

CIGMA

Containerized Intermodal Goods Movement Assessment: 2008

An assessment of the issues and trends impacting the transportation of containerized products throughout the logistic chain of N.A.

RON SUCIK
THE TIOGA GROUP

Presentation to
The New Railway Age Conference
Washington, D.C.



Dec 11 2008

So what is CIGMA & Why do the study?

CONTAINERIZED INTERMODAL GOODS MOVEMENT ASSESSMENT

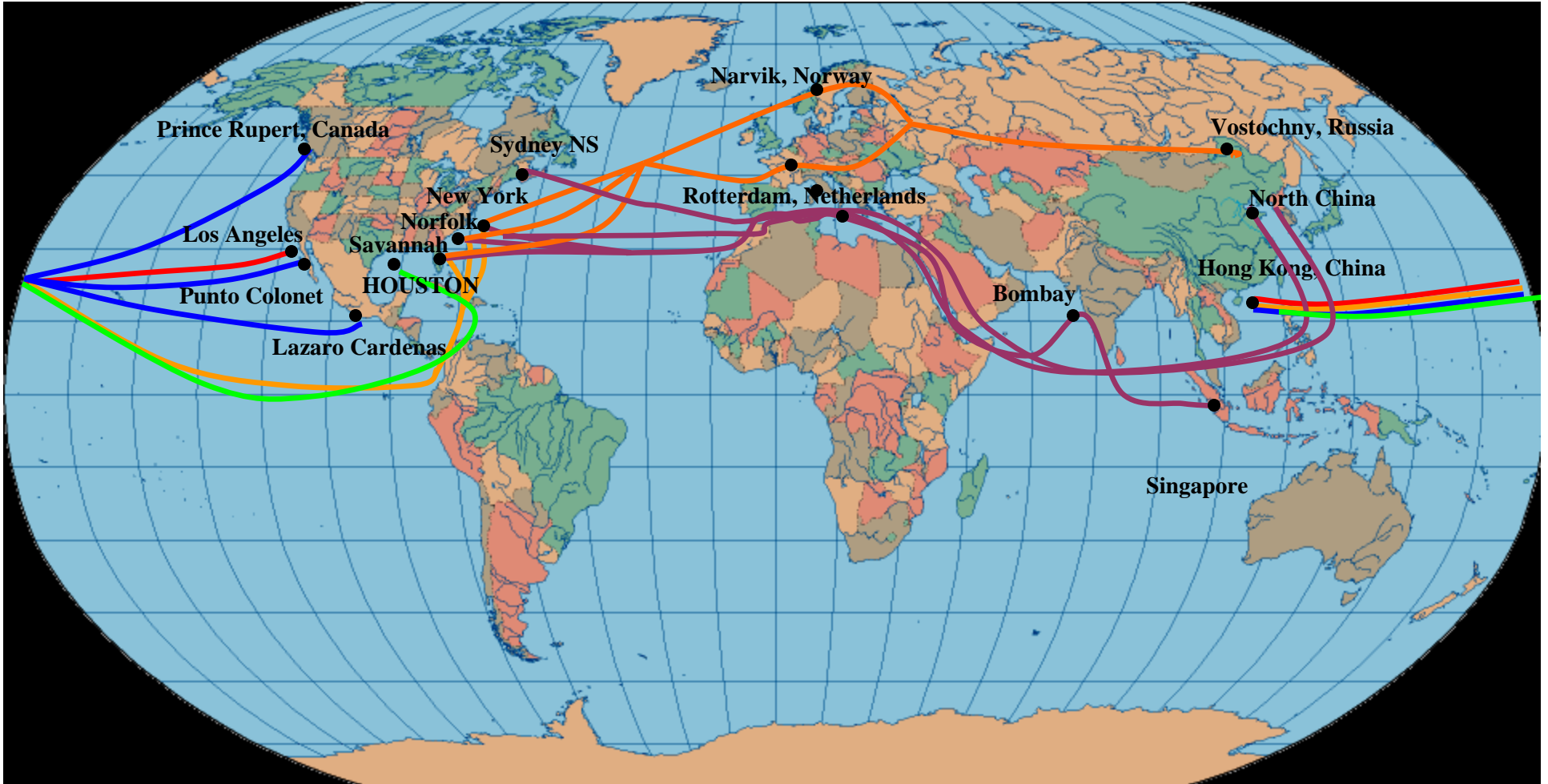
- **CIGMA is a composite assessment of the issues and trends impacting the movement of containerized products into North America.**
- **Every facet of the transportation chain deals with various issues and trends in their own best interest and these actions interrelate to other components of the transportation chain.**
- **These entities initiating the first actions are not always cognizant of the effect their actions may have on the other elements of the transportation chain.**

