

TABLE OF CONTENTS

Element	Title	Page
Table of Contents		ii
List of Figures.....		iii
List of Tables.....		vi
Appendices		ix
Acronyms		x
Project Introduction	0-1	
0.1 Background.....	0-1	
0.2 Planning Goal	0-1	
0.3 Plan Organization	0-2	
0.4 Schedule.....	0-2	
0.5 Planning Tasks	0-2	
0.6 Website.....	0-5	
Element 1: Existing Conditions Assessment		
1.1 Introduction.....	1-1	
1.2 Master Planning Context: Regional Setting and Port Environs	1-1	
1.3 Land Ownership and Uses	1-15	
1.4 Facility Inventory.....	1-19	
1.5 Progress on Projects in <i>2009 Port Everglades Master/Vision Plan</i> 5-Year Capital Improvement Plan.....	1-32	
1.6 Neighbors' Plans Influencing Port Development	1-45	
1.7 Cargo Berth and Yard Capacity Analysis.....	1-47	
1.8 On-Port Traffic and Parking.....	1-77	
1.9 Intermodal Transportation Network.....	1-82	
1.10 Environmental Conditions	1-109	
Element 2: Market Assessment		
2.1 Introduction.....	2-1	
2.2 Summary of Historic Core Cargo and Cruise Operations	2-1	
2.3 Cruise Market Assessment.....	2-10	
2.4 Liquid Bulk (Petroleum Products) Assessment	2-57	
2.5 Containerized Cargo Market Assessment.....	2-114	
2.6 Dry Bulk, Break-Bulk, and Yachts and Vehicles Cargo Market Assessment	2-134	
2.7 Potential Passenger Ferry Opportunities	2-145	
Element 3: Plan Development		
3.1 Introduction.....	3-1	
3.2 Conceptual Planning Process	3-1	
3.3 Terminal Design Trends	3-7	

3.4	Operational Enhancement Opportunities	3-27
3.5	Facility Needs Assessment	3-31
3.6	Conceptual Planning Studies	3-37
3.7	Conceptual 2014 Master/Vision Plan.....	3-53
3.8	Parking	3-55
3.9	Rail and Truck Traffic.....	3-66

Element 4: Strategy Development

4.1	Introduction	4-1
4.2	Business and Asset Utilization Strategies.....	4-2
4.3	Financial Strategies.....	4-9
4.4	Project Decision Matrix.....	4-10
4.5	Goals, Objectives, and Policies	4-14

Element 5: Final Master/Vision Plan

5.1	Introduction	5-1
5.2	Transition from the 2009 Plan to the 2014 Plan	5-3
5.3	The 5-Year Master Plan (2015-2019)	5-4
5.4	The 10-Year Vision Plan (2020-2023).....	5-24
5.5	The 20-Year Vision Plan (2024-2033).....	5-38
5.6	Berth Use Summary.....	5-49

Element 6: Plan Implementation

6.1	Introduction	6-1
6.2	Impacts from 2014 Plan Implementation.....	6-1
6.3	Plan Costs and Funding	6-15
6.4	Affordability Analysis	5-23

LIST OF FIGURES

Figure	Title	Page
1.2-1	Core South Florida Region.....	1-1
1.2-2	South Florida Population 2010-2035	1-2
1.2-3	South Florida Population Growth 2010-2035	1-3
1.2-4	Port Everglades Jurisdictional Area.....	1-11
1.3-1	Parcel Map	1-16
1.3-2	Current Land Use Map.....	1-17
1.3-3	Current Rail Tackage at Port Everglades	1-18
1.4-1	Summary of Repair Costs by Category	1-20
1.4-2	Map of Port Everglades.....	1-22
1.4-3	Northport Drainage Area.....	1-24
1.4-4	Midport Drainage Area.....	1-25
1.4-5	Southport Drainage Area	1-26
1.4-6	Northport Drainage Permit IDS.....	1-27
1.4-7	Midport Drainage Permit IDS	1-28
1.4-8	Southport Drainage Permit IDS.....	1-30
1.5-1	Location of Projects in 2011-2015 5-Year CIP	1-33
1.5-2	Slip 1 Widening.....	1-34
1.5-3	Cruise Terminal Improvements	1-35
1.5-4	Slip 2 Lengthening.....	1-36
1.5-5	Southport Overview	1-38
1.5-6	McIntosh Road Schematic	1-39
1.5-7	Super Post-Panamax Cranes.....	1-41
1.5-8	Turning Notch Extension.....	1-42
1.5-9	ICTF and McIntosh Realignment.....	1-43
1.5-10	Eller Drive Overpass Schematic.....	1-43
1.5-11	Tentatively Selected Plan Schematic.....	1-44
1.7-1	Berths 16-18 Shared Container and Cruise Operations	1-49
1.7-2	Map of Port Everglades.....	1-50
1.7-3	Average Annual Percent Availability by Berth and Cargo Type	1-52
1.7-4	Mean Moves per Call Over 10 Years at Port Everglades	1-54
1.7-5	Containership Length Histogram, FY 2008 vs. FY 2012.....	1-55
1.7-6	Mean Call Berth-Foot-Hours by Berth Number	1-56
1.7-7	Container Capacity by Berth (Current Operations).....	1-58
1.7-8	Container Capacity by Berth (Including Berth 30 Extension).....	1-59
1.7-9	Port Everglades Container Capacity vs. Throughput in TEUS.....	1-60
1.7-10	Port Everglades Southport vs. Neighboring Port Dock Crane Density	1-61
1.7-11	Port of Singapore Crane Density	1-62
1.7-12	Annual Capacity by Product Type	1-65
1.7-13	Current Annual Capacity vs. Historical Throughputs by Product Type.....	1-66
1.7-14	Current Southport Parcels.....	1-69

