

Embargoed until 10:45am – 30 October 2009

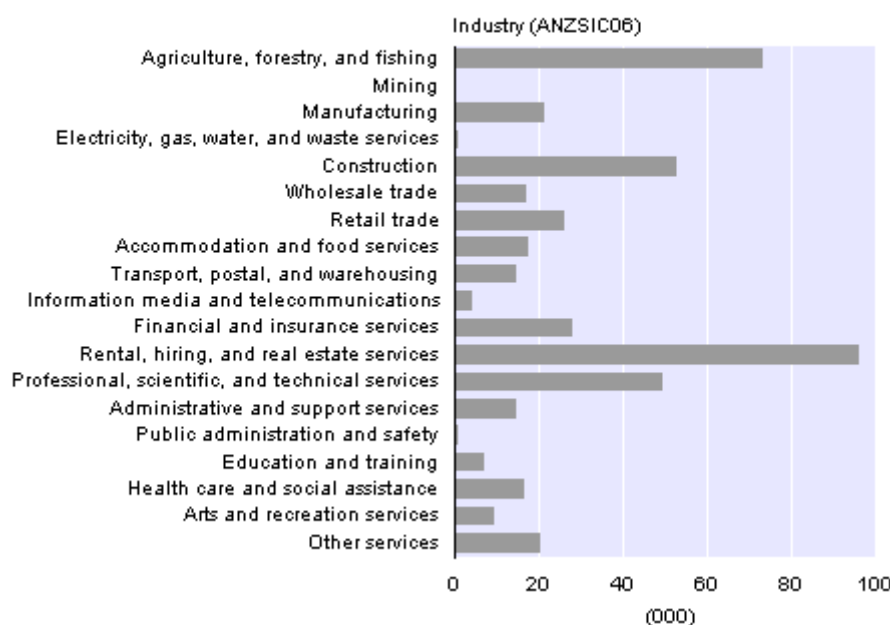
New Zealand Business Demography Statistics: At February 2009

Highlights

Provisional figures at February 2009 showed:

- 476,560 enterprises, up 0.3 percent compared with February 2008
- 51,800 enterprise births over the year, down 14.9 percent from the previous year
- 52,880 enterprises ceased over the year, up 2.9 percent from the previous year
- a total of 1.919 million paid employees (a business size measure statistic, not an official employment statistic), down 2.7 percent from 2008
- one-fifth of all enterprises were in the rental, hiring, and real estate services industry
- the manufacturing industry was the largest employer (239,500 employees)
- of the 60,880 births in the February 2008 year, 82 percent were still operating in 2009. Of the 42,880 births in the February 2001 year, 34 percent were still operating in 2009.

Number of Enterprises by Industry
At February 2009



Cathryn Ashley-Jones
Acting Government Statistician

30 October 2009
ISSN 1174-1988

Commentary

Business demography statistics

Business demography statistics provide an annual snapshot (as at February) of the structure and characteristics of New Zealand businesses. The series covers economically significant enterprises that are engaged in the production of goods and services in New Zealand.

This publication is the second release of business demography statistics on the basis of the 2006 version of the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006. Previously, the 1996 version of ANZSIC was used. For more details, see [Introducing ANZSIC 2006](#). All figures in this Hot Off the Press are based on the 2006 version of ANZSIC. The tables released with this publication include both the 1996 and 2006 versions of ANZSIC. This dual publication of the two versions of ANZSIC will be repeated for the 2010 release of business demography statistics, while the 2011 release will be based only on ANZSIC 2006. The ANZSIC 2006 classification has been back cast to 2000 to provide users with a consistent time series.

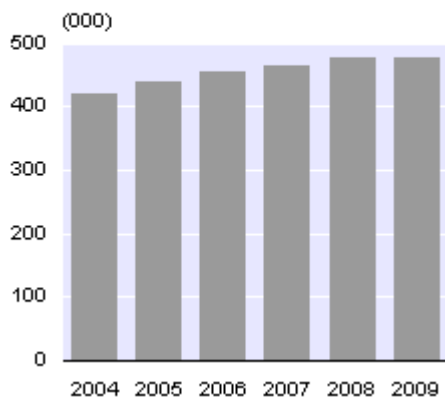
This is the third year of publication of an improved set of business demography statistics based on the Longitudinal Business Frame (LBF). This release includes both the structural (counts of businesses by industry, size, region, etc) and the dynamic (births, deaths, survival rates, etc) business demography statistics. The data is released on a provisional basis and includes a revised time series back to 2000. It is expected that the largest revisions will occur in the most recent reference periods. This is mainly due to the lags associated with the processing of administrative data. Analysis of the 2009 data should be carried out with caution.

Total number of enterprises, geographic units, and employees

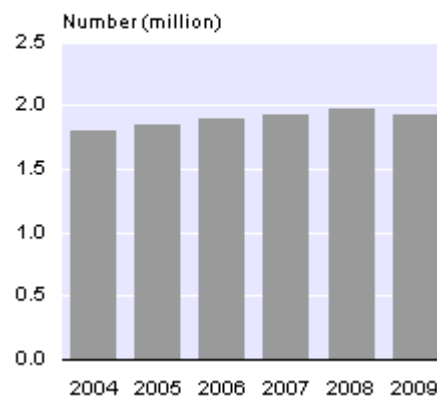
At February 2009, the total number of enterprises in New Zealand was 476,560, an increase of 0.3 percent (up 1,660) from 2008. The number of business locations (geographic units) corresponding to these enterprises was 512,580, an increase of 0.3 percent (up 1,550) from 2008.

These enterprises engaged a total of 1.919 million paid employees (a business size measure statistic, not an official employment statistic). The number of paid employees engaged decreased by 53,000 (2.7 percent) in February 2009 compared with February 2008. Continuing enterprises contributed most of this decrease.

Number of Enterprises
At February 2004–09



Employee Count
At February 2004–09



Industry statistics

Rental, hiring, and real estate services

The rental, hiring, and real estate services industry had the largest number of enterprises (96,250), representing 20 percent of all enterprises in New Zealand, at February 2009. This industry had a very small increase in the number of enterprises (up 80 or 0.1 percent), between February 2008 and 2009. About 94 percent of enterprises in this industry were non-employing enterprises. There were approximately 27,900 employees engaged in this industry at February 2009, compared with 30,100 at February 2008 (down 2,300 or 7.5 percent).

Agriculture, forestry, and fishing

There were 73,560 enterprises predominantly engaged in the agriculture, forestry, and fishing industry at February 2009, a decrease of 1,320 (1.8 percent) compared with February 2008. Most of this decrease (69 percent) was from non-employing enterprises. The agriculture, forestry, and fishing industry engaged approximately 109,700 employees at February 2009, down 400 (0.4 percent) from the previous year.

