

AGENDA REPORT

Resolution: Authorize a Fiscal Year 2019 Capital Equipment Budget of \$5,667,040 to Procure Equipment for Use by the Airport and Seaport; Designate Existing Equipment as Surplus because it is Either Inadequate, Obsolete or Worn-Out and Approve to Sell, Donate, or Dispose of Such Property; Authorize the Executive Director to Procure the Equipment Totaling \$5,667,040 and Award Items over \$250,000 to the Lowest Responsive, Responsible Bidder; and Authorize Single-Source Purchase of Specific Items. **(Aviation/Engineering)** [Choose an item.](#)

<u>MEETING DATE:</u>	11/29/2018
<u>AMOUNT:</u>	\$5,667,040 (FY 2019) Capital Expenditure
<u>PARTIES INVOLVED:</u>	To Be Determined
<u>SUBMITTED BY:</u>	Bryant L. Francis C.M., Director of Aviation Chris Chan, Director of Engineering
<u>APPROVED BY:</u>	Danny Wan, Acting Executive Director
<u>ACTION TYPE:</u>	Resolution

EXECUTIVE SUMMARY

This agenda report seeks approval from the Board of Port Commissioners (Board):

1. Authorizing capital equipment budget of \$5,667,040 to procure equipment for use by the Aviation and Maritime Engineering Divisions;
2. Designating existing equipment as surplus and approval to sell, donate or dispose of those items;
3. Authorizing the Executive Director to procure the equipment totaling \$5,667,040 and award specific items over \$250,000 to the lowest responsive, responsible bidder and;
4. Authorizing the Executive Director to purchase specific items by single-source.

Port staff identified new and replacement equipment included in this report as necessary to conduct ongoing operations or enhance customer service at Oakland International Airport (Airport) and the Maritime area (Seaport). Staff identified several pieces of equipment that need to be replaced to maintain compliance with California Air Resources Board regulations. Additionally, staff recommend alternative fuel

replacements for specific items which would cost more than a conventional fuel purchase in an effort to continue building on the Port's sustainability policy.

BACKGROUND

In April 2018, Port staff identified new or replacement capital equipment currently needed to be purchased during Fiscal Year 2019 (FY 2019). After departmental evaluations and division reviews, selected equipment and their estimated costs were compiled and included in the FY 2019 Capital Improvement Plan (CIP) as capital equipment. Requested capital equipment meets either, some, or all of the following goals: (1) addresses immediate needs; (2) replaces older equipment that has reached the end of its useful life; and/or (3) replaces equipment that have a Tier 0, Tier 1, or Tier 2 engine with Tier 4¹ engines to maintain compliance with the California Air Resources Board (CARB) regulations for In-Use Off-Road Diesel-Fueled Fleets (known as the "DOORS Regulation," for the Diesel Off-Road On-line Reporting System) and Portable Engines Rated at 50 Horsepower and Greater (known as the "PERP Regulation" for Portable Equipment Registration Program).

The DOORS regulation requires a fleet, on a horsepower-weighted average, to exceed Tier 3 standards by incorporating sufficient Tier 4 equipment before 2023, with stricter standards each year up to 2023. Staff have developed a plan to meet each year's compliance requirement from 2020 through 2023. The PERP regulation requires all portable equipment over 50 horsepower to have a Tier 4 Final engine by 2020. To meet the DOORS and PERP standards for calendar year 2020, the Port needs to replace older equipment in the fleet now. Equipment for FY 2019 has been selected based on the age and size of the diesel engines, so those that provide the most emissions reductions would be replaced first. After replacement of this set of equipment, the Port fleet will be able to meet the 2020 DOORS fleet standards and the PERP standards for portable equipment.

Over the past several months, staff researched the availability, cost effectiveness, and feasibility of alternative fuel purchases for applicable equipment. Staff contacted vendors and manufacturers both locally and within California to determine availability. Staff evaluated cost effectiveness based on cost differential, miles driven, and emissions. Staff evaluated the feasibility to effectively operate and maintain alternative fuel purchases. Through the research and evaluations performed, there are six pieces of electric-powered equipment that staff are now recommending to be purchased, including trucks, a forklift and a passenger van. These electric-powered items are significantly more expensive than conventionally powered equipment. The additional costs of procuring the electric options of these items totals over \$250,000. Further descriptions of the items are below in the "Analysis" section.

There are seven added items that were not originally identified as part of the FY 2019 capital equipment budget. Eight other items have been removed from the original list. The net result

¹ USEPA and the California Air Resources Board (CARB) set Tier Standards for off-road diesel engines. Tier 0 engines are those that are older than the adoption of engine emissions standards. Tiers 1 through 4 are increasingly strict engine emissions standards. Tier 4 Final is the most stringent engine emissions standard.

of the higher-cost electric-powered pieces of equipment, additional items, and removed items, if approved, is within the FY 2019 budget.

More details describing the purpose, need, and estimated costs for all the requested equipment are presented below in the “Analysis” section.

