

A F F O R D A B L E H O U S I N G

ISSUES

SHIMBERG CENTER FOR AFFORDABLE HOUSING

M.E. Rinker, Sr., School of Building Construction • College of Design, Construction & Planning • PO Box 115703, University of Florida, Gainesville, FL 32611-5703 TEL: (352) 273-1192 • SUNCOM: 622-7697 • FAX: (352) 392-4364

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Housing Affordability Index in Florida

The affordability of housing is an important issue in Florida and around the nation. Households are concerned about it because affordability affects their ability to become or remain as a homeowner, as well as the size and amenities of the home they are able to purchase. Real estate professionals and other industry participants also are concerned, because the number of households able to afford the purchase of a home is an important determinant of single-family sales activity in their local markets. Housing affordability also has become an important public policy issue, as home ownership is viewed as being an important goal for both individual and societal reasons. Household income, housing prices, and mortgage rates are the primary determinants of housing affordability. For a household considering homeownership, an additional factor is the rate of appreciation in housing prices.

Housing Affordability Index

One measure of housing affordability is the cost of homeownership, commonly conveyed through housing affordability indices. These indices generally indicate that affordability increased substantially towards the end of the last decade, primarily as a result of lower interest rates during that period.

A housing affordability index for an area brings together the price and the income elements that contribute to housing affordability. The most common housing affordability index is that used by the National Association of Realtors® (NAR).

The NAR index measures the ability of the median income household in an area to purchase a median priced house in that area. In addition to the median income and median house price, the index requires the current mortgage interest rate, assumptions about the down payment required to purchase the median priced home, and the maximum percentage of household income that can be spent on housing. An index of 100 indicates the median-income household in the area has sufficient income to purchase a single-family home selling at the median price.¹

The Shimberg Center calculates affordability indices for all counties in Florida. Our index calculations differ from those of the NAR because we use the

property appraiser data from the Florida Department of Revenue as the source for home sales transaction prices rather than the Multiple Listing Service[®] used by the Realtors[®], and our median income is household income rather than family income. Median household incomes are purchased from Claritas. Our index numbers are therefore not directly comparable, but do give an indication of relative affordability across the state. As can be seen in Table 1 the number of counties with an index value below 100 totaled 49 in 2005, an increase from 15 in 2003. These numbers point to a lessening of housing affordability in Florida in between 2003 and 2005. Although important, median sale prices in a county or metropolitan statistical area (MSA) does not alone determine housing affordability. A second important factor is the income of area residents. The highest household incomes in Florida are generally in the coastal counties that also contain many high priced housing units. However, median household incomes and single-family house prices in an area are only moderately correlated, a condition that can lead to significant differences in housing affordability across counties and MSAs.

Our index construction method can be represented by the following formula:

$$\text{Affordability Index} = \frac{\text{Median household income}}{\text{Qualifying income}} \times 100$$

Qualifying income is defined as the income needed to qualify for a mortgage to finance an existing median-priced home. As an example, the median household income in the Alachua County in 2005 is \$35,550, the median 2005 sales price of a single-family home

is \$184,300, and the 30-year mortgage interest rate of 5.87 percent and yields a mortgage constant of 0.00588, the calculated affordability index is 71.58:

$$\begin{aligned} &= \frac{\$35,550}{4 \times 12(0.95 \times \$184,300) \times 0.00588} \\ &= \frac{\$35,123}{\$49,416} \\ &= 71.58 \end{aligned}$$

The denominator is the annual mortgage payment, multiplied by 4, because the income needed to qualify for a 5 percent down, 5.82-percent, monthly payment loan is assumed to be four times the annual mortgage payment. This is equivalent to a household spending 25 percent of their monthly income on mortgage costs, and is consistent with the qualifying ratio used by residential mortgage lenders. The calculated index of 94.58 indicates that median household income in the area is 5.42% below the amount typically needed to qualify for the loan. The higher the calculated affordability index, the easier it is for a household in the area with median income to purchase a median-priced home, and the lower the affordability index, the harder it is for a household with the median income to purchase a median priced home.²

When interpreting the affordability indices for each county, several caveats should be considered. First, as a result of the limited sales transactions in some smaller counties, the median sale price may vary considerably from year-to-year. This fluctuation in the estimated median house price produces an exaggerated variability in the calculated affordability index. Second, the calculation of the index using median house prices and incomes may mask the

¹ Affordability indices are calculated by NAR only for the nine largest metropolitan areas in Florida. Moreover, most of these MSAs are recent additions to the report, and thus provide little historical information on how housing affordability has changed over time and across counties. In addition, the affordability indices published by NAR are based only on homes that have sold through the use of a multiple listing service. Thus, the home sales used to calculate the median sale price may not be representative of all housing stock in the area.