1.7-15	Berth Capacity vs. Storage Capacity	1-73
1.7-16	Parcel Size and Throughput Density of Southport Tenants	1-74
1.7-17	Berth Capacity vs. Storage Capacity	1-77
1.9-1	SIS Component Relevant to Port Everglades	1-83
1.9-2	Congested Corridors in Florida 2035	1-86
1.9-3	I-595 Project Improvements Map.....	1-87
1.9-4	The FEC System	1-89
1.9-5	The CSX System	1-91
1.9-6	The Norfolk Southern System	1-92
1.9-7	SFECCTA Study Area.....	1-96
1.9-8	Comparison of SFECC and all Aboard Projects.....	1-97
1.9-9	Short-Sea Shipping Operations.....	1-98
1.9-10	Freight and Industrial Zones in Broward County	1-105
1.9-11	Truck Activity Centers throughout South Florida.....	1-107
1.9-12	Truck Activity Centers in Broward County.....	1-108
1.10-1	Port Everglades Vicinity and Jurisdictional Boundary.....	1-109
1.10-2	Manatee Essential Habitat within Port Everglades.....	1-111
1.10-3	Reported Sightings of Listed Species in Vicinity of Port Everglades.....	1-113
1.10-4	Conservation Easement Changes	1-117
1.10-5	Tentatively Selected Plan.....	1-119
1.10-6	Existing Offshore Disposal Material Disposal Site and Proposed Expansion.....	1-121
1.10-7	Presence of Acropora Coral Critical Habitat in the Vicinity of Port Everglades.....	1-123
1.10-8	Port Everglades Acropora Survey	1-125
1.10-9	2009 Seagrass Distribution in Port Everglades Harbor	1-127
1.10.10	1999-2000 Seagrass Distribution in Port Everglades Harbor	1-128
1.10-11	Broward County Priority Planning Areas for Sea Level Rise	1-134
2.2-1	Tonnage at Port Everglades FY 2003 through FY 2012.....	2-2
2.2-2	Comparison of Tonnages at Port Everglades by Cargo Type FY 2003 through FY 2012.....	2-3
2.2-3	TEU Movements at Port Everglades FY 2003 through FY 2012.....	2-4
2.2-4	Cruise Passengers at Port Everglades FY 2003 through FY 2012	2-5
2.2-5	Comparison of Cruise Passengers at Port Everglades by Cruise Type FY 2003 through FY 2012.....	2-6
2.2-6	Comparison of Ship Calls at Port Everglades by Type FY 2003 through FY 2012.....	2-7
2.2-7	Port Waterborne Operating Revenues FY 2003 through FY 2012.....	2-8
2.2-8	Port Waterborne Operating Revenues FY 2003.....	2-9
2.2-9	Port Waterborne Operating Revenues FY 2012.....	2-9
2.3-1	Single-Day Cruise Projections Compared to Last Master Plan.....	2-13
2.3-2	Multi-Day Cruise Projections Compared to 2009 Plan	2-15
2.3-3	Growth in Global Passenger Embarkations	2-16
2.3-4	CLIA Embarkation Trends at Port Everglades	2-17
2.3-5	Value of Cruising Versus Land Based Vacations	2-18
2.3-6	Factors Influencing a Cruise Selection	2-19

