

# **Business Confidence Survey Design**

Reference period – 2008

## **DATA SOURCES**

### **AUSTRALIAN BUREAU OF STATISTICS**

Data in Table 1 is based on actively trading businesses from ABS catalogue, 8165.0, Counts of Australian Businesses, including Entries and Exits, Jun 2003 to Jun 2007.

Table 1 outlined below is based on number of businesses in Katherine (T) Statistical Local Area, (SLA).

| Industry                                 | Non<br>employing | Micro      | Small       | Medium           |                  |                    | large       | Total      |
|--|------------------|------------|-------------|------------------|------------------|--------------------|-------------|------------|
|  | no.              | 1-4<br>no. | 5-19<br>no. | 20-<br>49<br>no. | 50-<br>99<br>no. | 100-<br>199<br>no. | 200+<br>no. |            |
| A AGRICULTURE FORESTRY<br>AND FISHING    | 84               | 27         | 18          | 0                | 0                | 0                  |             | 129        |
| B MINING                                 | 0                |            | 0           | 0                |                  |                    |             | 0          |
| C MANUFACTURING                          | 6                | 12         | 0           |                  |                  |                    |             | 18         |
| D ELECTRICITY GAS AND<br>WATER SUPPLY    | 0                |            |             |                  |                  |                    |             | 0          |
| E CONSTRUCTION                           | 72               | 45         | 9           | 0                | 3                | 3                  | 0           | 132        |
| F WHOLESALE TRADE                        | 6                | 0          | 3           | 3                |                  |                    |             | 12         |
| G RETAIL TRADE                           | 48               | 45         | 36          | 0                | 0                |                    |             | 129        |
| H ACCOMMODATION CAFES<br>AND RESTAURANTS | 12               | 6          | 3           | 3                | 3                | 0                  |             | 27         |
| I TRANSPORT AND STORAGE                  | 12               | 12         | 3           | 3                | 0                | 0                  |             | 30         |
| J COMMUNICATION SERVICES                 | 3                |            | 3           |                  |                  |                    |             | 6          |
| K FINANCE AND INSURANCE                  | 18               | 3          |             |                  | 0                |                    |             | 21         |
| L PROPERTY AND BUSINESS<br>SERVICES      | 63               | 21         | 12          | 3                |                  | 3                  |             | 102        |
| N EDUCATION                              | 0                |            |             |                  |                  |                    |             | 0          |
| O HEALTH AND COMMUNITY<br>SERVICES       | 6                | 6          | 9           | 0                |                  |                    |             | 21         |
| P CULTURAL AND<br>RECREATIONAL SERVICES  | 0                | 0          | 3           | 0                | 0                |                    |             | 3          |
| Q PERSONAL AND OTHER<br>SERVICES         | 15               | 6          | 6           | 0                |                  |                    |             | 27         |
| <b>TOTAL</b>                             | <b>345</b>       | <b>183</b> | <b>105</b>  | <b>12</b>        | <b>6</b>         | <b>6</b>           | <b>0</b>    | <b>657</b> |

Source ABS cat 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2003 to Jun 2007.

ABS data suggests Non employing businesses (sole trader, owner operator) make up a larger component of Katherine businesses 52.5%.

A full business confidence census will be undertaken in Katherine. The area identified for the survey is Katherine (T) Local Government Area. This area covers approximately 581.9 sq KM.

In Northern Territory, the Local Government areas are closely aligned to the ABS Statistical Local Area geography (presently). This alignment may differ in the future due to boundary changes as a result of introducing mesh blocks.

### **AUSTRALIAN BUSINESS REGISTER (ABR)**

ABR identified 954 active businesses, who contributed to GST and have an active ABN number in Katherine as at 26/06/2008. These numbers are accurate as at a point in time. Estimates change as we receive the latest ABR figures.

The ABR data as opposed to the ABS is not 100% validated, i.e. misspelling of area on the actual form could affect business counts in that area. Further, one business may register multiple ABN numbers thus making the count of that business showing up more than once. When businesses register on ABN website, ATO validates or cross references the data against business data; this affects business counts and based on all of the above discrepancies occurs between ABS and ABR business counts numbers.

In the current file 56 ABR business addresses were not geocoded as they are not geocodable.

