



C L E V E L A N D  
R E S E A R C H C O M P A N Y

---

*The Evolving Transportation/Supply Chain Landscape*

*Trucking Owners Roundtable*

*Tuesday February 7, 2012*

*Mark Davis*

*Senior Analyst/Partner*

*216-649-7207*

*mdavis@cleveland-research.com*

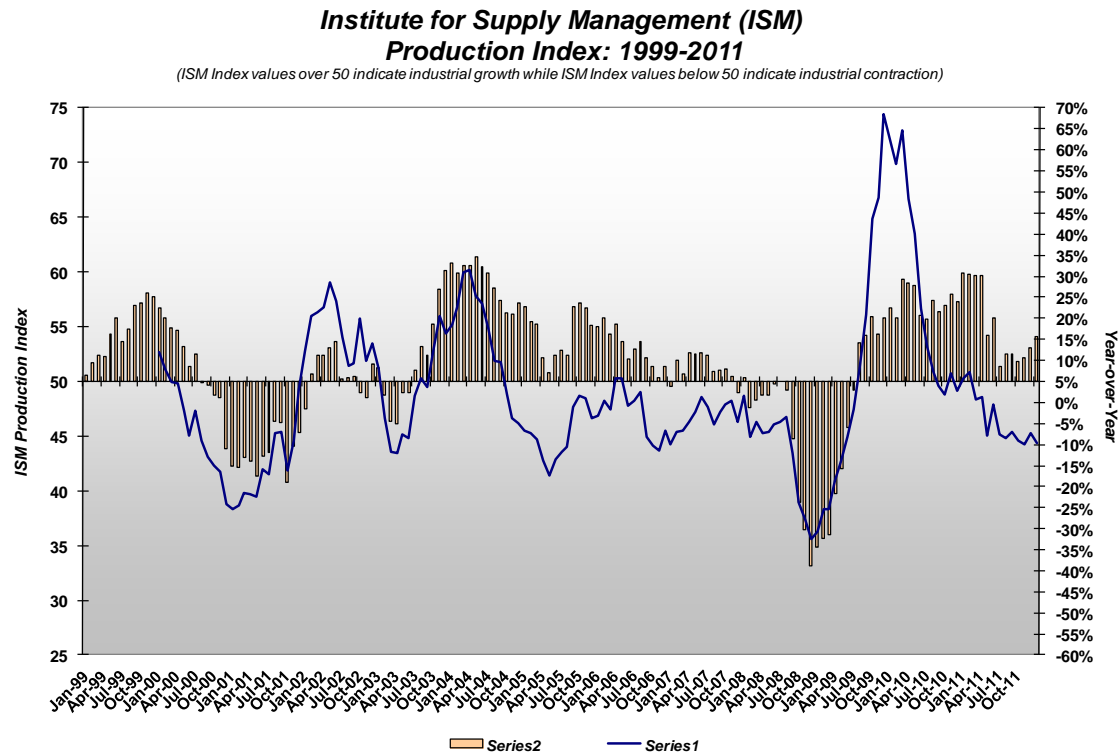
---

*Economic Snapshot:*  
*Is the Economy Improving?*

---

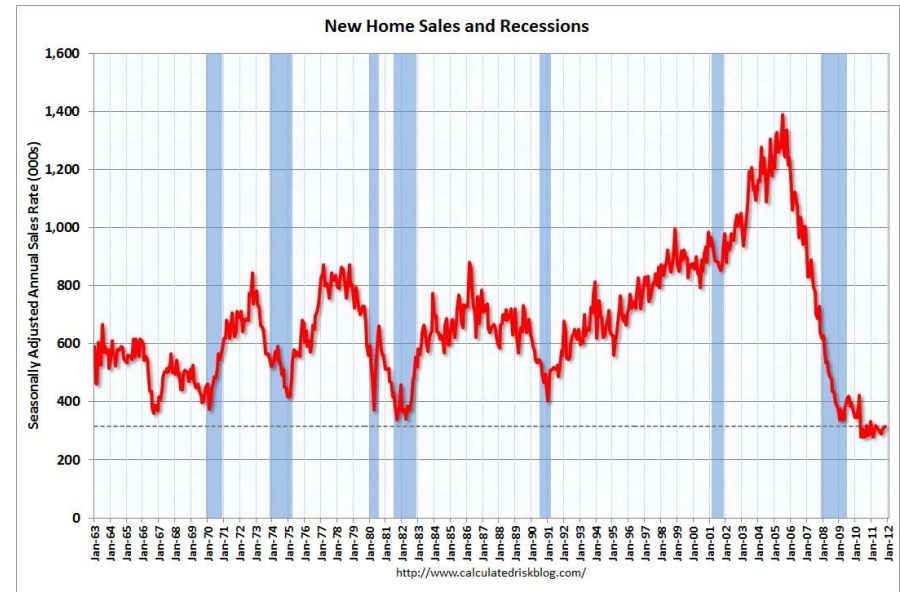
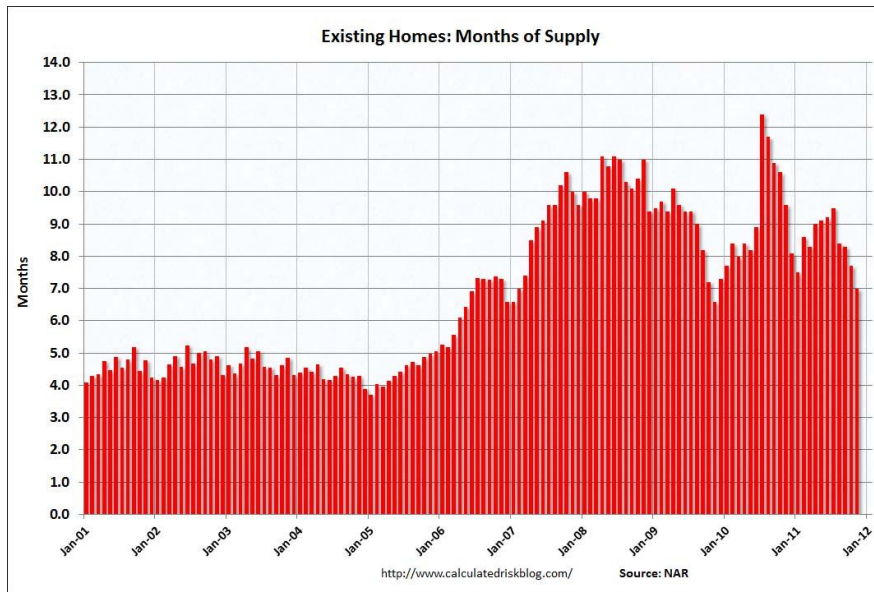
## Manufacturing: ISM In Positive Territory but Growth Remains Sluggish