What Makes A Location More Favorable

- **Large population or consumption centers**
 - (LALB, NYC, Florida and the Southeast)
- **Deep water for ports**
 - (Prince Rupert, LALB, Norfolk and Lazaro Cardenas)
- **Port infrastructure**
 - (LALB, Norfolk and PANYNJ)
- **Nearby Rail or Highway infrastructure**
 - (LALB, PANYNJ, Norfolk and the PNW-Vancouver, Seattle & Tacoma)
- **Space and/or Central Location for Distribution Complexes**
 - (Chicago, St. Louis, Columbus, SEUS including Charleston, Savannah & Jacksonville)

What is the origin of my cargo?
What size ship should I use?

Should I go Panama or Suez?
What port can handle the ship?



Port of Punta Colonet, MX



 **PORT OF PORTLAND**
Possibility. In every direction.™

Ocean Carrier Vessel Size and Capacity

- **Total of available container capacity over the 10 million TEU mark in 2007. The top 20 (by capacity) steamship companies reached 10,099,145 TEU by May 6, 2008.**
- **AXS-Alphaliner reported last October orders for 100 of the VLCS of 12,500-13,500 TEU.**
- **By end of November Alphaliner reported 115 cellular ships (270K TEU) idled. Represents 2.2% of cellular fleet in TEU. Could rise to 400K by end of Jan. (3.2% worst since 2002.)**
- **Container ships built in 70's that have traded beyond avg. life expectancy being sold for scrap.**

Emma Maersk 14000 TEU Vessel



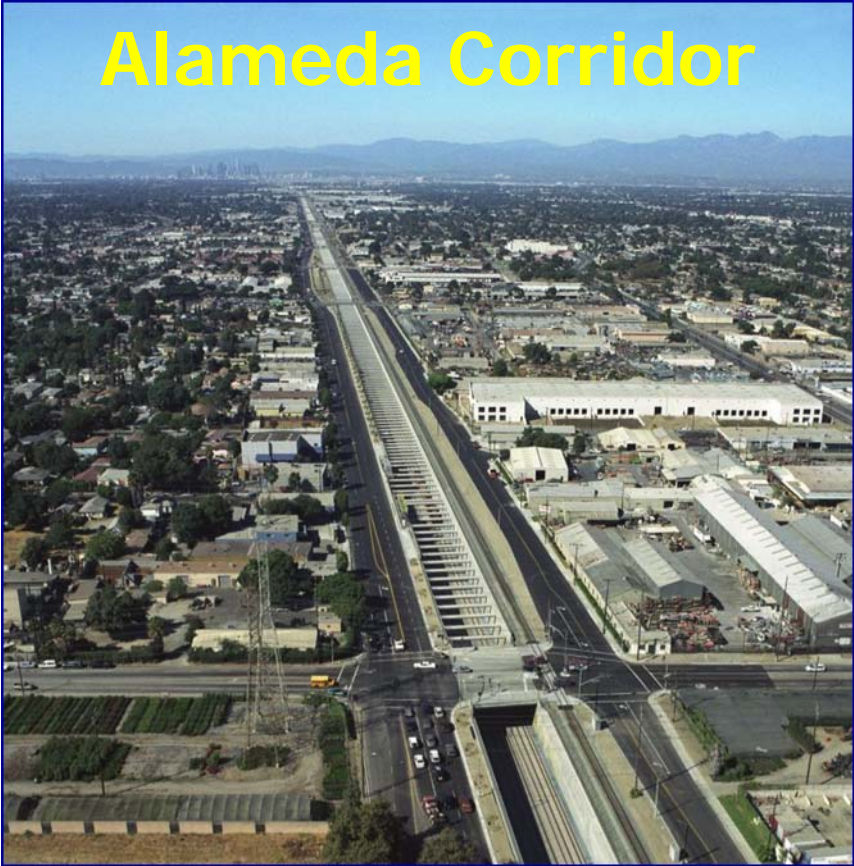
So Which U.S. Port Can Handle the Emma Class Vessels?

