

THE STATE OF FLORIDA'S Housing 2003

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The State of Florida's Housing 2003

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Due to a mathematical error, the Historic Affordability Index and County Affordability Index tables in the 2003 State of Florida's Housing contain incorrect information for 30 counties. The corrected tables are

- *Table 4.1 Historic Affordability Index County Affordability Index*
- *Table 4.2 County Affordability Index and Rank*

This error changes the level, but not the trend, of the affordability numbers and changes the rank of some counties, but the overall conclusions drawn in the report remain the same: housing affordability decreased in Florida last year due to the reasons mentioned in the report.

We regret the mistake.

4. Housing Affordability

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4.1 Introduction

The affordability of housing is an important issue nationally and in the state of Florida. Households are concerned about it because affordability affects their ability to become a homeowner, as well as the size and amenities of the home they are able to purchase. Real estate salespersons 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.

Three factors are the primary determinants of the affordability of housing. These are household income, housing prices, and mortgage rates. For a household considering homeownership, an additional factor is the rate of appreciation in housing prices. This chapter begins with a discussion of affordability using a homeownership cost index measure. It then investigates issues of housing affordability using a concept called cost burden.

4.2 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 index construction method 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 afford a median priced house. In addition to the median income and median house price in an area, index construction requires the current mortgage interest rate, assumptions about the down payment required to purchase the median price home, and the maximum percentage of household income that can be spent on housing. An index of 100 indicates the typical (median) family in the area has sufficient income to purchase a single-family home selling at the median price.¹ Median house prices are calculated from the DOR county property appraiser datasets. Median household incomes come from the 2000 decennial US Census.

Although important, median sale prices in a county or MSA do 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 — which can lead to significant differences in housing affordability across counties and MSAs.

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

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.

$$\text{Affordability Index} = \frac{\text{Median Family Income}}{\text{Qualifying Income}} \times 100$$

Qualifying income is defined as the income needed to qualify for a mortgage to finance an existing median-priced home. As an example, if median family income in the area is \$35,000, the median price of an existing home is \$100,000, and the mortgage interest rate is 10 percent, the calculated affordability index is 103.9:

$$\begin{aligned} & \frac{\$35,000}{4 \times 12(0.80 \times \$100,000) \times 0.008776} \\ &= \frac{\$35,000}{\$33,700} \\ &= 103.9\% \end{aligned}$$

The denominator is the annual mortgage payment, multiplied by 4, because the income needed to qualify for a 20 percent down, 10-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 103.9 indicates that median household income in the area is slightly (3.9 percent) higher than that 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.

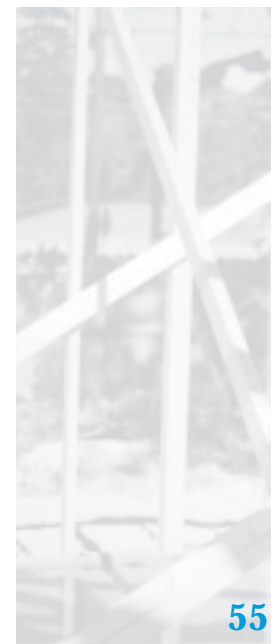
To calculate affordability indices for each county and MSA, mortgage rates for each year are obtained from the Federal Housing Finance Board. These effective mortgage rates (points are amortized over 10 years) combine fixed and adjustable rate loans.²

We calculate affordability indices (Exhibit 4-1) for all counties in Florida and for the years for which we have sufficient data (at least 25 sales each year, as the sales provide the basis for the calculation of a median sales price of a home). Our index calculations differ from those of the NAR because we use the property appraiser data as the source for home sales transaction prices rather than the Multiple Listing Service® used by the Realtors, and our median income is household rather than family income. Our numbers are therefore not directly comparable, but do give an indication of relative affordability across the state.

