



## **4.0 ELEMENT 4 – STRATEGY DEVELOPMENT ELEMENT**

This section presents the Strategy Development Phase of the Master Plan. The objective of this phase of the planning effort is to provide Port Everglades' senior management team with recommended strategies for diversifying and expanding the Port's business and financing the recommended master plan.

### **4.1 ANALYZE OCEAN CARGO TRENDS RELATED TO SOUTH FLORIDA MARKET POTENTIAL**

In recent years, the container shipping industry has been experiencing numerous mergers and acquisitions among carriers. Low net profitability resulting from chronically depressed ocean freight rates and high capital costs have been the driving forces. Container ship lines have continued to invest in larger container vessels to reduce per slot operating costs and improve margins during a period of declining rates. In order to maximize utilization of these larger vessels, ship lines have entered alliances with other carriers and subsequently consolidated ports. By consolidating port calls, ship lines are able to maximize vessel utilization by minimizing port calls, build scale economies in terminals and provide the opportunity to integrate multiple services.

In general, the effort to reduce costs has resulted in port consolidations and alliances controlling the majority of container business in selected trade lanes. Port characteristics, such as location, capacity, productivity, vessel access, costs, room to grow, and landside access to multiple markets, are all critical factors influencing ship lines' port selections. Ultimately, the combination of container shipping trends, port characteristics, and geographic coverage (both international and domestic) will determine long-term growth potential for any major container port.

Southern Florida ports have a single global carrier, and two dominant regional carriers. Maersk SeaLand is the largest carrier in the Southern Florida region, handling more than 2 million tons of container cargo annually. Seaboard Marine and Crowley, regional niche services, dominate the Central America and Caribbean trades. These carriers split their services between Port Everglades and the Port of Miami as both ports effectively serve the same Florida and eastern US markets.

Florida ports, particularly southern Florida ports, dominate regional north/south trades. Port Everglades primarily competes with the Port of Miami for cargo in the Central America, Caribbean and Northern South America trades. Port Everglades dominates the Central American trade with 55% of the market in the South Atlantic region. Port Everglades and Miami both dominate Northern South America trade with 61% of the South Atlantic trade collectively. Jacksonville has a unique role as the gateway to Puerto Rico, with limited service elsewhere.

Intermodal rail service plays an important role at South Florida ports. The Florida East Coast (FEC) Railroad's intermodal service provides container lines serving the Latin American trades with efficient access to northern Florida and eastern and Midwest US markets. The FEC's rail operation is one of the most efficient in the country and thus enhances the competitive position of South Florida markets in the Latin American trades. The proximity of the FEC's Andrews Avenue intermodal rail facility is a competitive advantage for Port Everglades since it improves the efficiency and lowers the cost of trucking containers between the port and the FEC. The potential to develop an on-port intermodal terminal is a key strength in sustaining Port Everglades' position as a regional gateway.



The emergence of Freeport in the Bahamas poses a potential challenge to South Florida ports. Several of world's largest container shipping lines have begun to transship cargoes to and from U.S. South Atlantic and South Florida ports via Freeport. This affects U.S. South Atlantic and South Florida ports in two ways. First, it can result in smaller feeder vessels serving these ports in lieu of the large vessels that carry container cargoes between major origins and destinations. This can limit the effective reach of ports to the local market they serve. Second, the substitution of smaller feeder vessels for the larger vessels can reduce dockage revenues, as significant source of container revenue. Port Everglades will need to closely monitor developments at Freeport in order to anticipate potential affects on its container business in the future.

#### **4.2 ANALYZE CRUISE INDUSTRY TRENDS**

As noted before, the cruise industry is currently being driven by the complex interaction of both demand side and supply side factors. Demand side factors include:

- An aging population.
- Increasing per capita income.
- Growing recognition of the positive attributes of cruising as reflected in reportedly high repeat factors by many cruise lines.

