

PI⁺ v2.5 TranSight v4.5 Tax-PI v2.5 Metro-PI v2.5

(changes from v2.4/4.4)

Major Economic Data Sources

Employment

County	BEA (sector industries; 2001-2019) ¹
	CBP (detail industries; 2018)
State	BEA (summary industries; 2001-2019) ²
	CBP (detail industries; 2018)
National	BEA (summary industries; $2001-2019$) ²
	CBP (detail industries; 2018)
	BLS EP (detail industries; $2001-2019$ and 2029) ³

Wages

County	BEA (total; 2001-2019)
	CBP (detail industries; 2018)
State	BEA (summary industries; 2001-2019)
	CBP (detail industries; 2018)
National	BEA (summary industries; 2001-2019)
	CBP (detail industries; 2018)

Personal Income and Earnings

County	BEA (components and summary industries; 2001-2019)
State	BEA (components and summary industries; 2001-2019)

¹ The BEA Regional Economic Accounts county data series used for v2.5/v4.5 is based on their 11/17/2020 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.

 $^{^2}$ The BEA Regional Economic Accounts state data series used for v2.5/v4.5 is based on their 09/24/2020 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.

³ The BLS Employment Projections (EP) data used for PI⁺ v2.5/v4.5 is based on their 09/01/2020 release.

National	BEA SPI (components and summary industries; 2001-2019) BLS EP (components; 2001-2019 and 2029) RSQE (components; 2021-2022) ⁴
<u>Compensation</u> County State National	BEA (components and summary industries; 2001-2019) BEA (components and summary industries; 2001-2019) BEA (components and summary industries; 2001-2019)
<u>Commuter Flows</u> County to County	 BEA (gross flow of earnings by county; 2001-2019) 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)
<u>Technology Matrix</u> National	BLS (detailed industries; 2001-2019 and 2029)
Detailed Industry Policy V National	⁷ ariables BEA Benchmark 2012 IO Table
<u>Final Demand</u> State National	 BEA (consumption for major categories; 2001-2019) BEA (components; 2001-2020) RSQE (components; 2021-2022) BLS EP (components and industry value added; 2001-2019, 2029)
GDP by Industry County State National	BEA GDP by County (21 major categories; 2001-2019) BEA GDP by State (summary industries; 2001-2019) BLS EP (detailed industries; 2001-2019 and 2029)
<u>Occupation Matrix</u> National	BLS EP (employment by industry and occupation; 2019 and 2029)
<u>Price Deflators</u> State National National National	BEA Implicit Price Deflators (aggregate; 2008-2018) BEA Personal Income Price Deflator (aggregate; 2001-2019) BEA Commodity Prices (detailed categories; 2001-2019) BLS EP (detailed industries; 2001-2019 and 2029)

⁴ The 02/19/2021 RSQE Forecast (Prolonged Fallout) is used for v2.5/v4.5.

Major Demographic Data Sources

Population County County	BEA (total; 2001-2019) Census (age, sex, race; 2000-2019)	
Demographic Components County	<u>of Change</u> Census (2000-2019)	
<u>Labor Force</u> County	BLS (total; 2000-2019)	
<u>Natality Rates</u> Nation	Census (2001-2100)	
Birth Rates State	CDC (2001-2019)	
<u>Survival Rates</u> Nation	Census (2001-2100)	
<u>Net International Migrants</u> Nation	Census (2001-2100)	
Participation Rates Nation	BLS (2001-2029)	
Active Military		
Base	DoD (total; 2001-2009)	
State	DoD (total; 2005-2019)	
Nation	DoD (total, sex, race; 2001-2018)	
County	American Community Survey (2005-2019)	
Military Dependents		
Nation	DoD (total; 2001-2005)	
Prisoners		
County	Census (sex, race, facility; 1990; 2000; 2010) Bureau of Justice Statistics (50 largest jail jurisdictions mapped to counties; 2001-2018) Bureau of Prisons (facilities mapped to counties; 2005-2019) Various state-specific correctional websites	
<u>College Enrollment</u>		
County	Census (2000; 2010)	
State	American Community Survey (2005-2019)	
State National	National Center for Education Statistics (2000-2018) National Center for Education Statistics (2000-2018)	
inational	National Center for Education Statistics (2000-2016)	

Incorporation of BLS 2019-29 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 2019-29 Employment Projections do not include impacts of COVID-19 pandemic and response efforts (Kevin S. Dubina, Janie-Lynn Kim, Emily Rolen, and Michael J. Rieley, "Projections Overview and Highlights, 2019–29," Monthly Labor Review, September 2020.)

