The Changing Landscape of Seaborne Trade

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THE PORT
OF LOS ANGELES

At-A-Glance
The L.A. Trade Gateway

Largest US Trade Gateway for Imports

RANK **1ST** in the U.S. since 2000

CONTAINER VOLUME

9TH in the World – LA/Long Beach Complex

CONTAINER VOLUME

Top Container Ports

(in millions of TEUs)

World
(CY 2013)

1.	Shanghai, China	33.6
2.	Singapore	32.6
3.	Shenzhen, China	23.3
4.	Hong Kong	22.4
5.	Busan, South Korea	17.7
6.	Ningbo, China	17.3
7.	Qingdao, China	15.5
8.	Guangzhou, China	15.3
9.	**L.A./Long Beach ('14)**	**14.6**
10.	Dubai, Arab Emirate	13.6

North America
(CY 2014)

1.	**Los Angeles**	**8.3**
2.	Long Beach	6.8
3.	New York/New Jersey	5.8
4.	Seattle-Tacoma	3.4
5.	Savannah	3.3
6.	Vancouver	2.9
7.	Oakland	2.4
8.	Hampton Roads	2.4
9.	Manzanillo	2.4
10.	Houston	2.0

A "FULL SERVICE" Port

7,500 acres
* 4,300 land and 3,200 water

43 miles of Waterfront
* Water depth of -53 ft

270 berths
* Includes 25 berths with Alternative Maritime Power ™ (AMP™)

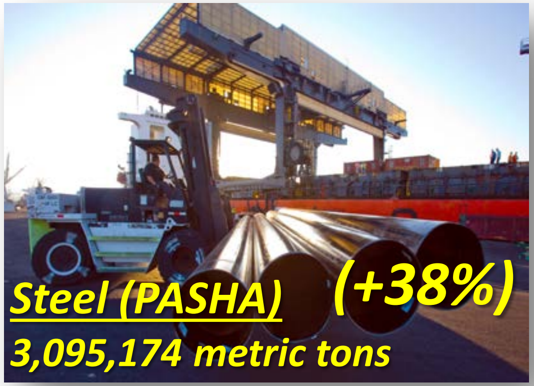
86 container cranes
* Includes 37 super Post-Panamax cranes and dual-trolley cranes

Public Amenities & Attractions
* Battleship IOWA and 2 other museums
* *CRAFTED at the Port of Los Angeles* marketplace
* Hotel, Restaurants & Retail
* 16 Marinas; 3,800 recreational boat slips

27 Terminals

- Auto (1)
- Breakbulk (4)
- Container (8)
- Dry Bulk (3)
- Liquid Bulk (7)
- Multi-Use (2)
- Passenger (2)

7 Primary Lines of Business



LA's Top Trading Partners & Commodities

TOP 5 TRADING PARTNERS

In Cargo Value, CY 2014

1. China/Hong Kong
   $142 billion
2. Japan
   $39 billion
3. South Korea
   $16 billion
4. Taiwan
   $13 billion
5. Vietnam
   $13 billion

IMPORTS

Consumer Goods

1. Furniture
   439,882 TEUs
2. Auto Parts
   392,118 TEUs
3. Apparel
   313,639 TEUs
4. Electronics
   238,761 TEUs
5. Footwear
   162,727 TEUs

