

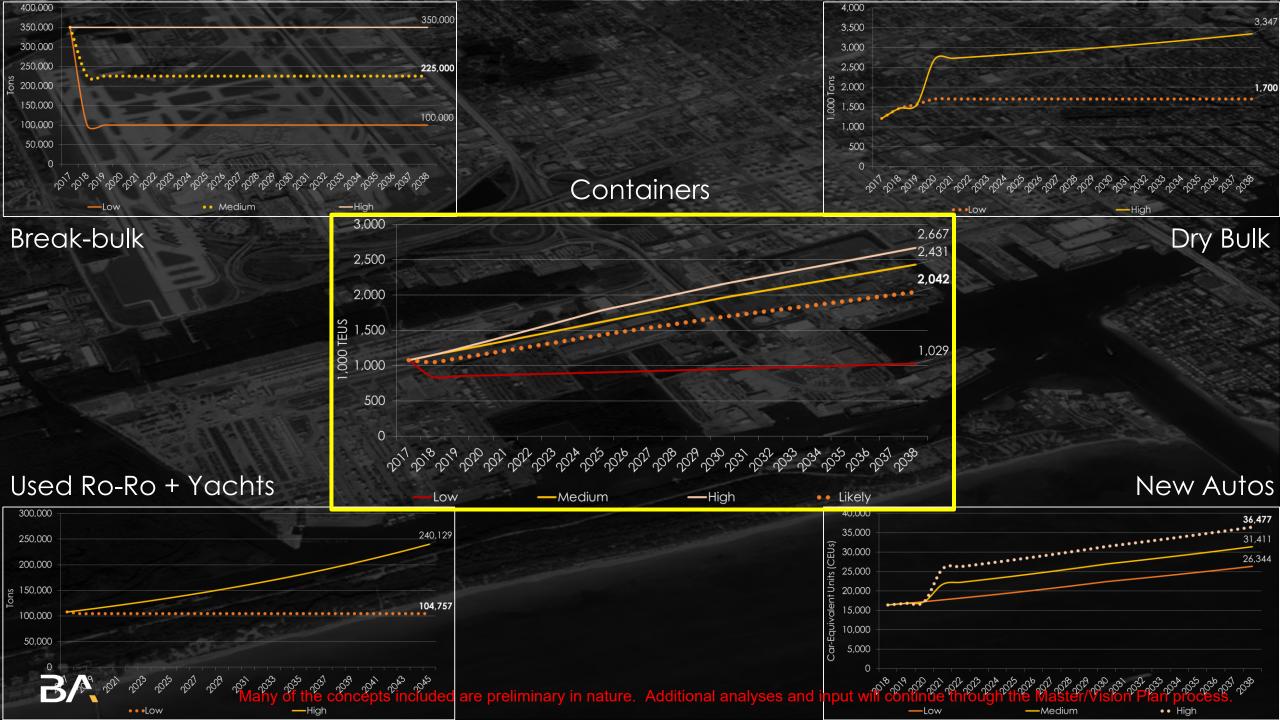
2018 Port Everglades Master/Vision Plan Update

Cargo Charrette

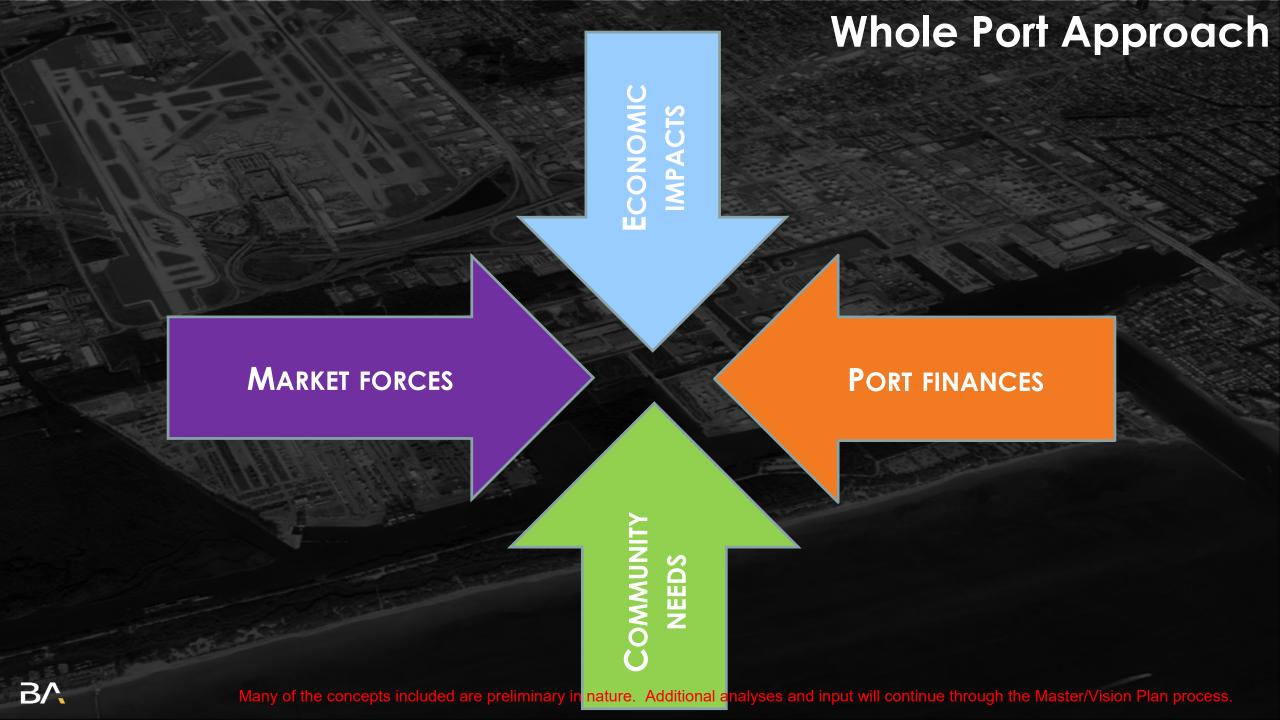
April 30, 2019



2018 Master/Vision Plan Update Phase 1: Market Assessments



2018 Master/Vision Plan Update Phase 2: Plan Development



Major Future Development Considerations

- Market projections for each PEV line of business
- Vessel sizes (cruise, cargo, liquid bulk)
- On-port traffic
- Core trade lanes/source markets, trade policy and macro-economic conditions
- Ongoing PEV improvements (STNE, USACE deepening/widening, etc.)
- Cruise industry expansion and transition to LNG
- Competitive dynamics and developments at other Florida ports
- Technology, industry best practices and supply chain evolution
- Environmental and community impacts
- Return on investment and economic impacts
- Resiliency
- Demand vs. Capacity



Current vs Future Demand/Canacity - ING Preferred

n/a TEUs/berth

409,514 Tons/berth

1,700,000 Tons/berth

72,954 CEUs/berth

Many of the concepts included are preliminary in nature. Additional analyses and input will continue through the Master/Vision Plan process.

1.0

0.5

n/a

n/a

n/a

n/a

n/a

2,083

25,933

93,724

3,219

14.0

16.0

9.0

20.0

n/a

46.0

n/a

-0.4

-2.6

-0.5

n/a TEUs/acre

20,476 Tons/acre

121,429 Tons/acre

1,459 CEUs/acre

-4.0

-2.0

16.0

-7.0

32.0

-47.0

10.0

14.0

25.0

13.0

n/a

78.0

n/a

52

		Berth Requirements (berths)		KPIs	Δ 2018-2038	Land Req	KPIs	Δ 2018-2038	
		2018	2038			2018	2038		
Cruise (including parking)		9.0	10.0		1.0	88.0	109.0	b	21.0
	Multi-Day	8.0	10.0			84.0	109.0	כ	
		467,676	716,220	PAX/berth		44,541	65,708	PAX/acre	
	Daily	1.0	0.0			4.0	0.0	ל	
		128,934	n/a	PAX/berth		32,234	n/a	PAX/acre	
Liquid Bulk		3.0	3.0		0.0	23.0	15.0	b	-8.0
		112,698	118,280	BPD/berth		14,700	23,656	BPD/acre	
Containers		5.5	8.0		2.5	327.0	294.0	b	-33.0
	Southport (w/ cranes)	4.0	6.0			279.0	294.0	כ	
		252,116	330,529	TEUs/berth		3,615	6,947	TEUs/acre	:
		80,037	84,751	Moves/crane					
	Southport (w/o cranes)	0.0	2.0						
		n/a	29,600	TEUs/berth					
	Midport	1.5	0.0			48.0	0.0	5	

	IVIUILI-Day	0.0	10.0			07.0	103.0	
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66,667

403,396

416,553

107,208

3.6

1.0

n/a

n/a

n/a

n/a

n/a

Break-bulk

Dry Bulk

Automobiles

Commercial

Vacant/Other

Total

Warehousing/Logistics/Miscellaneous

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Plan Development – Guiding Principles

Increase Efficiency

- Increase effective capacity and minimize intra-port drayage and associated truck trips/costs through operational improvements
- Consolidate similar operations/operators
 - Southport = containers + logistics + commercial (office)
 - Midport = cruise + ro-ro + dry bulk
 - Northport = liquid bulk/break-bulk + cruise + logistics + CVB/commercial
- Separate modes of transportation to minimize truck and non-truck traffic

