BUSINESS FORMATION STATISTICS, OCTOBER 2021

Release Number: CB21-180

Notice: In a few weeks, the U.S. Census Bureau's Business Formation Statistics (BFS) will make history. Starting with the December 8, 2021 monthly release, BFS will become just the second experimental data product to transition to a standard data product.

Notice: The High-Propensity Business Application definition has been revised to the following: a) from a corporate entity, (b) that indicate they are hiring employees, (c) that provide a first wages-paid date (planned wages); or (d) that have a NAICS industry code in accommodation and food services (72) or in portions of construction (237, 238), manufacturing (312, 321, 322, 332), retail (44, 452), professional, scientific, and technical services (5411, 5413), educational services (6111), and health care (621, 623). For more details on this process, our most recent revision, and our linking approach of the previous and revised definition, please see our methodology <https://www.census.gov/econ/bfs/methodology.html>.

Notice: The latest annual update was applied during the October 2021 monthly release. During the annual update, underlying NAICS codes are revised each year for the previous five years when more accurate and detailed NAICS codes may be available from administrative sources. The Formation series are updated annually to revise information on business formations (firm births) from the Business Dynamic Statistics (BDS) program. Also, seasonal factors are recomputed and applied during the annual update, resulting in revisions to our seasonally adjusted series.

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November 10, 2021 — The U.S. Census Bureau announced the following seasonally adjusted business application and formation statistics for October 2021. The Business Application Series describe the business applications for tax IDs as indicated by applications for an Employer Identification Number (EIN) through filings of the IRS Form SS-4. The Business Formation Series describe employer business formations as indicated by the first instance of payroll tax liabilities for the corresponding business applications.

BUSINESS APPLICATIONS		
U.S. Business Applications:	**OCT 2021**	**OCT 2021 / SEP 2021**
Total	432,101	Z°
High-Propensity	143,027	0.8%°
With Planned Wages	52,277	0.7%°
From Corporations	51,653	2.4%°

Next release: December 08, 2021
(°) Statistical significance is not applicable or not measurable.
Data adjusted for seasonality.
Source: U.S. Census Bureau, Business Formation Statistics, November 10, 2021

Monthly Business Applications
(Seasonally Adjusted)

Source: U.S. Census Bureau, Business Formation Statistics, November 10, 2021
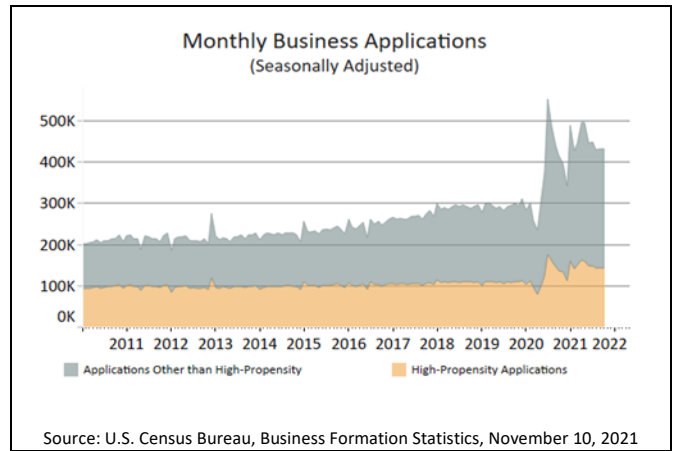
Business Applications - At a Glance

		US	Northeast	Midwest	South	West
Total	OCT 2021	432,101	66,441	70,103	200,743	94,814
	OCT 2021 / SEP 2021	Z	+2.0%	-0.5%	+0.1%	-1.2%
High-Propensity	OCT 2021	143,027	23,527	22,484	62,728	34,288
	OCT 2021 / SEP 2021	+0.8%	+3.3%	+1.2%	+0.7%	-1.1%
With Planned Wages	OCT 2021	52,277	7,389	9,118	23,143	12,627
	OCT 2021 / SEP 2021	+0.7%	+1.4%	-0.6%	+2.4%	-1.8%
From Corporations	OCT 2021	51,653	10,941	6,586	19,182	14,944
	OCT 2021 / SEP 2021	+2.4%	+5.2%	+3.4%	+2.2%	+0.2%

Details may not equal totals due to rounding. Regions defined by Census Bureau Geography Program. Statistical significance is not applicable or not measurable.

