

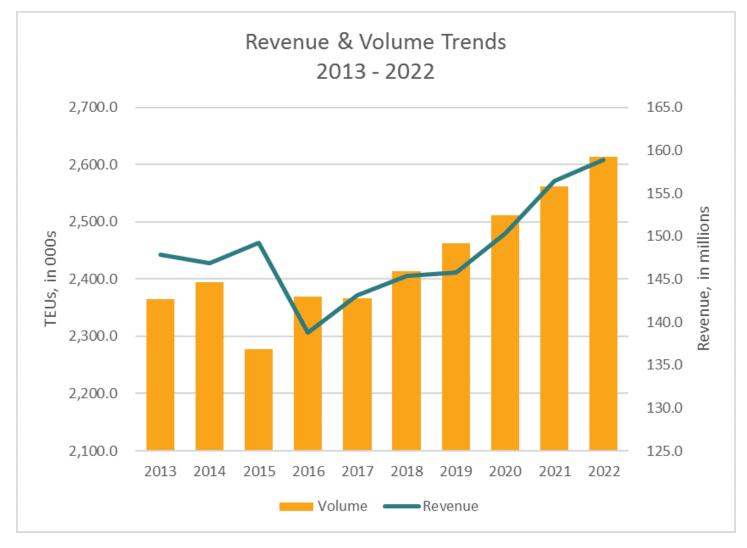
# **Strategic Maritime Roadmap**

# Overview

- Operational Stability
- Key Industry Trends
- Commercial Strategy
- Land Use Strategies
- Conclusion



#### **Operational Stability** *Today vs. 2015*



2017 - 2022 are forecasts

### **Marine Terminal Improvements**

- **\$50 million in TraPac Terminal**
- \$104 million in Oakland International Container Terminal
- **\$28 million** in Ben E. Nutter Terminal
- Extended Gate Hours
- Appointment Systems
- Off-Dock Container Yard



## **Trends Impacting Ports**

GDP growth along with

**Ocean Carrier** changes and trends

- Carrier Alliances & Consolidation
- Vessel Size
- Freight Rates
- Terminal Stakes

#### drive a Port's infrastructure demands



### **Ocean Carrier Alliances & Consolidation**

**2016 Carrier Alliances** 

**2017 Carrier Alliances** 

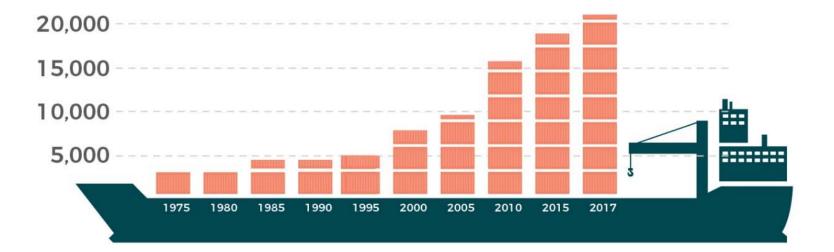


Despite major realignment of ocean carrier alliances in early 2017, the Port has maintained operational stability and terminal throughput.



### **Vessel Size**

#### CONTAINER SHIP TEU



Increasing vessel size has implications for yard and berth space requirements



### Vessel Size What does it mean for Oakland?

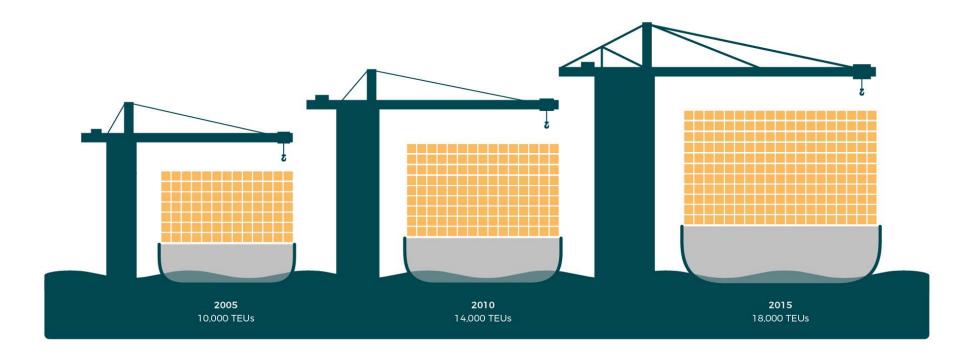
Over the next fifteen years, the average size of the Trans-Pacific vessels calling Oakland is expected to grow by over 35%. Ships will average over 10,000 TEUs.

