The Container Logistics Channel for Exports of Soybeans and Soybean Meal

Creating the “Win x 5” Environment

Project 5060
Prepared for ASA/USB

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Project 5060
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Pollock Logistics Consulting
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### Definitions & Acronyms

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<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Container Turn-around Time</td>
<td>The time to re-position a container from the U.S. consignee back to the foreign exporter.</td>
</tr>
<tr>
<td>Cost Avoidance</td>
<td>As used herein, the ocean carrier avoids absorbing the full cost of moving containers from the U.S. to Asia or Europe empty, by hauling revenue-paying goods in those containers.</td>
</tr>
<tr>
<td>Double Stack</td>
<td>Practice of loading containers two-high on &quot;stack trains&quot; to maximize train load factor.</td>
</tr>
<tr>
<td>Drayage</td>
<td>Local routine roundtrip movement by truck (e.g., from railroad ramp to transloader, or port to container yard, etc.)</td>
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<tr>
<td>FEU</td>
<td>Forty-foot equivalent unit (note: FEU weight of soybeans not much more than TEU weight due to density of this product and road weight restrictions)</td>
</tr>
<tr>
<td>IAS</td>
<td>International Asset Systems; provides global equipment visibility, container event management and analysis, etc.</td>
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<tr>
<td>Logistics</td>
<td>The planning, execution and control over product transportation, storage and handling.</td>
</tr>
<tr>
<td>MT; mt</td>
<td>Metric ton, or tonne (2204 lbs.)</td>
</tr>
<tr>
<td>PNW</td>
<td>Pacific Northwest (Region). Typically includes ports of Seattle, Tacoma, Portland and Vancouver.</td>
</tr>
<tr>
<td>POE</td>
<td>Port of Embarcation</td>
</tr>
<tr>
<td>PSW</td>
<td>Pacific Southwest, OAK/LA/LB</td>
</tr>
<tr>
<td>Repositioning</td>
<td>As used herein, transporting containers from the U.S. back to exporters in Asia or Europe. Containers can be repositioned either loaded or empty.</td>
</tr>
<tr>
<td>Terminal Handling Charge</td>
<td>THC: The charge to process a container within a port facility.</td>
</tr>
<tr>
<td>TEU</td>
<td>Twenty foot equivalent unit</td>
</tr>
<tr>
<td>Third Party</td>
<td>An agent that manages one or more logistics functions on behalf of the shipper and/or consignee (a 3PL is a third party logistics provider; a 4PL is an agent managing multiple 3PLs)</td>
</tr>
<tr>
<td>USG</td>
<td>U.S. Gulf Ports region</td>
</tr>
<tr>
<td>Wharfage fee</td>
<td>Fee to dock ship.</td>
</tr>
</tbody>
</table>
I. Background
Background

This project was in response to ASA/USB’s desire to determine how best to take advantage of empty containers in export markets.

“Due to record high bulk freight rates and record number of cargo containers returning from the USA to Asia empty, a new logistics channel has opened for smaller suppliers. Besides opening new opportunities for smaller US suppliers, this logistics channel uniquely favors the US soybean suppliers over those from S. America. Thus any activity that furthers the development of the container logistics channel ultimately benefits US soybean and soybean meal exports at the expense of S. American suppliers.”

-- ASA/USB’s RFP for Container Shipping Analysis May, 2005
The Ultimate Goal
Create a “Win x 5” Environment

- Improve smaller suppliers profitability and competitiveness
- Cost-effectively improve carriers’ container inventory imbalances
- Benefit the industry at expense of S.A. suppliers
- Support Asian & European customers’ supply-channel objectives
- Improve America’s Balance of Trade
Project Objectives

The path to accomplishing this goal started with these five project objectives.

1. Determine conditions/factors that influence ocean carriers’ pricing decisions....how these can make containerized soybean deliveries more competitive with bulk deliveries.
2. Identify carriers and U.S. origin points most competitive for sale/delivery of containerized soybeans.
3. Determine container volume levels, by carrier, that will attract competitive pricing agreements.
4. Identify and outline collaboration processes between carrier and producer organizations that will generate opportunities, while helping solve empty container repositioning problem.
5. Develop a presentation to be used to promote this channel to carriers showing benefit of soybeans exports for container repositioning.
Project Scope ~ Infrastructure

Midwest container logistics from elevator to overseas discharge port.

- PNW POEs are primary Ag container export points
- Intermodal stack train
- PSW trans-loaders
- Midwest Intermodal Ramps Vicinities
- USG is primary point for upper MW Ag exports ~ Bulk Vessel

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Project Information Sources

Primary Research ~ Interviews.

**Ocean Carriers**

- **CP Ships** ~ Shelton Scott, Sales Manager
  ~ Tom Gruel, Sales Manager
- **OOCL** ~ Mike Gismondi, Reg’l Sales Director, Midwest/Edward Zaninelli, VP Transpacific/Michael Checchi, Director Intermodal for OOCL
- **CMA-CGM** ~ MJ Dornfeld, VP Sales, Western US
- **Hanjin Shipping** ~ Richard Nuzzi, Regional sales manager-Export trade
- **Maersk** ~ Chris Nordstrom, Export Account Executive
- **Zim Lines** ~ Dan Sutton, Midwest Sales Manager.
- **China Shipping** ~ Joseph Alagna, VP Sales.
- **Yang Ming Lines** ~ Chris Wimberly, AVP Exports-Midwest
- **APL** ~ Steve Licursi, Director of Pricing, Transatlantic Trade.
  ~ Carolyn Almquist, Director of Pricing, Transpacific Trade.
  ~ Geir Sylte, Sales Representative
- **K-Line** ~ Todd LeSage, Sales Representative

The carriers interviewed - from some of the smallest to some of the largest - comprise over 50% of the import container volume in the transpacific trade.
Project Information Sources

Primary Research ~ Interviews (cont’d)

**Railroads**
- **BNSF** ~ Tim Prostek, Director, International Bulk Products
- **CP Rail** ~ Dennis Schmidt, Marketing Manager, Grain
- **CN Rail** ~ Jim Dolan, Midwest VP
  - ~ George Budd, AVP Int’l, Intermodal Ag Products
- **UP RR** ~ Marty Coalson, AVP-Intermodal (Domestic)
- **UP RR** ~ Paul Borseth, AVP – Intermodal (International)
Project Information Sources (cont’d)