Construction

There were 53,130 enterprises predominantly engaged in the construction industry at February 2009, a decrease of 860 (1.6 percent) compared with February 2008. The number of enterprises decreased in all employment size groups except for the zero-paid employee category.

The construction industry engaged approximately 121,900 employees at February 2009, down 9,700 (7.4 percent) from the previous year. This employment decrease was contributed largely by construction services (60 percent), while residential and non-residential building construction accounted for 35 percent of this decrease.

Professional, scientific, and technical services

There were 49,780 enterprises predominantly engaged in the professional, scientific, and technical services industry at February 2009, an increase of 1,200 (2.5 percent) compared with February 2008. About 92 percent of this increase was from non-employing enterprises.

The professional, scientific, and technical services industry engaged approximately 126,200 employees at February 2009, down 700 (0.5 percent) from the previous year.

Financial and insurance services

There were 28,400 enterprises predominantly engaged in the financial and insurance services industry at February 2009, an increase of 1,340 (4.9 percent) compared with February 2008. Almost all this increase was from non-employing enterprises.

The financial and insurance services industry engaged approximately 55,100 employees at February 2009, which was a decrease of 1,500 (2.6 percent) from 2008.

Manufacturing

There were 21,860 enterprises predominantly engaged in the manufacturing industry at February 2009, a decrease of 310 (1.4 percent) compared with February 2008. Of the total number of enterprises, 17 percent were involved in machinery and equipment manufacturing, while 15 percent were involved in fabricated metal product manufacturing.

The manufacturing industry was the largest employer at February 2009, with approximately 239,500 employees. Between 2008 and 2009, the number of employees in the manufacturing industry decreased by 14,400 (5.7 percent). Almost all manufacturing industries at the ANZSIC subdivision level recorded a decrease in employment. The main contributor to this decrease was wood product manufacturing, followed by textile, leather, clothing, and footwear manufacturing.

Regional statistics

In most regions of New Zealand, the number of business locations (geographic units) recorded little change between February 2008 and February 2009, with increases or decreases remaining within 1.0 percent.

Auckland region

At February 2009, the Auckland region had nearly one-third (31 percent) of all business locations in New Zealand. One-third (32 percent) of all paid employees were engaged by these business locations.

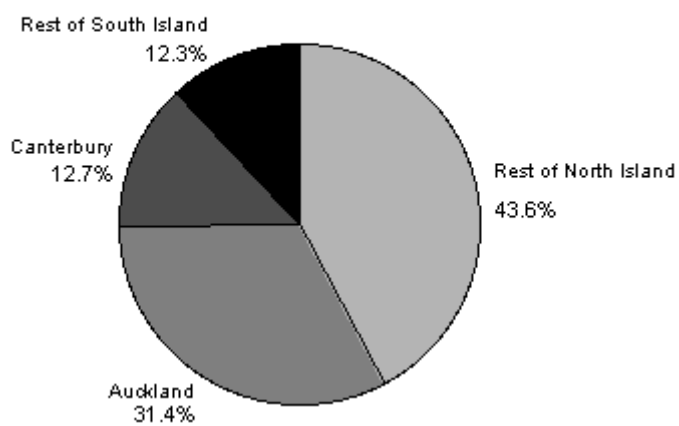
There were 161,100 business locations in the Auckland region at February 2009, up 0.5 percent from February 2008. At the ANZSIC division level, 12 out of 19 industry divisions recorded increases. The industry with the largest increase was financial and insurance services (up 490 or 3.9 percent), followed by professional, scientific, and technical

services (up 425 or 1.9 percent) and health care and social assistance (up 300 or 4.9 percent). The construction industry had the biggest drop in the number of business locations (down 490 or 2.8 percent).

At February 2009, the business locations in the Auckland region had 621,400 employees, down 3.6 percent from February 2008. The industries with the largest decreases in employee numbers were administrative and support services (down 5,200 or 13.5 percent), manufacturing (down 5,100 or 6.3 percent), and retail trade (down 4,800 or 7.3 percent). Only five industry divisions out of 19 had higher employee numbers at February 2009 compared with February 2008.

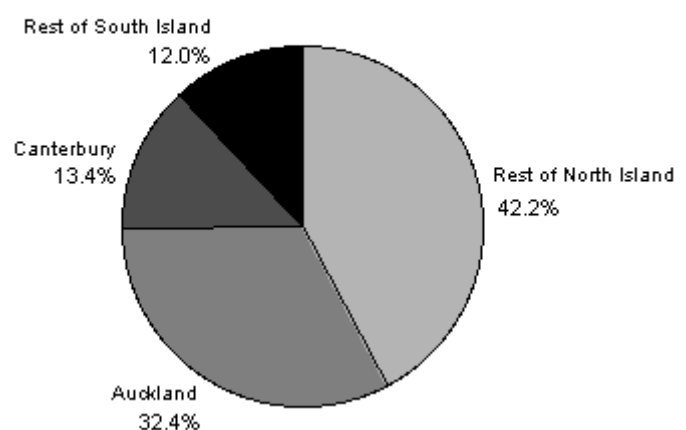
Number of Business Locations by Broad Region

At February 2009



Employee Count by Broad Region

At February 2009



Remainder of North Island

Excluding the Auckland region, there were 223,200 business locations in the remaining regions of the North Island at February 2009. This represented a marginal drop of 0.1 percent when compared with February 2008. These business locations engaged approximately 810,500 employees at February 2009, a 2.6 percent decrease from February 2008.

Only two regions in the remainder of the North Island showed any increase in the number of business locations. These were Wellington (up 370 or 0.7 percent) and Taranaki (up 110 or 0.8 percent). In the Wellington region, the administrative and support services industry saw the steepest drop in employment (down 1,630 or 11.5 percent), followed by manufacturing (down 1,280 or 8.0 percent).

South Island

There were 128,060 business locations in the South Island at February 2009. This was an increase of 1,070 (0.8 percent) from February 2008. These business locations engaged approximately 487,100 employees, a decrease of 7,900 (1.6 percent) when compared with February 2008.

At February 2009, just over half of all business locations (51 percent) in the South Island were located in the Canterbury region. These business locations accounted for 53 percent of all employees engaged in the South Island. Between February 2008 and February 2009, Canterbury region recorded a marginal increase of 350 (0.5 percent) business locations but the number of employees dropped by 5,300 (2.0 percent).

Going against the overall trend of declining employee numbers were the Marlborough region with an increase of 780 employees (3.4 percent) from February 2008 and the West Coast region with an increase of 390 employees (2.6 percent) during the same period. In the Marlborough region, the agriculture, forestry, and fishing industry recorded the highest increase in the number of employees (up 1,100 or 24.0 percent). The industry with the largest increase in employee numbers in the West Coast region was mining (up 320 or 37.0 percent).

