

BRIEFING ON THE SAN FRANCISCO BAY AREA SEAPORT PLAN UPDATE (BPA 1-19 & BPA 2-19)

KATHARINE PAN, WATERFRONT PLANNER

JUNE 4, 2020

PRESENTATION OUTLINE

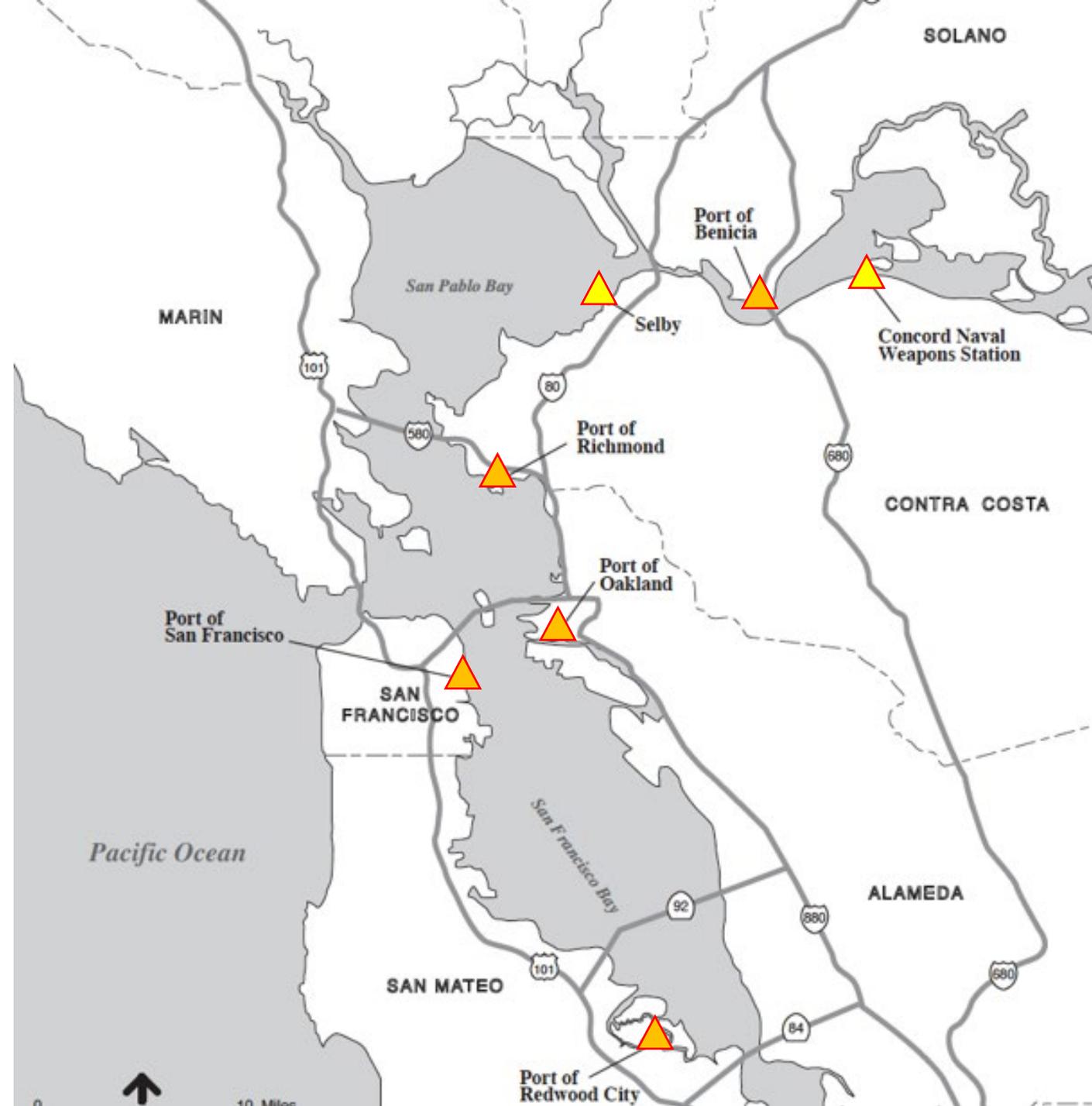
- Introduction
- Work to Date
- Cargo Forecast
- Next Steps

