

Port Everglades Master/Vision Plan Update

Final Tenant/Stakeholder Meeting January 17, 2020



Guiding Principals of Update

Increase Capacity

- Add berths where possible
- Facilitate operational improvements to increase intensity of asset utilization portwide

Enhance Efficiency

- Increase adjacency of berths and upland acreage for related uses
- Reduce intra-port movement to minimize traffic and operating costs
- Minimize double-handling and repositioning of cargo, people and equipment

Facilitate Integration

- Activate synergies between related uses (i.e. Automated People Mover)
- Optimize land use and transportation network to provide best possible level of service

Maintain Flexibility

Plan for expected conditions without precluding unexpected conditions

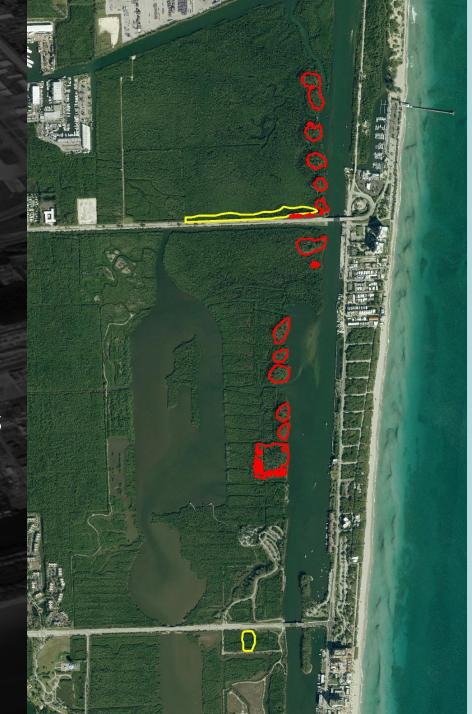
Preserve the Environment

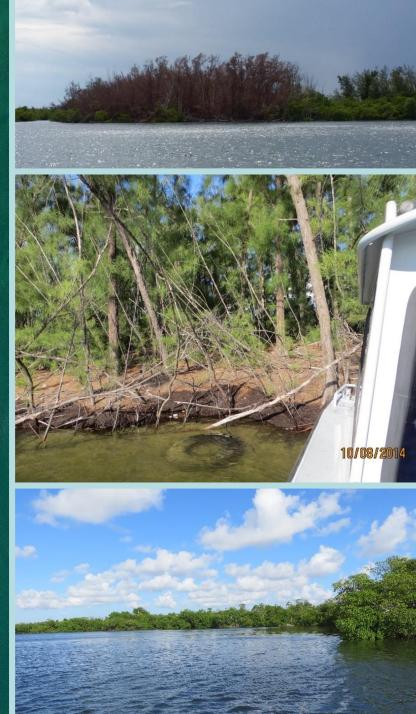
Proactively address known Port-related environmental impacts



West Lake Natural Area Restoration

- Broward County Park
- USACE Navigation Improvements Project
- Joint-Project with FLL Runway Extension
- 168 acres of flushing, mangrove and seagrass
- Purchased wetland parcels for conservation
- More improvements scheduled (Segment 4)

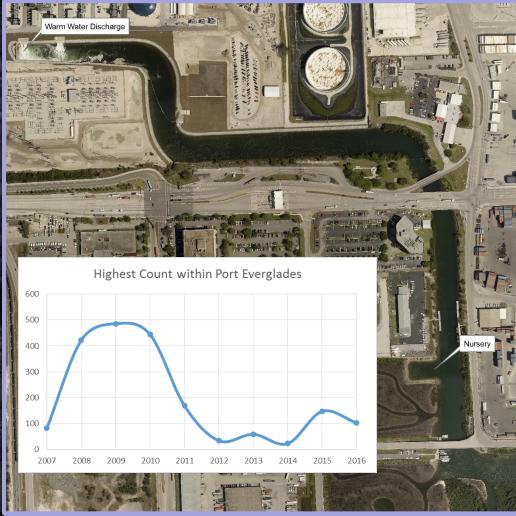






Manatee Aggregation Area

- Second Largest in Broward
- FPL Cooling Canal
- 455 Manatees in 2010
- Year-Round Presence
- Manatee Protection Plan and Tariff Requirements
- 3' Manatee Fenders on 26,000' of Bulkhead
- Manatee Exclusion Devices on Stormwater Outfalls
- Enhanced "Nursery Area"











Upland Habitat Restoration

- Most landscaping native.
- Removing Florida Exotic
 Pest Plant Council
 Categories I-II plants
- Facilities maintenance planting native Broward species for replacement landscaping
- Certified Wildlife Habitat
- Committed to optimizing habitat in green areas











Sustainable Facilities

- \$4.4 million energyefficient building upgrades.
- USGBC LEED certifications
- Broward County's GoGreen Seal of Sustainability
- Green Supply Chain Award
- Green Marine certification
- Vehicle & boat engine energy-efficient retrofits.
- Florida Recycling
 Partnership 75% Goal







Resiliency Studies

- University of Illinois
- Critical Infrastructure
 Resiliency Institute
- Florida AtlanticUniversity
- U.S. Coast Guard
- U.S. Department of Homeland Security
- 1.8" Vertical Resolution
 LIDAR Elevation Data





Environmental Restoration Collaboration

- Interagency Working Groups
- American Association of Port Authorities Environment Committee
- Broward County NatureScape
- Florida Ports Council
 Environmental Committee
- Green Marine/GreenTech 2017
- Southeast Florida Coral Reef Initiative
- Southeast Florida Regional Climate Change Compact
- Broward County Sustainability Stewards
- Broward County Critical Infrastructure and Future Flood Risk Workgroup
- Florida Shorebird Alliance
- South Florida Audubon Society
- FAEP/SFAEP











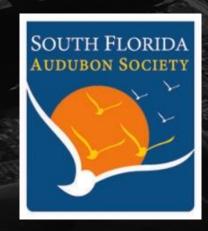


Florida Association of Environmental Professionals













Plan Drivers

2018 Market Assessments

- Cruise
- Liquid Bulk
- Containers
- Dry Bulk/Break-Bulk/Ro-Ro

Ongoing Projects/Current CIP

- T2/T4 Parking Garage; Slip 1/Phase 1 Expansion
- Southport Turning Notch Expansion (STNE); USACE Deepening & Widening
- PEV International Logistics Center (ILC); Phase 9A Container Yard

Constraints

- Costs vs. benefits (project-specific)
- Affordability/available funding (overall)
- Impact to operations

