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Local Area Personal Income for 2016

By Marcelo F. Yoon

P ERSONAL INCOME grew faster in the metropolitan portion of the United States (2.5 percent) than in the nonmetropolitan portion (1.0 percent) in 2016. The percent change across counties ranged widely, from –40.8 percent in Kenedy County, Texas, to 27.1 percent in Tillman County, Oklahoma. However, more than three-fourths of the metropolitan counties and almost half of the nonmetropolitan counties grew between 1.0 percent and 6.0 percent (chart 1). Inflation, as measured by the national price index for personal consumption expenditures, was 1.2 percent in 2016.

The local area personal income estimates presented in this article continue the successively more detailed series of data releases from the Bureau of Economic Analysis (BEA) that depict the geographic distribution of the nation's personal income for 2016. National estimates of personal income for 2016 were released in January 2017, followed by preliminary state personal income estimates in March. The local area personal income estimates provide the first glimpse of personal income for 2016 in counties and metropolitan statistical areas (MSAs). The geographic picture will be completed with the release of real personal income for

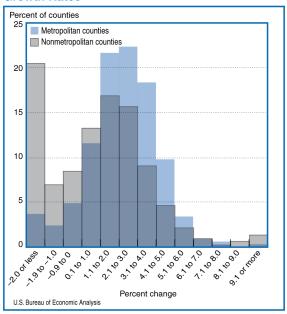
1. Personal income, which is measured in current dollars, is the sum of net earnings by place of residence, property income, and personal current transfer receipts.

states and metropolitan areas in May 2018. The estimates discussed in this article incorporate the results of the annual updates of the national income and product accounts (NIPAs) and the state personal income accounts, which were released in July 2017 and September 2017, respectively.

Metropolitan and Nonmetropolitan Comparison

With 14 percent of the U.S. population and 12 percent of the wage and salary employment, the nonmetropolitan portion of the country accounted for just over 9 percent of the nation's earnings in 2016.⁴ However, reflecting the rural location of much mining and farming, the nonmetropolitan portion of the United States

Chart 1. Distribution of Personal Income Growth Rates



^{2.} Both Kenedy County and Tillman County are nonmetropolitan counties. Personal income growth rates for metropolitan counties ranged from –20.1 percent in Oldham County, Texas (in the Amarillo metropolitan statistical area (MSA)), to 15.9 percent in Turner County, South Dakota (in the Sioux Falls MSA).

^{3.} BEA prepares estimates of personal income for 3,113 of the counties in the United States. Some small counties (mostly in Virginia but also in Hawaii) are combined with a larger, nearby county so that geographic coverage is complete (for details, see the appendix to the *Local Area Personal Income Methodology* on BEA's Web site). For statistical purposes, nonmetropolitan counties are those counties that remain after MSAs have been delineated by the Office of Management and Budget (OMB). According to the OMB, an MSA has at least one urbanized area of 50,000 or more residents plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. MSAs are defined in terms of whole counties. Of the counties for which BEA prepares personal income estimates, 1,147 are metropolitan and 1,966 are nonmetropolitan.

^{4.} BEA used the midyear (July 1) population estimates from the Census Bureau for vintage year 2016 (V2016), which were released in March 2017.

accounted for nearly a third of national earnings in the natural resource industries (table A). The nonmetropolitan portion also accounted for 14.9 percent of earnings in manufacturing and utilities, 11.7 percent of earnings in government, and 11.1 percent of earnings in transportation and warehousing. In contrast, relatively little—2.6 percent—of earnings in the information industry was generated in nonmetropolitan counties.

