



# **2008 NGFA Country Elevator/Feed Industry Conference**

**Dan Mack**

**Chairman: NGFA Rail Shipper/Receiver Committee**

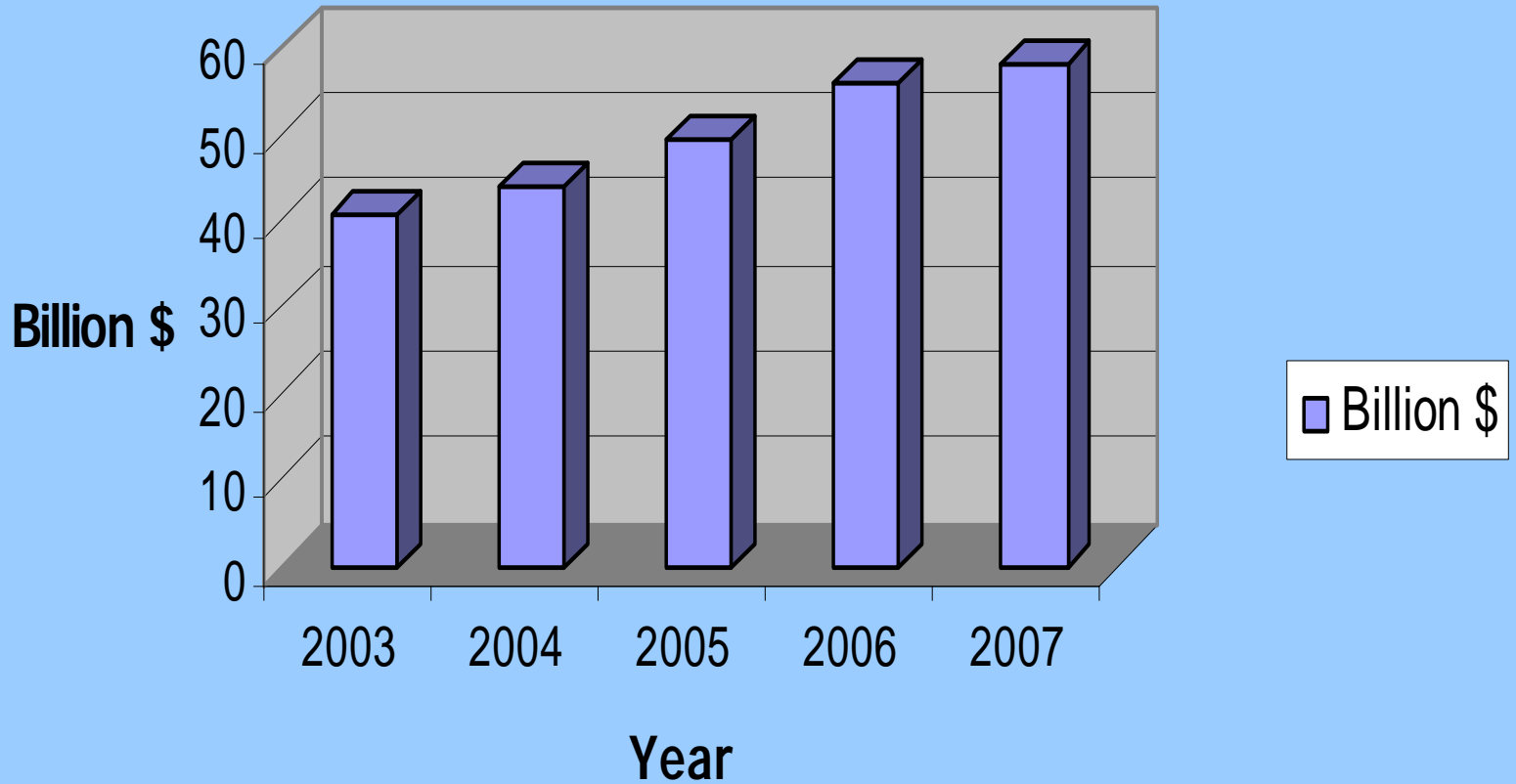
**Vice President - Transportation**

**CHS Inc.**

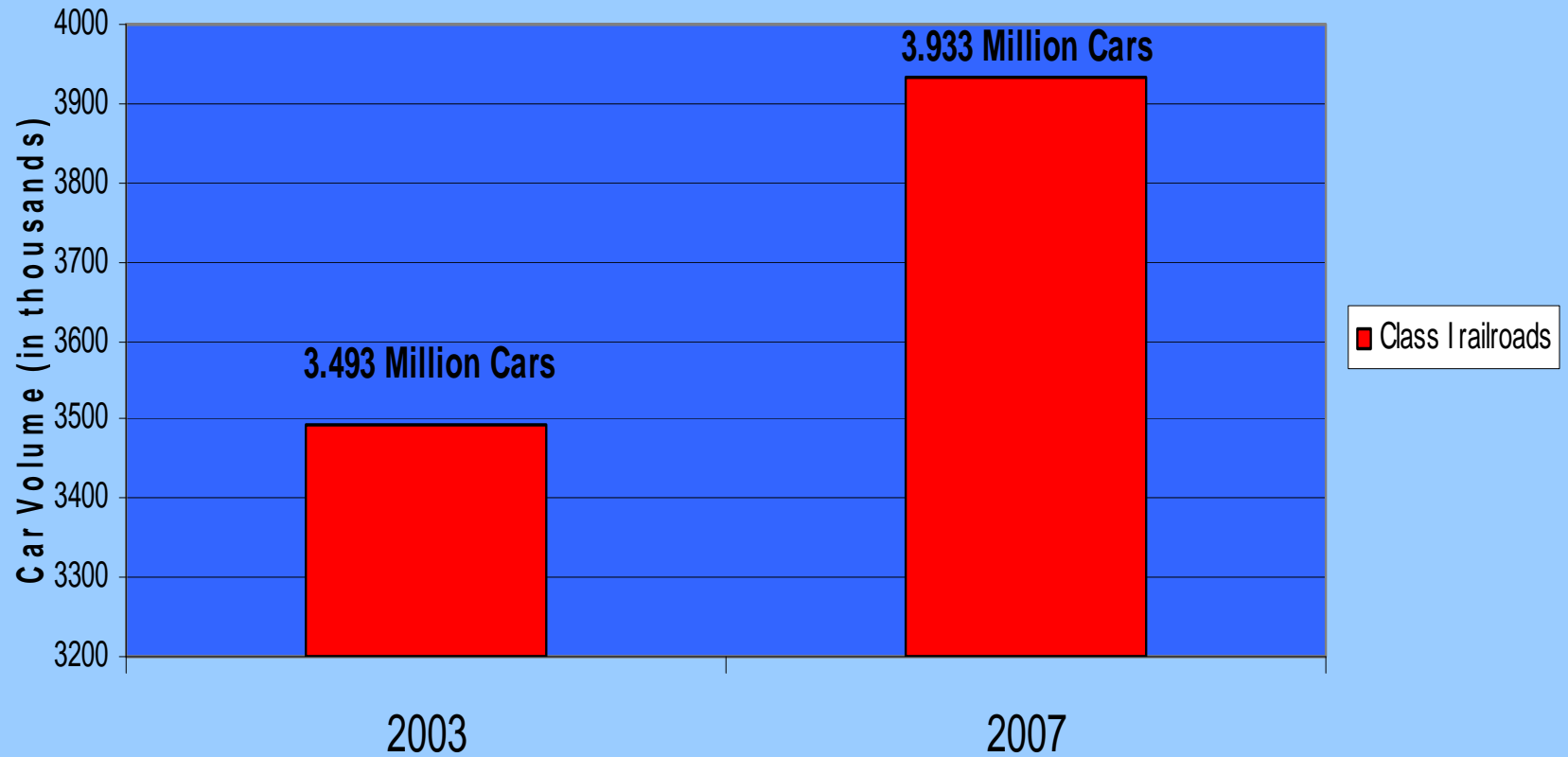
## Discussion Topics

- Backwards look at the previous 5 year period as it relates to rail transportation for agriculture.
- Rail capacity – a future look
- Rail transportation pricing

