

# Business Formation Statistics: from Research to Production

Alyson Plumb

Starting at 12.30 PM

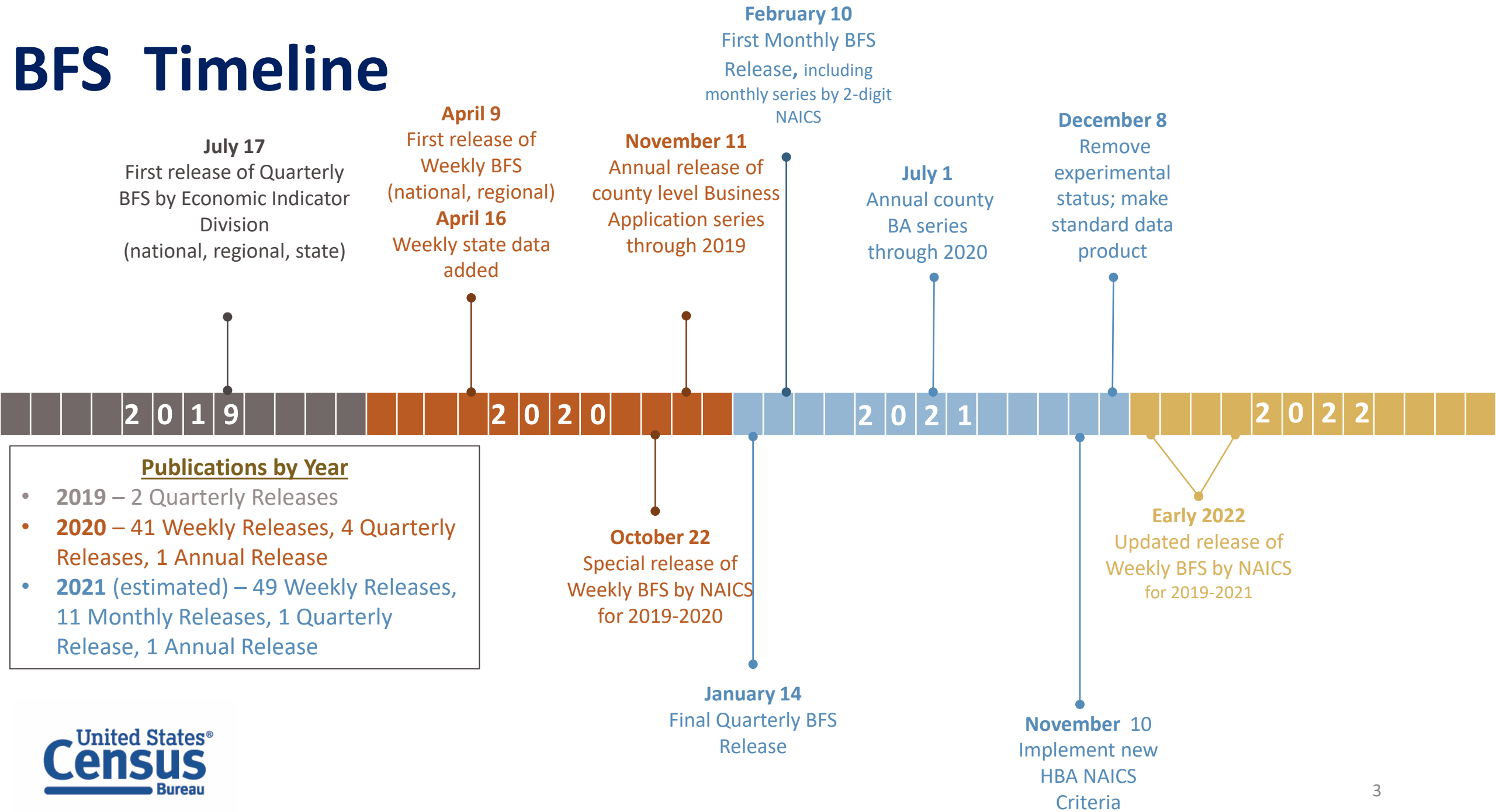
ESCoE ECONOMIC MEASUREMENT WEBINARS

# Business Formation Statistics (BFS)

Fills a gap in the availability of high frequency, timely data on new business formation in the U.S.