Preserve Flexibility

- Meet projected future demand without precluding changes in market conditions over time
 - Berths are the primary asset of all ports
 - Land should be configured to support berth utilization
 - Technology will drive future operations in unexpected ways



Plan Development – Guiding Principles

- Facilitate Integration
 - Integration within the port
 - Cruise/Bulk/Liquid Bulk/Containers/ICTF/Parking/Logistics/Commercial
 - Traffic and transportation
 - Integration between the port and surrounding area
 - FLL-PEV-CVB synergies
 - Logistics (cargo and people)
 - Traffic and transportation
 - Integration across the broader supply chain
 - Cruise: PEV/PortMiami/Port Canaveral/Caribbean destinations
 - Containers: shippers/vessel operators/MTOs/3PLs/trucking community
 - Liquid bulk: critical regional and national energy infrastructure
 - Bulk/break-bulk: regional alternatives and business cycle dynamics

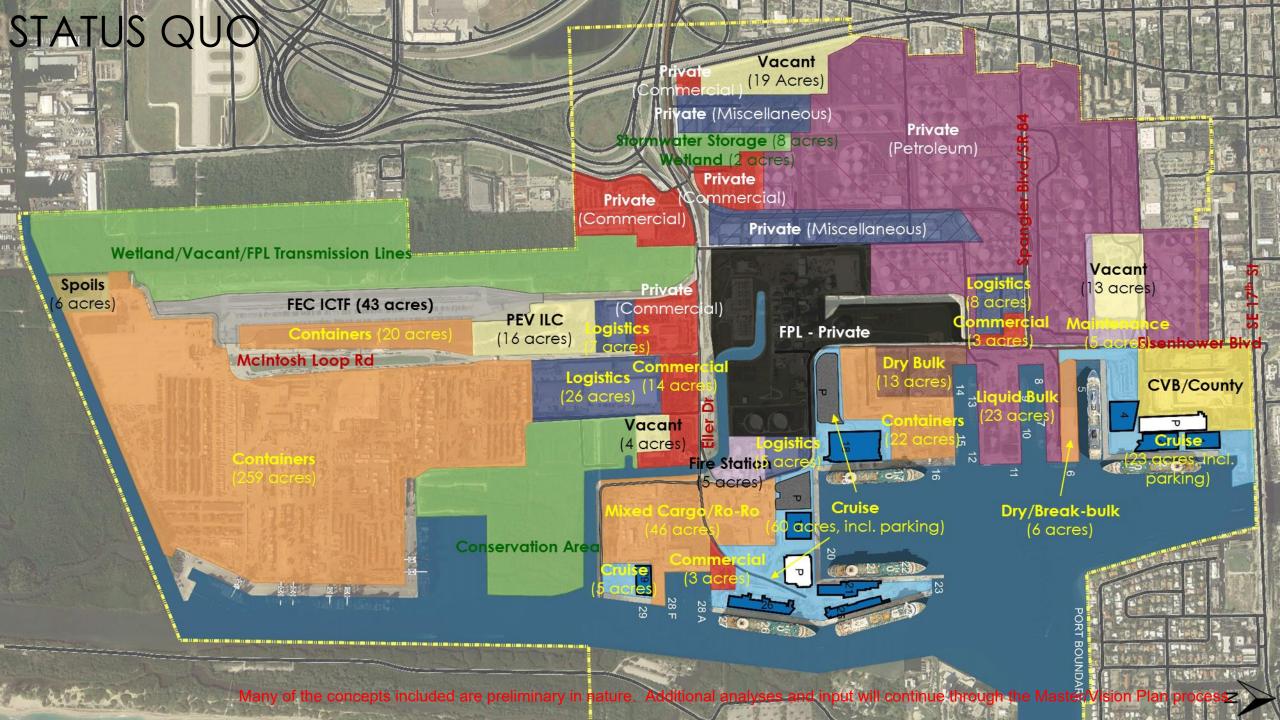


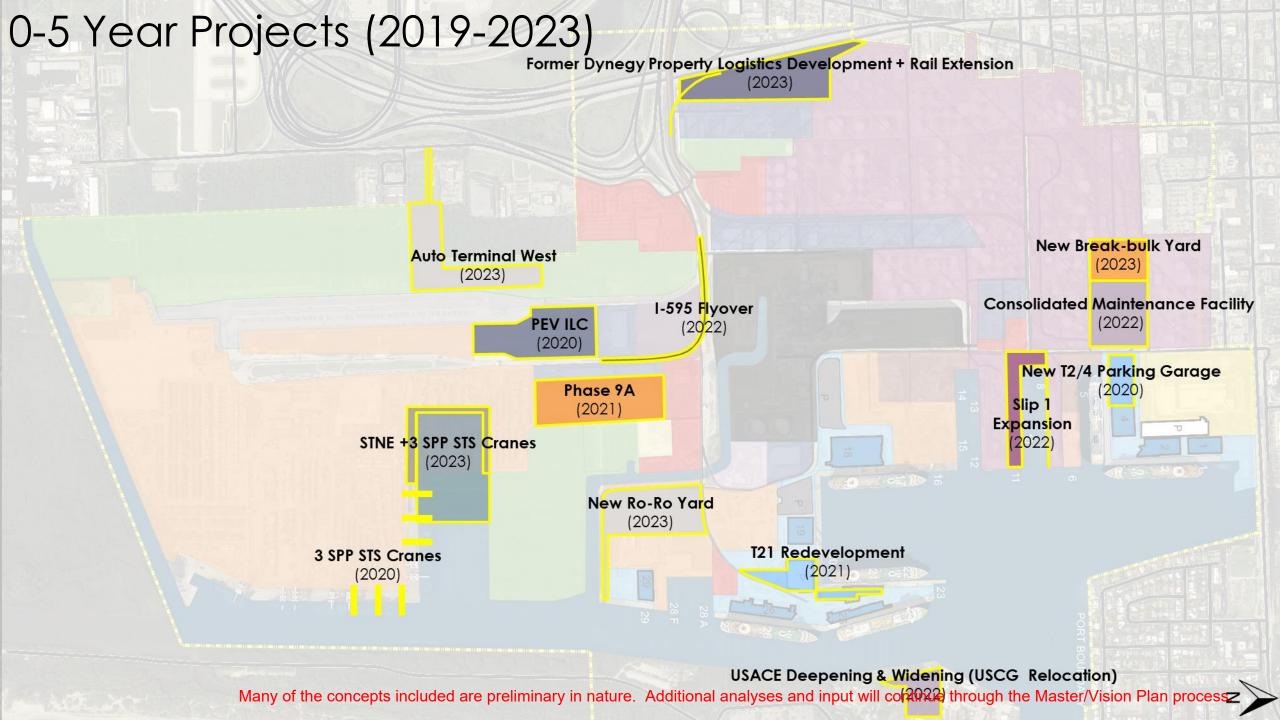
2018 Master/Vision Plan Update Phase 2a: Port Projects

