

San Francisco Bay Conservation and Development Commission

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TO: Seaport Planning Advisory Committee

FROM: Linda Scourtis, Ports and Oil Spill Prevention & Response Program Manager
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SUBJECT: Draft Minutes of the June 27, 2019, Seaport Planning Advisory Committee Meeting

1. **Call to Order.** The meeting was called to order by Chair Halsted at Pier 1, Ground Floor Conference Room, The Embarcadero, San Francisco, California at 1:01 p.m.

2. Committee Members or Alternates present: Anne Halsted, Committee Chair; Andre Coleman, Port of San Francisco; Cynthia Kroll, MTC/ABAG; David Lewis, Save the Bay; Jim McGrath, BCDC; Eric Napralla, Port of Oakland; Cameron Oakes, CalTrans; Delphine Prevost, Port of Oakland; Don Snaman, Port of Redwood City; Jim Triplett, Benicia Port Terminal

BCDC staff present: Planner Cody Aichele-Rothman, Planning Director Jessica Fain, Planner Katharine Pan, Ports and Oil Spill Prevention and Response Program Manager Linda Scourtis

Consultants present: Dan Smith of Tioga Group, Daniel Hackett of Hackett Associates

3. **Public Comments.** Chair Halsted called for public comment on subjects that were not on the agenda.

Charles Davidson of the Rodeo Citizens Association stated that his community had been meeting with BCDC and the Department of Toxic Substances Control (DTSC) regarding the Selby Slag Remediation Project when they heard about the Selby Slag Seaport Plan. The citizens are very upset about this for many reasons, including that Phillips 66 has requested a large increase in terminal capacity. The citizens are requesting that the *San Francisco Bay Seaport Plan* completely eliminate the Selby Slag site from the Plan. It is in a delicate area, and the citizens have serious questions about increasing transport at the mouth of the Carquinez Strait; it would also require extra building. There is a vast amount of heavy metals that have been deposited in the surrounding wetland area that was not measured in the DTSC study.

Ms. Scourtis stated that she could speak with Mr. Davidson following the meeting on what BCDC anticipates as to the process.



4. **Background.** Chair Halsted asked staff to provide background on the Seaport Plan for today's discussion. Ms. Aichele-Rothman gave the presentation.

a. She explained BCDC's Priority Use Areas and the need to reserve adequate shoreline areas for cargo handling.

b. She indicated the areas designated as Port Priority Use Areas (PPUAs), which are served by maintained deep water channels to ensure ship access.

c. She explained the current status of the Seaport Plan, which was developed by the Seaport Planning Advisory Committee (SPAC), BCDC, and the Metropolitan Transportation Commission (MTC).

d. She explained the goals of the Seaport Plan update, which is necessary because the current Seaport Plan forecast sunsets in 2020. The update will reflect trends in improvement in cargo handling and capacity in port operations. With this update, staff will assess the capability of the terminals to meet these forecast needs.

e. Staff also intends to include applicable information about sea level rise, environmental justice, and social equity policies.

f. Ms. Aichele-Rothman explained Amendments BPA No. 1-19 and 2-19.

g. She presented the timeline.

5. **Regional Cargo Forecast and Terminal Capacity.** Chair Halsted asked Dan Smith of the Tioga Group and Daniel Hackett of Hackett Associates to present their findings updating the regional cargo forecast and terminal capacity projections.

Mr. Smith emphasized that this was a draft; he and Mr. Hackett were relying on the Committee to ensure that the numbers in the charts and tables are correct.

There are no recommendations in the report. The report, and the whole process as well, are designed to give the SPAC and BCDC the best possible set of facts for making policy choices.

Mr. Smith presented the schedule for the study, which was compressed to get the information to the Committee as soon as possible.

There are five active ports in the Bay Area that handle a variety of commodities. This report focused on three categories: containerized cargo, roll-on/roll-off ("Ro-Ro") vehicles (formerly "neo-bulk"), and dry bulk cargo.