- Other data products measure new business activity with a lag
- BFS focuses on measuring early-stage business activity with shorter lag and with more frequent updates
- Began as a Center of Economic Studies research collaboration with economists at Board of Governors of the Federal Reserve System, Federal Reserve Bank of Atlanta, University of Maryland, and University of Notre Dame

# BFS Timeline



# Types of BFS Series

BFS consists of

- 4 Business Application Series
- 8 Business Formation Series (formations are applications that become employer businesses)

| BFS Publications |   |   |                      |
|------------------|---|---|----------------------|
| Frequency        | Weekly  | Monthly   | Annual               |
| Availability     | Week 1, 2006-Week 48, 2021  | July 2004-November 2021   | 2005-2020            |
| Series           | 4 Application series, not seasonally adjusted                                   | 4 Application series<br>8 Formation series, seasonally adjusted and not seasonally adjusted | 1 Application Series |
| Geography        | National, Regional, State   | National, Regional, State   | County               |
| Other            | Annual release of weekly data by 2- and 3-digit NAICS from 2019 to 2020 Week 40 | National industry series  |                      |

# Business *Application* Series

Several criteria applied to the entire set of EIN applications to generate business application series

**Business Applications (BA)** - The core series that includes all EIN applications made in the U.S. (50 states + DC) except those filed without a business intent:

- Trusts, estates, tax-liens
- Public entities
- Some other filings with little or no business intent (e.g. personal tax/finance related filings, some household activities, etc.)

# Business Application Series

**High-Propensity Business Applications (HBA):** Applications that have a relatively high likelihood of becoming employer businesses

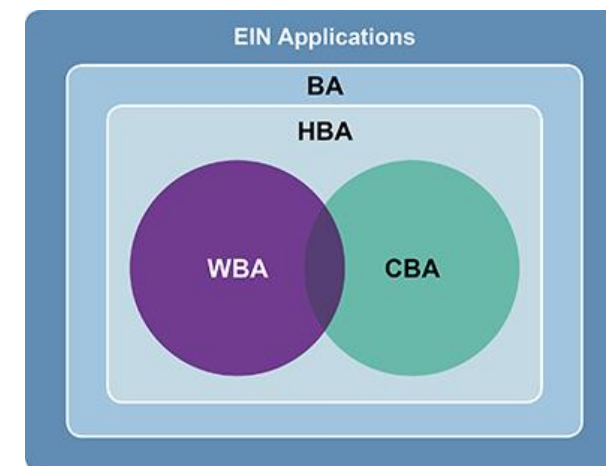
- From corporate entities
- Indicate hiring employees, purchasing a business or changing organizational type
- Provide a date for first-wages paid/planned
- Classified in certain industries:
  - 2004-2011 In manufacturing (NAICS 31-33), part of retail (NAICS 44), health care (NAICS 62), and accommodation and food services (72)
  - 2012 to present: Accommodation and food services (NAICS 72), parts of professional, scientific, and technical services (5411, 5413), educational services (6111), construction (237, 238), manufacturing (312, 321, 322, 332), retail (442, 443, 444, 445, 446, 447, 452), and health care (621, 623)

**Business Applications with Planned Wages (WBA) – a subset of HBA**

Provide a date for first-wages paid/planned

**Business Applications from Corporations (CBA) – a subset of HBA**

From corporate entities



# Business *Formation* Series

Use Census Bureau's Longitudinal Business Database (LBD) to identify new employer firm (EIN) births from business applications and the timing (quarter) of these births

## **Business Formations within 4 Quarters (BF4Q):**

Employer businesses that originate from Business Applications (BA) within a four quarter window from the quarter of application