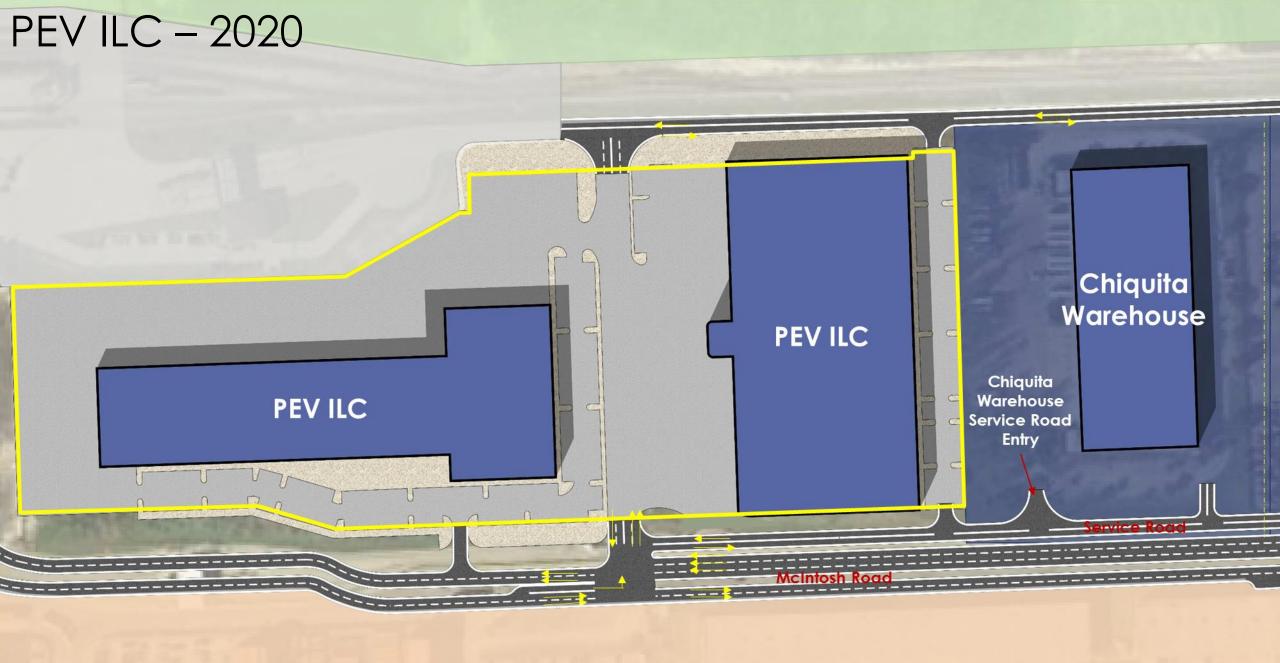
Port Projects by Area by Year

	0-5 Year Projects		5-10 Year Projects		10-20 Year Projects	
Northport	T2/T4 Parking Garage	2020	Port Access Road	2025		
	Slip 1 Expansion	2022	Slip 3 Expansion	2026		
	Maintenance Facility Consolidation	2022	LNG Bunkering + Storage Facility	2028		
	Break-bulk Yard	2023				
Midport	T21 Redevelopment	2021	Tracor Basin Fill	2024	Berth 19 Finger Pier	2029
	Ro-Ro Yard Relocation/Expansion	2023	T29	2027	T19/20	2030
			Ro-Ro Yard Expansion	2027	Berths 14/15 Realignment	2037
			T26	2028	Ro-Ro Yard Expansion	2033
					T14/15	2038
Southport	PEV ILC	2020	Phase 9C-1	2025	Phase 9C-2	2029
	3 SPP STS Cranes	2020	Phase 9A-2	2026		
	Phase 9A-1	2021	Griffin Road Extension	2026		
	STNE + 3 SPP STS Cranes	2023	McIntosh Road Realignment	2027		
			Berth 33 Alignment	2028		
			Container Terminal reconfiguration	2028		
Portwide/Other	USACE Deepening & Widening (USCG Relocation)	2022	Shaw Property Development	2024	APM	2035
	Shaw Property Acquisition	2022	USACE Deepening & Widening	2025		
	I-595 Flyover	2022	Commercial Consolidation	2025		
	Former Dynegy Logistics Development	2023				
	Auto Terminal West	2023				