Updates to Local Area Personal Income

From the BEA website:

"The estimates of 2019 local area personal income incorporate the results of BEA's annual update of local area personal income. The annual estimates for 2010-2018 were revised. The update incorporates revised source data that are more complete and more detailed than previously available, the results of the July 2020 annual update of the National Income and Product Accounts, and the results of the September 2020 annual update of state personal income."

Updates to GDP by County

From the BEA website:

"The estimates of 2019 GDP by county and metropolitan incorporate the results of BEA's annual update of GDP by county. The annual estimates for 2001 to 2018 were revised. The update incorporates revised source data that are more complete and more detailed than previously available, the results of the July 2020 annual update of the National Income and Product Accounts, the September 2020 annual update of the GDP by industry and GDP by state statistics, and the results of the November 2020 annual update of personal income by county."

Updated Occupational Classification

Classification of occupations are extensively revised in the BLS 2019-2029 Occupational Employment Projections data. The BLS Occupational Employment Statistics (OES) program began implementing the 2018 Standard Occupational Classification (SOC) system starting with data collection for the November 2018 panel. The 2019-29 Occupational Employment Projections data is based on a hybrid structure that is a combination of the 2010 SOC and 2018 SOC. A spreadsheet showing the list of OES 2019 occupations and the occupations on which they are based is available at <u>www.bls.gov/oes/oes 2019 hybrid structure.xlsx</u>. REMI has revised the detailed occupation list according to the BLS OES 2019 estimates.

Redesigned Inputs Layout

- Several tiles have been removed from main simulation inputs screen to help focus on most important tiles
- Inputs Search feature added to search for variables, details, topics, and scenarios. It can help to find exact matches and related topics.
- 'Recently Used' tile added for quick access to recently used and most frequently used policy variables

New Results

Direct, Indirect, Induced, and Dynamic Employment and Output results have been added along with Type I, Type II, and Dynamic Multipliers. This replaces the 'Calculate Multipliers' study type.

Redesigned Results Data Layout

- The 'Snapshots' and 'Profile' tables have been replaced by 'Key Results' which focuses on more relevant summary tables
- Analytical Graphs are displayed by Model Block
- Other changes to make it easier to find key tables

Other Results Enhancements

- Show Line Chart button will show a line chart with any table
- 'Fixed Local' unit type added as a unit conversion option to be consistent with policy variable options
- Configuration button added to column headers on tables for quick access to options for changing aggregations, adding totals, and selecting details for each field.
- A filter box has been added to the detail selection
- 'Favorites' save more settings and a 'Save' button has been added

Editable Forecast Options for Default Regional Control

For each national control forecast, a default regional control is automatically created. The iteration settings and the convergence criteria can now be changed for the default regional control forecast.

Multiple Regions Selection for Tax Variables

Sales Tax, Gas Tax, and Property Tax policy variables can now be created with grouped regions.

Other Interface Enhancements

- Forecast tabs have been enhanced with highlighting and underlining of links
- A new .xml format has been added for importing and exporting forecast data
- Additional right-click menus have been added and additional options have been added to existing menus.
- Custom Variable creation form can use conditional formatting to draw data bars or use color scales to better highlight the difference between the input-output coefficients
- Import Settings dialog has been redesigned to be less cluttered and more intuitive
- Search box added to policy variable detail lists to help find specific details when specifying policy variables
- Added option to 'Weighted Detail Spreading' custom result type to allow adding multiple subcategories at once and to pasting multiple names.