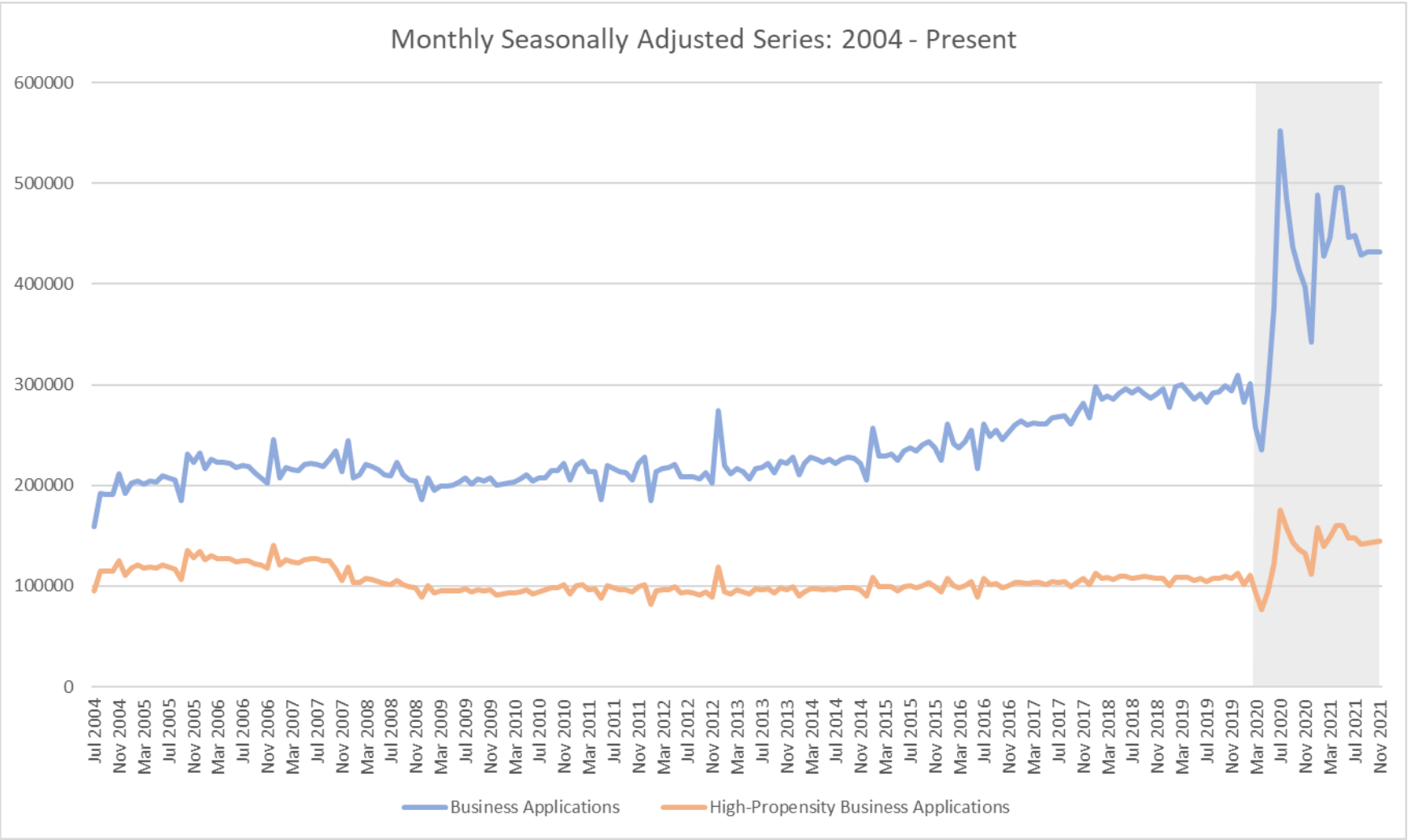
## **Projected Business Formations within 4 Quarters (PBF4Q):**

- Projected employer businesses that originate from Business Applications (BA) within a four-quarter window from the quarter of application
- Provides estimates for the quarters for which actuals are not yet available
- Estimates based on a model of employer birth indicator as a function of application characteristics

**Series that piece together actual and projected formations, and series that measure average duration from application to formation (SBF4Q,DUR4Q)**

