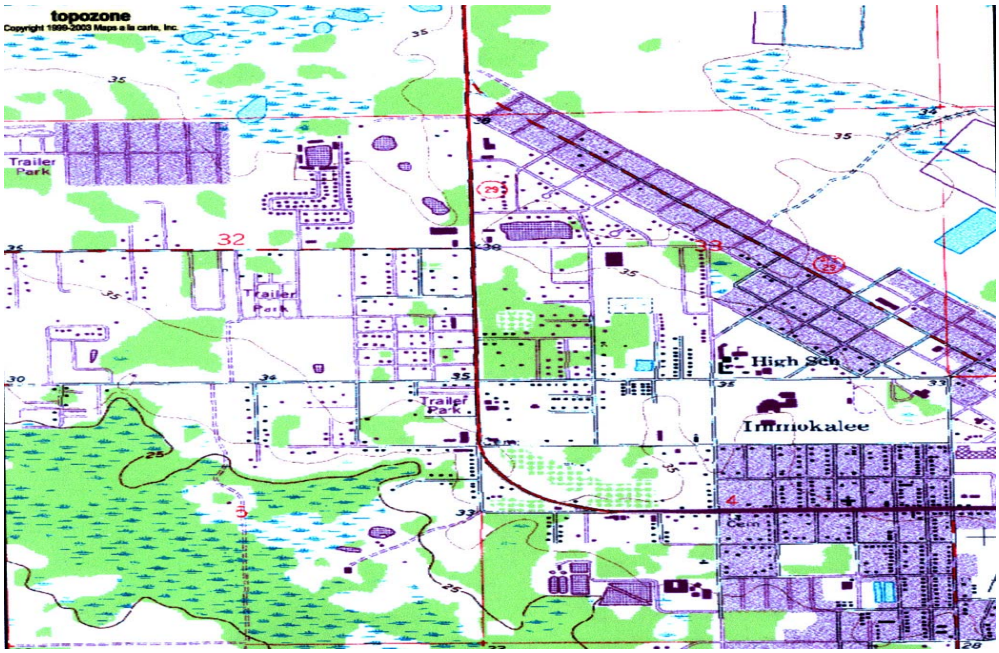
FLORIDA GULF COAST UNIVERSITY

IMMOKALEE MASTER PLAN STUDY
ECONOMIC ANALYSIS



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PREFACE

IMMOKALEE MASTER PLAN STUDY ECONOMIC ANALYSIS

This document represents a stand-alone economic analysis study of Immokalee, Florida, conducted for the RMPK Group. The RMPK group will incorporate the study into their analysis and development of the Immokalee Master Plan Study. The specific objectives of the economic analysis study are to:

- Obtain, analyze, and summarize business data for Immokalee on the number, types of firms, employment, and average annual wage levels, including any available trends from 2001 to 2005;
- Review and summarize the Ave Maria development plans and other potential developments in the local area of Immokalee;
- Develop a range of consistent population and employment planning forecasts for 2010, 2015, 2020, and 2025. Estimates of square footage per employee and acres of land by year will be based on Collier County's planning assumptions where available, including parameters developed for Collier County's FIAM model; and
- Identify potential industries and business clusters that may be targeted for Immokalee to diversify the local economy and increase the overall average annual wage levels.

The project was conducted by Florida Gulf Coast University (FGCU), Regional Economic Research Institute

Dr. Gary Jackson
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RESEARCH TEAM

Regional Economic Research Institute (RERI) *is part of the College of Business at Florida Gulf Coast University, and represents collaboration with local and regional governments to develop regional models and studies.*

Dr. Gary Jackson (Project Director) is currently the Director of the Regional Economic Research Institute at Florida Gulf Coast University. Dr. Jackson's specialty area is economic analysis and he has conducted extensive research and analysis of numerous industries and organizations. Dr. Jackson earned his Ph.D. in Economics from University of Massachusetts and has been an Assistant Professor of Economics for the University of Tennessee at Chattanooga and is a faculty member of the School of Business at Florida Gulf Coast University. He also has over 23 years experience with the Tennessee Valley Authority in a number of capacities with experience ranging from market analysis and policy, economic forecasting, energy policy, trading and options, to planning and strategic development.

Dr. Arthur Rubens is an Associate Professor of Management in the College of Business and former Director of Sponsored Projects and Programs in the College of Business, Center for Leadership and Innovation, at Florida Gulf Coast University. Dr. Rubens has over 25 years experience as an educator, administrator and consultant having worked with both public and private organizations. Dr. Rubens is experienced in qualitative and quantitative research methods, strategic planning, and quality improvement techniques and practices.

Dr. Mushfiq Swaleheen is currently an Assistant Professor of Economics at the Florida Gulf Coast University. He has extensive work experience in the field of development economics. He was the lead author of a number of annual economic reports on the Bangladesh Economy during 1990 – 1994. During 1994 – 2001, he worked as a Bangladeshi diplomat in Washington D.C. He is experienced in economic planning and forecasting. Dr. Swaleheen earned his Ph.D. in Economics from the University of Alabama in 2006. His specialization is in applied econometrics.

EXECUTIVE SUMMARY

Immokalee is located in Eastern Collier County Florida, in Southwest Florida. The local economy has been predominately agricultural in nature but is expected to change gradually as urban and industrial development moves eastward in Collier County. Several large projects have been started or announced that will change the surrounding landscape and create opportunities for Immokalee. These include Ave Maria which includes a new university, residential community, and town center. Big Cypress has been announced and will also include new residential communities and a town center. Immokalee has an existing airport and industrial park that can serve as important infrastructure components as the area develops. In addition, a 583 acre expansion of an industrial park and a 468 acre moderately priced housing development is being planned southwest of the Immokalee airport.

The greater Naples community is largely developed and occupies the Western Coastal region of Collier County. Economically, the Naples community has been dominated by tourism, entertainment, retail trade, construction, recreation, health care, business and financial services, and retirement-related services.

On September 28, 2004, the Immokalee Master Plan and Visioning Committee was created (Ordinance No. 2004-62). The purpose of this 10-member committee was to assist in the development of any necessary Requests for Proposals for consulting services; assist in the review of general planning matters related to the Immokalee Community; provide the Collier County Board of County Commissioners (BCC) recommendations regarding roads, economic incentives, affordable housing, and

improvement to Immokalee Airport; and, assist in the review and updating of the Immokalee Area Master Plan. As part of the committee charge, RMPK Group, Inc., of Sarasota, Florida was contracted in 2005 to develop the Immokalee Master Plan. In September 2006, RMPK Group, with the approval of the Immokalee Master Plan Oversight Committee, engaged in a subcontract with Florida Gulf Coast University (FGCU), Regional Economic Research Institute (RERI) to develop a stand-alone economic analysis study of Immokalee, Florida with the intent for the study to be incorporated into RMPK study findings and the overall master plan documents.

The FGCU RERI study included four primary tasks:

1) Business Analysis: The first task was to obtain, analyze, and summarize business data for Immokalee on the number of firms, type of firms, employment and average annual wage levels from 2001 to 2005.

2) Review Planned Developments: The second task of the study was to review and summarize available information on significant developments planned for the Immokalee area. These include Ave Maria, Big Cypress, and development plans for a residential and industrial park in the Immokalee area.

3) Construct Planning Forecasts: The third task was to develop low, medium, and high planning forecasts for Immokalee's population and employment for 2005, 2010, 2015, and 2020.

4) Identify Potential Industry/Cluster Targets for Immokalee: The final task was to identify a list of potential business clusters that could be recruited or grown to increase wealth and diversify the local economy.

The primary database used for the study was the Agency for Workforce Innovation (AWI) quarterly census of employment and wage program. The study used AWI employment data for enterprises operating in postal zip codes 34142 and 34143, for the years from 2001 to 2005. Owing to a confidentiality provision, the AWI employment data cannot be released publicly for business categories with less than three (3) reporting enterprises or for industry categories where a single business enterprise employ more than 80 percent of the total employees in the category. Therefore, only select industry categories were reported to meet this disclosure requirement.

• Natural Resources and Mining (Agriculture)	• Manufacturing	• Wholesale Trade
• Transportation, Warehousing and Utilities	• Financial	• Retail Trade
• Professional and Business Services	• Education and Health Services	• Leisure and Hospitality
• Government	• Other Services	

The key results of the study are presented on the following pages.

Business Analysis

- From 2001 to 2005 there has been a steady increase in number of enterprises (23.5 percent), employment (17.9 percent) and average wage (46.1 percent) in Immokalee. In 2005 there were 263 business enterprises operating in Immokalee with an average employment of 6,816 with an average wage of $23,649.

- The Natural Resources and Mining (Agriculture) industry is the largest single industry in Immokalee accounting for approximately 60 percent of all employment and 20 percent of all business establishments. However, the average annual wage in this industry is one of the lowest of all represented industries in Immokalee with leisure and hospitality the only industry group having a lower average annual wage.

- Like much of Southwest Florida, Immokalee has a seasonal cycle of employment, with the month of January showing the highest employment levels and the month of July showing the lowest employment levels. A majority of the seasonal workers are supporting the agricultural sector. In 2005, Overall employment reached a high of 8,826 in January and declined to a low of 4,315 employees in July.

- In 2005 there were 52 enterprises in the Natural Resources and Mining (Agriculture) industries. Average annual wages have risen from $13,300 in 2001 to $17,481 in 2005. Average annual employment has remained fairly constant at about 4,100 employees from 2003 to 2005.

- Professional and Business services, Other Services, Construction, Education and Health Services, and Financial Services employment have grown the fastest during the 2001 to 2005 period and creating a slightly more diversified economy. Manufacturing, Wholesale Trade, Retail Trade, Leisure and Hospitality, Transportation, Warehousing, and Utilities, and Natural Resources and Mining (Agriculture) have grown at a much slower pace during this five year period.

Review of Planned Developments

- With the movement of development east, the construction industry has steadily grown from 2001 to 2005 and the infrastructure of roads and utilities has followed this movement. Currently there are several large development either underway or planned for development. The most notable are 1) the town of Ave Maria and University; 2) Big Cypress; and 3) Expansion of Industrial Park and residential area which are in the 195,846 acre rural land stewardship area which surrounds Immokalee.

- The Town of Ave Maria currently under construction totals about 5,000 acres, of which nearly 20% has been designated as the University campus. The university is targeting an initial enrollment of 650 students at the permanent campus and has plans to grow to approximately 5,000 undergraduate and graduate students. The Town of Ave Maria will be a self-contained, self-sustaining community with a full range of residential options and commercial services to its residents. It is expected that 20,000 residents will live in the Town. The township has also designated over 195,000 acres of land as Rural Land Stewardship Area (RLSA).

- The Town of Ave Maria University is being built out in two phases with the final phase planned for completed in 2016. Direct benefits during the construction and build-out phase will be increased revenues due to impact fees, improved infrastructure, increased jobs and increased retail activity. Anticipated longer term benefits beyond increase tax revenues would be an expansion and diversification in the labor market in and around Immokalee.

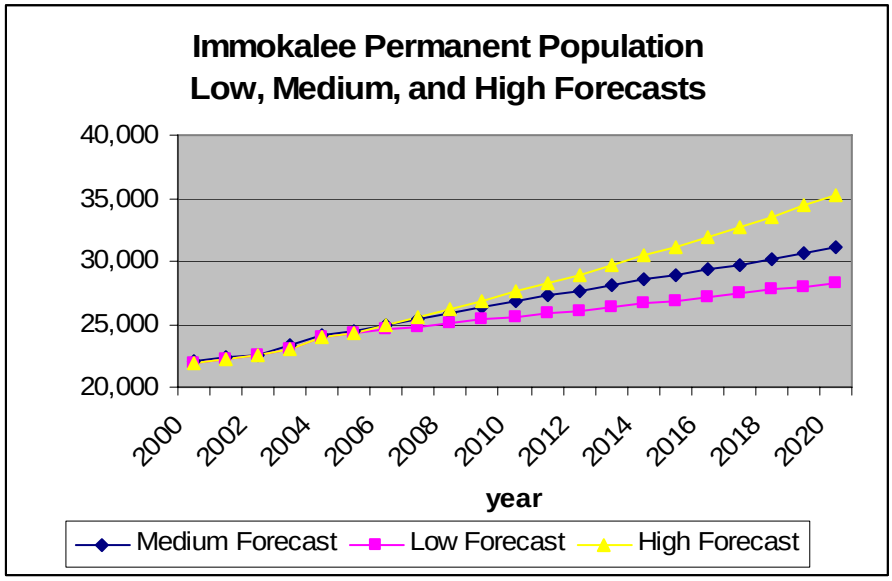
Anticipated developments in the Township of Ave Maria

Land use	Measurement unit	Phase I	Phase II	Total
Residential	Units	6,010	4,990	11,000
Assisted living facilities	Beds	0	450	450
Retail, entertainment, service	Square feet	367,900	322,100	690,000
Professional offices	Square feet	276,600	233,400	510,000
Civic/community/misc.	Square feet	115,500	33,000	1,485,000
Medical facilities	Square feet	15,000	20,000	35,000
Hotel	Room	110	290	400
University	Students	3,150	2,850	6,000
K-12 schools	Students	1,120	1,980	3,100

- Big Cypress, a planned community to be developed by Collier Enterprises, is a mixed use community being developed south of Immokalee and west of Ave Maria which will cover over 8,000 acres of developed land, with 14,000 acres of preserves and 13,000 acres of preserves beyond the project border. Approximately 25,000 homes are planned for a potential population of around 50,000 people with total build out around 2040. In addition, Collier Enterprises is proposing plans for a 580 acre expansion of an industrial park and a 470 acre moderately priced housing development southwest of the Immokalee airport.