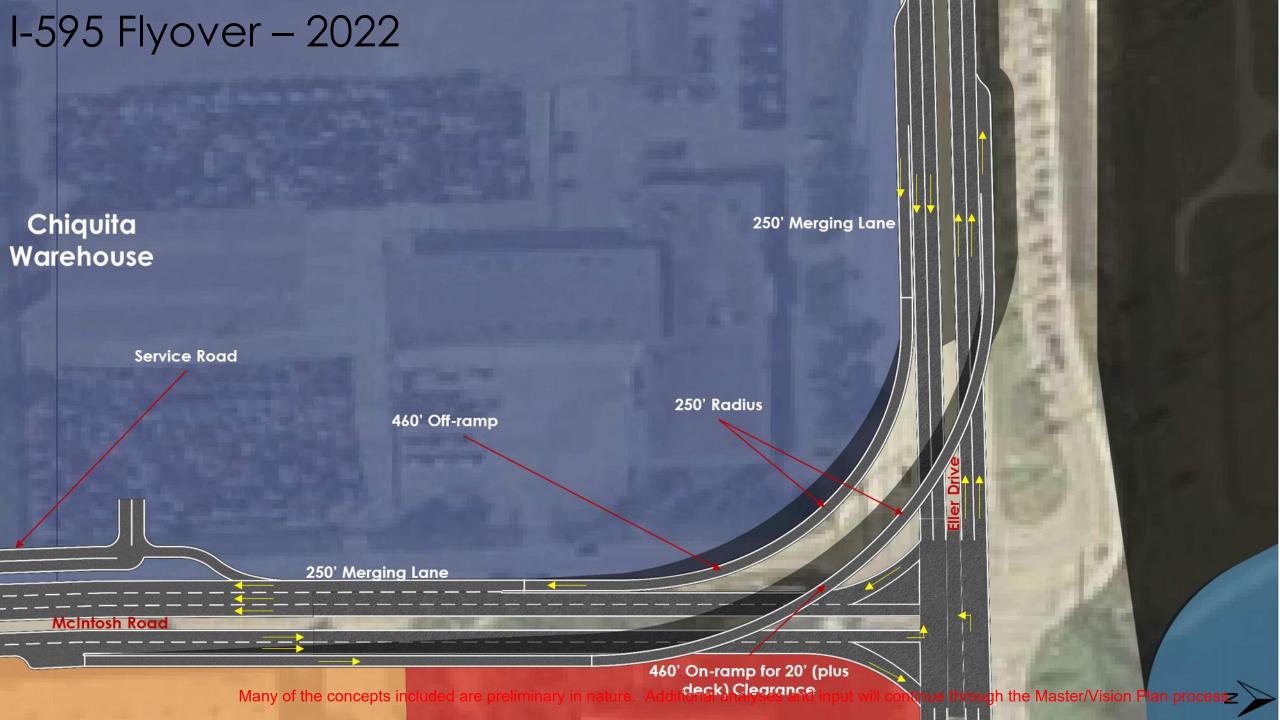




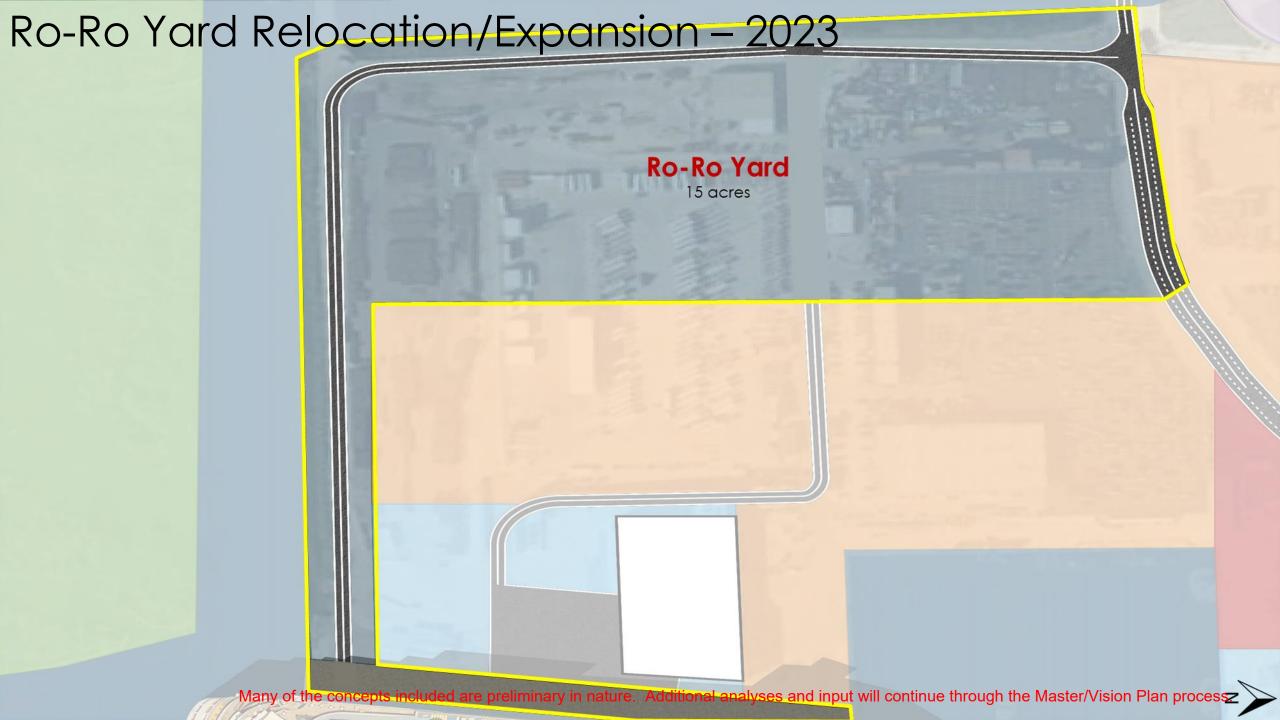
Phase 9A-1 - 2021



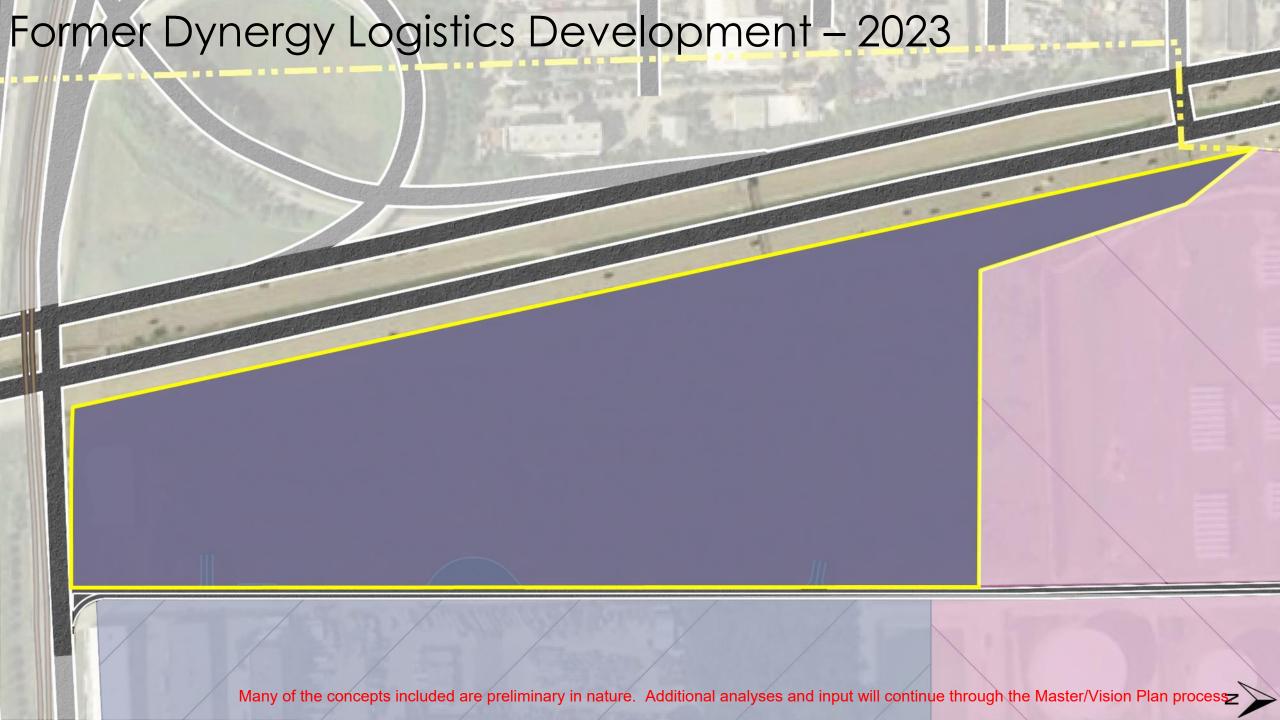
20 acres

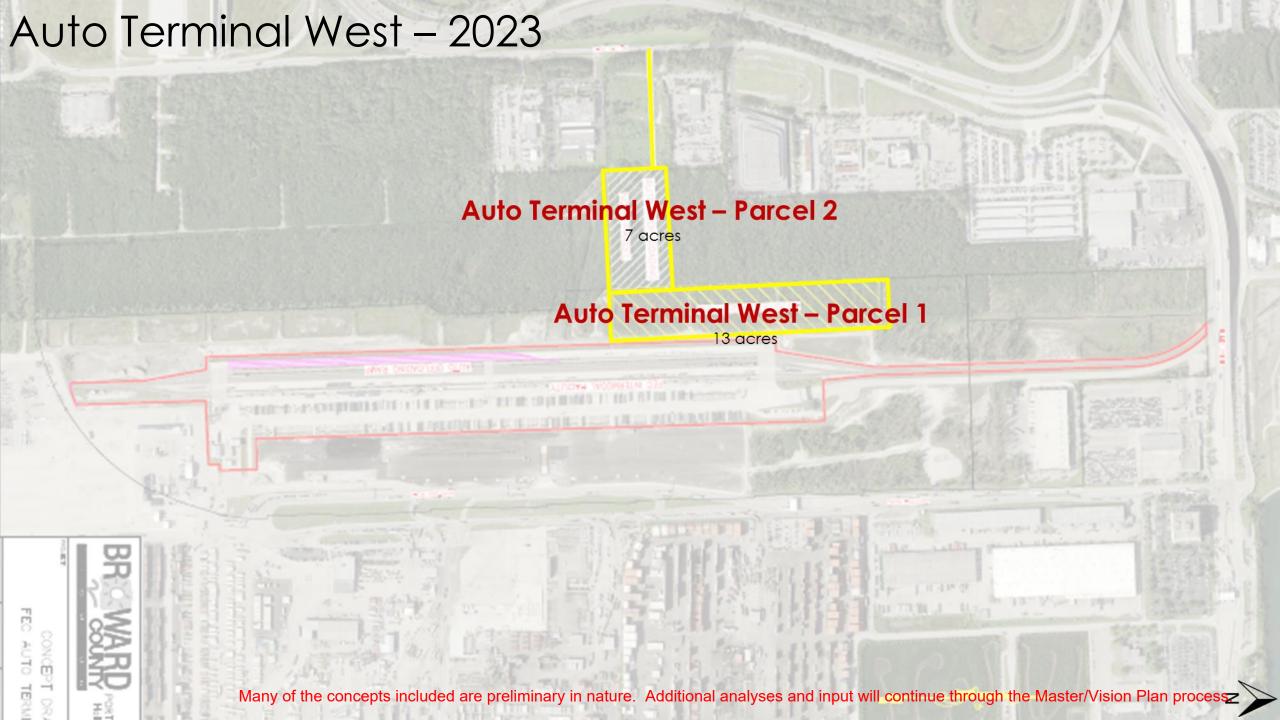