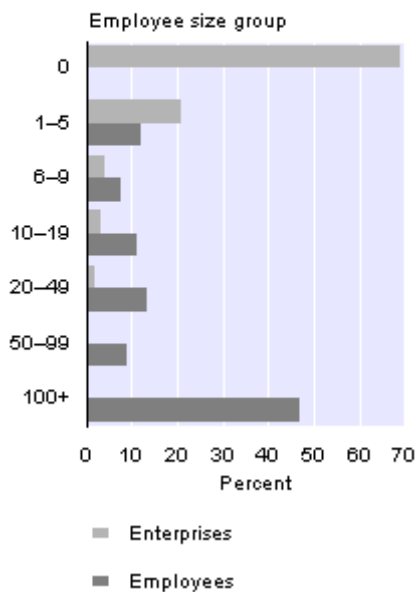
Business size

At February 2009, most enterprises in New Zealand (97 percent) had fewer than 20 employees. However, these enterprises accounted for only 31 percent of all employees. Conversely, enterprises with 100 or more employees made up 0.4 percent of the total number of enterprises in New Zealand but employed 47 percent of the total number of employees.

At February 2009, 69 percent (327,800) of all enterprises were non-employing enterprises. In terms of industrial activity, 28 percent of these enterprises were predominantly involved in rental, hiring, and real estate services, 16 percent in agriculture, forestry, and fishing, and 11 percent in professional, scientific, and technical services. During the year to February 2009, the largest decrease in employment came from businesses with 20–49 employees (down 14,800 employees or 5.5 percent), followed by enterprises with 100 or more employees (down 13,700 employees or 1.5 percent).

Note that the employee count statistics presented here do not include working owners unless they are paid a salary or a wage subject to pay as you earn tax (PAYE).

**Total Enterprises
and Total Employees**
By employee size group
At February 2009



Births and deaths of enterprises

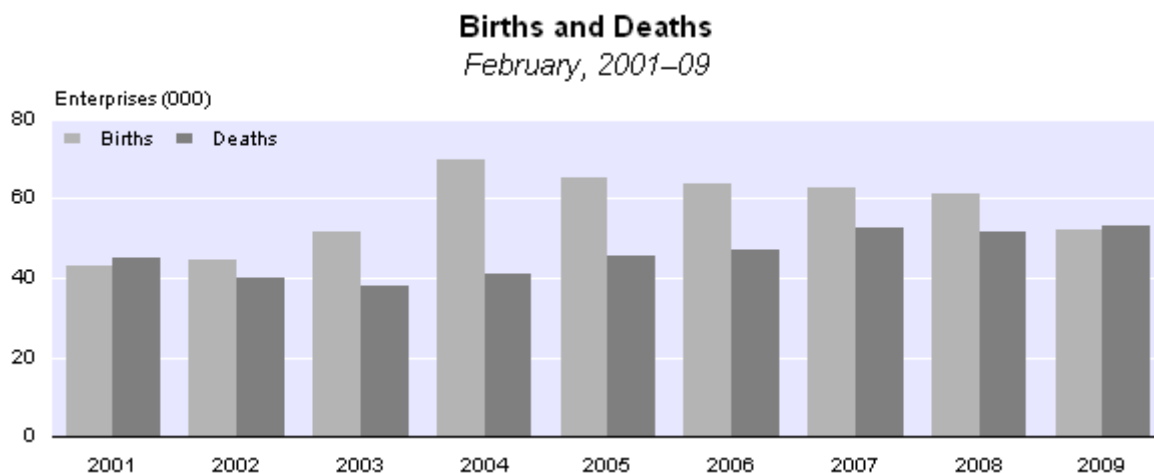
Births and deaths of enterprises are presented on an annual basis, as at February. For a birth or death to be counted in a reference period, it must have occurred during the year (start of March to the end of February), and not have a changed status by the February reference point. For example, an enterprise which ceased operation during the year, and then recommenced operation before February, will not be counted as a death. In the graphs for births and deaths, the term 'February' (eg February 2009) is used to describe this annual reference period for measuring births and deaths.

The data is released on a provisional basis and includes a revised time series back to 2001. It is expected that the largest revisions will occur in the most recent reference periods. This is mainly due to the lags associated with the processing of administrative data. Analysis of the 2009 data should be carried out with caution.

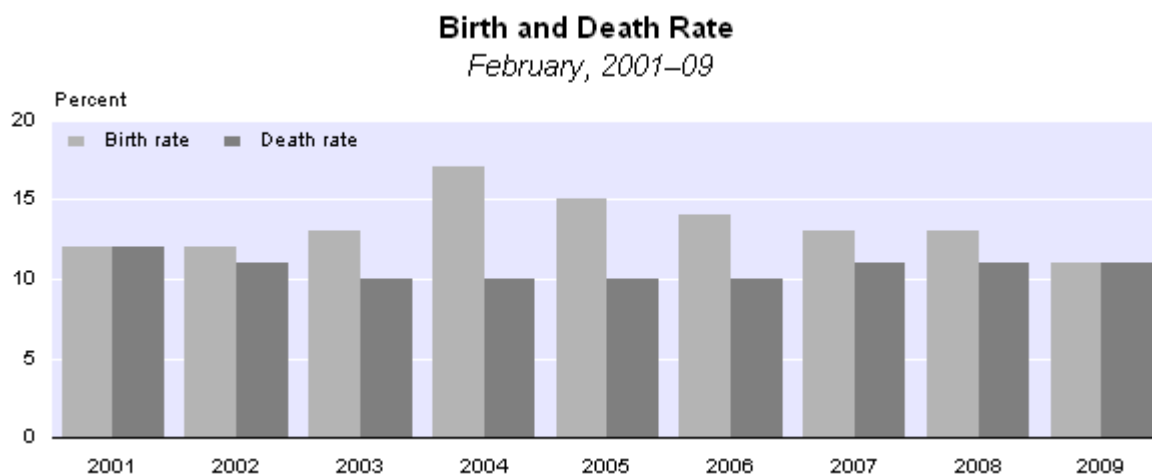
In the February 2009 reference period, 51,800 new enterprises started operation (births), which is a decrease of 14.9 percent compared with February 2008. These new enterprises accounted for 11 percent of the total number of enterprises (476,560) in New Zealand at February 2009. Over the period 2001 to 2009, the number of enterprise births each year has varied from 42,880 to 69,800. Note that the 2004 figure of 69,800 was influenced by a methodology change and needs to be interpreted with caution (see 'Technical notes').

