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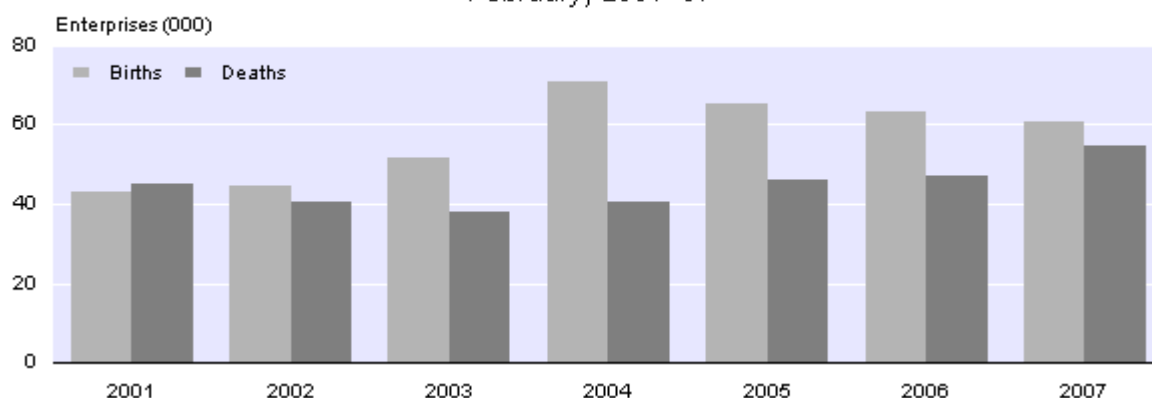
New Zealand Business Demography Statistics (Business Dynamics): February 2007

Highlights

- At February 2007, the number of enterprises (businesses) was 463,380, up 2.0 percent compared with February 2006.
- There were 60,440 enterprise births representing 13 percent of the total number of enterprises. These had a total of 30,500 paid employees, or about 1.5 percent of total employment. The new enterprises are predominantly non-employers (86 percent).
- Forty-three percent of the 2007 births are in the property and business services industry, and 12 percent in the construction industry (the second largest category).
- It is preliminarily estimated that there were 54,410 enterprise deaths in the February 2007 year, representing 12 percent of the total number of enterprises. These covered about 1 percent of total employment. Most of the ceased enterprises were non-employers (91 percent).
- Of the 63,040 births in the February 2006 year, 82 percent were still operating in 2007.
- Of the 42,850 births in the February 2001 year, 40 percent were still operating six years later (2007). Births with paid employees had a higher chance of surviving this period (56 percent for the 1 to 5 employee category) than businesses with no employees (37 percent).

Births and Deaths

February, 2001–07



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There is a companion Media Release published – [New Zealand Business Demography Statistics \(Business Dynamics\): February 2007](#).

Commentary

New business demography dynamic series

This is the first official publication of a new business demography dynamic statistics series, based on a recently developed statistical resource, the Longitudinal Business Frame (LBF). The release includes a new range of statistical measures, including counts of the births and deaths of enterprises, and analysis of the survival rates of new enterprises. The births and deaths counts, and survival rates, are presented by industry and business size.

To enable trends to be studied, the series has been backcast to February 2001 and released on a provisional basis. It is expected 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 2007 deaths data should be completed with caution. The data is preliminary until the February 2008 snapshot is available.

Newly developed methods make it possible to identify with greater certainty the level of real enterprise births and deaths, as opposed to enterprise entries and exits that include dormant enterprises, reactivations, and administrative churn (such as company restructuring and ownership changes). This is in line with the development of international standards for business demography by Eurostat and the Organisation for Economic Co-operation and Development, and comparable to methods used by other countries. The technical notes included in this release detail the methodology used.

This release follows the initial publication of an improved set of business demography structural statistics on 26 February 2008 which presented a snapshot of the structure and characteristics of New Zealand businesses. The business demography series now covers all industries, and includes an expanded coverage of New Zealand businesses.

