



Michael Christensen

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Drivers – Logistics & Globalization

"The Internet of Things (IoT) is the network of physical objects or "things" embedded with electronics...experts estimate that the IoT will consist of almost 50 billion objects by 2020..." Wikipedia



www.sourcemap.com

Drivers - Industry "Evolution"

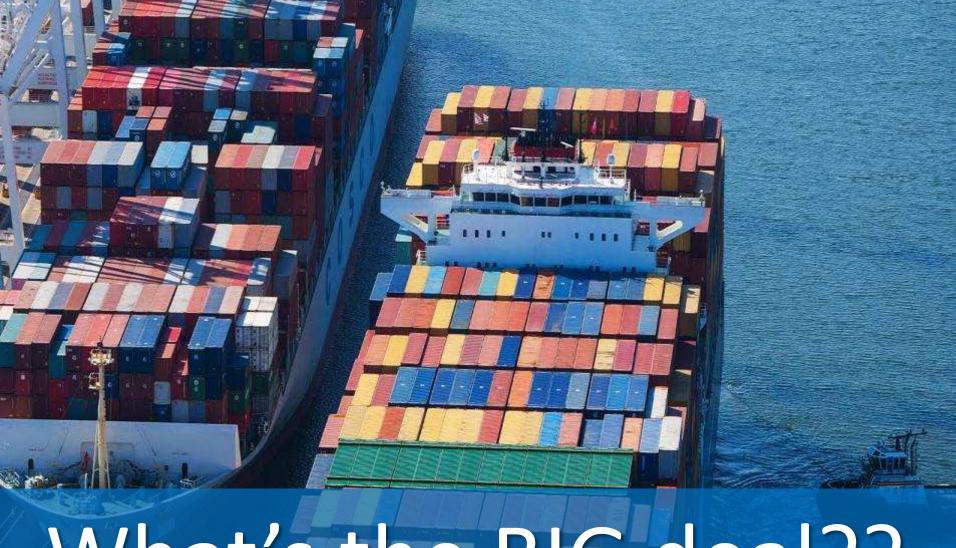
"...it seems some shippers noticed they could adopt a different plan other than preparing for the peak season. So for 2015, they ordered earlier than normal, they spread the entry lanes, and they watched the carriers create a significant overcapacity situation. Rates declined...

"Is there a new norm emerging, not by the carriers but by customers who didn't like peak seasons or the hoops they had to jump through for space and equipment? It sure looks like it to me. So now what? How does that change our world? Or does it?"

Journal of Commerce

Shippers managing change, planning ahead

Gary Ferrulli, president-North America, Unicon Logistics | Oct 24, 2015 9:00AM



What's the BIG deal??

Bigger Vessel Alliances, Bigger Ships

Carrier Alliances Capacity Share

Alliance	West Coast America	East Coast America	Asia- Europe	Asia- Mediterra nean
<u>2M</u> Maersk and MSC	15%	17%	32%	39%
<u>CKYHE</u> COSCO, K Line, Yang Ming, Hanjin and Evergreen	34%	30%	26%	20%
<u>G6</u> APL, Hapag-Lloyd, Hyundai, MOL, NYK and OOCL	32%	36%	23%	8%
Ocean Three China Shipping, CMA CGM and UASC	13%	13%	19%	17%
Other	6%	4%	0%	5%