Staff also seek approval to designate the property mentioned in this Agenda Report as surplus because it is either inadequate, obsolete, and/or worn-out, and authorize the Executive Director to dispose of such property by selling, donating, scrapping, recycling, destroying and/or abandoning the equipment.

ANALYSIS

Capital equipment items categorized as “pipeline” in the FY 2019 CIP were re-evaluated and are included in this request as appropriate. Costs for listed items are estimated based on received quotes where available. Staff will work with the Purchasing Department for all capital equipment purchases. Port Ordinance 4321 and the Port’s administrative policies will be followed for all procurements including obtaining formal competitive price quotes, or utilizing the State of California contract pricing if applicable for all equipment over \$250,000 with specific exemptions described below as allowed by Port Ordinance 4321. Equipment purchases seeking single-source procurement are identified in this report. Estimates received to date are for budgetary purposes and in some cases, may not yet include taxes and shipping charges. Individual final prices for equipment may vary.

Several items identified below have electric or hybrid options available. Most of the electric-powered purchases recommended by staff would be the first of its kind for both Aviation and Maritime facilities and maintenance staff. In some cases, there is a need to replace two items of the same type of equipment. For these, staff are recommending the purchase of one piece of conventional equipment and one piece of electric-powered equipment as a pilot effort to gain more in-depth experience. Staff anticipate a learning curve with operating, maintaining, and charging the electric-powered equipment. Infrastructure improvements required to charge the six new pieces of electric-powered equipment will be installed by Port Facilities staff and using existing budget.

For the following items estimated to cost over \$250,000, staff will Request for Bids through the Purchasing Department and is requesting the Board to authorize the Executive Director to award to the lowest responsive, responsible bidder upon receipt and review of the bids.

- D6 Bulldozer
- Grader
- Loading Ramp
- Passenger Lift

For the following items, staff is requesting that the Board waive the formal competitive bidding requirements and allow staff to procure the equipment from a single vendor:

- Electromagnetic inspection station (Vendor: CEIA)

- Passenger Lift (Vendor: Lift-A-Loft Engineered Aerial Solutions Corporation)

Further information is provided in the equipment descriptions below.

Aviation Capital Equipment

Replacement of Equipment to Meet CARB DOORS Regulation Requirements

The following three (3) pieces of equipment have either a Tier 0 or Tier 1 engine. To plan for compliance with upcoming annual fleet-average emission rate targets of the CARB regulation for DOORS Regulation, staff will need to replace these with Tier 4 engine equipment. To meet the upcoming 2020 emission standards, the following equipment should be replaced in FY 2019, with additional equipment to be replaced in FY 2020.

Electric Forklift 10,000 LB – (estimated cost: \$110,000)

The existing diesel 10,000-lb forklift, X101 is 11 years old. It is used daily to move equipment around the Airport. The new forklift will be electric powered. The existing forklift should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

D6 Bulldozer – (estimated cost: \$440,000)

The existing X158 bulldozer is 35 years old. This equipment is used to address emergencies such as dike repairs and it is used for regular maintenance activities such as pampas grass removal and clearing work around the Materials Management Site. Although this equipment could be rented for up to \$12,000/month, it is essential to have the equipment available on site to address emergencies. Currently, there is no electric replacement available. The existing bulldozer should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Grader – (estimated cost: \$440,000)

The existing X498 grader is 29 years old. In addition to replacing the grader to meet DOORS regulation, the existing grader has mechanical and transmission problems and would not be cost effective to repair given its age. This equipment is used to grade the vehicle service road on the dike as well as to ensure safety areas around runways and taxiways are maintained in accordance with Federal Aviation Regulations (FAR). With an expected useful life of 35 years, it would be more cost effective to purchase a new grader than to rent one for \$10,000/month. Currently, there is no electric replacement available. The existing grader should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement of Equipment to Meet CARB PERP Regulation Requirements

The following three (3) items of equipment have Tier 2 engines. To plan for compliance with the 2020 requirement of the CARB regulation for PERP, staff will need to replace these with Tier 4 engine equipment. To meet the upcoming 2020 standards, the following equipment should be replaced in FY 2019.

Air Compressor - (estimated cost: \$50,000)

The existing XW34 air compressor is 14 years old. The mobile air compressor is utilized in many of the Facilities job functions from fencing work to paving maintenance operations. The air compressor should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Generators - (estimated cost: \$60,000 and \$120,000)

The existing XV50 65-hp portable diesel generator is 12 years old and XS54 235-hp portable generator is eight years old. Both generators are used to provide backup power to locations that do not have connections to the grid for essential services such as lights and pumps. The diesel generators should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell these assets via public auction. If they are not sold, then staff will dispose of them properly.

The following equipment is either “replacement,” meaning the current equipment has reached the end of its useful life, or “new/upgrade,” meaning an operational need or efficiency improvement has been identified.