Containerized in TEUs CY 2014

EXPORTS

Raw Materials & Animal Feeds

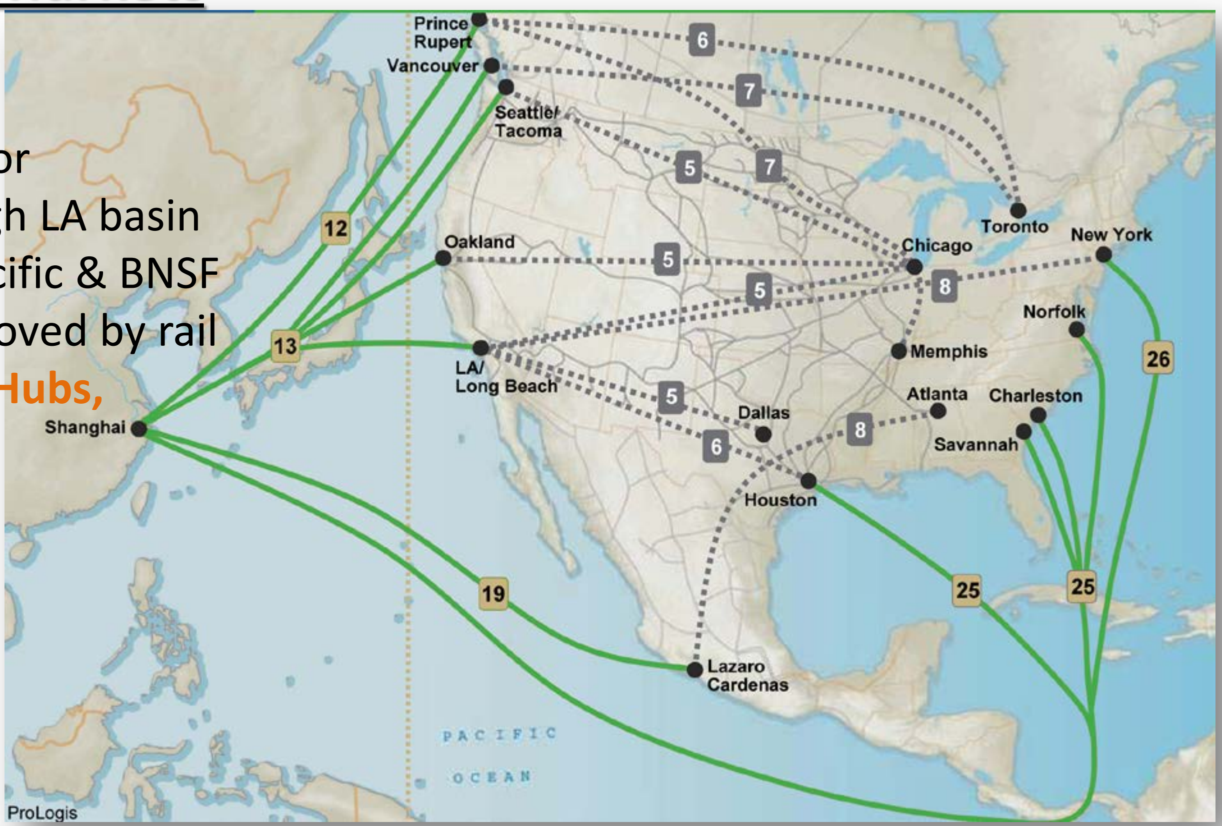
1. Wastepaper
   325,031 TEUs
2. Animal Feeds
   181,408 TEUs
3. Scrap Metal
   104,624 TEUs
4. Fabrics
   59,806 TEUs
5. Auto Parts
   56,713 TEUs

A Gateway of Connectivity

FREQUENCY & SPEED-TO-MARKET

Superior Access to US Markets

- No weather delays
- Plenty of cargo capacity
- $2.4 Billion Alameda Corridor
- Over **100 trains** daily through LA basin
- 2 Class 1 Carriers: Union Pacific & BNSF
- In 2012, **5.1 million TEUs** moved by rail
- Access to **14 Major Freight Hubs,** including:
  - ✓ Chicago
  - ✓ Atlanta
  - ✓ Memphis
  - ✓ Houston
  - ✓ San Antonio
  - ✓ Denver
  - ✓ Omaha
  - ✓ Kansas City
  - ✓ Dallas
  - ✓ St. Louis