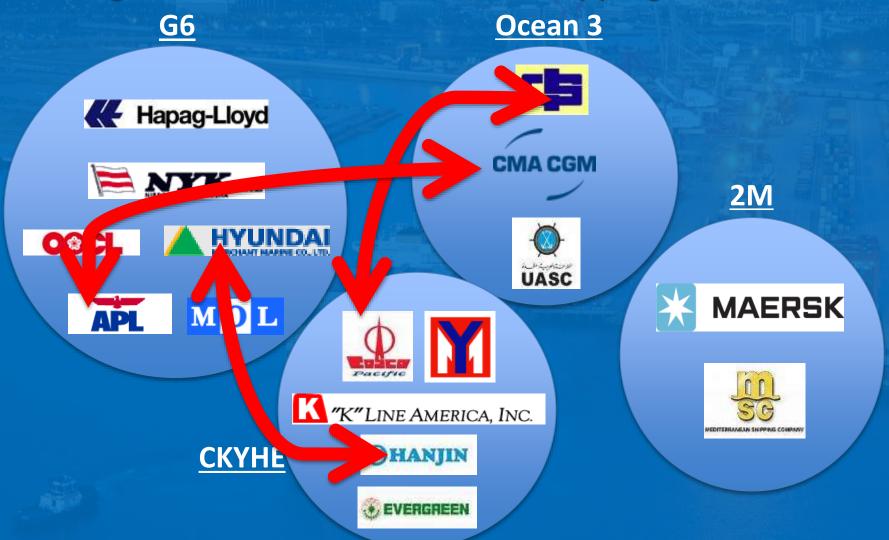
Ocean Carrier Alliances

Driving the new realities of ocean shipping.

Ocean 3 <u>G6</u> Hapag-Lloyd **2M MAERSK** MOL "K" LINE AMERICA, INC. **CKYHE HANJIN** * EVERGREEN

Ocean Carrier Alliances

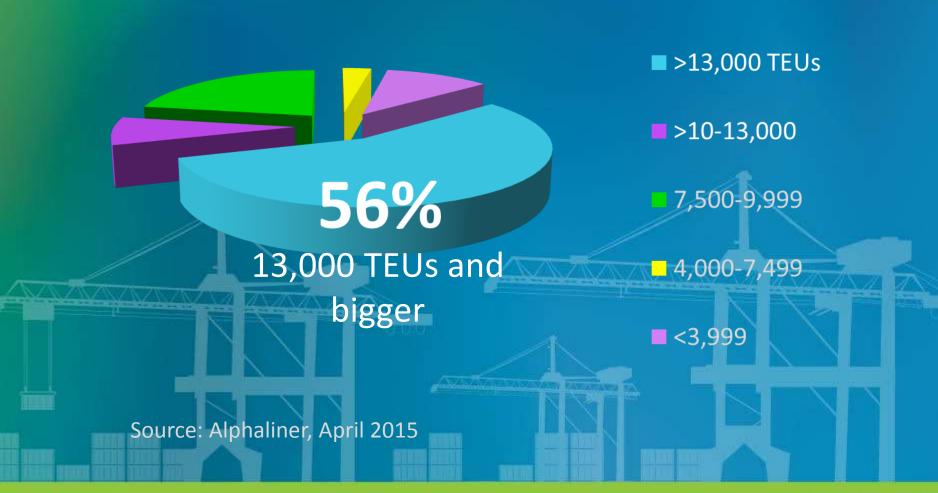
Driving the new realities of ocean shipping.





BIG SHIPS COMING ARE HERE

Of ships on order, more than half can't pass through expanded Panama Canal.





18,000 TEU CMA CGM Benjamin Franklin



Alliances: With bigger ships, come more "colorful" loads



Supply Chain Optimization Elements & Status

POLB SCO

- Organizational
- Customers
- "Free Flow"
- Chassis

SCO

"External"
SCO

- US Congress, FMC, USDOT
- CA: CalSTA/CalTrans, CARB
- Stakeholders

Joint Port SCO

- 12 months/40+ meetings
- Peel Piles, POP Website, Midnight P/O, KPIs/Data, turn times, cargo availability
- "Situational Awareness"

Redefined Port Role

- "Maturing" of SCO
- Benchmarking
- Data
- Carrot & Stick



SCO Joint Ports Initiative

Supply Chain Optimization Task Force Relationships

Steering Committee Working Groups Work Products

Stakeholder Participants:

- Beneficial Cargo Owners
- Marine Terminal Operators
- Shipping Lines
- Motor Carriers
- Chassis Pool Operators
- Railroads
- Brokers & Freight Forwarders
- Warehousing & Dist. Centers
- Labor & Management