	New series	Old series
Population source	Longitudinal Business Frame (LBF)	Business Frame (BF)
Business dynamics and identification of continuing businesses	Improved data sources and methodology	
Industry coverage	All industries	Excludes agriculture production (ANZSIC subdivision A01)
Business size measure	Employee count, sourced from the Linked Employer-Employee Database	Employee count, sourced from the BF
Businesses covered	All economically significant businesses	All economically significant businesses, except for those added as part of the change in BF maintenance strategy in 2003 and 2004
Updates to business demography data	Data released as provisional and updated in future releases	Data treated as final and only updated upon identification of significant changes or errors

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 individual, private sector and public sector enterprises that are engaged in the production of goods and services in New Zealand. This generally includes all enterprises with GST turnover greater than \$30,000 per year.

New Zealand business demography statistics are provided in two separate releases:

- The already released structural statistics provides an annual snapshot (as at February) of the structure and characteristics of New Zealand businesses. It includes statistics on a range of variables including industry, region, institutional sector, business type, size (employment levels), and degree of overseas ownership.
- This release presents business dynamics statistics. Business dynamics count the number of enterprise births and deaths that occurred over the previous 12 months, and analyse the survival of new births over time.

The structural statistics can be accessed through Table Builder on the Statistics New Zealand website. The tables now have data available to area unit, added as part of the [making more information freely available initiative](#).

Total number of enterprises and geographic units

At February 2007, the number of enterprises on Statistics NZ's Longitudinal Business Frame (LBF) was 463,380. The number of geographic units (business locations) corresponding to these enterprises was 499,940. These businesses engaged a total of 1.923 million employees. See the [business demography structural release](#) for more detailed data on counts of businesses.

Births and deaths of enterprises

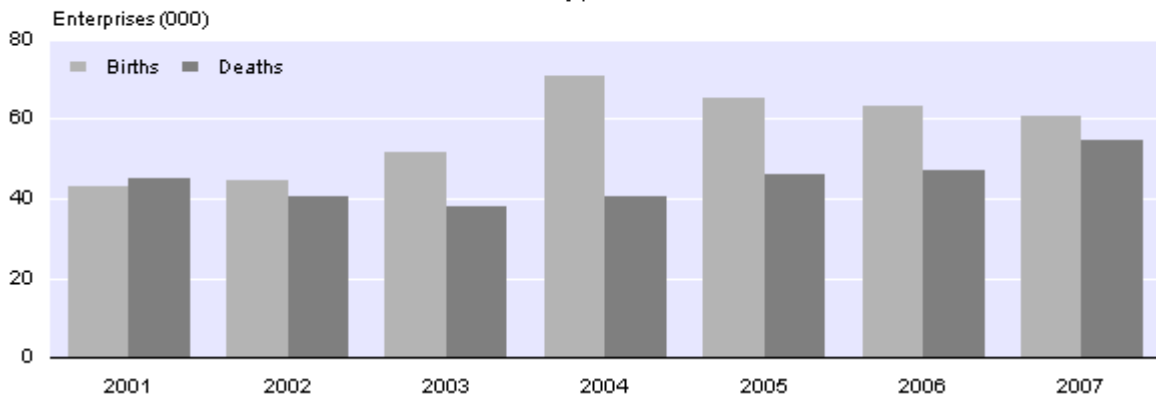
Births and deaths of enterprises are new statistical measures introduced with this release. Births and deaths are presented on an annual basis, as at February. For a birth or death to be counted in a reference period, it must have occurred at some stage during the year (start of March to the end of February), 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. In the commentary and graphs below for births and deaths, the term 'February' (eg February 2007) is used to describe this annual reference period for measuring births and deaths.

In the February 2007 reference period 60,440 new enterprises started operation (births). These new enterprises accounted for 13 percent of the total number of enterprises (463,380) in New Zealand at February 2007. In the February 2007 reference period it is estimated that 54,410 enterprises ceased operation (although this a preliminary estimate and should be treated with caution). There was an overall increase of 2 percent in the total number of enterprises from February 2006 to February 2007.