Primary Research (cont’d)

**Channel Intermediaries**

- **DeLong Co.** ~ Bo Delong, President – *trans-loader/Reseller*  
  ~ Pat Delong ~ Operations Manager
- **LA Harbor Grain Terminal** ~ Howard Wallace, President
- **Consolidated Barge and Grain** ~ Eric Kresin, Trading Manager – *trans-loader/Reseller*
- **Macmillan Piper**, Seattle ~ Tim Rose – *trans-loader*
- **Cal Grain** ~ Kumar Das, President – *Ag Commodity Broker*
- **Mills Bros.** ~ Eric Mills, Kent WA. - *trans-loader/Reseller*
- **FTS** ~ John Chiu, President - *Freight Forwarder*
- **AGP Corp.** ~ Terry Voss, Dir. of Transportation ~ *Farmer Co-op (Omaha)*

**Others**

- **ASA/USB** ~ Paul Burke, et. al
- **John C. Baize & Associates** ~ John Baize, President
- **Intermodal Asset Management (IAS)** ~ Phil Behenna, Sr. VP Bus. Dev.
Secondary Research ~ Data Sources

1. **USDA** - reports to USDA of Exports by Country - (via John Baize)
   Soybeans and meal (total of bulk and container metric tons), 9/1/04 – 6/23/05 and same prev. yr.

2. **USDA** – Soybeans inspected and/or weighed for export. Bulk vessel volumes only. – (via John Baize)
   by port area and country of destination, in 000s bushels; W/E June 02, 2005.

3. **USDA** – Agricultural Ocean Transportation Trends
4. **USDA** – Agricultural Container Indicators
5. **PIERS** data (via John Baize) ~ Asia, Central America, Mexico, Carrib.
   All products by destination, by shipment (multiple containers and bulk quantities), through May ‘05; ASA’s download captures all shipments to SE Asia and Taiwan and filters out shipments under 300 M.T. for remainder of countries. China and Japan. “Origin” points are shippers HQ (admin.) and therefore do not represent true physical originating locations.

6. **US Census Bureau** data (via John Baize)
   Monthly export volumes to all countries, (total of bulk and container metric tons), 9/1/04 – 5/30/05.

7. **USDA** – Agricultural Container Indicators
Secondary Research ~ Data Sources (cont’d)

8. Journal of Commerce – numerous articles
9. International Asset Management
11. Container Penetration in the bulk markets!, DVB Group, Shipping Division, June 2005
12. Infrastructure in the U.S. – Beyond the Vessel; BNSF Article (circa 2002)
Conclusions

The container logistics channel is feasible and sustainable:

- Container availability will continue through the foreseeable future.
  - Trans-Pacific and Trans-Atlantic trade continues to meaningfully grow.
- The financial interests of ocean carriers are well served by transporting containerized bulk soybeans.
  - Container ship and container capacity increasing rapidly
  - Container repositioning costs need to be avoided...container turn-around time not “deal killer”
- Ocean-related intermodal business for the railroads is huge – (over 30% of BNSF’s annual revenue) and hauling loaded containers is more profitable than empties.
- Sellers support westbound reloads of containerized soybeans while bulk ocean rates are high and/or to fulfill demand for higher quality product moving in smaller shipment size.
Conclusions (cont’d)

Bulk rates – on a “roller-coaster ride” as of late - will likely trend upward given supply/demand for bulk vessels and China import demands.

- However, because of the competitiveness of bulk shipping, soybeans need to be available near container terminals to avoid costly drayage costs.
- At the same time, soybean production is expanding west and north towards the West Coast POEs and away from the U.S. Gulf (USG).

Trans-loaders that are establishing operations at or near railroad terminals are making a wise decision.

- others need to be motivated.
- greater weight per container may be achievable when soybeans are loaded onto containers at or very near railroad ramps, precluding over the road movement.
- bringing ocean carriers and trans-loaders “together” at non-Burlington Northern/Santa Fe (BNSF) ramps enhances rail alternatives.
- empty container availability is not a problem.
- the peak time frame for soybean shippers’ needs for containers is aligned with availability of imported containers.
II. Soybean Exports and the Container Market
U.S. Soybean Exports Is “Big Business”...

The U.S. exports approximately one-third of its supply... exports are about 60% as large as domestic use.

**Previous-current-next marketing season activity**

![Graph showing export, domestic use, and supply over different marketing seasons.]

Logistics Costs are approximately 30% of the prices farmers receive.

Source: Canadian Research Report. [www.agr.gc.ca/mad-dam/e/bulletine/v18e/v18n08_e.htm](http://www.agr.gc.ca/mad-dam/e/bulletine/v18e/v18n08_e.htm); PLC analysis; Supply includes production and carry-in stocks

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...and The Trade Is Growing Rapidly

China, the world's largest soybean importer, and Hong Kong will continue to experience massive growth in imports vs. other markets. Prior to 2002, the EU was the largest importer.

Source: "USDA Baseline Agricultural Projections To 2013"; February 2004
U.S. Export Destinations

China is 43% of the total, and 8 of 48 countries comprise 80% of soybean exports.

Source: “USDA Census Data; PLC Analysis

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South America Projected To Support This Growth

Exports from South America are expected to dramatically grow over those of the U.S.

This obvious competitive threat underscores the need to use the container logistics channel to the extent it makes the U.S. more price competitive.

Source: “USDA Baseline Agricultural Projections To 2013”; February 2004
U.S. Soybean Exports

U.S. Soybean exports are projected to remain flat due to competition from foreign suppliers. The U.S. soybean industry could become more domestically oriented in the next 10 years as foreign suppliers are better situated to compete in the global market for soybeans than for feed grains. Container exports of soybeans should largely be incremental trade and improve this picture.

Container Activity Is Growing

U.S. containerized soybean exports in containers have increased 32% since 2000 to 45,700 20 foot containers...a data point we suggest be used as a baseline number.