2.3-7	Total Cruise Vacations Taken	2-19
2.3-8	Harris Interactive Poll Showing Impact of Carnival Triumph Event	2-21
2.3-9	Emissions Control Area.....	2-22
2.3-10	Trends in Median Household Income by Age Bracket.....	2-32
2.3-11	Historical Revenue Passengers at Port Everglades	2-33
2.3-12	Comparison of Port Everglades Cruise Traffic with PortMiami	2-34
2.3-13	Total Cruise Traffic by Berth FY 2008 – FY 2013 (through December).....	2-36
2.3-14	Berth 29 Monthly Usage FY 2008 – FY 2013 (through December).....	2-37
2.3-15	Occupancy Trends of Oasis Class Ships at Port Everglades	2-39
2.3-16	Single-Day Cruise Volumes at Port Everglades	2-44
2.3-17	Projected Growth of Single-Day Cruise Passengers.....	2-47
2.3-18	Single-Day Cruise Projections Compared to 2009 Plan	2-48
2.3-19	Projected Growth of Multi-Day Cruise Passengers	2-49
2.3-20	Multi-Day Cruise Projections Compared to 2009 Plan	2-50
2.3-21	Projected Growth of Total Cruise Passengers	2-51
2.3-22	Total Cruise Projections Compared to 2009 Plan	2-52
2.3-23	Port Everglades Share of Florida and East Coast Embarkations.....	2-55
2.4-1	Port Everglades Throughput	2-58
2.4-2	Tanker Calls at Port Everglades.....	2-59
2.4-3	Barge Calls at Port Everglades	2-60
2.4-4	LPG Barges	2-61
2.4-5	US, PADD, and Florida Population Forecasts.....	2-64
2.4-6	Florida Light Product Demand.....	2-70
2.4-7	Competitive Port Supply Overlap.....	2-72
2.4-8	Total Petroleum Product Received	2-73
2.4-9	Estimated Storage Capacity	2-75
2.4-10	Port Everglades Throughput	2-87
2.4-11	Map of Florida Counties	2-100
2.4-12	Map of Potential FPL Natural Gas Pipeline.....	2-102
2.4-13	Tanker Calls at Port Everglades.....	2-111
2.4-14	Barge Calls at Port Everglades	2-112
2.4-15	LPG Barges	2-113
2.5-1	Container Forecast Summary.....	2-114
2.5-2	USACE Forecast for Port Everglades Containerized Tonnage.....	2-119
2.5-3	Baseline Forecast, Container Traffic	2-122
2.5-4	Baseline Plus Forecast, Container Traffic.....	2-125
2.5-5	High Forecast, Container Traffic.....	2-127
2.5-6	Container Vessel Calls by Carrier and Capacity, 2012.....	2-132
2.5-7	Container Slot Calls by Carrier and Capacity, 2012	2-133
2.6-1	Dry Bulk, Break-Bulk, Yachts and Vehicles Forecast Summary	2-134
2.6-2	Baseline Forecast – Dry Bulk, Break-Bulk, Yachts and Vehicles.....	2-137
2.6-3	Historic Lake Belt Production	2-138
2.6-4	Baseline-Plus Forecast – Dry Bulk, Break-Bulk, Yachts and Vehicles.....	2-141
2.6-5	High Forecast – Dry Bulk, Break-Bulk, Yachts and Vehicles	2-144

3.2-1	Locations of Projects Included in 2009-5-Year Master Plan	3-5
3.3-1	Vertical Window of Accessibility	3-10
3.3-2	Current Horizontal Window of Accessibility for Pivot Passenger Boarding Bridges	3-10
3.3-3	Proposed Horizontal Window of Accessibility for Rail/Mobile Passenger Boarding Bridges ..	3-11
3.3-4	Passenger Flow Diagram	3-12
3.3-5	The World's First LNG-Powered Containerships.....	3-15
3.3-6	Storage Density of Container Handling Systems	3-19
3.3-7	E-RTG Options	3-21
3.3-8	Tandem Lift STS Crane	3-22
3.3-9	Virtual Container Yard.....	3-23
3.3-10	Camera on STS Crane.....	3-24
3.3-11	LNG Hybrid Barge.....	3-27
3.5-1	Port Everglades Current and Future Berth Capacity	3-34
3.5-2	Southport Container Terminal Size and Density	3-35
3.5-3	Port Revenue by Source	3-36
3.5-4	Non-Containerized Cargo Berth Capacity.....	3-37
3.6-1	New and Redefined Projects Considered for 2014 Master/Vision Plan.....	3-40
3.6-2	Northport Cruise Complex Expansion (Berth 5) (Northport)	3-41
3.6-3	Berth 18 Extension (Midport).....	3-42
3.6-4	Cruise Pier 19 and Cruise Terminals 19/20 (Midport)	3-43
3.6-5	Midport Cruise East Consolidation (Midport).....	3-44
3.6-6	Tracor Basin Fill – Cruise (Midport)	3-45
3.6-7	Petroleum Slip Expansion (Northport)	3-46
3.6-7a	Central Manifold Modernization.....	3-47
3.6-8	Tracor Basin Fill – Container (Midport)	3-48
3.6-9	Southport Phase 9b Container Yard.....	3-49
3.6-10	McIntosh Road Gate Lane Addition (Southport).....	3-49
3.6-11	Berth 33 Reconfiguration (Southport)	3-50
3.6-12	Neo-Bulk Storage Yard (Northport)	3-51
3.6-13	Crushed Rock Facility (Southport).....	3-52
3.7-1	Conceptual 20-Year Vision Plan.....	3-54
3.8-1	Monthly Parking Demand.....	3-56
5.2-1	Areas of Change in the 2009 Master/Vision Plan.....	5-3
5.3-1	5-Year Master Plan Project Location Map	5-5
5.3-2	New Bulkheads at Berths 1, 2, and 3.....	5-6
5.3-3	Petroleum Slip Expansion	5-7
5.3-4	Phase 1 Expansion of Slip 1 and New Bulkheads at Berths 9 and 10	5-8
5.3-5	Neo-Bulk Storage Yard	5-9
5.3-6	Slip 2 Lengthening	5-10
5.3-7	Cruise Terminal 25 Improvements/Expansion (Design/Construction)	5-11