# Class 1 Railroad Revenue

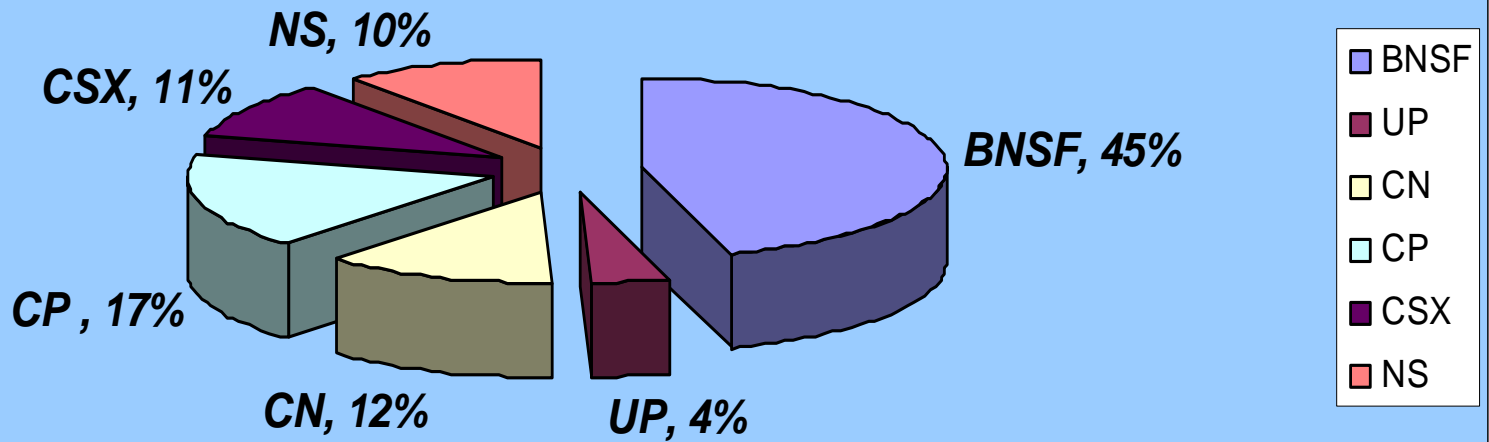


## Agriculture Volume Growth - Class 1 Railroads