Over the period 2001 to 2007, the number of enterprise births each year has varied from 42,850 to 70,600. Note that the 2004 figure of 70,600 is influenced by a methodology change and needs to be interpreted with caution (see the technical notes). The number of enterprise deaths has varied from 37,790 to 54,410 over the period 2001 to 2007. In every year from 2002, the number of births exceeds deaths and consequently there has been steady growth in the total number of enterprises each year to 2007.

Births and Deaths

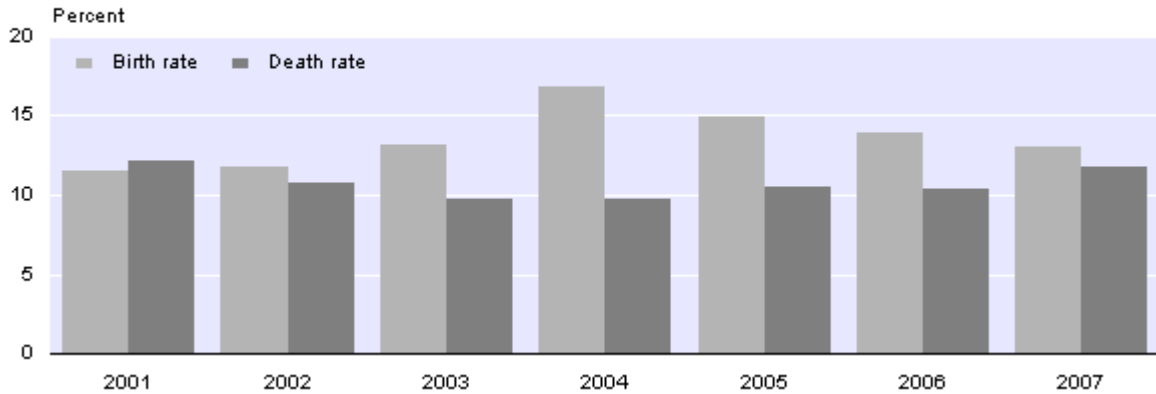
February, 2001–07



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 2007, the annual birth rate of new businesses varied between 12 and 17 percent. Note that the high value in 2004 (17 percent) coincides with a change in methodology (see the 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 23 percent to 27 percent.

Birth and Death Rate

February, 2001–07



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 period in the business demography population, either due to death or dormancy)

and

- 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 2007 suggests around four in five births survive at least one reference period (surviving births). Of the 63,040 births in the February 2006 reference period, 51,390 survived until February 2007, representing 82 percent of total births.

Analysis of births over the periods 2001 to 2007 shows that between 82 percent and 88 percent of births can be classified as pure births. The remaining births are likely to be reactivations (existing enterprises which have been dormant for a period of time and come back into the business demography population).

