



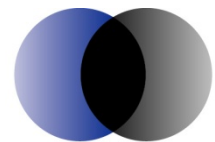
Final Report

Norfolk Island Economic Development Report

Reform of the Norfolk Island Economy

Department of Regional Australia, Regional Development
and Local Government

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ACIL Tasman

Economics Policy Strategy

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Executive summary

Overview

The economic downturn on Norfolk Island has been relatively severe, and can be described as an economic depression. There is relatively strong evidence that the economic downturn is impacting the quality of life on Norfolk Island and resulting in the depreciation of social capital. The Norfolk Island government fiscal position is poor; and to ensure basic government functions continue, between 2004 and 2012 the Commonwealth has provided soft loans and direct transfers to the Norfolk Island government totalling \$37.1M.

The most significant factors limiting investment and economic development on Norfolk Island are the dominant role of the government in the economy; the associated protectionist legislation that supports this role; and the lack of infrastructure investment by the Norfolk Island government.

The main driver of economic growth on Norfolk Island is the tourism industry, and path dependence means that future economic development on Norfolk Island should largely concentrate on the tourism sector.

Based on both Australian and international evidence there are a number of microeconomic reforms that can be implemented on Norfolk Island that will promote economic growth in general, and support the development of a new tourism sub-market that services cruise ship passengers.

A reformed, growing, Norfolk Island economy, is, however, unlikely to provide a tax base of the size required to support the level of infrastructure investment required on Norfolk Island, and also allow an appropriate level of service provision across health, education, and social welfare.

Over the longer term it will be necessary to implement arrangements between the Commonwealth and Norfolk Island governments so that Norfolk Island has access to regular fiscal equalisation payments of some kind. The full integration of Norfolk Island into the Australian tax system, and the subsequent provision of equalisation funding to Norfolk Island would be one way to achieve this. Reform of the Norfolk Island tax system, access to Commonwealth infrastructure grant programs and health funding, along with ad hoc funding provided by the Commonwealth would be another approach capable of delivering a similar outcome to full integration.

The way forward

In the immediate, it is not necessary to resolve the final status of the integration of Norfolk Island with the Australian tax and transfer payment system. Rather, it is necessary to implement a program of microeconomic

reform based on the *Competition Principles Agreement 1995*. The *Competition Principles Agreement 1995* covers:

- Price oversight of Government Business Enterprises (GBEs) by an independent economic regulator
- Competitive neutrality policy for GBEs to ensure that they do not receive unfair competitive advantages due to their relationship with the government, but rather face the full gambit of private sector costs
- The reform of public monopolies, which involves the separation of the industry regulation function from the public monopoly, and the subsequent privatisation of the remaining service delivery functions
- Review of all legislation, where in any case of legislation restricting competition a case must be made to show that the benefit of the restriction to the community is greater than the cost of reduced competition
- The development of third party access regimes for natural monopoly infrastructure that allows regulated access prices to be set.

In the immediate term, the privatisation revenue from the sale of the Liquor bond, Norfolk Telecom, Lighterage, and Norfolk Energy will allow the Norfolk Island government to both directly, and in partnership with the Commonwealth, invest in essential infrastructure.

The extension of land taxation arrangement (rates) to all properties on Norfolk Island will improve the fiscal position of the Norfolk Island government over the longer term so that it can maintain and continue to invest in essential infrastructure.

Roles and responsibilities with respect to economic development

The roles and responsibilities of the Commonwealth and Norfolk Island governments reflect the status of Norfolk Island as a self-governing territory.

The core contributions from the Commonwealth to assist with economic development are in terms of the human resources associated with a capacity building team; the provision of bridging finance until the proceeds of privatisation sales are realised; some modest additional spending in the initial years; facilitating access to a greater range of Commonwealth administered grant programs; and, over the longer term, in taking on greater financial responsibility for the provision of medical and pharmaceutical services at a user cost and standard consistent with the mainland.

The role of the Norfolk Island government is to implement the microeconomic reforms required under *Competition Principles Agreement 1995*; work with the Commonwealth to lower the direct user cost of health services; and invest the proceeds of privatisation sales in core infrastructure.

Box ES 1 **Recommendations summary**

Recommendation 1: Economic development

The Norfolk Island government adopt a program of microeconomic reform built around the implementation of the *Competition Principles Agreement 1995*. The core elements of the program will be privatisations of GBEs; tax reform to increase the government revenue base; the introduction of price setting for utilities by an Economic Regulator; increased legislative consistency with the mainland to reduce business costs; and investment in core infrastructure.

Recommendation 2: Human capacity development

Revise the funding agreement for the Norfolk Island Central School to allow funding on a per enrolment basis, and to also reflect new roles in terms of administering the apprenticeship financial support scheme, and serving as a community information source for accessing adult education.

Recommendation 3: Additional appointments

Appoint a person with expertise in the divestment of State assets to assist with the privatisation process; and for various lengths of time, an agricultural extension officer, and an expert in grant writing.

Recommendation 4: Infrastructure investment

The Norfolk Island government allocate at least 75 percent of net GBE privatisation revenue to infrastructure investment, and all Norfolk Island organisations, including the government, be made eligible for all appropriate Commonwealth government administered grant programs.

Recommendation 5: Microeconomic reform implementation

Create a standing committee with representatives of both the Commonwealth and Norfolk Island governments that is responsible for monitoring progress in microeconomic reform implementation, and developing annual funding agreements where payments are conditional on reform progress.

Recommendation 6: Capacity building team

That the Commonwealth capacity building team support the preparation of financial accounts in a format consistent with that required to privatised assets and allow future price determinations by an Economic Regulator.

Recommendation 7: Health and welfare

The Commonwealth and Norfolk Island governments jointly, and progressively, work to improve access to health services (including pharmaceuticals), on Norfolk Island so that they are at a standard, and have a direct user cost, equivalent to that on the mainland.

Recommendation 8: Business certainty

The staged extension of company tax and income tax (including medicare) to Norfolk Island be delayed until 2015/16.

1 Introduction

This chapter provides a brief introduction to Norfolk Island, outlines the project terms of reference and the context in which the terms of reference were framed, and describes the approach and methodology used to prepare the report.

1.1 Norfolk Island

Norfolk Island is a self-governing external territory of Australia located off the north east coast of New South Wales. Norfolk Island is approximately 8 km long and 5 km wide, and also includes two small, uninhabited islands (Nepean Island and Phillip Island) which are located to the south of the main island.

Norfolk Island is important as part of Australia's European history. Initially settled six weeks after the founding settlement at Sydney, it is one of Australia's oldest territories. As an area of convict settlement spanning the era of transportation to eastern Australia between 1788 and 1855, Norfolk Island provides one of the foremost national examples of a convict cultural landscape. It is also significant as the only site in Australia to display evidence of early Polynesian settlement, and the place where the Pitcairn Island descendants of the *Bounty* mutineers were re-settled in 1856. The convict history of Norfolk Island resulted in the Kingston and Arthur's Vale Historic Area, along with other Australian convict sites, receiving World Heritage status in July 2010.

Norfolk Island is governed under the *Norfolk Island Act 1979* (the *Act*). It is a self-governing territory of Australia and the provisions of the *Act* limit the extent of the Commonwealth's responsibility for the Island's governance to an advisory role.

The current population of Norfolk Island is approximately 1,800,¹ and tourism services are the main private sector economic activity. Tourism activity has, however, declined over recent years; and this has had a substantial negative impact on local incomes, and also resulted in a serious deterioration in the financial position of the Norfolk Island government. Without Commonwealth government assistance the Norfolk Island Government would have run out of money to pay suppliers by June 2011.²

¹ Norfolk Island Government (2011a) Norfolk Island Census of Population and Housing, Norfolk Island Government: Norfolk Island.

² Norfolk Island Government (2010a) Administration of Norfolk Island Financial Statements for the year ended 30 June 2010, Norfolk Island Government: Norfolk Island.

1.2 Project context

The Norfolk Island Economic Development Strategy and Action Plan report is an outcome of the Norfolk Island Road Map process. The report has been developed so as to be consistent with the objectives of the Road Map. The Road Map process covers the economic reforms required to ensure a strong economic base for Norfolk Island; how social capital on Norfolk Island can be improved; and how to preserve and strengthen Norfolk Island's heritage and environment. The report also draws on, and is consistent with, the other review reports commissioned as part of the Road Map process, which include:

- A basic community profile in the style of those prepared by the Australian Bureau of Statistics (prepared by Deloitte Access Economics)
- A comparison of Norfolk Island taxes, fees, charges, and the cost of service delivery compared to those on the mainland (prepared by the Commonwealth Grants Commission)
- A review of public service practices and capacity (prepared by Australian Continuous Improvement Group).

1.3 Terms of Reference

The specific terms of reference provided to ACIL Tasman are reproduced in Box 1. The methodology section below explains the process used to address the terms of reference, and the outline of report section explains how the various chapters of the report relate to the terms of reference.

Box 1 **Project terms of reference**

1. Assess the social and economic impact of the recent economic downturn on Norfolk Island, taking into account relative cost-of-living differences between the Island and comparable communities in the rest of Australia
2. Outline the existing structure and drivers of the Norfolk Island economy
3. Identify existing constraints to economic growth and diversification, investment and enterprise development, and recommend actions to overcome these constraints
4. Develop future potential restructuring options for the economy
5. Prepare an Economic Development Strategy. Five year and indicative ten year planning is required
6. Produce an Action Plan to underpin the Strategy. This is to include costings and possible funding sources
7. Develop and document so that they may be compiled locally in the future, a robust and appropriate set of whole-of-economy economic indicators which are comparable with national standards and allow the preparation of forward projections and the tracking of economic conditions
8. Identify key short and long term projects, including costings and possible funding sources, to drive diversification, and take the economy and community of Norfolk Island

forward. Priority should be given to practical and affordable projects

9. Provide design options for possible business, industry, and individual socio-economic stimulus packages that can be implemented in the short term to speed recovery

10. Recommend practical interventions which can be applied to Norfolk Island. These could include single and cross-sectoral initiatives which may provide opportunities for partnering with non-government and private sectors.

Source: Department of Regional Australia

1.4 Methodology

To develop an economic profile of the Norfolk Island economy, initial data was sourced from the Australian Bureau of Statistics. This detail was then refined using information gathered through consultation with representatives of the Norfolk Island public service, the local business community, Norfolk Island residents, and desktop research.

To represent the economic linkages in the economy a Norfolk Island specific Input Output table was developed. The starting point for developing the Input Output table was the economic representation of the economy in the Global Trade Analysis Project (GTAP) database. The base representation of the economy for the GTAP region containing Norfolk Island was then refined using detailed financial data regarding the nature of spending by the Norfolk Island government and Norfolk Island businesses; and analysis of Norfolk Island GST tax return information. This process allowed a relatively comprehensive description of the underlying economic structure of the Norfolk Island economy to be developed.

Economic and social indicators were then developed to track the change in the level of economic activity, the change in the cost of living, and social stress. The impact of the economic downturn was then measured using these indicators. Additional information on the impact of the downturn was collected as part of a survey conducted by ACIL Tasman.

The specific cost of living issues analysis relies on information collected on Norfolk Island, Commonwealth Grants Commission information, information collected through a survey conducted by ACIL Tasman, and other information collated by ACIL Tasman.

The economic development strategy, action plan, and supporting material reflect the Australian and international evidence on how to create an environment conducive to economic growth.

1.5 Outline of the report

The report addresses the terms of reference on a chapter by chapter basis. Although this approach results in minor repetition in some instances, the approach has the advantage of ensuring that the terms of reference have been addressed. Term of reference 7 is the subject of a separate report that explains how to input data into the Excel workbooks developed to address the term of reference. In this report the suggested economic and social indicators are simply reported.

1.6 Thankyou

It would not have been possible to prepare this report without considerable assistance from a large number of Norfolk Island residents. ACIL Tasman is sincerely thankful for the assistance that was provided by Norfolk Island residents during the process of drafting the report.

2 Social and economic impact of the downturn

The following chapter addresses the following term of reference

Assess the social and economic impact of the recent economic downturn on Norfolk Island, taking into account relative cost-of-living differences between the Island and comparable communities in the rest of Australia.

2.1 The extent of the downturn

Without access to data compiled by the Australian Bureau of Statistics, it is difficult to measure the extent of the economic downturn precisely. As such, the approach taken has been to consider several different measures calculated from available data and use these different measures to make an informed judgement about the change in the level of economic activity on Norfolk Island over recent years.

2.1.1 GST revenue measure

The extent of GST revenue collected, divided by the GST rate, provides a reasonable indicator of the level of nominal spending on Norfolk Island, and assuming the proportion of non-GST spending in the economy is approximately constant, changes in this measure can be used to provide an indication of changes in the nominal level of spending on Norfolk Island. By adjusting this measure by a suitable price inflation measure it is then possible to obtain some indication of the change in the level of real economic activity.

Using this approach nominal spending on Norfolk Island increased by 2.0 percent in 2008/09, and then fell by 7.1 percent in 2009/10 and a further 7.9 percent in 2010/11. Adjusting nominal spending by estimated price inflation suggests that in 2008/09 real spending fell by 1.3 percent, then fell by 10.5 percent in 2009/10, and a further 8.6 percent in 2010/11. A fall in real output of over 20 percent in three years is a severe contraction, and so an in-depth analysis of the share of GST liable turnover as a proportion of total reported turnover was undertaken. This analysis indicated that assuming a constant proportion of non-GST spending in the Norfolk Island economy may not be appropriate. If an adjustment is made for what appears to be an increase in the proportion of non-GST liable spending, the changes in the real level of spending are as follows: an increase of 1.3 percent in 2008/09, a fall of 6.3 percent in 2009/10, and a fall of 6.0 percent in 2010/11. A fall in output over two consecutive years is one definition of an economic depression. The main

alternative measure of a depression is a contraction in output of more than ten percent.³

For Australia, the most relevant corresponding measure to the GST based measure described above is the chain volume expenditure measure of GDP. The respective percentage change values in the chain volume expenditure measure of GDP for Australia in 2008/09, 2009/10, and 2010/11 are: 0.8 percent, 2.8 percent, and 1.7 percent.⁴ This suggests a divergence between the growth path on Australia as a whole and Norfolk Island over this period of around 11.5 percent.

2.1.2 Tourism spending measure

Another way to measure the extent of the downturn is to estimate the loss in tourism spending on Norfolk Island. Estimates of the daily tourism spend on Norfolk Island -- including accommodation spending -- for 2004/05 suggest a daily tourist spend of around \$215 per person, and an average visitor stay of 7.6 days.⁵

Using this earlier estimate of per day tourism spending and actual tourism visitor stay data, the fall in the nominal value of tourism spending on Norfolk Island between 2007/08 and 2008/09 was \$8.4M. Tourism spending then fell by a further \$5.6M in 2009/10, and a further \$2.6M in 2010/11 so that the total fall in tourism spending over this period was \$16.6M. This value can be put in context by noting that total income on Norfolk Island in 2004/05 was \$94.1M.⁶

2.1.3 Population and unemployment

The lack of unemployment benefits on Norfolk Island means that the local unemployment rate is not a useful measure of the extent of the downturn. As the unemployed must, in effect, leave Norfolk Island, it is the change in the ordinary resident population, and the change in the number of Temporary Entry Permits issued that provide an approximate labour measure of the extent of the economic downturn. Based on information collected as part the

³ To derive a GDP equivalent measure requires a number of additional assumptions, but using this approach the estimated fall in real economic activity over the past two years is of the same order of magnitude as that derived using the GST measure.

⁴ ABS (2011) Australian National Accounts: National Income, Expenditure and Product, catalogue no. 5206.0, Australian Bureau of Statistics: Canberra.

⁵ Centre for International Economics (2006) Economic Impact Assessment, Report prepared for the Department of Transport and Regional Services.

⁶ ABS (2006) Norfolk Island Business Statistics 2004-05, Catalogue No. 8139.0, Australian Bureau of Statistics: Canberra.

Norfolk Island Census, since 2006 the resident population has fallen by almost four percent.⁷ A number of people have, however, reported working fewer hours.

In 2008/09 460 Temporary Entry Permits were issued, and in 2010/11 402 Temporary Work Permits were issued; a fall of approximately 13 percent.⁸

2.1.4 Miscellaneous measures of economic activity

Norfolk Island customs collects information on a wide variety of measures that also provide insights into the extent of the economic downturn on Norfolk Island. Of the statistics collected and reported in Table 1, possibly the most telling relates to the volume of sea cargo imported to Norfolk Island, which has fallen by over 22 percent over recent years.

Table 1 Customs Arrival and Clearance Statistics: Norfolk Island

	2007/08	2008/09	2009/10	2010/11
Aircraft Arrivals (RPT, Military & Private)	669	676	592	479
Aircraft Passengers (Residents & Visitors)	39,717	34,047	30,897	28,694
Small craft (yachts etc)	15	23	30	16
Cruise Ships	-	3	7	9
Cargo Vessels	19	18	16	14
Air Cargo	282 tonnes	308 tonnes	319 tonnes	300 tonnes
Sea Cargo	5,755 tonnes	5,720 tonnes	5,344 tonnes	4,460 tonnes
Petroleum Tankers	4	3	4	3
Petroleum Products	4,760 tonnes	3,151 tonnes	3,688 tonnes	2,377 tonnes
Gas Tankers	4	5	3	4
Gas Discharged	304 tonnes	429 tonnes	247 tonnes	298 tonnes
Post Items	61 tonnes	58 tonnes	77 tonnes	71 tonnes
Customs Duty Collected	\$1,366,394	\$1,135,600	\$1,296,467	\$1,009,895

Data source: Norfolk Island Customs and Immigration Services.

2.1.5 Social indicators

During an economic downturn incomes fall, and the ability to pay bills as and when they fall due decreases. Over time this process results in an increase in the number of bad debts, and an increase in the number of default summons issued for non-payment of debts. As can be seen from Table 2, the number of default summons issued on Norfolk Island has increased by 187 percent since 2007/08.

⁷ Norfolk Island Government (2011a).

⁸ Temporary Entry Permit data provided by Norfolk Island Customs and Immigration Services.

Table 2 **Default summons issued on Norfolk Island**

	2007/08	2008/09	2009/10	2010/11
No. Issued	208	360	406	596
% Change	-	73	13	47

Data source: Norfolk Island Registrar.

At the individual family unit level one of the most dramatic consequences of an economic downturn is foreclosure on the family home. Two of the four major Australian retail banks have branches on Norfolk Island, with Westpac opening a branch in 1965, and the Commonwealth opening a branch in 1969. Since the economic downturn one of these banks has been involved in a small number of foreclosures, and has a small number of additional clients that are of serious concern. The other bank has not moved to foreclose on any properties, but has a small number of clients where their ability to repay loans is of serious concern. The total number of dwellings in question represents around 1.6 percent of the total housing stock on Norfolk Island.

The final social measure considered is the number of criminal summons issued on Norfolk Island. Table 3 provides information on the number of criminal summonses issued through time, and there is no clear trend in the data.

Table 3 **Criminal summons issued on Norfolk Island**

	2007/08	2008/09	2009/10	2010/11
No. Issued	117	105	70	101
% Change	-	-10.3	-33.3	44.3

Data source: Norfolk Island Registrar.

2.2 Impact of the downturn on the community

Three approaches were used to gain insights into the impact the economic downturn has had on the community:

- A survey was developed to seek specific input from members of the Norfolk Island community
- A community forum was held on Norfolk Island
- A series of structured meetings were held with representatives of sporting and community organisations on Norfolk Island.

2.2.1 Survey information

Hard copies of the survey used were made available on Norfolk Island, and an online version of the survey was promoted during a visit to Norfolk Island. In the survey the social impact of the economic downturn was tested with a series of questions relating to four social indicators covering:

- personal economic challenges
- changes in employment
- quality of health issues
- participation in cultural or leisure activities.

Although the number of survey responses was relatively modest, the information contained in the survey responses received was consistent with the information obtained through the structured meetings and the community forums. The survey findings are described below.

Personal economic challenges

Of the 33 survey respondents, 28 (85 percent) indicated that they had experienced personal economic challenges in the past three years. Four survey respondents (12 percent) had not experienced any personal economic challenges, and one respondent did not answer the question.

Of the 28 respondents that had experienced personal economic challenges in the past three years:

- 20 indicated that this was solely due to the economic downturn on Norfolk Island
- one indicated that this was due to the economic downturn and personal circumstances
- four indicated that this was due to the economic downturn and ‘other’ factors
- two indicated that this was due to ‘other’ factors alone, although these respondents indicated that the ‘other’ reason was a mismatch between income and prices, and so can therefore be included in the count of respondents reporting the economic downturn as the sole problem
- one did not specify a reason.

In terms of ‘other’ factors driving personal economic challenges, Norfolk Island government/ Administration decisions were mentioned by three respondents.

In total, 96 percent of respondents who experienced personal economic challenges in the past three years attributed all or some of this experience to the economic downturn on Norfolk Island.

Employment

Of the 33 survey respondents, 14 (42 percent) indicated that they had experienced a negative change in their employment in the past three years, such as working fewer hours. Of the remaining respondents, 16 (48 percent)

indicated that they had not experienced any negative change, and three people did not answer the question.

Of the 14 respondents that indicated that they had experienced a negative change in their employment:

- nine indicated that this was solely due to the economic downturn on Norfolk Island
- two indicated that this was due to the economic downturn and ‘other’ factors
- two indicated that this was due to ‘other’ factors alone
- one did not specify any reason for the negative change.

In terms of ‘other’ drivers of negative employment changes, one respondent commented that the negative change was being forced to work more hours because they could no longer afford to pay for staff, with another indicating that the economic downturn in Australia was the reason behind their changed circumstances.

In total, 79 percent of respondents that indicated that they had experienced a negative change in their employment situation attributed all or some of this change to the economic downturn on Norfolk Island.

It should also be noted that the absence of unemployment benefits on Norfolk Island means that those that have experienced unemployment and do not have substantial financial reserves are likely to have left Norfolk Island.

Health

Of the 33 survey respondents, 18 (54 percent) indicated that they had experienced a decline in their health over the past three years. Of the remaining respondents, 13 (39 percent) indicated that they had not experienced a change in their health status, and two respondents did not answer the question.

Of the 18 respondents that indicated that they had experienced a decline in the quality of their health:

- five indicated that this was solely due to the economic downturn on Norfolk Island
- five indicated that this was due to the economic downturn and ‘other’ factors
- seven indicated that this was due to ‘other’ factors alone, although one of these respondents indicated that the ‘other’ reason was a mismatch between income and prices. As with the personal economic challenges question this respondent can be included in the count of respondents reporting the economic downturn as the sole problem

- one respondent did not specify any reason for the decline in their health.

In terms of ‘other’ drivers of declining health, numerous factors were reported, including: working longer hours, lower income, diet (in particular lack of fresh fruit and vegetables), the cost of medicine, limited time for exercise, stress, age, and access to medication or medical treatment. In many cases, factors often occurred together, for example, lower income has reduced the affordability of medication and access to quality food.

In total, 61 percent of respondents that indicated that they had experienced a decline in their health attributed some, or all of the decline to the economic downturn on Norfolk Island.

Participation in cultural and leisure activities

Of the 33 respondents, 19 (58 percent) indicated that they had been forced to cease participation in cultural or leisure activities such as sports, arts, or continued learning in the past three years. Of the remaining respondents, seven (21 percent) indicated that they had not been forced to cease participation, five indicated ‘not applicable’ and two did not answer the relevant questions.

Of the 19 respondents that indicated that they had been forced to cease participation in social, cultural, and leisure activities:

- 12 indicated that this was solely due to the economic downturn on Norfolk Island
- one indicated that this was due to the economic downturn and changed personal circumstances
- three indicated that this was due to the economic downturn and ‘other’ factors
- one indicated that this was due to ‘other’ factors alone
- two did not specify any reason for ceasing participation.

In terms of ‘other’ factors forcing respondents to cease participation in cultural and leisure activities, factors reported included longer working hours, the affordability of activities, and health problems.

In total, 84 percent of respondents that indicated that they had been forced to cease participation in cultural or leisure activities identified the economic downturn as either the sole reason, or a contributing reason, for ceasing participation in activities.

General commentary on how the economic downturn has affected residents socially

Survey respondents were invited to comment on other ways that the economic downturn on Norfolk Island had affected them socially. Of the 33 survey respondents, 27 provided additional commentary. Many used this as an opportunity to provide further detail on responses to questions regarding personal economic challenges, employment, health, and participation; and to provide insights into how the economic downturn has affected them personally, their business or workplace, or the community as a whole.

Table 4 summarises the survey respondents' views on the different types of problems created by the economic downturn and the resultant social impact. The problems (and impacts) have been broken down into the areas for which they are most relevant – personal life, the workplace or business, or the community. It should however be noted there can be crossover between different areas. For example, problems affecting an individual's personal life may be driven by problems in the workplace.



Table 4 **Social impact of the economic downturn on Norfolk Island**

Area	Problem caused by economic downturn	Social impact experienced
Personal	Income stress	<ul style="list-style-type: none"> • Can't participate in social or sporting activities. • Can't help less fortunate. • Unable to pay bills. • Difficult to provide for family. • Personal stress. • Can't eat out/takeaway. • Delaying access to services such as doctor, dentist.
	Increased cost of living	<ul style="list-style-type: none"> • Can't participate in social activities or sporting.
	Increased 'other' costs	<ul style="list-style-type: none"> • Can't afford airfares to visit friend's/family living off the Island or take holidays overseas.
	Australian economy, e.g. bad investments	<ul style="list-style-type: none"> • Less to spend on the Island, including food.
Workplace or business	Work longer hours	<ul style="list-style-type: none"> • Reduced family life. • Can't participate in social activities.
	Increased costs and prices	<ul style="list-style-type: none"> • Reduced patronage.
	Inability to employ staff	<ul style="list-style-type: none"> • Running a business solo. • Can't have breaks from business. • Can't find stable employment. • Leave island to find better employment. • Can't participate in social or sporting activities.
	Difficult operating climate	<ul style="list-style-type: none"> • Family stress.
	Funds	<ul style="list-style-type: none"> • Need to have early access to superannuation funds to support business.
Community	Uncertainty regarding change	<ul style="list-style-type: none"> • Loss of community spirit. • Negativity. • Fear.
	Increase cost of social activities	<ul style="list-style-type: none"> • Lower membership.
	Unspecified	<ul style="list-style-type: none"> • Disenchantment. • Suspicion of authority. • Lack of belief that change will occur. • Low morale. • Anxiety.

Data source: ACIL Tasman survey.

2.2.2 Community forum information

The discussion at the community forum revealed that there remains a strong sense of community place on Norfolk Island, and that community social activity and cohesion remains a strength. There was however a general sense

that while the community is still able to achieve great things, it is getting harder.

Some specific examples of the way the economic downturn has affected community life on Norfolk Island that emerged during the evening discussion included:

- child care providers reporting that children have been withdrawn due to the financial pressure some families are under
- those participating in Girl Guides now wear just a scarf as parents would have to withdraw children if they had to purchase a full uniform
- general inability to build reserves at community organisation for major maintenance and minor capital works
- reduced ability to participate in social and community activities due to the need to work longer hours.

2.2.3 Information from structured meetings

Structured meetings were held with representatives of the main service and sporting clubs on Norfolk Island, as well as with some community not-for-profit organisations.

Service organisations

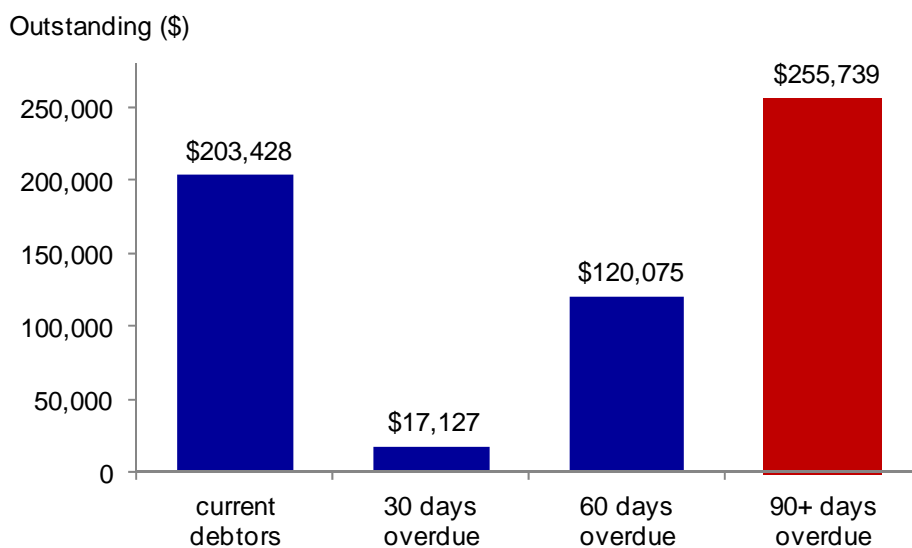
Service clubs indicated that membership was down and that fundraising had become more difficult.

