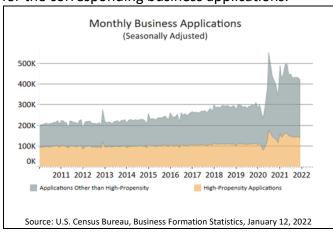
# **BUSINESS FORMATION STATISTICS, DECEMBER 2021**

Release Number: CB22-08

**January 12, 2022** — The U.S. Census Bureau announced the following seasonally adjusted business application and formation statistics for December 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:	DEC 2021	DEC 2021 / NOV 2021		
Total	418,380	-2.8%°		
High-Propensity	137,254	-4.6%°		
With Planned Wages	48,483 -6.6%°			
From Corporations	50,851	-4.3%°		
Next release: February 14, 2022				
(°) Statistical significance is not applicable or not measurable.				
Data adjusted for seasonality.				
Source: U.S. Census Bureau, Business Formation Statistics, January 12, 2022				



Business Applications - At	t a Glance				-	
		US	Northeast	Midwest	South	West
Total	DEC 2021	418,380	65,456	68,556	192,087	92,281
	DEC 2021 / NOV 2021	-2.8%	-0.7%	-1.5%	-2.9%	-4.7%
High-Propensity	DEC 2021	137,254	22,863	21,524	58,891	33,976
	DEC 2021 / NOV 2021	-4.6%	-3.5%	-4.2%	-5.1%	-4.5%
With Planned Wages	DEC 2021	48,483	7,002	8,551	20,562	12,368
	DEC 2021 / NOV 2021	-6.6%	-6.3%	-4.0%	-6.9%	-7.9%
From Corporations	DEC 2021	50,851	10,770	6,664	18,522	14,895
	DEC 2021 / NOV 2021	-4.3%	-4.0%	-4.8%	-2.3%	-6.7%

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**

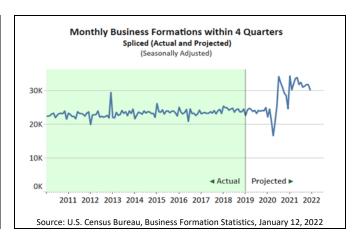
Business Applications for December 2021, adjusted for seasonal variation, were 418,380, a decrease of 2.8 percent compared to November 2021.

**Data Inquiries** 

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BUSINESS FORMATIONS				
DEC 2021 / NOV 2021				
-4.9%°				
-4.5%°				
Next release: February 14, 2022  (°) Statistical significance is not applicable or not measurable.  Spliced - Data adjusted for seasonality.  Source: U.S. Census Bureau, Business Formation Statistics, January 12, 2022				



Projected Business Form	ations - At a Glance	US	Northeast	Midwest	South	West
Within 4 Quarters	DEC 2021	30,201	4,910	4,877	12,042	8,372
	DEC 2021 / NOV 2021	-4.9%	-3.9%	-4.1%	-5.2%	-5.3%
Within 8 Quarters	DEC 2021	38,811	6,311	6,294	15,636	10,570
	DEC 2021 / NOV 2021	-4.5%	-4.5%	-4.6%	-3.2%	-6.3%

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**

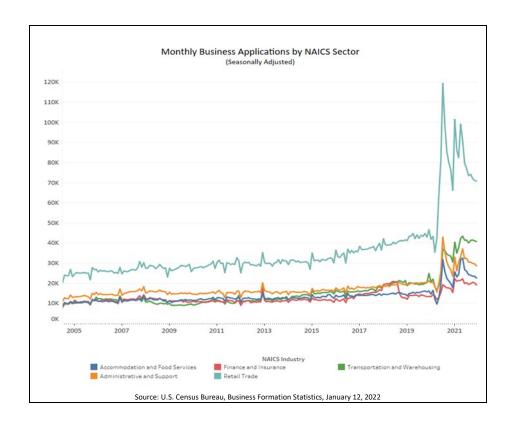
Projected Business Formations (within 4 quarters) for December 2021, adjusted for seasonal variation, were 30,201, a decrease of 4.9 percent compared to November 2021. The projected business formations are forward looking, providing an estimate of the number of new business startups that will appear 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 30,201 new business startups with payroll tax liabilities will form within 4 quarters of application from all the business applications filed during December 2021. The 4.9 percent decrease indicates that for December 2021 there will be 4.9 percent fewer businesses projected to form within 4 quarters of application, compared to the analogous projections for November 2021.

**Data Inquiries**Economic Indicators Division, Business Formation Statistics 301-763-2000
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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 December 2021. The most recent quarter for which administrative data on payroll is available is updated annually in the twelfth month based on new data on actual business formations.