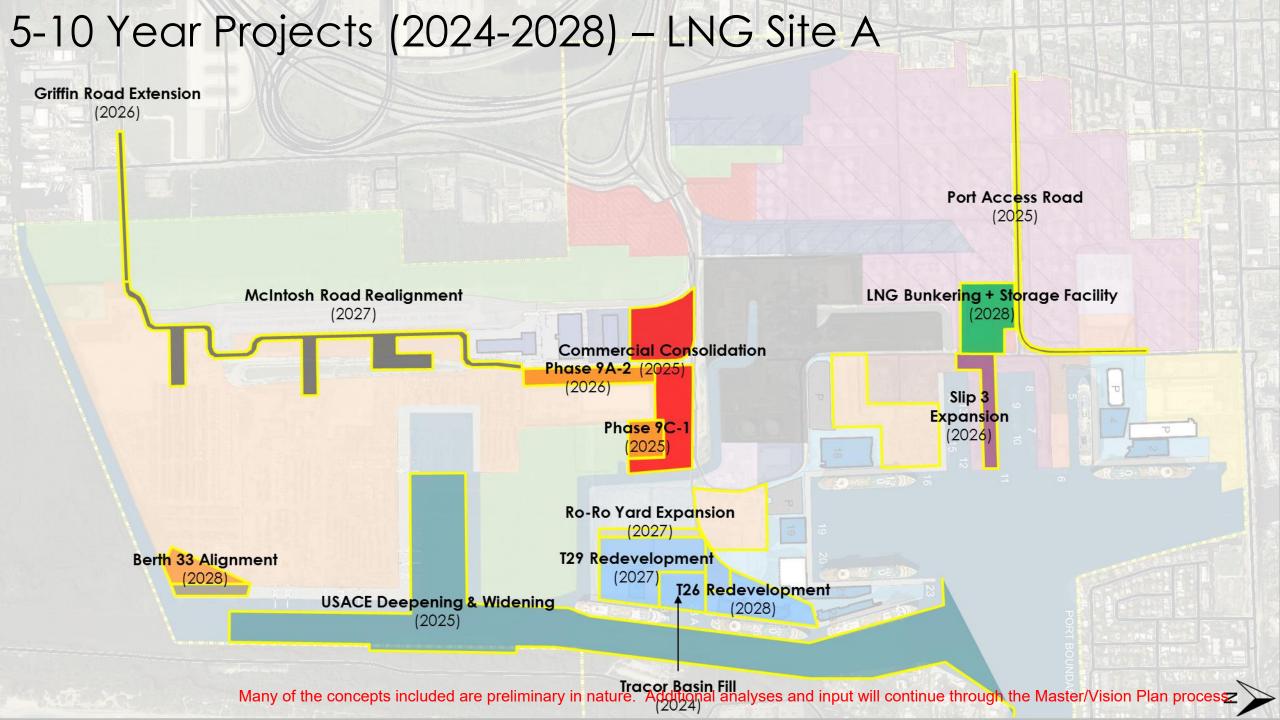


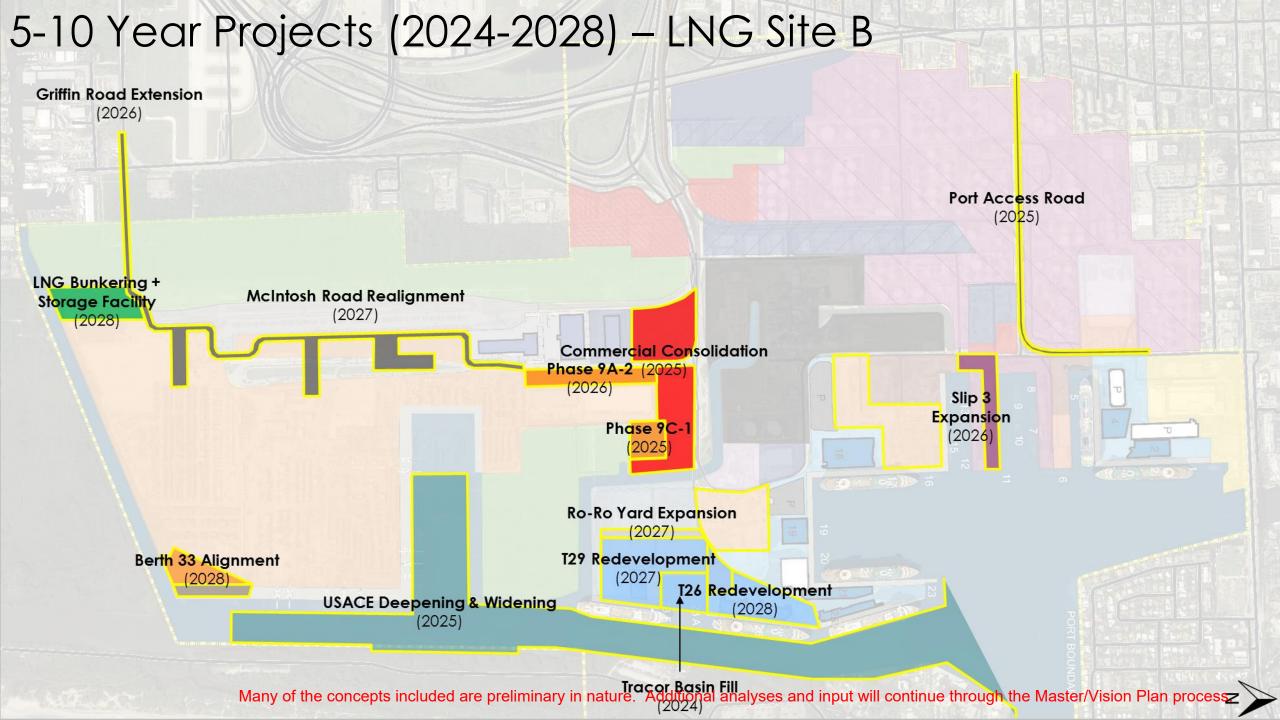


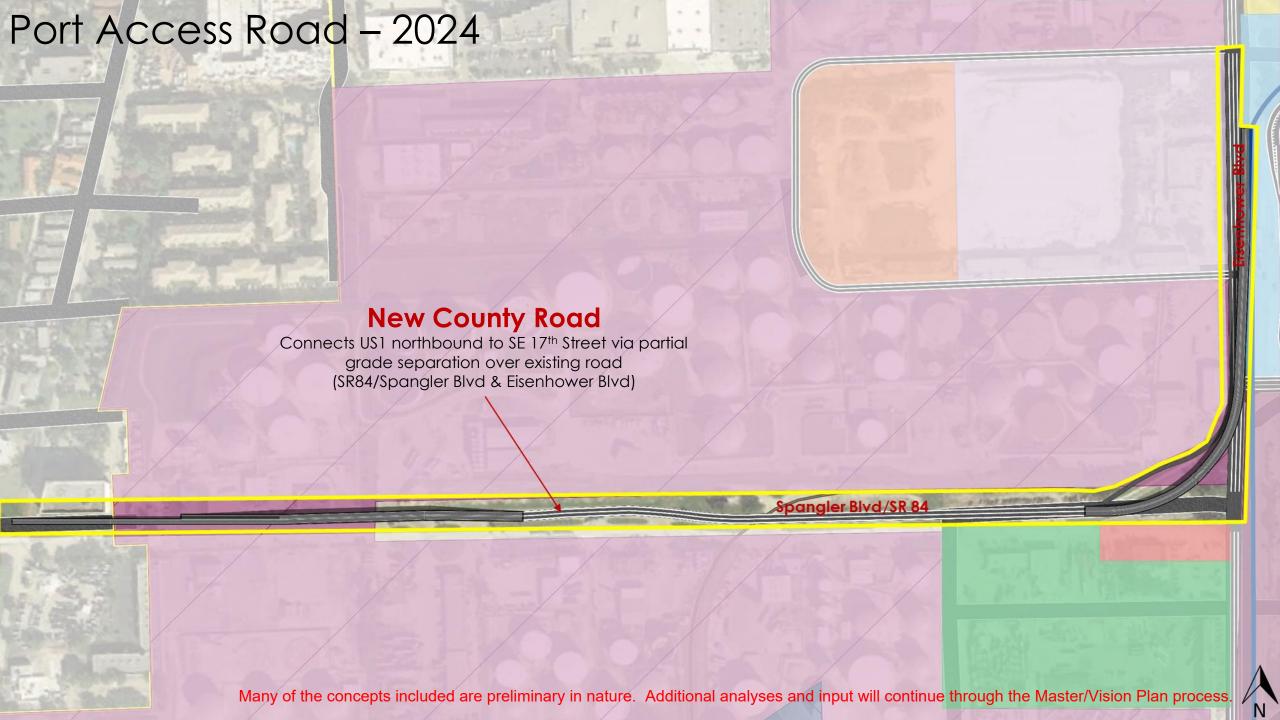


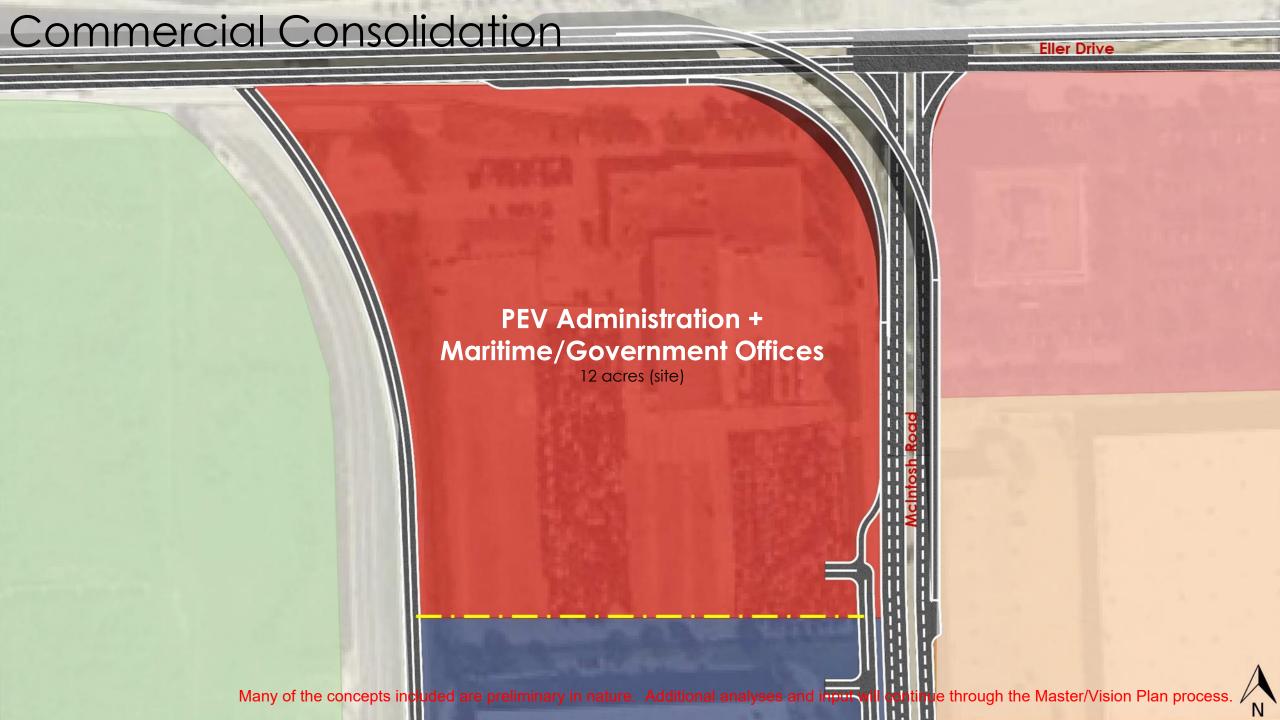










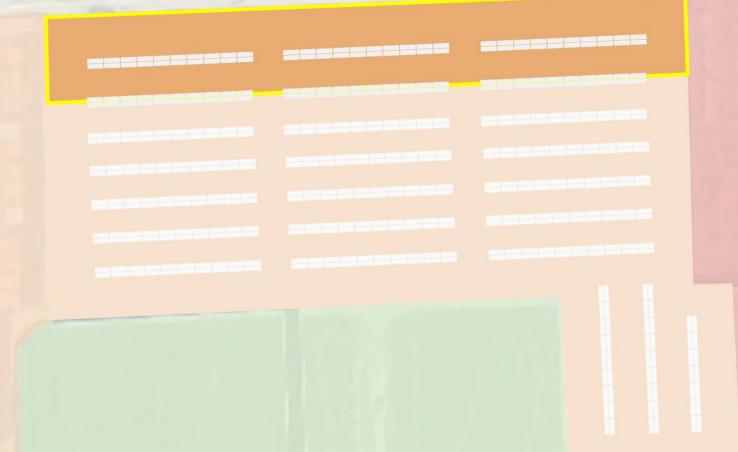




