

PART III

**DEMOGRAPHIC AND ECONOMIC ANALYSIS
OF ALTERNATIVE DEVELOPMENT SCENARIOS
IN THE FLORIDA KEYS**

1.0 PURPOSE AND SCOPE OF REPORT

This report is part of a series of reports that document the development of the Socioeconomic Module of the Florida Keys Carrying Capacity/Impact Assessment Model (CCIAM). The report examines the land use demand that would be created if independent population projections by the Monroe County Planning Department (MCPD) and the Bureau of Economic and Business Research (BEBR) through the year 2020 occur. It also compares the land use demands resulting from the independent population projections with those derived from the Smart Growth scenario (Appendix A) provided by the local planners. The Smart Growth Scenario was used to test the module's operations and compare a land use scenario with population-driven projections.

Other reports within this module document the socioeconomic conditions of the Florida Keys (Tasks 1 and 2 Report) and the development and use of the coefficients and relationships that form the basis of the module (Tasks 5 and 6 Report). Together, these reports provide a complete description of the Socioeconomic Module of the CCIAM.

An additional objective of the evaluation of land use demands created by independent population projections is to test module components in order to assist in the final refinement of the module. Also, future development scenarios will be compared to the results of land use demands and other socioeconomic parameters derived from independent population projections. These comparisons will provide a reference to evaluate the feasibility of alternative development scenarios.

The module is driven by land use, and the database for land use is the Monroe County Property Tax Roll as provided by the Property Appraiser. Because the parcel database and Tax Roll information have been developed for uses other than land use assessments, several shortcomings have been identified. Module testing with runs such as those presented here continue to help identify and rectify those shortcomings.

2.0 LAND USE DEMANDS FROM INDEPENDENT POPULATION PROJECTIONS AND SMART GROWTH SCENARIO

The following subsections state and compare the results predicted by the independent population projections and Smart Growth Scenario.

The population projections available for the Florida Keys predict a slight population growth (Table 1); the potential socioeconomic impacts of future development in the Florida Keys will also be slight. A similar situation will occur under the Smart Growth Scenario. The additional population will not create significant additional demands for housing, commercial space, or public facilities, nor will they provide a major financial base to pay for new or existing needs.

**TABLE 1
COMPARISON OF LAND USE CHANGES IN THE SMART GROWTH SCENARIO AND INDEPENDENT POPULATION PROJECTIONS THROUGH THE YEAR 2020**

Increase in	MCPD	BEBR	Smart Growth
Permanent Population	4,611	3,011	5,403*
Housing Units	2,068*	1,350*	3,500
Square-Feet of Non-Residential Uses	549,606*	358,895*	700,000

* Calculated values, whereas other values are provided by the population projection or the definition of the Smart Growth scenario (Appendix A)

The Smart Growth Scenario (Appendix A) calls for a small amount of development for the next 20 years. The resulting population increase is slightly higher than that projected on the basis of the independent population projection (Tables 1 and 2). The residential development component of Smart Growth assumes a larger number of units than the demand generated based on the independent population projections prepared by the MPCD and BEBR.

The nonresidential component of Smart Growth calls for more square footage than would be necessary to accommodate the needs of the additional population from the independent population projections (Table 1), but it does correspond to the larger population increase resulting from the scenario. This results in the higher employment, payrolls, tax value and other factors in the Smart Growth Scenario than in the independent population projections.

2.1 Population

Independent population projections come from the MCPD (MCPD 2000) and the BEBR. The Monroe County projection is based on a study of detailed local statistics and physical development trends. The BEBR projection is based on a statistical analysis of regional and local demographic factors. The projected population in the Year 2020 is similar for both projections and Smart Growth.

**TABLE 2
PROJECTED PERMANENT POPULATION, 2020**

	Smart Growth	MCPD	BEBR
Permanent Population	85,079	84,174	82,577

2.2 Residential Development

The two independent population projections reflect similar requirements for total housing units (Table 3). Total housing units are similar also for each Planning Area. The forecast of housing units by Planning Area is based upon the 2000 U.S. Census counts and the documented growth rates of each area during 1990-2000. Thus, these projections represent demographically driven housing demands.

**TABLE 3
PROJECTED HOUSING UNITS, 2020**

Planning Unit	Smart Growth	MCPD	BEBR
Bahia Honda/Ohio Key	2	96	94
Bay Point	269	111	109
Big Pine Key	3,271	2,863	2,809
Big/Mid Torch Key	70	39	39
Boca Chica	1,779	1,427	1,400
Cudjoe Key	1,580	696	682
Key West	10,876	15,013	14,727
Little Torch Key	741	696	682
Long Key/Layton	763	135	132
Lower Matecumbe	1,087	665	652
Lower Sugarloaf	534	509	499
Marathon Primary	7,097	5,400	5,298
Key Colony Beach	1,571	2,170	2,128
PAED 15	1,818	1,521	1,492
PAED 16	2,329	1,578	1,548
PAED 17	3,671	1,947	1,910
PAED 18	2,463	2,335	2,291
PAED 19 and 20	1,893	1,579	1,549
Ocean Reef Club/PAED 21	1,679	621	609
PAED 22	0	0	0
Plantation Key	3,570	2,906	2,851
Ramrod Key	436	696	682
Stock Island	3,130	3,010	2,953
Summerland Key	773	696	682
Upper Matecumbe	950	665	652
Upper Sugarloaf	332	509	499
Windley Key	82	142	139
TOTALS	52,767	48,025	47,108

Projections of housing units by type are possible only by density level. The small projected population growth suggests that there will be little opportunity for multi-family development. Typically, new multi-family projects tend to contain more than 200 units to make them more attractive to institutional investors. Approval of a single project that accounts for the vast majority of the county’s total annual housing-unit quota is unlikely.