ON DOCK AND UP THE ALAMEDA CORRIDOR

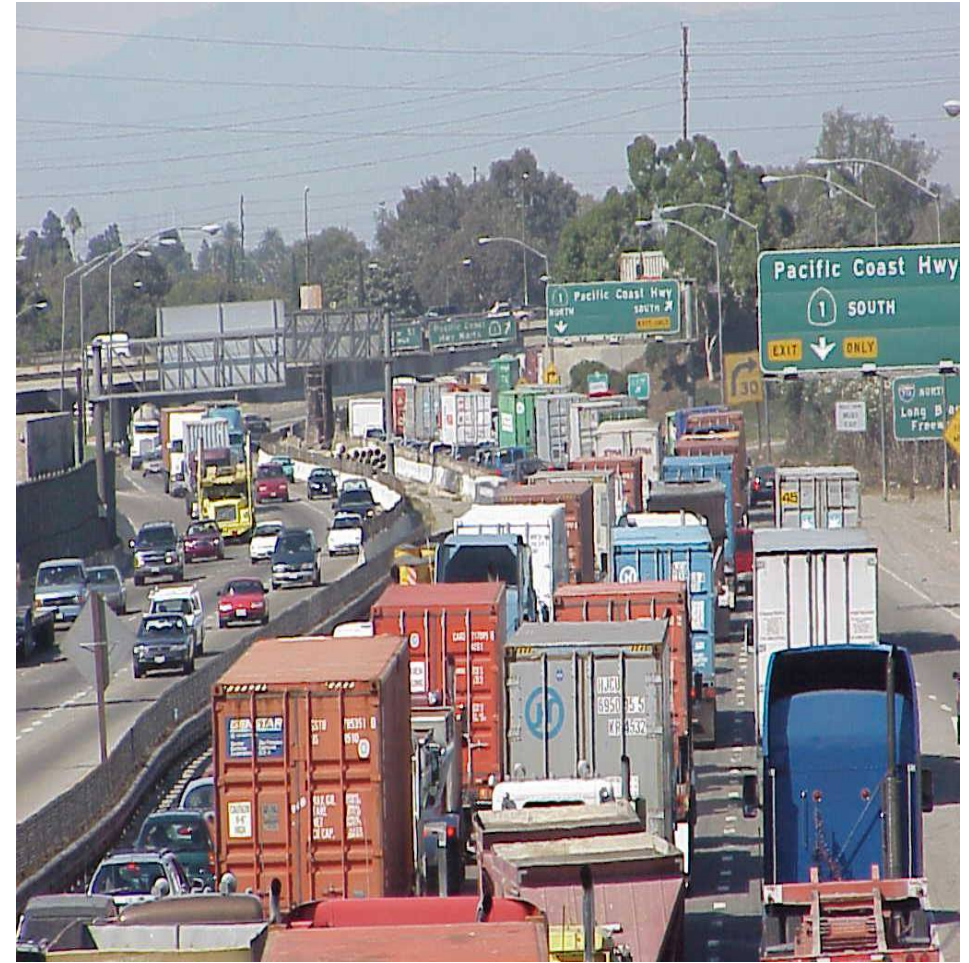
Near Dock Staging Area – Port of LA



Alameda Corridor



OUT THE PORT GATE TO THE TRANSLOADER OR OTR



