Annex B

Monitoring Employment Growth in the Auckland CBD

A Proposed Approach

1 Introduction

The Prime Minister’s recent Auckland transport package included an announcement that government is committing to a joint business plan for the City Rail Link with Auckland Council in 2017 and providing its share of funding for a construction start in 2020. The Prime Minister also stated that an earlier business case could be triggered if the following two targets are reached:

- Auckland CBD employment increases by 25 percent over current levels; and
- Annual rail patronage is on track to hit 20 million trips well before 2020.

The Minister of Transport has asked the Ministry to work with Auckland Council and Auckland Transport to establish robust and transparent measures to assess progress against these targets. He has also asked the Ministry to establish procedures for producing half yearly reports to track progress against these targets.

This note sets out a proposed approach to measuring employment in the Auckland city centre to identify the progress being made against the first of the two targets above.

2 Establishing an Appropriate Approach

2.1 Introduction

Ideally the criteria developed to identify employment growth in the Auckland CBD should be:-

- Transparent
- Reliable
- Able to provide information relating to the geographical area within the city centre. The proposed definition of this is discussed below
- Available in timely fashion
- Easily accessible

It should be noted that the criteria is a relative one relating to a proportional rate of growth and not to the absolute level of employment.
There are a number of measures of employment that in principle might be suitable and these have been reviewed. Following this review and discussions with staff from Statistics New Zealand, four measures, all of which are produced by Statistics New Zealand, were identified for further examination. These are:-

- The Household Labour Force Survey (HLFS)
- The Linked Employer-Employee Database (LEED)
- The Business Demographics Database (BDD)
- Census of Population

Each of these was reviewed against the criteria set out above. The details of each of these are set in Appendix A.

2.2 Defining the Auckland CBD

While there are a number of possible ways of defining the Auckland CBD, a widely used definition for this is the area bounded by the Waitemata Harbour to the north and the motorways. For the purposes of this comparison it is recommended that the Auckland CBD be defined as the area broadly bounded by the motorways and the harbour lying within 5 Census Area Units (CAUs) as follows:-

- Auckland Harbourside
- Auckland Central West
- Auckland Central east
- Grafton West
- Newton

While the selected CAUs do not match the areas precisely, the areas outside the motorway boundaries are small as can be seen in Figure 1.
Relating the area to Census Area Units facilitates obtaining employment data since information at this level is available on the Statistics New Zealand website, and can also be readily used if user-defined outputs are required. This definition has already been used in the assessment of the CRL and this approach would provide continuity with earlier analysis by Auckland Transport.

2.3 Proposed Approach

Following a review of the alternative sources of information on employment it is proposed that the data from the Business Development Database relating to 2012 and covering the 5 CAUs identified above be used as the basis for the comparison. This has the following advantages compared to other possible sources of data:

- BDD data is widely used for the analysis of employment patterns within Auckland. Comparison against other data sources indicates that that it produces similar estimates of employment growth

- The information is freely available at a CAU level with detailed data being published on the Statistics New Zealand web-site.

- The information is made available in a reasonably timely fashion with results for February being published in the following October or November

- Although the relatively early release of the data means that it is subject to subsequent review, the scale of any subsequent changes are typically small and tend to be concentrated in the first year after the initial publication of the figures. On the assumption that 2012 is to be used as the basis for the comparison, the publication of the 2013 data includes an initial adjustment of the 2012 figures and any subsequent changes are therefore likely to be small.
• BDD data has already been used in the assessment of the CRL.

Although the information is only produced on an annual basis this is considered to be sufficient for the current purpose, given its other advantages.

On the basis of the most recent release of BDD data, employment in the CBD in 2012, the base year, was estimated at 98,140. This increased by 2.1 per cent to reach 100,170 in 2013.
APPENDIX A

REVIEW OF POTENTIAL ALTERNATIVE SOURCES OF EMPLOYMENT DATA
Introduction

This appendix considers the issues associated with using four possible approaches to estimating employment numbers in the Auckland CBD and considers:

- The Household Labour Force Survey
- The Linked Employer-Employee Database (LEED)
- The Business Demographics Database (BDD)
- The Census

The Household Labour Force Survey

The Household Labour Force Survey is focused on identifying employment levels, unlike LEED and the BDD which have a business focus. It is therefore focused on workers rather than jobs and provides the basis for official employment statistics.