5.3-8	Conceptual Design of Low Profile Super Post-Panamax Crane	5-13
5.3-9	McIntosh Road Southport Gate Lane Addition.....	5-14
5.3-10	Southport Turning Notch Extension Project 1 (42 and 48-Foot Depths)	5-15
5.3-11	Turning Notch Deepening Project 2 (At 48-Foot Depth).....	5-16
5.3-12	Southport 9a Container Yard.....	5-17
5.3-13	Southport 9b Container Yard.....	5-18
5.3-14	Foreign Trade Zone Relocation.....	5-19
5.3-15	USACE Deepening and Widening Program: Tentatively Selected Plan.....	5-20
5.3-16	Final 5-Year Master Plan	5-21
5.3-17	Final 5-Year Master Plan Bulkheads	5-22
5.4-1	10-Year Vision Plan Project Location Map.....	5-24
5.4-2	Slip 1 New Bulkheads Phase 2 (Berths 7 and 8).....	5-25
5.4-3	Cruise Terminal 4 Parking Garage	5-26
5.4-4	Berths 14 and 15 New Bulkheads	5-27
5.4-5	Berths 16, 17, and 18 New Bulkheads.....	5-28
5.4-6	Cruise Terminal 29 Improvements/Expansion	5-29
5.4-7	Multimodal Facility at Midport.....	5-30
5.4-8	Tracor Basin Fill.....	5-31
5.4-9	Berths 21 and 22 New - Bulkheads	5-32
5.4-10	Location of Southport Cranes.....	5-33
5.4-11	Berth 33 Reconfiguration	5-34
5.4-12	Final 10-Year Vision Plan.....	5-35
5.4-13	Final 10-Year Vision Plan - Bulkheads	5-36
5.5-1	20-Year Vision Plan Project Location Map.....	5-38
5.5-2	New Bulkheads Berths 1A, 1B, 1C, and 1D.....	5-39
5.5-3	Slip 2 Widening.....	5-40
5.5-3a	Slip 2 Bulkheads	5-40
5.5-4	Petroleum Slip Expansion Phase 3 Slip 3 3 New Bulkheads and Reconfiguration.....	5-41
5.5-4a	Petroleum Slip Expansion Phase 3 Slip 3 New Bulkheads.....	5-42
5.5-5	Midport Bulkhead Projects for 20-Year Vision Plan.....	5-43
5.5-6	Crushed Rock (Aggregate) Facility.....	5-44
5.5-7	Super Post Panamax Crane Locations	5-45
5.5-8	Final 20-Year Vision Plan.....	5-46
5.5-9	Final 20-Year Vision Plan – Bulkheads	5-47
5.6-1	5-Year Master Plan Showing Ship Types	5-49
5.6-2	10-Year Vision Plan Showing Ship Types.....	5-50
5.6-3	20-Year Vision Plan Showing Ship Types.....	5-51
6.2-1	Areas of Traffic Impact.....	6-2
6.2-2	Port Everglades Mitigation Plan Location Map (DC&A 2013)	6-7

LIST OF TABLES

Table	Title	Page
1.2-1	Selected South Florida Economic Characteristics.....	1-5
1.2-2	Comparison of Total Florida and South Florida Cargo and Cruise Parameters FY 2012 and FY 2008.....	1-7
1.2-3	Broward County Population Growth Master/Vision Plan Milestones	1-9
1.4-1	Building Summary.....	1-19
1.4-2	Buildings with More Than \$100,000 in Repair Costs.....	1-19
1.4-3	Repair Costs by Discipline and Level of Importance	1-20
1.4-4	Buildings Needing Special Attention.....	1-21
1.4-5	Buildings with Highest Repair Costs.....	1-23
1.4-6	Buildings with Most Items to be Repaired.....	1-23
1.4-7	Northport Drainage Permits.....	1-27
1.4-8	Midport Drainage Permits.....	1-29
1.4-9	Southport Drainage Permits	1-30
1.5-1	2011-2015 5-Year Master Plan Projects.....	1-32
1.7-1	Summary of Cargo Activity by Berth.....	1-51
1.7-2	Off-Peak Cruise Season Berth Capacity, Current Operations	1-57
1.7-3	Peak Cruise Season Berth Capacity, Current Operations	1-58
1.7-4	Bulk Cement Berth Capacity at Port Everglades.....	1-63
1.7-5	Other Dry Bulk Berth Capacity at Port Everglades.....	1-64
1.7-6	Steel Break-Bulk Berth Capacity at Port Everglades.....	1-64
1.7-7	Container Yard Capacity Inputs.....	1-70
1.7-8	Slot Density Assumptions.....	1-71
1.7-9	Current Operation Peak Import Acres Required Calculation	1-71
1.7-10	Current and Future Yard Capacity.....	1-72
1.7-11	Average Dwell Time Impacts on Storage Turnover.....	1-75
1.7-12	Annual Steel Break-Bulk Storage Capacity.....	1-75
1.7-13	Annual Bulk Cement Storage Capacity.....	1-76
1.7-14	Annual Non-Cement Dry Bulk Storage Capacity.....	1-76
1.8-1	Location: McIntosh Road s/o Eller Drive	1-78
1.8-2	Location: Eller Drive e/o Gate.....	1-78
1.8-3	Location: Spangler Boulevard w/o Miami Road	1-79
1.8-4	Location: Eisenhower Boulevard s/o SE 17 Street.....	1-79
1.8-5	Summary of Traffic Count Data.....	1-80
1.8-6	Summary of Parking Utilization Data	1-81
1.9-1	FLL Passenger, Cargo, and Aircraft Operations 2008 and 2012	1-94
1.10-1	Listed Species Potentially Present in the Vicinity of Port Everglades	1-114