- Several key domestic sectors trending ahead of expectations (Auto, Industrial, Energy, Residential Rental Construction)
- Key for auto and residential rental will be the availability of credit or government backed financing in order to generate further growth



## Residential Construction: Not Yet on the Road to Recovery

- Existing home inventory remains elevated; inventory probably needs to drop by close to 30 -40% to be inline with historical levels
- Replacement cost still running above existing home prices which makes buying existing and renovating more attractive
- Bloated existing home inventory and tighter lending requirements will negatively impact new home construction and sales despite low interest rates
- If residential construction begins to rebound, we see significant capacity issues in trucking industry



---

*Factors Impacting  
Supply Chains/Trucking*

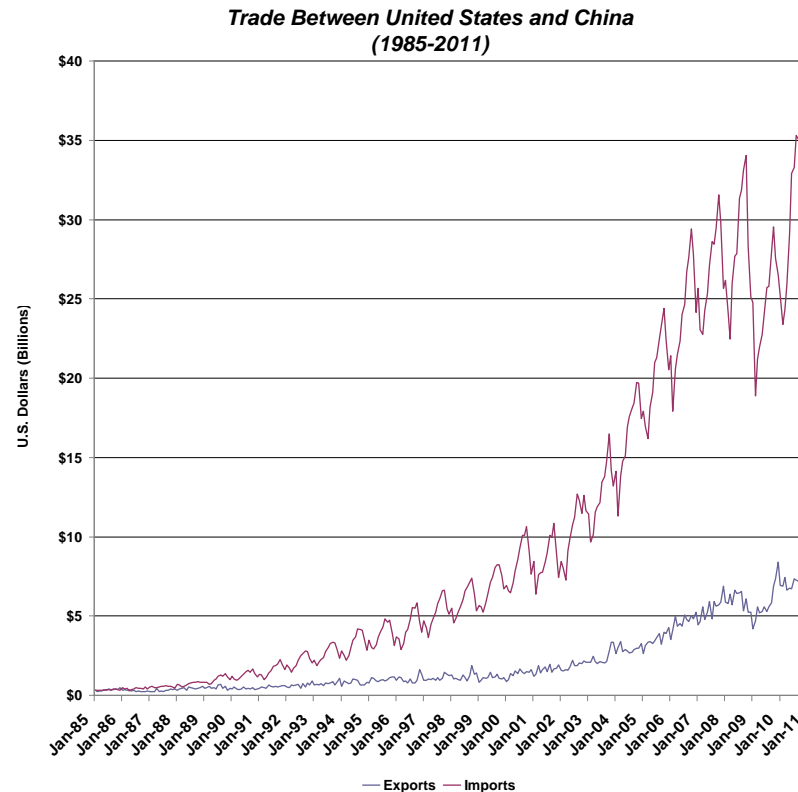
---

## ***Factors Impacting Supply Chains and Trucking***

- *Evolving International/Domestic Sourcing Strategies*
- *Changing Energy Paradigm*
- *Government Regulation*
- *Truck Capacity Issues*

## Evolving International/Domestic Sourcing Strategies

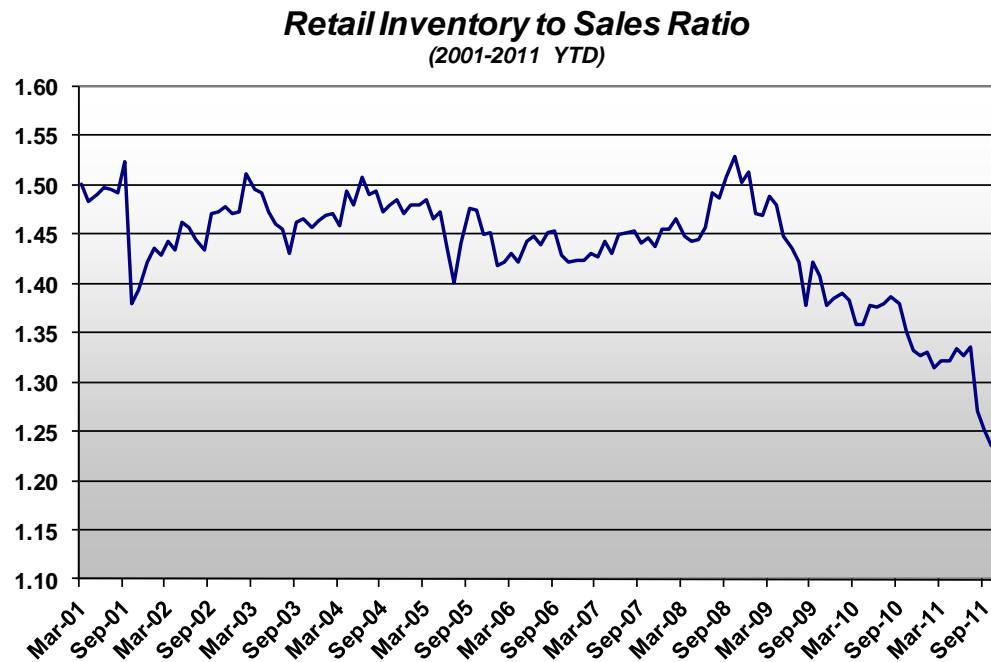
- Supply chains are global as companies develop resource networks that help them access raw materials and cheap labor
- Companies are seeking to gain access to new markets and customers
- Near sourcing activities accelerating as competitive advantages in places like China have run their course much faster than expected