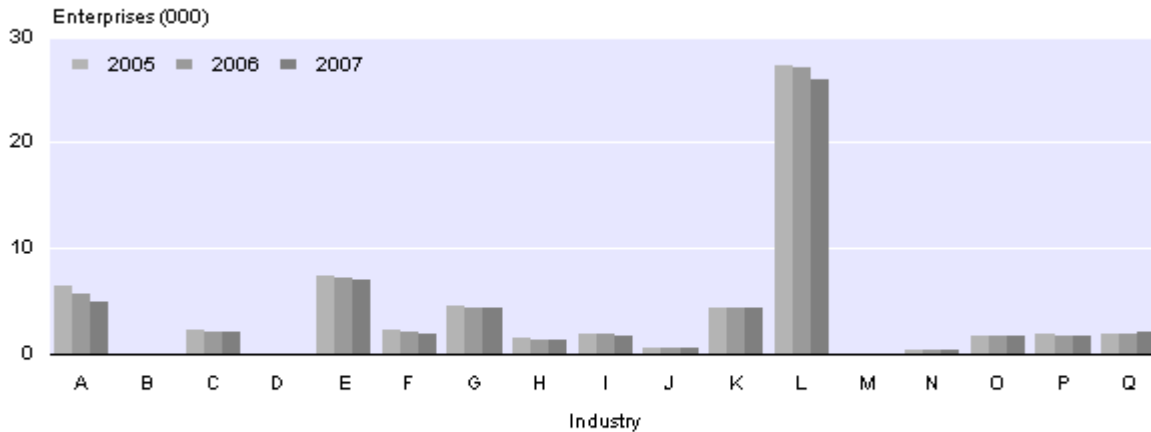
Births by industry

In the February 2007 reference period, the property and business services industry had the largest number of births (43 percent of total births), followed by construction (12 percent) and agriculture, forestry and fishing (8 percent). From 2001 to 2007 the property and business services industry has had the highest number of births in each year.

In the February 2007 reference period the government administration and defence industry had the lowest number of births, followed by electricity, gas and water supply and then mining. These three industries consistently had the lowest number of births over the period 2001 to 2007.

Births by Industry

February, 2005–07



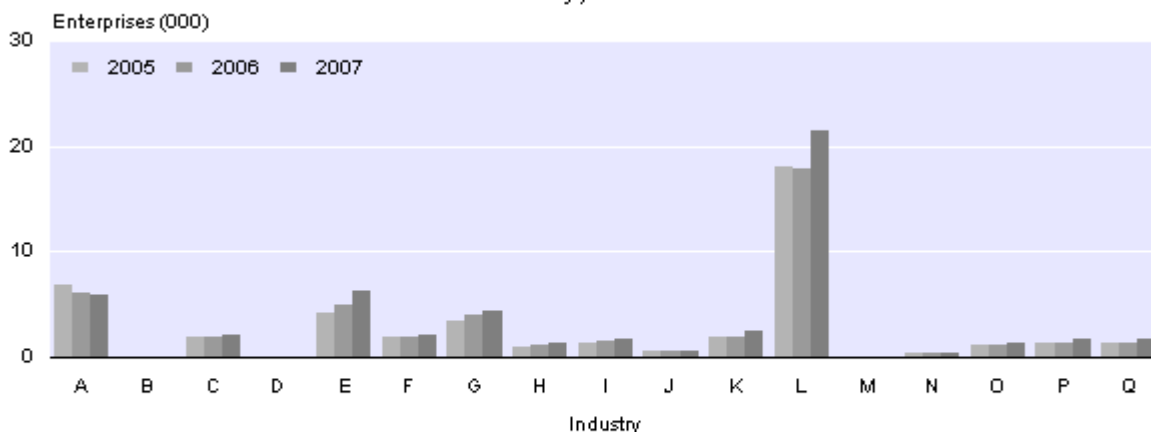
A Agriculture, forestry and fishing; B Mining; C Manufacturing; D Electricity, gas and water supply; E Construction; F Wholesale trade; G Retail trade; H Accommodation, cafes and restaurants; I Transport and storage; J Communication services; K Finance and insurance; L Property and business services; M Government administration and defence; N Education; O Health and community services; P Cultural and recreational services; Q Personal and other services

Deaths by industry

In the February 2007 reference period the property and business services industry had the largest number of deaths (39 percent of total deaths), followed by construction (12 percent), agriculture, forestry and fishing (11 percent) and retail trade (8 percent). Industries with low death numbers included government administration and defence, and electricity, gas and water supply.

Deaths by Industry

February, 2005–07



A Agriculture, forestry and fishing; B Mining; C Manufacturing; D Electricity, gas and water supply; E Construction; F Wholesale trade; G Retail trade; H Accommodation, cafes and restaurants; I Transport and storage; J Communication services; K Finance and insurance; L Property and business services; M Government administration and defence; N Education; O Health and community services; P Cultural and recreational services; Q Personal and other services

Births by employee size group

In the February 2007 reference period, the majority of births were non-employing enterprises (86 percent). Twelve percent of the births were in the one to five employees category. This is a consistent trend over the period 2001 to 2007. Only in 2001 did enterprises with 100 or more employees record more than 10 births. In total, the new enterprises for 2007 had 30,500 employees, which is approximately 1.5 percent of the total number of paid employees for all enterprises.

