The Fertilizer Institute

Current Transportation Dynamics

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Questions

- What will be the cost of fuel, insurance, taxes, and new transportation equipment?
- What will air, rail, truck, barge and ocean freight rates do in the next five years?
- Are barge line, truck lines and railroads taking advantage of the marketplace or just being good businessmen?
- HAVE RAILROADS FOCUSED ON SERVICE TO THEIR CUSTOMERS OR ON THEIR OWN BOTTOM LINE?
- What happened to “common carrier obligation”?
- Can railroads determine which shippers remain competitive?
- Will transportation service improve?
- Should railroads be re-regulated?
- Can US afford the cost of replacing and upgrading highway, water way, port, airport, and railroad infrastructure and security? Can we afford not to make these investments? Who will pay, the taxpayer or customer?

Transportation Facts

- Strong Economic Recovery and huge imports have created record demand for all transportation services.
- Strong demand, high input costs, huge capital needs and mergers have created an environment ripe for hyper rate increases by most transportation providers.
- According to FRA.....”The era of inexpensive transportation is over”.
- Most transportation service reliability is lower than anytime in the past 15 years.
- Transportation providers are (re-)structuring their service offerings in such away that most current customers will have to change their business practices.
- Railroads, truck lines and barge lines do not accept any responsibility for service failures, so industry must make necessary investments.
- Technology has arrived.
- All transportation infrastructure is in urgent need of major investment.
- ETHANOL A PARADIGM SHIFT IN AGRICULTURE.

Railroad Facts

- Seven Class One RR's today versus 31 in 1985.
- In 2005, RR traffic increased by every measure, i.e. cars, tons and ton miles.
- RR's in last fifteen years:
  - Productivity (revenue ton miles per employee) up 70%.
  - Rail car utilization up almost 50% (loads/car/year).
  - Western RR's carloads and ton miles up almost 50%.
  - Traffic density (ton miles per mile of track) up 50%.
  - Total costs up 33%. (From 1980 to 1993 RR cost steady.) Cost of homeland security is big new expense.
  - RR employment down 15% until 2005 then started increasing.
  - RR investment in cars down, but car companies and shippers investment up 30%.
  - AAR reports RR train speed down from 23.5 miles/hour in 1990 to under 19 miles/hour in 2004.
- Farm products (excluding food) least profitable; therefore, has most service and rate exposure.
- Projections are for total freight growth of 43% by 2020.
- To meet this demand, RR's need
  - Infrastructure.
  - Technology.
  - Improved operations.

Railroads Concerns

- Capacity has not kept pace with demand.
- Historical incremental demand met with cushion of excess capacity and productivity gains until recently.
- At capacity in some corridors, such as Barstow to L. A. and Chicago to Nashville and close from Barstow to El Paso.
- Carriers have started to ration limited capacity through price, with some current business activity not being offered renewal options at any price.
- Need billions in additional earnings to take capacity to next level. Wall Street will not support without substantial earnings increases.
- Rates declined 1.3%/year 1980 to 1999….now headed much higher.
- Single car service continues to deteriorate.
- Rail service and rates driving business to trucks.
- RR haz-mat pricing. Hang on…..much higher rates coming.
- RR hopper car availability (car fleet aging).
- RR's increasing all charges for accessorial services: demurrage, car storage, weighing, switching, empty leased rail car moves, etc. (and now finance charges if one does not pay via EFT.) These are becoming a major cost for customers.
- Implementing EFT payment, internet demurrage plans, and internet car billing plans and imposing more responsibility on customers.

Truck Line Concerns

- Capacity has not kept pace with demand.
- Diesel, taxes and insurance costs have increased substantially.
- RRs have cancelled some inter modal contracts and are refusing to renew others. Major truck lines cannot buy enough trucks or hire drivers to handle this additional over the road business. Could present opportunities for back haul truck freight.
- Huge demand for truck freight will push rates (much) higher.
- Interstate highway infrastructure in need of major federal funding of huge projects.
- Some interstate corridors are at or near capacity. California and Missouri are considering diverting trucks from major Interstates and/or restricting hours.
- Federal Highway Administration says highway delays in cities over 1 million population increased 180% in last 15 years.
- Enormous driver shortage, and trying to qualify immigrants.

