# Importance of Data Sharing to BEA

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Interagency Business Data Sharing

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Measuring the Nation's Economy.



## Why Data Sharing Matters

- Government budget forecasts
  - Federal
    - GDI grew 0.4 percentage points faster than GDP (1995-2001)
    - FY 2006 CBO sensitivity research 1.0 percent understatement of GDP growth = ~\$530 billion
  - State
    - \$1.2 billion difference in growth of NY wages ('01-'02) between Census and BLS
    - Represents ~\$185 million in projected income tax
- Allocation of federal funds
  - Nearly \$200 billion in Federal funds allocated by state personal income
- Monetary and other economic policy



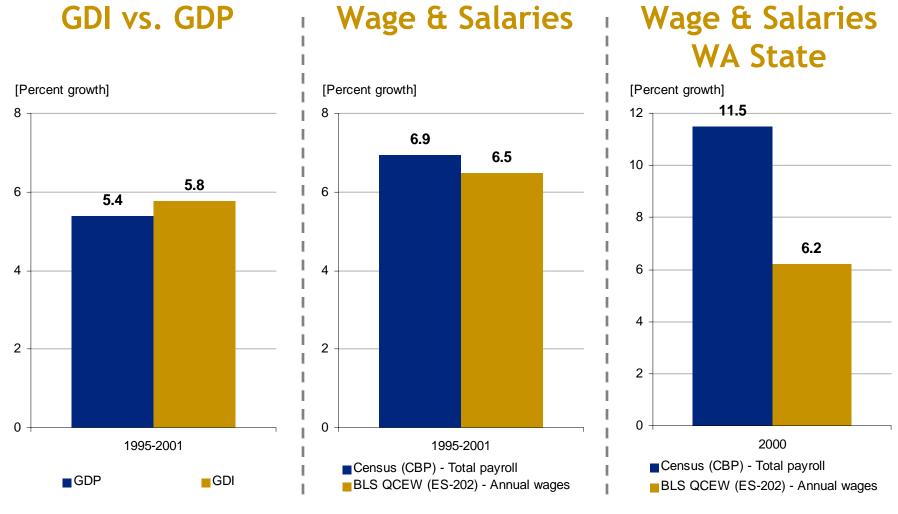
## **Sources of GDP Estimates**

#### [Billions of dollars]

Income side		Expenditure side			
	Primary		Primary		
	data source	2004		data source	2004
Labor compensation	BLS	\$6,693.4	Personal consumption expenditures	Census	\$8,214.3
Corporate profits & gov't enterprises	Census, SOI	973.6	Gross private domestic investment	Census	1,928.1
Proprietors' income and rental income	Census, SOI	1023.8	Gov't consumption exp. & gross invest.	Gov't, Census	2,215.9
Interest on assets, taxes, & misc. payments	S SOI, FRB	1,531.3	Net exports of goods and services	Census, BEA	-624.0
Depreciation	Census	1,435.3			
GROSS DOMESTIC INCOME		\$11,657.5			
Statistical discrepancy		76.8			
GROSS DOMESTIC PRODUCT		\$11,734.3	GROSS DOMESTIC PRODUCT		\$11,734.3