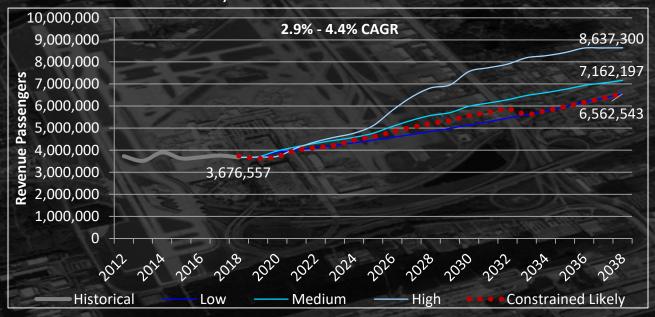


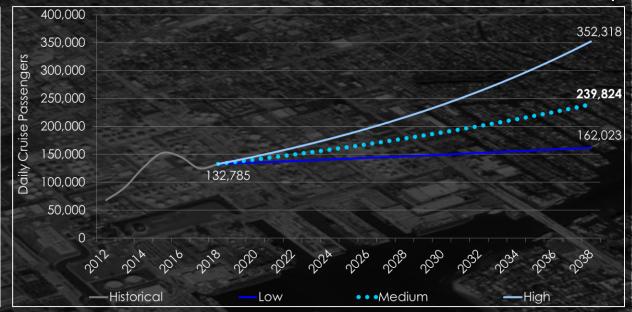




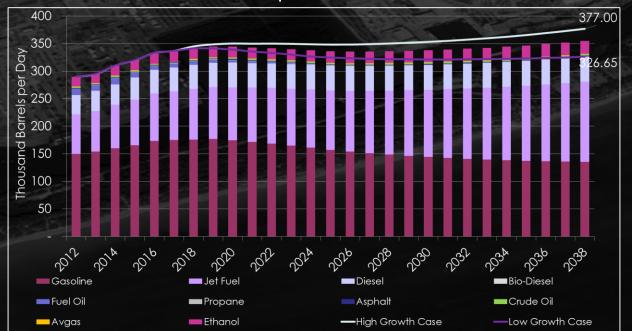
Cruise - Multi-Day

Cruise - Daily



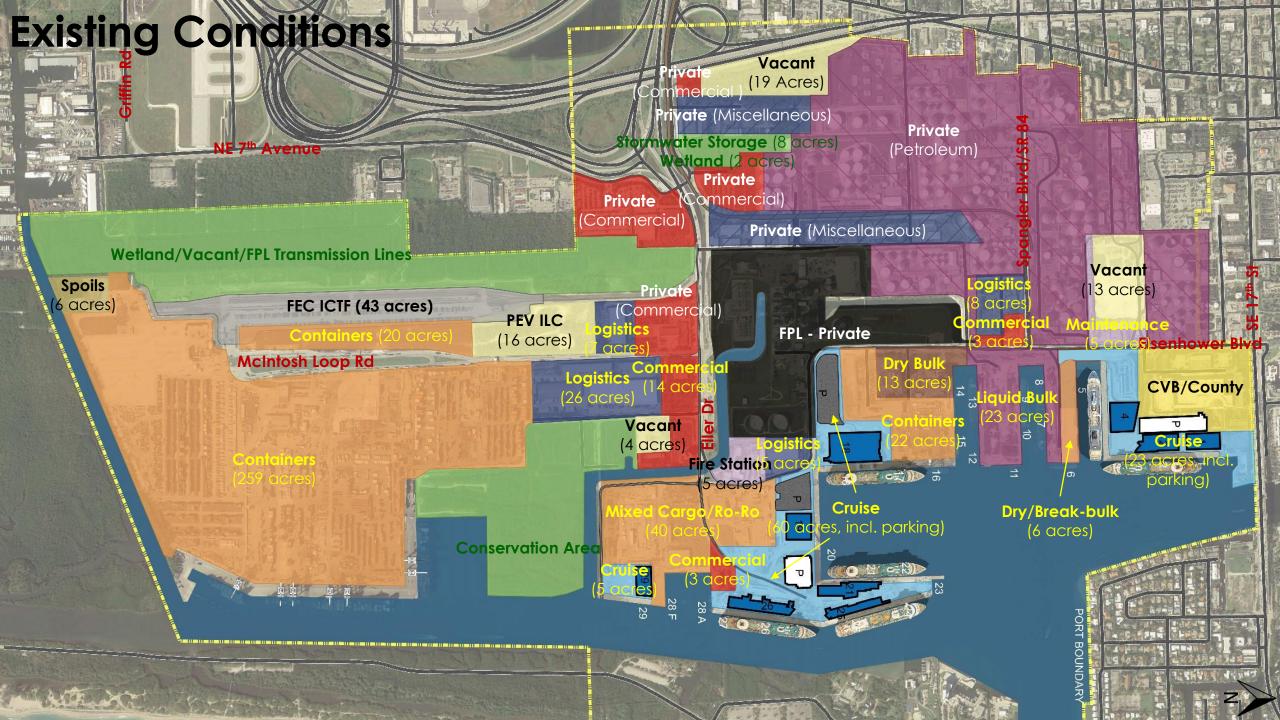


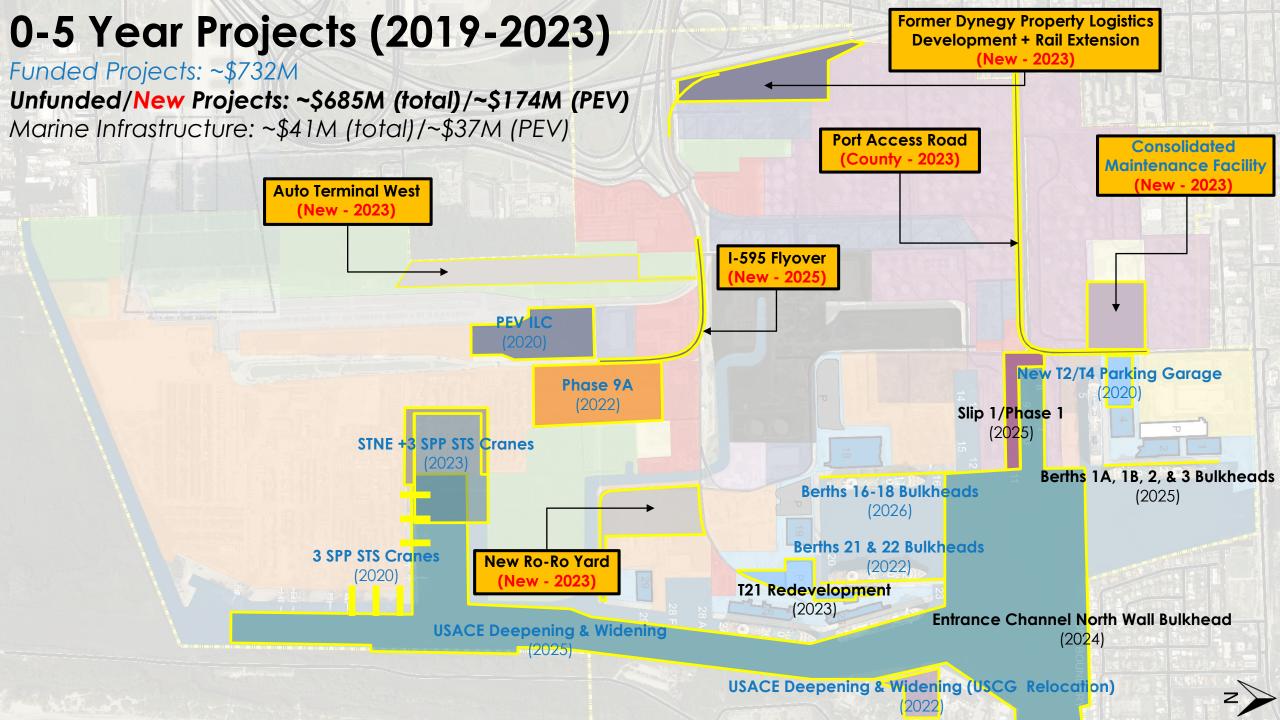
Liquid Bulk





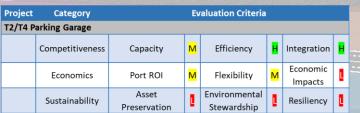








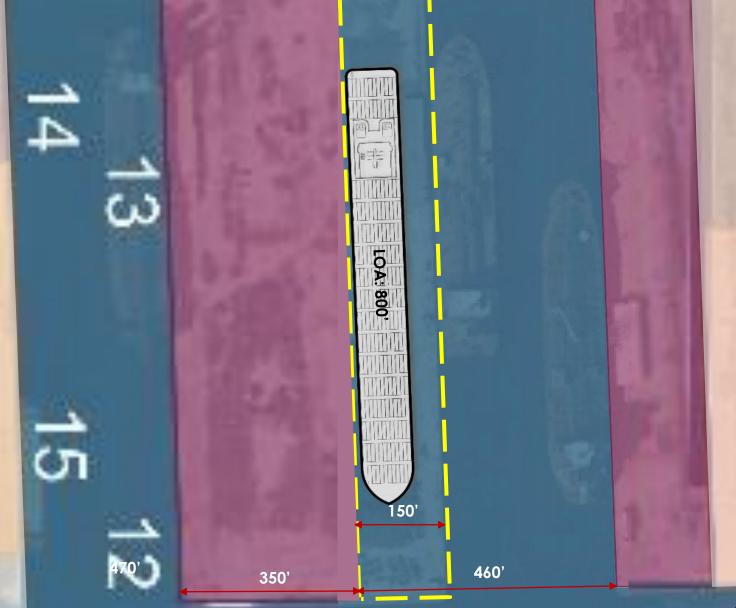
T2/T4 Parking Garage: 2018-2020 (~\$112M)



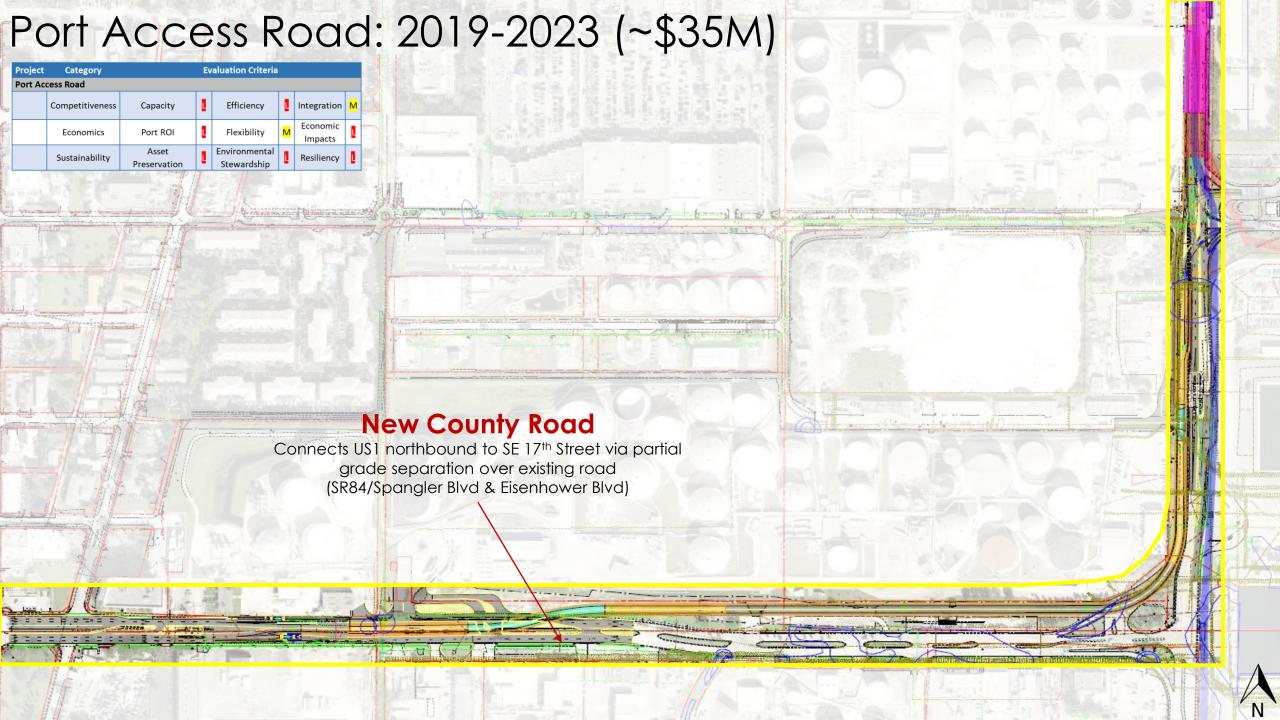


Maintenance Facility Consolidation: 2019-2023 (~\$21M) **Evaluation Criteria Maintenance Facility Consolidation** Efficiency Competitiveness Capacity Integration Economic Flexibility **Economics** Port ROI Impacts Asset Environmental Sustainability Stewardship Preservation Consolidated **Maintenance Facility** 11 acres

Slip 1/Phase 1 (Berths 9/10 Bulkheads): 2019-2025 (~\$138M) THIS IS A P3 PROJECT Category **Evaluation Criteria** Slip 1/Phase 1 (Berths 9/10) Competitiveness Efficiency Capacity H Integration Economic Flexibility Port ROI **Economics** Impacts Environmental Sustainability Resiliency H Preservation

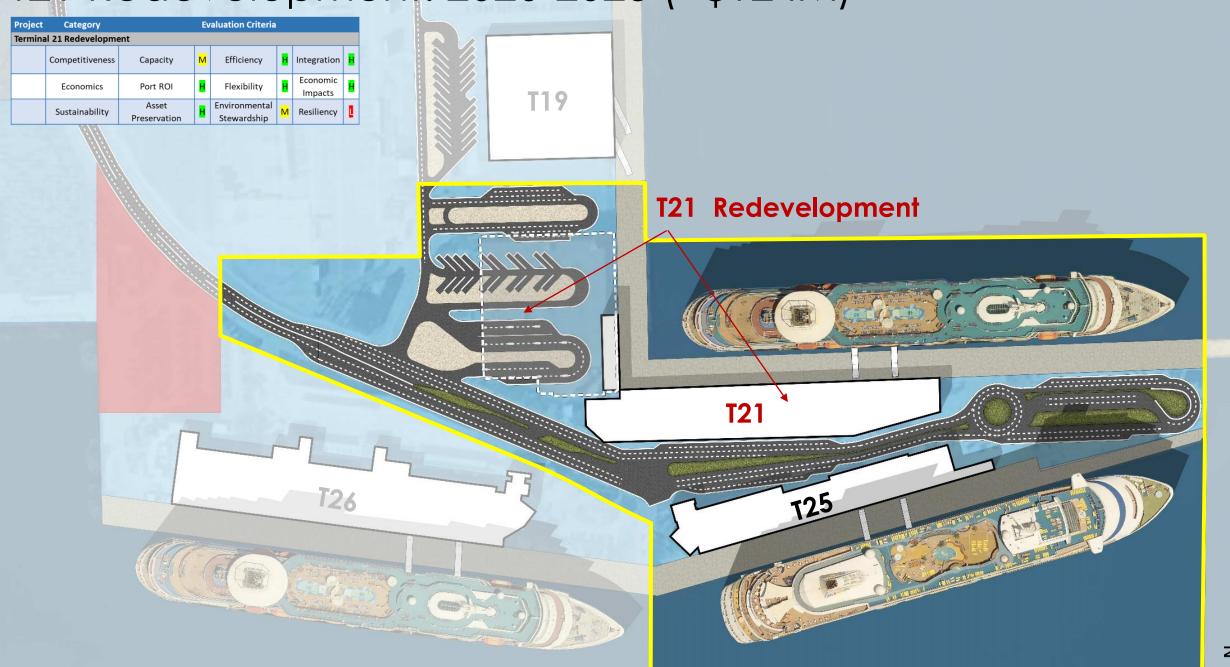


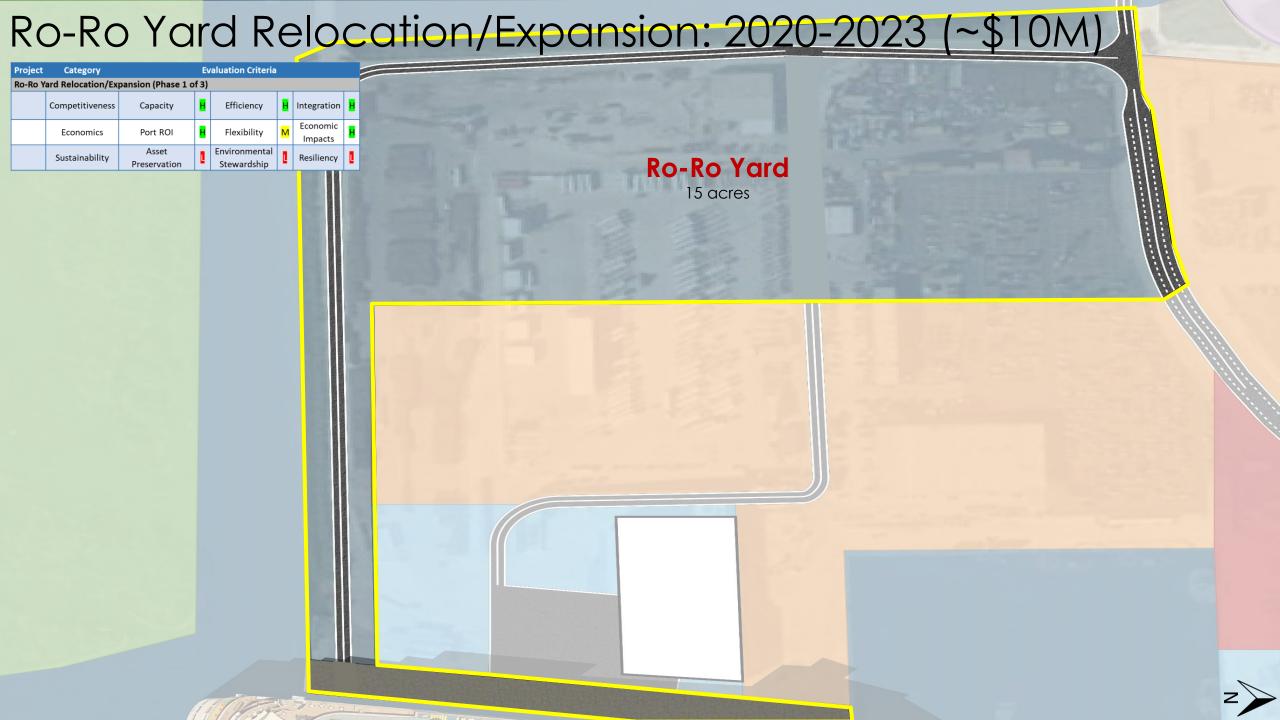






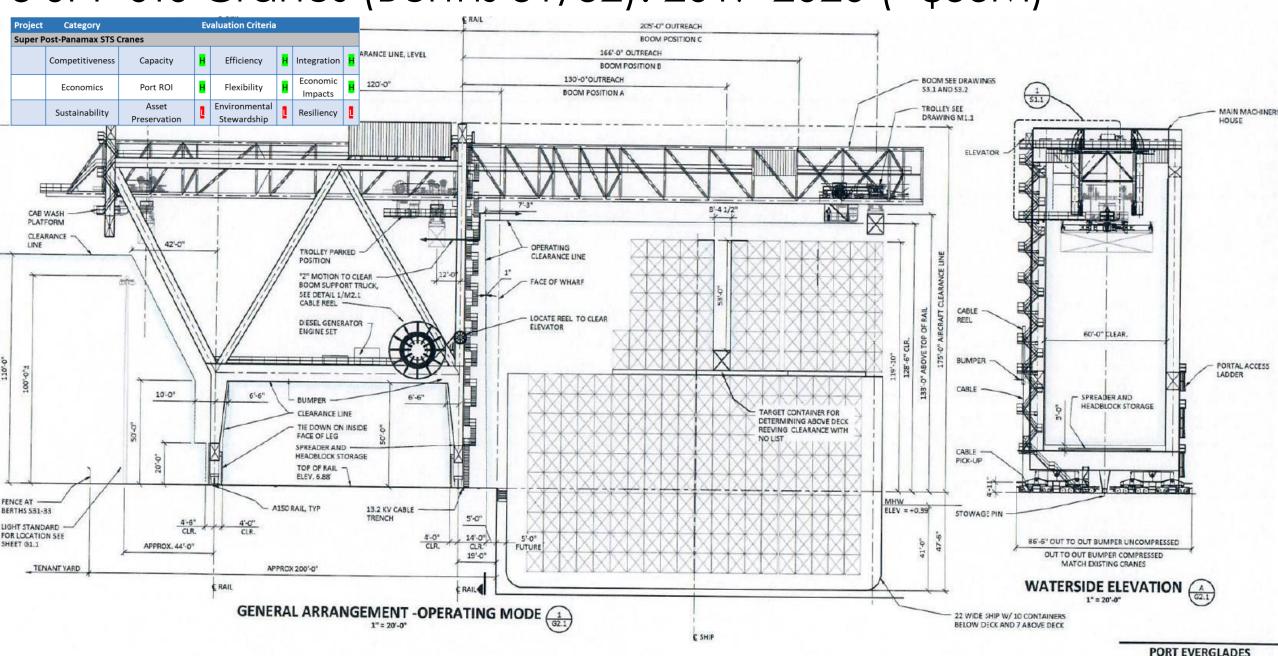
T21 Redevelopment: 2020-2023 (~\$124M)