In the February 2009 reference period, 52,880 enterprises ceased operation (deaths), which is an increase of 2.9 percent compared to February 2008. The number of enterprise deaths has varied from 38,010 to 52,880 over the period 2001 to 2009, the highest being in 2009.

The February 2009 reference period is the first year since 2001 where the provisional data shows the number of deaths exceeds the number of births. There was a small overall increase of 0.3 percent in the total number of enterprises in New Zealand from February 2008 to February 2009. This was because the enterprise births statistics do not include businesses that were temporarily ceased in February 2008, but were operating in February 2009.



The number of births each year can be expressed as a birth rate (percentage) by dividing the number of births by the total population of enterprises. Over the period 2001 to 2009, the annual birth rate of new businesses varied between 11 and 17 percent. Note that the high value in 2004 (17 percent) coincides with a change in methodology (see 'Technical notes'). The annual death rate varied between 10 and 12 percent. The resulting business turnover rate (sum of the birth rate and death rate) ranged from 22 percent to 26 percent.



Breakdown of births and deaths

Births can be analysed further and classified as:

- surviving births (births that survive at least one reference period in the business demography population)

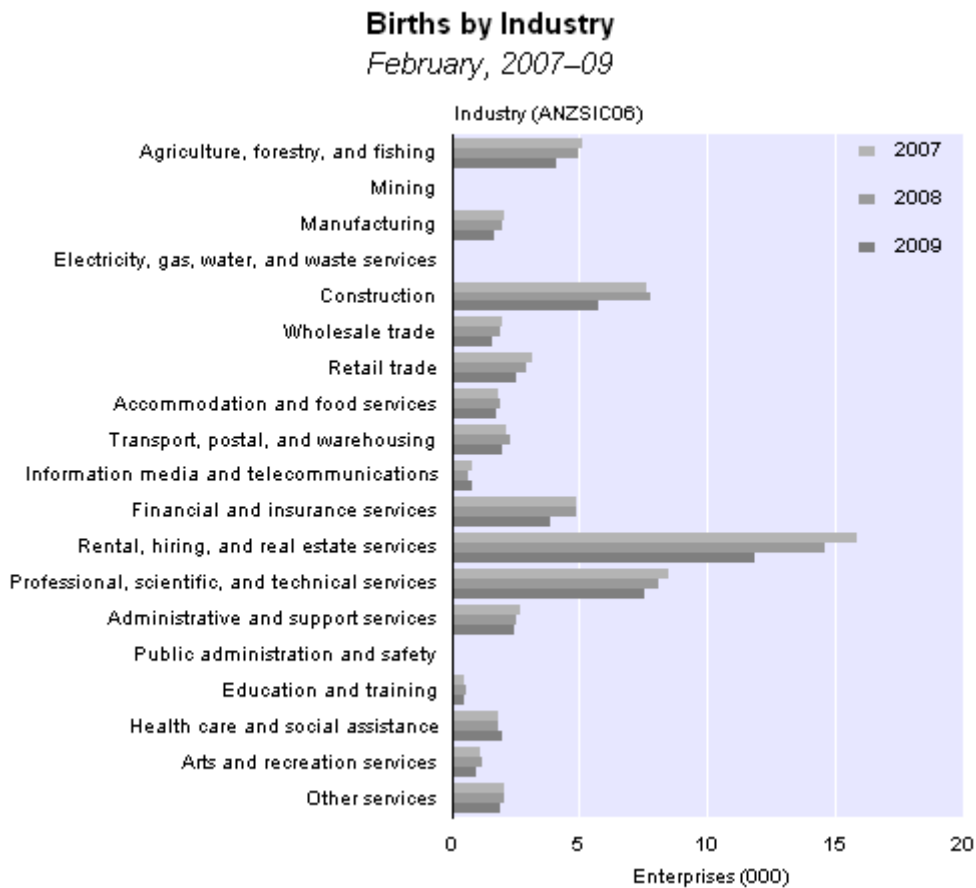
- short-lived births (births that do not survive one reference period in the business demography population, either due to death or dormancy)
- pure births (births that have a recent birth date – the birth dates of all geographic units and the enterprise are less than two years from the February reference period).

Analysis of births over the periods 2001 to 2008 suggests around four in five births survive at least one reference period (surviving births). Of the 60,880 births in the February 2008 reference period, 50,020 survived until February 2009, representing 82 percent of total births.

Births by industry

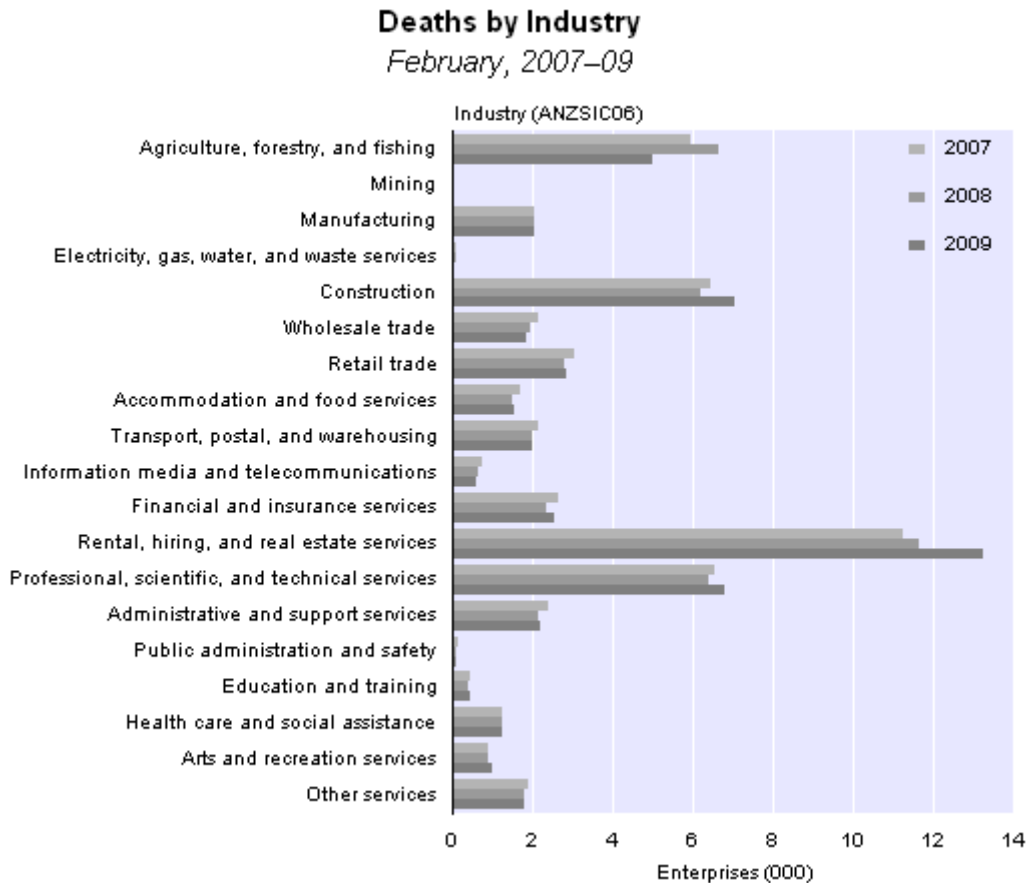
In the February 2009 reference period, the rental, hiring, and real estate services industry had the largest number of births (23 percent of total births), followed by professional, scientific, and technical services (15 percent) and construction (11 percent). From 2001 to 2009 the rental, hiring, and real estate industry has had the highest number of births in each year.