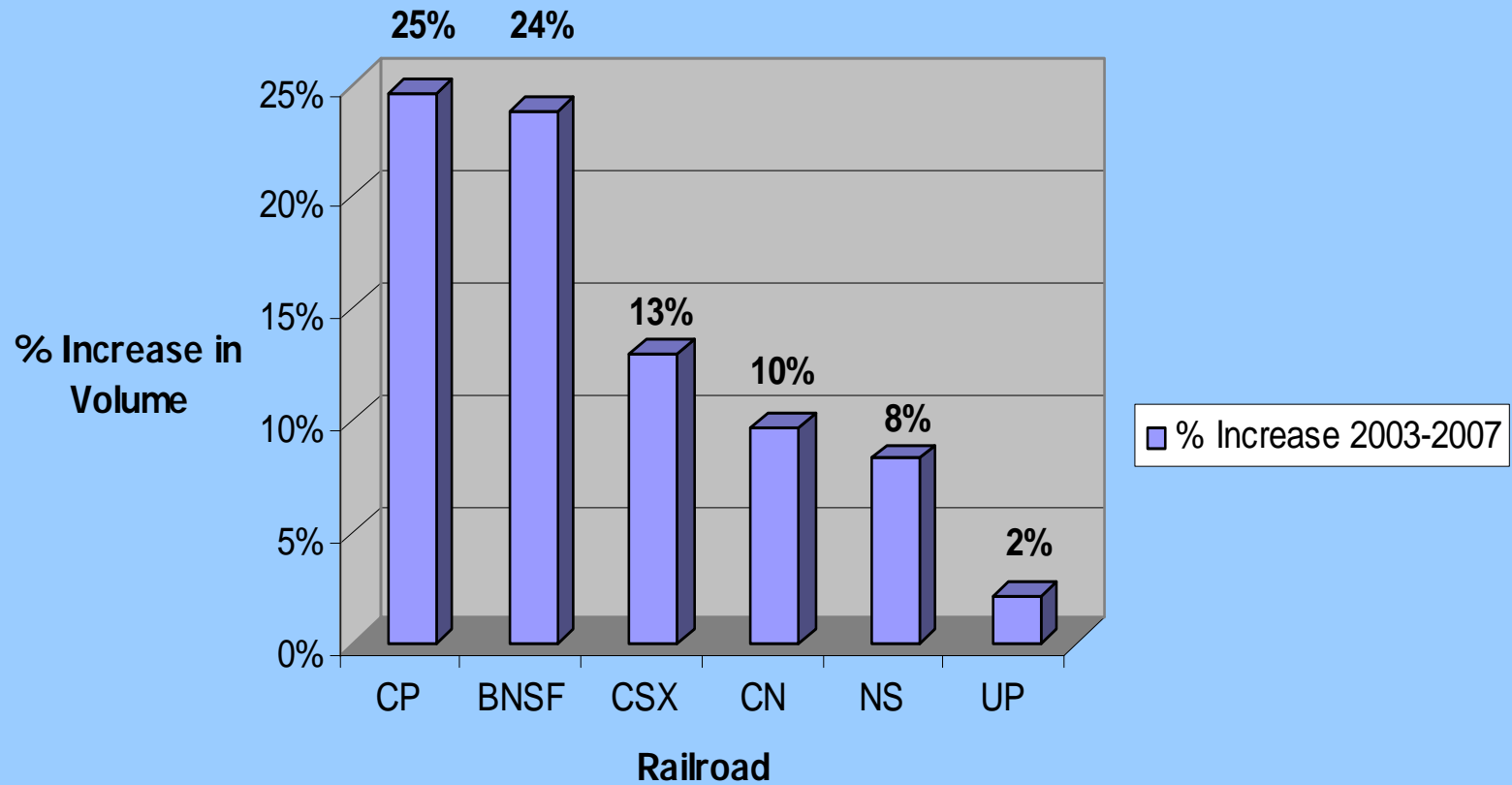


**12.6% increase over 5 years**

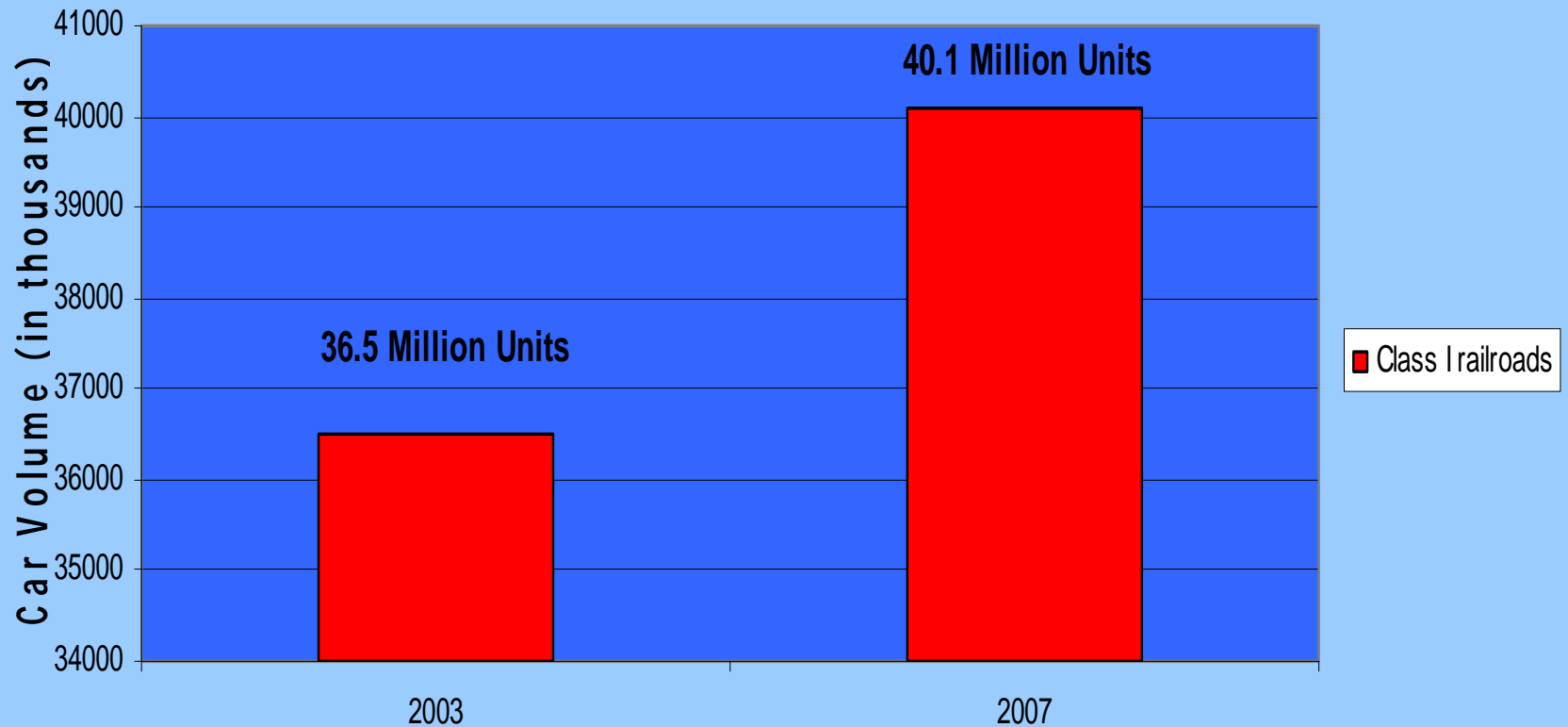
## Who Captured the Ag Volume Growth? 