In general, service clubs become aware of an individual or family that is in need through informal means. The overall situation reported was one of increased need and a shrinking base of people capable of providing financial assistance.

The question of the main trigger for a family or individual needing financial assistance was explicitly raised, and all organisations agreed that the most common trigger for financial stress was a large medical bill.

To further explore this issue, the hospital was contacted for debtor details, and an aged trial balance of hospital debtors is shown in Figure 1. As can be seen from the figure, 43 percent of the total value of debts outstanding have been outstanding for more than 90 days. In part this reflects the fact that some Norfolk Island residents have incurred substantial medical bills and are now on a repayment plan where repayments are scheduled over a number of years.

Figure 1 **Hospital aged trail balance (December 2011)**



Data source: Norfolk Island Hospital.

Sporting organisations

Sporting clubs serve an important function in building social cohesion on Norfolk Island. Sporting clubs all reported that memberships were down, and that revenue from bar and restaurant activities were also down. Some clubs reported that some members had let memberships lapse and had moved more towards a pay when you play approach. It was felt that where people had moved to such arrangements it was due to financial pressure.

In general, clubs reported that turnover had fallen to the point where maintenance of facilities was starting to be compromised.

2.3 Cost of living issues

High energy costs and high freight costs work to raise the average cost of living on Norfolk Island.⁹ In terms of changes in the cost of living since December 2005, using the price data collected as part of the Norfolk Island Retail Price Index, the cost of living on Norfolk Island has increased by 26 percent. For this same period the average increases in prices across Australia was only 19 percent.¹⁰

⁹ Commonwealth Grants Commission (2011) Update Of The Financial Capacity Of Norfolk Island 2011, Commonwealth Government: Canberra.

¹⁰ Norfolk Island price change calculation based on ACIL Tasman calculations, and Australian price change calculations based on the change in the Consumer Price Index, All Capital cities index series, Australian Bureau of Statistics, catalogue no. 6401.0.

Some of the specific cost differences between Norfolk Island and other communities are discussed below.

2.3.1 Fuel

The retail price of ULP on Norfolk Island in November 2011 was approximately \$2.40 per litre, or approximately one dollar per litre greater than the price in the major metropolitan regions of Australia (see Table 5). Western Australia is the only State to publish detailed retail fuel price information, and in Western Australia, the highest prices are recorded in the Kimberley region. The Kimberley region includes the towns of Broome, Derby, Fitzroy Crossing and Kununurra, and based on Fuelwatch data, at the end of November 2011 prices were between \$1.65 and \$1.76 per litre in the Kimberley.

Table 5 Fuel price comparison: cents per L

Jurisdiction	ULP
Australia**	145
Norfolk Island*	240
Kimberley towns	165 – 176
Sydney	143
Adelaide	141
Hobart	150
Melbourne	142
Perth	142
Darwin	153
Brisbane	144
Canberra	143

Data source: Australian Bureau of Statistics Average Retail Prices of Selected Items, Eight Capital Cities, June 2011. * = as at 30 November 2011. ** = unweighted average of capital cities only.

2.3.2 Gas

There is no reticulated gas supply on Norfolk Island, with NI Gas Pty Limited distributing LPG on behalf of Origin Energy. The type of gas used on Norfolk Island is liquid petroleum gas. Gas is delivered to Norfolk Island by ship, pumped ashore by hose, and is stored in bulk facilities at Ball Bay. It is then distributed to residential customers in 50 kg cylinders and to commercial customers by road tanker and piped into commercial facilities using a certified flow meter. Gas storage and handling procedures comply with the Australian Standard AS1596.

On Norfolk Island customers are charged a \$25 refundable deposit on cylinders, and there are two charge profiles based on annual gas consumption:

- High users (those using around 3 or 4 cylinders per year) \$147 per cylinder

- Low users (those using 2 or fewer cylinders per year) \$171 per cylinder.

In comparison, Kleenheat charges residential customers in Australia \$96 per 45 kg bottle including delivery. Delivery charges in very remote regions can be very high, but in a town such as Broome, which is serviced by a contractor, a residential consumer can expect to pay between \$100 and \$105 per LPG bottle. The maximum reported delivered bottle price in the Kimberly in 2007 was \$168.¹¹

Table 6 shows the prices in Australia compared to Norfolk Island on a per kg basis. As can be seen, Norfolk Island residents pay between \$2.93 and \$3.41 per kg for gas compared to between \$2.22 and \$2.33 per kg at a remote Australian mainland tourist town.

Table 6 **Gas price comparisons**

	Residential \$ per kg
Metro Australia	2.13
Regional Kimberly tourist town	2.22 – 2.33
Norfolk Island	2.93 – 3.41

Data source: WA = Kleenheat Gas, Norfolk Island = Norfolk Island Gas.

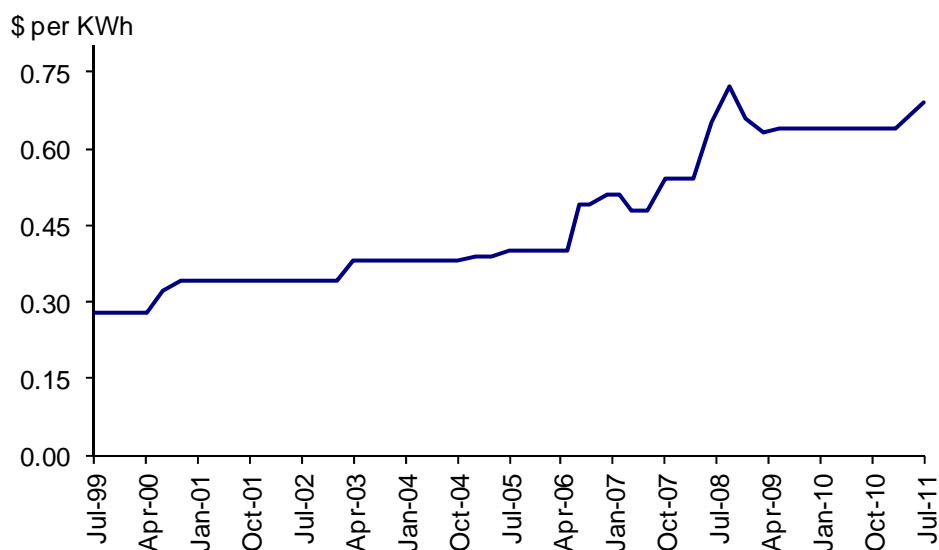
The price of natural gas supplied through reticulated systems can be substantially lower than the price of bottled LPG, but such systems are generally only available in large metropolitan areas, and hence these prices are not thought to be relevant.

2.3.3 Electricity

The cost of electricity on Norfolk Island is dependent on the cost of imported diesel fuel. There is one tariff for all consumers on Norfolk Island, which is currently \$0.69 per kWh. As can be seen from Figure 2, the price of electricity on Norfolk Island had doubled since 2003.

¹¹ Economic Research Associates (2007) Economic Analysis of LPG Costs for Households in Western Australia, Report prepared for the Office of Energy.

Figure 2 **Retail electricity tariffs: Norfolk Island**



Data source: Norfolk Island government.

There are no off-peak electricity or commercial tariffs. Table 7 shows the residential and commercial electricity tariffs in all States and Territories of Australia. For both residential and commercial customers the unweighted average tariff rate is \$0.22 per kWh, which is approximately one third of the price that customers on Norfolk Island pay. As uniform tariff rates generally apply across the States, in Australia, regional communities other than Norfolk Island enjoy substantial electricity subsidies.

Table 7 **Electricity tariff comparison: 30 June 2010 (cents kWh)**

Jurisdiction	Residential *	Commercial**
	¢ per kWh	¢ per kWh
Australia***	22.22	22.12
Norfolk Island	69.00	69.00
Bass Straight Islands	24.23	24.23
Christmas Island	21.47	21.36
New South Wales	27.47	25.96
South Australia	24.78	23.30
Tasmania	23.04	20.66
Victoria	21.62	21.58
Western Australia	21.47	21.36
Northern Territory	20.95	21.99
Queensland	20.58	21.65
Australian Capital Territory	17.83	20.43

Data source: Retailers published tariffs from Power and Water Corporation (2011), 2010 Annual Report p 45. Note: *Based on: 5,000 kWhs per annum for VIC, SA, NT, WA, QLD and NSW; 7,000 kWhs per annum for TAS and ACT; ** Based on 2,500 kWh per month. *** = unweighted average of states and territories only.

2.3.4 Water

Water on Norfolk Island is currently self-supplied and there is no universal water supply system. For comparison purposes, water on Christmas Island is supplied from underground sources and is managed and maintained by the Western Australian Water Corporation under contract to the Commonwealth. Current fees and charges on Christmas Island are set out in the *Christmas Island Water and Sewer Services Fees and Charges Determination No. 3 of 2011*.

Water tariff charges in Australia are presented in Table 8, where the charges shown include fixed connection charges where they apply. It has not been possible to estimate charges for users on Norfolk Island.

Table 8 **Water tariff comparison: 30 June 2010**

Jurisdiction	Residential*	Commercial**
	¢ per kL	¢ per kL
Australia***	203.23	238.08
Norfolk Island	Self supply	Self supply
Christmas Island	124.30	400.10
New South Wales	225.17	234.90
South Australia	198.67	192.94
Victoria	187.29	155.26
Western Australia	150.50	338.58
Northern Territory	141.43	131.18
Queensland	242.53	246.38
Australian Capital Territory	270.33	367.32

Data source: Retailers published tariffs from Power and Water Corporation (2011), 2010 Annual Report p 45. Note: * Based on 266 kL per annum (WSAA) ** Based on 1,325 kL per annum *** = unweighted average of states and territories only.

2.3.5 Housing

All rental accommodation on Norfolk Island is privately owned by investors, businesses, or community groups. There is no public housing on Norfolk Island.

A 2011 survey found that weekly rents on Norfolk Island were \$150 per week.¹² Discussions with Norfolk Island real estate agents indicated that rents range from around \$95 per week for a one bedroom cottage to \$350 per week for a three bedroom house. The average rent in the commercial market is around \$220 per week. The reason for the difference between the survey value and the value quoted by real estate agents is due to survey including employer

¹² Deloitte Access Economics (2011) Wellbeing Report – Norfolk Island, Prepared for the Department of Regional Australia, Regional Development and Local Government.

provided rental accommodation, and church or community group rental accommodation, which tend to be leased at rates below the commercial rate of rent.

All rental properties are rented fully furnished. A bond equivalent to four weeks rent is held on all properties. Landlords must pay a letting fee of one week's rent as well as a management fee of around seven percent to the real estate agent managing the property.

There is normally a good level of rental availability with six or 12 month leases common.

Median weekly house rental information in all capital cities of Australia is presented in Table 9, where it can be noted that the values are for unfurnished houses. As can be seen from the table, in June 2011 the average weekly rent range across capital cities was \$320 (Hobart) to \$540 (Darwin). Official rental data for regional centres is not available.

Table 9 **Median weekly housing rental prices: Australia**

Location	June 2010	June 2011
	(\$)	(\$)
Sydney	480	490
Melbourne	365	360
Brisbane	360	370
Adelaide	325	340
Canberra	450	475
Perth	370	380
Hobart	300	320
Darwin	540	540

Data source: Australian Property Monitors, available: www.apm.com.au, [accessed 11 November 2011].

It was not possible to find official house sale data for Norfolk Island. Discussions with real estate agents suggest that the cheapest house currently for sale on Norfolk Island is a one bedroom cottage, and this property is expected to sell for around \$140,000. The most expensive home currently on the market is expected to sell for around \$2 million. All houses are sold fully furnished. The average house on Norfolk Island is a three bedroom home, and fully furnished, the average home could expect to sell for around \$350,000.

In contrast, the average Australian house price in June 2011 was \$546,121 (see Table 10). Prices in capital cities tend to be higher than regional areas with representative values for regional Western Australia and Berry in NSW also reported in Table 10.

Table 10 Median house prices in Australia

	June 2010	June 2011
	(\$)	(\$)
Australia	559,736	546,121
Sydney	646,200	644,658
Melbourne	566,220	554,610
Brisbane	469,873	446,778
Adelaide	456,489	441,775
Canberra	565,803	551,065
Perth	568,449	535,617
Hobart	338,091	329,307
Darwin	585,829	593,642
Regional Western Australia*	382,000	372,500
Berry NSW**	431,000	485,000

Data source: Australian Property Monitors, available: www.apm.com.au, [accessed 11 November 2011].

* = Real Estate Institute of Western Australia annual sales prices for 2010 and 2011; ** = for 2009 and 2010 and available: www.realestate.com.au [accessed 11 November 2011].

The information suggests that property values on Norfolk Island are, on average, lower than on the mainland, as are rental costs.

2.3.6 Retail goods

Comparative price information is given in Table 11 for various household items. The price data is illustrative only, and is for Norfolk Island, Australia in general, and Broome, which is an isolated town in the Kimberley region of Western Australia whose economy has a similar structure to that of Norfolk Island, with tourism and government services the major economic drivers. The price data for Australia is the unweighted average taken across all capital cities.

The table shows that in general, goods purchased on Norfolk Island are significantly more expensive than goods bought in Australia's major metropolitan areas, and also more expensive than goods purchased in a remote Australian town with a significant tourism economy. For the items sampled, the average price on Norfolk Island was approximately 50 percent higher than in the metropolitan regions of Perth.

Table 11 **Basket of groceries: Australia, Norfolk Island and Broome 2011 (\$)**

Item	Unit	Norfolk Island	Australia	Broome
Plain flour	1kg	5.29	3.21	2.70
Rice – white, long grain	1kg	4.69	2.78	5.50
Biscuits savoury	250g	3.63	2.58	2.91
Beef mince	kg	11.00	7.96	10.00
Sausages	kg	9.75	7.13	7.00
Chicken breast	kg	17.95	13.01	14.00
Tin of salmon	210g	3.79	3.40	3.24
Canned tuna	425g	3.53	2.03	3.66
Milk full cream	1lt	2.30	1.99	1.25
Milk UHT full cream	1lt	6.60	1.90	1.44
Butter	500g	4.95	3.94	4.70
Tomatoes	1kg	7.25	6.31	4.98
Carrots	1kg	6.15	2.21	1.65
Potatoes	1kg	4.98	2.70	2.98
Frozen peas	500g	5.95	2.18	2.21
Canned pineapple	450g	2.45	2.12	2.00
Cherry Ripe	55g	1.60	1.99	1.68
Orange juice	1 litre	3.40	2.11	2.50
Eggs	dozen	7.39	5.26	5.50
Leaf tea	250g	2.30	3.54	4.00
Sugar	1kg	2.95	1.56	2.50
Dog food	700g	2.83	1.97	1.74
Panadol tablets	24	2.84	3.21	2.50
Toilet paper	6 rolls	9.95	4.61	3.15

Data source: Australia = unweighted average of all capital cities from the Australian Bureau of Statistics Average Retail Prices of Selected Items, Eight Capital Cities, June 2011, Catalogue no: 6403.0.55.001 and Woolworths Online, available: www.woolworths.com.au, [accessed 1 December 2011]; Norfolk Island = Norfolk Island Retail Price Index Database; Broome = consultant supermarket survey.

2.3.7 Services

As can be seen from Table 12, there are significant differences in the cost of services on Norfolk Island compared to Australia as a whole, and to Broome as a representative comparable community. On Norfolk Island car registrations and drivers licences are cheaper than on the mainland. However, the cost of medicines are significantly more expensive on Norfolk Island than they are on the mainland. For example, Becotide (asthma preventer) inhalers are \$42.50 per unit on Norfolk Island compared to \$21.00 per unit on the mainland. Other health care costs are discussed further in the following section, but the values shown in the table are the Medicare contribution for a single person earning the average income in Australia of \$1,376 per week.

General dental costs in Australia are not covered by Medicare, however some major dental costs are covered, as are some preventative dental services for

some teenagers. At around \$47 per visit compared to around \$60 in Australia, and \$110 per visit for the government preferred provider in Broome, dental costs on Norfolk Island are cheaper than on the mainland.

Table 12 **Cost of services: Australia, Norfolk Island and Broome: 2011**

Item	Unit	Norfolk Island	Australia	Broome
		(\$)	(\$)	(\$)
Registration of Motor Car	1 year	160	238**	432
Driver's Licence	3 years	39	50**	37
Healthcare per person (equivalent)	Per annum	760	1,073	1,073
Asthma inhaler	1	42	21	21
Dental Charges, basic filling	1	85	75 - 160	110

Note: ** = NSW Department of Transport www.rta.nsw.gov.au [accessed 1 December 2011].

Data source: Australia = various, Norfolk Island = Norfolk Island Administration, Broome = consultant survey, www.transport.com.au [accessed 1 December 2011].

2.3.8 Health

Health care in Australia is provided by Medicare and private providers. Medicare is a tax funded scheme where most tax payers contribute a levy of 1.5 percent of their taxable income. In addition, individuals earning over \$80,000 that do not have private health insurance pay a surcharge.

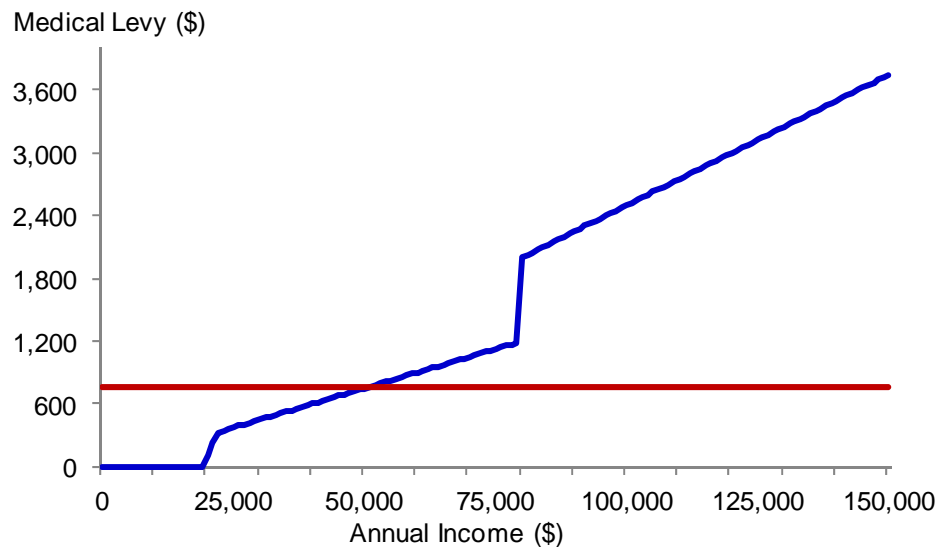
Medicare levies and surcharges are calculated based on tax return information. Those people with lower incomes pay reduced levies. For example, a reduced levy is paid by those with a taxable income of \$22,163 or less, and there is no levy payable for taxable incomes of \$18,839 or less.

Norfolk Island residents aged 15 and over pay an annual levy of \$760 for health cover. The health cover provides residents with insurance cover for a wide range of medical expenses, but not all expenses; and not all medicines are covered. The cover starts once residents have incurred \$2,500 in costs. It is therefore possible for residents on Norfolk Island to incur relatively large medical bills.

As the health care levy applies to individuals not income earners, and is levied at a flat rate, relative to the mainland, low income families on Norfolk Island pay substantially more for government provided health care. To illustrate the issue, in Figure 3 below, the red line tracks the medical services specific tax for different income levels on Norfolk Island, and the blue line tracks the medical services specific tax on the mainland. In order for an Australian tax payer to pay the equivalent of \$760 per annum in Medicare levies, they must be earning \$51,000 per annum (see Figure 3). The 2011 Census reports the median weekly income on Norfolk Island for residents aged 15 and over is \$555 per

week.¹³ If 20 percent is added to this value to reflect the absence of income tax on Norfolk Island, then the median resident on Norfolk Island would pay an annual Medicare levy \$520.¹⁴

Figure 3 Medicare levy by income level (2011)



Data source: Australian Taxation Office Guide to Medicare Levy, available: www.ato.gov.au, [accessed 14 December 2011].

In terms of a visit to a GP, on mainland Australia almost 80 percent of medical visits are bulk billed, and hence there is no charge. For the remaining 20 percent of visits there is a gap between what the doctor charges and what the patient pays that is not covered by Medicare, and this gap can be relatively substantial. On Norfolk Island the cost of a visit to the GP is \$48.

2.3.9 Telecommunications and information technology

The cost of information technology on Norfolk Island compared to Australia is shown in Table 13. Costs for Australia were sourced from Telstra for the HomeLine budget package, which is the basic land line phone package. The comparison shows that for landline phones, costs are cheaper on Norfolk Island than Australia in terms of line rental, local calls, and international calls between Australia and Norfolk Island.

Mobile calls are also cheaper on Norfolk Island and text messaging is comparable. It was not possible to directly compare internet service packages because the speeds and data usage amounts were not comparable.

¹³ Norfolk Island Government (2011a).

¹⁴ Medicare Levy calculated assuming no spouse or dependent children and no eligibility for offsets, exemptions or fringe benefits.

Table 13 **Cost of information technology: Australia and Norfolk Island**

Cost item	Unit	Norfolk Island	Australia
		(\$)	(\$)
Private telephone line rental	Per month	20.00	22.95
Local landline to local landline call	Per call	0.20	0.30
NI – Australia peak landline phone charge	Per minute	0.20	0.97
NI –Australia mobile peak call	Per minute	0.60	0.97
Local mobile to local mobile call - peak	Per minute	0.48	0.89
NI –Australia prepaid mobile SMS	Per text	0.36	0.35

Data source: Norfolk Telecom Current Operating Charges 1 July 2011, Telstra (HomeLine Budget) available: www.telstra.com.au, [accessed 18 December 2011].

2.4 Summary

The economic downturn on Norfolk Island has been relatively severe, and can be described as an economic depression. There is relatively strong evidence that the economic downturn is impacting the quality of life on Norfolk Island and resulting in the depreciation of social capital. Many costs on Norfolk Island are greater than on the mainland, and the cost of living on Norfolk Island has been increasing faster than on the mainland. Even allowing for the absence of income tax, incomes on Norfolk Island are relatively low. As such, increases in the cost of living have a relatively strong impact on welfare. Medical costs on Norfolk Island are higher than on the mainland, and medical expenses are a key trigger for financial stress. It is particularly notable that relative to mainland Australia medical costs on Norfolk Island fall disproportionately on low income families.

3 Economic structure and drivers

The following chapter addresses the following term of reference:

Outline the existing structure and drivers of the Norfolk Island economy.

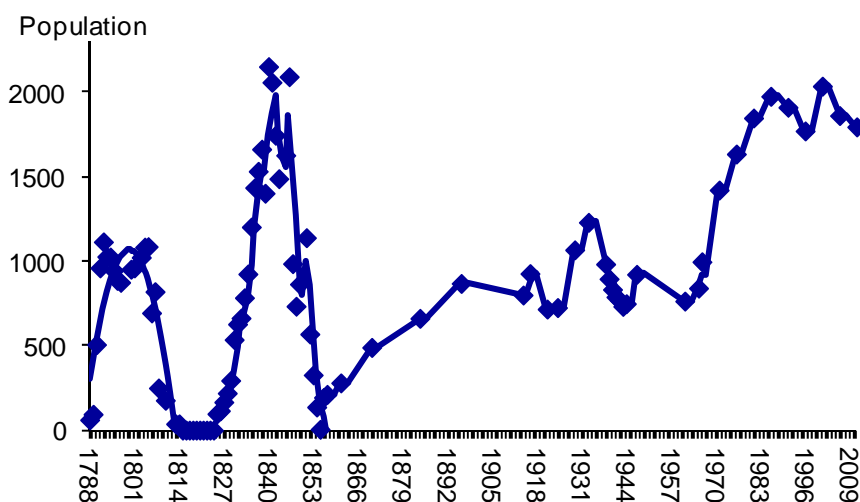
The discussion of structure and drivers has been grouped under a series of sub-headings that provide key information on the workforce, supporting infrastructure, and the economic linkages between different sectors of the Norfolk Island economy.

3.1 Population

Since the first settlement of Norfolk Island in 1788, the population has fluctuated substantially. Specific population values for Norfolk Island could be sourced for various years, and these values, along with a moving average population trend line, have been plotted in Figure 4. The convict history of Norfolk Island can be seen in the first two settlements on Norfolk Island. For the third settlement of Norfolk Island, from 1856 to the present, several observations can be made. First, the population has fluctuated with economic circumstances and international events, such as major international wars. Second, the very long term trend has been one of population growth. Third, the population grew strongly when it became easier to access Norfolk Island in the late 1960s and early 1970s. Fourth, over the past decade the population has fallen. The resident population on Norfolk Island at the end of 2011 was 1,796.¹⁵

¹⁵ Norfolk Island Government (2011a).

Figure 4 **Population: Norfolk Island (1788 – 2011)**



Data source: various sources have been used including the 2001, 2006 and 2011 Censuses, and Treadgold (1988).

Table 14 provides information on the population distribution of Norfolk Island compared to: Australia as a whole, Christmas Island, and the average across a number of remote mainland communities. The main differences between the population distribution on Norfolk Island and the other locations are: (i) the relative lack of people in the 15 to 54 age bracket; and (ii) the relatively large number of people in the over 55 age bracket.

Table 14 **Relative population distribution: Australia, Christmas Island, remote WA locations and Norfolk Island (percent)**

Age band	Australia	Christmas Island	Comparable WA locations*	Norfolk Island
less than 4 years	6	7	9	6
5 to 14 years	13	17	16	14
15 to 24 years	14	9	13	6
25 to 54 years	42	50	49	38
55 to 64 years	11	12	9	17
65 years and over	13	5	6	19

Note: Comparable WA communities represents the average of Broome, Derby, Exmouth, Fitzroy Crossing, Halls Creek, Kalbarri, Kalumburu, Kununurra, Laverton, Leonora, Mount Magnet, Mullewa, Onslow, Pannawonica, Warburton, and Wyndham.

Data source: Norfolk Island Government (2011a); ABS (2006); Government Commonwealth Grants Commission (2007).

The relatively low number of people in the 15 to 24 age bracket can be partly explained by people pursuing education and training opportunities on the mainland. In the older age groups the reasons are more varied. Some people will have left to seek employment opportunities in professional or other industries not present on Norfolk Island; and others will have left based on a general desire to experience the wider world.

The relatively large proportion of older people on Norfolk Island is in part attributable to the immigration policy pursued on Norfolk Island.

3.1.1 Population summary

Consistent with the historical pattern of fluctuations with economic circumstances, the population has been falling over recent years. Regardless of the reason behind the shape of the population distribution, the core insight is that the workers in their most economically productive years are significantly underrepresented on Norfolk Island.

3.2 Key infrastructure

The key economic infrastructure of Norfolk Island includes jetties at Kingston and Cascade Bay, fuel storage tanks at Ball Bay, the airport, roads, the electricity and telecommunications networks, the hospital, and the education buildings. The nature and condition of this infrastructure is described below.

3.2.1 Shipping access

Although there is some local production of fresh meat and vegetables from local farming enterprises, Norfolk Island relies on sea transport for the supply of many foodstuffs, all gas, fuel, and significant volumes of general cargo.

General cargo ships and passenger ships cannot dock at a harbour, but must anchor around one kilometre offshore. Lighters, towed by motorised launches, are then used to transport goods and people to one of two small jetties at Kingston and Cascade Bay.

Fuel and gas is landed at Ball Bay via a floating pipeline which transfers the product direct from the tanker to a storage facility.

The Norfolk Island Lighterage Service is a Government Business Enterprise and provides unloading facilities from ship to shore for cargo and passengers, and provides equipment for sea rescue. The Lighterage Service operates a fleet of four lighters and two motorised launches. Weather and sea conditions determine which jetty is used. Cranes located on the jetties can transfer a maximum load of 16 tonnes. Importantly, containerised cargo cannot be unloaded at Norfolk Island.