2.3 Commercial Development

Demographically driven demand affects future land use based on the needs of the of population growth. The demand for commercial space is similar under both population projections (Table 4). Currently, there is more vacant acreage suitable for commercial development than the expected population growth is likely to absorb over the next two decades.

**TABLE 4
PROJECTED TOTAL NON-RESIDENTIAL GROSS FLOOR AREA (SQ. FT.), 2020**

Planning Unit	Smart Growth	MCPD	BEBR
Bahia Honda/Ohio Key	0	18,621	18,266
Bay Point	22,870	22,167	21,747
Big Pine Key	486,088	557,738	547,140
Big/Mid Torch Key	0	7,094	6,959
Boca Chica	224,082	317,440	311,408
Cudjoe Key	127,626	125,025	122,650
Key West	4,134,739	2,841,004	2,787,017
Little Torch Key	13,408	125,025	122,650
Long Key/Layton	33,162	22,167	21,747
Lower Matecumbe	58,591	103,744	101,773
Lower Sugarloaf	4,903	101,971	100,033
Marathon Primary	1,583,816	962,075	943,794
Key Colony Beach	119,704	357,342	350,552
PAED 15	371,439	242,071	237,471
PAED 16	135,115	268,672	263,567
PAED 17	682,733	342,268	335,765
PAED 18	535,652	434,486	426,230
PAED 19 and 20	351,424	283,745	278,354
Ocean Reef Club/PAED 21	383,380	117,046	114,820
PAED 22	36,086	0	0
Plantation Key	529,648	533,797	523,653
Ramrod Key	31,593	125,025	122,650
Stock Island	798,906	602,959	591,502
Summerland Key	71,609	125,025	122,650
Upper Matecumbe	606,924	103,744	101,773
Upper Sugarloaf	21,591	101,971	100,033
Windley Key	26,460	22,167	21,747
TOTALS	11,391,549	8,864,389	8,685,951

2.4 Employment

Commercial employment is largely dependent upon the number of square feet of floor space that must be served as well as the business activities conducted in the facility. Employment projections are similar between the two population projections and both are lower than the Smart Growth Scenario projection (Table 5).

**TABLE 5
PROJECTED TOTAL EMPLOYMENT, 2020**

Planning Area	Smart Growth	MCPD	BEBR
Bahia Honda/Ohio Key	0	78	77
Bay Point	113	93	92
Big Pine Key	1,287	2,345	2,301
Big/Mid Torch Key	0	30	30
Boca Chica	184	1,335	1,310
Cudjoe Key	164	525	513
Key West	13,429	11,949	11,722
Little Torch Key	78	525	516
Long Key/Layton	149	93	92
Lower Matecumbe	283	436	430
Lower Sugarloaf	408	430	420
Marathon Primary	6,385	4,048	3,970
Key Colony Beach	1,009	1,502	1,475
PAED 15	998	1,019	999
PAED 16	988	1,129	1,109
PAED 17	2,656	1,439	1,413
PAED 18	1,686	1,828	1,793
PAED 19 and 20	1,261	1,193	1,171
Ocean Reef Club/PAED 21	1,005	493	482
PAED 22	0	0	0
Plantation Key	1,477	2,246	2,203
Ramrod Key	181	525	516
Stock Island	1,371	2,537	2,488
Summerland Key	274	525	516
Upper Matecumbe	3,826	436	430
Upper Sugarloaf	122	430	420
Windley Key	643	93	92
TOTALS	39,977	37,282	36,583

2.5 Payrolls

Payrolls are dependent upon the number of employees and their income levels. Since the number of employees is related to the physical space of the workplaces as well as the activities conducted within them, the projected payrolls are similar for both population projections (Table 6).