Personal income growth in the metropolitan portion decelerated to 2.5 percent in 2016 from 5.3 percent in 2015 (table B). Much of the deceleration was attributable to earnings—which grew 2.8 percent in 2016, down from 4.7 percent—and to property income (dividends, interest, and rent)—which increased 1.1 percent in 2016 after surging 7.0 percent in 2015 and 9.2 percent in 2014. Personal income growth in the

Table A. Industrial Structure of Metropolitan and Nonmetropolitan Portions of the United States for 2016

	place of	ngs by of work of dollars)	Industry's area's tota (per	Nonmetro- politan share of national		
	Metro- politan	Nonmetro- politan	Metro- politan	Nonmetro- politan	earnings (percent)	
Natural resources 1	157.0	76.0	1.5	7.4	32.6	
Construction	610.1	70.2	5.9	6.8	10.3	
Manufacturing and utilities	976.6	171.2	9.5	16.7	14.9	
Wholesale and retail trade	1,126.6	110.1	11.0	10.7	8.9	
Transportation and warehousing	364.7	45.7	3.5	4.5	11.1	
Information	375.5	9.9	3.7	1.0	2.6	
Finance and insurance	716.8	28.7	7.0	2.8	3.8	
Real estate and rental and leasing	256.3	15.4	2.5	1.5	5.7	
Business services 2	1,844.3	70.6	17.9	6.9	3.7	
Education, health care, and social						
assistance	1,337.9	119.4	13.0	11.7	8.2	
Leisure, hospitality, and other 3	851.7	86.6	8.3	8.5	9.2	
Government and government						
enterprises	1,662.3	221.2	16.2	21.6	11.7	
Local	889.0	134.8	8.6	13.2	13.2	
Total	10,279.7	1,025.0	100.0	100.0	9.1	

nonmetropolitan portion of the United States also decelerated, but not as much.

Population in the metropolitan portion of the United States grew 0.8 percent in 2016, slightly less than the 0.9 percent increase in 2015 (table C). Growth in wage and salary employment decelerated to 1.7 percent in 2016, down from 2.2 percent in 2015. Employment growth in the nonmetropolitan portion of the United States slipped 0.1 percent in 2016 following an increase of 0.5 percent in 2015. Nonmetropolitan population was mostly unchanged in 2016.

County Highlights

Teton County, Wyoming, had the highest per capita personal income in 2016, \$199,635, more than four times the national average of \$49,246 (chart 2). The next three counties with the highest per capita personal income were Shackelford, Texas (\$162,378); New York, New York (\$156,048); and Pitkin, Colorado (\$128,738). The major sources of personal income in these counties differ substantially (table D). Highlights for these four counties include the following:

- Dividends, interest, and rent accounted for slightly less than three-quarters of the personal income in Teton County.
- Property income was largely responsible for Pitkin County's high per capita personal income; it

Table C. Population and Jobs for U.S. Metropolitan and Nonmetropolitan Portions

	Percent	change	Change		
	2015	2016	2015	2016	
Metropolitan portion: Population Wage and salary jobs	0.9 2.2	0.8 1.7		2,251,056 2,267,543	
Nonmetropolitan portion: Population Wage and salary jobs	-0.1 0.5	0.0 -0.1	-26,613 83,877	-20,161 -20,543	

Table B. Personal Income Change by Component for U.S. Metropolitan and Nonmetropolitan Portions

	Percent change				Dollar change (billions of dollars)			
	Personal income	Net earnings	Dividends, interest, and rent	Transfer receipts	Personal income	Net earnings	Dividends, interest, and rent	Transfer receipts
2014–2015								
United States	5.0	4.3	6.8	5.5	736.3	403.5	192.8	140.0
Metropolitan portion	5.3	4.7	7.0	5.7	693.7	393.3	180.0	120.4
Nonmetropolitan portion	2.5	1.0	4.3	4.6	42.6	10.2	12.8	19.6
2015–2016								
United States	2.3	2.5	1.2	3.1	365.1	246.0	35.1	84.0
Metropolitan portion	2.5	2.8	1.1	3.2	348.5	246.9	29.3	72.3
Nonmetropolitan portion	1.0	-0.1	1.9	2.6	16.6	-0.9	5.8	11.7

Consists of farm; forestry, fishing, and related activities; and mining.
 Consist of professional, scientific, and technical services; management of companies and enterprises; and administrative and waste management services.