Source: Cleveland Research Analysis, U.S. Department of Commerce

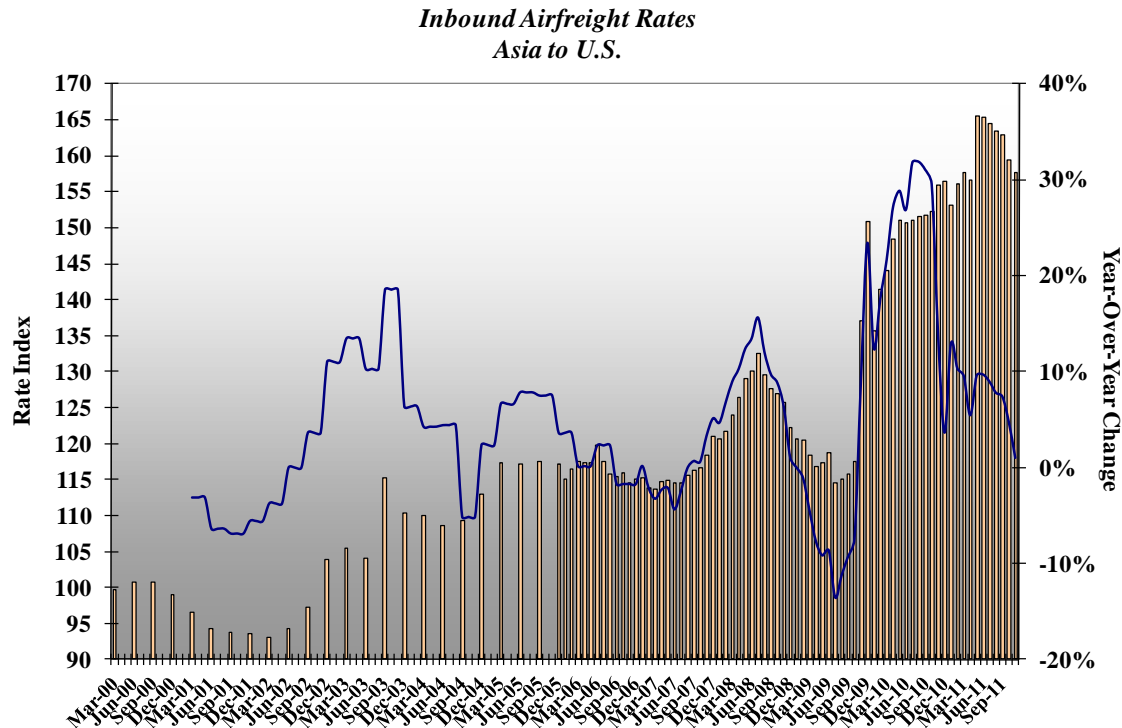
## Evolving International/Domestic Sourcing Strategies

- The 2009 recession drove companies to implement supply chain management strategies that move beyond minimizing transportation expenses
- Control now resides at the senior management level and involves balance sheet/cash flow considerations (inventory, working capital)
- Goal is to lean the supply chain while still being responsive to customer buying patterns



## Evolving International/Domestic Sourcing Strategies

- Lean supply chains increase the velocity of distribution systems
- Shipment size getting smaller, inventory is the enemy
- Driving modal substitution: Ocean → Airfreight, Truckload → LTL, LTL → Small Package; What is next: Ocean/Airfreight → Rail Intermodal?



