

An Economic Assessment of the Long-run Viability of the Pompano State Farmers' Market

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TABLE OF CONTENTS

FLORIDA AGRICULTURAL MARKET RESEARCH CENTER.....	i
ACKNOWLEDGEMENTS.....	ii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	v
LIST OF FIGURES.....	vii
INTRODUCTION.....	1
OBJECTIVES.....	2
PROCEDURE.....	2
STATUS OF AGRICULTURE IN THE PSFM SERVICE AREA.....	5
Production.....	5
Type of Production.....	5
Acreage.....	5
Market Value.....	7
Geography.....	8
Acreage.....	8
Revenues.....	10
Domestic and Import Competition.....	12
U.S. and Florida Consumer Demographics.....	18
Fruit and Vegetable Consumption Trends.....	22
HISTORICAL PERFORMANCE OF THE PSFM AND PROJECTIONS THROUGH 2020.....	27
Expenses and Revenues on the PSFM.....	27
Total Units of Produce.....	28
Gross Sales Revenue.....	29
Projected Market Activity Through 2020.....	29
FACTORS AFFECTING THE FUTURE OF THE PSFM.....	32
Strategic Location.....	32
Changes in Production Agriculture.....	34
Changes in Marketing.....	35
Changes in Consumption.....	36
BLUEPRINT FOR FUTURE MARKET FACILITIES.....	37
Amenities.....	41
Summary and Conclusions.....	48
APPENDIX A.....	50
Current Tenant Questionnaire.....	51
DRAFT.....	51

LIST OF TABLES

Table 1. Vegetable, Fruit and Nursery Acreage for the Pompano Farmers' Market Area.
.....

Table 2. Market Value of Fruit, Vegetable and Nursery Production in the Pompano Farmers' Market Area, 1992 \$.
.....

Table 3. Fruit, Vegetable and Nursery Production Acreage by County for the Pompano Farmers' Market Production Area, 1992 \$s.
.....

Table 4. Market Value of Fruit, Vegetable and Nursery Production by County for the Pompano Farmers' Market Production Area, 1992 \$s.
.....

Table 5. Imports of Melons and Cucumbers through South Florida District Ports for the 1998/99 Season.
.....

Table 6. U.S. Population, 1990, and Projections to 2050, by Race and Hispanic Origin.....

Table 7. Florida Population, 1995 and Projections to 2025, by Race and Hispanic Origin.
.....

Table 8. Estimated increases in Sales of Selected Exotic Produce Items in U.S. Supermarkets, 1996-1997.
.....

Table 9. Distance of Key Agricultural Facilities from the PSFM (miles).
.....

Table 10. Production of Selected Crops in the Pompano SFM Service Area in Comparison to State Totals.....

Table 11. Current Utilization of Office and Platform Space.

Table 12. Tenants' Ratings of Quality and Value for PSFM Space.

Table 13. Tenants' Perceived Advantages of Being on the PSFM.....

Table 14. Tenants' Perceived Disadvantages of Being on the PSFM.

Table 15. Tenants' and Potential Tenants' Opinions As To The Adequacy Of Platform Space On The PSFM (percent).
.....

Table 16. Tenants' and Potential Tenants' Opinions As To The Adequacy Of The PSFM Site To Accommodate Additional Platform Space (percent).
.....

Table 17. Current and Prospective Tenants' Demand for New Office Space at Various Prices.
.....

Table 18. Tenants' and Potential Tenants' Preferences for Selected Office Amenities (Percent Desiring the Amenity.).....

Table 19. Tenants' and Potential Tenants' Preferences for Selected Office Services (Percent Desiring the Service.).....

Table 20. Tenants' Evaluations of Food Service Facilities on the PSFM (On a scale of 0-10, where 10 is excellent).

Table 21. Tenants' Suggestions for Improving the PSFM's Foodservice Facilities.

Table 22. Tenant and Potential Tenant Utilization of Selected Business Services, if Available at the PSFM (Percent).

Table 23. Tenants' and Potential Tenants' Level of Interest in Having a Display of Fresh Produce in Public Areas of a New Office Building (Percent).

Table 24. Tenants' and Potential Tenants' Willingness to Provide Fresh Produce for an On-Going Display in a New Office Building (Percent.).....

Table 25. Tenants' and Potential Tenants' Concerns About an On-Going Display of Fresh Produce (Percent).

Table 26. Tenants' preferred location for a new office building on the PSFM property (Percent).

LIST OF FIGURES

Figure 1. Fruit, Vegetable, and Nursery Acreage in the Pompano Farmers' Market Area
.....

Figure 2. Market Value of Fruit, Vegetable, and Nursery Production in the PFMA,
1992 \$s.....

Figure 3. Vegetable, Fruit and Nursery Production Acreage by County in the Pompano
Farmers' Market Area, 1992 \$s.....

Figure 4. Market value of Fruit, Vegetable and Nursery Production by County for the
Pompano Farmers' Market Area, 1992 \$s.....

Figure 5. Shipments of Green Beans from Florida and Mexico, 1990/91 - 1997/98.
.....

Figure 6. Shipments of Fresh Cucumber from Florida, other States and Mexico, 1990/91-
1997/98.

Figure 7. Shipments of Eggplant from Florida, other States, and Mexico, 1990/91-1997/98.
.....

Figure 8. Shipments of Bell Peppers from Various Production Regions 1990/91-1997/98.
.....

Figure 9. Shipments of Other Peppers from Various Production Regions 1990/91-1997/98.
.....

Figure 10. Shipments of Watermelons from Florida, Other States, and Mexico, 1990/91-
1997/98.

Figure 11. Imports of Melons and Cucumbers through South Florida Ports for the 1998/99
Season.

Figure 12. U.S. Population, 1990, and Projections to 2050, by Race and Hispanic Origin.
.....

Figure 13. Florida Population, 1995 and projections to 2025, by race and Hispanic Origin.
.....

Figure 14. Per Capita Consumption of Fresh Fruits and Vegetables, 1977-1997.

Figure 15. U.S. Fresh Tomatoes: Prices with Per Capita Use, 1974-1998.....

Figure 16. U.S. Fresh Cucumber Prices and Per Capita Consumption, 1974-1998.

Figure 17. U.S. Snap Bean Prices and Per Capita Consumption. 1974-1998.....

Figure 18. U.S. Eggplant Prices and Per Capita Consumption, 1974-1998.

Figure 19. U.S. Bell Pepper Prices and Per Capita Consumption, 1974-1998.....

Figure 20. U.S. Melon Prices and Per Capita Consumption, 1974-1998.

Figure 21. PSFM Expenses and Revenue 1974-1998 in Current Dollars.....

Figure 22. Total Units of Produce on the PSFM, 1974-1998.

Figure 23. Gross Sales Revenue from 1974 to 1998 in Nominal Dollars.....

Figure 24. Gross Sales Revenue in Real Dollars from 1974 to 1998, (1998 \$).....

Figure 25. Projection of Units of Produce Using a Logarithmic Trend.....

Figure 26. Location of the Pompano State Farmers' Market in Relation to Key Agricultural Focal Points.....

INTRODUCTION

The Pompano State Farmers' Market (PSFM), established in 1939, is one of the oldest markets in the state's Farmers' Market system. The market initially served Broward County agricultural producers as an assembly point for fruits and winter vegetables. Local producers brought their fresh produce to the market where it was graded, packed and shipped to local and U.S. markets. Over time, the PSFM established itself as a major wholesale shipping point, attracting large numbers of South Florida sellers, brokers, and buyers from distant markets. By 1980, over 5.3 million packages of fresh produce were passing through the market. However, the decade of the 1980s was not kind to the PSFM. Broward County's population grew rapidly during the 1980's. From a population base of only 40,000 when the PSFM was established, Broward County was home to well over one million permanent residents by 1980, and by 1990, almost 1.3 million. This corresponded to the steady reduction in fruit and vegetable production in Broward County; the 1982 Census of Agriculture reported 4,593 acres of these crops, but by 1992, acreage had dropped to only 2,259, a decrease of over 50 percent over the decade. Also, the 1980s saw a marked increase in direct shipments by Florida growers to customers in distant markets. Consequently, the volume of produce physically moving through the market steady declined, and by 1990, only 2.7 million packages were reportedly handled by produce shippers on the market.

Despite the steady downward trend of shipping activity on the PSFM during the 1980s, the market has shown renewed signs of life during the 1990s as tenants have responded to changes in the produce marketplace. Tenants have added refrigerated storage and have focused on providing mixed loads for an increasingly diversified produce industry. Although agricultural production in Broward County has continued to decline, considerable quantities of fresh produce from other major production areas in South Florida flow through the PSFM, along with increasing quantities of imported fruits and vegetables that do not directly compete with Florida production.

This study provides an up-to-date overview of the activities of the PSFM and examines factors that will have significant impacts on its long-run economic viability. To that end, agricultural production in the market's service area is analyzed as are changes in consumption and imports of selected fruits and vegetables. Much of the market's infrastructure is 60 years old and

approaching the end of its useful life. This study also provides input from current and potential tenants of the PSFM as to facility needs.

OBJECTIVES

The basic objective of this study is to provide decisionmakers with a current, comprehensive evaluation of the long-run economic viability of the PSFM and to suggest several improvement scenarios as part of market's five-year master plan. Specific objectives are to:

1. Analyze current and emerging fruit and vegetable production patterns within the market's traditional south Florida service area, as well as national and international shifts in production and supply sources that have already impacted the Pompano SFM or have the potential to affect the market in the foreseeable future.
2. Analyze changing local, regional, national and international consumption patterns for fresh produce grown in south Florida or available from other regions of the U.S. or foreign sources.
3. Analyze the historical performance of the market with respect to operating revenues, operating expenses, and commodity sales for the 1971-1998 time period and project future market activity (physical product handled and the value of sales) through 2020.
4. Identify emerging technological advancements and changes in trade practices in the produce industry that have the potential to affect the long-run infrastructure needs associated with the Pompano SFM.
5. Assess the potential for development of complementary, on-site business activities. Developments evaluated include retail space for fresh produce and value-added products, space for processing value-added products, tenant amenities such as restaurants and business services, and trucker services such as refueling and lodging, and a limited assortment convenience store that would serve truckers and tenants.

PROCEDURE

Meeting objectives one and two requires a comprehensive analysis of existing secondary data pertaining to the health of the agricultural economy in the market's service area, imports of fresh produce items, and on the changing ethnic composition of the region's consumer base. Major

data sources include the Census of Agriculture, the USDA-NASS Vegetable Yearbook, the FASS Vegetable Summary, and "Marketing Florida Vegetables", published by USDA-AMS. Statistics on the changing consumer base are obtained from the Census of Population the University of Florida's Bureau of Economic and Business Research, and Sales & Marketing Management's: Survey of Buying Power.

Trends in consumer demand for various types of fresh fruits and vegetables (objective two) are determined by examining published USDA statistics on consumption as well as the changing ethnic composition of the south Florida region. These data are augmented through interviews of produce shippers and wholesalers in the south Florida region to obtain qualitative data on changes in demand for fresh fruits and vegetables.

The historical performance of the PSFM is evaluated using annual reports of market activities (units handled and value of shipments) obtained from the Bureau of State Farmers' Markets, Florida Department of Agriculture and Consumer Services (FDACS). FDACS compiles the annual reports from monthly reports submitted by the market manager.

Technological changes that are imminent, i.e., likely to impact the Pompano SFM within the 20-year planning horizon, were explored through interviews with many of the same produce industry representatives contacted to achieve objective two.

Identification and evaluation of complementary business activities for the market (objective five) were achieved through extensive in-depth personal interviews of various stakeholders and persons that are knowledgeable with respect to the Pompano SFM. Input from these respondents was sought using one or more methods, including mail surveys, telephone surveys, and face-to-face interviews. Groups of respondents interviewed included current tenants, potential tenants (former tenants and other produce related firms in the Pompano Beach, Deerfield Beach, Ft. Lauderdale areas) and PSFM Authority members.

Of the 25 current tenants, 21 were interviewed in person or by telephone (84 percent). Numerous attempts were made to interview the remaining four tenants, but they were unreachable. Because of smaller numbers and potentially more diverse viewpoints, members of the Pompano Beach Farmers' Market Authority were interviewed in person if at all possible. Input was obtained from four of the six Market Authority members. As with the tenants, numerous attempts were made to interview the two remaining members, but they were unavailable. Input was also obtained

via personal interviews with key personnel of the Marketing Division of the Florida Department of Agriculture and Consumer Services (FDACS).

Data obtained from all sources are used to develop recommendations for a five-year plan to more effectively utilize the Pompano State Farmers Market property. Faculty and staff of the Florida Agricultural Market Research Center have worked very closely with the architecture firm retained to develop the physical plan for the market. As various phases of the research were completed, the results were shared with architects and planners from Corzo, Castello, Carballo, Thompson and Salman so that findings could be integrated into preliminary improvements plans in an expeditious manner.

STATUS OF AGRICULTURE IN THE PSFM SERVICE AREA

This section of the report evaluates the demand and supply conditions for vegetables, fruits and horticultural products produced in a 7 county region of south Florida referred to as the Pompano Farmers' Market Area (PFMA). The purpose of this section is to provide an appropriate economic and logistical basis for formulating recommendations for future operating facilities and procedures on the Market.

South Florida is a unique and very dynamic region of the nation, recognized for its diverse, substantial and growing economy. International, national, and regional factors impact the success and vitality of its fresh fruit and vegetable industry. The changes that have had substantial effects on this industry during the last 15 years are discussed below.

Production

The scope and size of fruit, vegetable and nursery production in south Florida is examined in this section. Both land area and market value, with respect to the type of production and geography are reviewed. Particular attention is given to individual commodities which are known contribute substantially to the Pompano State Farmers' Market's revenues.

Type of Production

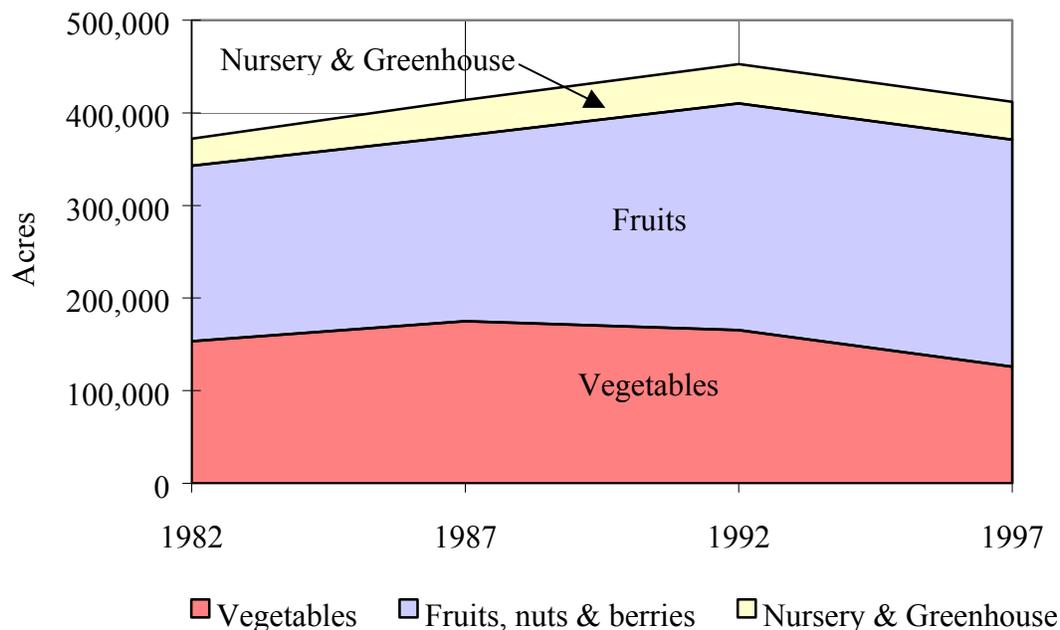
Agricultural production in the PFMA is divided into vegetables, fruits, and nursery and greenhouse operations. These are examined individually in terms of acreage and revenues.