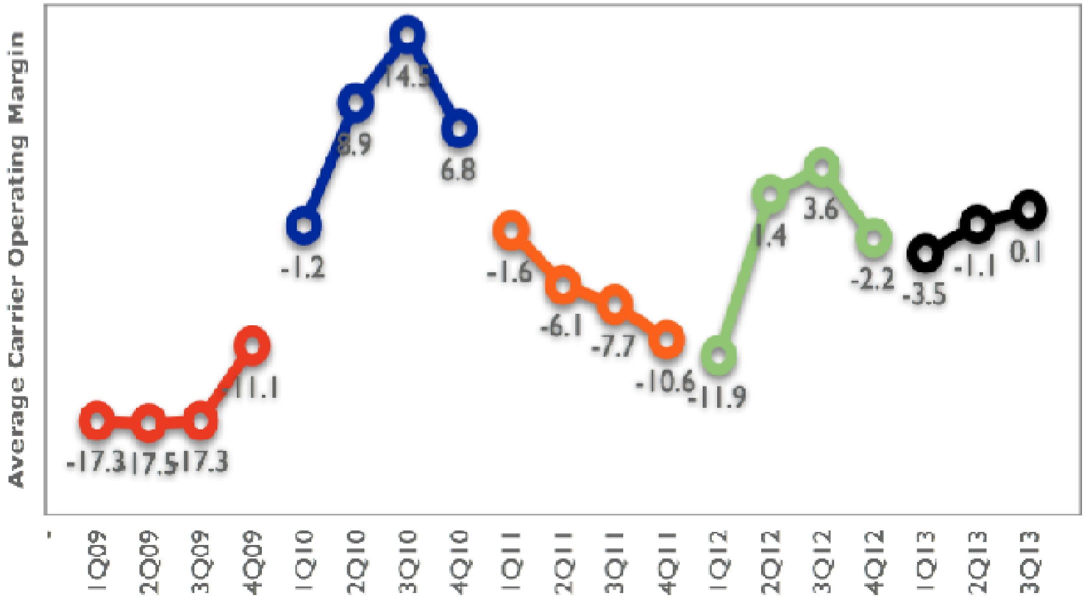


Market Dynamics

How the Competitive Environment For Carriers is Changing

The Container Shipping Industry is Going Through a Profound Transformation

Average carrier operating profit margin by quarter 2009-2013 (in %)

