

# **DRAFT CARGO FORECAST REVIEW SEAPORT PLANNING ADVISORY COMMITTEE #3**

KATHARINE PAN, WATERFRONT PLANNER

MAY 11, 2020

# PRESENTATION OUTLINE

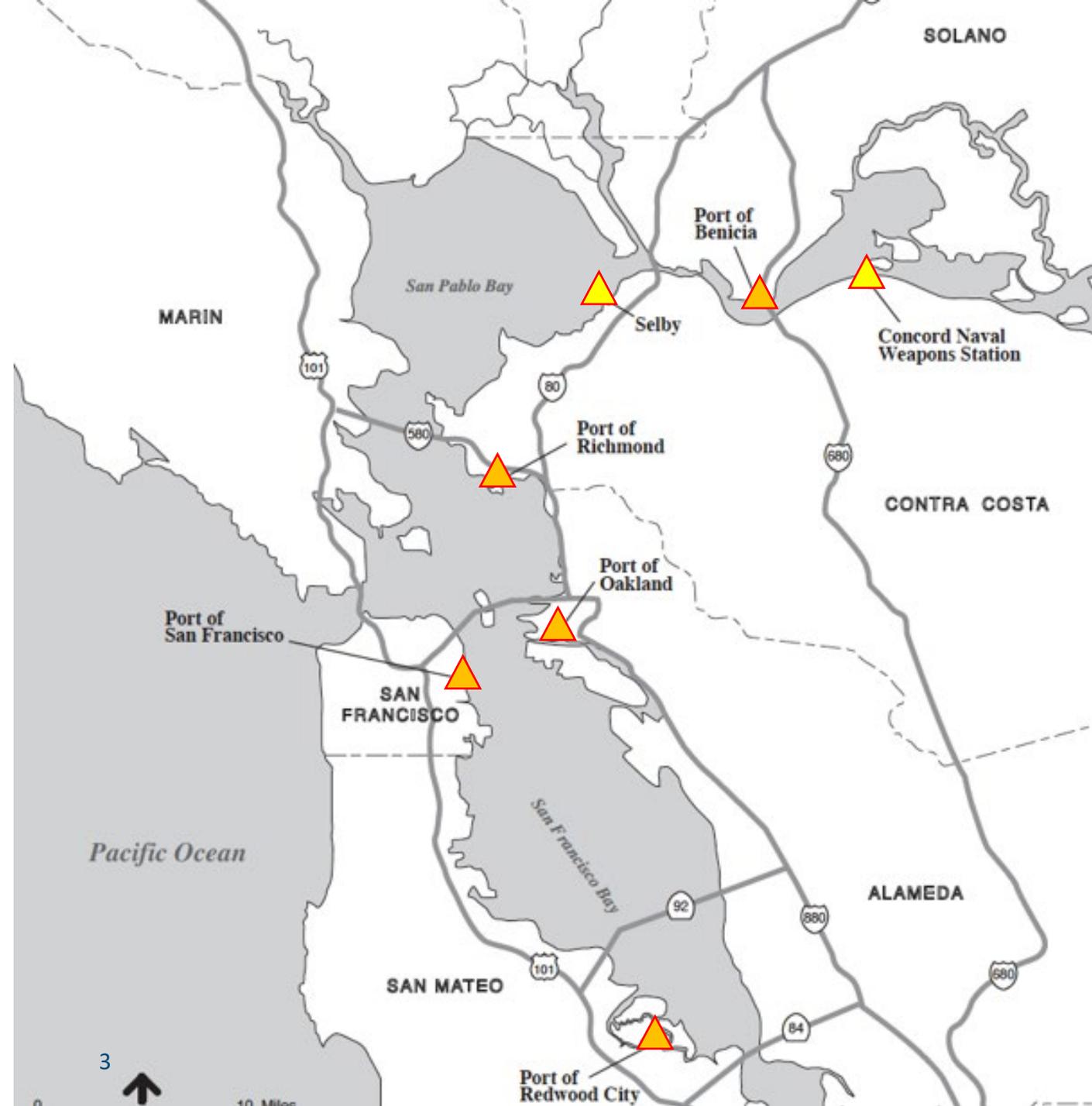
- Introduction
- Background
- Forecast Review
- Policy Implications

May 11, 2020



# INTRODUCTION

- The Seaport Plan guides BCDC decisions regarding the planning and development of ports
- Goals of maintaining port system and environmental quality of the Bay
- Reserves shoreline areas to accommodate future cargo growth to minimize the need for new Bay fill



# PORT PRIORITY USE DESIGNATION

- Designates areas determined necessary for future port development as port priority use.
- Marine terminals are identified and reserved for cargo handling.
- Reduces potential need for large-scale filling for maritime uses, promoting a thriving Bay Area port economy and protecting Bay habitats.

