Census' Economic Directorate Update

Moderator: Jeff McHugh – Economic Indicators Division

Presentations:

- Jeff McHugh – The Economic Directorate's Increased Role in the LEHD Program
- Adela Luque / Aneta Erdie - Administrative Records Based Business Demographics
- Henock Kebede - International Trade State Data

Any views expressed in this presentation are those of the author(s) and not those of the U.S. Census Bureau.

The Economic Directorate's Increased Role in the LEHD Program

Economic Directorate

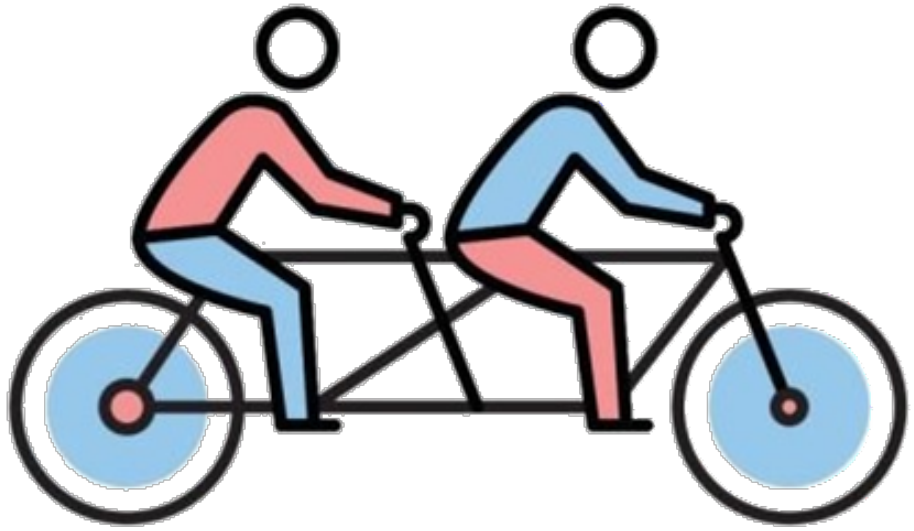
Conducts 60 monthly, quarterly, and annual surveys including the following:

- 12 economic indicators and an economic census and census of governments
- Reimbursable surveys for several other government agencies

Center for Economic Studies

Partners with stakeholders within and outside the Census Bureau to improve measures of the economy and people of the United States through research and the development of innovative data products.

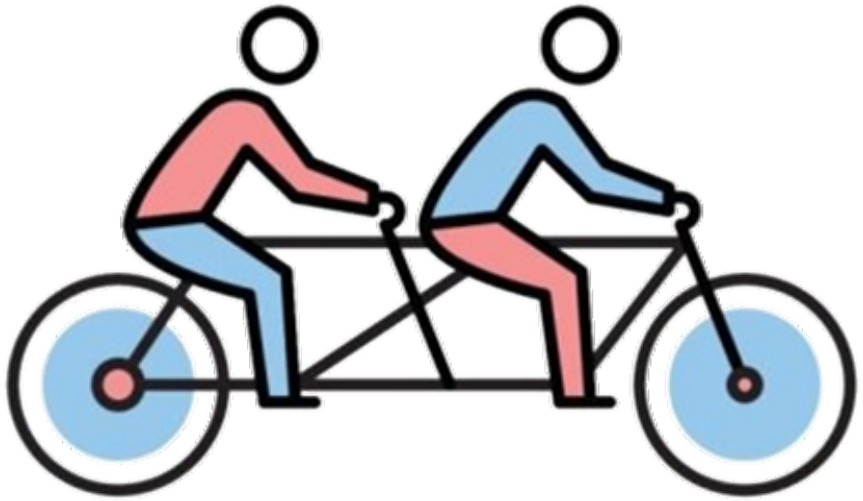
- Part of the Research and Methodology Directorate
- Responsible for developing the LEHD infrastructure and methodology



United States® Census Bureau

Benefits of the Collaboration between CES and the Economic Directorate

- Freed researchers from production workload
- Streamlined production and improved documentation of production processes
- Facilitated the sharing of ideas and best practices across directorates
- Moved data ingest to Econ
- Expedited production and publication of Puerto Rico QWI
- Better positioned the LEHD program for Census initiatives like Frames
- Integrated LEHD data into Econ data calls, presentations, and visualizations
- Improved LEHD infrastructure documentation and understanding
- And more to come…