Barge and Ocean Freight Concerns

- World demand, powered by China, has pushed ocean bulk cargo rates up by over 100% in past 18 months.
- River infrastructure (locks and dams), are in urgent need of renovation/repair. Federal funding for this work is not forthcoming, which will push economic burden to various user groups and to customers.
- More vessels to East Coast both liquid and dry to counter barge and rail rate increases.
- Barge industry is continuing consolidation trend. Rates are market driven but trending (much) higher.
- Price of steel driving costs of new barges, towboats and ships much higher.
- Fertilizer barge rates...does ethanol reduce export corn and thereby barges for backhaul fertilizer?
- River water levels.
- Demurrage rates for barges and ships up and free days down.

Rail Transportation Future

- RRs must increase capacity.
- Least expensive way is to drive shipments to (large) car shuttle trains and improve technology to run trains closer together. Shippers and receivers have a new major market force. RRs learned from coal, this works. Western railroads have nearly 700 coal and 150 grain shuttles running. Estimate that 90 % of all coal and 70% of all grain moved today is in shuttles.
- These dynamics are making some capital assets in the ag industry economically obsolete.
- Projecting total transportation costs is huge task, which we must do to best of our ability.
- Technology is allowing railroads to determine the costs and profitability of all shipments and price them accordingly.

Rail Direct Cost Impact

- Railroads are taking (large) rate increases, especially on single car shipments and move in specific corridors.
- Railroads are building the costs of their own inefficiencies and congestion into their rates.
- Most rail customers have experienced production interruptions due to railroad service failures and had to pay for expedited (truck) shipments.
- Demurrage, weighing, empty leased rail car shipment charges, leased rail car storage, switching, finance and other charges have increased dramatically.
- Poor RR service results in much higher leased car costs. Additional leased cars just congest the system.
- Railcar lease rates up 60% and new rail car costs up 50% in last 24 months.

Rail Indirect Cost Impact

- RR service failures have caused business interruptions and customers have incurred overtime costs to prevent rail demurrage.
- Cost of additional storage to insure against railroad service disruptions.
- Cost of additional personnel (1/2 to 2 people per plant) to control logistics and car movements to insure supply of equipment and products and to audit/input data for RR's to obtain correct (freight) bills.

Barge/Ocean Freight Future

- Northbound dry bulk: New one year contracts up appx. 5%.
- Northbound rates should be appx. $11.50/ton, with a spike in peak season.
- Demand up due to farmer profitability and corn price buying acres for ethanol. Expected to increase corn acres by more than 5%.
- Projecting crude oil price down to $45 to $50/barrel, lowering water transportation costs.
- Longer term barge freight expected to trade near current levels.
- Panama Canal project long term impact on ocean freight and U.S. land transportation.
- Major new investment in ships.
- New barge investment lagging.

Options For Risk Management

- Hedge rail transportation by utilizing pool cars, certificates of transportation, etc.
- Hedge fuel surcharges via futures markets.
- Expand rail track and install faster loading and unloading equipment.
- Add storage at both origin and destination.
- Hedge ocean freight.

Conclusions

- Transportation customers must become efficient shippers and/or receivers of every mode of transportation.
- Shippers and receivers must assume responsibility for their own destiny, without transportation service reliability.
- Railroads need tax credits for certain capital expenditures.
- Railroad re-regulation.....will it happen? Probably, but railroads and their customers need to find a way to make it better for the whole industry and not let government decide our destiny.
- Transportation price and service risk management is a must for customers.
- New infrastructure for rivers, ports and highways are essential for U.S. long term economic health.
- Long term - Panama Canal project will help reduce a stressed transportation system.