



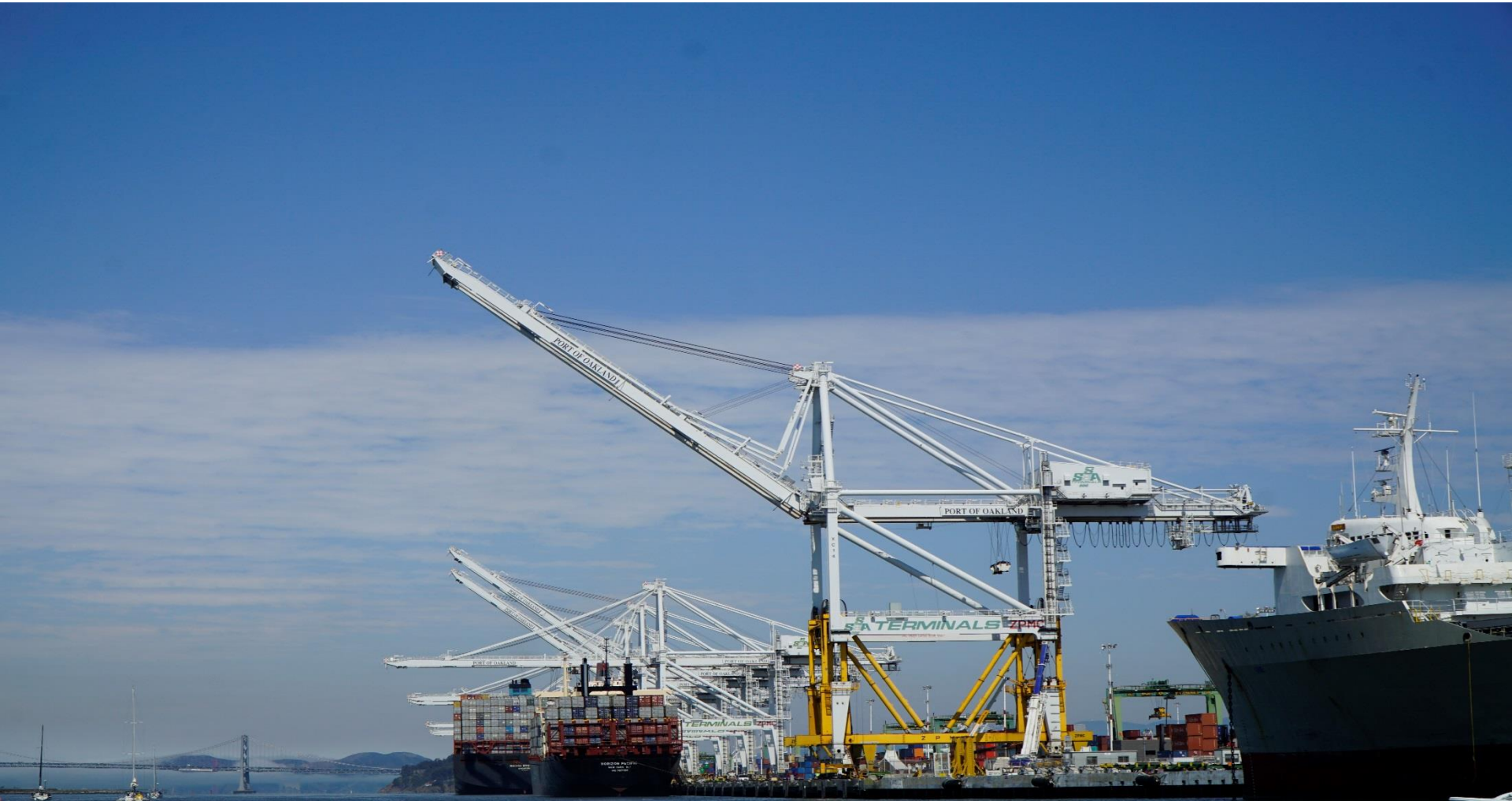
**PORT OF OAKLAND
SEAPORT**

***AAPA Smart Ports Seminar – March 6-7, 2018
Eric Napralla – Port of Oakland***

Port of Oakland **by the Numbers**

- **4 marine terminals** in operation
- **3 terminal operators** – SSA, Everport & TraPac
- **33 Cranes** of which 23 are Port-owned
- **2.42 million TEU** handled in 2017
- **20 ocean carriers** with service to/from Oakland
- **1,600 vessel calls** in 2017
- **2nd busiest** container terminal in the United States, in number of daily gate moves