LED Partnership Workshop

Administrative Records Based Business Demographics

(Update on Employer Businesses)

Adela Luque & Aneta Erdie

Economic Reimbursable Surveys Division (ERD), Census Bureau

May 14-15, 2024

United States® Census Bureau

Disclaimer & Acknowledgments

Any opinions and conclusions expressed herein are those of the author(s) and do not reflect the views of the U.S. Census Bureau. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-7504866, Disclosure Review Board (DRB) approval number: CBDRB-FY23-ESMD010-037 and CBDRB-FY24-ESMD010-005).

Employer Demographics Team

Valeska Araujo, George Mason University Ph.D candidate & Census Bureau; John Earle, George Mason University, IZA & Census Bureau; Lorenz Eckerd, Census Bureau; Vitaliy Novik, Census Bureau; Jared Wold, George Mason University Ph.D candidate & Census Bureau; Sammy Young, Arizona State University & Census Bureau; James Noon and Michaela Dillon, Census Bureau.

Financial support from the Small Business Administration is gratefully acknowledged.

United States® Census Bureau

Overview of Presentation

What are Administrative Records (AR)-based Business Demographics? (Overview)	Description, benefits and uses Background Brief methodology overview
Taking Stock - Where are we?	Nonemployers* (Nonemployers Statistics by Demographics, NES-D) Employer Demographics Project (ongoing research)
How are we planning on using findings & output from ongoing E*mployer* Demographics Project in the short & long term?	

**Nonemployers are firms with no paid employees –those we usually think of as the self-employed.*

AR-based Business Demographics Program

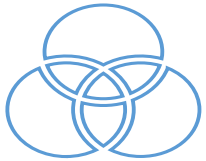
Goal

- Assign demographic characteristics to *universe* of firms by leveraging administrative records (AR), Census & third-party data

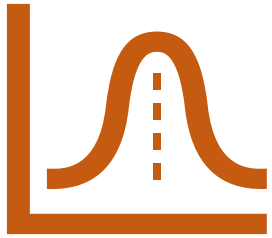
=> produce business demographics statistics

✓ Already accomplished for nonemployer firms (Nonemployer Statistics by Demographics, NES-D)

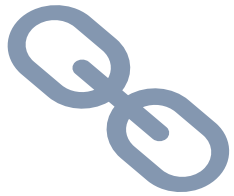
Benefits & Uses



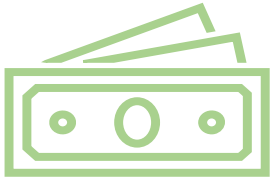
New data products & improvements, such as:
- Unburdening surveys/respondents
- Enhancing business programs w/ demographics
- More granularity and flexibility



Improve sampling frame for business surveys



Facilitate linkages of external & internal business data to business owners' demographics



Reduce costs

United States® Census Bureau

Background – Journey to Annualized AR-based Business Demographics

PAST STATE

Legacy Survey of Business Owners (SBO) - Every 5 yrs.
(Nonemployers & Employers Demographics)

Annual Business Survey (ABS)
(Employers)
Survey-based

+

Nonemployer Statistics by Demographics (NES-D)
AR – based (Not a survey)

CURRENT STATE

Annual Total Business Demographics Program

Employer Demographics Project
AR-based (Not a survey)

United States® Census Bureau

Data Sources

Variables	Data Sources
Firm identifiers, Legal Form of Organization (LFO), employment, payroll, industry, geography	Business Register: Comprehensive database of all U.S. employer & nonemployer business establishments containing business name, identifier, address, industry classification, legal form of organization, receipts, and employment and payroll.
Race Hispanic origin Sex Age of owner Place of birth U.S. Citizenship status	Decennial Census Data, American Community Survey (ACS), & Numident (from Social Security Administration)
Veteran-status	Department of Veterans Affairs (VA) AR data (USVETS). Integrating Department of Defense data.