2003-2007



## Ag Franchise Growth by Railroad? 2003-2007



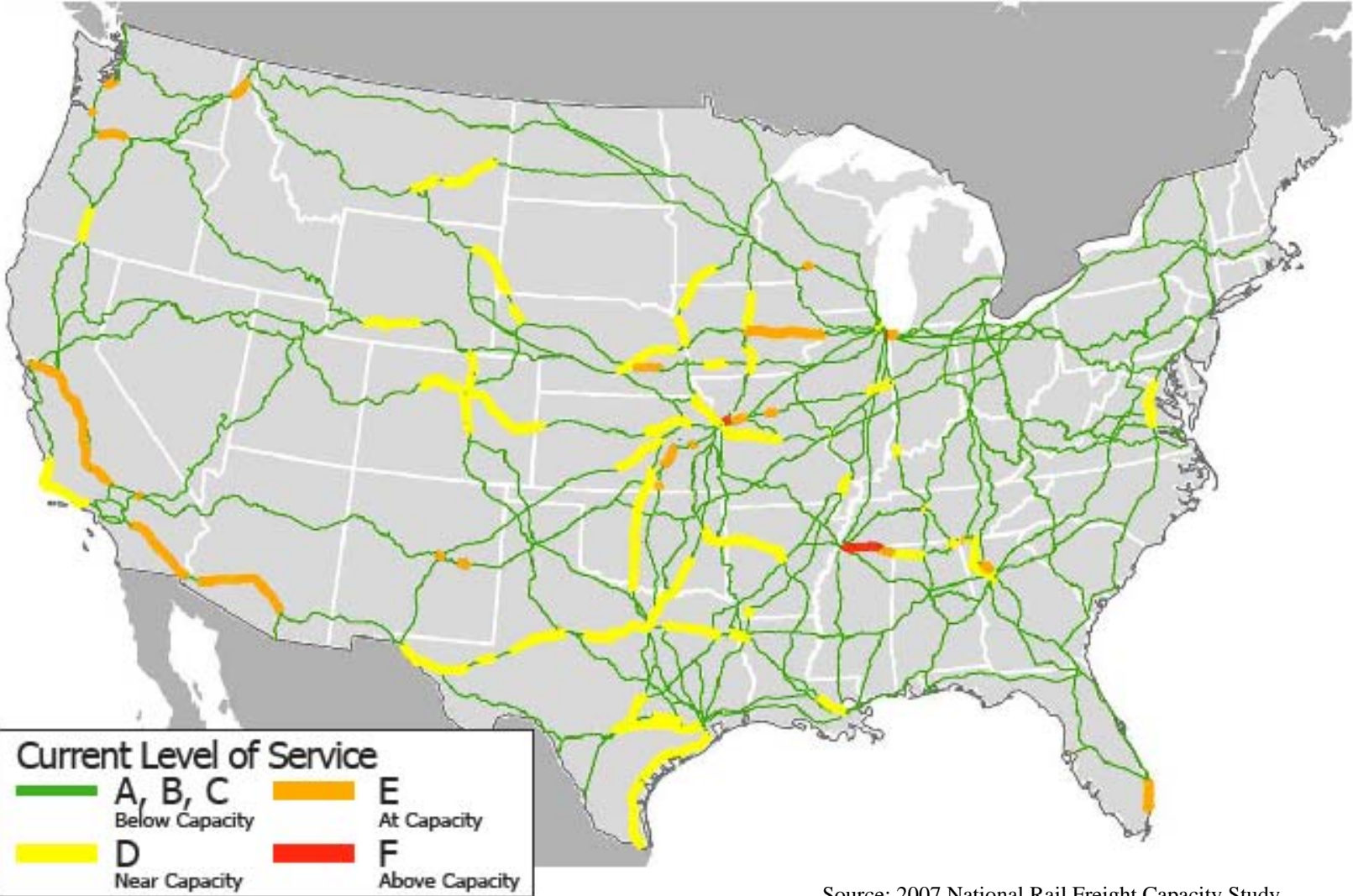
## Total Volume Growth - Class 1 Railroads