1.10-2	Comparison of Seagrass Acreage by Species 1999, 2000, 2006, and 2009	1-129
2.2-1	Percent Tonnage Change at Port Everglades by Cargo Type FY 2003 and FY 2012.....	2-4
2.2-2	Ship Calls at Port Everglades FY 2003 through FY 2012.....	2-7
2.3-1	Summary of Growth Assumptions	2-12
2.3-2	Summary of Projected Growth of Single-Day Cruise Passengers	2-13
2.3-3	Summary of Projected Growth of Multi-Day Cruise Passengers.....	2-14
2.3-4	International Ship Engine and Fuel Standards.....	2-23
2.3-5	Cruise Lines with Smaller Market Shares	2-25
2.3-6	New Cruise Ships on Order.....	2-26
2.3-7	Change in Deployment Trends 2008-2013	2-27
2.3-8	Source Market of Cruisers (2010 and 2011)	2-29
2.3-9	Expected US Population Growth by Age	2-31
2.3-10	Expected Population Growth.....	2-31
2.3-11	Annual Growth Rate of Population in 5 Year Intervals	2-43
2.3-12	Summary of Growth Assumptions	2-46
2.3-13	Summary of Projected Single-Day Cruise Passenger Growth at Plan Milestones.....	2-47
2.3-14	Summary of Projected Multi-Day Cruise Passenger Growth at Plan Milestones	2-48
2.3-15	Summary of Projected Growth of Total Cruise Passengers.....	2-51
2.3-16	Summary of Cruise Industry Growth Assumptions	2-53
2.3-17	Summary of New Caribbean Market Passengers	2-54
2.4-1	State and PADD Population Trends	2-63
2.4-2	United States Light Product Demand – Annual Percent Growth Rate	2-67
2.4-3	United States Light Product Demand.....	2-69
2.4-4	Recently Completed Terminal Expansions	2-74
2.4-5	Proposed Terminal Projects	2-75
2.4-6	Port Canaveral Total Petroleum Products Received	2-76
2.4-7	Port of Palm Beach Total Petroleum Products Received	2-76
2.4-8	Port of Tampa Total Petroleum Products Received	2-77
2.4-9	PortMiami Total Petroleum Products Received.....	2-78
2.4-10	Port of Jacksonville Total Petroleum Products Received	2-79
2.4-11	US Gulf Coast Major Refinery Projects.....	2-83
2.4-12	Terminal Operators at Florida Ports with US Gulf Coast Refinery Expansions	2-85
2.4-13	Port Everglades Petroleum Throughput.....	2-86
2.4-14	Gasoline and Population Growth Rate Projections	2-88
2.4-15	Gasoline Demand	2-89
2.4-16	Total Diesel and Population Growth Rate Projections	2-91
2.4-17	Total Diesel Demand	2-92
2.4-18	Jet (Excluding Kerosene) and Population Growth Rate Projections	2-94
2.4-19	Jet (Excluding Kerosene) Demand	2-95
2.4-20	Kerosene (Excluding Jet) and Population Growth Rate Projections	2-96
2.4-21	Kerosene (Excluding Jet) Demand	2-97
2.4-22	Jet and Kerosene Demand.....	2-98
2.4-23	FPL Fuel Usage.....	2-101
2.4-24	Port Everglades Fuel Oil Forecast.....	2-104

2.4-25	LPG Forecast	2-106
2.5-1	Key Container Market Variables.....	2-116
2.5-2	Port Everglades Share of South Atlantic Port Containerized Tonnage by Trade Region.....	2-118
2.5-3	Port Everglades Share of South Atlantic Port Trade Tonnage by Commodity/Direction.....	2-119
2.5-4	Baseline Forecast, Container Traffic	2-121
2.5-5	ICTF Traffic Projections	2-123
2.5-6	Baseline Plus Forecast, Container Traffic.....	2-124
2.5-7	High Forecast, Container Traffic.....	2-126
2.5-8	Share of Global Container Traffic Controlled by Key Alliances	2-129
2.5-9	MSC and Hamburg-Sud Container Traffic	2-133
2.6-1	Baseline Forecast – Dry Bulk, Break-Bulk, Yachts and Vehicles.....	2-136
2.6-2	Active FDEP Lake Belt Mining Permits.....	2-138
2.6-3	Baseline-Plus Forecast – Dry Bulk, Break-Bulk, Yachts and Vehicles.....	2-140
2.6-4	High Forecast – Dry Bulk, Break-Bulk, Yachts and Vehicles.....	2-143
3.2-1	Summary of Forecasts for 2014 Master/Vision Plan Milestones.....	3-3
3.2-2	Status of Projects Included in 2009 5-Year Master Plan	3-6
3.2-3	Projects Included in 10-Year 2009 Vision Plan	3-7
3.2-4	Projects Included in 20-Year 2009 Vision Plan	3-7
3.6-1	Projects Considered for the 2014 Master/Vision Plan	3-39
3.7-1	New and Redefined Projects Selected for Further Study	3-53
3.8-1	Existing Parking Capacity with Peak Utilization Parameters.....	3-55
3.8-2	Highest Daily Parking Demand by Month	3-56
3.8-3	Average Daily Parking Demand by Month	3-57
3.8-4	Share of FY 2013 Peak Month Parking Demand at Northport and Midport.....	3-58
3.8-5	Summary of Projected Revenue Cruise Passenger Growth	3-58
3.8-6	Summary of Existing and Planned Northport and Midport Parking Facilities.....	3-60
3.8-7	Comparison of Capacity and Peak Month Parking Demand Over the Planning Milestones ..	3-60
3.8-8	Perspectives on Port Parking Transactions	3-63
3.8-9	Comparison of Capacity and Peak Month Parking Demand Over the Planning Milestones Without the Cruise Terminal 18 Garage	3-65
3.9-1	Annual Projected Rail Usage at Port Everglades.....	3-67
3.9-2	Estimated Truck Traffic Through the McIntosh Road Security Gate	3-68
4.4-1	Decision Matrix Criteria	4-10
4.4-2	Summary of Port Everglades Goals, Objectives, and Policies.....	4-28
5.1-1	2014 Market Forecast Summary	5-2
5.3-1	5-Year Project Cost Estimates	5-23