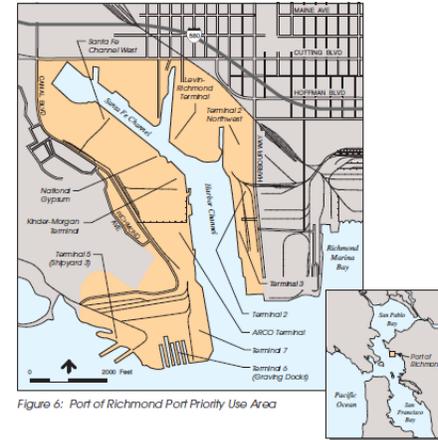
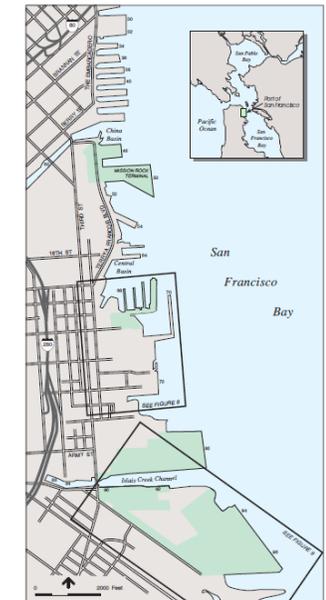
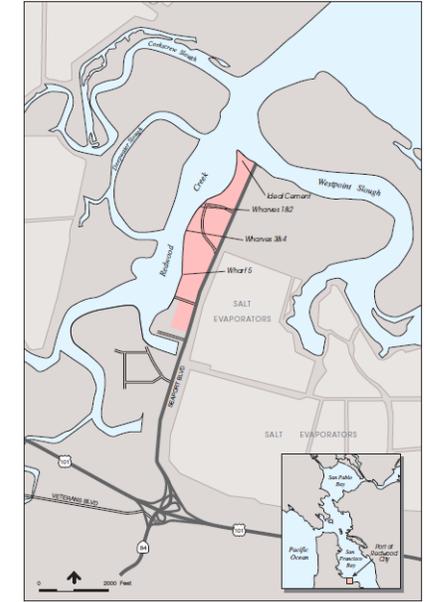
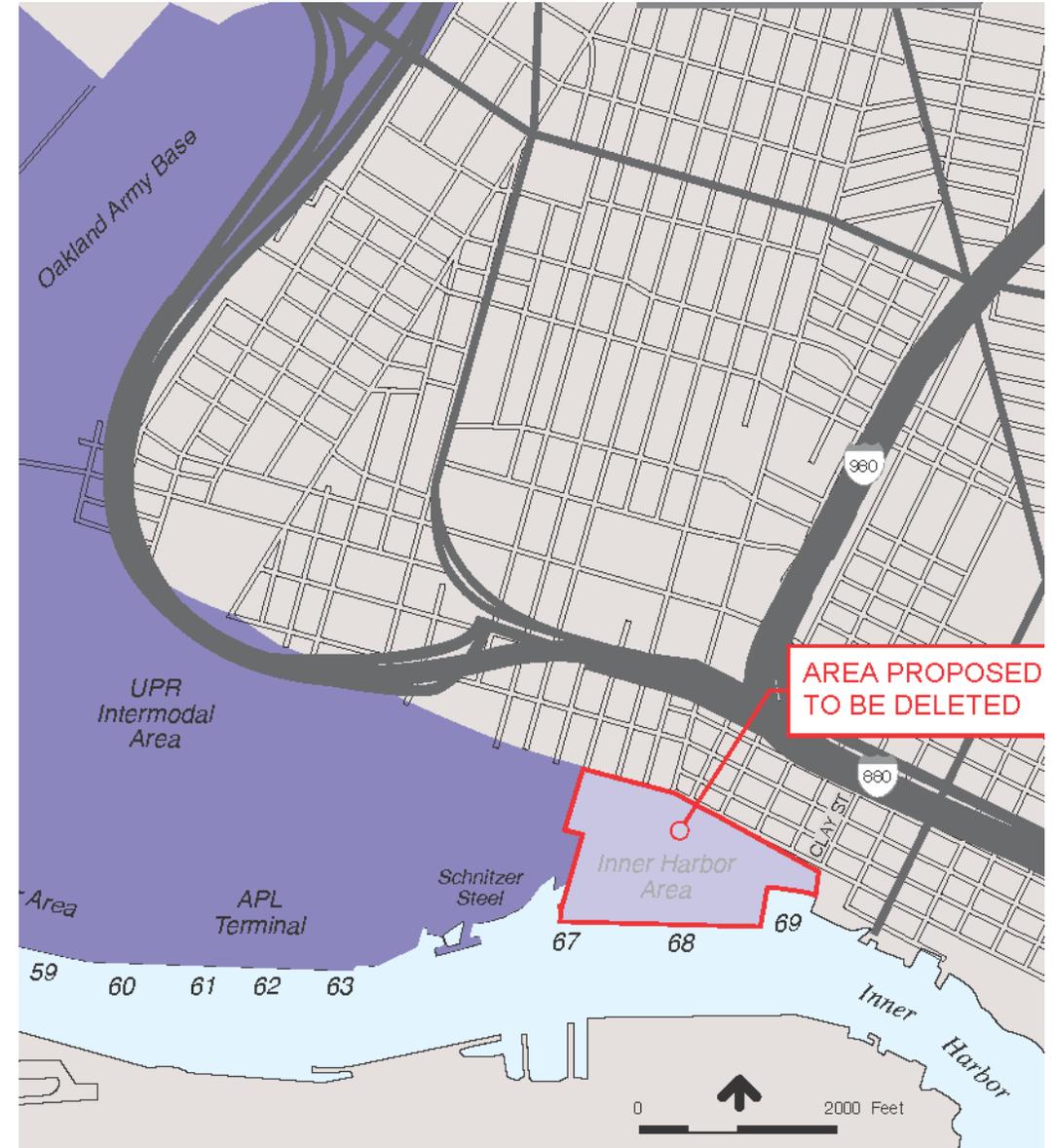


Figure 6: Port of Richmond Port Priority Use Area



# SEAPORT PLAN UPDATE

- The Seaport Plan needs to be updated
  - Forecasts in the Plan expire in 2020
  - Some policies may be outdated
  - Opportunity to ensure consistency with new Bay Plan policies
  - Requests for designation changes
- Bay Plan Amendments initiated January 2019:
  - BPA 1-19: A general update of the Seaport Plan to include new up-to-date forecasts, ensure consistency with updated Bay Plan policies, and address change requests from the ports.
  - BPA 2-19: The Oakland Athletics requested removal of the port priority use designation from Howard Terminal in Oakland.