The different cargo segments were forecast in different ways, as were the terminal capacities. Implied acreage needs were then compared to the current sites and terminals.

Mr. Smith explained the difficulty in forecasting cargo. Even if you get the long-term trend right, there is always the short-term disruption.

Mr. Hackett stated that first they looked at economic and trade trends to provide some context.

Population growth is slowing, although personal income is increasing.

The pace of the national GDP is slowing, as is trade growth.

Currently we have trade disputes with China, India, Mexico, and the EU; we do not know how they will resolve in the short run. We may have different trade partners in the near future. In addition, cargo volume may shift from the East Coast back to the West Coast.

Mr. Hackett explained the forecast methodology for containerized cargo for full and empty volumes.

The study used forecast scenarios for moderate growth, slow growth, and strong growth attributed to international and to domestic cargo.

Mr. Hackett presented the twenty-foot equivalent unit (TEU) international and domestic forecasts; he then gave the combined forecasts. After the strong economic growth and increasing globalization of the last 20 years, international trade is believed to be slowing down.

Containerized cargo imports are growing at a higher rate than exports, which are growing at a faster rate than domestic cargo. Rates over the next 30 years are expected to grow faster than during the last eight years.

Mr. Smith stated that in light of the above forecast, the report looked at the existing and available terminal space to handle the cargo. He described terminal acreages at the Port of Oakland.

Mr. Smith informed the committee of Port of Oakland container terminal productivity, and stated that the study attempted to use actual performance rather than theoretical figures. In assigning a long-term sustainable throughput for Oakland's busiest terminal (OICT), the figure came to 5,264 TEU/acre. For a long-term "high productivity" terminal with sustainable levels of investment and automation, the figure reached 7,112 TEU/acre.

Mr. Smith discussed container terminal capacity growth, and stated that container terminals do not build for distant futures; they aim to stay slightly ahead of demand. The report defined six potential expansion phases designed to increase terminal capacity.

Mr. Smith provided terminal capacity forecasts in 2050 with moderate, slow, and strong growth scenarios.

Member Prevost asked if they have considered where and when we run out of capacity under a moderate growth, if the willingness or financial ability to go high density is not there. Mr. Smith responded that they can run a spreadsheet with that scenario. Here, they assumed that the densification continues to accommodate the growth.

Member Lewis asked about this capacity: is it all assuming the 80% sustainable utilization rate? Mr. Smith affirmed. On a perfect day, the port would do 20% more than shown.

Mr. Smith continued: Container vessels are getting larger. Currently, the largest calling Oakland are between 14,000 and 15,000 TEU. Container vessels need a 50' channel depth. In the future they are going to need a greater berth capacity.

All these vessels call at Los Angeles/Long Beach first. Their size is driven by the growth of imports into those ports.

Mr. Smith explained how they devised a 2050 forecast for the appropriate vessel size, length, and time spent in port (berth occupancy).

He provided a berth capacity analysis for Oakland under a moderate growth forecast. An industry rule of thumb is that if you reach more than 65% berth occupancy, you are risking congestion. The 2050 moderate growth forecast shows tight berth occupancy with some potential issues; it looks like it fits but there is no slack in the system.

The report identified a series of ancillary services that need to be near the port and the space they require. There are four tracts adding up to about 247 acres available for ancillary services. Including the Union Pacific, city, and port parcels, the total is about 314 acres; it looks like there is space within the greater port area for the ancillary services.

Member McGrath asked about the upper limits of logistics improvements; is there more capacity to be had? With reducing dwell time, can you get terminals to be even more efficient? Mr. Smith indicated that some of that is built into the report. They had spoken to at least one major terminal owner who has found that semi-automated terminals are a better investment than fully-automated terminals in that they are increasing the throughput by reducing the container dwell time. This is a smarter strategy that optimizes the use of technology to keep things moving faster, as opposed to just adding gross storage capacity. Other logistics improvements are having trucks work at night, as well as appointment systems which have reduced queueing, allowed for more turns, and reduced the need for short-term truck parking.