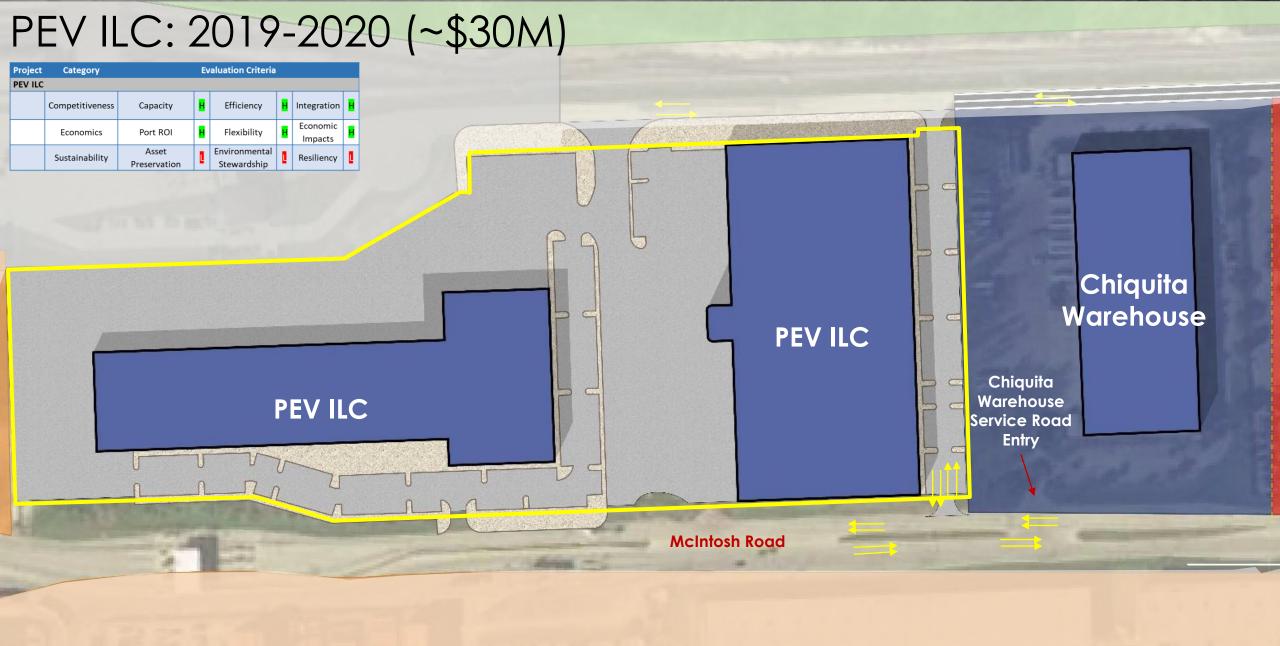




3 SPP STS Cranes (Berths 31/32): 2017-2020 (~\$55M)



LOW PROFILE CRANES



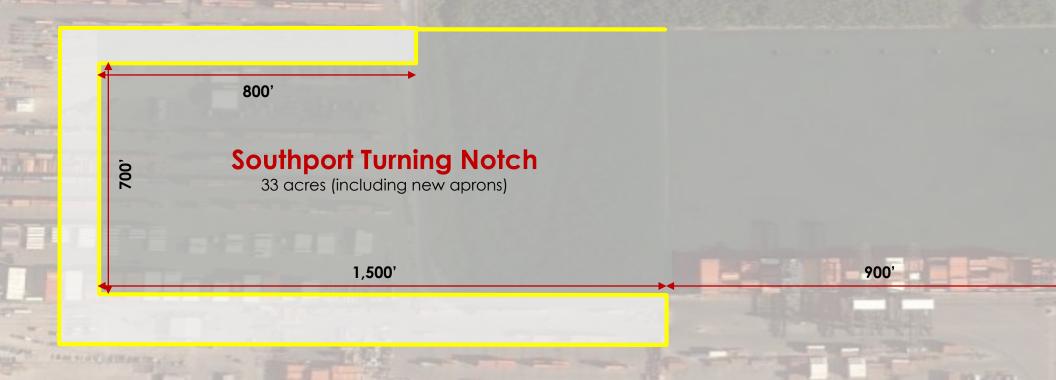
Phase 9A (Container Yard): 2018-2022 (~\$19M)

Project	Category	Evaluation Criteria					
Phase 9A CY							
	Competitiveness	Capacity	H	Efficiency	H	Integration	H
	Economics	Port ROI	H	Flexibility	H	Economic Impacts	H
	Sustainability	Asset Preservation	1	Environmental Stewardship	ı	Resiliency	1



STNE (inc Crane Rail): 2015-2023 (~\$471M)

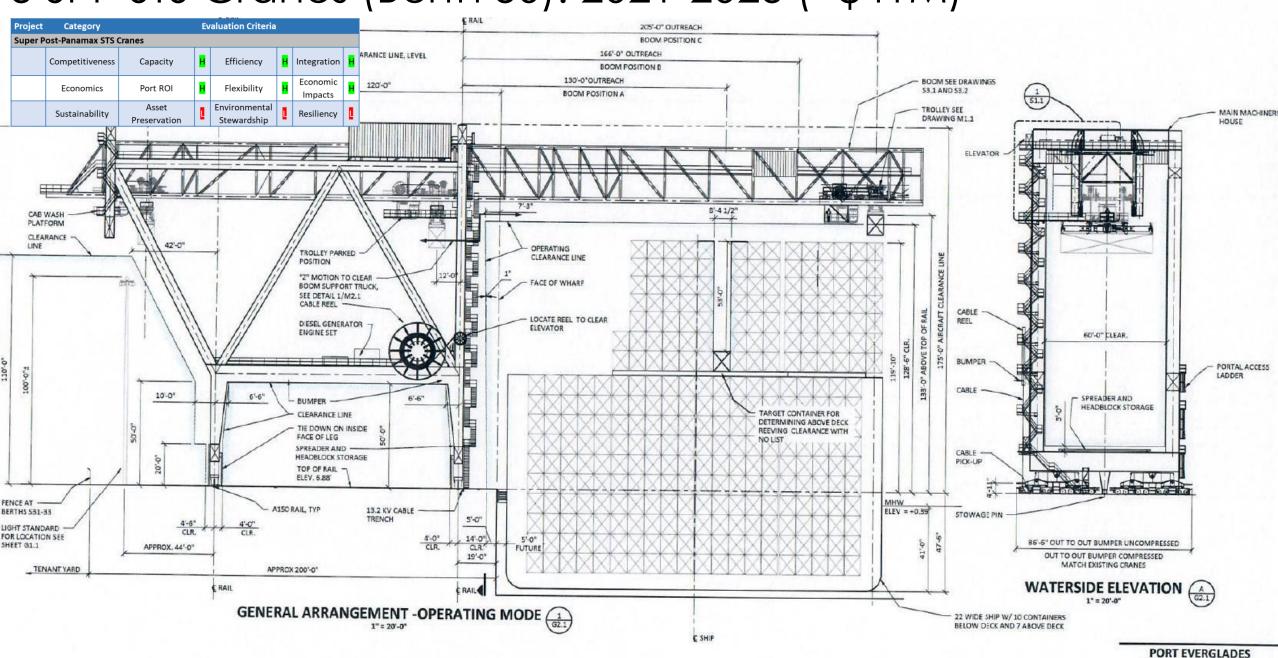








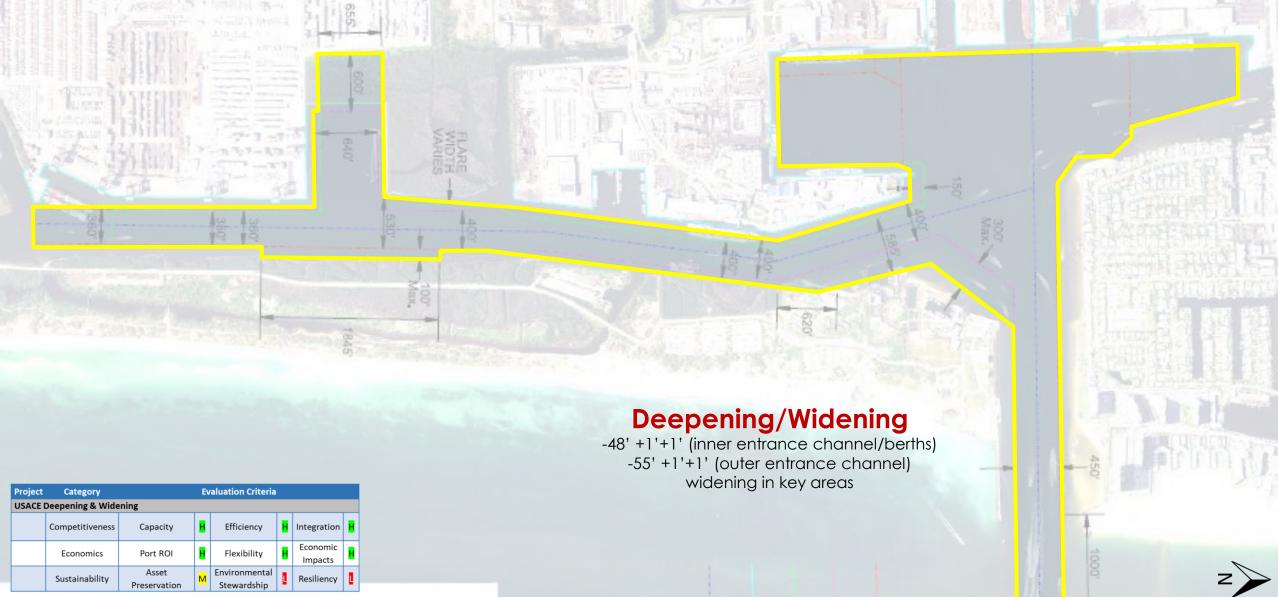
3 SPP STS Cranes (Berth 30): 2021-2023 (~\$41M)



LOW PROFILE CRANES

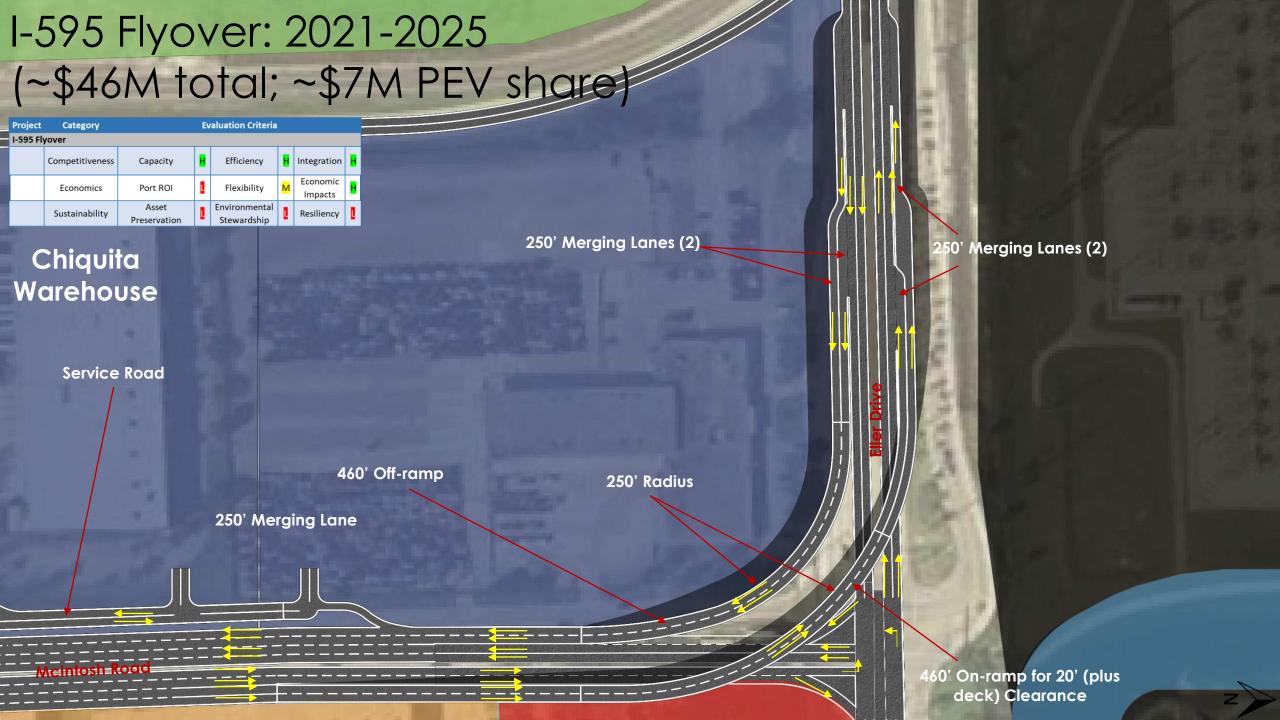


USACE Deepening/Widening (inc USCG Reconfig): 2019-2025 (~\$420M total; ~\$261M Fed/~\$92M State/~\$67M PEV)



