

PART II

**HOUSING CONSTRUCTION RATES AND PRICES
IN THE FLORIDA KEYS**

1.0 PURPOSE AND SCOPE

This report presents a summary of housing construction in terms of total growth between 1990 and 2000, growth in planning areas during the same period, price trends for single-family housing, and the current taxable value of new units in each planning unit. Further, increasing housing prices were analyzed to identify the potential effects on affordability and growth rates.

Because of the small number of annual housing starts, housing sales, and sale of vacant lots in some of the Waste Water Planning Units, results are shown by major subareas instead – Upper, Middle and Lower Keys. Information for Key West and Key Colony Beach are reported separately from the rest of the Lower Keys and Upper Keys, respectively when conditions differ significantly.

Each element is introduced with a brief description, followed by statements of the most important forces that directly affect future development. Growth in individual planning areas (capture rates) is used in the Carrying Capacity/Impact Assessment Model (CCIAM) modeling process to compare land development scenarios with growth patterns that have been documented over the past decade. Further, current taxable value of new single-family homes will also be used in the CCAM modeling process to provide future tax impacts that will accompany different alternative development scenarios.

2.0 DATA AND METHODOLOGY

The 2000 official tax roll generated by the Monroe County Property Appraiser was incorporated into a Geographic Information System (GIS). Information utilized to produce the analysis contained in this report was extracted and tabulated as needed.

Sales prices for new housing are based on the amount of the "last sale" reported in the tax roll for *qualified sales* – those that *qualify* as true market-rate transactions between independent parties. More specifically, qualified sales are arms-length transfers between willing buyers and sellers, each acting in his or her own economic self-interest and with a reasonable knowledge of market conditions. Sales at less than market price among family members or those made under duress as part of divorce settlements are examples of *not* qualified sales. All of these qualified sales are for units constructed since 1989 and sold during the 1990s within a year of their construction. These qualified sales are the primary measure of the rate of price increase for new housing during the past ten years.

Sales prices for older housing indicate the extent to which they have appreciated or depreciated in value since they were built. Houses built during the 1980-1988 period were used for this analysis because they were constructed before any influence of Rate of Growth Ordinance (ROGO) could have been exerted on their construction cost, and they are not old enough to have deteriorated significantly during the 1990s. (These price trends are reported in detail in the Appendix.)

The major purpose of reporting taxable values for new single-family homes is to provide a basis for forecasting future *ad valorem* tax. Since the county has a moratorium on commercial development, single-family homes were selected as the primary indicator of how growth will impact the local tax base. Further, single-family residential development is the primary urban land use group in terms of acreage, and ownership of single-family housing creates an important tax expenditure for families, making it an important economic indicator for both the community and individual households.

3.0 MAJOR FINDINGS AND CONCLUSIONS

3.1 Residential Development During the 1990's

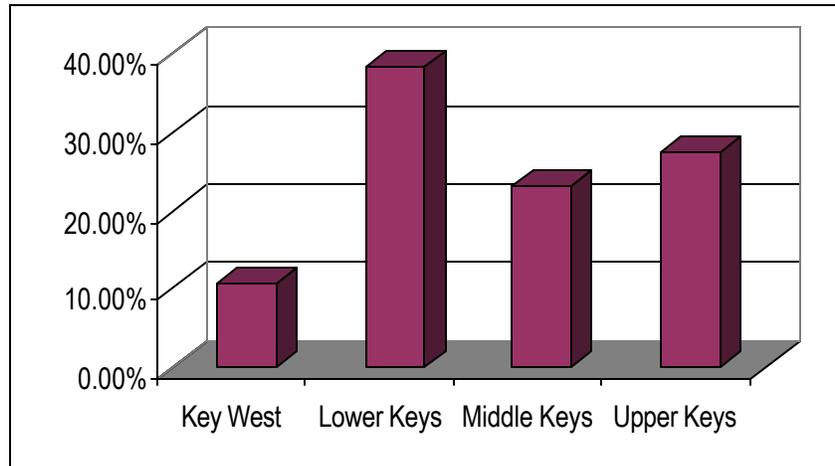
A survey of housing construction during the 1990's indicates the location of strong and weak market conditions that will probably continue. While overall construction rates are controlled by Monroe County's ROGO, the location of new housing construction is also strongly affected by the County's "point system" that is used to channel new construction into areas with existing, construction-ready lots.

Development of new subdivisions on untouched land has not been a major factor in creating lots for construction of new housing. These factors create a limited supply of potential new units in the face of independently generated demand, as well as focusing new housing construction on a relatively small number of locations. The high value of these development rights, and the small area available for their use, combine to increase inflationary pressures in the market for new housing units.

- **Information from the records of the Monroe County Property Appraiser indicates that new residential development has been distributed geographically throughout all subareas (Upper, Middle and Lower Keys).** The Upper and Middle Keys, combined, captured approximately half of the growth, while the other half was concentrated in the Lower Keys and Key West (Figure 1). However, the overall rate of growth was constrained by the County's managed growth program.

Details regarding the number of new housing units built and the rates at which overall countywide housing construction is "captured" by individual planning areas are presented in the Appendix, Table A-1. These "capture rates," the percentage of total growth that is attracted to an individual planning area, will be used in the CCIAM modeling process to compare alternative development scenarios with growth trends and patterns that can be documented through official County Property Appraiser records.