It is based on a relatively small survey covering 15,000 households and 30,000 workers nationally.

While estimates are produced at a regional level, the small sample size means that it is not therefore considered reliable for providing estimates of employment by disaggregated geographical area.

It is produced very quickly with the results for one quarter being available within about 6 weeks.

Because of the inability to produce local area statistics this is not considered to be an appropriate measure for the purpose of measuring city centre employment.

LEED

LEED and the BDD are produced from what is effectively a common source of data, tax records for workers paying tax through PAYE although there are differences in the way in which the information for the two databases is extracted.

LEED is intended to provide information that measures labour market dynamics, so providing an insight into the operation of New Zealand’s labour market and is not used to provide official employment statistics.

LEED measures all employees and some self-employed persons who have tax deducted at source through the PAYE system. It does not include workers who do not have tax deducted at source and therefore excludes some self-employed workers and working proprietors. For employment, published LEED quarterly data measures all those jobs which were present for the whole quarter.

The data is collected at the geographic unit level which relates to the location where the worker is actually employed, rather than his or her residential location.
Because of the complex analysis of data required to examine the dynamics of the labour market which takes time to be produced by employers, the results of the analysis are not available until 12 months after the reference quarter.

Information is available on the Statistics New Zealand web site at a Territorial Authority level although customised statistics could be produced for more disaggregated areas subject to confidentiality constraints. This would probably not be an issue for the Auckland city centre area given the size of employment in the area.

LEED data is available quarterly.

While LEED data would be a possible candidate for the provision of Auckland city centre employment statistics, the relatively slow time-scale for the publication of results and the need to generate customised tables for the area concerned would be disadvantages in its use.

**BDD**

Like LEED BDD does not produce an official employment measure but in this case is designed to explore the structure of business.

The BDD uses the same basic source of data as LEED but the employment component is based on all people employed in the month of February of a particular year. This would therefore take into account jobs which did not exist for the whole quarter, unlike LEED which is based on jobs for the whole quarter.

BDD also measures all employees not just those 15 and over.

The employment estimates from the BDD are higher than those for LEED because of the different definitions used. The differences over time are set out in Figure A1.

![Comparison of LEED Quarterly Data for the March Quarter and BDD Data](image)
Although there are differences between the numbers published by the approaches, data supplied by Statistics NZ has indicated that when placed on a common basis the differences between LEED and BDD are very small and that year on year changes are very similar. This is set out in Figure A2.

Results from BDD are published down to a CAU level. These also include data on employment by industrial sector.

Results are typically published in October or November for data relating to the previous February so are reasonably timely.

Because of this early publication results are subject to review in subsequent years. Although the adjustment process can apply over a number of years with for example the figures for 2007 being revised at the same time as the publication of the 2013 results, the main adjustments typically take place in the first or second years after publication and subsequent adjustments are normally very small. Even when adjustments have been relatively large, over the period from 2007 the largest changes have only amounted to about 1 per cent.

**The Census**

The Census is normally conducted at 5 year intervals and records data associated with the residence of the respondent. In terms of employment characteristics, these relate to workers rather than jobs since each respondent provides information for their main employment only and no information on any secondary employment is provided. Information is however in principle provided for all workers including those who are self employed.

While information is collected on the place of employment, this relies on the information provided by the respondent and in many instances the information provided is not in sufficient detail to allocate this to an exact place of work. In the 2006 Census for example the total number of workers was recorded as 1.986m but a workplace address by CAU was only available for 1.591m, about 80 per cent of the total. There is also a degree of non-response.
Statistics NZ state that workplace address data is a supplementary variable with a relatively low priority in terms of effort and resource.

The Census is only undertaken at relatively infrequent intervals, typically 5 years, and so would not in any case be appropriate for monitoring changes on an annual basis.

**Overall Assessment**

Because of the high level of geographical disaggregation possible, the relative timeliness of the data and its reasonable robustness being based on full records rather than just a survey, BDD data is considered to provide the most appropriate basis of comparison for levels of Auckland CBD employment.