

Goldschmidt 2023: Economic Data Overview

U.S. Census Bureau

Presented by: Adam Grundy

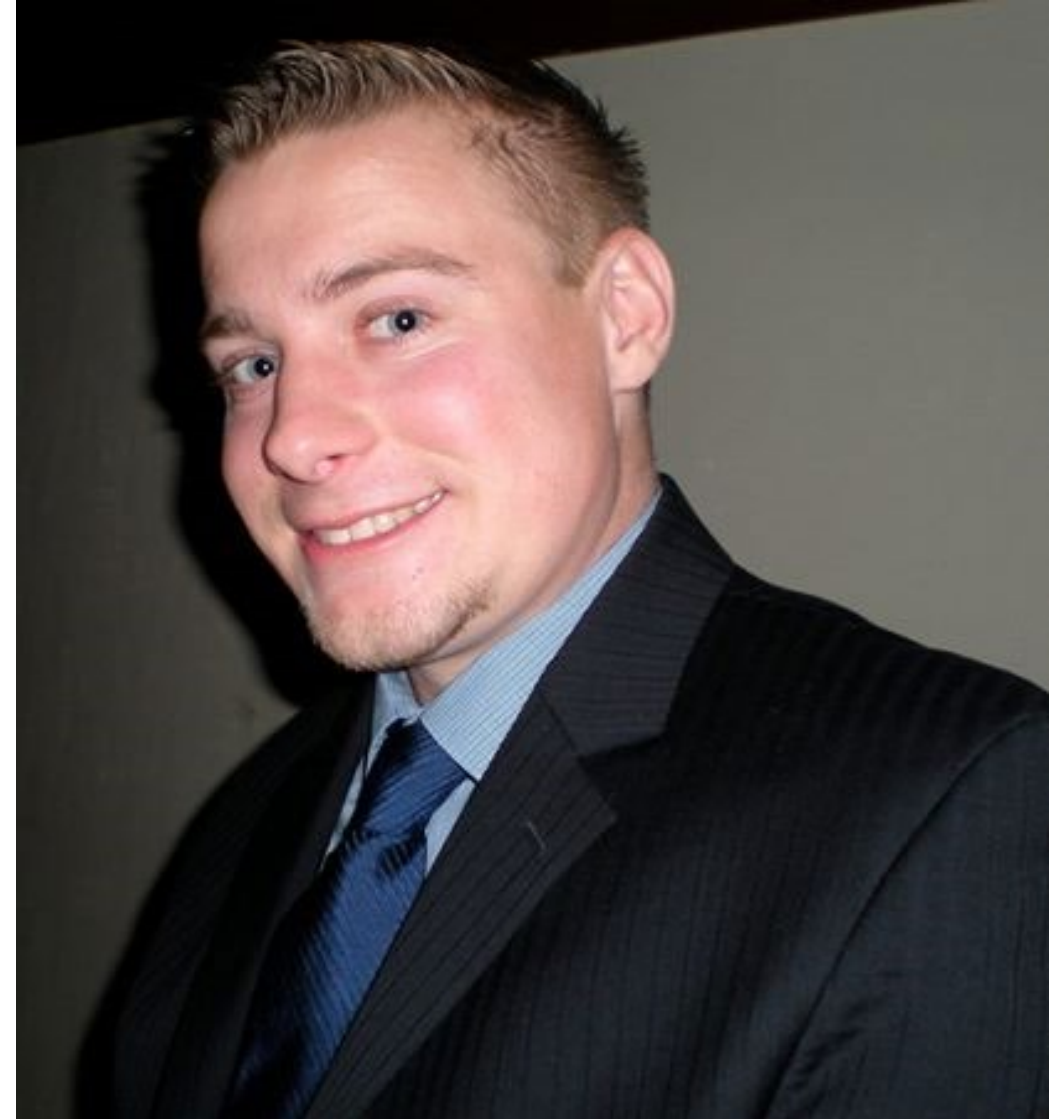


Meet Your Presenter

Adam Grundy worked in the Data User and Trade Outreach Branch in the Economic Management Division where he had taken on several leadership roles. Adam developed an online calendar for the Economic Directorate, participated in several key stakeholder meetings for developing the Census Business Builder data platform, and served as a valuable member of the Data Outreach team for the Census Bureau.

Adam has written several articles for the America Counts series for Census.gov and continues to look for new and interesting ways to share ECON data products with the public.

Adam received a bachelor's degree in human studies and a certification in elementary education.





The U.S. Census Bureau

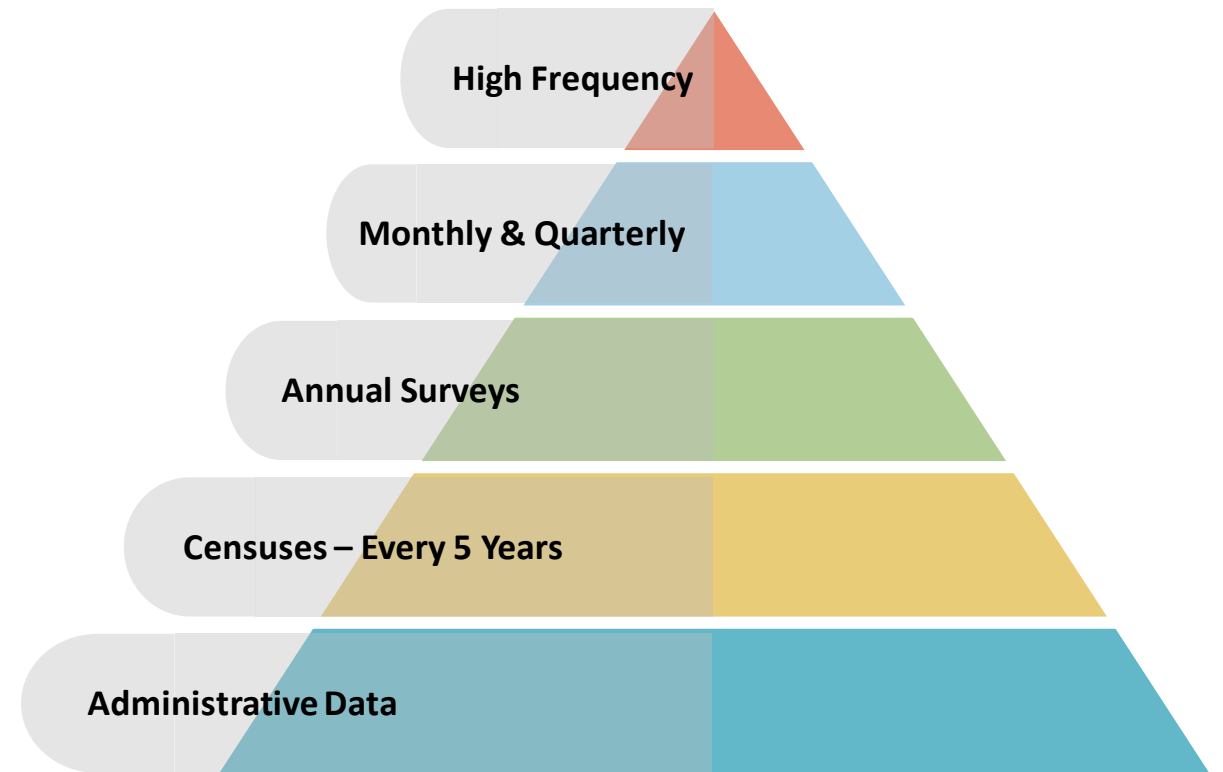
- The federal government's largest statistical agency – part of the U.S. Department of Commerce.
- Conducts more than 130 surveys and programs each year and 3 censuses, including:
 - **The Decennial Census** – the once-a-decade population and housing count.
 - **The Census of Governments** – measurement of the nation's state and local government sector.
 - **The Economic Census** – the official five-year measure of American business.



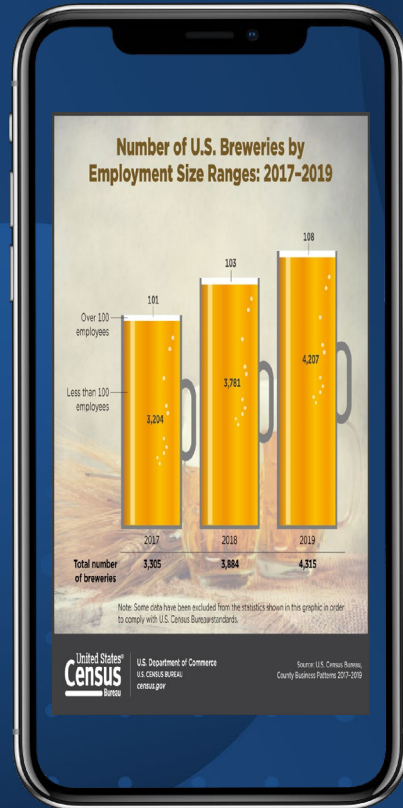
Programs

Census Bureau economic programs are a key source for official statistics:

- **NEW** High Frequency data
- Monthly and quarterly small sample surveys provide the most **TIMELY** data available
- Annual surveys have larger samples and provide the most up-to-date **TREND** data available
- Every 5 years, the Censuses measure all businesses and governments and provide the most **COMPREHENSIVE** data available
- Plus, **FOUNDATIONAL** administrative data from the Business Register to supplement or produce additional economic products



Where do these data come from?



County Business Patterns

This program covers Employer Businesses in the U.S.

Nonemployer Statistics

This program covers Nonemployer Businesses (self-employed persons) in the U.S.