**9.8% Increase over 5 years**

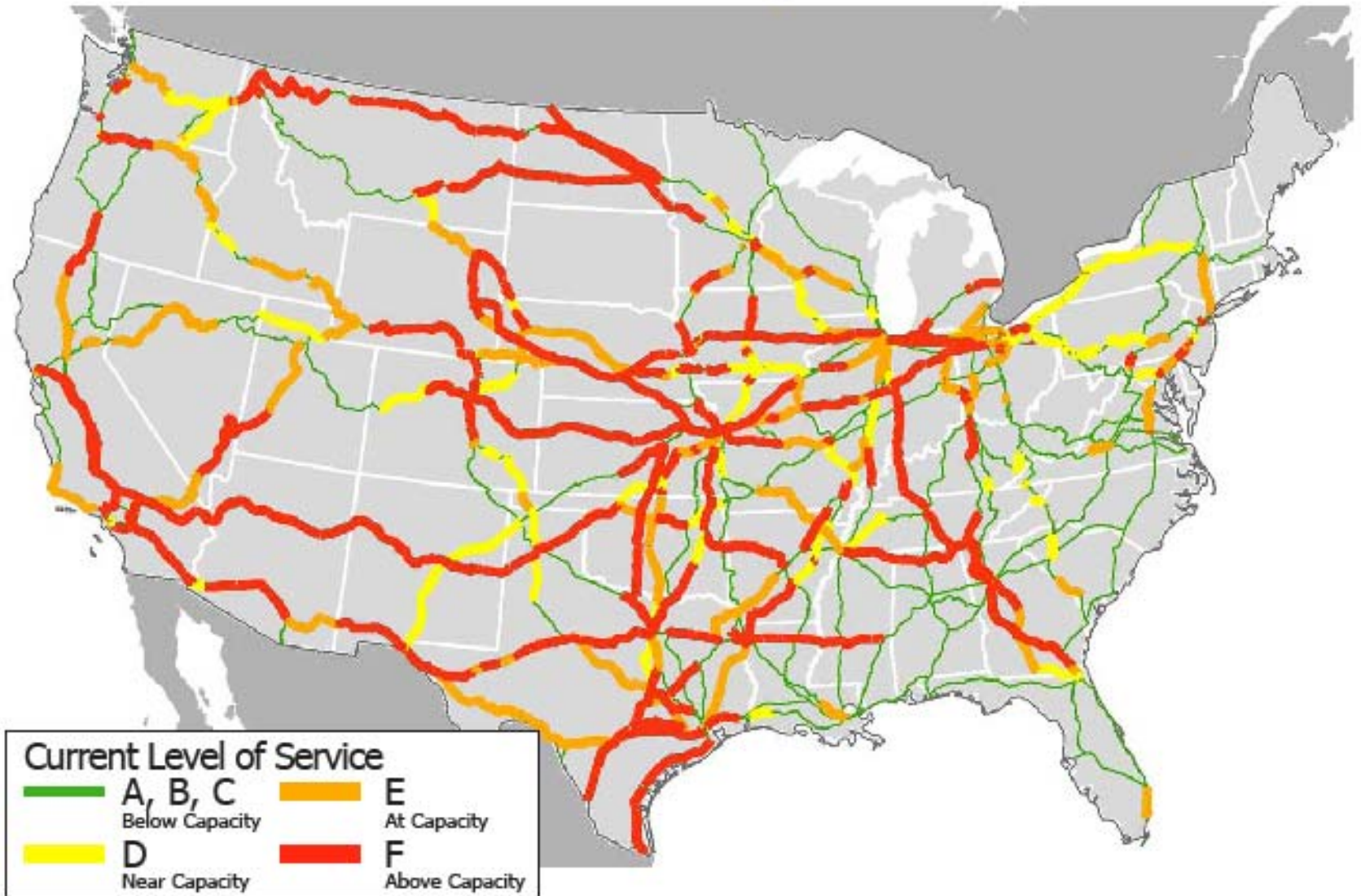
- Rail capacity – a future look

# Current Volumes Compared to Current Capacity



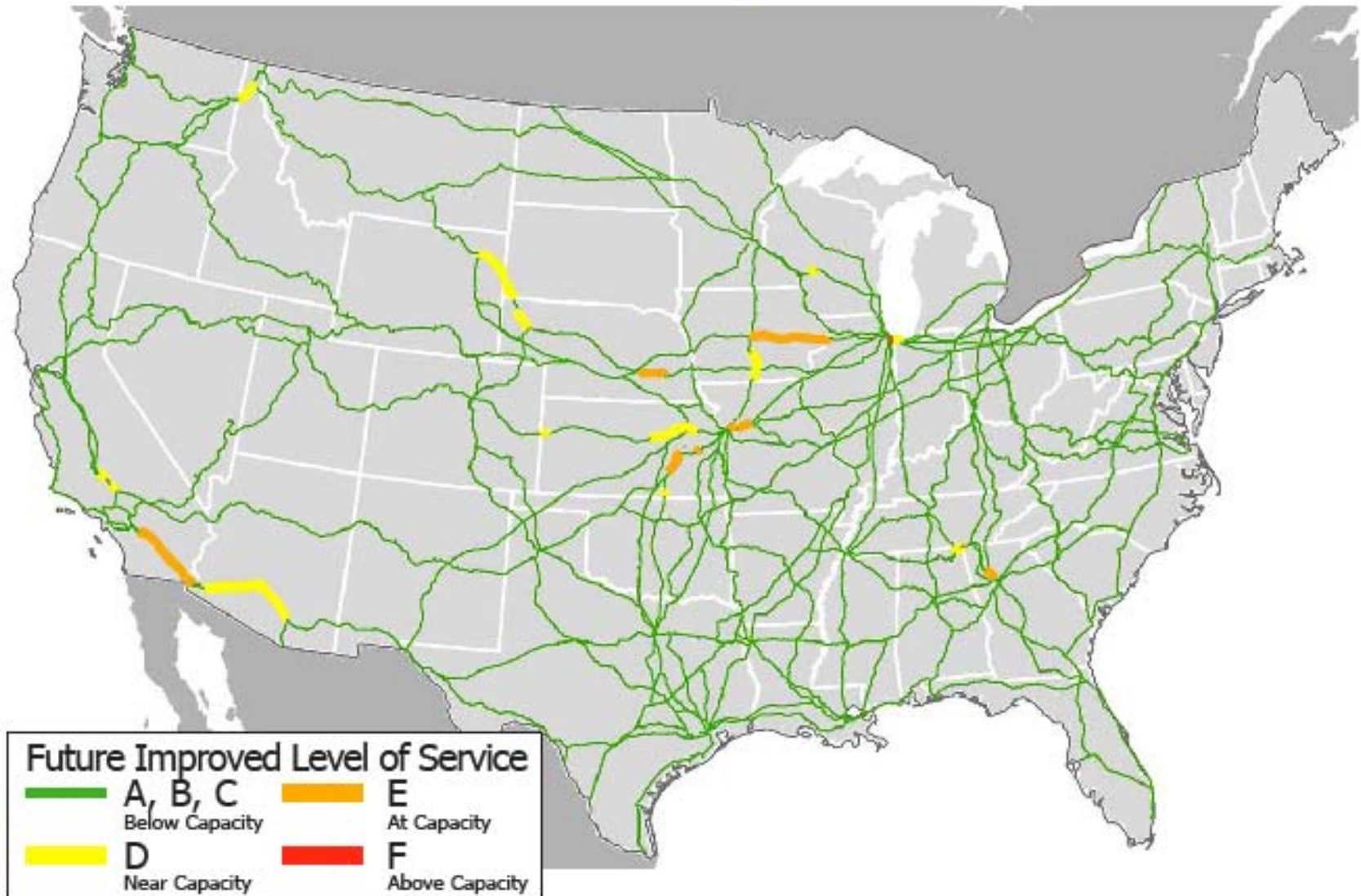
Source: 2007 National Rail Freight Capacity Study

