D Analysis of Market Absorption Potential

ANALYSIS OF MARKET ABSORPTION POTENTIAL OF LAND AT FORMER HOMESTEAD AIR FORCE BASE
October 1998

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this analysis is to estimate the type and extent of land development that is likely to occur on available property at former Homestead Air Force Base (AFB) if the property is not conveyed as part of a public use airport. Specifically, of the 1,632 acres identified for disposal, approximately 717 acres are available for industrial or other use. The remaining 915 acres comprise the runway and associated airfield facilities.

This study was conducted to identify potential land uses associated with the Mixed-Use Alternative analyzed in the Supplemental Environmental Impact Statement (SEIS) for the Disposal of Portions of Former Homestead AFB. Under that alternative, the airfield portion of the installation would continue to operate as a military airfield, but there would be no additional economic activity attributable to public or private sector use of the airfield. The highest and best use of the subject 717 acres under these conditions would depend on the supply and demand conditions in south Miami-Dade County under the influence of growth in the existing economy. Consequently, existing market forces and public policy will be the primary influences on the rate of absorption of various land uses, and the continued military use of the airfield could encumber rather than enhance land value.

1.2 LIMITATIONS

This analysis is primarily intended to support the completion of the SEIS and does not adhere the customary and usual practices of the appraisal industry to estimate highest and best use and absorption rates. This is primarily due to the fact that appraisals typically focus on current market conditions and support legal determinations of real property value, while the SEIS process addresses long-term effects that are too uncertain to be used for the estimation of value. The analysis covers the time period from 2000 through 2015.

Demand for land for residential and commercial development is related to population growth. For this analysis, that demand is based on population forecasts for Miami-Dade County in general and the "South Dade" area in particular over the 2000 to 2015 study period. Population forecasts are developed by various entities, including the federal Bureau of Economic Analysis (BEA), the University of Florida's Bureau of Economic and Business Research (BEBR), and Miami-Dade County. BEA and BEBR have projected a moderate level of future growth that is used as the baseline for this analysis. Miami-Dade County forecasts are for a substantially higher level of growth, also addressed in this analysis as the upper boundary of the rate and extent of development that could be supported by the market.

Unlike residential and commercial land uses, which are highly dependent on population growth, industrial absorption is not significantly affected by growth projections. Consequently, the moderate and high-growth scenarios are not applicable to the industrial absorption projections.

2.0 METHODOLOGY

2.1 FACTORS INFLUENCING METHODOLOGY

A number of factors, some of which are unique to the subject property and regional economy, have been taken into consideration in developing the methodology used in this analysis. These factors and their influence on methodology are summarized as follows.

- *Term of the Analysis.* As discussed above, the time horizon covered by the analysis makes the use of standard appraisal practices impractical. Instead, potential for development is based on estimates of demand derived from established economic growth forecasts.
- *Existing Land Use.* Existing land use is important in the immediate vicinity of the former base and within the South Dade region. In the vicinity of the former base, the existing land uses provide an indication of probable future adjacent uses and land use compatibility constraints likely to be present in the future. Within south Miami-Dade County, the existing land use reflects the evolution of development patterns under the influence of local economic and accessibility factors over the years. The relative proportions of land uses are likely to persist well into the future as additional land is developed.
- *Land Use Planning and Control Mechanisms.* The surplus property has not been subjected to traditional local land use planning and control measures in the past. Consequently, there is no existing adopted zoning for the site, and land use planning has been focused on the development of the site as a public use airport. The Miami-Dade County Comprehensive Development Master Plan currently prohibits residential development on former Homestead AFB and permits up to 139 acres of commercial and 111 acres of industrial land use (**CITE 1**).
- *Financial Risk.* In addition to the traditional market forces that influence real estate demand and supply relationships, there are a number of factors related to the perception of risk in the South Dade market, particularly in the wake of the recent and persistent real estate recession. Although such factors are qualitative, they are nonetheless real and impede the restoration of investor confidence.
- *Physical and Compatibility Constraints.* The continued operation of government aircraft from the airfield is likely to constrain portions of the site closest to the airfield to industrial and commercial uses due to land use compatibility considerations.
- *Existing Economy and Growth Forecasts.* The current stagnation of the South Dade economy may be traced in large part to the effects of Hurricane Andrew and the closure of Homestead AFB. Although there are a number of initiatives that have been planned and are in the process of being implemented to stimulate this local economy, it is likely that diversification and growth in the job market will not become measurable for several, and possibly many, years. At the same time there are a number of growth forecasts for the South Dade area that indicate rapid growth in population over the next 15 to 20 years. This implies that there is an emerging demand for commuter housing, supported by jobs in the Miami area, an influx of retirees, or both.
- *Location and Accessibility of Site.* As a result of its proximity to Florida's Turnpike, former Homestead AFB is only 25 to 30 minutes from Miami International Airport (MIA) and downtown Miami. Because of the dominance of north Miami-Dade County in the production and maintenance of employment opportunities, this accessibility has resulted in and will continue to support a dependent relationship between southern and northern portions of the county. This dependency is strongest for the home-based work trip, and there is little reason to expect that the introduction of jobs in north Miami-Dade County will create less demand for local housing than the introduction of jobs in South

Dade. In both cases, it is the availability of land suitable for residential development that is driving the demand for housing in southern Miami-Dade County, not South Dade employment opportunities.

- *Park of Commerce Absorption.* The Homestead Park of Commerce is south of former Homestead AFB and has been specifically designed to capture commercial and industrial land uses within a Free Trade Zone. The park comprises about 280 gross acres, with 191 net acres for sale or lease at this time (**CITE 2**). Leasing activity has recently included a total of 61 acres for long-term use and 60 acres for short-term use. This level of leasing activity was not anticipated and resulted in a revised analysis and addendum to the 1997 Park of Commerce appraisal (**CITE 3**). Given the historical absorption of industrial land in the Homestead area over the last 25 years at 3 to 4 acres per year, it is apparent that much of the current market captured by the Park of Commerce development is the result of demand inducement and not the aggregation of latent demand. This induced demand is attributable in part to the Free Trade Zone status of the property. It is therefore unlikely that the Park of Commerce experience is directly applicable to the potential rate of absorption for commercial or industrial land uses on the subject property over the period of analysis.
- *Disposition Mechanism.* The sale of the subject property for fair market value has an important implication for the attraction of all types of development: discounted land costs are not likely to be used to influence location decisions in the market place. In other words, the site would be in full competition with all other available developable land in south Miami-Dade County, and would not enjoy the benefits associated with below market land costs. Alternatively, conveyance to a qualified public entity for economic development purposes could provide some discount to offer incentives to potential developers.