Annual Business Survey

This survey covers Employer Businesses in the U.S. and includes business owner data.

Economic Census

The official five-year measure of American businesses providing comprehensive statistics at the national, state, and local levels.

The Economic Census

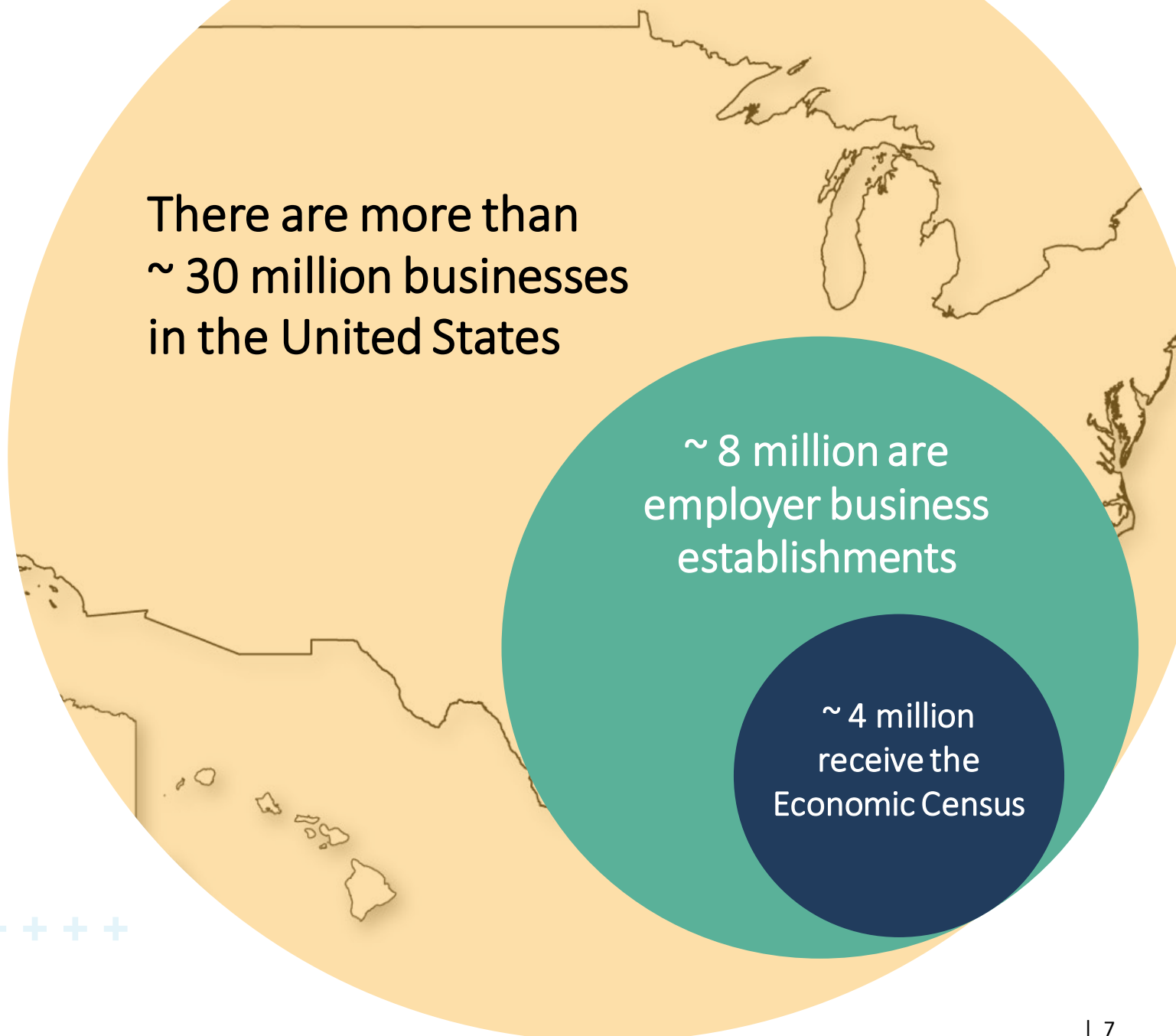
- Conducted every 5 years, it produces the most comprehensive economic data available.
- Data covers 19 economic sectors that encompass 950 NAICS industries, that span over 21,000 geographic areas
- Data includes number of establishments, products, revenue, employment and more
- The next Economic Census will be collected in 2023 with businesses reporting their 2022 year-end numbers.
- The Economic Census is conducted online, and response is mandatory.



Most companies do not receive the Economic Census

- Only businesses with employees, and
- Only a sample of smaller businesses are required to respond

Economic Census website:
<https://www.census.gov/programs-surveys/economic-census.html>



There are more than
~ 30 million businesses
in the United States

~ 8 million are
employer business
establishments

~ 4 million
receive the
Economic Census

New for 2022

- New Machine Learning searches in collection instrument
 - Ability to search for NAICS Industry
 - Ability to search for NAPCS Products and Services
 - Smarter, flexible instrument, ensuring respondents receive appropriate question set
- Scope and content updated
 - New content will capture data on emerging topics, for example
 - Use and acquisition of business technologies (such as robotics, 3D printing, and kiosks)
 - Telemedicine services
 - Cannabis
 - Expansion of scope to include Support Activities for Crop and Animal Production



2022 Economic Census Timeline

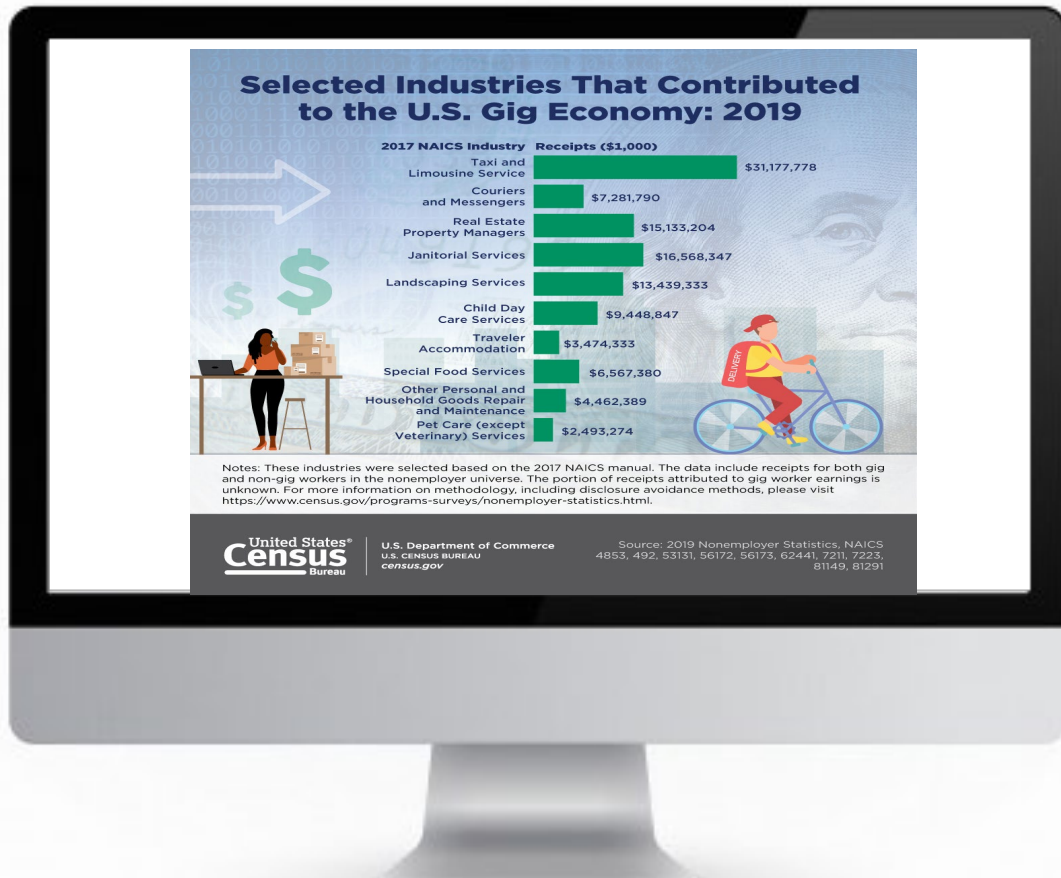


What is County Business Patterns?



- ✓ This program covers Employer Businesses in the U.S.
- ✓ Is published annually
 - ✓ Latest data available (as of February 2023) is for calendar year 2020
 - ✓ 2021 data are scheduled for release in 2023
- ✓ Includes statistics on the number of establishments, employment, and annual payroll for nearly every 2- thru 6-digit NAICS code
- ✓ Data are published at the national, state, metro area, county, congressional district, and ZIP Code levels
 - ✓ CBP also covers the 5 US territories
- ✓ Data are also shown by employment size of the establishment and by Legal Form of Organization
- ✓ Other facts about CBP:
 - ✓ See <https://www.census.gov/programs-surveys/cbp.html> for more information about this program

What is Nonemployer Statistics?



