Freight Market Perspective

*Survival of the Smartest: Freight’s New Competitive Frontiers*

2H 2015
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- Corporate Strategy
- Organic / Inorganic Growth Opportunities
- Operating Model and Technology Strategies

**Tactical Consulting**
- Implementation Support of Strategic Initiatives
- Sales and Operations Management
- Personnel Enablement

**Freight Analytics**
- Yield Management Framework Development
- LTL Data Analytics and Pattern Identification
- New Service and Market Pricing Guidance

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Happenings in the Freight World

What’s Ahead for the Freight Market

Survival of the Smartest
Economists have been unwavering in expecting only moderate growth out of the economy, as positive domestic indicators have buoyed the tumultuous recovery that we’ve seen abroad.

**US GDP Growth Outlook**

- Forecasts are anticipating growth for the third and fourth quarters at 2.7% and 2.8%, respectively, potentially adding demand pressure to the already tight capacity market.
- Barring any major shocks to the economy, the International Monetary Fund is projecting GDP growth to reach 3% in 2016.
- Economic forecasts for the coming quarters are buoyed by anticipated increased in personal expenditures (expected to rise by 1.5% for 2015).
- Citing employment pressure stemming from payroll gains, economists have revised unemployment forecasts down to 5.3% from 5.4%, despite reduced expectations that employers will be adding workers.

*Source: Bureau of Economic Analysis, Reuters, International Monetary Fund*
The US economy has continued to show modest growth, benefitting from continuously improving unemployment rates and consumer confidence levels that have injected demand into the marketplace.

Source: Bureau of Economic Analysis, University of Michigan
While the economy has positive indications from unemployment levels and consumer confidence, industrial production and inventory levels have the potential to bring dark clouds to America’s strong GDP growth.
Slumping Chinese import volumes and manufacturers right-shoring their operations have relieved the West Coast of some pressure, though 3PLs and shippers are still looking for ways to mitigate supply chain risk.

Source: Bureau of Economic Analysis

Trade Imbalance $55,627

Trade Imbalance $43,839
Increasing transportation costs, time zone alignment and speed to market advantages have catalyzed Mexican, Canadian and Central American manufacturing, helping to counter-balance Chinese trade growth.

Source: Bureau of Economic Analysis
The massive supply chain impact our nation felt from relying too heavily on the California ports as the primary gateway into our nation has driven shippers to consider other means of importing their materials.

### Impact from the Port Strikes

- In 2014, the National Association of Manufacturers estimated that a five-day stoppage in port operations would cost America $1.9B daily.
- Total cost to retailers, including rerouting and carrying costs, were estimated to top $7B in 2015.
- Washington apple exporters estimated that almost $100M of apples spoiled as a result of the port strikes and not being able to shipped to other markets or processors.
- In February, BNSF, the largest truck-rail carrier cut reduced weekly train departures from 60 to 30, or roughly 7,500 shipments.
- The North American Meat Institute calculated weekly loses of $85M due to exports sitting in freezers in California, rather than being delivered to buyers abroad.

### Panama Canal Expansion: Present and Future

After the expansion, the canal will be able to handle ships with up to 13,000 TEUs, more than doubling the current limit of 5,000 TEUs.

<table>
<thead>
<tr>
<th>January</th>
<th>January 2015</th>
<th>January 2014</th>
<th>Volume difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>529,427</td>
<td></td>
<td>685,550</td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th>February</th>
<th>February 2015</th>
<th>February 2014</th>
<th>Volume difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>502,663</td>
<td></td>
<td>559,786</td>
<td>156,123*</td>
</tr>
</tbody>
</table>

*Volume difference between '14 and '15

Source: Panama Canal, Port Websites, Transport Topics, Wall Street Journal
The West Coast port strikes impacted domestic supply chain on unprecedented levels, compelling nearly all manufacturers and retailers to rethink supply chain strategies and evaluate opportunities for diversification.