Source: U.S. Department of Commerce Bureau of Labor Statistics

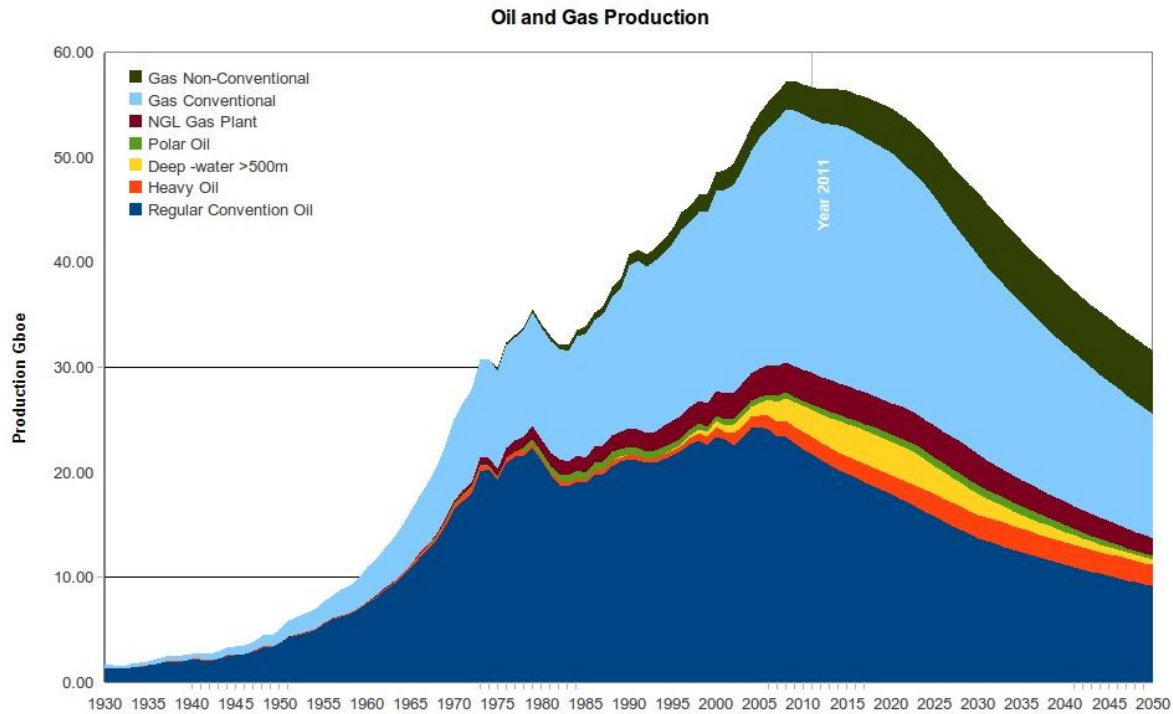
---

# *Changing Energy Paradigm*

---

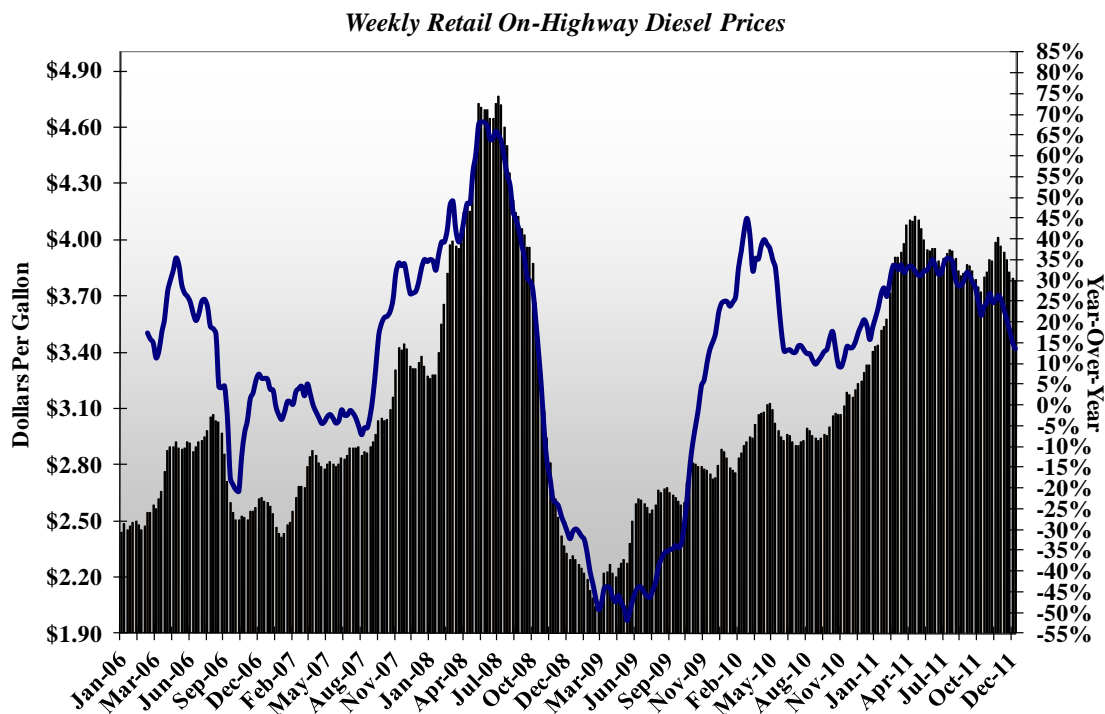
## Changing Energy Paradigm

- “Peak Cheap Oil” a reality as energy companies ramp exploration and development of new sources of energy (natural gas, oil sands, CTL technology)
- Rapidly rising energy costs not only cause supply chain disruptions, but also cause demand destruction (2008, 2011)
- Companies starting to look at near-sourcing as competitive advantages in places like Asia (China) rapidly deteriorate due to inflation



## Changing Energy Paradigm

- We are seeing the impact of “Peak Cheap Oil” on transportation systems as the supply/demand dynamic changes
- We believe the U.S. Government and transportation industry recognize these changes and are adapting to this new reality
- Aggressive regulation of the trucking industry; more favorable treatment of the railroads