Impressive as the growth has been, containerized soybean exports from the U.S., shown above, are only 4% of total soybean exports.``

Source: Container Penetration in the bulk Markets.; DVB Group 7/5/05; US Census data, PLC analysis

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The Characteristics Of Container Shipping

- In 2002, the average soybean net premium price (after increased marketing costs) for container shipping was 28% (albeit, likely overstated).
- Third-party facilitators are common in managing the marketing and logistics of container shipments.
- A majority of the containerized Soybean export volume is originated within 350 miles of the primary container terminal. Over 40% of shippers are within 100 miles of their primary terminal.
- Almost half of shippers use a freight forwarder to manage drayage, while only 13% report that the ocean carrier handles drayage arrangements.
- Individual businesses averaged 212 annual TEUs in 2002 up from 169 and 182 in ’00 and ’01.
- The number of shippers using containers is increasing (no quantitative insight available herein).
- The PNW region accounts for about two-thirds of annual shipments of containerized grain and oilseed exports.
- Bag (50 lbs.) and bulk packaging are most prevalent forms of packaging with 99% and 90% of shippers, respectively, reporting their use. 60% reported also shipping tote (1,000 or more lb. bags on pallet).

Source: U.S. Containerized Grain & Oilseed Exports Industry Survey, USDA, NDSU; July 2003
The pattern of export seasonality is pronounced with almost 90% of export volume in the six month Oct – Mar period.

This pattern is significantly influenced by China’s purchases accounting for 43% of the total U.S. exports of Soybeans. See Appendix B for shipping profiles for individual markets.

Source: US Census Bureau, PLC analysis
What Concerns Container Shippers?

In a recent extensive survey of shippers, top-rated factors most relevant to future container growth for grain/oilseed were mostly logistics related, with ocean rates predominating.

<table>
<thead>
<tr>
<th>Top 7 of 13 Factors</th>
<th>Rating by Shippers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ocean Shipping Rates</td>
<td>4.6*</td>
</tr>
<tr>
<td>2. Availability of Containers</td>
<td>4.2</td>
</tr>
<tr>
<td>3. Rail Shipping Rates for Containers</td>
<td>4.1</td>
</tr>
<tr>
<td>4. Ocean Liner Routes</td>
<td>3.9</td>
</tr>
<tr>
<td>5. Distance to Container Terminal</td>
<td>3.7</td>
</tr>
<tr>
<td>6. Foreign Buyer Information</td>
<td>3.6</td>
</tr>
<tr>
<td>7. State Truck Weight Limits</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Others with ratings above 3.0:
- Inspection requirements 3.4
- Access to market information 3.4
- Container Logistics Information 3.3
- Financing 3.2

* Note that this survey was performed in 2002/2003 when bulk ocean rates were in the $20 to $30 per mt range.

Source: U.S. Containerized Grain & Oilseed Exports Industry Survey, USDA, NDSU; July 2003

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III. Container Repositioning Cost Avoidance Drives Soybean Container Logistics
Container Repositioning Cost Avoidance

The imbalance of container traffic between the US and Asia is well recognized.

2003

Asia

9.4 MM containers loaded

4.3 MM containers loaded

U.S.

The cost of repositioning empty containers is $1.3 billion, up from $600 million in 2000.

Source: Journal of Commerce, 6-13-05; OOCL.
Container Repositioning Cost Avoidance

The realities of global sourcing shifts from the US to Asia will continue well into the future.

- U.S. containerized exports to Asia are projected to increase 6% to 7% this year and again in 2006. U.S. imports from Asia should increase about 10% each year.
- Repositioning of containers to Asia is a growing problem due to the ballooning trade deficit. In 2004, shipping lines in the Pacific carried 2.6 containers to the U.S. for every loaded container the U.S. exported to Asia. If the eastbound trade continues to grow at double-digit percentage rates a year and the westbound trade continues to increase only 7 percent a year, the trade imbalance will be three-to-one before long.

The ocean carriers’ problem of repositioning containers sans-revenue will continue unabated into the foreseeable future.

Source: JoC, 6-13-05
The Port of Seattle’s – a key PNW export terminal - 10 year cargo history underscores the increasing trade imbalance, with 387,503 empty TEUs in 2004... a record import year for Seattle.

Source: Port of Seattle statistics, PLC analysis
Exports to Europe are significant, but less than one-third of those to Asia.

Source: “USDA Census Bureau via John Baize; PLC analysis.

<table>
<thead>
<tr>
<th>Country</th>
<th>MTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>2,004,025</td>
</tr>
<tr>
<td>Spain</td>
<td>780,149</td>
</tr>
<tr>
<td>Netherlands</td>
<td>472,286</td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>412,819</td>
</tr>
<tr>
<td>Turkey</td>
<td>406,292</td>
</tr>
<tr>
<td>Portugal</td>
<td>259,005</td>
</tr>
</tbody>
</table>

U.S. soybean exports to Europe vs. Asia, MY '04/05, MTs

- Europe: 4,880,341 (22%)
- Asia: 17,106,248 (78%)
The imbalance of container traffic between the US and Europe, while not as severe as with Asia, is nonetheless meaningful.

One ocean carrier offered that they are carrying 500-600 FEUs of soybeans to Europe, and estimates that 8,000 to 10,000 FEUs are moving to this region from the U.S. (This would be approximately 20% of the total 45,000 baseline number suggested by PLC).

Source: Journal of Commerce, 6-13-05, OOCL presentation
**Container Repositioning Cost Avoidance**

The repositioning of empty containers is extremely costly to ocean carriers.

“Ocean carriers currently spend close to $100 billion per year operating their container assets.

Of this, approximately $16 billion is directly attributable to the total cost of repositioning (globally) empty equipment to the point of its next cargo.”

- *International Asset systems (IAS)*

Subject to the carriers’ need to have empty equipment to reload eastbound, any westbound load **avoids container repositioning costs**...**the carriers’ typical motivation**. [The one ocean carrier that offered that eastbound and westbound lanes must “stand on their own” also stated that they believe this policy will not prevail beyond 2006 due to increasing capacity in the trade.]
Westbound containerized soybeans is good business for the carriers...resulting in a $735 cost avoidance per 40-foot container.

* THC = Terminal Handling Charge
** Blended figure – rail and drayage
Container Repositioning Cost Avoidance

Carriers have different philosophies on the value of repositioning containers loaded.