**FIGURE 1
GEOGRAPHIC DISTRIBUTION
OF RESIDENTIAL DEVELOPMENT, 1990-2000**



Source: Monroe County Property Appraiser

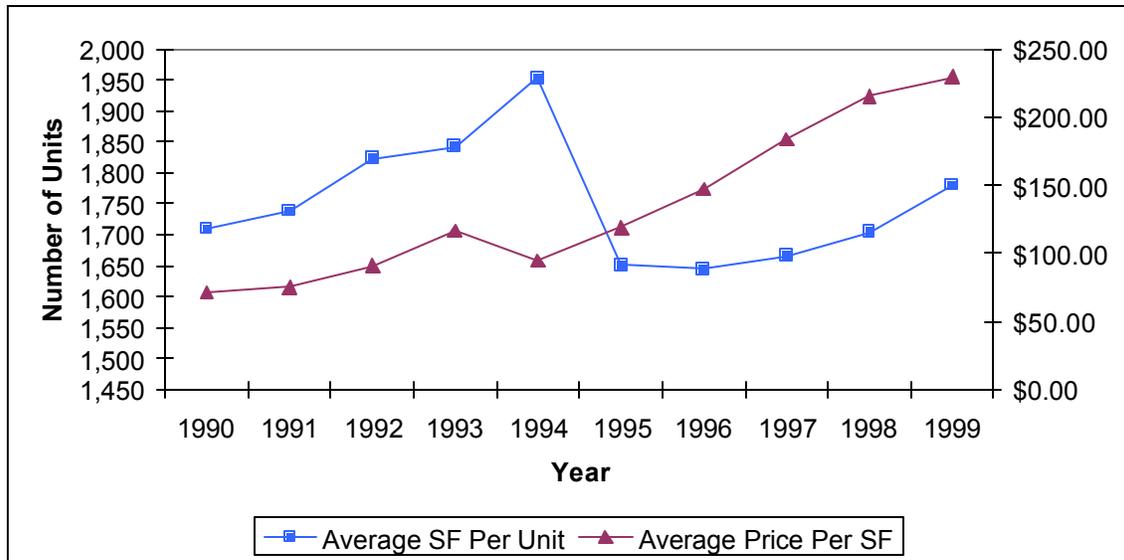
3.2 Market Prices of New Houses

This is the first of three sections that deal with housing prices and affordability. Section 3.2 deals with the trends that have been experienced by price levels of new construction during the period of 1990-2000. Section 3.3 describes the current housing market at the end of the 1990-2000 decade. It covers the total single-family housing market during the three-year period of 1998-2000 and includes all qualified sales that took place during that time frame. Section 3.4 addresses the price trends exhibited by older homes built during the 1980s. These older homes were selected for analysis because their construction cost was not affected by ROGO, yet they are not old enough to have deteriorated excessively at the time of the analysis period of the 1990s.

Housing prices must be affordable to the majority of the population and labor force if a community is to grow. Housing must be affordable to entry-level workers as well as senior executives, blue-collar employees as well as professionals, and those who work in lower-paying sectors as well as those in industries that have high wage rates. Consistent and reasonable increases of housing prices indicate a healthy investment climate for homebuyers, but an exceptionally high rate of increase is called inflation. Inflation quickly makes it difficult for middle-income households to find decent, affordable housing in the community. When inflation occurs, growth inevitably slows because fewer people can afford local housing prices.

Various factors, including construction of larger housing units, can cause housing prices to increase over time. However, from 1990 to 1999, the average size of new houses increased slightly, while the price per square foot nearly tripled (Figure 2).

FIGURE 2
SINGLE-FAMILY TRENDS: 1990-1999
(AVERAGE SQUARE FOOT PER UNIT & AVERAGE PRICE PER SQUARE FOOT)



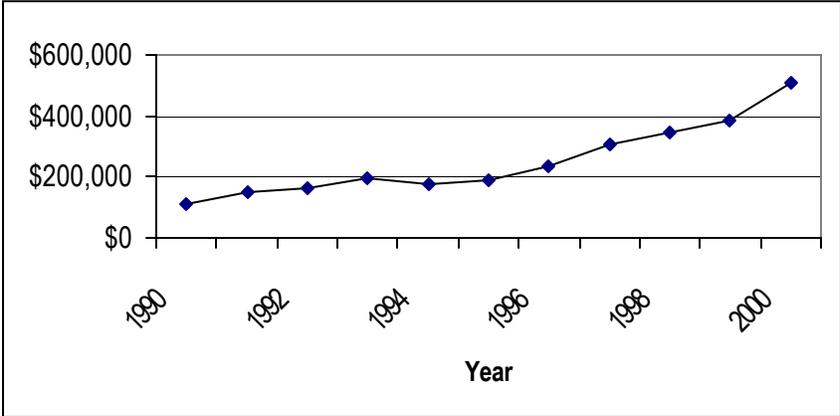
Source: Monroe County Property Appraiser

The average sizes of single-family housing units built each year during the 1990-1999 period were calculated from the Monroe County Property Appraiser database, and compared with the average sales price of new single-family housing units during the corresponding year. The results of this analysis are presented in detail in Tables A-2 and A-2a in the Appendix. An overall increase in housing size did not have a significant effect on prices over the decade. The average floor area in newly constructed houses increased from 1,710 square feet in 1990 to 1,781 square feet in 1999, an overall change of only +4.15%. The average size of a new house exhibited two distinct trends during the decade. In the 1990-94 period the average size increased from 1,710 square feet to 1,953 square feet (a +14.2% change). The average housing size fell to 1,651 square feet in 1995 and continued to increase to an average of 1,781 in 1999 (a +7.87% change). Thus, the net change over the ten-year period was only +71 square feet of floor area. During the same time frame, the price per square foot of floor area increased steadily from \$71.21 to \$229.73 (a +322.6% change).

The average price of a new house in the Florida Keys increased from \$108,063 in 1990 to \$508,204 in 2000; the median price increased from \$129,000 to \$256,400 in the same period (Table A-2a). The increase of the housing component of the Consumer Price Index (published monthly by the US Department of Commerce) was 27% for the same period. The specific increase of housing prices documented by change of the appropriate grouping in the County Property Appraiser accounted for only 7.3% of the total increase experienced in the single-family housing market of the Florida Keys. Importantly, this

change does not result from comparison of only the extreme prices at either end of the time frame. The trend of increasing housing prices was consistent over the decade (Figure 3). Detailed statistics are presented in Appendix Table A-3.