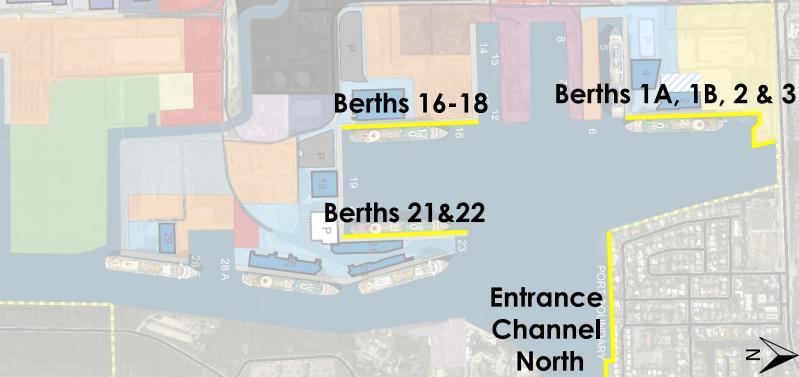
Former Dynegy Logistics Development: 2020-2023 (Private) Category **Dynegy Logistics Development** Efficiency Competitiveness Capacity Integration Economic Flexibility Economics Port ROI **Impacts** Asset Sustainability Stewardship Preservation

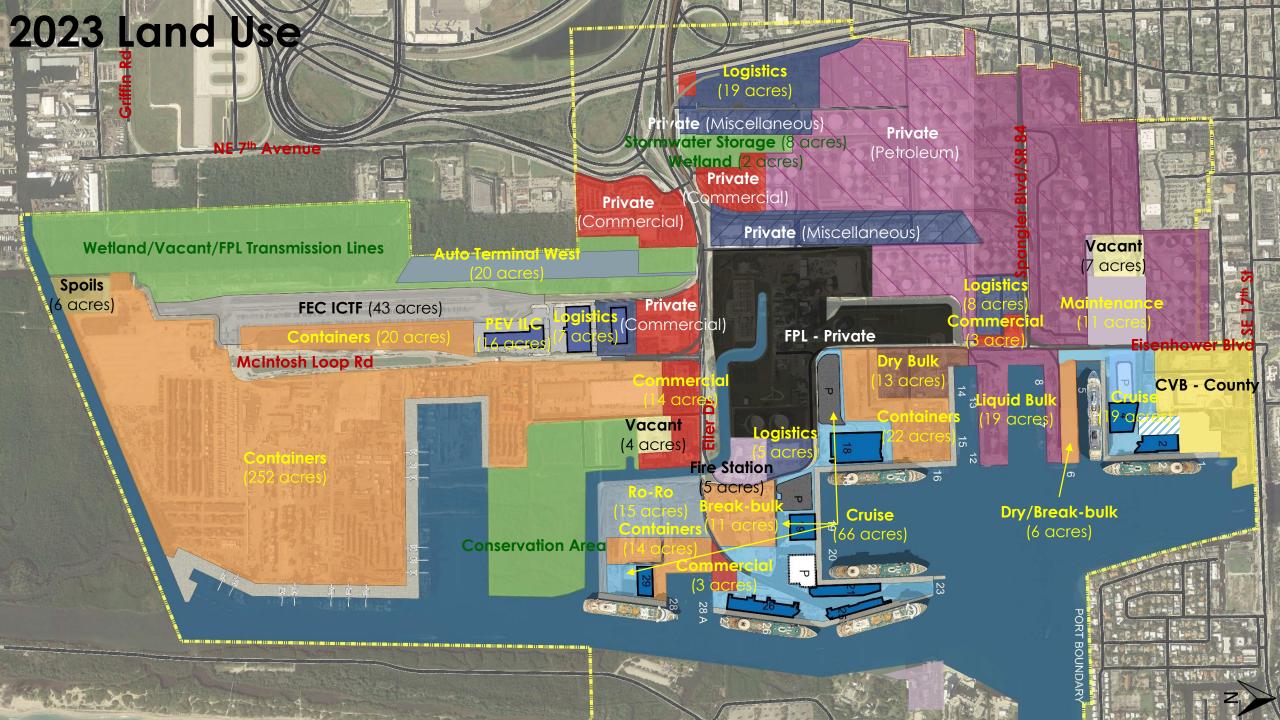




Berths 21 & 22 Bulkheads: 2019-2022 (~\$21M)
Entrance Channel North Wall: 2020-2024 (~\$12M)
Berths 1A, 1B, 2 & 3 Bulkheads: 2021-2025 (~\$26M)
Berths 16-18 Bulkheads: 2022-2026 (~\$26M)

| Toject | Category | Evaluation Criteria | Efficiency | Impacts | Impac



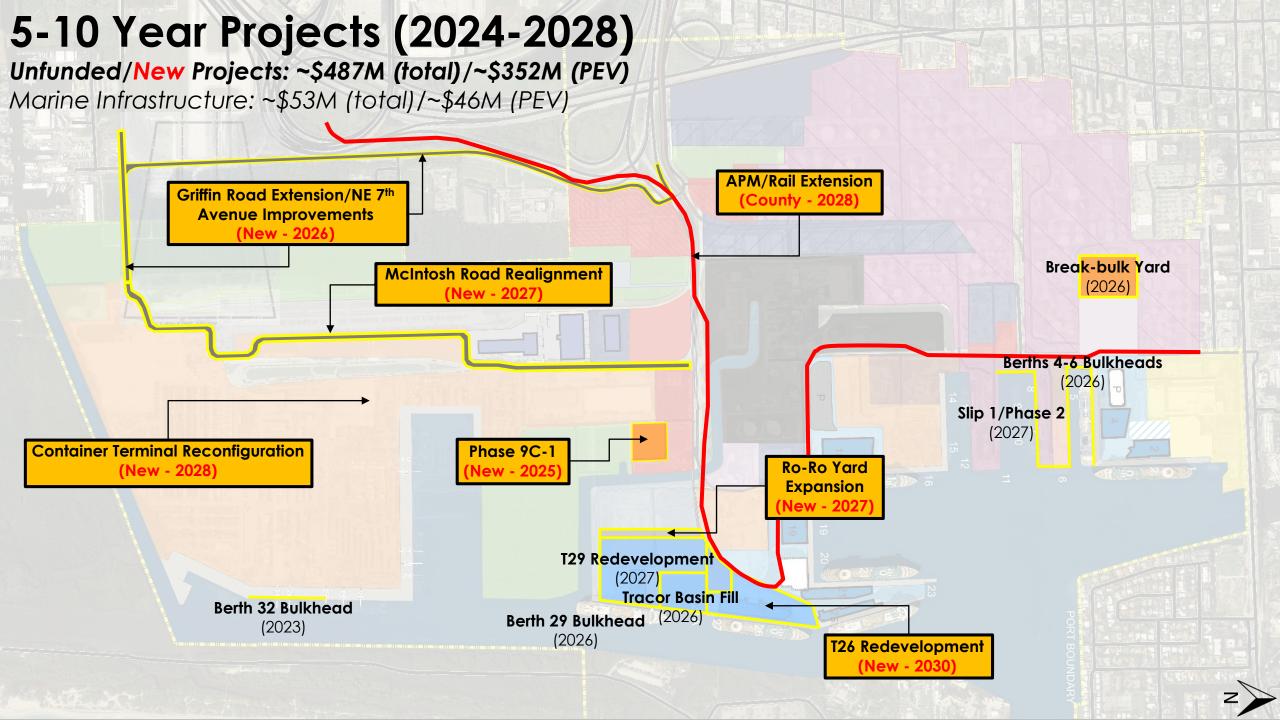


Economic Impacts – 5-Year Master Plan

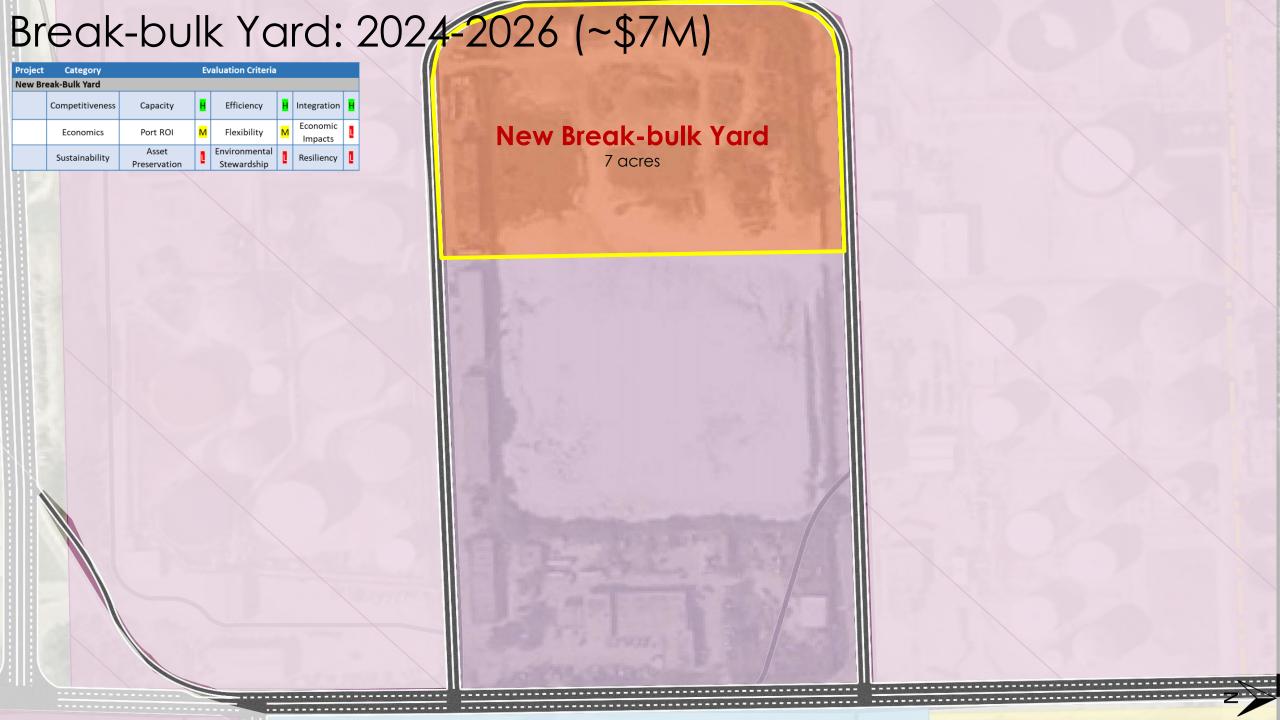
Impact Category	2018 (Total)	2023 (Cruise)	2023 (Cargo)*	2023 (Total)	
JOBS					
DIRECT	13,127	6,618	8,276	14,893	
INDUCED	8,624	3,437	6,329	9,766	
INDIRECT	9,660	4,638	6,492	11,130	
TOTAL JOBS	31,411	14,693	21,096	35,789	
PERSONAL INCOME (\$ 000)					
DIRECT	\$531,097	\$195,650	\$405,322	\$600,972	
INDUCED	\$1,008,260	\$335,623	\$805,131	\$1,140,754	
INDIRECT	\$396,137	\$147,613	\$309,293	\$456,906	
TOTAL PERSONAL INCOME (\$ 000)	\$1,935,494	\$678,886	\$1,519,746	\$2,198,632	
BUSINESS SERVICES REVENUE (\$ 000)	\$3,804,571	\$2,254,777	\$2,119,538	\$4,374,315	
LOCAL PURCHASES (\$ 000)	\$744,436	\$206,838	\$653,104	\$859,942	
STATE & LOCAL TAXES (\$ 000)	\$202,577	\$76,288	\$154,339	\$230,627	

^{*} Cargo includes liquid bulk, dry bulk, break-bulk, ro-ro and containers









Slip 1/Phase 2 (Berths 7, 8 and 8a Bulkheads): 2025-2027

(~\$41M)