5.4-1	10-Year Project Cost Estimates	5-37
5.5-1	20-Year Vision Plan Project Cost Estimate.....	5-48
6.2-1	Shore Power Installation Cost Estimate.....	6-13
6.3-1	Decision-Matrix Criteria.....	6-15
6.3-2	Decision Matrix: Master Plan Projects by Phase.....	6-16
6.3-3	Recommended 5-Year Capital Improvement Program Summary.....	6-17
6.3-4	Funding Sources of Recommended 5-Year Capital Improvement Program.....	6-18
6.3-5	5-Year Recommended Capital Improvement Program.....	6-19
6.3-6	Project Costs in 10-Year Vision Plan Development Program	6-21
6.3-7	Project Costs in 20-Year Vision Development Program	6-22
6.3-8	Comparison of 2014 and 2009 Plan Costs	6-22
6.4-1	Projected Debt Service Coverage (FY 2015 - 2019)	6-24
6.4-2	Projected Debt Service Coverage (FY 2020 - 2024)	6-25

APPENDICES

- A Outreach Meetings
- B Building Reports
- C Traffic Data
- D Parking Facility Utilization
- E Containerized Cargo Analyses
- F Cruise Projects
- G Bulkhead Study Update and Cathodic Protection System Evaluation
- H Order-of-Magnitude Cost Estimates for Projects
- I Order-of-Magnitude Bulkhead Cost Estimates
- J ROI and NPV Calculation Tables
- K Affordability Analysis Worksheets

ACRONYMS

Acronym	Description
AAPA	AMERICAN ASSOCIATION OF PORT AUTHORITIES
ADA	AMERICANS WITH DISABILITIES ACT
AGL	ABOVE GROUND LEVEL
AMP	ALTERNATIVE MARINE POWER
AMSL	ABOVE MEAN SEA LEVEL
APM	AUTOMATED PEOPLE MOVER
ASC	AUTOMATED STACKING CRANES
B/D	BARRELS PER DAY
BBL	BARRELS
BCAD	BROWARD COUNTY AVIATION DEPARTMENT
BCEMD	BROWARD COUNTY EMERGENCY MANAGEMENT DIVISION
BCEP&GMD	BROWARD COUNTY ENVIRONMENTAL PROTECTION AND GROWTH MANAGEMENT DEPARTMENT
BCT	BROWARD COUNTY TRANSIT
BEBR	BUREAU OF ECONOMIC AND BUSINESS RESEARCH
BMP	BEST MANAGEMENT PRACTICES
BOARD	BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS
BOD	BIOCHEMICAL OXYGEN DEMAND
BSO	BROWARD SHERIFF'S OFFICE
B/YR	BARRELS PER YEAR
CAGR	COMPOUND ANNUAL GROWTH RATE
CBOB	SUBOCTANE BLENDSTOCK THAT WILL MEET FINISHED GASOLINE SPECIFICATIONS WHEN BLENDED WITH 10 PERCENT ETHANOL
CBP	US CUSTOMS AND BORDER PROTECTION
CCR	CONTINUOUS CATALYST REGENERATION
CIP	CAPITAL IMPROVEMENT PROGRAM
CHHA	COASTAL HIGH HAZARD AREAS
CLIA	CRUISE LINES INTERNATIONAL ASSOCIATION
CNG	COMPRESSED NATURAL GAS
CSXI	CSX INTERMODAL
CSXT	CSX TRANSPORTATION INC.
DC&A	DIAL CORDY AND ASSOCIATES INC.
DCC	DANIA CUT-OFF CANAL
DERA	DIESEL EMISSIONS REDUCTION ACT
DOE	DEPARTMENT OF ENERGY
DR-CAFTA	CENTRAL AMERICA FREE TRADE AGREEMENT WITH THE DOMINICAN REPUBLIC, BELIZE, EL SALVADOR, HONDURAS, NICARAGUA, GUATEMALA, AND COSTA RICA
DRI	DEVELOPMENT OF REGIONAL IMPACT
DWT	DEADWEIGHT TON