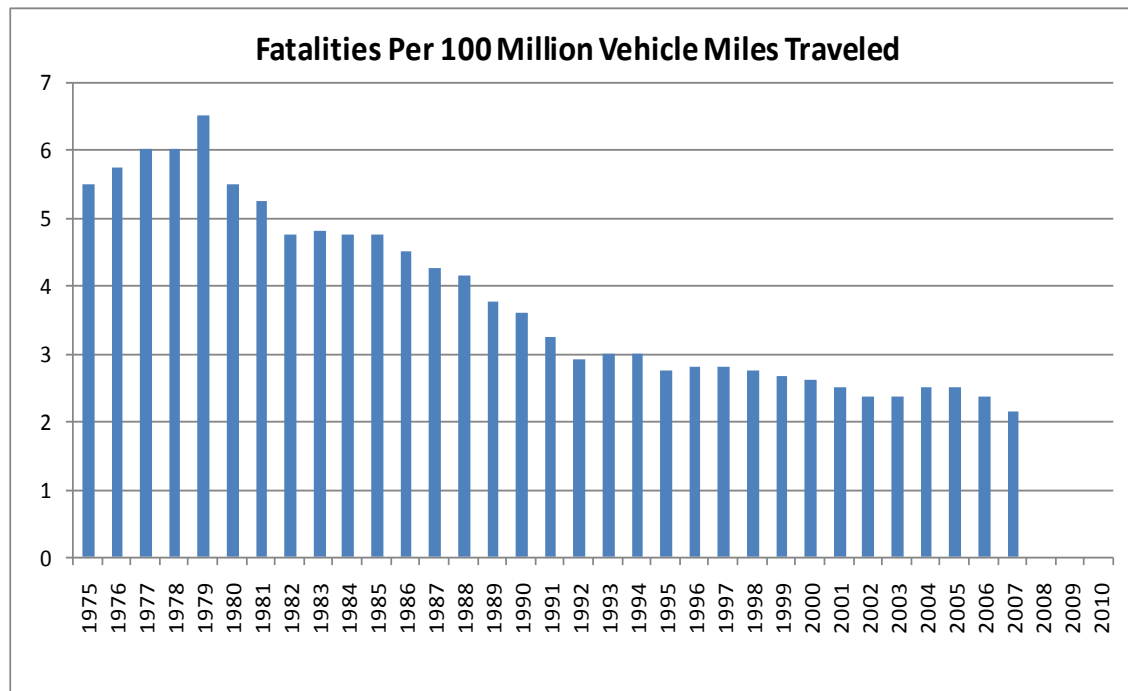
---

# *Government Regulation*

---

## Government Regulation: Trucking

- U.S. Government is implementing several new regulations that will impact the trucking industry over the next couple of years
- Headline motive is safety; we believe long term energy concerns are the real driver
- Carrier reactions to new regulations indicates a fundamental change in the transport markets



## Government Regulation: Impact on Trucking

---

- Trucks are one of the largest consumers of oil (in the form of diesel fuel) in the U.S.
- The trucking industry is highly fragmented (~600k carriers) with the vast majority being owner-operators or small to mid-sized trucking companies operating fewer than 10 trucks

### **Compliance, Safety, Accountability (CSA) Program**

- Targets both carriers (equipment) *and* drivers
- More comprehensive and “real time” monitoring and enforcement of the trucking industry
- Total driver loss estimated to be 10-15% of the existing population
- Smaller carriers will be negatively impacted to a greater degree than large carriers
- Carriers will likely face higher costs relative to driver recruitment, pay, and insurance which will be passed on to shippers
- Shippers/Brokers worried about negligible hiring and litigation exposure are reviewing CSA scores to determine what is ‘acceptable’

### **Hours of Service (HoS)**

- 11 hour driving limit after 10 consecutive hours off duty
- 14 hour driving limit
- 60/70 hour on-duty limit in 7/8 consecutive days (restart only after 34 or more consecutive hours off duty)
- Total reduction in aggregate available capacity (based on hours lost) could reach 10%
- Carriers will be less productive

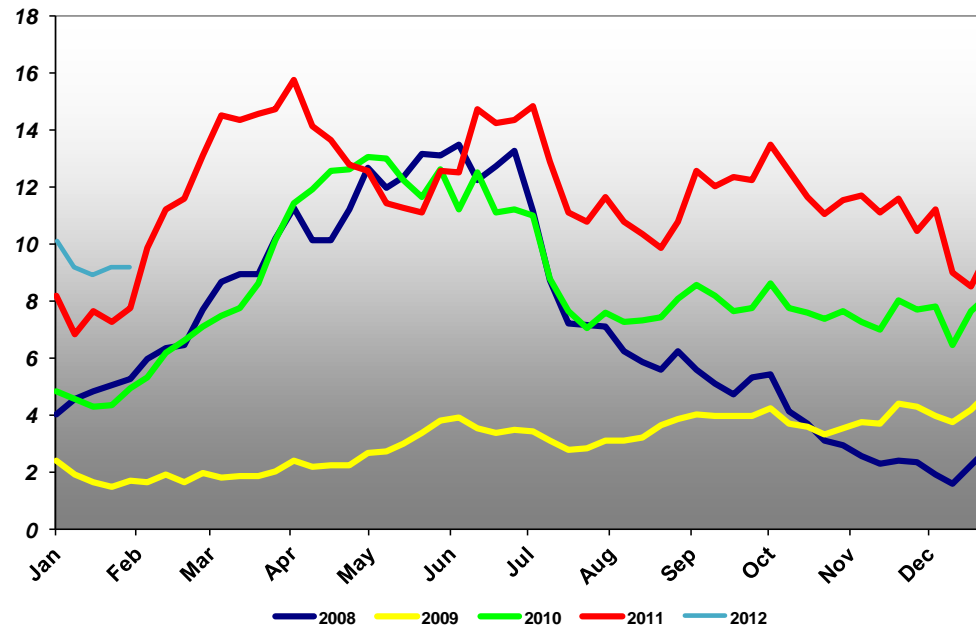
### **Electronic Onboard Recorders (EOBR)**

- Monitoring devices for trucks (details truck operations)
- Requirement of EOBR’s create additional headwinds for small and mid-sized carriers due to expense
- Some O&D pairs may no longer be viable

## Government Regulation: Carrier Response

- Carrier behavior unlike anything seen since deregulation (1980)
- Large carriers have not chasing market share as capacity tightens
- Fleets sizes remain relatively static (ex-replacement) after the 2009 recession due to driver shortage
- Lack of financing sources and rising equipment costs keeping trucks from re-entering the market