2.2 LONG-RANGE ABSORPTION METHODOLOGY

Based on these factors, it was determined that the absorption forecasting methodology should emphasize long-range, proportional growth and market aggregation principles. The methodology stresses the importance of site development in the out years of the period of analysis, when most impacts are likely to occur; assumes that long-term demand distribution is strongly influenced by existing development patterns; and defers almost exclusively to growth and absorption forecasts prepared by the Miami-Dade County Department of Planning, Development and Regulation. These county forecasts cover the period from 1994 through 2020 and specifically address the South Dade area (**CITE 2**).

In order to assign an appropriate part of the forecasted growth to the subject property, a three-step process was used. First, the property was characterized for general development suitability, using access parcel configuration and land use compatibility criteria. Second, applicable land use planning and control designations were considered. Third, a portion of the Miami-Dade County absorption forecasted for each land use was assigned to the site on a proportional basis.

Proportional absorption identifies the growth segment of the local real estate market and assigns gross development demand, by land use, to the available land in the jurisdiction that is zoned and/or plan-designated for that use ("developable land"). It is assumed that former base property in individual land use categories is absorbed in proportion to its share of developable land in the south county area. For example, if there are 100 acres of developable land within a Minor Statistical Area (MSA), and a single development site in that MSA has 10 suitable undeveloped acres available, gross demand may be characterized by approximately 10 percent of the annual absorption. Thus, if 20 acres of absorption were anticipated for the MSA, the site would be assigned a demand of 2 acres per year. Following this initial estimate of gross demand, adjustments can be made for unique site conditions, risks, and uncertainties.

In the case of the subject property, it is important to note that there is considerable uncertainty concerning the extent to which governmental intervention can create "induced demand" for industrial development

that is not evident under a sale for fair market value. As a matter of public policy, it may be determined that it is appropriate to use favorable disposition terms that are designed to induce employment rather than to achieve a maximum return on the value of the property. For example, in an extreme case, the property could be made available through a public entity at no cost to the private sector on the basis of employment opportunities. Under these conditions, the rate of absorption would be much higher than if the land were sold at fair market value.

For this reason, this analysis first considers industrial absorption under conditions where the land is in full competition with other sites in the region, on the basis of price. Subsequently, industrial absorption is evaluated where development incentives are provided which, in effect, give the site an advantage that is not available in the market in the absence of governmental intervention. The resulting site absorption projections are characterized as responding to "latent" and "induced" demand and are addressed in Sections 4.0 and 5.0, respectively. This distinction is not necessary when addressing residential or commercial absorption, because long-term demand is sufficient for these uses without special incentives.

3.0 MIAMI-DADE COUNTY FORECASTS

Within the region of influence, residential land use is addressed by Miami-Dade County forecasts in two subareas, east and west of U.S. Highway 1 (**CITE 2**). For commercial and industrial uses, the region of influence is more finely divided into the six MSAs that make up the area south of Eureka Drive (numbered from MSA 7.1 through 7.6). The subject property is centrally located in MSA number 7.4.

3.1 RESIDENTIAL

The Miami-Dade County absorption projections itemize residential capacity in 1994, 2000, 2005, 2010, and 2015. For intervening years, housing demand is deduced on an annual basis, leaving residual capacity. All of the projections are made on the basis of housing units, rather than areas of development, and single- and multi-family structures are differentiated.

Figure 1 depicts the housing unit capacity projected by the county in 1994 (actual), 2000, 2005, 2010, and 2015. It shows a decline in capacity for all housing types from 79,300 units in 1994 to zero units by 2015. Demand is expected to be about 2,800 units per year for the period from 1994 to 2000 and between 2000 and 2005; 5,000 units per year from 2005 to 2010; and 7,900 units per year from 2010 to 2015. **Figure 2** provides this projection on an annual basis and reveals that residential capacity is expected to be fully depleted in 2013. Adjusting to a more moderate-growth rate, housing demand would be expected to increase at an average of about 1,400 units per year over the planning period.

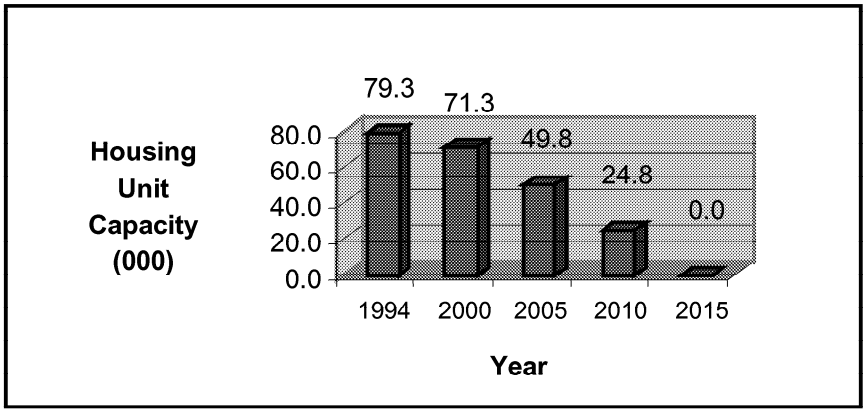

Figure 1. Residential Capacity in South Miami-Dade County

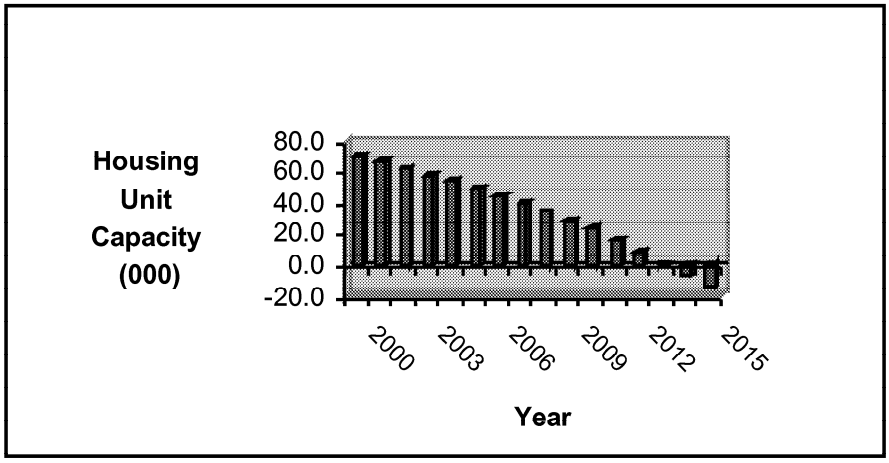

Figure 2. Annual Residential Capacity in South Miami-Dade County: 2000–2015

The implications for the subject property are that the portion of the site that is suitable for residential development is likely to be absorbed at a rate proportional to the decline in capacity for south Miami-Dade County. At the county's high-growth projection rate, all of this suitable residential area would be absorbed by 2013. At the more moderate-growth rate, only about 28,000 units would be absorbed by 2015, leaving approximately 51,000 units of capacity to absorb future growth.

