File #:	2021-0309	**Version:** 1	**Name:**		
Type:	Action Item		**Status:**	Agenda Ready	
File created:	8/2/2021		**In control:**	Board of Port Commissioners	
On agenda:	9/14/2021		**Final action:**		
Title:	INFORMATIONAL UPDATE ON FUNDING ANALYSIS, CONCEPTS, AND POTENTIAL DISTRICT FEES RELATED TO ZERO EMISSIONS INITIATIVES AND DIRECTION TO STAFF.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:					

Date	Ver.	Action By	Action	Result

DATE: September 14, 2021

SUBJECT:
INFORMATIONAL UPDATE ON FUNDING ANALYSIS, CONCEPTS, AND POTENTIAL DISTRICT FEES RELATED TO ZERO EMISSIONS INITIATIVES AND DIRECTION TO STAFF.

EXECUTIVE SUMMARY:

The District has identified multiple electrification opportunities across the tidelands. As these opportunities are identified, funding the transition to electrified machinery and operations becomes a challenge that requires in-depth review and planning. Current opportunities carry a total estimated price tag of over $90M to complete.

During the July 13, 2021 Board meeting, staff presented funding concepts that may be used for these electrification opportunities. After receiving the staff presentation, the Board directed staff to further analyze implementing Port fees as a potential new funding source for electrification opportunities, including a truck fee and other Port tariff fees, and conduct a market feasibility/ price elasticity study to determine the feasibility of implementing these fees.

Staff will be providing an information update on its evaluation of implementing new Port fees to fund electrification opportunities. Staff will also provide an update on its efforts to pursue external funding sources.

RECOMMENDATION:

Receive an informational update on status of funding analysis and the potential implementation of new District fees to fund electrification opportunities on Port Tidelands and provide direction to staff.

FISCAL IMPACT:

This presentation has no fiscal impact.

<u>COMPASS STRATEGIC GOALS</u>:

This agenda item supports the following Strategic Goal(s).

- A Port that the public understands and trusts.
- A thriving and modern maritime seaport.
- A vibrant waterfront destination where residents and visitors converge.
- A Port with a healthy and sustainable bay and its environment.
- A Port with a comprehensive vision for Port land and water uses integrated to regional plans.
- A Port that is a safe place to visit, work, and play.
- A Port with an innovative and motivated workforce.
- A financially sustainable Port that drives job creation and regional economic vitality.

<u>DISCUSSION</u>:

The District has identified multiple electrification opportunities across the tidelands. As these opportunities are identified, funding the transition to electrified machinery and operations becomes a challenge that requires in-depth review and planning. Current opportunities carry a total estimated price tag of over $90M to complete.

Timeline of Funding Cash Flows

The Table below includes estimated costs and potential cash outflow projections associated with the electrification opportunities identified in the draft Maritime Clean Air Strategy (MCAS). The estimated costs are based on assumed electrical infrastructure costs derived from prior electrical and/or engineering studies, electric vehicle equipment, and vehicle cost estimates gathered from manufacturers or are generated based on prior projects implemented within the District. Due diligence and further planning are needed to better understand the implementation costs and feasibility associated with each opportunity.

			Cash Outflow Projections			
	Estimated Cost	**FY21 (actual)**	**FY22**	**FY23**	**FY24**	**FY25**
Estimated Total by FY	**$60M**	**$447K**	**$12M**	**$13.2M**	**$27.3M**	**$7.5M**

Note:
[1] OGV Shore Power at CST – Initial project costs for and an Electrical study at NCMT were funded through FY21 District funds.

During the July 13, 2021 Board meeting, staff presented funding concepts that may be used for these electrification opportunities, broken down into two main categories of Traditional and Nontraditional opportunities and two subcategories of External Funding and Port Funding. After receiving the staff's presentation, the Board directed staff to further analyze implementing Port fees as a potential new funding source for electrification opportunities, including a truck fee and other Port tariff fees, and conduct a market feasibility/ price elasticity study to determine the feasibility of implementing these fees.

Potential Port Fees - Estimated Revenues

Staff has begun analyzing potential port fees, including a truck fee and other tariff-based fees such as a General Rate Increase (GRI) or a special tariff fee.

