Welcome to the
State of Freight

Theodore Prince
9th Annual Intermodal Freight Conference
Memphis, Tennessee
December 10, 2015
Tiger Cool Express LLC

• Asset-based provider of temperature-controlled intermodal transportation

Intermodal transportation

• Established in 2013
• A privately held company led by highly experienced management and private equity backing

State of the art assets

• Brand-new 53-foot refrigerated container fleet meets all CARB requirements
• Telematics enable real time track and trace and complete refrigeration control

Sustainable door-to-door value

• Nationwide operating network offering intermodal benefits
• Centralized business model with single point of contact

Temperature-controlled intermodal for sustainable advantage
Framing Our Discussion

- Freight Modes
- M&A
- Energy
- Intermodal

Issues
Mergers & Acquisitions

• Mergers and acquisitions are big news – again
Mergers & Acquisitions

- 3PL M&A market is currently driven by the desire to become:
  - Multimodal
  - Vertical expansion
  - Strong technology
  - Global

- Logos: FedEx, Kintetsu World Express, UPS, XPO Logistics
Mergers & Acquisitions

- Ocean merger activity

- Legacy no more
  Bidders from spectrum extremes

- COSCO and China Shipping into one

- Korean government solving the 2:1 issue?
Mergers & Acquisitions

• Railroads

CPR - NS
• One-off?

CN-CSX
• Matching pair?

BNSF and UP
• Will they stand by?
Mergers and Acquisitions

• Questions

How big is too big?
- RJR Nabisco (1987) was $25 billion
- TXU (2007) was $32 billion

Regulatory issues
- Penn Central, UP-SP, Conrail-CSXT-NS

Competition Conditions
- Maersk – PONL
- Fritz – Intertrans

Integration
- Airlines (too many to mention)
Energy and Transportation

Figure 2.0 Primary Energy Consumption by Source and Sector, 2008
(Quadrillion Btu)

Supply Sources

- Petroleum¹: 37.1%
- Natural Gas²: 23.8%
- Coal³: 22.5%
- Renewable Energy⁴: 7.3%
- Nuclear Electric Power: 8.5%

Demand Sectors

- Transportation: 27.8%
- Industrial⁵: 20.6%
- Residential and Commercial⁶: 10.8%
- Electric Power⁷: 40.1%

1. Petroleum
2. Natural Gas
3. Coal
4. Renewable Energy
5. Industrial
6. Residential and Commercial
7. Electric Power
Energy

Description: Crude Oil (petroleum), simple average of three spot prices, Dated Brent, West Texas Intermediate, and the Dubai Fateh, US Dollars per Barrel

Unit: US Dollars per Barrel

Production Output

Cargo Handled
# Railroads Viewed through BCG Model

- **The world one year ago**

<table>
<thead>
<tr>
<th>Profitability</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Crude and Coal</td>
</tr>
<tr>
<td>Low</td>
<td>Intermodal</td>
</tr>
</tbody>
</table>

- **The world today**

<table>
<thead>
<tr>
<th>Profitability</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>🚫 <strong>Crude, Coal</strong>, Grain, Chemicals, Auto</td>
</tr>
<tr>
<td>Low</td>
<td>Intermodal</td>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Boxcar</th>
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<tr>
<td>High</td>
<td></td>
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<tr>
<td>Low</td>
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</table>
Ocean Shipping

US crude storage at 80-year high of 490 million barrels

- OPEC: “The build in global inventories is mainly the result of the increase in total supply outpacing growth in world oil demand,”

Reduced onshore capacity driving storage at sea

- Daily VLCC charter rates from $20,000 to $110,000

Sovereign wealth funds had $7.1 trillion in assets in March 2015.

- $4.29 trillion came from oil and gas sovereign wealth funds
Environment

- Energy and environment
Intermodal Overview

- The “perfect storm”
- Collapse in fuel prices
- Increased supply of trucks
- Reduced shipment demand
Intermodal Economics

- How does intermodal “beat” truck?

High fixed cost
- Rail networks

High variable cost
- Truck linehaul

Low fixed cost
- Tractors

Low variable cost
- Rail linehaul

Tradeoffs
Intermodal Modal Competition

- Intermodal viability is closely correlated to fuel prices
Intermodal Modal Competition

![Graph showing Door-to-Door Intermodal as % of Truck vs. Door-to-Door Miles for different price points.]

- $3.00
- $4.00
- $5.00
- $6.00
Competitive Economics

- Intermodal advantage is currently offset by truckers’ ability to price at marginal (cash) expense levels short-term.

### Bakersfield, CA - Newark, NJ - Riverside, CA

**Pro Forma Cost-per-Mile**

<table>
<thead>
<tr>
<th></th>
<th>Cash CPM</th>
<th>Non-Cash CPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermodal COFC</td>
<td>$1.23</td>
<td>$0.07</td>
</tr>
<tr>
<td>Company Truck</td>
<td>$1.45</td>
<td>$0.43</td>
</tr>
<tr>
<td>Owner Operator</td>
<td>$1.94</td>
<td>$0.96</td>
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</table>

Intermodal cost advantage has been temporarily eliminated.
Intermodal Common Wisdom

Intermodal Slam Dunks

Dumping case would kill intermodal growth

Fuel prices will always rise

HOS would supercharge intermodal growth

The trade tsunami will continue
Reliable Dray Capacity

• Intermodal conversion is asymmetric impact of customer dock delay on drayage.
  – Draymen won’t accept what owner operators will.
The Ocean Inland Intermodal Dilemma

• Quantifying the North American problem

Ocean linehaul cross-subsidizes inland intermodal services unique to North America

Ocean Carrier Marginal Revenue – Marginal Cost

Ocean: China-USWC
Rail: USWC-Memphis
SDD: Memphis-Millington
Chassis

Source: TPLLC