In the February 2009 reference period, the mining industry had the lowest number of births, followed by electricity, gas, water, and waste services, and then public administration and safety. These three industries consistently had the lowest number of births over the period 2001 to 2009.



Deaths by industry

In the February 2009 reference period, the rental, hiring, and real estate services industry had the largest number of deaths (25 percent of total deaths), followed by construction (13 percent), professional, scientific, and technical services (13 percent). Industries with the smallest number of deaths included mining; public administration and safety; and electricity, gas, water, and waste services.



Births by employee size group

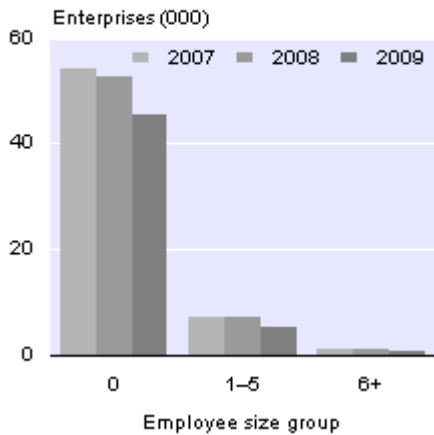
In the February 2009 reference period, the majority of births were non-employing enterprises (88 percent). Ten percent of the births were in the 1 to 5 employees category. All other employee size categories had small numbers of births. This was a consistent trend over the period 2001 to 2009. In total, the new enterprises for 2009 had 22,400 employees, which is approximately 1.2 percent of the total number of paid employees for all enterprises.

Deaths by employee size group

In the February 2009 reference period, the majority of enterprise deaths were non-employing enterprises (92 percent). A further seven percent were in the 1 to 5 employees category. In total the ceased enterprises had 20,800 paid employees (approximately 1.1 percent of the total number of paid employees).

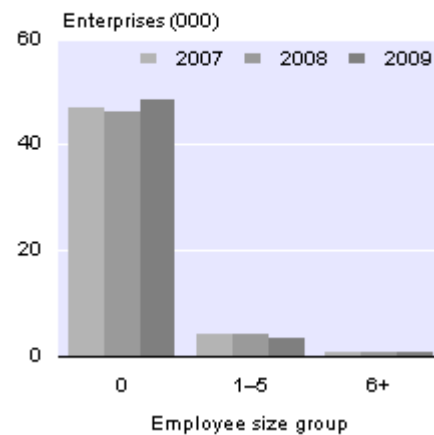
Births by Employee Size Group

February, 2007–09



Deaths by Employee Size Group

February, 2007–09



Surviving births

The longitudinal nature of the LBF (the source data for business demography statistics) allows enterprise births in any reference period to be tracked over subsequent years. Survival rate statistics can be used to analyse the rate of survival of new births, by both industry and business size. Survival rates are calculated as the percentage of births in each reference period that survive into future reference periods in the business demography population (surviving births divided by total births for a particular reference period). To be considered a survivor the enterprise must exist at every reference period between its birth year and the given reference period.

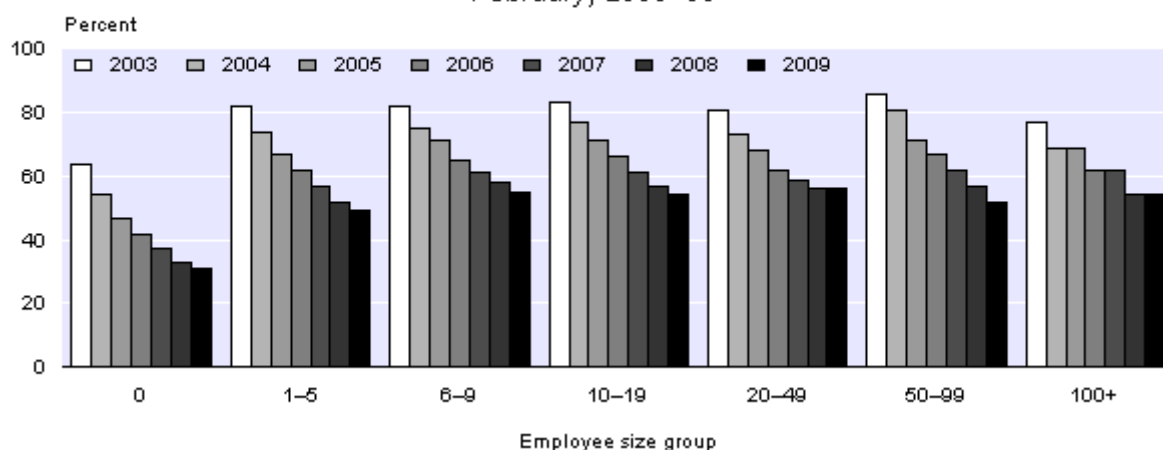
Survival rates of enterprises birthed in 2001

This analysis concentrates on enterprises birthed in 2001. Similar trends are observed for enterprises birthed from 2002 to 2007.

In the February 2001 reference period there were 42,880 enterprise births. Of these, 80 percent survived the first year, 67 percent survived the second, 58 percent survived the third, 50 percent survived the fourth, 45 percent survived the fifth, 40 percent survived the sixth, 37 percent survived the seventh, and 34 percent survived the eighth (2009).

Non-employed enterprises had a significantly lower proportion (31 percent) of births surviving the eight years to 2009 compared with businesses that had paid employees (49 percent for the 1 to 5 employees category and higher proportions for larger employee size groups).

Survival Rate of 2001 Births by Employee Size Group
February, 2003–09



Industries with higher survival rates over the eight-year period included mining (53 percent), health care and social assistance (50 percent), financial and insurance services (43 percent), and agriculture, forestry, and fishing (43 percent). Lower survival rates were observed for the administrative and support services industry and the information media and telecommunications industry (26 percent for both).