AFTER THE TRANSLOAD

DO YOU GO BACK TO THE RAIL----- OR OVER THE ROAD



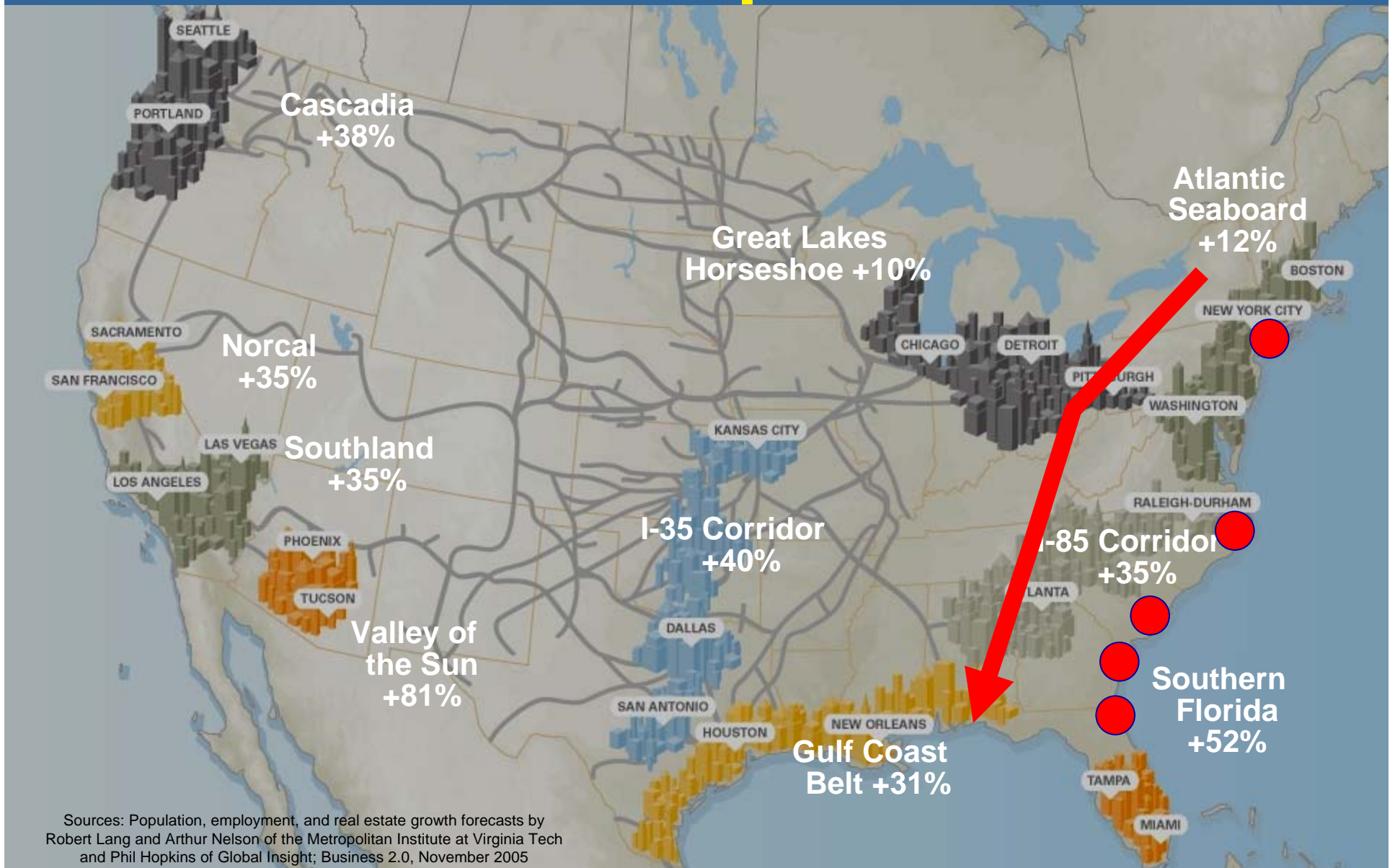
Did the increase in IPI Rates Promote Transloading?