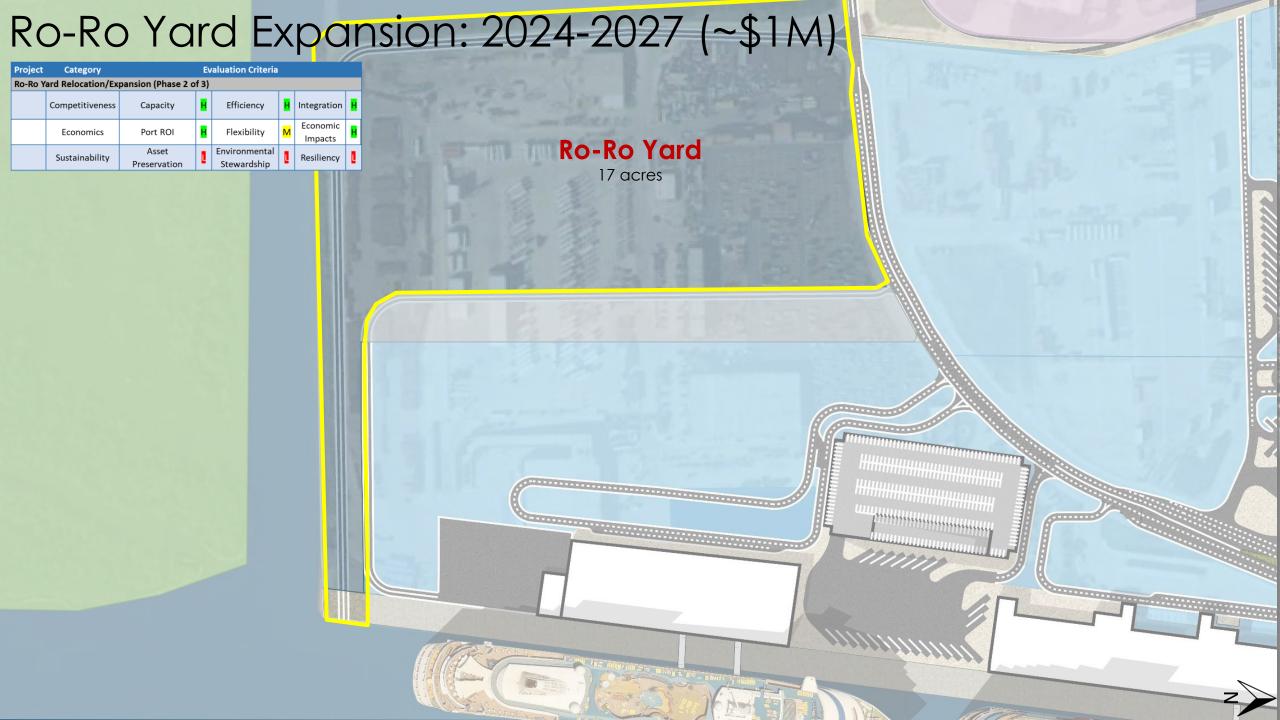


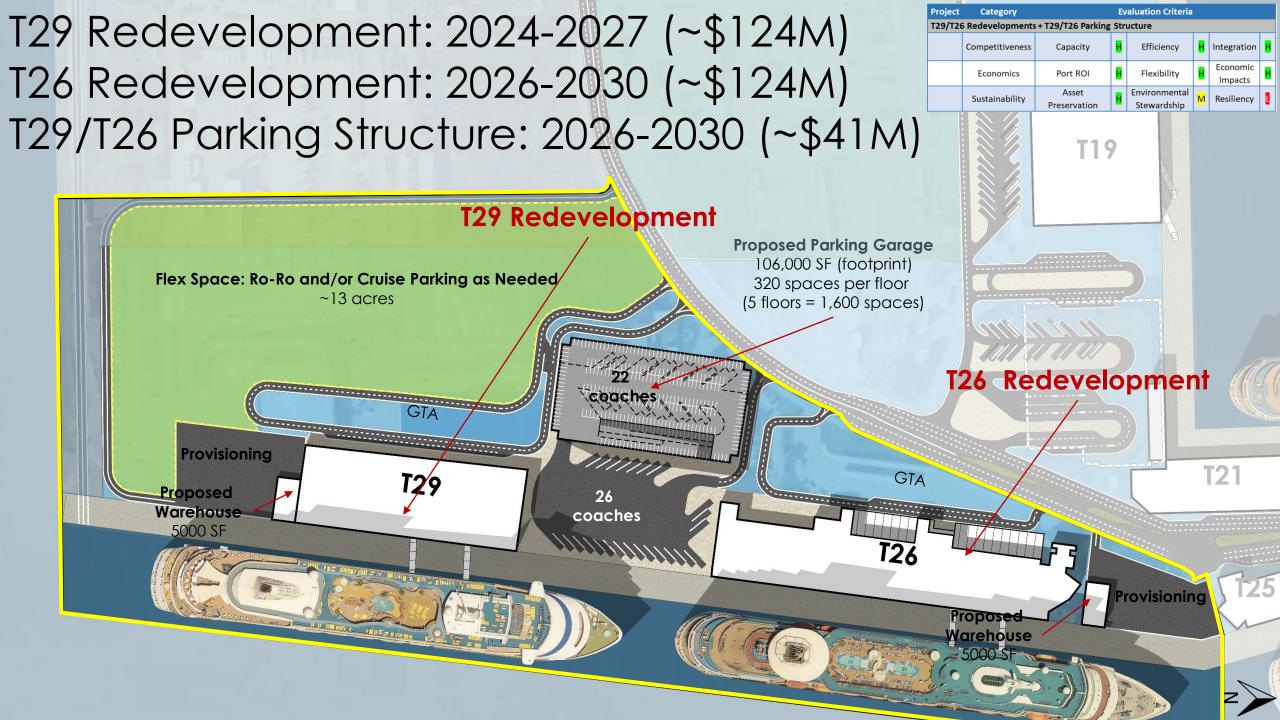














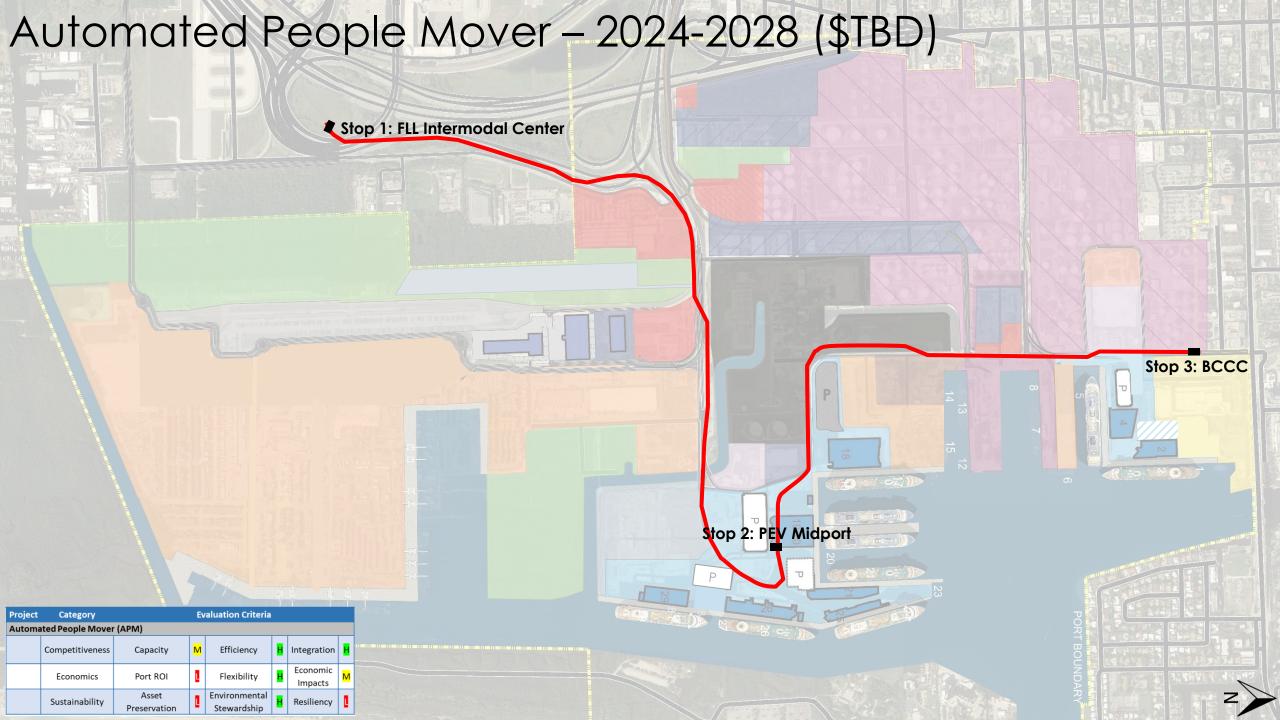
Phase 9C-1 (Container Yard): 2024-2025 (~\$4M)

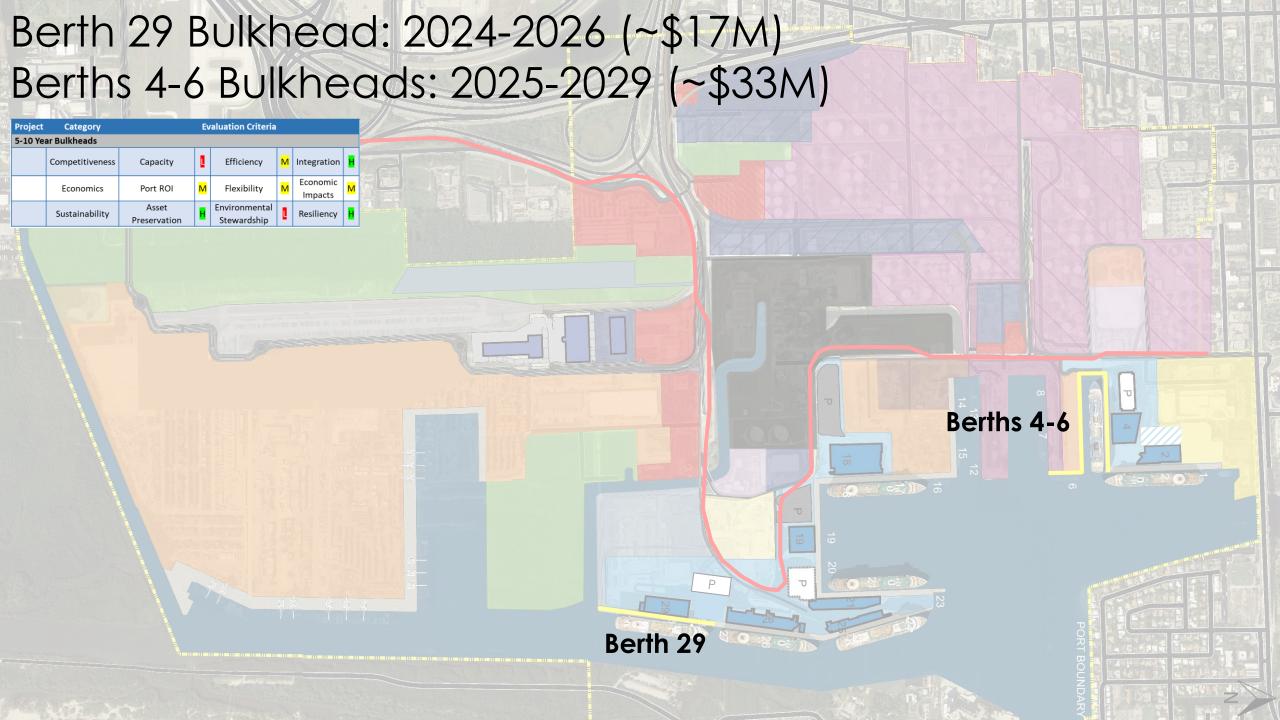
Project	Category	Evaluation Criteria											
Phase 9C-1 CY													
	Competitiveness	Capacity	H	Efficiency	H	Integration	H						
	Economics	Port ROI	H	Flexibility	H	Economic Impacts	H						
	Sustainability	Asset Preservation	1	Environmental Stewardship	Į.	Resiliency	l						