3.2 COMMERCIAL

Figure 3 shows the disposition of commercial land in Miami-Dade County in 1994. The "In Use" category refers to land that has been developed and is being used for commercial purposes. Vacant commercial land is land that either is zoned for commercial use or has been designated for commercial use by the county but not yet zoned.

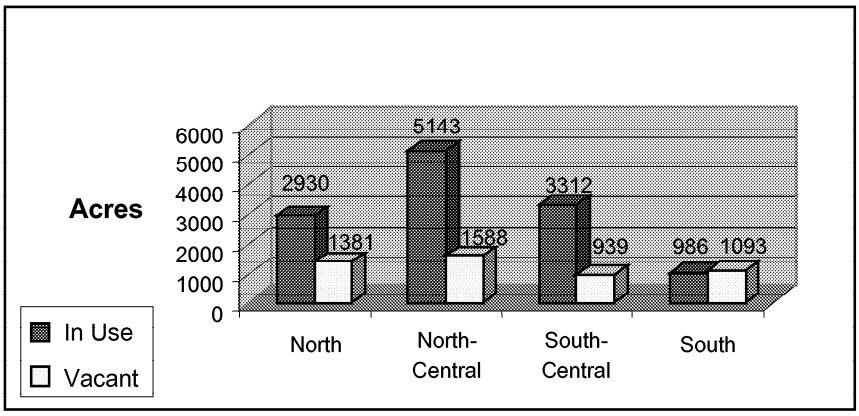

Figure 3. Commercial Land In Use and Vacant in Miami-Dade County (1994)

It is evident that the South tier, which contains the subject property, has the smallest amount of land devoted to commercial use and is the only tier with more vacant than developed commercial land. On a countywide basis, the South tier has about 22 percent of the available vacant commercial land and only about 8 percent of the existing developed commercial land in Miami-Dade County.

Figure 4 provides more detail on the MSAs within the South tier. The subject property is centrally located in MSA number 7.4, which had 312 acres of commercial land available in 1994.

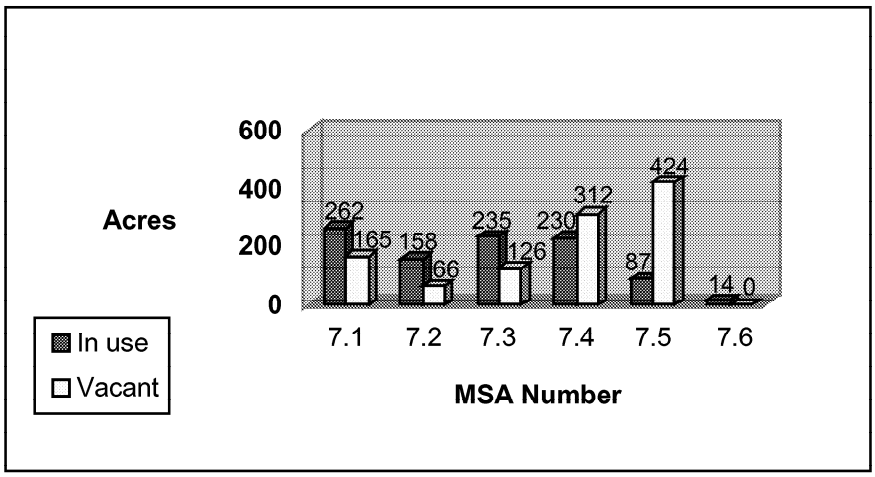

Figure 4. Commercial Land In Use and Vacant in South Dade (1994)

Figure 5 presents the Miami-Dade County forecast for commercial absorption for the same set of MSAs. It is noteworthy that MSA 7.4 is expected to average 22.7 acres of commercial absorption per year over the time period, and that this is the highest rate projected for the seven MSAs. In fact, MSA 7.4 is predicted to have the second highest commercial absorption rate among the 32 MSAs in Miami-Dade County. The average MSA commercial absorption rate in Miami-Dade County is 8.2 acres per year.

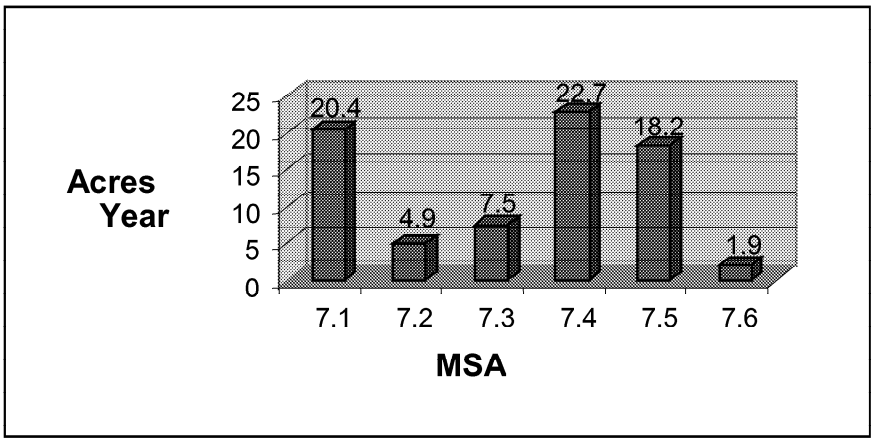

Figure 5. Average Commercial Absorption Rate for South Dade MSAs: 1990–2015

This growth is likely driven by the residential development anticipated in the area. MSAs 7.1, 7.4, and 7.5 are all east of U.S. Highway 1, where 76 percent of the residential growth in South Dade is expected.

The implication of absorbing commercial land at a rate of 22.7 acres per year is that all of the vacant commercial land in MSA 7.4 is likely be consumed by 2008 if no new supply is added. By 2000, the supply of undeveloped commercial land in MSA 7.4 will have been reduced to 176 acres. Adjusting for a more moderate baseline growth rate of 12 acres per year, the supply of available land for commercial development in MSA 7.4 will be approximately 241 acres in 2000.

3.3 INDUSTRIAL

Figure 6 depicts the industrial land that was either in use or vacant in Miami-Dade County in 1994. As with the commercial inventory, the vacant category refers to undeveloped land that is either zoned or plan designated for industrial use. The dominance of the North-Central tier is attributable to the presence of Miami International Airport and the large volume of freight related industry in that area. The South tier, where former Homestead AFB is located, has only about 5 percent of the industrial land in use in the county and 12 percent of the vacant industrial land.