**TABLE 6
PROJECTED TOTAL PAYROLL
(IN THOUSANDS OF DOLLARS)**

Planning Area	Smart Growth	MCPD	BEBR
Bahia Honda/Ohio Key	0	1,484	1,456
Bay Point	1,992	1,767	1,733
Big Pine Key	24,885	44,449	43,605
Big/Mid Torch Key	0	565	555
Boca Chica	3,630	25,299	24,818
Cudjoe Key	3,767	9,964	9,775
Key West	252,386	226,416	222,113
Little Torch Key	1,274	9,964	9,775
Long Key/Layton	2,540	1,767	1,733
Lower Matecumbe	4,867	8,268	8,111
Lower Sugarloaf	6,366	8,127	7,972
Marathon Primary	116,366	76,673	75,216
Key Colony Beach	16,587	28,479	27,937
PAED 15	20,637	19,292	18,926
PAED 16	17,145	21,412	21,005
PAED 17	50,779	27,277	26,759
PAED 18	31,139	34,627	33,969
PAED 19 and 20	22,183	22,613	22,184
Ocean Reef Club/PAED 21	20,801	9,328	9,151
PAED 22	0	0	0
Plantation Key	30,132	42,541	41,733
Ramrod Key	3,305	9,964	9,775
Stock Island	25,991	48,053	47,140
Summerland Key	5,942	9,964	9,775
Upper Matecumbe	67,191	8,268	8,111
Upper Sugarloaf	2,369	8,127	7,972
Windley Key	10,433	17,647	1,733
TOTALS	743,705	706,454	693,029

3.0 OTHER SOCIOECONOMIC INDICATORS

The small amount of population growth projected for the next two decades suggests that no significant changes in the demographic conditions of the Keys population will take place. The magnitude of population change over 20 years will be too small to affect current averages, percentages and geographic distribution. It is unlikely that the major trends that were established during the 1990s will be significantly modified during the foreseeable future. The Smart Growth Scenario calls for levels of development similar to those predicted in the independent population projections.

Several of the most salient trends that were discussed in reports previously prepared for this project, especially *Socioeconomic Environment of the Florida Keys* and *Housing Construction Rates and Prices in the Florida Keys*, will continue to be important in the future.

For example:

- The overall rate of population growth slowed significantly during the 1990s, with the net migration component changing from a major growth force to one of negligible importance. Since the age structure of the population is shifting to older groups and individuals, future growth will have to be driven by reversal of the net migration trend instead of higher natural increase rates.
- The Florida Keys have become an attractive destination for affluent citizens. The projected total number of new households will equal only 900-1,400 at their current average size, but many will be wealthy and the market for new housing will orient itself toward high-priced units demanded by these buyers. Purchasers of more moderately priced housing can be expected to rely heavily on older units that have “trickled down” in price and quality.
- The continued desirability of the Florida Keys as a vacation destination is partly dependent upon the quality of the hotel and motel facilities that are treated as residential units under the ROGO regulations. Construction limits imposed by the regulations are affecting development of new commercial lodging as well as permanent housing units. The Keys must rely on older hotels and motels to compete with expanding and modern facilities in competing locations in Florida and the Caribbean.

In general, the potential socioeconomic impacts of future development in the Florida Keys will not be pronounced if the population growth indicated by documented demographic trends takes place. The same situation will occur if the Smart Growth Scenario occurs.

APPENDIX

SMART GROWTH SCENARIO

A Smart Growth initiative will be implemented in Monroe County to preserve the natural environment, redevelop blighted commercial and residential areas, remove barriers to innovative design concepts, reduce sprawl and direct future growth to appropriate infill areas.

All Conservation and Recreational Lands (CARL) and any adjacent habitat areas will be closed to future development and purchases in an accelerated acquisition program. In sparsely developed areas, a one thousand foot buffer will be designated around the CARL/Habitat areas and any other land within this boundary also designated for purchase.

Infill will only be permitted on suitable parcels and will include those subdivisions, which are at least 75% (50%?) developed. The number of lots (maximum of 3,000) remaining in these subdivisions that are scarified will be permitted for development in a lottery system over the next 20 years. Scattered lands within subdivisions that contain habitat or “red flag” wetlands will be purchased and a conservation easement placed on the lots to prevent future development. Ocean Reef and other subdivisions, which are vested, will continue to build out on lots with habitat, but red flag wetland lots will not be filled and developed.

In the Urban Residential District and the Suburban Commercial District in Key Largo/Tavernier, and from Stock Island to Big Coppit an additional 500 multi-family, affordable housing units will be developed on scarified lands at a density of 15 to 20 units per acre. Redevelopment of trailer parks and other substandard housing throughout the Keys will be at the existing density, above base flood, and with sanitary sewer.

Twenty-five percent of the existing commercial stock will be redeveloped, resulting in improved stormwater management and landscaping. Infill sites for commercial development will be within 200 feet of existing commercially developed areas. A total of 700,000 square feet of commercial development will be permitted over the next 20 years either by expansion of existing uses or in infill sites. Institutional uses will be deducted from the 700,000 square feet, although they will not have to compete for square footage.

Fifty percent of the existing Industrial and Marine Industrial sites will be cleaned up and redeveloped with stormwater management and landscaping. Future uses will be more of a light industrial nature. All county-owned buildings would be landscaped and retrofitted for stormwater management.

Two additional parks of five to ten acres each will be developed in the Lower Keys: one on Big Pine Key and one on Sugarloaf. With full implementation of the Overseas Heritage Trail and the Scenic Highway program, U.S. 1 will be landscaped. The stormwater management plan will be implemented on state and county roadways and for all new development. The sewer master plan will be fully implemented with the removal of all cesspits. An active program of water conservation will be instituted for existing development and the building code will assure new development conserves water.