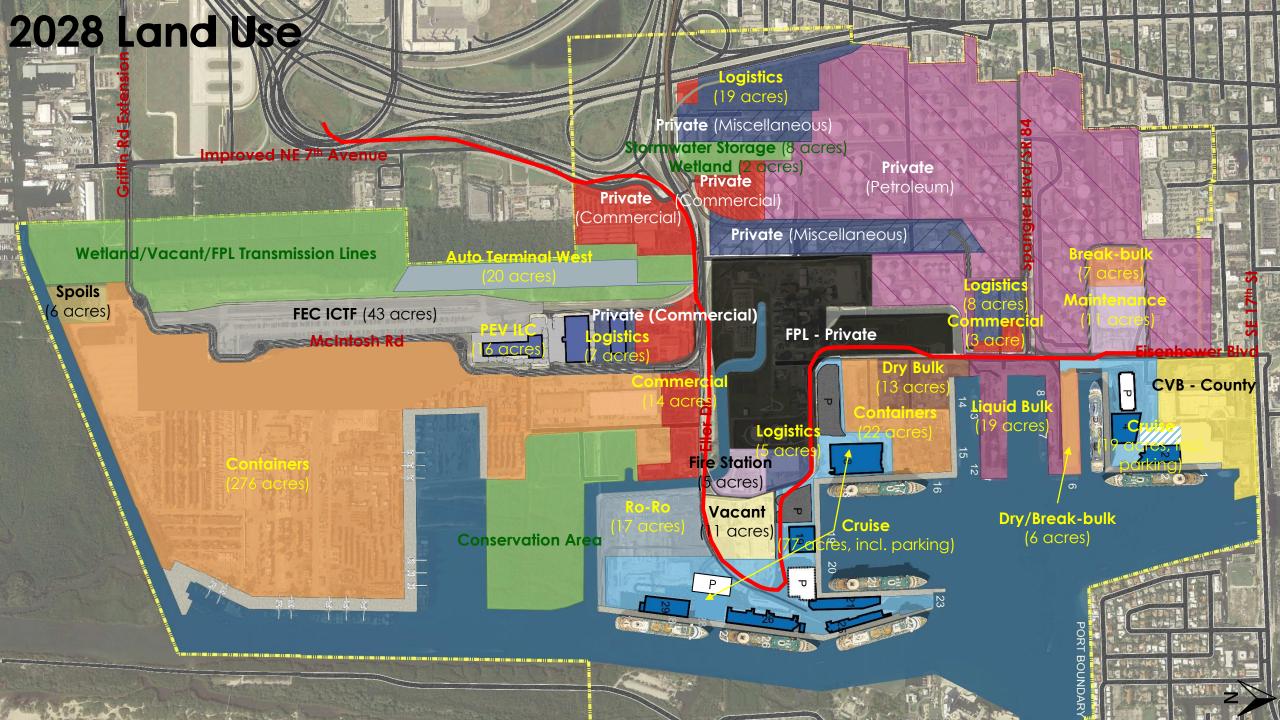




5-10 Year Projects Portwide





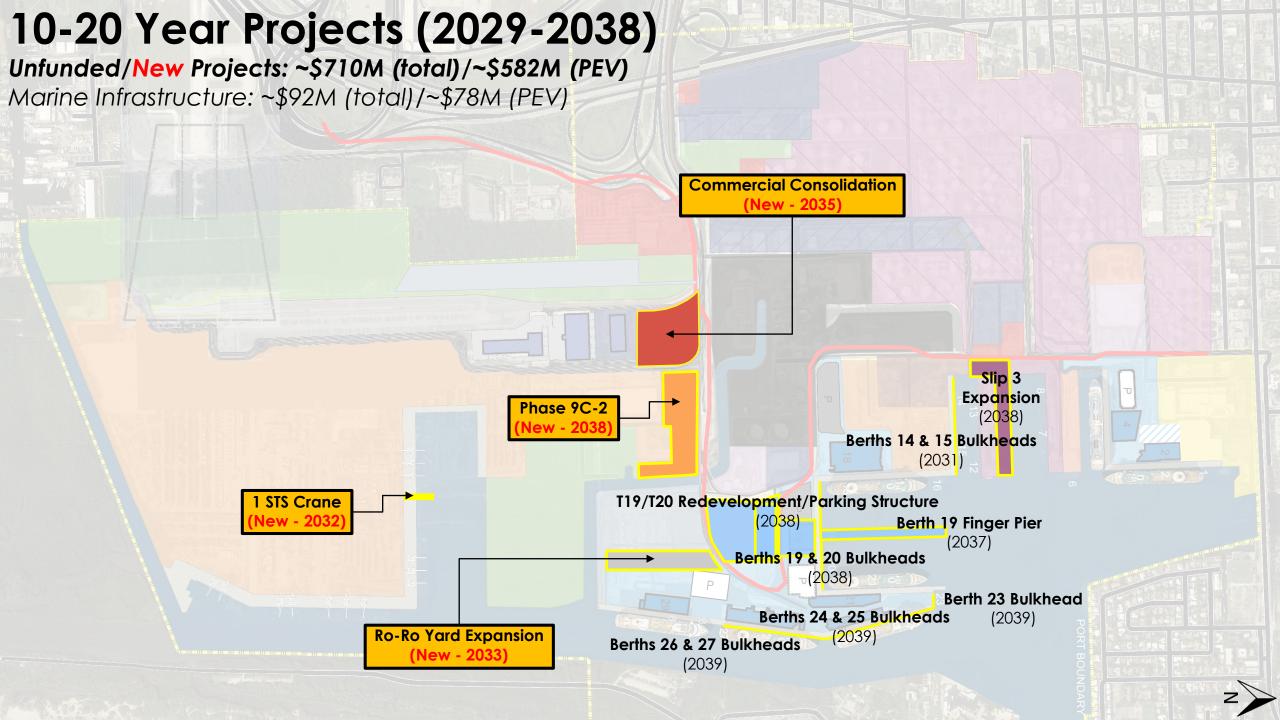


Economic Impacts – 10-Year Vision Plan

Impact Category	2018 (Total)	2028 (Cruise)	2028 (Cargo)*	2028 (Total)
JOBS				
DIRECT	13,127	8,090	9,029	17,119
INDUCED	8,624	4,187	6,903	11,090
INDIRECT	9,660	5,720	7,197	12,917
TOTAL JOBS	31,411	17,997	23,129	41,126
PERSONAL INCOME (\$ 000)				
DIRECT	\$531,097	\$237,794	\$442,052	\$679,847
INDUCED	\$1,008,260	\$407,685	\$878,093	\$1,285,777
INDIRECT	\$396,137	\$182,032	\$342,903	\$524,935
TOTAL PERSONAL INCOME (\$ 000)	\$1,935,494	\$827,511	\$1,663,048	\$2,490,558
BUSINESS SERVICES REVENUE (\$ 000)	\$3,804,571	\$2,774,011	\$2,349,862	\$5,123,873
LOCAL PURCHASES (\$ 000)	\$744,436	\$255,838	\$724,075	\$979,913
STATE & LOCAL TAXES (\$ 000)	\$202,577	\$93,144	\$169,228	\$262,372

^{*} Cargo includes liquid bulk, dry bulk, break-bulk, ro-ro and containers

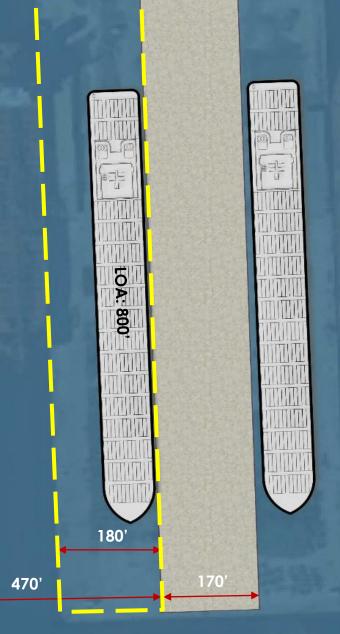




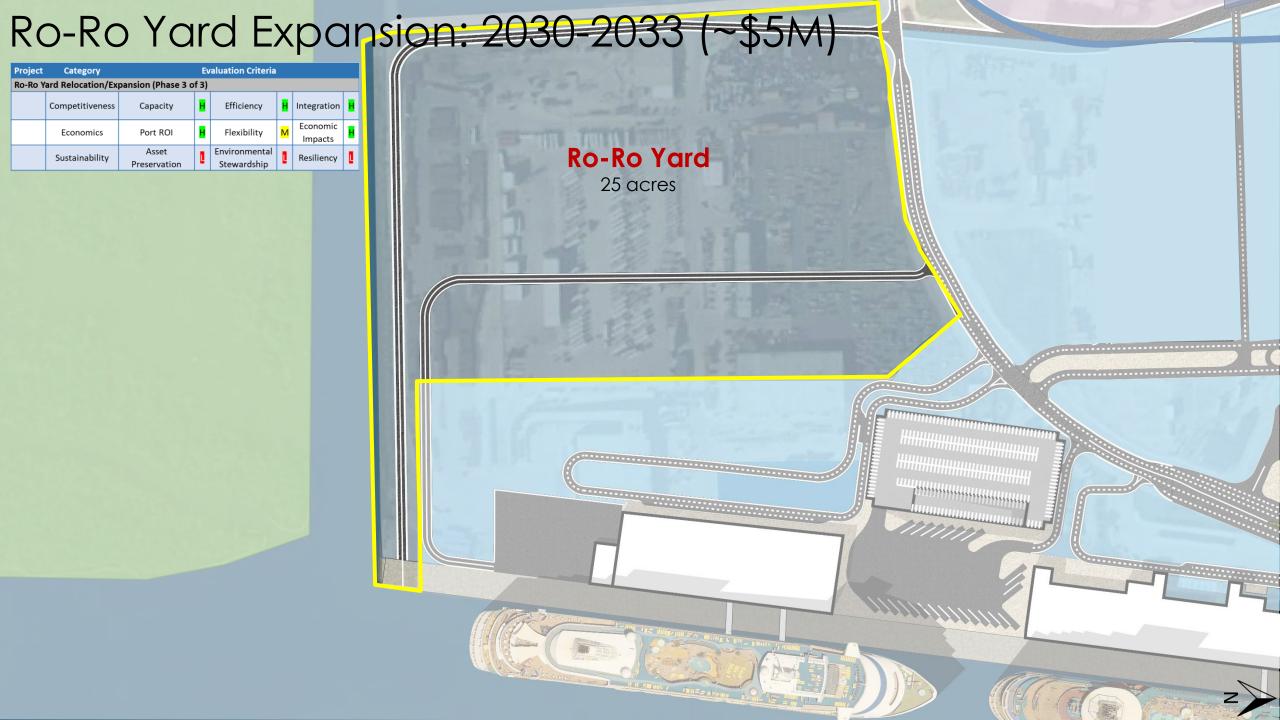


Slip 3 Expansion (Berths 11-13 Bulkheads): 2033-2038 (~\$134M)