² After several comments about last year's Affordability Index, we have changed our down payment assumption to 5 percent instead of the 20 percent used in the past. It is believed that this change better reflects what is occurring in Florida's housing market. Please note, that this change effectively increases the required qualifying income, and will lower housing affordability as compared to last year's report.

distribution of affordability across the various income brackets within a county. For example, if house prices in a county tend to be tightly clustered around their median value, while incomes are more widely dispersed, then affordability problems will exist at the lower income ranges that are not identified by the affordability index. Thus, standard indices based

on median house prices and median incomes are only one measure of housing affordability. What the affordability indices provide is an indication of the relative change in affordability within counties over time, and the relative affordability of housing across counties.

Table 1: County Affordability Index, 2003-2005

County	2003	2004	2005	County	2003	2004	2005
Alachua County	94.31	79.76	71.58	Lake County	104.20	91.01	71.10
Baker County	158.14	133.75	108.19	Lee County	97.85	7.11	66.65
Bay County	106.89	90.23	74.46	Leon County	113.81	95.71	91.54
Bradford County	160.64	137.45	115.02	Levy County	131.26	92.89	81.42
Brevard County	124.60	100.89	78.61	Liberty County	145.54	193.60	190.07
Broward County	83.34	67.86	56.33	Madison County	187.43	142.17	135.67
Calhoun County	182.15	139.20	137.02	Manatee County	83.34	67.00	54.89
Charlotte County	107.13	88.70	68.26	Marion County	102.36	93.51	83.71
Citrus County	135.39	108.79	86.52	Martin County	78.39	64.31	56.49
Clay County	137.69	117.63	106.50	Miami-Dade County	73.89	58.87	49.69
Collier County	74.68	61.25	48.42	Monroe County	41.96	29.79	24.38
Columbia County	129.29	102.00	90.17	Nassau County	108.33	100.21	88.41
DeSoto County	149.59	126.76	81.52	Okaloosa County	133.77	108.88	88.15
Dixie County	135.23	109.29	90.77	Okeechobee County	125.53	102.13	85.74
Duval County	118.82	106.63	97.25	Orange County	103.01	88.25	69.10
Escambia County	130.64	120.66	103.89	Osceola County	108.42	86.42	64.96
Flagler County	125.33	101.71	78.55	Palm Beach County	77.36	62.14	50.71
Franklin County	45.76	33.75	36.72	Pasco County	102.44	90.42	73.62
Gadsden County	145.56	114.09	102.00	Pinellas County	108.55	94.36	82.01
Gilchrist County	132.19	104.16	90.53	Polk County	125.35	108.59	89.54
Glades County	160.05	142.35	105.34	Putnam County	146.83	121.80	99.08
Gulf County	67.49	51.35	52.33	Santa Rosa County	161.55	134.79	102.51
Hamilton County	138.77	115.92	117.91	Sarasota County	86.90	73.47	59.32
Hardee County	190.14	155.64	146.30	Seminole County	103.50	95.03	73.07
Hendry County	179.25	123.73	90.04	St. Johns County	78.54	70.95	63.42
Hernando County	126.68	104.52	84.22	St. Lucie County	146.34	115.67	88.36
Highlands County	141.62	121.22	88.44	Sumter County	99.56	75.96	69.36
Hillsborough County	113.49	98.19	81.91	Suwannee County	149.68	133.39	94.35
Holmes County	183.39	172.60	161.22	Taylor County	173.29	133.73	123.54
Indian River County	109.79	93.87	79.63	Union County	173.32	135.16	162.95
Jackson County	155.95	133.34	131.20	Volusia County	109.55	95.46	78.53
Jefferson County	139.35	133.51	103.35	Wakulla County	111.10	100.25	89.12
Lafayette County	143.78	157.17	91.25	Walton County	55.34	38.97	33.33
				Washington County	167.40	137.79	115.52

Forty-nine Florida counties had an affordability index below 100 in 2005 and 18 counties had indexes above 100. These 18 more affordable counties are generally rural counties in the interior of the state, mostly in the north part of the state. It should be emphasized that most of the counties with the highest affordability indices also had fewer than 300 transactions in 2005. The small number of transactions is not surprising in small counties, but may be indicative of the level of competition in the market and therefore the lack of pressure on housing prices.

Additional Information

The information presented in this newsletter will appear in The State of Florida's Housing - 2005 to be released by the Shimberg Center for Affordable Housing in April 2007. The conclusion drawn from the Affordable Housing Index results in Table 1 is that median-income households can afford median priced housing in only 18 of Florida's 67 counties. The entire publication will be available on the Internet by going to www.flhousingdata.shimberg.ufl.edu, selecting the "Library", and clicking on the "Publications & Presentations" of the Shimberg Center.

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Shimberg Center for Affordable Housing
School of Building Construction
College of Design, Construction & Planning
203 Rinker Hall
Gainesville, FL 32611

UF UNIVERSITY of FLORIDA