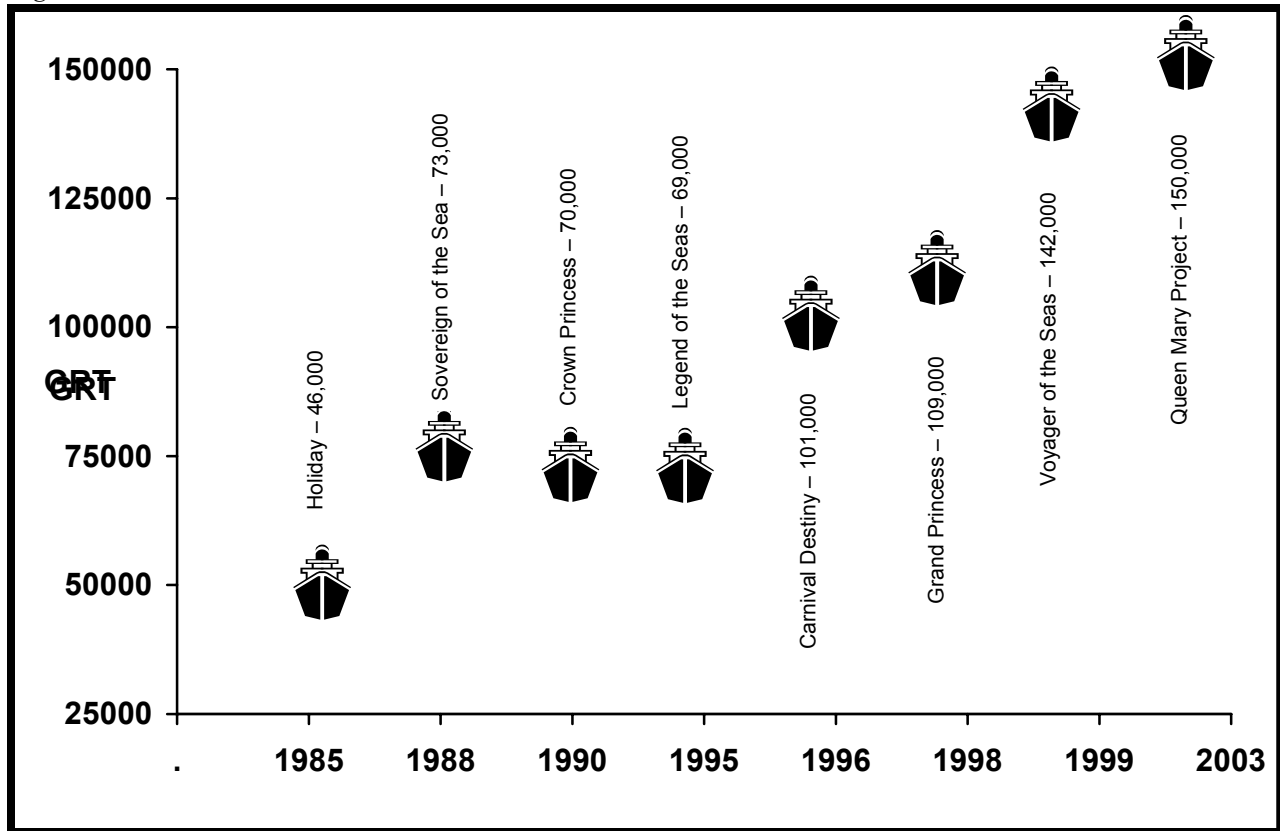
Supply side factors driving the industry include:

- The proliferation of products and itineraries.
- The mass appeal of the Caribbean cruise market due to its proximity to the US and Canada, its diversity and seasonal appeal.
- The pricing strategies of major cruise lines.
- The proactive marketing strategies of the cruise line industry to broaden their market reach and increase their share of the world's tourist industry.