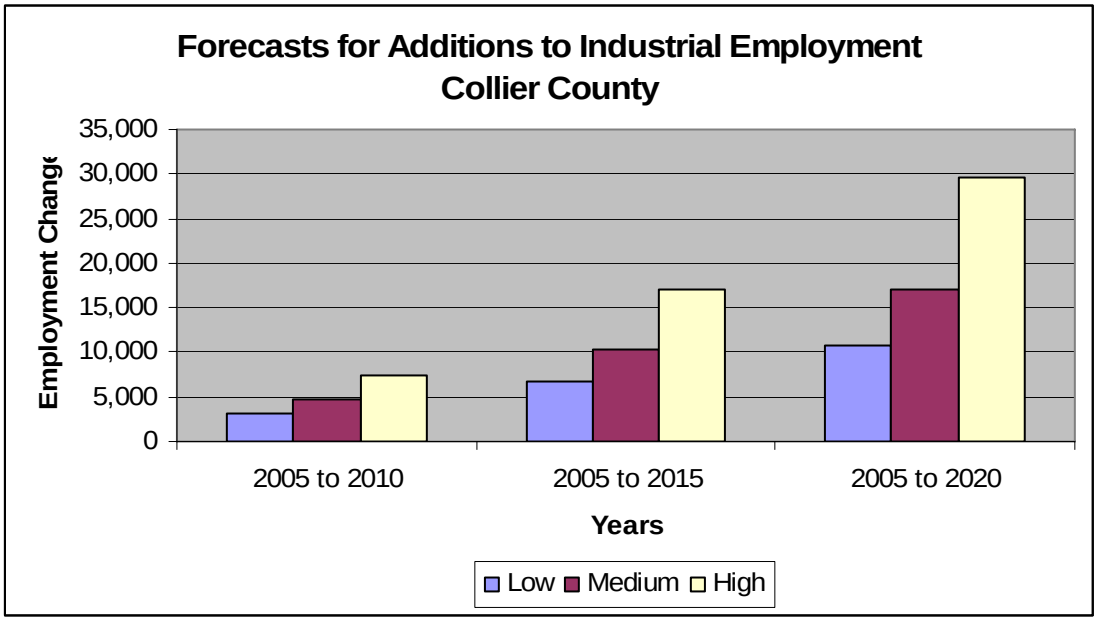
Planning Forecasts

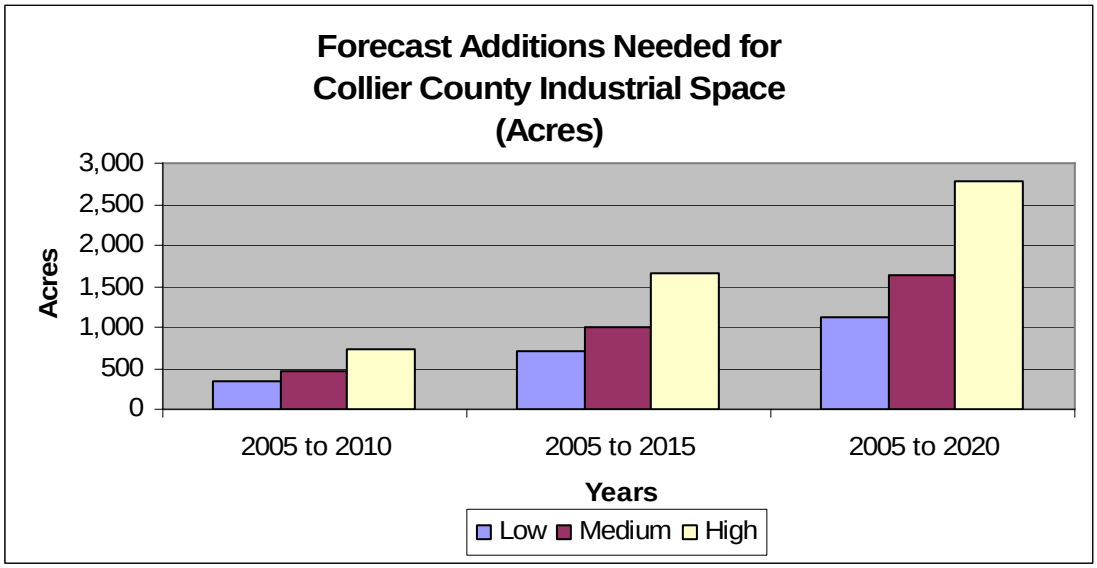
- A low, medium, and high Immokalee population forecasts were developed. The medium population forecast grows at 1.9 percent per year from 2005 to 2010 and 1.5 percent from 2010 to 2020. The high population forecast grows at 2.5 percent per year from 2005 to 2020 and the low population forecast grows at 1.0 percent from 2005 to 2020.



- Planning forecasts were developed for employment and space requirements for retail, office and industrial space in 2010, 2015, and 2020. Some of the specific projections follow:

- Retail: The additional retail employment and space requirements were generated based on the population forecasts. The medium forecast had additional retail employment of 164 employees by 2010, rising to 373 by 2015 and 650 additional retail employees by 2020. This translates into 12 more acres of retail land by 2010, 28 acres by 2020, and 49 acres by 2020.
- Office: The additional office employment and space requirements were also generated based on the population forecasts. The medium forecast had additional office employment of 188 by 2010, 310 employees by 2015, and 436 employees by 2020. This additional employment would require the addition of approximately 14 acres by 2010, 23 acres by 2015, and 33 acres by 2020.
- Industrial: The additional industrial space requirements were forecast for Collier County using the AWI model that provides regression and shift-share analysis to generate employment trend forecasts. The medium case for Collier County has additional industrial employment of about 4,700 by 2010, 10,400 by 2015, and 17,000 by 2020. This translates into the need for approximately 500 additional acres by 2010, 1,000 acres by 2015, and 1,600 acres by 2020. It is expected that much of the growth in industrial sites will take place in Eastern Collier County and that Immokalee will be one of the areas needed to meet the county's industrial growth.





- Although forecasts predict that agriculture will continue to play a very important role in Collier County and Immokalee, the overall amount of agricultural employment will decrease from 2005 to 2020 based upon low, medium, and high forecasts. The ranges of growth rates for agriculture are from -1.0 to -2.6 percent per year.

Industry/Cluster Targets

- Traded clusters are groups of firms and institutions that increase the group or cluster's overall productivity and allow the group of firms to succeed. These are firms that generally sell in national or international markets. The local area is noted for its beaches, sun, and recreation activities that boost tourism and create a cluster of firms that competes for the national and international tourists.

- Traded clusters that generate additional wealth and help diversify the economy include business services, heavy construction services, financial services, distribution (wholesale) services, computer design and software, and life sciences.

- The Florida Tradeport Study for the Immokalee Airport was conducted in March 2006 for the Economic Development Council of Collier County by KS&R (a 130 telephone interview study of key stakeholders of small airports). Some of the key recommendations of the study were:
  - → The proposed loop and connection to the Interstate is key to attracting businesses to the Florida Tradeport, regardless of industry.
  - → Enhancements to the infrastructure at the Florida Tradeport such as roads, pad ready sites, ILS (Instrument Landing System), runway lights, lengthening the runway, and a control tower will make the facility more attractive to Aviation as well as other industries.
  - → Two-thirds of respondent companies report that they are flexible regarding the lease/own decision, although one in five companies is likely to require the purchase of land.
  - → Creative local incentives, such as pre-permitting and pad-ready sites, can serve as a key differentiator for the Florida Tradeport.
  - → International capabilities serves as a niche play with prospective clients.
  - → Having local educational resources offering Aviation Training is key to bringing in more aviation businesses.
  - → Available work force, population growth, and proximity to major metropolitan cities all resonate with potential businesses and are key marketing messages.
  - → Site tours and personal contact from members of the EDC are the most effective tools to communicate with companies that are being marketed to.

- Over 50% of the study respondents reported that access to ground transportation, price of land, readily available land, and availability of skilled workforce were most important factors in relocation decisions.

Conclusion and Limitations of the Study

This study was undertaken to assist Immokalee and the citizens of Collier County in the development of the Immokalee Master Plan by providing key economic information. The economic development route can take many different paths and the

planning for the community will help to shape its future and its particular development path. Like any forecast there are limitations to the interpretation of the data:

- The historic and current economic data on Immokalee is very limited since the community is unincorporated and is not included in the annual American Community Survey completed annually by the U.S. Census. The university has an agreement with Florida's Agency for Workforce Innovation (AWI) and was able to get historic employment data for 2001 to 2005 for the zip code area 34142 and 34143.
- This zip code area is larger than Immokalee but the developed area is primarily Immokalee so the AWI data is the best available 2001 to 2005 employment information.
- The AWI employment data is only collected from those firms who have employees and are responsible for unemployment compensation payments.

Given the limited data for Immokalee and uncertainties inherent in predicting the future, a low, medium, and high planning forecasts have been generated to capture the range of uncertainties. The planning forecasts are based on trend data and should be viewed as long range trends and not short range forecasts that are often impacted by changes in the business cycle or short-term economic shocks to the economy.

In conclusion, citizens and experts have come together to help develop a plan that includes potential infrastructure upgrades along with the need to designate land uses for the community. Immokalee has the potential to meet many of Collier County's industrial growth needs if it desires to pursue that growth avenue. Finally, it is more of a journey where the path followed will need to be flexible to meet the changing nature of the markets and technology

1.0 IMMOKALEE EMPLOYMENT TRENDS: 2001 to 2005

The initial task of the FGCU study team was to obtain information on Immokalee's business mix and trends. The business analysis identified:

- Average employment defined as the average of monthly employment.
- Average wage defined as the total annual wages divided by the average employment.
- Seasonality of employment defined as the difference between January and July employment.
- Average growth rates defined as the average annual growth rate over the available years.

This employment information was collected for Immokalee zip codes 34142 and 34143 for the years 2001 to 2005. The data source used for the analysis was the Florida Agency for Workforce Innovation (AWI) Quarterly Census of Employment and Wages (QCEW) program (This quarterly census collects monthly enterprise level data on employment and wages). Although other data sources, i.e., U.S. Census Data, were reviewed, it became quickly apparent that the U.S. Census data source was very limited since Immokalee is unincorporated and its population level is below the level that is generally surveyed annually by the U.S. Census. In addition, U.S. Census data are decades apart (1990 and 2000) and do not capture the specificity of current mix and trends needed for our analysis.

Procedurally, the FGCU study team contacted Southwest Florida's Agency for Workforce Innovation and obtained permission to use its AWI database. Owing to a confidentiality provision, the database cannot be released for business categories with less than three (3) reporting enterprises or for categories where a single business enterprise employ more than 80 percent of the total employees in the category. In keeping with this provision, the study reports the number of firms, employment and average annual wage levels for the following defined groups:

- Natural Resources and Mining (includes Agriculture)
- Construction
- Manufacturing
- Wholesale Trade
- Retail Trade
- Transportation, Warehousing, and Utilities
- Financial Activities
- Professional and Business Services
- Education and Health Services
- Leisure and Hospitality
- Other Services
- Government
- All Industries

1.1 Overview of Business Activity in Immokalee

The Agency for Workforce Innovation (AWI) reported that there were 263 business enterprises operating in Immokalee in 2005 with average employment of 6,816 and average annual wage of $23,649. Overall, the number of enterprises, employment and wages has increased steadily during 2001 to 2005. Average monthly employment has increased by 17.92 percent. The average annual wage paid has increased by 46.13 percent and the number of enterprises has increased by 23.47 percent.

One distinctive feature of the aggregate economic picture in Immokalee is the importance of a single sector – *Natural Resources and Mining*, where business enterprises are mostly in crop and livestock production and provision of agricultural services. These mostly agricultural enterprises account for more than 60 percent of all employment and around 20 percent of all business establishments in Immokalee.

Table 1.1 portrays the overall business trend and the importance of agricultural activities in Immokalee. Figure 1.1 compares employment in the Natural Resources and Mining sector with employment in all categories of businesses in Immokalee.

Table 1.1
Overall Business Trend in Immokalee

All Industries	2001	2002	2003	2004	2005
Number of industries	213	227	233	241	263
Average employment	5,780	6,187	6,423	6,497	6,816
Average wage	$16,184	$18,132	$19,917	$21,973	$23,649
Natural Resources and Mining	2001	2002	2003	2004	2005
Number of industries	46	47	50	49	52
% of all industries	21.6	20.7	21.5	20.3	19.8
Average employment	3,788	3,892	4,155	4,160	4,132
% of all industries	65.5	62.9	64.7	64.0	60.6

Figure 1.1

Employment: All Industries and Natural Resources and Mining 2001-2005

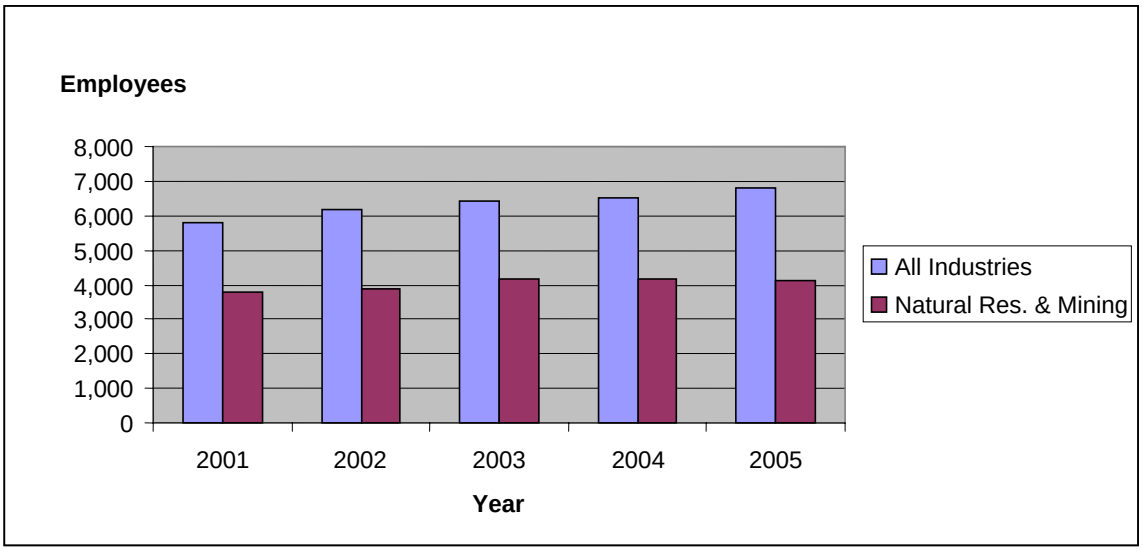
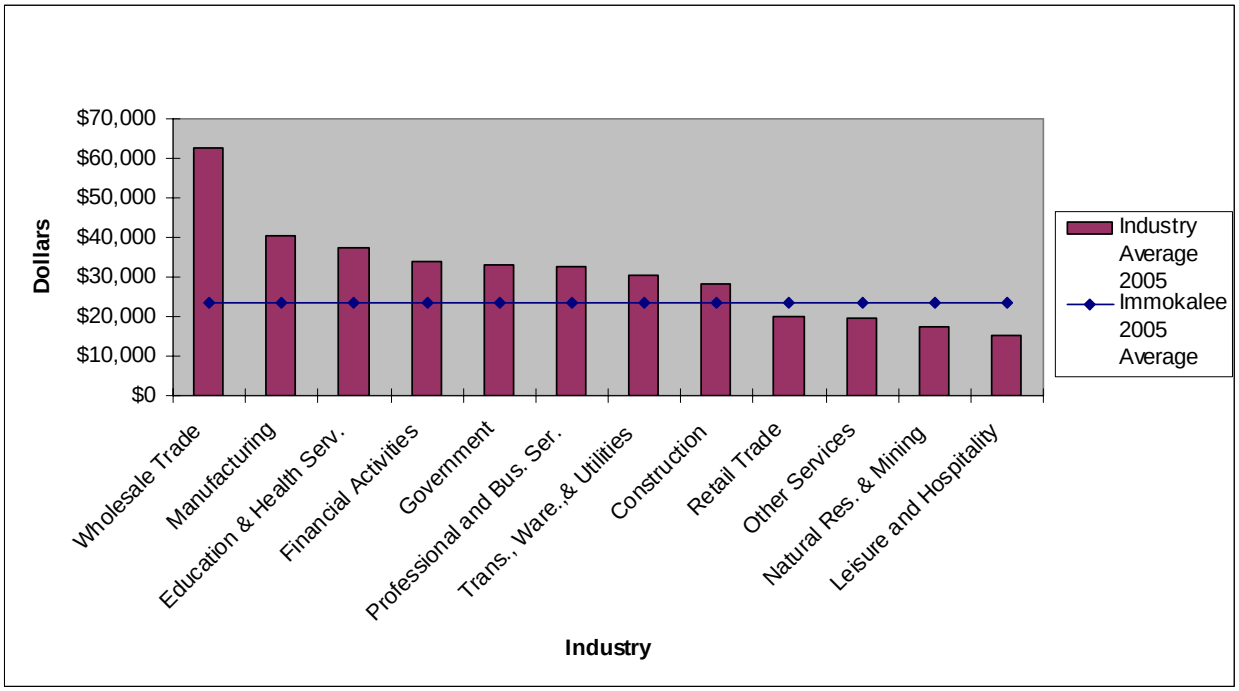


Figure 1.2 shows the annual average wage in different sectors in comparison to the annual average wage for all workers in Immokalee in 2005. The average annual wage in the Natural Resources and Mining sector was lower than the overall Immokalee worker average. Three other sectors, Retail Trade, Leisure, and Hospitality and Other Services had lower than average wage. These four sectors account for over 70 percent of all workers in Immokalee.