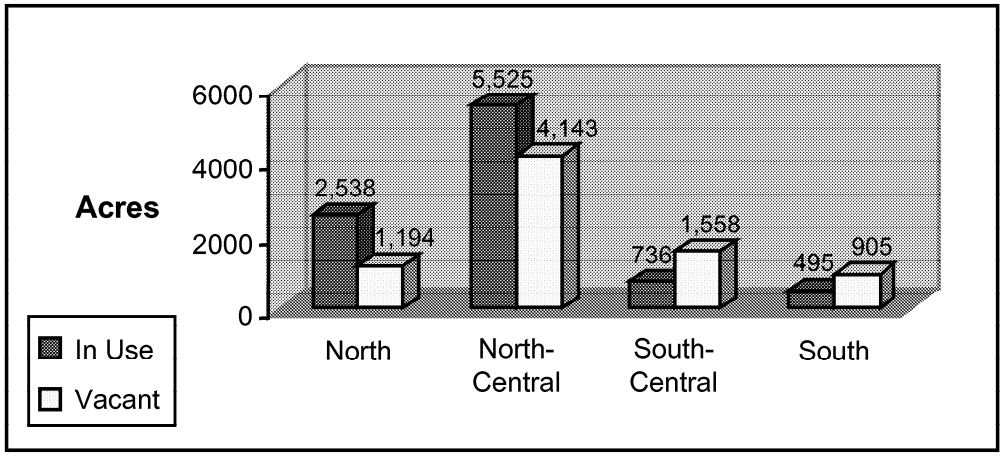

Figure 6. Industrial Land In Use and Vacant in Miami-Dade County (1994)

Figure 7 provides more detail on the MSAs within the South tier. The subject property is centrally located in MSA 7.4, which had 99 acres of industrial land available in 1994.

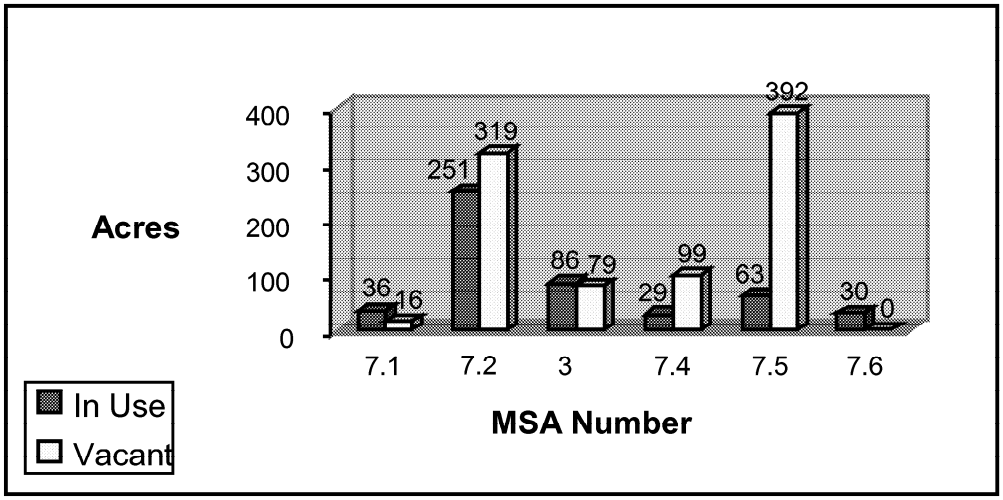

Figure 7. Industrial Land In Use and Vacant in South Dade

Figure 8 shows the Miami-Dade County forecast for industrial absorption rates for the above MSAs. In terms of industrial absorption rate, South Dade is expected to contribute only about 6 percent of the annual absorption for the county as a whole over the 1994 to 2015 time period. Only 0.5 percent of the county absorption is expected to occur in MSA 7.4. It is noteworthy that MSA 7.5, which contains the

Park of Commerce, is expected to absorb about 2.8 acres of industrial development per year, compared to only 1 acre for MSA 7.4. The county average industrial absorption rate is 5.9 acres per MSA per year. At a rate of absorption of 1 acre per year, the available supply of undeveloped industrial land in MSA 7.4 will be 93 acres in 2000.

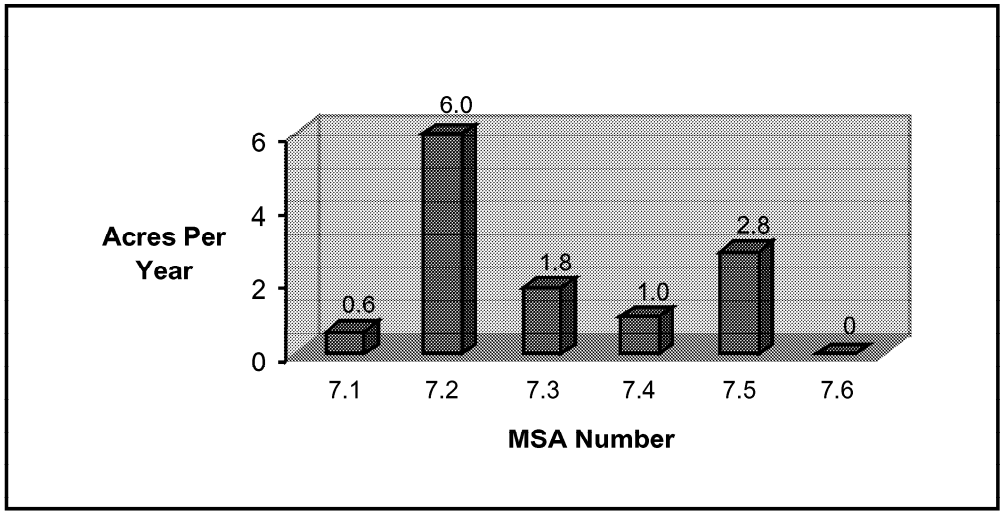

Figure 8. Average Industrial Absorption Rate for South Dade MSAs: 1990–2015

In recent years, the Park of Commerce development has grown more rapidly than the indicated 2.8 acres per year, due to marketing efforts and favorable tenant terms. The effects of this type of "induced" demand on absorption are addressed in more detail in Section 5.0.

4.0 SITE-SPECIFIC ABSORPTION WITHOUT INDUCED DEMAND

The specific absorption of the subject property at former Homestead AFB relies on the suitability of different parcels for specific types of development, as well as additional information drawn from recent appraisals and market studies that amplify the Miami-Dade County absorption forecasts.

In general, in the absence of a commercial airfield at this location, there are no unique attributes of the site that would serve to attract and aggregate demand above the latent demand associated with the general growth of south Miami-Dade County discussed above. However, there is the potential for some of the negative attributes of the site to adversely affect specific types of development from a land use compatibility perspective. These negative attributes limit the use of land contiguous to the airfield for industrial purposes, due to the industrial nature of the activities associated with the aircraft operations.

As a result of this limitation, long-term development of the available land on former Homestead AFB would probably be limited to approximately 239 acres of residential development, with more intensive industrial and commercial uses being suitable for the 450 acres adjacent to and near the airfield. Commercial demand is likely to be moderately strong in South Dade, particularly east of U.S. Highway 1. It is unlikely that industrial demand, however, will develop to a sufficient level over the same time period to absorb a significant portion of the 450 acres that are suitable for those land uses.

Absorption rates in this section are designated as resulting from moderate or high population growth projections. Moderate growth absorption is consistent with the forecasts selected for the baseline years in the SEIS. High growth absorption is consistent with Miami-Dade County forecasts.