- **With increases in IPI rates and higher bunker charges it was expected that steamship companies would be encouraging more transloading to reduce their inland costs.**
- **Comments from the steamship companies do not support that premise as the carriers would slow down or make fewer calls rather than drop a port of call.**
- **Existing infrastructure on the WC and especially in San Pedro with abundance of on-dock capabilities would seem to favor continued movement of containers directly from the ships to an on-dock railcar and movement in trains directly Eastbound to the warehouses and distribution centers in the Heartland of the country.**

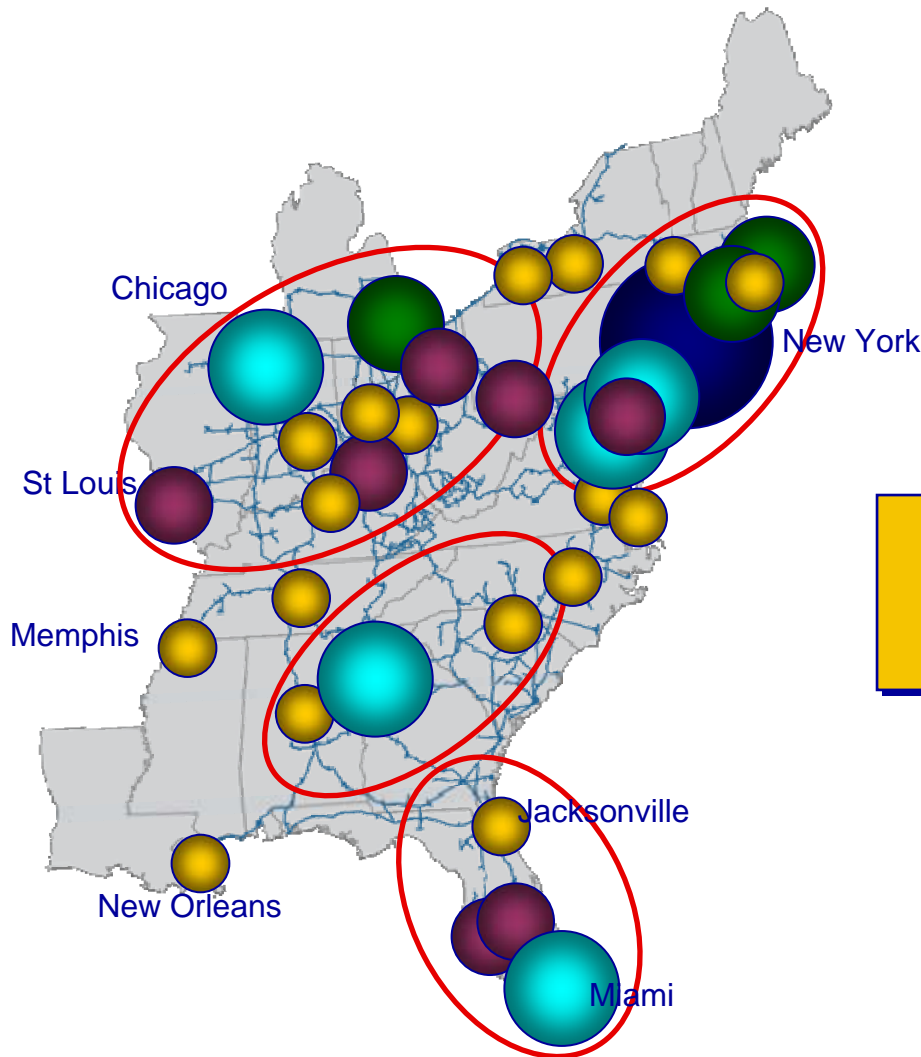
What About Increased Bunker Charges?