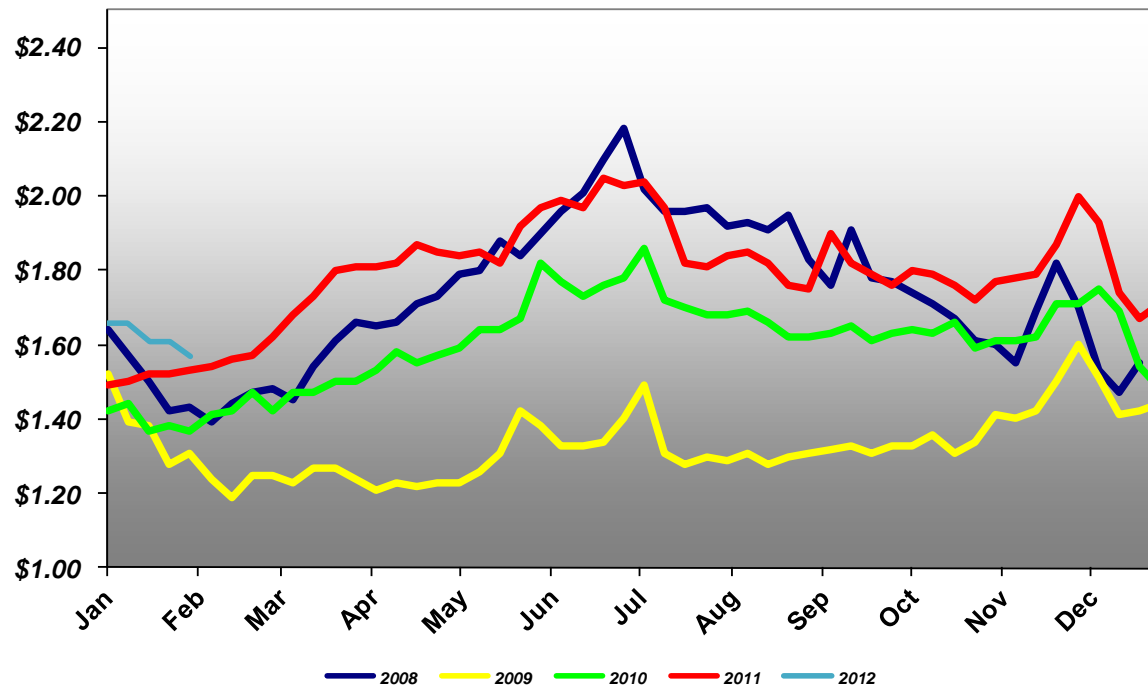
**Freight Market Demand Index**



## Government Regulation: Market Impact

- Van spot rates up 3-5% (ex-fuel) as capacity tightens; we see similar gains in 2012
- Rates could see upside as capacity tightens due to license., registration, and insurance renewals
- Spot rates likely move higher as shippers get more concerned about securing capacity for 2012

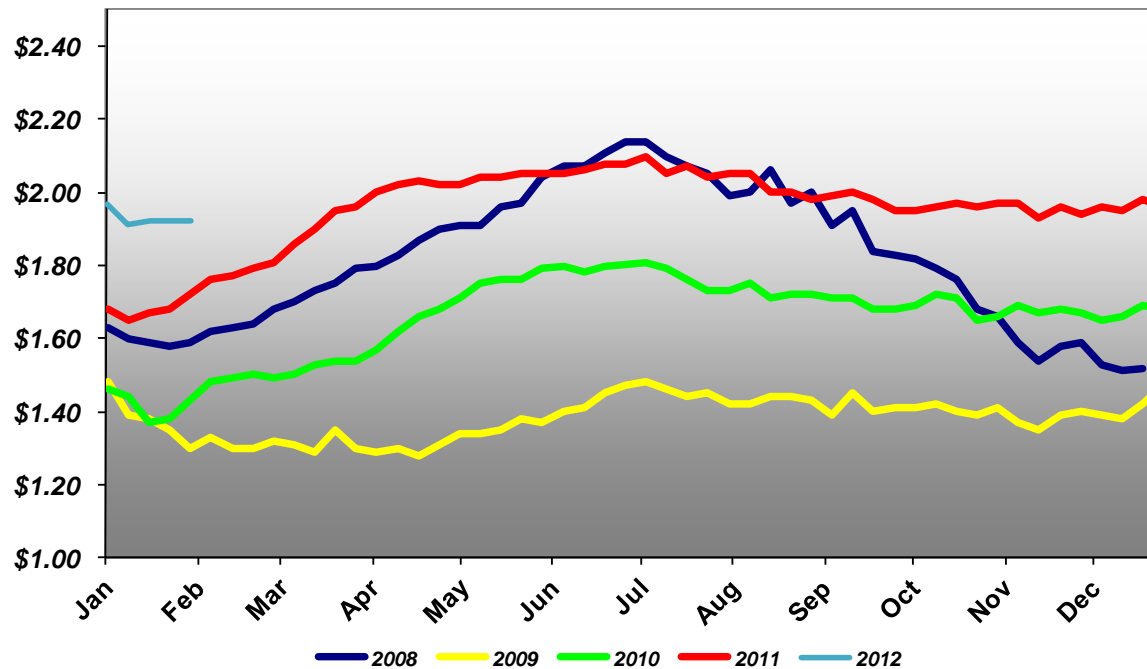
**Dry-Van Spot Rates**



## Government Regulation: Market Impact

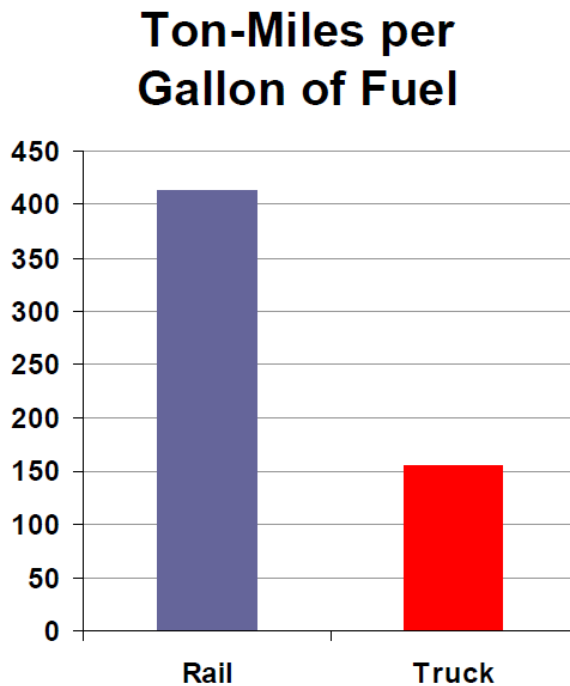
- Flatbed rates have materially improved as capacity exits the market
- Flatbed disproportionately impacted by impending CSA regulations because of extra work needed to secure loads as well as weight and size issues
- Rates likely will see more upside as core end markets continue to improve (commercial construction, energy, government tied to disaster relief)

