

YourEconomy.org Notes

The NETS database that is used to generate YourEconomy.org statistics contains over 36.5 million records for U.S. establishments that existed any time between 1990 and the present. Of the over 36.5 million establishments, 17 million are still active and report over 150 million employees. YourEconomy.org statistics begin with 1992, not 1990, because the NETS database was in a developmental stage during 1990 and 1991.

Dun & Bradstreet (D&B) delivers new data on U.S. establishments to Walls & Associates (Walls) at the beginning of each year. This data includes the records from the D&B Duns Market Identifier (DMI) database as well as several smaller databases. Walls uses the new D&B data to check the preceding year's data for problems, fixes any that are found, and then delivers the updated, improved dataset for the preceding year to subscribers in the form of the NETS database. As a subscriber to the national database, the Edward Lowe Foundation receives updated datasets each spring and fall. The "[National Establishment Time Series \(NETS\) Database: Database Description](#)" describes the database in detail.

About the NETS data

1. D&B callers ask respondents at all the active establishments they have identified to provide a current situation report each year. Calls are fairly evenly spaced throughout the year; over a million calls are made each month. In contrast, the Census Bureau collects data in the spring, and asks call recipients to provide data on their establishments as of the second week in March. The Census Bureau statistics most similar in scope to YourEconomy.org statistics are County Business Patterns (CBP), Statistics of U.S. Businesses (SUSB) and the Business Information Tracking Series (BITS). The Census Bureau Web site has an [explanation of terms](#) and details on the [survey methods](#) used to collect its data.
2. Correcting errors found in past years' data is one of the most important ways Walls & Associates adds value to the NETS database. D&B makes almost no corrections in back years when new information is received.
3. An unknown small fraction of the annual growth in the number of establishments in the NETS database is due to improvements in the methods that D&B has used to find and add establishments to the database. Walls observed that the D&B data coverage improved most in 1994 and 2000-2001. Most of the growth in numbers due to D&B procedure changes falls in the 1-9 employee bracket. Larger establishments have been well covered in most years of NETS data for at least two reasons: larger establishments are more widely known, and since D&B is also in the credit-rating business, the establishments' purchasing and credit relationships brought them to D&B's attention.
4. D&B attempts to contact every establishment in the database by telephone every year. Discussing the calls with the respondents who received them at local establishments revealed that employee numbers sometimes are not updated during the contact session. Small-scale expansions and contractions occasionally go unrecorded.
5. Analysis of the data also revealed that employee numbers often are rounded to the nearest ten by the respondents to D&B calls. When employee numbers get rounded up and down to the nearest number ending in zero, some expansions and contractions are not reported.

6. The unreported employment changes and rounding cause some establishment records to have flat employee numbers for a couple of years followed by sudden jumps in the numbers. As a result, the numbers of establishments undergoing expansions and contractions are somewhat underreported in NETS data. The statistics showing changes in employee numbers are accurate, because the large number of cases prevents the flat periods and surges reported for individual establishments from obscuring employment trends.
7. D&B drops an establishment from the database if it fails to answer six calls in three years, and the establishment is considered to have died. Some delisted establishments are reinstated when they are found again later. When that happens, Walls interpolates the data for the missed years so the establishments do not get counted among the deaths and births. Each time a new year of data is added to the NETS database, the numbers of establishments and employees in the two preceding years increase slightly because of the reinstated establishments and interpolated data.
8. Establishments in YourEconomy.org data are defined similarly to establishments in Census data. An establishment is an organization functioning at a single location. Some establishments are members of firms headquartered elsewhere and some are standalones with no corporate families.
9. A firm is comprised of all the establishments that are members of the firm and report to its headquarters, including the headquarters itself. A standalone is counted as a firm—a firm comprised of a single establishment.
10. Divisions or units of an organization at the same location whose products or services fall in different major industries (NAICS categories) are listed as separate establishments reporting to the same firm headquarters. D&B assigns each such establishment its own unique identifier, a nine-digit DUNS number.
11. NETS employment numbers usually reflect total head count, not full-time equivalents. The numbers reported by establishments sometimes include empty job positions in addition to current employee numbers.
12. Establishment proprietors and owning partners are counted as employees in the NETS data, so NETS statistics include sole proprietorships and partnerships with no paid employees in addition to the owners. That differs from the Census Bureau's SUSB and BITS databases that exclude establishments with no paid employees in addition to their owners.
13. The yearly employment and sales figures in the NETS record for each establishment are accompanied by codes indicating the data sources. The codes indicate whether each employee and sales number was reported by the respondent at the establishment, estimated by D&B, or estimated by Walls. The proportions do change. For example, the 2006 employment data are 69 percent reported, 28 percent estimated by D&B and 3 percent estimated by Walls. The 2004 employment data are 64 percent reported, 25 percent estimated by D&B and 11 percent estimated by Walls.
14. Analysis of the data sources revealed that the number of new records (establishment births) added by D&B with employment numbers estimated, not confirmed, by D&B to be 1, 2 or 3 employees increased after 2001. This has caused some over-reporting of