Staff analyzed various scales of the various fees noted above. Initial estimates of incremental annual revenue generated for these fees based on existing cargo volume generated between $226k and $1M annually, most in the $500k range.

Market Feasibility/Price Elasticity Study

Since the July Board meeting, the District contracted with the firm WSP to complete a market feasibility/price elasticity study. The purpose of the study is to develop a model and utilize existing research to determine the feasibility of new fees by predicting how changes in costs to ship through the Port of San Diego will impact overall throughput/volumes. These changes in costs could be direct, such as new fees or general rate increases, or indirect, such as increased costs resulting from electrification projects or requirements.

The contract with WSP tasks their team with performing a two-phased market and elasticity study that derives demand elasticities for the District's highest-volume commodities (auto and container) and identifies ranges for other commodities (sugar, construction materials, breakbulk, domestic roro, and domestic lumber).

Price elasticity is an economic concept that examines the correlation between the price and demand of a commodity or service. If the percentage change in price leads to a greater percentage change in demand (i.e., elasticity > 1.0), the commodity is said to be elastic. If a change in demand is smaller (percentage-wise) than a change in price, demand is considered inelastic (i.e., elasticity < 1.0). The same logic is utilized for the Port of San Diego's role in the goods supply chain. If the cost to use or call on the port changes, shippers may consider alternates to get their goods to market.

It is also critical to consider that there is no single elasticity for port fees. Some goods, such as dry bulk, are easily shipped through another port. Others, such as refrigerated cargo, require specialized facilities for handling that may not be readily available at alternative ports and/or require significant investment. In addition, the terms of leases, availability of space and equipment at alternate ports, time to market overland, and other factors impact decision-making. For example, cargo destined for the San Diego area is likely to be more inelastic to tariff increases than cargo headed to distant destinations where there is a less geographic advantage to utilizing the Port of San Diego.

The primary goal of this Elasticity Study is a risk assessment of increasing port fees on future throughput and revenue. Given the complexity of global supply chains and markets, there are far too many assumptions and unknowns to generate precise outputs. Rather, the goal of the study is to assess the risk that certain commodities or port users will reduce or eliminate usage of the Port and the extent of the financial impact that could ensue.

Unlike the major gateway container ports of LA/LB/Oakland, the Port of San Diego is a specialty port handling a variety of commodities (in a variety of volumes). The viability of Maritime's total cargo book of business is dependent on this diversification, which has served the Port of San Diego well during various economic cycles (most recently notable during the Pandemic). It is important to note that the volume of business derived from each of these commodities is determined by distinct and commodity-specific market and industry conditions. An equivalent logistics cost hike in one sector will not necessarily have the same degree of business impact on another sector. Therefore, it is important to analyze proposed rate increases, fees, or surcharges on a commodity-specific basis to ensure the continued viability of each sector and, by extension, the diversified book of business of our Port.

Due to this diverse cargo type, the Port tends to compete with very select ports- most of which are outside of California. When it comes to roll-on roll-off (RoRo) operations, the few California ports that may compete with San Diego are Ports Hueneme, Port of San Francisco, a single terminal in LA, and the private Port of Benecia. The true competition for RoRo lies in the Pacific Northwest, Mexico, and the East Coast. As for bulk and breakbulk commodities, within California, the Port of Stockton is considered a competitor. However, the true competition lies with the Pacific Northwest and US Gulf ports. The Port of San Diego cannot compete with most other California ports due to this specialized commodity mix handled at the District's two cargo terminals.

The Market Feasibility/Price Elasticity Study will be completed by January 2022, and staff will return to the Board with recommendations on the implementation of Port fees.

External Funding Sources: HVIP, CORE, and Grant Successes

Notwithstanding the feasibility of implementing new port fees, additional funding sources will be necessary to fund significant gaps in funding electrification opportunities in the coming years. The following is an update on District efforts to leverage external sources such as HVIP, CORE, and other grants

The California Air Resources Board (CARB) Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP) and the Clean Off-Road Equipment Voucher Incentive Program (CORE) are two state programs intended to provide vouchers to electric vehicle manufacturers to offset the cost of a new electric vehicle relative to the cost of a comparable diesel vehicle. These funds are distributed directly to vehicle manufacturers on a first-come, first-served basis. Tenants can apply to these programs directly and then work with vehicle manufacturers to apply vouchers to reduce the cost of the vehicle at the time of purchase.