June 4, 2020



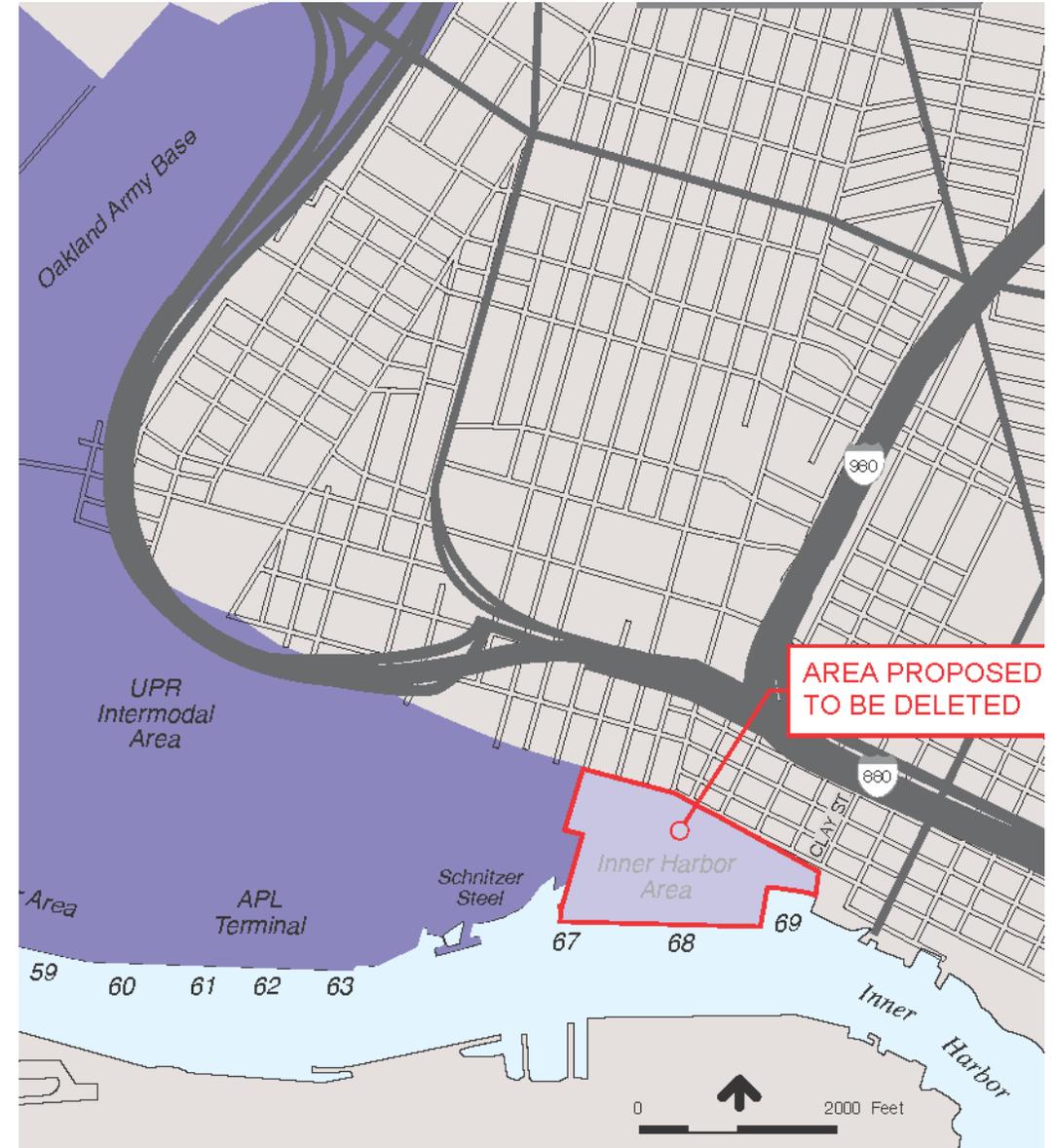
INTRODUCTION

- The Seaport Plan guides BCDC decisions on port-related actions
- Regional plan coordinating the planning and development of terminals at Bay Area seaports
- Goals of managing finite land resources to maintain port system and environmental quality
- Reserves shoreline areas to accommodate future cargo growth to minimize need for new Bay fill



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 - Some policies may be outdated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 PLANNING ADVISORY COMMITTEE

- Formed to help draft original Seaport Plan
- Considers proposed amendments to the Seaport Plan
- Representatives from BCDC, MTC/ABAG, the Marine Exchange, the five Bay Area Ports, Caltrans, and Save the Bay