The shipping access facilities are of poor quality; and cargo unloading practice does not meet mainland occupational health and safety standards. It is not possible to unload cargo in all weather conditions, and the majority of cruise ships that would like to unload passengers at Norfolk Island have not been able to do so due to the nature of the infrastructure available. The lack of ability to handle containerised freight places significant restrictions on the ships

that bring cargo to Norfolk Island, and results in very high freight charges. The lack of an ability to unload cargo during all weather conditions also adds to freight costs.

Significant investment is required to upgrade the shipping access facilities on Norfolk Island, and subsequent investment is also required for new lighterage related assets.

3.2.2 Norfolk Island International Airport

The Norfolk Island International Airport comprises 120 ha of land, of which 95 ha is used for aviation purposes. There are two runways. The main runway can support a Boeing 737-300, and the other a Fokker 27. The maximum weight for a Boeing 737-300 is restricted to 56 tonnes due to runway length. Recent upgrades have improved the pavement quality of the main runway.

The Airport is operated by the Norfolk Island government. The airport meets CASA standards, but this has only been possible due to the significant financial assistance provided by the Commonwealth.

Currently, there is no provisioning for future required works at the airport, suggesting that the Norfolk Island government will not be in a position to maintain the airport to the standard required by CASA without further significant financial assistance.

The commercial opportunities presented by the airport are not as well developed as at other regional airports.

Although the commercial opportunities at the airport have not been fully exploited, overall, the airport infrastructure is of good quality. However, if current financial arrangements continue, the Norfolk Island government will not be able to maintain the airport to the standard required by CASA over the medium to long term.

3.2.3 Roads

The Norfolk Island government is responsible for 67 km of sealed roads and nine km of unsealed roads. The National Park also has sealed roads to the Captain Cook Monument and Mount Pitt which total around 3 km.

In general, the Norfolk Island government road network is in poor condition and in need of significant works. In some areas, such as around Ball Bay, further deterioration of the road network would restrict access the main fuel storage tanks.

The Norfolk Island government is currently undertaking extremely limited road maintenance works.

3.2.4 Electricity

The Government Business Enterprise Norfolk Island Electricity is responsible for the generation, transmission, and distribution of electricity on Norfolk Island within the requirements of the *Electricity Supply Act 1985*.

The electricity supply chain on Norfolk Island is illustrated in Figure 5. Electricity generation is primarily via six diesel powered generators that have a combined capacity of 6 MW. There are six standby units such as the 120 KW standby generator that is jointly used by the hospital and airport to operate essential equipment during island wide power outages.

The system is supplemented by solar hot water systems, and individual solar power units that feed back into the grid. The uptake of individual solar powered units that feed into the grid has at least in part been spurred by government rebates. It is estimated that there is an installed capacity of 1,000 KW (i.e. 1MW at 100 percent output) of photovoltaic systems on Norfolk Island. Similar to mainland electricity networks, the feed-in tariff for photovoltaic systems has resulted in an increase in the average cost of generating electricity.¹⁶

There is an electricity grid consisting of overhead and underground high voltage 6.6kV and low voltage 415V cables.¹⁷

The peak load for Norfolk Island is approximately 1.7 MW, the base load is approximately 650kW, and in 2009/10 1.8 million litres of fuel were consumed to generate electricity on Norfolk Island.¹⁸ Surges are common, and tourists are advised to use surge protection devices.¹⁹ There is little variation in load between summer and winter.

The main uses of energy are for refrigeration, lighting, heating water, water pumping, and other general household needs. The main electricity consumers on Norfolk Island are large retail outlets with refrigeration requirements.

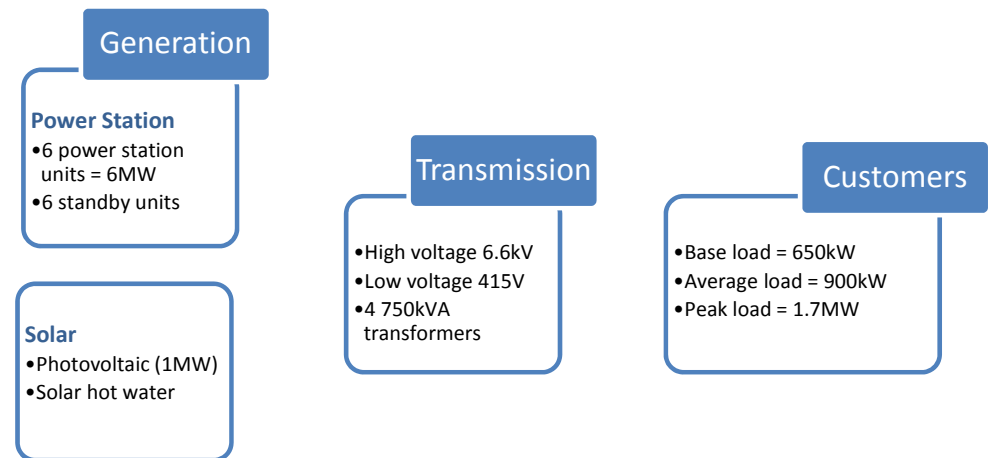
¹⁶ Norfolk Island Government (2011b) Matters Contributing to the Price of Electricity on Norfolk Island, Report prepared for the Chief Minister, January.

¹⁷ Barton D (2008) Social and Technical Aspects of Community Level Decision-making on Energy Options in Two Remote Island Communities, PhD thesis, Australian National University.

¹⁸ Norfolk Island Government (2010b) Annual Report 2009-10, Norfolk Island Government: Norfolk Island.

¹⁹ Information available: www.discovernorfolkisland.com/norfolk [accessed 12 November 2011].

Figure 5 Electricity supply chain: Norfolk Island



Source: ACIL Tasman

There has been sustained underinvestment in the electricity generation, distribution, and transmission network. New investment and major maintenance works are urgently needed.

The introduction of the load from photovoltaic systems has exacerbated the strain on the electricity generation and distribution infrastructure, and investment is required to better understand the nature of the problems caused by photovoltaic systems.

3.2.5 Telecommunications and information technology

The Government Business Enterprise Norfolk Telecom provides telecommunication services on Norfolk Island. Norfolk Island legislation acts to protect Norfolk Telecom from competition.²⁰

From 1902 until 2002, international telecommunications with Norfolk Island were provided via a submarine cable landed at Anson Bay. When the submarine cable was de-commissioned, the Norfolk Island government signed an agreement with the Telstra subsidiary Reach to provide telecommunications connectivity via satellite technology. Satellite telecommunications services to Norfolk Island are now provided under contract by Telecom New Zealand International.

Internet connectivity is sufficient only for relatively low intensity applications, with the Norfolk Island Central School reporting drop out problems.

²⁰ See *Norfolk Island Telecommunications Act 1992*.

Norfolk Telecom is currently on a debt repayment program with Telecom New Zealand, which acts to restrict the investment that Norfolk Telecom can undertake.

The Norfolk Island *Telecommunications Act 1992* works to limit private sector investment in information technology and telecommunications technology on Norfolk Island. The level and quality of such infrastructure is therefore below the level that would be achieved in a competitive market.

3.2.6 Water and sewage infrastructure

There is no public water supply or water catchment system on Norfolk Island, with each dwelling and business supplying its own rainwater storage facility.

The government operated Norfolk Island Water Assurance scheme provides sewerage services to Burnt Pine and Middlegate, which is where the majority of residents and tourism related businesses are located. The remaining population use septic tanks and effluent absorption trenches.

The water available from underground confined aquifers is an essential element of overall water supply security on Norfolk Island, and these aquifers should be thought of as part of the water supply infrastructure.

Determining acceptable extraction limits, and the implementation of a water licensing regime for water extraction, are not in place on Norfolk Island. Practice for managing water infrastructure is not consistent with the requirements outlined in the *1994 Water Reform Framework*, or the subsequent *2004 National Water Initiative*. Significant investment is required in water management infrastructure for practice to be raised to a level approximating that in regional mainland Australia.

There is also no process for determining appropriate headworks costs for developers to contribute to the expansion of the network as new developments are connected.

3.2.7 Waste disposal

Waste disposal on Norfolk Island is overseen by the Norfolk Island government Waste Management Centre. There is no waste collection system on Norfolk Island, with all residents and businesses required to bring their waste to the Waste Management Centre. Material that can be recycled is stockpiled, and from time-to-time sent off island. Due to quarantine restrictions, recycled material is more likely to be sent to New Zealand than Australia.

Waste management services include:

- Green waste – Historically, green waste was processed to produce a mulch product. However, the discovery of Argentine Ants at the Waste Management Centre in 2009/10 resulted in the suspension of this activity.
- Glass - All glass delivered to the Waste Management Centre is crushed into a product that can be re-used. Prior to 2009, glass was dumped into the ocean at Headstone. The purchase of the glass crusher was a Commonwealth funded project.²¹
- Asbestos – At the moment asbestos that has been removed from buildings is stockpiled in double wrapped form. Not all of the stockpiled material is sheltered from the elements. The process for shipping the material off island has not yet been determined.
- Other - Other household waste is burned at Headstone, and then dumped into the ocean. There are reports that partially burnt waste washes onto the island's beaches.²²

The waste infrastructure on Norfolk Island is substantially below the level expected of a location that promotes the environment and heritage to tourists, and significant investment is required to bring the level of waste management infrastructure up to the level of comparable mainland communities.

3.2.8 Health services

The Norfolk Island Hospital is run by the Norfolk Island Hospital Enterprise under the *Norfolk Island Hospital Act 1985*. Ultimate funding responsibility for health services and health infrastructure lies with the Norfolk Island government.

The 28 bed Hospital provides a dental clinic and a pharmacy. Emergency services are provided on a 24-hour basis and in serious emergencies evacuations to the mainland are provided by the RAAF.

The Norfolk Island Healthcare Scheme insures members against catastrophic medical costs. Membership is compulsory for all persons normally resident on Norfolk Island, except those whose medical costs are fully funded by the Department of Veterans Affairs.²³

The hospital employs three doctors, as well as a physiotherapist, and nursing, allied health, and ancillary staff.

²¹ Norfolk Island Government (2010b).

²² King, A. (2008) Environmental Education and the Norfolk Island Waste and Resource Recovery Education Strategic Plan 2008 – 2013, Unpublished Undergraduate Report. School of Environmental Science and Management, Southern Cross University.

²³ Norfolk Island Government (2010b).

The physical hospital infrastructure is in need of replacement. For example, a 2011 funding application notes that:

The existing Hospital is ageing and inefficient in layout, preventing any improvement in the physical environment and service delivery. The current building and its services are non-compliant to current building standards and guidelines.²⁴

The cost of replacement facilities is expected to be over \$30M.

3.2.9 Education

Ultimate funding responsibility for primary and secondary education services and infrastructure lies with the Norfolk Island government. Primary and secondary education is provided by the Norfolk Island Central School which caters for students from kindergarten through to year 12.

The school comprises an oval, running track, basketball and netball court, play equipment, library, administration block, trade rooms, science lab and class rooms.

The education infrastructure is generally of a good standard. However, the significant investment made by the Commonwealth in mainland education infrastructure over recent years has meant that the average education infrastructure standard on the mainland has increased, while that on Norfolk Island has remained unchanged.

Maintaining an appropriate level of information technology infrastructure is an emerging challenge for the school.

3.2.10 Major tourism assets

The assets in the historic Kingston area are relatively well maintained but in light of the recent World Heritage listing these assets have not been developed to their full potential. Significant improvements in the infrastructure that support the interpretation of the site are warranted.

3.2.11 Infrastructure summary

The core infrastructure on Norfolk Island is in poor condition, and in some cases infrastructure has deteriorated to the point where critical assets could be compromised. There is insufficient provisioning for known major future capital works. Even where infrastructure is in good condition, such as in the area of education, investment on the mainland over recent years has meant that Norfolk Island has fallen behind the standard on the mainland.

²⁴ Norfolk Island Health and Hospitals Fund Regional Priority Round Funding Application in 2011.

3.3 Gross Island Product

The Gross Island Product figure derived from the Input Output table developed for Norfolk Island for 2010/11 was \$87.9 million. The relative contribution of different sectors in the economy are identified in Table 15, where the identification of some sectors reflects the availability of detailed data for that sector. It is notable that the government has a prominent role in many areas of the economy.

Table 15 **Norfolk Island Gross Product shares using factor cost (2010-11)**

No.	Sector	Norfolk Island (%)
1	Agriculture, forestry and fishing	2.0
2	Manufacturing	1.9
3	Electricity and Water assurance	3.4
4	Construction/maintenance	5.1
5	Wholesale and Retail Trade	18.1
6	Lighthouse	0.4
7	Airport	4.1
8	Other transport, postal & warehousing	0.7
9	Accommodation	10.3
10	Pubs, cafes and restaurants	7.4
11	Education	3.1
12	Hospital	3.8
13	Financial, Banking, Accounting & Insurance	17.2
14	Information Media & Telecommunications	3.1
15	Public administration	4.4
16	Arts & recreation & Other services	7.8
17	Dwellings	7.2

Note: The classification used means that the Financial, Banking, Accounting & Insurance grouping also includes the Tourism board expenditure. With a view to using the Input Output table to calculate multipliers that are relevant to the economy looking forward, the role of Norfolk Air has been removed from the table.

Data source: ACIL Tasman 2010-11 Input Output Table for Norfolk Island.

3.3.1 Exports and imports

The main export of Norfolk Island is tourism services, and the value of these services are not captured as part of customs data. The only substantial export good in recent years has been Kentia palm seeds and sprouts. In the 2010/11 year, the value of Kentia palm seed and sprout exports was \$620,000. The main destination for these exports is Europe.

The main import items in the 2010/11 year were Food and Household goods (\$7.5M), Fuel (\$6.8M), and Building materials and supplies (\$4.9M).

3.4 Major private sector industries

3.4.1 Tourism

The Norfolk Island economy is highly dependent on tourism. Major attractions are the Kingston and Arthur's Vale Historic Area (KAVHA) which is World Heritage listed, the National Park and Botanic Gardens, the scenery of the island, and the history of the island, including its convict history and the Pitcairn community. Most tours offered on Norfolk Island are centred on these themes.

Norfolk Island primarily attracts tourists in the older age groups, with 66 percent of tourist arrivals aged 60 and over. Sporting groups are another major visitor market.²⁵

Tourism is not a separately identified industry in the Input Output database, but using a previously developed tourism spend methodology,²⁶ and actual tourism stay information, it is possible to derive a reasonably accurate measure of the extent to which tourism is a driver of economic activity on Norfolk Island. Based on the expected distribution and value of tourist spending, tourism is responsible for around 41 percent of Norfolk Island Gross Island Product.

Consistent with the high share of output attributable to tourism, there are a large number of accommodation businesses, restaurants, and cafes on Norfolk Island that cater for tourists. Although the data is now a little dated, the Australian Bureau of Statistics reported that in 2004/05, business that were strongly associated with servicing tourists accounted for 71 percent of all businesses on Norfolk Island, and 68 percent of private sector employment.²⁷

More recent business data is not available, however, it is expected that the relative importance of tourism related businesses has not changed much over the past few years. This assertion is based on analysis of employment share data contained in the various Norfolk Island Census reports. In the 2001 Census 17.8 percent of the workforce was employed in the Restaurants, hotels, accommodation and clubs industry, whilst in the 2006 Census the corresponding figure was 17.4 percent. In the 2011 Census the classification title changed slightly to Hotels, accommodation, pubs, and restaurants, and 17.8 percent of the workforce was employed in this industry.

²⁵ Department of Regional Australia, Regional Development and Local Government (2011), Air Services for Norfolk Island Information Pack.

²⁶ Centre for International Economics (2006).

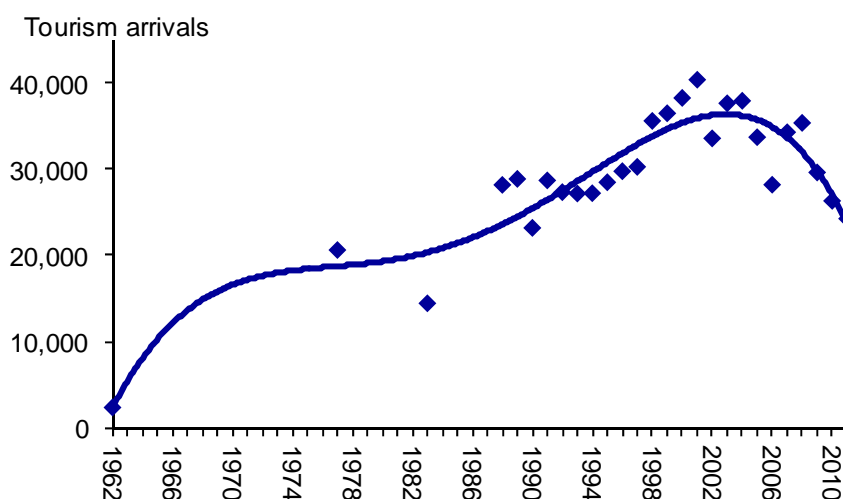
²⁷ ABS (2006).

Current information on accommodation providers is available, and there are 66 properties offering accommodation on Norfolk Island. In total there are 1,649 accommodation beds available on Norfolk Island. The distribution of accommodation on Norfolk Island is as follows:

- five hotels of 2.5 to 3.5 star rating
- 60 self-catering units, cottages or houses of 2.0 to 5.0 star rating
- one 3.5 star rated guest lodge.

The average occupancy rate for Norfolk Island in 2010/11 was 36 per cent.²⁸ The average occupancy rate in Australia for the same period was 65 percent.²⁹ Given the recent downturn in visitor numbers (Figure 6) the low average occupancy rate is to be expected.

Figure 6 **Tourism arrivals: Norfolk Island (1962 – 2011)**



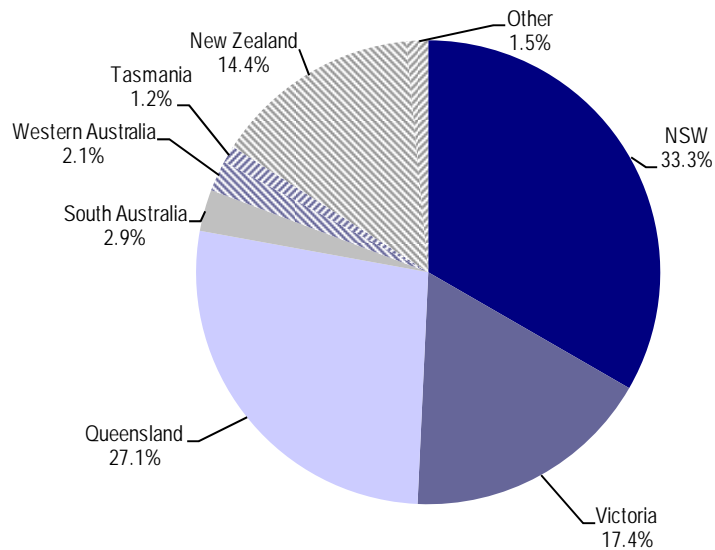
Data source: various sources including Treadgold (1999) and official Norfolk Island Government statistics.

Figure 7 shows the number of visitors by source, and at the moment, Australians represent over 80 percent of tourist arrivals.

²⁸ Department of Regional Australia, Regional Development and Local Government (2011).

²⁹ ABS, Tourist Accommodation, Small Area Data, Australia, June 2011, catalogue no. 8635.0.55.002 (Data cube only).

Figure 7 **Visitors to Norfolk Island by origin**



Note: The sample period is the July to October period of 2011.

Data source: Norfolk Island Government Tourism statistics

3.4.2 Farming

Farming activities on Norfolk Island are primarily set up to cater for the local population and include the production of vegetables, fruit, beef, poultry, eggs and pigs. There are very few exports of agricultural products, but Kentia palm sprouts/products are exported.

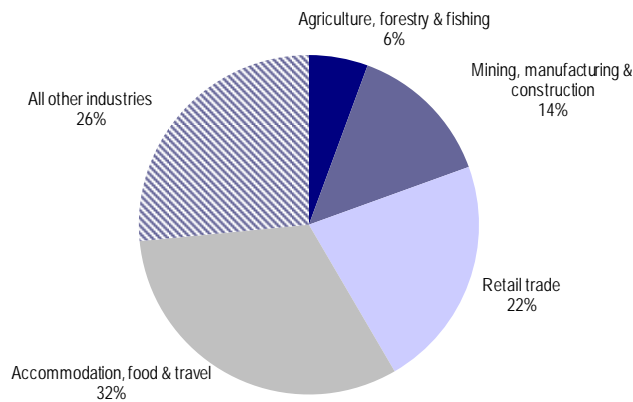
High transport costs and quarantine restrictions limit the extent to which farming activities can develop on Norfolk Island.

3.4.3 Businesses

In 2004/05 the Australian Bureau of Statistics surveyed businesses on Norfolk Island. That survey found there were 339 businesses on Norfolk Island, with 108 businesses providing accommodation, food or travel services.³⁰ The next major grouping of businesses was in the retail trade sector which accounted for 75 businesses. More recent data was not available, but as argued above, the relative share of businesses in different industries, which is what is shown in Figure 8, is thought to be similar today.

³⁰ Although the number of unique businesses on Norfolk Island seems high, 156 of the 339 business reported turnover of less than \$100,000.

Figure 8 **Norfolk Island businesses by industry: relative shares**



Data source: ABS (2006).

3.5 Government

The Norfolk Island government is the major employer on Norfolk Island. In addition, many private businesses hold government contracts for various services, and there are other government statutory authorities.

3.5.1 Government structure

The Government of Norfolk Island consists of an Administrator, a Legislative Assembly, and an Executive Council.

Administrator

The Administrator is appointed by the Governor-General of Australia and acts on the advice of Norfolk Island's Executive Council and Australia's Minister for Territories.

Legislative Assembly and Executive Council

The nine member Legislative Assembly is elected for a period of three years by the residents of Norfolk Island. The Assembly consists of a Speaker, Deputy Speaker and an Executive Council.

The Legislative Assembly makes laws under the *Norfolk Island Act 1979* which are approved by the Administrator. Australian Commonwealth laws apply to Norfolk Island only where they are explicitly expressed to do so.

The Executive Council is composed of three of the nine members of the Legislative Assembly plus the Chief Minister. Each member of the Executive Council holds the position of Minister for one or more of the portfolios of Finance and the Attorney General; Tourism, Industry and Development; and Community Services.

The role of the Executive Council is to make policy and advise the Administrator.

Norfolk Island Public Service

The Norfolk Island Public Service is headed by the Chief Administrative Officer the Deputy Chief Executive Officer. It includes nineteen branches that represent most public sector activities on Norfolk Island. These include the departments of Administrative Services, Community Services, Finance, Legal, and Works, but exclude the Norfolk Island Hospital and the Norfolk Island Tourist Bureau which are both Norfolk Island Authorities. Both Authorities are established under their own Act, and staff employed by them are exempt from the *Public Sector Management Act 2000*. Each Authority is responsible to their respective minister.

The Chief Administrative Officer is appointed by the Administrator on the advice of the Legislative Assembly.

3.5.2 Government role in the economy

The government has extensive involvement in the economy, from areas of traditional government responsibility, such as in the areas of health and education; through to utilities functions such as electricity generation and distribution; and on to pure commercial activities such as the supply of alcohol and the provision of lighterage services. Until recently, the government has also operated an Airline. Given the small size of the market, and the unique jurisdictional status of Norfolk Island, the Norfolk Island government is also involved in a number of activities that would not normally fall within the role of government, but which, historically, might not otherwise have been provided on Norfolk Island, such as the provision of workers competition insurance and local broadcasting services.

Given the Norfolk Island government has responsibility for functions that fall across three levels on government on the mainland, it is to be expected that there would be a significant government sector on Norfolk Island. The extensive role of the government in commercial activities is not, however, a characteristic of government on the mainland.

Tourism

Through the Norfolk Island Government Tourist Bureau (the Bureau) the government plays a significant role in the tourism sector. The Bureau is regulated by the *Norfolk Island Government Tourist Bureau Act 1980*. The Bureau is a body corporate governed by a board and is responsible for the promotion of tourism on Norfolk Island. The Bureau runs the Visitor Information

Centre, which provides a number of functions, including booking tours and accommodation, providing tourist information, selling souvenirs and crafts, meeting and greeting passengers off all inbound flights, collating and recording visitor surveys, and assisting with visits from travel agents and media.

The 2011/12 budget allocation for the Bureau was \$1.62M. The Bureau also raises around \$250,000 a year through commissions on the sale of tours and accommodation, events, retail sales, etc.

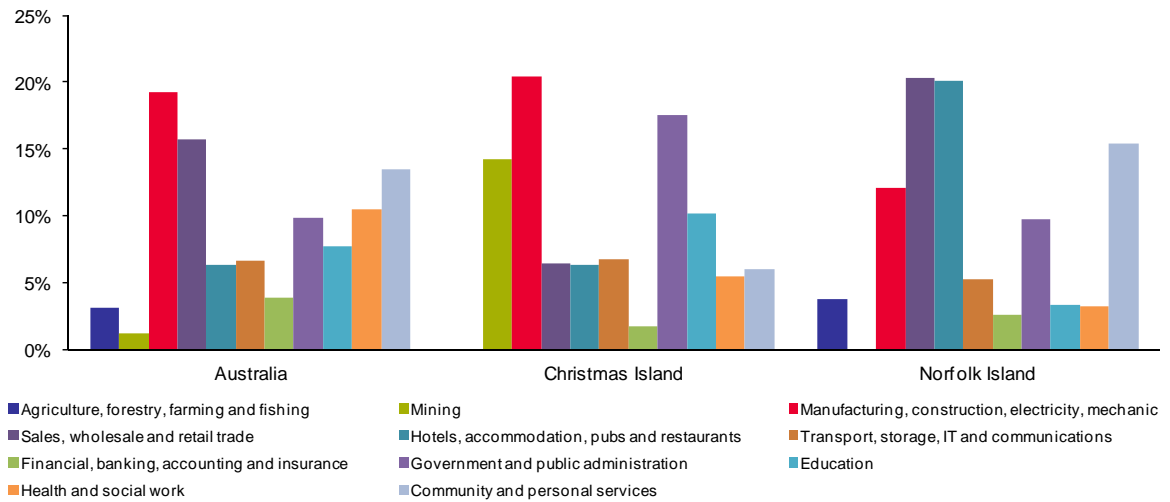
3.6 Employment

The data classification on Norfolk Island is slightly different to that used by the ABS, and so care must be taken when interpreting the information shown in Figure 9. However, with this caveat in mind, Figure 9 highlights Norfolk Island's reliance on tourism related industries -- the Sales, wholesale and retail trade industry group, and the Hotels, accommodation, pubs and restaurants industry group -- for employment. By way of comparison, it can be noted that these two industry sectors employ 40 percent of the workforce on Norfolk Island, but only 24 percent of the Australian workforce. Christmas Island has only a limited tourism sector, and so these two industries employ only 10 percent of the workforce on Christmas Island.

The reliance on a narrow band of industries for employment, coupled with a dominant government sector, is not unusual for small and isolated economies, and comparisons can be drawn with rural communities where agriculture dominates the economy and mining towns where the resources sector is the major employer. What is different about the Norfolk Island economy is the number of industries in which the government is involved, and the scale of government involvement in the economy.



Figure 9 **Employment by industry: Australia, Christmas Island and Norfolk Island (percent)**



Data source: Norfolk Island Government (2011a), and Australian Bureau of Statistics 2006 Census

3.7 Economic linkages

3.7.1 Internal linkages

Linkages between industries on Norfolk Island can be estimated by examining the purchases of industries located on Norfolk Island from businesses also located on the island. Table 16 shows both total spending and spending by private (non business) consumers that is captured on Norfolk Island. For comparison purposes Table 16 also shows details for Western Australia (as a representative large economy) and Christmas Island (as a comparison small island economy).

By reading down the total intermediate consumption column of the table it can be seen that 57 percent of purchases made on Norfolk Island are from businesses located on Norfolk Island. This is higher than the share of spending captured locally on Christmas Island, but as expected, less than for a broader State economy. At 73 percent, the share of private consumption spending captured on Norfolk Island is relatively high.