Staff has reached out to truck industry representatives for more information on zero-emission vehicle adoption rates and costs in California to better understand how manufacturers and purchasers are taking advantage of these tools. However, CARB reports that half of the available funds for FY20-21 were requested within three hours of opening, totaling $84M and funding more than 800 vehicles. Additional funds may become available later in 2021. According to publicly available information, 7% of HVIP vouchers statewide were awarded to applicants within the boundaries of the San Diego Air Pollution Control District. In comparison, 62% of vouchers were awarded to those within the South Coast Air Quality Management District. Their boundaries include Los Angeles, Orange County, Riverside, and San Bernardino counties. More than half of the state's HVIP funds - or $215.6M - went to the South Coast Air Quality Management District, while just $18.1M was received by San Diego Air Pollution Control District. Applications for Class-8 drayage truck vouchers may be submitted on a rolling basis at <https://californiahvip.org>.

While HVIP is aimed at point-of-purchase for zero-emission and near-zero-emission vehicles, the CORE program is focused on zero-emission off-road equipment, such as cargo-handling equipment. Though CORE was not launched until last year, 47% of statewide funding in CORE has gone to the greater Southern California region and 0% to the San Diego region. The San Diego Air Pollution Control District currently has ten vouchers worth a total of $1.9M on the waitlist for CORE funding, and the program has a total of 399 waitlisted vouchers and is $41.7M oversubscribed. Potential purchasers can learn more at <https://californiacore.org/>

All of $383.7M of HVIP and $ $40.8M of CORE funding has been allocated, and future state funding available to support these voucher and other grant programs are dependent on the state budget revenues, one-time funds from Cap-and-Trade auctions, and competing administration and legislative priorities that vary from year to year. Meanwhile, the Port has encouraged and supported its tenants' efforts to electrify their marine terminal operations, including assisting in securing and managing outside funding sources and advocating for their projects. Port tenants have been the recipients of various grant awards to demonstrate pre-commercial zero emissions. Most notably, the San Diego Port Tenants Association, on behalf of five Port Tenants (Dole Fresh Fruit Company, Pasha, Marine Group Boat Works, Terminal Lift, and Continental), was awarded $5.9M in funding from the California Energy Commission (CEC) in 2018 to demonstrate pre-commercial zero-emission medium and heavy-duty equipment. The grant included ten battery-electric yard tractors, drayage trucks, and forklifts on tidelands adjacent to the Portside Community. In 2010, the District received $2.4M of funding from the California Air Resources Board's Carl Moyer Memorial Air Quality Standards Attainment Program (Moyer) for California's first shore power system for passenger ships at the B Street Cruise Terminal in 2010, four years ahead of state requirements.

However, in recent years as technology has advanced and costs increased, legacy grant programs that could support clean technology at the District, such as Moyer, have not fit the scope or size of current potential projects. Common limitations and exclusions of existing grant programs have been low maximum award size, expectations of high usage rates, oversubscription of available funds, lack of funds or time allowed for first step planning & design, a requirement that the use exceeds regulatory compliance, inability to distribute funds based on small/medium size ports' needs, and requirements to scrap useful equipment regardless of age or emissions. The Portside Community's AB 617 Community Emission Reduction Program (CERP) inclusion of Action B1: Create Additional Flexibility for Mobile Source Incentives may prompt needed program updates once adopted.

In 2008, the Board of Port Commissioners authorized a Memorandum of Understanding with the San Diego Air Quality Management District to implement the District's Truck Retrofit and Replacement Program, allocating $2.9M of Proposition 1B funding from California Air Resources Board to fund approximately 35 truck retrofits that served the Port of San Diego. The Port is interested in exploring pre-determined funding set aside for ZE/NZE trucks and equipment that serve the Port of San Diego and using an MOU with SDAPCD to implement the program.

