

# **Size Matters**: How Very Large, Trains and Terminals are Changing America's Ports



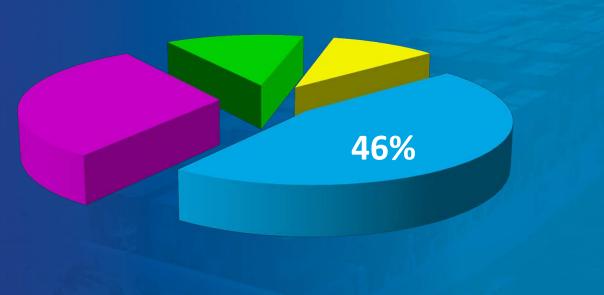
**Doug Thiessen**Managing Director of Engineering

Western Dredging Assn. Oct. 24, 2013



# **Big Ships Coming**

Of new vessels on order, nearly half of capacity will come from 10,000-TEU-plus ships.



>10,000 TEUs

7,500-9,999

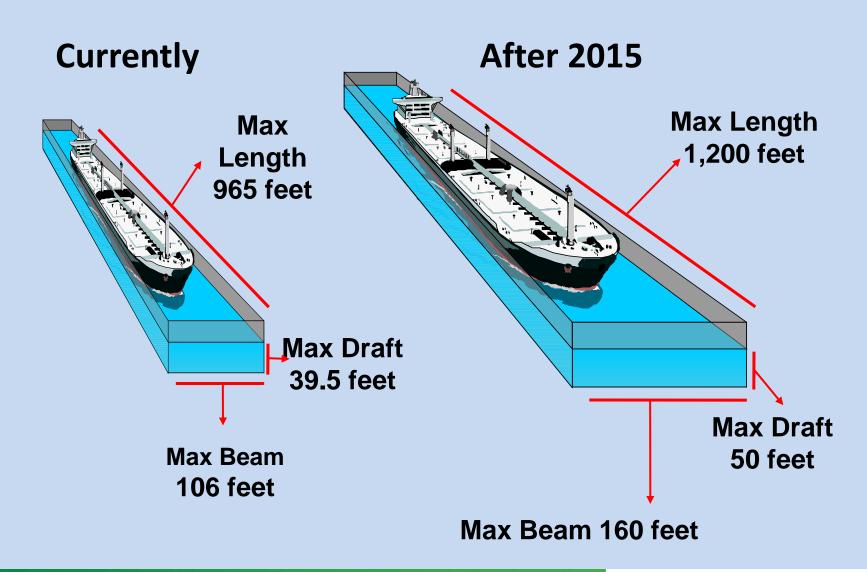
4,000-7,499

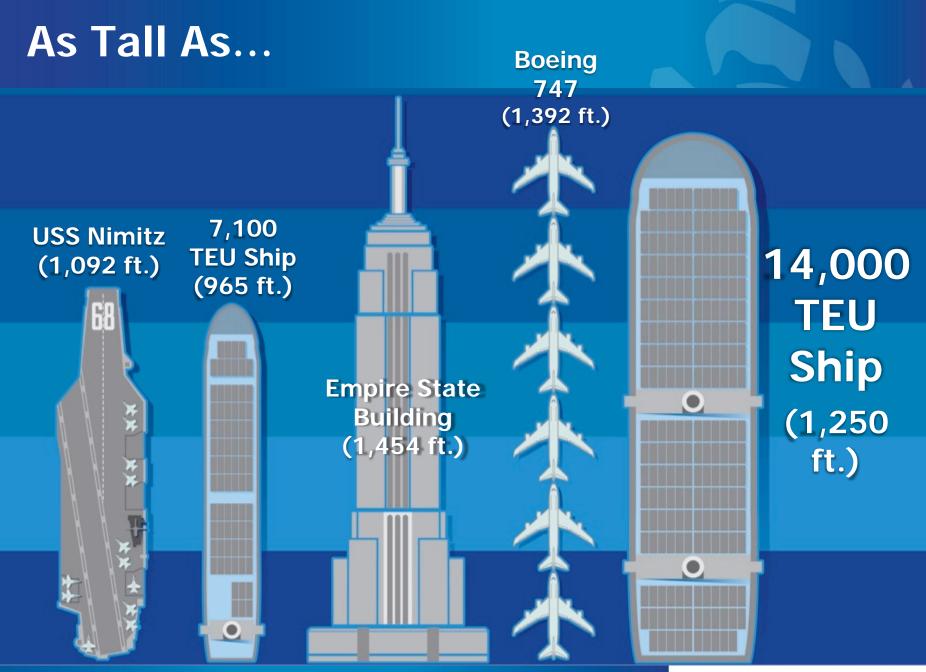
<3,999