Table 16 **Local share of spending estimate (percent): Norfolk Island, Christmas Island, Western Australia**

Region	Total intermediate consumption	Private consumption
Norfolk Island	57	73
Christmas Island	41	56
Western Australia	77	84

Data source: ACIL Tasman 2005-06 Input-Output Tables for Christmas Island and Western Australia; ACIL Tasman 2010-11 Input Output Table for Norfolk Island.

Note that given the high wages share for government spending, and a preference for local purchases at all levels of government, it is usually the case that a high proportion of government spending is captured within the local economy.

3.7.2 Output multipliers as a measure of economic linkages

Another way of examining the linkages between industries on Norfolk Island is to compare output multipliers. The total economic impact identified by use of Input Output multipliers includes the direct effect of the initial increase in demand and the indirect (or “flow-on”) effects. The flow-on effects result from the linkages between industries in the island economy. For example, accommodation providers on Norfolk Island purchase inputs from other local industries. When demand for their output increases, the accommodation providers will increase their purchases from other local businesses, who themselves must increase their consumption, some of which will be from other local firms, and so on.

For completeness, two multiplier values are reported. The simple multiplier estimates capture the primary direct effect of an economic shock and the impact of industry expenditure. The total multiplier estimates capture all the impact that the simple multiplier captures, but additionally capture the impact of the additional consumer spending from those employed in the industries that expand.

Assumption behind the multiplier values

It is important to be clear about what insights Input Output table analysis can provide; what the limitations of such an approach are; and the additional adjustments to raw modelling results that may be required. The Input Output table analysis technique is based on certain restrictive assumptions, including:

- constant prices
- fixed technology
- fixed import shares
- unlimited supplies of all resources, including labour and capital
- a fixed relationship between income and private consumption.

As a result of these assumptions, any calculations making use of Input Output multipliers do not allow for substitution between goods and services or between capital and labour in the production process, or between goods and services in consumption. For these reasons the results generated from Input Output total multipliers are generally considered to be upper bound estimates of the likely economic impact. It is because the technique results in upper bound estimates that it worthwhile to also report the simple multiplier results.

As the simple multiplier estimates capture direct effects and industry effects only, they could be interpreted as representing lower bound estimates. Reporting a range of values also helps convey the uncertainty involved when modelling. We believe modelling results provide general representative information that can be used to assist with policy formation. Presenting a single point estimate may convey a level of precision that simply does not exist with respect to economic modelling using Input Output tables.

A further complication with Input Output analysis arises in very small economies. When we consider large regions where there are many individual firms operating in any given industry, the assumption that employment reductions in each industry can occur in a smooth continuous fashion is an appropriate assumption. Marginal firms enter and leave the industry and individual firms add or reduce staff so that for a large economy aggregate industry level employment movements approximate a continuous function.

In very small economies where total industry employment can be represented by a single firm, the assumption sometimes needs to be revised. In particular, the marginal reduction in employment and output described by the Input Output analysis may result in a firm becoming economically unviable and so shutting down.

Output multiplier comparison

As there are differences between the classification of data on Norfolk Island and the national accounts, it was possible to develop comparable output multipliers for only a limited range of industry sectors. Even for the multiplier values presented, there are still slight differences in the classification of data, and so the Norfolk Island values represent only an approximate match to the standardised ABS industry groupings. Nevertheless, the comparison of output multipliers across sectors still provides useful insights.

The first point to note from the values shown in Table 17 is that for any given economic stimulus the flow-on effects are less well captured on small island economies than they are for large economies. This can be seen by comparing the output multipliers across the individual rows of the table. The reason for this is that larger economies have a broader economic base than small island economies and so the output benefits from an economic stimulus remain in the economy more than they do for small island economies.

The second point to note is that while the simple multiplier values for Christmas Island and Norfolk Island are similar, the total multiplier effect on Norfolk Island is significantly larger than on Christmas Island. This means that the induced private consumption effect is quite strong on Norfolk Island.

So that the meaning of the multipliers can be explained in further detail, it is useful to consider a specific example using the Output multiplier values in Table 17. The simple multiplier value for the Accommodation, cafes, and restaurants industry in Western Australia is 1.86, and the respective values for Norfolk Island and Christmas Island are 1.21 and 1.18.

The simple multiplier effect captures the direct spending impact and the impact of the Accommodation, cafes, and restaurant industry's other industry purchases. The simple multiplier values say that following a \$1M increase in output in this sector the flow on effect of Accommodation, cafes, and restaurant industry purchases from other industries will be to raise output for Western Australia by a further \$0.86M; raise the output of Norfolk Island by a further \$0.21M; and raise output for Christmas Island by a further \$0.18M.

Table 17 **Comparison of output multipliers: Western Australia, Norfolk Island, Christmas Island**

Sector	Simple multipliers			Total multipliers		
	Western Australia	Norfolk Island	Christmas Island	Western Australia	Norfolk Island	Christmas Island
Electricity supply	1.94	1.33	1.18	2.32	1.60	1.26
Water supply; sewerage and drainage services	1.50	1.26	1.19	2.01	1.69	1.34
Construction trade services	1.98	1.20	1.45	2.69	1.75	1.65
Retail trade and retail repairs	1.78	1.30	1.27	2.61	1.79	1.53
Accommodation, cafes and restaurants	1.86	1.21	1.18	2.62	1.62	1.40
Water transport	2.11	1.19	1.46	2.75	1.95	1.62
Communication services	1.75	1.10	1.30	2.33	1.34	1.46
Ownership of dwellings	1.24	1.14	1.08	1.34	1.20	1.10
Other business services	1.77	1.24	1.32	2.64	1.66	1.59
Government administration	1.75	1.59	1.31	2.85	2.21	1.68
Education	1.31	1.08	1.14	2.63	2.27	1.64
Health services	1.25	1.14	1.11	2.55	2.10	1.61
Libraries, museums, parks and the arts	1.86	1.32	1.28	2.91	1.84	1.60
<i>Average</i>	<i>1.70</i>	<i>1.24</i>	<i>1.25</i>	<i>2.48</i>	<i>1.77</i>	<i>1.50</i>

Note: Norfolk Island values are approximate matches to the ABS classifications only.

Data source: ACIL Tasman 2005-06 Input-Output Tables for Christmas Island and Western Australia; ACIL Tasman 2010-11 Input Output Table for Norfolk Island.

In addition to the impact of industry purchases, the total Output multiplier captures the impact of the additional spending of those employed in the directly affected industry and the industries that benefit from additional purchases (the private consumption effect). Continuing with the Accommodation, cafes, and restaurant industry it can be seen that the total output multiplier values for Western Australia, Norfolk Island and Christmas Island are: 2.62, 1.62, and 1.40.

A \$1M increase in output in the Accommodation, cafes, and restaurant industry in Western Australia will therefore generate a total increase in output in Western Australia additional to the initial \$1M increase of \$1.62M. As the Norfolk Island and Christmas Island economies are much narrower than the Western Australian economy as a whole, the flow-on stimulus in these island economies is substantially lower. Specifically, the total additional flow-on output growth above the initial \$1M increase in output in the Accommodation, cafes, and restaurant industry is \$0.62M on Norfolk Island and \$0.40M on Christmas Island.

On average, the impact of an additional dollar of spending on Norfolk Island will be to raise output by the additional dollar, and an additional amount of between 25¢ and 75¢.

3.8 Summary

The population distribution on Norfolk Island is such that those in their prime working years are significantly underrepresented. Overall the infrastructure on Norfolk Island is in poor condition. Through direct service provision service, via service delivery contracts, and through the role of the tourism bureau, the Norfolk Island government plays a dominant role in the economy. For a small island economy, a surprisingly large proportion of private sector spending is captured within the local economy.

4 Constraints

The following chapter addresses the following term of reference:

Identify existing constraints to economic growth and diversification, investment and enterprise development, and recommend actions to overcome these constraints.

To identify constraints the following process was used:

1. Two open community forums were held on Norfolk Island
2. A series of meetings were held with representatives of all business sectors on Norfolk Island
3. All Norfolk Island residents were provided with an opportunity to complete a survey seeking their input, and the ability to contact the consultant team directly was promoted
4. Review of the existing literature, both academic and Norfolk Island specific.

4.1 Constraints overview

The discussion of constraints has been grouped under a series of sub-headings that allow a tractable treatment of constraints and actions to remove constraints. It should however be recognised that the root cause of almost all of the constraints identified is the jurisdictional status of Norfolk Island, and the way that this status has allowed the government to emerge as the dominant player in the economy. The priority actions that need to be taken to remove the constraints on economic growth therefore involve actions to reduce the role of the Norfolk Island government in the economy.

4.2 Government involvement in the economy

Starting in the 1980s, in Australia and elsewhere, there has been a strong move away from government involvement in direct service provision. Where the government is still involved in direct service provision, government businesses are now subject to external price control through an economic regulation agency. This reform process has not taken place on Norfolk Island, and the extent of government involvement in commercial activities is the most fundamental constraint hindering economic growth on Norfolk Island.

In addition to being involved in direct service provision, the Norfolk Island government has also enacted legislation to ensure a monopoly supply position across many activities. Further, the legislation enacted by the Norfolk Island government means that in many instances there is no incentive to be responsive to customer needs. For example, the *Lighterage Act 1961* not only ensures the monopoly position of the government Lighterage service, but

provides extreme liability protections for the Lighterage service, and seriously undermines the ability of users of the service to seek redress for poor service.

There are numerous examples on Norfolk Island where government businesses have used their position in the market place to engage in pricing practices that would not be legal on the mainland. For example, there is prima facie evidence that Norfolk Telecom has acted in anti-competitive ways surrounding pricing for leased circuit point-to-point services, versus those bundled with a Norfolk Telecom service.³¹ Additionally, the full range of costs faced by the private sector are not levied on government operations such as the Post Office, which allows prices to be set below the true cost of the good; and such arrangements result in allocative inefficiency. More fundamentally, these actions by government businesses work to stifle private sector investment.

4.2.1 Government business enterprises

The extent to which the Norfolk Island government is involved in commercial activities is a fundamental constraint on economic development. In the 1990s the States, mainland Territories, local government, and the Commonwealth committed themselves to a process of microeconomic reform. This process has delivered significant economic benefits to the Australian community.³² International evidence also shows that microeconomic reform has delivered substantial economic benefits.³³

The best articulation of the microeconomic reform process on mainland Australia can be found in the *Competition Principles Agreement 1995*. The Competition Principles Agreement covers:

- Price oversight of GBEs by an independent economic regulator
- Competitive neutrality policy for GBEs to ensure that they do not receive unfair competitive advantages due to their relationship with the government, and face the full gambit of private sector costs
- The reform of public monopolies, which involves the separation of the industry regulation function from the public monopoly, and then the privatisation of the remaining service delivery functions
- Review of all legislation where in any case of legislation restricting competition a case must be made to show that the benefit of the restriction to the community is greater than the cost of reduced competition

³¹ Norfolk Island Government (2009) Norfolk Island Government Gazette, No. 46, Friday 30 October 2009.

³² Productivity Commission (2005) Review of National Competition Policy Reforms, Report no. 33: Canberra.

³³ OECD (2009).

- The development of third party access regimes for natural monopoly infrastructure that allows regulated access prices to be set.

Given the number of privatisations that have taken place, there is now an overwhelming body of literature demonstrating that privatised firms are more productive than state owned operations,³⁴ hence the continuing large role played in the economy by the Norfolk Island government is hindering economic development. The benefits of reducing the role of the Norfolk Island government through a privatisation process will include:

- Raising revenue to fund other enabling infrastructure investment
- Promoting efficiency in service delivery
- Reducing government interference in the economy
- The introduction of competition to markets
- Subjecting GBEs to market discipline.³⁵

The GBEs that are to be privatised include the:

- Liquor Bond
- Norfolk Energy
- Norfolk Telecom
- Norfolk Lighterage.

The GBEs that require review to ensure that they do not enjoy any special privileges due to their GBE status, and may be privatised include:

- Norfolk Electricity
- Philatelic Bureau
- Airport
- Water Assurance
- Waste Management
- Museums.

4.2.2 Public service reform

The concept of microeconomic reform also extends to the Norfolk Island public service, and the Norfolk Island legislature. An inefficient public service, through the drain it places on private sector income, acts as a constraint to growth. A recent review of the public service that assessed performance

³⁴ Megginson, W.L. and Netter, J.M. (2001) "From State to Market: A Survey of Empirical Studies on Privatization", *Journal of Economic Literature*, Vol. 39, No. 2, pp. 321-389.

³⁵ Megginson, W.L. and Netter, J.M. (2001).

against the Business Excellence Framework was highly critical of the Norfolk Island public service.³⁶

Reforms to the public service on the mainland, starting with reforms in the early 1980s, have been shown to be broadly beneficial.³⁷ Although there are alternative views about the success of the public service reform program of the Commonwealth, and evidence that in some specific instances reforms were not as successful as hoped.³⁸

The failure of the Norfolk Island government to adopt a program of public sector reform along the lines of the Commonwealth Financial Management Improvement Program acts as a constraint to the effective operation of government, and hence is a constraint to growth. Empirical evidence in support of the findings reported in the public administration literature can be found in the negative relationship between economic growth and the size of government consumption.³⁹

The extent of obsolete stock held by the Norfolk Island public service is evidence of inefficient practice in procurement. The cost of such inefficient and wasteful practices is ultimately passed through to Norfolk Island residents in the form of higher taxes and charges, which in turn work to reduce economic growth.

4.2.3 Funding government service delivery

The Norfolk Island government plays an essential role in service provision, and will continue to do so into the future. It is therefore appropriate for the Norfolk Island government to raise revenue. The main sources of revenue for the Norfolk Island government are a broadly based consumption tax and revenue from GBEs. For the 2011/12 financial year the Norfolk Island goods and service tax is expected to raise around \$7.3M and the aggregate surplus from GBEs \$4.8M.⁴⁰

³⁶ Australian Continuous Improvement Group (2011) Norfolk Island Public Service Review, Report prepared for the Department of Regional Australia, Regional Development and Local Government.

³⁷ Keating, M. (1989) "Quo Vadis? Challenges of Public Administration", *Australian Journal of Public Administration*, Vol. 48, No. 2, pp. 123-131.

³⁸ Johnston J. (1998) "Strategy, Planning, Leadership, and the Financial Management Improvement Plan: The Australian Public Service 1983 to 1996", *Public Productivity & Management Review*, Vol. 21, No. 4, pp. 352-368.

³⁹ Sala-i-Martin, X., et al. (2004) "Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach", *American Economic Review*, Vol. 94, No. 4, pp. 813-835.

⁴⁰ Values are based on the mid-year budget predictions of the Norfolk Island government.

The reliance of the Norfolk Island government on monopoly rent income from GBEs works as a constraint to economic development. For example, the lack of competition in the alcohol market restricts the ability of restaurants to develop diverse, well priced wine lists to match the tastes of visitors. Similarly, the reliance on revenue from Norfolk Telecom has meant that Norfolk Island residents have been prevented from accessing an ADSL2 network, and that competition for mobile services has been restricted.⁴¹

In the case of Norfolk Telecom the reason it has frustrated the attempts of the private sector to provide competitive alternative services is the belief by Norfolk Telecom management that the role of Norfolk Telecom is to provide a financial return to government to fund other government services.⁴²

Consumption taxes are one of the more efficient approaches to taxation, but taxation of the immobile factor of production (land) has the lowest distortionary effect on the economy.⁴³ It should be noted that the GST is also less equitable than almost all conceivable types of recurrent land tax regimes that could be introduced.⁴⁴

In terms of their distortionary impacts the most damaging taxes through to the least damaging taxes are:

- Company tax
- Income tax
- Consumption tax
- Recurrent taxes on immovable property.⁴⁵

The impact of relying on monopoly rent income from direct service provision by GBEs under a protected legislative framework is not a scenario considered in tax efficiency comparisons, but a large role for government in the economy is clearly negative for economic growth.⁴⁶

It is also worth noting previous advice provided by the Commonwealth regarding taxation options on Norfolk Island, and the use of a recurrent tax on land to raise revenue:

⁴¹ Personal communication, Riki Christian, Norfolk Island Data Services, 2 December 2011.

⁴² Discussion with Kim Davies, Manager, Norfolk Telecom, held on 31 October 2011.

⁴³ OECD (2009).

⁴⁴ Treasury (2003) Taxation Options for Norfolk Island, Discussion Paper, Commonwealth Government: Canberra.

⁴⁵ OECD (2009).

⁴⁶ Sala-i-Martin, X., et al. (2004).

Land taxation would provide the Norfolk Island economy with a stable and potential[ly] growing source of revenue, particularly if rates were adjusted regularly based on some uplift factor. Because land is immobile it would be difficult for land tax to be avoided. Also, it has been shown from experience in mainland Australia that land taxation does have long term ability to raise revenue. The tax has had the least impact on the level of economic output.⁴⁷

4.2.4 Exposure to losses

The involvement of the Norfolk Island government in commercial activities has resulted in a serious deterioration of the financial position of the Norfolk Island government. Such losses in turn restrict the ability of the Norfolk Island government to invest in enabling infrastructure, and hence restrict development on Norfolk Island.

4.2.5 Actions to remove constraints

The single most important action to promote economic growth and investment on Norfolk Island is the for the Norfolk Island government to implement the economic reform program outlined in the *Competition Principles Agreement 1995*.

This will then necessitate:

- The Norfolk Island government divesting itself of most trading enterprises
 - The steps necessary for a successful divestment program are:
 - ... Establishing a structure for privatisations, including appropriate legislation
 - ... Providing adequate financial performance records for GBEs
 - ... Introduction of new regulatory measures
 - ... Clarification of the role between the firm and the government in the post privatisation environment⁴⁸
 - For small to medium GBEs there is evidence that delaying privatisation so that reforms to the organisation can be made prior to privatisation does not yield additional benefits,⁴⁹ hence there is no need to delay significantly any privatisation program

⁴⁷ Treasury (2003), p. 31.

⁴⁸ Gibbon, H. (1997) “A Seller’s Manual: Guidelines for Selling State-Owned Enterprises”, Privatisation Yearbook, Privatisation International, pp. 16-26, cited in Megginson, W.L. and Netter, J.M. (2001).

⁴⁹ López-de-Silanes, F. (1997) “Determinants of Privatization Prices”, *Quarterly Journal of Economics*, Vol. 112, No. 4, pp. 965-1025.

- Maximising the number of bidders is essential to maximising the price received for privatised assets,⁵⁰ hence immigration policy reform is required prior to privatisation
- It is often necessary to bring in new entrepreneurial management to the privatised firm,⁵¹ hence the need for immigration policy reform to make it easier to move permanently to Norfolk Island
- Introducing a corporatised structure for any remaining GBEs to ensure that the full range of charges and taxes are levied against GBEs so that they do not accrue any unfair competitive advantage
- Legislative reform to remove monopoly protections in areas of government operation such as telecoms and insurance, as well as the removal of other anti-competitive measures such as accommodation licence restrictions
- Establishing a regulatory framework for pricing oversight, possibly via a service delivery arrangement with an established regulator, such as IPART.⁵²

It will also be necessary to fundamentally reform taxation arrangements on Norfolk Island because GBEs will no longer be a source of revenue. In this regard the following points can be noted:

- Taxing the immovable factor (land) is generally the least distortonary way of generating revenue,⁵³ and land tax is relatively modest on Norfolk Island⁵⁴
- Alcohol excise tax is currently value based (20 percent wine, 25 percent beer, and 30 percent spirits) not alcohol content based, and this is not consistent with harm minimisation principles, or social welfare maximisation principles.⁵⁵

The introduction of formal efficiency dividend targets for all public service areas of at least one percent per annum in real terms, except cultural, social, and very small departments, and the introduction of incentives through partial retention of savings from better resource management.

⁵⁰ Bulow, J. and Klemperer, P. (1996) "Auctions Versus Negotiations", *American Economic Review*, Vol. 86, No. 1, pp. 180-194.

⁵¹ Megginson, W.L. and Netter, J.M. (2001).

⁵² The matter of IPART acting as regulator for Norfolk Island was raised at the 30 November 2011 Tribunal meeting, and the Tribunal has indicated that it will provide a formal response if a formal request to undertake fee for service work is made. For fee for service work IPART legislation requires that the Tribunal receive direction from the NSW Premier.

⁵³ OECD (2009).

⁵⁴ Draft calculations prepared by the Grants Commission for the 2009-10 financial year indicate per capita revenue raising capacity on Norfolk Island from land taxes as \$505 pa, and actual per capita land tax revenue as \$91 pa.

⁵⁵ Fogarty, J.J. (2012) "Optimal Alcohol Taxes for Australia", *Forum for Health Economics & Policy*, forthcoming.

The introduction of a program similar to the Financial Management Improvement Program introduced at the Commonwealth level in 1984, with appropriate consideration to the factors, such as skilled leadership in strategic planning, that are likely to impact the success of such programs.

4.3 The openness of the economy

Current immigration policy acts as a significant constraint on economic development through the way it makes it difficult to move to, and invest in, Norfolk Island. The policy is also intertwined with a protectionist culture for business operations.

4.3.1 Relationship between population and economic growth

The relationship between total output and the (working age) population is relatively straight forward. An increase in the population increases the stock of one of the key factors of production, labour, and hence results in an increase in total output. The relationship between growth in per capita income and population growth, especially in terms of determining causation rather than correlation, is less straight forward.⁵⁶ As such, before discussing the specific impacts of current migration policy it is worth setting out a framework through which to evaluate the effect of current Norfolk Island immigration policy.

In traditional primary production activities, increases in the population can work to decrease per capita income through reducing the size of land holdings below the minimum efficient size. In the context of the third settlement of Norfolk Island, this process can most easily be seen in the reduction in the size of the original 157 lots of approximately 20 hectares granted in 1856.⁵⁷ In contrast to the negative impact population growth can have on per capita income derived from primary production, population growth has a positive effect on all other sectors of the economy. This is due to the incentive population growth gives to human capital investment, and the ability for greater specialisation as the population grows. The impact of population growth on per capita income is therefore ambiguous, and consideration must be given to the relative size of the different sectors of the economy.⁵⁸

In the case of Norfolk Island, the small size of the primary production sector, and the dominate role of the tourism sector, strongly suggest that the positive

⁵⁶ Wong, H.T. and Furuoka, F. (2005) "The Relationship between Population and Economic Growth in Asian Economies", *ASEAN Economic Bulletin*, Vol. 22, No. 3, pp. 314-330.

⁵⁷ BAE (1978) *The Prospects for Rural Development on Norfolk Island*, Occasional Paper No. 46, Bureau of Agricultural Economics, Canberra.

⁵⁸ Becker, G.S., Glaeser, E.L. and Murphy, K.M. (1999) "Population and Economic Growth", *American Economic Review, Papers and Proceedings*, Vol. 89, No. 2, pp. 145-149.

impacts of population growth will significantly outweigh any potential negative impacts in primary production: population growth is therefore positive for per capita income growth in the Norfolk Island context.

4.3.2 Endogenous and semi-endogenous growth models

It should also be understood that in the long run, across all economies, it is innovation that drives growth, and hence increases in living standards. Current immigration policy works in a number of ways to limit innovation.

The rate of innovation depends, in part, on the number of individuals in the population. Other factors constant, an increase in the number of individuals increases the rate of innovation, and hence increases the growth rate.⁵⁹ By making it difficult to move to Norfolk Island, current immigration policy works to limit growth.

The immigration policy requirement to purchase an existing business rather than allowing the immediate establishment of a new business works to slow the introduction of new businesses and business ideas to Norfolk Island, and hence slows innovation and growth. This regulation is also part of a protectionist business culture that is negative for economic growth.

Through attracting some people that are largely interested in retirement into business ownership, Norfolk Island immigration policy also works to attract people that do not necessarily have the level of business acumen required to generate innovation in business practice.

4.3.3 Immigration policy and business costs

The relative price of investment is a fundamental driver of economic growth.⁶⁰ Immigration policy works to increase the effective price of business investment on Norfolk Island in a number of ways. The real price of investment entails the direct dollar cost of the investment, and the opportunity cost value of the time required of those seeking to establish a business. Current immigration policy works to raise the opportunity cost element of project investments, and through the requirement to purchase an existing business, works to raise the investment price of new business projects.

Advertising costs associated with the Temporary Entry Permit system also work to raise business costs, and hence limit the funds available for business investment.

⁵⁹ Jones, C.I. (1995) "R&D-Based Models of Economic Growth", *Journal of Political Economy*, Vol. 103, No. 4, pp. 759-84.

⁶⁰ Sala-i-Martin, X., et al. (2004).

4.3.4 Actions

The funding agreement between the Commonwealth and the Norfolk Island government provides a framework for working towards removing those aspects of Norfolk Island immigration policy that constrain economic development. However, adopting the *Competition Principles Agreement 1995* would mean that immigration legislation, as with all Norfolk Island legislation, would have to demonstrate that it imposed no competition restrictions: it is clear that current immigration policy involves significant competition restrictions.

4.4 Infrastructure investment

Infrastructure investment is a core determinate of economic growth. The sustained low level of public infrastructure investment on Norfolk Island has acted as a constraint to economic development. Failure to invest in shipping access facilities has restricted the ability of the tourism industry to expand into servicing the cruise ship industry, and failure to appropriately provision for airport works puts the main economic activity on Norfolk Island at risk.

4.4.1 Infrastructure spending and output growth

Within a production function framework, output can be expressed as a function of labour, private capital, public capital, and multifactor productivity. A simple but robust specification of the relationship between output and inputs is the Cobb-Douglas production function specification, which can be written as:

$$Y(K_G, K_P, L) = AL^\alpha K_G^\beta K_P^\gamma,$$

where Y represents output, A represents multifactor productivity, L represents labour, K_G represents public capital, K_P represents private capital, α represents the labour output elasticity, β represents the public capital output elasticity, and γ represents the private capital output elasticity.⁶¹

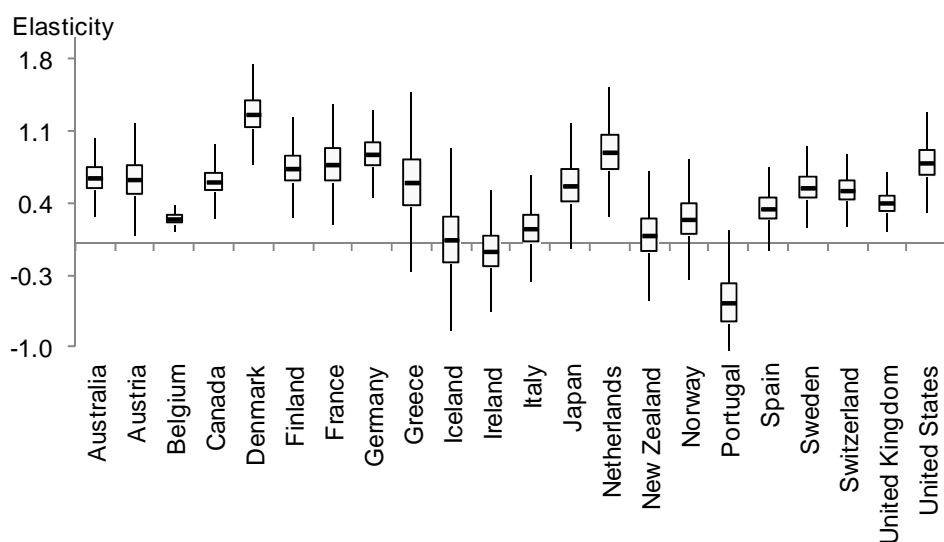
Using data covering the period 1960 to 2001, the public investment output elasticity for Australia has been estimated to be .65.⁶² This value can be interpreted as indicating that a one percent increase in public capital will raise output by .65 percent. There is some uncertainty surrounding this estimate,

⁶¹ Although the original specification did not distinguish between public and private capital, the separation of capital into component parts such as public capital and private capital, or information technology capital and other capital, is both common and uncontroversial.

⁶² Kamps, C. (2004) New Estimates of Government Net Capital Stocks for 22 OECD Countries 1960-2001, IMF Working Paper 04/67.

and so Figure 10 plots the point estimate for the Australian public investment output elasticity, along with estimates for 21 other OECD countries to provide some additional context. For each country in the figure, the solid line represents the public investment output elasticity point estimate; the box represents the point estimate plus and minus one half of one standard error; and the whiskers represent the full 95 percent confidence interval surrounding the point estimate. The clear message from the figure is that for Australia, the public capital output elasticity is positive, and that on average, increases in the stock of public capital are positive for economic growth.