**FIGURE 3
AVERAGE NEW HOME PRICES: MONROE COUNTY**

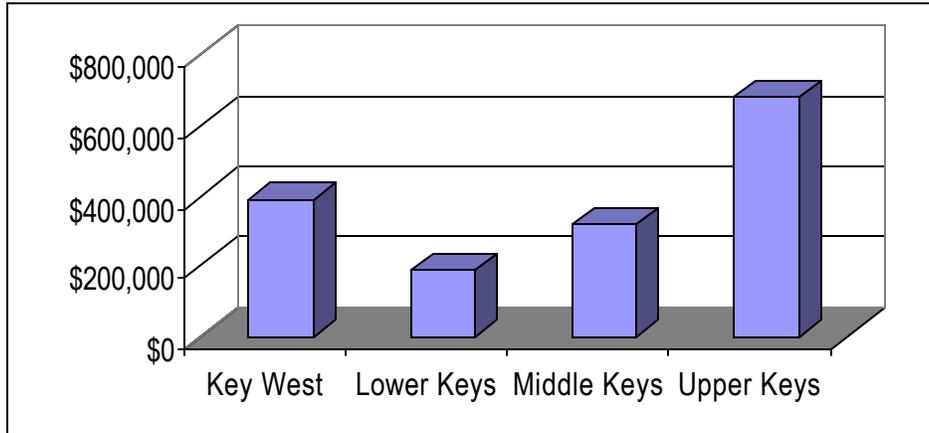


Source: Monroe County Property Appraiser

For the three years of 1998-2000, only 1.6% of the 1,154 single-family units sold were priced at more than \$1,000,000 (see Figure 5). In contrast, 38.4% (443 units) had prices in the range of \$100,000-\$200,000. While very expensive houses can have a significant effect on average housing prices in Key West and Ocean Reef Club, where only small numbers of sales take place yearly, their impact is considerably lower in other parts of the Florida Keys.

Three of the four general market areas of the Florida Keys (Upper and Middle Keys and Key West) experienced increases of average prices for new single-family homes in excess of \$300,000 between 1990 and 2000 (Figure 4). The Upper Keys and Key West experienced the greatest increase of average price. Average prices in the Upper Keys were influenced by sale of very expensive houses in Ocean Reef Club.

FIGURE 4
INCREASES OF AVERAGE NEW HOME PRICES: 1990-2000



Source: Monroe County Property Appraiser

In all subareas of the Florida Keys, the average price of new housing increased by 200% or more during the 1990-2000 period. The greatest increase of average new home prices was in the Upper Keys, an area impacted by demand pressures from Miami-Dade County and the presence of Ocean Reef Club.

3.3 Current Market Prices of Single-Family Housing

A three-year period of 1998-2000 was selected to portray a general picture of recent and current housing market condition. These years are the latest for which complete annual sales data are available from the County Property Appraiser. Detailed statistics are in Appendix Table A-4.

These prices represent all qualified single-family sales reported for the past three years in the current Property Appraiser's database. These amounted to almost 3,500 individual sales throughout the Florida Keys. The following are key points that should be emphasized:

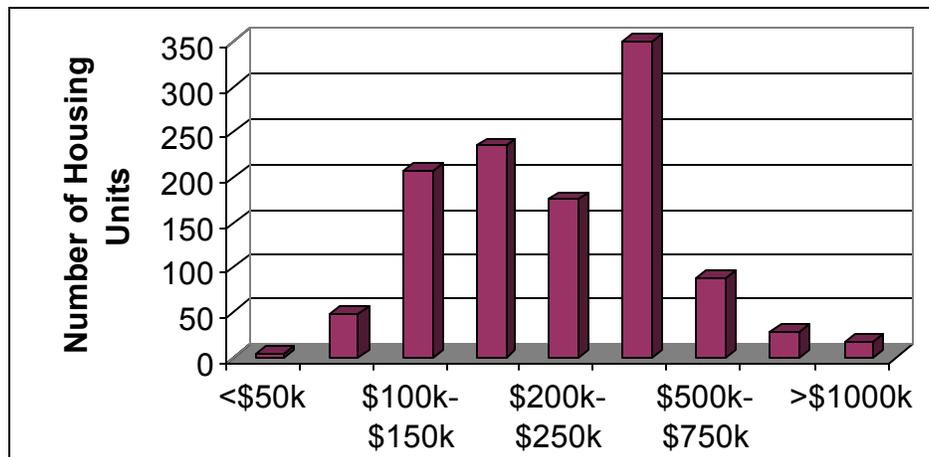
- The annual demand for all home sales in the Florida Keys is about 1,150 units.
- The yearly demand in the Upper Keys (including Ocean Reef Club) is approximately 420 units. Key West and the Lower Keys are currently exhibiting a combined total of 550 sales annually. The Upper and Lower Keys (including Key West) represent 84% of the total annual sales of single-family houses.
- Inexpensive housing is only a small part of the market. Houses costing less than \$50,000 comprise only 53 units annually under current market conditions. Households below an estimated median household income of \$41,800 can afford only 22.6% of the single-family houses sold in the Keys.

(“Affordability” was estimated by multiplying the median household income by a factor of 3.57, which represents a blended percentage of total household income acceptable for debt service derived by a combination of the percentages permitted by conventional and FHA/VA mortgage loans.)

- However, only 11.5% of the units sold are priced above \$500,000. Two-thirds of the units sold are priced between \$150,000 and \$500,000, and of these approximately half of them sell for prices in the range of \$150,000-\$250,000 (Figure 5).

The current market accommodates sales of single-family housing at prices that will enable households earning at the median level to have economic access to slightly more than 250 units annually. This is equivalent to the maximum number of new housing units that can be built each year under ROGO. Thus, the current market offers affordable units at the same rate at which housing supply can be expanded under County regulations.