Figure 1.2

Immokalee Annual Pay Levels
2005 by Industry and Community Average



Closely linked to the importance of the Natural Resources and Mining sector is the high degree of seasonality in economic activity in Immokalee. Table 1.2 presents a measure of seasonal employment defined as the difference between January and July employment each year. In 2005, Overall employment reached a high of 8,826 in January and feel to a low of 4,315 employees in July. Graph 1.3 shows that the pattern of seasonality has remained unchanged during 2001 – 2005.

Table 1.2
Seasonality in employment

Average employment	2001	1002	2003	2004	2005
All industries	5,780	6,178	6,423	6,497	6,816
Natural Resources & Mining	3,788	3,892	4,155	4,160	4,132
Seasonal employment	2001	1002	2003	2004	2005
All industries	3,752	3,805	4,997	4,811	4,511
Natural Resources & Mining	3,593	3,653	4,721	4,560	4,223

Table 1.3 and Figure 1.3 present the growth in different employment sectors during 2001 to 2005. It should be noted that employment in some of the enterprises providing services (Professional and Business Services; Education and Health Services; and, Other Services) and in enterprises engaged in Construction has grown at a brisk pace. Employment in Manufacturing; Wholesale and Retail Trade; Transportation, Warehousing, and Utilities; and, Natural Resources and Mining increased at a much slower pace.

Figure 1.3

Immokalee Employment
2001 to 2005

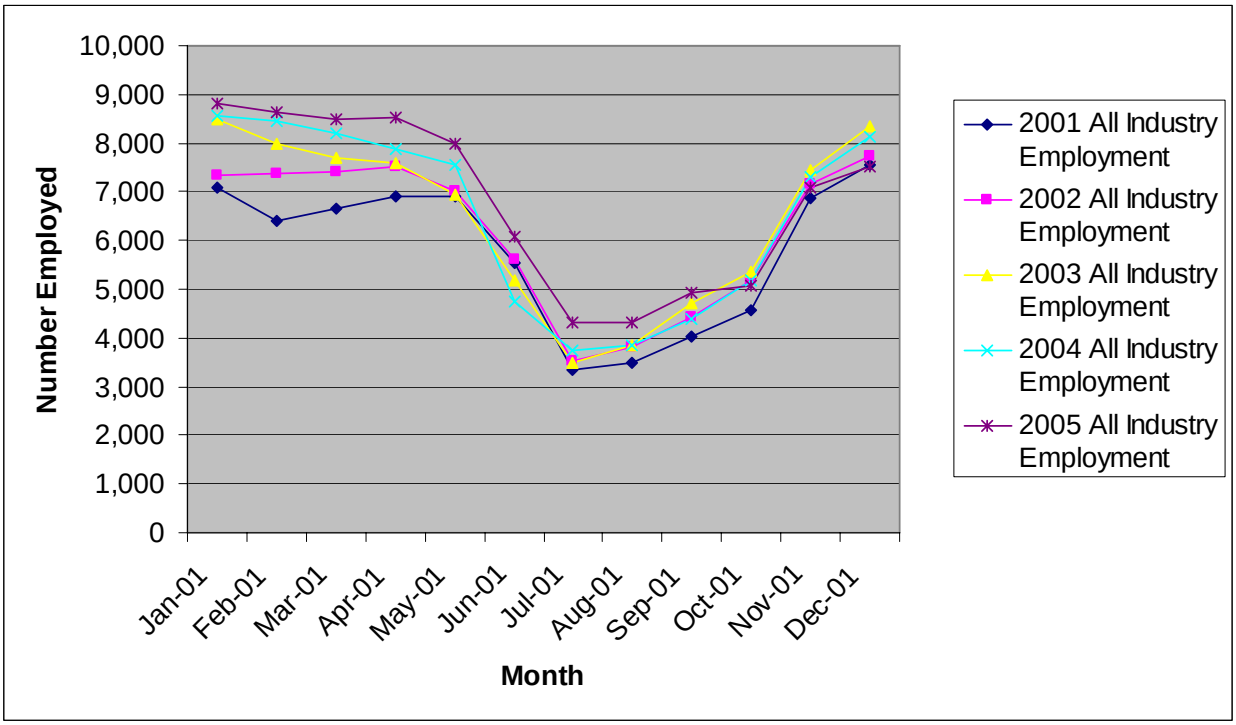


Table 1.3
Immokalee Business Sector Growth Rates 2001 - 2005

Business Sectors	2001-02	2002-03	2003-04	2004-05	2001-05
Natural Resources and Mining	2.8%	6.8%	0.1%	-0.7%	1.8%
Construction	18.4%	5.5%	19.8%	10.3%	10.6%
Manufacturing	-6.2%	-6.1%	3.4%	12.6%	0.5%
Wholesale Trade	-0.5%	0.0%	14.1%	-8.3%	0.8%
Retail Trade	5.9%	-11.4%	-8.2%	20.3%	0.7%
Transportation, Warehousing, and Utilities	5.3%	-19.7%	18.5%	5.7%	1.2%
Financial Activities	14.5%	15.4%	0.2%	6.2%	7.0%
Professional and Business Services	45.3%	-12.1%	-0.6%	147.1%	25.7%
Education and Health Services	18.3%	6.9%	4.7%	19.9%	9.7%
Leisure and Hospitality	-18.9%	-2.6%	-5.9%	46.6%	1.7%
Other Services	337.8%	6.9%	2.4%	8.6%	39.1%
Government	8.0%	1.3%	-1.2%	6.4%	2.8%
Total All Industries	6.9%	4.0%	1.1%	4.9%	3.4%

Source: AWI 2001-2005

1.2 Business Trends

Analysis was conducted for 10 different categories or sectors of businesses. The 10 sectors include:

- Natural Resources and Mining (Agriculture)
- Retail Trade
- Wholesale Trade
- Education and Health Services
- Financial Services
- Construction
- Leisure and Hospitality
- Other Services
- Government

1.2.1 Natural Resources and Mining (Agriculture):

In 2005 there were 52 enterprises in this category and an overwhelming majority of these enterprises were engaged in crops and livestock production and provision of agricultural services. The number of enterprises and the average monthly employment has increased since 2001 and has held steady since 2003. Table 1.4 shows the findings from this category or sector.

Table 1.4

Trends in the Natural Resources and Mining Sector

	2001	2002	2003	2004	2005
# of Enterprises	46	47	50	49	52
Employment					
Number	3,788	3,892	4,155	4,160	4,132
Growth (%)		2.8	6.8	0.1	-0.7
Share of total employment	65.5	63.0	64.7	64.0	60.6
Seasonality	3,593	3,653	4,721	4,560	4,223
Wage					
Annual wage	$13,300	$14,249	$15,892	$17,351	$17,481
Growth (%)		7.1	11.5	9.2	0.7
Percent of wage for all industries	82.2	78. 6	79.8	79.0	73.9

Three trends are noticeable: First, the share of this sector in total employment has decreased steadily during 2001 – 2005. Second, there is a marked increase in the seasonality of employment. The difference between January and July employment has increased substantially for 2003, 2004 and 2005 compared to the two earlier years. Third, wage growth in this sector (7.1 percent for 2001 – 2005) has been slower than the overall growth in wages (9.9 percent for 2001 – 2005). With the growth in non-agriculture positions, the average overall wage has increased relative to agricultural wages.

1.2.2 Retail Trade

Outside of the Natural Resources and Mining sector, the Retail Trade sector has the highest average monthly employment. The number of retail establishments and the

average monthly employment has remained more or less steady over 2001 to 2005. From 2002, the seasonality in employment has increased sharply. The average wage has declined relative to the average for all industries and shows a greater degree of year-to-year variation. Table 1.5 shows the finding for the retail trade sector.

Table 1.5.

Trends in the Retail Trade Sector

	2001	2002	2003	2004	2005
# of Enterprises	38	42	44	45	45
Employment					
Number	432	457	405	372	447
Growth (%)		5.9	-11.4	-8.2	20.3
Share of total employment	7.5	7.4	6.3	5.7	6.6
Seasonality	51	172	141	143	122
Wage					
Annual wage	$15,832	$16,113	$18,860	$18,792	$19,869
Growth (%)		1.8	17	-0.4	5.7
Percent of wage for all industries	97.8	88.9	94.7	85.5	84

1.2.3 Wholesale Trade

Average monthly employment in Wholesale Trade has remained stable at 370 during 2001to 2005. However, the number of enterprises has declined from 19 to 13. Employees in this group of enterprises have the highest average wage among all Immokalee workers. In 2005, the average annual wage was $62,460 compared to $37,995 in 2001. Historically, annual wage for workers in this sector stood at around 225 percent of the average wage for all Immokalee workers. In 2005, this has increased to over 264 percent. The data suggests that there was a significant restructuring in this sector in 2005 leading to the exit of a number of enterprises and the elimination of some relatively lower paying jobs. There is a significant seasonality of employment in this sector. The average difference in employment between January and July employment defined as seasonal employment was 83. Table 1.6 shows the data for the wholesale trade sector.

Table 1.6
Trends in the Wholesale Trade Sector

	2001	2002	2003	2004	2005
# of Enterprises	19	16	14	14	13
Employment					
Number	359	358	358	408	374
Growth (%)		0	0	13.9	-8.33
Share of total employment	6.2	5.8	5.6	6.3	5.5
Seasonality	90	79	42	104	100
Wage					
Annual wage	$37,995	$43,154	$44,119	$46,417	$62,460
Growth (%)		13.6	2.2	5.2	34.6
Percent of wage for all industries	234.8	238	221.5	211.2	264.1

1.2.4 Education and Health Services

The Education and Health Services sector has seen a steady growth both in terms of the number of enterprises and the number of persons employed. Between 2001 and 2005, the number of enterprises increased from 9 to 14 and the number employed increased from 224 to 356. However, wage growth for employees in this sector has been slow. Also, the gap with the average wage for all employees has widened: In 2001 average wage for employees in this sector was nearly twice (198.7%) that of the average for all workers in Immokalee. In 2005, this has fallen to 157.2%. There is no significant pattern in the seasonality of employment in the education and health services sector. Table 1.7 shows the data from this sector.

Table 1.7

Trends in the Education and Health Services Sector

	2001	2002	2003	2004	2005
# of Enterprises	9	10	12	14	14
Employment					
Number	224	265	283	297	356
Growth (%)		18.3	6.9	4.7	19.9
Share of total employment	3.9	4.3	4.4	4.5	5.2
Seasonality	34	-8	-24	18	5
Wage					
Annual wage	$32,160	$33,665	$32,660	$38,863	$37,184
Growth (%)		4.7	-2.9	19.0	-4.3
Percent of wage for all industries	198.7	185.7	164	176.9	157.2

1.2.5 Financial Activities

In 2005, the number of enterprises in this category increased to 17 from 14-15 in the preceding four years. There has been a steady growth in the number of workers employed in this sector which is consistent with the overall trend in business growth in the study area. The average annual wage for these workers has increased very slowly. There is no consistency in the seasonality of employment. If anything, the observed pattern actually works to reduce overall seasonality of employment in Immokalee. Table 1.8 shows the findings from this sector.

Table 1.8

Trends in the Financial Sector

	2001	2002	2003	2004	2005
# of Enterprises	15	15	14	15	17
Employment					
Number	151	181	209	210	223
Growth (%)		14.5	15.4	0.2	6.2
Share of total employment	2.7	2.9	3.2	3.2	3.3
Seasonality	-10	-16	-1	-13	-13
Wage					
Annual wage	$30,128	$31,182	$32,069	$34,377	$33,921
Growth (%)		3.5	2.5	7.2	-1.3
Percent of wage for all industries	193.3	172	161	156.4	143.4

1.2.6 Professional and Business Services

The Professional and Business Services sector experienced strong growth during 2001 to 2005. The number of enterprises in this category increased from 12 to 30 and average employment increased from 64 to 199 during this period. The pattern of wage increase suggest that Immokalee has attracted a significant number of relatively higher qualified professionals in 2005 which has helped to reverse the trend in the average wage during the previous three years. Table 1.9 shows the data from this sector.

Table 1.9

Trends in the Professional and Business Services Sector

	2001	2002	2003	2004	2005
# of Enterprises	12	25	25	21	30
Employment					
Number	64	92	81	81	199
Growth (%)		45.3	-12.1	-0.6	147.1
Share of total employment	1.1	1.5	1.3	1.2	2.9
Seasonality	-4	27	24	18	35
Wage					
Annual wage	$24,180	$18,646	$19,672	$19,731	$32,560
Growth (%)		-22.9	5.5	0.3	65
Percent of wage for all industries	149.4	102.8	98.8	89.8	137.7

1.2.7 Construction

The number of construction companies operating in Immokalee has ranged between 10 and 12 during 2001 to 2005. Hiring by these enterprises has increased at an annual average rate of 13.4 percent. The growth of annual average wage, however, has been a slow 0.8 percent compared to a growth rate of 9.9 percent for all employers. The pattern of seasonality is different from the overall seasonality of employment in Immokalee: The number of workers hired in July is higher than the number of workers hired in January in most years. Table 1.10 shows the findings from the Construction sector.

Table 1.10

Trends in the Construction Sector

	2001	2002	2003	2004	2005
# of Enterprises	12	12	10	11	12
Employment					
Number	106	125	132	159	175
Growth (%)		18.4	5.5	19.8	10.3
Share of total employment	1.8	2.0	2.1	2.4	2.6
Seasonality	-22	4	-9	-7	-7
Wage					
Annual wage	$27,449	$26,662	$30,077	$29,092	$28,247
Growth (%)		-2.9	12.8	-3.3	-2.9
Percent of wage for all industries	169.6	147.0	151.0	132.4	119.4

1.2.8 Leisure and Hospitality

The number of enterprises reporting has varied from 18 to 25 firms during 2001 to 2005. The number of employees has also fluctuated from 133 in 2001 to 145 employees in 2005 with a drop to around 100 employees in 2003 and 2004. In 2005, reported employment jumped up by 46.6 percent along with a 20.3 percent increase in the average annual wage. The annual wage for workers in this sector is still the lowest among all enterprise groups in Immokalee. In 2005, the average annual wage was $15,209 which was 64.3 percent of the average for all workers. Table 1.11 shows the findings in this sector.

Table 1.11

Trends in the Leisure and Hospitality Sector

	2001	2002	2003	2004	2005
# of Enterprises	22	18	22	24	25
Employment					
Number	133	108	105	99	145
Growth (%)		-18.9	-2.6	-5.9	46.6
Share of total employment	2.3	1.7	1.6	1.5	2.1
Seasonality	-9	16	5	-1	30
Wage					
Annual wage	$12,014	$13,118	$12,652	$12,644	$15,209
Growth (%)		9.2	-3.6	-0.1	20.3
Percent of wage for all industries	74.2	72.3	63.5	57.5	64.3

1.2.9 Other Services

The big jump in employment from 2001 to 2002 is most likely a reporting error. Employment has increased from 202 in 2002 to 240 in 2005 or about 5.9 percent per year. Wages have increased from $14,418 in 2002 to $19,710 in 2005 or abut 11.0 percent per year. Table 1.12 shows the data from the other services sector.