Births by Employee Size Group

February, 2005-07

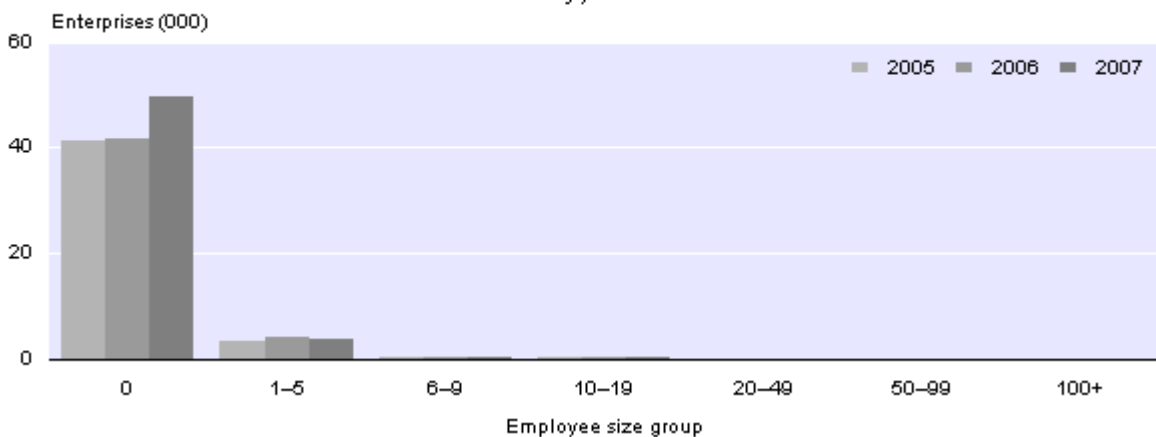


Deaths by employee size group

In the February 2007 reference period, the majority of enterprise deaths were non-employing businesses (91 percent). A further 7 percent were in the 1 to 5 employees category. In total the ceased business had 23,100 paid employees (approximately 1 percent) of total paid employees.

Deaths by Employee Size Group

February, 2005-07



Surviving births

The longitudinal nature of the LBF (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 birthed enterprise must exist in the specified succeeding reference period, as well as every reference period in between.

Survival rates of enterprises birthed in 2001

The analysis presented below concentrates on enterprises birthed in 2001. Similar trends are observed for enterprises birthed from 2002 to 2005.

In the February 2001 reference period there were 42,850 new enterprise births. Of these, 79 percent survived the first year, 66 percent survived the second, 57 percent survived the third, 50 percent survived the fourth, 45 percent survived the fifth, and 40 percent survived the sixth (2007).

Non-employing enterprises had a significantly lower proportion (37 percent) of new births surviving the six years to 2007 than businesses with paid employees. This compares with 56 percent of the 1 to 5 employee size group that survived, and the larger employee size groups with a 59 percent survival rate or higher.