Acreage

The total acreage in fruit, vegetable, and horticultural production in the PFMA has increased by nearly 11 percent between 1982 and 1997 (Figure 1, Table 1). This acreage growth was continuous from 1982 through 1992. By 1997 it had declined by approximately nine percent from its 1992 levels, which totaled nearly 453 thousand acres. Much of this recent decline is due to reduced vegetable acreage, which by itself has decreased by slightly more than 28 percent since 1987. This decline in vegetable acreage has accelerated since 1992, falling over 23 percent during the last 5 year census period. Although fruit acreage has increased during each 5 year census during the study period, there was little change between 1992 and 1997. Nursery and greenhouse

acreage has leveled off at nearly 41,000 acres for the PFMA, but overall it has increased by more than 40 percent since 1982.

Figure 1. Fruit, Vegetable, and Nursery Acreage in the Pompano Farmers' Market Area ^{1,2}.



Source: Census of Agriculture

Table 1 Vegetable, Fruit and Nursery Acreage for the Pompano Farmers' Market Area ¹

year	Vegetables	Fruits	Nurseries and Greenhouses ²	Total
	Acres			Acres
1982	153,251	189,568	29,161	371,980
1987	175,044	200,446	38,468	413,958
1992	165,375	244,766	42,491	452,632
1997	125,961	244,957	40,973	411,891

Source: Census of Agriculture

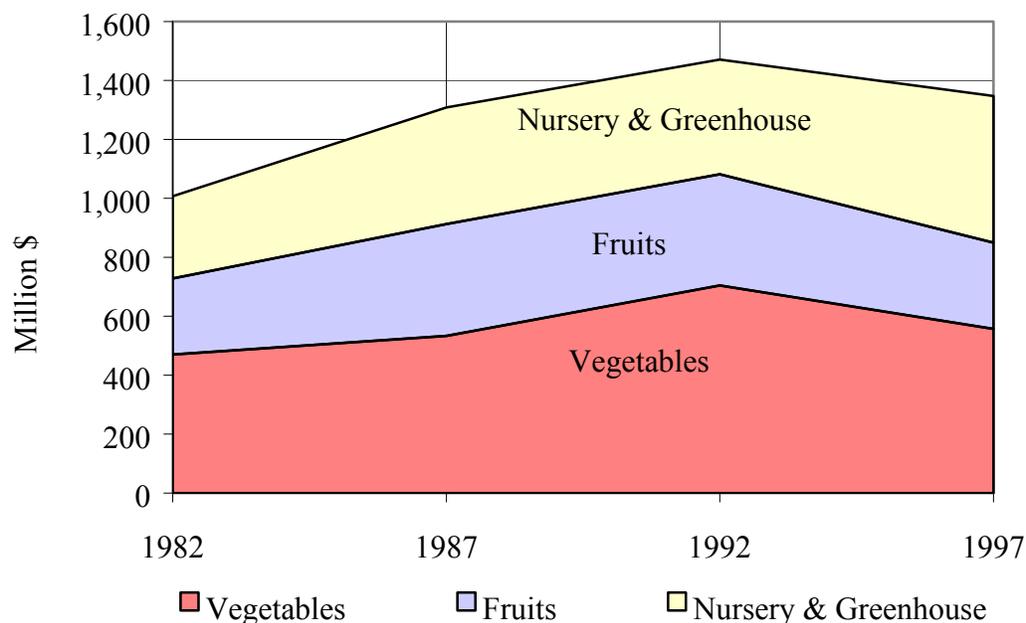
¹ Missing values for some counties were estimated

² Greenhouse square footage converted to acres

Market Value

The market value of vegetable, fruit and horticultural production in the 7 county area was approximately 1,487 billion dollars in 1997 (Figure 2, Table 2). The real market value of production (measured in 1992 dollars) from these three subsectors was in excess of \$1 billion in 1982 and exceeded 1.3 billion in 1997. The value of vegetable production in the PFMA peaked at \$704 million in 1992. Its subsequent decline, by almost 21 percent in 1997, was most likely due to the impacts of the North American Free Trade Agreement (NAFTA) and Hurricane Andrew. Revenues from fruit and nut production also peaked in 1992 at \$377 million and similarly declined by over 22 percent in 1997. In contrast, nursery and greenhouse revenues for the PFMA increased by nearly 28 percent between 1992 and 1997. Overall, revenues from nursery and greenhouse operations have grown more consistently than for the other sectors.

Figure 2. Market Value of Fruit, Vegetable, and Nursery Production in the PFMA, 1992 \$ ¹.



Source: Census of Agriculture

¹ Missing values for some counties were estimated.

Table 2. Market Value of Fruit, Vegetable and Nursery Production in the Pompano Farmers' Market Area, 1992 \$ ¹

year	Vegetables	Fruits	Nurseries and Greenhouses	Total
	Million 1992 \$s			Million 1992 \$s
1982	469.75	258.51	279.13	1,007.39
1987	532.90	380.15	395.56	1,308.61
1992	703.99	377.31	389.51	1,470.80
1997	556.79	292.34	497.70	1,346.83

Source: Census of Agriculture

¹ Missing values for some counties were estimated.

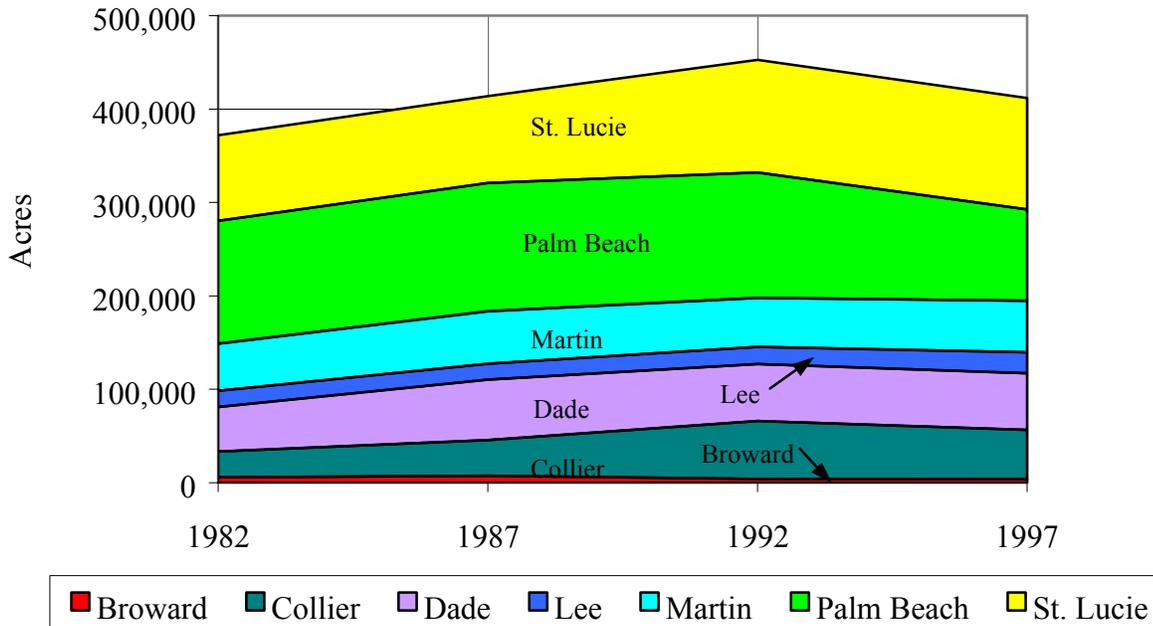
Geography

The PFMA consist of seven counties spanning both east and west coasts of south Florida. It includes Broward, Collier, Dade, Lee, Martin, Palm Beach and St. Lucie counties. This area is physically and agriculturally diverse. Individual counties exhibit significant differences in both the type and level of agricultural production.

Acreage

Figure 3 and Table 3 show the distribution of acreage in vegetable, fruit and nursery production for individual counties within the PFMA. During the study period, Palm Beach and St. Lucie Counties have traded places in having the largest acreage in combined production. The majority of relevant acreage in Palm Beach County is in vegetables. Even though vegetable acreage has declined in Palm Beach County from over 91,000 acres in 1982, to 58,000 in 1997, it still leads the seven county area in this category. The vast majority of St. Lucie County's acreage is in citrus production. This acreage has grown from nearly 91,000 acres in 1982 to almost 118,000 in 1997. In contrast, vegetable production has been almost non-existent in St. Lucie County. Collier, Dade, and Martin County acreages are clustered near 55,000. Vegetable acreage is predominant in Dade County, while fruit acreage is greater in Collier and Martin counties. Collier county has experienced a dramatic increase in fruit and total acreage over the last 15 years. This is largely due to significant increases in citrus acreage in the aftermath of freezes which destroyed much of the citrus in Central Florida.

Figure 3. Vegetable, Fruit and Nursery Production Acreage by County in the Pompano Farmers' Market Area, 1992 \$¹.



Source: Census of Agriculture

¹ Missing values for some counties were estimated

Table 3. Fruit, Vegetable and Nursery Production Acreage by County for the Pompano Farmers' Market Production Area, 1992 \$s¹

County	1982	1987	1992	1997
	Acres			
Broward	5,787	7,504	4,150	3,593
Collier	27,470	38,058	61,973	53,041
Dade	47,856	64,915	60,761	60,478
Lee	17,435	16,928	18,717	22,585
Martin	50,443	56,317	52,436	55,188
Palm Beach	131,166	137,107	133,992	97,683
St. Lucie	91,823	93,128	120,604	119,323
Total	371,980	413,958	452,632	411,891

Source: Census of Agriculture

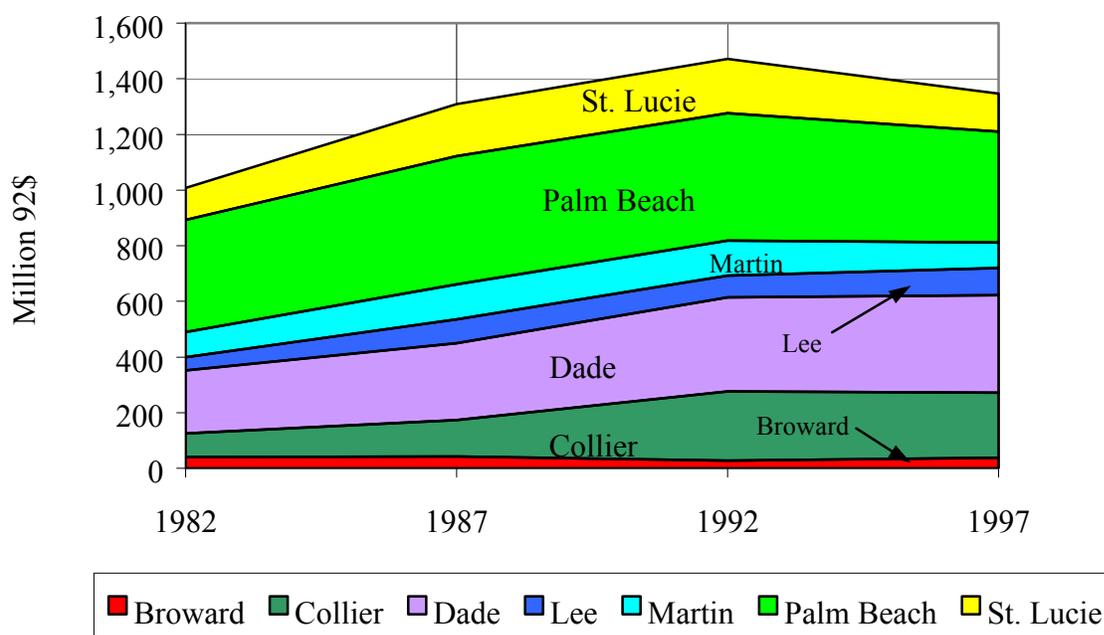
¹ Missing values for some counties were estimated

Revenues

The greatest market value of vegetable production in the 7 county PFMA occurs in Palm Beach County, which is immediately north of Broward County. Palm Beach County has large land areas devoted vegetable production and particularly to sweet corn, (21,770 acres in 1997). Collier and Dade are the next largest vegetable producing counties, but also generate significant revenues from fruit and nursery operations. Collier County has more than doubled its revenues from vegetable production during the 15 years between 1982 and 1997. The bulk of fruit production revenues are generated in St. Lucie and Martin counties, in the northern range of the PFMA. This is primarily in the form of citrus fruit. Dade and Palm Beach Counties generate the lion's share of revenues from nursery and greenhouse production, with Dade County showing a significant increase in the last 5 year census period (43 percent). In contrast to the previous two commodity groups, nursery and greenhouse revenues increased dramatically between 1992 and 1997.

Looking at the geographic distribution of revenues from the three types of commodities reveals that Palm Beach County, to the north of the Pompano Market, currently has the largest revenues in the PFMA. It is followed by Dade County in the southern part of the area and then Collier County to the west. Thus the Pompano Farmers Market is centrally located with respect to the value of production in the marketing area it serves.

Figure 4. Market value of Fruit, Vegetable and Nursery Production by County for the Pompano Farmers' Market Area, 1992 \$¹.



Source: Census of Agriculture

¹ Missing values for some counties were estimated

Table 4. Market Value of Fruit, Vegetable and Nursery Production by County for the Pompano Farmers' Market Production Area, 1992 \$s¹

County	1982	1987	1992	1997
	Million 1992 \$			
Broward	39.44	42.28	26.98	37.37
Collier	85.84	130.82	248.81	233.83
Dade	226.30	276.63	338.70	350.84
Lee	48.26	84.95	77.89	97.88
Martin	89.96	126.48	125.60	91.96
Palm Beach	402.97	460.45	458.15	398.29
St. Lucie	114.62	187.00	194.67	136.65
Total	1007.39	1308.61	1470.8	1346.82

Source: Census of Agriculture

¹ Missing values for some counties were estimated

Domestic and Import Competition

Figures 5 through 10 graphically compare the volume and origin of U.S. shipments for selected fresh vegetables during the fall, winter and spring months of the year. These are shipments destined to major terminal markets in the US. Florida has competed with Mexico in fresh winter vegetable production for several decades. During the 1990s the nature of U.S. - Mexico competition changed. NAFTA eliminated or reduced many tariff barriers between the two countries. Also, a significant decline the value of the Mexican Peso in relation to the U.S. Dollar made Mexican imports much cheaper in the U.S. These figures demonstrate the relative share of Mexican and Florida shipments with respect to the domestic supply of these vegetables.