Methodology

- Employer universe identified & extracted from Business Register*
- Business Owner Identification - Obtain anonymized owner identifiers (PIKs)
- Source of PIKs vary by Legal Form of Organization (LFO)**
  - Sole proprietors – Tax form 1040 Schedule C & EIN applications (SS-4 form)
  - Partnerships & S-corporations – Schedule K-1 (Forms 1065 & 1022S)
  - Owners of U.S. nonemployer C-corporations cannot be identified with tax or AR data

    => Evaluating feasibility of demographics imputation for small C-corps

    => Longer term: Evaluate feasibility of classifying public corporations based on board members or executives' demographics
- Link demographics from various sources to business owners via PIK

*The BR is a comprehensive database of all U.S. employer and nonemployer business establishments containing business name, identifier, address, industry classification, legal form of organization, receipts, and employment and payroll (these last two apply only to employer firms).

**Business select a given LFO based on number of owners, ownership/control/liability preferences, and how they want to be taxed.

Taking Stock - AR-based Business Demographics

- Where are we now?
  - **Nonemployers - Annual Nonemployer Statistics by Demographics (NES-D)**
    - Replaced nonemployer component of legacy quinquennial Survey of Business Owners (SBO)
    - First release in 2020 with reference year 2017 –when the 2017 SBO would have come out
    - No C-corps (2% of nonemployers) but working on imputation model
  - **Can AR-based demographics work for employers? - Ongoing Employer Demographics Project**
    - Yes!
    - Surprises
    - No C-corps
      - Exploring imputation of small C-corporations
      - Exploring alternatives for public firms

Taking Stock - AR-based Total Business Owner-identification Coverage

	Legal Form of Organization (LFO)	Share of universe covered*	Share of rcpts/emp covered	Methodology
Non Employer Universe	Sole-props, Partnerships & S-corps	98% of NEs	96% rcpts	AR
	C-corporations	2% of NEs	4% rcpts	Imputation
Employer Universe (ongoing)	Sole-props, Partnerships & S-corps	83% of employers	49% emp	76% AR 7% imputation
	Small C-corporations**	14% of employers	3% emp	Imputation
	Public C-corporations (long term)	< 1% of employers***	Approx. 23% emp***	Third-party data?
	Large Private C-corporations	Approx. 3%***	Approx. 25%***	Survey

*Excludes 'Other' LFO category (i.e., governments, non-profits) **Those w/ <20 employees. ***Preliminary estimate obtained from 2018 BR linked to Compustat data.

Immediate Steps in Implementing AR-based Business Demographics

- Initially use admin records data for imputation in Annual Business Survey (ABS)
- ABS collects valuable business data by sex, ethnicity, race, and veteran status of the business owners for employer businesses
- ABS samples 338,000 employer businesses and nonprofit organizations; sample increases to 858,000 every 5 years

United States® Census Bureau

Next Steps in Implementing AR-based Business Demographics

- Incorporate admin records data into sampling methods for ABS
- Aim to create more detailed race and ethnicity estimates annually
  - Currently detailed race and ethnicity every 5 years with larger sample size of 858K businesses (economic census years)
- Explore reduction of ABS sample size to further decrease respondent burden and operational costs

United States® Census Bureau

Future Steps in Implementing AR-based Business Demographics

- Explore integration of AR-based demographics into other Economic surveys & programs
  - For instance, Business Trends and Outlook Survey (BTOS), Annual Integrated Economic Survey (AIES), Business Dynamics Statistics (BDS), Business Formation Statistics (BFS)
  - Enables survey or program to consider business owner demographics in sampling, imputation & data products
- Evaluate ability to link AR-based business demographics to external program data (e.g., SBA's Covid-relief Programs)

United States® Census Bureau

Thank you!

