Beyond the Numbers:
An Inside Look at BEA’s Economic Data

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BEA’s Statistical Products

- **National Accounts**: Gross Domestic Product (GDP), Personal Income, Corporate Profits
- **International Accounts**: Balance of Payments Accounts, Trade in Goods and Services, Foreign Direct Investment
- **Industry Accounts**: Input-Output Accounts, GDP by Industry, Travel and Tourism Accounts
- **Regional Accounts**: GDP by State Accounts, State and Local Area Personal Income, PCE by State
Importance of BEA’s Products

• Economic analysis
  • Businesses
  • Households
  • Research
• Monetary policy
• Fiscal policy
• State and local planning and allocation of funds
Uses in Fiscal Policy

BEA Regional Income & Product Account Estimates Used to Distribute $366.5 Billion in Federal Funds, FY2014

Funded Programs Are Shown in Millions of Dollars

- National School Lunch Program: $11,481.9
- Children’s Health Insurance Program: $10,092.0
- Foster Care Title IV-E: $4,300.0
- Rehabilitation Services Vocational Rehabilitation Grants to States: $3,302.1
- Child Care and Development Block Grant: $2,344.2
- Adoption Assistance: $2,500.0
- Child Care Mandatory and Matching Funds of the Child Care and Development Fund: $2,909.7
- Block Grants for Prevention and Treatment of Substance Abuse: $1,719.7
- Career and Technical Education -- Basic Grants to States: $1,117.6
- Other programs: $2,090.2
- Title I Grants to Local Educational Agencies: $14,384.8
- Medicaid: $310,200.0
- All Other Funding: $56,280.5

Sources: Catalog of Federal Domestic Assistance, 2015 President’s Budget, Appalachian Regional Commission, Department of Agriculture, Department of Commerce, Department of Education, Department of Health and Human Services, Department of Homeland Security, Department of Interior.
• BEA produces some of the most closely watched economic indicators that move markets and make headlines.

• Mechanisms for ensuring the integrity of our statistics:
  • Well established security and release procedures
    • GDP Lock-up
  • Transparency of source data and estimation methods
  • Regular review of revisions
Quarterly GDP by Industry

- Quarterly statistics provide a more timely snapshot of how individual industries are faring and contributing to overall U.S. economic growth

- Provide a better barometer for turning points in the U.S. economy
Quarterly GDP by State

Chart 1. Percent Change in Real GDP by State, 2015:IV-2016:I, Seasonally Adjusted at Annual Rates

- Far West: 2.2
- Southwestern: 0.5
- Rocky Mountain: 1.7
- Plains: -0.8
- Great Lakes: 0.7
- Mideast: 1.0
- New England: 1.5
- Southeast: 1.5

Key:
- Blue: 2.1 to 3.9
- Medium Blue: 1.7 to 2.1
- Light Blue: 0.5 to 1.7
- Orange: -0.6 to 0.5
- Red: -11.4 to -0.6

U.S. Bureau of Economic Analysis
Regional Price Parities

What Does $100 Buy?
The Relative Value of $100 in Each State

Chart based on 2014 Real Gross Domestic Product by State
U.S. Bureau of Economic Analysis
Arts and Cultural Production

What is the economic value of THE ARTS?

- $698 Billion | What the arts contribute to the U.S. economy
- 4.7 Million | Number of workers in the arts and cultural sector
- $334.9 Billion | Total compensation of arts and culture workers
- $105 Billion | Total capital investments in arts and culture
- $869 Billion | Contribution to GDP from copyright-intensive industries
- 62 | Number of additional jobs created for every 100 from new demand for the arts

Big Data

• Goal is to integrate nontraditional, near-real-time data to enhance BEA’s statistics

• Looking to big data to:
  • Fill data gaps
  • Expand the geographic detail of our statistics
  • Facilitate passive data collection to improve the timelines and accuracy of our source data
Health Care Satellite Account

How much does the United States spend to treat different medical conditions?

Spending by medical condition

- Circulatory system (hypertension, heart attack, etc.)
- Musculoskeletal system (arthritis, back pain, etc.)
- Respiratory (pneumonia, asthma, etc.)
- Endocrine (diabetes, high cholesterol, etc.)
- Nervous system (alzheimer's, MS, epilepsy, etc.)
- Neoplasms (cancers, tumors, etc.)

Medical condition data, including spending and price indexes, are available at http://go.usa.gov/JNnP

Source: Health Care Satellite Account, Bureau of Economic Analysis
Health Care Survey Data Only

Price Index (2009=100)

- Circulatory system
- Musculoskeletal system
- Nervous system
- Neoplasms
- Endocrine
- Respiratory
Health Care Survey Data + “Big Data”

- Circulatory system
- Musculoskeletal system
- Nervous system
- Neoplasms
- Endocrine
- Respiratory

Price Index (2009=100)


Price Index increases from 2000 to 2010 for all systems.
Credit Card Data for Consumer Spending

![Graph of Clothing spending data over time]

- **SpendingPulse**
- **Census Retail Trade**

The graph illustrates the spending trends for clothing over the period from January 2010 to May 2014.
Data Dissemination

• BEA uses a variety of platforms to disseminate our statistics:
  - News Releases
  - Survey of Current Business
  - FAQs
  - BEA Blog
  - Twitter
  - Interactive Tables
  - Custom Charts
  - Custom Regional data maps

• Including through resources for developers:
  - APIs
  - BeaR
Developer Tools

- BEA supports 12 distinct APIs spanning National / Regional / Industry / and International aspects of the US economy
- Release of beaR Library will help developers more easily navigate our APIs

Coding from scratch

>200 lines of code
>180 minutes to get to intended data

Using beaR

< 20 lines of code
< 10 minutes to get intended data