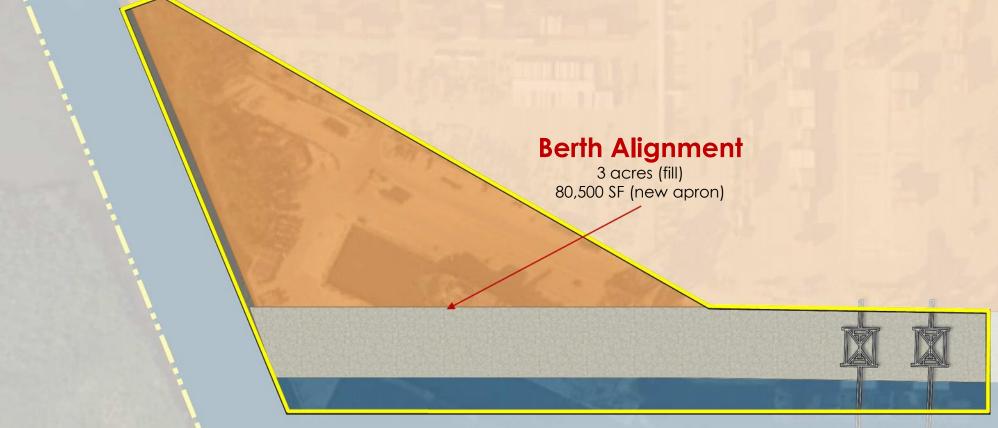
Phase 9A-2 - 2026

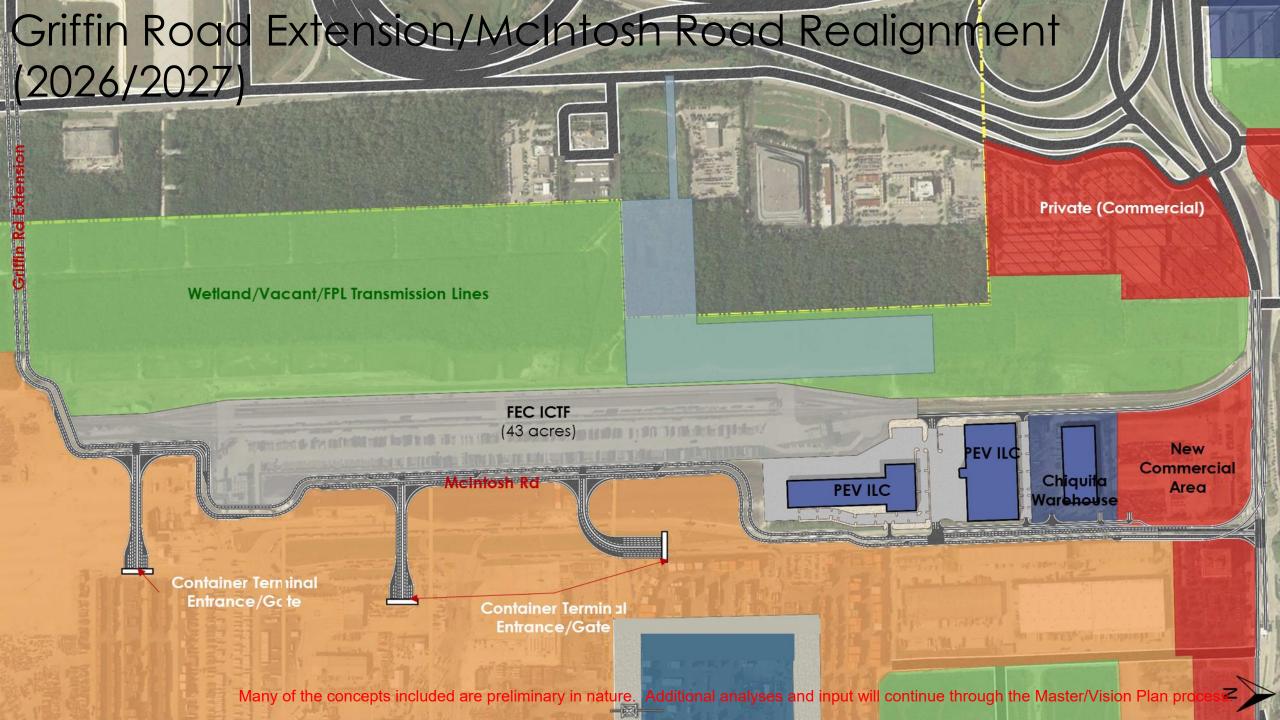
New Container Yard

6 acres

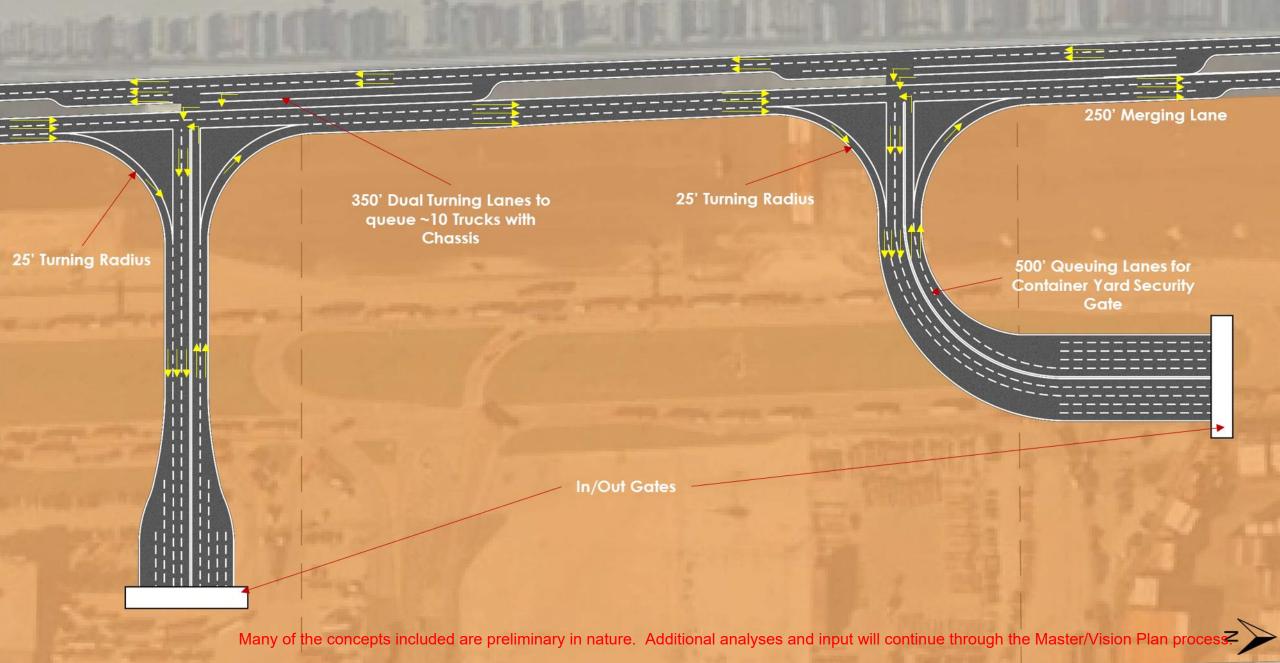


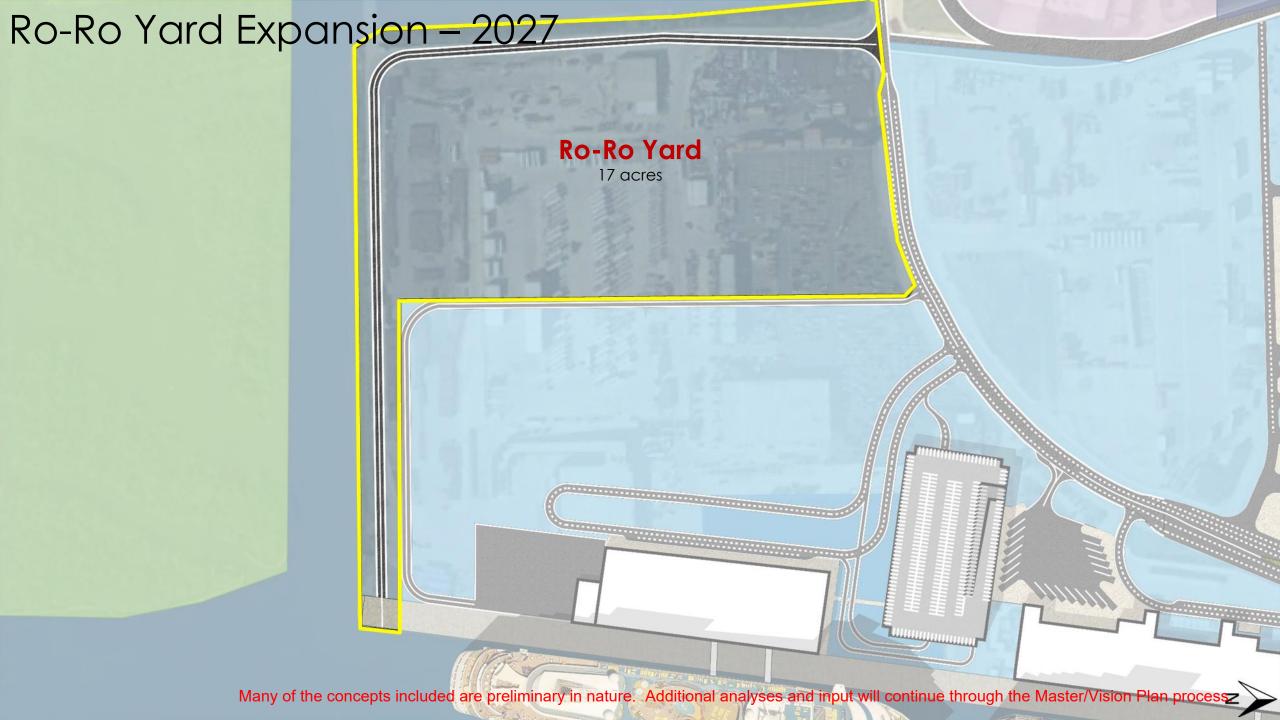
Berth 33 Alignment – 2028