4.1 RESIDENTIAL

There are a number of statistics which support the contention that the housing market in south Miami-Dade County continues to be stagnant, but one of the more meaningful ones is the comparison of the number of homes sold with the number for sale on a monthly basis. For all of Miami-Dade County over the period from April 1997 through March 1998, there was an average of 12.8 homes for sale for every home sold. For South Dade County, there were 20.8 homes for sale for every home sold (Esslinger, Wooten and Maxwell, *Realtors Facts and Trends* Report #1, April 1998). The for-sale to sales ratio is 63 percent higher in South Dade than in Miami-Dade County as a whole (**CITE 3**).

On the other hand, there are some indications that the market for new homes is somewhat better than for existing homes in the Homestead area. For the three months ending on June 30, 1997, the southwest Dade/Homestead submarket supported the sale of 347 new single-family homes over 28 separate projects, for an average sales rate of 4.1 units per project per month. This was very good performance compared to Miami-Dade County as a whole, which averaged 2.3 units per project per month. At the 4.1 units per month rate, the average project in the area would sell out in less than 2.5 years. The same study indicates that the short-term market in MSA 7.4 is likely to absorb 378 new single-family homes per year, or over 750 new units between 1998 and 2000. Affordability considerations in the $70,000 to $90,000 price range would reduce this market to approximately 150 new homes over the 2 year period (**CITE 4**).

Only about 239 of the available acres at former Homestead AFB may be suitable for residential development, due to the continued presence of the airfield and associated operations. This land was previously used for residential related purposes, is adjacent to existing residential land, and has separate access from other parcels that are contiguous to the airfield. In addition, the 28 acres comprising Mystic Lake would be accessible to this area as well as to adjoining neighborhoods. If the airfield is only used for government aircraft operations, it is assumed that a residential area on former base property would receive plan designation and zoning for residential use, notwithstanding the current prohibition on residential development at the site (**CITE 1**).

Figure 9 shows the projected net absorption of residential land in South Dade between 2000 and 2015. The high-growth absorption is directly derived from the changes in residential land capacity predicted by Miami-Dade County shown previously in Figure 1.

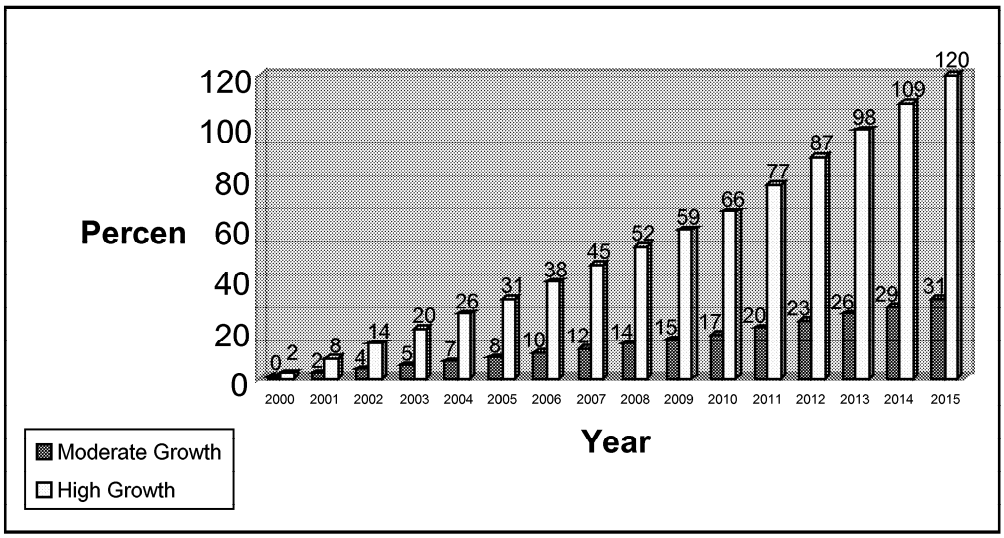

Figure 9. Residential Land Absorption in South Dade: 2000–2015

For purposes of estimating the absorption at the subject property over the same time period, it is assumed that the suitable land on the site would be absorbed at the same rate as other land in South Dade. Given 239 acres of suitable residential land on the site, the estimate for absorption becomes a simple matter of multiplying the percentages in Figure 9 by 239 acres to obtain the absorption demand in each of the years in the time period. The resulting estimate of residential absorption is shown in **Figure 10**.

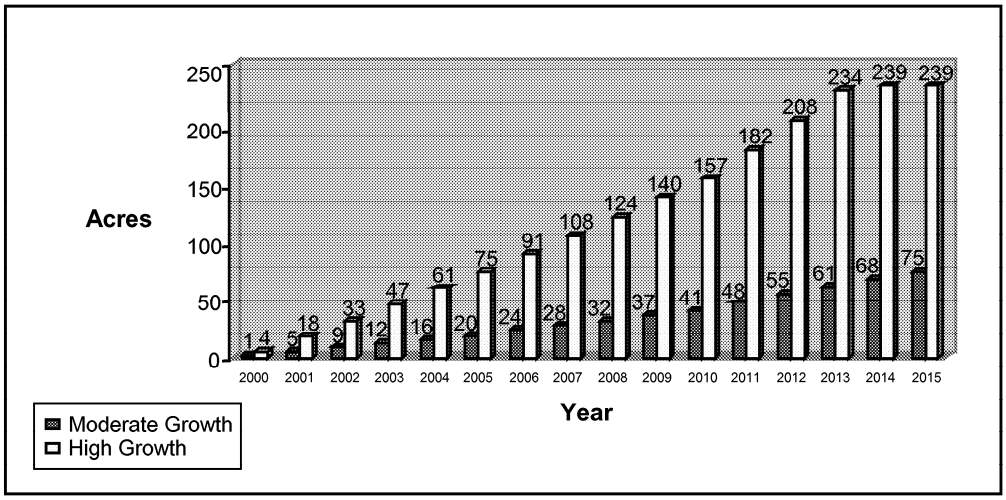

Figure 10. Residential Absorption at Former Homestead AFB: 2000–2015

Under the moderate-growth baseline forecasts, approximately 75 of the 239 acres would be expected to be absorbed by 2015. Under the high-growth forecasts, absorption would reach 75 acres in 2005, increasing to total absorption of 239 acres in 2014. Based on Miami-Dade County absorption projections, it is likely that about 37 percent of the indicated absorption would be for multi-family units and 63 percent for single-family units.

4.2 COMMERCIAL AND INDUSTRIAL

The remainder of the available property at former Homestead AFB could be used for either commercial or industrial use, depending on demand. Therefore, its absorption for either use is addressed together. With the addition of 450 acres to the supply of land for commercial and industrial development in MSA 7.4 in 2000, a total of 787 acres would be available for absorption (commercial uses are permitted in industrial zones) under the moderate-growth forecasts. This addition to the supply would more than double the combined commercial and industrial land expected to be available at that time.

