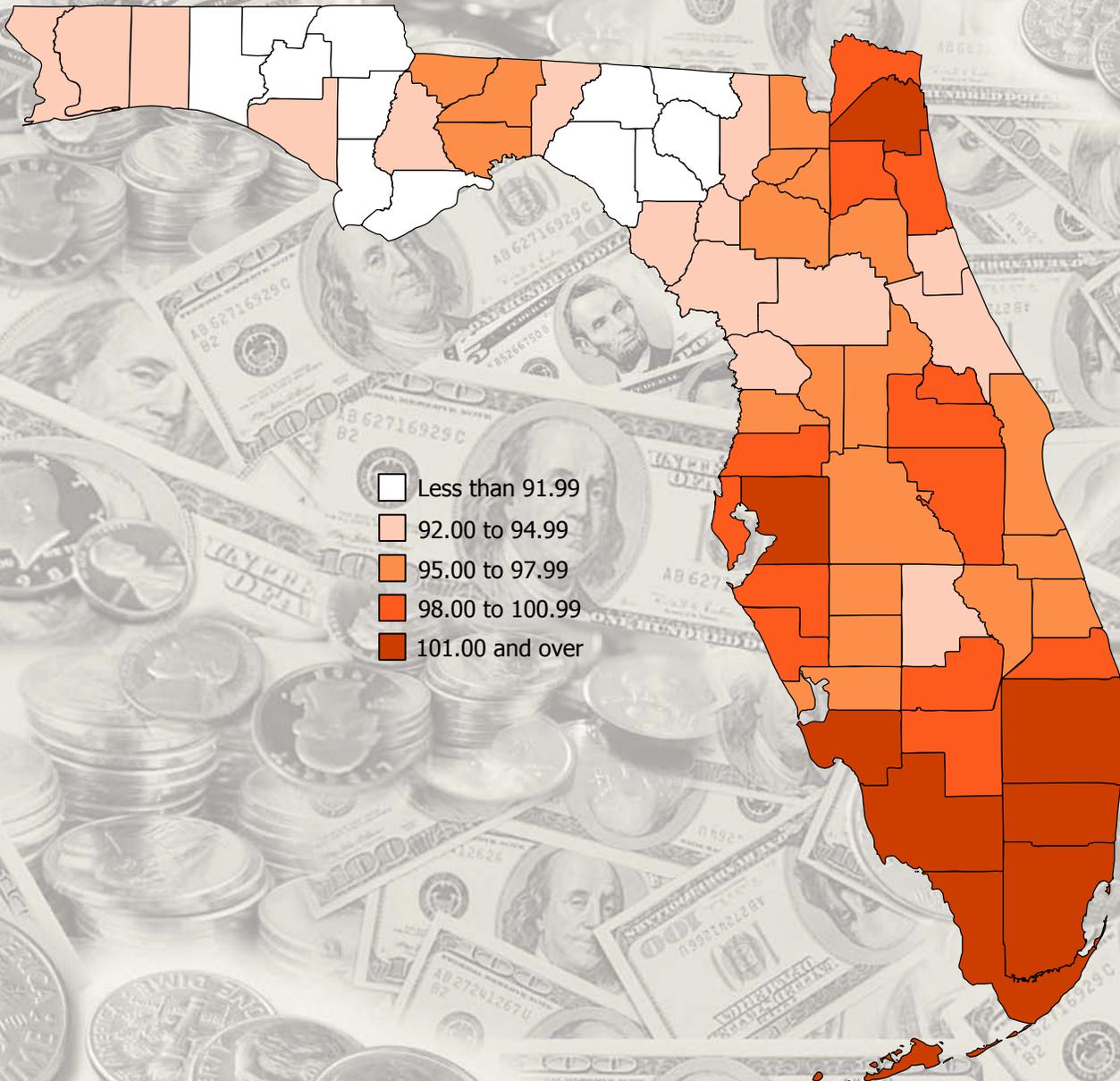


2005 Florida Price Level Index



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<http://www.bebr.ufl.edu>

or

<http://www.firn.edu/doe/fefp>

2005 Florida Price Level Index

The Florida Price Level Index (FPLI) was established by the Legislature as the basis for the District Cost Differential (DCD) in the Florida Education Finance Program. In this role, the FPLI is used to represent the costs of hiring equally qualified personnel across school districts. Since 1995, and at the request of the Legislature, the Bureau of Economic and Business Research (BEBR) at the University of Florida has performed an ongoing review of the methodology of the FPLI and has made appropriate recommendations to improve it. Since 2000, BEBR has also been responsible for calculating the FPLI. To denote its intended use as an adjustment factor for school personnel costs, and to distinguish it from other price indexes produced by BEBR, the index presented in this report is referred to as the FPLI for School Personnel, or FPLI_SP.¹ Note that this is a cross-sectional measure that compares the cost of living or relative wage levels among Florida's 67 counties and is not designed to measure inflation from one year to the next.