- This program covers Nonemployer Businesses (self-employed persons) in the U.S.
- Is published annually
 - Latest data available (as of February 2023) is for calendar year 2019
 - 2020 data are scheduled for release in 2023
- Includes statistics on the number of firms and revenue for most 2- thru 6-digit NAICS codes
- Data are published at the national, state, metro area, and county levels
 - NES does not cover the 5 US territories
- Data are also shown by revenue size of the firm and by Legal Form of Organization
- Other facts about NES:
 - See <https://www.census.gov/programs-surveys/nonemployer-statistics.html> for more information about this program

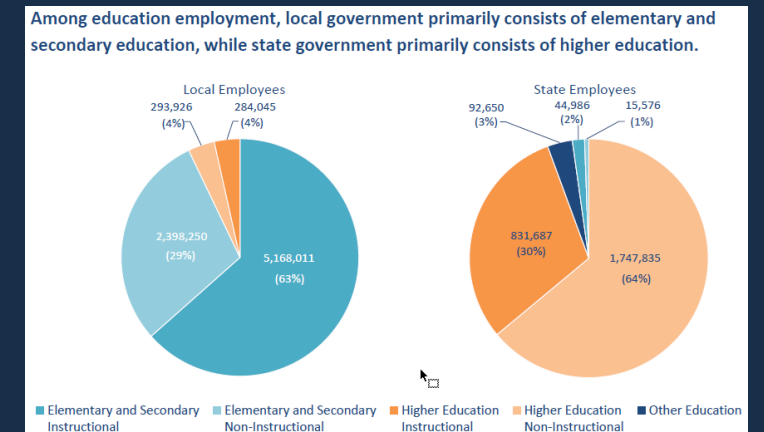
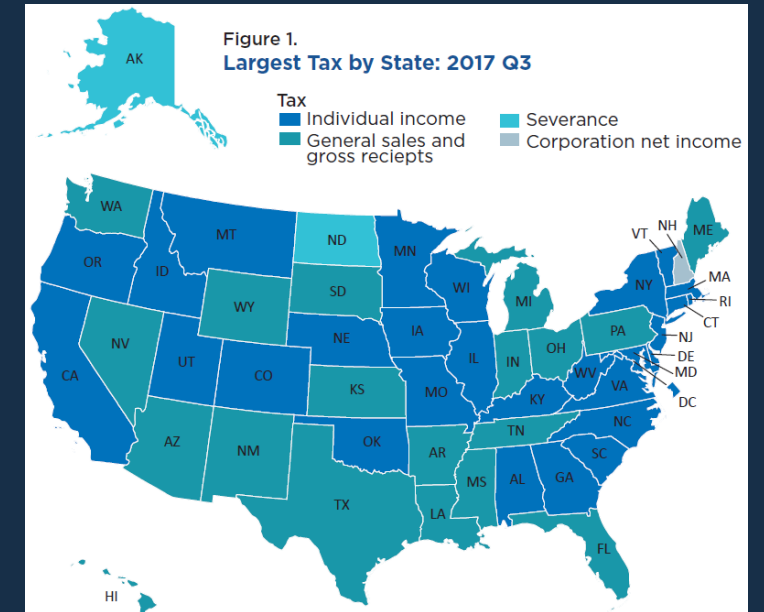
What is the Annual Business Survey?



- This program covers Employer Businesses in the U.S.
- Is published annually
 - Latest data available (as of February 2023) is for calendar year 2020
 - 2021 data are scheduled for release in 2023.
- Includes statistics on the number of firms, employment, annual payroll, and sales, shipments, receipts, or revenue for nearly every 2- thru 6-digit NAICS code
- Data are published at the national, state, county, and place levels
 - Nation and state: full NAICS; County and place: just NAICS 00
 - ABS does not cover the 5 US territories
- Data are also shown by race, ethnicity, gender, and veteran status of the business owner and by other characteristics of the business and the owner
- Other facts about ABS:
 - See <https://www.census.gov/programs-surveys/abs.html> for more information

Public Sector (Governments)

- 5 surveys that provide economic statistics about **state and local** governments
- Serve as public-sector counterpart to private sector data
- Response is voluntary
- Virtually no confidentiality restriction – data is public record
- Core Program Content
 - Organization and Structure
 - Government Employment
 - Government Finances
- Released on Excel files, and other Census tools



Business Trends and Outlook Survey (BTOS)



Small Business Pulse Survey (SBPS) Recap

The SBPS measured the effect of changing business conditions during the coronavirus pandemic. The SBPS complemented existing Census Bureau data by providing detailed, near real-time information on the challenges that small businesses face. The Census Bureau partnered with subject matter experts at other federal agencies for content.



BUSINESS AND ECONOMY

New Small Business Pulse Survey Shows COVID-19 Impact on Businesses

The U.S. Census Bureau's Small Business Pulse Survey yields near real-time economic data on businesses...



BUSINESS AND ECONOMY

Census Survey Shows Shift in Expectations from Spring to Winter

The Small Business Pulse Survey shows a majority of businesses face long-term challenges while others experienced little or no effect from the pandemic.



BUSINESS AND ECONOMY

U.S. Small Businesses Suffer Supply Chain Disruptions

Over 60% of manufacturers responding to the Small Business Pulse Survey saw disruptions in domestic supplies and 39% need to identify new supply options.



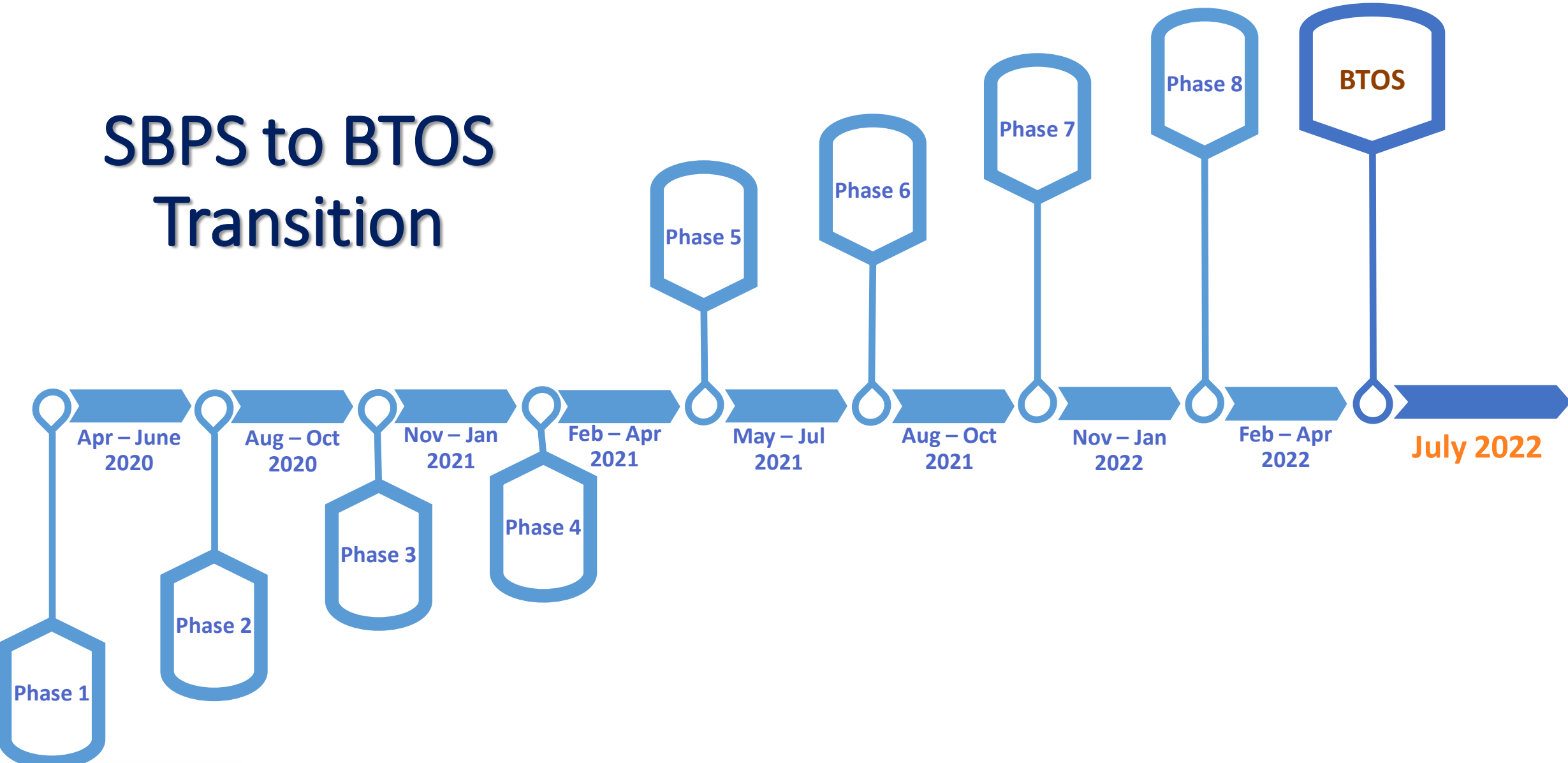
BUSINESS AND ECONOMY

Small Business Pulse Survey Reveals Price Increases by Sector

Phase 6 wrapped up October 17 and Phase 7 went into the field November 15. Will Phase 7 show that these economic trends are continuing?



