Future Direction of the Regional Accounts

Mauricio Ortiz Advisory Committee Meeting May 13, 2022



Overview – Regional Directorate



Where we were before:

State Statistics

- Gross Domestic Product (GDP)
- Personal Income (PI)
- Employment

County & Metro Area

- Personal Income (PI)
- Employment

Overview – Regional Directorate



State Statistics

- Gross Domestic Product (GDP)
- Personal Income (PI)
- Employment
- Personal Consumption
 Expenditures (PCE)
- Regional Price Parities (RPPs)
- Outdoor Recreation
 Satellite Account (ORSA)
- Arts and Cultural Production Satellite Account

County & Metro Area

- Gross Domestic Product
- Personal Income (PI)
- Employment
- Regional Price Parities
 (RPPs) metro area only

U.S. Territories

Gross Domestic Product

Stakeholders





Media

Report on economic activity



Businesses, trade associations, and labor organizations



Academic Researchers

Applied economic research



Federal Government

Policy

Distribute funds to states



State / Local Governments

Policy

Distribute funds to localities

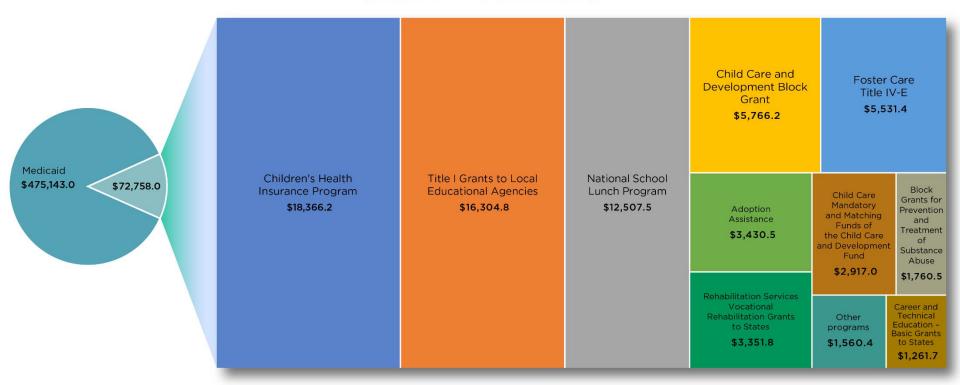
Set limits on government revenues or spending

Federal Funding Allocated with BEA Regional Statistics



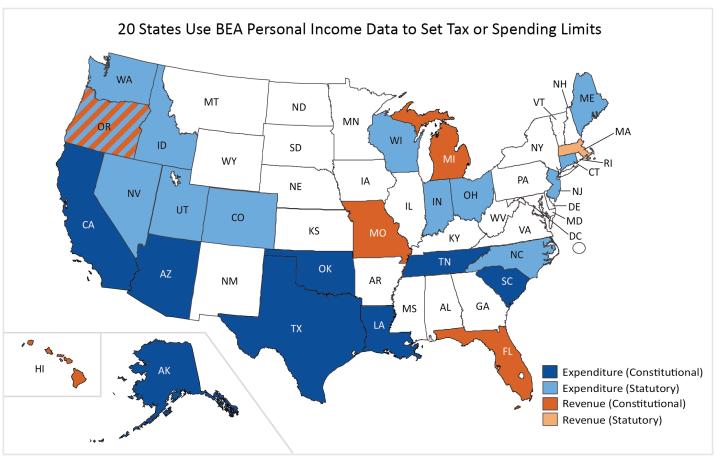
\$547.9 Billion of FY2020 Federal Health and Wellness Funding Allocated with BEA Regional Statistics

(Data shown in millions of dollars)



State Tax and Expenditure Limits





Source: State Tax and Expenditure Limits -- National Conference of State Legislatures 2020. State Constitutions or Statutes.