- Role of the SPAC
 - Provide recommendations
 - Represent stakeholders' perspectives

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

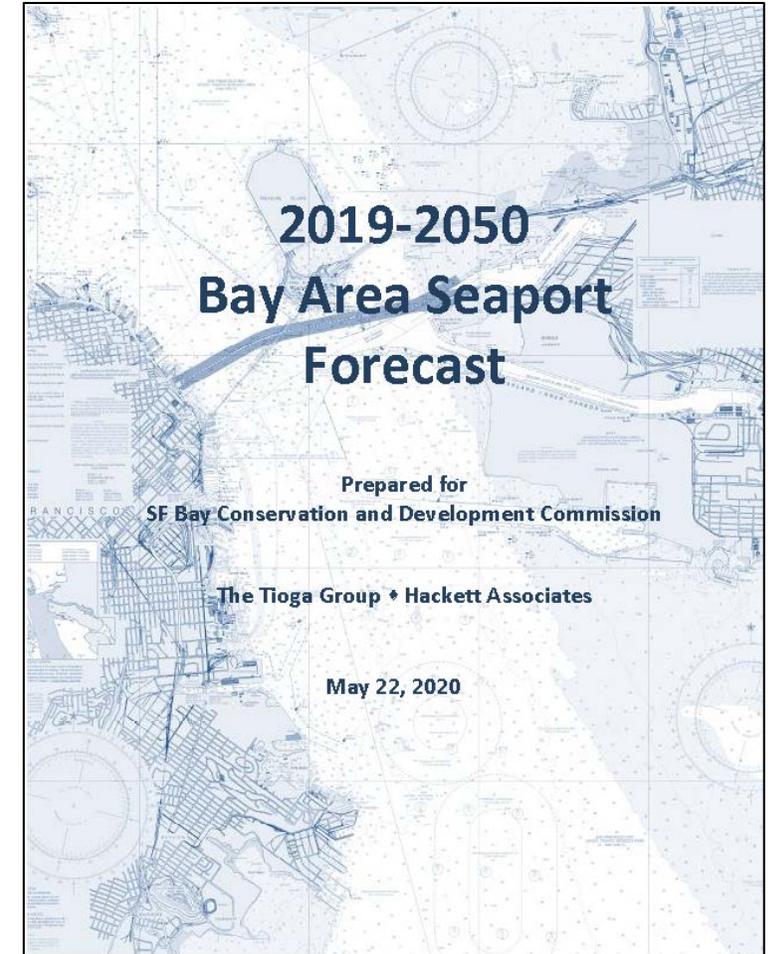
SEAPORT PLAN UPDATE PROCESS



- Draft Cargo Forecast recommended for use in planning
- Beginning Alternatives analysis

CARGO FORECAST

- Includes demand forecast and terminal capacity estimates for container, Ro-Ro, and dry bulk cargoes
- Prepared by the Tioga Group and Hackett Associates
- First presented to SPAC at June 27, 2019 meeting
- Revised for December and May SPAC meetings
- SPAC voted to accept revised forecast in May
- Available online at <https://www.bcdc.ca.gov/seaport/2019-2050-Bay-Area-Seaport-Forecast.pdf>.