Table 1.12

Trends in the Other Services Sector

	2001	2002	2003	2004	2005
# of Enterprises	19	20	18	18	22
Employment					
Number	46	202	216	221	240
Growth (%)		337.8	6.9	2.4	8.6
Share of total employment	0.8	3.3	3.4	3.4	3.5
Seasonality	11	-119	33	-1	3
Wage					
Annual wage	$18,987	$14,418	$16,425	$18,484	$19,710
Growth (%)		-24.1	13.9	12.5	6.6
Percent of wage for all industries	117.3	79.5	82.5	84.1	83.3

1.2.10 Government

Government jobs account for a little over five percent of all employment in Immokalee. The number of government positions has increased at an average rate of 3.6 percent while annual wage has increased at an average rate of 13.3 percent. Table 1.13 shows the findings from the government sector.

Table 1.13

Trends in the Government Sector

	2001	2002	2003	2004	2005
# of Enterprises	3	3	3	3	3
Employment					
Number	320	345	350	345	367
Growth (%)		8	1.3	-1.2	6.4
Share of total employment	5.5	5.6	5.4	5.3	5.4
Seasonality	10	-38	17	7	8
Wage					
Annual wage	$21,801	$17,137	$23,106	$29,023	$33,173
Growth (%)		-21.4	34.8	25.6	14.3
Percent of wage for all industries	134.7	94.5	116	132.1	140.3

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2.0 PLANNED DEVELOPMENT REVIEW

There are several large developments currently under development or planned in eastern Collier County surrounding Immokalee. This section of the analysis provides a summary of the surrounding developments based on available public information.

The importance of the surrounding developments includes the development of additional local infrastructure such as roads and interchanges. It is assumed that the new developments will make upgrades to local infrastructure that will benefit Immokalee as part of the permitting and zoning process. These can create a positive externality for Immokalee by creating new roads, increasing the capacity of the existing road systems and potentially reducing the time traveled to I-75, a major interstate connecting the region to the east and north. The new developments also will create jobs in the local area. These are large scale developments that will need the support of additional workers not only for the construction phases of the projects but also to provide services to the new residents of the developments. Construction and service workers will be expected to move to the local area given the low level of unemployment in Collier and the surrounding counties. The new developments will also provide housing for some of their workforce who may shop in the local area and create opportunities for Immokalee to meet some of their needs.

Immokalee continues to growth internally as well. In 2005 and 2006, Collier County CDES records showed 139 single family permits were issued with a value of $11.4 million and 17 commercial permits for 149,294 square feet with a value of $14.2 million.

2.1 Ave Maria

The Town of Ave Maria (TAM) is a development that will encompass 4,995 acres of land in eastern Collier County. The Ave Maria University (AMU) will own, develop and occupy 950 acres that it has received as a gift from the Barron Collier Company. The remaining acreage will be developed as a mixed-use community by Town Development, LLLP. The TAM will be developed in two phases, with the first phase ending in 2011 and buildout planned for the year 2016. The anticipated developments are summarized in the Table 2.1 below.

Table 2.1

Anticipated developments in the TAM

Land use	Measurement unit	Phase I	Phase II	Total
Residential	Units	6,010	4,990	11,000
Assisted living facilities	Beds	0	450	450
Retail, entertainment, service	Square feet	367,900	322,100	690,000
Professional offices	Square feet	276,600	233,400	510,000
Civic/community/misc.	Square feet	115,500	33,000	1,485,000
Medical facilities	Square feet	15,000	20,000	35,000
Hotel	Room	110	290	400
University	Students	3,150	2,850	6,000
K-12 schools	Students	1,120	1,980	3,100

Since AMU's ground breaking in February 2006, 48 percent of the construction of the University and its utilities are complete. The campus is scheduled to open to students in the fall of 2007. Retail buildings and homes are expected to open in stages from the summer of 2007 ("On the rise." The Naples Daily News, August 5, 2006).

The driving force behind AMU is Mr. Thomas Monaghan, one of the country's

richest men and founder of Domino's Pizza. Mr. Monaghan has pledged $240 million of his personal fortune to begin the school and another $300 million to begin an endowment program for the future. The university is targeting an initial enrollment of 650 students at the permanent campus and has plans to grow to approximately 5,000 undergraduate and graduate students. The Town of Ave Maria will be a self-contained, self-sustaining community with a full range of residential options and commercial services to its residents. Figure 2.1 below is artist's rendition of the Town of Ave Maria.

Figure 2.1

Artist Rendering of TAM

From Immokalee the TAM can be entered from its east by Camp Keais Road and from the west by Immokalee Road and Oil Well Road. These and other roadways in the vicinity will be widened to handle the traffic inflow and outflow from the TAM. The first road project is the widening of an 11.3 mile stretch of the Oil Well Road from Immokalee Road to Camp Keais Road. Road impact fees of $80 million will be available to fund the

road projects which are being identified ("Ave Maria town developer pledges up to $80 million to widen roads", The Naples Daily News, March 5, 2006).

The nature and the scale of the economic impact that TAM will have on Immokalee will be influenced by the planning strategy underlying the TAM. The TAM is the first development of its kind under the Collier County's Growth Management Plan. The Collier County has designated 195,000 acres of land as Rural Lands Stewardship Area (RLSA). The RLSA applies an incentive based Stewardship Credit system under which areas designated for protection of agriculture and natural resources can generate development credit which can be used for development of communities in areas where natural resource values are low. The Stewardship Credits for the TAM come from the establishment of a protected area of 20,000 acres which was agreed to by the property owner.

The underlying RLSA growth strategy encourages a minimal impact on networks external to the community being developed. Consequently, the TAM master plan is for a mixed-use community centering on self-sufficiency. When the development is complete, it is expected that the 20,000 residents will enjoy easy access to retailers, entertainment, dining, civic gathering places etc. without leaving the TAM.

From the information summarized above, the following TAM impacts on Immokalee can be anticipated: (1) the full impact will take a long time to unfold as the AMU grows and develops; (2) During the initial phase of development of the TAM, Immokalee may experience some growth in retail business, but will taper off as the TAM develops its own retail businesses; (3) The demand for additional workers will increase

steadily and is likely to bring a permanent improvement in the labor market conditions in Immokalee.

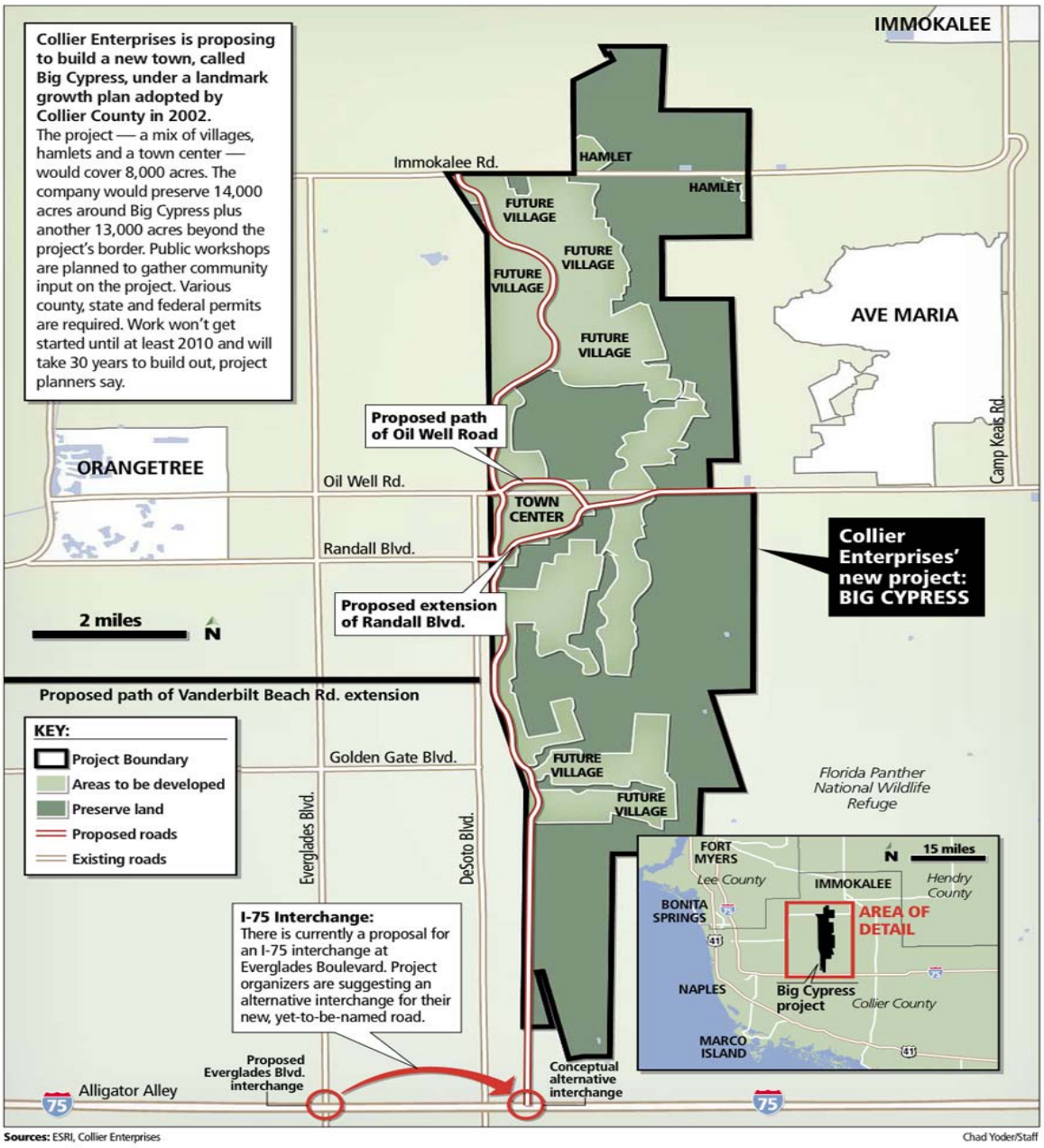
2.2 Big Cypress

Collier Enterprises has recently announced a plan for a new urban development in Eastern Collier County south of Immokalee, east of Golden Gate Estates, and west of Ave Maria in the RLSA. The following is a summary of available information on the proposed project received from Collier Enterprises and stories in the Naples Daily News.

The project will be a mix of small villages and hamlets with a town center and would cover about 8,000 acres. The development would preserve 14,000 acres around Big Cypress and another 13,000 acres beyond the project's border. Approximately 25,000 homes are planned for a potential overall population of around 50,000 people if one assumes Collier's existing average of 2.4 persons per household with about 80 percent as permanent residents. Work would not begin until at least 2010 and build out would take approximately 30 years to around 2040. A new I-75 (Alligator Alley) Interchange is currently proposed at one of two potential locations.

Pubic workshops are planned after a kickoff event in late October 2006. These workshops will focus on land conservation, agriculture, parks, schools, economic development, roads, and housing. According to Collier Enterprises CEO Tom Flood, the goal is to make Big Cypress a self-sustaining town that fits with the rural character of Collier County (Figure 2.2).

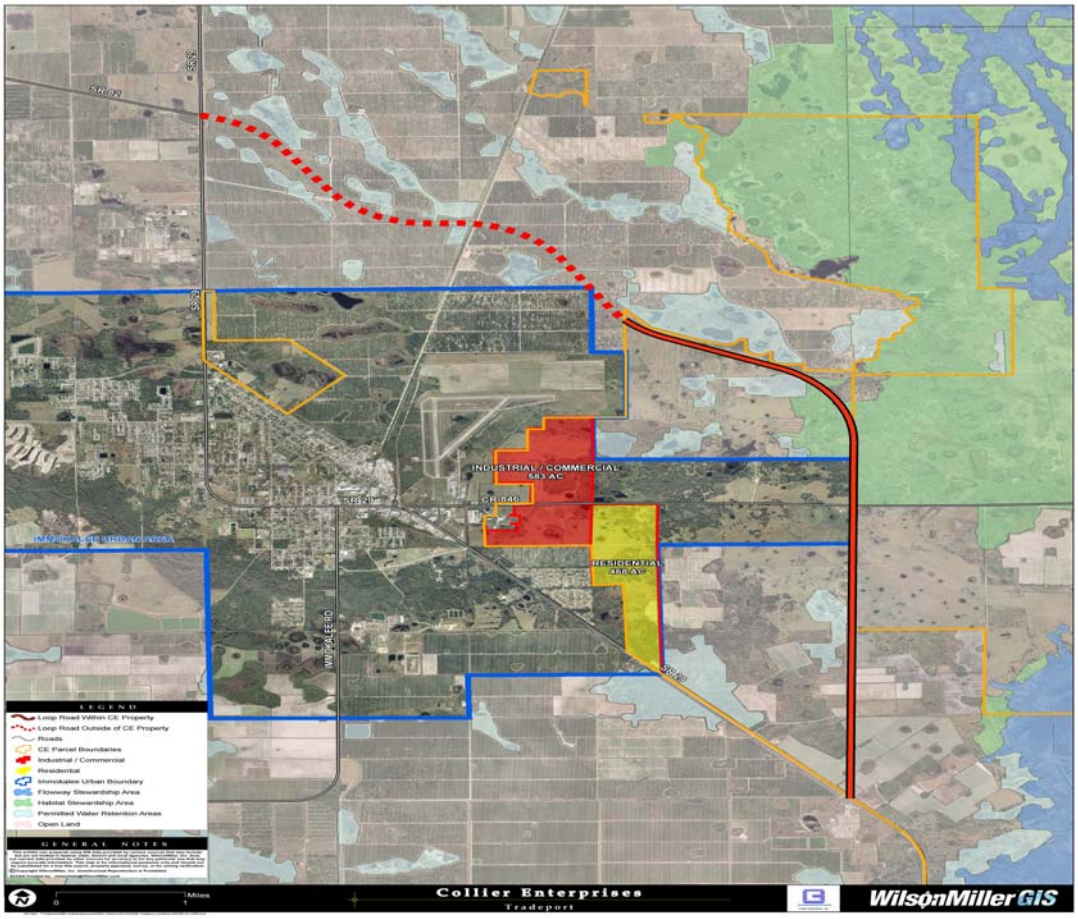
Figure 2.2


Collier Enterprises is proposing to build a new town, called Big Cypress, under a landmark growth plan adopted by Collier County in 2002.
The project — a mix of villages, hamlets and a town center — would cover 8,000 acres. The company would preserve 14,000 acres around Big Cypress plus another 13,000 acres beyond the project's border. Public workshops are planned to gather community input on the project. Various county, state and federal permits are required. Work won't get started until at least 2010 and will take 30 years to build out, project planners say.
IMMOKALEE
Immokalee Rd.
HAMLET
HAMLET
FUTURE VILLAGE
FUTURE VILLAGE
FUTURE VILLAGE
FUTURE VILLAGE
AVE MARIA
Camp Keais Rd.
Proposed path of Oil Well Road
ORANGETREE
Oil Well Rd.
TOWN CENTER
Randall Blvd.
Collier Enterprises' new project: BIG CYPRESS
Proposed extension of Randall Blvd.
2 miles
N
Proposed path of Vanderbilt Beach Rd. extension
KEY:
Project Boundary
Areas to be developed
Preserve land
Proposed roads
Existing roads
Golden Gate Blvd.
Everglades Blvd.
DeSoto Blvd.
FUTURE VILLAGE
FUTURE VILLAGE
Florida Panther National Wildlife Refuge
FORT MYERS
Lee County
IMMOKALEE
Hendry County
BONITA SPRINGS
AREA OF DETAIL
NAPLES
Big Cypress project
Collier County
MARCO ISLAND
N
15 miles
I-75 Interchange:
There is currently a proposal for an I-75 interchange at Everglades Boulevard. Project organizers are suggesting an alternative interchange for their new, yet-to-be-named road.
Proposed Everglades Blvd. interchange
Conceptual alternative interchange
Alligator Alley
75
75
Sources: ESRI, Collier Enterprises
Chad Yoder/Staff

2.3 Collier Enterprise's Planned Immokalee Industrial Park Expansion and New Residential Area for Moderately Priced Housing

Collier Enterprises is proposing plans for a 580 acre expansion of the an industrial park and a 470 acre moderately priced housing development southwest of the Immokalee airport, as shown in Figure 2. The loop road is also shown and would also connect State Road 82 with 29 to create a by-pass around Immokalee to the north and east of the airport (Figure 2.3).