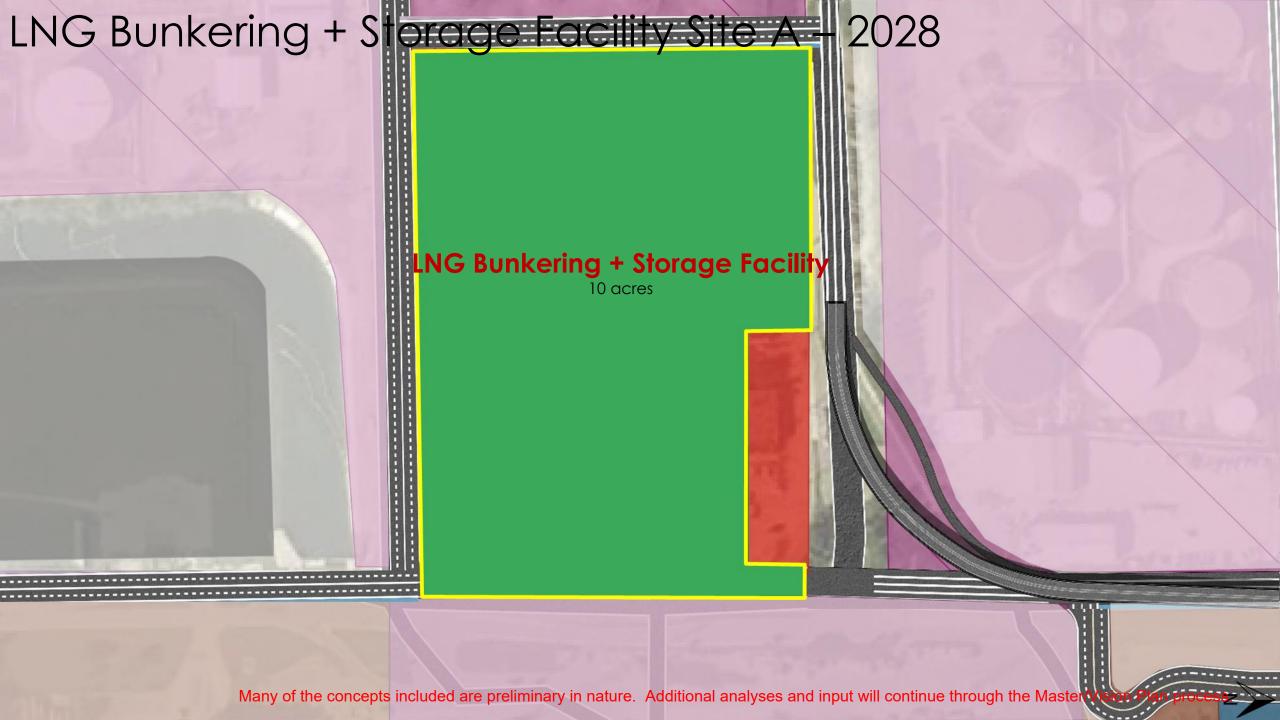




McIntosh Road Realignment (2027)





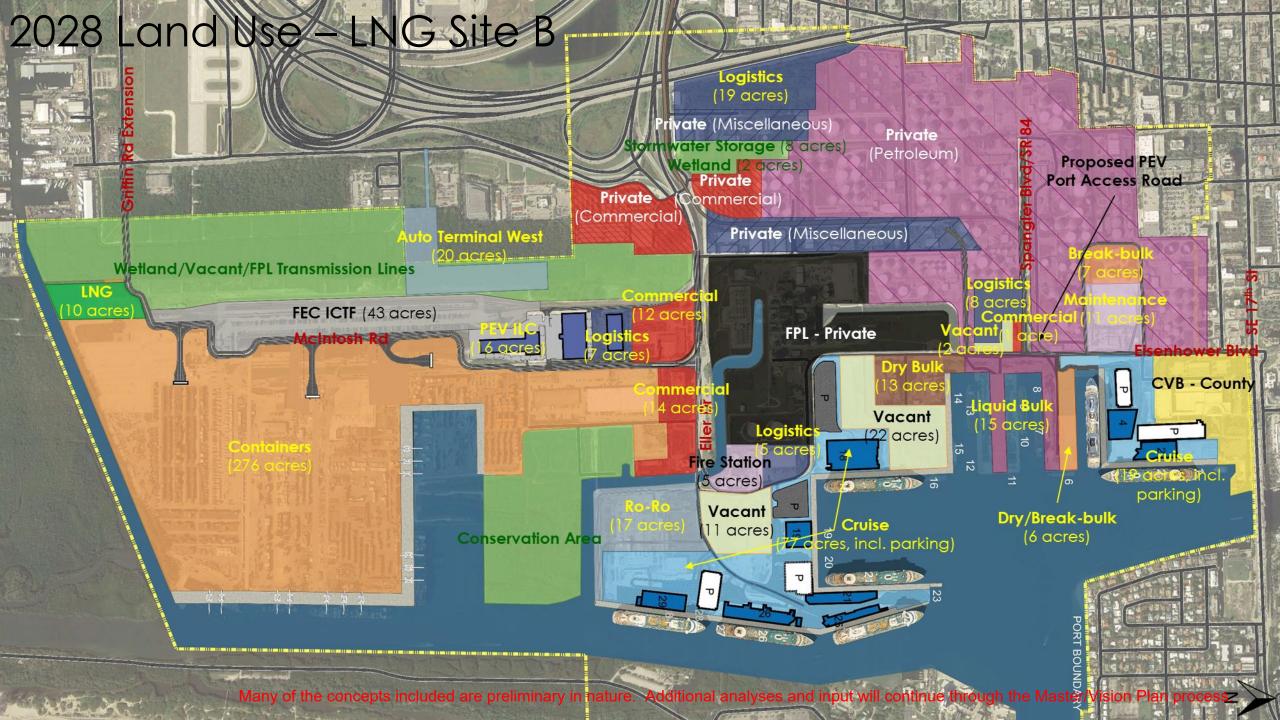


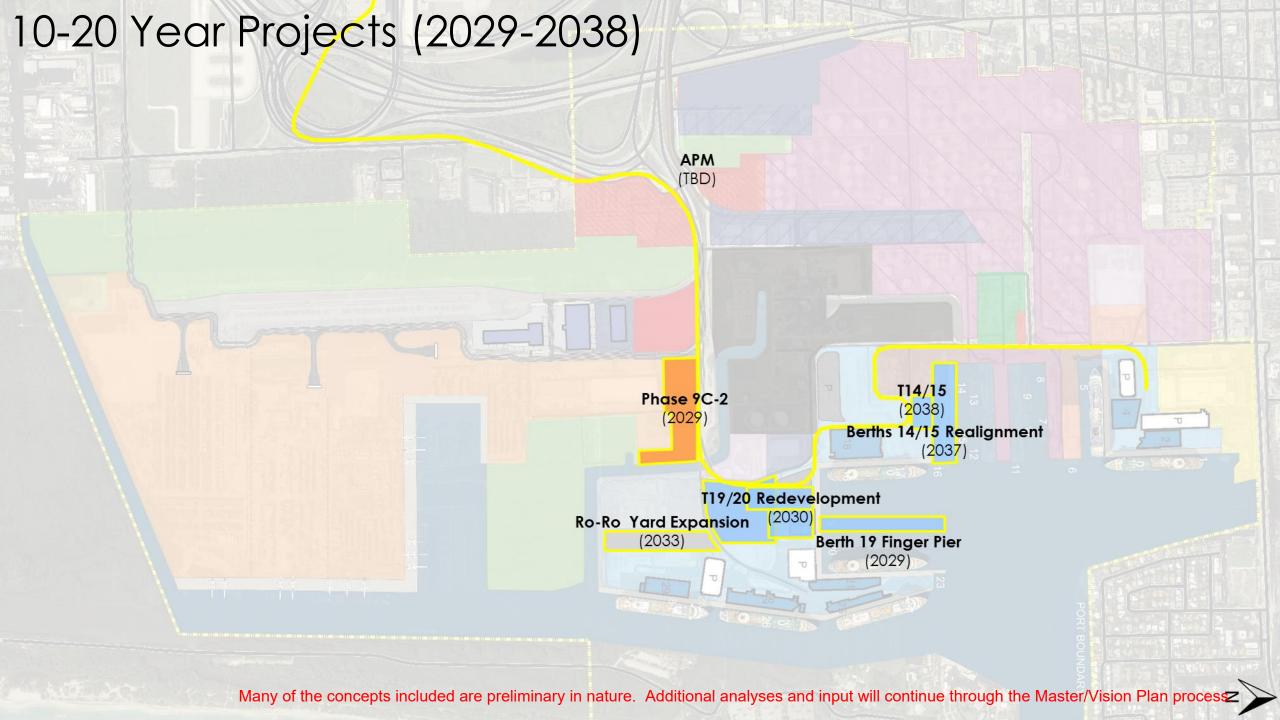
LNG Bunkering + Storage Facility Site B – 2028