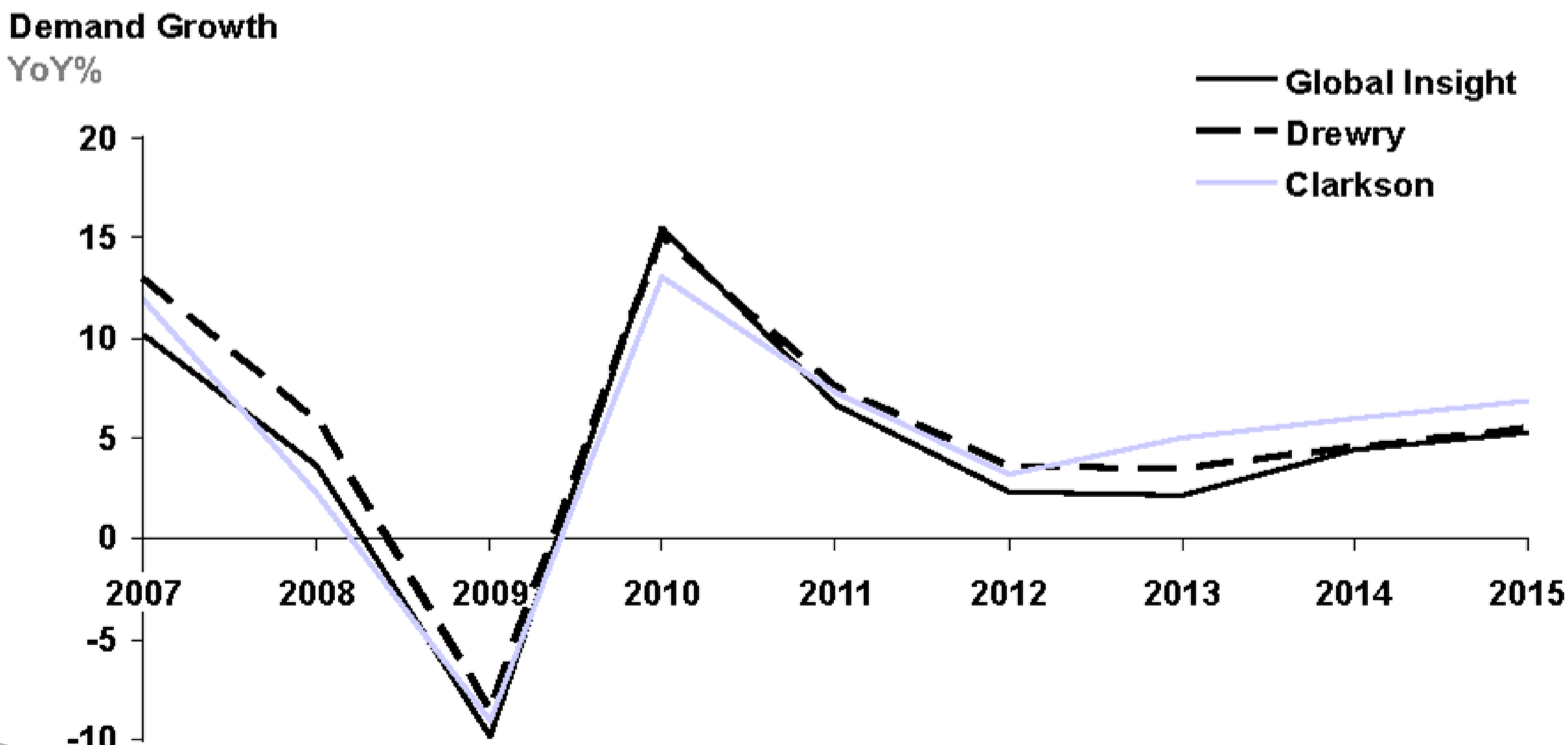


Average of APL, CMA CGM (Fr 2010), CCNI, CSAV, CSCL, EMC, Hanjin, HMM, Hapag-Lloyd, KL, Maersk, MOL, NYK, RCL, STX PO (until 2012), WHL, YML, ZIM

- The shipping industry is at a crossroad
- We are entering an era of low-growth and intense competition
- Shipping lines are struggling through the worst slump on record (see annualized losses over last few years)
- Developments are driving fundamental behavioral changes
- The key to success: low cost position; attractive customer value proposition

Slow Growth Means Continuing Vessel Overcapacity

Fleet capacity has averaged about 7.5% a year since 2010. Demand is only growing about 3-5% a year. Scrapping smaller vessels helps reduce capacity, but overcapacity will persist – which leads to intense pricing competition.



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Capacity is Also Increasing Because Ships are Getting Bigger

Between 1988 and 2013, the largest vessel size has quadrupled – from 4,500 to 18,000 TEU

Vessel	TEU tdw	LOA m	Breath m	Draft m	Containers rows across
'Triple E' Class 2013	18,270 TEU 200,000	400	59.0	16.0	23
CMA CGM MARCO POLO 2012	16,020 TEU 180,000	395	53.6	16.0	21
EMMA MAERSK 2006	15,550 TEU 175,000	397	56.4	16.0	22
GUDRUN MAERSK 2005	9,500 TEU 115,700	367	42.8	15.0	17
SOVEREIGN MAERSK 1997	8,200 TEU 105,000	347	42.8	14.5	17
REGINA MAERSK 1996	7,403 TEU 90,500	318	42.8	14.5	17
NYK ALTAIR 1994	4,953 TEU 63,000	300	37.1	13.0	15
PRESIDENT TRUMAN 1988	4,538 TEU 55,500	275	39.4	12.5	16

More Big Ships Are Coming

82 percent of containers vessels on order today have a capacity of 7,500+ TEUs.

Carriers will take delivery of 53 vessels of 13,300 to 19,000 TEU capacity in 2015.

285 vessels of 7,500 to 18,000 TEU capacity will be delivered by the end of 2016.