**How Affected Were You By LA/LB Congestion?**

- **We Have Been Significantly Affected:**
  - Manufacturers: 49%
  - Retailers: 60%
- **We Have Been Moderately Affected:**
  - Manufacturers: 46%
  - Retailers: 39%
- **We Have Not Been Affected At All:**
  - Manufacturers: 2%
  - Retailers: 1%
- **Uncertain:**
  - Manufacturers: 2%
  - Retailers: 1%

**How Does / Will Your Volume Be Split by Each Coast?**

- **Today:**
  - East Coast: 60%
  - West Coast: 40%
- **Goal:**
  - East Coast: 39%
  - West Coast: 61%

Source: American Shipper, March 2015
Continuous growth in tonnage levels from 2009 have led to record levels of freight being moved so far in 2015, lending carriers the upper hand in negotiations as the value of their capacity has consistently climbed.
Since 2009 the growth of carriers’ core operating expenses (excluding fuel) have increased at a rate faster than most carriers’ revenue, challenging their ability to generate strong profits despite tonnage growth.

Changes In The Carrier P&L Since 2009

- **Parts**: 14%
- **Tires**: 50%
- **Trailers**: 18%
- **Tractors**: 11%
- **Drivers**: 16%
- **Revenue**: 11%

High demand, increases in raw materials and regulatory compliance has forced heavy increases in trailer costs.

Regulation compliance and more sophisticated tech has driven up costs of new tractors.

Despite rising costs, carriers have only seen 11% growth in revenue.

Source: University of North Florida
Despite high initial costs, dimensioners have helped LTL carriers gain better visibility and knowledge of the costs in their network to augment low profit margins and ultimately, carriers’ return on invested capital.

**How Carriers are Benefitting**

- Capturing otherwise lost revenue from misclassified shipments that aren’t inspected (some report payoffs as quickly as 20 days)
- Greater ability to profile customers and types of freight to better gauge freight costs
- Better knowledge of freight moving in their networks, along with a greater understanding of how that freight impacts margin levels
- Ability to more intelligently price freight based on historical profit data and how it operates within your network today

**How 3PLs are Benefitting**

- Ability to engage carriers as a partner with their margin in mind though improved profit visibility
- Improved chances of passing on increased shipment costs due to improved W&I documentation, such as pictures
- Improved shipper relationships due to the educational conversations that must occur when discussing W&I issues

*LTL Carriers Using Dimensioners Today*:

- SAIA
- ESTES
- Old Dominion
- SHIFT
- A.Duie Pyle
- YRC
- Pitt Ohio
- Roadrunner
- Dayton Freight

*Not a comprehensive listing of carriers using dimensioning technology
Source: Transport Topics, Company News Releases, CarrierDirect Research

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The Coyote acquisition showcases the strategic impact that technology and a best-in-class brokerage create in optimizing an asset network and capturing synergies through enhanced customer offerings.

**Tech is King**
- Coyote’s best-in-class truckload technology grants UPS access to purchased transportation to better manage costs during peak season.
- Post-integration, Coyote’s tech will enable improved network management for UPS enterprises.

**Asset Network Optimization**
- Leveraging Coyote’s truckload density will help UPS to limit backhaul and deadhead miles and in their asset fleet.
- In turn, Coyote can now offer a superior service-level product at highly competitive rates to shippers.

**Transportation is Agnostic**
- Carriers’ relationship with Coyote will continue to evolve due to their strategic, network-based platform.
- The value of capacity won’t change, meaning Coyote will continue to provide purchased transportation to LTL carriers.

How Coyote’s acquisition will shape the industry over the coming years.
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The United States will begin to see a major, systemic shift in freight flows across the nation as shippers attempt to mitigate their supply chain risk and improve supply chain efficiency, speed and performance.

- ** Strikes expose supply chain risk from low diversification
  - An estimated 500,000 shipments stopped at the Calif. ports paralyzed supply chains across the nation.

- ** Manufacturers deciding to right shore their operations
  - Faster speed to market, similar labor costs and time zone alignment is driving manufacturers to move operations.

- ** Panama Canal expansion and increased throughput
  - Once complete, Post-Panamax vessels with up to 13,000 TEUs can use the canal, doubling current capacity.

- ** Lower transportation costs through ‘vacuum’ markets
  - Shippers who divert freight to ‘vacuum’ markets will capture extra cost savings and improved service levels.

- ** Ability to handle larger ships and in turn, more freight
  - Ports have already expanded so they can handle Panamax ocean vessels.

- ** Increased trade with Mexico and ease of execution
  - Industry leaders like Werner, ProTrans and DHL are greasing the tracks for easier commerce with Mexico.

Despite the factors not in their favor, the California ports will continue to grow, albeit slower than peers.