- The spectrum is: maintaining separate P&Ls for westbound and eastbound trade (loads must make a contribution to overhead and profit) to simply covering some portion of costs.
- One ocean carrier with significant Asia to U.S. trade does not have a requirement to make a profit on inland exports to Asia. However, each rate quote is run through a cost avoidance model. If moving the export load costs less than moving the container empty, it is an acceptable rate. Cost factors include:
  - drayage
  - intermodal rate
  - surcharges
  - port terminal handling charges.

There is clearly no consistent policy regarding the marketing of ocean container logistics by the carriers.
Container Repositioning Cost Avoidance

The peak period for imports - July to December - results in a glut of empty containers coinciding with soybean export needs.

Source: Port of Long Beach web site .. Statistics; PLC analysis (http://www.polb.com/html/1_about/ps_teusArchive.htm)
We estimated the incremental container export volume by Asian market based on current exports, qualitative views, and other facts, to preliminarily “size” the near-future container market.

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPAN</td>
<td>2,093,556</td>
<td>92,309</td>
<td>10%</td>
<td>9,231</td>
<td>H</td>
<td>H</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>792,511</td>
<td>34,943</td>
<td>10%</td>
<td>3,494</td>
<td>M</td>
<td>H</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>KOREA, REP. OF</td>
<td>550,625</td>
<td>24,278</td>
<td>10%</td>
<td>2,428</td>
<td>L</td>
<td>H</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>CHINA, P.R.</td>
<td>11,447,398</td>
<td>504,739</td>
<td>5%</td>
<td>25,237</td>
<td>L</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>TAIWAN</td>
<td>1,258,580</td>
<td>55,493</td>
<td>5%</td>
<td>2,775</td>
<td>M</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>THAILAND</td>
<td>551,134</td>
<td>24,301</td>
<td>5%</td>
<td>1,215</td>
<td>M</td>
<td>M</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>TURKEY</td>
<td>406,292</td>
<td>17,914</td>
<td>5%</td>
<td>896</td>
<td>L</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>168,426</td>
<td>7,426</td>
<td>5%</td>
<td>371</td>
<td>L</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>123,996</td>
<td>5,467</td>
<td>5%</td>
<td>273</td>
<td>L</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>Total…</td>
<td></td>
<td></td>
<td></td>
<td>45,920</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Per Day (over a 7 month shipping period)… 219

A preliminary estimate is that 219 empty FEUs would be needed on average per day in the Midwest to support container channel growth. The total FEUs is in the order of 1% of total container exports to Asia and Europe. Revenue to ocean carriers is in the range of $40 million.

Source: US Census data; John Baize perspectives; BNSF China perspective; Minn. Shippers analysis, PLC analysis
Container Repositioning Cost Avoidance

In the Midwest, a sampling of empty containers reveals more than adequate availability to support export needs.

Ocean Carriers

- P&O
- Hanjin
- China Shipping
- MOL
- CMA-CGM

Represents 24% of import market share.

June 2005, daily average availability in Midwest.

700 Empty 20/40 Foot Containers Per Day.*

* Note: typically, imports are shipped 80% in 40’s and 20% in 20s.

Notably, this sample does not include such carriers as Maersk, Evergreen, NYK, Yang Ming, CP Ships, etc. Inclusion of these carriers would at least triple empty availability. [Additionally, June would be a low-level month for empties in the U.S.]. **In short, container availability is not an issue.**

Source: IAS; PLC analysis.

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IV. Ocean Carriers: Interests, Costs, Issues
Ocean Carriers: Interests, Costs, Issues

The carrier market in the transpacific trade is highly fragmented... thus, smaller soybean suppliers have an abundance of carriers with whom to negotiate and an abundance of equipment to haul product. E.g., Zim is #25, but has meaningful volume of empty containers and is negotiating soybean deals.

<table>
<thead>
<tr>
<th>Ocean Carrier</th>
<th>Imports 000 s TEUs</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Maersk – Sealand (10%)</td>
<td>849</td>
<td>10.0%</td>
</tr>
<tr>
<td>2 APL (8.6%)</td>
<td>730</td>
<td>8.6%</td>
</tr>
<tr>
<td>3 Hanjin (8.4%)</td>
<td>714</td>
<td>8.4%</td>
</tr>
<tr>
<td>4 Hyundai</td>
<td>567</td>
<td>6.7%</td>
</tr>
<tr>
<td>5 Evergreen (6.5%)</td>
<td>555</td>
<td>6.5%</td>
</tr>
<tr>
<td>6 OOCL (6.1%)</td>
<td>521</td>
<td>6.1%</td>
</tr>
<tr>
<td>7 Cosco (6.1%)</td>
<td>516</td>
<td>6.1%</td>
</tr>
<tr>
<td>8 China Shipping (5.9%)</td>
<td>499</td>
<td>5.9%</td>
</tr>
<tr>
<td>9 NYK Line (5.6%)</td>
<td>472</td>
<td>5.6%</td>
</tr>
<tr>
<td>10 “K” Line (4.8%)</td>
<td>407</td>
<td>4.8%</td>
</tr>
<tr>
<td>11 Yang Ming (4.4%)</td>
<td>377</td>
<td>4.4%</td>
</tr>
<tr>
<td>12 MOL (3.7%)</td>
<td>314</td>
<td>3.7%</td>
</tr>
<tr>
<td>13 Mediterr’n Shipping (3.2%)</td>
<td>270</td>
<td>3.2%</td>
</tr>
<tr>
<td>14 CMA-CGM (2.9%)</td>
<td>244</td>
<td>2.9%</td>
</tr>
<tr>
<td>15 P&amp;O Nedlloyd (2.8%)</td>
<td>235</td>
<td>2.8%</td>
</tr>
<tr>
<td>16 Lloyd Trestino</td>
<td>216</td>
<td>2.5%</td>
</tr>
<tr>
<td>17 Hatsu Marine</td>
<td>167</td>
<td>2.0%</td>
</tr>
<tr>
<td>18 Wan Hai Lines</td>
<td>165</td>
<td>1.9%</td>
</tr>
<tr>
<td>19 Hapag-Lloyd</td>
<td>149</td>
<td>1.8%</td>
</tr>
<tr>
<td>20 Sinotrans</td>
<td>128</td>
<td>1.5%</td>
</tr>
<tr>
<td>21 Norasia</td>
<td>76</td>
<td>0.9%</td>
</tr>
<tr>
<td>22 US Lines, Ltd</td>
<td>64</td>
<td>0.8%</td>
</tr>
<tr>
<td>23 Great Western Stmship</td>
<td>60</td>
<td>0.7%</td>
</tr>
<tr>
<td>24 Westwood</td>
<td>42</td>
<td>0.5%</td>
</tr>
<tr>
<td>25 Zim</td>
<td>41</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Top 25 8378 98.8%

Source: Journal of Commerce; 7/4/05; PLC analysis and perspectives.
Ocean Carriers: Interests, Costs, Issues

Despite reported concerns such as lane balancing and container turn-around time to Asian shippers, most ocean carriers have expressed serious interest in the business.