Replacement 10-Passenger Van – (estimated cost: up to \$110,000)

The Airport maintains one large passenger van to provide larger groups, such as potential tenants and customers, regulators, local and state officials, larger staff and Commissioner groups, and dignitaries, tours of the Airport and project locations. The van is 14 years old, is at the end of its useful life, and needs to be replaced. The new van would be electric. Maritime has purchased an electric van and is still waiting for delivery. Aviation staff recommend purchasing an electric van assuming Maritime van is delivered and staff can properly charge and operate it. Otherwise, staff plan to purchase a conventional gas-powered van for approximately \$65,000. The estimated cost for an electric van is \$200,000 without incentives. With up to a total of \$90,000 in incentives available, the estimated cost would be \$110,000 for the van. The existing van should be declared as surplus so the Port may dispose of it. The van may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement Bucket Truck – (estimated cost: \$220,000)

The existing XZ59 diesel-operated bucket truck is 17 years old. This truck is used weekly to service the public roadways, air operations area, and maintain over 1,200 lighting fixtures throughout the Airport. Due to age and wear and tear of the truck,

the maintenance costs have significantly increased. Currently, there is a hybrid replacement available. Only the truck's bucket system runs on electricity; the hybrid bucket truck engine is used for propulsion. Based on the low miles driven, it has been determined that a hybrid version is not a good match for the intended use due to very limited emissions reductions and high cost differential. Staff recommend purchasing the latest model year on-road diesel engine type for this truck replacement. The newer diesel models meet stricter emission standards than the current truck. The existing truck should be declared as surplus so the Port may dispose of it. The truck may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement Flatbed Trucks (estimated cost: 1 gas @ \$66,000 + 1 electric @ \$105,000)

The existing flatbed trucks, X167 and XZ55, both 18 years old, have high miles, and are unable to pass their smog checks due to outdated emissions systems. Truck X167 has lift gate electrical problems. Truck XZ55's gross combined vehicle weight rating is under-rated for its current payload. The cost of repairs would exceed the value of the vehicles. Staff does not have any electric flatbed trucks in its current fleet. Therefore, staff recommend purchasing one conventional gas-powered truck and one electric-powered truck as a pilot. The estimated cost for an electric flatbed truck is \$195,000 without incentives. With up to a total of \$90,000 in incentives available per truck, the estimated cost would be \$105,000 for one truck. The existing trucks should be declared as surplus so the Port may dispose of them. The trucks may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

Replacement/Upgrade Flatbed Truck and Upgrade Sprayer

Replacement/Upgrade Flatbed Truck – (estimated cost: \$61,000)

The existing ½ ton truck, X752, is 28 years old and past its useful life. The vehicle is unable to pass its smog check due to an outdated emission system. Staff would like to replace the existing ½ ton truck with a flatbed truck, which would allow a larger payload for use with the requested 200-gallon spray tank. Staff recommends a gas truck replacement because this truck will have the sprayer unit attached to it. There is no replacement spray unit on another truck that staff could use if the electric truck needed off-site servicing or maintenance or there was an issue charging the vehicle. Staff recommend purchasing an electric flatbed truck (details above) and would like to use that as a pilot prior to purchasing more electric-powered trucks. The existing truck should be declared as surplus so the Port may dispose of it. The truck may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Upgrade Sprayer– (estimated cost: \$11,000)

The current 100-gallon tank sprayer on X752 is used for weed abatement and work around runway signs and structures. Much of this work must be accomplished during the limited duration of Monday Morning Closures (MMCs) of Runway 12/30. Due to the limited capacity of the 100-gallon sprayer, staff must

make multiple trips to refill the sprayer tank, which is not an efficient use of staff time and can result in not being able to complete the job during the MMC. A 200-gallon tank will allow staff to fill once and stay on site during the entire time of the MMC. The upgraded sprayer will also be used regularly throughout the Airport for uses such as weed control. The existing equipment should be declared as surplus so the Port may dispose of it. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement Sealcoat Sprayer – (estimated cost: \$11,000)

The sealcoat sprayer is used on asphalt pavement for seal coat work at the Airport. The current sealcoat sprayer has multiple broken welds that cause it to leak. The cost to repair the sprayer would exceed its value. The existing sprayer should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement Runway “X” Signs (2) – (estimated cost: \$66,000)

Two of the Airport’s runway closure “X” signs need to be replaced. They were originally purchased in 2004. The signs do not always function due to age which could affect runway closure operations. The current signs are also difficult to transport and laborious to set up. The replacement signs are simple and modern in design, include quick set up, and have LED lighting. The signs are diesel-operated. Currently, there are no electric replacements available. The existing signs should be declared as surplus so the Port may dispose of them. The existing signs may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

New Jet Bridge Monitoring Equipment – (estimated cost: \$66,000)

Jet bridge monitoring equipment would provide details of gate availability, real-time status of boarding bridges, pre-conditioned air units, 400 Hz ground power units, and other equipment that are critical for gate operations efficiency. Staff would be able to monitor equipment status, operations, faults, and diagnostic issues in real time. Staff will have this system installed at two critical jet bridges to determine if this is a viable option for all jet bridges at the Airport. This system is essential as gate utilization increases and any out-of-service period can cause operational impacts and delays to airlines and passengers.