Mega-Ship Era



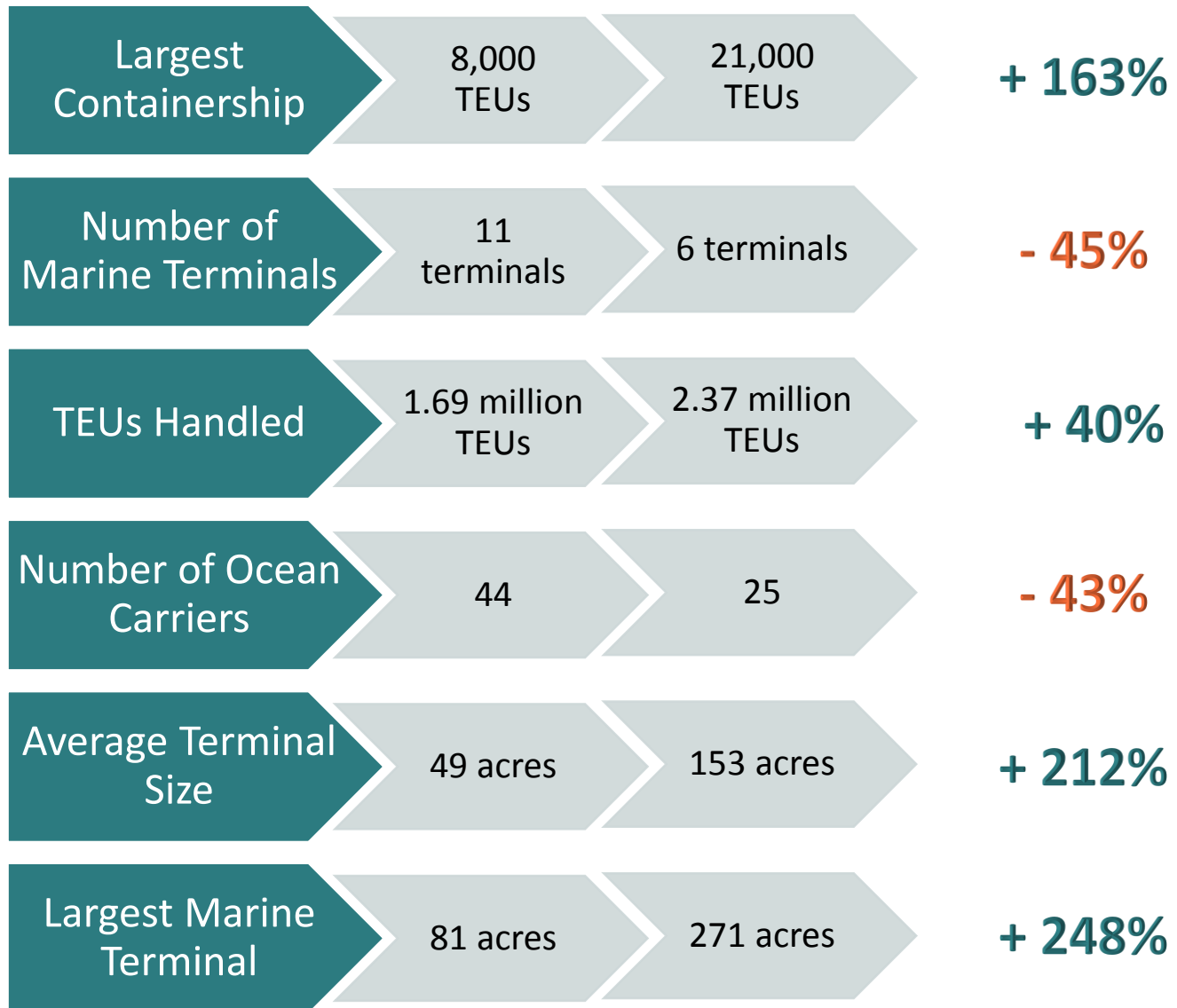
**PORT OF OAKLAND
SEAPORT**

Marine Terminal Consolidation