As shown in **Figure 11**, this would result in the absorption of about 21 percent of the land in the MSA for commercial use by 2015. Under the county's high-growth forecasts, about 56 percent of the available land would be absorbed by 2015.

Given this rate of absorption, approximately 95 of the 450 acres available at former Homestead AFB could be absorbed under the moderate-growth forecasts and 252 acres under the high-growth forecasts by 2015, as shown in **Figure 12**.

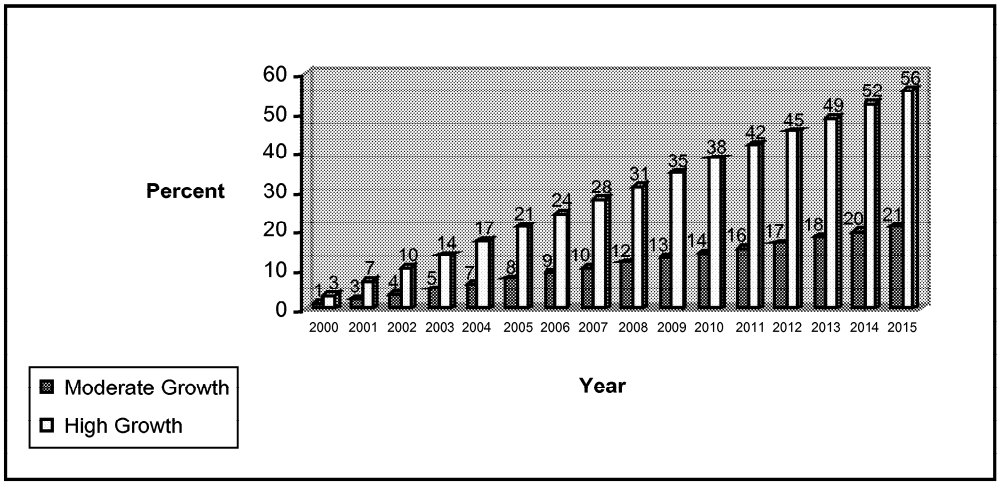

Figure 11. Commercial Absorption in MSA 7.4: 2000–2015

Unlike commercial land uses in industrial zones, industrial uses are not permitted in commercial zones. Consequently the market is restricted to land that is zoned or plan designated for industrial uses only. This is a different situation from the previous commercial analysis where there is a fairly free flow of high value commercial uses into industrial zones. In south Miami-Dade County, this results in a relatively small supply of industrial land. South Dade had 905 acres available in 1994, and MSA 7.4 had only 99 acres in the same year. This is projected to decrease to 93 acres by 2000. The addition of 450 acres of commercial/industrial land in 2000 would effectively increase the supply more than fourfold. Only about 3 percent of the available land would likely be absorbed for industrial use by 2015.

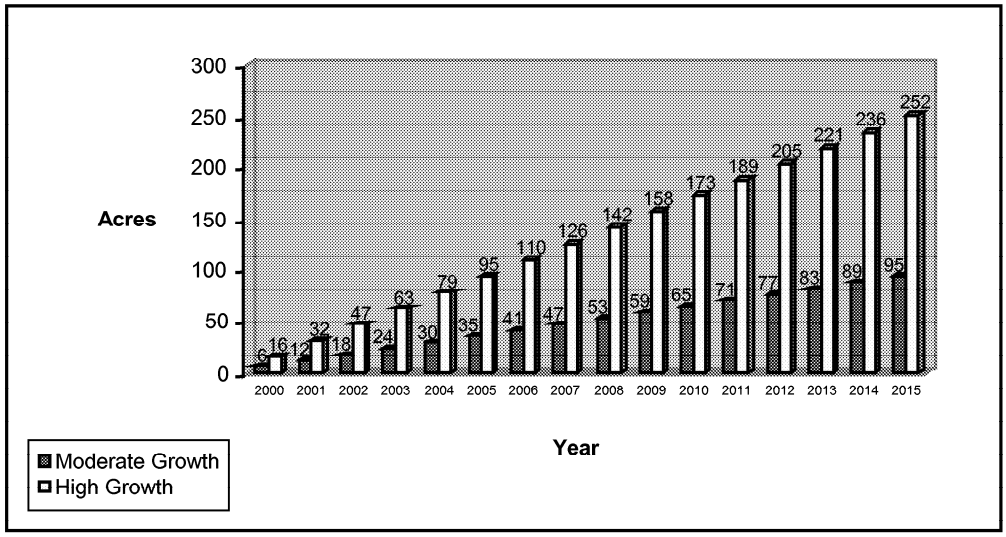

Figure 12. Commercial Absorption at Former Homestead AFB: 2000–2015

At a rate of absorption of 1 acre per year, the proportional allocation of demand to the site, based on 450 acres of industrial land being available in 2000, is shown in **Figure 13**.

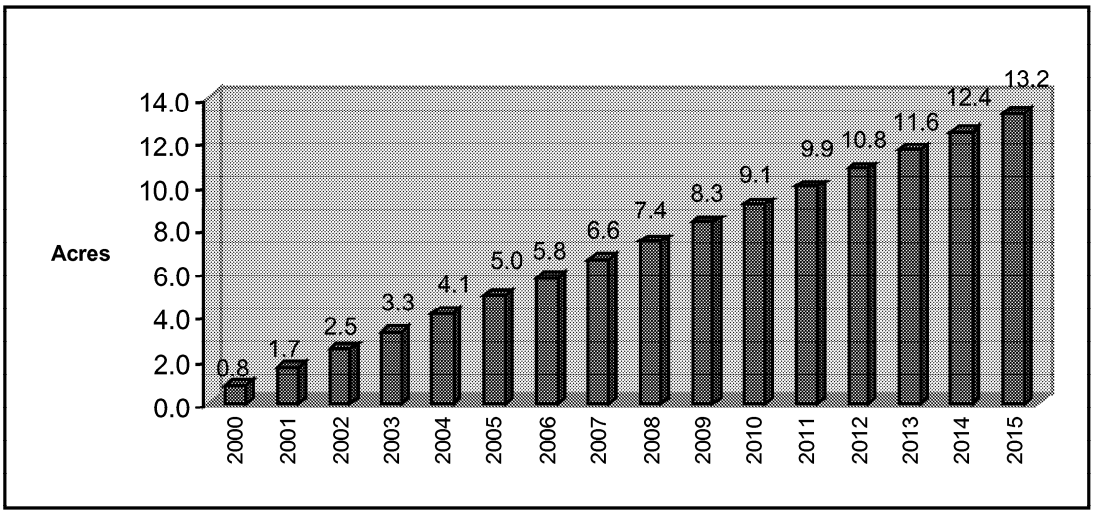

Figure 13. Industrial Absorption at Former Homestead AFB: 2000–2015

Primarily because of the low absorption rate allocated to MSA 7.4, only a small portion of the available acres would be absorbed by 2015. However, these 13.2 acres amount to a 45 percent increase in the amount of land currently in industrial use in the MSA. The MSA as a whole may be viewed as growing in industrial use at a rate of 3.4 percent per year between 1994 and 2015, a rate which would double the 1994 industrial use in MSA 7.4 by 2014.