**Flatbed Spot Rates**

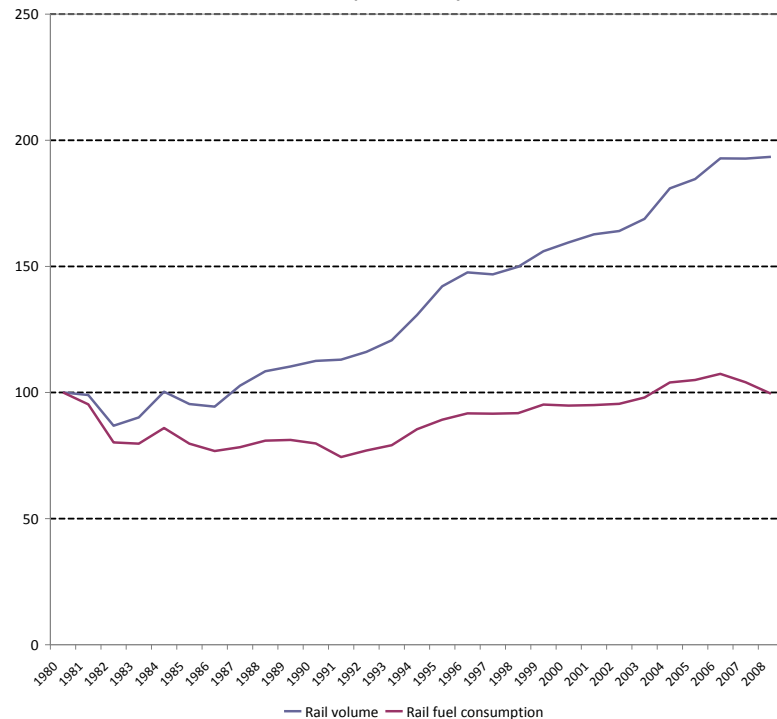


## Government Regulation: Benefit for Railroads

- What drove Warren Buffett to buy BNSF in 2009?
- As the trucking industry faces more regulation, rails stand to haul more volume and gain market share due to modal conversion
- Rails are far more efficient than trucks and have been able to add incremental volume without significantly increasing fuel consumption



**U.S. Rail Volume vs. Fuel Consumption  
(1980-2008)**

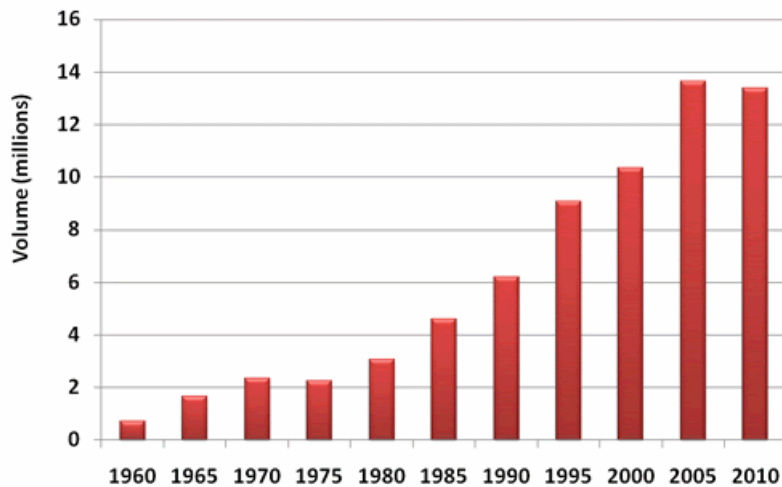


Source: U.S. Department of Transportation

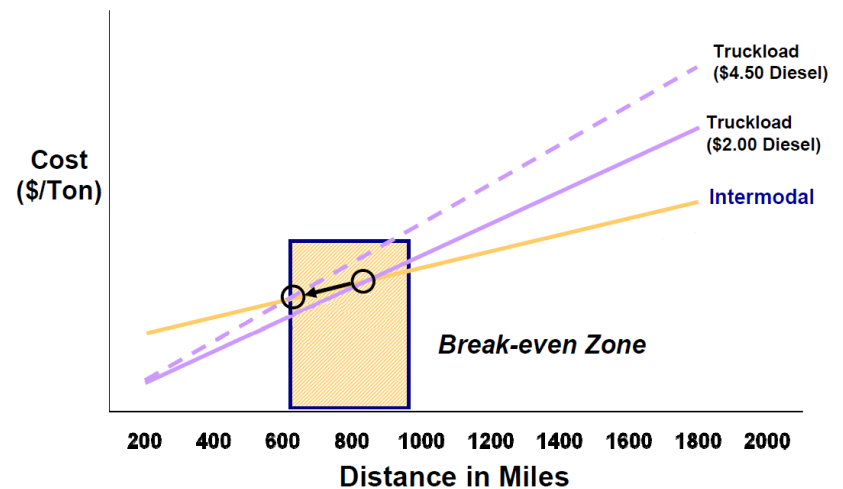
## Government Regulation: Benefit for Railroads

- Growth will accelerate as fuel moves higher and rails tap lane segments below 800 miles (as low as 550 miles)
- Service and fit with shipper supply chains is the biggest inhibitor to intermodal adoption
- Near term: reliability faces headwinds from train crew shortages
- Long term: performance will improve giving shippers a more cost effective and time-sensitive solution for their supply chains