All series also provided for an 8-quarter window (**BF8Q, PBF8Q, SBF8Q, DUR8Q**)

# Applications hit pandemic record highs

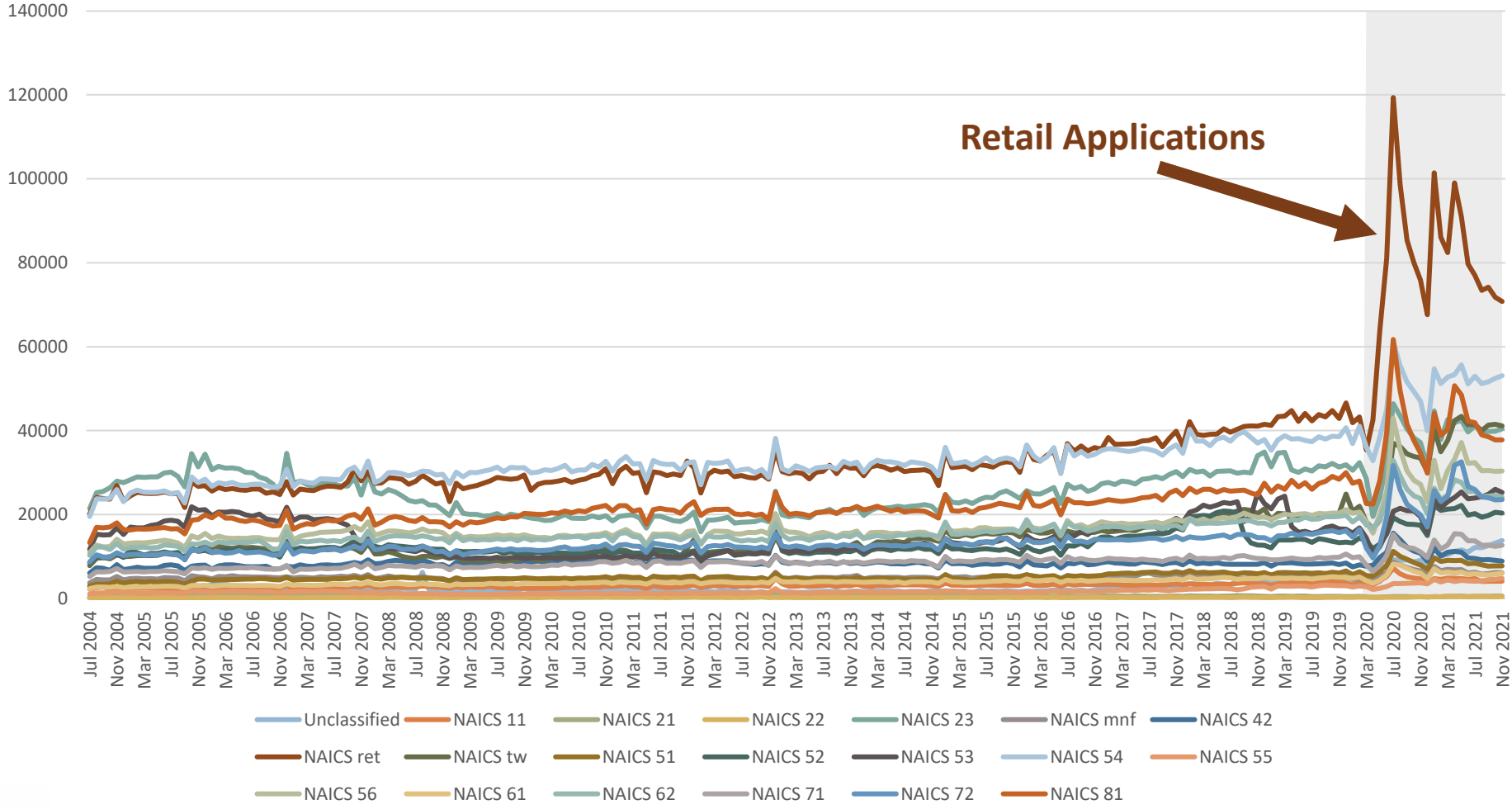


Source: [Census Bureau Monthly BFS](#)