Florida has been relatively successful in retaining a majority share of the cool-season fresh green-bean market. There has been a slight upward trend in Mexico's share over the decade of the 90s (Figure 5). During this period, Florida's shipments to major U.S. terminal markets fluctuated between 63 and 116 million pounds per year. The USDA Agricultural Marketing Service (AMS) does not report any other sources of green bean shipments during the winter season for the U.S.

In contrast, Florida's shipments of cucumbers to major terminal markets declined precipitously during the 1990s (Figure 6). In the 1990/91 season, nearly 42 percent of cucumber shipments originated from Florida. By the 1997/98 season, Florida's share of this market had shrunk to less than 22 percent. Florida also faces competition from other states such as Georgia and Texas, (Figure 6) which usually come into the market during the early fall and late spring of the year. Imports of cucumbers from Central American and the Caribbean through South Florida district ports in the 1998/99 season were approximately 87 million pounds (Figure 11, Table 5). This is about one third as large as the quantity of Florida produced shipments during the 1997/98 season. Clearly, the state's cucumber producers face significant challenges from both domestic and foreign competition.

Shipments of eggplant from Florida have fluctuated substantially in the last three years of the analysis period, as shown in Figure 7. Overall, Florida's production has shown no clear trend, but the volume of shipments from Mexico has grown by 79 percent since the 1990/91 season. As of the 1997/98 season, nearly three quarters of eggplant shipments originated from Mexico. Cool season shipments of eggplant from other U.S. states are relatively insignificant.

While Florida clearly dominated the cool season bell pepper market during the early 1990s, shipments from Mexico in 1997/98 were nearly double their 1990/91 levels, almost matching those

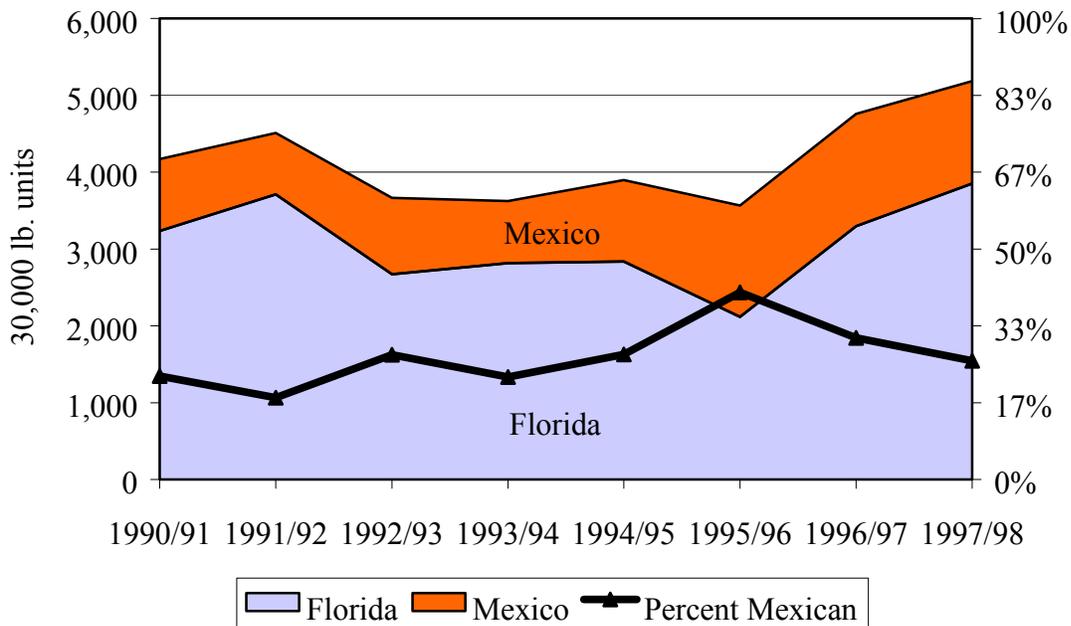
from Florida (Figure 8). Georgia has recently emerged as a minor competitor in the market as well. In the 1996/97 and 1997/98 seasons, shipments of bell peppers from Florida have rebounded, exceeding 300 million pounds for the first time since the 1991/92 season.

Since the 1992/93 season, Mexico has strengthened its dominance in the "other" pepper market (Figure 9). As of the 1997/98 season, ninety percent of the shipments of this category of peppers originated from Mexico. California and Texas do not appear to substantially contribute to the national supply of these peppers.

The volume of watermelon shipments from Florida rebounded in 1997/98 season, from their lowest levels of the decade in the previous year, but overall they show no clear trend during the 1990s (Figure 10). Mexican imports have shown a fairly steady increase since the 1991/92 season. Watermelon shipments from states other than Florida dominate the national total, but overall, the three production regions are fairly complementary in their production/shipping seasons. Mexican shipments do compete with Florida in the late spring, while shipments from others states in the U.S. compete with Florida in the mid summer.

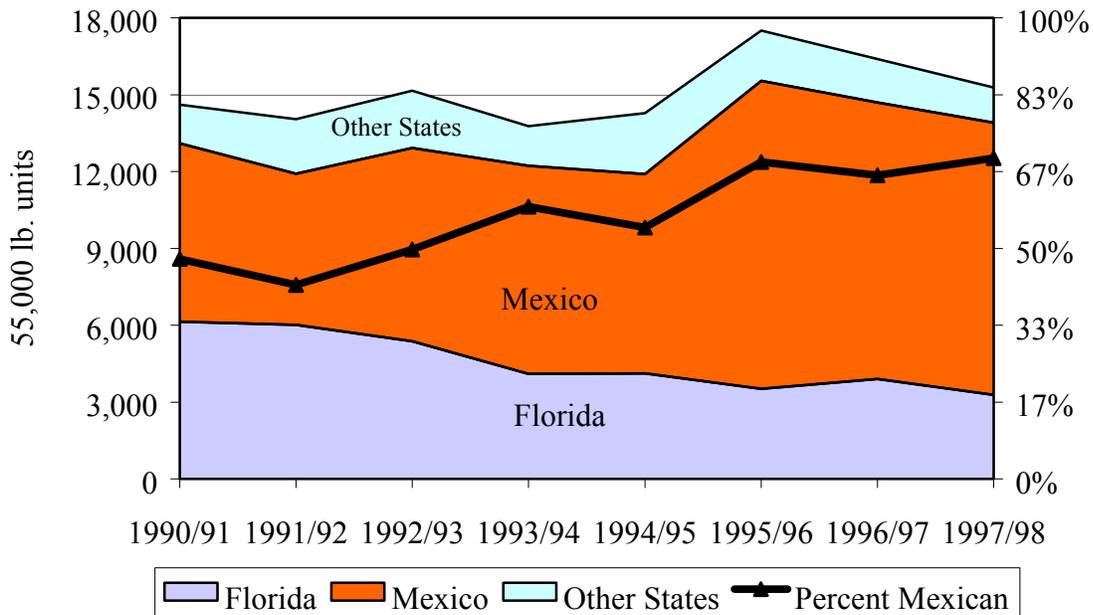
Substantial quantities of cantaloupe and honeydew melons are imported into the U.S. through ports in the South Florida District. These melons originate primarily from Central America and the Caribbean (Figure 11, Table 5). In the latest season (ending in March 1999) over 226 million pounds of cantaloupe were shipped into South Florida sea ports. This represents about 23 percent of all imports of cantaloupe into the U.S. and over 7 percent of annual domestic consumption. Approximately 84 million pounds of honeydew melons were imported through Florida ports during the 1998/99 season. This corresponds to over 40 percent of national imports and nearly 12 percent of domestic consumption. There is no reason to assume these import volumes through south Florida ports will not continue at current levels or increase in the future.

Figure 5. Shipments of Green Beans from Florida and Mexico, 1990/91 - 1997/98.



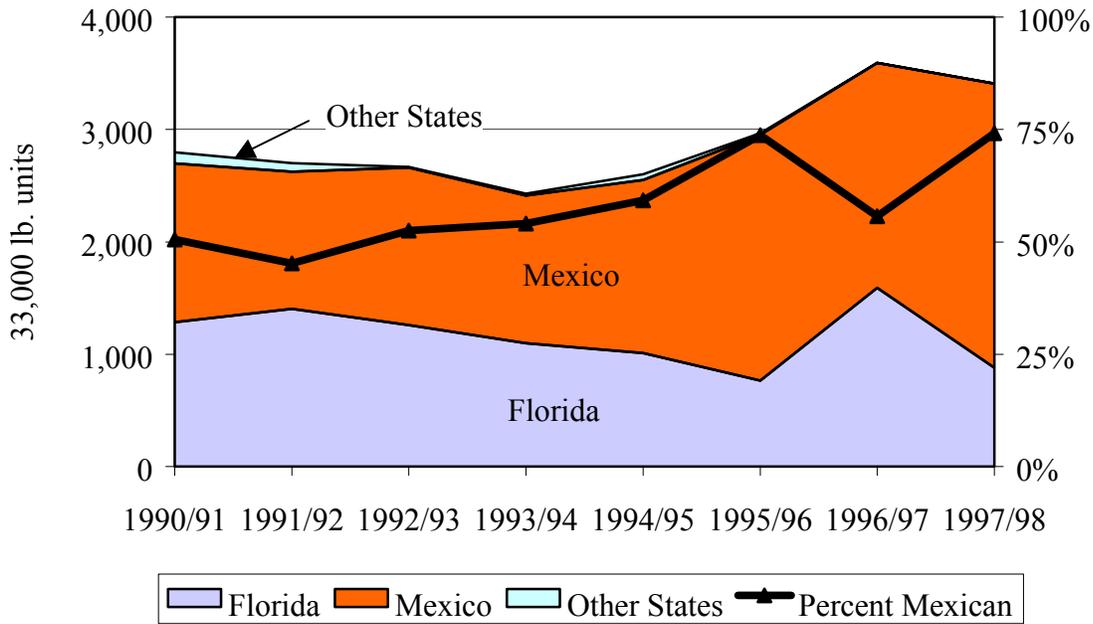
Source: USDA-AMS, "Marketing Florida Vegetables"

Figure 6. Shipments of Fresh Cucumber from Florida, other States and Mexico, 1990/91-1997/98.



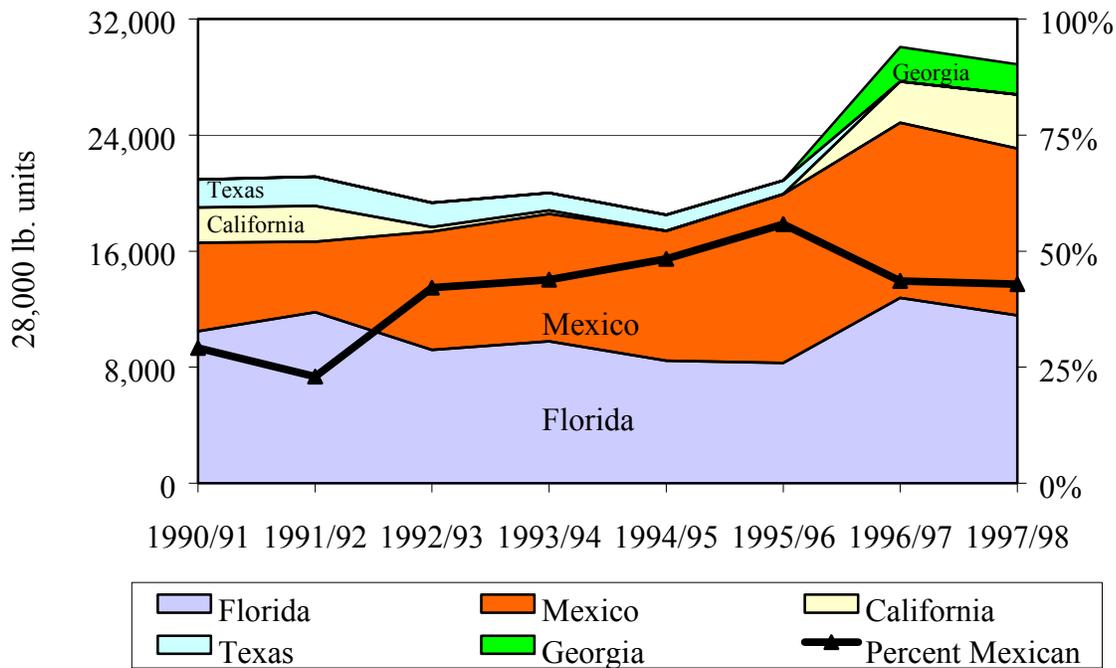
Source: USDA-AMS, "Marketing Florida Vegetables"

Figure 7. Shipments of Eggplant from Florida, other States, and Mexico, 1990/91-1997/98.



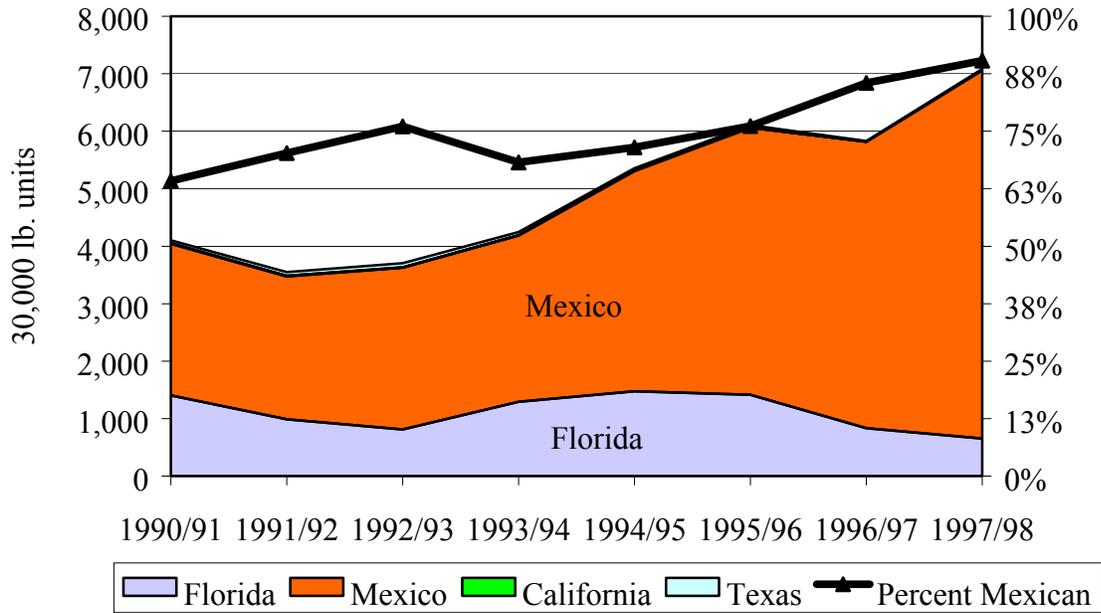
Source: USDA-AMS, "Marketing Florida Vegetables"

Figure 8. Shipments of Bell Peppers from Various Production Regions 1990/91-1997/98.