- **Bunker prices have tripled within the last three years and as of May of 2008 had increased 87% since the beginning of 2007 and now represent as much as 50-60 percent of total ship operating costs, depending on the type of ship and service.**
- **Belief higher bunker charges would result in the cutting back of some of the AWEC resulting in a return of some of the traffic that had migrated to the all-water services.**
- **Comments from the steamship companies do not support that premise as the carriers would slow down or make fewer calls rather than drop a port of call.**

East Coast-West Coast TEU cost line equilibrium



Population density makes intermodal rail an essential part of freight movement



- Eastern U.S. region holds 66% of the U.S. population
- Approximately 75% of U.S. consumption takes place in the East

Projected population growth will increase volume and capacity requirements

Population in Major Metropolitan Areas



Early 2008 Cargo Forecast

| | 000 Loaded TEU | | | | | | CAGR % | | | 25 Yr % |
|--------------------|----------------|---------------|---------------|---------------|---------------|---------------|------------|------------|------------|------------|
| | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 05-10 | 10-20 | 20-30 | 05-30 |
| Imports | | | | | | | | | | |
| East Coast | 9,653 | 12,215 | 14,982 | 18,164 | 22,174 | 27,670 | 4.8 | 4.0 | 4.3 | 4.3 |
| West Coast | 8,976 | 13,262 | 18,181 | 24,305 | 32,258 | 43,657 | 8.1 | 6.2 | 6.0 | 6.5 |
| SubTotal | 18,629 | 25,477 | 33,163 | 42,468 | 54,432 | 71,327 | 6.5 | 5.2 | 5.3 | 5.5 |
| Exports | | | | | | | | | | |
| East Coast | 5,170 | 6,497 | 7,465 | 8,477 | 9,688 | 11,188 | 4.7 | 2.7 | 2.8 | 3.1 |
| West Coast | 3,331 | 4,178 | 4,908 | 5,523 | 6,190 | 7,012 | 4.6 | 2.8 | 2.4 | 3.0 |
| SubTotal | 8,501 | 10,675 | 12,373 | 14,001 | 15,877 | 18,200 | 4.7 | 2.7 | 2.7 | 3.1 |
| Total | | | | | | | | | | |
| East Coast | 14,823 | 18,712 | 22,446 | 26,641 | 31,861 | 38,858 | 4.8 | 3.6 | 3.8 | 3.9 |
| West Coast | 12,307 | 17,440 | 23,089 | 29,828 | 38,447 | 50,669 | 7.2 | 5.5 | 5.4 | 5.8 |
| Grand Total | 27,130 | 36,152 | 45,536 | 56,469 | 70,309 | 89,527 | 5.9 | 4.6 | 4.7 | 4.9 |

The LALB forecast calls for U.S. TEU volume (loads) to grow at an average of 5.9% annually from 2005 to 2010, with the West Coast at 7.2% and the East and Gulf Coast at 4.8% (Exhibit 6). Growth in 2010-2020 and 2020-2030 is expected to be appreciably slower, averaging 4.6-4.7% annually. This would be far slower growth than the 7.9% average for 2000-2005.

Current Intermodal Situation

2008 YTD TEU GROWTH

| Port | Imports | Exports |
|-------------|---------|---------|
| Los Angeles | -6.6% | +22.2% |
| Long Beach | -12.7% | +23.2% |
| Oakland | -5.3% | +8.8% |
| Seattle | -13.0% | +1.6% |
| Tacoma | -5.9% | +22.3% |
| NYNJ | -2.1% | +19.6% |
| Savannah | +8.3% | +16.8% |

- Largest importers use multi-coastal distribution strategies adjusting mix of all-water and intermodal service to balance cost and service.
- Largest retail chains have grown import volumes to point where they can sustain economically scaled flows on multiple trade lanes.