Perhaps the most notable of the supply side trends is the relentless trend toward larger cruise ships (Figure 4.1)

Figure 4.1: Cruise Vessel Size Trends



The cruise industry has begun introducing the latest generation of cruise ships. These ships, known as mega ships, accommodate 3,000 or more passengers per voyage or nearly 20 percent to 50 percent more than the previous generations of cruise ships. These vessels pose significant challenges to ports. They require longer berths, substantially larger passenger processing areas, larger, more efficient landside access and significant airlift capacity. The ability of ports to develop the infrastructure to accommodate and process mega ships efficiently in the tight time windows demanded by the cruise line operators is key to sustaining a competitive position in the cruise port industry.

The introduction of latest generation mega ships poses significant challenges to ports on the landside. These larger ships disembark and embark upwards of 5,000 to 7,000 or more passengers per vessel call at their homeports. Handling this volume of passengers and their baggage efficiently and safely pose challenges to the cruise lines, ports, landside transportation companies (buses, taxis, limos) and airports. These parties will need to continue to work together to ensure passengers are handled safely and efficiently.

**4.3 DEVELOP STRATEGIES TO COORDINATE FACILITY AND INFRASTRUCTURE DEVELOPMENT ACROSS BUSINESS LINES**

The Master Plan provides the Port’s management team with two key tools to achieve this objective. The first tool is the Master Plan itself. The Master Plan provides the Port with a road



map for planning and developing marine terminal and supporting infrastructure. The Master Plan is a market driven-plan, i.e. it is driven by the collective requirements of the Port's current customer base. It is an integrated, phased plan designed to ensure the Port's customers will have the terminals and infrastructure required to grow and sustain their businesses at the Port, thereby sustaining and growing the significant economic contribution the Port and its customers make to Broward County and the State of Florida. Consequently, the Master Plan should be the first criteria against which any proposed development should be evaluated.

The Port's second set of tools to evaluate whether or not to proceed with planning and developing the proposed project are the financial and economic impact models and design guidelines contained in the Master Plan. These tools can be used to determine:

- The estimated cost of the proposed project based on the Master Plan design guidelines
- Does the proposed development generate sufficient cash over its useful life to amortize the Port's investment? Does the proposed development generate superior cash over the life of the project relative to developments that are consistent with the Master Plan?
- Does the proposed development generate both superior economic impacts relative to the required investment and superior impacts relative to those associated with competing developments that are consistent with the Master Plan?
- What effect does the proposed project have on the Port's ability to continue to fund the implementation of the Master Plan?

Collectively, these tools provide the Port's senior management team with the capabilities necessary to ensure a consistent, market-driven, integrated approach is taken to planning and implementing new development projects across the Port's existing lines of business and potential new lines of business.

#### **4.4 DEVELOP A STRATEGY TO ATTRACT "OFF-PEAK" CRUISE ACTIVITY**

"Market realities" are assisting the Port to develop off-peak use strategies. First, weekend berth availability in the South Florida cruise market is very tight. Both the Port of Miami and Port Everglades are currently operating near full capacity on weekends during the cruise season. The major cruise line customers recognize this condition, generally recognize that the ability of the ports to significantly expand current berth capacity to accommodate additional increases in this peak demand is limited, and recognize that there are practical (demand, berth constraints in ports-of-call) limits to the number of weekend sailings that can be economically offered in the market place.

Second, cruise industry research indicates that the amount of leisure time available to people in general and to the North American population in particular may be declining. Consequently, the cruise line industry in general, and the South Florida segment in particular, have begun to offer a variety of cruise products involving shorter itineraries and week day sailings. The significant increase in three and four day cruises that sail on Fridays and Mondays are the first "diversification" into "off-peak days by the cruise industry. The cruise industry's increasing disposition to offering non-weekend products will facilitate the Port's attempts to diversify cruise vessel calls to "non-peak" days. Taking a proactive approach to working with the cruise lines to expand their use of cruise berths and terminals during weekdays should further enhance the



ability of the cruise lines to diversify their product offerings. The critical elements of the recommended off-peak asset utilization strategy for the Port's cruise business include:

- Proactive approach to working with the cruise lines to plan and introduce new cruise products that call the port on weekdays. The Port's role in this process is to ensure, to the fullest extent possible, that its cruise line customers have access to the berths and facilities that best meet their needs
- Given current and anticipated market conditions, the Port should not need to offer pricing incentives to induce the cruise lines to introduce off-peak services
- The Port will realize the greatest long-term benefit from working with its customers to develop 52 week services via the Port
- Multi-year agreements that link capacity guarantees during peak season periods to sustained commitments during off-peak periods are a key element of the strategy
- Financial terms should focus on providing appropriate incentives to commit to full year operations while generating sufficient funds to amortize the Port's investment in modern facilities that meet cruise lines long-term needs

#### **4.5 DEVELOP AN "OFF-PEAK" CARGO STRATEGY**

A second market reality that may enhance the Port's asset enhancement efforts is the trend for shippers to demand and carriers to offer increased container vessel sailings per week. The most salient example of this trend is CP Ships' reported offering of 11 transatlantic sailings per week between North America and North Europe. Similarly, most transpacific carriers now offer 5-6 sailings per week between Asia and the west coast of North America. The potential benefits to the Port are twofold: first, the peak demand for container berth capacity on a relatively few days per week (typically some combination of Friday, Saturday, Sunday and Monday) is reduced. Second, the size of container vessels and thus the total lineal feet of berth required are generally reduced. Carriers can transport the same number of containers in smaller vessels if the sailing frequency increases.

Diversity has been a salient strength of the Port's cargo business. Diversity has lessened the Port's market and financial risks, generated significant economic benefits for Broward County and South Florida and ensured competitive access to key breakbulk and bulk commodities by Broward County and South Florida businesses. The market, cargo forecasting, capacity and needs analyses indicate that the Port faces significant challenges to sustaining the diversity of its cargo base. Part of this challenge is based on the market reality that breakbulk and dry bulk commodities will not grow as fast in the future as container cargo. Part of it is based on the financial returns alternative cargo types generate and part of the challenge is based on the fact that over the 20 year planning horizon the Port will not have sufficient land area and capital to accommodate all businesses. However, development of a cargo marketing strategy that disperses cargo activity in general and breakbulk and dry bulk cargo in particular to off-peak periods will enhance the Port's ability to maintain a significant level of diversity and accommodate the needs of breakbulk and dry bulk cargoes.

The recommended steps to sustaining the Port's diverse cargo base and developing off-peak cargo strategies are:

- First, the Master Plan emphasizes flexibility of use for the Port's marine terminal assets. Wherever practical, cruise facilities are designed to handle cargoes in general and breakbulk cargoes in particular. Similarly, container terminals are



- designed to accommodate roll-on/roll-off traffic. Maintaining this flexible capability is the first requisite step to developing an effective off-peak cargo activity strategy.
- Second, work with the Port's existing breakbulk, dry bulk and smaller container line customers to understand their needs, the needs of their customers and the implications for berth and terminal use. If, in working with its customers the Port determines that breakbulk and dry bulk carriers' services to their customers are not unduly disrupted by having vessel calls occur on weekdays in general and mid-week days in particular, then the Port should work with its carrier customers to ensure breakbulk, dry bulk and selected container services call on these off-peak days. Incentives such as preferential berthing and storage areas are two operational incentives that may enhance the efficiency of carriers' operations while enhancing the off-peak use of berths and terminals.
  - Third, instituting premium pricing during peak periods. This strategy could prove to be an effective disincentive to customers who could use cargo facilities during off-peak periods without negative commercial or financial consequences.
  - Fourth, review and refine preferential berthing policies. Specifically, the Port should seek opportunities, created by expiration of existing agreements, to implement more flexible berthing policies. Preferential berthing, particularly for large, high volume container and cruise lines are a standard industry practice. However, such agreements should be structured to ensure the customer has access to a berth within reasonable proximity of the terminal it requires while maintaining the Port's flexibility to maximize berth utilization.

#### **4.6 RECOMMENDED STRATEGIES FOR ATTRACTING CRUISE/FERRY SERVICES TO THE PORT**

The objective of this task is to outline facilities and marketing strategies the Port's senior management team can use the attract combination-cruise ferry services to the Port. This section outlines the Team's recommendations to accomplish this objective.