New Loading Ramp – (estimated cost: \$350,000)

To enhance operational flexibility and to ensure that sufficient space is available to board and deplane aircraft even during busy periods, the Airport has designated locations away from the terminal to perform remote operations. Passengers boarding and deplaning in these remote locations require the use of a stair or loading ramp and due to the safety and throughput benefits of a ramp, staff are recommending the purchase of a large switchback ramp that will provide passengers an efficient, safe, and covered path between aircraft and airfield busses. These ramps also enable mobility-impaired passengers to access aircraft without the use of secondary equipment such as a passenger lift. These

ramps can facilitate multiple aircraft types and can be easily operated by tenant personnel that are responsible for handling flights.

New Passenger Lift – (estimated cost: \$250,000)

Currently the Airport has some aircraft hardstand positions within walking distance of the terminal where passengers board or deplane without the use of a passenger boarding bridge. Since some airlines provide stairs instead of boarding ramps for passengers at these locations, the Airport has been providing a passenger lift and has been leasing a lift for over a year and a half at approximately \$7,000 a month for passengers with mobility needs. Staff have determined it would be more cost effective for the Airport to purchase and own a passenger lift.

Staff plan to purchase the lift through the current lease supplier Lift-A-Loft Engineered Aerial Solutions Corporation (Lift-A-Loft). Lift-A-Loft specializes in designing, engineering and customizing aerial lifts. Based in Muncie, Indiana, with 60 years of manufacturing experience, Lift-A-Loft has a reputation in the aviation industry for safe, reliable equipment. Lift-A-Loft is the only manufacturer of aircraft passenger aerial lifts within the United States. The Airport has recognized the necessity of the passenger lift to our daily operations. Purchase of the passenger lift will allow the airport to continue to meet these expectations. Staff is requesting a waiver of competition to purchase this equipment from Lift-A-Loft based on their expertise in this area, their proven track record with the Port, and the fact that they are the only manufacturer in the United States.

New Electro-Magnetic Inspection Scanner (EMIS) (2) – (estimated cost: \$126,000)

The EMIS is a security screening device designed to inspect non-metallic cargo. Staff recommend deploying this technology at both concession screening locations in the Airport. Currently, the contracted security guard company is required to open all product (i.e., boxes, crates, bins, etc.) that passes through both screening locations and visually verify that no prohibited items are present. This process has proven to be lengthy and inefficient for the concessionaires to quickly move their product (i.e., produce, frozen foods, beverages, etc.) into the terminal and often requires the presence of extra security guards during peak hours. Staff is confident that this technology will not only speed up the screening process allowing concessionaires to move more product into the terminal but also provides an enhancement to the security posture at the Airport.

Staff requests a waiver of competition for single source procurement of this equipment through CEIA. The CEIA exclusive Electromagnetic Profile Analysis technology ensures automatic detection of metallic items. Further, the CEIA equipment does not utilize X-ray technology which alleviates having to train guards on how to interpret threats that display on screen. Instead, this piece of equipment acts as a magnetometer which alarms on metallic items.

New Surveillance Radar (estimated cost: \$49,000)

The mobile radar kit would be used to investigate possible locations for future expansion of the existing radar system. The unit consists of a radar panel, tripod, computer, batteries, and other accessories. This unit is standalone and battery operated and allows for a localized radar setup to determine if the prospective location is feasible with regards to interference, clutter, jamming, and other conditions that would make a location unsuitable. In addition to the testing of potential sites, the radar panel from the unit would be used as a spare in the event of a failure of one of the existing five radars.

Replacement Uninterruptible Power Supply (UPS) (38) – (estimated cost: \$126,000)

There are 38 UPSs which serve as battery backups that support the Intermediate Distribution Frames (IDFs) in buildings M130 (Terminal 2 older concourse) and M367 (Terminal 2 newer concourse). The IDFs are racks used for managing and interconnecting communications cable for the two buildings. The existing UPSs are twelve years old, past their useful life, and in need of replacement. The existing UPSs should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

Replacement Multi-User Flight Information Display Monitors (MUFIDS) (50) - (estimated cost: \$61,000)

Fifty display monitors in building M103 (Terminal 1 concourse), M130 (Terminal 2 older concourse), and M367 (Terminal 2 newer concourse) are 12 years old and have exceeded their ten-year useful life. These are the last monitors at the Airport that need replacement at this time. The existing monitors should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

Replacement Satellite Phones (2) – (estimated cost: \$11,000)

The satellite phones, located at the Emergency Operations Center (EOC), are used in the event that normal communications are unavailable (such as during a seismic event) to permit Airport Operations/EOC staff to communicate with the City EOC, the Port, as well as other area airports. The current phones are over 10 years old and need to be replaced as they have been technologically superseded and will no longer be supported by maintenance companies. They are also extremely large and difficult to use compared to today's models. The existing phones should be declared as surplus so the Port may dispose of them. The phones may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

New Furniture in Emergency Operations Center (EOC) – (estimated cost: \$14,000)

New furniture is needed in the EOC, located in Building M104, to accommodate IT equipment required to operate the large video wall. The new furniture would be

specifically designed to house the numerous computer screens and other IT equipment required for this function, while minimizing space needs which is paramount as the current setup takes a significant amount of the available space in the room.