Table 4.1 illustrates that consistently across counties and MSAs, the affordability indices developed for this report show housing affordability improving in Florida throughout the 1990s (i.e. the level of the affordability index has generally increased). However in many counties and MSAs there was a decline in affordability between 1999 and 2001. Florida's improved housing affordability in the 1990s is consistent with an increase in affordability at the national level. In 1990, the U.S. affordability index was 109.5. In 1999 the index had risen to 139.1. That is, the median household income in the U.S. was 39.1 percent greater than that needed to purchase a median price home (using standard financing). In Florida the median of 67 counties was 156.81 in 1991, 158.91 in 1999, and 140.98 in 2001 (the Florida median is not directly comparable to the national number because the Florida median is derived from the 67 county indices). While experiencing an increase in affordability throughout the nineties, last year Florida experienced a decline in affordability.

In the calculation of an affordability index, the mortgage interest rate is a key component because of its role in

² The NAR also uses the effective mortgage rates supplied by the Federal Housing Finance Board and assumes, as we do, that the income needed to qualify for standard financing is four times the annual mortgage payment. Thus, our calculated affordability indexes are directly comparable to those calculated by NAR for the country's largest metropolitan areas.



The State of Florida's Housing 2003

determining the qualifying income needed to purchase the median priced house. A large reason for the increased affordability throughout the nineties was the continued decline of mortgage rates. The national average mortgage rate for a single-family home was 9.74% in 1990, and it had fallen to 7.96% by 2000, and continued to decline to 6.51% in 2002.³ The combination of low interest rates and the recent lackluster return to the stock market has lead many to invest in real estate. This increased investment has caused home prices to dramatically increase over the last few years and led to concern that a speculative bubble is forming in the housing market.

Another important factor that contributed to the increased affordability in the 1990s was the steady increase in median household incomes. In fact, median incomes generally increased faster than median house prices over the 1990s time period. However, unemployment in Florida increased from 3.6% in January 2000 to 5.3% in January 2003.⁴ Not surprisingly, per capita personal income barely increased from \$28,366 in 2000 to \$29,596 in 2002.⁵ This slow income growth while housing prices continue to appreciate explains the recent decrease in housing affordability.

In 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 distribution of affordability across the various income brackets within a county or MSA. For

example, if house prices in a county tend to be tightly distributed 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 4.2 ranks the affordability of each county. Eight Florida counties had an affordability index below 100 in 2001. The least affordable counties [i.e., those with ranks closer to 65, only 65 counties are included because insufficient sales precluded the inclusion of Liberty and Volusia County] included seven counties in major metropolitan areas, Miami-Dade which ranked 60th, Broward which ranked 59th, Lake which ranked 58th, Osceola which ranked 55th, Nassau which ranked 56th, Saint Johns which ranked 54th, and Palm Beach which ranked 52nd, two other MSA counties, Martin (53), and Collier (57), and coastal counties in south Florida and on the panhandle including Gulf (61), Franklin (64), Monroe (65), and Walton (62). Monroe (the Florida Keys), a growth restricted county with a unique environment, is the least affordable with an affordability index of 66.58. The index exceeds the 2001 national average of 135.7 in 43 of the 65 counties.

At the other extreme, the most affordable counties are generally rural counties in the interior of the state, mostly in the north part of the state. Bradford County is Florida's most affordable county in 2001 (index = 213.04). Other top 10 high affordability

³ Interest rate data is from the Federal Housing Finance Board.

⁴ Unemployment figures are from the Bureau of Labor Statistics, U.S. Department of Labor.

⁵ Per capita personal income figures are from the Bureau of Economic Analysis, Regional Accounts Data.