# SEAPORT PLAN UPDATE PROCESS



- Updated cargo forecasting
- Inventory of existing and potential terminal acres

# SEAPORT PLAN UPDATE PROCESS



- Port priority use designation changes
- Potential land use configurations
- Proposed policy approaches
- Preferred Alternative

# SEAPORT PLAN UPDATE PROCESS



- Draft Seaport Plan based on Preferred Alternative

# SEAPORT PLAN UPDATE PROCESS



- CEQA-equivalent environmental assessment

# SEAPORT PLAN UPDATE PROCESS



- Preliminary Recommendation
- Final Recommendation

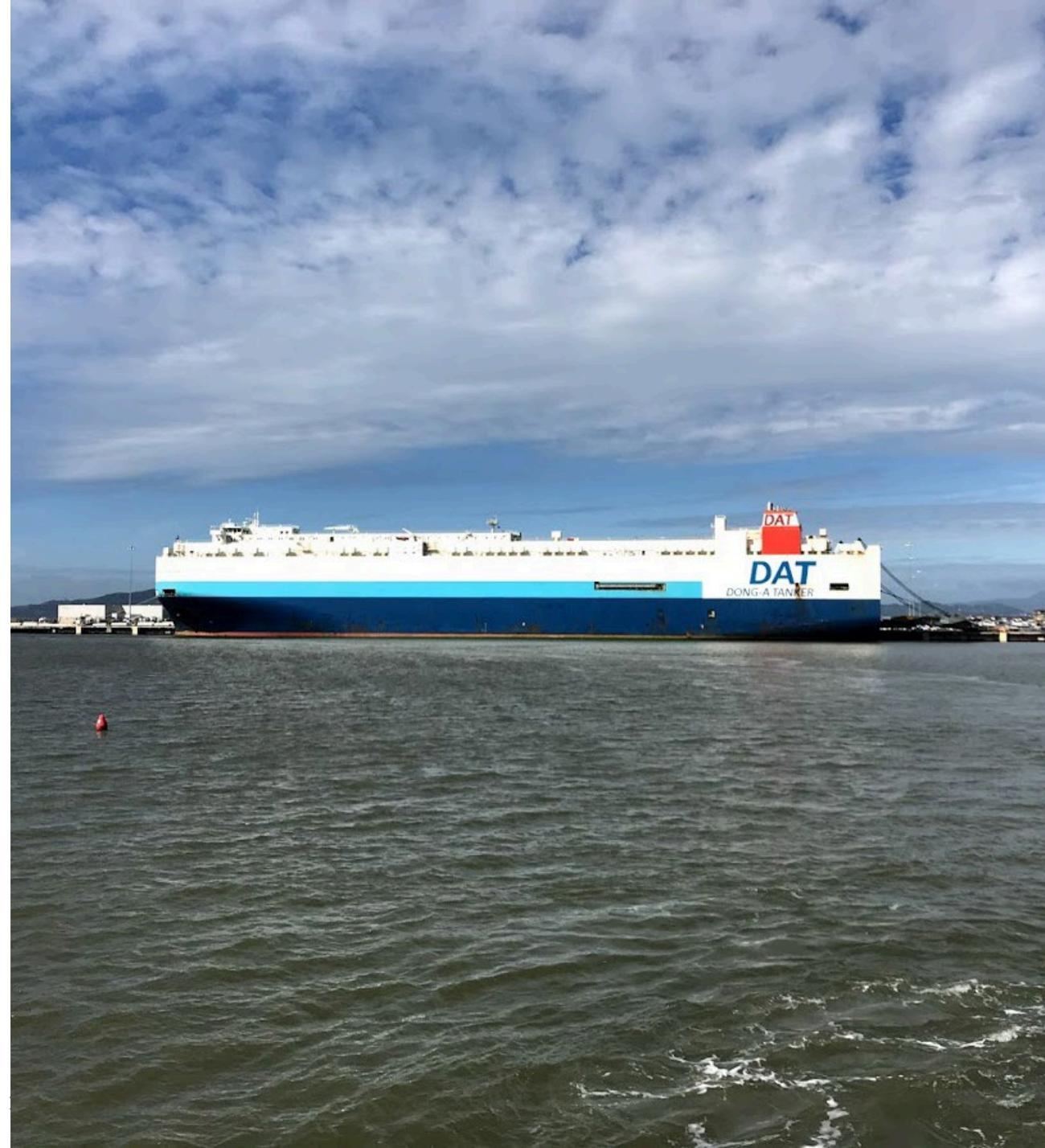
# SEAPORT PLAN UPDATE PROCESS



- Draft Cargo Forecast completed
- SPAC considering whether to accept it as a basis for planning

# MEETING OBJECTIVES

1. Review Draft Cargo Forecast and staff research
2. Vote to accept Draft Cargo Forecast for use in Seaport Plan update, as-is or with specific revisions



# PURPOSE OF THE CARGO FORECAST

- The Seaport Plan’s policies are based on forecasts for different cargo types and port handling capacity.
- Accepting a cargo forecast gives the SPAC an agreed-upon measure for evaluating potential impacts of alternative land use configurations on the Bay Area’s cargo handling capability.