THE DRAFT CARGO FORECAST AND MERCATOR REPORT

Draft Cargo Forecast

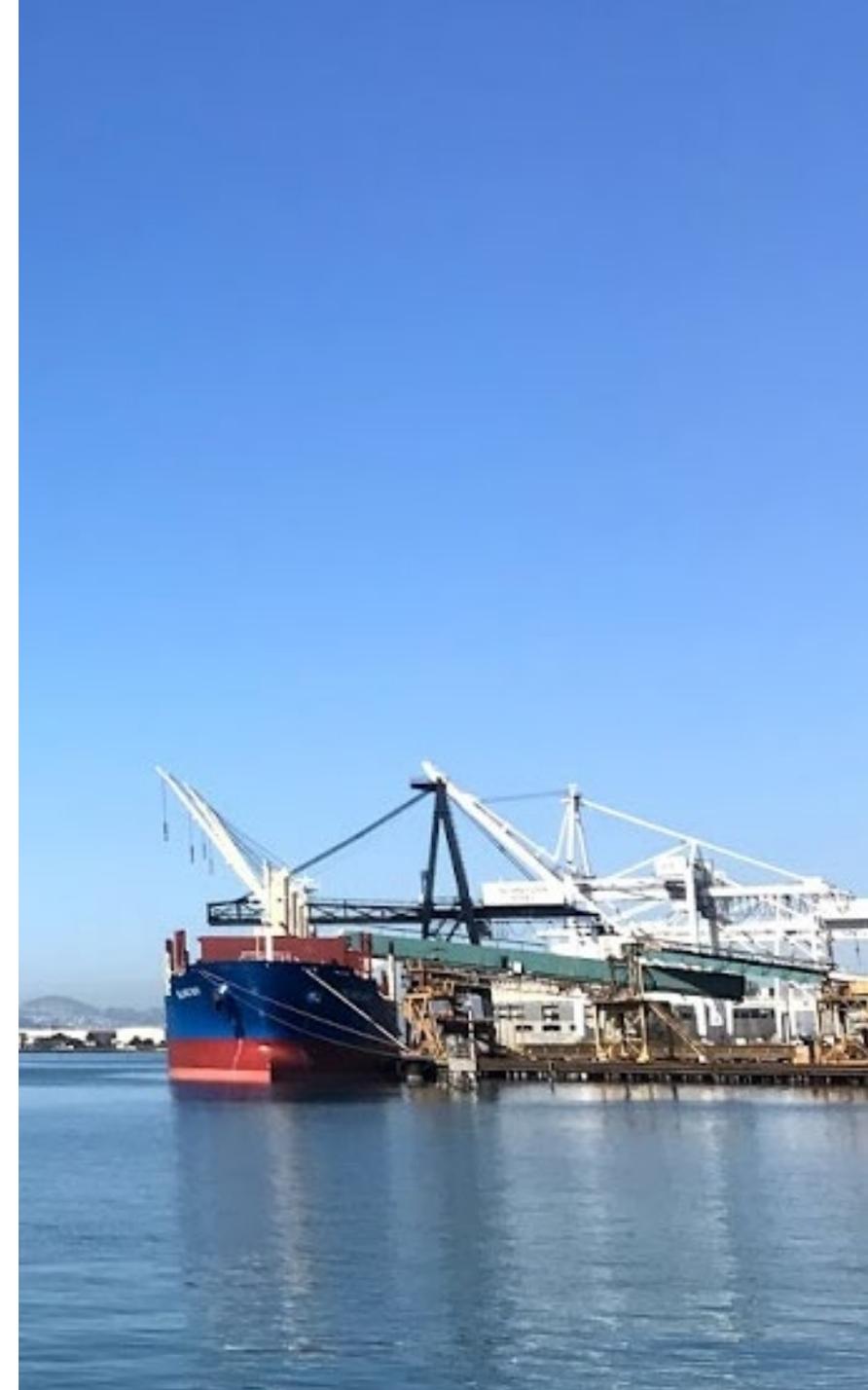
- Looked at the 5 ports and available port priority use land to estimate the number of acres that may be needed to meet cargo demands by 2050.
- Concluded that additional land may be required for container, Ro-Ro, and dry bulk cargo.