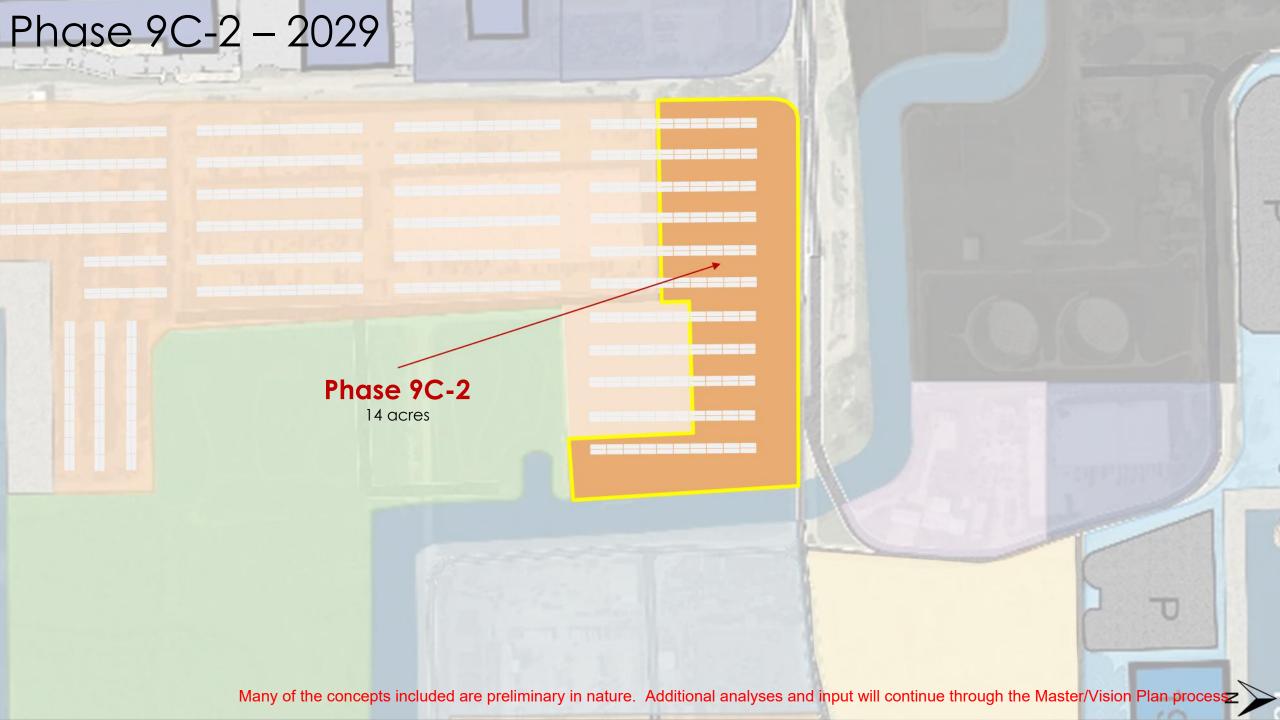


FEC Rail Spur



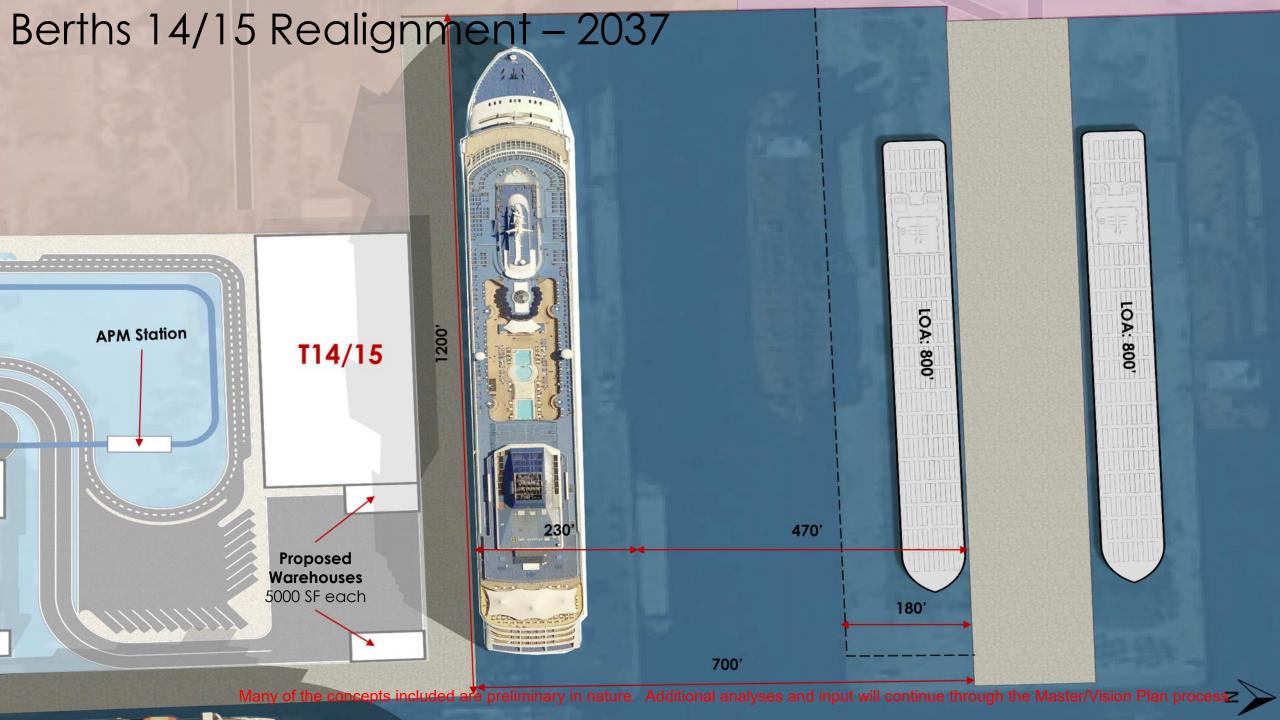




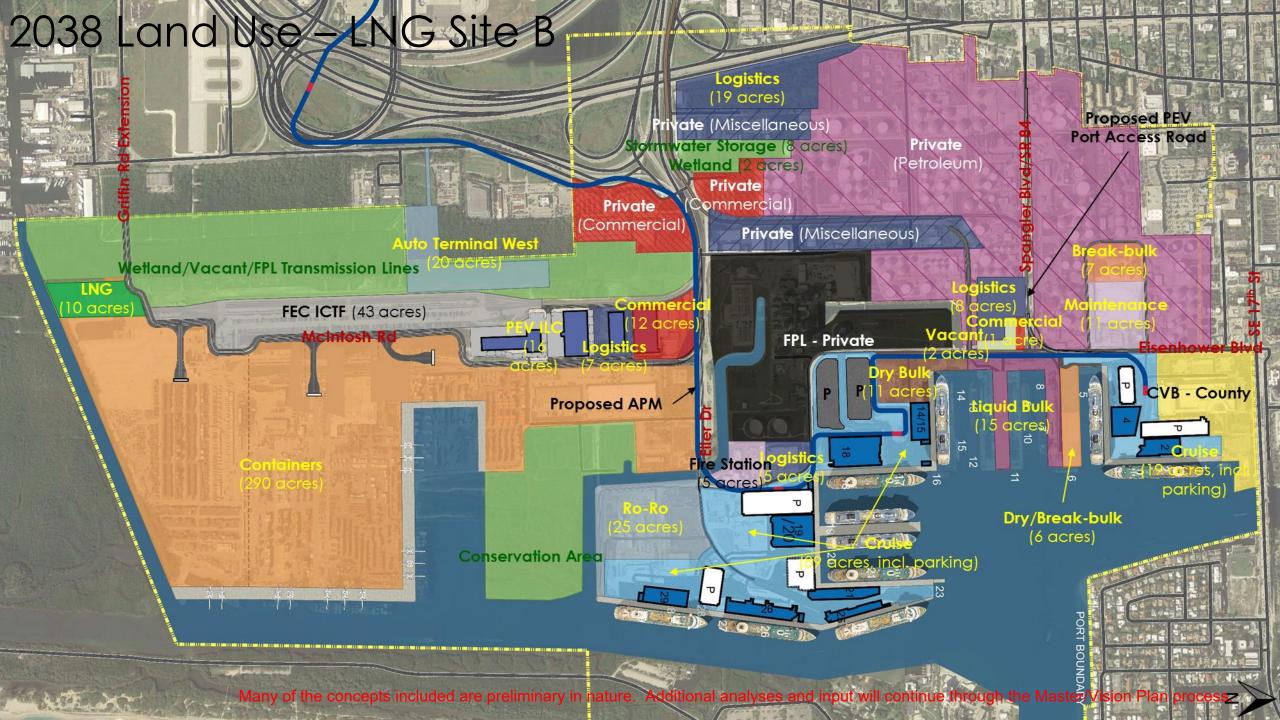












Issues and Opportunities

- Ability to add berths/acres very limited
 - Prioritization of berth/land use against different criteria required
 - More volume on same footprint required
 - Liquid bulk: steady as she goes
 - Cruise: more berths and percent utilization of berths will need to increase
 - Containers: moves per crane/berth and TEUs per acre need to increase; dwell times need to decrease
 - Bulk/breakbulk: tons/acre need to increase
 - Ro-Ro: high growth market; requires more land
- Regional demand vs. PEV demand
 - Three ports (PEV, PortMiami, Port of Palm Beach) serve the core South Florida market
 - Market conditions will drive future berth and land demand in the region
 - Value proposition, capacity, efficiency and relationships will drive port selection
 - Infrastructure and efficient operations are key to PEV's future success



Immediate Next steps

- Phase 1
 - Phase 1 (Elements 1 and 2) final report delivered in October, 2018
- Phase 2
 - Future development concepts and projects
 - Berth and land demand for each line of business
 - Operational and infrastructure enhancements
 - Commercial and logistics opportunities
 - Traffic and parking
 - Financial evaluation
 - Final recommended plan
 - Strategies for implementation





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