**FIGURE 5
CURRENT MARKET DEMAND FOR SINGLE-FAMILY HOUSING
MONROE COUNTY**



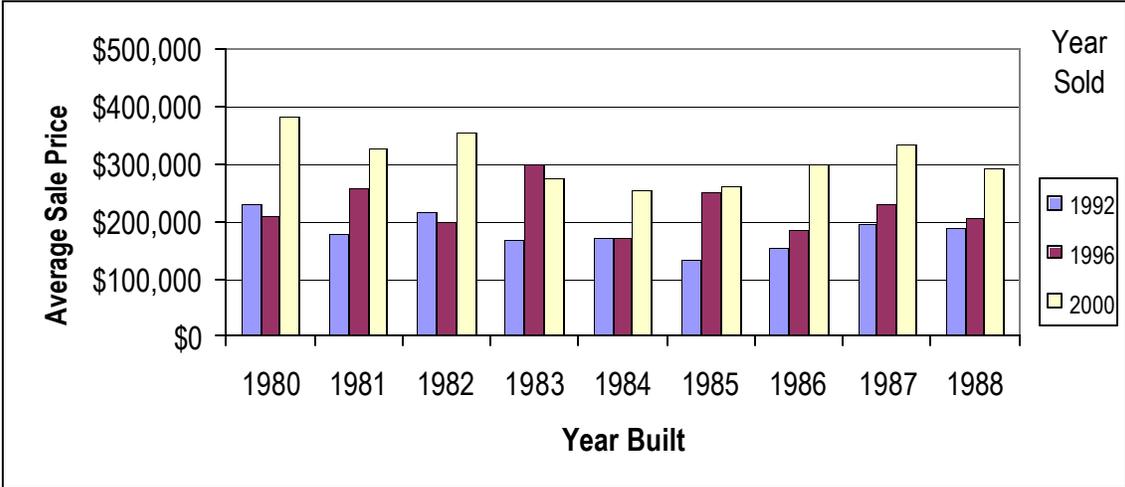
Source: Monroe County Property Appraiser

3.4 Sales Prices of Older Houses

This analysis examined sales trends of single-family houses built during the 1980s and sold during the 1990s. This analysis strategy was selected because housing units built in the 1980s were not influenced by any inflationary influences of ROGO (adopted in 1992), yet they have not aged to the point that depreciation is significantly affecting their value. These older houses could be used to measure effects of ROGO-induced inflation on the newest portion of the housing supply that existed when ROGO was adopted. Houses built prior to 1980 were not included because they had already reached the age at which deferred maintenance and other depreciation factors could be highly variable and prices could reflect significant qualitative differences between otherwise similar units.

The average sales prices of houses built from 1980 to 1988 were examined for years 1992-2000. The details of these calculations are shown in Appendix Table A-5, but a summary of these trends is shown in Figure 6.

**FIGURE 6
PRICE TRENDS OF OLDER HOMES: 1992, 1996, 2000**



Source: Monroe County Property Appraiser

There has been an increase of inflationary pressure on pre-owned homes since 1996 (Figure 6). Average prices of pre-owned homes in 1992 and 1996 show smaller changes than the prices between 1996 and 2000. The sharp upward movement of prices in most of the housing units built in each year during the 1980-1988 period indicates a market response to inflationary pressure during the 1992-2000 time frame.

3.5 Price Trends of Vacant Residential Lots

The previous sections have dealt with the sales prices of completed houses, including land as well as improvements in the package price. However, the price characteristics of vacant lots are also an important element for analysis. If a restricted supply of suitable building sites is a major causal factor in the rapidly increasing prices of new housing in Monroe County, it would be reasonable to expect lot prices to escalate in a trend that is generally parallel to the prices of new homes. However, the data analyzed in this report shows that this pattern does not exist in the county real estate market.

A report prepared by Industrial Economics, Incorporated (IEc) in October 2000 addressed the behavior of lot prices as part of an analysis of the fiscal impacts of alternative growth scenarios. The purpose of the IEc analysis was to examine the price of residential lots as an expense in future land acquisition by Monroe County – not their relationship to housing prices. Nonetheless, the existence of two analyses of residential lot pricing begs comparison. The

research strategies, techniques, and findings of each should be examined for purposes of identifying any conceptual differences.

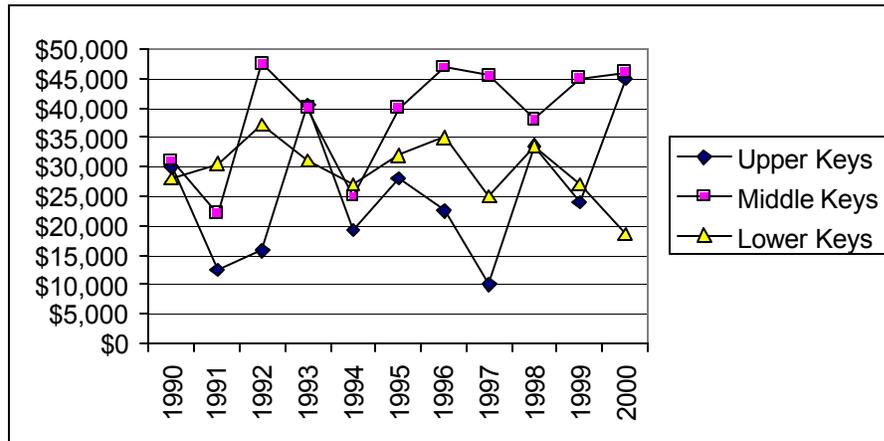
Analysis Conducted For This Report

This analysis examines the qualified sales of 1,401 currently vacant residential lots that have a reported “last sale” during the 1990-2000 time frame. The research strategy focuses on the prices paid for direct sale of lots rather than focusing on indirectly estimating the land value through extraction from sales of improved properties. The direct sales comparison approach yields a more accurate measure of the residential land market than is possible through use of indirect methods.

- A larger number of transactions that represent all submarkets in Monroe County provide a more accurate representation of the existing market than is possible through a small sample of sales that occurred over a short period. The 1,401 sales used in this analysis exhibit a broad geographic distribution throughout all of the submarkets. In fact, they represent *all of the qualified residential lot sales* that took place over the 1990-2000 time frame. (See Appendix Table A-6.)
- Analyzing transactions of residential lots avoided distortions that result from mixing values of properties with different highest-and-best use.
- Examination of sales over a period of eleven years that correspond with the period of ROGO enforcement analyzes regulation-induced price inflation on residential land. Data for individual years provides a more accurate picture of actual trends than comparison of data at either end of a five-to-ten year time period.
- Examination of sales data for specific submarkets permits identification of any different price levels and distinct trends associated with several geographic areas.

The sales of vacant residential lots do not document a clear and predictable trend of price increases over the 1990-2000 period – or a strong correlation with the price of new housing. Measures of the annual mean and median values in each submarket exhibit a high degree of fluctuation from one year to the next (Figure 7). The large deviations of individual sales prices from the mean price is a reflection of the wide price range of lots sold during the 1990s.