The key facility requirements to accommodating cruise-ferry services include:

- RoRo berth or berths, typically for stern or bow ramped vessels
- Passenger processing (ticket counters, waiting area, and restrooms at a minimum) areas
- Vehicle staging area, preferably with the ability to segregate passenger and commercial vehicles

The key "market or commercial factors" for attracting cruise-ferry services typically include:

- Geographic position relative to markets most efficiently served via ferry
  - For example, in both the case of Seattle and the Olympic Peninsula and Portland, Maine and Nova Scotia, ferries save substantial (5+hours or more) time relative to highways
- Efficient highway connections: the cruise-ferry port must have convenient, efficient highway links (preferably the interstate highway system) to major population and freight markets
- Proximity to large, local population and freight markets is a plus, but not a prerequisite



The Master Plan forecasts show the Port will likely experience significant long-term growth in its cruise and container businesses. The Master Plan's needs assessment shows that the Port will face significant challenges in accommodating this growth; particularly cruise growth during the next 5-8 years. Given these challenges, the potential opening of Cuba, and the demands cruise-ferry services place on port facilities, the Port's senior management team will need to carefully consider the cost/benefit tradeoffs associated with an aggressive marketing effort to attract cruise-ferry services.

In terms of a marketing strategy, the three most logical markets for cruise-ferry services are the Bahamas, Cuba and potentially in the longer-term inter-coastal and or intracoastal services. Of these three, the Bahamas offers the greatest potential in the short-term due to their proximity, highly developed tourist industries, established infrastructure and proximity to Port Everglades. In terms of key marketing steps, the Port's senior management team would need to pursue two parallel paths to attracting cruise-ferry services. The first of these paths would address the demand side, beginning with the Bahamas market for the reasons stated above. Specific tasks to be accomplished would include:

- Sizing the market in terms of the number of people and vehicles currently moving between the Bahamas and the US
- Segmenting the market in terms of US gateways, US and Bahamian origins and destinations, passengers versus cargo, the number of vehicles, and current modal splits
- Assessing competitive factors including the characteristics of alternative modes (air, pure cruise, current RoRo cargo operations), i.e. service frequency, reliability, cost, and services offered, lanes in which they are offered, and respective abilities to meet individual market segment's cost/service requirements
- Conducting customer research by market segment to understand each segments service/cost requirements and views on the relative attractiveness of alternative modes
- Developing traffic projections by mode and lane segment
- Evaluating the market, facility, financial and economic impact effects to the Port and its current businesses and the "fit" of potential services with the Master Plan

The second path to be pursued is to evaluate the provider side of the business, i.e. identifying and evaluating potential cruise-ferry service providers. This task would involve working with the Port's current cruise and cargo service providers as well as "prospecting" for potential new providers who may be considering entry into this market. Key steps to be taken in evaluating the "provider" side of the cruise-ferry opportunity include:

- Identifying current and potential service providers through primary (interviews) and secondary (industry research) research
- Identifying the technical, operational and economic drivers of the feasibility of instituting such services
- In coordination with current and potential customers, identifying the facility and service requirements
- Assessing the capital investment and financial benefits of investing in the requisite facilities
- Evaluating alternative pricing structures that optimize the use of assets allocated to the potential services



- Evaluating, within the context of the demand-side, provider-side and Task 2.1.3 recommendations, the overall attractiveness and feasibility of the proposed services

#### **4.7 POSITIONING PORT EVERGLADES FOR THE ANTICIPATED OPENING OF CUBA**

The opening of Cuba to trade with the United States appears closer than at any point in time in the last forty years. Crowley's recently announced intention to begin a freight service to Cuba is the latest support for this observation. Given the reported condition of the Cuban economy, i.e. highly oriented towards agriculture and with very low "hard currency" reserves, the opening of Cuba will likely occur in three stages. The first stage will be an initial rush of cargo and people, followed by a retrenchment of trade and tourist flows as the "economic realities" of Cuba's economy begin to affect trade and tourism, followed by a normalizing of tourism and trade as the Cuban economy begins to expand and diversify into sustainable sectors.