- Ocean carriers want to maintain or grow their overall market share and, as discussed, need to minimize costs to reposition containers abroad.
- As new sources for low cost production continue to develop in Asia, the ocean carriers will see greater demand for empty containers shift to these new origin points. This will be an opportunity for soybean shippers. More carriers will want containers in these points. Instead of using feeder carriers, they may well begin direct port calls. This will reduce their transportation costs and will allow them to offer lower rates to soybean shippers.
Intermodal carriers have a keen interest in the Ag business

- Railroads receive more revenue on loaded containers vs. empties, so their preference is of course the former.
- The UP RR has a broad distribution of ramp sites and is “very interested in generating westbound loads.”
  - “Anything that moves loaded containers West is good—UP gets more revenue dollars from loaded container than empty container. Ocean carriers achieve better cost avoidance with loaded containers.” AVP International, Intermodal.
  - They are particularly interested in adding westbound re-loads at their relatively new “Global III” terminal, about 80 miles west of Chicago.
- The BNSF – the largest intermodal carrier - wants to grow this business but has no preference whether in hopper car or intermodal. However, they do not want to grow the container business at the expense of ongoing, traditional hopper car freight.
- While the railroads will, by and large, haul most commodities in containers, ocean carriers have the contracts with them- not the shippers - and make decisions on whether to reload an Ag product in a container.
Ocean Carriers: Interests, Costs, Issues

Ocean and rail carriers consider the following factors in developing their promotion and pricing of containerized westbound traffic.

- Inventory balance (e.g., OOCL identifies inventory surplus and deficit areas and applies a debit and credit system).
- Need to balance Westbound with Eastbound to assure total container moves are balanced within terms of railroad contract.
- Empty container availability at particular ramp locations.
- Need for containers at particular destination ports.
- Cost avoidance contribution.
- Vessel scheduling and rotation.
- Stack-train platform availability and capacity.

These are not static issues, and as they change new opportunities become available to the ASA/USB membership.
Carrier’s interest in container traffic is lane-specific.

### Lane Preferences for Selected Carriers

<table>
<thead>
<tr>
<th>Ocean Carrier</th>
<th>Ramp City</th>
<th>Preferred Routes / Destination</th>
<th>Undesired Routes / Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA - CGM</td>
<td>Chicago</td>
<td>Hong Kong, China (Shanghai)</td>
<td>Japan, Korea</td>
</tr>
<tr>
<td></td>
<td>Kansas City</td>
<td>Modest interest in Europe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>St. Louis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OOCL</td>
<td>Chicago</td>
<td>China, Korea, Taiwan</td>
<td>Some Europe</td>
</tr>
<tr>
<td></td>
<td>Kansas City</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minneapolis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Detroit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Omaha</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memphis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>St. Louis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Columbus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CP Ships</td>
<td>Chicago</td>
<td>China, Any Europe except UK.</td>
<td>Taiwan</td>
</tr>
<tr>
<td></td>
<td>Minneapolis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kansas City</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Milwaukee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zim Lines</td>
<td>Chicago</td>
<td>China, Indonesia and Korea</td>
<td>Japan</td>
</tr>
<tr>
<td></td>
<td>Arcadia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China Shipping</td>
<td>Chicago</td>
<td></td>
<td>Europe</td>
</tr>
<tr>
<td></td>
<td>Minneapolis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kansas City</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PLC interviews; experience

Pollock Logistics Consulting
Carriers’ interest in container traffic is lane-specific (cont’d)

Lanes Preferences for Selected Carriers

<table>
<thead>
<tr>
<th>Ocean Carrier</th>
<th>Ramp City</th>
<th>Preferred Routes / Destination</th>
<th>Undesired Routes/ Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maersk</td>
<td>Chicago</td>
<td>China, Japan, Indonesia, India</td>
<td>Korea</td>
</tr>
<tr>
<td></td>
<td>Minneapolis</td>
<td>China, Japan, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kansas City</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memphis</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>St. Louis</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Omaha</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Columbus</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td>Hanjin</td>
<td>Chicago</td>
<td>Korea, China, Hong Kong</td>
<td>Europe, Indonesia</td>
</tr>
<tr>
<td></td>
<td>Minneapolis</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kansas City</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>St. Louis</td>
<td>Korea, China, Hong Kong</td>
<td></td>
</tr>
<tr>
<td>K-Line</td>
<td>Chicago</td>
<td>China, Japan, Hong Kong</td>
<td>Europe, Indonesia</td>
</tr>
<tr>
<td></td>
<td>St. Louis</td>
<td>China, Japan, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memphis</td>
<td>China, Japan, Hong Kong</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taiwan, Korea and Thailand</td>
<td></td>
</tr>
</tbody>
</table>

Source: PLC interviews; experience
Ocean Carriers: Interests, Costs, Issues

At this time, there do not appear to be *threshold volume levels* that carriers deem attractive or seek as minimums.

- Ocean carriers have advised that, presently, “Time-Volume” contracts are not required.
- Intermediaries advise that their sales / supply-contracts have been relatively short-term and “opportunistic”
- The 30-60 day time frame to fulfill a supply contract fits the ocean carriers’ operating mode. This also protects the soybean shipper from being hit with a rail cost increase after contract pricing is fixed.
- Maersk and the larger top 5 carriers tend to rely more on TVC’s with the likes of Cargill and ADM.
- We have seen that some of the smaller carriers, e.g. Zim and CP Ships, are more flexible and responsive to smaller shippers.
- The per container rate variance in a TVC versus a small lot shipment is a maximum of $50.