Data adjusted for seasonality. Green Percentage changes are greater than zero (+). Red Percentage changes are less than zero (-). Z = absolute value < 0.05.

Business Applications

Business Applications for October 2021, adjusted for seasonal variation, were 432,101, virtually unchanged from September 2021.

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BUSINESS FORMATIONS

U.S. Total Projected Business Formations:	OCT 2021	OCT 2021 / SEP 2021
Within 4 Quarters	31,831	1.9%°
Within 8 Quarters	41,039	2.4%°

Next release: December 08, 2021

(°) Statistical significance is not applicable or not measurable.

Spliced - Data adjusted for seasonality.

Source: U.S. Census Bureau, Business Formation Statistics, November 10, 2021

Monthly Business Formations within 4 Quarters
Spliced (Actual and Projected)
(Seasonally Adjusted)

Source: U.S. Census Bureau, Business Formation Statistics, November 10, 2021
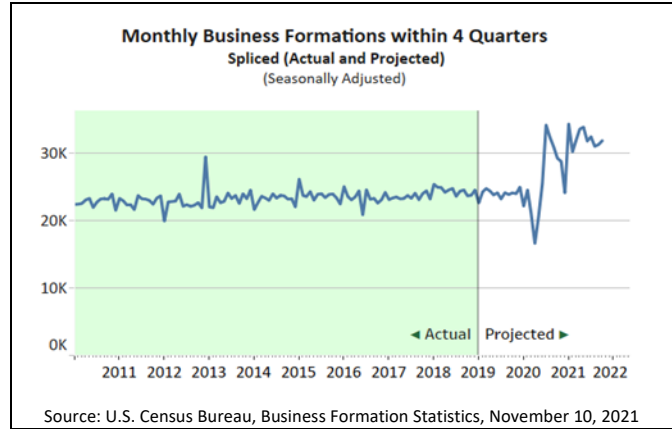
Projected Business Formations - At a Glance

		US	Northeast	Midwest	South	West
Within 4 Quarters	OCT 2021	31,831	5,096	5,125	13,022	8,588
	OCT 2021 / SEP 2021	+1.9%	+4.0%	+1.3%	+2.8%	-0.5%
Within 8 Quarters	OCT 2021	41,039	6,582	6,733	16,778	10,946
	OCT 2021 / SEP 2021	+2.4%	+3.7%	+2.8%	+3.6%	-0.3%

Details may not equal totals due to rounding. Regions defined by Census Bureau Geography Program. Statistical significance is not applicable or not measurable.

Data adjusted for seasonality. Green Percentage changes are greater than zero (+). Red Percentage changes are less than zero (-). Z = absolute value < 0.05.

Business Formations

Projected Business Formations (within 4 quarters) for October 2021, adjusted for seasonal variation, were 31,831, an increase of 1.9 percent compared to September 2021. The projected business formations are forward looking, providing an estimate of the number of new business startups that will appear from the cohort of business applications in a given month. It does not provide an estimate of the total number of business startups that appeared within a specific month. In other words, the Census Bureau is projecting that 31,831 new business startups with payroll tax liabilities will form within 4 quarters of application from all the business applications filed during October 2021. The 1.9 percent increase indicates that for October 2021 there will be 1.9 percent more businesses projected to form within 4 quarters of application, compared to the analogous projections for September 2021.