# Future Volumes Compared to Future Capacity In 2035 without Improvements



Source: 2007 National Rail Freight Capacity Study

# Future Volumes Compared to Current Capacity In 2035 with Improvements

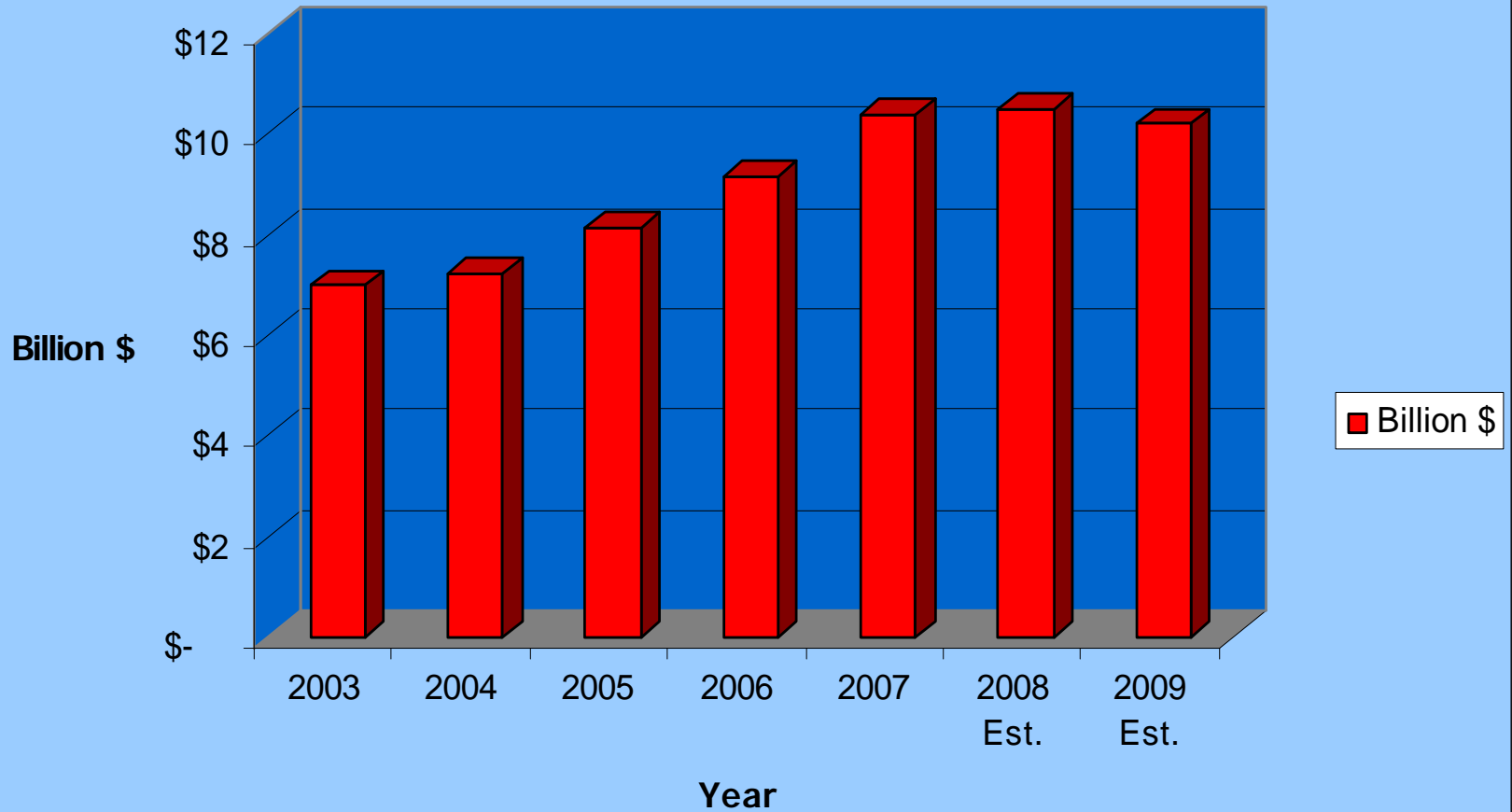


Source: 2007 National Rail Freight Capacity Study

## Capacity Expansion Impediments

- Capital

## Class 1 Railroad Capital Expenditures





## Infrastructure Investments Needed by 2035

• Rail line expansions:	\$95 Billion
• Bridges/tunnels	\$24 Billion
• Branch line upgrades	\$10 Billion
