructed for the purposes of flood | 1971 |
| mitigation and water storage | |
| Refining nickel at Yabulu (in Townsville) | Early 1970s |
| Establishment of the Great Barrier Reef Marine Park | Mid 1970s |
| Air force moved to Townsville | Mid 1970s |
| AIMS (Australian Institute of Marine Science) and GBRMPA | Late 1970s |
| (Great Barrier Reef Marine Park Authority) head quarters opened in | |
| Townsville | |
| Townsville Civic Theatre opened | 1978 |

Table 2. Infrastructure Critical to Townsville's Growth from the Late 1980s On

| Infrastructure Projects in Townsville over the past 20 years | Timing | |
|--|----------------|--|
| Perc Tucker Regional Gallery officially opened | 1981 | |
| Significant expansion in the air force | Late 1980s | |
| Reef HQ aquarium was opened | June 1987 | |
| Burdekin dam mainly for irrigation completed | Late 1980s | |
| Townsville Entertainment and Convention Centre was built | 1993 | |
| Townsville Local Government decision to use water for the greening | Early 1990s | |
| of public space in Townsville | | |
| Delfin the first high profile national land developer arrived in | 1995 | |
| Townsville | | |
| Pipeline for urban consumption from Burdekin dam to Townsville | Late 1990s | |
| Opening of Sun Metals Zinc Refinery | Late 1990s | |
| Re-development of the part of the Townsville foreshore called the | 1999-2000 | |
| Strand that significantly increased its recreation use | | |
| Museum of Tropical Queensland' new building was opened | June 2000 | |
| New public hospital completed | Early 2000s | |
| Approval of the pricing of water for the greening of public space in | Early 2000's | |
| Townsville by National Competition Council | • | |
| Significant re-development of the Army's Lavarack barracks | On-going since | |
| | 2002 | |
| Expansion of the mining industry Fly in Fly out workforce | Mid 2000s | |
| Upgrade of Ross River Dam completed | Late 2007 | |
| Emergence of Palmer Street as an accommodation and hospitality | 1998 - 2008 | |
| precinct that is very close to the city centre | | |

Table 3. Themes related to Drivers of Growth Emerging from Content Analysis

| | Driver Themes | | | | |
|--------------|---------------------------------|-----------------------------|---------------------------|------------------------------|--|
| Interviewees | 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 | |

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

Table 4. Further Results from Content Analysis of Interviews Conducted

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

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.

Before concluding, the authors would like to add some further reflections. 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 found:

• The open-ended-question interviews were time efficient to administer and they provided very rich data, and

 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, it is important 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.

6. CONCLUSIONS

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 exploring in the future:

- 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 lobbing 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?

REFERENCES

- Coombs, G. (ed.) (2001) Essays on Regional Economic Development, South Australian Centre for Economic Studies, Rundle Mall South Australia.
- Dick, B. (2004). Action research literature: Themes and trends. *Action Research*. 2(4), pp. 425–444.
- Dick, B. (2006). Action research literature 2004–2006: Themes and trends. *Action Research*. 4(4), pp. 439–458.
- Dick, B. (2009) *Action research literature 2006–2008 Themes and trends*. SAGE Publications Action Research OnlineFirst, published on October 5, 2009 as doi:10.1177/1476750309350701
- Dollahite, J.S., Nelson, J.A., Frongillo, E.A. and Griffin, M.R. (2005) Building Community Capacity through Enhanced Collaboration in the Farmers Market Nutrition Program. *Agriculture and Human Values*. 22, pp. 339-354.
- Greenfields, M. and Home, R. (2006) Assessing Gypsies and Travellers Needs: Partnership working and "The Cambridge Project". *Romani Studies* 16 (2), pp. 105-131.
- Jain, A. (2009) An Integrated Model of Subnational Regional and Urban Economic Development: Framework and Analysis. *International Journal of Urban and Regional Research*, 33(3), pp. 809-26.
- Salinger, M.J., Sivakumar, M.V.K., and Motha, R. (2005). Reducing Vulnerability of Agriculture and Forestry to Climate Variability and Change. *Climate Change*, 70, pp. 341-362.
- Schutt, R.K., (2006) *Investigating the social world: The process and practice of research*. *5ed.* Sage Publications:Thousand Oaks, USA.