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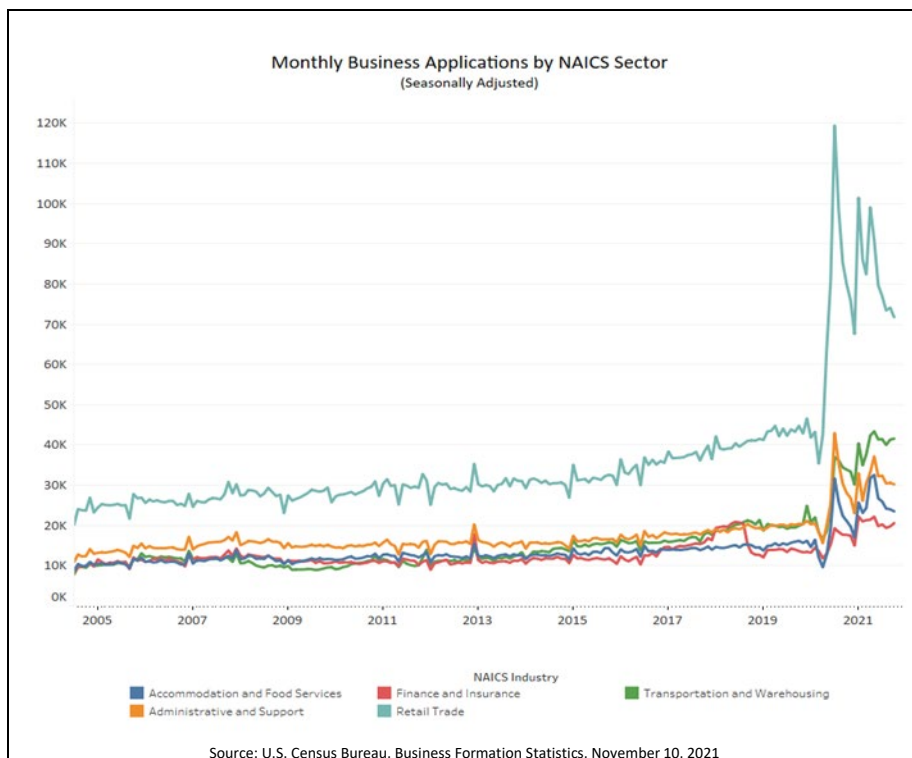301-763-3030
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Statistics on actual business formations are available up to the latest quarter for which administrative data identifies employer business startup activity based on first payroll observation, currently the fourth quarter of 2019. Given the forward-looking nature of business formations, the Census Bureau can only state actual business formations within 4 quarters up to December 2018, and business formations within 8 quarters up to December 2017. Projected business formations within 4 quarters start in January 2019 and projected business formations within 8 quarters start in January 2018 and both end in October 2021. The most recent quarter for which administrative data on payroll is available is updated annually typically by the twelfth month based on new data on actual business formations.

For more information, see the explanatory notes later in this release or visit <https://www.census.gov/econ/bfs/methodology.html>.

Source: U.S. Census Bureau, Business Formation Statistics, November 10, 2021

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Business Applications by Industry - At a Glance

		US
11: Agriculture	OCT 2021	4,098
	OCT 2021 / SEP 2021	**+0.8%**
21: Mining	OCT 2021	551
	OCT 2021 / SEP 2021	**+10.2%**
22: Utilities	OCT 2021	379
	OCT 2021 / SEP 2021	**-15.6%**
23: Construction	OCT 2021	39,744
	OCT 2021 / SEP 2021	**Z**
31-33: Manufacturing	OCT 2021	6,153
	OCT 2021 / SEP 2021	**+3.8%**
42: Wholesale Trade	OCT 2021	9,083
	OCT 2021 / SEP 2021	**-1.8%**
44-45: Retail Trade	OCT 2021	71,776
	OCT 2021 / SEP 2021	**-3.1%**
48-49: Transportation and Warehousing	OCT 2021	41,559
	OCT 2021 / SEP 2021	**+0.6%**
51: Information	OCT 2021	7,742
	OCT 2021 / SEP 2021	**+0.2%**
52: Finance and Insurance	OCT 2021	20,567
	OCT 2021 / SEP 2021	**+4.1%**
53: Real Estate	OCT 2021	26,089
	OCT 2021 / SEP 2021	**+5.0%**
54: Professional Services	OCT 2021	52,444
	OCT 2021 / SEP 2021	**+1.6%**
55: Management of Companies	OCT 2021	4,543
	OCT 2021 / SEP 2021	**+2.5%**
56: Administrative and Support	OCT 2021	30,208
	OCT 2021 / SEP 2021	**-1.3%**
61: Educational Services	OCT 2021	5,793
	OCT 2021 / SEP 2021	**+3.6%**
62: Health Care and Social Assistance	OCT 2021	24,543
	OCT 2021 / SEP 2021	**+0.6%**
71: Arts and Entertainment	OCT 2021	12,435
	OCT 2021 / SEP 2021	**-2.0%**
72: Accommodation and Food Services	OCT 2021	23,508
	OCT 2021 / SEP 2021	**-2.0%**
81: Other Services	OCT 2021	37,777
	OCT 2021 / SEP 2021	**-1.9%**
Unclassified	OCT 2021	13,111
	OCT 2021 / SEP 2021	**+4.1%**