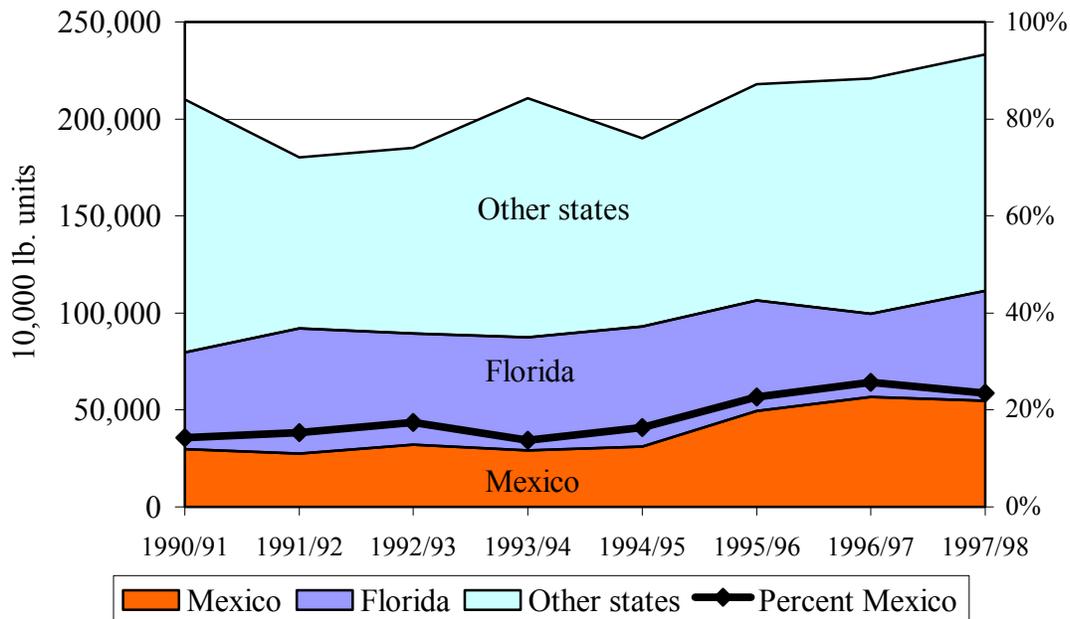
Source: USDA-AMS, "Marketing Florida Vegetables"

Figure 9. Shipments of Other Peppers from Various Production Regions 1990/91-1997/98.



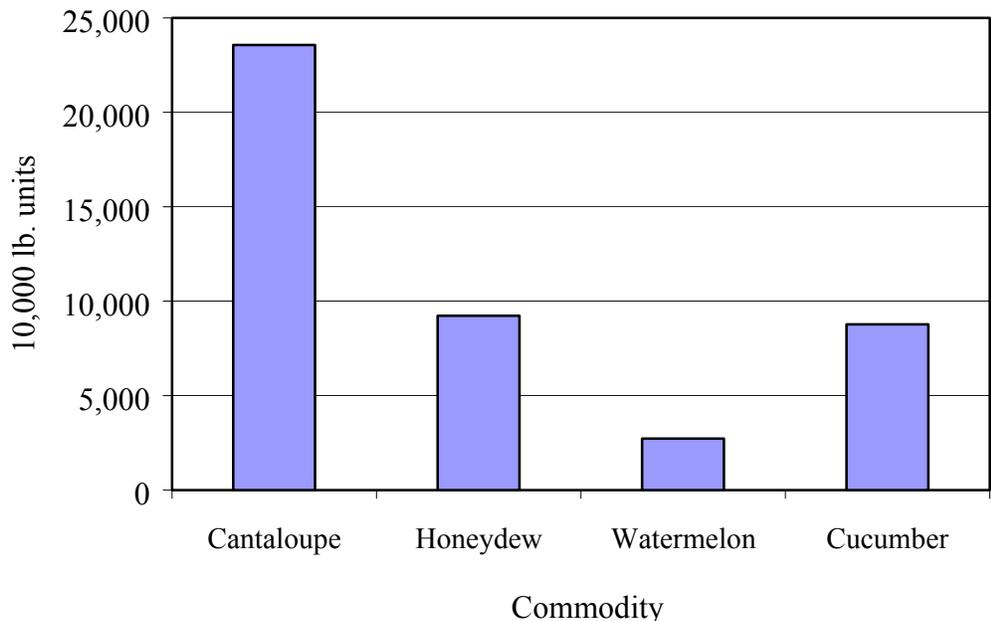
Source: USDA-AMS, "Marketing Florida Vegetables"

Figure 10. Shipments of Watermelons from Florida, Other States, and Mexico, 1990/91-1997/98.



Source: USDA-AMS, "Marketing Florida Vegetables"

Figure 11. Imports of Melons and Cucumbers through South Florida Ports for the 1998/99 Season^{1,2}.



¹ South Florida district includes the Port of Miami, Port Everglades, Port of Palm Beach, Port Manatee and Port Canaveral

² Countries of origin include Costa Rica, the Dominican Republic, Guatemala, Honduras, Nicaragua, and Panama

Table 5. Imports of Melons and Cucumbers through South Florida District Ports for the 1998/99 Season¹

Origin	Cantaloupe	Cucumber	Honeydew	Watermelon	Squash
	10,000 lb. units				
Costa Rica	3,064	3,982	1,149	181	
Dominican Rep.	1,640	222	343	131	
Guatemala	9,729	526	4,031	27	102
Honduras	7,197	4,042	1,978	1,297	78
Nicaragua	165		5		
Panama	891		859	547	
Total	22,686	8,772	8,365	2,183	180

¹ The South Florida district includes the Port of Miami, Port Everglades, Port of Palm Beach, Port Manatee and Port Canaveral.

U.S. and Florida Consumer Demographics

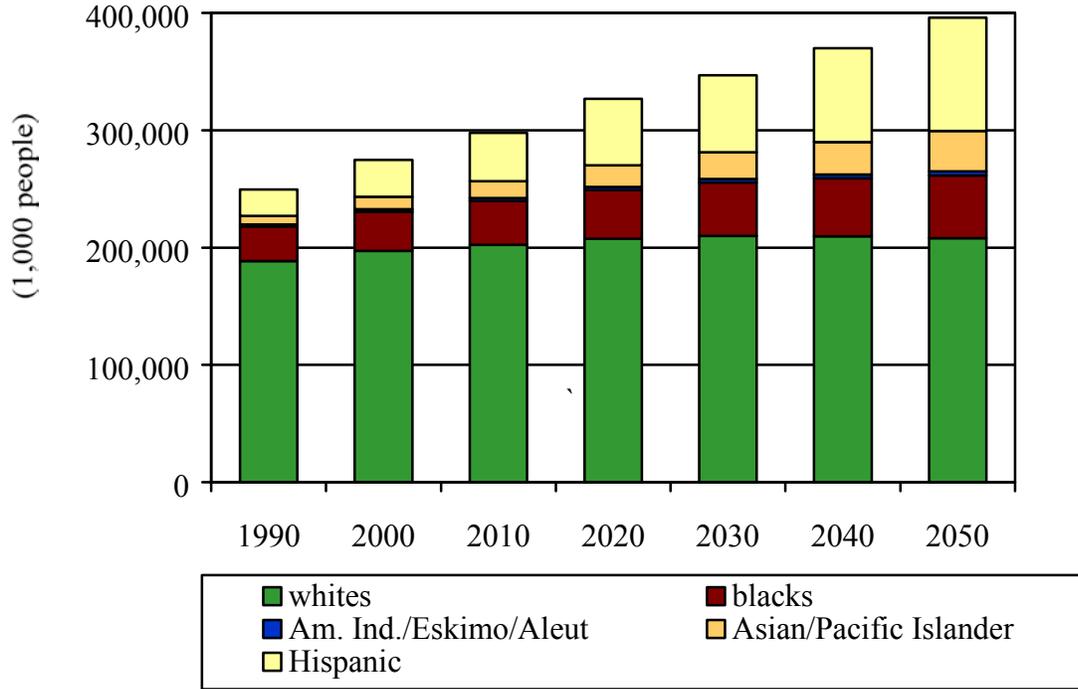
Changes in the size and make-up of the national and regional population will have a variety of impacts on the demand and supply of fresh fruits, vegetables and nursery products. Obviously, the overall demand for food will increase with population growth. It is also important to evaluate how population changes will impact local versus out-of-state demand for these products. The demographic make-up of our society influences the demands for different types of foods. The impacts of such trends in population size and make-up on the consumption of fruits and vegetables are evaluated below.

The population of the United States is expected to increase at a fairly steady rate over the next 50 years, reaching nearly 400 million people by the year 2050. The projections for U.S. population growth, broken out by ethnic category, are shown in Figure 12 and Table 6. After the year 2010, almost all population growth will occur in non-white ethnic groups. This indicates that a wider variety of food products will be consumed by our society in the future. Projected population growth for the State of Florida, shown in Figure 13 and Table 7, reflects a similar pattern. This chart shows that the population of Hispanic, Black and other ethnic groups will more than double over the next 25 years, while Florida's Caucasian population will only increase marginally.

Table 8 shows how the demand for exotic produce items is already changing due to the evolving ethnic make-up of our society and the overall increasing popularity of ethnic foods. For the seven items listed in this table, each experienced at least double digit increases in quantity sold and sales revenue between 1996 and 1997 alone. The expanding list of exotic or specialty fruit and vegetables in our diet will likely increase the need for centralized assembly and distribution centers in our food marketing system.

With advances in medical and nutrition science, the importance of fresh fruits and vegetables in our diet has been recognized and promoted by researchers and government agencies. The public has responded to this information by significantly increasing their per capita consumption of these foods since the early 1980s (Figure 14). Consumption of both fruits and vegetables has increased by more than 24 percent on a per capita basis, during the 15 year period between 1982 and 1997. This growth is likely to continue for the intermediate future. Consumption patterns for individual fruits and vegetables are discussed in the following section.

Figure 12. U.S. Population, 1990, and Projections to 2050, by Race and Hispanic Origin.

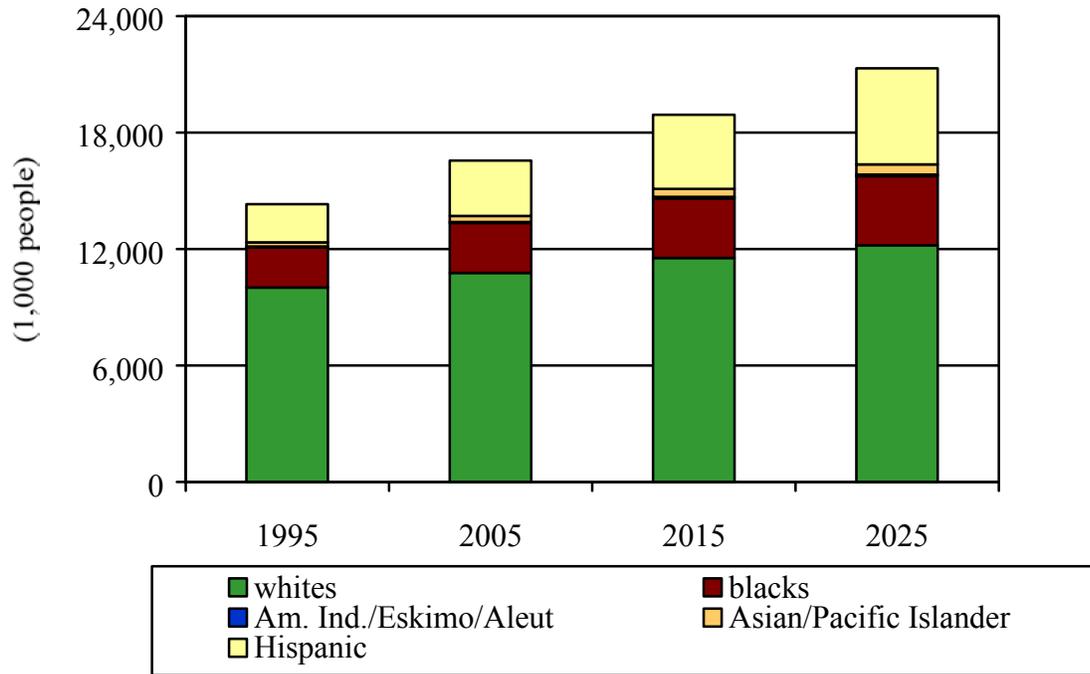


Source: U.S. Census Bureau

Table 6. U.S. Population, 1990, and Projections to 2050, by Race and Hispanic Origin.

Ethnicity	1990	2000	2010	2020	2030	2040	2050
Whites	188,588	197,061	202,390	207,393	209,998	209,621	207,901
Blacks	29,398	33,568	37,466	41,538	45,448	49,379	53,555
Am. Indian Eskimo/Aleut	1,802	2,054	2,320	2,601	2,891	3,203	3,534
Asian/Pacific Islander	7,086	10,584	14,402	18,557	22,993	27,614	34,432
Hispanic	22,565	31,366	41,139	56,652	65,570	80,164	96,508

Figure 13. Florida Population, 1995 and projections to 2025, by race and Hispanic Origin.



Source: U.S. Census Bureau

Table 7. Florida Population, 1995 and Projections to 2025, by Race and Hispanic Origin.

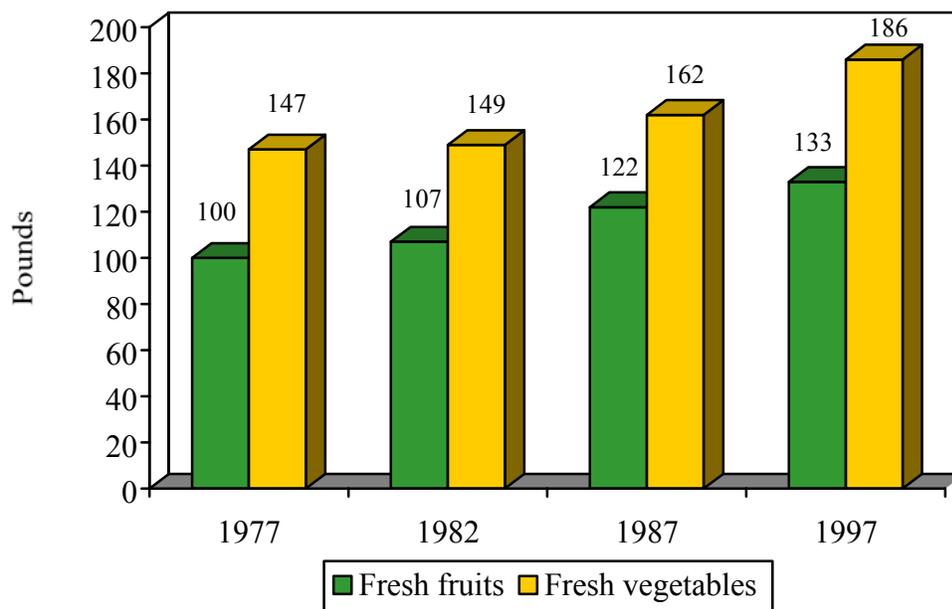
Ethnicity	1995	2005	2015	2025
Whites	10,010	10,764	11,540	12,196
Blacks	2,078	2,573	3,071	3,556
Am. Indian Eskimo/Aleut	45	58	70	84
Asian/Pacific Islander	218	316	417	526
Hispanic	1,955	2,845	3,828	4,944

Table 8. Estimated increases in Sales of Selected Exotic Produce Items in U.S. Supermarkets, 1996-1997.