Figure 2.3
Map of proposed Loop Road,
Immokalee Industrial/Commercial Park and Residential Area



3.0 PLANNING FORECASTS

Planning forecasts of population, employment and land areas to meet the future needs of retail, office space, and industry/warehouses are required for the development of the Immokalee Master Plan. This study uses the limited data available for Immokalee along with Collier County estimates to produce a range of planning forecasts. Given the wide range of uncertainties such as economic growth for the state and region, interest rates, gasoline prices, insurance costs, and regulatory approvals, it is prudent to provide a low, medium, and high forecast to bracket these uncertainties.

The market for industrial sites and to some degree office space will be dependent on the region and Collier County. Growth will require new industrial and commercial areas and these are expected to be located in Eastern Collier County, given the lack of suitable space in the more developed Western part of the county. The need for retail and office space will be primarily driven by the local population and markets in the area of Immokalee. Although agriculture will continue to be a key component of Eastern Collier County and Southwest Florida, its employment and land use are expected to give way gradually to more urban and industrial development.

3.1 Population Forecasts:

A low, medium, and high permanent population forecast for Immokalee was prepared and is presented in Table 3.1 and Figure 3.1. The medium forecast is the average of the April and October permanent forecasts prepared by the Collier County's Planning Department. It is based on unincorporated population forecasts for Collier

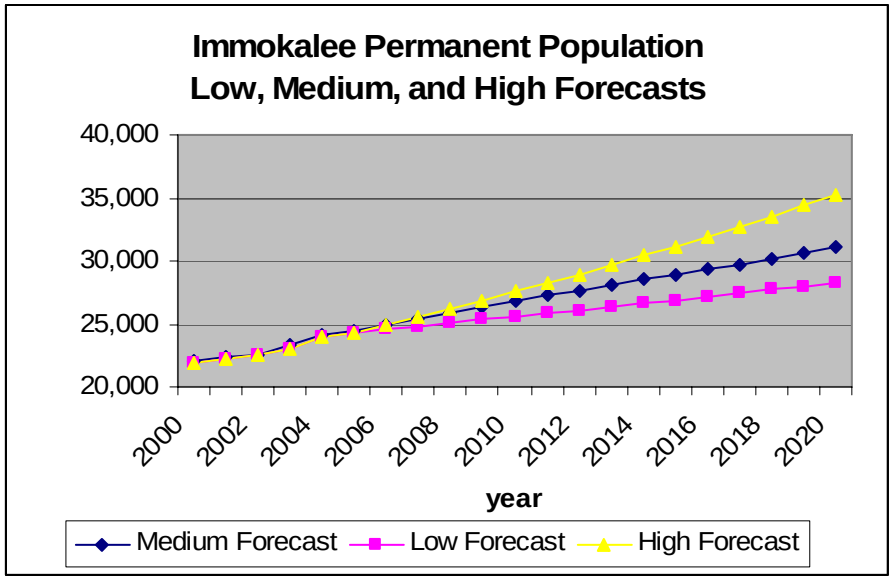
County provided by the University of Florida's Bureau of Economic and Business Research (BEBR). The county disaggregates the forecast to arrive at planning community forecasts using county certificate of occupancy histories and 2000 Census data on occupants per dwelling.

A range of population forecasts is developed by this study to allow for the uncertainties surrounding the timing of land development and anticipated demand. These uncertainties include concerns over land and housing costs, the timing of the zoning and permit process, hurricanes and accompanying increases in insurance costs, and the area's competitive position in attracting workforce, seasonal and retired residents to the local area. Certainly, the low unemployment rate of only 3.6 percent of the labor force in Collier County compared to the national unemployment level of about 4.6 percent indicates a tight labor market and the need for a larger workforce to meet the area's growing economy. Table 3.1 provides the low, medium, and high permanent population forecasts for Immokalee. The Immokalee population forecasts are charted in Figure 1 which shows that the uncertainty grows with the length of the forecast.

Table 3.1
Immokalee Permanent Population Forecast

Year	Low	Medium	High
2000	21,938	21,938	21,938
2005	24,349	24,349	24,349
2010	25,591	26,740	27,549
2015	26,897	28,816	31,169
2020	28,269	30,955	35,265

Figure 3.1



The medium or reference forecast has population growing at about two percent from 2000 to 2005. Population growth slows slightly to about 1.9 percent from 2005 to 2010, and slows further to about 1.5 percent through 2020.

The high population forecast represents much faster growth. Permanent population grows at about 2.5 percent for the whole period from 2005 to 2020. This would represent a case where an additional 4,300 people would be living in Immokalee by 2020. If we assume that there about 2.5 people per household, the need for housing would be about 1,700 dwellings above the medium forecast.

The low population forecast represents a case where population grows at one percent per year for the period from 2005 to 2020. This slower but positive growth in population growth would result in approximately 28,000 permanent residents in 2020 compared to around 31,000 permanent residents in the reference or medium forecast.

The need for housing would be about 1,000 units less under the low case in 2020 compared to the reference or medium case, assuming about 2.5 persons per dwelling.

In addition to the permanent population, Collier County estimates that there are about 15,000 seasonal residents who come to the area to support agricultural production primarily in the winter months.

3.2 Employment and Land Use Forecasts

Employment is a “derived demand” which is highly dependent on the demand for the products and services that are produced. The demand for industrial, and to some degree commercial products and services, is a function of markets much broader than the local Immokalee market. The demands for retail establishments are dependent on local traffic and income levels in the area. Office needs will be largely dependent on the services being offered to the local area. This section develops employment and space forecasts for retail, office space, and industrial needs. In addition, a summary of a business park study for Collier County completed by Fishkind & Associates is summarized. Agricultural employment is forecast and is expected to continue to be an important element in the community over the foreseeable future.

Again, a range of employment forecasts is developed to capture the uncertainties inherent in forecasting new firms, expansion or relocation of existing firms, their employment needs, cost competitiveness, productivity and the types of firms. The range of employment planning forecasts has been developed for the years 2010, 2015, and 2020.

The forecasts of additional employment are driving the need for retail and office space and industrial sites and buildings. The zoning, permitting and development of the sites would need to be completed before the additional employment can take place. This is the primary reason for the development of these planning forecasts.

3.2.1 Retail Space Forecast

The range of population forecasts along with the ratio of population to retail employees is used to arrive at a range of forecasts for retail employment. Once the forecasts of retail employment were developed, this study used the FIAM model's ratio of 600 square feet per employee and an estimate of 8,000 square feet per acre to arrive at a range of forecasts for the number of acres needed to support the forecast increases in retail employment. The FIAM model was developed by Fishkind and Associates for the Florida Department of Community Affairs to forecast the fiscal impacts of development. Tables 3.2 through 3.4 provide the forecast numbers for additional employment square footage and acres needed for the low, medium, and high retail forecasts.

Currently, Immokalee has about 55 residents per retail employee. The state average is about 18.2 residents per employee and Collier County has an average of about 16.8 residents per employee. It is expected that Immokalee will move over time to a ratio closer to the state and county. The low case assumes that the ratio of residents to retail employees falls from 55 to 36 by 2030. The medium case assumes that Immokalee's population to retail employees falls to the state average of 18.2 by

2030 and the high case assumes that the ratio falls to Collier County's average of 16.8 by 2030.

Florida's Agency for Workforce Innovation (AWI) provides an annual forecast for Collier County's retail employment that predicts an average annual growth rate of about 2.1 percent per year from 2005 to 2013. The medium forecast's growth rate or trend developed for this study for Immokalee is much faster, growing at about six percent per year over the forecast horizon. This faster growth would be expected as development shifts eastward in the county and as local incomes rise. The surrounding developments of Ave Maria and Big Cypress are expected to create increased retail traffic during their development and this is expected to continue even after they develop their own town centers.

Tables 3.2 though 3.4 provide the low, medium, and high forecasts for employment, square footage, and acres needed to support the retail sector. The medium or reference case shows a local need for 12 additional acres by 2010. This need increases to 28 acres by 2015 and to 49 acres by 2020. The high forecast increases the need for retail acres to 65 by 2020 while the low case shows a need for only about 16 additional acres by 2020.

Table 3.2
Immokalee Low Case
Retail Planning Forecast

Year	Employment Growth	Square Footage	Acres Needed
2005 to 2010	64	38,114	5
2005 to 2015	136	81,647	10
2005 to 2020	219	131,370	16

Table 3.3
Immokalee Medium Case
Retail Planning Forecast

Year	Employment Growth	Square Footage	Acres Needed
2005 to 2010	164	98,480	12
2005 to 2015	373	223,761	28
2005 to 2020	650	389,792	49

Table 3.4
Immokalee High Case
Retail Planning Forecas

Year	Employment Growth	Square Footage	Acres Needed
2005 to 2010	193	115,746	15
2005 to 2015	469	281,470	35
2005 to 2020	865	518,751	65

Employment additions over the level in 2005 are shown in Figure 3.2. These are used along with assumptions about the square footage requirements and square footage per acres to estimate the additional retail space requirements (shown in Figure 3.3).

Figure 3.2

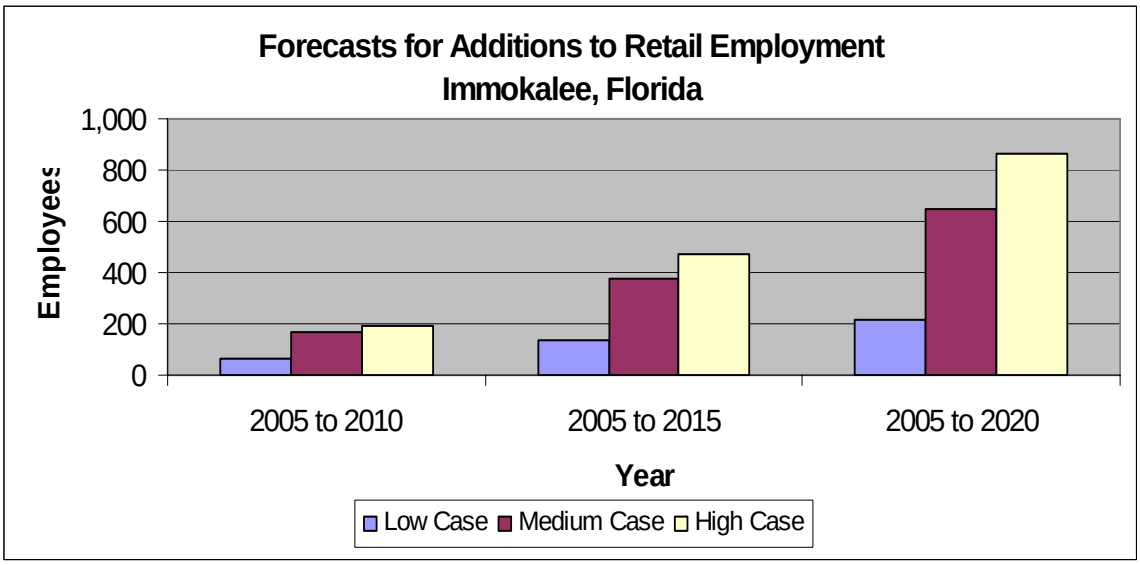
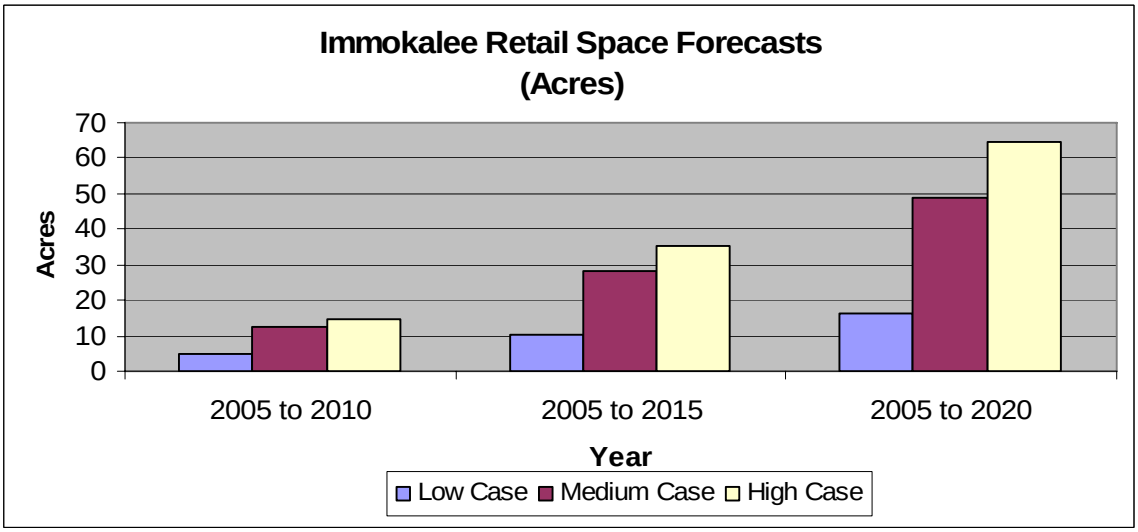


Figure 3.3



3.2.2 Office Space Forecast

The Office space requirements to meet Immokalee's future growth will be primarily driven by the need to locate in the local area to meet customer needs. This forecast for office space is based on the projected increases in the local population. The ratio of office employees to population for both Immokalee and Collier County were both about one office employee for each 17 people. Office employees were defined as those in information, financial, professional, education, health, other services, and government. The FIAM model assumption of 600 square feet on average per employee and an estimate of 8,000 square feet per acre were used to arrive at the square footage and acres needed forecasts.

Table 3.5 shows the low forecast case for office employment growth, square footage, and acres needed. Growth in the service and professional occupations are expected to create additional employment opportunities for Immokalee and Eastern Collier County. The low case shows increased employment by 2020 of about 278 employees. The number of acres of office land to support the growth rises to 21 acres by 2020.

Table 3.5

Immokalee Low Case Office Space Planning Forecast			
Year	**Employment Growth**	**Square Footage**	**Acres Needed**
2005 to 2010	120	72,225	9
2005 to 2015	197	118,298	15
2005 to 2020	278	166,722	21

The medium or reference forecast for Immokalee's office employment and space planning forecast is shown in Table 3.6. The employment rises by 436 employees by 2020 and the office land to support the employment rises to 33 acres by 2020.