Results

The table on this page presents the index for 2005, which is constructed so that the population-weighted average is 100. Counties with index values above 100 contain 58.2 percent of the state's population. The median Floridian, ranked by county FPLI_SP, lives in Orange county, with an index value of 100.99. That is, less than half of the state's residents



live in counties with index values that are greater than 100.99, less than half in counties with index values that are less than or equal to 100.99, and the rest live in Orange County. The 36 counties with index values below 97.00 together account for only 15.77 percent of the state's population.

The map on the cover displays the distribution of the FPLI_SP across the state. Index values tend to be highest in the southern portion of the state, while 32 of the 36 counties with index values below 97.00 are north of Tampa. When population pressures reach the high levels seen in south Florida, land within easy reach of employment and shopping centers becomes very scarce, and thus very expensive. This means workers will encounter high house prices, long commutes, or both, for which they must be compensated in the form of higher wages. Of course, if the reason south Florida's population is so high is that many people find it to be a highly desirable place to live and work, wages will adjust up for the higher housing prices and down due to the desirability of the location in a market economy, so relative house prices will still exceed relative wages.

¹An index of the relative costs of goods and services, the BEBR FCRPI, a spatial COLI for the average occupation, the BEBR FCWI, and the data and calculations supporting the FPLI_SP may be accessed at www.bebr.ufl.edu after April 1, 2006.

Florida Price Level Index for School Personnel			
County	2005	2004	2003
Alachua	97.55	98.01	99.46
Baker	97.53	97.86	97.58
Bay	92.60	94.32	95.03
Bradford	96.96	97.28	97.01
Brevard	97.67	98.24	99.02
Broward	103.76	103.11	102.96
Calhoun	91.31	93.07	95.55
Charlotte	95.36	95.95	95.66
Citrus	93.96	93.38	94.03
Clay	99.59	99.92	99.63
Collier	106.84	104.81	104.47
Columbia	93.92	94.24	93.97
DeSoto	97.44	95.58	96.19
Dixie	92.19	92.64	92.98
Duval	101.95	102.29	102.95
Escambia	92.05	94.61	95.69
Flagler	94.51	94.80	94.54
Franklin	90.80	92.55	95.02
Gadsden	95.01	96.84	99.42
Gilchrist	94.32	94.77	95.13
Glades	98.63	96.76	97.37
Gulf	89.20	90.86	93.24
Hamilton	91.59	91.89	92.28
Hardee	95.64	95.05	94.90
Hendry	100.36	98.45	99.08
Hernando	97.03	96.43	96.28
Highlands	94.92	93.28	93.71
Hillsborough	101.69	101.06	101.18
Holmes	87.58	89.09	90.30
Indian River	97.46	97.65	96.91
Jackson	90.27	92.00	94.46
Jefferson	94.75	96.57	99.15
Lafayette	90.77	91.20	93.13
Lake	97.50	98.13	98.79
Lee	101.4	100.25	100.24
Leon	97.58	99.46	103.22
Levy	94.17	94.62	94.98
Liberty	92.48	94.26	96.77
Madison	91.53	93.29	95.78
Manatee	98.40	97.98	96.87
Marion	94.30	96.02	95.99
Martin	99.27	98.39	99.15
Miami-Dade	102.00	102.03	100.34
Monroe	103.32	103.06	101.66
Nassau	99.18	99.51	99.23
Okaloosa	93.78	95.40	95.51
Okeechobee	96.23	95.19	96.50
Orange	100.99	101.17	101.63
Osceola	98.65	98.83	98.45
Palm Beach	104.52	103.39	103.61
Pasco	98.97	98.36	98.20
Pinellas	100.66	100.36	100.24
Polk	97.56	98.85	98.85
Putnam	95.79	96.11	96.24
St. Johns	98.53	98.85	98.57
St. Lucie	97.80	97.22	98.28
Santa Rosa	92.20	94.78	95.79
Sarasota	99.32	98.56	98.45
Seminole	99.56	99.99	100.01
Sumter	95.33	95.50	95.14
Suwannee	91.52	91.82	92.10
Taylor	91.62	93.38	95.87
Union	95.88	96.20	95.92
Volusia	94.90	95.53	96.16
Wakulla	95.07	96.90	99.48
Walton	90.87	92.43	91.84
Washington	88.98	90.63	91.68

About the FPLI

Use of the FPLI in the DCD assumes that, in order to attract equally qualified personnel, districts must be able to offer salaries that will support similar standards of living. It further assumes that the FPLI measures the relative costs of maintaining a given standard of living across Florida's counties—that is, the FPLI is explicitly used as a Cost of Living Index (COLI) in the DCD calculation.