Weston LaBar, Executive Director of the Harbor Trucking Association, stated that the faster you expedite cargo through the dock and reduce dwell time, the more inland capacity you need. How much does the report look at the need for inland support facilities? Also, regarding an approach of having a West Coast gateway, cargo can ship from Seattle to Long Beach and all points in between, but once a carrier vacates a gateway harbor, it is difficult to bring back the service, especially for discretionary cargo. We want to promote a West Coast approach—to know what is required for ports from Seattle to Long Beach to make sure we have the proper facilities so that if things are shifted, they are only shifted from, say, Long Beach to Oakland rather than Long Beach to Houston. Mr. Smith answered that a section of the report addresses some of those port competition issues. We did not address the issue for inland facilities but there is definitely an eventual need there.

Michael Murphy, Air Quality Management District, asked about ancillary services being pushed out to the community; do the communities have land space, and would this potentially cause conflicts for the residents? Mr. Smith answered that we know that some of those facilities are out there already. We did not do an inventory to learn where they would go; that is a long-term land use discussion around the I-80 corridor.

Member Provost referred to the report's moderate growth rate of 2.2%; Port of Oakland planning efforts are using 3%. We feel that this report should build in a higher level of conservatism in looking at growth to accommodate a variety of imperfections in the system, such as peaks and valleys. Further, the report looks at capacity and opportunity for expansion in a high-level way such that all the marine terminal space at the Port of Oakland is fungible; however, the port is not set up that way. Multiple terminal operators compete in the same marketplace and have contractual and regulatory arrangements. This lack of fungibility is where the need for conservatism arises as it very much affects capacity. It is not practical for Mr. Smith to do a microanalysis for the entire Bay Area; it is all the more reason to build in conservatism, one method of which is having a slightly higher moderate growth rate.

Ms. Provost continued that Port staff thinks that the report possibly overestimates capacity in Oakland. We talk about high utilization and densification, and the assumption that the industry will continue to automate and move to higher densification to accommodate the growth on the footprints they have been given. However, that is not the only threshold – there are many other factors such as the profitability of any single corporate entity that is operating these facilities, their long-term prospects, the return on the investment, and coming up with the capital to make the investments. The assumption that the market will bring forth the investment to accommodate capacity needs is a big unknown and another reason for some conservatism.

Ancillary usage is a big issue in Oakland. The City of Oakland property on the map and the Union Pacific (UPSI) properties are currently not supporting maritime activities, nor has the City committed to make them such in the future. This goes back to having some greater measure of conservatism for the long term in the report.

Ms. Provost referred to the investments listed as necessary in the Howard Appendix. There are facilities today that are not at 50' of water depth that are suitable for certain maritime operations without a lot of capital investment. Howard Terminal did not close because it was unsuitable for vessel operations. Not every marine facility needs to be at 50' of water or 290 acres; there is value in smaller footprints. We should not dismiss them. The prospect of running out of this very finite port resource is very serious.

Mr. Smith responded that they can all get on the same page. He agreed that we cannot guarantee that the facilities in question will be developed in ways that will support the port.

Member McGrath asked Member Prevost asked about the difference in lease terms of the existing facilities and how they come up for renewal and renegotiation at different times. She responded that currently one of their major terminal leases expires in 2023; one expires in 2030 with options to extend; others expire in 2032 with different options to extend. Some options are up to the tenant, some are up to the port, and some are mutual.

Regarding land exchanges rather than sales, Ms. Prevost explained that there are hard boundaries around the port. She felt that berth congestion is going to be an increasing problem in spite of having fewer calls with larger ships. Because of the nature of the operations, there are only so many land exchanges that can work. With freeway congestion, an increasing amount of cargo will have to move by rail irrespective of whether we have a new first port of call that takes discretionary cargo that used to go to L.A. Putting more cargo on rail isn't just about having the berths and the marine terminal space; it is also about having the land to integrate those marine terminals into a meaningful cost-effective connection to rail. Looking at those things, it is hard to come up with meaningful land swaps that don't bring you back to the core of the seaport.