Table 3.6

Immokalee Medium Case Office Space Planning Forecast			
Year	**Employment Growth**	**Square Footage**	**Acres Needed**
2005 to 2010	188	112,763	14
2005 to 2015	310	186,027	23
2005 to 2020	436	261,545	33

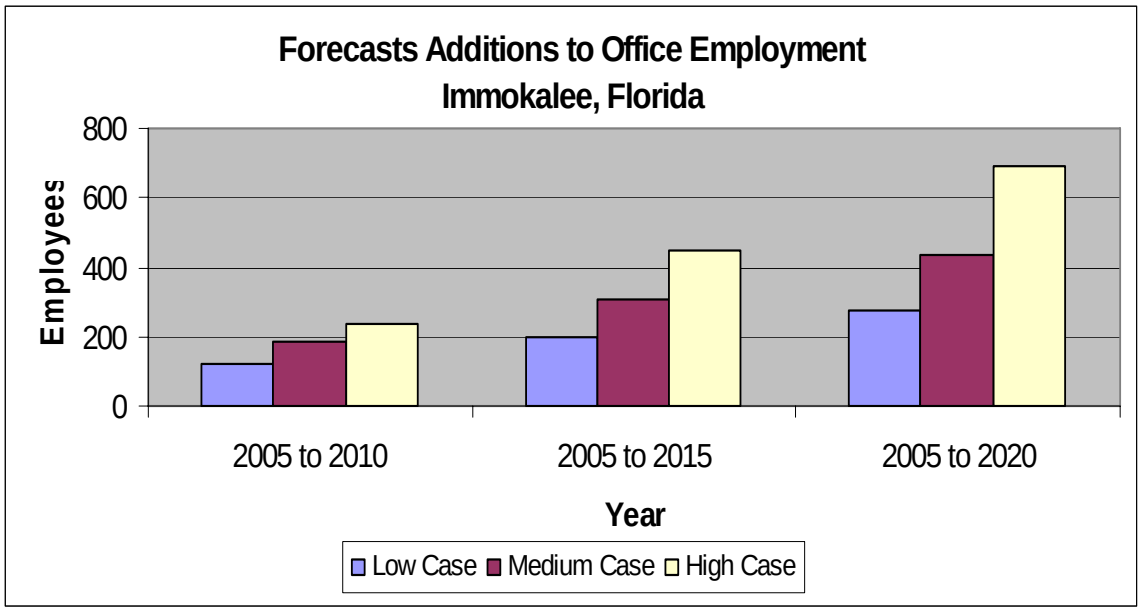
Table 3.7 shows the office employment and space planning high forecast case. Faster growth in employment adds 689 employees by 2020 and the land to support the employees is estimated at 52 acres.

Table 3.7

Immokalee High Case Office Space Planning Forecast			
Year	**Employment Growth**	**Square Footage**	**Acres Needed**
2005 to 2010	236	141,318	18
2005 to 2015	449	269,089	34
2005 to 2020	689	413,649	52

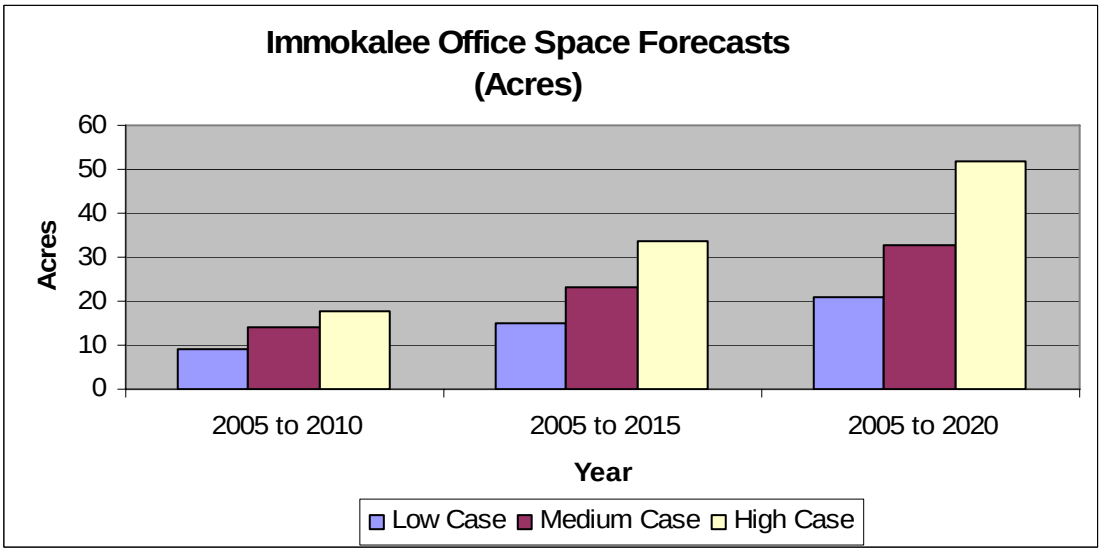
The additions to employment for office space are charted in Figure 3.4. The chart provides a graphical view of the increases and shows the range of uncertainty through the three levels of forecasts.

Figure 3.4



The corresponding land acres to support the additional office space are charted in Figure 3.5. Again, the chart provides a range of potential acres needed and developed by the dates shown in the chart.

Figure 3.5



3.2.3 Industrial Acreage Forecast

Immokalee's industrial employment and acreage forecast is dependent upon Collier County's overall growth. It is likely that most of the new industrial growth will be located in Eastern Collier County where most of the undeveloped land in the county is located. Given that Immokalee establishes industrial areas that can meet Collier County's projected industrial needs, it should be a strong candidate for Collier County's future industrial development.

This study defines industrial companies for this study as those in construction, manufacturing, wholesale trade, and transportation and warehousing. Companies in these sectors would want to locate company buildings and sites in areas designated for industrial use. Based on the FIAM model and other sources, the assumptions for square feet per employee for this study are 200 square feet per construction employee; 2,500 square feet for wholesale trade and manufacturing employee; and 5,000 square feet per transportation and warehouse employee. An average of 8,000 square feet per acre is assumed to transform square feet to acres.

Each year the Florida's Agency for Workforce Innovation (AWI) forecasts Collier County employment trends using regression analysis and shift-share analysis for 2005 through 2013. These trends are used by this study to provide a medium case forecast for Collier County's industrial employment for 2010, 2015, and 2020.

Table 3.8 provides the low-growth industrial planning case which shows additional employment and the additional acres that will be needed to support the growth in the industrial areas of Collier County.

Table 3.8

Collier Low Case Industrial Planning Forecast		
Years	**Employment Growth**	**Acres Needed**
2005 to 2010	3,169	337
2005 to 2015	6,728	708
2005 to 2020	10,726	1,117

Table 3.9 provides the medium or reference case employment forecasts and acres needed for industrial development. Employment grows by over 17,000 from 2005 to 2020. The need for additional acres of land to support the growth in industrial companies grows to approximately 1,600 acres by 2020.

Table 3.9

Collier Medium Case Industrial Planning Forecast		
Years	**Employment Growth**	**Acres Needed**
2005 to 2010	4,751	470
2005 to 2015	10,387	1,009
2005 to 2020	17,078	1,629

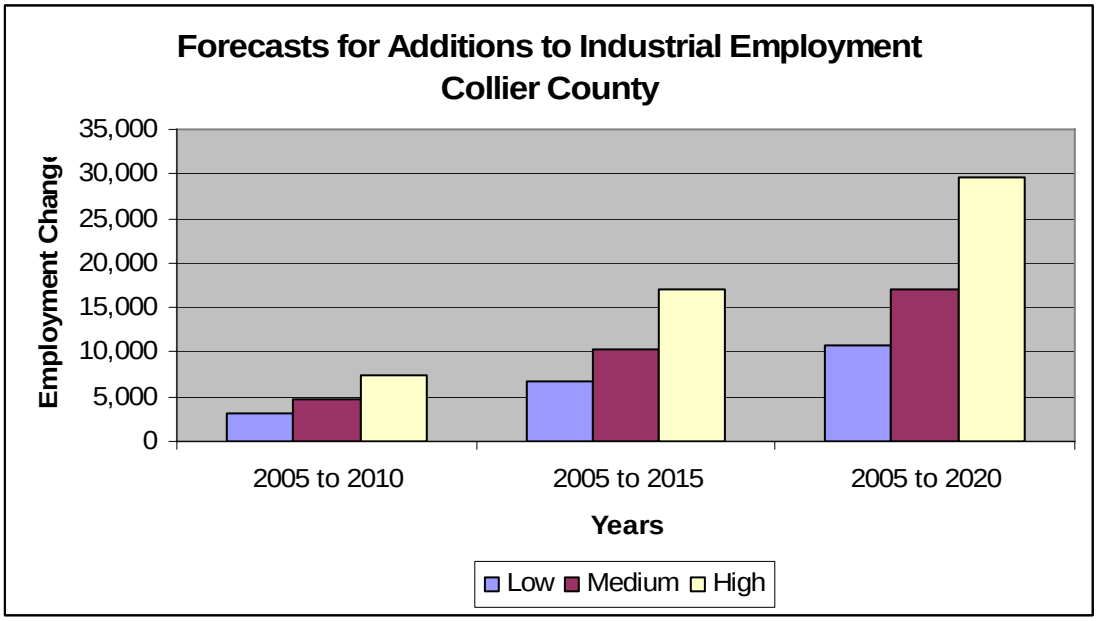
The high industrial forecast case is shown in Table 3.10. Industrial employment increases by about 30,000 employees by 2020 and acres of land to support the employment grows to about 2,800 acres.

Table 3.10

Collier High Case Industrial Planning Forecast		
Years	**Employment Growth**	**Acres Needed**
2005 to 2010	7,452	738
2005 to 2015	17,081	1,648
2005 to 2020	29,540	2,772

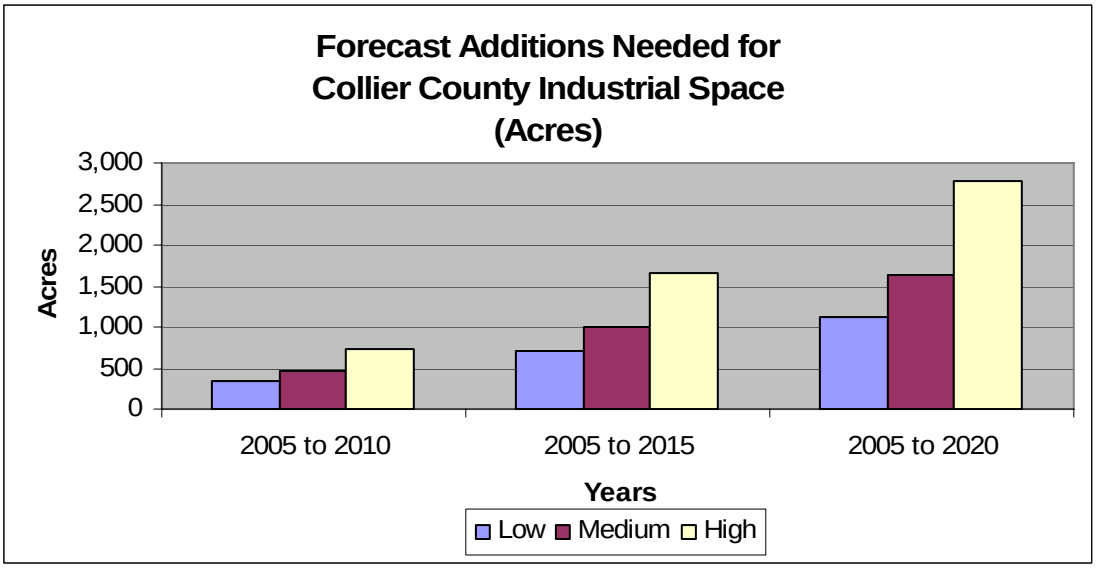
The industrial low, medium, and high employment increase cases are charted in Figure 3.6. The medium forecast adds about 1,000 employees per year.

Figure 3.6



Finally, the additional industrial land to support the forecast increases in employment is charted in Figure 3.7. The medium forecast indicates the need for about 110 acres of industrial type land per year.

Figure 3.7



3.2.4 Business Parks:

Business and Industrial site selection is driven by many factors including available road systems, water and sewer, education systems, work force, available sites, and distance to markets. Immokalee has established industrial parks in eastern Collier County and additional business parks are being proposed to meet the future needs of the county and region.

This study has forecast a range of employment and acres to meet retail, office space, and industrial needs. Many communities are providing business parks that service not only industrial clients but also allow a mix of commercial uses including offices and some limited retail space. A recent acreage needs study for business parks was completed for Collier County by Fishkind & Associates, Inc., in cooperation with

Collier County's Economic Development Council. The study was completed in March, 2006 and Table 3.11 summarizes its assumptions and findings.

Table 3.11
Acreage Needs Analysis

	2010	2015	2020	2025	2030
Population	404,577	481,835	563,745	649,203	744,000
Incremental Population	77,506	77,258	81,910	85,458	94,797
New Incremental Workforce Population	24,992	24,912	26,412	27,556	30,567
Adjusted Square Foot Total	7,263,755	7,240,513	7,676,492	8,009,006	8,884,244
Square feet per acre converted to acres	908	905	960	1,001	1,111
Existing Industrial Zoned Acreage Available	200	250	300	275	175
Acreage Surplus / (Deficit)	-708	-655	-660	-726	-936
Cumulative Acreage Surplus / (Deficit)	-708	-1,363	-2,023	-2,749	-3,685

Source: Fishkind & Associates, Inc. March 29, 2006

The Fishkind study found that the county needs to add about 650 to 725 acres of business park land each five years to meet projected needs of commercial and industrial companies. These findings would be expected to fall within the range of forecasts generated by this study if planning forecasts were generated for the additional Collier County retail and commercial requirements.

3.2.5 Agricultural Forecasts

Forecasts predict that agriculture will to continue to play a very important role in Collier County and Immokalee. Agricultural land is expected to taken out of production as new towns such as Ave Maria, Big Cypress and other being discussed are developed. The additional construction and growth in business and industrial parks will compete for the available workforce as Eastern Collier County develops into a more diversified economy. Currently, Immokalee has about 4,000 agricultural employees identified by quarterly surveys done by the Agency for Workforce Innovation. This number is expected to understate the number of agricultural workers since many are self-employed and not counted by in the unemployment compensation survey. Collier County uses a rough estimate for peak seasonal farm workers of around 15,000 during the winter months. The acreage required for agriculture is expected to decline slowly as land is developed for communities and business parks. Table 3.12 provides a range of employment forecasts for Colliers agricultural employment based on the latest AWI employment data.

Table 3.12
Collier County Agricultural Employment Forecasts

	Year				
Case	**2005**	**2010**	**2015**	**2020**	**Growth Rate**
High	6,643	6,317	6,008	5,713	-1.0%
Medium	6,643	6,159	5,711	5,296	-1.5%
Low	6,643	5,823	5,105	4,475	-2.6%

4.0 POTENTIAL INDUSTRY/CLUSTER TARGETS FOR IMMOKALEE

The final section of the paper addresses potential industry or business cluster targets that would help to diversify the local economy and create higher wages and wealth. The work for this section is provided in four sections:

- Immokalee's and regional employment by industry type and average annual pay levels is provided and discussed.
- Explanation of business clusters and a Harvard Business School ranking of Collier County industry clusters.
- A summary of a regional cluster study completed by Florida Gulf Coast University in June 2006.
- A summary of the findings and recommendations from the Immokalee Tradeport Study completed in March, 2006 are presented.