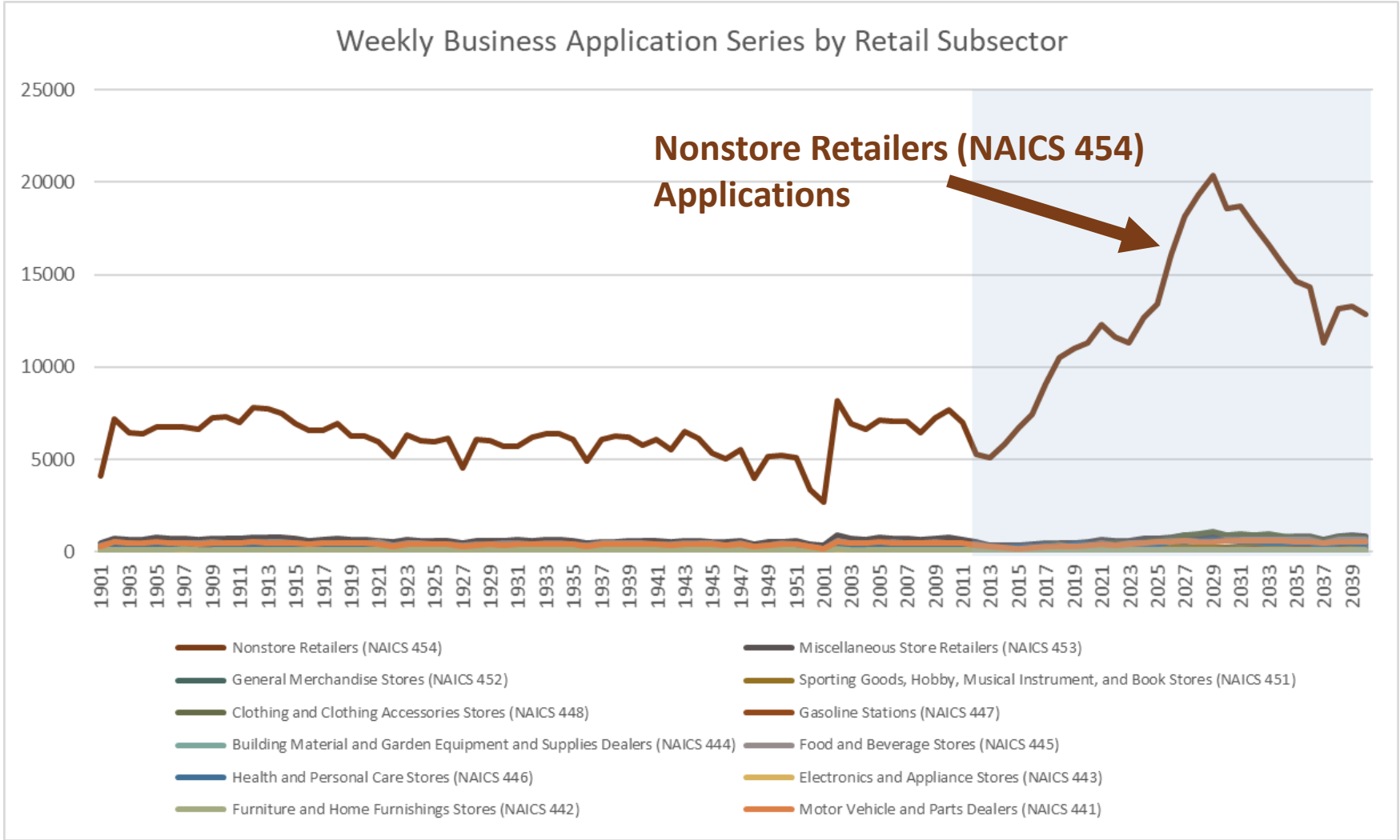
# Surge in retail applications led the increase