3. Consists of arts, entertainment and recreation; accommodation and food services; and other services.

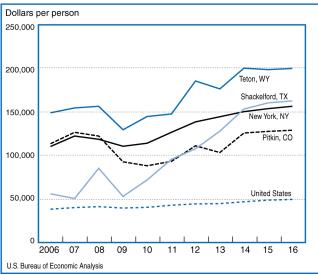
except public administration.

accounted for roughly 62 percent of its personal income in 2016.

- Earnings accounted for 84 percent of the personal income in Shackelford County and exceeded \$130,000 per person (table D). Mining, quarrying, and oil and gas extraction accounted for nearly 90 percent of earnings in 2016 in Shackelford.
- •Both property income and earnings contributed to New York County's high per capita personal income. New York County's property income and earnings were roughly three times and five times higher than their respective U.S. averages. The small nonmetropolitan populations of Teton County (23,191 residents), Shackelford County (3,315), and Pitkin County (17,752) in 2016 contrast sharply with New York County's 1.6 million residents.

Wheeler County, Georgia, had the lowest per capita personal income of all counties in 2016 (chart 3). Its per capita personal income of \$16,267 was about a third of the national average of \$49,246 (table E). Part of the reason for its low per capita personal income was the large share of its population living in group quarters—almost a third. Many group quarter residents are prisoners with little income. The relatively low per capita personal income in Union County, Florida, and Bledsoe County, Tennessee, can also be explained by their relatively large group quarter

Chart 2. Counties With the Highest Per Capita Personal Income



populations. Ziebach County, South Dakota, had the second lowest per capita personal income in the nation in 2016, due to large declines in farm proprietors' income, which began in 2014.⁶

Source Data

The main 2016 county-level data used by BEA to prepare the estimates of local area personal income presented in this article were wage and salary data from

Table D. Counties With the Highest Per Capita Personal Income for 2016

[Dollars per person]

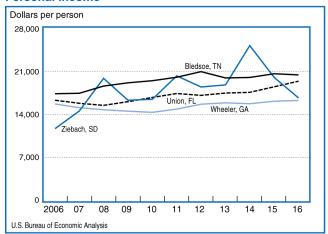
	Teton, Wyoming	Shackelford, Texas	New York, New York		U.S. average
Personal income Net earnings by place of	199,635	162,378	156,048	128,738	49,246
residence	46,907	136,484	93,397	43,754	31,148
Dividends, interest, and rent	147,447	16,045	50,622	79,750	9,531
Personal current transfer receipts	5,281	9,849	12,029	5,234	8,567

Table E. Counties With the Lowest Per Capita Personal Income for 2016

[Dollars per person]

	Wheeler, Georgia	Ziebach, South Dakota	Union, Florida	Bledsoe, Tennessee	U.S. average
Personal income Net earnings by place of	16,267	16,681	19,374	20,353	49,246
residence	7,458	7,384	9,853	9,302	31,148
Dividends, interest, and rent	2,263	3,608	3,104		9,531
Personal current transfer receipts	6,545	5,689	6,418	8,404	8,567

Chart 3. Counties With the Lowest Per Capita Personal Income



^{5.} Group quarters are defined as a place where people live or stay in a group living arrangement that is owned or managed by an entity or organization providing housing and services for the residents. They include college residence halls, residential treatment centers, skilled nursing facilities, group homes, correctional facilities, and workers' dormitories.

^{6.} Farm proprietors' income fell 87.5 percent in 2015 and 58.3 percent in 2014, mainly driven by a 38 percent decline in cattle prices.

the Bureau of Labor Statistics, benefits paid by the Social Security Administration, Medicare enrollment and fee-for-service expenditure data from the Centers for Medicare and Medicaid Services, and Medicaid payments from state departments of social services. In addition, IRS tabulations of 2015 federal income tax returns were used, primarily for dividends, interest, nonfarm proprietors' income, and the residence adjustment.⁷ Other 2015 county-level data were used to prepare estimates of various components of local area personal income, including the following (table F):

• For local area farm income, farm cash receipts, government payments, crop production, livestock

- stocks, and crop insurance indemnity payments by county for 2016 from the U.S. Department of Agriculture and state offices of agricultural statistics were used.
- For military earnings, the number of full-time military and Coast Guard personnel by county for 2016 from the Departments of Defense and Homeland Security was used.
- For state unemployment insurance compensation, county-level data for 2016 from state employment security agencies were used.
- For a few small components of personal income, population (excluding population in group quarters) by county for 2016 from the Census Bureau was used to allocate state estimates to the counties.