Vessel Size	2017	2021	2026	2031
< 5,000 TEUs	11	7	5	6
Between 5,000 – 9,999 TEUs	14	16	15	14
Between 10,000 – 13,999 TEUs	3	6	9	11
Between 14,000 – 17,999 TEUs	1	1	3	0
> 18,000 TEUs	0	0	1	0
Total No. of Vessel Services	29	30	33	31
Avg T/P Vessel Size, in TEUs	7,789	9,367	10,386	10,556



### Vessel Size Infrastructure Demands

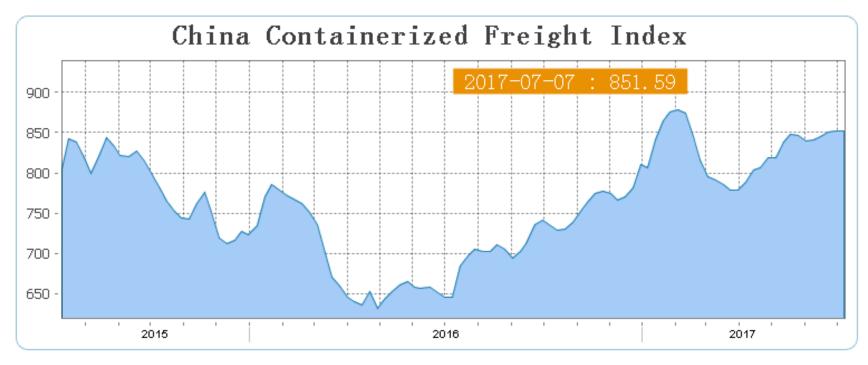
#### **Crane Raising**





## **Freight Rates**

After hitting the lowest levels seen in years, freight rates are on the rise after a series of mergers, acquisitions and one bankruptcy.



Source: Shanghai Shipping Exchange

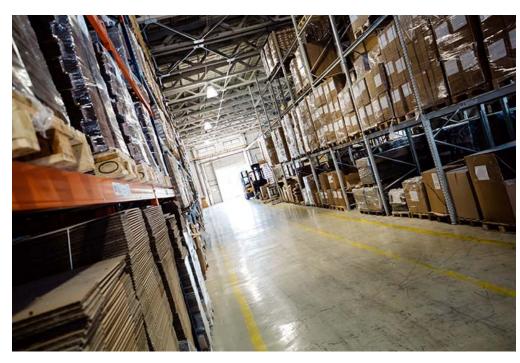


# **Strategy - Commercial**

- Serve and grow our local & regional market
- Maintain market leader position in Central Valley exports
- Increase mid-western grain & frozen protein exports
- Develop logistics facilities Seaport Logistics Complex & Cool Port – for incremental over-the-dock cargo
- Increase discretionary intermodal cargo to 15%
- Grow refrigerated exports by 10% and imports by 5%
- Explore automotive import growth opportunities
- Cargo recapture, especially Utah / Colorado market
- Continue to pursue First Inbound Vessel Call PETF workgroup 11

### **Strategy - Commercial** Distribution & Warehouse Space

"It is unclear if industrial real estate development can keep up with demand. National vacancy rates in the first quarter hit a 17-year low and average rental rates are up 10 percent from a year ago in the hottest coastal markets."









### **Strategy – Land Use**

**Operations & Infrastructure Needs** 

Off-Dock Container Yards	Truck Staging & Parking	Bollards, Fenders & Wharves	Fumigation
Container & Chassis Storage	Transload & Crossdock Services	Cranes	Shore Power
Warehousing	Near Dock & Short Haul Rail	Traffic Management	Customs

# **Strategy – Land Use**

- Finite water and land holdings
- Capacity
- Diversification
- Velocity, complex-wide



		1999	2017	2031
	Largest Containership	8,000 TEUs	21,000 TEUs	
	Number of Marine Terminals	11 terminals	6 terminals	
onclus	TEUs Handled	1.69 million TEUs	2.37 million TEUs	
0	Number of Ocean Carriers	44	25	
CO	Average Terminal Size	49 acres	153 acres	
Ö	Largest Marine Terminal	81 acres	271 acres	16