Member Lewis asked about channel deepening – you are not making assumptions about how or when that happens, but is it a long enough time that it wouldn't be a constraint? Mr. Smith replied that the report acknowledges intermediate variations such as cost. He characterized the study as basically looking at the finite resources: the land, and implicitly assuming that all the other resources will come along (such as permissions, permits, necessary capital for dredging).

Member Lewis stated that the value of the long-term planning horizon includes things we know are going to happen; things we assume are going to happen but we don't know how or when; and things we don't know are going to happen. The more flexibility the ports retain to handle business changes, environmental changes, and economic changes, the closer these projections will be in the long run. Mr. Smith responded that one of the functions of this Committee is to recommend to BCDC where to strike a balance.

Andy Garcia of GSC Logistics asked Member Prevost if she has articulated her thoughts to the Commissioners on the rightful value of waterfront land relative to the current plan to transform it into somewhat of a playground. Ms. Prevost responded she had not, but that the Maritime Director has.

Mr. LaBar asked if Mr. Smith is taking into consideration things like the Utah Inland Port Authority, and how that could help West Coast marine ports move some of the rail cargo. Mr. Smith responded that rail does not necessarily move faster; the rail container may stay on the terminal for two or three days before the right train schedule aligns. We do not see a strong reduction in dwell time associated with rail.

Mr. Hackett explained the Ro-Ro import forecast through 2050 for vehicle sales with moderate, slow, and strong growth.

He followed with the export forecast, and stated that it will be very much affected by Tesla operations, which will likely build plants worldwide wherever they can sell the vehicles; this will dampen export potential. The industry believes that passenger vehicle sales are going to decelerate; long-term, this could decrease volume.

Mr. Smith stated that Ro-Ro terminals are basically large parking lots with some processing buildings and maybe some rail connections. To handle the vehicles, currently we import them through Benicia and Richmond, and export them through San Francisco.

The capacity of the terminals depends on the size of the vehicles and how long they remain at a terminal. The report defined different mixes of vehicle size and dwell time to come up with low, moderate, and high throughput facilities.

Mr. Smith showed terminal capacities at Benicia, Richmond, and San Francisco Pier 80 terminals (existing), and San Francisco Pier 96 and Oakland Howard terminals (potential).

By 2050, we will need more capacity acres whether there is slow, moderate, or strong growth. Productivity actually has a greater effect than growth. It comes down to the strategies the importers choose on handling the vehicles and this changes all the time. Many of these trends are not under the control of the ports and terminals.

Mr. Hackett stated that Bay Area ports handle a variety of dry bulk cargo, dominated by construction needs. The dry bulk cargo includes aggregate (sand and gravel), bay sand, bauxite and slag, gypsum, and scrap metal.

The report looked at the dry bulk cargo types individually for the forecast. Aggregates drive the dry bulk demand by far: by 2050, 70% of the tonnage will be aggregate. The amount that will have to be imported by 2050 is unknown.

Mr. Smith stated that most dry bulk terminals are essentially large piles of material on the ground. The capacity of the terminal depends mostly on how long cargo remains there. Throughput depends on velocity, much like container dwell. Data on this subject are difficult to come by.

The report established 63,000 annual tons per acre as the benchmark for low productivity into the future. For a moderate productivity forecast estimate, we used 103,500 annual tons per acre, and for a strong growth it was 139,000 per acre. With moderate growth, we will need about 34 additional acres of marine terminal space for dry bulk.

Mr. Smith listed the location options for the needed dry bulk capacity.

In summary, in trying to combine the acreage requirements for the different types of facilities, for moderate growth we need to expand in Oakland from 565 container cargo terminal acres to 729 from other Oakland sites. We need to add about 73 acres of Ro-Ro cargo terminal and about 34 acres of dry bulk. We have 946 acres working now and we need to activate another 271 acres under moderate growth.

Mr. Smith listed and showed aerial photos of the available expansion sites and their potential uses.