Acknowledgments

The annual estimates of local area personal income were prepared by the Regional Income Division under the direction of Mauricio Ortiz, Chief. Methodological research and analysis of the estimates was provided by David G. Lenze. Joel D. Platt, Associate Director for Regional Economics, provided general guidance. The preparation of the revised estimates was a division-wide effort.

The annual estimates of wages and salaries, supplements to wages and salaries, and farm proprietors' income were prepared by the Compensation Branch, under the supervision of Marcelo F. Yoon, Chief. Major responsibilities were assigned to Peter Battikha, Michael L. Berry, John D. Laffman, David G. Lenze, and Paul K. Medzerian. Contributing staff members were Daniel R. Corrin, Terence J. Fallon, David Guo, Hong Han, Michelle A. Harder, Nayana S. Kollanthara, Nik Manohar, Krishna J. Parajuli, Ross A. Stepp, and Troy P. Watson.

The estimates of nonfarm proprietors' income, prop-

erty income, personal current transfer receipts, contributions for government social insurance, and the adjustment for residence were prepared by the Regional Income Branch, under the supervision of Lisa C. Ninomiya, Chief. Major responsibilities were assigned to Brian J. Maisano, James P. Stehle, Matthew A. von Kerczek, and Steven L. Zemanek. Contributing staff members were Michael Bentley, Suet M. Boudhraa, Ernie Enriquez, Solomon Kublashvili, Toan A. Ly, Elizabeth C. McCormack, Nathaniel R. Milhous, W. Timothy McKeel, and Jesse E. Park.

The public use tabulations and data files were assembled and the tables were prepared by the Data and Administrative Systems Group, under the direction of Elizabeth P. Cologer and Nicholas R. Empey. Major responsibilities were assigned to Jeffrey L. Newman, Michael J. Paris, and Callan S. Swenson. Contributing staff members were Melanie Carrales, Jake C. Dillon, and Jonas D. Wilson.

^{7.} For details about the estimation methodology and data sources, see *Local Area Personal Income Methodology* on BEA's Web site.

Table F. County Source Data Used to Estimate Local Area Personal Income 1

Wages and salaries by industry In general	BLS Quarterly Concus of Employment and Magas data
Farm	USDA Census of Agriculture data
Agriculture and forestry support activities	USDA Census of Agriculture data.
Rail transportation	. RRB payroll and employment data; Census Bureau <i>Journey to Work</i> (Census of Population) data.
Educational services	. Census Bureau Countý Business Patterns payroll data; State departments of education employment data; DOE Private School Universe Survey employment data; Official Catholic Directory number of teachers in religious orders data.
Membership associations and organizations	. Household population data ²
Private households	. Household population data; ² Census Bureau <i>Journey to Work</i> (Census of Population) data.
Military	DOD personnel data; DHS Coast Guard personnel and payroll data; Household population data. ²
State and local government	. Census Bureau American Community Survey wage data; RRB payroll and employment data.
Employer contributions for employee pension and insurance funds by industry	
All industries	BEA estimates of wages and employment. ³
Employer contributions for government social insurance by industry	
All industries	BLS state unemployment insurance programs employer contributions data.
Proprietors' income	
Farm	. USDA Census of Agriculture data; USDA National Agriculture and Statistic Service crop production and livestock
	stocks data; Cash receipts from state offices of agricultural statistics; USDA Farm Service Agency and Natural Resource Conservation Service government payments to farmers data; USDA Risk Management Agency crop indemnity payments data. IRS data on net profits of sole proprietorships and partnerships.
Nonam mustres	. In a data of thet profits of sole proprietorships and partnerships.
Residence adjustment	. Census Bureau Journey to Work (American Community Survey) employment and wage data; IRS wage data.
Dividends, interest, and rent	IRS income tax returns data on dividends, taxable interest, and gross rents and royalties; OPM federal civilian retirement payments data; DOD military retirement payments data; Census Bureau Census of Housing data on the aggregate gross rental value of owner-occupied single family dwellings and number of mobile homes; USDA gross rental value of farm dwellings data.
Personal current transfer receipts	SSA Social Security and Supplemental Security Income enrollees and benefits data; CMS data on the number of enrollees in the Medicare Hospital Insurance, Supplementary Medical Insurance, and Part D programs; CMS Medicare Advantage fee-for-services expenditure data; data from the Treasury Department's USASpending.gov (higher education student assistance and railroad worker retirement benefits); Census Bureau Small Area Income and Poverty Estimates (persons and children age 0–17 in poverty and number of Supplemental Nutritional Assistance Program recipients); Census Bureau American Indian and Alaska Native Alone population, and household population data; DOD Tricare payments data; IRS refundable income tax credit data; Number of unemployed persons from the BLS Local Area Unemployment Statistics program; DVA veterans pension, disability, life insurance, and readjustment benefits data and number of pension and disability beneficiaries; NSF federal fellowship benefits data; Federal Reserve Bank of New York data on the number of mortgage debtors, per debtor mortgage debt balance and percent of mortgage debt in delinquency; Medicaid payments, Children's Health Insurance Program enrollment, Supplemental Nutritional Assistance Program benefits, energy assistance payments, general assistance benefits, and family assistance benefits data from the state departments of social services; State unemployment insurance compensation data from the state employment security agencies.
Employee and self-employed contributions for government social insurance	CMS Medicare Parts B and D enrollment data; Census Bureau American Community Survey veteran population data; Civilian population age 18 and over data. ⁴