SBPS to BTOS Transition



SMALL BUSINESS
PULSE SURVEY

BUSINESS TRENDS AND
OUTLOOK SURVEY (BTOS)

- SBPS initially created as response to the Coronavirus pandemic
- Concept to publication in 39 days

Goals:
Continue
producing near
real time data
products

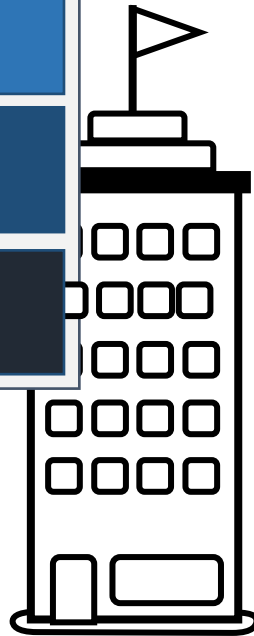
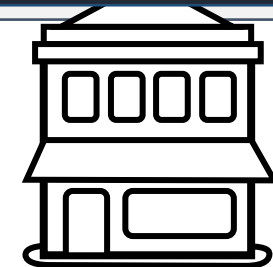
Produce
economic pulse

To create BTOS:

- SBPS lessons learned
- Stakeholder feedback
- Leadership strategy

Business Trends and Outlook Survey (BTOS)

Frame	2020 Business Register // Contact Mgmt Table
Sample Design	Stratified systematic sample with strata defined by state and sector
Content	Designed to capture economic norms, impacts of unforeseen events
Instrument	Centurion
Timing	Ongoing 2-week data collection period and data publications
Data Products	New indexes summarizing core concepts
IT	HFP Admin



Methodology

- Initial target population for BTOS is all nonfarm, single-location employer businesses with receipts of \$1,000 or more that are in the United States, District of Columbia, and Puerto Rico
- Sample size to be 1.2M, split into six bi-weekly panels of 200K, representing 5.8M single unit businesses of all sizes
- Proportional sample allocation is used (the same percentage of businesses is selected from each stratum)
- Once in the sample, businesses will be asked to respond to the survey once every twelve weeks

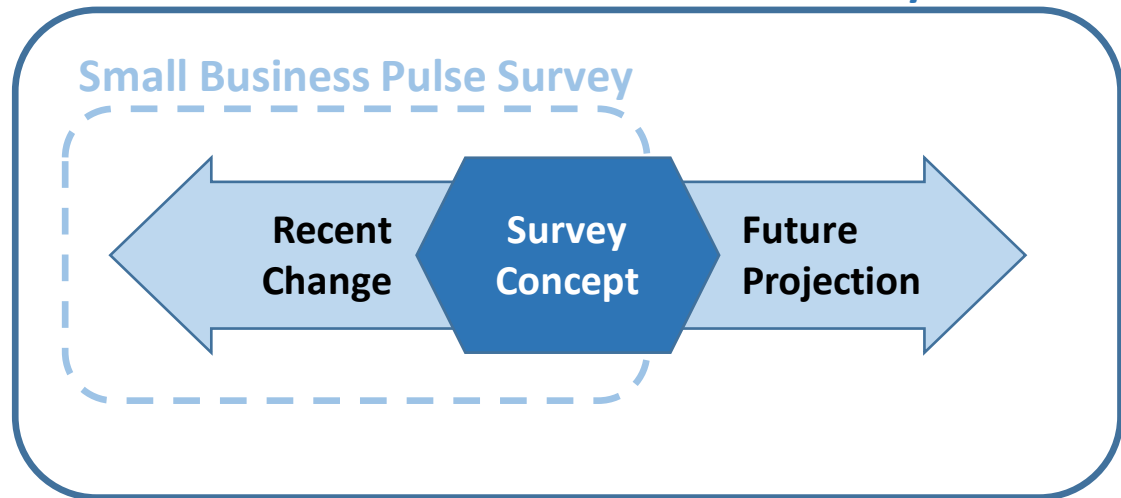
Data Collection

- Ongoing 2-week data collection periods
- Dual contact strategy for representative sample
 - Email vs *mail collection*
 - Pre-canvas effort to increase email address pool
 - Centralization in BR
- Conducted through online reporting tool, Centurion
- Began mid-July and first publication was October 13, 2022

Content

- Reuse SBPS content where possible
- External stakeholder feedback used to help prioritize content
- Expanded to include future projections for many concepts

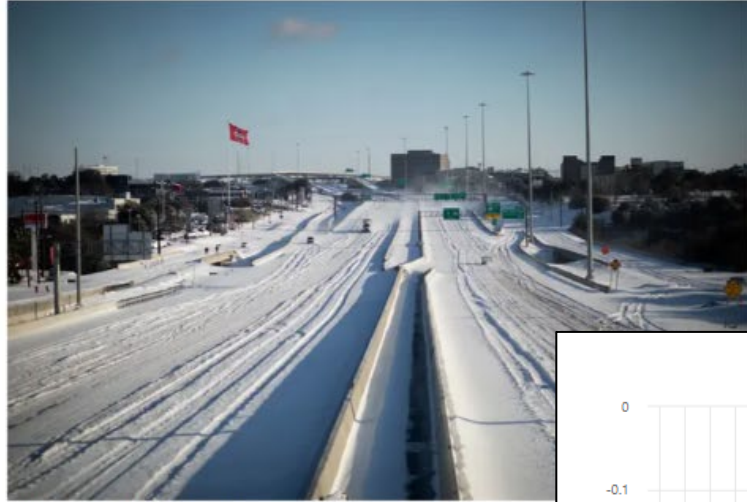
Business Trends and Outlook Survey



Questionnaire Concepts
Overall performance
Revenue
Employment
Hours worked
Hiring Difficulties
Operating status
Delivery time
Supply chain impacts
Demand
Output prices
Input prices
Online platforms
Forecast horizon

 - Legacy SBPS Concepts

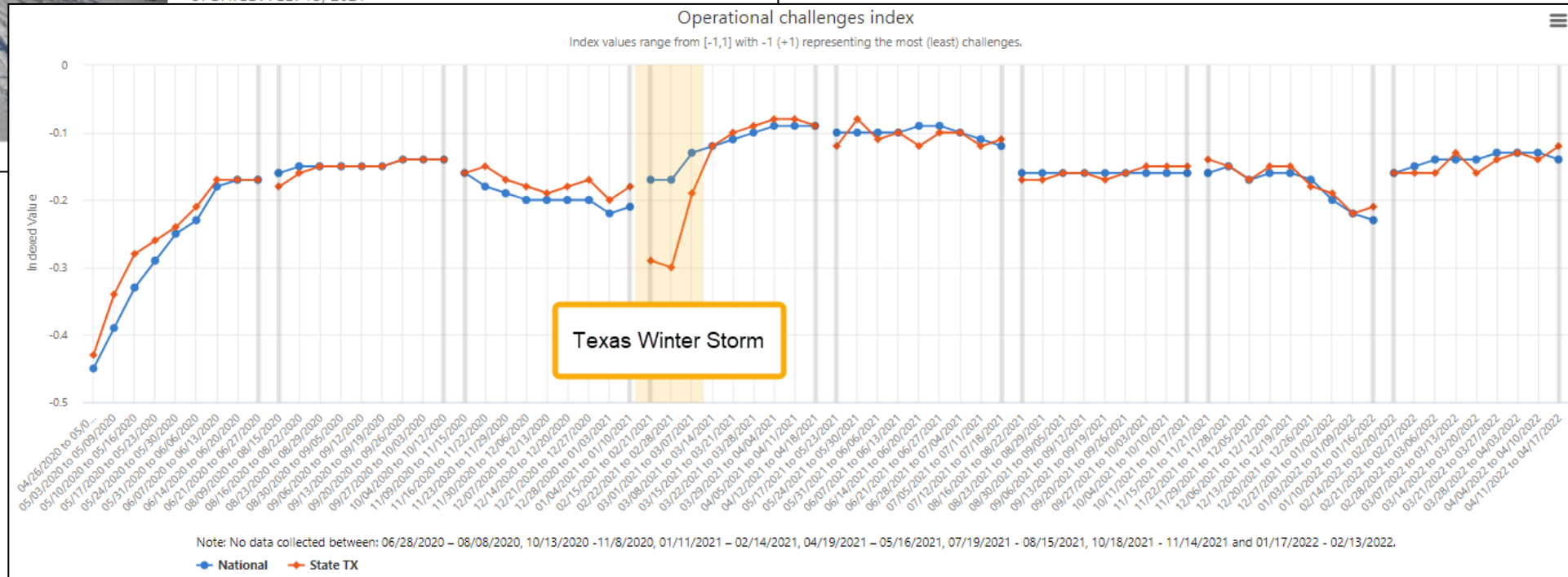
Content



Miguel Gutierrez Jr./The Texas Tribune

2 million Texas households without power as massive winter storm drives demand for electricity