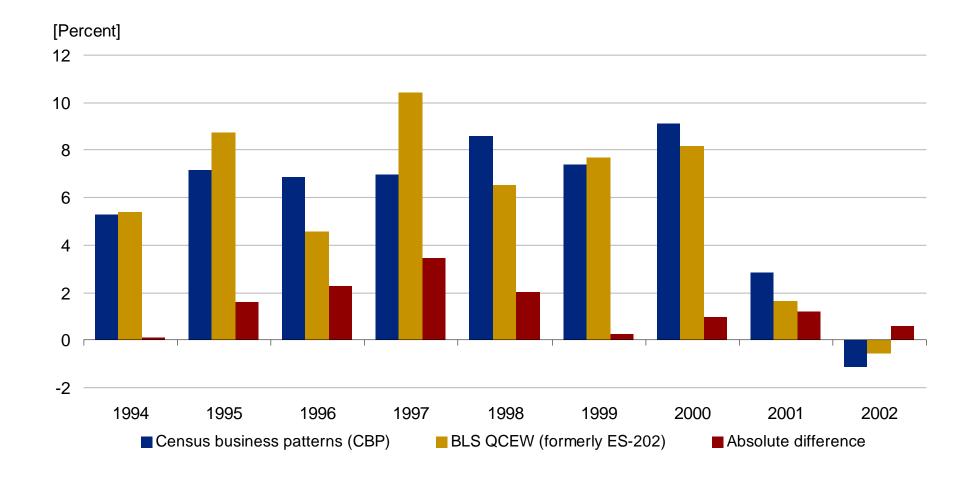


## GDI & GDP and Differences in Wage Data





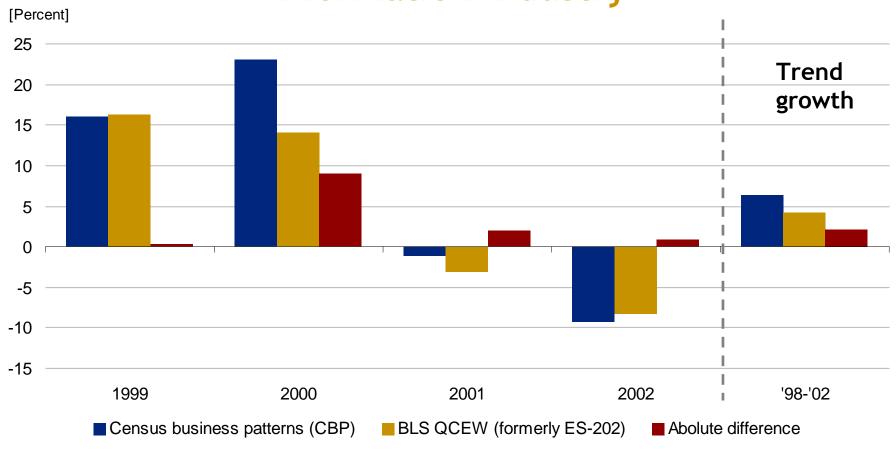
# Private Payroll Growth





## Private Payroll Growth — Industry

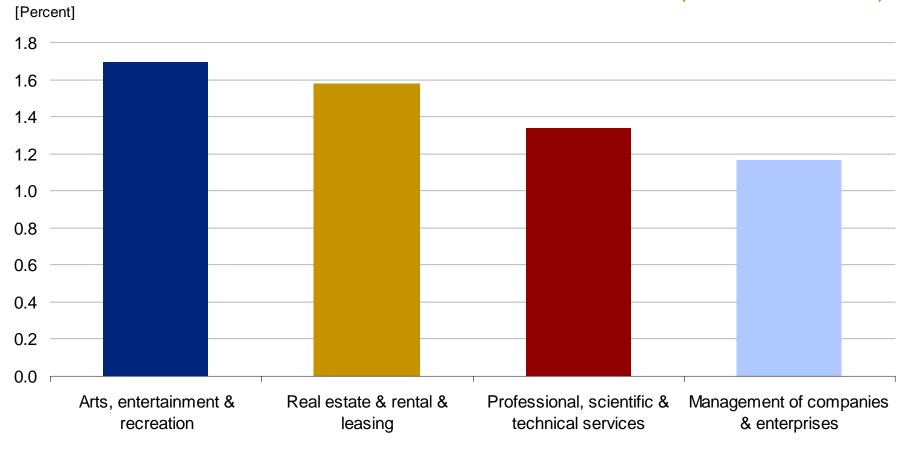






## Private Payroll Growth — Industry

#### Absolute Difference in Trend Growth (1998-2002)

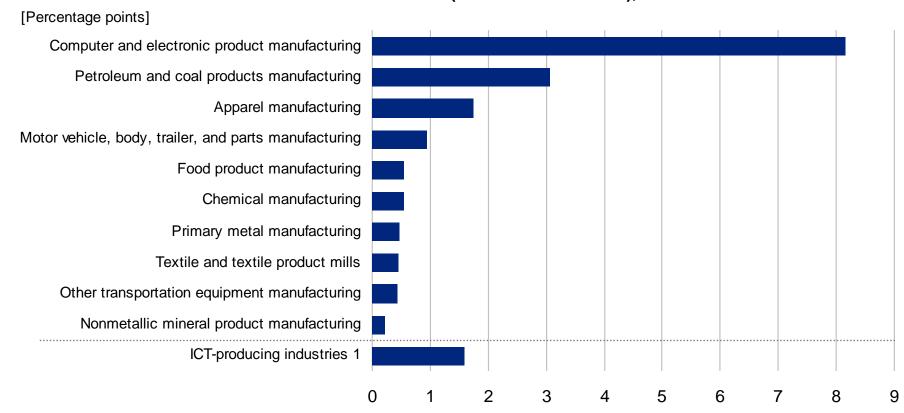




### Real Value Added Growth

#### **Selected Industries**

Published vs. Simulated (Absolute Difference), 2002



<sup>1.</sup> Consists of computer and electronic products; publishing industries (includes software); information and data processing services; and computer systems design and related services.



# **Gross Output Per Worker**

#### **Selected Industries**

[Dollars]

2002		2002 Output		
NAICS		per employee		Percent
Code	Industry	Census	BLS	diff.
211	Oil and gas extraction	991,595	853,547	-13.9
324	Petroleum and coal products	2,062,617	1,798,598	-12.8
486	Pipeline transportation	761,076	660,673	-13.2
515-517	Broadcasting and telecommunications	296,694	342,739	15.5
52-535	Finance, insurance, real estate, rental, & leasing	392,955	434,753	10.6

# R&D Expenditures — NSF Vs. BEA

	2001			
Industry	NSF All U.S.	BEA U.S. parent	% parent/ all U.S.	
Manufacturing	120,705	115,118	95	
Food	1,819	914	50	
Beverage and tobacco products	152	469	309	
Chemicals	17,892	31,927	178	
Nonmetallic mineral products	990	339	34	
Primary metals	485	484	100	
Fabricated metal products	1,599	554	35	
Machinery	6,404	8,561	134	
Computer and electronic products	47,079	38,356	81	
Electrical equip., appliances, & components	4,980	2,008	40	
Transportation equipment	25,965	25,147	97	
Furniture and related products	301	128	43	
Miscellaneous manufacturing	6,606	2,570	39	

Note: The industries Textiles, apparel, and leather; Wood products; Paper, printing and support activities; Petroleum and coal products; and Plastics and rubber products were excluded because a direct comparison was not available due to suppressed data.