Details may not equal totals due to rounding. Statistical significance is not applicable or not measurable. Data adjusted for seasonality, except for Utilities (22).

Green Percentage changes are greater than zero (+). Red Percentage changes are less than zero (-). Z = absolute value < 0.05.

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Business Applications by Industry

The Census Bureau classifies BFS data by industry using the North American Industry Classification System (NAICS). NAICS codes are assigned using a variety of sources. A Census Bureau-developed automated industry-coding program first attempts to assign NAICS codes to all new EIN applications received from the IRS. The automated industry-coding program is based on established patterns in the business name and descriptions provided on the EIN applications. This auto-coding process assigned NAICS codes to over 80% of all incoming EIN applications in 2020. For applications that did not receive a NAICS code during the auto-coding process, BFS staff use a Census-developed machine learning algorithm to assign NAICS codes where possible. NAICS codes are revised each year for the previous five years as part of the BFS annual update process when more accurate and detailed NAICS codes may be available from the Social Security Administration, the Bureau of Labor Statistics, and the Census Bureau's Business Register. There are a small number of EIN applications where there is not enough information available to assign a NAICS code through any source.

For more information on the Census Bureau automated industry-coding program, please visit <https://www.census.gov/econ/bfs/pdf/naics_improvement.pdf>. For more information on the machine learning algorithm, please visit <https://www.census.gov/content/dam/Census/newsroom/press-kits/2019/jsm/Using%20Machine%20Learning%20to%20Assign%20North%20American%20Industry%20Classification%20System%20Codes%20to%20Establishments_Dumbacher.pdf>.

GENERAL INFORMATION

On May 13, 2019, the IRS implemented a change in Form SS-4 requiring a social security number (SSN) or an individual taxpayer identification number (ITIN) for the responsible party indicated in the EIN application. The change will prevent entities using their existing EINs to apply for additional EINs. For more information on the requirement change, please visit <https://www.irs.gov/newsroom/irs-revises-ein-application-process-seeks-to-enhance-security>. The form field that the change applies to is not one that the Census Bureau receives and it is not used in the analysis. As a result, we cannot necessarily draw any conclusions on the impact of this change on the BFS.

Release Schedule

The November 2021 Business Formation Statistics Report is scheduled for release on December 08, 2021. View the full schedule in the Economic Briefing Room: <https://www.census.gov/economic-indicators/>. Further information on BFS, including additional series and the full time span of the series listed above, can be found at <https://www.census.gov/econ/bfs>.

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EXPLANATORY NOTES

The Business Formation Statistics (BFS) are a product of the U.S. Census Bureau developed in research collaboration with economists affiliated with Board of Governors of the Federal Reserve System, Federal Reserve Bank of Atlanta, University of Maryland, and University of Notre Dame.

The Business Formation Statistics (BFS) provide timely and high-frequency data on business applications and employer business formations. The BFS measure business initiation activity (Business Application Series) as indicated by applications for an Employer Identification Number (EIN) on the IRS Form SS-4. The BFS also provide information on actual and projected employer business formations (Business Formation Series) that originate from these applications, based on the record of first payroll tax liability for an EIN. In addition, the BFS contain measures of delay in business starts as indicated by the average duration between the application for an EIN and the transition to an employer business.

The BFS currently cover the period starting from July 2004 (2004 JUL) onwards at a monthly frequency. The data are available nationally, regionally, and by individual states.

Business Application Series

These series describe the business applications for tax IDs as indicated by applications for an Employer Identification Number (EIN) through filings of IRS Form SS-4. Business applications are presented in four different series reflecting different subsets of the applications for an EIN. All business applications series cover the period from 2004 JUL onwards.