Figure 10 **Public investment output elasticity estimates for OECD countries**



Data source: Kamps, C. (2004).

There has been significant research into whether there are benefits from public infrastructure investment above those that would be expected from increasing the capital stock, and much of this research has been summarised by the Organisation for Economic Cooperation and Development (OECD). Key findings of the OECD research review include: (i) that infrastructure investment can boost output by more than other types of investment; and (ii) that where the infrastructure base is low, spending on infrastructure can raise the long run growth rate of output by more than that implied by a larger capital stock.⁶³

In a Norfolk Island context, it is relatively easy to see how investment in infrastructure that would improve shipping access would provide benefits in excess of those due simply to increasing the capital stock. For example, allowing for containerised freight to be delivered would allow freight costs to

⁶³ OECD, (2009) *Economic Policy Reforms: Going for Growth: 2009*, OECD, Paris.

be reduced, and this would have widespread flow-on benefits across many industries.⁶⁴ It would also allow for competition to be introduced into a range of areas that are currently monopoly operations on Norfolk Island, such as bulk fuel transportation. Finally, investment in shipping access infrastructure would facilitate the development of tourism services that target cruise ships.⁶⁵

4.4.2 Reasons for low infrastructure spending

Before identifying actions that will work to raise the level of infrastructure spending, it is necessary to identify the reasons why infrastructure spending has been so low on Norfolk Island. The following reasons have been identified as contributing to a low level of infrastructure spending on Norfolk Island:

- A tax base that is insufficient to support the required level of infrastructure investment
 - This relates to both the size of the economy and the nature of the taxes levied on Norfolk Island
- National fiscal equalisation arrangements that exclude Norfolk Island from transfer payments
- Poor asset management plan development by the Norfolk Island government
- Limited access to Commonwealth grant programs, and a lack of capacity to develop competitive grant proposals where Norfolk Island is eligible for grant funding (see Box 2)
- A taxation system where GBEs provide revenue to government rather than accumulating funds for capital works
- The lack of an appropriate regulatory framework that would provide an incentive for infrastructure investment, in terms of an agreed rate of return on the regulatory asset base value
- The Commonwealth and Norfolk Island governments have yet to agree to a management approach -- with associated funding commitments -- consistent with that required to reflect KAVAH's recent world heritage listing
- All the aspects that work to draw on Norfolk Island government funds and detract from the level of funds available for infrastructure investment, including:
 - Tender arrangements where it is not clear that the government is getting value for money. This has an obvious direct effect in

⁶⁴ Personal Communication, Norfolk Island Business Group, 11 November 2011.

⁶⁵ Although in the case of shipping access facilities on Norfolk Island many of the benefits seem obvious, all infrastructure projects must still be subject to appropriate cost-benefit analysis to ensure that this is really the case.

- infrastructure provision and an indirect effect through the reduction in total available funds
- High levels of recurrent expenditure on public service staff
- The cost of the government function, in terms of the size of the legislature
- Poor performing Government Business Enterprises
- Recurrent expenditure commitments in areas where cost growth has been strong, such as education and health
- Historically, poor control of GBE spending so that it was possible for a particular GBE to overspend substantially.

Box 2 Survey of grant eligibility

Whilst organisations on Norfolk Island have had success in accessing funding grants from Australian funding bodies, they have primarily been confined to small values for community groups and others such as the Norfolk Island Rescue Squad Incorporated.

Most eligibility criteria for government funds include specific requirements which render organisations on Norfolk Island ineligible for funding.

A review of the major funding programs for key Commonwealth agencies in the area of health, economic development, infrastructure, and tourism and eligibility criteria is presented below. It should be noted that some funding programs run for a limited time only and guidelines change from year to year. The following analysis was undertaken on funding programs and their eligibility criteria that were current as at December 2011.

Department of Employment, Education and Workplace Relations

The Department of Employment, Education and Workplace Relations administers key grants for education through initiatives such as:

- the Digital Education Revolution program which builds on the National Broadband Network to deliver information and communication technology in Australian schools. The major funding element of this program is the National Secondary School Computer Fund
- the Building the Education Revolution fund. Through the BER program, the Australian Government is investing \$16.2 billion over 3 years to fund infrastructure projects at eligible primary and secondary schools
- Trade Training Centres in Schools Program. The fund provides \$2.5 billion over 10 years from 2008 to enable secondary schools to seek funding for Trade Training Centres (TTC). The program allows secondary students from years 9 – 12 to access vocational education and training through TTCs.

The guidelines for each of these funding programs state that to be eligible, schools must be in receipt of General Recurrent Grant Funding under the *Schools Assistance Act 2008* or be a member of a Block Grant Authority (BGA) also under the Act. The Norfolk Island Central School does not meet either of these criteria and is therefore ineligible for funding under programs offered by DEEWR.

The *Schools Assistance Act 2008* gives discretion to the Minister to approve funding, however it is understood that legislative change would be required to make Norfolk Island Central School eligible on a regular basis.

Department of Regional Development, Regional Australia and Local Government

The Department of Regional Development, Regional Australia and Local Government administers the Regional Development Australia Fund. Funding is available for projects that support the infrastructure needs -- and will enhance the economic and community development -- of Australia's regions. Examples of projects that can be funded include road related infrastructure projects; community projects for facilities such as child care centres and sporting facilities; and general enabling economic infrastructure projects that support local regional economies. Funding is available for projects valued at between \$500,000 and \$25 million.

Local government bodies and incorporated not-for-profit organisations are eligible to apply. The Norfolk Island government is not considered a local government and is ineligible to apply for funding. The not-for-profit organisations do not meet the turnover criteria for eligibility.

It is understood that legislative change is not required for the Norfolk Island government to be deemed an eligible entity.

Department of Health and Ageing

The Department of Health administers a number of programs. An example is the National Rural and Remote Health Infrastructure Program. This program aims to improve access to health services by providing funding to rural and remote communities where the lack of infrastructure is a barrier to the establishment of new, or the enhancement of existing health services. A maximum of \$500,000 (GST exclusive) is available under the NRRHIP for eligible applicants seeking to provide services in rural and remote communities in the Australian Standard Geographical Classification (ASGC) Remoteness Areas (RA) 2 to 5 with a population of up to 20,000. Norfolk Island is considered an offshore location and is therefore not eligible for grants.

In order to be included in the ASGC RA listing, Norfolk Island would need to be included in the Australian Bureau of Statistics Census. The Census is administered under the *Census and Statistics Act 1905*. Section 2 of the Act indicates that Christmas Island and the Cocos (Keeling) Islands are the only external Territories prescribed under the Act.

Legislative change would be required for Norfolk Island to become a prescribed external Territory under the Act.

Department of Resources, Energy and Tourism

The Department of Resources, Energy and Tourism administers the TQUAL Grants Scheme. This is a competitive merit based grants program aimed at stimulating sustainable growth in the Australian tourism industry. The Government has allocated \$40 million over 4 years for TQUAL Grants. Advice from the Department is that projects on Norfolk Island are ineligible because the project must be located in Australia and be registered for the Australian goods and services tax.

The program guidelines are not based on legislation and so it would appear that they could be changed at the discretion of the Minister to meet relevant policy objectives of the portfolio.

4.4.3 Actions to promote infrastructure investment

The following actions will work to increase the level of infrastructure investment on Norfolk Island:

- Reform of taxation arrangements on Norfolk Island to provide a higher tax base, focused on taxes that involve the least distortion
- The inclusion of Norfolk Island in fiscal equalisation arrangements to increase the Norfolk Island government revenue base
- Direct funding of infrastructure by the Department of Regional Australia, Regional Development and Local Government in a manner similar to that used in the Indian Ocean External Territories
- Changing the criteria for access to Commonwealth grant programs so that Norfolk Island is eligible for all relevant Commonwealth grant programs, and the provision of support for grant preparation
 - With respect to grant access, emphasis should be placed on those funds that provide the Minister with discretion over decisions. Examples of this type of fund include the Regional Development Australia and Better Regions Fund administered by the Department for Regional Australia, Regional Development and Local Government. Grants that require the amendment of existing legislation such as the *Census and Statistics Act 1905* and the *Schools Assistance Act 2008* should be pursued over the longer term.
- The introduction of a regulatory framework based on the *Competition Principles Agreement 1995* that provides an incentive for an efficient level of infrastructure investment and the divestment of GBEs
- Improved capital budgeting and asset management planning processes by the Norfolk Island government, including an asset revaluation exercise
- Actions that work to reduce the level of recurrent spending by the Norfolk Island government
 - The introduction of an efficiency divided policy for most sections within the public service
 - A reduction in the number of elected members
 - Ensuring tender processes are subject to external scrutiny
 - Privatisation program for GBEs
- Limiting the extent to which the Norfolk Island government is responsible for high growth cost areas such as health services.

4.5 Human capital formation

Economic output is a function of the quantity of labour and capital, and the quality of these factors. Improvements in either the quality or quantity of inputs increase economic output.

Individual human capital formation can take place through: on the job learning, through apprenticeship programs or informal learning by doing; formal structured instruction processes, such as secondary school education, vocational education and training, and higher education; and outreach programs such as agricultural extension workshops or Business Enterprise Centre seminars.

4.5.1 Human capital and economic growth

At the most basic level, human capital formation simply means growth in worker knowledge and skill level, measured as worker effectiveness. Worker effectiveness in turn depends on the level of educational attainment, the cumulative stock of learning through training, job specific and general experience, and firm level specific programs that might engage with workers to raise their commitment and effort level at work.⁶⁶

There is a substantial literature that links productivity growth to human capital formation, but some debate about whether it is accumulation or the level that is important.⁶⁷ There is however substantial evidence that growth in skill levels contributes to productivity growth,^{68, 69} and recent modelling has also shown that increases in the proportion of people with qualifications, and the average level of people's qualifications, raises productivity.⁷⁰

Although human capital formation is much broader than just educational attainment, Figure 11 is illustrative in that it shows that median weekly earnings, which can be viewed as a proxy for worker productivity, are positively correlated with the level of educational attainment.

⁶⁶ Laplagne, P. and Bensted, L. (1999) The Role of Training and Innovation in Workplace Performance, Productivity Commission Staff Research Paper, Canberra.

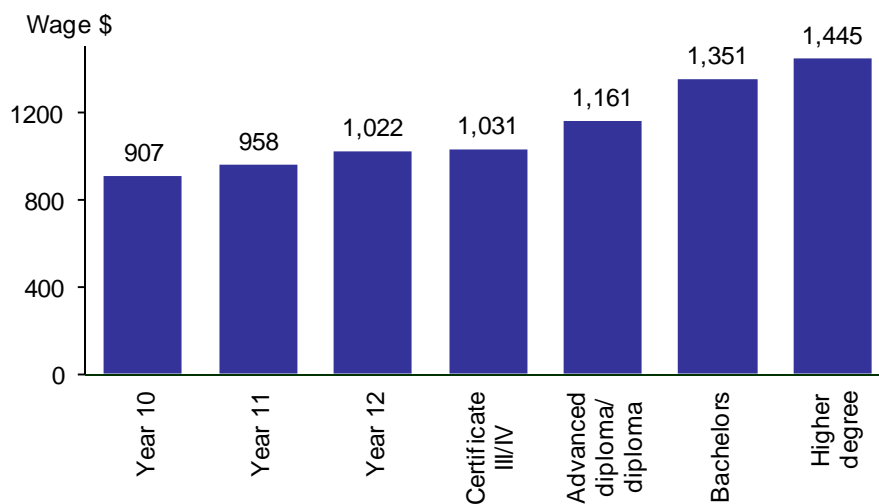
⁶⁷ Parham, D. (2004) "Sources of Australia's Productivity Revival, Economic Record, Vol. 80, No. 249, p. 51, pp. 239-257.

⁶⁸ Parham, D. (2004).

⁶⁹ Barro, R.J. (1991) "Economic Growth in a Cross Section of Countries, Quarterly Journal of Economics, Vol. 106, No. 2, pp. 407-443.

⁷⁰ Productivity Commission (2006) Potential Benefits of the National Reform Agenda, Report to the Council of Australian Governments, Canberra.

Figure 11 **Median weekly earnings by highest qualification: Australia**



Data source: ABS (2009) Education and Training Experience, Catalogue No. 6278.0, Australian Bureau of Statistics: Canberra.

The average skill level in Australia is rising, with the share of the working age population reporting a Certificate III/IV qualification or above as their highest non-school qualification increasing by ten percentage points between 2001 and 2009 to reach 53 percent.⁷¹ Relative to the mainland, the proportion of the population on Norfolk Island with Certificate III/IV and higher qualifications is relatively low.⁷²

The average skill level of the Norfolk Island public service has also been identified as relatively low.⁷³

Lack of access to vocational training also has more subtle effects that act as constraints to economic development. To a large extent, worker effort on the job is unobservable to management. One way that management can encourage worker commitment to the firm, and hence encourage higher levels of effort and effectiveness, is through subsidising worker participation in formal education and training programs. The lack of reasonably priced opportunities on Norfolk Island for employers to enrol staff in vocational training programs therefore limits the options available to managers to encourage worker effort. In the tourism industry, which is the main industry on Norfolk Island, visitor interactions with employees are key to the overall tourism experience; hence actions that promote worker effort are relatively valuable.

⁷¹ ABS (2009) Education and Training Experience, Catalogue No. 6278.0, Australian Bureau of Statistics: Canberra..

⁷² Deloitte Access Economics (2011).

⁷³ Australian Continuous Improvement Group (2011).

Trades training

Whilst employers on Norfolk Island are willing to take on apprentices, and have a history of doing so, the cost of sending an apprentice to the mainland for the block release component of their apprenticeship is high. This cost is in the form of air fares, accommodation on the mainland, and living expenses. Difficulty understanding how to enrol an apprentice in the block release program on the mainland was also identified as an issue.

In terms of support for trades training, it can be noted that residents on Lord Howe Island who are required to attend block release training on the mainland are entitled to a \$28 per day accommodation allowance, a travel allowance for transport to and from airports, and a return economy airfare from Lord Howe Island to Sydney.⁷⁴

Agricultural sector skills

The largest constraint to human capital formation for those working in the agricultural sector is the lack of access to traditional agricultural extension services. On the mainland, agricultural extension services are supported by industry, governments, and universities. The lack of access to such services manifests itself in practical ways that limit productivity, such as an inability to send soil samples to a laboratory for analysis; the inability to import animal breeding stock from Australia; and the inability to import disease free root stock for orchard activities.

These limits to productivity in turn impact the local community through limiting the access to fresh produce, and also impact the quality of the tourism product that can be offered on Norfolk Island.

Business sector skills

Business Enterprise Centres offer support to micro and small businesses. The main constraint to human capital development for small business on Norfolk Island is the lack of access to services of the kind provided by Business Enterprise Centres, and lack of access to adult education services.

Online learning

The quality of the satellite internet service was raised as a constraint to the development of online learning.

⁷⁴ NSW Government (undated) Travel and Accommodation Assistance for Apprentices and Trainees in NSW, Education & Training, State Training Services, NSW Government, available: www.training.nsw.gov.au/individuals/apprenticeships_traineeships [accessed: 25 November 2011].

4.5.2 Current training systems

TAFE NSW runs VET courses for Norfolk Island through several programs:

- Vocational education and training is delivered by Norfolk Island Central School on behalf of the NSW Department of Education and Communities North Coast Region Regional Training Organisation to year 11 and 12 students as HSC subjects. Current courses include courses to Certificate II level in hospitality and construction and to AQF Certificate III level in Information Technology. There is capability to expand the range of training provided
- The Open Training and Education Network (OTEN) is a business unit of TAFE NSW - Western Sydney Institute, providing specialist distance and online education and training services. Currently there is one school-based hairdressing apprentice undertaking training through TAFE NSW - New England Institute and two school students studying Children's Services through the TAFE NSW Open Training and Education Network.

No post school qualifications are offered on Norfolk Island.

4.5.3 Summary

In summary, a core constraint to economic development on Norfolk Island is the lack of access to reasonably priced adult education and vocational training opportunities.

The core constraint to skill development in the trades is the high cost of sending an apprentice to the mainland for the block release component of their apprenticeship, and the difficulty employers have in understanding how to interact with relevant organisations on the mainland.

The core constraint to human capital formation in the agricultural sector is the lack of access to agricultural extension activities.

The core constraint to skill development in the small business sector is the lack of access to small business support services.

4.5.4 How can the constraint of training facilities on Norfolk Island be removed?

There are two ways in which additional vocational training could be provided on Norfolk Island. The first is the creation of a registered training organisation on Norfolk Island and the second involves altering the funding arrangements for the Norfolk Island Central School.

Registered training organisation (RTO)

Vocational Education and Training in NSW is administered by State Training Services which is part of the NSW Department of Education and Communities. State Training Services' goal is to develop and promote a quality vocational education and training system through the Training Market. RTOs deliver vocational education and training and/or assessment services in NSW. RTOs can include TAFE colleges, private and community training organisations, schools, higher education institutions and some large employers.

The formal training that RTOs provide is paid for by the NSW Government through State Training Services for most apprentices and new entrant trainees. Employers must pay for the recognition, training and assessment services delivered by RTOs to existing worker trainees.

Currently, the NSW Department of Education and Communities-North Coast Region is an RTO that delivers VET to Norfolk Island. The Norfolk Island Central School is the delivery site for this RTO.

NSW Department of Education and Communities-North Coast Region RTO is approved to provide Certificate I and II courses in a range of industries including agriculture, business, construction, information technology, retail and hospitality. It is also approved to deliver Certificate III courses in live production, theatre and events, venues and events, and information technology. However, the RTO currently delivers Certificate I and II only to Norfolk Island.

How an RTO can access funded training

A Registered Training Organisation would need to have a contract with the Approved Providers List (APL) at the NSW Department of Education and Communities. The Department purchases training from training organisations on the APL under various NSW Training Market programs offered by the NSW Department of Education and Communities.

The Australian Skills Quality Authority (ASQA) is a newly formed national body which is responsible for registering training organisations and accrediting courses. The *National Vocational Education and Training Regulator Act 2011* has established a new approach to national regulation of the vocational education and training sector in Australia. This Act applies to Norfolk Island.

ASQA's functions include:

- registering training providers as 'registered training organisations' (RTOs)
- recommending RTOs as CRICOS providers—providers that can enrol international students

- accrediting vocational education and training (VET) courses
- ensuring that RTOs comply with the conditions and standards for registration, including by carrying out compliance audits.

There are also standards that apply to training facilities that ensure students have access to the proper facilities to enable them to complete their course. These are listed in the resources and equipment requirements checklist of each course.

Norfolk Island RTO

Norfolk Island could attract a registered training organisation or could register the Norfolk Island Central School as a registered training organisation.

This would have the benefit of allowing the introduction of Certificate III and IV training on Norfolk Island. This, in turn, would encourage young people to remain on Norfolk Island, at least for the duration of their study.

There are however issues with this approach. In the past, RTOs have been established on Norfolk Island but their businesses have failed due to the small size of the market. This could be partially mitigated by introducing mandatory training in certain fields, including basic administration and occupational health and safety, which would guarantee an RTO a certain level of enrolments. Other issues include the cost of developing facilities that meet VET training standards, and the effort in attracting an RTO to Norfolk Island.

Norfolk Island Central School

Norfolk Island Central School currently delivers AQF Certificate II courses as a delivery site for NSW Department of Education and Communities North Coast Region RTO. These courses are taught by teachers employed by the school. There is an option to offer additional courses through the school including to students not enrolled at the school (such as adult education classes) and for day and night time learning.

The school currently operates under a system where the Norfolk Island government determines the quantity of teachers employed by the school. As such, if the school were to attract additional enrolments (school students and adults), there would be no additional funding. On the mainland, the number of teachers and funding is generally determined by the number of enrolments at the school. If Norfolk Island were able to adopt this type of school funding system, it would mean that the school could attract additional enrolments and be assured of additional funds to employ the required additional staff. These teachers would also be able to teach regular classes in the school as long as the combined workload did not exceed their normal working hours. It is

understood that all additional teachers would need to be employed on a full time basis.

Under the current funding system, if the school were to offer classes outside of school hours, teachers would need to be paid an additional amount and would have to work hours in excess of their normal working day. The cost of service would then be passed on to students. With a revised funding model the cost to students would be minimal, as the majority of funding would be provided through the school funding model.

This system would apply to Certificate I, II and some Certificate III courses, and would rely on attracting teaching staff with accreditation to teach at these levels. It would however assist in targeting adult education on Norfolk Island, particularly as it relates to computer and business skills, including MYOB, introduction to Excel pivot tables and macros, advanced Excel courses, template creation in Word etc., hospitality, and heritage. This would be an immediate course of action and it is possible to have such a system in place as early as April 2012, assuming no obstacles to implementation, including the Norfolk Island government agreeing to and implementing a revised funding model.

The Norfolk Island government would also be responsible for contributing to the process of determining the programs to be offered, and committing to enrol fixed numbers of administration staff in courses each year.

Other Certificate III and all Certificate IV courses could be taught at the school, to both school students and adult students by visiting TAFE staff. These courses could be offered on an ad hoc basis depending on the level of enrolments.

Expansion of adult education services through the Norfolk Island Central School is the recommended approach as it allows an immediate response and avoids the costs associated with registering the school as an RTO.

The action required is to allow the number of teachers at Norfolk Island Central School to be determined by the total level of enrolments.

School management would be responsible for implementation, co-ordination of teaching responsibilities, and all operational matters.

4.5.5 Other actions to remove constraints to human capital formation

An additional specified function at the school, to be reflected in the funding agreement, would be to provide an information service for anyone in the community looking to access online learning opportunities.

The progressive inclusion of qualification requirements, for example, a requirement that all tour operators working in the world heritage area have an appropriate qualification or become a quality accredited provider, by the Commonwealth and Norfolk Island governments, to encourage private sector up skilling.

In terms of trades training the main constraints identified were the cost of block release training, and the lack of ability to understand how to enrol in a mainland block release program.

The Norfolk Island government can remove this constraint by providing support to apprentices on the same basis as that available to residents on Lord Howe Island.

The administration of such a system should be included in a job description, and the operation of the system reported against annually. As private sector employer interaction with the system is likely to be periodic, it would be most appropriate for the administration of the Norfolk Island apprenticeship travel support system to lie with the Norfolk Island Central School.

The Norfolk Island government, through the hospital, currently offers a scholarship program for those accepted into nursing training on the mainland. In any given year it is possible that the scholarship offer will not be fully subscribed, but the program is an excellent initiative. The program should be continued.

The development of a service delivery agreement with an existing Business Enterprise Centre from regional New South Wales to provide small business support services would be the most effective way to assist small and mirco business skill development.

4.5.6 Agricultural extension

Human capital development and skills transfer in the agricultural sector would be most effectively progressed through the employment of an agricultural extension officer.

Role of NSW DPI

As part of a Commonwealth funded project it is understood that NSW DPI has provided extension services to Norfolk Island in the past. Two DPI officers including a plant pathologist assisted growers on Norfolk Island with the production of Kentia Palms.

Another model for the provision of extension services to Norfolk Island could be a service agreement similar to that with the NSW Department of Education

and Communities regarding the provision of primary and secondary education on Norfolk Island. NSW DPI has entered into this type of agreement to assist Lord Howe Island in the production of Kentia palms.

Approach

Discussions with NSW DPI suggested that a comprehensive approach would include:

- The provision of extension officers with a broad background in horticulture and livestock to visit Norfolk Island with the purpose of conducting an audit of the current agricultural system. The audit would include an analysis of:
 - Growing conditions – climate, soil conditions, rainfall etc.
 - Pests and diseases – identification of current pests and diseases
 - Infrastructure – access to water supplies, greenhouses
 - Products – horticulture, livestock and other products that are currently produced on the Island including varieties, their susceptibility to pests and diseases, their production rate and so on
- On completion of the audit, DPI extension officers with a particular specialisation such as citrus, beef cattle, etc. would then be assigned to review appropriate varieties for the growing conditions on Norfolk Island, as well as appropriate remediation strategies to assist in tackling pests and diseases, improving soil conditions and so on
- These officers would then work with land holders to develop a plan of implementation for each product. This plan would include identifying the appropriate varieties for each land holding
- Extension officers would provide follow up services for a period to provide support to growers and to track the performance of products.

Service agreement

The recommended approach is that NSW DPI enter into a service delivery agreement with the Commonwealth to provide ongoing extension services to Norfolk Island in the areas of horticulture and livestock.

Extension officers could serve on island for several months at a time to provide growers with intensive assistance. Extension officers would be housed in government provided housing and paid NSW wages. It is anticipated that this would be an ongoing arrangement with the number of man hours diminishing over time as growers on Norfolk Island improved their skills and knowledge.

Funding for the position should be shared across agricultural producers, the Norfolk Island government, and the Commonwealth government, although the share of costs paid by each organisation does not need to be equal.

4.6 Uncertainty and business investment

Business investment, and hence economic growth, has been constrained by a high degree of uncertainty surrounding the operating environment on Norfolk Island. A non-mathematical overview of the way uncertainty impacts business investment decisions is explained below.

4.6.1 Investment under uncertainty

Traditional project investment theory involved the consideration of Net Present Value (NPV) calculations, where uncertainty in future prices or investment returns was largely incorporated through the consideration of expected values in input costs and sales prices. The traditional approach was, however, found to be a poor explanation of much observed investment behaviour. In response to the poor explanatory power of existing business investment theory models, business theorists developed the real options approach to physical investment analysis. At its core, the real options approach borrows from the options pricing theory developed for the financial markets^{75,76} to explain observed business investment behaviour. The real options framework provides insights into the way uncertainty impacts business investment decisions on Norfolk Island.⁷⁷

When faced with the option to make a specific project investment in new plant or equipment a firm has two options: they can either invest, or wait for more information about future business conditions. New information about the future operating environment has value. Where there is uncertainty, part of the value attributable to waiting is due to the fact that if future operating conditions are very bad, the firm has been able to avoid making an unprofitable investment; whereas if business conditions are favourable, they can still take advantage of the positive operating environment. It is the option value of waiting, and the factors that affect the option value of waiting, that are of primary concern to understanding the way uncertainty impacts investment decisions on Norfolk Island.

⁷⁵ Merton, R.C. (1973) "Theory of Rational Option Pricing" Bell Journal of Economics and Management Science, Vol. 4, No. 1, pp. 141-183.

⁷⁶ Black, F. and Scholes, M. (1973) "The Pricing of Options and Corporate Liabilities", Journal of Political Economy, Vol. 81, No. 3, pp. 637-659.

⁷⁷ Dixit, A. and Pindyck, R.A. (1994) Investment Under Uncertainty, Princeton University Press.

As uncertainty increases, the potential range of positive outcomes that might be realised increases, and in theory there is no bound to the positive side of the return distribution. For example, the 20-year return to Fortescue Metals Group (and the forerunner company Allied Mining and Processing) to 2011 has been 248,625 percent.⁷⁸ The negative side of the return distribution is, however, capped at the total amount of investment that can be lost. The effect of the asymmetry in the return distribution means that as uncertainty increases, the value of the option to wait increases, and hence the number of investment projects undertaken decreases: uncertainty has a negative impact on business investment through increasing the option value of waiting.⁷⁹

The extent to which uncertainty has a negative impact on investment has been shown to be impacted by the extent of competition in the market. Where the market is monopolistic, the future opportunity to invest will always remain available to the monopoly firm, and hence the value of waiting when faced with uncertainty increases.⁸⁰ In a fully competitive market, delaying investment may allow a competitor firm to obtain a first mover advantage, and hence the value of waiting is diminished with a competitive market. At the limit of competition the option value of waiting can approach zero.⁸¹

The size of the Norfolk Island market, and its isolation from trade due to high transport costs, means that in general competition is relatively low. Further, the Norfolk Island government has established a legislative framework to ensure the existence of a monopoly position in a number of areas.⁸² This suggests that uncertainty in operating conditions on Norfolk Island is likely to have a relatively strong negative impact on business investment.

Average firm size is another factor that may act in a way that increases the negative impact of uncertainty on business investment in Norfolk Island. Although alternative models have been proposed, it is reasonable to argue that on average, the managerial expertise required to respond when economic conditions deteriorate increases with firm size. If this proposition is accepted, it then follows that the value of the option to wait increases as firm size

⁷⁸ McDuling, J. (2011) "Cult of Equity is Losing its Followers", *Australian Financial Review*, Wednesday 23 November, pp. 27-28.