Aneta.Erdie@census.gov

Adela.Luque@census.gov

United States® Census Bureau

International Trade State Data

Henock Kebede
International Trade Macro Analysis Branch
Economic Indicators Division (EID)

United States® Census Bureau

Available Data

Origin of Movement (OM) - ZIP Code Based:
The ZIP Code of the United States Principal Party in Interest (USPPI), the party in the United States that receives the primary benefit monetary or otherwise from the shipment, was redefined in 2004 to indicate the origin of movement of goods. It does not necessarily represent the location of the USPPI.
Available Data: Monthly 2006- Present

Origin of Movement (OM) – Based on Origin State:
The OM series based on origin state, available since 1987, provides export statistics based on the state from which the merchandise starts its journey to the port of export; that is, the data reflect the transportation origin of exports.
Available Data: Monthly 1995- Present

State of Destination Series:
This new series is based upon the U.S. State of Destination Code. This is defined as the U.S. state, U.S. territory or U.S. possession where the merchandise is destined, as known at the time of entry summary filing. If the contents of the shipment are destined to more than one state, territory, or possession, or if the entry summary represents a consolidated shipment, report the state of destination with the greatest aggregate value. If in either case, this information is unknown, the state of the ultimate consignee, or the state where the entry is filed, in that order, should be reported.
Available Data: Monthly 2008- Present

Where Do I get Data?

USA Trade Online:

- State Export Data – HS (6-digit) & NAICS (4-digit): *Annual and Monthly Data from 2002*

- State Import Data - HS (6-digit) & NAICS (4-digit): *Annual and Monthly Data from 2008*

International Trade API :

- State Export Data – HS (6-digit) & NAICS (4-digit): *Annual and Monthly Data from 2010*

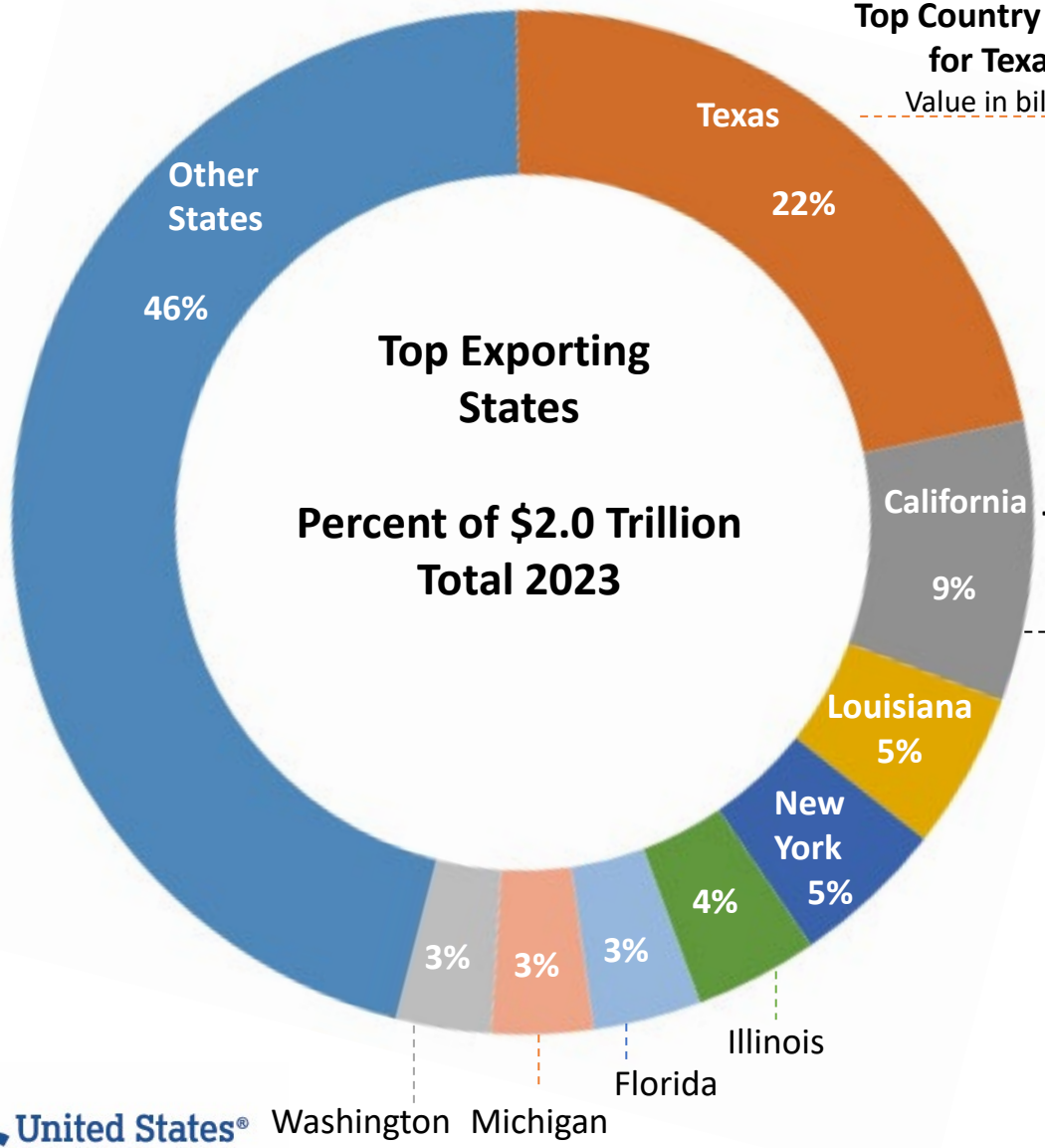
- State Import Data - HS (6-digit) & NAICS (4-digit): *Annual and Monthly Data from 2010*