Produce item	\$ Sales 1997	% Change in Sales, 1996-1997	% Change in lbs. Sold, 1996-1997
Avocados	276,328,641	19	13
Limes	115,992,224	12	15
Mangoes	109,873,190	23	18
Bok Choy	18,767,095	53	75
Ginger Root	16,361,256	37	28
Jicama	8,355,058	23	29
Yucca Root	7,487,628	112	66

Source: Information Resources Inc., InfoScan Census for Perishables, Progressive Grocer.

Figure 14. Per Capita Consumption of Fresh Fruits and Vegetables, 1977-1997.



Source: USDA-ERS, Vegetable Yearbook.

Fruit and Vegetable Consumption Trends

Figures 15 through 20 graphically depict trends in per capita consumption, along with real and nominal shipping-point prices, during the last 25 years for six fruits and vegetables that are important to the Pompano Market. These include tomatoes, cucumbers, green beans, eggplant, bell peppers, and melons.

Historical prices and consumption of fresh tomatoes are shown in Figure 15. From 1974 to 1998, real FOB prices for tomatoes have declined by approximately 22 percent, but since 1995 tomato prices have increased by thirty percent. Over the 25 year period, per capita consumption of tomatoes has grown from 11.8 to 17.4 pounds per year, an increase of 47.5 percent.

Per capita consumption of fresh cucumbers has grown dramatically over the study period, from slightly less than 3 pounds per year in 1974, to 6.7 pounds in 1998 (Figure 16). Real shipping-point prices for cucumbers dropped by over 40 percent between 1974 and 1986. Since that time they have fluctuated between \$15 and \$20 per hundred-weight, with no discernable trend.

Consumption of green or snap beans has not shown the dramatic per capita increases that are seen for other fruits and vegetables. Neither have real farm prices for green beans shown any substantial declines (Figure 17). As noted earlier, Florida continues to supply more than 50 percent of the cool season shipments of snap or green beans in the U.S.

No clear trends are evident with respect to the consumption or prices of eggplant. Eggplant production remains a relatively minor segment of Florida agriculture and like snap beans, it does not any obvious trends in acreage or revenues over time (Figure 18).

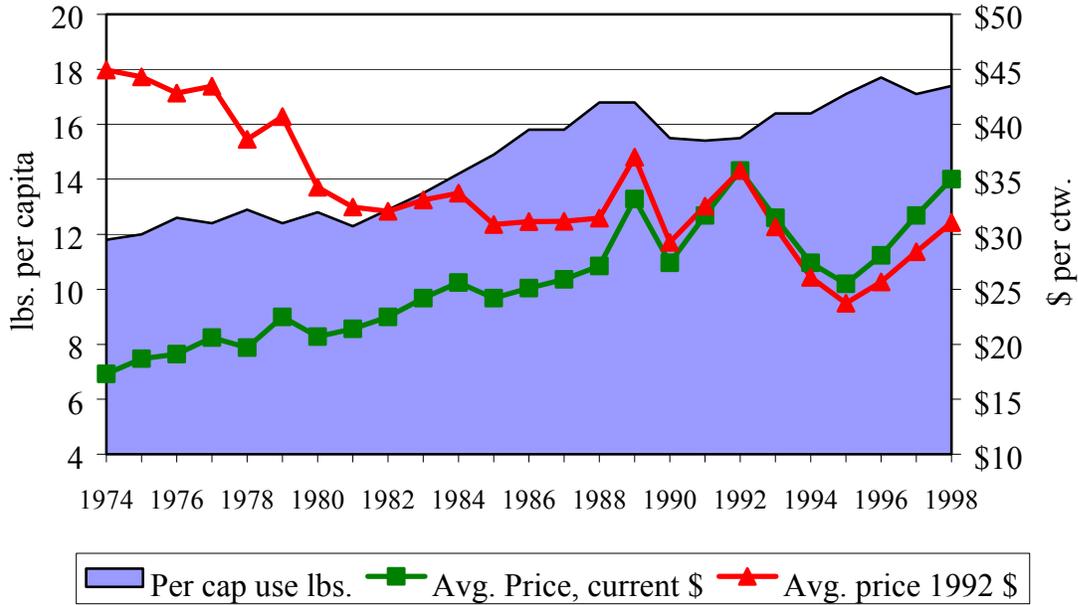
Bell peppers have shown increasing popularity with consumers since the early 1980s, with per capita consumption more than doubling over the last 20 years. Real shipping-point prices for bell peppers took a significant drop during the first half of the 1980s, but have since remained fairly stable at around \$28 per hundred weight since that time (Figure 19).

Melons have an increasingly large per capita consumption level in the U.S., growing by over 60 percent in the 24 years since 1974. Real farm prices for melons have remained fairly stable since 1983, fluctuating between \$10 and \$12 per hundred-weight (Figure 20).

In conclusion, the consumption of most of the fresh vegetables that have been traditionally important to the PSFM has increased dramatically in recent years. As long as South Florida producers of these commodities can remain competitive with foreign sources, these items will most likely continue to flow through the PSFM to distant markets. However, if Florida producers

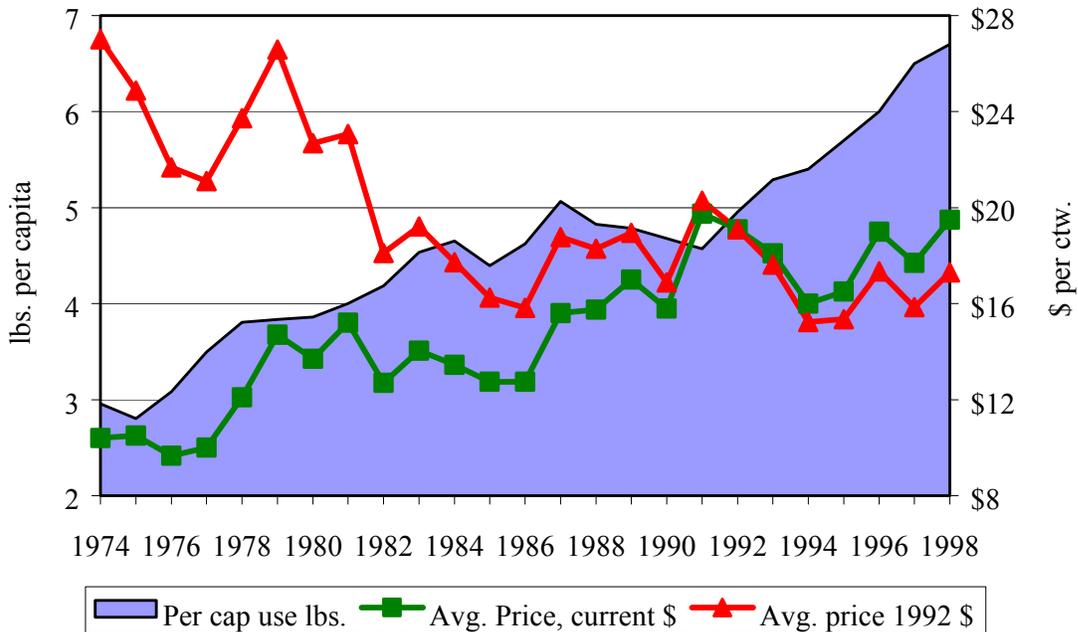
cannot compete, many of these popular items will probably be imported through South Florida sea and airports, and may be repacked and loaded as mixed loads by shippers on the PSFM as before.

Figure 15. U.S. Fresh Tomatoes: Prices with Per Capita Use, 1974-1998.



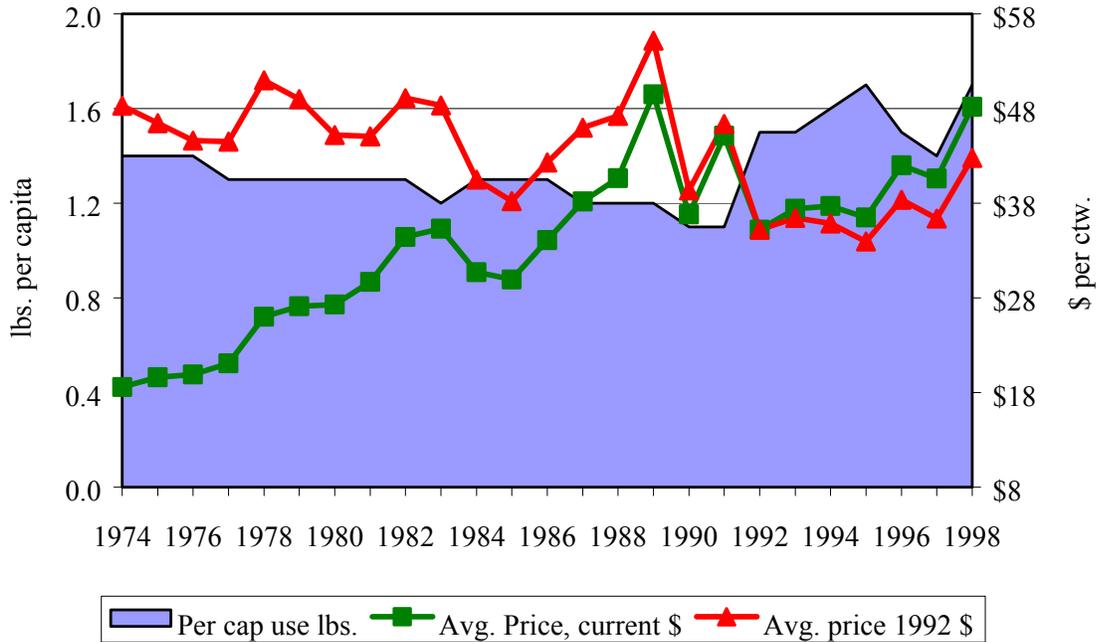
Source: National Agricultural Statistics Service, USDA.

Figure 16. U.S. Fresh Cucumber Prices and Per Capita Consumption, 1974-1998.



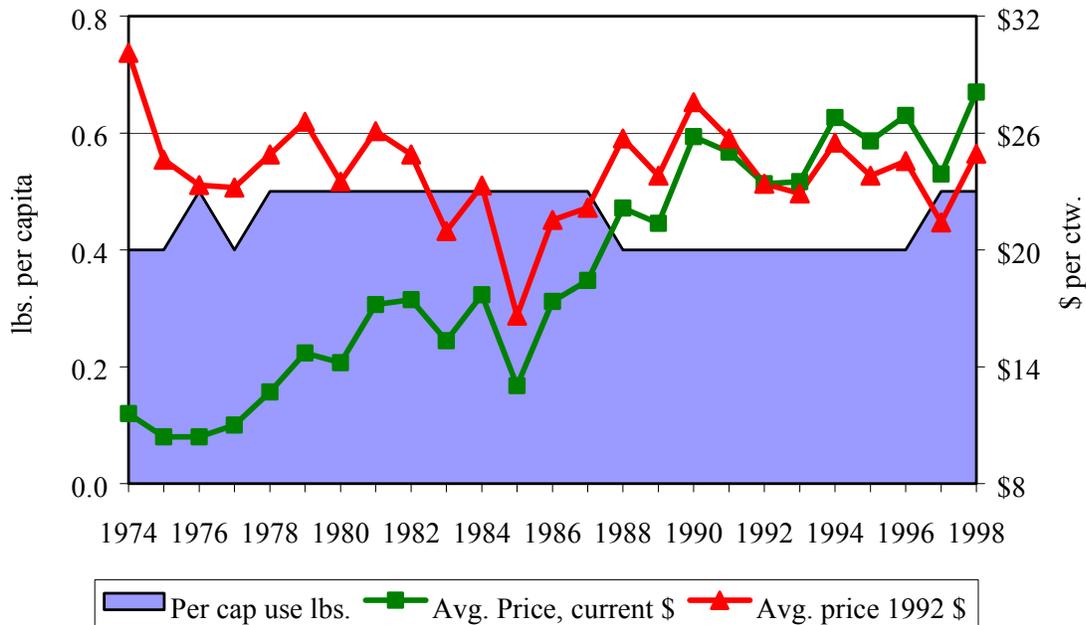
Source: National Agricultural Statistics Service, USDA.

Figure 17. U.S. Snap Bean Prices and Per Capita Consumption. 1974-1998.



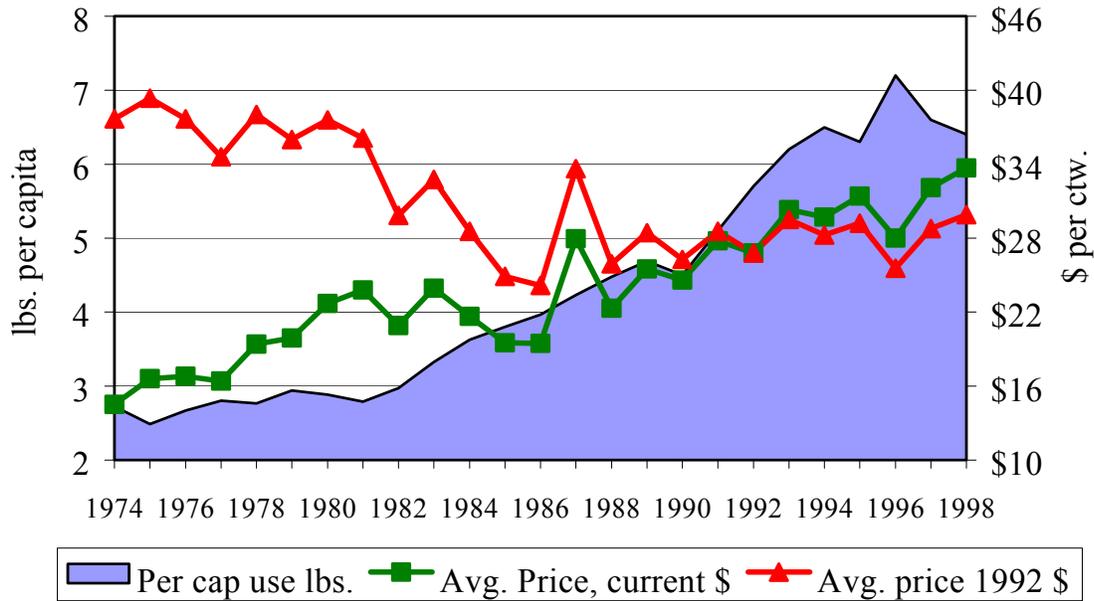
Source: National Agricultural Statistics Service, USDA.

Figure 18. U.S. Eggplant Prices and Per Capita Consumption, 1974-1998.