 ^{1.} BEA prepares some county estimates by aggregating source data available by ZIP code.
 2. Household population for counties is calculated as the difference between the Census Bureau population and the Census Bureau population in group quarters estimates.
 3. See the Local Area Personal Income Methodology for the data sources used by BEA to estimate employment.
 4. Civilian population for counties is based on Census Bureau population, Coast Guard employment, and Department of Defense active duty military employment data, adjusted to a place of residence basis.
 BEA Bureau of Economic Analysis
 BLS Bureau of Labor Statistics
 CMS Centers for Medicare and Medicaid Services
 DHS Department of Homeland Security

DOD Department of Defense DOE Department of Education DVA Department of Veterans Affairs IRS Internal Revenue Service NSF National Science Foundation OPM Office of Personnel Management RRB Railroad Retirement Board SSA Social Security Administration USDA U.S. Department of Agriculture

Alternative Measures of County Employment and Wages

Three widely used measures of county employment and wages by place of work are (1) employment and payroll in the County Business Patterns (CBP) series from the Census Bureau, (2) employment and wages from the Quarterly Census of Employment and Wages (QCEW) program from the Bureau of Labor Statistics (BLS), and (3) wage and salary disbursements and employment from the Bureau of Economic Analysis (BEA). These measures differ in source data and coverage.

The CBP data are derived from Census Bureau business establishment surveys and federal administrative records. The QCEW data are tabulations of monthly employment and quarterly wages of workers who are covered by state unemployment insurance programs or by the unemployment insurance program for federal employees.1 The BEA estimates of employment and wages are primarily derived from the BLS data; the estimates for industries that are either not covered or not fully covered in the QCEW are also based on supplemental data from other agencies, such as the Department of Defense, the U.S. Department of Agriculture, and the Railroad Retirement Board.

The coverage of the Census Bureau data differs from that of the BLS data primarily because the Census Bureau data exclude most government employees and because the BLS data cover civilian government employees.² The CBP data also exclude several private industries that are partly covered by the QCEW: crop and animal production; rail transportation; insurance and employee benefit funds; trusts, estates, and agency accounts; and private households. However, the CBP data cover the employees of educational institutions, membership organizations, and small nonprofit organizations in other industries more completely than the BLS data.3 In addition, the Census Bureau reports employment only for the month of March; the BLS employment data are quarterly and annual averages of monthly data.