**FIGURE 7
MEDIAN LOT PRICES BY SUBMARKET**



Source: Monroe County Property Appraiser

Using the patterns in Figure 7 as a context, there are several key characteristics of the current market for residential lots that should be highlighted:

- The wide range of lot prices – sometimes including a relatively small number of extremely expensive and inexpensive lots – makes the median a more useful measure of central tendency than the average. Furthermore, the wide variation of prices creates large standard deviations in all major submarkets and in almost every year, decreasing the reliability of the mean as an accurate forecasting tool.
- There is no general trend, except that the median value for 2000 is greater than that for 1990 in two of three submarkets.
- The change expressed by the overall county average lot price (Figure 8, below) is considerably more consistent as a single measure, although each of the average values is accompanied by a large standard deviation that also indicates an instability.

The high degree of fluctuation of median lot prices since 1990 is very important when assessing potential causal impacts on housing prices. First, this pattern *is not consistent* with the continuing upward trend of housing prices (Figure 3). Second, this erratic pattern indicates the *absence of a consistent relationship* between median lot prices and time, thereby reducing the validity of “time adjustments” for value in the broad market. If median lot prices for the two end dates of 1990 and 2000 are compared with one another, a general upward trend is exhibited for the Upper Keys and the Middle Keys, but the Lower Keys expresses a decline in median price. Detailed data (Appendix Table A-7) illustrates fluctuation of these values on a yearly basis that makes it virtually impossible to compute a quantitative relationship.

Since adoption of ROGO the housing market in the Florida Keys has been sharply affected by the regulations of this ordinance, and it is not functioning as freely as housing markets in urban areas with fewer external constraints. Some of the more salient factors affecting this condition include:

- The limitation on permits for new housing construction reduces the annual demand for building lots that are not served by infrastructure. The lots will not receive high scores under the County's "point system" for awarding building permits. Thus, a strong demand for lots that are unlikely to receive a development permit during the next five years cannot be expected.
- Economically prudent buyers will logically seek and pay discounted prices for lots that may require holding periods of several years. Significant holding periods will also tend to reduce the value estimates by professional real estate appraisers, causing buyers and lenders to respond to the discounted values by diminishing the pressure for price increases.
- The geographic distribution of lots that can receive high scores under the point system is largely restricted to subdivided areas with existing infrastructure. These lots tend to be concentrated in existing urban areas, a geographic constraint that effectively limits the demand for lots in less developed areas.
- The availability of improved properties as a source of lots for new housing construction (after demolition of the existing structure) is an expensive but effective means of avoiding the constraints imposed by ROGO. While the total cost of land and improvements is essentially the "land" cost under this situation, it also must be recognized that external policy and regulatory influences have created land market characteristics that are unlike those in most other urban areas of the state. ROGO has limited the effective supply of residential lots, both geographically and quantitatively, to the point that the residential land market is not functioning in a manner typical of urban or suburban areas.
- The residential land market is characterized by a high degree of price instability. Prices within submarkets range widely and annual absorption rates (the number of new units that are sold or rented each year within a market area) vary substantially between submarkets. General analyses are suitable for identifying overall patterns, and in this case, are too variable to be applied to value analysis for small areas or individual properties. Nonetheless, the data from 1,401 sales show that increasing residential land costs cannot be identified as the driving force behind the rapid increase of prices for new housing during the 1990s.

Comparison with Analysis by Industrial Economics, Inc.

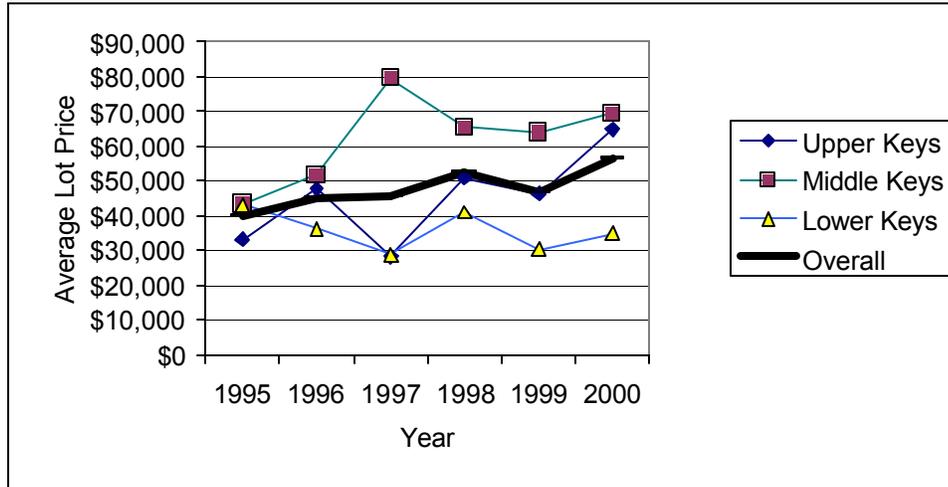
Fiscal Impacts of Alternative Development Scenarios for Monroe County, Florida, by IEC, (Iec 2000) analyzed the *fiscal impacts* of two development scenarios, no growth and growth according to ROGO. In this study, however, the purpose of land valuation analysis is to identify

any stable quantitative relationships between residential land value and housing cost that could be used in a forecasting model.

The land value analysis conducted by IEC focused on estimating the total cost of the County acquiring vacant residential lots as part of a no-growth scenario.

- The IEC study states that the “market value of vacant buildable land” reflects the “average sales price of vacant parcels in the year 2000.” (See Footnote 2 on page 1-7.) Actually, 321 sales were analyzed (see Footnote 26 on page 3-7 of the IEC report) for the period January-July of 2000. This sales total is different from the 296 qualified sales of vacant residential lots reported for all of 2000 in the final Monroe County Tax Roll. A representative of IEC reported in a telephone conversation (Cindy Manson, IEC, personal communication, September 13, 2001) that the sales used in their study were not all “qualified.” The IEC study reports an average sales price of “approximately \$90,000” for a vacant parcel. In contrast, the analysis of qualified sales undertaken for this report results in an average price of \$83,368 for vacant residential lots in the Florida Keys. Although the difference between the values is less than 10%, either one must be considered against a price range from \$2,600 to \$1,100,000 during 2000. Average prices and their standard deviations are presented for each major submarket of the Florida Keys in Appendix Table A-8.
- The IEC report also addresses the consideration of rising land prices, generally referred to in valuation analysis as “time” or “market” adjustments. IEC states the following in Footnote 35 on page 4-9: “We calculated the average sale price of vacant buildable parcels each year between 1995 and 2000. The average per parcel sale price of vacant buildable land in 2000 (\$347,000) was more than twice the average per parcel sale price of land in 1995 (\$147,000), indicating an average annual increase of 18.7 percent. While this comparison may reflect variation in site-specific parcel features (e.g., size or location), it indicates that a real increase in excess of 5.5 percent is possible.”
- In order to make a direct comparison with the IEC findings, the qualified residential sales since 1995 were analyzed. The average prices computed from the latest qualified sales in the Property Appraiser’s database showed an increase from \$39,849 in 1995 to \$56,316 in 2000. Annual changes over the 5-year period showed a relatively consistent trend line, and the average annual rate of increase was 8.26%, slightly higher than 5.5%, as suggested by IEC. The 5-year changes of average residential lot prices are shown in Figure 8.