Seasonally Adjusted Monthly Business Application Series



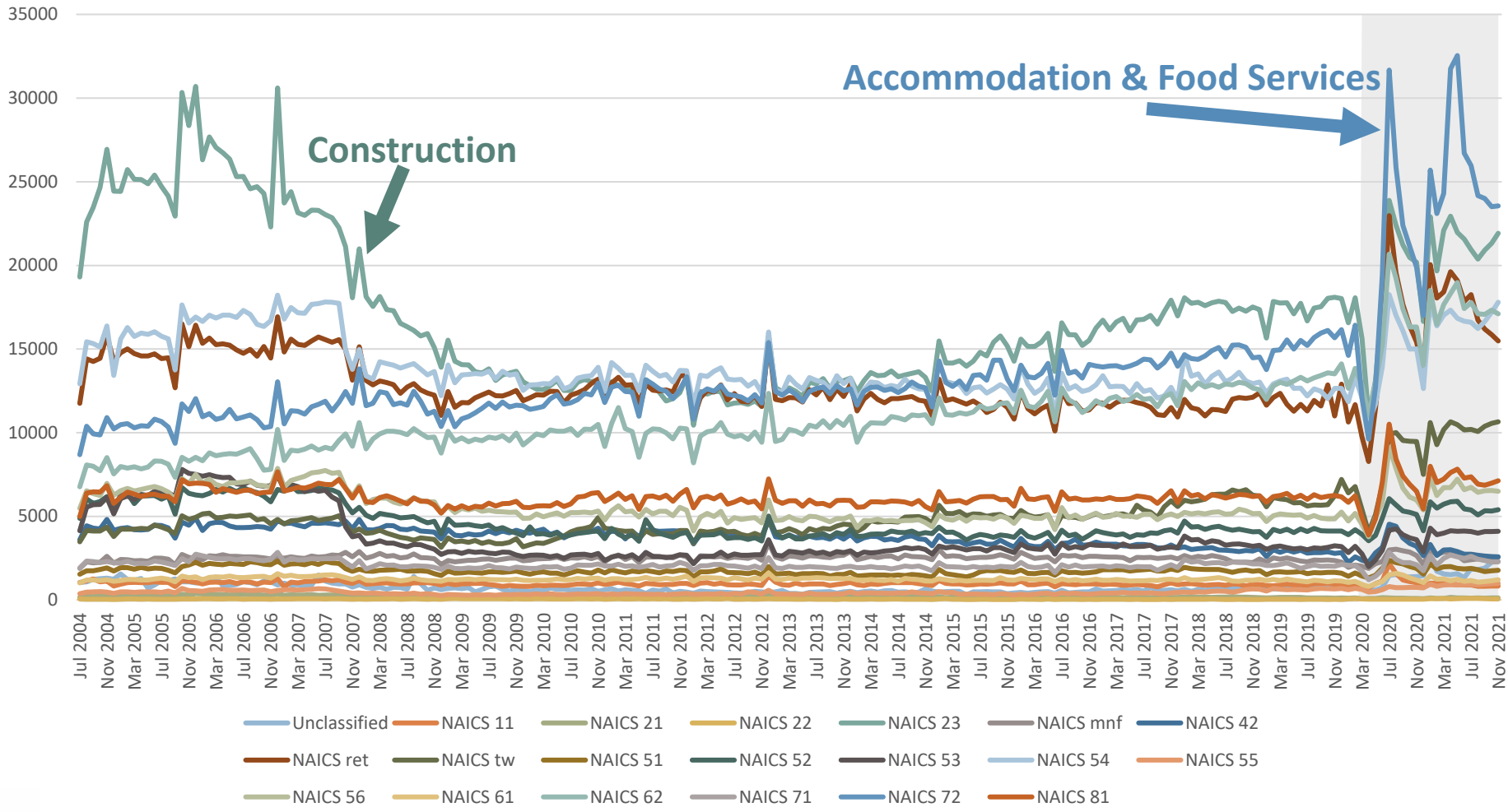
Source: [Census Bureau Monthly BFS](#)