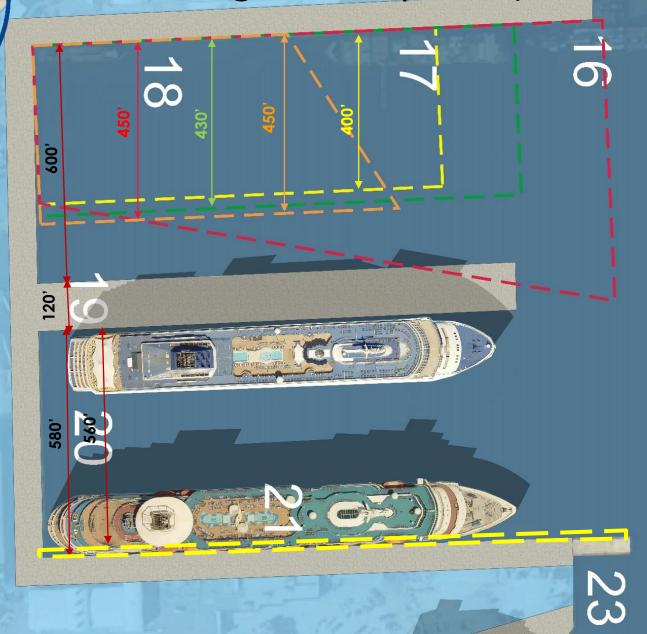






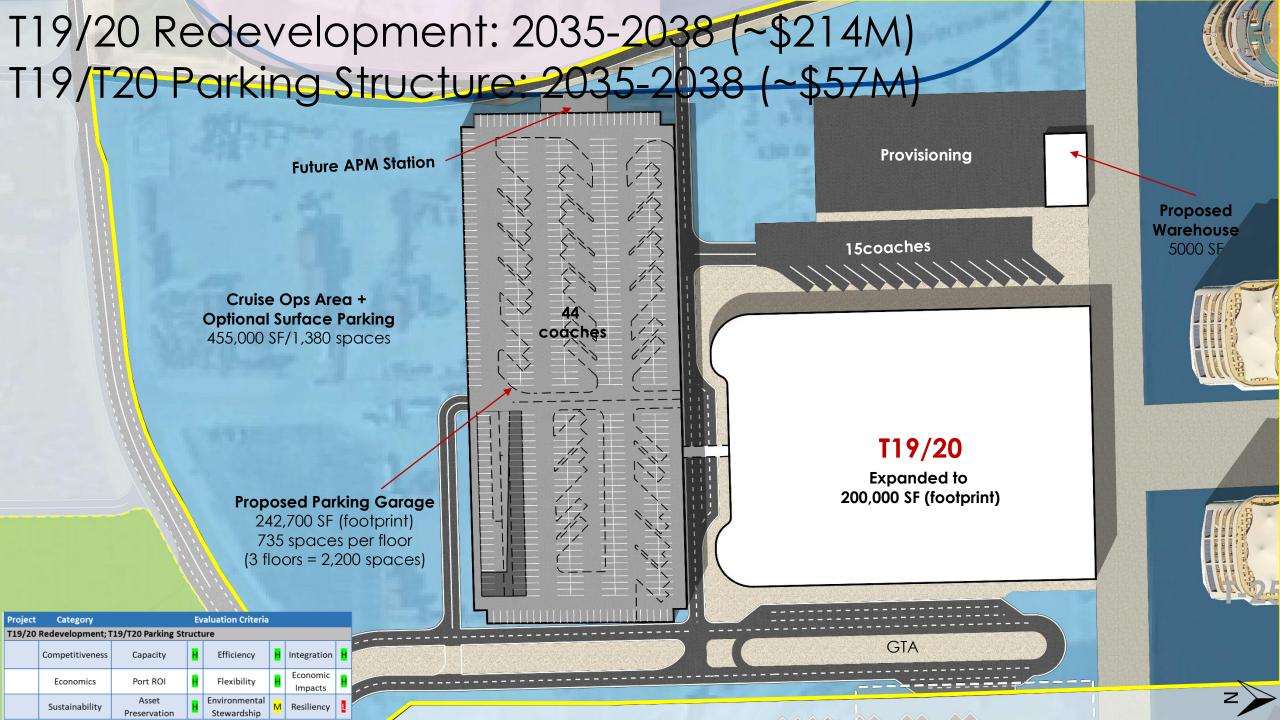


Berth 19 Finger Pier (Comparisons): 2033-2037



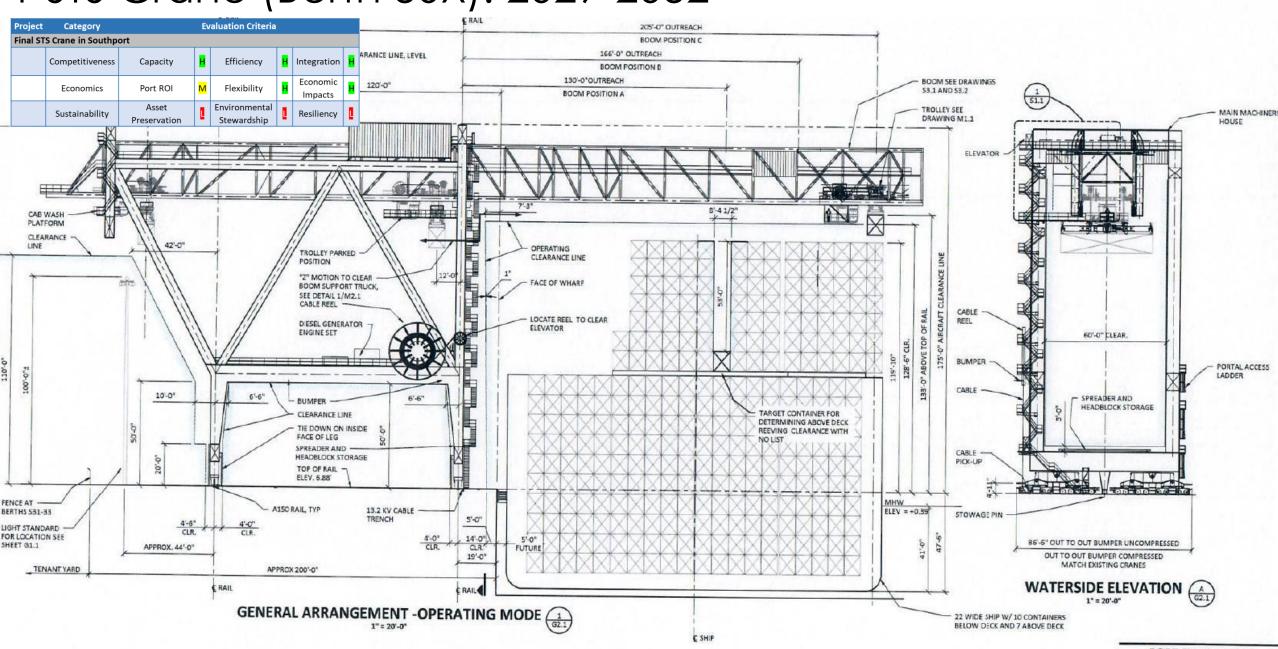








1 STS Crane (Berth 30X): 2029-2032

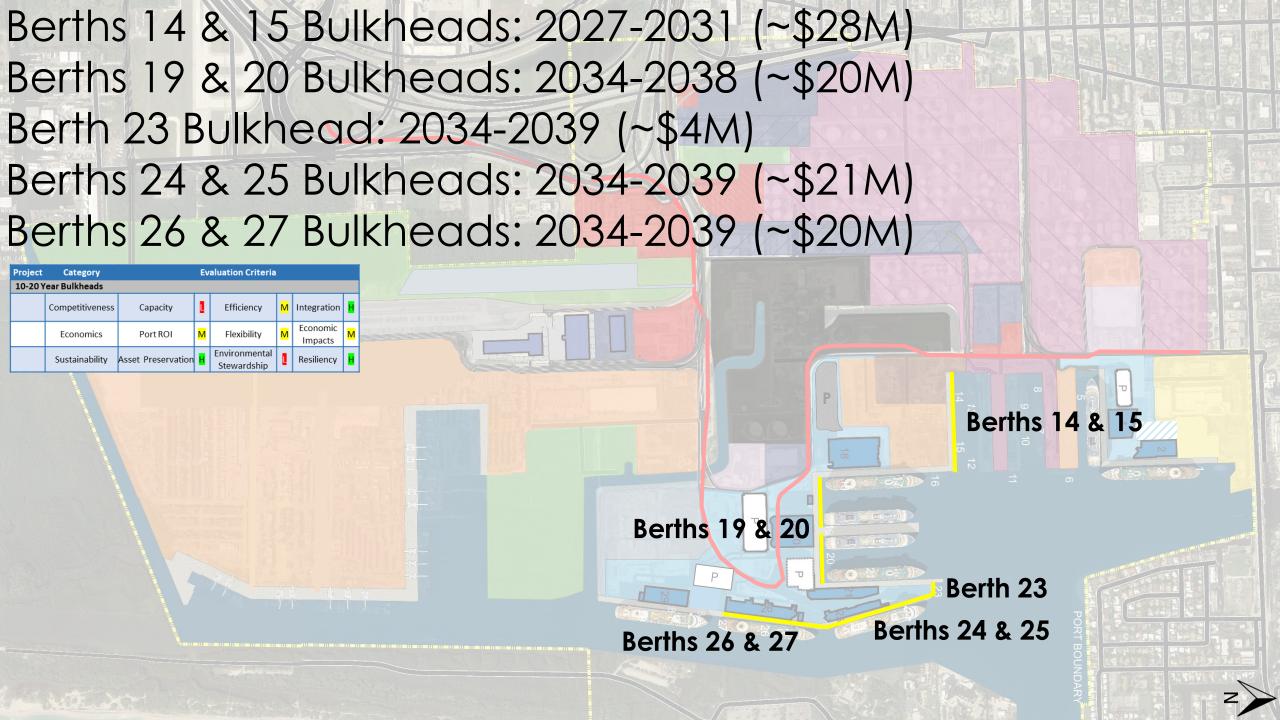


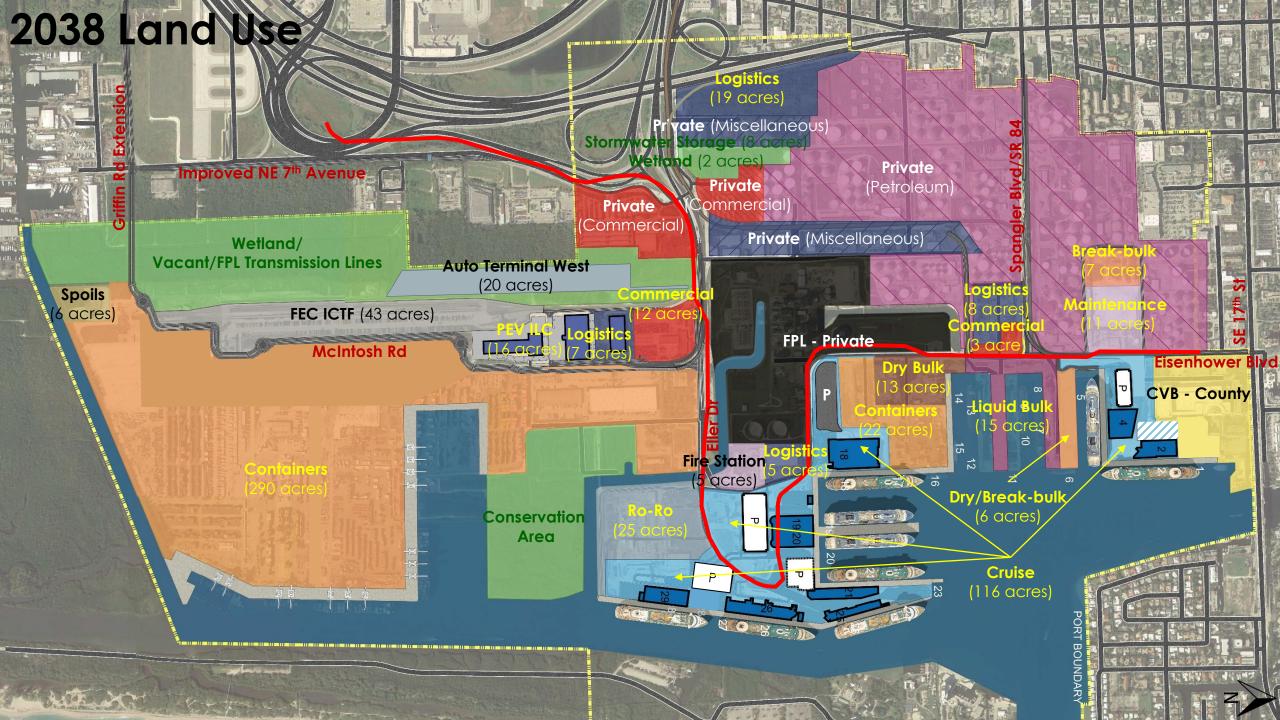
PORT EVERGLADES LOW PROFILE CRANES

Commercial Consolidation: 2031-2035 (~\$137M) **Evaluation Criteria** Category Commercial Consolidation Efficiency H Integration Competitiveness Capacity Economics Port ROI Flexibility Impacts Asset Environmental Sustainability Resiliency Preservation Stewardship **PEV Administration + Maritime/Government Offices** 12 acres

Phase 9C-2 (Container Yard): 2035-2038 (~\$21M) **Evaluation Criteria** Phase 9C-2 CY Efficiency Integration Competitiveness Capacity Economic Flexibility Economics Port ROI Impacts Asset Environmental Sustainability Stewardship Preservation Phase 9C-2 14 acres







Economic Impacts – 20-Year Vision Plan

Impact Category	2018 (Total)	2038 (Cruise)	2038 (Cargo)*	2038 (Total)	
JOBS					
DIRECT	13,127	9,958	10,040	19,998	
INDUCED	8,624	5,134	7,670	12,804	
INDIRECT	9,660	7,135	8,090	15,225	
TOTAL JOBS	31,411	22,227	25,799	48,027	
PERSONAL INCOME (\$ 000)					
DIRECT	\$531,097	\$291,110	\$490,981	782,092	
INDUCED	\$1,008,260	\$498,611	\$975,285	1,473,896	
INDIRECT	\$396,137	\$226,969	\$385,433	612,403	
TOTAL PERSONAL INCOME (\$ 000)	\$1,935,494	\$1,016,691	\$1,851,699	\$2,868,391	
BUSINESS SERVICES REVENUE (\$ 000)	\$3,804,571	\$3,448,424	\$2,641,315	\$6,089,739	
LOCAL PURCHASES (\$ 000)	\$744,436	\$320,564	\$813,882	\$1,134,446	
STATE & LOCAL TAXES (\$ 000)	\$202,577	\$114,608	\$188,698	\$303,307	

^{*} Cargo includes liquid bulk, dry bulk, break-bulk, ro-ro and containers



Proposed CAPEX (2019-2023)