Table 15: Port of Richmond Future Facilities

TERMINAL	DESIGNATION	TERMINAL ACRES	CARGO TYPE	EFFECTIVE NO. OF BERTHS	EXPECTED THROUGHPUT CAPABILITY*	TOTAL THROUGHPUT*
Terminal 2-3 <i>Includes area NW and S of Terminals 2 and 3</i>	Future	80	Container	2.0	209,000	418,000
			Neo-Bulk	2.0	286,000	572,000
Terminals 5-6-7 <i>Assumes 33 acres of fill and near-dock intermodal rail facilities</i>	Future	140	Container	3.0	760,000	2,280,000
ARCO Terminal	Future	20	Container	0.5	209,000	104,500
			Neo-Bulk	0.5	286,000	143,000
Kinder-Morgan	Active	12	Liquid Bulk	1.0	148,000	148,000
Santa Fe NW	Future	13	Dry Bulk	1.0	1,037,000	1,037,000
National Gypsum	Active	22	Dry Bulk	1.0	1,037,000	1,037,000
Levin-Richmond	Active	25	Dry Bulk	1.0 <sup>b</sup>	1,037,000	1,037,000
Totals	Container <sup>a</sup>	190		5.5		2,802,500
	Neo-Bulk	50		2.5		715,000
	Dry Bulk	60		3.0		3,111,000
	Liquid Bulk	12		1.0		148,000

<sup>a</sup> Includes combined container/neo-bulk terminal acreage.

<sup>b</sup> Although the Levin-Richmond Terminal has three berths, the effective capacity is equal to one berth.

\*Denotes optimal annual throughput capability, in metric tons.

Table 17: Port of San Francisco Future Facilities

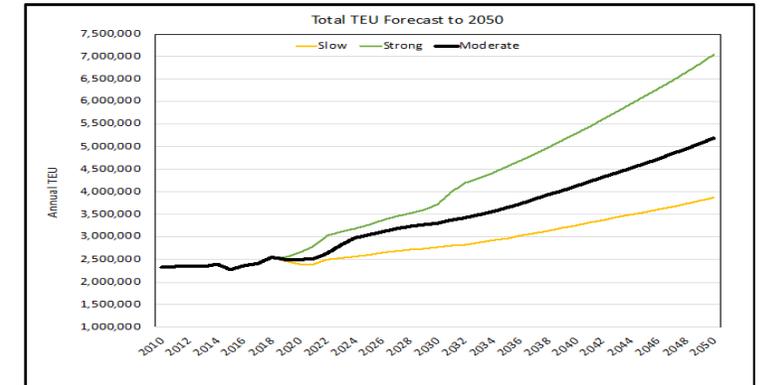
TERMINAL	DESIGNATION	TERMINAL ACRES	CARGO TYPE	EFFECTIVE NO. OF BERTHS	EXPECTED THROUGHPUT CAPABILITY*	TOTAL THROUGHPUT*
Pier 94-96	Active	80	Container	3	749,000	2,247,000
Pier 94N <i>Assumes 10 acres of fill</i>	Future	40	Container	1	749,000	749,000
Pier 80	Inactive	65	Container	2	749,000	1,498,000
Pier 90-92	Inactive	12	Dry Bulk Liquid Bulk	1	1,219,000	1,219,000
	Active	13		1	118,000	118,000
Pier 70	Ship Repair	16	-	-	-	-
Pier 50	Inactive	24	Break Bulk	4	78,000	312,000
Pier 48	Inactive	9	Neo-Bulk	2	103,000	206,000
Totals	Container	185		6		4,494,000
	Break bulk	24		4		312,000
	Neo-bulk	9		2		206,000
	Dry Bulk	12		1		1,219,000
	Liquid Bulk	13		1		118,000

\*Denotes optimal annual throughput capability, in metric tons.

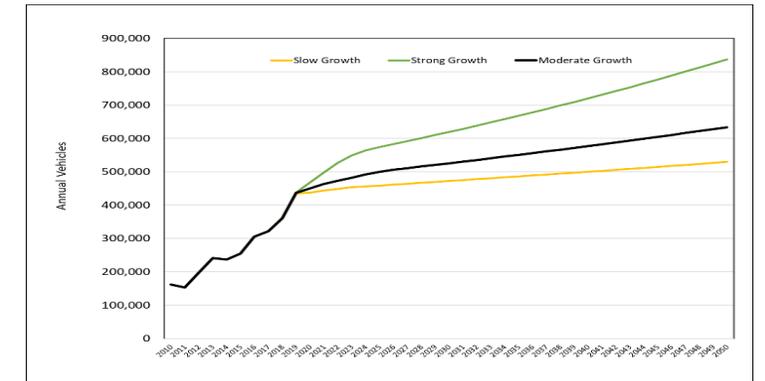
# DRAFT CARGO FORECAST

- Prepared by the Tioga Group and Hackett Associates
- First presented to SPAC at June 27, 2019 meeting
- Revised draft presented at December 5, 2019 meeting with requested revisions
- New April 30, 2020 revised draft available online
- Includes demand forecast and terminal capacity estimates for container, Ro-Ro, and dry bulk cargoes
- Staff is monitoring for COVID-19 impacts