Mercator Report

- Looked at whether Howard Terminal would be needed to meet cargo projections.
- Considered additional land not designated port priority use.
- Used higher productivity capacity estimates.
- Concluded that adequate sites are available to serve demand 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



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 ^b	1,037,000	1,037,000
Totals	Container ^a	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

^a Includes combined container/neo-bulk terminal acreage.

^b 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

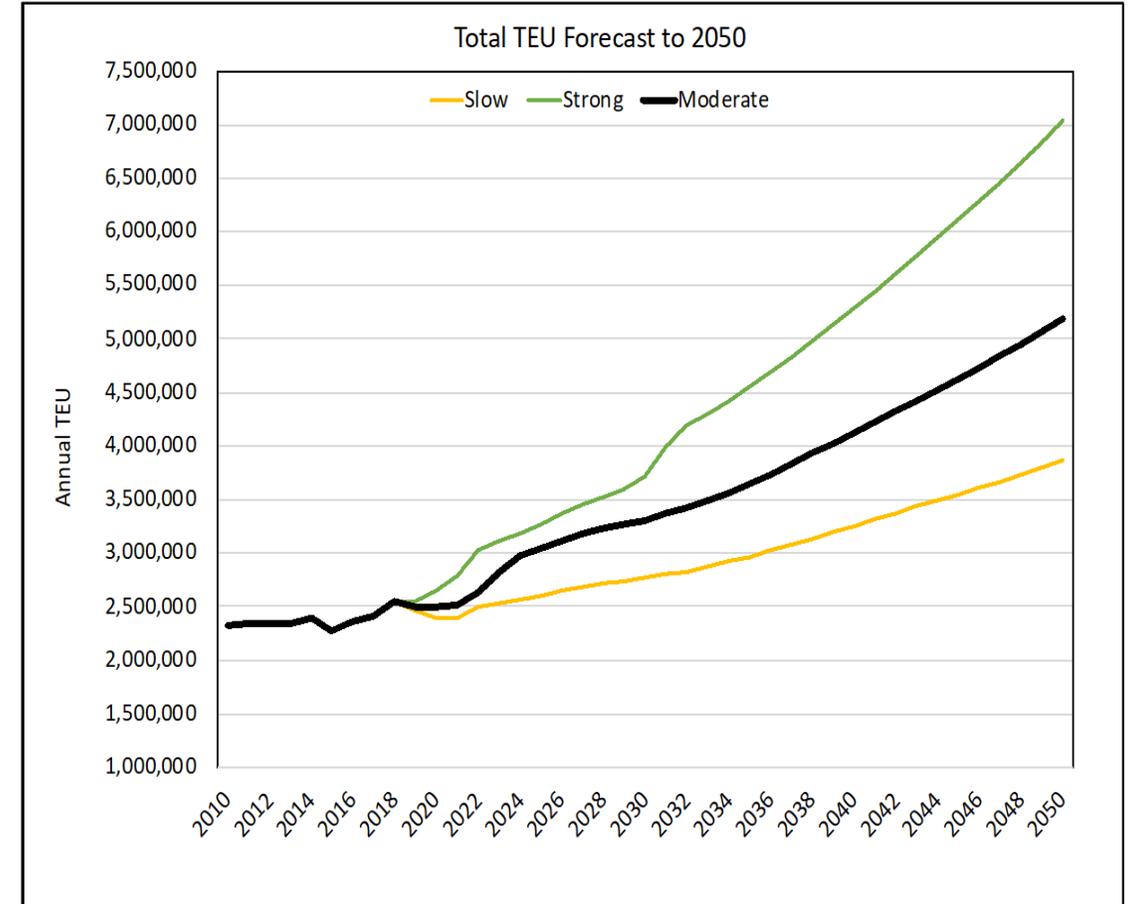
*Denotes optimal annual throughput capability, in metric tons.