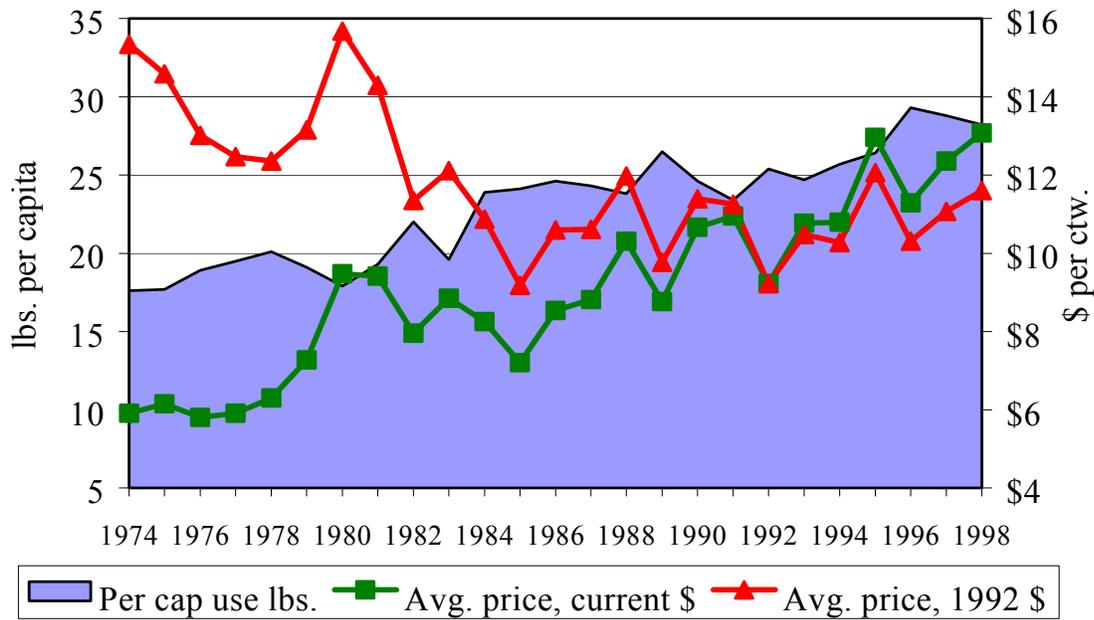
Source: National Agricultural Statistics Service, USDA.

Figure 19. U.S. Bell Pepper Prices and Per Capita Consumption, 1974-1998.



Source: National Agricultural Statistics Service, USDA.

Figure 20. U.S. Melon Prices and Per Capita Consumption, 1974-1998.



Source: National Agricultural Statistics Service, USDA.

HISTORICAL PERFORMANCE OF THE PSFM AND PROJECTIONS THROUGH 2020

This section evaluates the performance of the PSFM over the last 25 years by analyzing the market's expenses and revenues, the number of units of produce moving over the market, and the gross sales revenue earned by those units. This analysis is based on monthly reports from the PSFM provided to the Florida Department of Agriculture and Consumer Services (FDACS). Future market performance is estimated using linear and logarithmic regression models that predict the number of units moving over the market through the year 2020.

Expenses and Revenues on the PSFM

The PSFM generates revenue by leasing space on the loading platform, leasing cooler space (as well as three state-owned coolers) on the platform, and by leasing office space. The PSFM also charges fees for electricity and other utilities. Over the last few years, approximately 60 percent of all revenue has been generated by the platform (including cooler space and the cooler rentals.) Office leases comprise just under 40 percent, while fees earn roughly two percent of all revenue. Expenses consist of salaries, operating costs, and indirect costs. Since 1991, salaries have averaged 41 percent of total expenses, operating costs have averaged 30 percent and indirect costs have averaged 29 percent. In recent years, salaries have fallen to approximately 30 percent while indirect costs have risen to 37 percent.

Both revenues and expenses at the PSFM have fallen from the late 1970s through the late 1990s. In real terms (inflation-adjusted 1998 dollars), revenue has declined from an average of approximately \$600,000 in the late 1970s to approximately \$400,000 in the late 1990s. Costs have fallen from \$730,000 in the late 1970s to roughly \$400,000 in the late 1990s. Net income was significantly negative in the late 1970s, but ran comfortably in the black throughout the 1980s. Recently, net income has declined somewhat, averaging \$4,382 for the decade, as revenues have fallen and costs have increased (Figure 21).

Total Units of Produce

The number of units of produce moving over the market generally has declined over the last 25 years. Total units peaked at over 5,300,000 units in 1980. From 1980 until 1990 activity on the market declined fairly steadily. In 1990, a low of 2,700,000 units crossed the market, approximately 50 percent of market activity at its peak. Since 1990, the market's volume has stabilized, averaging about 3,100,000 units per year (Figure 22).

Figure 21. PSFM Expenses and Revenue 1974-1998 in Current Dollars.

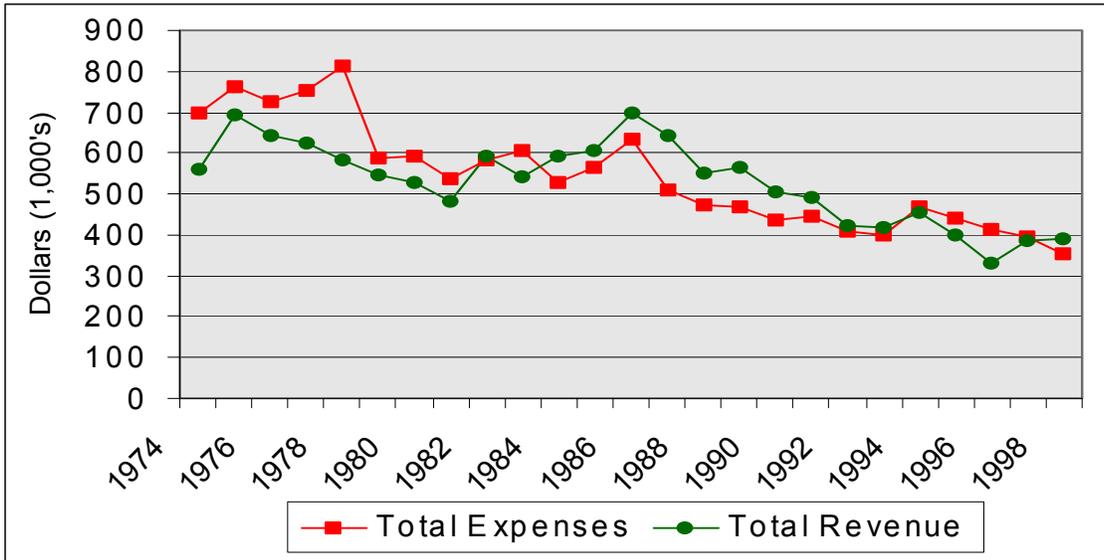
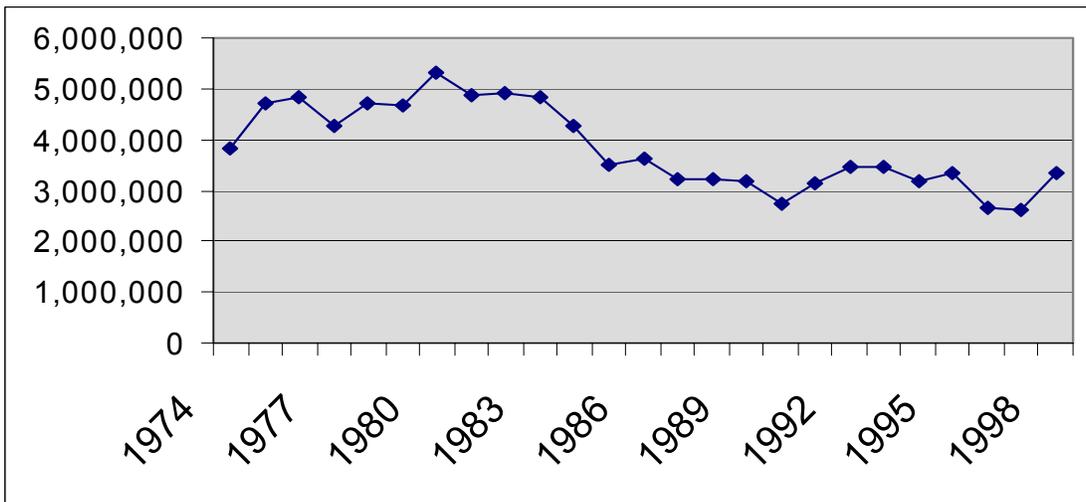


Figure 22. Total Units of Produce on the PSFM, 1974-1998.



Gross Sales Revenue

Since 1974, nominal sales revenue has fluctuated around an average of \$39.6 million. This average reflects price increases that have offset the overall decline in the number of units moving across the market. Figure 23 shows the fluctuations in sales revenue from 1974 to 1998 in nominal dollars. After adjusting for inflation, the picture for sales revenue changes significantly. Real sales revenue (in 1998 dollars) reflects the overall decline in the number of units moving over the market. Over the twenty-five-year period, real sales revenue averages \$67.6 million, with a high of \$121.6 million in 1975 and a low of \$28.9 million in 1997. Since 1989, however, real sales revenue has averaged \$40.1 million with relatively little fluctuation. The leveling of real sales revenue in the last decade is shown in Figure 24.

It should be noted that these gross sales revenues include only those items that are physically handled on the market, i.e. those that move across the platform. Anecdotal evidence suggests that the economic activity generated by the brokerage activities of the market's tenants dwarfs the dollar value of produce that is physically handled. No attempt was made to determine the value of these brokerage activities because of their highly confidential nature and the likely reluctance of tenants to provide such data.

Projected Market Activity Through 2020

To project market activity in the future, two widely-used projection techniques are used to forecast the number of units of produce that will move over the market over the next twenty years. These projections are based on the assumptions that no physical changes occur on the PSFM, and past sales patterns continue in the future. Because of these assumptions, forecasts of future market activity become successively less accurate as the time frame is extended.

The first projection model fits a simple linear regression to the number of units of produce over time. The results of this model can be approximated by using a ruler to draw a line through the points in Figure 22, and extend it out for 20 years. Because of the decline in units from 1974 to 1998, this model predicts a significant decline in units over the next twenty years. Specifically, this model suggests that the number of units moving over the market would decline by 88,000 per year. One problem with this model, however, is that it gives little weight to the leveling out of units moving over the market in the last ten years.

A model that better reflects the stability of the number of units over the last decade is a logarithmic model that regresses the number of units over the natural log of time. Using a logarithmic model, the number of units moving over the market is predicted to decline very slowly. As a result, slightly more than 3 million units are predicted to move across the market in the year 2010. This model is presented in Figure 25.

Figure 23. Gross Sales Revenue from 1974 to 1998 in Nominal Dollars.

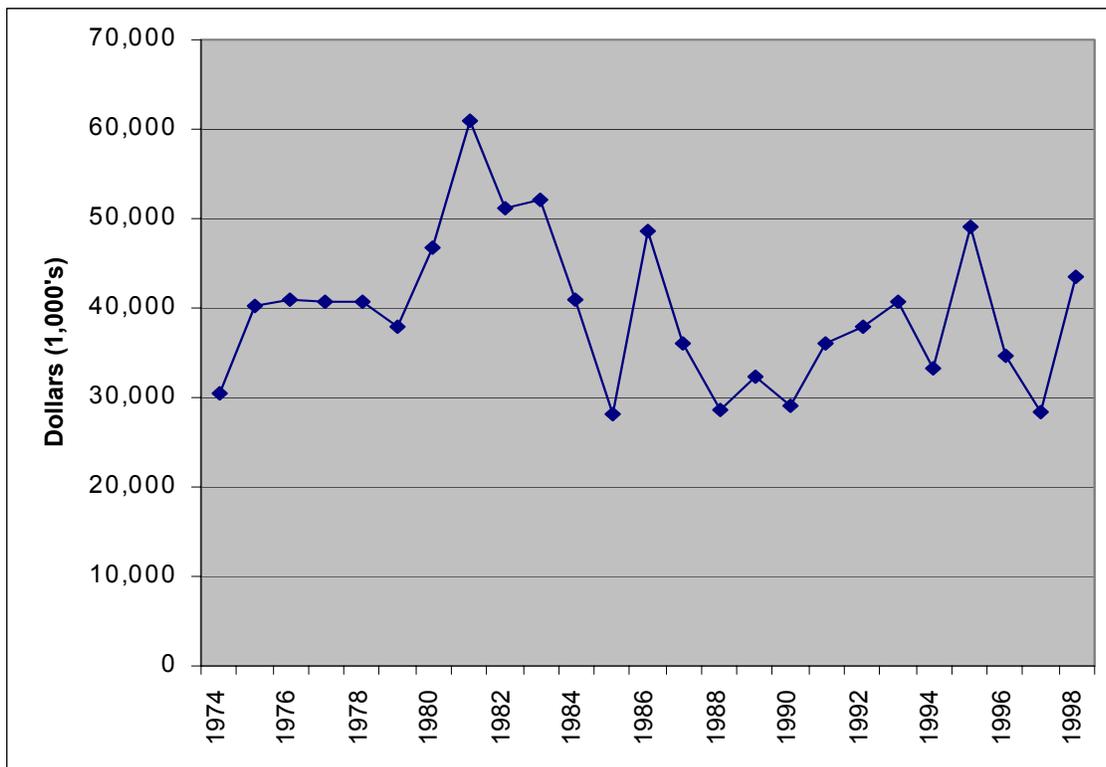


Figure 24. Gross Sales Revenue in Real Dollars from 1974 to 1998, (1998 \$).

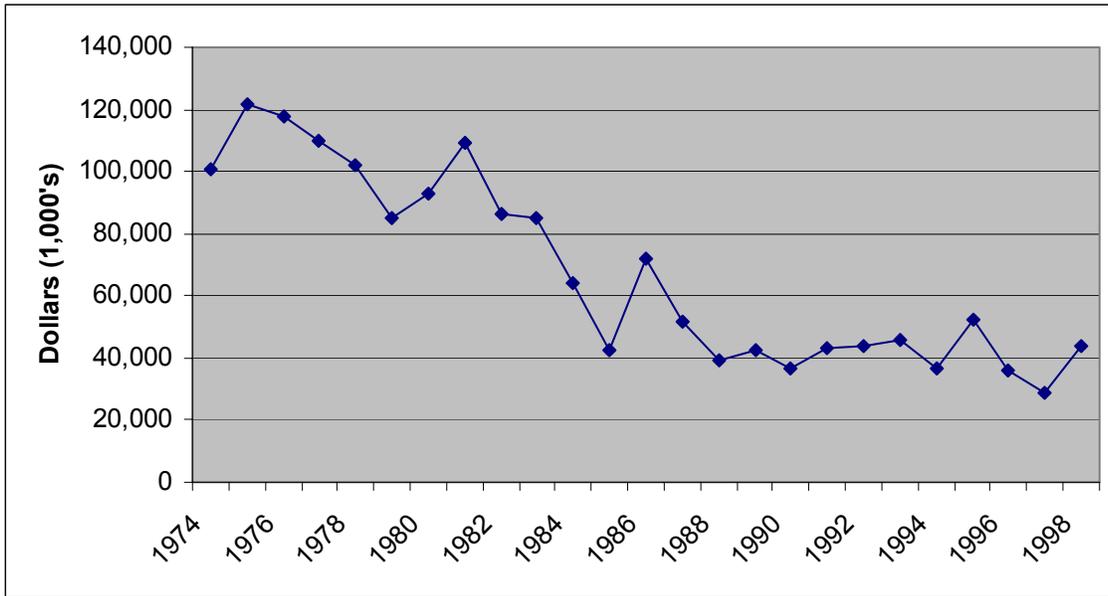
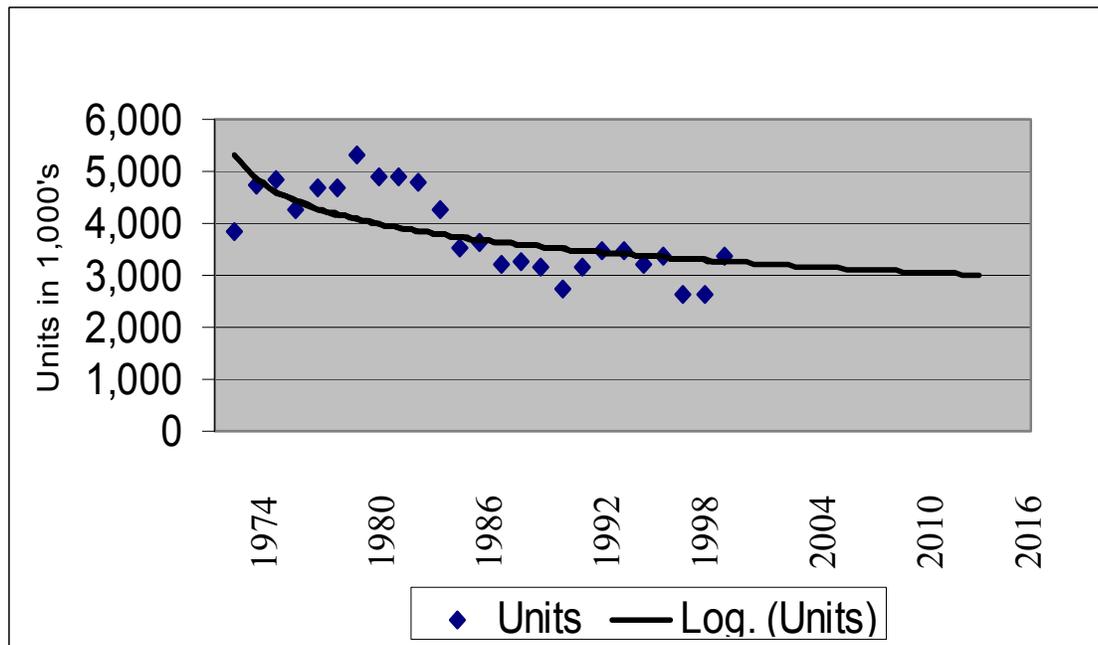


Figure 25. Projection of Units of Produce Using a Logarithmic Trend.