International Trade State Data Page:

- Origin of Movement Exports, Zip Code-based, *Monthly 2006 – Present*

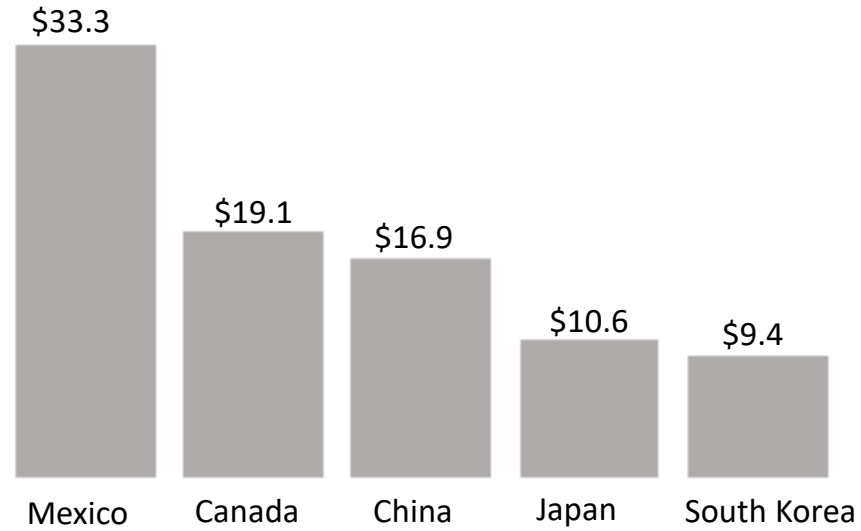
- Origin of Movement Exports, Origin state – based, *Monthly 1995-Present*