Acronym	Description
EA	ENVIRONMENTAL ASSESSMENT
ECA	EMISSIONS CONTROL AREA
EDI	ELECTRONIC DATA INTERCHANGE
EIA	ENERGY INFORMATION AGENCY
EISA	ENERGY INDEPENDENCE AND SECURITY ACT OF 2007
EPA	ENVIRONMENTAL PROTECTION AGENCY
E-RTG	ELECTRIC-POWERED RUBBER-TIRED GABTRY CRANE
ETS	ELECTRIFIED TRUCK STOPS
FAA	FEDERAL AVIATION ADMINISTRATION
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FEC	FLORIDA EAST COAST RAILWAY
FECI	FLORIDA EAST COAST INDUSTRIES
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
FG	FUNCTIONAL GAIN
FHWA	FEDERAL HIGHWAY ADMINISTRATION
PM2.5	FINE PARTICULATE MATTER
FIT	FLORIDA INTERNATIONAL TERMINAL
FLL	FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
FLP	OFFICE OF FREIGHT, LOGISTICS, AND PASSENGER OPERATIONS
FONSI	FINDING OF NO SIGNIFICANT IMPACT
FPC	FLORIDA PORTS COUNCIL
FPL	FLORIDA POWER AND LIGHT
FR	FEDERAL REGISTER
FSTED	FLORIDA SEAPORT TRANSPORTATION AND ECONOMIC DEVELOPMENT COUNCIL
FWC	FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
FY	FISCAL YEAR
G	GRANTS
GDP	GROSS DOMESTIC PRODUCT
GPA	GEORGIA PORTS AUTHORITY
GPS	GLOBAL POSITIONING SYSTEM
GRP	GROSS REGIONAL PRODUCT
GT	GROSS TONS
HEA	HABITAT EQUIVALENCY ANALYSIS
HOV	HIGH-OCCUPANCY VEHICLE
I	INTERNAL REVENUE
ICTF	INTERMODAL CONTAINER TRANSFER FACILITY
IEC	INNER ENTRANCE CHANNEL
ILC	INTERMODAL (OR INTEGRATED) LOGISTICS CENTER
IMC	BROWARD COUNTY INTERMODAL CENTER

Acronym	Description
IMF	INTERNATIONAL MONETARY FUND
IMO	INTERNATIONAL MARITIME ORGANIZATION
ISC	INDIAN SUB-CONTINENT
ITB	INTEGRATED TUG-BARGE
ITS	INTELLIGENT TRANSPORTATION SYSTEM
JOC	JOURNAL OF COMMERCE
JONES ACT	THE MERCHANT MARINE ACT OF 1920. A FEDERAL STATUTE THAT REQUIRES US-FLAGGED VESSELS TO BE BUILT IN THE US, OWNED BY US CITIZENS, AND DOCUMENTED (I.E., REGISTERED, ENROLLED, OR LICENSED) UNDER THE LAWS OF THE US. IN ADDITION, ALL OFFICERS AND 75 PERCENT OF THE CREW MUST BE US CITIZENS. VESSELS THAT SATISFY THESE REQUIREMENTS COMprise THE "JONES ACT FLEET." THE JONES ACT RESTRICTS THE CARRIAGE OF GOODS BETWEEN US PORTS TO US- FLAGGED VESSELS.
KM/HR	KILOMETERS PER HOUR
LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
LF	LINEAR FEET
LNG	LIQUIFIED NATURAL GAS
Lo/Lo	LIFT-ON/LIFT-OFF (USED TO DESIGNATE CARGO THAT IS LIFTED ON AND OFF A VESSEL RATHER THAN BEING ROLLED ON AND OFF
LOA	LENGTH OVERALL
LOS	LEVEL OF SERVICE
LPA	LOCALLY PREFERRED ALTERNATIVE
LPG	LIQUEFIED PETROLEUM GAS
LPP	LOCALLY PREFERRED PLAN
LRTP	LONG-RANGE TRANSPORTATION PLAN
MAP-21	MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY ACT
MARAD	U.S. MARITIME ADMINISTRATION
MARPOL	INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS
MARSEC	MARITIME SECURITY SYSTEM
MBD	MILLION BARRELS PER DAY
MBTA	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
MIA	MIAMI INTERNATIONAL AIRPORT
MOL	MITSUI O.S.K. LINES
MPG	MILES PER GALLON
MPH	MILES PER HOUR
MPO	METROPOLITAN PLANNING ORGANIZATION
MSA	METROPOLITAN STATISTICAL AREA
MSC	MEDITERRANEAN SHIPPING COMPANY
MSL	MEAN SEA LEVEL
MTB	MAIN TURNING BASIN