It remains to be seen if, in the future, ocean carriers will require “Time-Volume” contracts. Presently, soybean exporters can compete for supply contracts without making any long-term commitments.
Loaded containers are given priority by the rail lines over empties. The latter might accumulate at rail terminals and get dispatched on a space-available basis.

The relatively small potential soybean container trade should not impact carriers’ access to containers in Asia.

- consider that U.S. soybean exports to Asia total about 17 million tonnes -- equivalent to approximately 820,000 TEUs.
- if the container channel for soybeans developed even into 20% of this export level, there would be 164,000 TEUs shipped in trans-pacific trade.
- westbound shipments totaled over 4 million FEUs in 2004.
- thus, soybeans would represent only about 4% of trans-pacific trade...insignificant, it would seem, in impeding eastbound freight on-time deliveries or investments in containers by carriers.

Source: PLC interviews, JofC, and knowledge base.
Also, important to note, Soybean exports would “hit” Asia in the November to January timeframe...when empty container demand is reduced.

In short, for carriers, rate levels, moving containers from surplus to deficit areas, and overall percentage of market share are more important issues than container turn time. As long as containers are returned within 14-21 days (and even 30 days if stipulated in contract), turn time will not be a “deal killer.”

Source: PLC interviews, JofC, and PLC knowledge base.
Ocean Carriers: Interests, Costs, Issues

Ocean dry bulk rates have been on a “roller coaster ride” as of late, peaking near $70/mt in ’04 after years of stability.

It would appear that the key drivers of these unprecedented rates was (upward) significant, unanticipated demand “chasing” capacity typically at 80-90%, and then (downward) China’s import restrictions on raw materials.

Ocean Carriers: Interests, Costs, Issues

Ocean dry bulk rates....(cont’d)

- At market peak in ’04, Brazil to China ship charter rates exceeded $100,000 per day. In mid-April, ’05, about $80,000. In July ’05, about $30,000!
- Many shippers try to catch “the bottom” implying that prices could then surge upward as demand surges.
- More than half of all so-called dry-bulk cargo is steel related. China has been cutting back on iron-ore imports and, in general, world growth is slowing, all contributing to reduced charter activity.
- When bulk ocean rates started moving up from $40/ton, container business increased dramatically as reported by one originator/trans-loader. This major inland trans-loader was handling about 250 containers per month of IP. When ocean bulk rates hit $80/mt, this activity surged to 2,500-2,800 containers per month. Their view is that $40/mt bulk rate might be viewed as an “ocean container cutoff point.”

The ocean carriers have 3-5 year contracts with the railroads (primarily BNSF). As these contracts come up for renewal, there will be upward pressure on rates due to a lack of competition and an infrastructure that is operating at maximum capacity.

Source: WSJ, 6-13-05. PLC interviews, 6-13-05. PLC knowledge base.
Ocean Carriers: Interests, Costs, Issues

Container rates compare favorably with USG Bulk-shipping rates, when latter at or above approximately $37/mt (which was the 7-15-05 bulk rate).

However, some believe that the rate spread needs to be $8-$10 per tonne for containers to look attractive, implying perhaps a $45 bulk-rate “cross-over” point...this based on pure economics (i.e., no consideration of shipment size or product quality protection).

Option - Midwest to Asia via container.

<table>
<thead>
<tr>
<th>Cost</th>
<th>per</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Elevator charges</td>
<td>$.03-.05</td>
<td>bushel</td>
</tr>
<tr>
<td>2. Ctr. drayage from/to ramp</td>
<td>$100</td>
<td>FEU</td>
</tr>
<tr>
<td>3. Bulk Head</td>
<td>$50</td>
<td>FEU</td>
</tr>
<tr>
<td>4. Transload</td>
<td>$125</td>
<td>FEU</td>
</tr>
<tr>
<td>5. Ctr. to Asia Discharge Port</td>
<td>$850</td>
<td>FEU</td>
</tr>
<tr>
<td>6. BNSF RR Surcharge</td>
<td>Using $.04 for elev. and 48K lbs./FEU</td>
<td></td>
</tr>
<tr>
<td>Total….</td>
<td>$1,158</td>
<td>FEU</td>
</tr>
</tbody>
</table>

Option - Midwest to Asia bulk ex. USG

<table>
<thead>
<tr>
<th>Cost</th>
<th>per</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Elevator charges</td>
<td>$.03-.05</td>
<td>bushel</td>
</tr>
<tr>
<td>2. Transload to Barge</td>
<td>included</td>
<td></td>
</tr>
<tr>
<td>3. Barge to USG</td>
<td>$0.34</td>
<td>bushel</td>
</tr>
<tr>
<td>4. Elevator charges</td>
<td>$.03-.05</td>
<td>bushel</td>
</tr>
<tr>
<td>5. Transload to Ship</td>
<td>included</td>
<td></td>
</tr>
<tr>
<td>6. Ocean to port</td>
<td>$37</td>
<td>mt</td>
</tr>
<tr>
<td>Using $.04 for elev. (tw ice)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cost $53 mt

Cost $52 mt

Pollock Logistics Consulting
Ocean Carriers: Interests, Costs, Issues

While the previous page used a realistic $850/40 ft. container rate, obviously this will vary with ocean carrier, ramp, etc.

Rates quoted ramp to Hong Kong discharge, FEU.

Source: PLC interviews

Pollock Logistics Consulting
Ocean Carriers: Interests, Costs, Issues

Unlike bulk cargo vessel rates of late, *container rates* have been relatively stable, varying around the average for the past 2 years by at most 20%.

PLC has determined that the base rate to Asia ports from Chicago is approx. $850/40 foot container...the above higher rate range is *public* information.

Source: Container Penetration in the bulk Markets.; DVB Group 7/5/05
Increasing bunker and rail fuel costs would suggest rising rates. This depends on when individual carriers’ contracts expire. (One carrier projected an increase of $100-$150 starting in October).