⁷⁹ McDonald, R. and Siegel, D. (1986) "The Value of Waiting to Invest", *Quarterly Journal of Economics*, Vol. 101, No. 4, pp. 707-727.

⁸⁰ Caballero, R.J. (1991) "On the Sign of the Investment-Uncertainty Relationship", *American Economic Review*, Vol. 81, No. 1, pp. 279-288.

⁸¹ Grenadier, S.R. (2002) "Option Exercise Games: An Application to the Equilibrium Investment Strategies of Firms", *Review of Financial Studies*, Vol. 15, No. 3, pp. 691-721.

⁸² See, for example, the *Telecommunications Act 1992* and the *Lightridge Act 1961*.

decreases. As average firm size on Norfolk Island is relatively small, the effect of uncertainty on business investment is likely to be relatively strong.

For the Norfolk Island context, the mitigating factors to the general result that uncertainty is negative for investment, such as the option value created in terms of the possibility to expand following investment, and the option value of abandoning the investment via resale, are thought to have only marginal relevance. This is because the secondary market on Norfolk Island is limited, and hence investments have low irreversibility (low resale value); and the Norfolk Island market is small and isolated from trade with external markets, meaning that the option value of the opportunity to expand is limited.

4.6.2 Sources of business uncertainty on Norfolk Island

The main sources of business uncertainty that are in addition to those faced under normal operating conditions are as follows:

- Road map implementation and status
 - The road map process has created uncertainty regarding the future economic operating environment on Norfolk Island, in terms of what legislation will apply on Norfolk Island and when this legislation will come into effect. The issue of concern is not the imposition of new business costs, but the uncertainty of exactly what legislation will be extended to Norfolk Island and the timeline for the extension of that legislation
- Immigration policy of the Norfolk Island government
 - The current staged immigration process creates uncertainty regarding the right to stay on Norfolk Island for those that wish to permanently move to Norfolk Island, and for those wishing to work on Norfolk Island
- Drafting and application of Norfolk Island legislation
 - Incomplete legislation, and inconsistent application, or at least the perception that legislation is applied inconsistently, adds to business uncertainty; as does an inconsistent approach to tendering⁸³
- The accuracy of government statistics
 - The consultation process revealed extreme scepticism regarding official Norfolk Island government statistics, such as the Retail Price Index (RPI). The universal lack of faith in the official measure of price

⁸³ In private meetings specific examples were provided of inconsistent application of legislation and irregularities in tendering processes.

inflation has meant that businesses are operating in an environment of price uncertainty⁸⁴

- Policy direction consistency
 - Changes in Norfolk Island government taxation policy, such as the level of the GST, and changes in Norfolk Island government charges, such as workers compensation insurance charges, raise uncertainty. Again, it is important to emphasise that it is not the level of charges that are of concern, but the possibility that taxes and charges may change with little notice
- Government involvement in the economy
 - The extent to which the Norfolk Island government is involved in the economy adds to business uncertainty in several ways. First, the existence of large government owned businesses that provide a revenue stream to government that are not regulated means that it is uncertain whether the Norfolk Island government will enforce third party access arrangements where such arrangements will be detrimental to government revenue. The second way that government owned businesses create uncertainty is via the contingent liability that owning such business creates, and the consequent possibility of future tax increases to fund operating losses incurred by government entities
- Authority of the government to enter contracts that expose the community to large liabilities
 - The ability of the Norfolk Island government to enter contracts that potentially give rise to significant liabilities in turn raises the possibility of sudden future tax increases to meet contract obligations
- Air service reliability
 - The air service is an essential element of the tourism sector supply chain. The financial position of the airline over recent years has created uncertainty.

4.6.3 Actions to lower uncertainty

The following actions will work to lower the level of uncertainty on Norfolk Island:

- Articulation of a complete, staged, timeline for the extension of legislation to Norfolk Island that is both comprehensive and realistic
- The privatisation of most government owned businesses, and the corporatisation of the remaining operations

⁸⁴ A technical review of the RPI has revealed that the measure has been systematically under reporting inflation, and that the cumulative under reporting of price inflation is material.

- Further simplifications to the immigration process that would allow those with demonstrated financial capacity to support themselves to move to Norfolk Island
- Legislative reform to extend consumer protection against anti-competitive behaviour from monopoly operations
- The use of professional services for the periodic review of officially compiled Norfolk Island government statistics
- External regulation of utility prices and infrastructure access charges
- Development and publication of government forward budget projections for capital works
- Continued involvement of the Commonwealth to ensure appropriate air services to Norfolk Island into the future
- Restrictions on the nature of contracts that the Norfolk Island government can enter into such that the liability of the Norfolk Island community is limited to a level commensurate with the community's capacity to pay
- The extension, by the Commonwealth, of contracting arrangements that lower general operating risks
- Ensuring that all Norfolk Island government tendering and contracting arrangements are subject to external review.

4.7 Miscellaneous constraints

During the consultation process a number of specific issues were raised by members of the business community as constraints. These specific issues and the steps that can be taken to remove these constraints are discussed below.

4.7.1 Cost faced by tourists visiting Norfolk Island

Price plays a role in consumer choices, and so to the extent that the jurisdictional status of Norfolk Island works to increase the cost of a tourist visiting Norfolk Island, this works to constrain development of the tourism industry.

The findings of a systematic review of the air travel literature can be summarised as follows:

- Estimates of the own-price elasticity for business travellers tend to be between -0.8 and -0.2 , while estimates of the own-price elasticity for other travellers tend to be between -1.6 and -1.4
- Australian own-price elasticity estimates tend to be at the more elastic end of those found in the literature
- Reflecting the role of substitutes, the shorter the distance travelled the more elastic the demand, although in the case of Norfolk Island, where

there really is no practical substitute for air travel, this is not a feature of the market

- Demand is slowly becoming less responsive to price through time.⁸⁵

As can be seen from the sample information on airline ticket prices reported in Table 18, airline ticket prices to Norfolk Island are broadly consistent with the cost of travel to Fiji, but above that for domestic travel to regional locations. Travel to Norfolk Island is significantly cheaper than travel to Lord Howe Island.

In terms of specific charging, it is understood that the additional cost of air travel from an international airport rather than a domestic airport is approximately \$26 per segment.⁸⁶

Table 18 **Indicative QANTAS one airfare air travel costs**

Origin	Destination	Red e deal	Flexible fare
		(\$)	(\$)
Sydney	Norfolk Island	311	384
Sydney	Fiji	366	498
Sydney	Vanuatu	283	373
Sydney	Lord Howe Island	560	654
Brisbane	Norfolk Island	285	491
Brisbane	Fiji	263	291
Brisbane	Townsville	189	270
Melbourne	Norfolk Island	371	493
Melbourne	Fiji	338	366
Perth	Norfolk Island	517	602
Perth	Broome	239	499

Note: Flight prices are for a period two months in advance.

Data source: Qantas online booking [accessed 23 November 2011].

The cost of travel to non-Australian destinations also has an additional cost, in terms of travel insurance for medical expenses. Table 19 provides information on the cost of travel insurance for a one week visit to Norfolk Island, where it is important to note that the price of insurance increases with age.

⁸⁵ Brons, M., Pels, E., Nijkamp, P. and Rietveld, P. (2002) "Price Elasticities of Demand for Passenger Air Travel: A meta-analysis, *Journal of Air Transport Management*, Vol. 8, No. 3, pp. 165-175.

⁸⁶ Personal communication, Jeff Murdoch, Chief Executive Officer, Norfolk Air.

Table 19 **Travel insurance: Norfolk Island for one week**

Company	Age	Price (\$)
Suresave Insurance	65	77
Chi Insurance	65	92
QBE	Up to 50	51
Chi Insurance	Up to 50	71

Data source: Quotes obtained via phone on 1 December 2011.

It is possible to take out travel insurance for domestic travel, which costs between \$44 and \$46 for one week's cover.⁸⁷ However it is thought that it is the need for medical cover that is central to the decision to take out travel insurance, and that as medical cover is not required for domestic travel, the majority of domestic travellers do not take out this cover.

The academic literature suggests that actions to reduce the price of air travel to Norfolk Island will result in an increase in tourism arrivals to Norfolk Island and that this in turn will stimulate demand for tourism services on Norfolk Island, and hence economic activity. To the extent that the price of travel to Norfolk Island is above the level it would otherwise be if flights were from a domestic terminal, the price of travel to Norfolk Island acts as a constraint on the development of tourism services.

To the extent that there is a difference in the average travel insurance cost associated with travel to Norfolk Island versus other domestic travel destinations, this acts as a constraint on the development of tourism services.

It is difficult to calculate the additional tourist arrivals that might visit Norfolk Island if the price of travel to Norfolk Island was reduced by either: (i) the difference in cost between travel from a domestic airport and an international airport; or (ii) the additional costs associated with travel insurance when visiting Norfolk Island. However, to gain some insight into the additional tourism arrivals that would flow from cost reductions the following approach has been used.

A representative airfare price has been determined using a 75 percent weight to the red e-deal ticket price and a 25 percent weight to the flexible fare price, with destination weights reflecting current arrival information, and the insurance component reflecting the average insurance cost for a one week stay for a 65 year old visitor. This process gives a representative return airfare full

⁸⁷ Quotes obtained 5 December 2011 by (i) completing the Allianz online quote form, and (ii) selecting the travel insurance option on an airline ticket transaction through the QANTAS website.

price of \$793.⁸⁸ The cost reduction for moving to a domestic airport is then calculated as \$26 multiplied by two segments to give \$56, and the insurance travel cost reduction assumes 100 percent of travellers to Norfolk Island hold travel insurance while only 50 percent of domestic travellers hold travel insurance, which gives an average cost reduction of \$62 per trip. Using an own-price elasticity value of -1.4 implies that the cost reduction associated with shifting to domestic airport arrangements would generate around 2,200 additional visitors and that the insurance travel cost reduction if medical cover was not required for visitors to Norfolk Island would generate around 2,400 additional visitors.⁸⁹

In terms of the cost of making Norfolk Island a domestic destination for air travel, preliminary discussions indicate that the costs would outweigh the benefits.⁹⁰

It has not been possible to quantify the cost of providing health cover to visitors to Norfolk Island.

4.7.2 Norfolk Island specific legislation

To the extent that Norfolk Island legislation is different to mainland legislation, those businesses that have operations on both the mainland and Norfolk Island face additional costs in terms of legal advice and operational systems management. To the extent that this inconsistency adds to business costs, it acts as a constraint to business investment, and hence development.

To the extent that Norfolk Island legislation has not developed at the same pace as legislation on the mainland, this acts as a constraint to development. A specific example of this problem that was raised during the consultation process was the lack of strata title legislation, and the way that this has constrained the development of businesses servicing elderly residents on Norfolk Island.

⁸⁸ It can be noted that the reference airfare used in Norfolk Island Retail Price Index, which is a fully flexible airfare, is significantly greater than \$793. A higher reference airfare works to lower the implied percentage price fall involved, and hence also lowers the expected quantity response.

⁸⁹ To the extent that some travellers have the foresight to see that their travel to Norfolk Island allows them the possibility of duty free purchases, and that they value this potential saving when considering travel, the estimated additional visitor numbers following the introduction of domestic travel are an overstatement.

⁹⁰ Costs based on preliminary discussion with agencies, and benefits based on an additional 2,200 visitors staying for one week.

This constraint can be reduced by working through a staged process of streamlining Norfolk Island legislation to increase the consistency with mainland legislation.

4.7.3 Other issues raised as constraints

Lack of integration into global booking system for air travel

Norfolk Air was not integrated into any of the global booking systems, although the code share arrangement with QANTAS provided partial exposure to a global booking system. This acted to restrict the visibility of Norfolk Island as a travel destination, and hence constrained development of the tourism sector.

This constraint to tourism development can be removed by ensuring the air service carrier has access to a global booking system. All major carriers, including Air New Zealand, are part of at least one global booking system.

Tourism board skill level

The lack of capacity at the tourism board to develop and present a consistent marketing image, and enter into appropriate marketing contracts has limited the effectiveness of tourism promotion spending.

This constraint can be mitigated by developing a formal link with an appropriate body such as Tourism Australia to facilitate skill development of tourism board members, and by ensuring that all contracts entered into by the tourism board are subject to scrutiny and review.

The overall structure of the Tourism Board could also be revised so as to be more in line with those found on the mainland.

Limited fresh produce for tourist

The lack of cheap, readily available fresh produce has a negative impact on the tourism experience.

This constraint can be mitigated through the employment of an agricultural extension officer with responsibility for providing technical assistance to the local agricultural industry and facilitating the importation of disease free root stock.

Lack of signature facility

The lack of a signature resort facility, such as Capella Lodge on Lord Howe Island, acts a constraint to attracting high spending tourists.

A premium accommodation facility on Norfolk Island would assist in attracting a different type of tourist to Norfolk Island, and through the destination marketing associated with such a facility, increase the overall tourism level.

The probability of attracting an investment of this kind can be increased through relaxing immigration and investment controls, ensuring effective government service delivery and infrastructure provision, and the development of an investment climate on Norfolk Island that is conducive to private sector investment.

No MICE facility

There is no suitable facility to support expansion into the Meetings, Incentives, Conventions, and Exhibitions (MICE) tourism market.

The development of tourism facilities that cater to the MICE market is a private sector activity. Actions that promote business investment on Norfolk Island such as relaxing immigration and investment controls, ensuring effective government service delivery and infrastructure provision will work to increase the probability of such an investment taking place.

Ability to unload a greater proportion of cruise ship passengers

Norfolk Island is well situated to serve as the first stop on Pacific Island cruises originating from both New Zealand and the East Coast of Australia. For this reason, Carnival, the largest cruise operator in the region, have indicated that they would like to schedule Norfolk Island as a cruise stop destination.⁹¹ Current arrangements for disembarking passengers from cruise ships are, however, such that on a majority of occasions it is not possible to disembark passengers. The lack of an appropriate passenger disembarkation service acts as a constraint to the development of Norfolk Island as a cruise ship destination.

This constraint can be removed by attracting appropriate investment in shipping access facilities and shipping disembarkation services.

Base material for construction

Cascade quarry is currently the primary source of rock for Norfolk Island construction works, and there is thought to be between 2,000 and 4,000 tonnes

⁹¹ Personal communication, Mike Drake, Director, Marine Operations, Carnival, 5 December 2011.

of unscreened rock left at the site.⁹² This material, along with other available material is sufficient for several years of minimal construction, but is insufficient for the construction needs arising should there be significant road works projects, pier construction works, construction of a new hospital, or the work required to reseal the airport runway.

Imported rock base for construction would raise building costs significantly due to the freight and quarantine costs associated with importation. As a comparison point for costs it has been suggested that gravel imported to Lord Howe Island costs approximately \$540 per tonne whereas locally sourced gravel on Norfolk Island can be produced for approximately \$180 per tonne, inclusive of all taxes.⁹³

The Commonwealth and Norfolk Island governments have previously partnered to develop rock base resources on Norfolk Island. The basic framework of the arrangement involved the Commonwealth providing funds upfront for the required blasting, with royalty payments from rock sales then used to service the loan. This is an appropriate approach to use for the further development of the rock base required for construction on Norfolk Island. The most appropriate site for the development of rock base resources is Cascade cliff, and the upfront contribution required by the Commonwealth to be repaid through royalties on rock sales would be between \$1.5M and \$2M.⁹⁴

4.8 Survey feedback

As part of the survey people were able to provide feedback on what they saw as constraints to economic growth on Norfolk Island. The feedback obtained through the survey is outlined below.

4.8.1 Constraints to economic growth

The survey question asked was:

Do you agree with the following as constraints to Norfolk Island's economic growth?

and the responses to this question have been summarised in Table 20.

⁹² Personal communication, Jim Taverner, Director and Operations Manager Norfolk Industries, 5 December 2011.

⁹³ Personal communication, Jim Taverner, Director and Operations Manager Norfolk Industries, 5 December 2011.

⁹⁴ Lyell, A. (2009) Cascade Cliff: Feasibility of Extending the Original Cascade Cliff Safety Project, Report prepared for the Norfolk Island Administration.

Table 20 **Agree with perceived economic constraints (percent)**

	Yes	No	Not sure	Total
Immigration regime controls	75.8	15.2	9.1	100.0
The cost of air travel to Norfolk Island	90.9	3.0	6.1	100.0
Poor Government and Administrative quality and accountability	75.8	12.1	12.1	100.0
Poor tourism promotion	84.8	6.1	9.1	100.0
Quality of tourism product	51.5	36.4	12.1	100.0
Access to education and training services	69.7	18.2	12.1	100.0
Internet access	69.7	15.2	15.2	100.0
Cost of doing business	78.8	9.1	12.1	100.0
Customs and quarantine barriers	69.7	18.2	12.1	100.0

Note: n=33

Data source: ACIL Tasman survey.

Respondents were invited to discuss additional economic constraints or provide additional commentary on perceived constraints. Many respondents used this as an opportunity to provide detail on the issues they believed were underlying different constraints. Survey respondent feedback is summarised in Table 21.

Table 21 **Issues underlying the economic constraints**

Perceived constraint	Perceived underlying issues
Immigration regime controls	<ul style="list-style-type: none"> • Insufficient population to sustain business. • Inability of “outsiders” to reside on the Island without restrictions or owning a business. • Restrictive immigration policy is leading to negative population growth. • People can’t live on Norfolk without a business. Those that purchase a business often have no interest or experience. These businesses often run at a loss and then are sold/closed as the owner has obtained their immigration status. • Poorly managed process.
The cost of air travel to Norfolk Island	<ul style="list-style-type: none"> • Cost of airfares. • Aircraft scheduling.
Poor Government and Administrative quality and accountability	<ul style="list-style-type: none"> • Historical and cultural background influencing decision making process. • Disproportionately large number of public servants compared to number of businesses. • Not encouraging private investment. • Unable to fund and support community facilities. • Lack of experience. • Lack of funds to spend in infrastructure (new and maintenance). • Lack of necessary personnel to manage major and minor projects, e.g. engineers, project managers. • Poor knowledge and expertise in finance and monitoring of economic activity. • Close public and private scrutiny of elected members.

Perceived constraint	Perceived underlying issues
Poor tourism promotion	<ul style="list-style-type: none"> • Lack of spending on promotion. • Low levels of capital to invest in promotion. • Poor understanding of competitive advantages so not keep up with trends and expectations. • No accountability. • Exclusion from Tourism Australia promotions. • Low quality advertising and marketing. • Industry not accountable for its performance. • No representative in Australia. • Lack of funds for promotion doesn't allow Norfolk Island to compete with other destinations. • Tourist groups targeted are not spending money.
Quality of tourism product	<ul style="list-style-type: none"> • Lack of reinvestment has diminished the product. • Accommodation is out dated and not offering facilities that travellers expect.
Access to education and training services	<ul style="list-style-type: none"> • No broadband internet access limits ability to access offshore training and education. • Limited opportunities for apprenticeships.
Internet access	<ul style="list-style-type: none"> • High cost of internet. • Limited capacity.
Cost of doing business	<ul style="list-style-type: none"> • Delaying improvements due to poor profits. • High freight and ancillary costs. • High cost of electricity, food and fuel. • Restrictive trade practices. • No incentive for capital investment and erosion of capital base.
Customs and quarantine barriers	<ul style="list-style-type: none"> • Not able to fish in own waters. • Not being able to bring new farm stock to the island.
Others constraints	<ul style="list-style-type: none"> • Threat of taxes. • Lack of suitable wharf, particularly for freight and cruise ships. • Low minimum wage. • Implementation of constraints on business and laws from Australia. • Customs and quarantine restrictions. • GST on food and cost of medical treatment. • Reliance on a single industry – tourism. • Administration's role in influencing fuel prices.

Data source: ACIL Tasman survey.

4.8.2 Facilitating economic growth

The specific survey question was:

Do you agree with the following as actions to facilitate economic growth in Norfolk Island?

and the survey responses are summarised in Table 22.

Table 22 **Agree with actions to facilitate economic growth (percent)**

	Yes	No	Not sure	Blank	Total
Improve tourism promotion	93.9	0.0	6.1	0.0	100.0
Improve tourism operations (e.g. improve tourist facilities, more reasonably priced tours)	81.8	6.1	12.1	0.0	100.0
Improve the flight service to Norfolk Island	87.9	3.0	9.1	0.0	100.0
Remove migration controls	66.7	21.2	12.1	0.0	100.0
Remove quarantine barriers to exports	66.7	3.0	27.3	3.0	100.0
Remove quarantine barriers to imports	57.6	18.2	24.2	0.0	100.0

Note: n=33

Data source: ACIL Tasman survey.

Respondents were invited to discuss what they think would be the most effective actions to facilitate economic growth on Norfolk Island. Respondents' ideas on how to implement different actions are listed in Table 23.

Table 23 **Potential actions to facilitate economic growth on Norfolk Island**

Suggested action	Ideas to implement action
Improve tourism promotion	<ul style="list-style-type: none"> • Adopt the promotion strategy undertaken by Lord Howe Island. • Target the cruise industry. • Tourist bureau on a corporate basis. • Link tourist attraction to world heritage status. • Australian Government to appoint a Tourism Officer. • Deregulate tourism governance. • Target sporting events such as golf and yachting. • Target tourists who are more likely to spend money on the Island.
Improve tourism operations (e.g. improve tourist facilities, more reasonably priced tours)	<ul style="list-style-type: none"> • Provide 5-star services, including at least one 5-star hotel. • Modernise bus operators and tours. • Invite new motel operators (at least 4-star) and ensure they have an environmental plan. • Encourage motel operators to reinvest in their business. • Construct safe wharf or harbour. • Reduce Government control over accommodation facilities. • Restrict duty free shopping prior to arrival on the Island. • Upgrade accommodation facilities. • Cease operations that run for a commission rather than promote the Island as a destination, e.g. dinner at an Island home, as they undermine other local businesses specialising in the service.
Improve the flight service to Norfolk Island	<ul style="list-style-type: none"> • Subsidise or provide airfares. • More flights. • Allow a 'known' airline to service the Island, e.g. Virgin or Jetstar. • Long term scheduling. • Frequent flyer benefits.

Suggested action	Ideas to implement action
Remove migration controls	<ul style="list-style-type: none"> • Allow more people to settle on the Island with ability to either work, buy business or support themselves. • Target people and businesses with skills and resources in new industries, such as internet base services. • Provide information to visitors regarding new immigration opportunities. • Attract younger immigrants to reinvigorate the business community. • Remove restrictive, confronting and lengthy procedures.
Remove quarantine barriers to exports	<ul style="list-style-type: none"> • Remove controls that limit export of potential export products.
Remove quarantine barriers to imports	<ul style="list-style-type: none"> • Subsidise shipping costs. • Remove excessive import charges. • Remove restrictions on import of goods such as fruit and vegetables.
Others	<ul style="list-style-type: none"> • Abandon the Norfolk Island Government and Administration. • Encourage private business to adopt initiatives, entrepreneurial spirit and to pursue opportunities. • Funding assistance to build a cultural/community centre. • Financial support or subsidies for growers. • Grants to assist fledgling industries. • Investment in infrastructure and new construction. • Divest Government from liquor bond. • Raise the minimum wage to at least Australia's level. • Provide broadband internet, fibre optic connectivity and 3G mobile network. • Pay retailers duty free owing to them to encourage reinvestment. • Reduce the size of the public sector. • Open up telecommunications sector to allow competition with Norfolk Telecom. • Privatised Government owned companies. • Stagger the introduction of taxes but implement Centrelink and Medicare immediately. • Market year-round agricultural products, such as bananas. • Enter the Australian fiscal system. • Lower taxes to attract outside investment. • Allow for commercial fishing. • Training for apprentices.

Data source: ACIL Tasman survey.

4.8.3 Actions to remove constraints

The specific survey question was:

On a scale of 1 (very low) to 5 (very high), to what extent do you think each option outlined above would be effective in helping business and community groups during the economic downturn?

and the survey responses have been summaries in Table 24.



Table 24 **Effectiveness of options to help with economic downturn (percent)**

	Very low	Low	Neither low nor high	High	Very high	Total
Online support	12.1	18.2	15.2	21.2	33.3	100.0
Economic Development Officer	6.1	3.0	15.2	33.3	42.4	100.0
Business Planning Grants	9.1	0.0	9.1	36.4	45.5	100.0
Norfolk Island Economic Development Grants	6.1	0.0	3.0	30.3	60.6	100.0

Note: n=33

Data source: ACIL Tasman survey.

Respondents were invited to comment on why particular options would succeed (or fail), as well as what different options should consider or include. Respondents' views included:

Online support

- Effectiveness limited because many of the business owners are not computer literate
- Will assist anonymity and privacy.

Economic Development Officer

- Ensure “grounded” ideas and minimise failure
- Could assist a business group (also to be formed) to identify and drive new projects
- Good face-to-face option, particularly for those who are not internet savvy
- Would need to have no link to the Norfolk Island government or Administration, either in appointment or operation
- Would assist those who don't know how to develop plans or apply for grants.

Business Planning Grants

- Encourage and facilitate development of opportunities on Norfolk Island
- Would need to be closely monitored to ensure they are used appropriately
- Provide an instant cash injection to Norfolk Island
- Could be provided in the form of Training and Development grants and business planning seminars
- Assist many businesses where the capacity to prepare business plans is very low, particular when the existing business is carried on as was before it was sold
- Helpful because a lot of business owners don't have the funds for this
- Need to be supported by recovery grants to ensure they keep businesses going as well as develop a future.

Norfolk Island Economic Development Grants

- Encourage and facilitate development of opportunities on Norfolk Island
- Would need to be closely monitored to ensure they are used appropriately
- Would need to ensure projects benefit the community
- Provide short term injections which can turn into longer term projects that are ongoing revenue raisers.

Funding opportunities

- A Cultural Centre would preserve Norfolk Island's cultural identity, inject funds through construction, create employment and promote unique heritage to visitors
- An Environment or Conservation Officer would be valuable.

4.8.4 Supporting the tourism sector

The specific survey question was:

Do you think there need to be changes to assist the growth of the tourism sector on Norfolk Island.

All 33 survey respondents believed that there need to be changes to assist the growth of the tourism sector on Norfolk Island. Respondents were invited to comment on changes that they thought would assist growth in the tourism sector, with ideas generally relating to a tourism strategy, access to Norfolk Island and tourism operations.

Strategy

- Move away from the current marketing strategy that focuses on “Mutiny on the Bounty” and the language. Consider farming or convict history, the latter based on success of Port Arthur in Tasmania
- Target cruise ship industry
- Promote and market against the Island's “World Heritage” status
- Develop a new tourism entity that is member-based and has a Board elected by members. Make the tourism body accountable and results driven
- Target younger tourists who are more likely to spend money on the Island
- Better coordination, particularly between the air services provider and wholesale and retail sectors
- Uniform “Branding Norfolk”
- Promote and market against the Island's green image to target upcoming ecotourism industry.

Accessing the island

- Attract a competitive airline

- Improve wharf facilities
- Not require passports for Australian travellers
- Lower airfares.

Operations

- Encourage networking among tourism community on the island
- Improve service delivery, possibly through education
- Operate for tourists – e.g. keep restaurants open later, keep shops open more days in the year, allow sale of liquor all days
- More 5-star facilities, in particular a hotel. A major hotel will have its own marketing strategy to attract tourists
- Better value and less similar tours
- Cease the progressive home dinner tours to encourage dining at restaurants
- Become more interactive with guests (from point of booking to returning home) to encourage tourism via word of mouth
- Introduce accreditation to ensure there are forced standards of performance and continued improvement
- Offer bookings longer than seven days
- Improved roads and public toilet facilities.

Other

- Build walking trails around the island.

4.9 Summary

The core constraints to economic growth on Norfolk Island identified relate to: the dominant role of the government in the economy; uncertainty about business operating conditions; poor quality infrastructure and low infrastructure investment; lack of access to Commonwealth grant programs; difficulty in accessing vocational training programs; and the jurisdictional status of Norfolk Island.

5 Economic restructuring

The following chapter addresses the following term of reference:

Develop future potential restructuring options for the economy.

There are two elements to economic restructuring. The first element entails considering the industry specific actions required to transition an economy from a focus on one area of production to another area of production where there has been a change in comparative advantage. In the context of small island economies this requires consideration of path dependence in development.

The second element of economic restructuring considers restructuring to remove the factors identified as constraints to economic development, and in the context of Norfolk Island, this is largely a discussion of microeconomic reform.