**FIGURE 8
AVERAGE LOT PRICES BY SUBMARKET**



Source: Monroe County Property Appraiser

The high degree of price variation exhibited by these sales indicates that all price estimates prepared for policy analysis, decision-making, and action programs should incorporate “range” estimates that show the probable variation of value. The estimated ranges will facilitate analysis of the cost sensitivity associated with residential land values, for both land acquisition and tax revenues.

3.6 Seasonal Housing

The importance of tourism and retirement in the local economy suggests that seasonal housing is an especially important market component in the Florida Keys, but measuring the size of this market segment is difficult. Factors that contribute to understanding this phenomenon include the following:

- The 2000 U.S. Census conducted during April, indicated that the permanent population was 79,589, with 76,705 living in households. At the average household size of 2.23, this population equates to approximately 34,400 households.
- However, the U.S. Census Bureau reports on its web site that the total number of housing units in Monroe County was 51,617 in 2000.
- If all of the 51,617 housing units occupied by permanent residents, the average household size (pph) would be only 1.49 persons – two-thirds of the size reported by the U.S. Census Bureau from 2000 Census data.
- A comparison of the total number of housing units physically located in the Florida Keys at the time of the 2000 Census with the number of households counted at this time, infers that the 17,217 units in excess of those required for households who live permanently in Monroe County are for temporary residents (33% of the total inventory of housing units).

- In addition to the information from the Census Bureau, information from the Monroe County Property Appraiser's database was used to prepare an estimate of the number of units used for temporary occupancy. This data analysis also revealed that persons who live outside of Monroe County for most of the year owned 32% of the units.

Using the Census data, 33% of the total housing units in Monroe County are dedicated to temporary residents, and the Property Appraiser's data indicate that temporary residents own 32% of the units. Therefore, it can be estimated that temporary – or seasonal – housing comprises one-third of the total market demand in the Florida Keys.

3.7 Summary of Factors Affecting Single-Family Housing Prices

In all markets prices are influenced by the "ready, willing and able" buyers that are interacting with the supply of housing units that are actively offered for sale. The following factors contribute to the price levels of housing in the Keys. All are forces in the market, and their combined influence is expressed in prices.

- **National Economic Trends.** National economic trends exhibited a generally upward direction during the 1992-2000 time frame. This was also a period of consistently low mortgage interest rates. Further, the housing component of the U.S. Department of Commerce Consumer Price Index increased by a modest average of 21.52% from 1992 to 2000. All of these trends contribute to a stable housing and financial market at the national level and reinforce continuation of similar market conditions in localities such as the Florida Keys that had experienced substantial growth during the prior decade.
- **Flexible vs. Inflexible Supply.** Prices for older homes have not been as sharply impacted as the prices for new construction homes. The number of new houses that can be built each year is limited by ROGO, and this constriction of supply can have pronounced effects on prices if demand is sufficiently high. The potential supply of pre-owned houses is flexible and significantly larger. Any willing owner can seek a willing buyer, and the supply of units on the market can easily expand to meet the demands of more buyers. This supply expansion tends to keep supply and demand in balance with one another until current owners are unwilling to sell at prevailing prices. At this point an "inflation psychology," in which existing owners will only sell for high prices and buyers are willing to pay them because they expect prices to continue to rise, can occur. This appears to have become a pricing factor in the market for older homes, as indicated by the rapid escalation of average prices for older houses since 1996.
- **Lot Prices.** The supply of construction-ready residential lots has been largely restricted by ROGO. Increasing land and development costs have not had a material impact on lot prices during the 1990s. The actual number of lots available for absorption each year is fixed by the general limits of the ordinance on the number of new houses that will be permitted (actual

demand), and the locations of lots that are acceptable for development. These additional locations are further defined by the "point system" in county regulations that determines the suitability of an approved lot for immediate improvement with a new house. Maximum points are awarded to lots that are fully developed and have available urban services and facilities. Both of these limitations combine to materially restrict buyers' options and place upward pressures on prices of a relatively limited number of parcels that meet the criteria for maximizing development points. Other lots are in a less desirable position in the market. Owners or purchasers are facing a holding period of uncertain length that can last several years, during which time no economic benefit can flow from the land. Within normal market dynamics, prices are depressed when a present expenditure for land is accompanied by a long or uncertain delay of economic benefits from the investment.

- **Demand Characteristics.** Basic demographics indicate that there has been a shift of housing demand characteristics toward units that are priced for purchase by affluent buyers who are not as sensitive to price changes as those earning more modest incomes. In fact, examination of the changed composition of personal income of Keys residents since 1990 shows that they are not as dependent on salary income as before. These income trends over the past decade show that current residents have a materially greater concentration of personal income in the "investment" component, which further indicates that they probably have a greater net worth than households whose income comes almost exclusively from wages and salaries. Those with more net worth can afford to pay higher prices for desirable housing opportunities.
- **"Ratchet Effect."** The ratchet effect is somewhat similar to an inflationary psychology, but once established, it tends to extend far into the future while the inflationary behavior can reverse itself in a relatively short period. The ratchet effect occurs when a combination of factors establish a price floor that effectively moves the area to a new level within the market. This movement is so strong that the market position of the area has been reestablished at a higher price level, for example, and return to the previous price range is unlikely. The ratchet effect can take place in areas of new development as readily as in those in later stages of their typical life-cycle. Another term that is sometimes applied to this general phenomenon is "gentrification," but this process is usually associated with rehabilitation of blighted areas through private market forces. In the Florida Keys, the ratchet effect has had ten years to become established through application of ROGO regulations as well as fundamental changes in demographic and economic conditions.