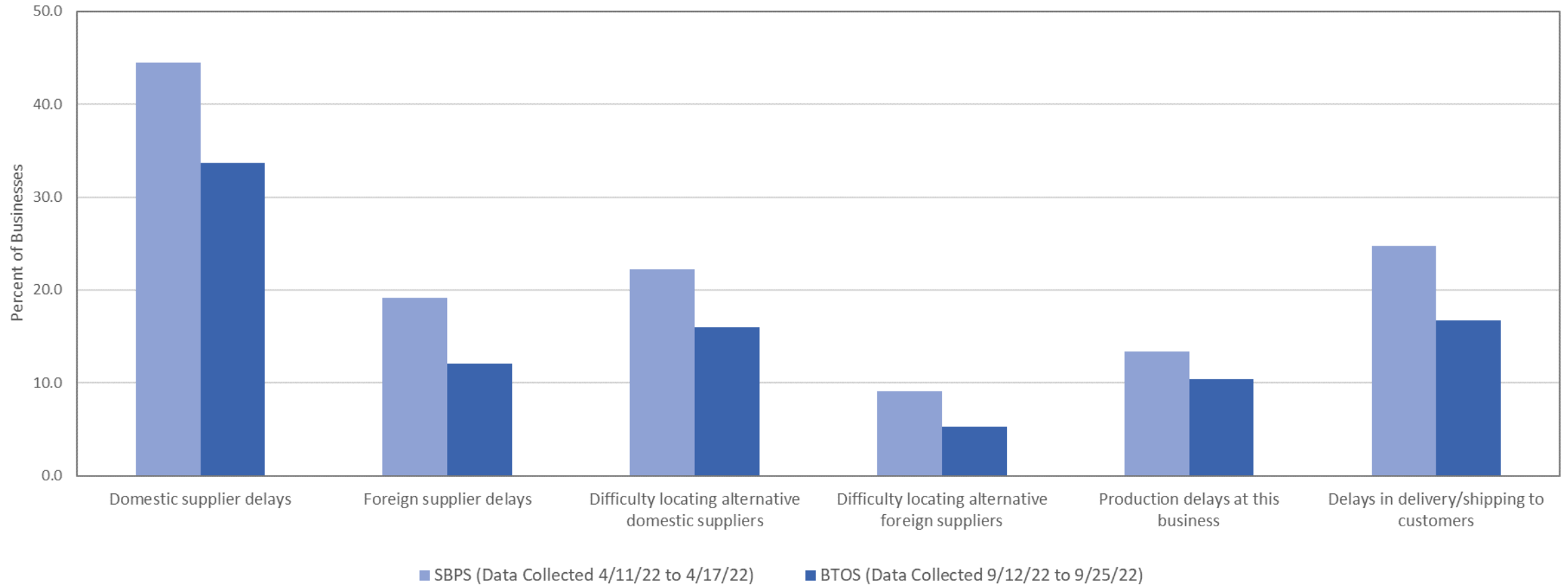
BY MITCHELL FERMAN, SAMI SPARBER AND ELVIA LIMÓN
 UPDATED: FEB. 15, 2021



Supply Chain Data

Supply Chain Impacts

Did this business have any of the following?



Data Products

Single Dimension:

- National Average
- State (D.C. and Puerto Rico)
- NAICS Sector
- Sub-sector (NAICS3)
- Top 25 MSA
- Employment Size

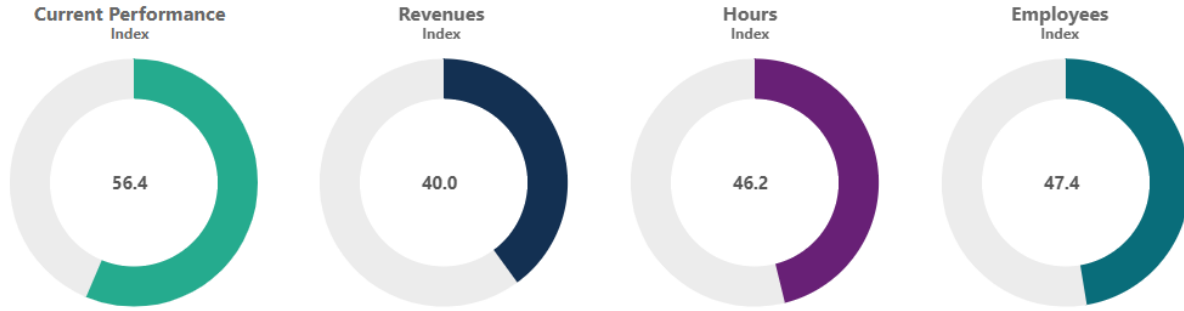
Multi-Dimension:

- State by Sector
- State by Employment Size
- Sector by Employment Size

	State	Sector	Sub-sector (NAICS3)	Top 25 MSA	Employment Size
State	X	X			X
Sector	X	X			X
Sub-sector (NAICS3)			X		
Top 25 MSA				X	
Employment Size	X	X			X

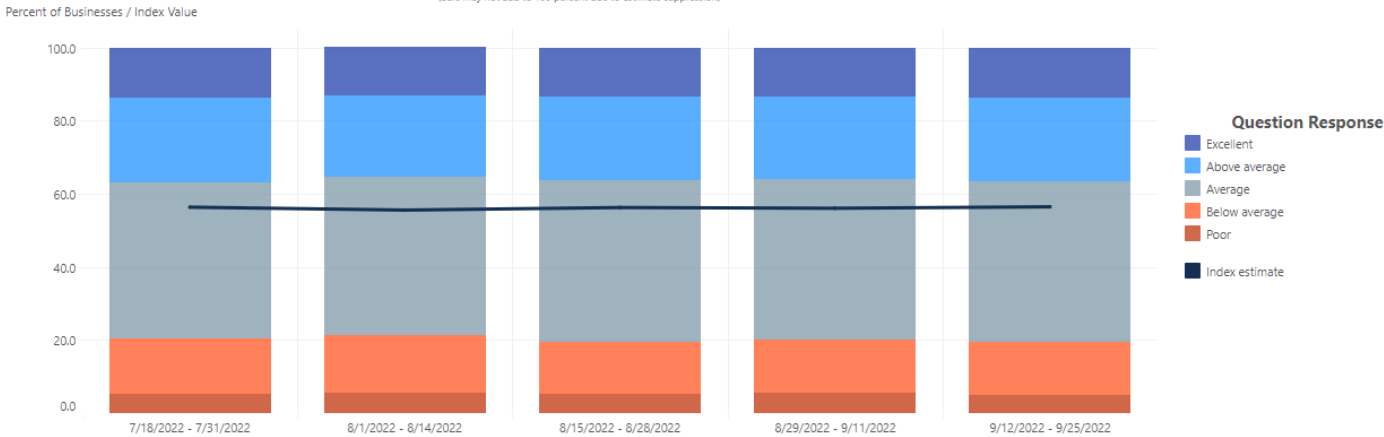
Interactive Data Viz

Business Trends and Outlook Survey - National Data



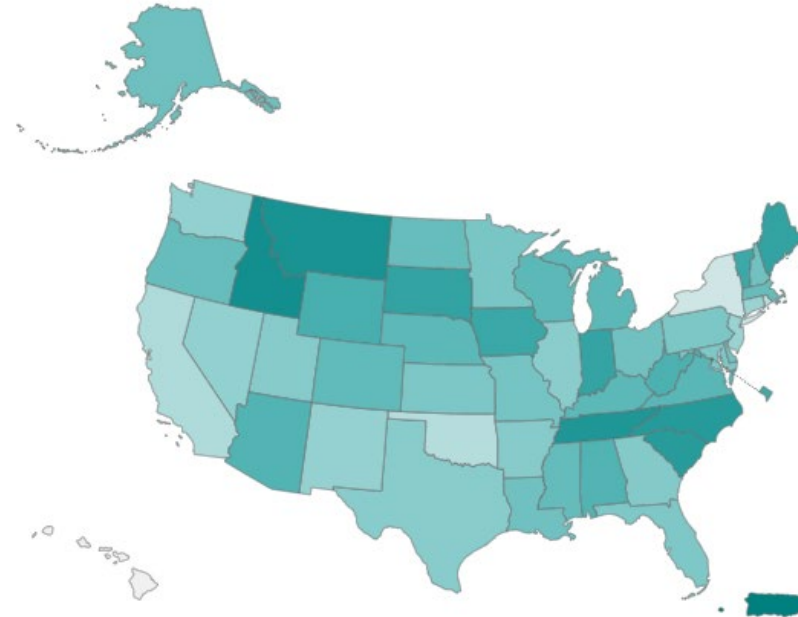
Collection Period
 9/12/2022 - 9/25/2022

Current Performance
 Overall, how would you describe this business's current performance?
 (Bars may not add to 100 percent due to estimate suppression)



Current Performance by State

Overall, how would you describe this business's current performance?



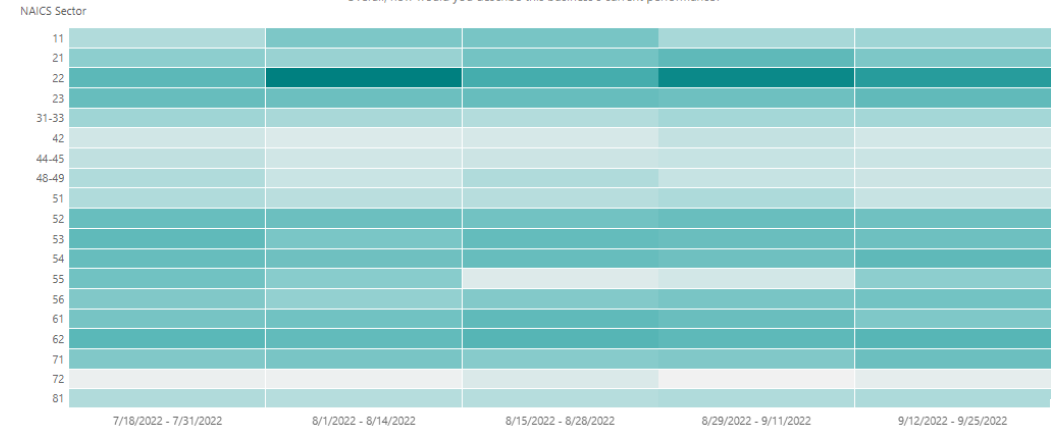
Collection Period
 9/12/2022 - 9/25/2022

Index Selection
 Current performance

Index Estimate
 51.4 ————— 64.5

Current Performance by Sector by Collection Period

Overall, how would you describe this business's current performance?