Canal Routes

- **Success of AWEC services brought substantial volume to Panama Canal. This long term trade's internal growth may use up much of capacity provided by 3rd set of lock.**
- **Suez route SE Asia and EC US provides opportunity to fill VLCS with Mediterranean traffic and transshipment hubs. These intermediate stops affect transit times.**
- **Speculation importers might forgive slow transit for slow selling merchandise but trend so far has been to keep inventories lean in times of trouble.**

Migration Of Export Manufacturing Away From China?

- **Will rising prosperity levels of China drive wages up and manufacturing to other countries?**
- **Or will manufacturing shift to lower cost interior areas as the transportation infrastructure improves?**

Port Capacity

- **Misleading to focus on 2004 So. Cal port congestion or rapid growth preceding it as indicators of the future.**
- **WC ports have had luxury of abundant space albeit is wasted on wheeled terminals and long dwell times.**
- **In the long run densities must rise and dwell times must fall on the WC and across N.A.**

What About Transloading?

- For the most part the transloading occurring on the East Coast and Gulf has been into a box for movement by highway.
- Transloading in the PNW and Oakland is growing but given first port of call rotations does not lend itself to calling their first
- So. CA has warehouse space available near port as well as in the Inland Empire. So. CA is the largest local market near a port and generally has a plentiful supply of containers and trailers for transloading imported goods.
- Los Angeles also generates a lot of Domestic Containers and trailers from the freight moving to consumption for 25 million people in the PSW.

Which Retailers Will Transload?

- **Variance in the nbr. of stores and the amts. of vol. retailers might have which leads to variety of different logistic chains in the system.**
- **Some retailers have the volume to move intact and distribute from inland Logistic Parks.**
- **Others will find transloading is driven by their product density**
- **Some retailers with small enough volumes will consider transloading in China in order to drop-ship the containers directly to their stores with the correct product mixes.**

DELIVER THE PRODUCT TO THE STORE



What About Those Motor Carriers?

- **UP Streamline product provides an opportunity to utilize or in some cases sample the rail intermodal product.**
- **End of 2007 est. 92,000 units of excess capacity in the industry. Over supply will eventually meet the current demand by business failures, carriers parking equipment and delays in replacing older tractors.**
- **Is this result of shippers driving down the charges of motor carriers as long as there was a surplus of carriers? Some carriers believe there could be “day of reckoning” coming as this fall out of motor carriers will force the shippers to finally have to pay the higher fees.**
- **This “rude awakening” scenario goes along with the theme we have been seeing as railroads increase IPI rates and the steamship companies try to recover their higher bunker charges. The leverage the shippers once held over the transportation industry may be coming to an end and the field of realistic costing may be coming into being.**

Export Complexities – 2007 & 2008

- **WC Ports up 15.4% - EC Ports up 14.4%**
- **Drivers – Devaluation of dollar & demand for export grains**
- **Decline in imports decreases availability of containers**
- **Ship capacity affected by deployment & export weights**
- **High cost to reposition empty containers**
- **Hub and spoke complexities of train services and competition to Railroad hopper fleets**
- **Bulk cargo rates falling rapidly**

Take Away Points from RA Conference

- **Continued diversion AWEC stimulating short haul intermodal & Motor Carrier traffic from East Coast ports.**
- **Transloading percentage will increase slightly.**
- **As economy strengthens probably shortages of domestic containers may develop.**
- **Retailers continue to expand in population growth areas.**
- **Motor Carriers trying to stimulate Railroad interest in short haul lanes like the Kansas City, KS to Marion, OH.**

THE CIGMA REPORT 2008

THANK YOU FOR YOUR TIME

Any interest or questions regarding the

CIGMA

report by The Tioga Group can be made to

The Tioga Group, Inc.

1617 JFK Blvd

Suite 1252

Philadelphia, PA 19103

215-775-2142