Source: Transport Topics, Company News Releases, CarrierDirect Research

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Though truckload rates aren’t expected to take large hikes unless annual GDP growth exceeds 2.5%, the overarching reality is that while capacity may ebb and flow in the short-term, it won’t loosen up for 5+ years.

Factors Impacting Capacity

- **Driver Pay**
  - **What it is**: Low pay doesn’t motivate young people to get CDLs
  - **Why does it matter**: Aging driver population isn’t getting reinforcements
  - **Who will it impact First**: Carriers / Shippers / 3PLs

- **HOS Restart Rule**
  - **What it is**: Highway bill may not push back HOS restart rule
  - **Why does it matter**: Less road time could limit capacity by 1-3%
  - **Who will it impact First**: Carriers / Shippers / 3PLs

- **ELDs**
  - **What it is**: Legally mandated electronic logging devices
  - **Why does it matter**: More regulation; new costs for owner ops / small fleets
  - **Who will it impact First**: Owner ops / small fleets

- **Hair Drug Testing**
  - **What it is**: DOT mandated hair drug testing for Class 8 drivers
  - **Why does it matter**: Hair testing is 5-10x more accurate than urine testing, meaning more drivers could be caught
  - **Who will it impact First**: Owner ops / small fleets

- **Platooning**
  - **What it is**: Wirelessly linked trucks forming road trains to boost fuel efficiency
  - **Why does it matter**: Enables carriers to grow margins and reinvest in themselves
  - **Who will it impact First**: LTL carriers / large truckload carriers

- **Twin 33' Trailers**
  - **What it is**: 33' pup trailers for LTL carriers
  - **Why does it matter**: Twin 33s have 24.5% more feet than a dry van
  - **Who will it impact First**: LTL carriers / large truckload carriers

- **Autonomous Trucks**
  - **What it is**: Trucks with advanced autopilot features and safety features
  - **Why does it matter**: More driver downtime so they can perform more tasks and earn more
  - **Who will it impact First**: Large truckload carriers

- **Carriers’ Brokerages**
  - **What it is**: Carriers growing their capacity offering with their brokerage groups
  - **Why does it matter**: Strong carriers will eat market share and manage asset capacity better
  - **Who will it impact First**: Truckload carriers

- **Mexican Carriers**
  - **What it is**: Mexican carriers can now apply for US authority
  - **Why does it matter**: May bring more capacity into the market
  - **Who will it impact First**: Owner ops / small fleets
The information about a shipment is now more important than the shipment itself as the strategic importance of supply chain efficiency grows and the costs associated with poor execution are magnified.

### Negative Impacts of EDI on Carriers
- Complex tariffs lead to long wait times before customers can implement new pricing
- Increased likelihood of billing errors due to mistakes made when loading pricing

### Negative Impacts of EDI on 3PLs
- Complex pricing agreements result in inflated costs from loading and managing the pricing agreements
- Manual management creates high administrative and maintenance costs

### Why API (web services) is Better
- Pricing is accessed directly from the server, also limiting billing issues
- Enables access to volume LTL pricing and capacity so 3PLs can capture discounted lanes better

### Rating Bureau
- (manual entry, not EDI)
- EDI 204s infrequently contain all shipment info needed to effectively plan for pickups
- Seconds matter, but EDI dispatches can be delayed by 5-120 minutes

### Dispatching
- Customer service suffers from poor shipment status visibility
- Reps compensate for stale EDI data by calling and emailing carriers for updates more frequently

### Tracking
- Reps don’t trust EDI status updates due to the delay, leading them to call carriers to check on shipments, rather than booking more freight or calling shippers

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Source: Transport Topics, CarrierDirect Research

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Now that Uber has claimed its first casualties with traditional taxi service providers, it's rather clear that Uber (or another tech company) will add transportation to the list of industries its already disrupted.