New E510 Handheld Readers (3) - (estimated cost: \$29,000)

Staff recommend purchasing three new handheld readers to allow for all ground transportation modes to be incorporated into the new automated vehicle identification (AVI) system at the Terminal. Currently taxis and on-demand shuttles cannot be added to the tracking system without the readers because there is a new AVI system in place.

New Tow Cart Plastic Liners (33) - (estimated cost: \$33,000)

The current tow carts rust and do not last for their full useful life due to a lack of liners that could contain fluids and other products that erode the metal. Staff use the tow carts daily throughout the Airport.

Replacement Recycling Compactors (2) – (estimated cost: \$77,000)

The current compactors are 15 years old and are continually failing. They are not dependable and require regular maintenance. This equipment is used daily by staff and tenants to dispose of recyclable materials. Staff recommend replacing both Terminal 1 and Terminal 2 compactors with new units. The existing compactors should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

New Washout Bins (2) – (estimated cost: \$5,500)

The trash tote carts need to be washed out regularly. The washout bins would allow staff to capture the fluid for proper disposal into the sewer system and ensure no runoff into the storm drain system. The bins would be used temporarily until a project can be completed that provides a proper wash-out area for trash receptacles with a built in sanitary sewer connection.

New Spill Cart – (estimated cost: \$5,500)

Staff recommend a cart that transport brooms and other equipment necessary to respond to spills on the Airport Operations Area. The cart would be made available to responsible tenants in the event they do not have all the necessary equipment readily available. The cart would improve staff efficiency and response time.

Replace Noise Monitoring Terminal Components (7) – (estimated cost: \$7,700)

The Noise Monitoring Terminals, which are in place to monitor aircraft noise levels around the Airport, have been operating 24/7 for over 20 years. The cost of each monitor was originally \$15,000. Staff believe the useful lives of the monitors could be extended by replacing some key components related to the modems. The old components should be declared as surplus so the Port may dispose of them. The components may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

Replacement Portable Light Towers (4) – (estimated cost: \$57,200)

The current portable light towers are approximately 15 years old, past their useful life, and in need of replacement. The light towers are used Airport-wide for irregular operations that must operate in areas that lack sufficient lighting and other special events that need additional lighting. The light towers should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

Maritime Capital Equipment**Replacement of Equipment to Meet CARB DOORS Regulation Requirements**

The following eight (8) items of equipment have either a Tier 1 or Tier 2 engine. To plan for compliance with upcoming annual fleet-average emission rate targets of the CARB regulation for In-Use Off-Road Diesel-Fueled Fleets, staff will need to replace these with Tier 4 engine equipment. To meet the upcoming 2020 emission standards, the following equipment should be replaced in FY 2019, with additional equipment to be replaced in FY 2020.

Loader - (estimated cost: \$130,000)

The existing XS31 loader is over 10 years old. This loader provides maintenance functions at Middle Harbor Shoreline Park. Currently, there is no electric replacement available. The loader should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Paver - (estimated cost: \$240,000)

The existing XY36 paver is over 15 years old. The paver helps maintain the Port-owned streets and helps provide immediate response Maritime terminal operations when needed. Currently, there is no electric replacement available. The paver should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Large Capacity Forklifts (estimated cost: 1 diesel @ \$100,000 + 1 electric @ \$200,000)

The existing XU74 and XY01 forklifts are at least 11 years old. The forklifts are used for moving materials in the Facilities yard as well as for projects around the Maritime area. Staff recommends purchasing one diesel-powered forklift and one electric-powered forklift so staff can become familiar with how an electric forklift operates. Both forklifts should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

Backhoe - (estimated cost: \$140,000)

The existing XY82 backhoe is 15 years old. The backhoe is used for auger operations, trenching and digging to assist with underground utilities, and fence maintenance projects. Currently, there is no electric replacement available. The

backhoe should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Air Compressor - (estimated cost: \$50,000)

The existing XZ15 air compressor is almost 20 years old. The mobile air compressor is utilized in many of the Facilities job functions from fencing work to paving maintenance operations. The air compressor should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Pressure Washer - (estimated cost: \$140,000)

The existing XY05 pressure washer is almost 20 years old. This pressure washer is utilized by the Dive team to clean marine growth off the piles for their visual inspections. Currently, there is no electric replacement available. The pressure washer should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Mower - (estimated cost: \$25,000)

The existing XS36 mower is over 15 years old. This mower is utilized at Middle Harbor Shoreline Park in providing landscape maintenance. Currently, there is no electric replacement available. The mower should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement of Equipment to Meet CARB PERP Regulation Requirements

The following two (2) items of equipment have Tier 3 engines. To plan for compliance with the 2020 requirement of the CARB regulation for Portable Engines Rated at 50 Horsepower and Greater, staff will need to replace these with Tier 4 engine equipment. To meet the upcoming 2020 standards, the following equipment should be replaced in FY 2019.