The remainder of this chapter outlines, in broad terms, the nature of the economic restructuring that should take place on Norfolk Island, and the factors that must be considered.

5.1 Microeconomic reform

The response of the Norfolk Island government to a rapidly deteriorating balance sheet position caused by losses at the government controlled entity Norfolk Air was to consolidate control of all government business operations within the administration. The response to exert greater central control is fundamentally flawed. Rather than increasing the role of the central government, it is necessary to decrease the role of government in general, and increase the role of the private sector.

The chapter on constraints provided a coherent discussion of the negative role a large government sector has on economic development, and indicated the actions that can be undertaken to remove the constraint of a large government sector. In broad terms, the economic restructuring of the operation of government requires:

1. Removal of barriers to competition
2. Privatisation of government businesses
3. Expansion and reform of the tax base
4. Fundamental public sector reform.

The *Competition Principles Agreement 1995* provides a ready template to follow for the microeconomic reforms required. Implementation of the *Competition*

Principles Agreement 1995 will address the microeconomic reforms required on Norfolk Island.

5.2 Comparative advantage and path dependence

At its core, the discussion about economic development on Norfolk Island is a discussion about developing export or import replacement industries to allow for a sufficient level of consumption to support a high standard of living. As such, the discussion about economic restructuring can be framed as a discussion about actions that either raise export capacity on Norfolk Island or assist with the development of import replacement industries.

In general terms, an economy's ability to export is determined by its comparative advantage. The Heckscher-Ohlin theorem states that Norfolk Island will have a comparative advantage in, and thus be able to export goods that are intensive in the abundant factor of production. Originally, it could be argued that on Norfolk Island the abundant factor was arable land, and that the scarce factor was labour; hence a pre-WWII economy orientated around rural exports.⁹⁵ Modern agricultural practice, and the increase in the relative price of transport for produce from Norfolk Island suggests that Norfolk Island has not enjoyed a comparative advantage in agricultural production for some time.⁹⁶

Some work has been done on activities in which Norfolk Island might have a comparative advantage, and previously identified activities include:

- The testing of weapons and chemicals, and other military applications
- Bulk handling, refining, and treatment of dangerous substances
- Incarceration of people where it is seen as valuable they be kept in a location from which it is difficult to escape
- Quarantine station functions, either as a place for holding animals and plant material prior to release on mainland Australia, or as a place to grow disease free material
- Export of endemic goods or other naturally occurring products that are unique to Norfolk Island
- Conservation functions for threatened species
- Natural sciences research, where isolation in a priority
- The exploitation of marine resources

⁹⁵ Treadgold, M.L. (1999) "Breaking out of the MIRAB mould: Historical Evidence from Norfolk Island, *Asia Pacific Viewpoint*, Vol. 40, No. 3, pp. 235-249.

⁹⁶ BAE (1978).

- Development as a tourist destination.⁹⁷

Many of these opportunities are mutually exclusive, hence the development on Norfolk Island of the last of these opportunities precludes development of many of the other activities identified.

Rather than consider the issue of the ability to export through a standard economic lens, specific models of development for small island economies have subsequently been developed that recognise the issue of path dependence in development.⁹⁸ Path dependence means that it is very costly to change economic focus in a small island economy, and hence questions the relevance of trade theory models such as the Heckscher-Ohlin model. For Norfolk Island, path dependence means that restructuring should focus on expansion within tourism not diversification away from tourism.

In a small island economy context, a related concept to path dependence is hyper-specialization with strategic engagement. The concept has been referred to as ‘speciation’, and refers to a situation where an island community develops its own particular arrangements to take advantage of niche opportunities as they arise.⁹⁹ With respect to speciation, it is necessary for the economy to remain as flexible as possible, so as to be able to grasp opportunities as they emerge.

The above discussion suggests that: (i) restructuring options should focus on actions that work to increase the flexibility and responsiveness of the Norfolk Island economy so that it is able to take advantage of emerging niche opportunities as and when they arise; and (ii) that restructuring activities should focus on actions that allow existing industries to further develop: an approach that might be described as conditional diversification.

⁹⁷ Treadgold, M.L. (1988) Bounteous Bestowal: The Economic History of Norfolk Island, Australian National University National Centre for Development Studies, Pacific Research Monograph no. 18, p. 276.

⁹⁸ Hampton, M.P. and Christensen, J. (2002) “Offshore Pariahs? Small Island Economies, Tax Havens, and the Re-configuration of Global Finance”, World Development, Vol. 30, No. 9, pp. 1657-1673.

⁹⁹ Bertram, G. and Poirine, B. (2007) “Island Political Economy” in Baldacchino, G. (ed) A World of Islands: An Island Reader, Institute of Island Studies, University of Prince Edward Island, Prince Edward Island: Canada.

5.2.1 Increasing flexibility and responsiveness

As demonstrated in a large literature,¹⁰⁰ the ability of the Norfolk Island economy to successfully take advantage of opportunities as and when they arise will be improved by actions that:

- Decrease the role of the Norfolk Island government in the economy and promote the private sector, which is generally more flexible and responsive
- Promote competition and remove monopoly restrictions so as to create a more responsive and dynamic business environment
- Increase the human capital base of the economy, through either training the existing workforce or attracting those with skills to Norfolk Island
- Make the operation and establishment of new businesses on Norfolk Island easier.

The specific restructuring activities that will increase the flexibility and responsiveness of the Norfolk Island economy are described in the economic development strategy chapter, and follow the same format as the microeconomic reforms implemented on the mainland over the past 20 years.

5.2.2 Tourism opportunities

Tourism accounts for over 40 percent of economic production on Norfolk Island, and diversification into additional tourism markets, and the development of additional tourism products represent real opportunities for further economic development.

Diversification within the tourism sector must be led by the private sector, although there is a role for government to make this easier through infrastructure provision, ensuring a business investment framework that is conducive to investment, and promoting the adoption of quality standards.

There is also a role for the government to invest in the tourism product associated with sites of national significance, and given that KAVAH is now a world heritage site, it has national significance. Responsibility for management of KAVAH is shared between the Norfolk Island and Commonwealth governments, with the Commonwealth responsible for 80 percent of the site. To develop the site appropriately requires the Commonwealth and Norfolk Island governments to agree on an appropriate governance structure.

The specific economic restructuring activities that can be taken to support the development of additional tourism opportunities are described in the economic

¹⁰⁰ Productivity Commission, (2005); OECD, (2009); Megginson, W.L. and Netter, J.M. (2001); Sala-i-Martin, X., et al. (2004).

development strategy chapter, and the focus of these activities is on enabling private sector investment.

5.2.3 Rentier activities

Economic rents refer to revenues received that are disproportionate to the effort expended, and are a common feature of small island economies.¹⁰¹ The type of activities associated with economic rents and small island economies include: flag of convenience services, philately, tax haven related revenues, casino operations, etc.¹⁰² Both classical economic theory and Marxist economic theory is highly critical of the role of the rentier in the economy, but it is possible that Norfolk Island could diversify into additional rentier activities.

Norfolk Island currently attracts significant economic rents as a registry for internet gaming operators and from philately. The listing of Norfolk Island as the registration port for the new Australian International Shipping Register¹⁰³ would be an additional opportunity for Norfolk Island to obtain economic rents.

5.2.4 Other niche markets

Transport costs restrict the viability of any large scale expansion of agricultural production, but there are opportunities to further develop niche markets for premium Norfolk Island specific agricultural products, and also further develop import replacement capability in some aspects of agricultural production.

Development of import replacement capacity in agriculture on Norfolk Island also directly supports the development of tourism product through increasing the availability of fresh produce throughout the year.

Actions to assist with the development of niche products in the agricultural sector are described in the economic development strategy chapter.

¹⁰¹ Baldacchino, G. (1993) "Bursting the Bubble: The Pseudo-Development Strategies of Microstates", *Development and Change*, Vol. 24, No. 1, pp. 29-52.

¹⁰² Baldacchino, G. (1993).

¹⁰³ Department of Infrastructure and Transport (2011) *Stronger Shipping for a Stronger Economy*, Department of Infrastructure and Transport, Australian Government, available: www.infraststructure.gov.au, [accessed 12 December 2011].

6 Economic Development Strategy

The economic indicators developed show that the Norfolk Island economy is in an economic depression: economic activity has fallen for at least two years. Further, the revised cost of living indicator shows that over recent years the cost of living on Norfolk Island has increased faster than on the mainland. The economic development strategy prepared reflects the current economic circumstances of Norfolk Island and is consistent with the vision articulated in the Road Map.

The following chapter addresses the following terms of reference:

1. Prepare an Economic Development Strategy. Five year and ten year planning is required.
2. Produce an Action Plan to underpin the Strategy. This is to include costings and possible funding sources.

A relatively common format for a regional economic development strategy might be as follows:

1. the identification of industry sectors of importance, for example:
 - tourism and leisure services, agriculture etc.
2. articulation of a high level vision for each industry sector, where, for example, the vision statement for agriculture might be:
 - the creation of a sustainable agriculture industry based on the identification of value adding opportunities, implementation of environmentally sustainable practices, and skill development
3. high level strategy statements, which again, using agriculture as an example, might include statements such as:
 - encourage the adoption of environmentally sustainable farming practices
 - support the development of an organic farming industry
4. identification of outcomes, actions, lead agency, and partner organisations, which for the strategy statement about encouraging the adoption of environmentally sustainable farming practices might include detail such as:
 - support the development of organic farming systems that provide benefits to farmers; lead agency to be the organic farmers association; partner organisations to be the Department of Agriculture and Food, and the regional economic development corporation.

It is however important to note that where regional economic development strategy documents are prepared along the lines of the format described above, it is usually from a situation where there are reasonably stable financial

conditions, and, in an Australian context, where the government does not play a dominant role in the economy.

The Norfolk Island government is in a very weak financial position; plays a large role in the economy; and the economy has contracted sharply over the past two years. As such, the economic development strategies of the transition economies that emerged following the collapse of communism are at least as relevant as traditional Australian regional economic development strategies.

Following the collapse of communism, the economic development strategies of the transition economies emphasised: macroeconomic stability (credible fiscal and monetary policy), microeconomic reform (small scale privatisations and price liberalisation), along with political reforms and the introduction of a social safety net; and these policies were associated with improvements in economic performance.¹⁰⁴

6.1 Overview of strategy

The most significant factors limiting investment and economic development on Norfolk Island are the dominant role of the government in the economy, the associated protectionist legislation that supports this role, and the lack of infrastructure investment by the Norfolk Island government.

These factors have emerged as constraints to economic development due to the jurisdictional status of Norfolk Island, and the specific actions required to remove these constraints have been identified in an earlier chapter.

The main driver of economic growth on Norfolk Island is the tourism industry, and path dependence means that future economic development on Norfolk Island should largely concentrate on tourism reform.

Based on both Australian and international evidence there are a number of microeconomic reforms that can be implemented on Norfolk Island that will promote economic growth in general, and support the development of a new tourism sub-market that services cruise ship passengers. Much of this evidence was discussed in the constraints chapter.

The strategy document is not a restatement of actions that can be undertaken to remove constraints, but rather tries to outline how specific actions fit within an overarching theme of microeconomic reform.

A reformed, growing, Norfolk Island economy, is, however, unlikely to provide a tax base of the size required to support the level of infrastructure investment required on Norfolk Island, and also allow an appropriate level of

¹⁰⁴ Svejnar, J. (2002) "Transition Economies: Performance and Challenges", *Journal of Economic Perspectives*, Vol. 16, No. 1, pp. 3-28.

service provision across health, education, and social welfare. For example, the cost of the next airport runway reseal -- a single investment project -- will be equal to approximately 25 percent of Norfolk Island Gross Island Product.

Over the longer term it will be necessary to clarify the relationship between the Commonwealth and Norfolk Island so that Norfolk Island has access to fiscal equalisation payments of some kind. The full integration of Norfolk Island into the Australian tax system, and the subsequent provision of equalisation funding to Norfolk Island would be one way to achieve this. Reform of the Norfolk Island tax system, access to Commonwealth infrastructure grant programs and health funding, along with ad hoc funding provided by the Commonwealth would be another approach capable of delivering a similar outcome to full integration.

In the immediate, it is not, however, necessary to resolve the final status of the integration of Norfolk Island with the Australian tax and transfer payment system. Rather, it is simply necessary to provide business with certainty regarding the operating environment. This certainty can be provided by the Commonwealth and Norfolk Island governments agreeing that company and income tax will not be extended to Norfolk Island until there is sustained evidence that the Norfolk Island economy is growing, and that the imposition of such taxes will not derail this growth; and that regardless of evidence of economic growth the extension of such taxes will not take place within the next five years.

6.2 Plan overview

The overall aim of the economic development strategy is to transition the Norfolk Island economy from a situation where the Norfolk Island government dominates the economy, to one where the private sector plays the leading role in the economy.

Reflecting the need to: (i) take immediate action to promote growth and improve community welfare; (ii) undertake structural microeconomic reforms; and (iii) resolve the long term funding needs to support infrastructure development, the proposed economic development strategy for Norfolk Island has three phases.

The core contributions from the Commonwealth are in terms of the human resources associated with the capacity building team; some modest additional spending in the initial years; and, over the longer term, in taking on greater financial responsibility for the provision of medical and pharmaceutical services at a user cost and standard consistent with the mainland. Funding for the additional core infrastructure investments required by the Norfolk Island

government are to be largely provided from the net proceeds of privatisation sales.

The first phase of the development strategy deals with: immediate measures to improve community welfare; the provision of certainty for business; fiscal consolidation through privatisations and expenditure reductions; the removal of barriers to competition and investment; capacity development in the public sector; legislative reform to provide access to Commonwealth grant programs; continued immigration policy reform; the commissioning of preliminary studies for infrastructure investment; and the further development of a framework for the divestment and corporatisation of GBEs. Phase one of the development strategy is expected to last for approximately 18 to 24 months.

The immediate economic stimulus measures are described in full in a separate chapter, and so here, the main actions, along with an indication of the financial implications are simply noted.

Table 25 Immediate actions to promote community welfare

Stimulus and Welfare Improvement	Funding
Extension of medical and associated services	Norfolk residents- \$760 pp, pa; Norfolk Island government approx. \$500,000 pa and Commonwealth government approx. 500,000 pa
BER equivalent grant to Norfolk Central School	Commonwealth government - \$2.0M
Capital works temporary tax credit	Norfolk Island government - \$600,000
KAVAH rehabilitation works (four projects)	Commonwealth - \$100,000 - \$200,000 per project
Social & sporting club major maintenance support grants	Norfolk - \$50,000; Commonwealth - \$50,000

Outside the measures designed to address the stimulus spending term of reference, the most important actions in terms of supporting economic development to be introduced during phase one of the economic development strategy include:

- the implementation of the *Competition Principles Agreement 1995* as the framework for microeconomic reform and the subsequent
 - the privatisation of the liquor bond and other GBEs
 - reform of immigration legislation to remove competition restrictions
 - agreement from an established economic regulation agency to act as the regulator for Norfolk Island
- provision of a clear commitment by the Commonwealth and Norfolk Island governments to improve shipping access to Norfolk Island
- establishing Norfolk Island eligibility for a number of Commonwealth grant programs
- further immigration reforms
- reform of the Norfolk Island Central School funding agreement

- the appointment of a person with skills in State owned enterprise divestment and corporatisation, the appointment of a person with skills in drafting grant applications, and the appointment of an agricultural extension officer
- the articulation of a clear and credible timeline to resolve the question of integration with the Australian tax system.

The role of the Commonwealth and Norfolk Island governments in phase one is to work collaboratively to improve the underlying fiscal position of the Norfolk Island government so that it is able to fully participate in future infrastructure investment projects and adequately serve the Norfolk Island community. During phase one there may be a need for the Commonwealth to provide bridging finance until the proceeds of privatisation sales are realised.

The second phase of the economic development strategy is built around the continued implementation of a microeconomic reform agenda to bring competition and transparency to the Norfolk Island economy to lower business costs; continued skill development in the public and private sector; building a coherent destination marketing program to support tourism development; productivity improving infrastructure investment; tax reform; and further legislative reform to improve constancy with mainland legislation and remove barriers to competition. Phase two of the economic development strategy is expected to last at least six years.

The *Competition Principles Agreement 1995* outlines the core structural economic reforms required during phase two, and the Norfolk Island government will be required to continue with the privatisation of most of its business operations. For those businesses retained, price setting is to be determined by the regulator.

The role of the Commonwealth during phase two is to support the privatisation process through facilitating access to appropriate agencies and providing skilled professionals to assist the Norfolk Island government as it moves through the privatisation process. The role of the Norfolk Island government is to implement the required economic reforms.

The core piece of enabling public sector infrastructure completed during phase two will be shipping access infrastructure that allows the delivery of containerised freight and provides a relatively high degree of certainty that passing cruise ships can disembark passengers.

The core piece of welfare improving infrastructure begun -- if not completed -- during phase two will be the construction of a new hospital.

The most significant private sector investments will be in areas that have been privatised and will include barges and associated infrastructure to allow cruise

ship passenger disembarkation and the unloading of containerised cargo, and telecommunications technology.

The third phase of the economic development strategy involves the resolution of the long term taxation and funding arrangements for Norfolk Island. This involves either the staged integration of Norfolk Island into the Australian tax system, or the development of an alternative mechanism for providing financial support to Norfolk Island. This is a matter that requires further discussion between the Norfolk Island community and the Commonwealth.

6.3 Implementation

The organisation with the greatest responsibility for actions that will transition Norfolk Island away from a government dominated economy to a more private sector focused economy is, paradoxically, the Norfolk Island government. The second most important agency is the Department of Regional Australia.

Implementation of the economic reforms will involve painful adjustments for some, and create new opportunities for others. It is therefore necessary to consider mechanisms that will ensure reforms are implemented.

Although the current context is slightly different, national competition payments from the Commonwealth to the States in recognition of reform implementation were a key element of national competition policy. As were the imposition of penalties for the failure to implement reforms.

Implementation of the economic development strategy for Norfolk Island can be facilitated through the creation of a standing committee with representatives of the Commonwealth and Norfolk Island governments that monitors progress in reform implementation, and the subsequent use of annual funding agreements that make payments conditional on the implementation of specific reforms. Where reforms are not implemented, financial penalties must apply.

6.4 Microeconomic reform

As described in the constraints chapter, there is overwhelming evidence that microeconomic reform is positive for economic development.

The core microeconomic reform strategies are:

- implementation of the *Competition Principles Agreement 1995* agenda
- introduction of an economic regulator
- legislative reform
- tax reform
- public sector reform.

The expected outcome of the microeconomic reform process is a substantial increase in the role of the private sector, and a substantial improvement in productivity.

6.4.1 Competition Principles Agreement

During phase one, the core actions to assist with microeconomic reform of the Norfolk Island economy are as follows:

- Norfolk Island government to adopt the *Competition Principles Agreement 1995* as microeconomic reform framework
 - Responsibility for implementation lies with the Norfolk Island government
 - Key partner organisations include the COAG reform council, Commonwealth Treasury, IPART, and through the capacity building appointee, the Department of Regional Australia
- Engagement by the Commonwealth of an expert in the divestment and corporatisation of GBEs
 - Responsibility for implementation lies with the Department of Regional Development
- The privatisation of the liquor bond
 - Responsibility for implementation lies with the Norfolk Island government
 - Key partner organisation: the Department of Regional Australia, through the capacity building appointee,
- In line with responsibilities under the *Competition Principles Agreement 1995* remove accommodation bed licence restrictions on developments
 - Responsibility for implementation lies with the Norfolk Island government
- Consistent with the *Competition Principles Agreement 1995* the Norfolk Island government to cease operating in areas of direct competition with the private, effective immediately
 - Responsibility for implementation lies with the Norfolk Island government
- Consistent with the *Competition Principles Agreement 1995* the reform of the Norfolk Island *Telecommunications Act* to remove competition restrictions
 - Responsibility for implementation lies with the Norfolk Island government
- Consistent with the *Competition Principles Agreement 1995* the removal of any remaining restrictions on Australian residents with demonstrated financial capacity moving to Norfolk Island

- Responsibility for implementation lies with the Norfolk Island government
- Consistent with the *Competition Principles Agreement 1995* the Removal of any remaining restrictions on Australian residents establishing a business on Norfolk Island
 - Responsibility for implementation lies with the Norfolk Island government
- Extension of all mainland consumer protection legislation to Norfolk Island
 - Responsibility for implementation lies with the Norfolk Island government

During phase two the core actions required for microeconomic reform are the full compliance with the *Competition Principles Agreement 1995*, which means:

- the privatisation of most remaining GBEs; the corporatisation of any remaining GBEs, such as the airport; and external price oversight and regulation of utilities
 - Responsibility for implementation lies with the Norfolk Island government
 - Key partner organisations include the COAG reform council, Commonwealth Treasury, IPART, and through the capacity building appointee, the Department of Regional Australia
- Complete asset revaluation exercise of Norfolk Island government assets to ensure appropriate provisioning to undertake capital works
 - Responsibility for implementation lies with the Norfolk Island government, with the insurance valuation provider the key partner organisation.

6.4.2 Economic regulator

During phase one of the economic development strategy the core actions to facilitate the introduction of an economic regulator include:

- Formally approaching IPART to act as the economic regulator
 - Responsibility for implementation lies with the Norfolk Island government, with assistance from the Department of Regional Australia
- Preparation of financial accounts for the 2012/13 financial year in the format recommended by IPART
 - Responsibility for implementation lies with the Norfolk Island government, with IPART the key partner organisation.

During phase two of the economic development strategy the core actions to facilitate the introduction of price determination by an economic regulator include:

- IPART public inquiry to determine price paths for core utility prices and monopoly businesses charges
 - Responsibility for undertaking the price path review lies with IPART, and the key partner organisation is the Norfolk Island government.

6.4.3 Legislative reform

Starting in the first phase of the economic development strategy and running through the second phase, the revision and updating of Norfolk Island legislation to improve consistency with mainland legislation and to address legislation that limits the development of economic activity. The introduction of strata title legislation to Norfolk Island to be a priority action.

Responsibility for implementation lies with the Norfolk Island government, with the Department of Regional Australia assisting through an appropriate capacity building team member appointment.

6.4.4 Tax reform

The core tax reform required is the introduction of a recurrent land tax. The responsibility for implementation of a land tax lies with the Norfolk Island government, and the key partner organisation is the Queensland office of the Valuer-General.

Reform of the alcohol taxation system to a volumetric basis rather than a value basis is a secondary tax reform. The responsibility for implementation the change lies with the Norfolk Island government, and the key partner organisation is the Australian Tax office.

Investment is also required in the information technology that supports tax collections. The responsibility for funding this investment lies with the Norfolk Island government.

6.4.5 Public sector reform

During phase one of the economic development strategy, the core actions required with respect to public sector reform are:

- The introduction of an efficiency dividend policy for all major Norfolk Island government departments of at least one percent per year in real terms, cultural, welfare and very small service areas exempted, with provision for business units to keep part of identified savings for new activities
 - Responsibility for implementation lies with the Norfolk Island government
- Implementation of the recommendations of the public service review

- Joint responsibility of the Department of Regional Australia and Norfolk Island government
- Key partner organisations include other Commonwealth government agencies providing capacity building staff
- Closing the store function for government purchases and replacing this system with an approved provider list
 - Responsibility for implementation lies with the Norfolk Island government.

During phase two of the economic development strategy, the core actions required with respect to public sector reform are the continued implementation of the public sector review recommendations, and the continuation of the efficiency dividend policy.

6.5 Fiscal stabilisation

Fiscal stabilisation refers to the process of improving the financial position of the Norfolk Island government so that it is able to invest in enabling infrastructure. The three strategies for improving the fiscal position of the Norfolk Island government are to:

- Reduce recurrent government outlays
- Improve revenue raising capacity
- Complete asset sales.

The expected outcome from actions aimed at macroeconomic stabilisation is an improvement in the cash position of the Norfolk Island government, and the active participation of the Norfolk Island government in infrastructure investment.

6.5.1 Reduce recurrent government outlays

Actions in phase one to reduce Norfolk Island government recurrent outlays:

- Establishment of a service delivery agreement between the Commonwealth government and the Norfolk Island government that progresses Norfolk Island towards the provision of medical services equivalent to those on mainland Australia for residents of Norfolk Island and Australian tourists visiting Norfolk Island
 - The cost to Norfolk Island residents would be the revenue collected through the Norfolk Island Health Care Levy (\$760 per year per individual)
 - The cost to the Norfolk Island government would be part of the additional cost of service provision, which can be funded, initially, with part of the proceeds from privatisation sales.

- Ultimately, the difference between the full cost of service provision and the revenue collected through the Norfolk Island Health Care Levy (or equivalent charge) is to be funded by the Commonwealth, and this amount is expected to be between \$1.5M and 2.0M
- Responsibility for implementation lies with the Department of Regional Australia and the Norfolk Island government
- Key partner organisations include the Department of Health and Ageing
- Divestment by the Norfolk Island government of responsibility for air services to Norfolk Island
 - Responsibility for implementation lies with the Department of Regional Australia and the Norfolk Island government
 - Key partner organisations are private sector air service providers
- The introduction of an efficiency dividend policy for all major Norfolk Island government departments of at least one percent per year in real terms, cultural, welfare and very small service areas exempted
 - Responsibility for implementation lies with the Norfolk Island government
- Norfolk Island government and National Parks to work collaboratively on arrangements that would see National Parks take on responsibility for additional areas of high conservation value and or high recreational benefit
 - Responsibility for implementation lies with National Parks and the Norfolk Island government
- Closure of the central stores purchasing function for the public service and the replacement with an approved provider panel tender system
 - Responsibility for implementation lies with the Norfolk Island government
- Capital investment to raise efficiency at operational units
 - Responsibility for implementation lies with the Norfolk Island government
- Achieve access for Norfolk Island to major Commonwealth capital works grants programs
 - Responsibility for implementation lies with the Department of Regional Australia
 - Key partner organisations: all relevant Commonwealth agencies.

Actions in phase two to reduce Norfolk Island government recurrent outlays:

- Continued implementation of efficiency dividend policy
 - Responsibility for implementation lies with the Norfolk Island government
- Unification of customs and GST collection process

- Responsibility for implementation lies with the Norfolk Island government
- Capital investment to raise efficiency at operational units
 - Responsibility for implementation lies with the Norfolk Island government
- Renegotiation of air services contract for Norfolk Island
 - The lead agency responsible for managing arrangements for a new air service contract is to be the Department of Regional Australia, in consultation with the Norfolk Island government.

6.5.2 Improve revenue raising capacity

The core action to improve the revenue raising capacity of the Norfolk Island government is the implementation of a recurrent land tax. A universal land tax is to be implemented during phase two of the economic development strategy.

The basic structure of the tax is to be similar to that currently used for absentee landholders, with an initial annual tax rate of between one and two percent of the unimproved value of the property.

Responsibility for implementation of a recurrent land tax lies with the Norfolk Island government, and the key partner organisation is the Queensland office of the Valuer-General.

6.5.3 Asset sales

The more monopolistic the market following the asset sale the greater the realised asset sale price, but the lower the gain in consumer welfare. Given the financial position of the Norfolk Island government it is proposed that asset sales take place with relatively generous protections from competition at the point of sale, with full competition introduced over a three to five year period following privatisation.

Asset sales are to take place sequentially starting in the 2012/13 financial year. Priority is to be given to selling the liquor bond, where proceeds are to be realised in the 2012/13 financial year.

The Norfolk Island government is to be the lead agency in co-ordinating the privatisation process.

The role of the Commonwealth is to provide support through a capacity building team appointment of a person with skills in privatisations; through the provision of bridging finance to the Norfolk Island government until the proceeds from asset sales are realised; and ensuring the privatisation process conforms to the highest ethical standards.

The key support agencies are IPART, Commonwealth Treasury, and the COAG reform council.

6.6 Infrastructure provision

The stimulus activity chapter outlines a project at the Norfolk Island Central School that is equivalent in value to those undertaken as part of the Building the Education Revolution stimulus package on the mainland. The strategies to allow for new infrastructure projects beyond the recommended immediate stimulus spending measures are:

- Increase the range of grant bodies that Norfolk Island organisations can apply to for funding
- Improve the competitiveness of grant applications prepared by Norfolk Island organisations
- Increase the capacity of the Norfolk Island government to directly fund infrastructure investment.