FACTORS AFFECTING THE FUTURE OF THE PSFM

In addition to a quantitative analysis of the future of the market, a qualitative analysis of the market is necessary in order to incorporate the effects of changes in the produce industry that are not quantitatively measurable. It has been shown that quantitative projections of “business as usual” are slightly negative for the PSFM. However, changes in fresh produce production, marketing, and consumption have potential for positive as well as negative impacts on the PSFM.

The importance of the PSFM to agriculture in South Florida is derived primarily from its function as a centrally-located congregation point for assembling mixed loads of produce for shipment north. As a result, it has been advantageous for many elements of the industry from brokers to buyers to truckers to be located on the market, thus maintaining the market’s reputation as a focal point for produce in South Florida. The vitality of the PSFM in the future depends on factors that may affect the market in this capacity.

Strategic Location

As can be seen from the map in Figure 26, and from the mileage chart in Table 9, the PSFM is located near two several agricultural production centers represented by the Immokalee SFM (101 miles west), Florida City SFM (66 miles south) and major growing areas in Palm Beach County. Most vegetable production in Palm Beach County is concentrated near Belle Glade (73 miles northwest) and the Boynton Beach – Delray Beach area (approximately 22 miles north). It also is located within 38 miles of three ports and two international airports. In addition, the PSFM is conveniently located adjacent to I-95 and near the Florida Turnpike, which are the two major arteries for shipping produce into and out of South Florida (Figure 26, and Table 9).

The port of Miami is the largest container port in Florida, and the tenth largest in the U.S. In 1998, nearly 357,000 tons of fresh fruits and vegetables arrived through the port, and approximately 224,000 tons were exported. Port Everglades and the Port of Palm Beach also are becoming important ports of entry. Additional cold storage space is currently being added to both port facilities to facilitate handling of refrigerated food products, including fresh fruit and vegetables.

Figure 26. Location of the Pompano State Farmers’ Market in Relation to Key Agricultural Focal Points.



Table 9. Distance of Key Agricultural Facilities from the PSFM (miles).

Facility	Miles
Port of Miami	35
Port of Everglades	11
Port of Palm Beach	34
Port Canaveral	164
Port Manatee	203
Miami Int'l Airport	38
Ft. Lauderdale Int'l Airport	14
Homestead AFB	66
Immokalee SFM	101
Florida City SFM	66

Moreover, Port Canaveral and Port Manatee are located within about 200 miles. Although limited quantities of fresh fruit and vegetables currently arrive at these ports, some produce ultimately ends up in Pompano Beach food distribution channels. As local or regional food distribution becomes more important to the south Florida area, the PSFM's proximity to all these facilities could prove to be a significant asset.

The PSFM is also strategically located to benefit from its proximity to the Miami International Airport (MIA). MIA is the number one airport for freight in the U.S., and fresh fruit constitutes one of the major import categories. Further, MIA has a \$500 million cargo development program underway. This program will add 15 new cargo buildings and more than double cargo warehouse space from 1.4 million to about 3 million square feet. Fort Lauderdale International Airport (FLL) currently has limited cooler space, but there has been some recent growth in its import of fruit. Another possibility for future importation of fruits and vegetables is the Homestead Air Force Base. Although its future use is still uncertain and has been surrounded by controversy, there is the possibility that this facility could be used as a major air freight center.

The rapid growth in import activity through south Florida's seaports and airports could have a significant, positive impact on the PSFM as the produce industry in the U.S. requires more mixed loads. These factors combine to make the PSFM an ideally situated site for assembling mixed loads of produce for shipment into and out of south Florida.

In a previous section, it was demonstrated that imports of produce are increasing. The expectation that imports will increase is reflected in the growth of port facilities in South Florida as described above. To the extent that these imports will need to be re-mixed, and provided that they do not compete with local produce, the PSFM would continue to provide a necessary service to the agriculture industry and the food distribution sector, because mixed loads of imports often mix imported products (such as exotic fruits and vegetables) with produce grown in south Florida.

Changes in Production Agriculture

Agriculture in South Florida plays a prominent role in the State's production of produce. Table 10 shows the fraction of the State's total output in selected crops that is produced in the PSFM service area. Clearly, changes that affect local agricultural production will affect the level of activity on the PSFM. Two changes that can positively affect the PSFM in the future are

increases in yield per acre, and the development of superior crop varieties. By maintaining the competitiveness of local agriculture, these advances in production would tend to maintain the importance of the PSFM as a centrally-located mixing station. At the same time though, environmental restrictions will increasingly constrain farming in South Florida as key pesticides (such as methyl bromide) are eliminated and agricultural land is purchased by agencies such as the South Florida Water Management District (SWFMD) and the Army Corp of Engineers (USACE) for environmental purposes. In addition, increasing urbanization will continue to drive land values higher, thus reducing the attractiveness for farmers to remain in the area. This demonstrates once again that the proportion of imported produce moving over the market could increase. On the other hand, increasing urbanization could generate a need for the PSFM to function as a point for incoming produce to be distributed to local wholesalers, jobbers and retailers.

Changes in Marketing

Many changes are occurring in the techniques used to pack, ship, and market produce. While it is difficult to say definitively how all these changes will affect the PSFM, one implication is clear – the market, and its tenants, can benefit from these changes given the proper facilities and a willingness to adapt. Changes that can affect the market either negatively or positively include: more sophisticated packing requirements (e.g. custom packs, PLU stickers), communication advances that allow the buying, selling, and brokering of produce to be conducted from anywhere, and the globalization of retailing. Two changes in marketing that may affect the market adversely are first, less re-grading of shipments due to superior varieties and handling practices, and second, an increase in the average size of farms, with a concomitant increase in direct sales and shipping from larger farms. Activity on the PSFM could be stimulated, however, by increased year round availability of many items, and the tendency for large retailers to use the market as a warehouse to facilitate just-in-time delivery.

Table 10. Production of Selected Crops in the Pompano SFM Service Area in Comparison to State Totals.

<u>Crop</u>	<u>Pompano SFM Area (1,000s)</u>	<u>State of Florida (1,000s)</u>	<u>Percent of State Production</u>
Bell Peppers (bu)	10,079	13,921	72
Corn (crts)	11,525	22,987	50
Cucumber (bu)	2,679	5,175	52
Squash (bu)	1,793	2,423	74
Tomatoes (ctns)	23,733	54,750	43

Changes in Consumption

An earlier section showed how the U.S. population is increasing in number, and in ethnic diversity. Moreover, consumption of fruits and vegetables per person is trending strongly upward. The result is not only a large increase in the consumption of fruits and vegetables, but also an increase in the varieties of produce (such as tropical fruits) that are in demand. Supermarkets now carry over 400 produce items versus 150 items in 1970. In the last ten years on the PSFM the number of categories of items moving over the market has increased nearly 60 percent.

Rising demand for a diversity of produce items has important implications for the PSFM since shipping a diversity of products in relatively small quantities will require that more mixed loads be assembled. The PSFM is particularly well-suited for assembling these loads since at least some of the produce will be arriving in area ports from tropical suppliers.

BLUEPRINT FOR FUTURE MARKET FACILITIES

In order to design facilities that will meet the needs of the market’s tenants in the future, an attempt was made to contact every current tenant in order to administer a questionnaire to them (see Appendix A). Of the current 26 tenants, 84% were successfully interviewed. These interviews were in-depth, with each one lasting from twenty minutes to an hour. Not every question was relevant to every tenant, and some questions allowed for multiple answers, so the totals for each question may vary. The results below are reported in percent of responses where appropriate.

Table 11 shows that 91 percent of office space on the market is currently leased and all of the platform space is leased. The tenants were asked to rate the quality of the space they lease on the market on a scale from 0 to 10, where 10 is excellent. They were then asked to rate the value of the space (on a 0 to 3 scale where 3 is excellent) by considering the quality of the space combined with the price they pay. The results in Table 12 shows that the tenants consider the office quality to be below average, but a fair to good value. Platform quality is judged to be of average quality, but a good value.

Table 11. Current Utilization of Office and Platform Space.

Type of Space	Available (Sq. Ft)	Occupied (Sq. Ft.)	Occupancy Percent
Office	20,367	18,709	91
Platform	98,961	98,961	100

Table 12. Tenants’ Ratings of Quality and Value for PSFM Space.

Type of Space	Quality	Value
Office	4.4	Fair-Good (1.7)
Platform	5	Good (2.0)

Tenants were asked to list the advantages to their firm of being located on the PSFM. Forty percent of the tenants think that the geographic location of the market is an advantage. The same percentage thinks that being near brokers is an advantage (Table 13). The ability to inspect produce, the proximity to truckers, and the availability of truck parking appeared on one-third of the tenant's lists. The reputation of the market and proximity to the restaurant were listed thirteen percent of the time. Forty percent of the tenants think that there are no disadvantages to being on the market, although a lack of security, traffic, and prohibition of imports appeared on twenty percent of the tenants' lists (Table 14).

Table 13. Tenants' Perceived Advantages of Being on the PSFM.

Advantages	Percent of Respondents
Geographic location	40
Proximity to brokers	40
Ability to inspect produce	33
Proximity to truckers	33
Truck parking	33
Reputation of the market	13
Proximity to the restaurant	13

Table 14. Tenants' Perceived Disadvantages of Being on the PSFM.

Disadvantages	Percent of Respondents
None	40
Lack of security	20
Traffic, congestion	20
No imports allowed	20
Not near growers	13
Lack of access through N. gate	7

In the following questions, tenants responses are reported along with the responses of “potential tenants.” Potential tenants are identified as firms in the produce industry, excluding firms that focus exclusively on imports or retail sales (such as jobbers), that are located in the Pompano area (including Fort Lauderdale, Boca Raton, and Deerfield Beach.) Using the Produce Reporter Co.’s Blue Book, 38 firms fitting this description were located. Of those 38 firms, 20 were successfully interviewed. These 20 make up the sample of potential tenants.

Both tenants and potential tenants were asked if there is sufficient platform space on the PSFM (Table 15). The majority of tenants (71%) think that there is sufficient platform space on the market, 29% think that there is insufficient space available. Among potential tenants a significant number (47%) had no opinion, while 33% (just over half of those professing an opinion) think that there is sufficient platform space. When asked if there is sufficient space on the market to accommodate additional platform space, the majority of tenants (53%) say the site is too small, while the majority of potential tenants (60%) think that the site can accommodate more platform space (Table 16). (Many tenants who answered “no” were concerned with the loss of truck parking.)

Table 15. Tenants’ and Potential Tenants’ Opinions As To The Adequacy Of Platform Space On The PSFM (percent).

Opinion	Tenants	Potential Tenants
Platform space is adequate	71	33
Platform space is inadequate	29	20
No opinion	0	47

Table 16. Tenants’ and Potential Tenants’ Opinions As To The Adequacy Of The PSFM Site To Accommodate Additional Platform Space (percent).

Opinion	Tenants	Potential Tenants
Yes, more space can be accommodated	47	60
No, the site is too small	53	13
Do not know	0	27

Table 17 shows current and potential tenants' demand for space in a new office building. At the current rate of \$9.86 per square foot tenants would want to lease 10 percent more than they currently lease. Increasing the price approximately 25 percent lowers the amount they would lease by 10 percent. Prospective tenants' demand is a rough projection of the sampled firms' responses to the 38 firms in the area. Due to the very small sample size these figures can have a very large variance.

Table 17. Current and Prospective Tenants' Demand for New Office Space at Various Prices.

Price per Square Foot	Current Tenant	Prospective Tenant ^(a)	Total
\$9.86	20,580	12,350	32,930
\$12.50	18,460	10,070	28,530
\$15.00	12,840	8,550	21,390

(a): Thirty-eight produce firms were contacted, of which 20 were successfully interviewed. Of these, five expressed interest in leasing office space. Square feet demanded are projections of the sample to a universe of 38 firms.

To determine which amenities the tenants would like to see in a new office building, they were asked if they would or would not like each amenity, recognizing that the cost of providing each amenity would be passed on to the lease rate. The following amenities found very high levels of support: a private bathroom for each office, in-office climate control, off-hours air-conditioning, cable TV hookups, and carpeting (Table 18). Office services that meet with high approval are at-door trash removal, and nighttime security personnel (Table 19). In general, potential tenants seemed to prefer more amenities and services than do current tenants.

Table 18. Tenants' and Potential Tenants' Preferences for Selected Office Amenities
(Percent Desiring the Amenity.)

Amenities	Tenants	Prospective Tenants
Shared Conference Room	31	33
Employee Lounge, Not For Truckers	27	47
In-Office Coffee Bar/Sink	71	80
Shared Executive Bathroom	7	27
Private Bathroom	100	100
Carpeting	79	100
Window Treatments	71	67
Alarm System	44	80
Intercom System	33	56
High-Speed Internet Connection	60	81
Cable TV Hookup	80	93
Digital Door Locks	33	60
Video Security Systems	44	60
Reserved Parking	60	80
In-Office Climate Control	100	100
Off-Hours Air Conditioning	100	93
Outside Lights For Security	7	0
Open Landscaping For Security	7	0
Full Kitchen	0	7

Table 19. Tenants' and Potential Tenants' Preferences for Selected Office Services
(Percent Desiring the Service.)