Index Selection
 Current performance

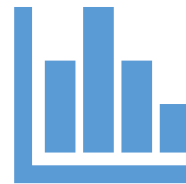
Index Estimate
 49.1 ————— 71.1

BTOS Resources – External Links

- [BTOS Experimental Data Page](#)
- [BTOS Visualization and Downloads Page](#)
- [BTOS Viz on Interactive Gallery](#)

Data Tools in Action

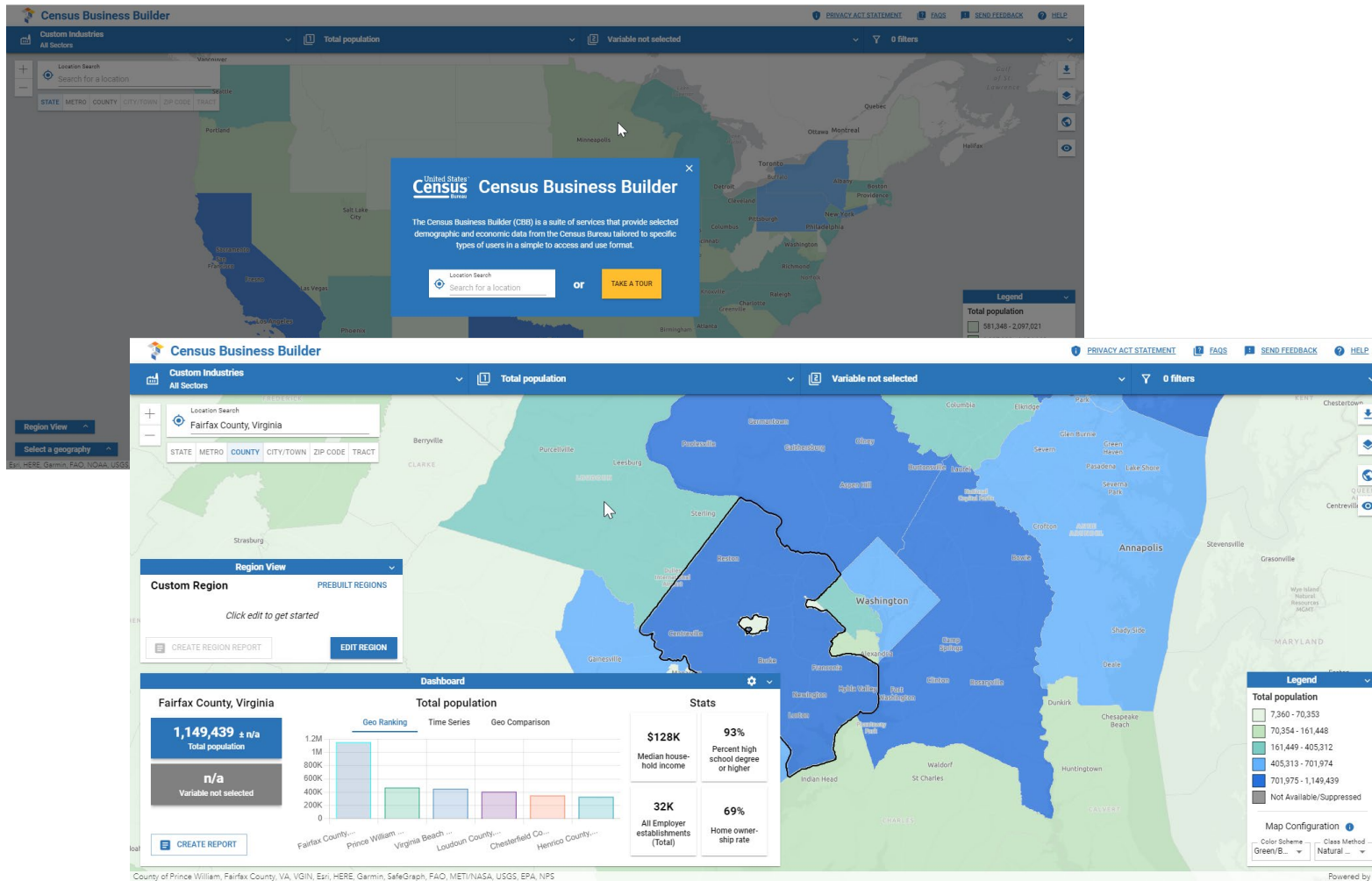
Census Business Builder 5.0



Census Business Builder 5.0

Guiding Principles

- Easy to use
- Customer focused
- Provide access to Census data and more
 - BLS, USDA, & third party
- Leverage existing Census investments
 - Esri, API
- Use latest technology
 - Cloud
- Provide for free



CBB Home Page
<https://www.census.gov/data/data-tools/cbb.html>

Census Business Builder

CBB 5.0 - Tour

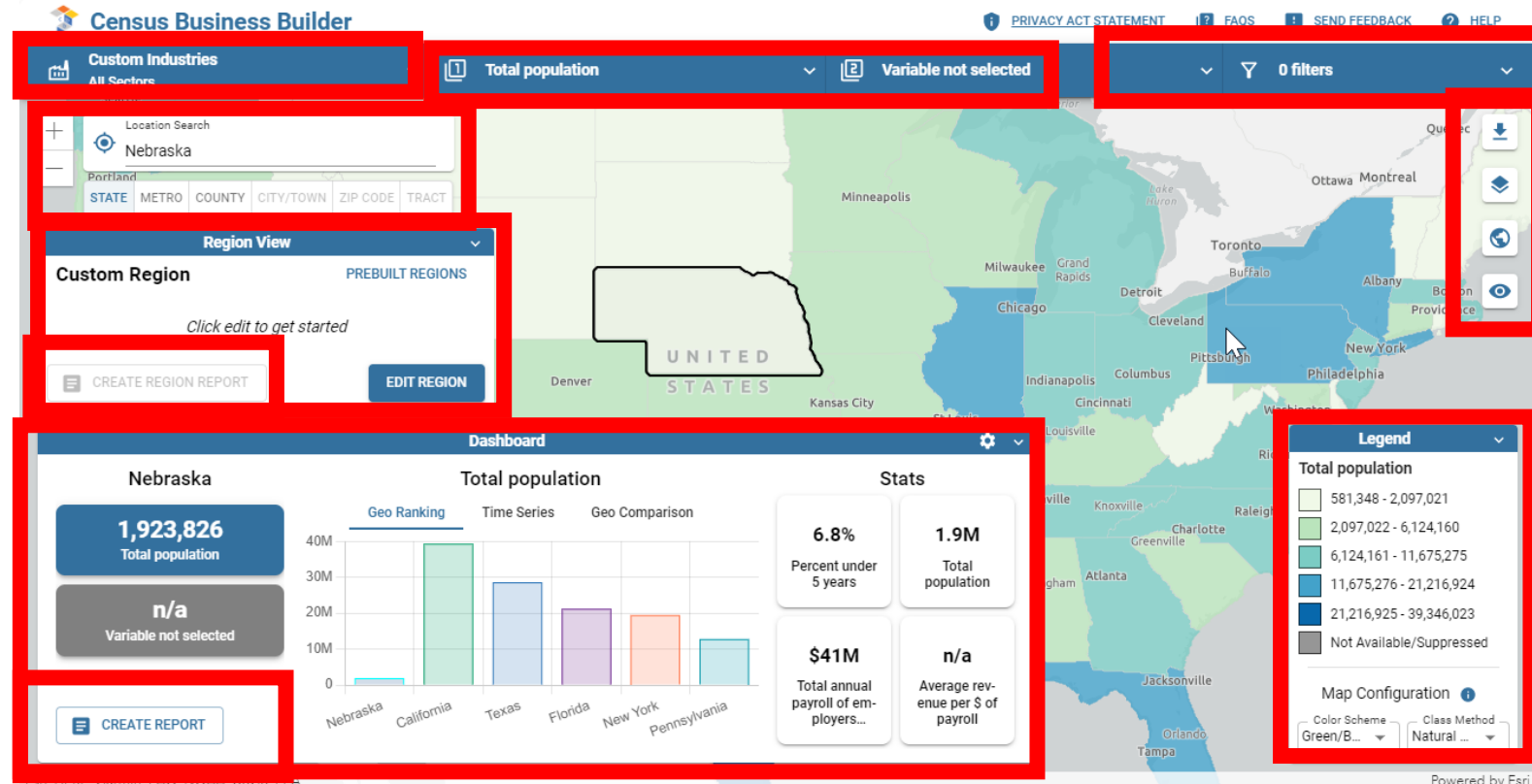
- Tour will walk you through the core functionality of the application

The screenshot shows the Census Business Builder application interface. At the top, there's a navigation bar with 'Custom Industries' and 'All Sectors' dropdowns, and filters for 'Total population' and 'Variable not selected'. A map of the United States is displayed with a legend for 'Total population' showing five ranges from 581,348 to 39,346,023. A blue overlay window titled 'United States Census Bureau Census Business Builder' provides an overview of the tool and includes a 'TAKE A TOUR' button. An 'Intro' window explains that CBB is a feature-rich data exploration application. A 'Select Industries' window shows two views: 'Industry List' (with categories like Construction, Food Services, etc.) and 'Industry Tree' (with sub-categories like Drywall, Electrical, etc.). A 'Select an Industry' window explains that users can choose from either a list or tree view.

