



PI<sup>+</sup> v3.0  
TranSight v5.0  
Tax-PI v3.0  
Metro-PI v3.0  
E3+ v3.0

(changes from v2.5/4.5)

### *Major Economic Data Sources*

#### Employment

County	BEA (sector industries; 2001-2020) <sup>1</sup> CBP (detail industries; 2019)
State	BEA (summary industries; 2001-2020) <sup>2</sup> CBP (detail industries; 2019)
National	BEA (summary industries; 2001-2020) <sup>2</sup> CBP (detail industries; 2019) BLS EP (detail industries; 2001-2020 and 2030) <sup>3</sup>

#### Wages

County	BEA (total; 2001-2020) CBP (detail industries; 2019)
State	BEA (summary industries; 2001-2020) CBP (detail industries; 2019)
National	BEA (summary industries; 2001-2020) CBP (detail industries; 2019)

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<sup>1</sup> The BEA Regional Economic Accounts county data series used for v2.5/v4.5 is based on their 11/16/2021 release. The estimates for 2001-2006 are based on the 2002 North American Industry Classification System (NAICS). The estimates for 2007-2010 are based on the 2007 NAICS. The estimates for 2011-2016 are based on the 2012 NAICS. The estimates for 2017 forward are based on the 2017 NAICS.

<sup>2</sup> The BEA Regional Economic Accounts state data series used for v2.5/v4.5 is based on their 09/23/2021 release. The estimates for 2001-2006 are based on the 2002 North American Industry Classification System (NAICS). The estimates for 2007-2010 are based on the 2007 NAICS. The estimates for 2011-2016 are based on the 2012 NAICS. The estimates for 2017 forward are based on the 2017 NAICS.

<sup>3</sup> The BLS Employment Projections (EP) data used for PI<sup>+</sup> v2.5/v4.5 is based on their 09/08/2021 release.

### **Personal Income and Earnings**

County	BEA (components and summary industries; 2001-2020)
State	BEA (components and summary industries; 2001-2020)
National	BEA SPI (components and summary industries; 2001-2020) BLS EP (components; 2001-2020 and 2030) RSQE (components; 2022-2023) <sup>4</sup>

### **Compensation**

County	BEA (components and summary industries; 2001-2020)
State	BEA (components and summary industries; 2001-2020)
National	BEA (components and summary industries; 2001-2020)

### **Commuter Flows**

County to County	BEA (gross flow of earnings by county; 2001-2020) BEA (total number of workers commuting between counties of residence and counties of work; 1990, 2000) BEA (commuting patterns between counties of work and counties of residence by major industry; 2000) ACS (residence county to residence workplace county flows; 2009-2013)
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### **Technology Matrix**

National	BLS (detailed industries; 2001-2020 and 2030)
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### **Detailed Industry Policy Variables**

National	BEA Benchmark 2012 IO Table
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### **Final Demand**

State	BEA (consumption for major categories; 2001-2020)
National	BEA (components; 2001-2021) RSQE (components; 2022-2023) BLS EP (components and industry value added; 2001-2020, 2030)

### **GDP by Industry**

County	BEA GDP by County (21 major categories; 2001-2020)
State	BEA GDP by State (summary industries; 2001-2020)
National	BLS EP (detailed industries; 2001-2020 and 2030)

### **Occupation Matrix**

National	BLS EP (employment by industry and occupation; 2020 and 2030)
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### **Price Deflators**

State	BEA Implicit Price Deflators (aggregate; 2008-2019)
National	BEA Personal Income Price Deflator (aggregate; 2001-2020)
National	BEA Commodity Prices (detailed categories; 2001-2020)
National	BLS EP (detailed industries; 2001-2020 and 2030)

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<sup>4</sup> The 02/18/2022 RSQE Forecast (Prolonged Fallout) is used for v2.5/v4.5.

## ***Major Demographic Data Sources***

### **Population**

County	BEA (total; 2001-2020)
County	Census (age, sex, race; 2000-2020)

### **Demographic Components of Change**

County	Census (2000-2020)
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### **Labor Force**

County	BLS (total; 2000-2020)
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### **Natality Rates**

Nation	Census (2001-2100)
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### **Birth Rates**

State	CDC (2001-2020)
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### **Survival Rates**

Nation	Census (2001-2100)
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### **Net International Migrants**

Nation	Census (2001-2100)
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### **Participation Rates**

Nation	BLS (2001-2030)
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### **Active Military**

Base	DoD (total; 2001-2009)
State	DoD (total; 2005-2020)
Nation	DoD (total, sex, race; 2001-2020)
County	American Community Survey (2005-2019)

### **Military Dependents**

Nation	DoD (total; 2001-2005)
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### **Prisoners**