The challenge for Port Everglades is twofold, avoiding building for the initial peak and ensuring it has the inland transport connections and port facilities to maximize the efficient, cost-effective movement of cargo and people between Cuba and inland US markets. The competition among U.S. ports for Cuban trade and cruise traffic will be substantial.

In terms of positioning the Port, the Port's senior management team should pursue the same parallel paths described above for pursuing cruise-ferry services. However, in contrast to the cruise-ferry opportunity, the recommended LoLo/RoRo facilities along the Dania Canal at the southern end of Southport probably are the most ideally suited for accommodating trade with Cuba. This is based on the assumptions that the demand for cargo services will likely be substantially greater than the demand for passenger services and that inland rail transport will likely play a significant role at least in the early stages of US-Cuba trade. The rail potential at Southport, together with the proposed LoLo/RoRo capability, provide an ideal location for handling what are likely to be multiple sailings per day to and from Cuba. This high volume of activity could be effectively segregated from the Port's other cargo businesses to a very high degree, particularly on the landside. Further, Crowley is likely to figure prominently in the development of this trade and their location at the south end of Southport further enhances this location as the logical one for handling Cuba trade.

#### **4.8 DEVELOP AN ACTION PLAN TO ENHANCE FACILITY AND LAND USE AND TO IMPLEMENT EXPANSION PROGRAMS**

The Implementation Plan, covered in Section 6.0 of this report covers the development plan associated with expansion programs.

#### **4.9 ANALYZE NAVY AND COAST GUARD IMPACTS**

Both the Navy and the Coast Guard play significant roles in Port Everglades. The Navy together with the Port hosts Fleet Week each year. The Coast Guard is both a regulator of port activities and user of the port. They each impact the Port, its facilities and its operations.

The primary impacts of associated with the Navy are the berthing of aircraft carriers and nuclear submarines during Fleet Week. Each of these vessels has special berthing requirements, which limits where they can be accommodated. Typically aircraft carriers are moored at Berths 25-26 while nuclear submarines are moored at Berth 22. The Master Plan recommendations for the redevelopment of Midport will enhance the Port's ability to accommodate these vessels at these berths. Both Berth 22 and the Berth 25-26 are being extended in order to accommodate the new



generation of mega cruise ships. In certain instances, these vessels approach the size of aircraft carriers. The extended berths and facilities will allow each of these vessel types to be more easily accommodated together with their crews and the tourists who visit these vessels during Fleet Week.

The Master Plan incorporates both the regulatory input and needs of the Coast Guard. Both the final Northport and Midport cruise projects reflect the input of the Coast Guard. In the case of Northport, petroleum operations at the new petroleum piers will be limited to low volatile “black oil” operations at the northern most pier. Also, petroleum operations will be suspended at the northern most pier during Berth 4 cruise operations. At Midport, the final redevelopment of Berths 25-29 has been modified to accommodate the needs of the Coast Guard and to meet navigational requirements.

#### ***4.10 DEVELOP A USER-FRIENDLY COMPUTER-BASED ANALYTICAL TOOL***

Element 4 - Strategy Development includes the development of a “user-friendly” model that the Port’s senior management team can use in planning and evaluating alternative port development options. Two models have been developed for the Port’s management team. The first of these models is an economic impact model. This model estimates the economic benefits generated for Broward County and the State of Florida by the Port’s cargo and cruise activities. The model is a tailored version of the model recently developed for the U.S Maritime Administration, US Department of Transportation. Specifically, the model quantifies jobs, income to citizens, business activity, taxes (local, state and federal), and value added output for Broward County and the State of Florida.

The second model is a financial model. The model includes both a five-year analysis of the Port’s historical financial performance and a twenty-year financial projection for the Port’s businesses, based on the Element II Baseline Cargo Forecasts.