Goals – Regional Directorate



- Overall goal: Bring regional statistics together
- Four principal areas of focus:

Improve existing statistics

New statistical products

Research activities

Other activities

- Challenges
 - Data, Data, and Data

Improve Existing Statistics



- Integrated release of quarterly statistics of GDP and Personal Income by state, September 2022
 - Greater industry detail (NAICS 3-digit detail)
- Improve timeliness of GDP statistics for U.S. territories, TBD
 - Establish data access agreements with all of the U.S. territories
- Migration of all production procedures to Python programming language, 2024-2025

New Statistical Products

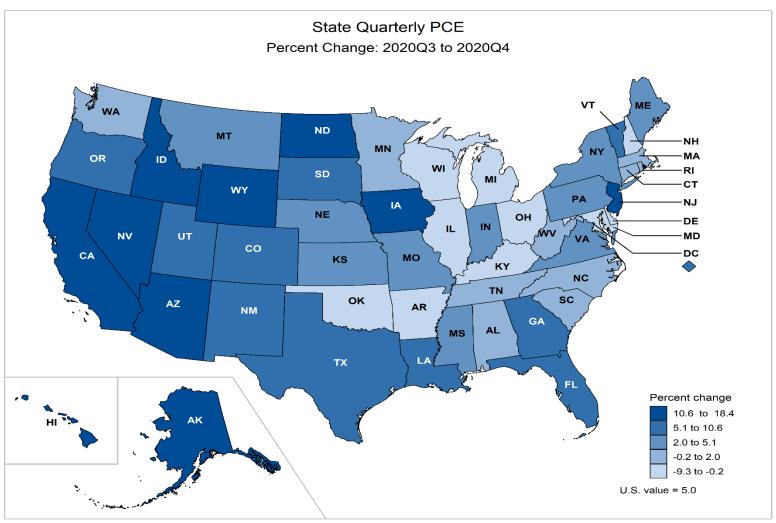


Quarterly PCE by state statistics

- Expenditure measures of GDP for state statistics
 - State private fixed investment (includes residential and nonresidential buildings, equipment, and software), (FY2023 budget)
 - Government consumption and gross investment by state
- Research and development (R&D) satellite account state statistics

Quarterly PCE by State





Research & Development by State



Proposed R&D Satellite Account by State Statistics, 2012-2020

Industry

Research and development

Business

Manufacturing

Pharmaceutical and medicine mfg.

Chemical mfg., excluding pharmaceutical and medicine Semiconductor and other electronic component mfg.

Other computer and electronic product mfg.

Motor vehicles, bodies and trailers, and parts mfg.

Aerospace products and parts mfg.

Other mfg.

Nonmanufacturing

Scientific research and development services

All other nonmanufacturing

Software publishers

Financial and real estate services

Computer systems design and related services

Other nonmanufacturing

Nonprofit institutions serving households (NPISH)

Universities and colleges

Other nonprofit institutions

Government

Federal

General government

National defense

Nondefense

State and local

- ✓ Value Added
- ✓ Employment
- ✓ Compensation

Research Activities



 Updating concepts, improving methodology, and identifying new source data for existing regional statistics

- Expanding or filling in statistics already measured at the regional level
 - Improving frequency (e.g., quarterly statistics)
 - Sub-state geographical boundaries (e.g., county statistics)
- Developing concepts for statistics not published at the regional level
 - Subnational measures of existing national-level statistics
 - Satellite accounts

Research Activities



- State income distributions and income inequality statistics, FY2023 budget
 - Working paper forthcoming
- Synthetic data, differential privacy, and privacy protection
 - SOI data / proprietors' income statistics Urban Institute
- Geography of consumption Consumption Zones
- State gross output/state Supply Use Tables

Distribution of Personal Income by State



State income distributions and income inequality statistics



- Based on the "personal income" concept
- Experimental results include:
 - Inequality statistics such as Gini coefficients and income quintiles
 - Distributional information such as median income and income percentiles for states and the District of Columbia
 - Regional Price Parity adjusted statistics too
- Data sources: Current Population Survey, adjusted/augmented with data from the Internal Revenue Service, the American Community Survey, and other sources

Other Activities



- Data science and alternative data sources
 - Applications for QCEW microdata (firm-level data)
 - Alternative data sources from payroll processors, credit card intermediaries, and budgeting service providers
 - Partnering with Opportunity Insights, the Census Bureau, and the Bureau of Labor Statistics
 - Alternative methods such as machine learning, nowcasting, and hierarchical modeling

Feedback and Discussion



Regional Directorate's focus



- Potential improvements or new regional statistics
 - Quarterly PCE by State Statistics
 - R&D by state Statistics
 - Any additional regional statistics to consider (State / County)
- Regional research priorities
 - Income Distribution
 - Consumption Zones
 - State Supply Use Tables
 - Additional regional research to consider