- births in the YourEconomy.org 1–9 employee bracket for recent years. Two years after the records with estimated employee numbers were added, D&B dropped large numbers of them from the database, so the mortality rate of the newborn establishments with employee numbers estimated by D&B increased significantly. This means YourEconomy.org establishment birthrates in the 1–9 employee bracket are inflated after 2001, and the death rates are inflated after 2003. Options being considered to compensate for the increased numbers of estimates added and quickly withdrawn starting in 2001 include (a) excluding the estimated data from analysis, (b) quantifying the effect of the unusual estimates and adjusting the statistics to remove it and (c) using Walls' estimation and interpolation methods to add estimated employee and sales numbers to the records in question for years prior to 2001.
15. There are some redundant records in the NETS database, perhaps due to different phone representatives at D&B contacting different respondents at the same establishment in the same years. Other kinds of errors in the NETS data are found occasionally during analysis at the Edward Lowe Foundation, usually as a result of seeking the cause of anomalous local results. For example, a problem record might be found showing that an establishment had 1,462 employees reported in year one, 146,200 employees in year two, and 1,462 employees in year three of a sequence. The redundancies are cleared, and when such obvious errors are found, they are replaced with estimates. Because the total number of establishments and employees is so large, when corrections are made, it has almost no effect on national statistics and not much effect on the statistics at the state and MSA levels. Statistics for counties, especially those with sparse business populations, are more susceptible to change when the numbers for an establishment are corrected.
 16. According to Walls, a very small fraction of the establishment births in NETS data are actually moves. The misclassification happens because when an establishment moves part of its operation, its DUNS number stays behind, and the moved operation is assigned a new DUNS number.
 17. When ownership of a standalone establishment changes—as when a restaurant or plant is sold and continues business with a new owner—the old DUNS number is retired and the operation is assigned a new DUNS number. Statistically, the ownership change is treated as a death and birth. When ownership of an establishment that is a member of a larger firm changes, its DUNS number usually is not changed; all that changes is the establishment's headquarters affiliation.

About YourEconomy.org statistics

1. FileMaker database management software is used to calculate YourEconomy.org statistics.
2. YourEconomy.org statistical tables report resident and nonresident establishments separately. Resident establishments are those with headquarters within the same state. Nonresident establishments report to headquarters outside the state.
3. YourEconomy.org statistical tables also report noncommercial, nonprofit establishments separately from business establishments. Noncommercial establishment status is

determined by each establishment's NAICS code. The pertinent NAICS codes are listed in the glossary.

4. Each resident establishment is assigned to a growth-stage bracket based on its local employee numbers in its birth year or the first (base) year of the period being analyzed. The four brackets are 1–9 employees, 10–99 employees, 100–499 employees, and 500 or more employees.
 - The base-year assignment method differs from the practice commonly followed by the Census Bureau and other government agencies of assigning each establishment to the bracket that includes the average of the first- and last-year employment numbers of the firm the establishment belongs to. The base-year assignment method is used in the YourEconomy.org tables because a primary objective of the statistical analysis is to display clearly the employment history over varying periods of establishments as they started in each size bracket. For example, 1994 is the base year of the period 1994–2007. An establishment that reported 5 employees in 1994 and 25 employees in 2007 would be assigned to the first stage bracket (1-9 employees) in YourEconomy.org tables.
 - Local employment numbers are used for bracket assignment for the same reason—to reflect the local situation. In YourEconomy.org tables, a local Starbucks with 12 employees is assigned to the 10–99 bracket. The Census Bureau or Bureau of Labor Statistics would assign the same Starbucks to the 500+ employee bracket because the Starbucks firm headquartered in Washington has over 500 employees.
5. An establishment birth is tallied when an establishment goes from no employees in one year to one or more employees the next year. An establishment death is tallied when an establishment goes from one or more employees in one year to no employees the next year. For example, if the record for an establishment had blank employment-number fields for the years prior to 1999, twelve employees listed in the fields for 2000 to 2004, and blank fields after 2004, the establishment's birth would be counted for 1999–2000 and its death would be counted for 2004–2005.
6. An expansion is tallied when an establishment has one or more employees in one year and a larger number the next year. An establishment contraction is tallied when an establishment has a lower number of employees in year two than in year one without having died.
7. When a division or branch of an organization that has been assigned its own DUNS number is shut down or consolidated into another division, its employee count drops to zero, and it is tallied as an establishment death. An expansion is tallied for the division that has employees migrate in from the division that shut down. Move this item to the YourEconomy.org section.
8. Stage 1 establishment statistics (1–9 employees) show an artificially high proportion of expansions to contractions because of the calculation method. All the expansions at establishments with one employee are counted as expansions, but if a one-employee establishment contracts, the change is counted as a death, not a contraction. (Of the 11 million active stage-one establishments, 5 million have only one employee.) The same pattern holds for larger establishments: A two-employee contraction at a two-employee

- establishment is counted as a death, not a contraction, but all two-employee establishment expansions are counted as expansions.
9. MSA boundary definitions correspond to the Census Bureau's 2003 definitions, which were changed significantly from earlier definitions to better represent economic and social activity in a region.
 10. Ten cities in Virginia have their own tables in the YourEconomy.org county listings: Alexandria, Chesapeake, Hampton, Lynchburg, Newport News, Norfolk, Portsmouth, Richmond, Suffolk and Virginia Beach. Three other US cities, Baltimore, Maryland, Carson City, Nevada, and St. Louis, Missouri, also have their own tables in the county listings.
 11. The sum of the employee numbers on the resident and nonresident lines at the state, MSA and county levels do not equal the exact total number of employees in the regions, because some establishments have their headquarters move into or out of the state and the establishments switch between the resident and nonresident brackets.
 12. Similar adjustments need to be made when establishments switched industries enough to change their NAICS categories between the base year and the end year being examined.

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