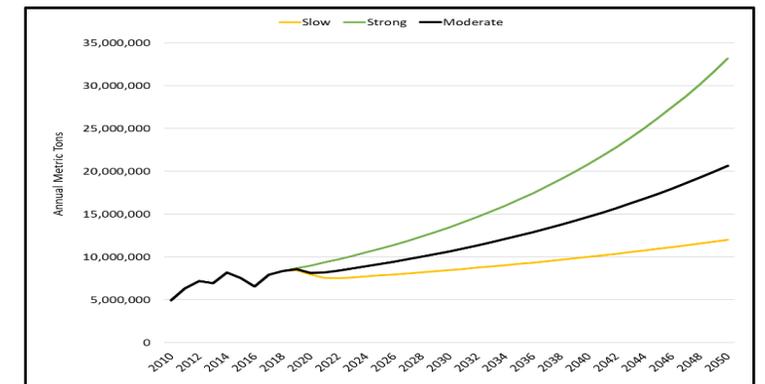
## Container



## Ro-Ro



## Dry Bulk



# CARGO AND CAPACITY FINDINGS

Forecast Scenario	Container Cargo Terminal Acres			Ro-Ro Cargo Terminal Acres			Dry Bulk Cargo Terminal Acres			Combined Cargo Terminal Acres		
	Existing	2050	Additional	Existing	2050	Additional	Existing	2050	Additional	Existing	2050	Additional
Moderate Growth	593	729	136	215	375	160	152	182	30	960	1,286	<b>327</b>
Slow Growth	593	543	-	215	313	98	152	152	-	960	1,008	<b>98</b>
Strong Growth	593	990	397	215	496	281	152	227	75	960	1,712	<b>753</b>

- Long-term cargo growth in three sectors that could stress terminal and berth capacity
- Additional acres will likely be needed under any growth scenario

# REVISIONS TO THE FORECAST SINCE DEC. 5

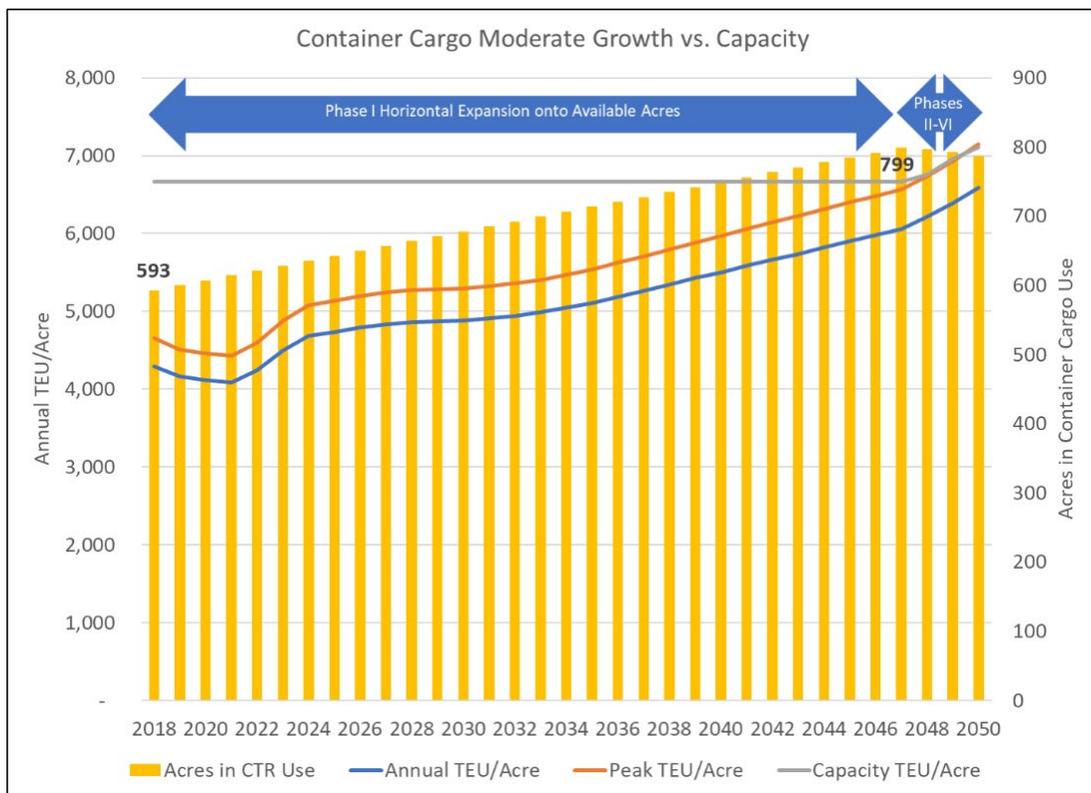
## San Francisco Ro-Ro revisions

- Port saw higher throughput rates for exports than imports in 2019.
- Revisions use Port's 2019 actual throughput of 146,203 vehicles instead of an estimated 100,000.
- Raised the 2050 moderate growth Ro-Ro totals from 633,739 to 718,863 vehicles.
- Included separate productivity scenarios for exports, which move through terminals faster than imports.
- Net impact of revisions was to raise the required additional Ro-Ro terminal acres under the Moderate Growth case from 158 to 160.