BAY AREA CARGO FLOWS (PORT PRIORITY USE AREAS)

Commodity	Benicia	Oakland	Redwood City	Richmond	San Francisco
Container		X			
Ro-Ro (Automobiles)	X			X	X
Dry Bulk					
<i>Bauxite (import)</i>			X		
<i>Coal (export)</i>				X	
<i>Gypsum (import)</i>			X		
<i>Harvested Bay Sand</i>					X
<i>Petroleum Coke (export)</i>	X			X	
<i>Sand and Gravel (import)</i>			X	X	X
<i>Scrap Metal (export)</i>		X	X	X	
<i>Slag (import)</i>			X		
Liquid Bulk					
<i>Vegetable Oils (Import)</i>				X	
<i>Chemicals (Import)</i>				X	

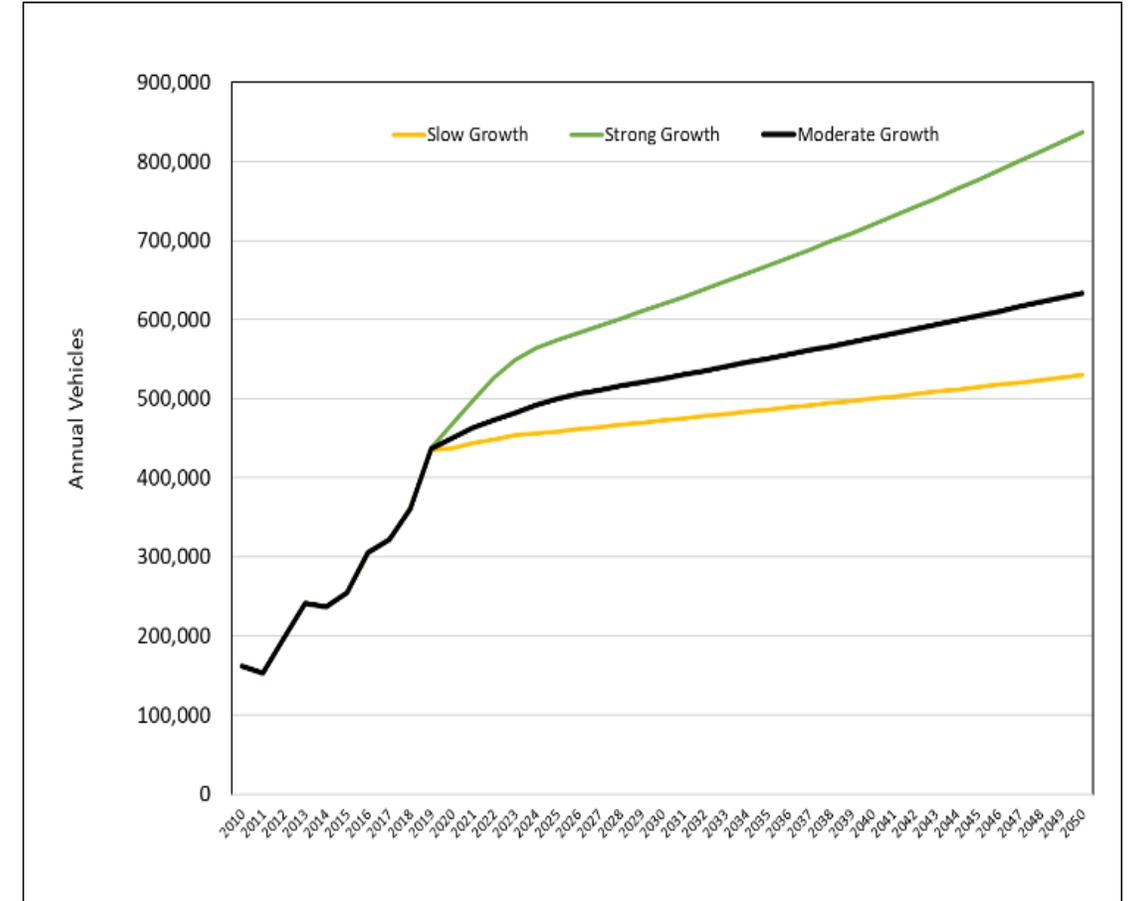
CONTAINER DEMAND AND CAPACITY FORECAST

- Moderate Growth Scenario
 - Trade disputes resolved
 - Refrigerated container trade grows due to new facilities
 - Automobile parts imports increase
- Terminal Capacity
 - High productivity estimate of 7,112 TEU/ac/year allows for 66% increase in productivity over 30 years
 - Conventional and “Full” Automation estimates also included
- Ancillary Service Needs
- Berth Requirements