Additionally, the District has advocated for increased funding in these programs and earlier this year urged the Legislature to support the Governor's $1.5B proposal for zero-emission vehicle-related investments, which included incentives for medium- and heavy-duty zero-emission vehicles, off-road equipment, and supportive charging infrastructure through programs such HVIP, CORE, the AB 617 Community Air Protection program and more. Other legislation from the current legislative session that the District supports includes Assembly Bill 365 to reduce the state sales tax burden on drayage trucks that qualify for emissions reduction programs, and Senate Bill 372 to expand existing programs at California Air Resources Board with financial incentives and purchasing assistance for the conversion of California's medium and heavy-duty fleets to zero-emission vehicles.

Other Related Updates

As District staff evaluates the opportunities listed above, staff continues to advance projects that meet the District's goals to eliminate air emissions from maritime and shipyard operations.

Staff has released the draft MCAS and met with several stakeholders, including the Ports Tenant Association, the Environmental Health Coalition, individual tenants, non-governmental organizations, and governmental organizations.

Staff has continued developing a Request for Proposals for a public-private partnership (P3RFP) to design, build, operate, and maintain an Emissions Control and Capture System or "Bonnet". The District is working with the California Transportation Commission (CTC) to allocate the $4.8M in Transportation Corridor Enhancement Program (TCEP) funds awarded to the project in 2018. Staff expects funding to be allocated in December 2021 and the P3RFP to be released in winter 2021. Once the CTC funds are allocated, the District will have six months to award a contract to the desired vendor.

In addition, staff is finalizing new agreements with additional tenants to leverage the Low Carbon Fuel Standard (LCFS) program to further clean freight initiatives.

In advance of the California Air Resources Board At-Berth regulation requirement for roll-on/roll-off vessels, effective January 2025, the District conducted an Electrical Study of National City Marine Terminal (NCMT) to evaluate the infrastructure needs to install shore power plugs. The District has also conducted an environmental review of NCMT shore power implementation and has issued a Notice of Exemption (NOE) for the installation of the plugs, signifying that an environmental review has been completed for the project. Both the Electrical Study and NOE were used to apply for grant funding applications submitted earlier this year to the U.S. Department of Transportation's Port Infrastructure Development Program (PIDP) and Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grants.

Next Steps

Staff will return to the Board with implementation recommendations on District fees upon completion of the Market Feasibility/Price Elasticity Study. Staff will continue to aggressively pursue external funding opportunities and will provide the Board updates on these efforts.

General Counsel's Comments:

The Office of the General Counsel has reviewed and approved this agenda, as presented, as to form and legality.

Environmental Review:

This item would provide a presentation regarding the financial aspects and funding concepts related to MCAS and direction to staff. This presentation to the Board and direction to staff do not constitute an "approval" or a "project" under the definitions set forth in California Environmental Quality Act (CEQA) Guidelines Sections 15352 and 15378 because no direct or indirect changes to the physical environment would occur. CEQA requires that the District adequately assess the environmental impacts of projects and reasonably foreseeable activities that may result from projects prior to the approval of the same. Any project developed as a result of the presentation that requires the District or the Board's discretionary approval resulting in a physical change to the environment will be analyzed in accordance with CEQA prior to such approval. CEQA review may result in the District, in its sole and absolute discretion, requiring implementation of mitigation measures, adopting an alternative, including without limitation, a "no project alternative" or adopting a Statement of Overriding Consideration, if required. The presentation in no way limits the exercise of this discretion. Therefore, no further CEQA review is required.

The presentation complies with Section 35 of the Port Act, which allows the Board to do all acts necessary and convenient for the exercise of its powers. The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the presentation is consistent with the Public Trust Doctrine.

The presentation does not allow for "development", as defined in Section 30106 of the California Coastal Act, or "new development", pursuant to Section 1.a. of the District's Coastal Development Permit (CDP) Regulations because it will not result in, without limitation, a physical change, change in use or increase the intensity of uses. Therefore, issuance of a Coastal Development Permit or exclusion is not required. However, development within the District requires processing under the District's CDP Regulations. Future development, as defined in Section 30106 of the Coastal Act, will remain subject to its own independent review pursuant to the District's certified CDP Regulations, PMP, and Chapters 3 and 8 of the Coastal Act. The presentation in no way limits the exercise of the District's discretion under the District's CDP Regulations. Therefore, issuance of a CDP or exclusion is not required at this time.

Diversity, Equity, and Inclusion Program:

This agenda item has no direct DEI impact.

PREPARED BY:

Mike LaFleur
Vice President, Maritime