Mr. Smith summarized the findings for the 2050 cargo forecast and capacity.

- Bay Area seaport capacity is going to be tight with moderate growth.
- With slow growth, space will be ample.
- With strong growth occurring across all cargo types, space will be inadequate.

Oakland can probably handle moderate container cargo growth without Howard Terminal or Berths 20-21, but it would use up essentially all the space by 2050.

We can probably meet the moderate needs for Ro-Ro terminal expansion using San Francisco Pier 96 and Richmond's Terminal 3. Dry cargo capacity needs may conflict with the availability of space for Ro-Ro or container cargo.

Member Snaman stated that an 8½ acre facility operated by one of his tenants pushes through 2 million tons (230,000 tons per acre), significantly more than the metric tons per acre shown on slide 35. The numbers on the slide may be underestimated. Mr. Smith noted that the facilities differ greatly from one to the next.

Scott Taylor, GSC Logistics, asked the depth required by a Ro-Ro cargo vessel. Mr. Smith answered that those vessels are shorter and do not have the depth requirements of the largest container vessels. Howard Terminal did handle Matson's Ro-Ro vessel traffic until 2014.

An audience member commented that the Oakland Bulk and Oversized Terminal (OBOT) capacity is not in any of the analyses. Mr. Smith responded that we do not know what is going to happen with OBOT. Further, given that the objective here is to provide capacity within the existing seaport land, it is outside.

Mr. Smith stated that information specific to Howard Terminal is in the report as an appendix. Currently, Howard Terminal has a 1,946' berth and about 50 acres. We will work with the Port to make sure we know the exact acreage. It has nominally 42' of water – enough for most vessels (for the large vessels of the future that becomes a limit). Right now Howard Terminal is being used for ancillary services, truck parking, cargo transloading, and training.

Mr. Smith addressed the turning basin expansion anticipated at Howard Terminal and showed the outline for the proposed reuse.

Member McGrath asked the status of the project. Eric Napralla, Chief Wharfinger at the Port of Oakland, stated that they are about to enter into a feasibility study with the Army Corps. They are in the early stages of the process. A simulation test has been successfully completed.

Mr. Smith stated that with slow and moderate growth, we may not require Howard Terminal's acreage for container cargo. Use of Berths 20-21 for dry bulk cargo would increase the need for Howard Terminal. It could handle Ro-Ro and dry bulk cargo.

Howard Terminal is one potential option to meet some of the acreage needs for the Bay Area seaports. It cannot meet the needs of all three cargo types.

Dave Kaval, Oakland A's President, stated that one of their guiding principles for this project is to ensure that their plan for Howard Terminal does not negatively impact the maritime community. He has distributed a letter he received from Will Travis that refers to the Tioga report and gives some high-level findings, especially in relation to Howard Terminal.

5. Committee Discussion of Report Findings. Chair Halsted opened the Committee discussion.

Member Kroll asked if the population estimates are based on driving population or total population. Mr. Hackett answered that the estimates are purely based on total population growth for the nine-county region.

Member Coleman felt that clarifications need to be provided to accurately reflect acreage for some of the Port of San Francisco facilities listed in the report. Pier 80 has available berth space for Ro-Ro operations and it can accommodate additional export volume. Pier 96 needs some clarifications regarding automobile use; it has some limitations for rail access.

Member Snaman felt that it would be good to refine the report with more accurate numbers, throughputs, and needed acreages and bring an update back to the Committee.

Member Triplett commented that there are some source and volume flow discussions that could be updated with consultants; from his experience at the Port of Benicia, auto industry sales figures are relatively accurate every year, but they do not actually indicate source. We need to look at potential future sourcing – what is going to happen in the next 50 years irrespective of current international trade differences.

Member McGrath stated that he was not ready to adopt the report today. He suggested that Gerry Serventi, who participated in building Howard Terminal, to come and speak to the Committee. At one extreme, if the necessary expansion of the turning basin compromises Howard Terminal to some degree, that would lead us down a certain path regarding its value and capacity. It behooves the Committee to talk publicly with people who know the port and maybe that terminal specifically.