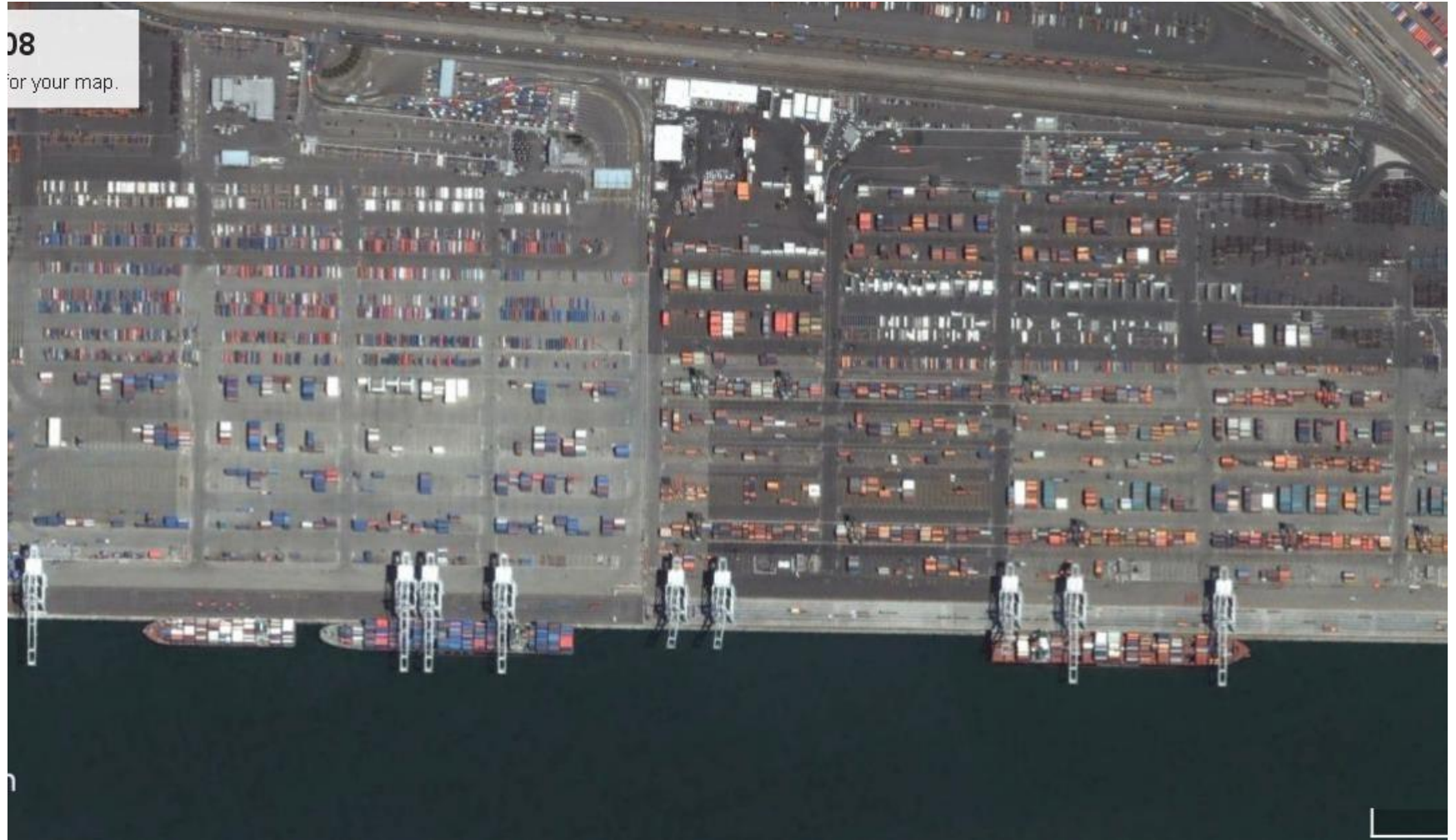


1999

2017



January 2008



October 2017 – Densified

17

for your map.