Table 4.1 Historic Affordability Index County Affordability Index

	1992	1994	1995	1996	1997	1998	1999	2001
<u>Major Metro Areas</u>								
Ft. Lauderdale MSA								
Broward County	NA	NA	NA	NA	NA	NA	NA	92.12
Jacksonville MSA								
Clay County	162.92	162.71	144.28	157.38	155.48	165.66	172.55	154.34
Duval County	NA	NA	NA	NA	NA	NA	150.39	141.34
Nassau County	133.42	131.90	126.89	120.29	117.80	121.49	126.88	106.43
St. Johns County	127.51	109.23	96.58	101.53	98.23	106.51	115.48	111.62
Miami MSA								
Miami-Dade County	105.23	93.94	82.81	90.93	88.01	93.72	100.40	87.46
Orlando MSA								
Lake County	124.69	113.22	111.99	108.39	108.63	106.94	132.45	99.11
Orange County	130.14	121.88	127.83	131.05	131.59	137.79	138.39	133.28
Osceola County	130.53	118.10	118.80	127.03	122.90	120.10	140.37	108.89
Seminole County	148.25	142.21	134.33	144.00	146.89	151.52	147.42	160.11
Tampa-St. Petersburg-Clearwater MSA								
Hernando County	150.45	135.93	136.56	134.91	145.81	145.51	162.59	146.71
Hillsborough County	135.01	131.12	126.57	131.99	134.02	139.04	134.43	145.32
Pasco County	NA	NA	NA	NA	NA	NA	NA	129.00
Pinellas County	132.01	122.76	120.13	125.87	132.90	136.63	137.12	126.08
West Palm Beach-Boca Raton MSA								
Palm Beach County	113.82	111.76	107.38	116.85	114.86	133.15	121.30	112.04
<u>Other Metro Areas</u>								
Daytona Beach MSA								
Flagler County	116.01	106.34	97.51	118.14	133.32	132.63	150.05	139.19
Volusia County	136.95	128.73	124.86	130.17	131.87	140.40	156.15	NA
Ft. Myers-Cape Coral MSA								
Lee County	126.97	113.13	106.08	107.38	106.33	115.21	123.54	114.22
Ft. Pierce-Port St. Lucie MSA								
Martin County	116.66	104.41	104.03	103.67	102.39	114.82	111.98	112.02
St. Lucie County	168.69	156.60	148.36	155.05	155.04	156.74	172.38	153.78
Ft. Walton Beach MSA								
Okaloosa County	145.54	142.47	133.34	142.10	142.22	143.32	153.24	159.92
Gainesville MSA								
Alachua County	114.77	115.78	113.74	114.85	112.86	115.59	114.99	121.38
Lakeland-Winter Haven MSA								
Polk County	146.53	137.99	135.57	138.05	143.46	154.25	161.68	147.89
Melbourne-Titusville-Palm Bay MSA								
Brevard County	155.77	151.23	146.83	151.04	147.19	147.06	163.37	146.35
Naples MSA								
Collier County	100.80	98.47	88.75	97.68	95.57	98.12	103.99	103.01
Ocala MSA								
Marion County	157.05	125.83	124.44	133.12	130.27	136.11	149.10	136.12
Panama City MSA								
Bay County	144.82	149.03	136.71	142.90	139.72	140.29	148.66	135.77
Pensacola MSA								
Escambia County	144.82	156.43	161.85	147.31	136.56	142.29	143.17	143.77
Santa Rosa County	151.34	138.31	126.71	138.39	131.59	136.48	151.18	136.71

Table 4.1 Historic Affordability Index County Affordability Index (continued)