SCO Joint Ports Initiative

Supply Chain Optimization Task Force Relationships

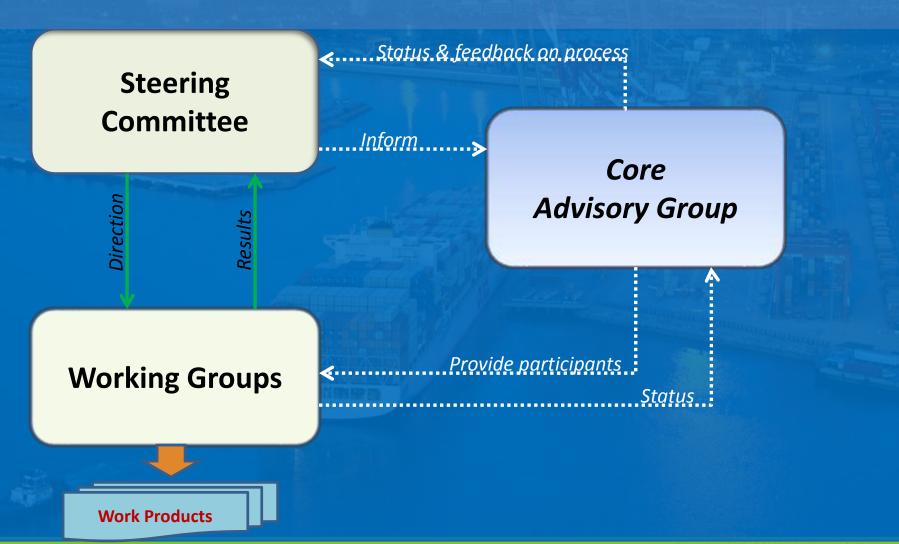
Steering Committee **Working Groups Work Products**

Working Groups:

- Peak Season 2015
- Container Terminal
 - Chassis
 - Rail
- KPI & Data Solutions

SCO Joint Ports Initiative

Supply Chain Optimization Task Force Relationships



SCO – In Progress

- Gate Operations/Turn Times
- "Peel-Off" Operations
- "Push" System
- KPIs
- Information Systems & Data
- Rail
- Chassis



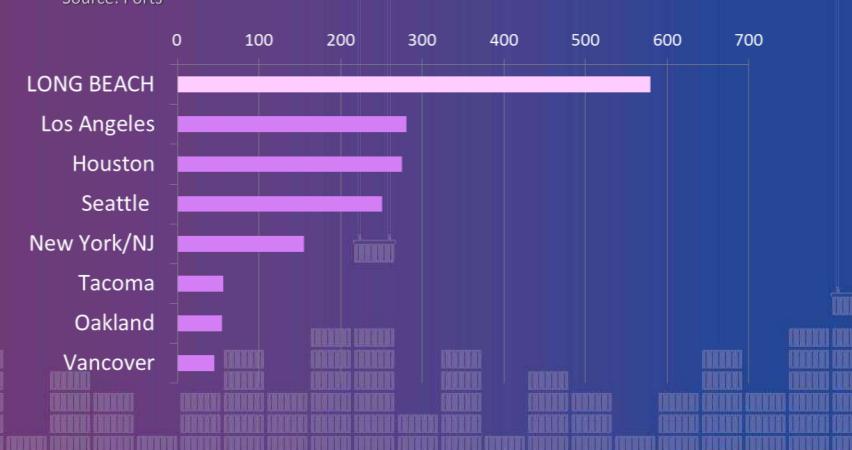
Chassis "Pool of Pools"

