# BEA's State and Local Data Symposium -- Regional Data II

## Gross State Product and Regional Multipliers

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# Gross State Product: Why and When?

- Before the GSP estimates were produced, BEA's state labor and proprietors' income (earnings) estimates were the most comprehensive measures of state production.

- In an effort to accommodate our users' demand for a complete production measure, BEA produced a set of experimental GSP estimates that were consistent with the concepts and methods used to produce the national estimates of GDP, GDP by industry, and the Input-Output accounts.

- The first set of GSP accounts containing estimates for years 1963-1977 was released in May 1985. Beginning in 1996, the GSP estimates were released annually.

# What is Gross State Product (GSP)?

- GSP is the state counterpart of GDP for the nation.
- Total GSP is derived as the sum of gross state product originating in all the industries in the state.
- GSP is a value-added measure that is equivalent to gross output less intermediate inputs.
- Prior to the December 2004 benchmark release of GSP, the growth rate in real U.S. GSP closely matched the growth rate in gross domestic income (GDI). The benchmark integration with the GDP by industry accounts and the I-O accounts has reduced the difference between real GDP and real GSP.

# Relation of GSP to GDP

| Relation of GSP to GDP, 2002 | | | |
|---|---|---|---|
| [Billions of dollars] | | | |
| | **GDP**/1/ | **GSP** | Difference between GDP and GSP |
| | | | |
| **Compensation of employees** | **6,024.3** | **6,003.5** | **20.8** |
| Wages and salaries | 4,979.8 | 4,965.9 | 13.9 |
| Supplements to wages and salaries | | | |
| Employer contributions for employee pension and insurance funds | 680.4 | 674.2 | 6.2 |
| Employer contributions for government social insurance | 364.1 | 363.4 | 0.7 |
| | | | |
| **Taxes on production and imports** | **760.1** | **760.1** | 0.0 |
| | | | |
| **Less: Subsidies** | **38.2** | **38.2** | 0.0 |
| | | | |
| **Gross operating surplus** | **3,734.7** | **3,681.9** | 52.8 |
| | | | |
| **Equals: Gross domestic product** | **10,480.9** | **10,407.1** | 73.8 |
| | | | |
| 1. GDP data are based on the latest NIPA benchmark, and do not reflect revisions from the annual revision in July 2004. | | | |

# How Does GSP Differ from Personal Income?

| GSP | SPI |
| --- | --- |
| Place of work. | Place of residence. |
| Accrual basis. | Disbursement basis. |
| Includes employer contributions for social insurance. | Does not include employer contributions for social insurance. |
| Includes non corporate CCA. | Excludes non corporate CCA. |
| Excludes non corporate CCAdj. | Includes non corporate CCAdj. |
| Includes TOPI. | Does not include TOPI. |
| Includes corporate income. | Does not include corporate income. |
| Does not include receipts on assets. | Includes receipts on assets (dividends, interest). |
| Does not include transfer receipts. | Includes transfer receipts. |

# Major Benchmark Changes to the GSP Accounts

- Conversion from 1987 SIC to 1997 NAICS.
- New measure of output in the insurance, banking, real estate, and state and local government industries.
- Redefinition of the GSP income components.
- Reconciliation of the benchmark and annual national input output accounts with the GDP by industry accounts and the regional product accounts.