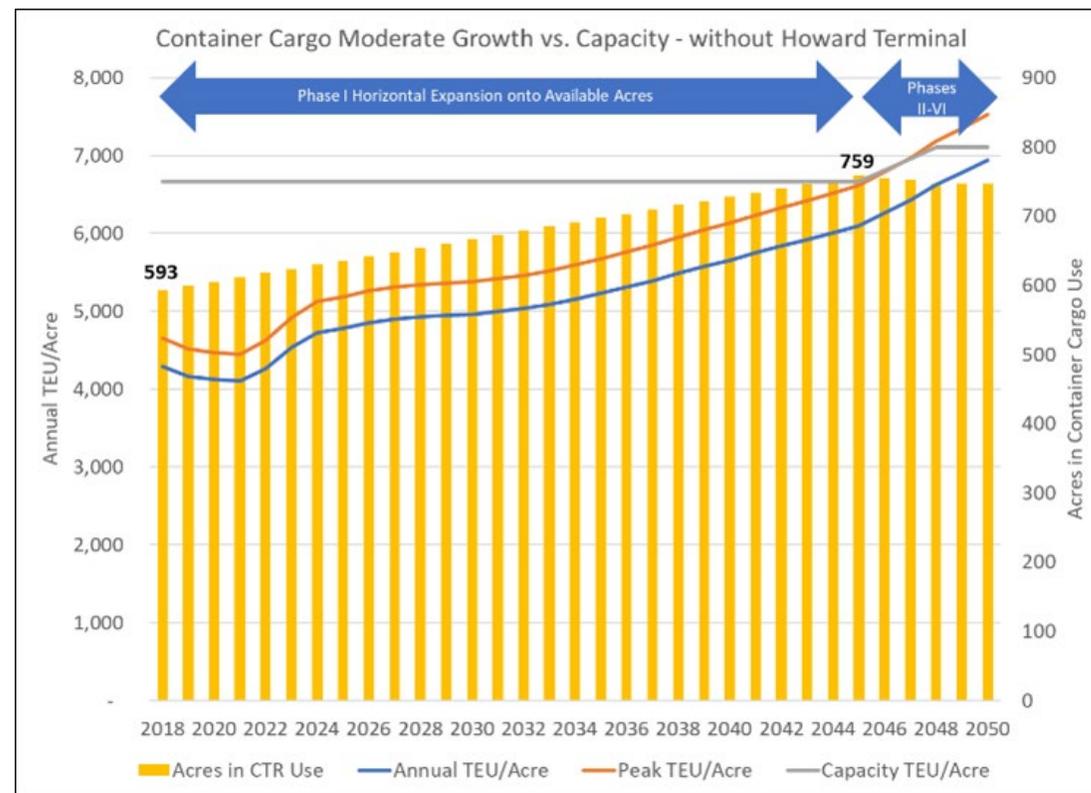


# REVISIONS TO THE FORECAST SINCE DEC. 5 (CONT'D)

Further discussion added on container terminal expansion



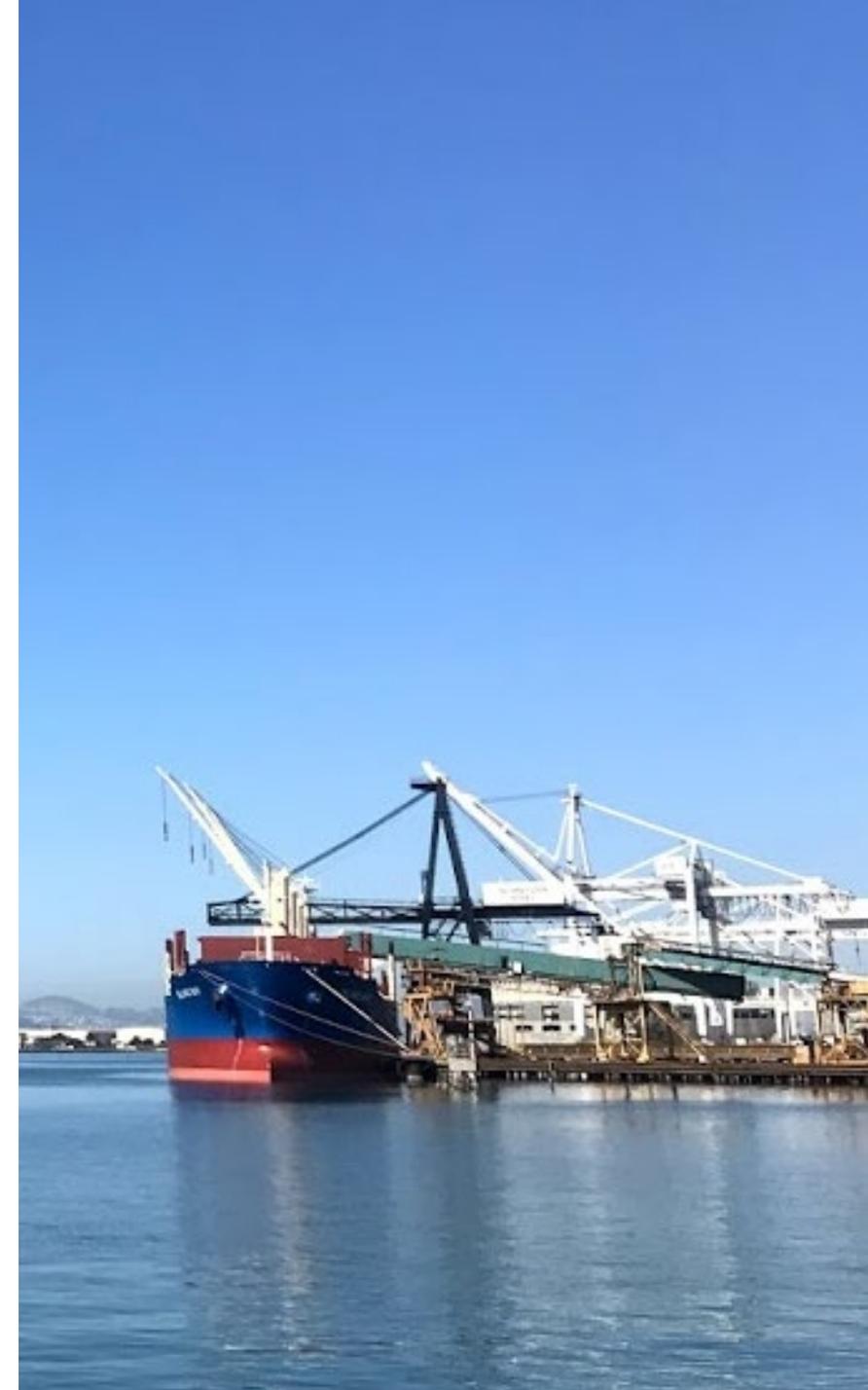
*Conceptual Container Terminal Expansion Path – All Acres*