The expected outcome for these strategies is an increase in the dollar value and number of infrastructure projects completed on Norfolk Island.

6.6.1 Increase the number of grant accepting bodies

The overall object is for Norfolk Island to be eligible for all Commonwealth administered grant programs.

Responsibility for increasing the range of Commonwealth administered grant funds that Norfolk Island organisations can apply to lies with the Department of Regional Australia, and the Norfolk Island government is the key partner organisation.

The priority fund for access is the Regional Development Australia Fund, and it is important that Norfolk Island based organisations are eligible for round three funding from this program.

6.6.2 Improving the competitiveness of grant applications

During phase one of the economic development strategy the following actions will assist with improving the competitiveness of Norfolk Island grant applications

- Identify and prioritise core grant applications and identify target grant fund
 - a) New hospital -- Health and Hospital Fund
 - b) Port infrastructure -- Regional Development Australia Fund
 - c) Cultural centre -- Regional Development Australia Fund

- Responsibility for implementation lies with the Norfolk Island government
- Key partner organisations include Norfolk Island community organisations and the Department of Regional Australia
- Undertake preliminary works required for grant applications and obtain environmental approvals where required
 - Responsibility for implementation lies with the Norfolk Island government
 - Key partner organisations include the Department of Regional Australia and the Department of Sustainability, Environment, Water, Population and Communities
- Build capacity in grant writing across the government, business, and not-for-profit sectors on Norfolk Island
 - Responsibility for implementation lies with the Department of Regional Australia
 - Key partner organisations include the Norfolk Island government and Norfolk Island community groups
- Establish an infrastructure partnership fund using part of the proceeds from privatisations to ensure the Norfolk Island government can provide matching funding as required under some Commonwealth grant programs
 - Responsibility for implementation lies with the Norfolk Island government.

6.6.3 Increase Norfolk Island capacity to fund infrastructure investment

The actions identified under microeconomic reform and macroeconomic stabilisation will work to increase the Norfolk Island government's ability to directly fund infrastructure investment. Additional actions include:

- Establishment of suitable rock base resource for construction at Cascade cliff
 - The Norfolk Island government and the Department of Regional Australia share joint responsibility for implementation
 - Partner organisations include Norfolk Island private sector construction firms.

6.7 Human resource development

The strategies to increase human capital development are to:

- Increase access to relevant adult education services
- Create a culture of skill development on Norfolk Island
- Support young people to access mainland education and training.

These strategies can be implemented either in full, or partially during the first phase of the economic development strategy.

The expected outcome of actions described below is an increase in the human capital base of Norfolk Island that in turn results in higher levels of productivity and improved profitability at Norfolk Island businesses.

6.7.1 Increase access to relevant adult education services and capacity building

Actions to increase access to adult education can be started immediately, and include:

- Revision to the Norfolk Island Central School funding agreement to provide funding on an enrolment basis so that adult education and other courses can be offered. At this stage, Norfolk Island Central School would not be a Registered Training Organisation, but would offer courses in computer skills, hospitality, and business skills
 - Key responsibilities shared between the Norfolk Island Central School and the Norfolk Island government
- The introduction of funding for Agricultural extension services to Norfolk Island
 - The position would support the public sector through support for forestry activities, including a full assessment of what is an appropriate role for the Norfolk Island government to play in forestry activities, and support the private sector through facilitation of the importation of disease free plant material, the export of soil samples for analysis, interaction with Quarantine on the importation of livestock, livestock management, and other matters as required
 - Responsibility for implementation lies with the Department of Regional Australia and the Norfolk Island government
 - Key partner organisations include the New South Wales Department of Primary Industry, the Australasia-Pacific Extension Network, and the local agriculture industry
- Establishment of a formal link between Tourism Australia and the Norfolk Island Tourism board to facilitate skill transfer
 - Responsibility lies with the Norfolk Island government
 - Key partner organisations include Tourism Australia and the Department of Regional Australia
- Formation of a service delivery agreement with an existing Business Enterprise Centre in New South Wales to provide services on Norfolk Island
 - Responsibility for implementation lies with the Norfolk Island government

- Key partner organisations include the Business Enterprise Centre network and the Department of Regional Australia
- Revisions to the funding agreement of the Norfolk Island Central School to establish the school as the Norfolk Island community information source for matters relating to online adult education opportunities
 - Responsibility for implementation shared between the Norfolk Island government and the Norfolk Island Central School.

6.7.2 Create a culture of skill development on Norfolk Island

Actions that can be taken to encourage a culture of skill development on Norfolk Island include:

- Introduction of a requirement for all tour operators operating in the world heritage area to achieve Australian Tourism Accreditation Standard
 - Responsibility for implementation lies with the KAVAH board
 - Partner organisations include Tourism Australia, the Department of Regional Australia, and the Norfolk Island government
- Introduction of reporting against required skill training and received skill training as part of each public servant's annual performance review
 - Responsibility for implementation lies with the Norfolk Island government
 - Partner organisations include the Norfolk Island Central School
- Progressive introduction of qualifications criteria into Norfolk Island government tender contracts
 - Responsibility for implementation lies with the Norfolk Island government
 - Partner organisations include the Norfolk Island Central School.

6.7.3 Support young people accessing mainland education and training

The following actions can be taken to support young people on Norfolk Island accessing trades training and higher education on the mainland:

- Revisions to the funding agreement of the Norfolk Island Central School to establish it as the Norfolk Island community information source for matters relating to apprenticeship training
 - Responsibility for implementation shared between the Norfolk Island government and the Norfolk Island Central School
- Introduction of an apprentice training block release support payment scheme that is funded by the Norfolk Island government, and mirrors the form of the scheme operating in NSW. Current payments under the system would be a \$28 per day accommodation allowance, a travel

allowance for transport to and from airports, and a return economy airfare from Norfolk Island to Sydney or Brisbane, as appropriate

- Responsibility for funding lies with the Norfolk Island government, and responsibility for operation lies with the Norfolk Island Central School
- Continuation of the Nursing scholarship program
 - Responsibility for implementation lies with Norfolk Island hospital
 - Partner organisations include Norfolk Island government

6.8 Miscellaneous

The following are miscellaneous actions to support economic development on Norfolk Island.

- The inclusion of Norfolk Island within the locations promoted by Tourism Australia
 - Responsibility for implementation lies with the Department of Regional Australia
- Restructuring the KAVAH board structure to increase the effectiveness of the board in maximising the promotion and development of the KAVAH assets
 - Responsibility for implementation lies with the Norfolk Island government and the Department of Regional Australia.

7 Projects

The following chapter addresses the following term of reference:

Identify key short term and long term projects, including possible funding sources, to drive diversification and take the economy and community of Norfolk Island forward. Priority should be given to practical and affordable projects.

As explained in earlier chapters, path dependence means that diversification away from tourism is not an appropriate or cost effective option for Norfolk Island. Rather, the focus should be on projects that enhance tourism and allow expansion into new tourism sub-markets, or assist with human capital development.

The main thrust of the economic development strategy is for the private sector to take on a greater role in economy, including the role of driving investment activity. Table 26 below identifies specific investment projects, indicative timing, benefits, funding sources, and indicative project cost for projects that involve either the Commonwealth of Norfolk Island government. Future projects where the private sector is expected to take the lead role are not identified.

The identified projects require further work with respect to developing a detailed business case, and in some cases the project identified in Table 26 is actually an investment project that would allow the preliminary works required before a business case can be developed to be completed.

The overwhelming feedback from both the community consultation process and the structured meetings was that works allowing containerised cargo to be landed at Norfolk Island, and that also increased the probability of being able to unload cruise ship passengers, would be the project seen as most valuable to economic development.

Table 26 **Investment project summary**

Project	Timing	Benefits	Funding source	Indicative Cost
New school building (BER equivalent)	2012/13	Immediate support to construction industry; long term benefits in terms of higher quality education infrastructure	Commonwealth government	\$2.0M
KAVAH site works	2012/13	Immediate boost to employment and spending on Norfolk Island; long term benefits in terms of improvements to the most significant tourism site on Norfolk Island	Commonwealth government	\$600,000
Preliminary work to allow for dredging at Kingston, and jetty works at Cascade	2012/13	Will support the development of improved shipping access to Norfolk Island to lower freight cost and support the development of cruise ship based tourism	Funded from privatisation sale revenue	\$200,000
Electricity Generation infrastructure maintenance and solar power stability impact study	2012/13	Investment to support the efficient generation and provision of power on Norfolk Island	Funded from privatisation sale revenue	\$200,000
Rock supply works at Cascade cliff	2013/14	Ensure an appropriate rock supply for construction activity on Norfolk Island to support infrastructure works	Loan from the Commonwealth to be repaid from rock royalty payments	\$1.5M
Major works at Kingston and Cascade jetties to allow containerised freight and support unloading cruise ship passengers	2013/15	Will allow containerised freight services to Norfolk Island, and also allow tenders to service passing cruise ships to support tourism development	Regional Development Fund and privatisation sale revenue	\$3.5M
Norfolk Island Cultural Centre	2013/15	Will support strengthening the cultural identity of the Norfolk Island community, and the provision of services relevant to tourism	Regional Development Fund and privatisation sale revenue	\$3.0M
Norfolk Island Hospital	2013/18	Replacement of outdated and non-compliant infrastructure and provide an efficient and integrated health and aged care service	Health and Hospitals Fund, privatisation sale revenue, private sector donations	\$30.0M
Relocation of administration functions from Kingston and redevelopment of historic buildings	2015/20	Allow the development of cultural and museum space in the historic Kingston area to enhance the premier tourist attraction on Norfolk Island	Department of Regional Development, Norfolk Island government, private sector	\$5.0M

8 Stimulus measures

The following chapter addresses the following term of reference:

Provide design options for possible business, industry, and individual socio-economic stimulus packages that can be implemented in the short term to speed recovery.

The following stimulus measures either temporarily reduce Norfolk Island government taxation revenue, or require the provision of additional Commonwealth government or Norfolk Island government spending. As these are measures to be enacted in the very short term, it is assumed that the required legislative change to allow Norfolk Island organisations to be eligible for a wider range of Commonwealth grant programs has not yet taken place.

In developing stimulus measures it has been assumed that the current Norfolk Island hospital grant application for a new hospital building is unsuccessful.

8.1 Stimulus spending issues

There are a wide range of views about the effectiveness of fiscal stimulus spending. However, most, if not all of the concerns about the effectiveness of fiscal stimulus measures are not relevant in the case of a stimulus package for Norfolk Island.

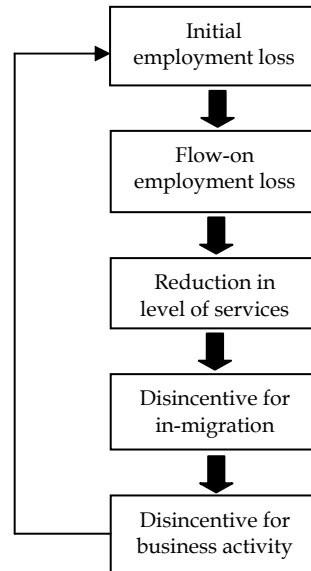
First, Norfolk Island, as a sub-national jurisdiction, does not have the ability to use monetary policy to stimulate economic activity, and hence the general preference in economics for the use of monetary policy over fiscal policy for stimulus activity is not relevant.

Second, to the extent that the Commonwealth government provides some of the stimulus funding, and the total tax burden for supporting this spending largely falls outside Norfolk Island, stimulus spending represents a net transfer to Norfolk Island.

Third, Norfolk Island is not in a typical business cyclical downturn, but as shown in Figure 12, Norfolk Island has entered a downward spiral with a negative feedback loop such that a falling population is leading to falls in economic output, which is in turn leading to negative future expectations and a further reduction in population.¹⁰⁵

¹⁰⁵ Beer, A. and Keane, R. (2000) "Population Decline and Service Provision in Regional Australia: A South Australian Case Study", *People and Place*, Vol. 8, No. 2, pp. 69-76.

Figure 12 **Services, employment, and population loss spiral**



Data source: Beer and Keane (2000).

Fourth, to the extent that stimulus measures work to constrain Norfolk Island government tax revenue and assist in reducing the role of the Norfolk Island government in the economy, stimulus measures can work to support a broader microeconomic reform package.

Fifth, general concerns about the role of the accelerator principle in creating business cycles are not relevant as investment spending is likely to grow over the medium term. In the context of Norfolk Island, the proposed capital expenditure tax incentive and net additional Commonwealth spending is modest, and so will bring forward only a modest amount of new investment that would not otherwise take place. In subsequent periods, investment spending is expected to grow because:

- The privatisation of GBEs will provide funds that the Norfolk Island government can invest in capital works projects
- New owners of former GBEs are likely to make additional investments in these businesses
- Providing the Norfolk Island community with access to the full range of Commonwealth grant programs, and investment in grant writing capacity will increase the number of capital works projects funded on Norfolk Island
- The removal of immigration conditions that restrict the ability of individuals to invest in new business will promote private sector investment.

Sixth, if the general output elasticity is around unity,¹⁰⁶ then the estimated additional works stimulated by direct Commonwealth spending and temporary tax incentives will be modest. Hence, concerns about the clustering of investment projects, and potential supply constraints, are not relevant.

Seventh, the proposed measures meet the basic requirements of a good stimulus package, in that there is no sign the economy is emerging from an economic depression, and hence new spending is timely; proposed measures are well targeted, in terms of maximising multiplier effects; and the measures do not imply a deterioration in the long term fiscal position of the Norfolk Island government.¹⁰⁷

8.2 Infrastructure investment

8.2.1 Commonwealth government funded projects

A wide range of public infrastructure projects could be funded. Given the world heritage status of the KAVAH site, and its future role as a core tourism attraction on Norfolk Island, projects in this area have been identified as high priority projects for stimulus spending.

The following projects have a high local content component and can be implemented at short notice. As such these projects are worth exploring further in terms of developing a formal business case. It is anticipated that the majority of funding for the identified projects would be provided by the Commonwealth.

Projects with a target to begin prior to 1 July 2012

- Timber wall replacement and ground stabilisation works at Cemetery Bay and Emily Bay
 - Indicative cost of works at each site of \$200,000 (total cost \$400,000)
 - Projects will use local materials and local labour
- Terracing, replanting, and cliff face stabilisation works around the Pier area and around Bloody Bridge
 - Indicative cost of works at each site of \$100,000 (total cost \$200,000)
 - Projects will use local material and local labour.

¹⁰⁶) Hassett, K.A and Hubbard R.G. (2002) Tax Policy and Business Investment, in M. Feldstein and A.J. Auerbach (eds) Handbook of Public Economics, Burlington: North Holland.

¹⁰⁷ Elmendorf, D.W. and Furman, J. (2008) If, When, How: A Primer on Fiscal Stimulus, The Brookings Institute.

Project with a target commencement date of between 1 July 2012 and 30 June 2013

- Ex gratia grant to allow a project comparable to those funded under the Building the Education Revolution (BER) program to be completed on Norfolk Island
 - For schools with 151-300 FTE students, projects funded through the BER program were around \$2.0M
 - The Norfolk Island Central School is to be responsible for deciding the exact nature of the project
 - The Department of Regional Australia is to be responsible for approving the final project.

8.2.2 Norfolk Island government funded projects

Both theory and empirical evidence strongly support the idea that reducing the user cost of capital through tax changes results in higher investment, higher consumption, and higher output, with the response elasticity likely to be around unity.¹⁰⁸

The role of a temporary tax incentive in stimulating economic activity is less clear cut, and must be considered on a case-by-case basis. It can, however, be argued that a temporary tax cut works to encourage investment by simultaneously lowering the user cost of capital in the current period, through the reduction in tax, and raising the user cost of capital in subsequent periods, by reinstating the tax.¹⁰⁹

In the specific context of Norfolk Island, a temporary tax incentive scheme has several additional advantages. For example, the reduction in tax receipts is complementary to the goal of achieving an overall efficiency dividend from the Norfolk Island public service, and also demonstrates a significant commitment by the Norfolk Island government to stimulating private sector economic activity that is commensurate with the revenue base of the Norfolk Island government.

Tax cut stimulus actions

Effective immediately, the provision of a GST exception/tax credit or partial rebate for capital works spending on housing and accommodation assets undertaken between 1 January 2012 and 30 June 2013.

¹⁰⁸ Hassett, K.A and Hubbard R.G. (2002).

¹⁰⁹ Hassett, K.A and Hubbard R.G. (2002).

- The cost to the Norfolk Island government in terms of lost GST revenue is difficult to quantify, but:
 - ... based on the value of building supplies imported in the 2010/11 financial year, the extent of the first round loss of GST income is likely to be around \$600,000
 - ... The additional GST revenue gained from the multiplier effect of new works might be around \$50,000.

Government spending projects

The Norfolk Island Forester has provided a list of works in public reserves to improve the amenity value of these areas. Individual projects range in value from \$3,000 to \$35,000 and largely use local labour and materials. The total value of works identified is \$314,000.

- Actual projects to be funded to be subject to Norfolk Island government budget deliberations.

Other actions

- Removal of immigration restrictions on the establishment of new businesses
 - No substantive cost.

8.3 Improving community welfare

8.3.1 Measures targeted at individuals

Reducing the risk of incurring a substantial medical related expense will increase community welfare and add to disposable income which will provide a stimulus to local spending.

- Effective 1 July 2012, establishment of a service delivery agreement between the Commonwealth government and the Norfolk Island government for the progressive expansion of medical services such that they are equivalent in cost to those on mainland Australia for residents of Norfolk Island
 - The cost to Norfolk Island residents would be the revenue collected through the Norfolk Island Health Care Levy (\$760 per year per individual). The Norfolk Island government would make a contribution from privatisation revenues. Ultimately, the difference between the full cost of service provision and the revenue collected through the Norfolk Island Health Care Levy (or equivalent) is to be funded by the Commonwealth, and this amount is expected to be around \$1.5M to 2.0M. In the immediate costs are to be shared across the Commonwealth and Norfolk Island governments.

8.3.2 Measures targeted at social and community organisations

Social, community, and sporting clubs provide services that are essential to the overall wellbeing of the Norfolk Island community. These organisations are under substantial financial pressure, and report difficulty meeting required maintenance spending needs. The establishment of a temporary community grants program to support substantial maintenance activities and minor capital works would provide both an economic stimulus and improve community social capital. The nature of the proposed temporary grants scheme is outlined below.

- Total grant funding of \$100,000
 - Source of funds to be 50 percent Commonwealth government and 50 percent Norfolk Island government
 - Maximum funding for a single project of \$20,000
- Two funding rounds, with funds available to sporting, community and other not-for profit organisations established prior to 1 January 2012
- Criteria for projects to be funded
 - Major maintenance or minor capital works project
 - Demonstrated need
 - Ability to provide lasting value to the community
 - Local content component of works
- Evaluation of submissions
 - Committee to include one community representative, one Norfolk Island government representative, and one Commonwealth government representative. Committee secretarial support to be provided by the Norfolk Island government.

9 Economic and social indicators

The following material addresses the following term of reference:

Develop and document so that they may be compiled locally in the future, a robust and appropriate set of whole-of-economy economic indicators which are comparable with national standards and allow the preparation of forward projections and the tracking of economic conditions.

9.1 Social indicators

The following social indicators are proposed as measures that provide relevant information about the social situation on Norfolk Island, but do not require additional effort to collect.

9.1.1 Financial stress indicator

Default summons issued provide an indicator of financial stress, and the required information is collected as part of the Registrar function. Rather than the level of default summons issued it is the change from year to year that is of interest.

Table 27 **Default summons issued on Norfolk Island**

	2007/08	2008/09	2009/10	2010/11
No. Issued	208	360	406	596
% Change	-	73	13	47

Data source: Norfolk Island Registrar

9.1.2 Crime statistics

Criminal summons issued provide a broad indicator of the level of criminal activity and the required information is collected as part of the Registrar function. As with the financial stress indicator it is the change from year to year rather than the level per se that is of interest.

Table 28 **Criminal summons issued on Norfolk Island**

	2007/08	2008/09	2009/10	2010/11
No. Issued	117	105	70	101
% Change	-	-10.3	-33.3	44.3

Data source: Norfolk Island Registrar

9.1.3 Education indicators

School attendance rates show the ratio of students who attend school compared to the number of students enrolled. As failure to obtain a basic education is associated with negative social outcomes, school attendance rates are an appropriate leading social indicator. Table 29 shows school attendance rates on Norfolk Island compared to those in New South Wales. In 2010 attendance rates at Norfolk Island Central School were 94 percent compared to 92 percent for all public schools in New South Wales.

Table 29 **School attendance rate: Norfolk Island**

	New South Wales*	Norfolk Island
2007	92	89
2008	92	92
2009	92	93
2010	92	94

Data source: Norfolk Island Central School; * = NSW Department of Education and Communities data for public schools

9.2 Economic indicators

The following economic indicators are proposed for Norfolk Island.

9.2.1 Retail price index

In the existing Retail Price Index calculator when an item was discontinued the price was held constant in the index. This resulted in the price index understating the level of price inflation on Norfolk Island. Additionally, a number of cases were identified where the price values recorded for a specific item appeared to be incorrect. These were cases where following years of steady increase in a product price the price suddenly dropped to one tenth of the previously recorded price. This suggests a change in package size or some other change that has not adequately been recorded during the data collection process.

To arrive at a revised retail price index all data that was clearly in error has been replaced by the average value for that index group. Similarly, where an item has been discontinued it has been replaced by the mean price change for the index group. These changes resulted in substantial revisions to the historical values of the RPI. The revised measure is a serviceable measure, but a resampling exercise is required to update the RPI basket.

Table 30 Retail price index for Norfolk Island

Group	Dec-05	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08
Food and non-alcoholic beverages	100.0	103.1	104.0	107.6	107.6	109.2	115.0	114.0	117.8	119.3	121.3	126.0
Tobacco and alcohol	100.0	110.1	110.1	109.9	109.9	110.4	106.7	105.1	105.1	105.5	109.3	111.0
Clothing and footwear	100.0	100.0	100.0	100.1	100.1	103.5	103.5	101.0	101.0	101.0	101.0	102.9
Household operation	100.0	103.5	106.0	108.4	108.4	109.0	109.8	202.9	117.4	117.5	109.8	120.1
Household maintenance	100.0	103.2	106.9	105.1	105.1	118.3	118.3	118.3	118.3	118.3	119.2	119.6
Household equipment	100.0	100.0	102.5	104.0	104.0	108.3	114.2	107.5	107.5	107.7	107.7	107.7
Health services	100.0	99.5	105.3	105.7	105.7	112.3	112.7	113.1	113.6	115.3	115.8	116.8
Personal care products	100.0	104.2	106.1	104.3	104.3	105.7	108.2	106.1	106.7	106.9	106.9	108.6
Transportation statutory & insur costs	100.0	109.2	109.1	114.3	114.3	108.7	111.7	116.3	122.4	131.7	128.6	129.1
Recreation, education and travel	100.0	104.6	106.9	107.9	107.9	106.1	103.0	109.0	107.5	112.5	112.7	115.3
All Groups	100.0	104.1	105.8	107.8	107.8	108.5	109.8	123.2	113.1	115.9	115.3	118.8
Group	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
Food and non-alcoholic beverages	126.5	128.6	128.4	132.8	132.5	133.1	133.8	133.9	135.3	134.6	134.9	135.7
Tobacco and alcohol	112.6	112.4	112.6	123.0	127.8	128.7	128.7	129.3	129.3	129.3	129.3	130.7
Clothing and footwear	102.9	102.9	102.9	103.4	103.7	86.0	101.7	84.2	84.2	84.2	83.9	84.1
Household operation	126.8	123.4	121.4	123.9	124.4	124.8	125.0	125.6	125.9	126.0	126.2	130.4
Household maintenance	119.6	115.0	115.0	115.1	121.6	121.6	121.6	118.6	118.6	120.4	120.4	120.4
Household equipment	108.7	108.7	108.7	108.7	114.3	115.6	112.6	120.0	120.0	121.9	121.9	121.9
Health services and	117.4	117.4	117.2	123.4	122.8	123.2	123.1	124.4	124.5	125.8	125.1	127.4
Personal care products	108.6	112.6	112.8	114.5	119.8	122.4	122.4	125.9	123.8	131.9	132.6	134.3
Transportation statutory & insur costs	129.1	126.0	126.6	127.9	131.8	131.2	127.2	128.5	135.5	136.7	136.7	138.9
Recreation, education and travel	112.8	113.9	114.2	115.4	116.1	118.3	117.9	115.9	113.7	118.1	117.2	116.2
All Groups	119.4	119.2	119.1	121.9	123.4	123.1	123.6	122.6	123.3	124.7	124.5	125.5

Data source: ACIL Tasman

9.2.2 Economic activity

To calculate a GDP measure requires a number of assumptions, and the more complete the measure the greater the number of assumptions required. Over time it is likely that the accuracy of these assumptions will decrease and so there is the potential for the measure to become inaccurate. With this in mind a number of simple measures are proposed that combined provide an accurate picture of the level of economic activity.

GST based measure

The GST based measure gives an indication of the changes in the level of economic activity for those industries subject to GST. For this measure it is the change from period to period that is important rather than the level of the measure itself.

Table 31 **GST measure of economic activity annual change**

	2007/08	2008/09	2009/10	2010/11
Nominal change (%)	-	4.6	-2.8	-5.3
Real change (%)	-	1.3	-6.3	-6.0

Data source: ACIL Tasman

Tourism arrivals

The Gross Island Product calculations indicate that over 40 percent of economic activity on Norfolk Island is related to tourism. As such, simply tracking tourism arrival numbers provides a valuable indicator of the change in economic activity on Norfolk Island.

Table 32 **Tourism arrivals on Norfolk Island**

	2007/08	2008/09	2009/10	2010/11
Level	34,310	35,399	26,339	24,268
Change (%)	-	-16.3	-11.1	-7.9

Data source: Norfolk Island Government

Labour force measure

The lack of unemployment benefits on Norfolk Island means that it is not possible to develop a measure comparable to the unemployment rate. It is however possible to infer something about the labour market by tracking the flow of Temporary and General Entry Permits issued each year.

Table 33 **Summary statistics: immigration**

	2008/09	2009/10	2010/11
Temporary Entry Permits	460	454	402
General Entry Permits/Quota	32	22	44
General Entry Permits/Section 18	7	21	39
Declaration of Residency	36	13	35

Data source: Norfolk Island Customs and Immigration

10 Recommendations

When a large number of recommendations are presented it is possible that the majority of recommendations can be accepted while fundamental reforms remain ignored. Here the approach taken has been to make only a limited number of high level recommendations.

Recommendation 1: Economic development

The Norfolk Island government adopt a program of microeconomic reform built around the implementation of the *Competition Principles Agreement 1995*. The core elements of the program will be privatisations of GBEs; tax reform to increase the government revenue base; the introduction of price setting for utilities by an Economic Regulator; increased legislative consistency with the mainland to reduce business costs; and investment in core infrastructure.

Recommendation 2: Human capacity development

Revise the funding agreement for the Norfolk Island Central School to allow funding on a per enrolment basis, and to also reflect new roles in terms of administering the apprenticeship financial support scheme, and serving as a community information source for accessing adult education.

Recommendation 3: Additional appointments

Appoint a person with expertise in the divestment of State assets to assist with the privatisation process; and for various lengths of time, an agricultural extension officer, and an expert in grant writing.

Recommendation 4: Infrastructure investment

The Norfolk Island government allocate at least 75 percent of net GBE privatisation revenue to infrastructure investment, and all Norfolk Island organisations, including the government, be made eligible for all appropriate Commonwealth government administered grant programs.

Recommendation 5: Microeconomic reform implementation

Create a standing committee with representatives of both the Commonwealth and Norfolk Island governments that is responsible for monitoring progress in microeconomic reform implementation, and developing annual funding agreements where payments are conditional on reform progress.

Recommendation 6: Capacity building team

That the Commonwealth capacity building team support the preparation of financial accounts in a format consistent with that required to privatise assets and allow future price determinations by an Economic Regulator.

Recommendation 7: Health and welfare

The Commonwealth and Norfolk Island governments jointly, and progressively, work to improve access to health services (including pharmaceuticals), on Norfolk Island so that they are at a standard, and have a direct user cost, equivalent to that on the mainland.

Recommendation 8: Business certainty

The staged extension of company tax and income tax (including medicare) to Norfolk Island be delayed until 2015/16.

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