The Consumer Price Index (CPI), constructed by the U.S. Bureau of Labor Statistics (BLS) using the concept of a COLI as a framework, is perhaps the best known example of a price index.² Indeed, use of the FPLI to index costs from one Florida county to the next parallels the use of the CPI by the Federal Government to index Social Security funds from one year to the next. The CPI, however, is not a simple weighted average of the prices of a specific market basket of goods and services. Rather, the BLS continually evaluates and improves its methods. Numerous adjustments are made to measured price data to make the CPI more appropriate in its intended use as a COLI for comparisons across time periods at a given location.³ BEBR's work on the FPLI since 1995 has been aimed at making it more accurate and appropriate in its intended use as a COLI for comparisons across space at a given point in time.

At a given location, factors other than the monetary costs of goods and services purchased in the marketplace that significantly affect the compensation needed to maintain a given standard of living are nearly the same from one year

to the next. Variations in climate from year to year, for example, are usually so small they can be ignored when estimating changes in the cost of living. Across locations, however, such factors as climate, access to lakes or sandy beaches, and cultural opportunities vary widely. Moreover, climate, the range of available cultural and recreational opportunities, and the mix of public services and taxes all affect workers' standards of living and thus the ability of employers—including school districts—to hire personnel. Thus, a COLI intended to make comparisons across space must allow for variation in such factors.⁴ Beginning with the 2003 FPLI, BEBR has used data on private market wages to construct an index measuring the relative compensation required to attract equally qualified workers across Florida's school districts. Referred to as the FPLI_SP, this index is more appropriate for comparing the costs of hiring equally qualified personnel to do identical jobs across locations at a given point in time.⁵

Market wages adjust both for differences in conditions across areas and for differences in the location of employment within areas. Across areas, other things being equal, places that are more productive, and thus more attractive to firms, will have higher wages and prices, while places that are more pleasant to live in, and thus more attractive to workers, will have lower wages and higher prices. Consequently, a simple weighted average of the relative prices of purchased goods and services is inferior to the FPLI_SP as a COLI in a spatial context. Areas that have lower than

average prices of purchased goods and services, if they are otherwise less attractive to live in, could well have higher than average labor costs.

Within areas, firms that must locate closer to downtown must pay higher wages than firms free to locate near outlying residential areas. That is because workers at downtown firms must either pay higher housing costs near downtown or endure longer commutes. Further, the larger the difference between real estate costs downtown and in outlying areas, the larger this pay difference will be. Therefore, occupations and industries that tend to locate farther from downtown will show less difference in average wages between cities with high housing costs and cities with low housing costs than occupations and industries that tend to be concentrated near downtown. Therefore, BEBR controls for occupational centrality in constructing the FPLI.

In calculating the FPLI_SP, BEBR first used statistical techniques to estimate a raw index of wages for comparable workers employed in jobs of comparable centralization of employment across counties. Wage data for this calculation consist of average wages for over 700 occupations across Florida's 67 counties. Although data for each specific occupation are not available for all 67 counties, observations for a great many individual occupations are available in even the smallest counties. The Labor Market Information division of Florida's Agency for Workforce Innovation collects these data as part of the U.S. Bureau of Labor Statistics' Occupational Employment Statistics (OES) Survey. Measures of occupational centralization are also calculated from these data, and are used in conjunction with data on the costs of goods and services, including housing costs, to capture adjustments to housing costs for occupations with locational centrality comparable to school personnel.

²Question 4 under "Frequently Asked Questions" at the CPI homepage, <http://www.bls.gov/cpi/home.htm>, discusses this point. Chapter 17 of the *BLS Handbook of Methods*, which may be accessed at the same web site, contains more detail.

³Links to documentation for many hedonic adjustments may be found at <http://www.bls.gov/cpi/home.htm>.

⁴In terms of the CPI methodology adapted to a spatial context, this would be analogous to a full hedonic adjustment to the price of land across space to reflect all factors affecting standards of living that are determined with choice of residential location.

⁵In the 2003 FPLI Report, what is now designated as the FPLI_SP was named the Low Centrality FPLI_A.

Since the quality and extent of the data may vary with the size of the labor market in a county, the raw index is statistically and geographically smoothed. To carry out the statistical smoothing, BEBR constructs a model relating the raw index of wages to the costs of goods and services, the raw wage index in surrounding counties, and county retirement-age and total population. This model is used to generate a “predicted” value for the raw index. A weighted average of the raw and predicted

values is then calculated, where the weights in each county are chosen to maximize the accuracy of the final index, given the reliability of each county’s raw and predicted indexes.

The second type of smoothing is geographic in nature. Workers who live in suburban or rural counties surrounding a larger urban county will commute to the larger county for work if wages in the larger area are sufficiently higher to compensate for any extra commute time.

Further, given the design of the OES survey, it is expected that the index is most accurate in large counties. Therefore, the index has been constrained in non-metropolitan counties to be no less than the commute-time-adjusted wage index of nearby metropolitan counties (counties with cities that lend their names to one of Florida’s metropolitan statistical areas, as defined by the U.S. Census Bureau).