CBB 5.0 – Key Features

Map page

- Dashboard
- Region View
- Geographic Levels
- Industry Cluster
- Map Variables options
- Filter Menu
- Map Buttons
- Map Legend
- Reports



CBB 5.0 – Reports

Reports

- Report sections, interactive charts, customizing, and bookmarking
- Single or multi-geography reports

Business Summary

Industry Cluster Name:
Custom Industries

Employer Businesses

Includes key statistics for businesses with 1 or more paid employees (Employers) from the 2015 thru 2019 County Business Patterns, 2012 and 2017 Economic Census, and the 2017 Census of Agriculture. (These variables are related to the Industry selected.)

Variable	Estimate	
All Employer establishments (Total)	54,791	▲ ■
Average employment per employer	16	▲ ■
Average payroll per employee	\$47,566	▲ ■
Population per employer	35	▲ ■
Total employment of employers	866,139	▲ ■
Total annual payroll of employers (\$1,000)	\$41,198,526	▲ ■
Number of farm operations (Ag only)	28,762	▲ ■
Total contract and hired labor expense (Ag only)	\$90,743,000	▲ ■
Total operating expense (Ag only)	\$7,928,359,000	▲ ■

Selected Industries:
Total for all sectors

Business Comparison

Businesses Totals

Includes key statistics for businesses with 1 or more paid employees (Employers) from the 2019 County Business Patterns, 2018 Nonemployer Statistics program, and the 2017 Economic Census. (These variables are related to the Industry selected.)

Industry	All Employer establishments (Total)	All Nonemployer firms	Total employment of employers	Total annual payroll of employers (\$1,000)	Total revenue of employers (\$1,000)	Revenue of nonemployer firms (\$1,000)	Number of farm operations (Ag only)	Total contract and hired labor expense (Ag only)	Total operating expense (Ag only)
All Sectors	54,791	140,567	866,139	\$41,198,526	n/a	\$6,531,663	n/a	n/a	n/a
Accommodation and Food Services	4,536	2,072	78,076	\$1,143,833	\$1,257,818	\$77,764	n/a	n/a	n/a
Administrative and Support and Waste Management and Remediation Services	2,822	11,785	73,236	\$2,948,837	\$4,864,100	\$238,926	n/a	n/a	n/a
Arts, Entertainment, and Recreation	1,455	n/a	n/a	n/a	\$157,350	n/a	n/a	n/a	n/a
Construction	240,269	889,277	\$129,318	n/a	n/a	n/a	n/a	n/a	
Finance and Insurance	2,988,136	\$12,497,262	\$986,691	n/a	n/a	n/a	n/a	n/a	
Health Care and Social Assistance	574,686	\$146,701	\$45,674	n/a	n/a	n/a	n/a	n/a	
Information	5,719,422	n/a	\$387,179	n/a	n/a	n/a	n/a	n/a	

Consumers/Residents

Demographic Characteristics

Includes information on total population and population by age, race, and ethnicity from the 2011-2015 and the 2016-2020 American Community Survey 5-Year Estimates

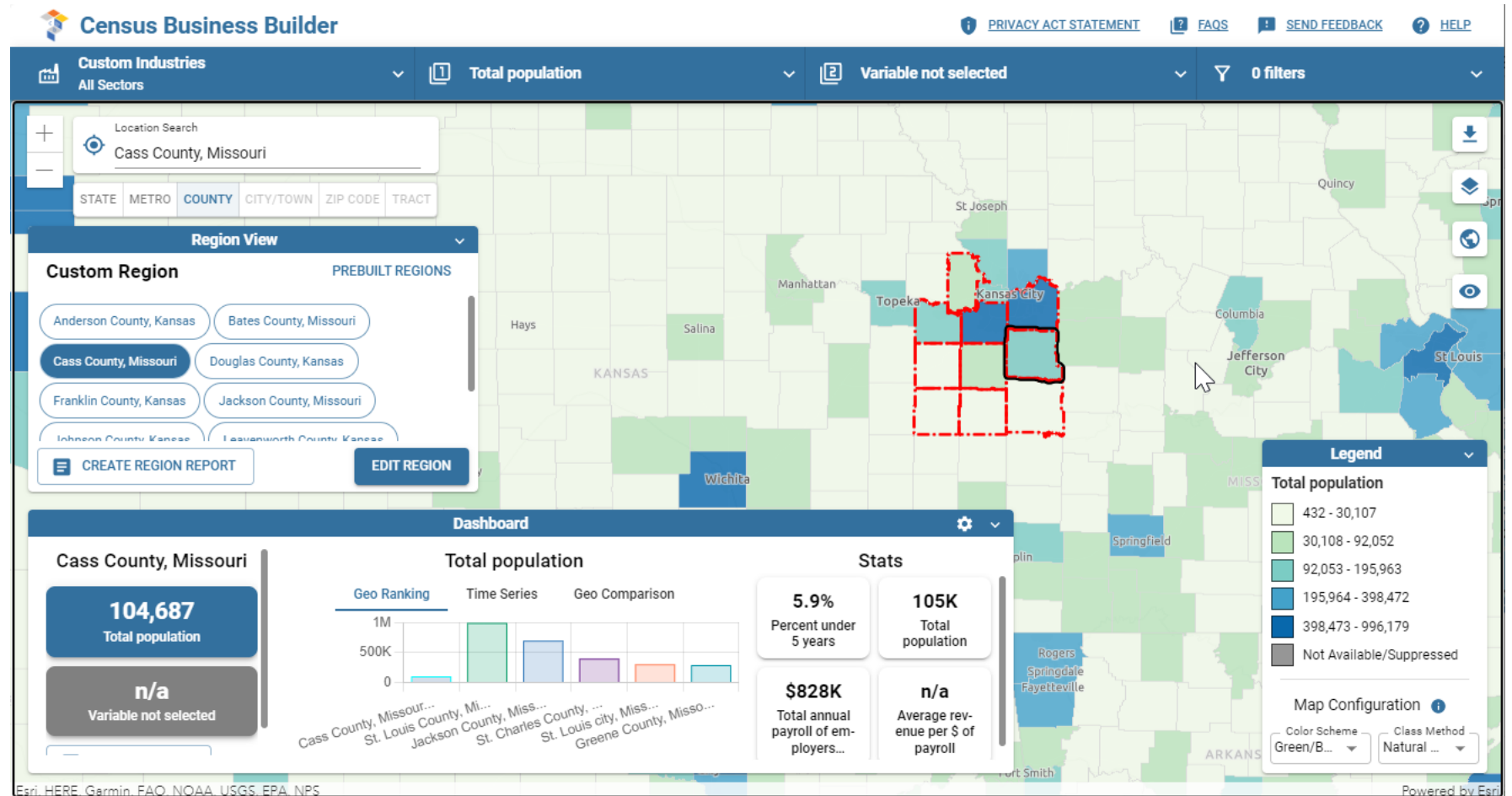
Variable	Estimate	
Total population	1,923,826	▲ ■
Percent male	49.9%	▲ ■
Percent female	50.1%	▲ ■
Percent under 5 years	6.8%	▲ ■
Percent under 18 years	24.7%	▲ ■
Percent 18 years and over	75.3%	▲ ■
Percent 21 years and over	71.1%	▲ ■
Percent working age (25 to 64 years)	49.8%	▲ ■
Percent 65 years and over	15.7%	▲ ■
Median age	36.6	▲ ■
Percent White	85.31%	▲ ■
Percent Black or African American	4.78%	▲ ■
Percent American Indian and Alaska Native	0.88%	▲ ■
Percent Asian	2.84%	▲ ■

These data are subject to sampling and non-sampling errors. See [Methodology](#) on the ACS Home Page for more information.

CBB 5.0 - Region Builder

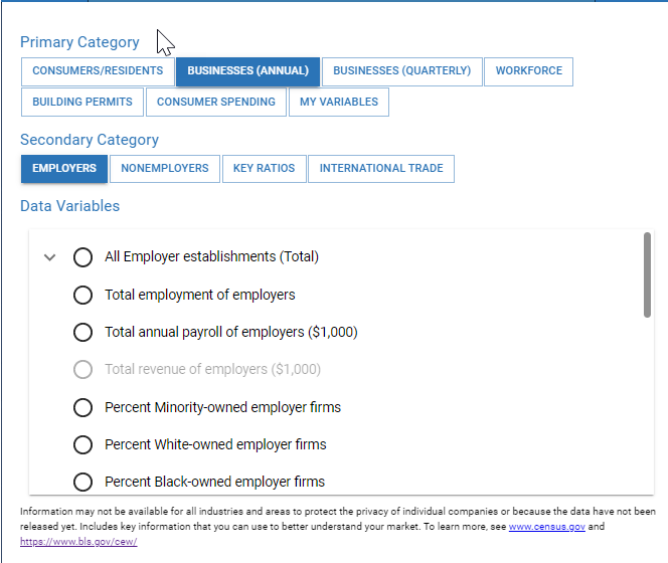
Multiple options to build a region

- Option #1: build region of 2+ geographies of the SAME TYPE
- Option #2: build a Region of 2 or more geographies of 2 OR MORE types
- Option #3: build a Region using Prebuilt Regions



CBB: Data Sources

- Demographic, socioeconomic, and housing data from the American Community Survey
- Business data from the County Business Patterns, Nonemployer Statistics, Economic Census, and Survey of Business Owners
- Imports and Exports data from the International Trade program
- Workforce data from the Quarterly Workforce Indicators
- Building Permits data from the Building Permits Survey
- Your own data (via Excel file upload feature)
- Consumer Spending data from Esri
- Agriculture data from the Census of Agriculture (USDA)
- Employment and related data from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW)