**Table 2. ABR Data by Industry**

| <b>ANZSIC_<br/>Div Code</b> | <b>ANZSIC Div Des</b>                      | <b>No of<br/>businesses</b> |
|-----------------------------|--|-----------------------------|
| A                           | Agriculture, Forestry and Fishing          | 185                         |
| B                           | Mining                                     | 5                           |
| C                           | Manufacturing                              | 25                          |
| D                           | Electricity, Gas, Water and Waste Services | 4                           |
| E                           | Construction                               | 169                         |
| F                           | Wholesale Trade                            | 16                          |
| G                           | Retail Trade                               | 82                          |
| H                           | Accommodation and Food Services            | 48                          |
| I                           | Transport, Postal and Warehousing          | 54                          |
| J                           | Information Media and Telecommunication    | 5                           |
| K                           | Financial and Insurance Services           | 32                          |
| L                           | Rental, Hiring and Real Estate Services    | 75                          |
| M                           | Professional, Scientific and Technical     | 51                          |
| N                           | Administrative and Support Services        | 52                          |
| O                           | Public Administration and Safety           | 14                          |
| P                           | Education and Training                     | 17                          |
| Q                           | Health Care and Social Assistance          | 21                          |
| R                           | Arts and Recreation Services               | 15                          |
| S                           | Other Services                             | 64                          |
| Undefined                   | Undefined                                  | 20                          |
|                             | Total Business (ABN number) =              | 954                         |

## **KATHERINE TERRITORY BUSINESS CENTRE**

Katherine Territory Business Centre (KTBC) has their own business register which has 863 business contacts; these are not validated or updated regularly and do not have industry classifications. The business register held by KTBC is based on data collected by businesses when they approach KTBC to register for a business name. Using this as another source would ensure hobby businesses are captured.

## **SCOPE OF THE CENSUS**

The sampling frame is based on ABR and Katherine TBC register less those that cannot be geocoded. In the absence of names and business address from the ABS this method will provide robust information

After cross-referencing with the ABR and local business directories, an additional 354 businesses were added from this register to the sampling frame.

It should be noted that ABR and Katherine TBC registers are still sources of primary information, as ABS business register ( with names and addresses) is not available to the public.

|  |             |
|--|-------------|
| Katherine Business Register -          | 354         |
| ABR less those that cannot be geocoded | 898         |
| <u>Total -</u>                         | <u>1252</u> |

**Average number of businesses actively trading in Katherine 626 and this aligns with the ABS count of businesses for the Katherine LGA area also.**

Assumption – Unlike ABS, NT Government can not enforce businesses to participate in the Business confidence survey, thus it is important to estimate a response rate. The business participation calculations are based on clean ABS data.

In conducting a census, all businesses will be visited to part take in the **“Business Confidence Survey”**. **However as we can not enforce compulsory businesses participation in the census**, we estimate 230 business returns from approximately 524 to be visited. This equates to a 35% response rate and a 5% error rate in the data (using ABS data).

The surveying (in most cases) will be conducted face to face and will be interview based.

To ensure good coverage of businesses within Katherine, the Local Government area will be broke down by light Industry, general industry, service commercial, tourist commercial, commercial and central business district. We assume that the majority of current businesses operate in these sampling areas.

A stratified sample of industry is also developed to ensure a cross section of industry is captured. See Table 3.

**Table 3 – ABR Stratified by Industry**

| ANZSIC_Div_Des                                  | Freq.(N) | estimated p | fraction allocated to each stratum, a | $N^2pq/a$ | $Npq$ | Sample Size,n |
|---|----------|-------------|---------------------------------------|-----------|-------|---------------|
| Agriculture, Forestry and Fishing               | 185      | 0.5         | 0.19                                  | 44122.5   | 46.25 | 54            |
| Construction                                    | 169      | 0.5         | 0.18                                  | 40306.5   | 42.25 | 50            |
| Retail Trade                                    | 82       | 0.5         | 0.09                                  | 19557     | 20.5  | 24            |
| Rental, Hiring and Real Estate Services         | 75       | 0.5         | 0.08                                  | 17887.5   | 18.75 | 22            |
| Other Services                                  | 64       | 0.5         | 0.07                                  | 15264     | 16    | 19            |
| Transport, Postal and Warehousing               | 54       | 0.5         | 0.06                                  | 12879     | 13.5  | 16            |
| Administrative and Support Services             | 52       | 0.5         | 0.05                                  | 12402     | 13    | 15            |
| Professional, Scientific and Technical Services | 51       | 0.5         | 0.05                                  | 12163.5   | 12.75 | 15            |
| Accommodation and Food Services                 | 48       | 0.5         | 0.05                                  | 11448     | 12    | 14            |
| Financial and Insurance Services                | 32       | 0.5         | 0.03                                  | 7632      | 8     | 9             |
| Manufacturing                                   | 25       | 0.5         | 0.03                                  | 5962.5    | 6.25  | 7             |
| Health Care and Social Assistance               | 21       | 0.5         | 0.02                                  | 5008.5    | 5.25  | 6             |
| Undefined                                       | 20       | 0.5         | 0.02                                  | 4770      | 5     | 6             |
| Education and Training                          | 17       | 0.5         | 0.02                                  | 4054.5    | 4.25  | 5             |
| Wholesale Trade                                 | 16       | 0.5         | 0.02                                  | 3816      | 4     | 5             |
| Arts and Recreation Services                    | 15       | 0.5         | 0.02                                  | 3577.5    | 3.75  | 4             |
| Public Administration and Safety                | 14       | 0.5         | 0.01                                  | 3339      | 3.5   | 4             |
| Information Media and Telecommunications        | 5        | 0.5         | 0.01                                  | 1192.5    | 1.25  | 1             |
| Mining  | 5        | 0.5         | 0.01                                  | 1192.5    | 1.25  | 1             |
| Electricity, Gas, Water and Waste Services      | 4        | 0.5         | 0.00                                  | 954       | 1     | 1             |
| Total   | 954      | 0.5         | 1                                     | 226575    | 237.5 | 281           |

