

SPECIAL TOPIC - AFFORDABILITY

EL CAMINO COLLEGE

REAL ESTATE ECONOMICS -

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Using these basic components, and adding additional factors, will allow customizing of the "Affordability Index" to special purposes, such as affordability of new homes, existing homes, condominiums, first time homebuyers, homebuyers by age group, etc.

Calculation of the "Affordability Index". For the purpose of this illustration the following facts will be assumed:

1. Median home price = \$250,000
2. Median family income = \$50,000
3. Prevailing financing terms
 - Interest rate = 8%
 - Downpayment = 20%
 - Type of loan = 30 Year Fixed

Step #1 - Calculate the annual payments based on the data above:

$$\$250,000 \times 80\% = \$200,000 \text{ Loan Amount}$$

$$\$200,000 @ 8\% \text{ Amortized over 30 Years} = \$1,467.53 \text{ Per Month}$$

$$\$1,467.53 \times 12 = \$17,610 \text{ Per Year Loan Payments}$$

Step #2 - Determine the current lending standards for income qualification. For this example we will assume that local lending institutions require that annual housing payments not exceed 32% of annual gross income.

$$\$17,610 \div 32\% = \$55,031 \text{ Qualifying Income Required.}$$

Step #3 - Calculate the index by dividing the Median Family Income by the Qualifying Income Required.

$$\frac{\$50,000}{\$55,031} = 91\%$$

In the example above a family earning the median income in this area would have 91% of the income required to purchase a median priced home in the area. Obviously a score above 100% would mean that more families have sufficient income to purchase homes in the area and a score below 100% means that homes are overpriced relative to the peoples ability to purchase.

Attached are two charts prepared by the NAR on Housing Affordability, as printed in NAR's magazine Real Estate Today. Chart #1 was printed in the April, 1989 issue and Chart #2 was printed in the May, 1989 issue.

Chart #1 presents the details behind the national statistics used in calculating the index for a period of years. The Affordability Index itself is broken down into a Composite amount as well as based on Fixed and ARM financing terms. Please note that this index is measuring the relationship of Median Family Income to Qualifying Income as previously discussed in the example above.

Chart #2 presents the statistics of a single period in a City By City breakdown for this index. Note that the Affordability Ratio presented in this chart is measuring the relationship between Median Family Income and Median House Prices. This is a comparison using different factors, and results in an index that is on a completely different scale from that displayed in Chart #1.

Real estate investors can use these "Affordability Indices" as one tool to help predict the future direction of housing prices in an area. If the index is above 100%, there are more families qualifying for half the homes for sale in the area and the resulting demand should drive prices upwards. The further below 100% that the index falls, the more overpriced housing is in the area relative to families ability to purchase, which will cause properties to sell very slowly and should, in a more perfect market, cause prices to decline.

HOUSING AFFORDABILITY INDEX

CHART #1

Year	Median- Priced Existing Home	Average Mortgage Rate *	Monthly P & I Payment	Payment As % Income	Median Family Income	Qualifying Income **	Affordability Index ***	
							Composite	Fixed ARM
1981	\$66,400	15.12%	\$677	36.3%	\$22,388	\$32,485	68.9	68.9
1982	67,800	15.38%	702	35.9%	23,433	33,713	69.5	69.4
1983	70,300	12.85%	616	30.1%	24,580	29,546	83.2	81.7
1984	72,400	12.49%	618	28.2%	26,433	29,650	89.1	84.6
1985	75,500	11.74%	609	26.2%	27,735	29,243	94.8	89.6
1986	80,300	10.25%	563	23.0%	29,458	27,047	108.9	105.7
1987	85,600	9.28%	565	22.0%	30,853	27,113	113.8	107.1
1988	89,100	9.31%	590	22.0%	32,100	28,296	113.4	n/a
1989	93,100	10.11%	660	23.1%	34,213	31,662	108.1	103.6
1990	95,500	10.04%	673	22.8%	35,353	32,286	109.5	106.5
1991	100,300	9.30%	663	22.1%	35,939	31,825	112.9	109.9
1992	103,200	7.70%	589	19.3%	36,614	28,254	129.6	125.0

* Effective rate on loans closed on existing homes - Federal Home Loan Bank Board.

** Based on the current lending requirements of the Federal National Mortgage Association using a 20% down payment.

*** Index equals 100 when median family income equals qualifying income.

NOTE: 1992 figures are through September (Preliminary) | SOURCE: National Association of Realtors

HOME AFFORDABILITY

CHART #2

CITY BY CITY

CITY	MEDIAN HOUSEHOLD INCOME	MEDIAN HOUSE PRICE	AFFORDABILITY RATIO
ALBANY/SCHENECTADY/TROY	\$27,523	\$89,300	31%
BALTIMORE	30,269	87,300	35%
BIRMINGHAM	23,523	76,500	31%
BOSTON	32,012	182,900	18%
BUFFALO/NIAGARA FALLS	26,512	64,800	41%
CHICAGO	30,190	99,300	30%
CINCINNATI	27,769	71,100	39%
CLEVELAND	27,933	69,900	40%
COLUMBUS	27,894	73,400	38%
DALLAS/FORT WORTH	30,902	85,500	36%
DENVER	32,724	83,500	39%
DETROIT	29,694	72,300	41%
HARTFORD	34,034	169,000	20%
HONOLULU	31,313	198,700	16%
HOUSTON	30,558	63,500	48%
INDIANAPOLIS	27,854	66,700	42%
JACKSONVILLE	24,757	67,400	37%
KANSAS CITY	28,332	72,100	39%
LOS ANGELES	27,579	175,600	16%
LOUISVILLE	26,036	54,600	48%
MEMPHIS	24,271	76,900	32%
MIAMI/HIALEAH	24,492	83,500	29%
MILWAUKEE	29,405	75,300	39%
MINNEAPOLIS/ST. PAUL	32,444	84,300	38%
NASHVILLE/DAVIDSON	27,079	78,300	35%
NEW ORLEANS	24,489	73,200	33%
NEW YORK/NORTHERN N J/LONG ISLAND	29,154	191,900	15%
OKLAHOMA CITY	26,061	56,900	46%
ORLANDO	26,850	78,500	34%
PHILADELPHIA	28,213	97,600	29%
PHOENIX	28,057	79,100	35%
PITTSBURGH	25,550	62,300	41%
PORTLAND (ORE.)	25,628	64,900	39%
PROVIDENCE	25,933	130,400	20%
ROCHESTER	31,213	73,700	42%
ST. LOUIS	29,330	79,500	37%
SALT LAKE CITY/OGDEN	27,742	66,400	42%
SAN ANTONIO	25,365	65,200	39%
SAN DIEGO	26,973	142,500	19%
SAN FRANCISCO BAY AREA	32,538	196,300	17%
SEATTLE/TACOMA	28,583	93,600	31%
TAMPA/ST. PETERSBURG/CLEARWATER	21,668	65,500	33%
WASHINGTON, D.C.	39,865	131,600	30%

SOURCE: National Association of Realtors; CACI Market Analysis
 Reproduced from: CHANGING TIMES, V.43, May '89, p51.

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