- Note: per Morgan Stanley – most railroads have been somewhat insulated by fuel hedges. An estimated $810 million in hedges (assuming oil prices at $60/barrel) will expire in 2006, having the greatest impact on the BNSF and CSX. Railroads are currently recovering fuel surcharges from only 60% to 75% of their revenue base. Improved recovery of surcharges and continued tight rail capacity could spell a strong position for railroads on rates. Shippers could be facing rising rates over the next 12-18 months.
- For the soybean container channel, the dynamic would appear to be how important is this business to the ocean carrier and how much will they absorb?

However, significant Newbuildings of container ships should dampen price increases...a glut of empty containers at Midwest ramps certainly suggests continued need for cost-avoidance.

Asia’s growth as an exporter suggests continued need for raw material imports, hauled by bulk vessels, which are not being built at a rapid pace. Despite recent rate reductions - driven by China import dynamics – the long-term trend in bulk rates should be upward.

Scrap rates are high, inducing older vessels to be scrapped.

Notwithstanding economics, ocean carriers have not shown any negative tendencies toward hauling soybeans.
Ocean Carriers: Interests, Costs, Issues

The growth of container supply will exceed demand in 2006 for the first time, which should put downward pressure on container rates.

In the second half of 2006, there will be substantial inflows of new large container ships of over 6,500 TEUs for the Far East trades.
Containership newbuildings are adding capacity to this mode significantly more rapidly than to bulk.

BRS-Alphaliner's (French ship broker) figures show 115 ships of more than 4,000 TEUs are due for delivery this year, 129 in 2006, 133 in 2007 and 144 in 2008.

This further suggests that container rates should be under downward pressure while bulk vessel rates will probably not fall to anywhere near historical lows for the foreseeable future.
V. Inland-U.S. Logistics
Inland-U.S. Logistics

There is an abundance of intermodal ramps, serving both coasts, located in the soybean growing regions.

- **BNSF**
  - Omaha, NE
  - Memphis, TN
  - Harvard, AR
  - St. Louis
  - Kansas City
  - Chicago / Cicero
  - Chicago / Corwith
  - Chicago / Willow Sprgs
  - Chicago / Logistics Pk.
  - St. Paul
  - Dilworth, MN

- **Ports**
  - Seattle
  - Tacoma
  - Portland
  - Los Angeles
  - Long Beach
  - Oakland

- **CNRR**
  - Chicago
  - Detroit
  - E. Peoria, IL
  - Memphis
  - Arcadia, WI

- **Ports**
  - Vancouver, BC
  - Halifax, NS
  - Montreal, QC
  - New Orleans
  - Mobile
  - St. John, NB

- **UPRR**
  - Chicago / Rochelle, IL
  - Council Bluffs, IA
  - Kansas City
  - St. Louis / Dupo
  - Marion, AR
  - N. Little Rock

- **Ports**
  - Los Angeles
  - Long Beach
  - Oakland
  - Portland
  - Seattle

- **CPRR**
  - Schiller Park, IL
  - Bensenville, IL
  - Detroit
  - Minneapolis
  - Milwaukee

- **Ports**
  - Montreal. QC
  - Vancouver. BC
Logistics costs are reduced meaningfully when elevators are in reasonably close proximity to these ramps.

*Three truck over the road (OTR) moves ~ Significant Drayage*

*Two truck OTR moves ~ Moderate Drayage*

*One truck OTR move ~ Modest Drayage*
Inland-U.S. Logistics

As distance from source to ramp widens, costs become excessive; e.g., an incremental 100 miles over a local move adds approx. $6/mt (or over 10%) to the total logistics cost to the discharge port.

Thus, as stated earlier building the trans-load capabilities at or near ramps is highly important.

Source: PLC motor carrier cost model

Pollock Logistics Consulting
Inland-U.S. Logistics

Origin points supporting growth of the containerized channel

Three key criteria:

❖ A single rail-carrier movement
  • Ocean carriers may not have competitive contracts involving a two-line haul
  • Two-line haul may result in transit time issues to meet vessel or delivery schedule
  • Stack-train equipment less likely to be interchanged between railroads

❖ Routinely large supply of empty containers

❖ Elevators in close proximity to intermodal ramps

Given these criteria, the locations shown in the next slides are deemed the most competitive origin points for sale/delivery of soybeans.
Thus, it would appear that soybean sources in the range of “50 miles” around ramps – with single line rail service – would be logical draw-area maximums for competitive container freight development.
Inland-U.S. Logistics

Draw areas...ramps that could provide single-line railroad service to East Coast for shipment to Europe.
Inland-U.S. Logistics

An important factor in minimizing logistics total landed costs by logistics option is the primarily safety-driven **weight limitations** in the container logistics channel.

**Examples of Weight Limitations**

- **Loaded at port without need to move over-the-road**: 58,000 lbs. ~ 40 ft. container.
- **BNSF and CP**: total weight of the box/chassis limited to 65,000 lbs., resulting in product weight of 50,000 lbs. (22.7 mt).
- **CN over Chicago**: product weight of 60,000 lbs. and over East Coast 58,000 to 60,000 lbs. Assess a surcharge where cannot double stack due to weight (e.g., C$125 for 60-65K lbs in a 40 footer).
- **UP restricted to 48,000 lbs**...maximum that, from safety and operating standpoint, they can double stack. Prefer 40 foot containers.

Source: PLC interviews.
Inland-U.S. Logistics

On a unit basis, freight cost can vary from $32/mt to $42/mt depending on weight per container.

Impact of Weight On Ocean Carrier Cost

Weight per container varies by RR, but two key factors are whether container must move over the road, and railroad rules related to safety and stackability.
Inland-U.S. Logistics

The railroads’ vision of their infrastructure needs are in synch with the needs for soybean container exports.*

Per the BNSF:

❖ Offer a range of transportation solutions that extends our reach into our shippers’ supply chains
❖ they see a growing role for 3PLs and 4PLs in handling total transportation solutions for shippers
❖ they see their need to establish a network of trans-loads located at key junctions that can serve multiple commodities.

* Of course soybean export transportation contracts are with ocean carriers, not railroads. However the railroads’ perspective is important given their role in the Midwest to W. Coast soybean pipeline.
Other railroad observations:

- BNSF: need to balance the network...which ramp city has empty boxes and where do they need to go. Too many loaded 20s may be difficult to handle with other boxes resulting in not using car platforms to full capacity.