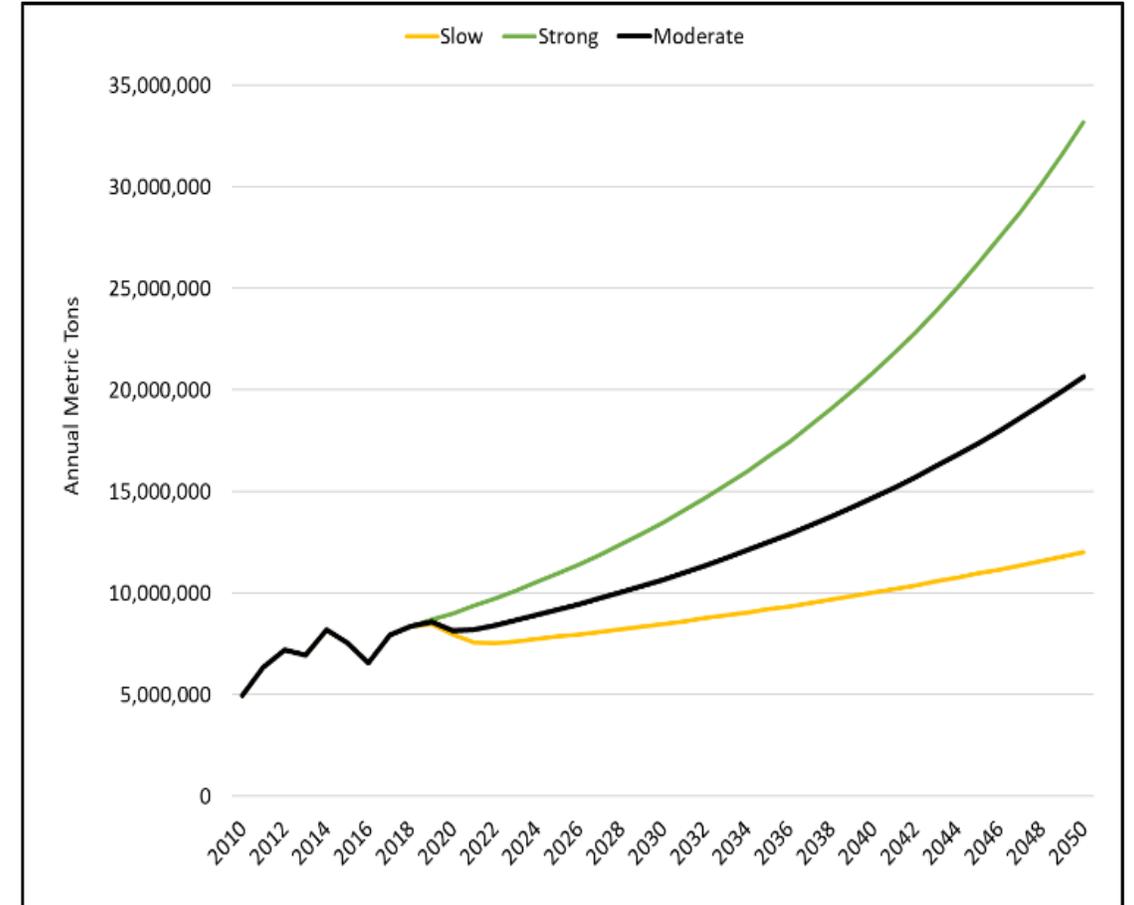
RO-RO CAPACITY FORECAST

- Growth depends on growth in import and export auto volume, and number of vehicles stored, processed, and moved through ports
- Productivity estimates are functions of vehicle mix and footprint size, based on recent experiences at the ports
- Base case capacity is estimated at 1,976 units/ac/year, about a 20% increase over 2018



DRY BULK CAPACITY FORECAST

- Bay Area dry bulk cargo dominated by construction needs
- Growth projections driven by demand for sand and gravel and decreasing regional supply
- Capacity forecasts allow for range of efficiency improvements, including denser storage or faster throughput
- Moderate growth productivity benchmarked to Eagle Rock in Richmond (113,397 MT/ac), 101% higher than 2018 Bay Area average (56,452 MT/ac)



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	327
Slow Growth	593	543	-	215	313	98	152	152	-	960	1,008	98
Strong Growth	593	990	397	215	496	281	152	227	75	960	1,712	753

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

SEAPORT EXPANSION SITES ANALYSIS

Forecast includes inventory of dormant or under-utilized terminal sites that could help meet acreage requirements in the future

Site	Acres	Potential Use		
		Container	Ro-Ro	Dry Bulk
SF Pier 96 & Other	67	-	X	X
Oakland Berths 20-21	20	X	-	X
Oakland Berths 22-24	130	X	-	-
Oakland Berths 33-34	20	X	-	-
Oakland Roundhouse	26	X	-	-
Oakland Howard*	38	X	X	X
Benicia Short-Term Lease	35	-	X	-
Richmond Terminal 3	20	-	X	X
Available Acres	356	176-234	35-162	0-147

* 38 acres after turning basin expansion and electrification

APPENDIX ON HOWARD TERMINAL

- Covers terminal history, interim uses, and potential role as a cargo terminal