## **Income Tax Revenue Forecasts**

#### **Selected States**

[Millions of dollars]

Effective tax
BLS to Census difference <sup>1</sup>

State	2001	2002	2003
Alabama	-11	3	-9
Arizona	76	52	38
Arkansas	-15	2	-23
California	-211	-139	25
Colorado	2	44	44
Connecticut	-34	-77	-79
Georgia	16	48	3
Idaho	31	18	7
Iowa	-16	-11	-17

Effective tax
BLS to Census difference <sup>1</sup>

State	2001	2002	2003
Minnesota	-123	-79	-101
Montana	9	13	16
New York	-709	-536	-468
Ohio	-175	-37	-54
Pennsylvania	-115	-10	-49
Utah	-9	-20	-29
Vermont	9	5	3
Virginia	38	32	13
West Virginia	30	22	7

<sup>1)</sup> Estimates are based on multiplying the difference between BLS and Census estimates of private wages and salaries by the estimated effective state and local tax. The effective state and local tax is estimated from BEA estimates of state personal income and state and local income tax.



## How Data Sharing Could Help: System-wide

- More consistent and improved sample frames
- More consistent classification by industry and region
- More accurate reporting by respondents from resolving anomalies
- More detailed and more consistent data with <u>no</u> increase in respondent burden
- Answers to policy and analytical questions through data matching while protecting confidentiality (FDI and offshoring)



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## How Data Sharing Could Help: BEA

- Aid in resolving the statistical discrepancy, income estimates, and difference across industries and regions
- Improve BEA early estimates that are based on preliminary survey results
- Improve BEA estimates during periods of economic change such as change in accounting rules and business practice
- Manage periods of data source disruptions such as Hurricane Katrina
- Improve BEA sample frame for international services, R&D, offshoring, etc.