Without incentives, this projection is an upper limit of the level of absorption of industrial land likely to occur over the study period. At first, such a projection might appear to be inconsistent with the strength of the industrial market in Miami-Dade County as a whole. The industrial market in Miami-Dade County has been strong for over four years. The overall vacancy rate at the end of the first quarter in 1997 was 7.3 percent, with a total inventory of 126.8 million square feet according to a Cushman and Wakefield survey. Over 6.7 million square feet of warehouses were leased in 1996 and over 2 million in the first quarter of 1997.

However, the industrial market in South Dade is markedly different from other areas in the county. The bulk of the activity has been in central and north areas of the county, centering around MIA, where international business is booming. Less than 15 percent of the total market is in areas outside of central and north Miami-Dade County, which includes South Dade and the easterly areas. The South Dade industrial market has been slow to develop over the past 25 years. In the Homestead area there has been industrial absorption of 3 to 4 acres per year.

Higher rates of industrial absorption have been observed in recent months, primarily in association with the strong marketing of the Park of Commerce in MSA 7.5. However, this analysis has to this point only been concerned with industrial development demand assuming the subject property is sold at fair market value and no special financial incentives are offered to induce and/or aggregate demand. The effects of such incentives on industrial absorption are discussed in Section 5.0.

5.0 SITE-SPECIFIC ABSORPTION WITH INDUCED DEMAND

5.1 CASH FLOW, LAND VALUE, AND ABSORPTION RATES

The concept of induced demand implies the introduction of factors into real estate transactions and business agreements that result in financial advantages to the buyer/lessee that are not available in the normal course of business. One example of such a factor would be the offering of land at 50 percent of fair market value. The reduced cost of land would induce a higher portion of the market to find a site desirable, in some cases offsetting risk, location, or aesthetic impediments. Reduced land costs can effectively induce absorption because land costs are incurred in the early stages of development and often constitute owner equity in a project that may take many years to build out and establish positive cash flows.

For example, a 100 acre industrial tract selling at a fair market value of $4.00 per square foot would cost $17.4 million. A 50 percent discount would save the buyer $8.7 million in "up front" costs. Since these costs are equity in the project, the opportunity costs of investment in another project would be at a rate of return of at least 15 percent. Absorption might take 15 years, with no positive cash flow for 5 years. Over the period of positive cash flow from the 6th to the 15th year, the $2.00 discount in land cost would be the equivalent of over $3 million per year in revenue—worth $45 million in undiscounted cash flow to the project.

There are many other types of incentives that apply to the marketing and sale of industrial and commercial property. Any factor that provides a business with a competitive advantage by either reducing costs or increasing revenues will make the property more attractive and will increase the rate of absorption. A good example of a factor that positively affects operating costs in south Miami-Dade County is the existence of a Free Trade Zone at the Park of Commerce. Within the Free Trade Zone, qualified businesses can import materials and components from foreign nations and not pay import duty. This greatly reduces the cost for some fabrication and assembly operations and makes property within the Free Trade Zone more attractive. If the cost of the land in the Free Trade Zone is held to market rates in the area (or even discounted), it can be a powerful stimulus to industrial growth and overcome significant disadvantages associated with location and risk. This has been demonstrated at the Park of Commerce, which is within 3 miles of former Homestead AFB.

5.2 METHOD OF CONVEYANCE

Generally speaking, the infusion of value into a development project for the purpose of stimulating the local economy and improving employment opportunity is a governmental rather than private sector activity. This is because the infusion requires governmental authority to legally create the value (Free Trade Zone or tax incentives), or the required investment would result in a loss for a private sector owner (selling land for $2.00 per square foot that is worth $4.00).

The involvement of a governmental entity or non-profit organization is necessary to induce industrial demand, as the favorable terms that attract industry and jobs actually reduce the positive cash flow in the out years of the development, reducing current land value. This loss in current value is a form of investment that local government makes to increase employment opportunity in the area.

Following are examples of land values from the recent sale of industrial land in the South Dade region:

- A 1996 appraisal of the MCR Lumber property in Homestead evaluated six land sales of comparable property in the area. Comparable land ranged in sales price from $1.34 to $3.31 per square foot, with

an adjusted average of $2.50 to $3.00 per square foot, amounting to between $108,900 and $130,680 per acre.

- A 1997 appraisal of the Booker Lumber property in Homestead considered four comparable land sales in the area. Comparable land ranged in sales price from $1.91 to $3.33 per square foot, with an adjusted average of $1.91 to $2.16 per square foot, amounting to between $83,200 and $94,900 per acre.
- The 1998 Park of Commerce appraisal considered 10 comparable land sales in the Homestead area, as well as three in north Miami-Dade County and one in Broward County. The Homestead area properties were $2.69 to $4.90 per square foot, and the appraiser concluded that small finished lots would need to be sold for $3.00 per square foot, amounting to $130,680 per acre.

These values contrasted sharply with the land value estimated for the Park of Commerce on the basis of discounted cash flow analysis. An initial finding of less than $1 per square foot was subsequently updated to about $1.25 per square foot, amounting to $54,450 per acre. The difference in value is attributable in large part to the favorable terms provided to prospective tenants in order to increase absorption rates.

An appraisal of the Park of Commerce property noted that there is no shortage of industrial land in Miami-Dade County, although the Airport West area is using up land quickly. There is however, more than ample supply for at least the next 25 years or more. The Park of Commerce will have to be aggressive in pricing to maintain an absorption level of 10 acres per year.

In order to achieve the 10 acre per year absorption rate, an investment had to be made. The difference between the value of comparable land and the $1.25 value resulting from the appraisal easily amounts to $75,000 per acre—the cost of inducing demand.

In order for the governmental infusion of value to be considered as a factor in the rate of absorption of industrial land at former Homestead AFB, it would be necessary for the property to be conveyed to a governmental entity as the initial owner. The receiving entity could then establish favorable terms for subsequent sale or lease and other incentives that are financially advantageous to desired industries. The goal becomes one of job creation and economic growth, rather than profitability for the initial property owner. Under this type of property transfer, induced demand becomes a possibility. The extent to which the demand for industrial land can be successfully induced in MSA 7.4 is discussed in the next section.

