# Annual Integrated Economic Survey (AIES)

FESAC
December 2022



#### **Annual Integrated Economic Survey (AIES)**

# State Cirrent

- Industry focused
- Overlapping content
- National estimates
- **Independent samples**
- Different reporting units by program
- inefficient processes and operations.
- Varying classification systems

#### Alignment to enterprise programs

- Consolidated processing system
- Integrated frame and sample
- National and state geographic estimates
- Standardized and rotating content
- Respondent centric
- Coordinated collection and instruments
- Harmonized reporting units
- Leveraging of alternative data
- Holistic company analysis
- Economy-wide data products

# Integration of seven current annual economic surveys **AWTS**



2020

State

**Future** 



2021



2022



2023



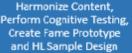
2024



2025



Coordinate collection across SAS/ARTS/AWTS, 💜 Evaluate existing content





Test Sample Selection, Finalize Content and

Develop Instrument, End-to-End Testing, Finalize Frame.

Launch New Annual Integrated Economic Survey (AIES),

Analyze and Release New Annual Integrated Economic Survey (AIES) Data

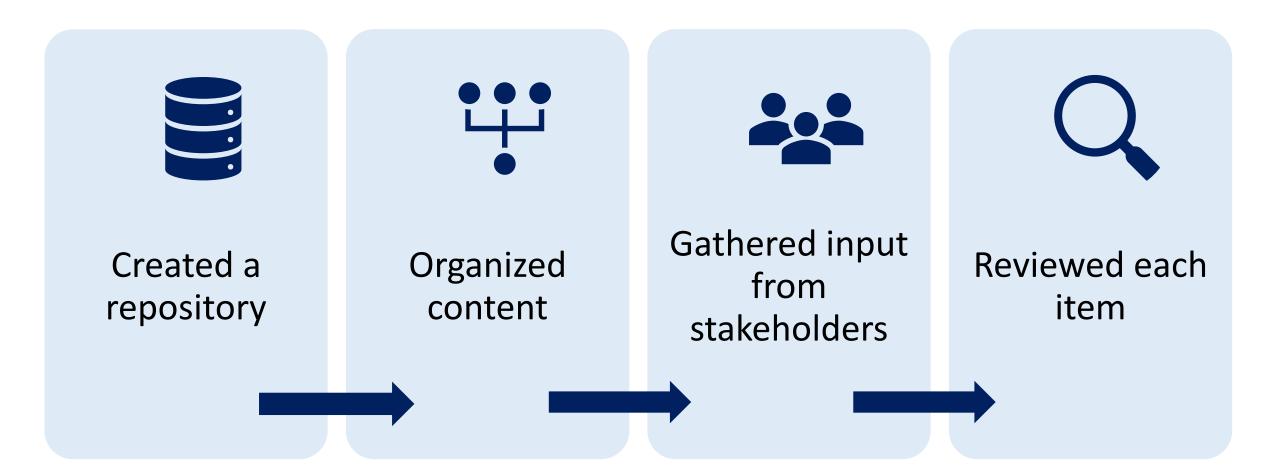
# **Key AIES Improvements**

- Aligned with enterprise solutions
- Consolidated processing systems
- Standardized and rotating content
- Respondent-centric
- Coordinated collection and instruments
- Harmonized reporting units

- Leveraging of alternative data
- Holistic company analysis
- Integrated frame and sample
- National and subnational estimates
- Economy-wide data products



## **Content Harmonization**





### **Content Harmonization - Revenue**



Retail

What were the total sales of merchandise and other operating receipts for this firm in 2021?



Wholesale

What were this firm's TOTAL sales and operating revenue in 2021?\*

What were this firm's sales and other operating receipts in 2021?



Services

What were the revenues for this firm in 2021?



Manufacturing

What was the total value of products shipped and other receipts for this establishment?

What were the sales, shipments, receipts, or revenue?\*\*



AIES

What were the total sales, shipments, receipts, or revenue in 2021?



<sup>\*\*</sup> Added establishments

## **Content and Structure Research**

#### **Content Cognitive Testing**

- Harmonized questions only
- Results:
  - Clarified instructions on one question
  - Dropped two questions too burdensome and confusing

#### **Survey Structure Interviews**

- Industry-level is challenging
- Clearly establish link between establishments and industry

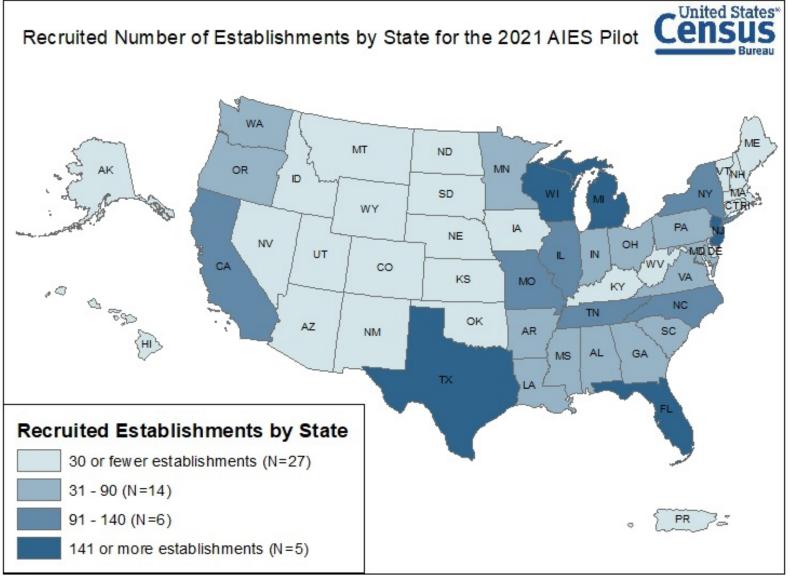


### Pilot - Phase 1

#### What we did:

- 62 of 78 recruited companies provided data
- Survey instrument, debriefing interviews, Response Analysis Survey