Interoperable chassis fleet increasing availability

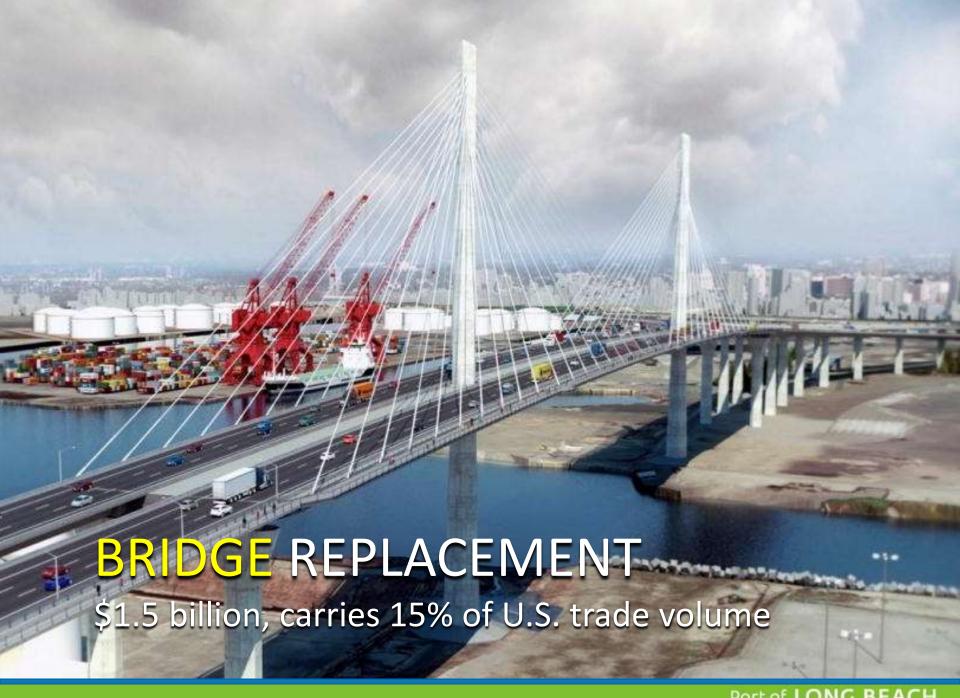
BETTING ON THE FUTURE

POLB leads No. Am. ports in capital spending

Millions of dollars in FY2015 capital budget
Source: Ports

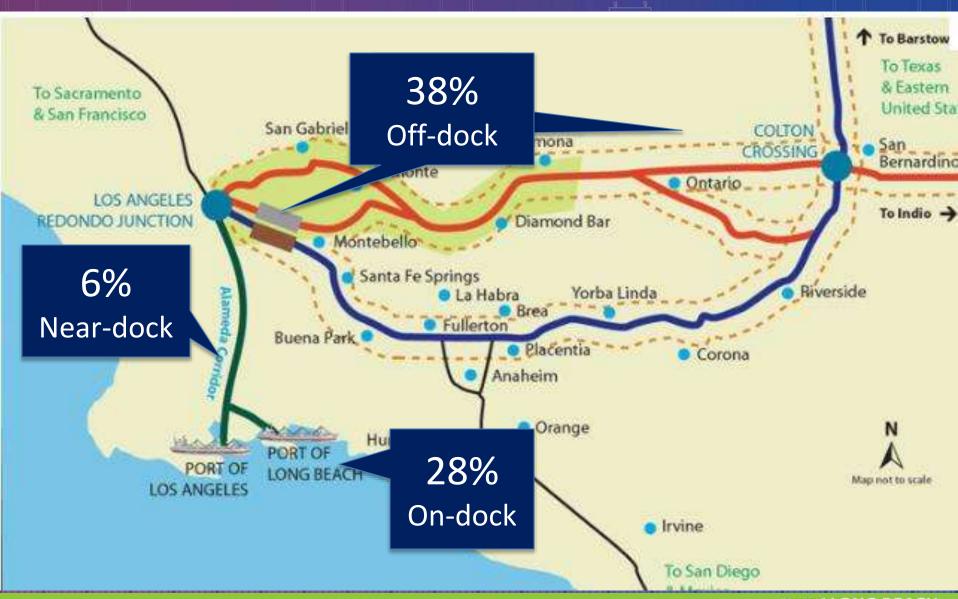








% Imports Shipped by Rail



Port Railroads

- Pacific Harbor Line (PHL Shortline)
- Class I Union Pacific Railroad
- Class I BNSF Railway







Best rail connections