- **Business Applications (BA)**: The core business applications series that correspond to a subset of all applications for an EIN. This series includes all applications for an EIN, except for applications for tax liens, estates, and trusts, applications outside of the 50 states and the District of Columbia or those with no state-county geocodes, applications with certain NAICS codes in sector 11 (agriculture, forestry, fishing and hunting) or 92 (public administration) that have low transition rates, and applications in certain industries (i.e. private households, certain financial services, civic and social organizations).

- **High-Propensity Business Applications (HBA)**: Business Applications (BA) that have a high-propensity of turning into businesses with payroll. The identification of high-propensity applications is based on the characteristics of applications revealed on the IRS Form SS-4 that are associated with a high rate of business formation. High-propensity applications include applications: (a) from a corporate entity, (b) that indicate they are hiring employees, (c) that provide a first wages-paid date (planned wages); or (d) that have a NAICS industry code in

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accommodation and food services (72) or in portions of construction (237, 238), manufacturing (312, 321, 322, 332), retail (44, 452), professional, scientific, and technical services (5411, 5413), educational services (6111), and health care (621, 623).

- **Business Applications with Planned Wages (WBA)**: High-Propensity Business Applications (HBA) that indicate a first wages-paid date on the IRS Form SS-4. The indication of a wages-paid date is associated with a high likelihood of transitioning into a business with payroll.

- **Business Applications from Corporations (CBA)**: High-Propensity Business Applications (HBA) from a corporation or personal service corporation, based on the legal form of organization stated in the IRS Form SS-4. Similar to the WBA series, this series is important primarily because it consists of a set of applications that have a high rate of transitioning into businesses with payroll.

The following is a graphical representation (Venn diagram) of the relationship between the four business applications series (BA, HBA, WBA, CBA) and EIN applications. This graph does not represent the actual relative sizes of different groups.
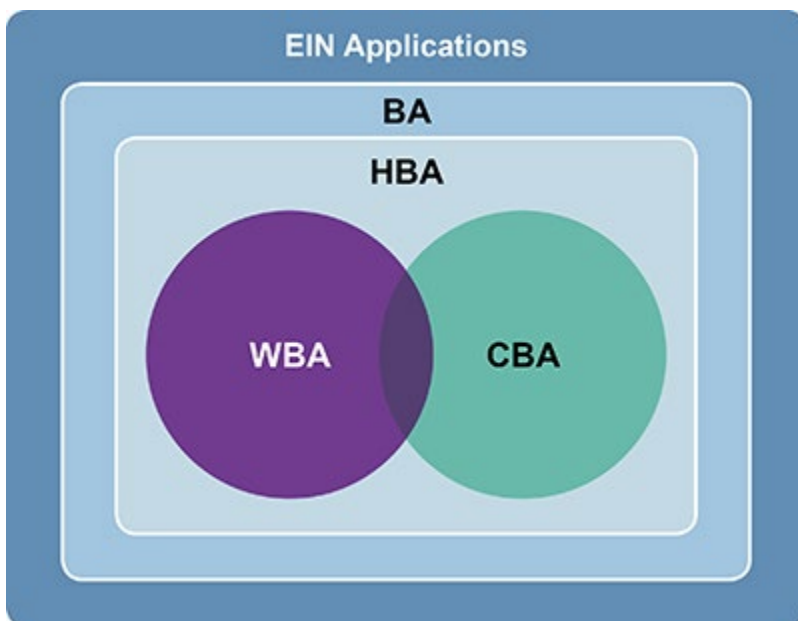
Business Formation Series

These series describe employer business formations as indicated by the first instance of payroll tax liabilities for the corresponding business applications. The business formation series are forward-looking in the sense that they measure new business formations from the month of business application in any given quarter. Two series are provided: the first describes transitions within the next four quarters (12 months), and the second within the next eight quarters (24 months). Payroll information is only available on a quarterly basis so it is only possible to look ahead in terms of quarters. All business formation series start in 2004 JUL, the earliest month for which the data on business applications are available.