Services	Tenants	Potential Tenants
Daily at-door trash removal	76	80
Daily trash removal from inside offices	7	67
Cleaning services	20	73
Exterior window washing	62	67
Interior window washing	0	60
Pest control	57	80
Daytime security personnel	47	50
Nighttime security personnel	93	87

According to Table 20 the tenants are highly satisfied with the snack bar on the platform and consider it very important to the market. They are somewhat less satisfied with the restaurant, although it does receive an above average rating. The tenants also consider the restaurant to be important to the well-being of the market.

Table 20. Tenants’ Evaluations of Food Service Facilities on the PSFM (On a scale of 0-10, where 10 is excellent).

Facility/Criteria	Average Rating
<u>Restaurant</u>	
Personal satisfaction	6.4
Importance to the tenant	5.6
Importance to the market	7.5
<u>Snack Bar</u>	
Personal satisfaction	8.6
Importance to the tenant	7.6
Importance to the market	9.5

Suggestions for improving the restaurant are presented in Table 21 along with the number of people making each type of suggestion. Inadequate restroom facilities are frequently mentioned, not just as a problem for the restaurant but for the market as a whole.

Table 21. Tenants' Suggestions for Improving the PSFM's Foodservice Facilities.

Facility/Suggestions	Number of Tenants
<u>Restaurant Facilities</u>	
Improve restrooms	3
Modernize facilities for cooking, storage	2
Improve ventilation to reduce tobacco smoke	2
Keep restaurant cleaner	2
<u>Menu</u>	
Serve more fresh vegetables	3
Serve deli sandwiches	1
<u>Snack Bar</u>	
Serve more hot food	1

When asked about the necessity for ancillary business services there was not an overwhelming response from the tenants since their offices already have most of these services (Table 22). Those tenants who do see a need for such services want them for the truckers so that the drivers will stop asking to use their office equipment.

Table 22. Tenant and Potential Tenant Utilization of Selected Business Services, if Available at the PSFM (Percent).

Business service	Tenants	Potential Tenants
Document copying	40	7
Faxing	33	13
Typing	13	7
Bulk mailing	26	20
Overnight courier	33	73
Computer with internet access	13	20
Sale of basic office supplies	33	27
Notary Public	N.A.	N.A.
Telephones	N.A.	N.A.

For many years it has been postulated that the PSFM might make itself a showcase of Florida produce. The following tables show little support for the idea among the tenants. Their primary concerns are that none of their clients would see such a display, the produce would need to be refreshed frequently, and if the display was not maintained it would look bad and attract insects. Some tenants suggested that a static display of the history of the market would be nice. Other suggestions for improving the market's facilities focussed on the conference room. Several of the members of the Farmers' Market Authority as well as several tenants suggested that a multi-use conference room be designed to handle periodic training sessions as well as public meetings. In personal interviews several tenants indicated their willingness to support periodic training sessions for produce inspection and marketing, and for retail produce department employees. These

training sessions are envisioned partly as community outreach programs and partly as a step in consolidating state and federal agricultural representatives and their offices on the PSFM.

Table 23. Tenants’ and Potential Tenants’ Level of Interest in Having a Display of Fresh Produce in Public Areas of a New Office Building (Percent).

Response	Tenants	Potential Tenants
Yes, would like a display of fresh produce	13	27
No, would not like a display of fresh produce	67	67
Do not know	20	7

Table 24. Tenants’ and Potential Tenants’ Willingness to Provide Fresh Produce for an On-Going Display in a New Office Building (Percent.)

Willingness to provide fresh produce	Tenants	Potential Tenants
Yes, willing	7	33
No, unwilling	93	60
Uncertain	0	7

Table 25. Tenants’ and Potential Tenants’ Concerns About an On-Going Display of Fresh Produce (Percent).

Concerns	Tenants	Potential Tenants
None	8	19
Lack of freshness	33	12
Insects	25	12
Neglect	17	31
Waste of money	17	25

Most tenants had no preference for the location of a new office building. Of those with a preference, the vast majority preferred the south side of the property.

Table 26. Tenants' preferred location for a new office building on the PSFM property (Percent).

Preferred location	Percent of Respondents
North side	7
South side	33
Current site of offices	0
No preference	60

SUMMARY AND CONCLUSIONS

This report examines the long-run economic viability of the Pompano State Farmers' Market. The market has functioned as a major assembly and shipping point for Florida-grown fresh produce since 1939. Although the volume of produce physically moving across the market declined steadily during the 1980s, volume in the 1990s has stabilized at approximately 3.1 million units annually. Projections for the next 20 years indicate that volume will remain fairly stable.

Acreage, production and value of fresh vegetables in the market's south Florida service area have declined about 20 percent since the 1992 Census of Agriculture, but this is primarily attributable to increased import competition from Mexico resulting from NAFTA and the devaluation of the Peso. When all agricultural crops, i.e., vegetables, fruits and nursery crops are considered, the decline in value is only about eight percent between 1992 and 1997. Thus, it appears that agriculture as a whole remains fairly robust. However, the outlook for vegetable production in south Florida is mixed. Improved crop yields and product quality are likely as new cultivars are developed, giving Florida a competitive advantage. On the negative side, the loss of key pesticides due to environmental concerns could put Florida producers at a decided advantage. One example is the ban on methyl bromide for soil fumigation, scheduled for 2005 in Florida, but 2015 in developing countries such as Mexico. Other environmental regulations and the purchase of agricultural land by various governmental agencies may also place further constraints on south Florida agriculture. Urbanization is also a real threat to production agriculture in several of the counties in the market's service area, as real estate developers push prices for farmland to stratospheric heights, approaching \$100,000 per acre in some locales.

Even though production agriculture in south Florida has declined somewhat in the past few years and may face daunting challenges in the future, the outlook for the PSFM remains bright. One of the major reasons for this positive outlook is the long-term upward trend in the consumption of fresh fruits and vegetables by American consumers, especially the items that have been traditionally handled by the PSFM. Additionally, the sheer diversity of produce items being offered by retail stores in Florida and throughout Florida's primary marketing region works to the advantage of the PSFM due to the increased demand for mixed loads. For example, in the 1970s, the typical supermarket handled about 100 to 150 produce items during the course of a year; today, it is not uncommon for a large supermarket to sell 400 or more items, as retailers strive for the

“Garden of Eden” image. Many of the more exotic (and low-volume) items are imported through airports and seaports of south Florida, and some are grown in the market’s service area as well.

Another factor driving the demand for new and unusual produce items is the increasing ethnic diversity of the U.S. and Florida population. By 2020, approximately 17 percent of the U.S. population will be of Hispanic origin, and an additional six percent will be of Asian origin. Many of these ethnic consumers are familiar with produce items that are not common to the U.S. Thus, increasing ethnic diversity is driving the demand for an increasingly diverse product mix, and because many of these items are relatively low volumes, this has created a greater demand for mixed loads. Because of its history of providing mixed loads and its proximity to domestic and imported supplies of unusual produce, the PSFM is well positioned to meet future produce industry’s demands

Today the PSFM is at a literal and figurative “crossroads”. From a geographic standpoint, the market enjoys a unique, strategic location at the crossroads of south Florida’s diverse fruit and vegetable industry. Coupled with the dramatic growth in exotic imported produce, much of which enters through south Florida’s seaports and airports, the market’s location is ideally suited to serve the emerging needs of the produce industry and ultimately, American consumers. However, from a functional standpoint, the market is at the figurative “crossroads” because much of its infrastructure is now 60 years old and is approaching the end of its useful life. If the market is to attract and retain tenants and function as a major trading center for the produce industry, a significant investment in infrastructure will soon be required.

APPENDIX A

Current Tenant Questionnaire

DRAFT

1) How long have you been a tenant on the Pompano State Farmers' Market (PSFM)?
 _____ years.

2) What business services do you conduct from your PSFM office(s)? _____

3) What types of space do you rent on the PSFM? Using a rating scale where 10 = "Excellent" and 0 = "Very poor", how would you rate the **quality** of the [type] space that you rent? Considering the quality of the space, in conjunction with the price you pay, how would you describe the **value** received: "Excellent", "Good", "Fair", or "Poor".

Type [check]	Quality rating 0 - 10	Value rating [circle]			
Office _____	_____	Excellent	Good	Fair	Poor
Platform _____	_____	Excellent	Good	Fair	Poor
Owned cooler _____	_____	Excellent	Good	Fair	Poor
State cooler _____	_____	Excellent	Good	Fair	Poor

4) From your perspective, what are the major advantages, if any, of being located on the PSFM? _____

5) What are the major disadvantages, if any?

6) Given your experience in the produce business, how important, if at all, do you think that it will be ten years from now for your firm to be located on the PSFM? Please use a rating scale where 10 = extremely important and 0 = not important at all.

7) What technological changes, if any, in production agriculture do you see that might affect how you do business in the Farmers' Market?

8) What technological changes, if any, in grading, packing, and shipping do you see that might affect how you do business in the Farmers' Market?

- 9) A. How much (TYPE: office; platform; State-owned cooler; individually-owned cooler) space do you currently lease on the PSFM? How many [type] units?
- B. How much [type] space, if any, do you currently lease off the PSFM? We realize that this is very confidential, but how much do you pay for the (TYPE) space off the market (\$ per sq. ft. per year)?
- C. The State Farmers' Market system is exploring the possibility of building new office space and refurbishing platform and cooler space. If (TYPE of space) space were available on the market at (Current, rate #2, rate #3) per sq. ft. per year, how much total [TYPE] space would you lease?

	OFFICE	PLATFORM	STATE OWNED COOLER	OWNED COOLER
PSFM (sq. ft)				
Number of Units				
Square ft. off PSFM				
Number of Units off PSFM				
Private lease rates				
Current PSFM lease rates	\$9.86	\$1.92	\$7.74	\$2.61
Units needed at current rate				
Square ft. needed at current rate				
Projected Rate #2	\$12.50	\$2.50		\$3.25
Units needed at Rate #2				
Square ft. needed at Rate #2				
Projected Rate #3	\$15.00	\$3.00		\$4.00
Units needed at Rate #3				
Space needed at Rate #3				

10) Which of the following services and amenities would you be willing to pay for, at cost, in a new office building?

		<u>Comments</u>
A)	Shared conference room	Yes or No
B)	Employee lounge (not for truckers)	Yes or No
C)	In-office coffee bar/sink area	Yes or No
D)	Daily at-door trash removal	Yes or No
E)	Daily trash removal from inside offices	Yes or No
F)	Cleaning service (vacuuming, sweeping, mopping, dusting)	Yes or No
G)	Exterior window washing	Yes or No
H)	Interior window washing	Yes or No
I)	Pest-control	Yes or No
J)	Shared executive bathroom	Yes or No
K))Private bathroom	Yes or No
L)	Carpeting	Yes or No
M)	Window treatments (e.g. vertical blinds)	Yes or No
N)	Alarm system (e.g. office burglar alarm)	Yes or No
O)	Daytime security personnel	Yes or No
P)	Nighttime security personnel	Yes or No
Q)	Intercom system	Yes or No
R)	High-speed internet connection	Yes or No
S)	Cable-TV hookup	Yes or No
T)	Digital door locks	Yes or No
U)	Video security system	Yes or No
V)	Reserved parking	Yes or No
W)	In-office climate control	Yes or No
X)	Off-hours air-conditioning system	Yes or No
Y)	Other (specify) _____	

11) Do you currently make coffee in your office? Yes or No

12) If a new office building were to be built, which location on the property would you prefer?

1. Northern-most portion of the parking lot. Why? _____
2. Southern-most portion of the parking lot (near Atlantic). Why? _____
3. Current location. Why? _____
4. No strong preference.

13) In your opinion, is there or is there not sufficient platform space available on the PSFM?
 Yes No No opinion

14) In your opinion, is there or is there not sufficient room for additional platform space on the PSFM?
No. If no, why not? _____
Yes. If yes, where would you locate it? _____

15) (For those leasing or desiring platform space:) What kinds of amenities would you be willing to pay for, at cost, on a refurbished or new platform?
Office Cubicle Yes or No If yes: Approx. size _____
Intercom Yes or No
Air-conditioning Yes or No

Other (specify:) _____

16) On an **average** day, how many trips do you make from your office to the platform?
_____ trips.

17) On a **busy** day, how many trips do you make from your office to the platform?
_____ trips.

18) Foodservice on the market.
a) About how many times do you patronize the market's **restaurant** each week?
About how much do you spend each week? In general, how would you rate your satisfaction with the **restaurant**, where 10 = extremely satisfied and 0 = extremely dissatisfied? In your opinion, how important is it to you personally, if at all, to have a **restaurant** on the PSFM? In your opinion, how important is it to the overall well-being of the market, if at all, to have a **restaurant** on the PSFM? Please rate importance, where 10 = extremely important and 0 = extremely unimportant.

Times per week _____
Money spent each week _____
Satisfaction rating: _____
Personal Importance rating: _____
Market Importance rating: _____

b) What suggestions, if any, do you have which would improve the restaurant?

- c) About how many times do you patronize the **snack bar** on the platform each week? About how much do you spend each week? In general, how would you rate your satisfaction with the snack bar, where 10 = extremely satisfied and 0 = extremely dissatisfied? In your opinion, how important is it to you personally, if at all, to have a **snack bar** on the PSFM? In your opinion, how important is it to the overall well-being of the market, if at all, to have a **snack bar** on the PSFM? Please rate importance, where 10 = extremely important and 0 = extremely unimportant.

Times per week _____
 Money spent each week _____
 Satisfaction rating: _____
 Personal Importance rating: _____
 Market Importance rating: _____

- d) What suggestions, if any, do you have which would improve the snack bar on the platform?

- 19) If a **limited assortment convenience store** were established as part of the restaurant, what types of items, if any, would you be likely to buy there? About how much would you be likely to spend on [item] each week?

Item	Weekly expenditure

- 20) If **custom "business services"** were available on the PSFM, which of the following services, if any, would you use if priced at competitive rates? About how many/much would you need each week?

Service			Number/week
A. Document copying	Yes	No	_____ pages
B. Faxing	Yes	No	_____ pages
C. Typing	Yes	No	_____ pages
D. Bulk mailing	Yes	No	_____ pieces
E. Overnight courier	Yes	No	_____ pieces
F. Computer with internet access	Yes	No	_____ hours
G. Office supplies	Yes	No	_____
H. Other _____	Yes	No	_____

21) Would you like or would you not like for the office building to have a display of fresh produce items in the lobby?
 Yes _____ Why? _____
 No _____ Why? _____
 D.K. _____

22) If space were available for a display of fresh produce grown in Florida in the lobby area of a new office building, how often do you think the display would have to be "freshened up"?

- a) Every _____ days.
- b) What kinds(s) of items, if any, would you personally be willing to provide? Over what approximate period of time would you be willing to provide these items?

Item(s)	Approx. Time Period
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

c) In your opinion, who would view such a display of fresh produce items?

d) In your opinion, what major benefits, if any, would be gained from such a display? Who would be the major beneficiaries?

Benefits	Beneficiaries
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

e) What concerns, if any, do you have about an on-going display of fresh produce at the PSFM?

f) How effective do you feel such a display would be in meeting your firm's business objectives where 10 = extremely effective and 0 = not effective at all.

23) In addition to the things we have already discussed, what kinds of services or amenities, if any, would you like to see at the PSFM?