For technical information contact:
 Geoff Mead, Auckland 09 920 9100
 or Upul Paranawithana, Auckland 09 920 9100
Email: info@stats.govt.nz

Next release ...

New Zealand Business Demography Statistics: At February 2010 will be released in October 2010.

Technical notes

Business demography statistics

Business demography statistics provide an annual snapshot (as at February) of the structure and characteristics of New Zealand businesses. The series covers economically significant enterprises that are engaged in the production of goods and services in New Zealand.

This is the third publication of a new business demography dynamic statistics series, based on the Longitudinal Business Frame (LBF). The first publication, New Zealand Business Demography Statistics (Structural): At February 2007 includes more background about the new series.

Businesses covered

In order to understand what business demography statistics measure, it is important to take into account the coverage of businesses in the published series. The coverage of business demography statistics is limited to economically significant enterprises that are engaged in the production of goods and services in New Zealand. They must meet at least one of the following criteria:

- annual expenses or sales subject to GST of more than \$30,000
- 12 month rolling mean employee count of greater than three
- part of a group of enterprises
- registered for GST and involved in agriculture or forestry
- over \$40,000 of income recorded in the IR10 annual tax return (this includes some units in residential property leasing and rental).

Enterprises recorded on Inland Revenue's client registration file are continually monitored to determine whether they meet the 'economic significance' requirements for inclusion. These enterprises maintained on the Business Frame (source of the LBF) represent the target population from which Statistics New Zealand's economic surveys are selected.

All non-trading and dormant enterprises, as well as enterprises outside of New Zealand, are excluded from business demography statistics.

How businesses are represented as statistical units

Businesses are represented in the BF (Business Frame) and the business demography statistics as statistical units. Two types of statistical units are used.

- The enterprise unit represents the legal business entity, for example a limited company, a partnership, a trust, an incorporated society. Where there is a group of limited companies linked by share ownership, each individual limited company is recorded in the statistics as a separate enterprise.
- The geographic unit represents a business location engaged in one, or predominantly one, kind of economic activity at a single physical site or base (eg a

factory, a farm, a shop, an office). Geographic units are unique to enterprises and an enterprise unit can have from one to many geographic units (business locations). Typically an enterprise unit only has a single geographic unit, unless the enterprise has paid employees permanently working at more than one location. Geographic units can be transferred between enterprises, for example enterprise B purchases a factory (a geographic unit on the BF) as a going concern from enterprise A.

The detailed [Table Builder business demography statistics](#) include outputs for both enterprise and geographic units. When you create a table in Table Builder select the statistical unit that is appropriate to your statistical requirements. Regional data is only available for geographic units.

Updates to business demography data

Data on the BF is updated continually to maintain the latest information on businesses. Updates can affect the history of businesses as well. The LBF is constructed monthly from all current and historic BF data, taking into account all updates that have occurred on the BF since the last construction. This means that statistics based on the LBF can change if they are recreated from an updated version of the LBF.

From the 2007 release onwards, business demography statistics are released provisionally to allow for updates to the series to be incorporated. It is expected the largest revisions will occur in the most recent reference periods, with smaller changes earlier in the time series. This is mainly due to the lags associated with the processing of administrative data, which are a key component of the BF maintenance strategy.

Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006

This publication is the second release of business demography statistics on the basis of the [Australian and New Zealand Standard Industrial Classification \(ANZSIC\) 2006](#). Previously, the 1996 version of ANZSIC was used. References to industries in this Hot Off the Press all relate to ANZSIC 2006. The tables released with this publication include both the 1996 and 2006 versions of ANZSIC. This dual publication of the two versions of ANZSIC will be repeated for the final time with the 2010 release of business demography statistics, while the 2011 release and beyond will be based only on ANZSIC 2006.

Identification and definition of business births and deaths

To observe business dynamics such as births and deaths over time from administrative data sources, it is crucial to be able to link continuing businesses if their identifiers change in the source data. A business may undergo several changes in its lifetime, in addition to birth and death. For example, legal or administrative entities may close down or emerge due to breakups, mergers, split-offs, takeovers, or restructuring. Any of these events can result in the business obtaining a new unique identifier (an IRD number) in the tax reporting system and subsequently on the BF. A business would then appear as a death and subsequent birth in these systems. However, neither administrative changes nor the events mentioned above necessarily indicate the occurrence of a birth or death of the underlying business activity in the real world.

The methods used to identify business births, deaths, and continuing businesses in the business demography dataset is in line with recommendations from the Organisation for Economic Co-operation and Development (OECD) and Eurostat. The theoretical criteria used to define business births, deaths, and continuing businesses are based on a combination of factors of production (land, labour, capital). A birth is an assembly of new factors of production. A death is a disassembly of factors of production.

In practice, the information that is used as proxies for these factors of production to identify continuing businesses are:

- whether a business holds a majority of its original geographic units (business locations)
- if a business keeps the same trading name
- if a business is in the same industry
- if a business continues to operate from the same location
- whether a business continues to employ most of its former employees.

In contrast, indicators for a new business (birth) are whether a business formed new geographic units, has a new trading name, and mostly recruits new employees.

The processes used to identify continuing businesses on the LBF (longitudinal links) are described in Business Demographic Statistics Review Report.

Reference period for births and deaths

Births and deaths are presented on an annual basis, as at February. For a birth or death to be counted in a reference period, it must have occurred at some stage during the year (start of March to the end of February), and not have a changed status by the February reference point. For example, an enterprise which ceased operation at some stage during the year, and then recommenced operation before February, will not be counted as a death.

According to the recommendation of Eurostat for enterprise births and deaths, a reactivation (existing enterprises which have been dormant for a period of time and come back into the business demography population) after less than two years of inactivity is not counted as a death and subsequent birth. To identify births at time T, it is therefore necessary to check movements in the enterprise population over more than one period (year) – that is, at least back to time T-2 years. Looking back in time further than just one period to determine the status of an enterprise also helps to filter out temporary movements in and out of scope (as determined by the economic significance of an enterprise, which may change from one period to the next). The number of periods we can look back for births, or forward for deaths, is limited by the start and end points of the available data (the LBF holds data from April 1999 to the current month). For enterprise births in 2001, the snapshots of April 1999 and February 2000 were used as reference points. For all other birth and death reference periods, only snapshots for February were used as reference points.

Identification of enterprise births in business demography

Total entries of period T are all enterprises whose identifiers exist at time T but not at time T-1 year. Of these, **real births** are all enterprises whose geographic units existed at neither time T-1 year nor time T-2 years.

- If an enterprise consists of more than one geographical unit, it is only considered a real birth if none of its units existed in the previous two years.
- Entries other than real births are enterprises that experience administrative changes or movements in and out of scope.