Survival Rate of 2001 Births by Employee Size Group

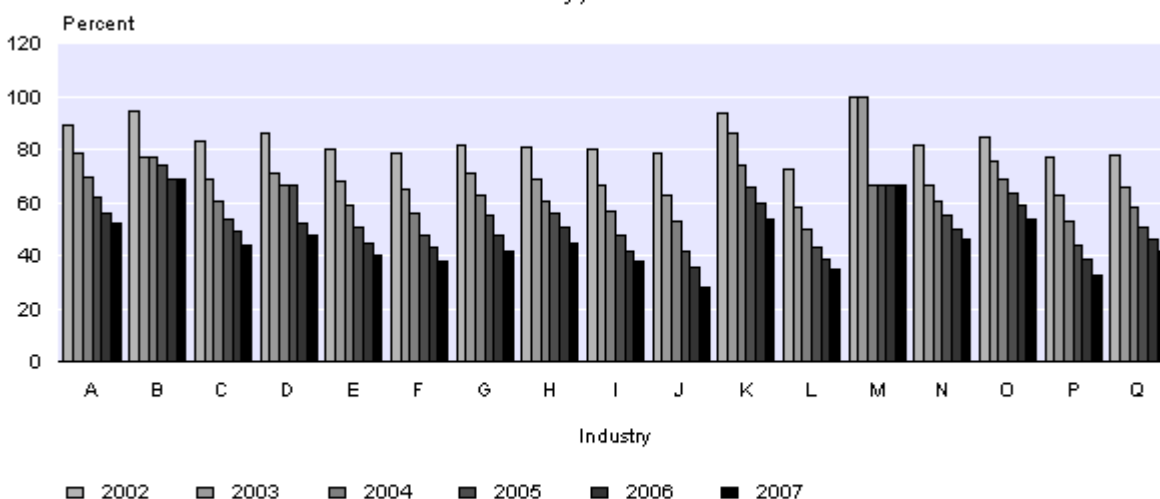
February, 2002–07



Industries with higher survival rates over the six years included mining (69 percent), government administration and defence (67 percent), health and community services (54 percent), and finance and insurance (54 percent). Lower survival rates were observed for communication services (28 percent), cultural and recreational services (33 percent), and property and business services (35 percent).

Survival Rate of 2001 Births by Industry

February, 2002–07



A Agriculture, forestry and fishing; B Mining; C Manufacturing; D Electricity, gas and water supply; E Construction; F Wholesale trade; G Retail trade; H Accommodation, cafes and restaurants; I Transport and storage; J Communication services; K Finance and insurance; L Property and business services; M Government administration and defence; N Education; O Health and community services; P Cultural and recreational services; Q Personal and other services

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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 individual, private sector and public sector enterprises that are engaged in the production of goods and services in New Zealand. This generally includes all enterprises with GST turnover greater than \$30,000 per year.

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New business demography dynamic series

This is the first official publication of a new business demography dynamic statistics series, based on a recently developed statistical resource, the Longitudinal Business Frame (LBF). The release includes a new range of statistical measures, including counts of the births and deaths of enterprises, and analysis of the survival rates of new enterprises. The birth and death counts, and survival rates, have been presented by industry and business size. To enable trends to be studied, the series has been backcast to February 2001 and released on a provisional basis.

Newly developed methods make it possible to identify with greater certainty the level of real enterprise births and deaths, as opposed to enterprise entries and exits that include dormant enterprises, reactivations, and administrative churn (such as company restructuring and ownership changes). This is in line with the development of international standards for business demography statistics by Eurostat and the Organisation for Economic Cooperation and Development, and comparable to methods used by other countries.

This release follows the initial publication of an improved set of business demography structural statistics on 26 February 2008 which presented a snapshot of the structure and characteristics of New Zealand businesses. Business demography series now covers all industries, and includes an expanded coverage of New Zealand businesses.

The table below summarises the main differences between the new and old business demography series:

	New series	Old series
Population source	Longitudinal Business Frame (LBF)	Business Frame (BF)
Business dynamics and identification of continuing businesses	Improved data sources and methodology	
Industry coverage	All industries	Excludes agriculture production (ANZSIC subdivision A01)
Business size measure	Employee count, sourced from the Linked Employer-Employee Database	Employee count, sourced from the BF
Businesses covered	All economically significant businesses	All economically significant businesses, except for those added as part of the change in BF maintenance strategy in 2003 and 2004
Updates to business demography data	Data released as provisional and updated in future releases	Data treated as final and only updated upon identification of significant changes or errors

The LBF contains data from two main sources: Statistics New Zealand's Business Frame (BF), and payroll tax records drawn from the Linked Employer-Employee Database (LEED). Of these, the BF is the predominant source, it covers businesses that are registered with Inland Revenue and meet the criteria for economic significance (described in the 'Businesses covered' section below). All economically significant enterprises and their attributes such as industry or region are registered in both the BF and LBF.