Member McGrath continued that there are some substantial confounding factors that could change many assumptions in the report: tariffs and fuel prices, for example. When do fuel prices and rising Chinese salaries shift the locations of manufacturing sites?

Chair Halsted felt that there are still questions to be answered and information to be explored before she is ready to move ahead with the report.

Cameron Oakes, Caltrans, asked if any consideration was given to ports outside but adjacent to this region, i.e., the Port of West Sacramento and the Port of Stockton. What could their role be in terms of capacity for the future? Mr. Smith replied that over the years the ports have typically served different markets. Being upriver, they have very limited drafts so their potential use as container ports is basically nil. Ro-ro vessels are smaller, but Mr. Smith doubted the feasibility there. The Port of Stockton is a very strong facility for bulk commodities. West Sacramento is basically a break bulk port. Much of what is handled at the two ports is difficult

to move very far – for example, windmill blades and sand/gravel. Economics would not permit bringing cargo to Stockton or Sacramento and trucking it back to the Bay Area.

Mr. Oakes asked if any analysis has been given to what the cargo volumes of increasingly bigger ships would present on the local street network, adjacent communities, and the state highway system. Mr. Smith answered that there is some information in the report on cargo spikes and so forth; he has some information on what happens during the week and during the month. However, the highway implications have not been tracked. Within the scope of the report they did not look outside the port boundary. Mr. Smith agreed that cargo volumes are a serious issue, particularly when looking forward 32 years. In the report, using the terminal's capacity as 80% of the maximum, serves to create slack for daily and weekly spikes.

Member Lewis agreed that it is important to get the report right, and to consult with all the ports to get the pieces right. He voiced a reminder that BCDC gets to use the report for deciding whether to make any changes in port priority use. He requested staff to let the Committee know the last time BCDC added property to port priority use. Member Lewis also thought it important to emphasize in the appendix that Howard Terminal is the only terminal potentially available for all three types of cargo use (although not concurrently). Member Lewis also suggested to emphasize strongly that with all three of the growth assumptions, cargo acreage will eventually need to be added even if the efficiencies are captured.

Mr. Napralla agreed on the need to revisit many of the calculations; we want to understand how the report came up with the throughput and gross versus net. The Port of Oakland understands in a slightly different way the current capacities and growth volumes, based on conventional operating structure. Based on our market studies, the point in time at which any of the marine terminals go from conventional to high-density/high-utilization, is fairly far out. We are planning for conventional operating mode to extend pretty far out. Last, Mr. Napralla commented that the report's view was from a macro-level; however, from a micro level, each of the terminals will reach capacity and have growth rates based on decisions made by the carriers with whom they have alliances. We would like to have more conversations with Mr. Smith and Mr. Hackett about that.

Will Travis, former BCDC Executive Director, stated that we are getting far enough out in the projections that it is essential to fold in the issue of sea level rise. He commented that priority use areas are simply land-banking areas for which BCDC has the authority to approve filling in the Bay; with sea level rise, it may be time to question this concept of reserving areas. Filling the Bay is a very expensive proposition, so simply reserving or not reserving enough space may not be the determinant as to whether the Bay is filled. Mr. Travis continued that if there is an area that is particularly well-suited for ports, it can legally be added by BCDC if you continue the approach of reserving priority use areas to protect the Bay.

6. Consideration of and Possible Vote to Recommend Approval of the SF Bay Area Seaport Forecast. Chair Halsted stated that she had not heard any motions other than suggestions to continue this discussion with further information at a future meeting.

MOTION: David Lewis moved to continue the discussion at a future meeting, seconded by Jim Triplett. The motion was adopted by a voice vote with no objections or abstentions.

7. **Discussion of Next Steps.** Chair Halsted stated that there is no future meeting yet scheduled.

8. **Adjournment.** There being no further business the meeting adjourned at 4:00 p.m.