Once real births have been identified on the LBF using the methods above, they can be analysed further. By splitting real births of period T into:

- **pure births**, birth dates of all geographic units and the enterprise are more recent than the February snapshot of time T-2 years
- **other births**, birth dates are not recent, therefore these are likely to be reactivations
- **surviving births**, survive at least one period until time T+1 year
- **short-lived births**, disappear by time T+1 year, either due to death or dormancy.

Identification of enterprise deaths in business demography

Total exits of period T are all enterprises whose identifiers exist at time T-1 year but not at time T. Of these, **real deaths** are all enterprises whose geographic units exist at neither time T nor time T+1 year.

- If an enterprise consists of more than one geographical unit, it is only considered a death if all of its units disappear in the following two years.
- Exits other than real deaths are enterprises that experience administrative changes or movements in and out of scope.
- If data for time T+1 year are not available, the number of real deaths will be preliminary until it can be revised after the next snapshot is available. A review of the identified real deaths for the 2001–05 period showed that they would have been overestimated by 7 to 8 percent if the next snapshot had not been available. Therefore deaths for the 2009 reference period should be treated with caution.

Identification of geographic unit births and deaths in business demography

Births and deaths of geographic units are new statistical measures introduced in this publication. These statistics are available by regional council and territorial local authority. The rules for identifying geographic unit births and deaths mirror those of enterprise units, as described above, except that the enterprise unit to geographic unit linkages are irrelevant. Existing geographic units moving into or between regions are not considered as births or deaths.

Survival of enterprise births

The longitudinal nature of the LBF allows enterprise births in any reference period to be tracked over subsequent years. Survival rate statistics can be used to analyse the rate of survival of new births, by both industry and business size. Survival rates are calculated as the percentage of births in each reference period that survive into future reference periods in the business demography population (surviving births divided by total births for a particular reference period). To be considered a survivor, the enterprise must have existed at every reference period between its birth year and the given reference period.

International comparability

The OECD study on international comparability of business start-up rates found that although enterprise birth rates are considered key economic indicators, their availability and definition varies considerably from country to country. Therefore, comparisons of birth or start-up rates between countries should be treated with caution. Eurostat and the OECD are currently working on standard models for business populations and standardised definitions for key indicators. The definitions and methods used in New Zealand business demography statistics align well with the best practice models presented in the [OECD study](#). Further detail is available in the [Business Demographic Statistics Review Report](#).

Employee count data

The employee count data published in the Business Demography Statistics is sourced from [LEED \(Linked Employer-Employee Database\)](#). There are a number of conceptual differences between the business demography size measures and the published LEED employment statistics. A few of the major differences include:

- Business demography includes employees of all ages (LEED statistics exclude employees aged under 15 years).
- Business demography counts employees employed at any time during the February month (LEED statistics only count employees employed on the 15th of the reference month).
- LEED statistics are constructed from administrative Employment Monthly Schedule (EMS) data. Business demography uses the EMS data before all the returns are finalised. At the time of the business demography publication, the EMS data is considered robust enough to provide an accurate indicator for business size.

Business demography does not provide official statistics on employment levels. Business demography revisions each year can include updates to the employee count data for previous years.

The employee count data does not include working owners unless they are paid a salary and wage by the enterprise that is subject to PAYE. So enterprises in the zero employee count size category may have working owners.

Guide to interpreting time series data

The published time series of business demography data has several significant changes caused by improved Statistics NZ processes. Due to data constraints, no attempt has been made in the series to remove the influence of these changes, rather they are described here so that users can understand the time series.

- Agriculture units (ANZSIC 2006 subdivision A01) – For a period of time prior to 2002 the agricultural units on the BF were maintained to a lower quality level than other units on the BF as there was no agricultural production statistics programme in place. Following the reintroduction of a programme of annual agricultural production statistics in 2002, there were consequential improvements in the BF quality, with business demography data for the agriculture industry considered more robust from 2004. However, feedback on the BF from the agriculture programme cycle can still result in some volatility in the agriculture series. Some of the changes in business demography statistics for agriculture therefore reflect quality improvements in the BF, rather than actual changes.
- The business demography series shows a small drop in the total number of enterprises from 2000 to 2001. This was influenced by a change in June 2000 to the methodology used to add new units to the BF. Under the new methodology units were only added to the BF after administrative data sources reported that they displayed sufficient activity to meet the BF economic significance conditions. Previously, non-employed units had been added to the frame before they met the economic significance conditions. The change only affected non-employed businesses.
- The business demography series shows a significant increase in the number of enterprises in 2004, particularly in ANZSIC 2006 divisions K (financial and insurance services) and L (rental, hiring, and real estate services). This was largely a consequence of improved use of administrative data to maintain the BF. Most of the enterprises added were non-employed businesses.

Other factors related to the representation of businesses on the BF can also influence time series data.

- Business demography time series statistics can be influenced by structural changes in businesses, such as business mergers, one business taking over another business, or a business selling part of its activities. This can cause a significant movement in an industry (ANZSIC) time series of employee count data. For example, in a business takeover where one enterprise is absorbed into another enterprise, the employees of the smaller enterprise will typically become classified to the ANZSIC of the larger enterprise.
- Regional business demography time series statistics can be influenced by changes in how an enterprise with many business locations is represented on the BF as geographic unit(s). For example a move to a less granular or more detailed geographic unit structure on the BF, due to changes in a way a business reports regional information can influence regional time series.
- Many enterprises undertake a range of business activities simultaneously. For example, they manufacture and wholesale goods and their activities can be over a range of commodities that cross ANZSIC boundaries. Enterprises are classified to ANZSIC on the BF according to its predominant activity. Movements in time series

of ANZSIC data can be caused by the predominant activity of enterprises changing. This can cause what appears to be a significant change in an industry time series. These changes need to be interpreted with caution, because the business activity may be largely continuing under a different predominant industry classification.