• Intermodal terminals	\$9 Billion
• Carload terminal expansion	\$6 Billion
• Misc.	\$3 Billion
• Total Investment	\$147 Billion

## Capacity Expansion Impediments

- Capital
- Lack of public/private partnerships
- Passenger rail using existing right of way
- Environmental/political
- Future hazmat Regulations

## Capacity Expansion Solutions

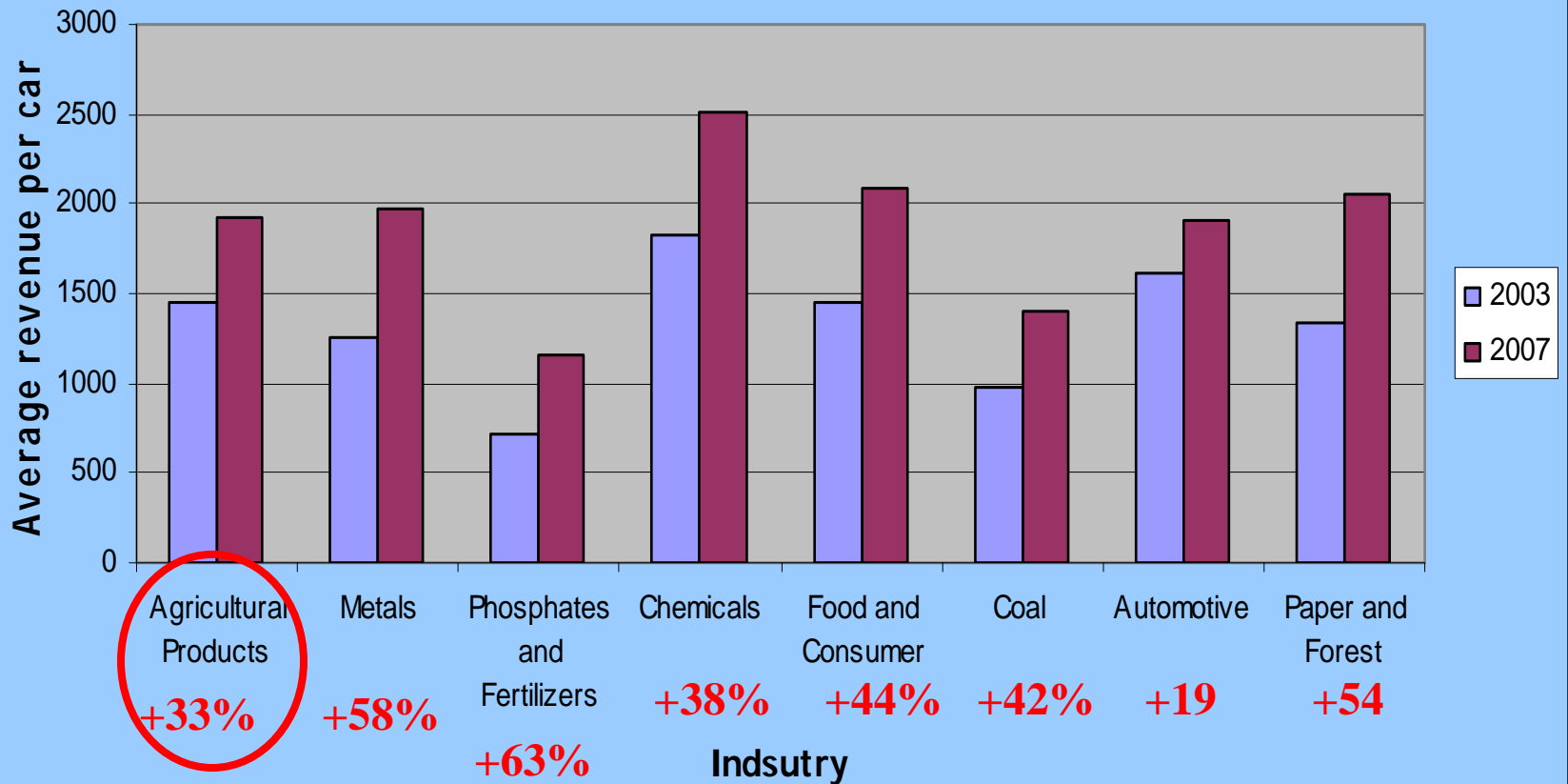
- Physical construction of infrastructure
- Technology
  - Positive train control
  - electronic brakes
- Unit and or longer/heavier trains
- Improved asset utilization