Cellular ships deliveries by year: 2014, 2015, 2016, 2017 based on order books as of 01 March 2014

	2014 Deliveries		2015 Deliveries		2016 Deliveries		2017 Deliveries	
TEU nominal	Ships	TEU	Ships	TEU	Ships	TEU	Ships	TEU
13,300–19,000	30	468,254	53	855,449	19	270,000		
10,000–13,300	27	301,711	16	171,708	9	94,000		
7,500–9,999	48	437,883	60	541,458	23	212,320	2	18,800
5,100–7,499	22	132,220	11					
4,000–5,099	23	109,997	3	13,200	1	4,957		
3,000–3,999	21	77,141	12	45,500	1	3,100		
2,000–2,999	14	33,025	29	67,977	10	24,378	2	4,800
1,500–1,999	23	40,543	13	22,88	14	24,536		
1,000–1,499	13	13,991	14	16,087				
500–999	6	4,782	1	606	2	1,642		
100–499								
TOTAL	**227**	**1,619,547**	**212**	**1,803,993**	**79**	**634,933**	**4**	**23,600**
Exp. Slippage	**-30**	**-170,000**	**15**	**80,000**	**10**	**90,000**		
TOTAL after Slippage	**197**	**1,449,547**	**227**	**1,883,993**	**89**	**724,933**		

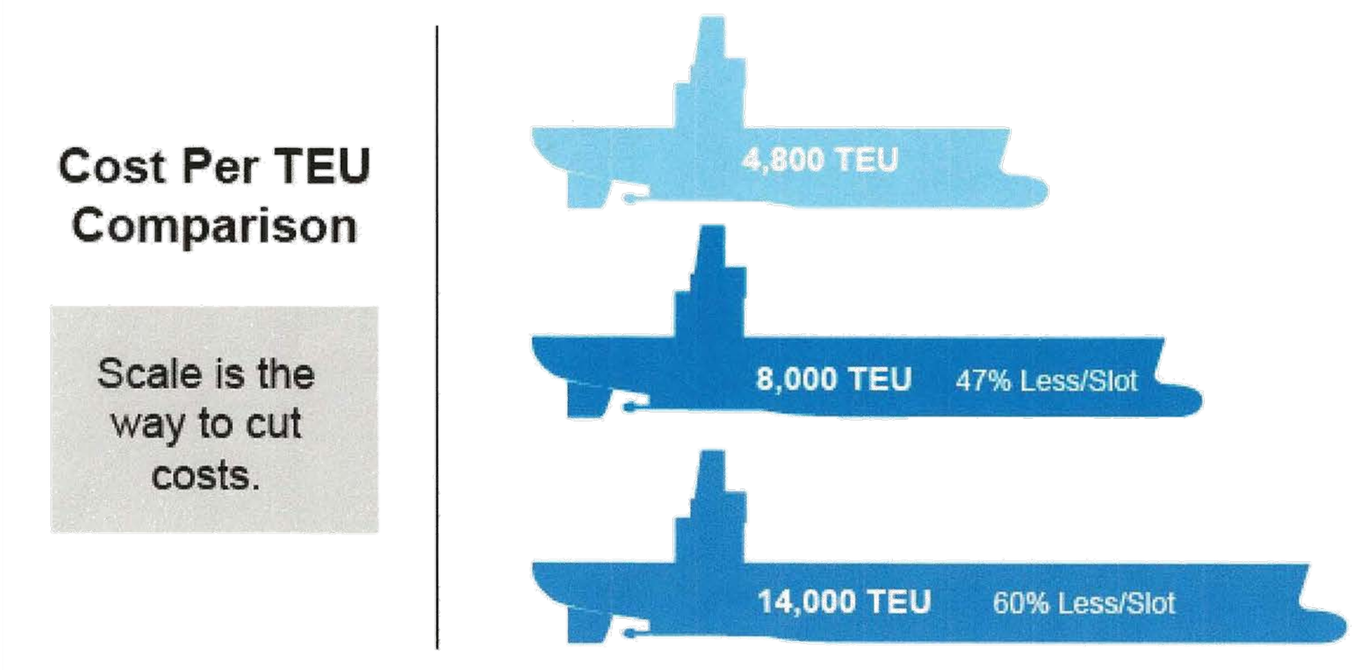
Note: The addition of the capacity by range at 1st Jan 2014 and the capacity planned for delivery during the year 2014 leads to a figure which is higher than the capacity stated as of 31 Dec 2013. The difference comes from the capacity removed from the fleet (scrappings and losses) since 1st Jan 2014, or committed for scrap at that date (i.e. 40 ships for 126,795 TEU).