3.8 Taxable Value of New Single-Family Houses

The taxable value of new single-family houses was calculated from the Monroe County Property Appraiser's files by looking at all new houses built since 1997 in each planning unit. The average of these values was calculated for the individual planning areas and for the county as a whole. The values for specific planning areas will be used to estimate potential *ad valorem* tax revenues generated by new housing in alternative development scenarios. These values are shown in Table A-9 in the Appendix.

APPENDIX

TABLES

**TABLE A-1
RESIDENTIAL DEVELOPMENT BY PLANNING AREA: 1990-2000**

Waste Water Planning Unit	Total Number of Dwelling Units (DU)	DU/Year	Capture Rate
Baypoint	31	3.10	0.55%
Big Pine Key	504	50.40	8.96%
Big/Mid Torch Key	22	2.20	0.39%
Boca Chica	187	18.70	3.32%
Cudjoe Key	429	42.90	7.63%
Key West	519	51.90	9.23%
Little Torch Key	98	9.80	1.74%
Long Key/Layton	91	9.10	1.62%
Lower Matecumbe	154	15.40	2.74%
Lower Sugarloaf	128	12.80	2.28%
Marathon Primary	523	52.30	9.30%
Marathon Secondary	306	30.60	5.44%
Ocean Reef Club	140	14.00	2.49%
PAED 15	81	8.10	1.44%
PAED 16	15	1.50	0.27%
PAED 17	250	25.00	4.44%
PAED 18	221	22.10	3.93%
PAED 19 & 20	211	21.10	3.75%
PAED 21	16	1.60	0.28%
PAED 22	2	0.20	0.04%
Plantation Key	393	39.30	6.99%
Ramrod Key	153	15.30	2.72%
Stock Island	111	11.10	1.97%
Summerland Key	154	15.40	2.74%
Upper Matecumbe	50	5.00	0.89%
Upper Sugarloaf	38	3.80	0.68%
Windley Key	3	0.30	0.05%
Outside WWUnits	796	79.60	14.15%
Totals	5,626	562.60	100.00%

Source: Monroe County Property Appraiser

**TABLE A-2
AVERAGE SALES PRICES OF NEW SINGLE-FAMILY HOUSES**

	Key West		Lower Keys		Middle Keys		Upper Keys	
	Average Price	No. of Sales						
1990	\$154,117	6	\$94,375	53	\$138,073	27	\$100,536	46
1991	\$79,500	1	\$128,030	46	\$144,074	19	\$170,704	52
1992	\$164,625	4	\$139,000	46	\$192,726	38	\$164,557	49
1993	\$185,900	8	\$126,740	71	\$227,550	28	\$321,266	35
1994	\$162,913	26	\$137,369	83	\$224,027	30	\$215,860	57
1995	\$221,007	34	\$134,121	95	\$196,624	39	\$235,419	67
1996	\$243,619	35	\$180,053	81	\$281,577	43	\$262,393	56
1997	\$311,600	26	\$192,552	98	\$277,611	82	\$444,105	93
1998	\$424,019	28	\$227,341	101	\$276,976	145	\$541,523	102
1999	\$476,705	69	\$260,334	125	\$320,195	131	\$579,363	100
2000	\$505,874	27	\$281,656	94	\$460,909	56	\$779,934	88

Source: Monroe County Property Appraiser

**TABLE A-2A
ADDITIONAL STATISTICS, COUNTYWIDE**

Year	Average Price	Std Deviation	Median Price	Minimum Price	Maximum Price
1990	\$108,063	\$73,907	\$129,000	\$68,000	\$325,000
1991	\$149,008	\$60,584	\$155,000	\$79,900	\$285,000
1992	\$163,791	\$79,180	\$114,900	\$79,000	\$325,000
1993	\$197,898	\$439,241	\$162,000	\$83,500	\$2,115,000
1994	\$176,847	\$128,212	\$139,000	\$30,000	\$600,000
1995	\$185,945	\$130,957	\$116,900	\$88,300	\$875,000
1996	\$232,152	\$100,685	\$169,900	\$99,900	\$660,000
1997	\$304,473	\$218,921	\$203,350	\$85,200	\$1,950,000
1998	\$346,359	\$345,348	\$239,250	\$92,000	\$3,900,000
1999	\$388,979	\$265,146	\$225,000	\$90,000	\$2,500,000
2000	\$508,204	\$471,783	\$256,400	\$93,000	\$2,886,000

Source: Monroe County Property Appraiser Database

**TABLE A-3
ESTIMATED SINGLE-FAMILY SALES PER SQUARE FOOT**

Year	Average Square Feet Per Unit	Average Price Per Unit	Average Price Per Square Foot
1990	1,710	\$121,775	\$71.21
1991	1,739	\$130,577	\$75.09
1992	1,823	\$165,227	\$90.63
1993	1,843	\$215,364	\$116.86
1994	1,953	\$185,042	\$94.75
1995	1,651	\$196,793	\$119.20
1996	1,645	\$241,911	\$147.06
1997	1,666	\$306,467	\$183.95
1998	1,705	\$367,465	\$215.52
1999	1,781	\$409,149	\$229.73

Source: Monroe County Property Appraiser

**TABLE A-4
SUMMARY OF RECENT SINGLE-FAMILY SALES: 1998-2000**

Price Range	Average Annual Number of Sales					
	Key Colony Beach	Upper Keys	Middle Keys	Lower Keys	Key West	Totals
<\$50k	0	2	1	1	0	4
\$50k-\$100k	2	31	10	5	1	49
\$100k-\$150k	9	80	25	78	16	208
\$150k-\$200k	12	62	33	95	33	235
\$200k-\$250k	9	39	26	51	51	176
\$250k-\$500k	20	104	68	66	91	349
\$500k-\$750k	1	23	15	26	22	87
\$750k-\$1000k	4	10	3	1	10	28
>\$1000k	0	11	4	0	3	18
Totals	57	362	185	323	227	1,154