County	Census (sex, race, facility; 1990; 2000; 2010)
	Bureau of Justice Statistics (50 largest jail jurisdictions mapped to counties; 2001-2020)
	Bureau of Prisons (facilities mapped to counties; 2005-2020)
	Various state-specific correctional websites

### **College Enrollment**

County	Census (2000; 2010)
	American Community Survey (2005-2019)
State	National Center for Education Statistics (2000-2019)
National	National Center for Education Statistics (2000-2019)

## **Incorporation of BLS 2020-30 Employment Projections**

National projections include the input-output table, employment, output, value-added, labor productivity, and deflators by detailed industry; final demand by component; personal income by component; labor force; and occupations by detailed industry. The BLS 2020-30 Employment Projections predict higher growth rates than recent projections cycles and account for recovery from the low base year for 2020 due to the COVID-19 pandemic and its associated recession. Many industries are expected to experience cyclical recoveries in the earlier part of the projections decade as industry output and employment normalize, returning to their long-term growth patterns.

## **Updates to Local Area Personal Income**

From the BEA website:

“The 2020 estimates of local area personal income were impacted by the response to the spread of COVID-19, as governments issued and lifted "stay-at-home" orders and government pandemic assistance payments were distributed to households and businesses. The estimates for 2020 incorporate the results of BEA's annual update of county and metropolitan area personal income that was also released today. The annual estimates of county and metropolitan area personal income for 1998 to 2019 were revised. The update incorporates revised source data that are more complete and more detailed than previously available, the results of the July 2021 annual update of the National Income and Product Accounts, and the results of the September 2021 annual update of state personal income.”

## **Updates to GDP by County**

From the BEA website:

“The 2020 estimates of local area GDP were impacted by the response to the spread of COVID-19, as governments issued and lifted "stay-at-home" orders and government pandemic assistance payments were distributed to households and businesses. The estimates for 2020 incorporate the results of BEA's annual update of GDP by county and metropolitan area that was also released today. The annual estimates of county and metropolitan area GDP for 2001 to 2019 were revised. The update incorporates revised source data that are more complete and more detailed than previously available, the results of the July 2021 annual update of the National Income and Product Accounts, the September 2021 annual update of the GDP by industry statistics, the October 2021 annual update of the GDP by state statistics, and the results of the November 2021 annual update of personal income by county.”

## **Updated Personal Consumption Expenditures by State**

On December 14, 2021, BEA released official statistics of real personal consumption expenditures by state for the first time. This dataset provides 109 hierarchical consumption expenditures statistics for 1997 to 2020 that are mapped to the 75 REMI consumption commodity categories. REMI revised the regional personal consumption expenditure estimation according to this dataset.

From the BEA website:

“The PCE by state estimates were impacted by the response to the spread of COVID-19, as governments issued and lifted "stay-at-home" orders. This led to rapid changes in demand and consumers canceled, restricted, or redirected their spending. The update incorporates revised

source data that are more complete and more detailed than previously available. The update includes the results of the July 2021 annual update of the NIPAs and the September 2021 annual update of the state personal income statistics.”

### **Redesigned Home Window Interface**

- Simplified and streamlined home window to provide quick access to run new simulations.
- Forecasts and frequently used tiles can be pinned to the home window

### **User Preferences**

- Redesigned user preferences form
- Added many new preferences, especially global settings for viewing forecast results
- Forecast store local settings for viewing results

### **Policy Variable Selection**

- Search bar is more prominent for policy variable selection and searches produce more robust results. It displays recent searches, frequently used variables, and show suggested scenarios in addition to searching more content and finding better matches.
- Full list of policy variables sorted in alphabetical order or by concept can now be accessed from within any scenario

### **Redesigned Policy Variable Options**

- Options have most commonly used settings as default and alternative options are more clearly labeled with additional text explaining when to use them

### **Policy Variable Notes**

- Notes can be added by the user to policy variables and variable groups to document why the variables are being used

### **Detailed Industry and Custom Industry Employment Policy Variables**

- Values for detailed industries and custom industries can now be added as employment concepts in addition to sales concepts

### **Results Search Bar**

- Search bar for forecast results is more prominent and searches produce more robust results by searching visualization names, categories included in a visualization, and industry names. Search works with approximate matches and displays visualization path.

### **Results Browsing History**

- Added the ability to navigate forward or backward through visualization browsing history
- The entire browsing history can be displayed and favorites can be created from history items

### **Results Export to Database**

- Forecast results can be exported to certain types of database

### **Other Results Enhancements**

- Changed cursor icon to a hand when hovering over column headers to make it clear that they can be dragged and dropped to pivot tables
- Renamed 'All Ages' to show specific ages when viewing demographic totals
- Improved 'Add to Favorite Group' dialog
- Added button to 'Favorites Added' alert to jump to newly added favorite
- Added preview dialog for favorites to provide more options for customization