**Total Intermodal Volume  
1960-2010**



**Addressable Market for Intermodal Rail**



---

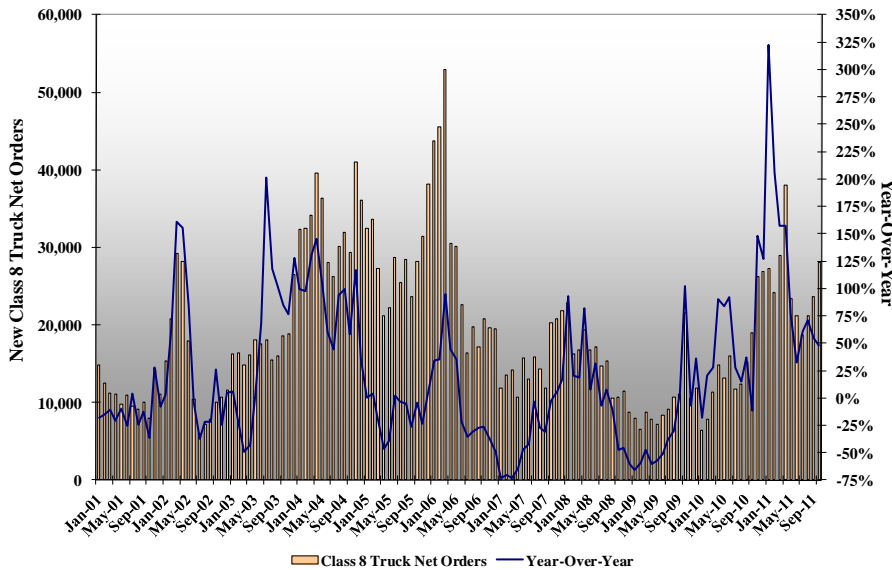
# *Truck Capacity Issues*

---

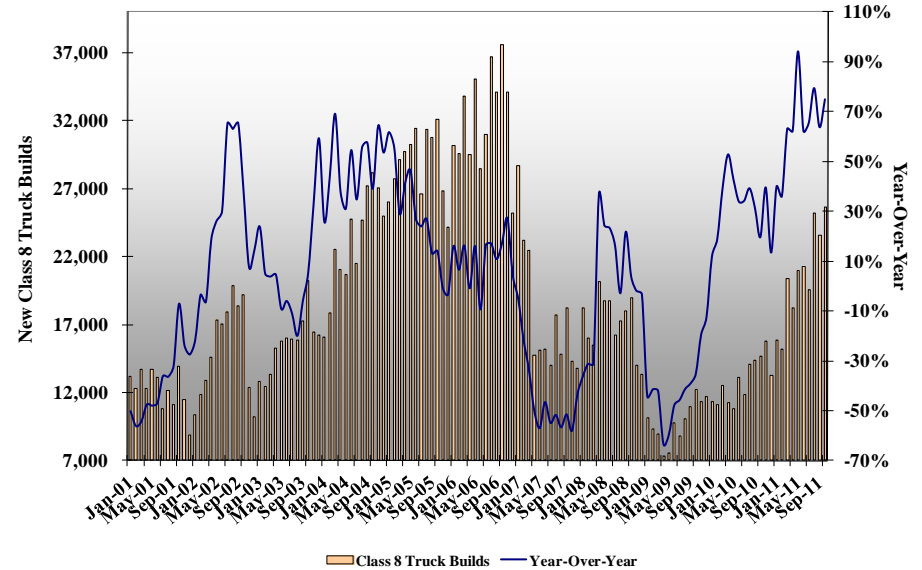
## Truck Capacity Issues: Changing Landscape

- Ongoing evolution of the role of big carriers; no longer placing huge equipment orders with OEMs
- Focusing on yields versus market share
- Tight credit markets making it difficult for owner-operators and small to mid-sized trucking companies to buy new equipment (even replacement)
- Many turning to leasing companies (when possible) for relief

Class 8 Truck Net Orders



Class 8 Truck Builds



### Near Term Outlook

- Restart after Chinese New Year looks muted as inventories remain lean and consumers remain cautious
- Truck (TL and LTL) capacity will continue to tighten and will likely see some cost pressures (driver pay, tires, lubricants, etc.)
- Contract manufacturing outlook for the first six months of 2012 has softened over the past couple of months
  - Total orders and volumes are weaker (down 10-25% year-over-year)

### Long Term Outlook

- We believe supply chains will remain lean as companies look to be more responsive to customer buying patterns
  - Supply chain velocity will increase
  - Supply chain infrastructure will change (more regional versus national as shippers customize products to consumer preferences)
  - Shipper focus will shift to service performance not just price
  - Modal choices will evolve
- Shipper/Carriers relationships will evolve from transactional to more of a partnership which will benefit both sides
  - Shippers will gain access to the capacity they need when they need it
  - Carriers will be able to improve asset utilization which will drive profitability
- Trucking companies that adapt to the evolving market will prosper as rates rise and shippers pay up to secure capacity

## Disclosures



CLEVELAND  
RESEARCH COMPANY

**Other Disclosures:** *I, Mark Davis, certify that the views expressed in the research report(s) accurately reflect my personal views about the subject security(s). Further I certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report(s). The analysts responsible for the preparation of this report have no ownership stake in this company. Cleveland Research Company provides no investment banking services of any type on this or any company.*

*The information transmitted is intended only for the person or entity to which it is addressed. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited.*

*If you received this in error, please contact the sender and delete the material from any computer.*

*Member FINRA/SIPC*



C L E V E L A N D  
R E S E A R C H C O M P A N Y

---

*The Evolving Transportation/Supply Chain Landscape*

*Trucking Owners Roundtable*

*Tuesday February 7, 2012*

*Mark Davis*

*Senior Analyst/Partner*

*216-649-7207*

*mdavis@cleveland-research.com*