Acronym	Description
MW	MEGAWATT
NCL	NORWEGIAN CRUISE LINE
NEPA	NATIONAL ENVIRONMENTAL POLICY ACT
NFA	NO FURTHER ACTION
NMFS	NATIONAL MARINE FISHERIES SERVICE
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOx	NITROGEN OXIDES
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPV	NET PRESENT VALUE
NS	NORFOLK SOUTHERN
NVOCC	NON-VESSEL OPERATING COMMON CARRIER
OCR	OPTICAL CHARACTER RECOGNITION
ODMDS	OCEAN DREDGED MATERIAL DISPOSAL SITES
OEC	OUTER ENTRANCE CHANNEL
OFAC	OFFICE OF FOREIGN ASSETS CONTROL
OPA 90	OIL POLLUTION ACT OF 1990
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P	PRIVATE INVESTMENT
P3	PUBLIC PRIVATE PARTNERSHIP
P&G	PURVIN & GERTZ
PADD	PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT
PANAMAX VESSEL	VESSEL WHOSE DIMENSIONS (BEAM, LENGTH, AND/OR DRAFT) ALLOW IT TO TRAVERSE THE EXISTING PANAMA CANAL
PBI	PALM BEACH INTERNATIONAL AIRPORT
PD&E	PROJECT DEVELOPMENT AND ENVIRONMENTAL STUDY
PDVSA	PETROLEOS DE VENEZUELA, S.A.
PED	PORT EVERGLADES DEPARTMENT
PEDD	PORT EVERGLADES DEVELOPMENT DISTRICT
PJA	PORT JURISDICTIONAL AREA
PNW	PACIFIC NORTHWEST
POMTOC	PORT OF MIAMI TERMINAL OPERATING COMPANY
POST-PANAMAX VESSEL	VESSEL TOO LARGE TO TRAVERSE THE PRESENT CONFIGURATION OF THE PANAMA CANAL
POV	PRIVATELY OWNED VEHICLES
PPM	PARTS PER MILLION
PSA	PASSENGER SERVICES ASSOCIATION
RCCL	ROYAL CARIBBEAN CRUISE LINES
RFID	RADIO FREQUENCY IDENTIFICATION
RFP	REQUEST FOR PROPOSAL
RLI	REQUEST FOR LETTERS OF INTEREST

Acronym	Description
RMG	RAIL-MOUNTED GANTRY CRANE
Ro/Ro	ROLL-ON/ROLL-OFF (USED TO DESIGNATE CARGO THAT IS ROLLED ON AND OFF A VESSEL RATHER THAN BEING LIFTED ON AND OFF)
ROI	RETURN ON INCREMENTAL INVESTMENT
ROM	ROUGH ORDER OF MAGNITUDE
RTG	RUBBER-TIRED GANTRY CRANE
SAC	SOUTHPORT ACCESS CHANNEL
SAFETEA-LU	SAFE, ACCOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS
SCFE	SOUTH CENTRAL FLORIDA EXPRESS
SEDS	STATE ENERGY DATA SYSTEM
SEIS	SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
SEFTC	SOUTHEAST FLORIDA TRANSPORTATION COUNCIL
SFECC	SOUTH FLORIDA EAST COAST CORRIDOR STUDY
SFRC	SOUTH FLORIDA RAIL CORRIDOR
SFRTA	SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY
SFWMD	SOUTH FLORIDA WATER MANAGEMENT DISTRICT
SIB	STATE INFRASTRUCTURE BANK
SIS	STRATEGIC INTERMODAL SYSTEM
SOLAS	SAFETY OF LIFE AT SEA
SOx	SULFUR OXIDES
STB	SURFACE TRANSPORTATION BOARD
STS	SHIP-TO-SHORE CRANE
SUPER POST-PANAMAX VESSEL	VESSEL ABLE TO TRAVERSE THE EXPANDED CONFIGURATION OF THE NEW PANAMA CANAL LOCKS
TEU	TWENTY-FOOT EQUIVALENT CONTAINER UNIT
TGS	TWENTY-FOOT GROUND SLOT
TL 2.0	<i>FLORIDA: MADE FOR TRADE, FLORIDA TRADE AND LOGISTICS STUDY 2.0</i>
TOS	TERMINAL OPERATING SYSTEM
TPI	TONS PER INCH OF DISPERSION
TSM&O	TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS
TSP	TENTATIVELY SELECTED PLAN
U	UNFUNDED (POTENTIAL DEBT)
UK	UNITED KINGDOM
ULCC	ULTRA LARGE CRUDE CARRIERS
UMAM	UNIFORM MITIGATION ASSESSMENT METHOD
USACE	US ARMY CORPS OF ENGINEERS
USCG	UNITED STATES COAST GUARD
USDA APHIS/PPQ	US DEPARTMENT OF AGRICULTURE, ANIMAL AND PLANT HEALTH INSPECTION SERVICE, PLANT PROTECTION AND QUARANTINE

Acronym	Description
USDOT	UNITED STATES DEPARTMENT OF TRANSPORTATION
USFWS	US FISH AND WILDLIFE SERVICES
VCY	VIRTUAL CONTAINER YARD
VFN	VIRTUAL FREIGHT NETWORK
VFR	VISUAL FLIGHT RULES
VGO	VACUUM GAS OIL
VLCC	VERY LARGE CRUDE CARRIERS
WOA	WINDOW OF ACCESSIBILITY
YMS	YARD MANAGEMENT SYSTEM