- Imports, State of Destination, *Monthly 2008 - Present*

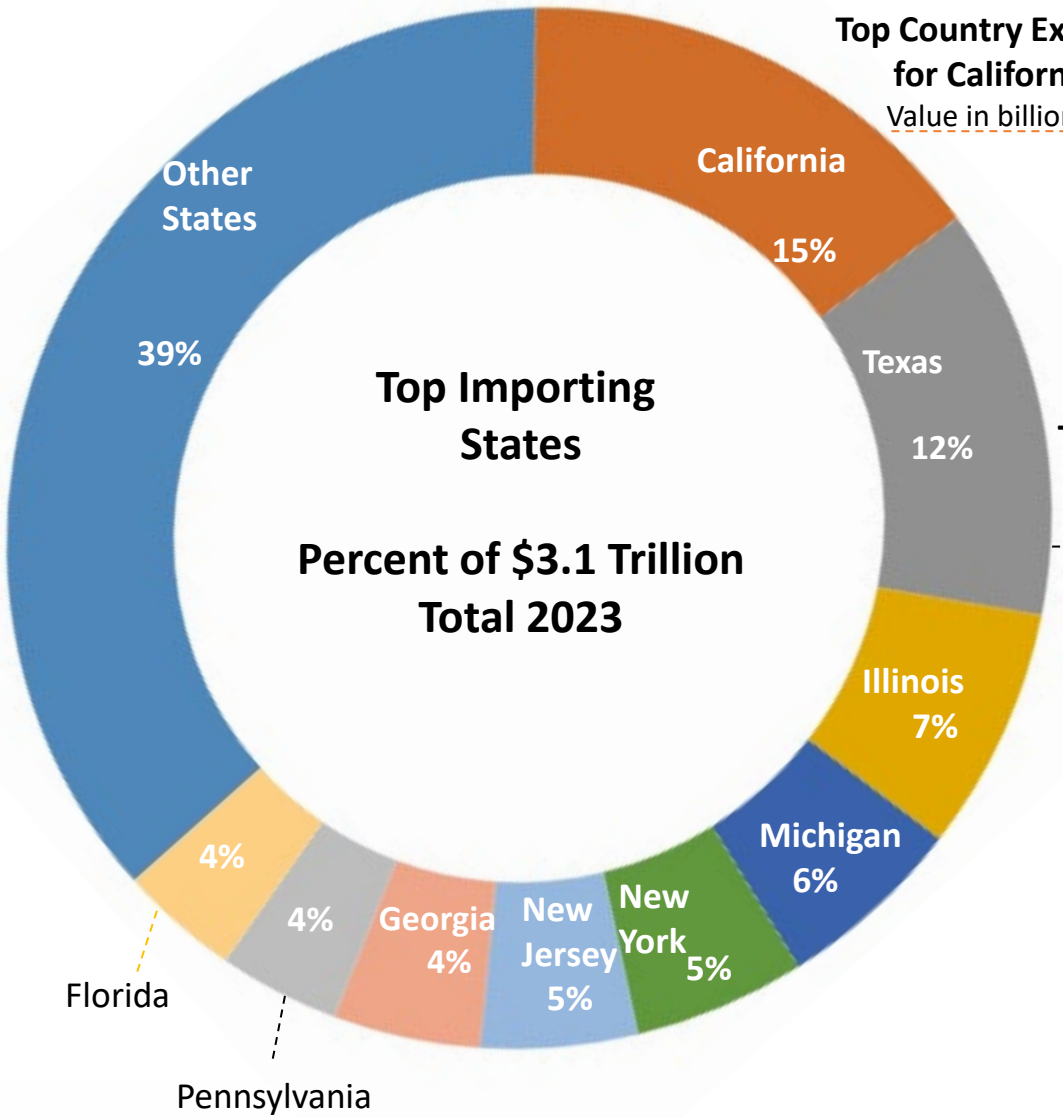


Top Country Exports for Texas
Value in billions

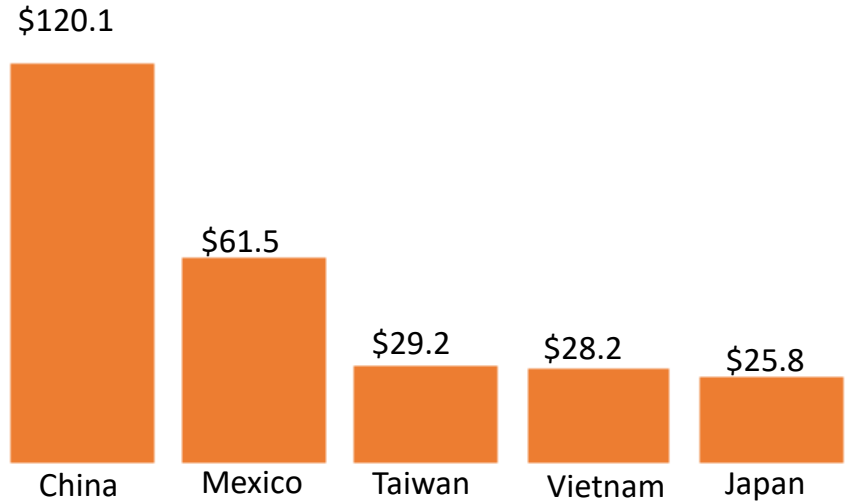
Top Country Exports for California
Value in billions