Source: Alphaliner

Carriers Are Ordering Big Ships to Reduce Their Costs

Why so many big ships? “To reduce costs, pure and simple.” – Lars Jensen, Sea-Intel

A 14,000 TEU vessel costs up to 60% less per slot than a 4,800 TEU vessel.



Mega Shipping Alliances Are Changing Cargo Flow & Predictability

G6

Hapag-Lloyd
NYK LINE
NIPPON YUSEN KAISHA
OOCL
HYUNDAI
MERCHANT MARINE CO., LTD.
APL
MOL

Ocean 3

CMA CGM
UASC

CKYHE

COSCO
Pacific
"K" LINE AMERICA, INC.
HANJIN
EVERGREEN

2M

MAERSK
MSC
MEDITERRANEAN SHIPPING COMPANY

Mega Shipping Alliances Will Favor Major Gateways Like L.A.

- Carriers are looking for density – deploy fewer but larger ships to fewer ports
- Shippers want ample warehouse, distribution center and transloading options
- Transloaded import cargo makes containers available for exports
- Speed-to-market by rail and roadway are key
- Alliance partners will leverage the most favorable terminal relationships to provide the most aggressive pricing

CMA CGM Group described the factors that lines consider when deciding which ports to call at:

- *"Making a choice between ports in competition on a single market is linked to stevedoring efficiency and reliability, to port services and dues, and to maritime access."*
- 'Wish list' of services: *"Efficiency, reliability and competitive tariffs are the clues."*

Supply Chain Challenges

How Big Ships & Carrier Alliances Impact Port Cargo Conveyance

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Big Ship Dynamics

New Challenges

- **Alliance calls alternate between POLA & POLB terminals**
- **Higher wharf productivity demands**
- **Greater cargo sorting complexity**
- **Higher peak factor at truck gates**