Location	Project ID	Estimator	Business Unit	Category	Funding Status	Project Description	Start Year	Completion Year	Total Cost	PEV Cost	PEV Expenditures through 2019	Private investment	County	FDOT/FSTED	Federal CoE
	NP1	PEV	Parking	Parking		T2 / T4 Parking Garage	2018	2020	\$112,400,950	\$112,400,950	\$19,224,939				
Northport	NP2	S&F	Other	General Operations		Maintenance Facility Consolidation	2019	2023	\$21,000,000	\$17,500,000				\$3,500,000	
Normport	NP3	PEV/HDR	Petroleum	Berth & Apron		Slip 1 / Phase 1 (Berths 9 / 10 Bulkheads)	2019	2025	\$137,500,000	\$88,809,129	\$5,051,201	\$40,000,000		\$8,690,871	
	COUNTY	PEV	Other	Transportation	County	Port Access Road	2019	2023	\$35,000,000	\$0			\$35,000,000		
	MP1	B&A	Cruise	Cruise Terminal		T21 Redevelopment	2020	2023	\$123,918,250	\$69,000,000		\$51,418,250		\$3,500,000	
Midport	MP2	HDR	Cruise	Berth & Apron	New	Berth 21 Apron Expansion	2020	2023	\$0	\$0					
	MP3	CRA	Break Bulk	Cargo Yard	New	Ro-Ro Yard Relocation / Expansion	2020	2023	\$9,548,589	\$9,548,589					
	SP1	PEV	Containers	Cranes		3 SPP STS Cranes	2017	2020	\$54,607,277	\$45,207,277	\$19,511,417			\$9,400,000	
	SP2	PEV	Containers	Logistics		PEV ILC	2019	2020	\$30,000,000	\$2,500,000		\$27,500,000			
Southport	SP3	PEV	Containers	Cargo Yard		Phase 9A	2018	2022	\$18,500,000	\$18,500,000	\$374,626				
Soumpon	SP4	PEV	Containers	Channel		STNE	2015	2023	\$391,449,674	\$335,743,981	\$194,068,698			\$55,705,693	
	SP5	PEV	Containers	Cranes		SP Crane Rail	2015	2023	\$79,581,914	\$64,370,531	\$34,842,011			\$15,211,383	
	SP6	PEV	Containers	Cranes		3 SPP STS Cranes	2021	2023	\$41,400,000	\$41,400,000					
	PW1	PEV	Other	Channel		USACE Deepening & Widening (USCG Relocation)	2019	2023	\$39,100,000	\$9,800,000					\$29,300,000
	PW2	PEV	Other	Channel		USACE Deepening & Widening ¹	2019	2025	\$380,797,000	\$57,634,224	\$8,835,277			\$91,585,776	\$231,577,000
Portwide/Other	PRIVATE	PEV	Containers	Logistics	3rd Party	Former Dynegy Logistics Development ²	2020	2023	\$50,000,000	\$0					
	PRIVATE	PEV	Other	Logistics	3rd Party	Auto Terminal West	2020	2023	\$20,000,000	\$0					
	PW3	HDR	Other	Transportation	New	I-595 Flyover	2021	2025	\$45,977,950	\$6,896,700				\$39,081,250	
	BH2	PEV	Cruise	Berth & Apron		Berths 1A, 1B, 2, & 3 Bulkheads	2021	2025	\$25,500,000	\$22,000,000				\$3,500,000	
Bulkheads	BH3	PEV	Petroleum	Berth & Apron		Berths 7, 8, 8A & 32 Bulkheads (USACE Design)	2019	2023	\$3,400,000	\$3,400,000					
Replacements/	BH4	PEV	Cruise	Berth & Apron		Berths 16-18 Bulkheads	2022	2026	\$26,196,000	\$15,330,151				\$10,865,849	
Improvements	BH5	PEV	Cruise	Berth & Apron		Berths 21 & 22 Bulkheads	2019	2022	\$21,058,000	\$21,058,000					
	BH6	PEV	Other	Berth & Apron		Entrance Channel North Wall	2020	2024	\$12,000,000	\$12,000,000					
TOTALS									\$1,678,935,604	\$953,099,532	\$281,908,169	\$118,918,250	\$35,000,000	\$241,040,822	\$260,877,000



Proposed CAPEX (2024-2028)

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Location	Project ID	Estimator	Business Unit	Category	Funding Status	Project Description	Start Year	Completion Year	Total Cost	PEV Cost	PEV Expenditures through 2019	Private investment	County	FDOT-Pledged	Federal CoE
Northport	NP4	PEV	Break Bulk	Cargo Yard	New	Break-bulk Yard	2024	2026	\$6,600,000	\$3,100,000				\$3,500,000	
Noniipon	NP5	PEV	Petroleum	Berth & Apron	New	Slip 1 / Phase 2 (Berths 7, 8, 8A & 32 Bulkheads)	2025	2027	\$40,500,000	\$37,000,000	\$12,119			\$3,500,000	
	MP4	HDR	Cruise	Berth & Apron		Tracor Basin Fill ⁴	2024	2026	\$68,026,287	\$64,526,287				\$3,500,000	
	MP5	CRA	Break Bulk	Cargo Yard	New	Ro-Ro Yard Expansion	2024	2027	\$1,106,123	\$1,106,123					
Midport	MP6	B&A	Cruise	Cruise Terminal		T29 Redevelopment	2024	2027	\$123,918,250	\$61,959,125		\$61,959,125			
	MP7	B&A	Cruise	Cruise Terminal		T26 Redevelopment	2026	2030	\$123,918,250	\$61,959,125		\$61,959,125			
	MP8	S&F	Parking	Parking	New	T29 / T26 Parking Structure	2026	2030	\$41,190,400	\$41,190,400					
	SP7	CRA	Containers	Cargo Yard	New	Phase 9C-1	2024	2025	\$3,764,813	\$3,764,813					
	SP8	CRA	Containers	Transportation	New	Griffin Road Extension / NE 7th Avenue Improvements	2024	2026	\$21,233,530	\$21,233,530					
Southport	SP9	CRA	Containers	Transportation	New	McIntosh Road Realignment	2024	2027	\$18,438,568	\$18,438,568					
	SP10	HDR/PEV	Containers	Berth and Apron	New	Berth 33 Alignment	2024	2028	\$0	\$0					
	SP11	B&A	Containers	Security	New	Container Terminal Reconfiguration	2024	2028	\$37,628,460	\$37,628,460					
Dowledge (Ollege	PW5	CRA	Containers	Logistics	New	Shaw Property Development	2024	2026	\$0	\$0					
Portwide/Other	COUNTY	PEV	Other	Transportation	County	APM/Rail Extension (TBD)	2024	2028		\$0			\$0		
Bulkheads	BH8	PEV	Cruise	Berth & Apron		Berth 29 Bulkheads	2024	2026	\$17,300,000	\$13,800,000				\$3,500,000	
Replacements/	ВН9	PEV	Cruise	Berth & Apron		Berths 4-6 Bulkheads	2025	2029	\$33,300,000	\$29,800,000				\$3,500,000	
Improvements	BH10	PEV	Break Bulk	Berth & Apron		Berths 14 & 15 Bulkheads (Design Only)	2023	2027	\$2,810,000	\$2,810,000					
TOTALS									\$539,734,681	\$398,316,431	\$12,119	\$123,918,250	\$0	\$17,500,000	\$0



Proposed CAPEX (2029-2038)

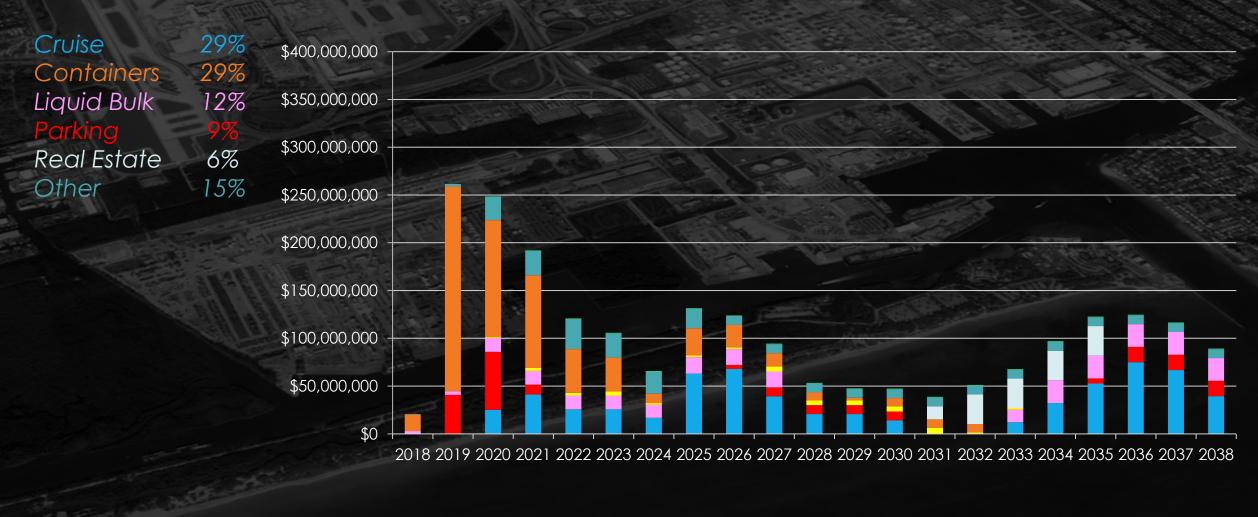
Location	Project ID	Estimator	Business Unit	Category	Funding Status	Project Description	Start Year	Completion Year	Total Cost	PEV Cost	PEV Expenditures through 2019	Private investment	County	FDOT-Pledged	Federal CoE
Northport -	NP6	PEV	Petroleum	Berth & Apron		Slip 3 Expansion (Berths 11-13 Bulkheads)	2033	2038	\$135,980,000	\$132,480,000				\$3,500,000	
	PRIVATE	HDR	Cruise	Logistics	3rd Party	LNG Bunkering + Storage Facility	TBD	TBD	\$0	\$ 0					
Midport	MP9	CRA	Break Bulk	Cargo Yard	New	Ro-Ro Yard Expansion	2030	2033	\$5,097,756	\$5,097,756					
	MP10	HDR	Cruise	Berths & Apron	New	Berth 19 Finger Pier	2033	2037	\$124,619,700	\$121,119,700				\$3,500,000	
Miapon	MP11	B&A	Cruise	Cruise Terminal	New	T19 / T20 Redevelopment	2035	2038	\$214,124,250	\$103,562,125		\$107,062,125		\$3,500,000	
	MP12	S&F	Parking	Parking	New	T19 / T20 Parking Structure	2035	2038	\$56,765,520	\$53,265,520				\$3,500,000	
الب م سالين د ٢	SP12	CRA	Containers	Cargo Yard	New	Phase 9C-2	2029	2032	\$21,191,457	\$17,691,457				\$3,500,000	
Southport	SP13	PEV	Containers	Cranes	New	1 Small STS Cranes	2029	2032	\$14,666,667	\$11,166,667				\$3,500,000	
Portwide/Other	PW4	S&F	Real Estate	Administration	New	Commercial Consolidation ³	2031	2035	\$137,497,761	\$137,497,761					
	BH11	PEV	Break Bulk	Berth & Apron		Berths 14 & 15 Bulkheads (construction)	2027	2031	\$28,000,000	\$24,500,000				\$3,500,000	
Bulkheads	BH13	PEV	Cruise	Berth & Apron		Berths 19 & 20 Bulkheads	2034	2038	\$19,500,000	\$16,000,000				\$3,500,000	
Replacements/	BH14	PEV	Cruise	Berth & Apron		Berth 23 Bulkhead	2034	2039	\$3,600,000	\$3,600,000					
Improvements	BH15	PEV	Cruise	Berth & Apron		Berths 24 & 25 Bulkheads	2034	2039	\$20,500,000	\$17,000,000				\$3,500,000	
	BH16	PEV	Cruise	Berth & Apron		Berths 26 & 27 Bulkheads	2034	2039	\$20,100,000	\$16,600,000				\$3,500,000	
TOTALS									\$801,643,110	\$659,580,985	\$0	\$107,062,125	\$ 0	\$35,000,000	\$0
	Total 20-year								\$3,020,313,395	\$2,010,996,948	\$281,920,288	\$349,898,625	\$35,000,000	\$293,540,822	\$260,877,000



CAPEX by Business Unit (~\$3B Total/~\$2B PEV)

~\$732M already funded

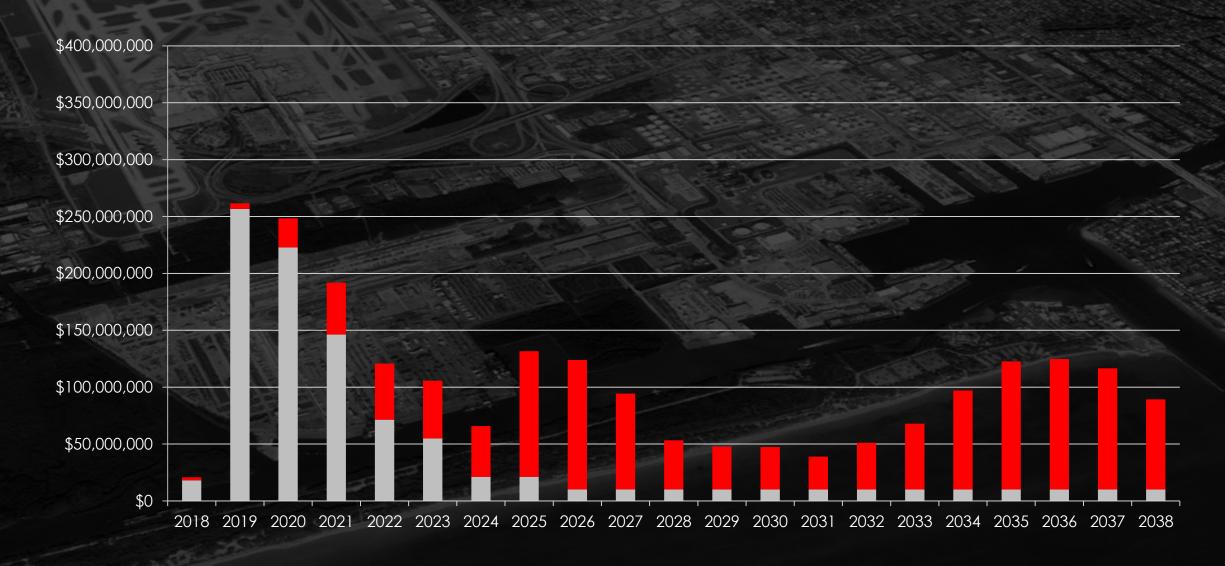
PEV Investment Distribution by Line of Business:



■ Cruise projects ■ Parking ■ Petroleum ■ Break Bulk ■ Containers ■ Real estate ■ Other ■ Project management



CAPEX by Funding Source (~\$2.01B) - PEV Only







Port Everglades Master/Vision Plan Update

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