**PORT OF OAKLAND
SEAPORT**

Operational Impacts

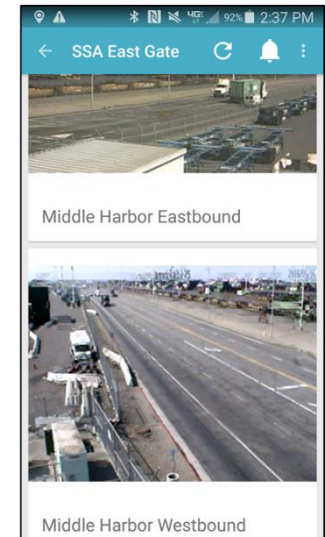
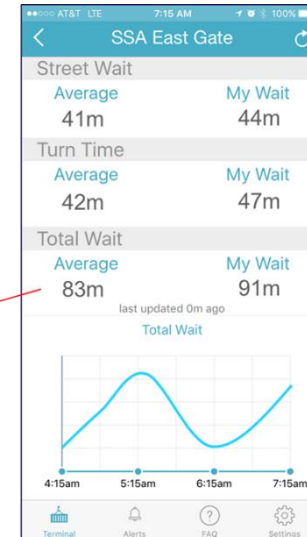
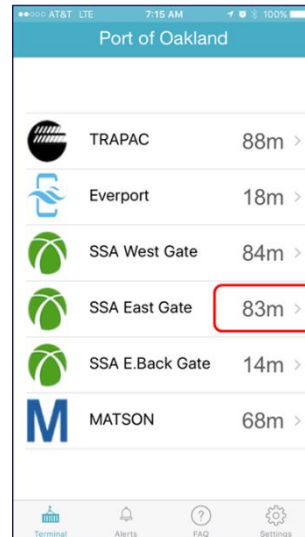


Port Efficiency Task Force

- Port convened multi-stakeholder work group in 2015 to develop/implement operations and technology-based efficiency measures:
 - Extended Marine Terminal Truck Gate Hours
 - Appointment Systems
 - Chassis
 - Truck Wait/Turn Time Metrics
 - ILWU Workforce Growth
 - Central Valley Depot
 - Customer Portal
 - Freight Intelligent Transportation Systems (FITS) Initiative

Truck Wait/Turn Time Metrics

- Truck street wait and truck terminal turn times are a good indicator of marine terminal performance.
- From 2016 to mid-2017, the Port introduced and utilized a Bluetooth traffic measurement system to provide truck street and terminal turn times
- Port is currently evaluating additional GPS and RFID-based solutions for long-term use.



Customer Portal

- All Port of Oakland marine terminals use various features of eModal for their customer interface.
- Current features include:
 - Terminal information
 - Appointment system
 - Fee collection
 - Import container track and trace
 - Vessel schedules
 - Drayage truck registry feed

Customer Portal

- Port working with Advent to **create one system of record for the Port of Oakland:**
 - Expand eModal utility for utilization by ALL supply chain stakeholders
 - Ensure data consistency, accuracy for OAK MTO's
 - Launch new Oakland-specific URL/website
 - Digitize and streamline landside operations
 - Transparency will drive ops efficiency and cargo velocity