Source: Monroe County Property Appraiser Database

Note: Price ranges in *italics* are affordable by average-size households at median income of \$41,800

**TABLE A-5
AVERAGE SALES PRICES OF OLDER HOUSES**

Year Built	Year Sold								
	1992	1993	1994	1995	1996	1997	1998	1999	2000
1980	\$229,500	\$210,111	\$159,222	\$226,671	\$207,837	\$295,655	\$246,403	\$308,513	\$382,238
1981	\$179,375	\$196,156	\$308,063	\$245,545	\$257,867	\$257,069	\$256,557	\$333,486	\$326,938
1982	\$218,088	\$228,683	\$200,953	\$176,708	\$197,821	\$212,008	\$222,844	\$226,700	\$354,590
1983	\$168,917	\$177,200	\$251,990	\$230,778	\$300,307	\$376,692	\$375,445	\$273,861	\$274,908
1984	\$172,831	\$206,722	\$160,132	\$207,719	\$170,886	\$236,086	\$266,634	\$283,303	\$255,291
1985	\$133,256	\$174,913	\$156,400	\$210,692	\$250,225	\$283,390	\$196,679	\$246,790	\$261,081
1986	\$153,000	\$198,591	\$179,450	\$204,843	\$186,493	\$248,236	\$193,918	\$262,376	\$299,015
1987	\$194,658	\$205,510	\$197,232	\$337,450	\$229,597	\$190,314	\$248,333	\$273,761	\$334,188
1988	\$188,741	\$269,143	\$236,543	\$236,055	\$205,927	\$240,812	\$253,465	\$337,291	\$291,486

Source: Monroe County Property Appraiser

**TABLE A-6
SUMMARY OF RESIDENTIAL LOT SALES: 1998-2000**

Year	Number of Currently Vacant Lots Sold Per Year					
	Key Colony Beach	Upper Keys	Middle Keys	Lower Keys	Key West	Totals
2000	8	116	42	119	11	296
1999	18	62	32	33	2	147
1998	18	72	24	22	0	136
1997	3	180	13	38	1	235
1996	0	38	16	15	10	79
1995	0	47	21	21	1	90
1994	1	44	9	45	0	99
1993	0	26	11	34	1	72
1992	0	28	14	12	1	55
1991	0	39	25	14	2	80
1990	0	47	32	32	1	112
Total Sales	48	699	239	385	30	1,401

Source: Monroe County Property Appraiser Database

**TABLE A-7
MEDIAN PRICES OF RESIDENTIAL LOT SALES: 1990-2000**

	Key Colony Beach	Upper Keys	Middle Keys	Lower Keys	Key West
2000	\$154,500	\$45,000	\$46,000	\$18,500	\$1,100,000
1999	\$184,000	\$23,900	\$45,000	\$27,000	\$146,000
1998	\$150,000	\$33,500	\$38,000	\$33,500	n.a.
1997	\$130,000	\$10,000	\$45,500	\$25,000	n.a.
1996	n.a.	\$22,500	\$46,950	\$35,000	n.a.
1995	n.a.	\$28,000	\$40,000	\$32,000	n.a.
1994	n.a.	\$19,250	\$25,000	\$27,000	n.a.
1993	n.a.	\$40,500	\$40,000	\$31,000	n.a.
1992	n.a.	\$15,750	\$47,500	\$37,150	n.a.
1991	n.a.	\$12,500	\$22,000	\$30,500	n.a.
1990	n.a.	\$30,000	\$31,000	\$28,000	n.a.

Source: Monroe County Property Appraiser Database
n.a. – not available

**TABLE A-8
AVERAGE SINGLE-FAMILY LOT SALES: 1990-2000**

Year	Upper Keys		Middle Keys		Lower Keys	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1990	\$29,600	\$21,803	\$45,038	\$41,955	\$36,363	\$34,571
1991	\$24,556	\$24,102	\$37,284	\$34,675	\$33,143	\$14,485
1992	\$31,336	\$36,619	\$42,600	\$25,784	\$39,983	\$24,533
1993	\$34,781	\$20,823	\$57,936	\$54,654	\$32,300	\$16,003
1994	\$50,768	\$99,919	\$105,867	\$168,471	\$31,447	\$19,253
1994	\$33,223	\$26,728	\$43,229	\$33,391	\$43,095	\$39,916
1996	\$47,626	\$54,510	\$51,600	\$44,657	\$36,253	\$18,613
1997	\$28,136	\$60,370	\$79,477	\$97,803	\$28,676	\$19,505
1998	\$50,922	\$51,710	\$65,275	\$76,807	\$40,936	\$31,159
1999	\$46,369	\$59,476	\$63,931	\$58,298	\$30,264	\$21,055
2000	\$64,743	\$78,551	\$69,440	\$73,068	\$34,766	\$45,284

Source: Monroe County Property Appraiser

**TABLE A-9
AVERAGE CURRENT TAXABLE VALUE OF
NEW SINGLE-FAMILY HOUSES**

WWUnit	Taxable Value
BAY POINT	\$169,671
BIG PINE KEY	\$138,095
BIG/MID TORCH KEY	\$187,626
BOCA CHICA	\$289,235
CUDJOE KEY	\$193,502
KEY WEST	\$430,008
LITTLE TORCH KEY	\$192,865
LONG KEY/LAYTON	\$185,345
LOWER MATECUMBE	\$305,668
LOWER SUGARLOAF	\$296,689
MARATHON PRIMARY	\$283,553
MARATHON SECONDARY	\$206,625
OCEAN REEF CLUB	\$1,683,754
PAED 15	\$240,084
PAED 16	\$329,580
PAED 17	\$349,058
PAED 18	\$148,851
PAED 19 AND 20	\$148,001
PAED 21	\$255,230
PAED 22	\$304,552
PLANTATION KEY	\$290,312
RAMROD KEY	\$157,191
STOCK ISLAND	\$451,171
SUMMERLAND KEY	\$235,724
UPPER MATECUMBE	\$398,555
UPPER SUGARLOAF	\$98,470
WINDLEY KEY	\$289,228
OUTSIDE WWUNITS	\$264,504
County-Wide Average	\$310,251

Source: Monroe County Property Appraiser