- Effective January 1, 2006, BNSF will replace its current fuel surcharge methodology—based on a percentage of a customer's freight transportation bill—with a mileage-based methodology based on fuel intensity. This mileage-based fuel surcharge will be the first in the railroad industry.

- UPRR prefers loaded 40 ft containers as they can use both platforms on a car. If a 20 footer is too heavy, they can’t double stack, thus losing half the capacity of that particular platform
  - UP is considering adding a weight restriction to their rules and procedures limiting the weight in container to assure that they can double stack.
The BNSF is presently the only railroad that has an indemnification requirement* affecting bulk ag products:

- This is likely due to a couple of bad experiences with mis-loaded containers that resulted in derailments.
- A concern is that the soybeans are not evenly spread across the length of the container, and/or, the box is overloaded, with the lading too high resulting in an unacceptably high center of gravity.
- If the container were in the upper position on a stack train, it could topple on a curve and cause a derailment. It only takes one derailment to cause millions of dollars of damage.
- The ocean carrier must indemnify the railroad...not the shipper.
- Shipper must be forthcoming regarding lading, weight, etc.

* see Appendix C for the letter of agreement between OOCL and Ag shippers using intermodal.

These, and other issues, strongly suggest that standards, policies and procedures be developed for this logistics channel of trade.
VI. Education and Collaboration
Education and Collaboration

To further soybean container shipping, the participants in the channel need to be educated on its benefits, requirements and what forms of collaboration are necessary.

*Educational points:*

❖ Soybeans represent beneficial lading to carriers:
  - Soybeans are dense freight... approximately 50 lbs. / cubic ft.
  - Containers can be loaded with bulk soybeans in less than 1 hour
  - Soybeans are essentially a damage-free lading
  - Their valuation is modest...approx. $4,000 per TEU
  - Containers can be turned quickly at destination
  - Soybeans are a dry Ag product and containers can be easily cleaned

❖ Because soybeans can be stored, they offer a year-around sales opportunity resulting in ocean container re-loads.

❖ New soybean destinations will become available as US outsourcing shifts to new origins in Asia.
New origins for soybean shipments will become available as the ocean carrier consignees open new distribution channels. Arcadia, WI/Ashley Furniture/Zim Lines are a recent example that benefited soybean exports.

**Collaboration points:**

- Carriers may be aware of soybean sales opportunities from their overseas offices. Partnerships with originators and trans-loaders are possible, providing enhanced shipment volumes.
- Immediate pricing concessions by ocean-carriers can generate additional volumes of soybean shipments, addressing short-term empty container inventory issues.
- Simplify, Standardize and Automate (SSA) business processes.
- Quarterly business reviews between ASA/USB and key ocean carriers.
- Measurement and continuous improvement to minimize additional cost, maximize efficiency and security.
- Promote shipment visibility through information sharing.
- Take advantage of technology, i.e. EDI, automated documentation and online B/L etc., to reduce business cost and improve service.
VI. Path Forward
Path Forward

Recommended Phase II considerations:

✎ Assist intermediaries in developing negotiating leverage
✎ Help develop the most efficient U.S. soybean container physical network
  • trans-load sites
  • container weight restrictions
  • railroad interface
  • freight forwarder network
✎ Develop container shipment standards, policies & procedures
  • bulkhead installation, free time, clean out requirements/process, etc.
✎ Analyze potential for 3rd party (or overarching 4th party) management of soybean container exports
✎ Evaluate hopper car/West Coast trans-load logistics (see slides ahead)
Path Forward

Recommended Phase II considerations (cont’d):

- Determine issues surrounding rail car availability
- Consider opportunities afforded by emerging container imports into Houston area...Wal-Mart, et. al. imports. See slide ahead.
- Consider opportunities to barge containers from upper midwest to USG ports for containership export (Osprey Line – a container-on-barge operator - recently completed a 750 TEU move in 15 barges from Memphis to New Orleans and Houston).
  - Osprey has just purchased 19 acres on Cedar Bayou in the Cedar Crossing industrial development just east of Houston as part of its plans to develop a container trans-loading facility.
- Develop a container management information system using PIERS data at the transaction level. (PIERS can report at container level by commodity by destination).
Phase II analyses

Study bulk railcar to LA - trans-load - dray to dock

This option would be compared to moving, for example, containers direct from Joliet.
Phase II analyses (cont’d)

Study bulk railcar to PNW – trans-load - dray to dock

- trans-loader
- Hopper car
- Elevator

This option would be compared to LA port move and to bulk vessel PNW ocean move.
Wal-Mart is building a 4 million s.f. DC near Houston to avoid container inbound congestion at LA/LB ports. Repositioning of containers from the USG will likely be an emerging issue!
Exhibit A ~ Carrier Contact Information
Ocean Carrier Contacts

- **CP Ships** ~ Tom Gruel, Sales Manager -- **630-971-7004**
  - ~ Shelton Scott, Sales Manager -- **630-971-7001**

- **OOCL** ~ Mike Gismondi, Reg’l Sales Director, Midwest -- **773-399-6228**
  ~ Edward Zaninelli, VP Transpacific
  ~ Michael Checchi, Director Intermodal for OOCL

- **CMA-CGM** ~ MJ Dornfeld, VP Sales, Western US -- **562-377-0811**

- **Hanjin Shipping** ~ Richard Nuzzi, Regional sales manager-Export trade

- **Maersk** ~ Chris Nordstrom, Export Account Executive -- **206-461-1229**

- **Zim Lines** ~ Dan Sutton, Midwest Sales Manager. -- **847-671-7999**

- **China Shipping** ~ Joseph Alagna, VP Sales. -- **201 490-8622**

- **Yang Ming Lines** ~ Chris Wimberly, AVP Exports-Midwest -- **630-572-5724**

- **APL** ~ Steve Licursi, Director of Pricing, Transatlantic Trade. -- **973-522-3451**
  ~ Carolyn Almquist, Director of Pricing, Transpacific Trade. -- **510-272-7850**
  ~ Geir Sylte, Sales Representative. -- **206-933-4560**

- **K-Line** ~ Todd LeSage, Sales Representative -- **630-599-2346**
Exhibit B ~ Shipping Seasonality
Soybean Export Shipping Seasonality

The global seasonality pattern varies somewhat by destination.

Source: US Census Bureau, PLC analysis