Limitations of business demography data

There are a number of limitations associated with business demography data. These limitations include:

- Non-coverage of 'small' enterprises that fall below the economic significance criteria.
- Partial coverage of enterprises in the gap between the BF economic significance condition of \$30,000 of sales subject to GST and the compulsory GST registration threshold of \$40,000 (applied up to 31 March 2009). The level of this partial coverage cannot be quantified, but it is observed that some businesses do register for GST when their activity is below the compulsory GST registration threshold.
- The residential property operators industry (ANZSIC 2006 class L6711) contains only partial coverage, so must be analysed with caution.
- Lags in recording enterprise births and deaths.
- The published time series is subject to revision each year as the latest data from the LBF is incorporated for relevant years. Revisions of any significance will typically be confined to the last end points of the series.
- The business demography statistics on the number of business births, deaths, and surviving businesses rely on a variety of data sources to identify a continuing business that for example undergoes a change of legal ownership and restructuring as well as genuine business start-ups and closures. These data sources are not comprehensive and are of lower quality for small non-employed businesses. When businesses register for GST and are added (or 'birthed') onto the BF, they are given a new reference number. Company restructuring or changes of ownership can result in a new GST registration being filed, even though it relates to an existing business. Both the BF and the LBF have procedures in place to identify links between new and existing businesses, but there is no guarantee that all links will be identified. There will also be some false positive links identified. So some caution is required in the interpretation and use of these statistics.
- Non-availability of overseas ownership information for some of the units on the BF.
- Difficulties in maintaining industrial and geographic classifications for medium and smaller enterprises (that are primarily maintained on the BF using administrative data).
- Fine-level regional and industry business demography data needs to be used with caution. The BF, which is the main source of data for the business demography series, is designed to support quality national level and aggregate industry level statistics. It is not designed to provide quality fine-level regional or industry statistics. Particularly for small and medium-sized enterprises, the BF update sources can have timing lags and less robust information. These quality weaknesses can be highlighted in fine-level business demography statistics.

- Some caution is required with the use of back cast ANZSIC 2006 statistics as some of the classification data has been imputed (estimated).

Rounding

Enterprise and geographic unit counts in the tables attached to this release are unrounded. Employee count data has been rounded. This may result in a total differing slightly from the sum of its components. Derived figures (eg percentage changes) have been calculated using unrounded data.

Terms and definitions

ANZSIC

Australian and New Zealand Standard Industrial Classification (ANZSIC 1996 and ANZSIC 2006). A geographic unit is assigned to an ANZSIC category according to the predominant activity in which it is engaged.

Ancillary industry

When a geographic unit predominantly provides services to other geographic units in the same enterprise or group of enterprises, it is assigned an ancillary ANZSIC. This indicates the predominant industrial activity of the units to which the services are provided. For example, an office serving several factory units would have a primary industry reflecting the administration activity, while the ancillary industry would reflect the factory activity. The business demography statistics in this release use the ancillary industry when one exists, and the primary industry otherwise.

Birth

A birth is the creation of a combination of production factors, with the restriction that no other national businesses are involved in the event. Births do not include entries into the population due to reactivations, mergers, break-ups, split-offs, or other restructuring of a group of businesses linked by ownership or control. Births also exclude entries into a population resulting from changes to characteristics of existing businesses (this is largely based on, and fully consistent with, the Eurostat definition of enterprise births). To be considered a birth in the business demography population, the enterprise and associated geographic units existed at neither time T-1 year nor time T-2 years.

Death

A death is the dissolution of a combination of production factors, with the restriction that no other domestic businesses are involved in the event. Deaths do not include exits from the population due to temporary inactivity, mergers, takeovers, break-ups, or other restructuring of a group of businesses linked by ownership or control. Deaths also exclude exits from a population resulting from changes to characteristics of businesses which remain active (this is largely based on, and fully consistent with, the Eurostat definition of enterprise deaths). To be considered a death in the business demography population, the enterprise and associated geographic units exist at neither time T year nor time T+1 year.

Employee count (EC)

Head count of salary and wage earners sourced from taxation data. EC data is available on a monthly basis. The EC count used for the derivation of business demography statistics is for the February month.

Employment size groups

EC data in this release has been summarised into seven employment size groups:

- 0 EC
- 1–5 EC
- 6–9 EC
- 10–19 EC
- 20–49 EC
- 50–99 EC
- 100+ EC.

Enterprise

A business operating in New Zealand. It can be a company, partnership, trust, estate, incorporated society, producer board, local or central government organisation, voluntary organisation, or self-employed individual.

Entries

Enterprises that are present in the business demography population at the end of the reference period, but were not present at the start of the reference period.

Exits

Enterprises that are present in the business demography population at the start of the reference period, but are not present at the end of the reference period.

Geographic unit or business location

A separate operating unit engaged in New Zealand in one, or predominantly one, kind of economic activity from a single physical location or base.

Pure births

Births which have a recent birth date. The birth dates of all geographic units and the enterprise are more recent than the February snapshot of time T-2 in the business demography population. Pure births generally exclude reactivations (enterprises dormant for a period of time that come back into the population).

Reactivations

Enterprises dormant for a period of time that come back into the business demography population.

Surviving births

Births that survive at least one period (until time T+1 reference period) in the business demography population.

Short-lived births

Births that disappear by the time T+1 reference period in the business demography population, either due to death or dormancy.

Survival rates

Survival rates are calculated as the percentage of births in each reference period that survive into future reference periods in the business demography population (surviving births divided by total births for a particular reference period). To be considered a survivor, the birthed enterprise must have existed at every reference period between its birth year and the given reference period.

Copyright

Information obtained from Statistics NZ may be freely used, reproduced, or quoted unless otherwise specified. In all cases Statistics NZ must be acknowledged as the source.

Liability

While care has been used in processing, analysing, and extracting information, Statistics NZ gives no warranty that the information supplied is free from error. Statistics NZ shall not be liable for any loss suffered through the use, directly or indirectly, of any information, product, or service.

Timing

Timed statistical releases are delivered using postal and electronic services provided by third parties. Delivery of these releases may be delayed by circumstances outside the control of Statistics NZ. Statistics NZ accepts no responsibility for any such delays.

Tables

The following tables provided with this Hot Off the Press can also be downloaded from the Statistics New Zealand website in Excel format. If you do not have access to Excel, you may use the Excel file viewer to view, print and export the contents of the file.

1. Enterprises, geographic units, and employee count, by ANZSIC06 division, at February 2009
2. Business demography population, births, and deaths, at February, 2001–09
3. Breakdown of births, at February, 2001–09
4. Births by industry (ANZSIC06), at February, 2001–09
5. Deaths by industry (ANZSIC06), at February, 2001–09
6. Births by employee count size group, at February, 2001–09
7. Deaths by employee count size group, at February, 2001–09
8. Employee count of births and deaths, by employee count size group, at February, 2001–09
9. Average employee count of births and deaths, at February, 2001–09
10. Survival rate of births by industry (ANZSIC06), at February, births in 2001–07
11. Survival rate of births by employee count size group, at February, births in 2001–07
12. Enterprises, geographic units, and employee count, by ANZSIC96 division, at February 2009
13. Births by industry (ANZSIC96), at February, 2001–09
14. Deaths by industry (ANZSIC96), at February, 2001–09
15. Survival rate of births by industry (ANZSIC96), at February, births in 2001–07

Supplementary tables

More business demography tables can be found in [Table Builder](#).