Customer Portal

The screenshot shows a web browser window with the address bar displaying <https://oak.emodal.com>. The browser's address bar includes navigation icons (back, forward, refresh, home) and a search icon. Below the address bar, a bookmarks bar lists various applications and services: Apps, sharepoint, Office365, surf, BofA, hotmail, Cap1, fidelity, Team, marcom, gCal, eModal, hubspot, Delivering on the cus, and Other bookmarks. The main content area features a large aerial photograph of the Port of Oakland, showing numerous shipping containers, cranes, and a large cargo ship docked at a pier. To the right of the image is the login interface. At the top of this interface is the Port of Oakland logo, which consists of two globes with a star on the right one, and the text "PORT OF OAKLAND" below it. Below the logo is a "user" label followed by a text input field. Underneath the input field is a yellow bar representing a password field, with a "Forgot your Password?" link to its right. Below the password field is a "Remember Me" checkbox and another "Forgot your Password?" link. A dark blue "LOGIN" button is positioned below these elements. Below the button is a link that says "Don't have an account ? Register Now.". At the bottom of the login section, there is an email icon followed by the address "oaksupport@emodal.com" and a phone icon followed by the number "877-904-1680". The bottom right corner of the login section features the "POWERED by eModal" logo. The Windows taskbar is visible at the bottom of the screenshot, showing the search bar, taskbar icons for Chrome, Outlook, Word, File Explorer, Edge, Skype, Teams, and PowerPoint, and the system tray with the date and time "10:47 AM 12/4/2017".



Customer Portal





PORT NOTICES

PORT OF OAKLAND LANDMARK PROJECT COULD START BY SUMMER

Oakland, Calif., March 1, 2019. Construction could begin this summer on a landmark expansion project at the Port of Oakland. Developer Calmar Corp. expects that by the end of the year, the port will be able to handle 15 million TEUs.

PORT OF THE OAKLAND FIRST, BATTERY-POWERED TRUCK ENTERS THE FLEET

Oakland, Calif., Feb. 27, 2019. A battery-powered truck has entered the Port of Oakland fleet for the first time, leaving the responsibility of zero-emission freight handling to the Port staff.








SSAMarine
A Carrix Enterprise
Oakland International Container Terminal

EVERPORT
Terminal Services
3000 79th Street
Oakland, CA 94607

TraPac
Terminal Services
3000 79th Street
Oakland, CA 94607

Matson
Terminal Services
3000 79th Street
Oakland, CA 94607

TERMINAL NOTICES

Vessel Schedule & Cutoff Times

Terminal	Vessel	Origin	ETA	ETD	Port Arr DT	Relief DT	Relief DT (Home)	Cargo Cutoff	Reef/Cutoff
TRPOAK	MOL MANIFESTO (MSK)	MANSA	03/03/19	03/03/19	03/03/19 10:00			03/03/19 10:00	
TRPOAK	HANSEBROS BRIDGE (HBB)	HAMB	03/03/19	03/03/19	03/03/19 10:00			03/03/19 10:00	
TRPOAK	MOL COMPASSLINE (CST)	OSAK	03/03/19	03/03/19	03/03/19 10:00			03/03/19 10:00	
TRPOAK	MOL MANIFESTO (MSK)	MANSA	03/03/19	03/03/19	03/03/19 10:00			03/03/19 10:00	
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How are we looking?

No Video Feed Available

No Video Feed Available

No Video Feed Available

Vessel Schedule & Cutoff Times

Terminal: **TRPOAK**

Terminal	Vessel	Origin	ETA	ETD	Port Arr DT	Relief DT	Relief DT (Home)	Cargo Cutoff	Reef/Cutoff
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TRPOAK	MOL COMPASSLINE (CST)	OSAK	03/03/19	03/03/19	03/03/19 10:00			03/03/19 10:00	
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TRPOAK	MOL COMPASSLINE (CST)	OSAK	03/03/19	03/03/19	03/03/19 10:00			03/03/19 10:00	
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How are we looking?

No Video Feed Available

No Video Feed Available

No Video Feed Available

How are we looking?

No Video Feed Available

No Video Feed Available

No Video Feed Available

Empty Container Instructions

44' High	40'	40'	40'	40'	40'
44' High	40'	40'	40'	40'	40'
44' High	40'	40'	40'	40'	40'
44' High	40'	40'	40'	40'	40'
44' High	40'	40'	40'	40'	40'
44' High	40'	40'	40'	40'	40'
44' High	40'	40'	40'	40'	40'

Gate Information

Hours

Monday
Day 07:00 - 10:00 | 10:00 - 10:00 Full Yard & Gate | No Dual Transshipments after 2:30 PM
Night 10:00 - 02:00 Open for Export Load in 1 Empty in 1 Check-in & Out | No Transfer Loads or Empty Out