	1992	1994	1995	1996	1997	1998	1999	2001
Punta Gorda MSA								
Charlotte County	141.41	125.61	119.48	128.68	128.44	132.95	154.05	120.42
Sarasota-Bradenton MSA								
Manatee County	122.53	119.51	117.24	119.60	118.54	120.41	118.49	116.40
Sarasota County	136.12	120.06	116.93	122.57	119.83	132.98	129.61	114.94
Tallahassee MSA								
Gadsden County	137.01	135.71	131.23	146.17	122.71	134.15	169.44	142.52
Leon County	144.56	144.46	128.73	136.62	144.79	145.17	142.82	154.66
Vero Beach								
Indian River County	152.63	146.47	145.46	145.55	151.74	170.00	156.82	152.57
<u>Nonmetro County Regions</u>								
Northwest nonmetropolitan area								
Calhoun County	186.57	192.39	179.82	167.72	174.73	190.35	182.10	179.76
Franklin County	123.48	89.85	85.07	76.83	93.41	78.15	77.06	72.12
Gulf County	166.32	143.41	146.43	161.99	137.36	118.07	114.10	84.92
Holmes County	201.00	193.65	188.88	176.34	209.71	197.12	210.89	195.50
Jackson County	154.89	191.47	155.73	160.16	150.45	155.87	191.62	148.41
Jefferson County	NA	218.45	240.65	171.68	200.90	190.92	191.32	168.56
Wakulla County	NA	141.97	144.58	136.58	140.86	138.16	143.74	137.30
Walton County	169.54	114.97	103.74	105.28	88.00	87.64	93.95	83.55
Washington County	176.74	184.07	182.72	177.71	173.26	176.84	210.46	174.41
Northeast nonmetropolitan area								
Baker County	178.36	196.58	196.48	182.13	159.80	171.26	190.99	179.40
Bradford County	204.00	203.27	179.53	171.62	188.40	189.75	178.68	213.04
Columbia County	142.20	153.65	152.04	167.16	155.47	153.66	159.43	164.52
Dixie County	198.51	191.68	199.59	164.72	NA	173.00	220.39	147.12
Gilchrist County	203.16	124.43	189.25	145.38	116.15	170.58	159.30	147.45
Lafayette County	NA	NA	NA	NA	NA	208.31	212.93	201.71
Levy County	158.35	151.97	138.16	148.48	128.56	159.69	160.00	153.04
Madison County	203.35	212.91	215.78	175.91	166.05	169.04	174.75	174.31
Suwannee County	207.12	160.67	168.57	156.84	144.87	168.45	181.40	141.95
Taylor County	199.46	147.17	182.01	179.37	189.41	194.74	197.38	178.70
Union County	NA	NA	NA	NA	NA	NA	NA	161.08
Central nonmetropolitan area								
Citrus County	152.98	148.84	132.14	143.10	151.28	145.48	166.90	146.80
Putnam County	149.55	146.02	155.12	156.39	167.84	172.72	163.39	166.12
Sumter County	NA	NA	NA	NA	NA	NA	106.50	79.66
South nonmetropolitan area								
De Soto County	159.69	182.96	168.86	160.58	172.81	147.04	165.36	155.32
Glades County	133.25	132.51	134.98	182.99	162.45	158.28	182.64	169.14
Hardee County	262.56	263.51	210.55	199.86	201.89	197.01	214.62	189.27
Hendry County	135.90	160.80	150.26	147.87	165.94	186.73	194.77	200.03
Highlands County	155.31	148.61	131.13	134.03	140.93	161.01	179.00	165.04
Monroe County	79.55	72.41	64.25	70.38	67.64	74.22	70.21	66.58
Okeechobee County	162.21	145.86	145.68	157.16	145.63	150.86	176.58	164.01

index counties in 2001 include Lafayette, Hendry, Holmes, Hardee, Calhoun, Baker, Taylor, Washington, and Madison. These counties, with the exception of Taylor County, are inland, rural, and characterized by relatively low median house prices. It should be emphasized that most of the counties with the highest affordability indices also had fewer than 300 transactions in 2001. 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 pressure on housing prices. Also, with so few

transactions, the estimated median house price is subject to more random variation from year to year, and thus likely overstates the true variation in affordability in these small counties.

4.3 Cost Burden

The affordability index indicates that housing became more affordable in Florida in the late 1990s as compared to the early part of the decade. The primary factor in increasing affordability is the decline in mortgage interest rates during the period.