- Role as a cargo terminal dependent on growth and productivity improvements in container, Ro-Ro, and dry bulk trades
- Could serve any of the three cargo types if needed, but constraints exist:
 - Loss of berth space for turning basin expansion may limit utility as a container terminal without extension to the east
 - Ro-Ro configuration would depend on the need for rail connections and processing facilities
 - Dry bulk could result in dust and heavy truck impacts on surrounding streets



COVID-19 IMPLICATIONS

- Cargo Forecast is a long-term forecast
- Assumes that there will be economic fluctuations from unpredictable events over 30-year period
- Currently no clear indication of what the pandemic-related disruption will ultimately be
- Staff will continue to monitor COVID-19 impacts on cargo flows and consider how to address long-term effects through planning process



SPAC DISCUSSION

- Conservative approach to demand and capacity forecasting is best for BCDC's goals
- Seeking flexibility for ports to explore a range of options in the future, particularly with economic impacts of COVID-19
- Feasibility is an important consideration for terminal development, capacity, and productivity
 - Air quality concerns will be a feasibility constraint
 - Infrastructure, including transportation corridors, will be a feasibility constraint



NEXT STEPS

Milestone	Est. Timeframe
Begin Environmental Justice and Sea Level Rise Analyses	Summer 2020
SPAC Meeting(s) on Alternatives	Summer/Fall 2020
SPAC Meeting for Draft Plan Review	Fall/Winter 2020
Environmental Assessment & Preliminary Recommendation	Winter/Spring 2021
Final Recommendation	Spring 2021

THANK YOU!



katharine.pan@bccdc.ca.gov



www.bccdc.ca.gov/seaport/meetings