4.1 Immokalee and Collier County employment by Industry and average annual Pay Levels

This study was able to obtain Immokalee employment and pay levels as defined by zip code areas 34142 and 34143 from the Florida's Agency for Workforce Innovation. A majority of the workforce is engaged in agricultural work as shown by Figure 4.1. Figure 4.2 provides the workforce in percent of employment and shows that agriculture accounts for approximately 60 percent of the employment while each of the other industry categories is less than 10 percent. Figure 4.3 shows the levels of Immokalee employment by each industry other than agriculture, natural resources, and mining.

The next largest industries other than agriculture are retail and wholesale trade, government, education and health services, and other services.

Figure 4.1

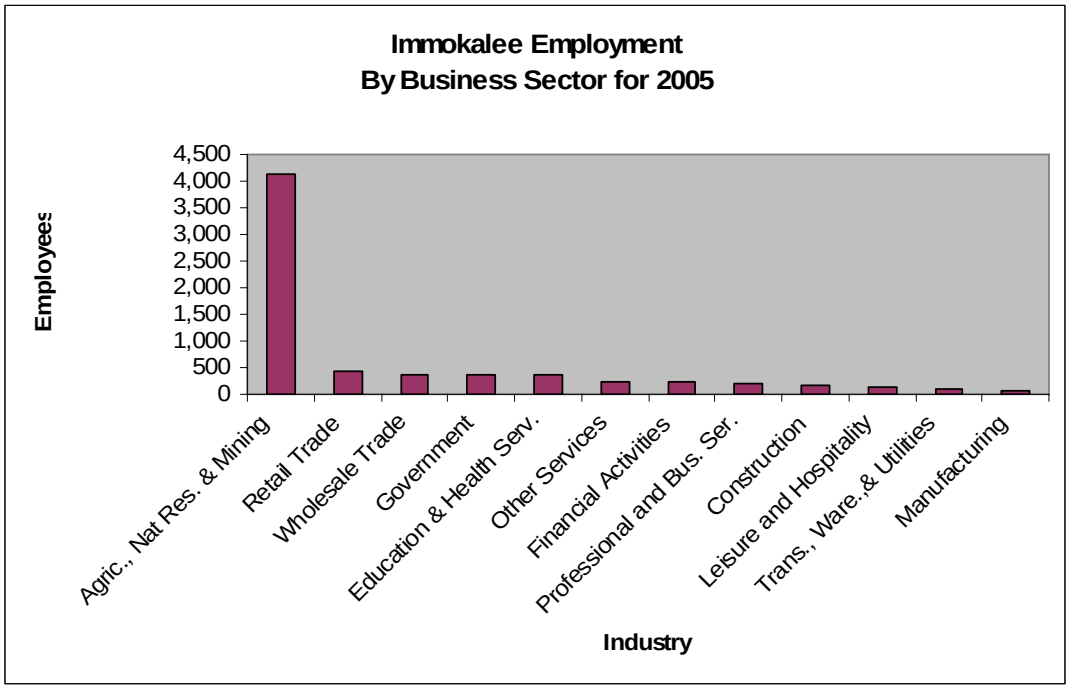


Figure 4.2

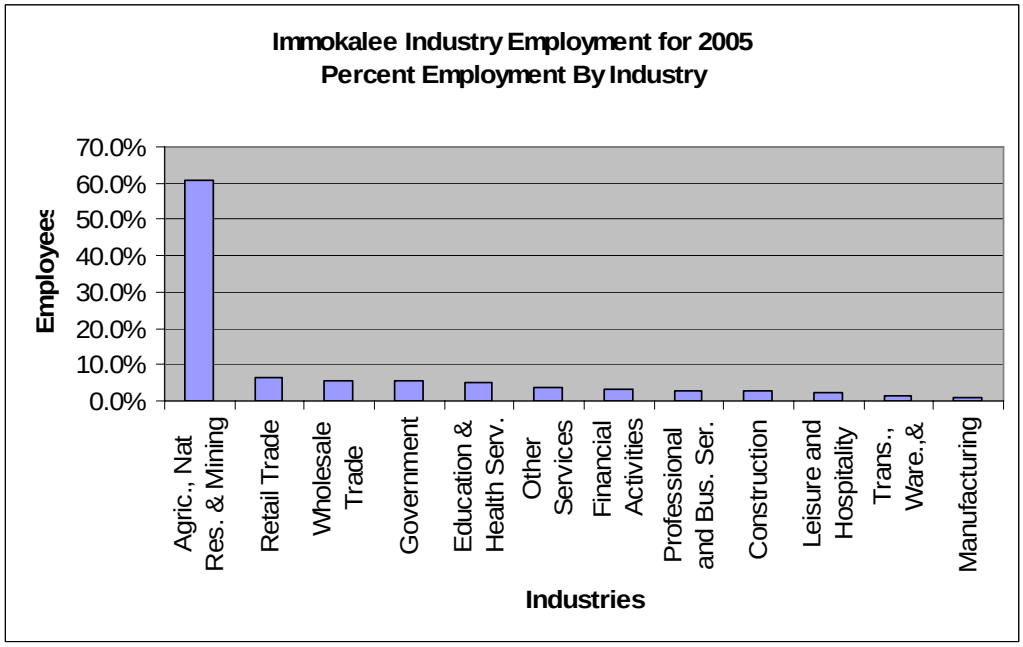
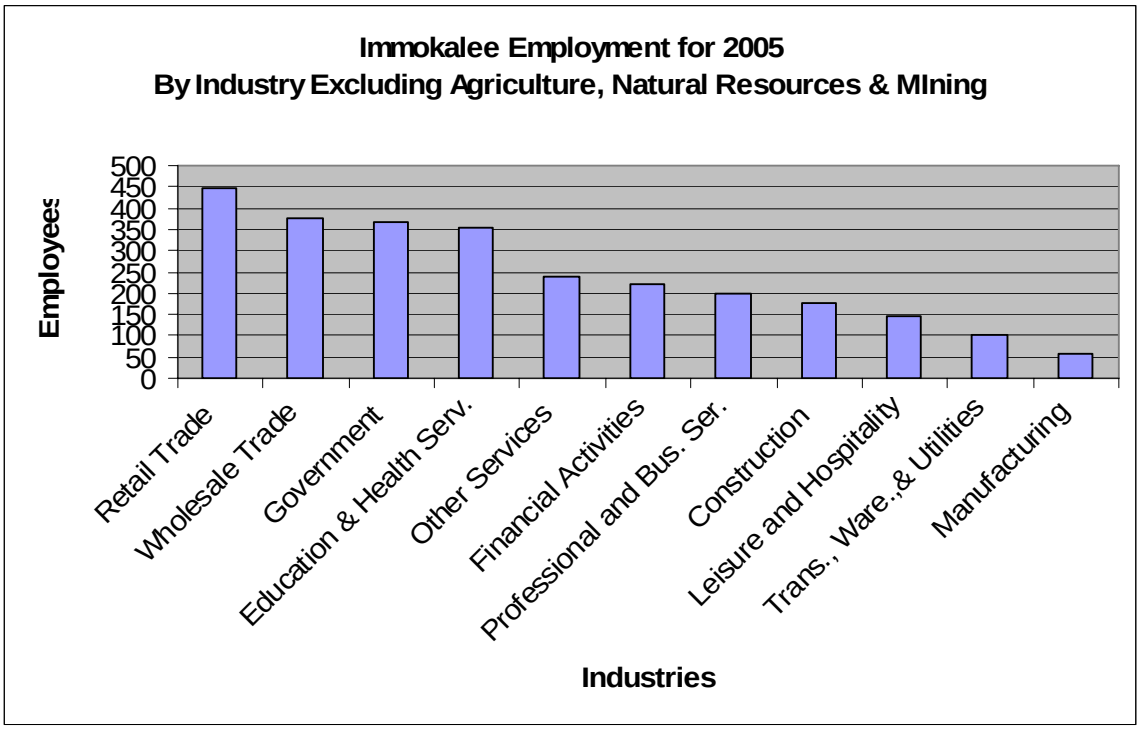
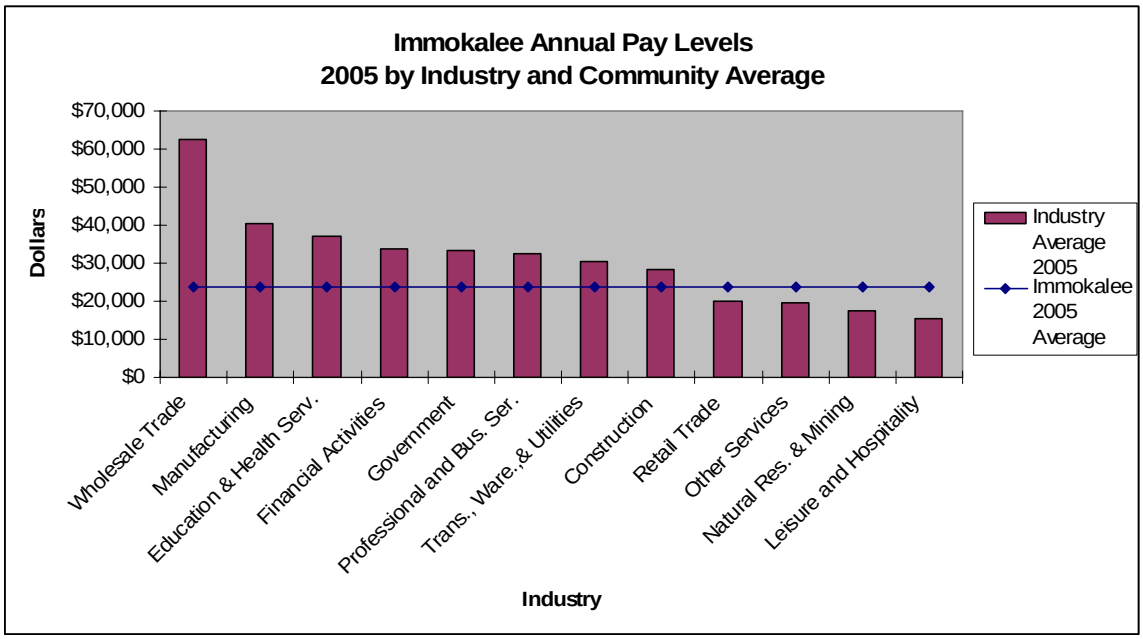


Figure 4.3



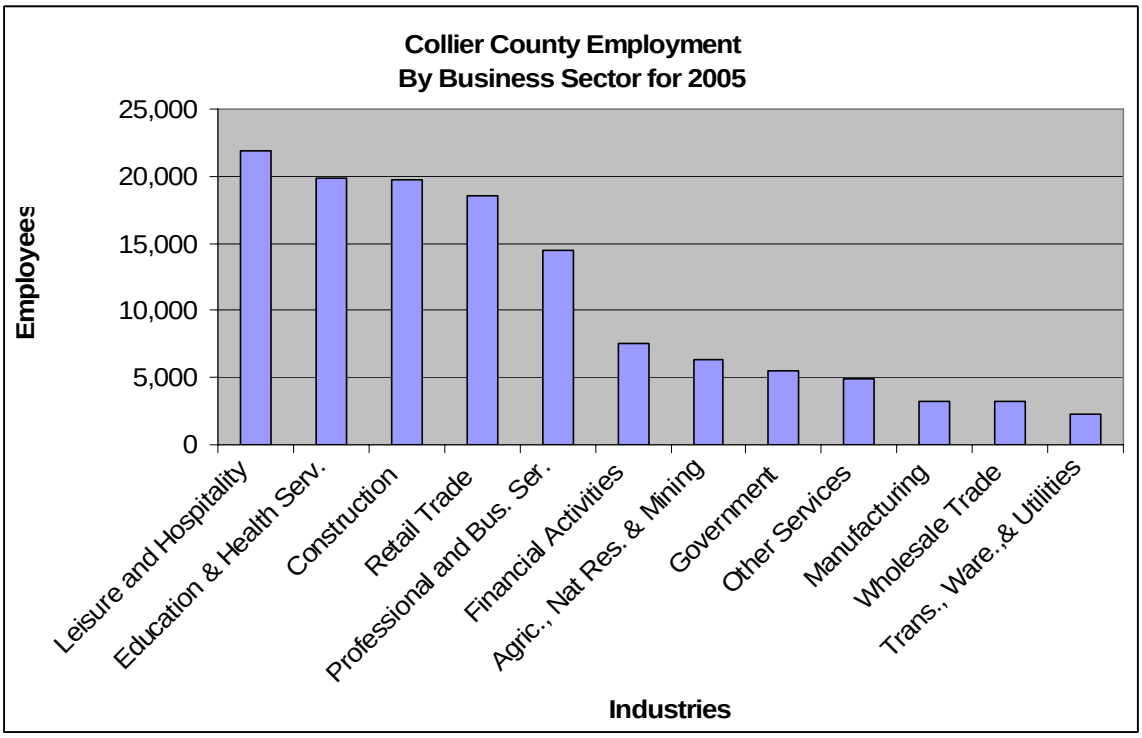
The Immokalee average annual pay levels are shown by industry in Figure 4.4. Wholesale trade has the highest average annual pay level followed by manufacturing, education and health services, financial activities, government, professional and business services, transportation, warehousing, and utilities, and construction. Each of these industries has an average annual pay level above Immokalee's average annual pay level of $23,649. The average annual pay levels below the Immokalee average annual pay are in leisure and hospitality, natural resources and mining (agriculture), other services, and retail trade.

Figure 4.4



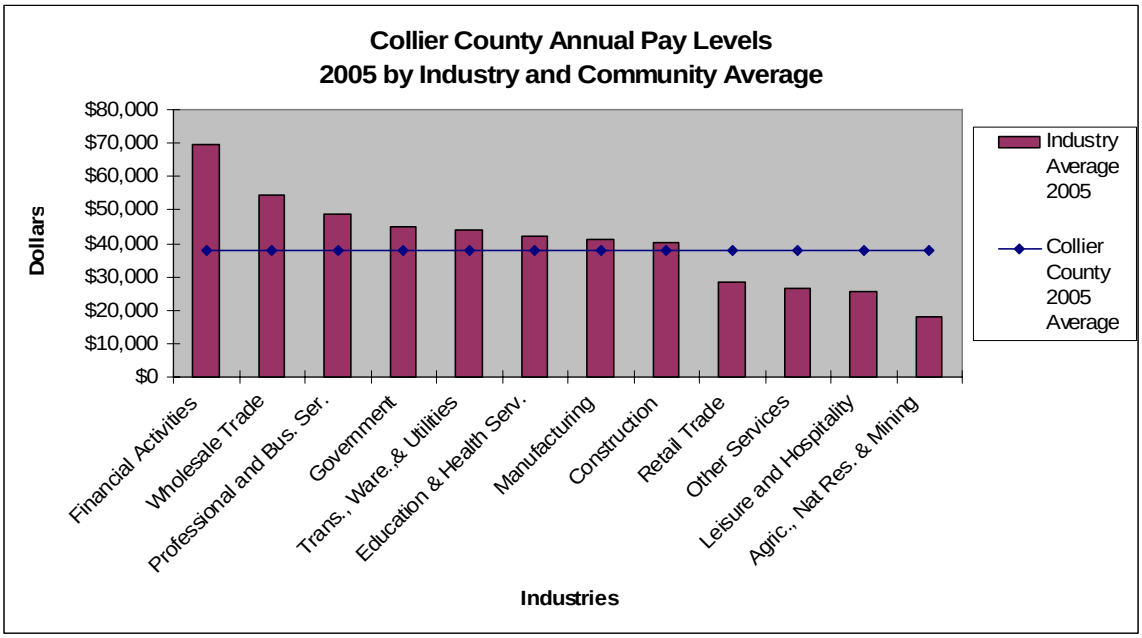
A comparison of Immokalee's employment mix to the region and counties will provide an idea of the trends that might be expected as Eastern Collier County moves toward a more urban and industrialized mix of development. The Collier County mix of industries is shown in Figure 4.5 for 2005. The largest employee segments as expected are in leisure and hospitality, education and health services, construction, and retail trade. The lower levels of employment are in transportation, warehousing, and utilities, wholesale trade, and manufacturing.