The main difference between the two is that the BF only shows the latest available data on businesses, while the LBF records their attributes over time. The main function of the BF is to provide an accurate and timely population source for economic and financial surveys so that robust economic and financial statistics can be produced. The BF is maintained using administrative data from Inland Revenue, such as goods and services tax (GST) registrations and Employee Monthly Schedule (EMS) returns (IR348 form), Companies Office information, as well as Statistics NZ survey information.

The LBF is an offshoot of the LEED integration project. The LBF is a more statistically robust data source for business demography in terms of its maintenance and the enterprises covered, providing a rich panel dataset of monthly information on all active business units. It holds historical data back to April 1999 and is updated monthly. It facilitates the creation of a consistent time series for business demography without methodological breaks, and allows for updates of previously published data.

Identification and definition of business births and deaths

To observe enterprise 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 (for example, an IRD number) in the tax reporting system and subsequently in 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 in the real world.

The methods used to identify 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 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.

Three processes have been developed to identify continuing businesses on the LBF (longitudinal links). Each process, by making complementary linkages to LBF units, is set up to support the others in minimising the likelihood of creating erroneous links. While the first two repair processes use the geographic unit from the BF to repair longitudinal links, the third repair process uses the Inland Revenue reporting unit from the taxation system. In general, the Inland Revenue reporting unit is the enterprise or a group of enterprises. The main objective of exploiting the repair information made by either the geographic unit or the enterprise unit is to isolate the economic birth or death of a business, which in business demography is defined around the enterprise or legal unit rather than around the geographic unit. These processes are described in more detail in the [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 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). Of course 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 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 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 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. Review of the identified real deaths for the 2001–2004 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 2007 reference period should be treated with caution.**

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 birthed enterprise must exist in the specified succeeding reference period, as well as every reference period in between.

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. However, it might take some time for countries to adopt such standards, as “data producers are often more influenced by national data requirements than international comparability”.

The definitions and methods set out in this section align well with the best practice models presented in the OECD study, especially with the standard model proposed therein. With a better understanding of the various categories of enterprise entries (pure births, reactivations, other entries) it should also be possible to adapt the methods developed by Statistics New Zealand to international standards, once the latter are finalised. Further detail is available in the [Business Demographic Statistics Review Report](#).

Change in business size measure

An important change in the new and old series is the business employment size measure used. The new series uses employee counts sourced from the LEED database, while the old series used employee counts from the BF. Both employee count measures are mainly sourced from the Inland Revenue EMS, and are a head count of salary and wage earners for the February reference month. The key difference between the measures is the methodology used to apportion employee counts from the enterprise to the geographic units (or business locations) for those with multiple locations. The BF measure uses data sourced from the respondent, while the LEED measure uses algorithms based on a series of factors associated with the business and the employees. This includes the distance between an individual’s address and the employer’s geographic location.

Although both are sourced from the LEED 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).
- Business demography uses the EMS data before all returns are finalised. At the time of the business demography publication, the data is considered robust enough to provide an accurate indicator for business size. Business demography does not provide official statistics on employment levels.

Change in Business Frame maintenance strategy

In 2003 and 2004, there was a significant change in the strategy used to maintain the BF. This strategy involves greater use of administrative data to maintain the BF. The changes in business coverage included:

- increased coverage of the BF to include all employing businesses, with the exception of individuals that are employers but are not registered for GST
- reactivation of previously ceased businesses that are showing current GST activity
- improved coverage of GST-exempt industries by making greater use of tax data sourced from the EMS and IR10 tax returns
- inclusion of agriculture businesses (ANZSIC subdivision A01) in the maintenance strategy.

Previously, the coverage of these businesses resulting solely from the change in strategy used to maintain the BF has been excluded from business demography statistics. This was to ensure a greater level of consistency with previously published business demography statistics.

The new series based on the LBF includes these businesses to more accurately reflect the coverage of businesses in the New Zealand economy. This has added approximately 40,000 enterprises to the business demography population. However, these enterprises are typically small, and in total account for approximately 0.5 percent of the total employee count.

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 data, taking into account all updates that have occurred 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 releases onwards, business demography statistics will be released provisionally to allow 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.