5.3 INDUCED INDUSTRIAL ABSORPTION OF FORMER HOMESTEAD AFB PROPERTY

The Park of Commerce is a good example of the effectiveness of incentives in inducing industrial demand. The Park of Commerce is an industrial park development that comprises about 70 percent of the available industrial land in MSA 7.5. Although the Miami-Dade County forecast for industrial absorption in MSA 7.5 was for 2.8 acres per year, it is evident that the Park of Commerce could achieve rates of 10 acres per year or more over the next 15 years. In fact, the most recent appraisal of the property estimated an average rate of absorption of 12.3 acres per year over the 15 year period. This is 4.4 times the rate expected by Miami-Dade County for all of MSA 7.5 and 6.3 times the rate that would apply to the Park of Commerce on a proportional basis.

It is reasonable to assume that if equivalent incentives were applied to the subject property at former Homestead AFB, an increase of over fourfold in the forecasted absorption rate for MSA 7.4 could be achieved for the industrial portion of the site. This would imply transferal of a portion of the unused Free Trade Zone at the Park of Commerce to the former base, as well as equivalent treatment in land costs and favorable lease terms. However, a different market would have to be pursued, or any gain for the former base property would be a loss for the Park of Commerce. With this caveat, it is likely that the upper limit

of induced industrial absorption of the subject property could reach 84 acres by 2015, as shown in **Figure 14**.

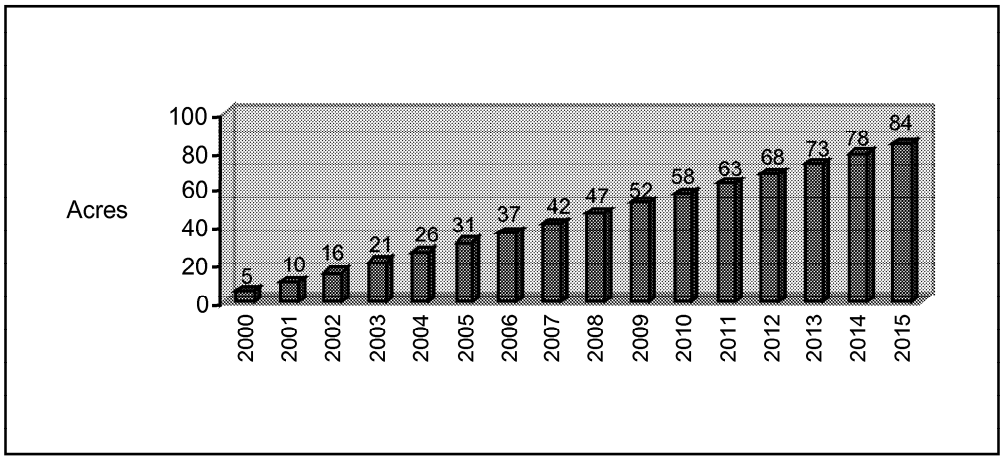

Figure 14. Induced Industrial Absorption at Former Homestead AFB: 2000–2015

This forecast includes existing latent demand in addition to the 4.4 acres per year for induced demand, totaling over 5 acres per year of industrial absorption between 2000 and 2015. With the induced demand, the absorption for industrial development would be higher by 2001 than relying only on latent demand could achieve by 2015. However, this would only be achievable with a property transfer at no or substantially discounted cost.

6.0 CONCLUSION

The combined potential absorption for all land use categories over the 2000 to 2015 time period is depicted in **Figure 15**.

Of the 717 acres available for disposal, about 28 acres include Mystic Lake, leaving 689 for residential, commercial, and industrial development. Under the moderate-growth forecasts, a total of about 183 acres would be absorbed by 2015 if industrial demand remained latent. With induced industrial demand, about 254 acres could be absorbed by 2015, leaving 435 acres undeveloped. Under Miami-Dade County's high-growth forecasts, the quantity of land absorbed could increase to 587 acres by 2015, leaving 102 acres undeveloped at that time.

CITATIONS

1. *Dade County Plan Amendment*, adopted June 16, 1998, regarding approval of designated land uses for Homestead ARB.

2. Miami-Dade Department of Planning. *Initial Recommendations October 1997 Applications to Amend the Comprehensive Development Master Plan.* February 25, 1998.

3. Esslinger, Wooten and Maxwell. *Facts and Trends Report Number 1.* March 1998.

4. Appraisal and Real Estate Economics Associates, Inc. *Market/Marketability Study: The Pioneer Village.* January 28, 1998.

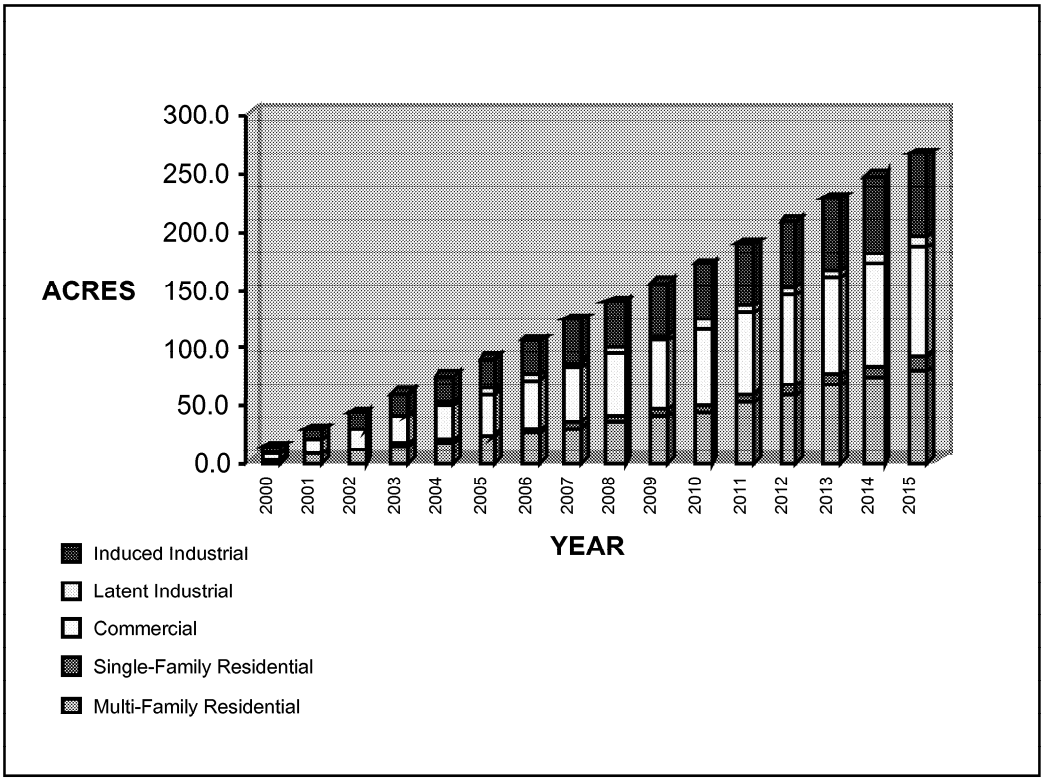

Figure 15. Summary of Combined Absorption at Former Homestead AFB: 2000–2015