Sorting Cargo More Efficiently

Focus Points

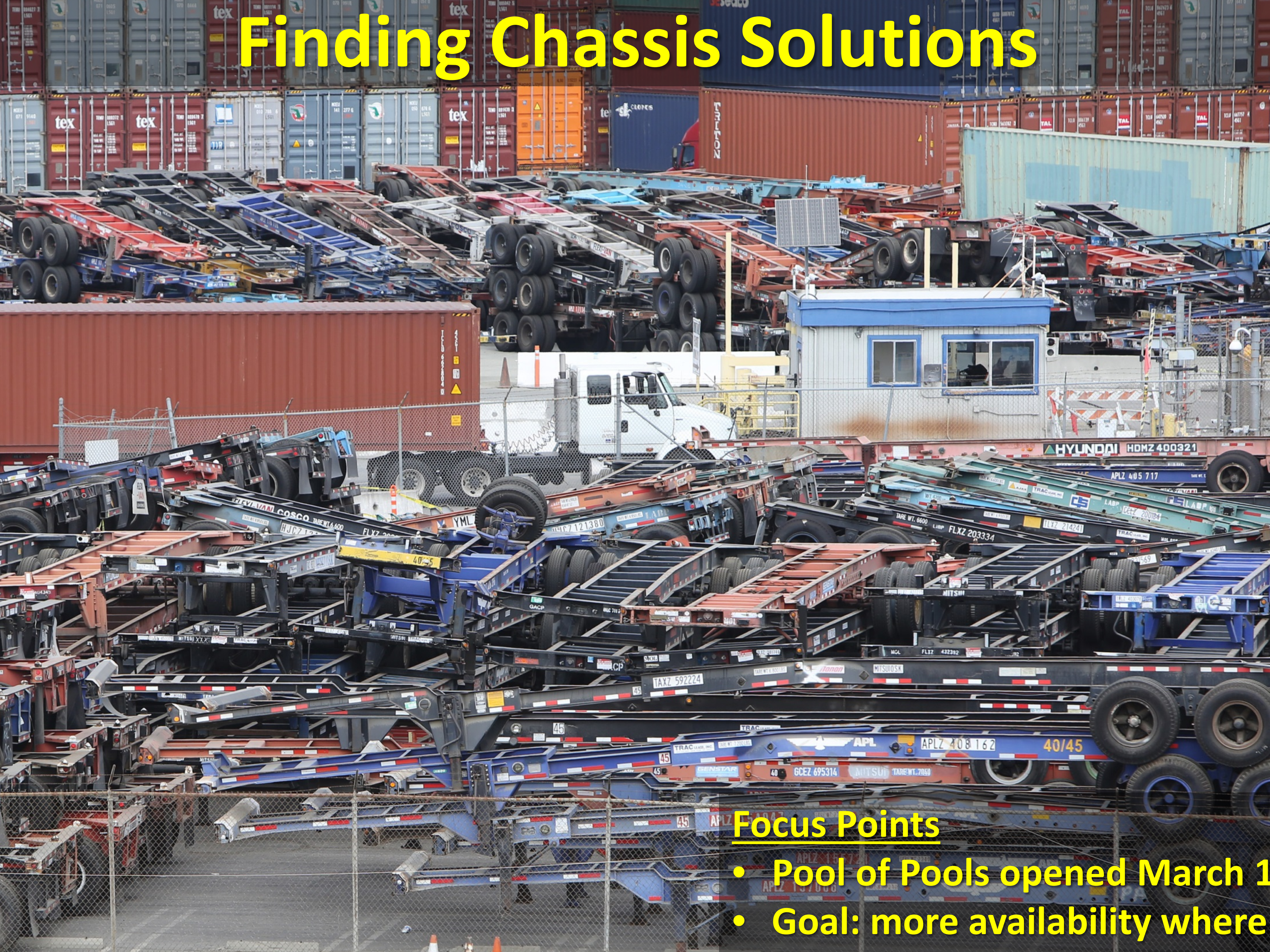
- Smarter cargo stowage
- Greater interaction between vessel owners, MTO's & ports
- Enhancing high-velocity terminal hours of operation
- Opportunities for Inland Empire container yard

Improving Secondary Conveyance

<u>Focus Points</u>

- "Peel-Off," Batching and other pragmatic solutions
- Exploring Ecommerce solutions (Cargomatic)
- More real-time data (routes & road conditions)
- Appointment systems
- Strategies for driver retention
- Revisiting PierPass