# Nonstore Retailers drove retail surge



# Shift in high propensity business applications

Seasonally Adjusted Monthly High Propensity Business Application Series



Source: [Census Bureau Monthly BFS](#)

# Data widely featured during pandemic

**For New Congress And Administration: State Of Small Business And Entrepreneurship**

Forbes, 2/4/21

**Business Startups Surged Amid Covid-19 Pandemic**

Insurance Journal, 1/19/2021

**Americans' Shift to Be Their Own Bosses Is Lasting in Pandemic**

Bloomberg, 7/13/21

**People are quitting their jobs at record rates. That's a good thing for the economy.**

CBS News, 6/21/21

**U.S. applications to start a business rise steadily in May**

Reuters, 6/10/21

**Entrepreneurship during economic uncertainty: Why millions of people started a business during the pandemic**

NBC News, 9/14/21

**What America's Startup Boom Could Mean For The Economy**

NPR, 6/29/21

**With small businesses suffering, women turning to entrepreneurship**

Greater Baton Rouge Business Report, 1/26/21

**Shopify's Secret Weapon Is Thousands of New Business Owners**

Wall Street Journal, 2/16/21

**New Business Formation Tells Of A Brighter Immediate Economic Outlook**

Forbes, 9/7/21

***Start-Up Boom in the Pandemic Is Growing Stronger***

The New York Times, 8/19/21

# Current BFS Research Projects

Properties of BFS as an early indicator of economic activity

- by Asturias, Dinlersoz, Haltiwanger, and Hutchinson
- Compares BFS monthly series with economic indicators generated by Census Bureau and other agencies

Understanding non-employer business activity that originates from business applications, and predicting both non-employer and employer business formation from applications

- by Dinlersoz and Luque
- Leverages the work done in the context of Non-employer Statistics presented earlier by Adela Luque to connect business applications with non-employer business formations

Exploring local origins of business applications and transitions to employer status: the effects of local characteristics

- by Dinlersoz, Dunne, Haltiwanger, and Penciakova
- Uses ACS, Decennial and other data from Census Bureau to relate business applications/formations to demographics and business conditions at the local level

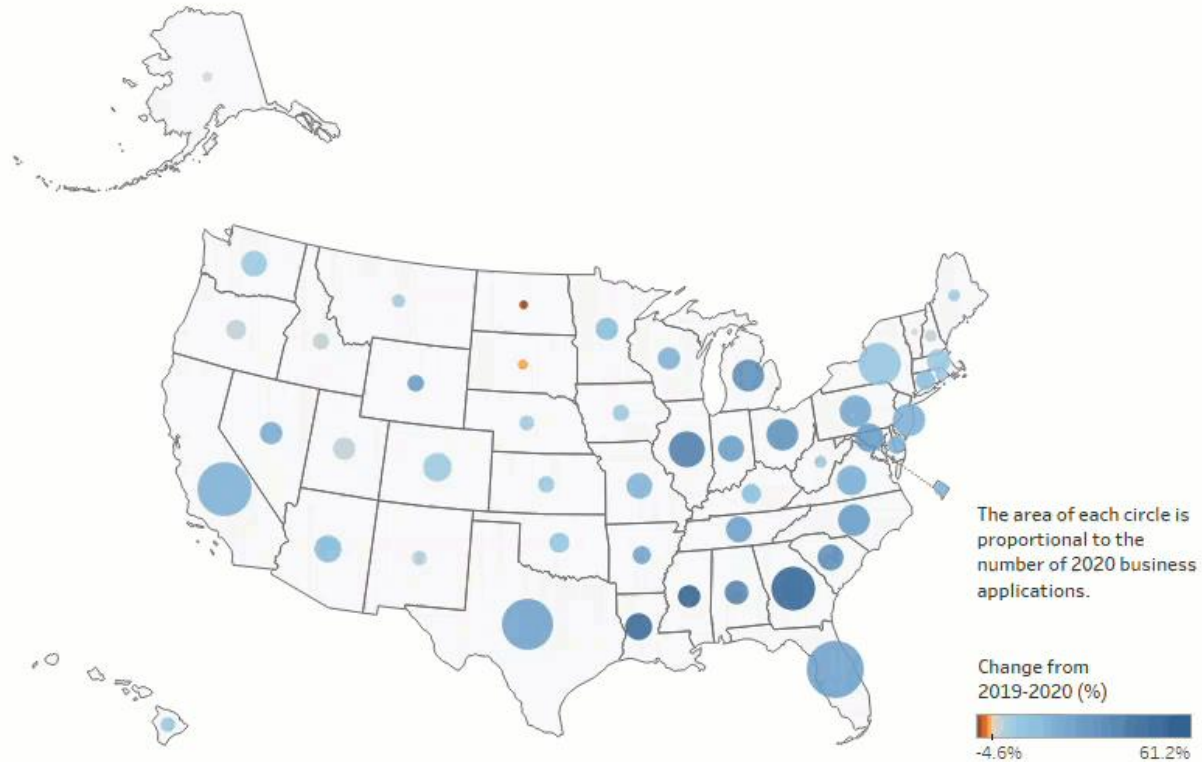
Sectoral shifts and reallocation in business applications and formations during recessions