*Conceptual Container Terminal Expansion Path – Without Howard Terminal*

# CONTAINER CARGO FORECAST REVIEW

- Operator review
  - **SSA Terminals**
    - Susan Ransom, Client Relations Manager
    - Edward DeNike, President, SSA Containers
  - **Everport**
    - Michael Andrews, Terminal Manager
- Peer review
  - Asaf Ashar, PhD, National Ports and Waterways Initiative
  - James Fawcett, PhD, University of California School of Policy, Planning, and Development
- Internal review
  - Comparison of Draft Cargo Forecast against other forecasts



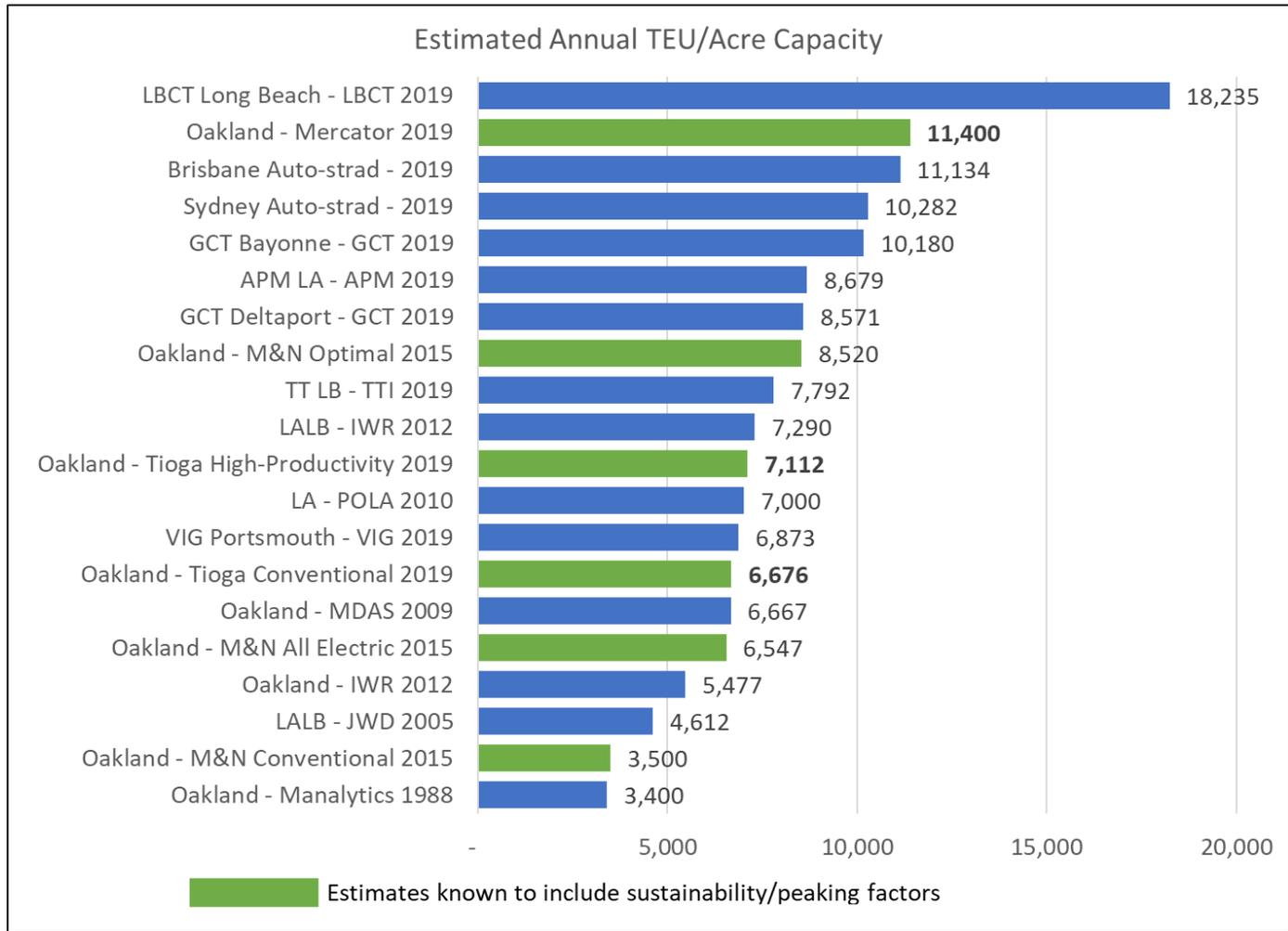
# CARGO FORECAST REVIEW – METHODOLOGY

- Draft Cargo Forecast used benchmarking approach
- Mercator International used terminal-by-terminal approach
- Both used factors to account for peaks to arrive at “sustainable capacity”
- Draft Cargo Forecast approach adequate for large-scale, regional planning purposes
- Other terminals may be comparable benchmarks for the Port of Oakland, but no published capacities were found
- Main differences in estimates driven by assumptions (dwell time and operating days), not methodology