Air Compressor - (estimated cost: \$50,000)

The existing XT84 air compressor is 10 years old. The mobile air compressor is utilized in many of the Facilities job functions from fencing work to paving maintenance operations. This piece of equipment has a Tier 3 engine but to stay in compliance with the PERP program, the air compressor will need to be replaced with one that has a Tier 4 Final engine by January 1, 2020. The air compressor should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Mobile Vacuum on Trailer - (estimated cost: \$20,000)

The existing XS72 mobile vacuum on trailer is seven years old. The mobile vacuum on trailer is used to provide cleaning as part of maintenance operations. This piece of equipment has a Tier 3 engine but to stay in compliance with the PERP program, the vacuum on trailer will need to be replaced with one that has a Tier 4 Final engine by January 1, 2020. The vacuum on trailer should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

The following equipment is either “replacement,” meaning the current equipment has reached the end of its useful life, or “new,” meaning an operational need or efficiency improvement has been identified.

New High Lift Wheel Dolly - (estimated cost: \$15,000)

The High Lift Wheel Dolly will be utilized by Fleet services, particularly at the Aircraft Rescue and Firefighting (ARFF) facility, to lift large capacity wheels so staff can ergonomically service and maintain the equipment.

New Transmission Jack - (estimated cost: \$15,000)

With an aging fleet, staff are now required to perform additional services such as servicing and maintaining transmission systems. This transmission jack will help staff perform this task on all Port vehicles more ergonomically. The purchase of this equipment would be more economical than taking the vehicles to outside service centers for service and maintenance.

Replacement Work Trucks (estimated cost: 9 gas @ \$52,000 ea. + 2 electric @ \$135,000 ea.)

These existing work trucks (5 maintenance trucks, 2 Equipment System Engineer trucks, 2 Fire Protection trucks, 2 work trucks for the Engineering Division) are between 15-20 years old and have become functionally obsolete. Staff does not have any electric trucks in its current fleet. Therefore, staff recommend purchasing one electric-powered equipment system engineer work truck and one electric-powered fire protection work truck as pilots. The estimated cost of an electric truck is \$225,000 without incentives. With up to a total of \$90,000 in incentives available per truck, the estimated cost would be \$135,000 per truck. The trucks listed below should be declared as surplus so the Port may dispose of them. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If they are not sold, then staff will dispose of them properly.

- X644 – Maintenance Work Truck
- XZ86 – Maintenance Work Truck
- XY97 – Maintenance Work Truck
- XY98 – Maintenance Work Truck
- X251 – Maintenance Work Truck
- XZ88 – Equipment System Engineer Work Truck (to be replaced by Electric)
- XZ89 – Equipment System Engineer Work Truck

- X822 – Fire Protection Work Truck (to be replaced by Electric)
- X936 – Fire Protection Work Truck
- XY25 – Engineering Division Work Truck
- XY79 – Engineering Division Work Truck

Replacement Painter Van - (estimated cost: \$70,000)

The existing X160 painter van is over 20 years old and has become functionally obsolete as parts to repair and maintain this vehicle are becoming increasingly difficult or completely unavailable. Estimated costs of an electric replacement would be \$150,000 and incentives of up to \$100,000 are available. Staff recommend a gas replacement at this time due to the long range of miles traveled to procure painting supplies. The existing van should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement Arrow Board - (estimated cost: \$10,000)

The existing X140 arrow board is over 20 years old and has become functionally obsolete as parts to repair and maintain this unit are becoming increasingly difficult to procure. The replacement arrow board will be battery powered with a solar option. This arrow board should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

Replacement Scissor Lift - (estimated cost: \$70,000)

The existing XZ77 electric scissor lift is over 18 years old and has become functionally obsolete as parts to repair and maintain this unit are becoming increasingly difficult to procure. This scissor lift should be declared as surplus so the Port may dispose of it. The equipment may have value as scrap or parts. Staff will attempt to sell this asset via public auction. If it is not sold, then staff will dispose of it properly.

BUDGET & STAFFING

This Agenda Report requests authorization of \$5,667,040 to purchase the requested capital equipment, which is about \$11,000 less than budgeted, including two generators, a passenger lift, an electro-magnetic inspection scanner, a surveillance radar, and an additional air compressor which were not included in the Port's June 28, 2018 CIP. After additional research, staff is recommending purchasing an electric-powered passenger van, flatbed truck, equipment system engineer work truck, and fire protection truck, rather than gas-powered, in addition to the two originally identified electric forklifts to its electric fleet in an effort to continue building on the Port's sustainability policy.