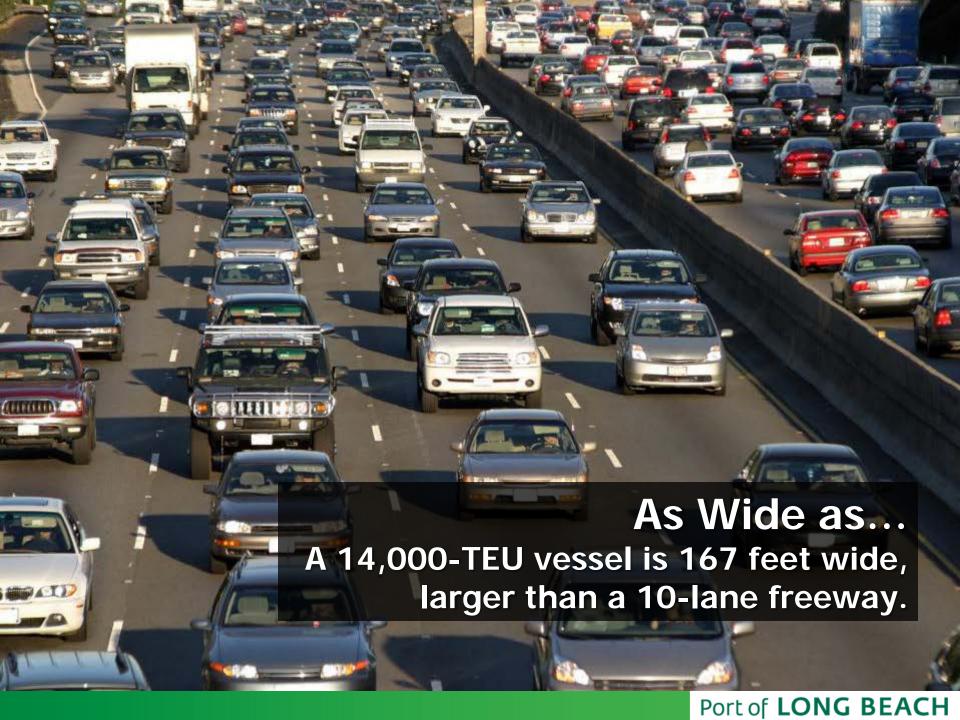




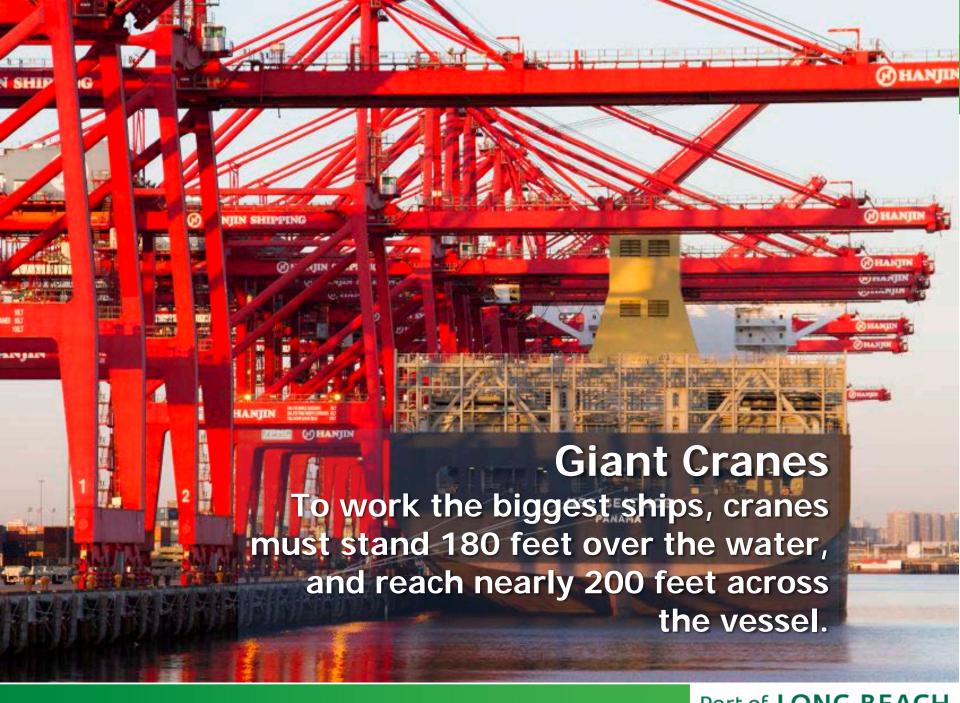
## **Panama Canal Expansion**

















# **Before construction**



### Middle Harbor Phase 1 Landfill

### **City of Long Beach:**

Los Angeles River

Colorado Lagoon

**Alamitos Bay** 

Other 3<sup>rd</sup> Party:

Marina Del Rey

**Newport Beach** 

Middle Harbor Phase 1

Fill closed in 2013.

**Next opportunity, for Phase 2 Fill, starts October 2015** 



### Middle Harbor Phase 2 Landfill