# CARGO FORECAST REVIEW – ASSUMPTIONS

	Calculation Using Draft Cargo Forecast Projected Capacity and Mercator Report Methodology	Mercator Report Calculations
Projected Capacity (TEU/acre)	7,112	11,134
Acres	288	290
Annual Capacity (TEU/acre)	2,048,256	3,228,863
Annual Working Days	250	360
Average Dwell Time (Days)	5.6	5
Annual Slot Turnover (Annual Working Days/Dwell Time)	44.6	72
Allowable Average Inventory	45,881	44,845
Peaking Factor	1.25	1.25
Maximum Allowable Annual Inventory	57,351	56,057
Allowable Occupancy Factor	65%	65%
Maximum Static Capacity (TEUs)	88,233	86,241

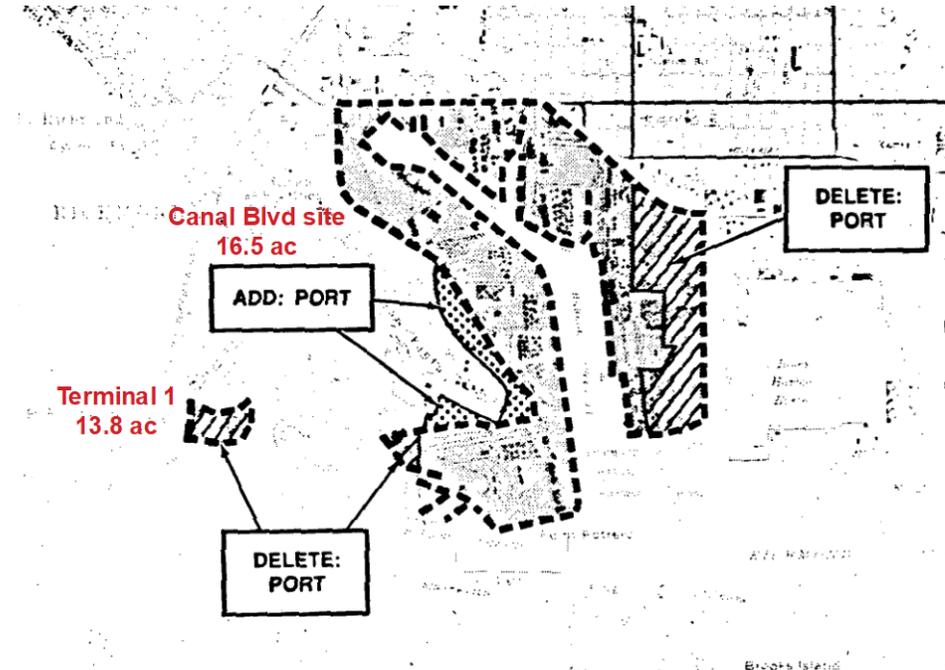
# CARGO FORECAST REVIEW – FORECAST RESULTS



*Container Terminal Throughput Estimate Comparison Summary*

# PAST ADDITIONS TO PORT PRIORITY USE AREAS

- Staff reviewed 20 amendments of the Seaport Plan and found five amendments where the designation was added to areas that were not previously designated.
- Most were transfers from areas where the port priority use designations were proposed to be removed.
- Bay Plan Amendments
  - BPA 5-82: Resolution 16 update to reflect Seaport Plan port priority use area boundaries
  - BPA 1-88: Transfer at Richmond (Terminal One)
  - BPA 1-93: Transfer at Oakland (water treatment plant)
  - BPA 4-00: Acres added in Oakland for ancillary uses (Oakland Army Base)
  - BPA 3-06: Transfer in Oakland for ancillary uses (Oakland Army Base)



*Changes to port priority use area at Port of Richmond from BPA 1-88*

# POLICY IMPLICATIONS

- Considerations for accepting the cargo forecast
  - Conservative vs. Aggressive Estimates
  - Planning beyond 2050
  - Areas to include in the forecast
- Considerations for map and policy development
  - Ancillary Uses
  - Impacts to Communities
  - Port Priority Use Transfers/Replacements

# THANK YOU!



[katharine.pan@bccdc.ca.gov](mailto:katharine.pan@bccdc.ca.gov)



[www.bccdc.ca.gov/seaport/meetings](http://www.bccdc.ca.gov/seaport/meetings)

# DISCUSSION QUESTIONS

1. Is the Draft Cargo Forecast approach and methodology acceptable to the SPAC for long-range planning?
2. Is the April 30, 2020 Revised Draft Cargo Forecast acceptable as-is? If not, what specific final revisions should be made?
3. Which of the Draft Cargo Forecast's capacity estimates for each type of cargo should BCDC use in moving forward with the Seaport Plan update? How can we resolve any concerns with these estimates?
4. Should other potential sites be considered in estimating available terminal acreage, including areas in port priority use areas not currently in use or planned for port operations, areas in BCDC jurisdiction outside of port priority use areas, and areas outside of BCDC jurisdiction and outside of port priority use areas?

# NEXT STEPS

Milestone	Est. Timeframe
Finalize Cargo Forecast	May 2020
Commission Briefing	June 4, 2020
SPAC Meetings 4 & 5	Summer/Fall 2020
SPAC Meeting 6	Fall/Winter 2020
Environmental Assessment & Preliminary Recommendation	Early 2021
Final Recommendation	Winter/Spring 2021