Tuesday
Day 07:00 - 10:00 | 10:00 - 10:00 Full Yard & Gate | No Dual Transshipments after 2:30 PM
Night 10:00 - 02:00 Open for Export Load in 1 Empty in 1 Check-in & Out | No Transfer Loads or Empty Out

Wednesday
Day 07:00 - 10:00 | 10:00 - 10:00 Full Yard & Gate | No Dual Transshipments after 2:30 PM
Night 10:00 - 02:00 Closed

Thursday
Day 07:00 - 10:00 | 10:00 - 10:00 Full Yard & Gate | No Dual Transshipments after 2:30 PM
Night 10:00 - 02:00 Closed

Friday
Day 07:00 - 10:00 | 10:00 - 10:00 Full Yard & Gate | No Dual Transshipments after 2:30 PM
Night 10:00 - 02:00 Closed

Saturday - Sunday
Day Closed Closed
Night Closed Closed

Terminal Contact Information

Global Feed Ops: 510.208.1013
Marine Ops: 510.208.1020
Administration and Support: 510.208.1029
Safety & Claims: 510.208.1016



Freight Intelligent Transportation Systems (FITS) Initiative

- Improve traffic flow/goods movement and reduce congestion/emissions to/from the Port's marine terminals

- Project Sponsor



- Project Partners



FITS Phase 1

- Communications (Fiber)
- CCTV Upgrade to HD
- RFID Readers
- Joint TMS/EOC
- Changeable Message Sign Boards
- Truck Queue Detection
- Traffic Signal Upgrades
- Basic GoPort Web/Mobile Application



FITS Phase 2

- Communications (Wi-Fi)
- Supplemental Vehicle Detection (speed)
- C2C Communications
- Advanced Train Detection System
- Weigh-In-Motion Technology
- Basic Smart Parking



Central Valley Agriculture

The Central Valley agriculture and associated warehouses are a key origin for users of the port.

Livermore Weigh Station

May interface with Port systems and information.



Oakland City Center

Improved coordination with Oakland's traffic management system.

Port Headquarters

Location of port operational control.

Oakland Coliseum

I-80 Integrated Corridor Mgmt.

Freeway operations coordinated with the Port's traffic management center.

C2C communications

Center-to-center communications with Caltrans D4 and MTC 511 improves shared information to the region.

RFID System

May interface with Port's traffic management.



Weigh-in-Motion Scales

Scales near port exits allow truckers immediate feedback on container weight

Intermodal Facilities

Maritime, trucking and rail operations coordinated for improved traffic conditions.

Train Detection

Advanced train detection provides early warnings to Port users.

Railport

Advanced Traffic Mgmt. System

Signals are optimized for smoother movement through arterials.

Outer Harbor Intermodal Terminal

CCTV Upgrades

Cameras are added for improved coverage and detection.

Parking Mgmt. and Information

Improved coordination with Port operations. Basic smart parking system.

Traffic Management Center (TMC)/ Emergency Operations Center (EOC)

Command and control center for monitoring and collecting system data to improve traffic flow. Also utilize center-to-center communication, centrally controlled and adaptive signal system, and an advanced Traffic Management System.



Speed Detection

Add new sidefire radar to detect mid-block speeds.



Queue Detection

Queue detectors provide real-time information on queuing of trucks at terminal gates.

Changeable Message Sign

Electronic signage is updated with realtime Port traffic information.

Communication Upgrades

WiFi and fiber additions improves communications.

GoPort! Applications for smartphones and web

12:00 AM

GoPort!

Consolidated '511 for truckers' application.

Turn time >

Driving times >

Parking info. >

Etc. >



FITS Implementation

- **Current Schedule**

- 35% Design - Q2 2018
- 100% Design – Q2 2019
- Start Construction – Q4 2019

- **Current Finance Plan**

- Design

- Measure BB (County)

- Construction

- Advanced Transportation & Congestion Management Technologies Deployment (Federal grant)
- Port Security (Federal grant)
- Measure BB

Contact Information

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Port of Oakland

Senior Maritime Project Administrator

510.627.1403

enapralla@portoakland.com





**PORT OF OAKLAND
SEAPORT**

Your Port. Your Partner.