**4.10.1 Economic Impact of Port Everglades**

The objective of the Economic Impact Assessment is to use the MARAD Port Kit, developed by A. Strauss-Wieder, Inc. and Rutgers University, to estimate the economic value of port activities in easily understandable terms – jobs, income, and taxes generated. The model measures both the direct port industry impacts of investment, cargo flows or passenger flows and the total economic effect on the Broward County and the State of Florida.

In FY 2000, Port Everglades in total (directly and indirectly) generated more than 19,000 jobs in Broward County and nearly 27,000 jobs in the State of Florida. The Port generated over \$545 million in personal income (wages, salaries and proprietors’ income) for workers throughout Broward County and \$764 million for workers in the State of Florida. In addition, the Port’s activities generated \$45 million in local and \$57 million in State taxes.

Implementation of the recommended draft master development plan will sustain the Port’s ability to generate substantial economic benefits to Broward County and the State of Florida. The preliminary incremental economic benefits projected to be generated in Broward County and the State of Florida over the next 10 years as a result of implementing the master plan include (Figure 4.2):

*Figure 4.2: Incremental Economic Benefits for Broward County and the State of Florida*

	<b>Broward County</b>	<b>State of Florida</b>
New Jobs	14,000	18,000
New Wages	\$431 Million	\$535 Million
New Taxes	\$40 Million	\$41 Million

**4.10.2 Financial Analysis & Forecast**

The financial assessment consists of a financial model developed by Norbridge that analyzes revenues and expenses by business line. The financial model provides pro forma profit and loss statements (P&Ls) for the Port’s major lines of business: cruise, petroleum, container, real estate, dry bulk, breakbulk and all other.

The forecast methodology comprised the following analytical steps:

- Historical Financial Analysis
  - Detailed analysis FY 1999 & 2000
  - Analysis of FY 1996-1998 based on FY 1999 & 2000 methodology
- Evaluation of historical financial performance
- Develop expense and revenue allocation methodologies in order to develop pro forma (P&Ls)
  - Allocations for all operating expenses and revenues were developed in conjunction with Port Everglades’ finance division
- Identify major revenue & expense drivers
- Prepare baseline financial forecasts from the baseline cargo projections and Port Everglades’ FY 2001 & 2002 financial projections



- All projections are in real dollars, no provisions for inflation-driven escalations have been made

In FY 2000, the Port generated \$76 million in operating revenue, incurred \$41 million in operating expenses and 36 million in operating income.

The Port's strong financial performance is projected to continue during the planning horizon. Operating revenues are projected to increase by 51 percent to \$115 million in 2010. The Port's operating income is projected to increase to \$48 million in 2010.

Despite Port's projected financial growth, the current projections indicate the Port will potentially face challenges in implementing the recommended 10-year master development plan. The Port may be unable to fund the entire 10-year master plan program solely from its own internally generated funds, including new debt. This finding is based on a number of conservative assumptions including:

- No real increase in rates during the ten-year planning horizon.
- The baseline cargo forecasts, which assume no new customers are attracted to the Port, other than those anticipated in the South Stevedore agreement. This is a particularly conservative assumption given the Port's competitive position and strengths.
- The Port implements both its current CIP program and the recommended master plan. The Port has the flexibility, particularly during the first three-to-five years of the master plan to postpone temporarily or indefinitely certain capital improvements without jeopardizing the Port's projected throughput and financial performance.
- A higher debt coverage ratio than has historically been maintained.

The master plan consultant is working with the Port's planning and financial managers to explore multiple options for addressing the potential funding shortfall. Options currently being considered include:

- Opportunities to postpone current CIP projects that will not adversely affect the Port's short and mid-term throughput and financial performance.
- Opportunities to improve the Port's capacity to generate internal funds including cost-reduction and real price increases.
- Grants and other federal or state funding programs for which certain elements of the Port's master development plan may qualify.
- Long-term agreements with key customers who will be the primary beneficiaries of the Port's major master plan investments.