Primary Category

CONSUMERS/RESIDENTS **BUSINESSES (ANNUAL)** BUSINESSES (QUARTERLY) WORKFORCE

BUILDING PERMITS CONSUMER SPENDING MY VARIABLES

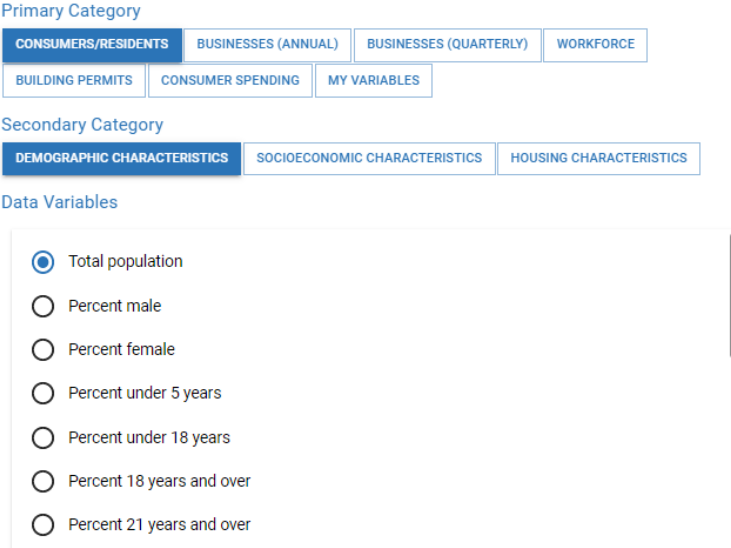
Secondary Category

EMPLOYERS **NONEMPLOYERS** KEY RATIOS INTERNATIONAL TRADE

Data Variables

- All Employer establishments (Total)
- Total employment of employers
- Total annual payroll of employers (\$1,000)
- Total revenue of employers (\$1,000)
- Percent Minority-owned employer firms
- Percent White-owned employer firms
- Percent Black-owned employer firms

Information may not be available for all industries and areas to protect the privacy of individual companies or because the data have not been released yet. Includes key information that you can use to better understand your market. To learn more, see www.census.gov and <https://www.bls.gov/qcew/>



Primary Category

CONSUMERS/RESIDENTS **BUSINESSES (ANNUAL)** BUSINESSES (QUARTERLY) WORKFORCE

BUILDING PERMITS CONSUMER SPENDING MY VARIABLES

Secondary Category

DEMOGRAPHIC CHARACTERISTICS SOCIOECONOMIC CHARACTERISTICS HOUSING CHARACTERISTICS

Data Variables

- Total population
- Percent male
- Percent female
- Percent under 5 years
- Percent under 18 years
- Percent 18 years and over
- Percent 21 years and over

These data are subject to sampling and non-sampling errors. See [Methodology](#) on the ACS Home Page for more information. Includes key information that you can use to better understand your market. To learn more, see www.census.gov and <https://www.bls.gov/qcew/>

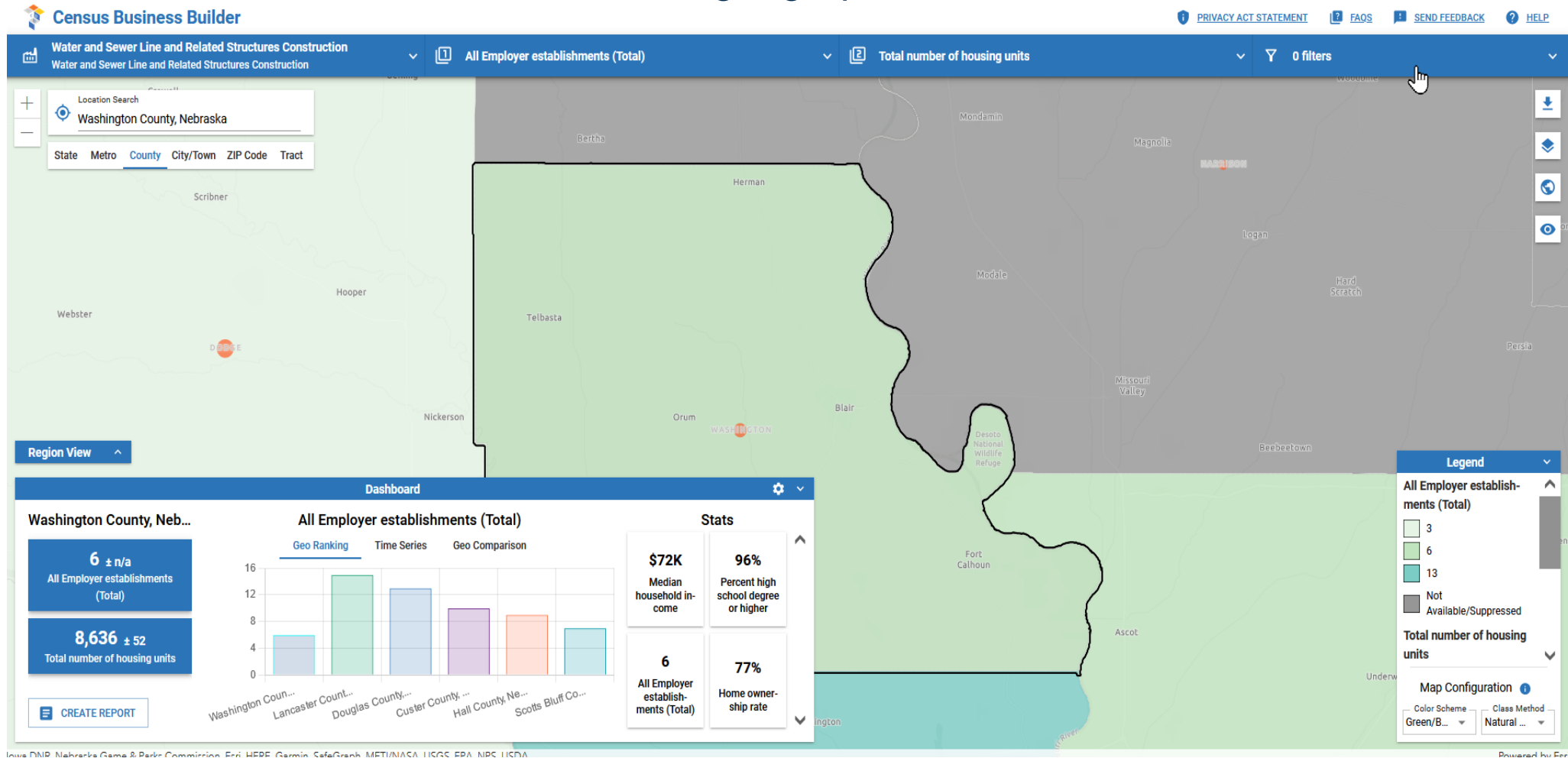
Case Study:

- Access to [clean water](#) is a key issue for many Americans
- Some casual data users have heard about Census business data available on housing/construction statistics from a recently published America Counts article
 - They need guidance on where to begin using the great resources found on [Census.gov](#)
- Let's say an entrepreneur wants to start a business in [“Water and Sewer Line and Related Structures Construction” \(NAICS 237110\)](#)
 - Using an innovative data tool called Census Business Builder, the entrepreneur looks at competitors in the same industry, potential customers, and socioeconomic characteristics to make an informed, data-driven decision.




Using Census Business Builder, the entrepreneur investigates business data in **Washington County, Nebraska** to see how many other potential competitors are in this industry.

By comparing other counties nearby, and researching key demographics from Census data, the prospective business owner can determine the best geographical location and fit for their business model.



- Looking at potential customers, competitive businesses and consumer spending patterns help the entrepreneur make informed decisions on their business plan.

Sections 

- Contents
- Consumers/Residents
 - Demographic Characteristics
 - Socioeconomic Characteristics
 - Housing Characteristics
- Business Summary
 - Employer Businesses
 - Business Revenue
 - Nonemployer Businesses
 - Workforce
 - Quarterly Businesses
 - Building Permits
- Business Comparison
 - Businesses Totals
 - Key Ratios
 - Employer Business Ownership
 - Consumer Spending**
 - Consumer Spending
- About Data

Consumer Spending

Consumer Spending

Includes information on consumer expenditures per household in 2021 from Esri

Variable	Estimate
Total consumer expenditures per household	\$74,325.06
▼ Consumer expenditures per household on Alcoholic beverages	\$589.37
▼ Consumer expenditures per household on Apparel & services	\$1,965.17
▼ Consumer expenditures per household on Dining out (Food away from home)	\$3,449.59
Consumer expenditures per household on Education	\$1,558.95
▼ Consumer expenditures per household on Entertainment / Recreation	\$3,157.88
▼ Consumer expenditures per household on Food consumed at home	\$5,110.01
▼ Consumer expenditures per household on Health Care	\$6,219.69
▼ Consumer expenditures per household on Household Services	\$2,124.91
▼ Consumer expenditures per household on Housing	\$23,008.77
Consumer expenditures per household on Life and other insurance	\$607.94
Consumer expenditures per household on Pensions and social security	\$7,932.13
▼ Consumer expenditures per household on Personal Care Products and Services	\$841.50
▼ Consumer expenditures per household on Local Transportation	\$8,565.85

Source: [Esri \(2021\)](#)

- By using Census data and data tools, the entrepreneur makes the decision to open a Water and Sewer Line and Related Structures Construction plant in Washington County, Nebraska to better service the needs of the residents of that county.



How can we help you?

- Trainings on using Census data and tools
- America Counts Stories
- Stats for Stories series
- Outreach Specialists



Q & A

Adam Grundy

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U.S. Census Bureau

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