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



**Data Inquiries**Economic Indicators Division, Business Formation Statistics 301-763-2000
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# **Business Applications by Industry - At a Glance**



44 4 1 6		2
11: Agriculture	DEC 2021 DEC 2021 / NOV 2021	3,773 <b>-7.8%</b>
21. Mining	DEC 2021 / NOV 2021 DEC 2021	505
21: Mining	DEC 2021 / NOV 2021	- <b>12.3</b> %
22: Utilities	DEC 2021 / NOV 2021	323
22. Othicles	DEC 2021   DEC 2021   NOV 2021	- <b>31.9%</b>
22. Canadan dian	DEC 2021 / NOV 2021	
23: Construction		39,384
24.22 May forth day	DEC 2021 / NOV 2021	-2.0%
31-33: Manufacturing	DEC 2021	6,021
	DEC 2021 / NOV 2021	-2.0%
42: Wholesale Trade	DEC 2021	8,537
	DEC 2021 / NOV 2021	-3.6%
44-45: Retail Trade	DEC 2021	70,827
	DEC 2021 / NOV 2021	-0.4%
48-49: Transportation and Warehousing	DEC 2021	40,716
	DEC 2021 / NOV 2021	-0.8%
51: Information	DEC 2021	7,706
	DEC 2021 / NOV 2021	-0.7%
52: Finance and Insurance	DEC 2021	19,073
	DEC 2021 / NOV 2021	-5.6%
53: Real Estate	DEC 2021	23,275
	DEC 2021 / NOV 2021	-7.1%
54: Professional Services	DEC 2021	51,191
	DEC 2021 / NOV 2021	-3.3%
55: Management of Companies	DEC 2021	4,458
	DEC 2021 / NOV 2021	-6.8%
56: Administrative and Support	DEC 2021	28,582
	DEC 2021 / NOV 2021	-3.6%
61: Educational Services	DEC 2021	5,495
	DEC 2021 / NOV 2021	-7.4%
62: Health Care and Social Assistance	DEC 2021	23,390
	DEC 2021 / NOV 2021	-3.3%
71: Arts and Entertainment	DEC 2021	12,426
	DEC 2021 / NOV 2021	-2.0%
72: Accommodation and Food Services	DEC 2021	22,516
	DEC 2021 / NOV 2021	-4.0%
81: Other Services	DEC 2021	37,096
52. 53. 53. 71665	DEC 2021 / NOV 2021	-1.2%
Unclassified	DEC 2021	13,087
- Cholassifica	DEC 2021 / NOV 2021	-3.9%
	DLC 2021 / NOV 2021	-3.370

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.

**Data Inquiries** 

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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 autocoding 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 < <a href="https://www.census.gov/econ/bfs/pdf/naics\_improvement.pdf">https://www.census.gov/econ/bfs/pdf/naics\_improvement.pdf</a>. For more information on the machine learning algorithm, please visit < <a href="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</a>>.

### **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 <a href="https://www.irs.gov/newsroom/irs-revises-ein-application-process-seeks-to-enhance-security">https://www.irs.gov/newsroom/irs-revises-ein-application-process-seeks-to-enhance-security</a>. 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 January 2022 Business Formation Statistics Report is scheduled for release on February 14, 2022. 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>.

**Data Inquiries** 

Economic Indicators Division, Business Formation Statistics 301-763-2000 <a href="mailto:eid.bfs@census.gov">eid.bfs@census.gov</a>

Media Inquiries
Public Information Office
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U.S. Department of Commerce U.S. CENSUS BUREAU census.gov

#### **EXPLANATORY NOTES**

The Business Formation Statistics (BFS) are a standard data 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 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 July 2004 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

**Data Inquiries** 

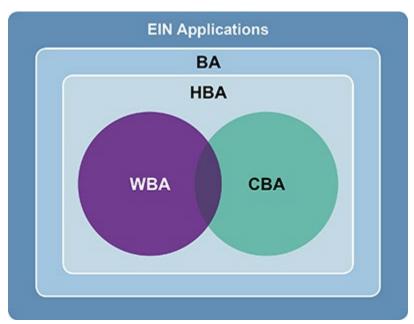
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accommodation and food services (72) or in portions of construction (237, 238), manufacturing (312, 321, 322, 332), retail (44, 452), professional, scientific, and technical services (5411, 5413), educational services (6111), and health care (621,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



Data Inquiries

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#### **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 July 2004, 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 <<a href="https://www.census.gov/library/working-papers/2018/adrm/bfs\_FEB2018.html">https://www.census.gov/library/working-papers/2018/adrm/bfs\_FEB2018.html</a>. 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 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.

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#### **Notes**

Technical documentation for these statistics and specific recommendations for interpreting these statistics are described on the product's webpage < <a href="https://www.census.gov/econ/bfs">https://www.census.gov/econ/bfs</a>>.

### **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.

<a href="https://www.census.gov/developers/">https://www.census.gov/developers/</a>

# **FRED Mobile App**



Receive the latest updates on the nation's key economic indicators by downloading the FRED App < <a href="https://fred.stlouisfed.org/fred-mobile/">https://fred.stlouisfed.org/fred-mobile/</a> 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.

**Data Inquiries** 

Economic Indicators Division, Business Formation Statistics 301-763-2000 eid.bfs@census.gov

United States U.S. Department of Commerce U.S. CENSUS BUREAU census.gov