If good coverage of industry sectors is not achieved a more targeted approach will be undertaken to capture specific industries.

On top of the layered map an address coder using ABR and KTBC is incorporated, this identifies the location of businesses. This approach will assist to capture all businesses with a street address and also home based businesses within the Local Government area.

Hobby businesses if registered with an active ABR will be captured. However most hobby businesses are not required to have an ABR as their turnover is less than \$50, 000 a year and often these businesses also do not have shop frontage. To ensure we captured these businesses The KTBC register was used as these businesses will need active business name and address.

To ensure we have a greater response rate as well as encourage as many businesses as possible to participate in the survey an after hours number will be made available, and a TBC business number will be promoted during office hrs.

The survey was forwarded to Katherine Economic Development Committee and comments incorporated. The initial survey instrument was also forwarded to the ABS along with the survey management plan for comment and input.

Relevant agency employees will part-take in the survey as interviewers. They were provided half day interview training on the first day of the (initial) survey to go through the logistics. For safety and **where possible** field officers will travel in groups of two staff and carry a mobile phone. Field staff will be issued with precise field maps indicating the area to be targeted so as to avoid overlaps.

At the end of each day interview forms will be edited to ensure responses had been correctly gathered/ compiled. Interviewers will enter data collected for the day on each survey within Survey Monkey, an on-line survey tool. This will allow for real time results and avoid any data entry delays. Completed edited forms reside with the Economics unit of DRDPIFR.

## **2. SURVEY METHODOLOGY**

The census will be interview based, conducted irregularly. Respondents will be asked to provide data on the same basis regardless of the person interviewing. Respondents should be owner, manager or other (nominated person) of the business. Employees of the business **who** do not have this authority are not allowed to participate in the survey.

Where a selected unit does not participate or respond in a given survey, the next business unit should be approached. Business participating in the Katherine Economic Development Committee should participate in the census. Other businesses which are active participants through business services will be asked to participate in the survey.

Staff within the relevant agency will partake as interviewers for the census. At the end of each day interview forms will be edited to ensure responses have been correctly gathered / compiled.

Census forms will be allocated to interview personnel as efficiently as possible on the first day of the commencement of interviews.

Completed edited forms will be returned to the Katherine Business office, in an envelope marking completed forms, the interviewer name, contact number for the interviewer, survey forms allocated, survey forms returned, date of return and the location allocated.

David Malone and Megha Raut (Methodology) as the media contact for the survey. Tim Mcmanus will also be another contact for issues associated with survey field work.

Data entry to be undertaken at the Katherine Business office, by interviewers, Hock and Megha will provide support as applicable. Final data once collected will be edited at the individual unit level and the aggregated level if needed.

Clean data files (unit record) to be forwarded to Megha Raut and Tim Mcmanus to undertake analysis and report writing.

**Survey timing/ Implementation**

Survey should be conducted 8 to 12 September 2008 onwards:

Over a one week period (5 days) – 10 to 12 interviewers should be allocated in undertaking this census, each completing approximately 8 to 10 forms per day or approximately 50 forms at the end of the week.

The late morning of the first day will be allocated for refresh training. Survey will be in the field as of 8<sup>th</sup> September afternoon.

**Please contact Megha Raut if there are any questions or concerns.**