Items with an asterisk (*) next to them in the table below have additional infrastructure costs that are not included in the estimated costs column. Electric charging stations are required for each piece of electric-powered equipment. The costs are estimated at \$10,000 for each charging station which would include the charger, miscellaneous parts, and labor. Three

charging stations each would be needed in Maritime facilities and in Aviation facilities. The costs would be funded using Miscellaneous Facilities budget.

All the equipment would be purchased with Port cash. Eligible costs for Aviation items will be recovered through the airlines' rates and charges over time.

The requested total includes a contingency for equipment to account for potential cost increases for items after bids are received, as well as taxes or shipping that may not have been included in estimates for some items. Purchased equipment may cost more or less than the quotes indicated in the table below, but the total expenditure will not exceed \$5,667,040. Should final costs exceed the total authorized amount, staff would defer certain purchases to stay within the authorized amount.

The table below lists the revised capital equipment request list for FY 2019 and their associated estimated equipment costs.

FY 2019 Capital Equipment Requests

ITEM	ITEM COST	QUANTITY	EST. COST
*Replacement Forklift 10,000 LB (electric)	\$110,000	1	\$110,000
Replacement D6 Bulldozer	\$440,000	1	440,000
Replacement Grader	\$440,000	1	440,000
Replacement Air Compressor	\$50,000	1	50,000
Replacement Generator 65 hp ^(a)	\$60,000	1	60,000
Replacement Generator 235 hp ^(a)	\$120,000	1	120,000
*Replacement 10-Passenger Van (electric)	\$110,000	1	110,000
Replacement Bucket Truck (gas)	\$220,000	1	220,000
Replacement Flatbed Trucks (gas)	\$66,000	1	66,000
*Replacement Flatbed Trucks (electric)	\$105,000	1	105,000
Upgrade Flatbed Truck (gas)	\$61,000	1	61,000
Upgrade Sprayer	\$11,000	1	11,000
Replacement Sealcoat Sprayer	\$11,000	1	11,000
Replacement Runway "X" Signs	\$33,000	2	66,000
New Jet Bridge Monitoring Equipment	\$66,000	1	66,000
New Loading Ramp	\$350,000	1	350,000
New Passenger Lift ^(a)	\$250,000	1	250,000
New Electro-Magnetic Inspection Scanner ^(a)	\$63,000	2	126,000

ITEM	ITEM COST	QUANTITY	EST. COST
New Surveillance Radar ^(a)	\$49,000	1	49,000
Replacement Uninterruptible Power Supply (UPS)	\$3,316	38	126,000
Replacement Multi-User Flight Information Display Monitors (MUFIDS)	\$1,220	50	61,000
Replacement Satellite Phones	\$5,500	2	11,000
New Furniture in Emergency Operations Center	\$14,000	1	14,000
New E510 Handheld Readers	\$9,667	3	29,000
New Tow Cart Plastic Liners	\$1,000	33	33,000
Replacement Recycling Compactors	\$38,500	2	77,000
New Washout Bins	\$2,750	2	5,500
New Spill Cart	\$5,500	1	5,500
Replace Noise Monitoring Terminal Components	\$1,100	7	7,700
Replacement Portable Light Towers	\$14,300	4	57,200
Contingency ^(b)	\$319,640	1	319,640
Aviation Total			\$3,457,540
Replacement Loader	\$130,000	1	\$130,000
Replacement Paver	\$240,000	1	240,000
Replacement Large Capacity Forklifts (diesel)	\$100,000	1	100,000
*Replacement Large Capacity Forklifts (electric)	\$200,000	1	200,000
Replacement Backhoe	\$140,000	1	140,000
Replacement Air Compressor ^(a)	\$50,000	2	100,000
Replacement Pressure Washer	\$140,000	1	140,000
Replacement Mower	\$25,000	1	25,000
Replacement Mobile Vacuum on Trailer	\$20,000	1	20,000
New High Lift Wheel Dolly	\$15,000	1	15,000
New Transmission Jack	\$15,000	1	15,000
Replacement Work Trucks (gas)	\$52,000	9	468,000
*Replacement Work Trucks (electric)	\$135,000	2	270,000
Replacement Painter Van (gas)	\$70,000	1	70,000
Replacement Arrow Board	\$10,000	1	10,000

ITEM	ITEM COST	QUANTITY	EST. COST
Replacement Scissor Lift	\$70,000	1	70,000
Contingency ^(b)	\$196,500	1	196,500
Maritime Total			\$2,209,500
Total Budget Request			\$5,667,040

(a) *Items were not included in the FY 2019 CIP capital equipment budget presented to the Board on June 28, 2018. Staff is requesting adjustments for the following items that have been added or removed:*

Replacement Generator 65 hp for \$60,000 has been added to the budget

Replacement Generator 235-hp for \$120,000 has been added to the budget

New Passenger Lift for \$250,000 has been added to the budget.

New Electro-Magnetic Inspection Scanners (2) for a total of \$126,000 has been added to the budget

New Surveillance Radar for \$49,000 has been added to the budget

Replacement Air Compressor - one additional compressor for \$50,000 has been added to the budget

Brute Boom for Pier for \$132,000 has been removed from the budget.