This policy differs from previous releases of business demography statistics, where data was treated as final and only updated upon identification of significant changes or errors.

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 individual, private sector and public sector 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 GST expenses or sales of more than \$30,000
- rolling mean employee count of greater than three
- in a GST-exempt industry (except residential property leasing and rental)
- part of a group of enterprises
- a new GST registration that is compulsory, special or forced
- registered for GST and involved in agriculture or forestry.

At February 2007, there were 463,380 economically significant enterprises on the LBF. They were estimated to represent 99 percent of all GST sales. All non-trading and dormant companies, as well as companies outside of New Zealand, are excluded from business demography statistics.

All GST registered enterprises recorded on Inland Revenue's client registration file are continually monitored to determine whether they meet the 'economic significance' requirements for inclusion. A buffer zone of \$25,000 to \$35,000 has been established to prevent enterprises switching repeatedly in and out of the economic significance group. The enterprises maintained on the BF represent the target population from which Statistics NZ's economic surveys are selected.

Guide to interpreting time series data

The time series of business demography data published 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 96 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. From 2002 a programme of annual agricultural production statistics was reintroduced with consequential improvements in the BF quality. From 2004 the quality of the agricultural units on the BF is considered robust. Prior to this, some of the changes in business demography statistics for agriculture reflect quality improvements in the BF, rather than actual changes.
- The residential property operators industry (ANZSIC 96 class L7711) contains only partial coverage, so must be analysed with caution.
- 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. New non-employing 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, and that had been added to the frame at an earlier date. The change only affected non-employing businesses.
- The business demography series shows a significant increase in the number of enterprises in 2004, particularly in ANZSIC divisions K (finance and insurance) and L (property and business services). This was largely a consequence of improved use of administrative data to maintain the BF (further described in 'Change in Business Frame maintenance strategy' section). Most of the enterprises added were non-employing 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.
- 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 on the basis of 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.
- Lags in recording business births and deaths.
- Difficulties in maintaining industrial and business classifications for smaller firms (that are primarily maintained using administrative data).
- The business demographic 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 in administrative data sources as well as genuine business start-ups and closures. These data sources are not comprehensive and are of lower quality for small non-employing businesses. When businesses register for GST and are added (or 'birthed') onto the BF, they are given a new reference number. Company restructuring and 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 BF.
- 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 statistics. It is not designed to provide quality fine-level regional or industry statistics. Particularly for small and medium-sized businesses, the BF update sources can have timing lags and less robust information. These quality weaknesses can be highlighted in fine-level business demography statistics.

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 (for example percentage changes) have been calculated using unrounded data.

Terms and definitions

ANZSIC

Australian and New Zealand Standard Industrial Classification (ANZSIC96). A geographic unit is assigned to an ANZSIC96 category according to the predominant activity in which it is engaged. The enterprise ANZSIC96 is derived from the ANZSIC96 and employment levels of the geographic unit(s) belonging to that enterprise.

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 ANZSIC96. 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 births). 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 years.

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 six 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 at the start of the reference period, but are not present at the end of the reference period.

Geographic unit / 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 exist in the specified succeeding reference period, as well as every reference period in between.

More information

For more information, follow the [link](#) from the technical notes of this release on the Statistics NZ website.

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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.

Next release ...

New Zealand Business Demography Statistics (Dynamics): At February 2008 will be released on 27 November 2008.

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Tables

The following tables can 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. Business demography population, births and deaths, February, 2001–07
2. Breakdown of births, February, 2001–07
3. Births by industry, February, 2001–07
4. Deaths by industry, February, 2001–07
5. Births by employee count size group, February, 2001–07
6. Deaths by employee count size group, February, 2001–07
7. Employee count of births and deaths, by employee count size group, February, 2001–07
8. Average employee count of births and deaths, February, 2001–07
9. Survival rate of births by industry, February, births in 2001–05
10. Survival rate of births by employee count size group, February, births in 2001–05

Supplementary tables

More business demography tables can be found in the [Table Builder](#) facility on Statistics New Zealand's website.