The U.S. Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied. (Approval ID: CBDRB-FY23-ESMD002-004)

# Instrument Design

# What we learned:

- Holistic view
- Flexible approach
- Mixed response method
- Integrated units

# How we adapted:

- 3-step reporting
  - Step 1: Verify Establishments
  - <u>Step 2</u>: Company
  - Step 3: Establishment and Industry

# What we are working on:

- Finalizing requirements for collection instrument
- Developing a prototype
- Getting first reactions from respondents



# **Next Steps for Research and Testing**

#### **Future Research**

- Pilot Phase II
- Usability testing
- Large business special investigations
- Dress Rehearsal

#### **Upcoming Activities**

- Present findings on respondent first reactions
- Request OMB clearances and allocate resources
- Develop collection strategy utilizing adaptive design



# **Communication of AIES Changes**

- Developed stakeholder engagement plan
- Establish AIES external webpage
- Inform respondents of upcoming change with wrap up of Econ Census and Annual Surveys
- Prepare clerks and analysts to answer questions
- Engaged full-service account managers



**Thank you** for participating in the **Annual Retail Trade Survey** (**ARTS**). Your survey has been received. Please note that a survey analyst may contact you if any clarification is necessary.

ARTS is the nation's official source of information on sales, expenses, and other items for the retail sector in the U.S. It provides statistics and trends to guide government policy and inform corporate planning. Previous results are available, free, and online (see the data).

Beginning in 2024 these data will be collected as part of the <u>Annual Integrated Economic Survey</u> (AIES). The AIES will improve operational efficiency, increase consistency, and reduce respondent burden by integrating many of our annual programs into one survey.

#### Stay connected with us!

Join the conversation on social media.

















# Sampling Design Requirements

#### **National**

- Revenue/Receipts, Annual Payroll, Inventories, Capital Expenditures...
- Disaggregated industry (NAICS) levels
  - Differs by sector
  - 4-digit NAICS, 5-digit NAICS, 6-digit NAICS

#### Subnational

- Revenue/Receipts, Annual Payroll,
   1st Quarter Employment
- Aggregated NAICS levels (3-digit)
  - "Direct use" states (meet target reliability for Annual Payroll)
    - 23 states
    - Allocated within region
  - "Balance" of region category for nondirect use states



# Sampling Design Accomplishments

#### Developed sample design

- Stratification addresses subnational estimate requirements
- Allocation and unequal probability of inclusion assignment procedures incorporate unit size
- Conducted three end-to-end tests in FY2022
  - Addressed allocation issues with larger states uncovered in 1<sup>st</sup> end-to-test
  - Evaluated overlap of AIES certainty companies with current programs
  - Developed sample verification procedure
- Finalized sample design and recommended sample size of approximately 390,000 companies



# **Next Steps for Sample Design**

- Determine frequency of sample selection
- Determine how to treat AIES during an Economic Census year



# Dissemination – Viewing AIES Data

- API
- Limited footprint in data.census.gov
- Publication Outline
- Focus on Tableau dashboard
- CSV data files
- Ingest of AIES data in Federal Reserve Economic Data (FRED)

- Work in **Progress!**
- Tableau Data Visualizations



## **Dissemination Standards**

- All states, divisions, & regions (US only for sectors 11, 21, 23, 55)
   NAICS levels where possible to create full tab structure

E.g.-NAICS4 = NAICS5 = NAICS6 - In some annuals we only publish the lowestdenominator



- Work in Progress
   Determine publication standards
   Existing annuals have 4 different sets of pub standards
  - AIES will have one set of publication standards



# **Next Steps for Dissemination**

- Time series impact
- Special tabs process
- Concordance on AIES website to link from old to new
- Finalize full dissemination plan (deliver by end of FY23)



# Challenges

- Conducting large-scale testing and research given tight timeframes and competing priorities
- Developing a collection instrument for respondents that is intuitive and efficient
- Developing communication strategies to inform and prepare respondents
- Developing collection strategies to encourage response



# **Key Milestones**

Key Task/Deliverable	Planned Timeframe
Conduct Phase II Pilot Survey	January – May 2023
Conduct Usability Testing (3 rounds)	February - Sept. 2023
Conduct Large Business Special Investigations	March – Sept. 2023
Conduct Dress Rehearsal	August –Nov. 2023
Finalize Dissemination Plan	September 2023
Obtain Production Sample	Nov. 2023 – Jan. 2024
Receive Production-Ready Collection Instrument	December 2023
Mail the Annual Integrated Economic Survey	March 2024
Release Data Products	July 2025



### **THANK YOU!**

If you have further questions, feel free to contact:

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- Assistant Division Chief Service Sectors <u>Edward.E.Watkins.III@census.gov</u>