In 2001, both BLS and BEA began to include employees of Indian tribal councils in local government. These employees were previously included in the relevant private industries.⁴ In the Census Bureau data, these employees are still classified in private industries.

BEA estimates of employment and wages differ from the

BLS data because BEA adjusts the estimates to account for employment and wages that are not covered or that are not fully covered by the unemployment insurance programs. BEA adds estimates of employment and wages to the BLS data to bridge small gaps in coverage for nonprofit organizations that do not participate in the unemployment insurance program (in several industries), for students and their spouses employed by colleges or universities, for elected officials and members of the judiciary, for interns employed by hospitals and by social service agencies, and for insurance agents classified as statutory employees. In addition, BEA uses supplemental source data to estimate most, or all, of the employment and wages for the following: farms, farm labor contractors and crew leaders, private households, private elementary and secondary schools, religious membership organizations, rail transportation, and military. BEA also adjusts for employment and wages subject to unemployment insurance, but not reported by employers. Other adjustments to wages include estimates for unreported tips, judicial fees paid to jurors and witnesses, compensation of prison inmates, and marriage and license fees paid to justices of the peace.5

The Census Bureau released 2015 data for total employment and payrolls for counties on its Web site on April 20, 2017. BLS released county data on total employment and average weekly pay for 2016 on its Web site on June 7, 2017. BEA released estimates for 2016 and revised estimates for 2014-2015 of total wage employment and total wage and salary disbursements for counties on its Web site on November 16, 2017.

5. For a detailed description of the sources and methods used to prepare the estimates, visit BEA's Web site.

National Totals of BEA County Estimates of Wages and Salaries and CBP Payrolls and QCEW Wages

[Billions of dollars]

	2014	2015	2016
Total CBP payrolls	5,940.2	6,253.5	n.a.
Plus: Differences in coverage:			
QCEW civilian government wages 1	1,077.2	1,116.9	1,145.5
Other differences, net 2	-0.4	14.5	n.a.
Equals: Total QCEW wages	7,017.0	7,384.9	7,605.6
Plus: BEA adjustments:			
For unreported wages and unreported tips on employment tax returns	87.1	94.3	98.5
For wages and salaries not covered or not fully covered by unemployment insurance:			
Private	238.5	245.4	247.1
Government	128.4	128.2	129.5
Other BEA adjustments 3	-1.8	-0.1	-1.0
Equals: BEA estimates of wages and salaries 4	7,469.2	7,852.8	8,079.8

n.a. Not available

Ross Stepp

^{1.} The QCEW data account for 94 percent of BEA's wages and salaries.

^{2.} The Census Bureau data cover only those government employees who work in government hospitals, federally chartered savings institutions and credit unions, liquor stores and wholesale liquor establishments, and university publishers. The BLS data in most states exclude state and local elected officials, members of the judiciary, state national and air national guardsmen, temporary emergency employees, and employees in policy and advisory positions.

^{3.} The BLS data do not cover certain religious elementary and secondary schools, because a Supreme Court decision exempts some of these schools from unemployment compensation taxes. The BLS data also exclude college students (and their spouses) who are employed by the school in which they are enrolled and student nurses and interns who are employed by hospitals as part of their training. In half of the states, the BLS data only include nonprofit organizations with four or more employees during 20 weeks in a calendar year.

^{4.} For example, employees of casinos owned by tribal councils were included in "Amusement, Gambling, and Recreation Industries."

BEA Bureau of Economic Analysis
CBP County Business Patterns
NIPAs National income and product accounts

QCEW Quarterly Census of Employment and Wages

1. Adjusted to remove the wages of Indian tribal councils that are included in the Census Bureau's total payroll

atal.

2. Includes differences of coverage in private education, membership organizations, and government.

3. Adjusted to remove wage and salary of employees of U.S. companies stationed overseas and to reflect updates

to QUEW data.

4. Consists of the earnings of persons who live in the United States and of foreign residents working in the United States. The regional total differs from the national estimate; see "Personal Income in the NIPAs and State Personal Income," Survey or Cuprent Business 95 (October 2016): 10.

Nore. Details may not equal totals due to rounding.