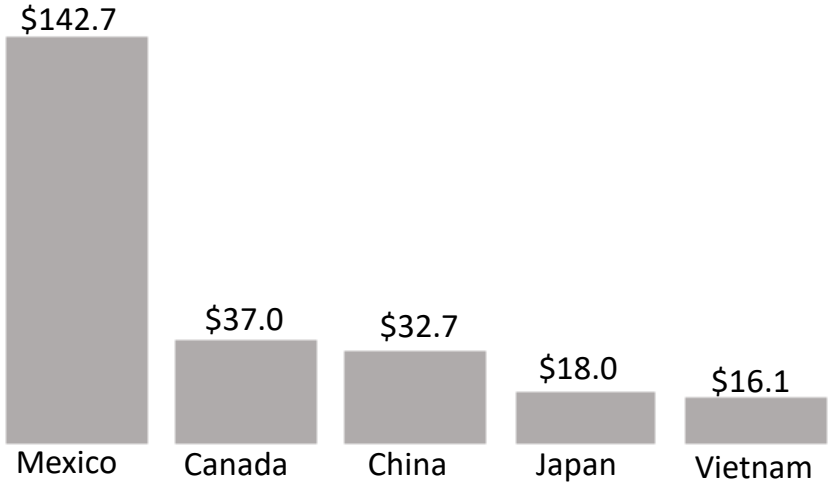
United States® Census Bureau



Top Country Exports for California
Value in billions



Top Country Imports for Texas
Value in billions



United States® Census Bureau

Questions?

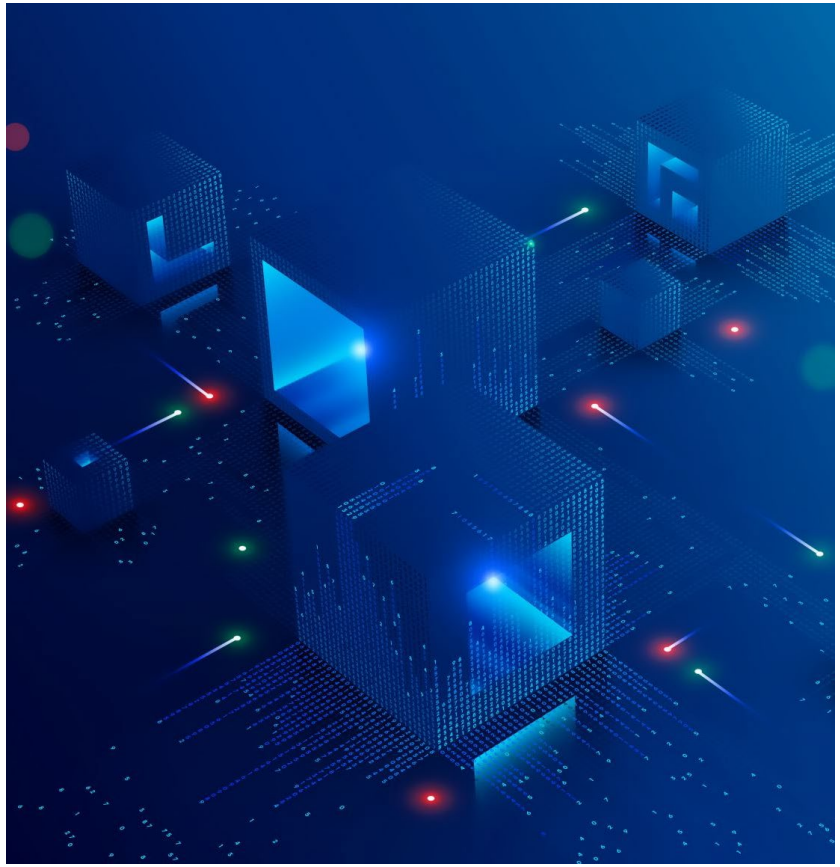
Contact Us

U.S. Census Bureau
International Trade Macro Analysis Branch

Phone: (301)763-2311 or 1-800-549-0595 option 4
Email: eid.international.trade.data@census.gov

Henock Kebede
Henock.Kebede@census.gov

Visit us @ - census.gov/trade



United States® Census Bureau