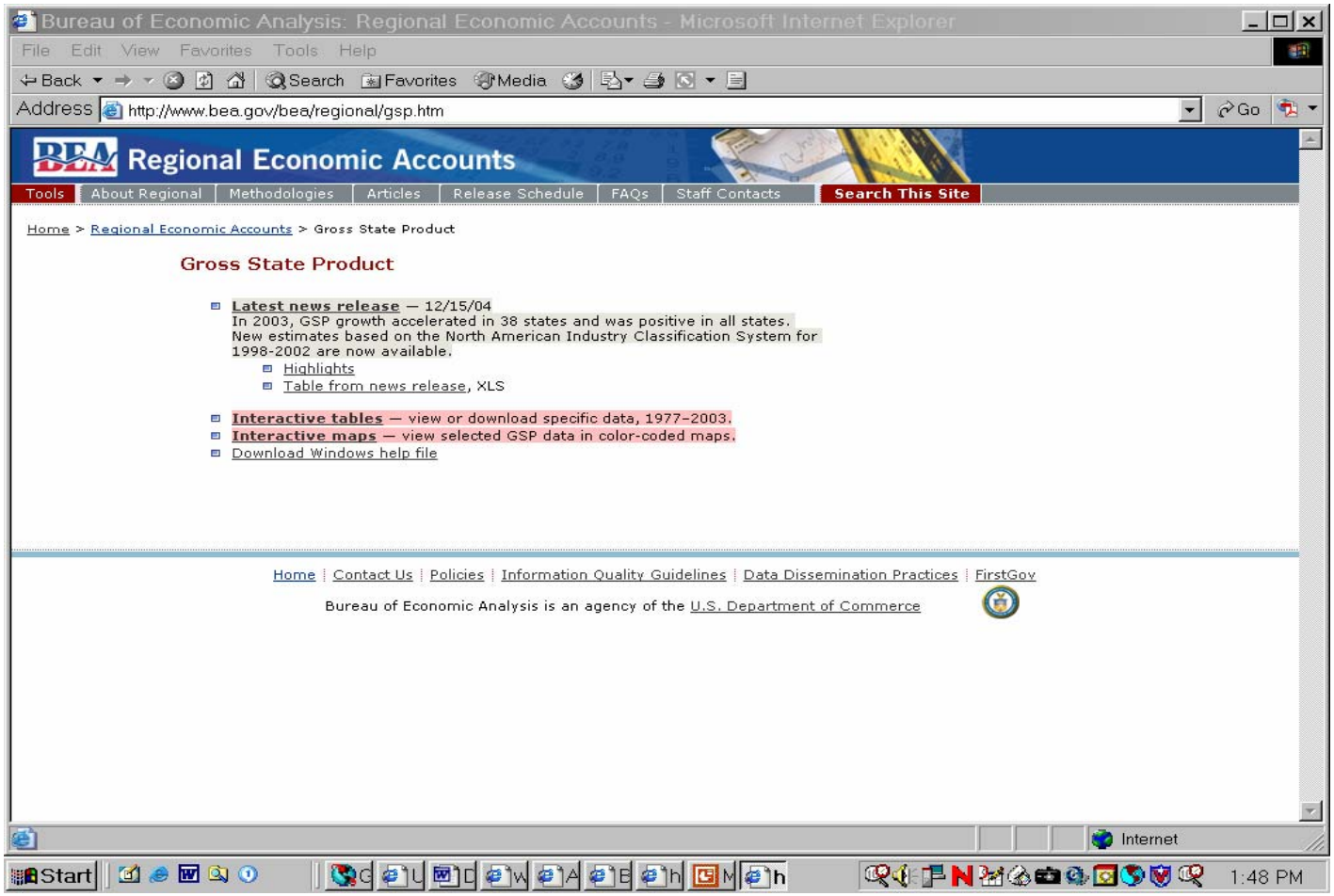
# Release schedule

- June 23, 2005
  - Revised 1997-2003 GSP by industry, by income component for 64 NAICS industries.
  - Accelerated 2004 Total GSP in current and real chained dollars.
- October 2005
  - Accelerated 2004 GSP for aggregate NAICS industries in current and real chained dollars.

# Future Research

- Extending GSP estimates back to 1963 (SIC).
- Extending GSP NAICS estimates back to 1987.
- Metro area product estimates for aggregate NAICS industries beginning with 1997.
- Improving and expanding the content of the accelerated GSP estimates.

# How to Obtain BEA's GSP Estimates



# What is RIMS II?

- Regional Input-Output Modeling System
- A non-survey regional input-output model
- RIMS was developed in the mid 1970's in response to the need for a model to conduct internal regional impact analysis
- RIMS II was developed in the 1980's
- Provides five types of input-output multipliers for any county or multi-county region in the United States ($275 per region)

# Type I and Type II Multipliers

- Type I multipliers:
  - Trace economic impact of industries only
  - Excludes impacts of household expenditures
  - Total requirements = direct + indirect
- Type II multipliers:
  - Trace economic impact of industries and household expenditures
  - Total requirements = direct + indirect + induced

# Final-Demand Change

- An increase or decrease in production not used to produce other goods and services
- For example:
  - Exports
  - Purchases by household consumers (Type I model only)
  - Purchases by government
  - Capital investments (e.g., new construction, computers, equipment)

# Examples of Final-Demand Changes

- Hotel services purchased by tourists
- Investment in new construction
- Investment in computers
- Production exported outside the economy

# What Can an Input-Output Model Do?

- Estimate the impacts of changes that do not affect the structure of the economy
  - An increase in the production of existing industries
  - A decrease in the production of existing industries
- Estimate how an industry is linked to the rest of the economy

# What Can't an Input-Output Model Do?

- Estimate the impacts of changes to the structure of the economy, e.g., productivity or price changes, or the introduction of a brand new industry into a region

- Estimate the impacts of very large final-demand changes

# RIMS II Updates

- After new releases of main data sources
- Updated annually using benchmark or annual I-O accounts
  - Benchmark updates are most comprehensive
  - Methodological changes often introduced
- Currently based on:
  - 1997 benchmark national I-O accounts and 2002 regional economic accounts data
  - 2002 annual national I-O accounts and 2002 regional economic accounts data
- Updating RIMS II to incorporate the 2003 annual I-O accounts and 2003 (expected release August 2005)

# Future Enhancements

- Accelerate RIMS II updates
- Value-added multipliers
- Improved methods for regionalizing RIMS II
- Interregional multipliers
- Web-based ordering and delivery

# How to Obtain RIMS II Multipliers

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### RIMS II Regional Input-Output Multipliers

**Regional Multipliers based on 1997 benchmark data and 2001 regional data are available f**

- **RIMS II User Workshop** NEW (Agenda, Registration)
- Brief description of RIMS II
- How RIMS II multipliers are used
- Industries for which regional multipliers are available
- Information on ordering RIMS II multipliers *(Go directly to orderform)*
- The RIMS II User Handbook (PDF version)
- Metropolitan Statistical Area (MSA) definitions

PDF requires Acrobat Reader (free from ADOBE)

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