- by Dinlersoz, Dunne, Haltiwanger, and Penciakova

The short and long-run effects of weather events on business applications and formations - modeling and predicting the impact of local weather events on entrepreneurship

- Joint with EID and NASA researchers Batuhan Osmanoglu and Arif Albayrak
- Combines satellite weather data and BFS micro-data at the local level to study the connection between strength of weather events and business applications

## Annual Business Applications by State and County



United States  
Census  
Bureau

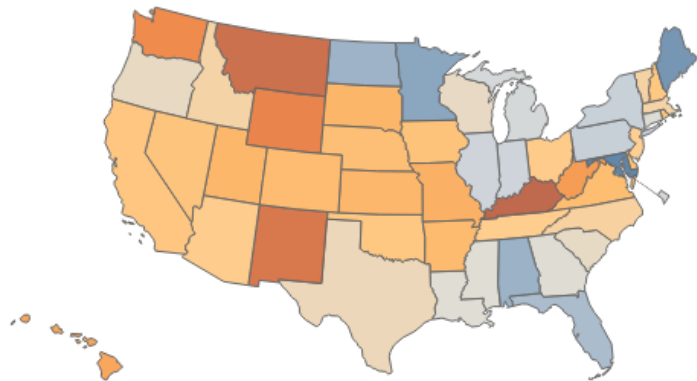
Source: U.S. Census Bureau,  
Business Formation Statistics

## Business Applications

Change From October 2021 to November 2021  
(Seasonally Adjusted)



Type: Business Applications  
Month: November 2021  
Change: Month-to-Month



November 2021

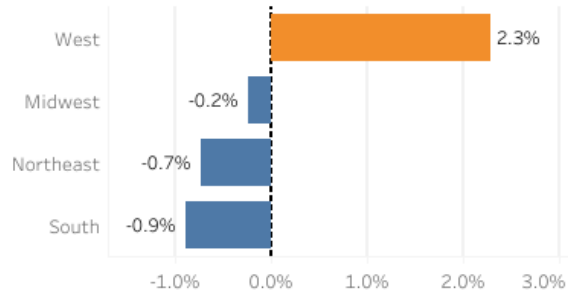
U.S. Total

432,034 Applications

▼ -0.1%



Percent (%) Change by Region



Business Applications - U.S. Total

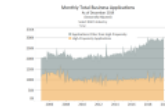


## Business Formation Statistics (BFS)

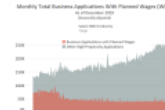
Interactive Visualizations

### U.S. Total

Monthly Business Applications (BA) and High Propensity Business Applications (HBA)



Monthly Business Applications with Planned Wages (WBA)



Monthly Business Applications from Corporations (CBA)



Monthly Business Formations - Actual & Projected (SBF4Q)



### By State

Monthly Business Applications by State (BA)



Monthly Business Formations by State (SBF4Q)



# BFS Contact Information

**Website** – <https://www.census.gov/econ/bfs/index.html>

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