- **Business Formations within 4 Quarters (BF4Q)**: This series provides the number of employer businesses that originate from Business Applications (BA) within four quarters from the month of application. By definition, the end-point of this series is determined by the most recent quarter for which the administrative data identifies employer business startup activity based on first payroll observation.

- **Projected Business Formations within 4 Quarters (PBF4Q)**: The projected number of employer businesses that originate from Business Applications (BA) within four quarters from the month of application. The projections are based on an econometric model that generates estimates of the likelihood that a business application turns into an employer business. For the details of the model, see the working paper <https://www.census.gov/library/working-papers/2018/adrm/bfs_FEB2018.html>. The projected business formation series cover the period for which the actual number of business formations within 4 quarters is not yet available. Combining the projected series with the actual business formations (the BF4Q series) results in an up-to-date, forward-looking business formation series.

- **Spliced Business Formations within 4 Quarters (SBF4Q):** This series combines (splices) BF4Q and PBF4Q to provide the entire time series for the actual and projected business formations within 4 quarters.

- **Business Formations within 8 Quarters (BF8Q)**: The number of employer businesses that originate from Business Applications (BA) within eight quarters from the month of application, similar to the BF4Q series. Again, the end-point of this series is determined by the most recent quarter for which the administrative data identifies employer business startup activity based on first payroll observation.

- **Projected Business Formations within 8 Quarters (PBF8Q)**: The projected number of employer

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businesses that originate from Business Applications (BA) within eight quarters from the month of application, similar to the PBF4Q series. The projected business formation series cover the period for which the actual business formations within 8 quarters are not yet available.

- **Spliced Business Formations within 8 Quarters (SBF8Q):** This series combines (splices) BF8Q and PBF8Q to provide the entire time series for the actual and projected business formations within 8 quarters.

- **Average Duration (in Quarters) from Business Application to Formation within 4 Quarters (DUR4Q)**: A measure of delay between business application and formation, measured as the average duration (in quarters) between the quarter in which the month of business application falls and the quarter of business formation, conditional on business formation within four quarters. These series span the same period as BF4Q.

- **Average Duration (in Quarters) from Business Application to Formation within 8 Quarters (DUR8Q)**: A measure of delay between business application and formation, similar to the DUR4Q series. The difference is that the window for business formation is eight quarters, rather than four. The series span the same period as BF8Q.

Description of Seasonal Adjustment

Because of strong seasonality detected in most of the business application and formation series, all series are provided with and without seasonal adjustment. In the case of the duration series (DUR4Q and DUR8Q), seasonality is not significant in general. Therefore, no seasonally adjusted duration series are provided. All data, with the exception of the industry data, is seasonally adjusted at the state level and summed to create seasonally adjusted United States total and regional data. Industry data, except for Utilities (22), is seasonally adjusted at the national level to create adjusted United States total data. Seasonal adjustment is performed using the X-13ARIMA-SEATS seasonal adjustment program of the US Census Bureau. Users can implement their own seasonal adjustment methods using the unadjusted data.

Reliability of Estimates

The statistics presented in this release are based on administrative data and therefore are not subject to sampling error. There is also projection error associated with the projected business formation series. The statistics may also be subject to non-sampling error. Non-sampling error occurs because accurate information cannot always be obtained. There are many potential contributors to nonsampling error – misreporting, mistakes in recording and coding responses, misinterpretation of questions, and other errors

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of collection, response, coverage, or processing. Though nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

Notes

Technical documentation for these experimental statistics and specific recommendations for interpreting these statistics are described on the product's webpage <https://www.census.gov/econ/bfs>. The Census Bureau invites users to provide feedback on how to improve this experimental product.

RESOURCES

API

The Census Bureau's application programming interface lets developers create custom apps to reach new users and makes key demographic, socio-economic and housing statistics more accessible than ever before.

<https://www.census.gov/developers/>

FRED Mobile App

 Receive the latest updates on the nation's key economic indicators by downloading the FRED App <https://fred.stlouisfed.org/fred-mobile/> for both Apple and Android devices. FRED, the signature database of the Federal Reserve Bank of St. Louis, now incorporates the Census Bureau's 13 economic indicators.