Finding Chassis Solutions



Focus Points

- Pool of Pools opened March 1
- Goal: more availability where

Enhancing Rail Efficiency

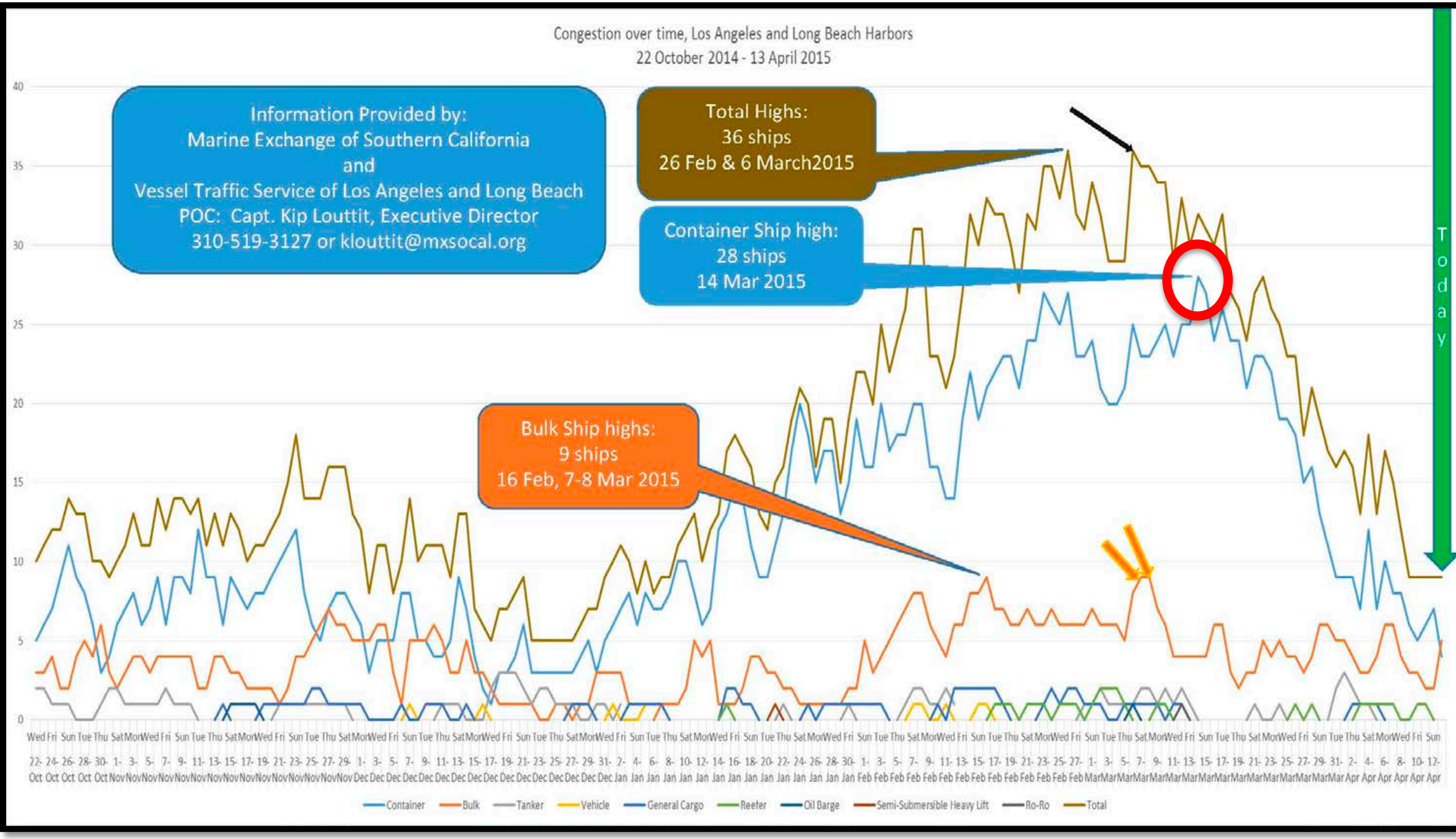
Focus Points

- Unit trains to inland destinations (i.e. Chicago)
- Maximizing on-dock rail
- Near-dock opportunities

The Changing Role for Ports

- ✓ **“Landlord” role versus “Hybrid” model**
- ✓ **Deeper Collaboration is Necessary**
  - Example: an expanded FMC agreement approved in late February allows LA/LB to ...
    - Jointly address concerns relative to congestion & supply chain issues
    - Work with supply chain stakeholders to enhance operational efficiencies & terminal velocity
    - Jointly market the gateway & advocate for favorable funding, legislation
    - Continue our important collaboration on environmental and safety initiatives
- ✓ **Broader Dialogue with Supply Chain Stakeholders**
  - LA/LB port leaders held planning meeting March 23rd
  - Supply Chain Optimization Forum to be held tomorrow in Long Beach
- ✓ **New levels of promotion & dialogue with customers & cargo owners**
  - Ports need to market to carrier alliances & help terminal operators and carriers achieve efficiency gains

LA/Long Beach Congestion Update



We Lead Through Our Actions

January-June 2014 -- #1 Port in Berth Productivity

- ✓ Evergreen Container Terminal
- ✓ West Basin Container Terminal
- ✓ APM Terminal / Pier 400
- ✓ TraPac
- ✓ Yusen Terminals
- ✓ APL Global Gateway South / Pier 300

February 22 – March 7th New US Berth Productivity Record

- ✓ APM Terminals/Pier 400
- ✓ 3 Ultra-larger container ships (approx 13,000 TEUs ea)
- ✓ 34,465 container moves, including 28 double-stacked trains


LA
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Thank You.