### Industries Already Impacted

<table>
<thead>
<tr>
<th>Taxi Services</th>
<th>Valet Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Ticket Revenue</td>
<td>Car Sales Volume</td>
</tr>
<tr>
<td>Car Repair Cost</td>
<td>Oil Demand</td>
</tr>
</tbody>
</table>

### Future Impacts to Transportation

Potential impacts as Uber approaches conventional transportation will be far reaching.
High returns and the opportunity to leave a mark on a structurally central industry is driving up investment in tech; these are three of the most important companies that will sculpt the future of trucking

**Company Name:** Peloton  
**PE / VC Funding:** Yes  
**What They Do:** Truck technology platform utilizing vehicle-vehicle communication to link trucks  
**Why They Matter:** Platooning can save up to 7% of fuel between the lead and following truck  
**Website:** www.peloton-tech.com

**Company Name:** project44  
**PE / VC Funding:** Yes  
**What They Do:** Provide the fastest real-time data connectivity and offer a Dynamic LTL Pricing Engine  
**Why They Matter:** Information about freight is more valuable than freight itself, plus EDI doesn’t work  
**Website:** www.p-44.com

**Company Name:** Trucker Path  
**PE / VC Funding:** Yes  
**What They Do:** Tech platform that provides navigational assistance, load sourcing and freight tracking  
**Why They Matter:** Both drivers and carriers are drawn to the app because it makes their lives easier  
**Website:** www.truckerpath.com
While new tech platforms are helping to transform how the industry behaves, these established players are showcasing their best-in-class results and operations that continue to disrupt the status quo.

<table>
<thead>
<tr>
<th>What They’re Doing Right</th>
<th>Why They’ll Keep Winning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superior truckload competency has allowed them to create a niche service offering of providing purchased transportation to major LTL carriers</td>
<td>Now that the industry is agnostic, Big Brown’s biggest benefit will be capacity during peak season, but carriers will continue investing in the relationship</td>
</tr>
<tr>
<td>Strong management and culture has enabled the sales force to develop a competency with moving both truckload and LTL freight</td>
<td>New technology from the recent Command acquisition fortifies Echo’s position as a premium truckload provider and modal-dominating 3PL</td>
</tr>
<tr>
<td>Acquiring market share though intelligent and selective engagement of the 3PL marketplace while continuing to be a premium service provider</td>
<td>The momentum will continue as FedEx further masters 3PL engagement and partnership to help balance their network</td>
</tr>
<tr>
<td>Experienced management and asset backed solutions provides a strategic global transportation network, with fully developed 3PL, brokerage and intermodal offerings</td>
<td>Organizational commitment to continued investment in technology, talent and infrastructure. Werner’s re-investment model will continue to deliver customer value</td>
</tr>
<tr>
<td>Sales swagger and a competitive culture has led WWE to dominate SMB market small pack by reselling Big Brown and to become the biggest private LTL 3PL</td>
<td>Expect to see the growth momentum last as WWE expands modal offerings, giving their sales team more ammo and using APIs to gain better data access</td>
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Experienced management and asset backed solutions provides a strategic global transportation network, with fully developed 3PL, brokerage and intermodal offerings. Organizational commitment to continued investment in technology, talent and infrastructure. Werner’s re-investment model will continue to deliver customer value. Expect to see the growth momentum last as WWE expands modal offerings, giving their sales team more ammo and using APIs to gain better data access.
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The future's winners in transportation and logistics will be the companies that can outsmart their competitors by magnifying their strengths.
Broker Freight Like the Best

- Build a brokerage able to compete with the best, then use that density to decrease backhaul and deadhead miles
- Service asset overflow with brokered capacity, rather than aimlessly expanding capacity
- Use asset-light operations to counterweight asset network variability

Intelligently Align with 3PLs

- Create pricing complimentary to asset movement and only give it to a select 3PLs that focus on true partnership
- Give Most Favored Nation status to those 3PLs by adopting a multi-year strategy
- Engage 3PLs to help lower margin by sharing margin and operating information

Ditch EDI

- EDI shipment tenders can take up to 2 hours to be received, adversely impacting perceived performance
- Using EDI for shipment status provides customers with stale data, increasing inbound calls
- Rate requests can’t be logged and stored with EDI, which drastically limits data intelligence
Dynamically Manage Margin
- Understand customer behavior, such as rate elasticity, to harness the opportunity to maximize margin through psychology rather than pricing
- Invest in technology that recognizes shipping patterns to make it easier for shippers to move freight while simultaneously growing profit

Ditch EDI
- Information about freight is now more important than the freight itself, meaning old data negatively impacts margins and increases churn
- Transition away from EDI quickly, since stale data restricts the ability to efficiently allocate resources (e.g. employee time, capital)

Empathize with Carriers
- Start dialogue with carriers to create strategies that balance their network and improve operating performance
- Identify the frivolous day-to-day costs 3PLs contribute to and implement SOPs to lower those costs, such as high inbound call volume to track freight (see ‘Ditch EDI”)