Figure 4.5



The 2005 Collier County average annual pay levels are shown in Figure 4.6 with an average annual pay level for the county at about $38,000 per year. Industries with above average annual pay levels in Collier County are financial activities, wholesale trade, professional and business services, government, transportation, warehousing, and utilities, education and health services, manufacturing, and construction. Retail trade, other services, leisure and hospitality, and agriculture, natural resources, and mining had below average annual pay levels.

Figure 4.6



4.2 Traded or Business Clusters

The Regional Economic Research Institute at Florida Gulf Coast University worked with the Charlotte, Collier, and Lee County economic development organizations to complete a traded industry cluster analysis in June of 2006. The concept is that certain groups of companies and institutions can result in increased efficiency and productivity and locate in a particular area. Some good examples include carpet manufacturing firms locating in Dalton, Georgia or furniture manufacturing locating in North Carolina. Some high technology examples include San Diego where there as clusters of firms in life sciences and telecommunications.

Michael Porter of the Harvard Business School and the Institute for Strategy and Competitiveness has studied industry clusters and competition for a

number of years and is a well known expert in the field of cluster analysis. Porter's website, www.isc.hbs.edu, provides a good definition and overview of industry clusters:

- "*Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region."*
- *"Clusters arise because they increase the productivity with which companies compete."*
- *"The development and upgrading of clusters is an important agenda for governments, companies, and other institutions. Cluster development initiatives are an important new direction in economic policy, building on earlier efforts in macroeconomic stabilization, privatization, market opening, and reducing the costs of doing business."*

The traded industry clusters are firms that create value for the community by producing goods and services that are sold outside the local area and generally in regional, national, or international markets and are able to bring wealth into to the community in the form of high-paying jobs.

The local area has several inherent advantages that have allowed for the development of traded clusters. This area is very strong in visitor services or tourism. The warm weather, sunny skies, beaches, and recreation activities have resulted in a strong cluster of firms providing visitor and entertainment services. In addition, the construction of infrastructure such as roads, bridges, and large multi-story buildings has led to a concentration of firms in the heavy construction area including architectural and engineering firms. Business and financial services are also show strong employment

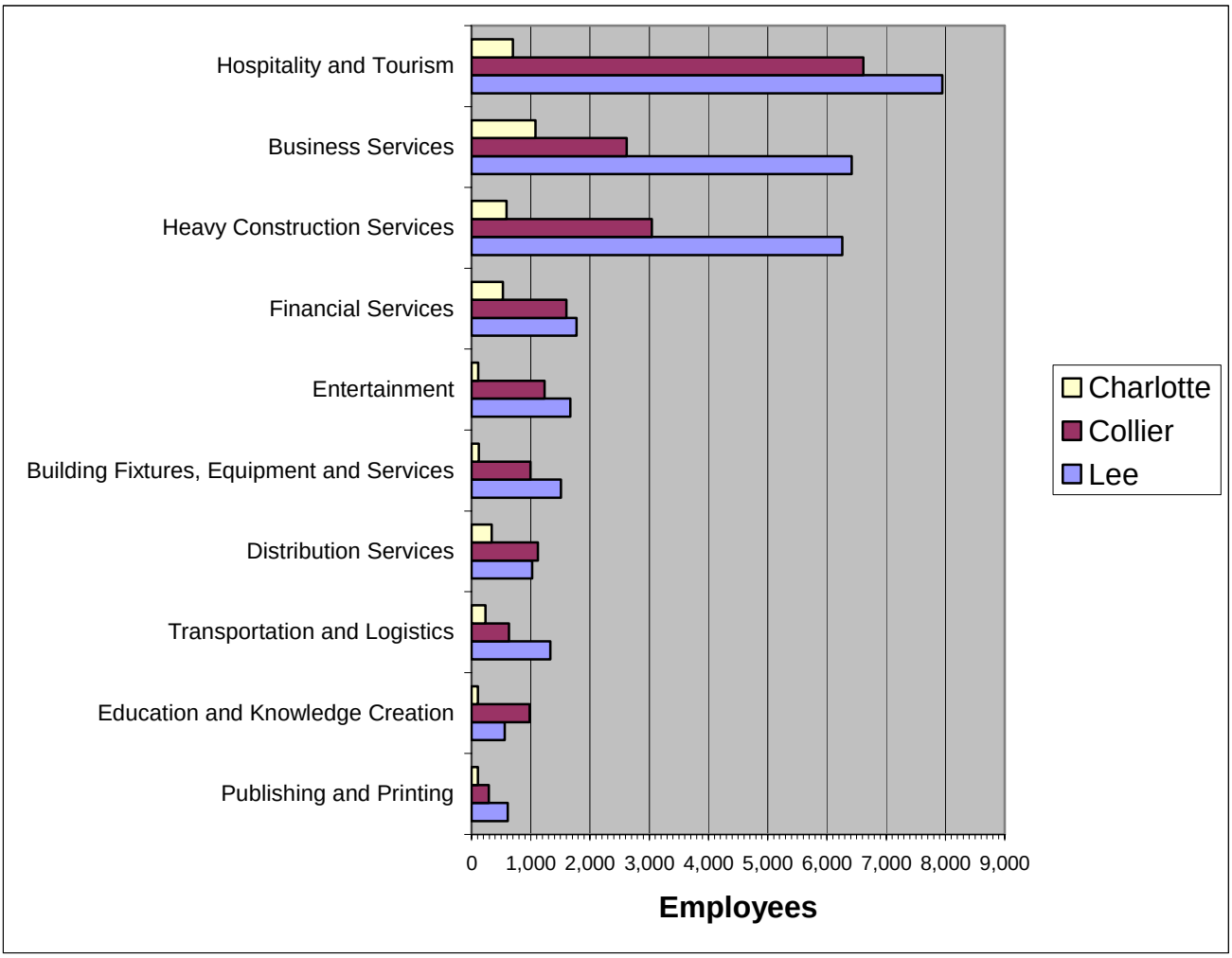
numbers for Collier County compared to the average percent employment for the nation as a whole.

The ranking of Collier County's traded clusters using employment by the Harvard Business School is shown in Figure 4.7. This ranking is based on employment. Most of the industries shown would not be considered traded clusters since the local employment is not more concentrated in the local area than the nation.

The cluster study was undertaken to assist the economic development organizations. Economic development organizations such as Collier County's Economic Development Council generally work to diversify the industrial mix while creating wealth in the community by helping to develop or recruit industries with higher average pay.

Figure 4.7

Charlotte, Collier, and Lee Counties
Traded Industry Cluster Rankings



Source: Michael E. Porter Cluster Mapping Project, Harvard Business School for Charlotte, Collier and Lee Counties, 2003 data, www.isc.hbs.edu

The cluster study looked at a select group of potential clusters for the region and Collier County. These were ranked by average annual pay levels and are shown in Table 4.1. The location quotient is defined as the local percent of employment relative to the national percent of employment in that cluster. A location quotient of one would indicate that the county has the same percentage of employment as the nation in that cluster. A value greater than one indicates that the percentage of employment in that cluster is greater than the national average and a value less than one indicates that employment locally is less than the national percentage of employment.

Table 4.1
Collier County Clusters
Ranked by 2004 Average Annual Pay

Collier County Cluster Data	2001 Location Quotient	2004 Location Quotient	2004 Employment	2004 Average Annual Pay
Medical Instruments, Appliances and Supplies		0.21	18	$65,121
Software and Computer Services	0.20	0.46	322	$56,874
Financial Services	1.10	1.11	2,470	$53,669
Distribution Services Part 1 (mainly durables)	0.63	0.59	1,351	$52,714
Distribution Services Part 2 (mainly non-durables)	0.60	0.64	747	$46,735
Transportation and Warehousing	0.51	0.97	93	$41,892
Building Component Manufacturing and Services	1.16	1.09	2,499	$40,169
Printing and Publishing	0.82	0.61	398	$38,121
Business Services	1.25	1.44	13,176	$36,010
Entertainment	3.37	3.34	5,629	$32,964
Visitor Services	3.04	2.99	10,249	$29,528

The purpose of this cluster study was to provide a basic economic analysis on key traded clusters. Given the goal of diversifying the economy and increasing the average annual wage in the county, the clusters with the higher average wage should be considered as candidates where efforts can be focused to grow existing firms or recruit new firms. This will require a better understanding of the firms in the clusters and the factors that drive growth and location decisions. The next section summarizes the Immokalee Tradeport study which provides primary research into the factors that help determine the location decisions of firms.

4.3 Florida Tradeport Study

A Florida Tradeport study of the Immokalee airport and business park was completed in March 2006 for the Economic Development Council of Collier County. The study was completed by Knowledge Systems and Research, Inc. (KS&R) and included benchmarking of similar sized airports and 130 telephone interviews with decision makers and influencers. The study provides good insights into the factors that drive location decisions and recommends infrastructure enhancements to the Immokalee airport and surrounding Business Park to increase its appeal to existing and new industries.

The key research findings for the Florida Tradeport study were:

1. The proposed loop and connection to the Interstate is key to attracting businesses to the Florida Tradeport, regardless of industry.

2. Over three-quarters of participant companies expect the overall decision process to take one year or less.

3. Enhancements to the infrastructure at the Florida Tradeport such as roads, pad ready sites, ILS (Instrument Landing System), runway lights, lengthening the runway, and a control tower will make the facility more attractive to Aviation as well as other industries.

4. Two-thirds of respondent companies report that they are flexible regarding the lease/own decision, although one in five companies is likely to require the purchase of land.

5. Creative local incentives, such as pre-permitting and pad-ready sites, can serve as a key differentiator for the Florida Tradeport.

6. International capabilities serves as a niche play with prospective clients.

7. Having local educational resources offering Aviation Training is key to bringing in more aviation businesses.

8. Available work force, population growth, and proximity to major metropolitan cities all resonate with potential businesses and are key marketing messages.

9. Site tours and personal contact from members of the EDC are the most effective tools to communicate with prospective companies that are being marketed to.

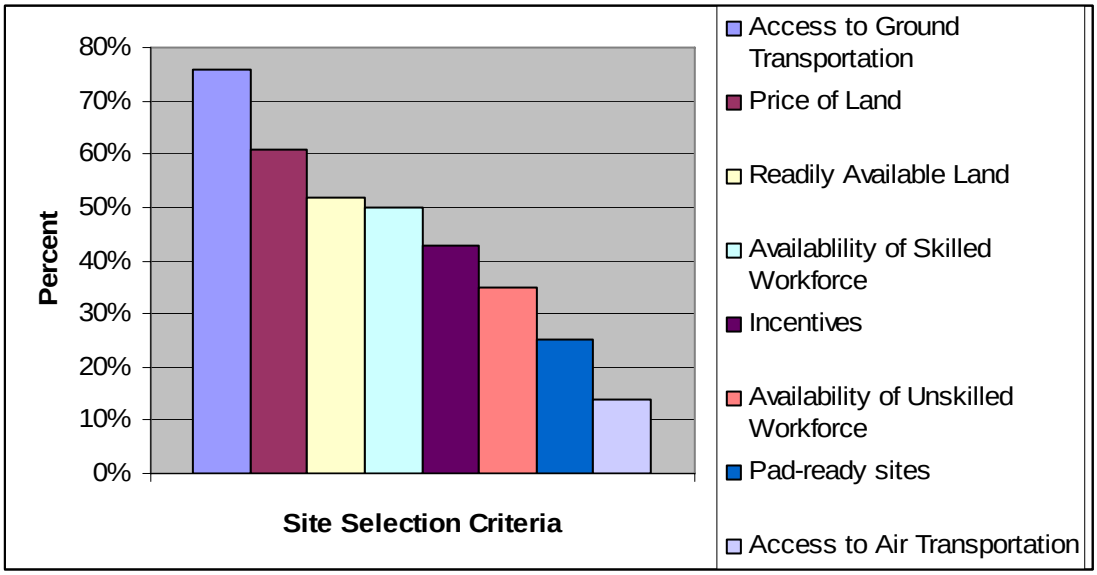
4.4 Site Selection Criteria and Airport Benchmarking

The study interviewed companies primarily in the Southeastern United States including Florida to gain insights into what factors are important in company location (site selection) decisions. The companies that were interviewed were in food processing, aviation, manufacturing, warehouse and storage, wholesale trade and retail trade.

Access to ground transportation was ranked as the most important site selection criteria. Many of the companies wanted to be within 10 miles of an interstate system. The price of land was ranked second most important criteria followed by ready availability of land, availability of skilled workforce, incentives, availability of unskilled workers, pad-ready sites, and access to air transportation. The rankings of the site selection criteria reported in the study are shown in Figure 4.8. The study found that 72 percent of the companies interviewed wanted workers to be high school graduates or equivalent.

The airport benchmarking part of the study included 13 other airports. The study showed that many of the other airports were expanding airport infrastructure including instrument landing systems and lengthening the runways to around 7,000 feet. Another issue for many of the benchmarked airports was a lack of available land for accompanying industrial parks.

Figure 4.8
Percent of Companies that Ranked Site Selection Criteria "Very Important"



4.4 Master Plan Focus Groups

Several focus group sessions were by the RMPK group from October 2005 through January 2006 to help focus on issues and concerns. Summaries of these focus groups are included in the Immokalee Master Plan Inventory Report. Many of the issues identified in the Florida Tradeport Study were also identified in the master plan focus groups. These included:

- Transportation infrastructure
- Education and workforce training
- Workforce housing
- Distance from Coast (markets)

Potential economic impediments were also identified in the Master Plan Inventory Report and included:

- Inadequate transportation networks
- Relatively low average annual pay level
- Limited education levels for much of the Immokalee population
- Marketplace Isolation
- Lack of tourist or visitor destinations
- Negative perception of the area
- New planned developments plan competing town centers

4.5 Summary

This section has provided a summary of economic data about existing employment and average annual pay levels. It has discussed the concept of building and recruiting traded clusters and summarized primary research on factors that impact the growth and location decisions of firms. Certainly, infrastructure improvements and planning that allows for flexibility and the needs of existing and new firms while protecting the environment can help to shape the future of Immokalee to better service its citizens and those in the region. There is no one single path to lead to the best solution. It is more of a journey where the path will need to be flexible to meet the changing nature of markets and technology. The development of the master plan is an important step in that process.

Concluding Remarks

This study was undertaken to assist Immokalee and the citizens of Collier County in the development of the Immokalee Master Plan by providing key economic information. The economic development route can take many different paths and the planning for the community will help to shape its future and its particular development path. Citizens and experts have come together to help develop a plan that includes potential infrastructure upgrades along with the need to designate land uses for the community. Immokalee has the potential to meet many of Collier County's industrial growth needs if it desires to pursue that growth avenue.

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