However, the use of indices focuses only on the average and masks what is happening at the low end. In addition, the index reported only examines owner-occupied housing. For households of lower income, the loss of affordable housing from the stock and price increases that have exceeded the growth in incomes, among other factors, have led to a worsening problem of housing affordability. As a means of examining the number of households with a housing affordability problem, we calculate a number called “cost burden.” Cost burden is our estimate of the number of

Table 4.2 County Affordability Index and Rank

County	2001	2001 Rank	County	2001	2001 Rank
Bradford	213.04	Most Affordable	Escambia	143.77	35
Lafayette	201.71	2	Gadsden	142.52	36
Hendry	200.03	3	Suwannee	141.95	37
Holmes	195.50	4	Duval	141.34	38
Hardee	189.27	5	Flagler	139.19	39
Calhoun	179.76	6	Wakulla	137.30	40
Baker	179.40	7	Santa Rosa	136.71	41
Taylor	178.70	8	Marion	136.12	42
Washington	174.41	9	Bay	135.77	43
Madison	174.31	10	Orange	133.28	44
Glades	169.14	11	Pasco	129.00	45
Jefferson	168.56	12	Pinellas	126.08	46
Putnam	166.12	13	Alachua	121.38	47
Highlands	165.04	14	Charlotte	120.42	48
Columbia	164.52	15	Manatee	116.40	49
Okeechobee	164.01	16	Sarasota	114.94	50
Union	161.08	17	Lee	114.22	51
Seminole	160.11	18	Palm Beach	112.04	52
Okaloosa	159.92	19	Martin	112.02	53
DeSoto	155.32	20	Saint Johns	111.62	54
Leon	154.66	21	Osceola	108.89	55
Clay	154.34	22	Nassau	106.43	56
Saint Lucie	153.78	23	Collier	103.01	57
Levy	153.04	24	Lake	99.11	58
Indian River	152.57	25	Broward	92.12	59
Hamilton	149.17	26	Miami-Dade	87.46	60
Jackson	148.41	27	Gulf	84.92	61
Polk	147.89	28	Walton	83.55	62
Gilchrist	147.45	29	Sumter	79.66	63
Dixie	147.12	30	Franklin	72.12	64
Citrus	146.80	31	Monroe	66.58	Least Affordable
Hernando	146.71	32	Liberty	NA	
Brevard	146.35	33	Volusia	NA	
Hillsborough	145.32	34			

The State of Florida's Housing 2003

Florida renter households paying more than 30 percent of their income toward housing costs. The 30 percent figure corresponds to that used in federal housing programs and is a common standard used to assess housing affordability problems. Our calculation is for renter households only. While over 20 percent of the State's owner households are also cost burdened, the renter households are the targets of most assistance programs historically.

Table 4.3 shows that our estimate is that in the year 2002 there were about 1.9 million renter households in Florida. Of these households, about 809,000

were cost burdened, representing 41.6 percent of all renters. Of the households paying more than 30 percent of their income toward rent, over 361,000 (almost 45 percent) pay more than 50 percent. Most of the households paying more than 50 percent of their income toward housing costs had incomes below 50 percent of the median income for their area.

About 20 percent of the cost burdened renter households reside in Miami-Dade County. With 11.5 percent in Broward County and 6.5 percent in Palm Beach County, our estimate is that more than one-third, 38 percent, of cost burdened households are located in the three south Florida counties. An additional 15 percent of the state's cost burdened households are in the Tampa Bay metropolitan area, so that a total of 53 percent of Florida's renter households experiencing cost burden are located in four MSAs.

Table 4.3. Cost Burden Renters in Florida

Income as Percent of Area Median Family Income	All Renters	Cost Burden	
		30-50%	50+ %
<30%	353,069	43,383	217,315
30-49.9%	290,570	124,412	109,886
50-79.9%	425,173	202,653	28,248
80-119.9%	428,904	64,234	5,477
120+ %	445,974	12,778	458
Grand Total	1,943,690	447,460	361,384