Forklift for \$44,000 has been removed from the budget.

Dynamic Watering System for \$132,000 has been removed from the budget.

Laptop and Projector for \$5,500 have been removed from the budget.

Part 139 Software Upgrade for \$44,000 has been removed from the budget.

Training Modules for ARFF for \$28,000 have been removed from the budget.

New Vehicle Wraps for \$7,000 has been removed from the budget.

Equipment Shelter for \$132,000 has been removed from the budget.

(b) *Total accounts for taxes, shipping, or other fees not included in some of the cost estimates.*

The proposed capital equipment will have no impact on current and future Port staffing.

MARITIME AVIATION PROJECT LABOR AGREEMENT (MAPLA)

The provisions of the Port of Oakland Maritime and Aviation Project Labor Agreement (MAPLA) do not apply to this recommended procurement of equipment.

STRATEGIC PLAN

The action described herein would help the Port achieve the following goals and objectives in the Port's Strategic Business Plan (2018-2022).

<https://www.portofoakland.com/wp-content/uploads/Port-of-Oakland-Strategic-Plan.pdf>

- *Goal: Modernize and Maintain Infrastructure*
- *Goal: Pursue Employee Excellence*
- *Goal: Care for Our Environment*

LIVING WAGE

Living wage requirements, in accordance with the Port's Rules and Regulations for the Implementation and Enforcement of the Port of Oakland Living Wage Requirements, do not apply because the purchase of capital equipment is not a covered service contract, but a contract for goods, commodities, supplies or equipment with incidental service provisions.

SUSTAINABILITY

Staff completed the Sustainability Opportunities Assessment Form for this project pursuant to the 2000 Sustainability Policy and updated procedures. Both the DOORS and the PERP regulation are requiring phase-out of equipment with Tier 0, Tier 1, and Tier 2 engines. The replacement equipment will have Tier 4F engines that will reduce emissions. Fifteen (4 Aviation + 11 Maritime) trucks are at least 15 years old and beyond their useful life. Staff have researched low- to zero-emissions options for these vehicles and recommendations have been made accordingly. To maintain compliance with the CARB regulations, staff are already identifying the next pieces of equipment that should be replaced in FY 2020 and considering alternative power replacements.

ENVIRONMENTAL

California Environmental Quality Act (CEQA) Determination: The CEQA Guidelines Section 15378(b)(2) states that "(c)ontinuing administrative or maintenance activities, such as purchases for supplies" is not considered a project. Because this action involves purchasing equipment for maintenance activities, Section 15378(b)(2) applies and therefore is not subject to CEQA.

GENERAL PLAN

This action does not change the use of any existing facility, make alterations to an existing facility, or create a new facility; therefore, a General Plan conformity determination pursuant to Section 727 of the City of Oakland Charter is not required.

OWNER-CONTROLLED INSURANCE PROGRAM (OCIP)

This action is not subject to the Port's Owner Controlled Insurance Program (OCIP) as it is not a capital improvement construction project.

OPTIONS

The following options are offered for the Board's consideration:

Option 1: Authorize the Executive Director to approve a capital equipment budget of up to \$5,667,040, to procure capital equipment as recommended by staff in this Agenda Report in accordance with Port Ordinance 4321 and summarized in the table under "Analysis"; designate all the old equipment being replaced by the new equipment described in this Agenda Report as Surplus because it is either inadequate, obsolete or worn-out, and authorize the Executive Director to dispose of the property through a variety of means,

including sale, donation, or disposal in an environmentally sustainable manner; authorize the Executive Director to award to the lowest responsive, responsible bidder for items that exceed \$250,000; and authorize the Executive Director to purchase the EMIS through CEIA and the Passenger Lift through Lift-A-Loft Engineered Aerial Solutions Corporation. This is the recommended option.

Option 2: Do not authorize budget for procurement of the proposed capital equipment. Staff may be delayed or prevented from meeting operational demands and maintaining compliance with the CARB regulations. Some older equipment in need of replacement could fail which may affect operations at the Airport and Seaport.

RECOMMENDATION

It is recommended that the Board adopt a resolution to:

- Authorize the capital equipment budget of \$5,667,040 and to procure equipment for use by the Airport and Seaport;
- Authorize the Executive Director to purchase the equipment described in this Agenda Report in accordance with Port Ordinance 4321 not to exceed \$5,667,040;
- Designate all the old equipment being replaced by the new equipment described in this Agenda Report as surplus because it is either inadequate, obsolete or worn-out, and authorize the Executive Director to dispose of the property through a variety of means including sale, donation, or disposal in an environmentally sustainable manner;
- Authorize the Executive Director to award to the lowest responsive, responsible bidder for the following items that exceed \$250,000:
 - D6 Bulldozer
 - Grader
 - Loading Ramp
 - Passenger Lift
- Authorize the Executive Director to waive competitive bidding and directly procure the electromagnetic inspection scanner through CEIA and the passenger lift through Lift-A-Loft Engineered Aerial Solutions Corporation.