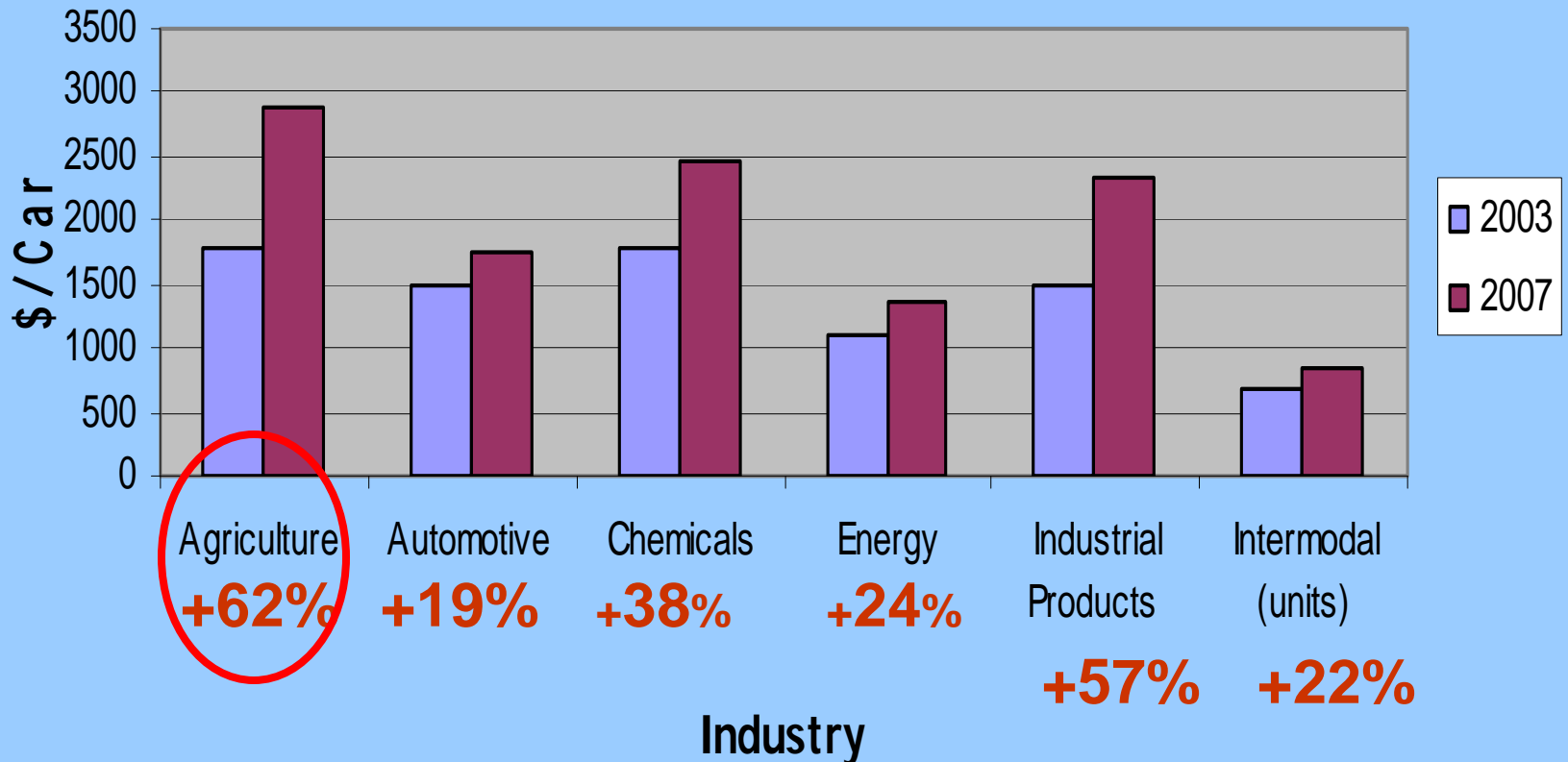
# Rail Transportation Pricing

- Rates

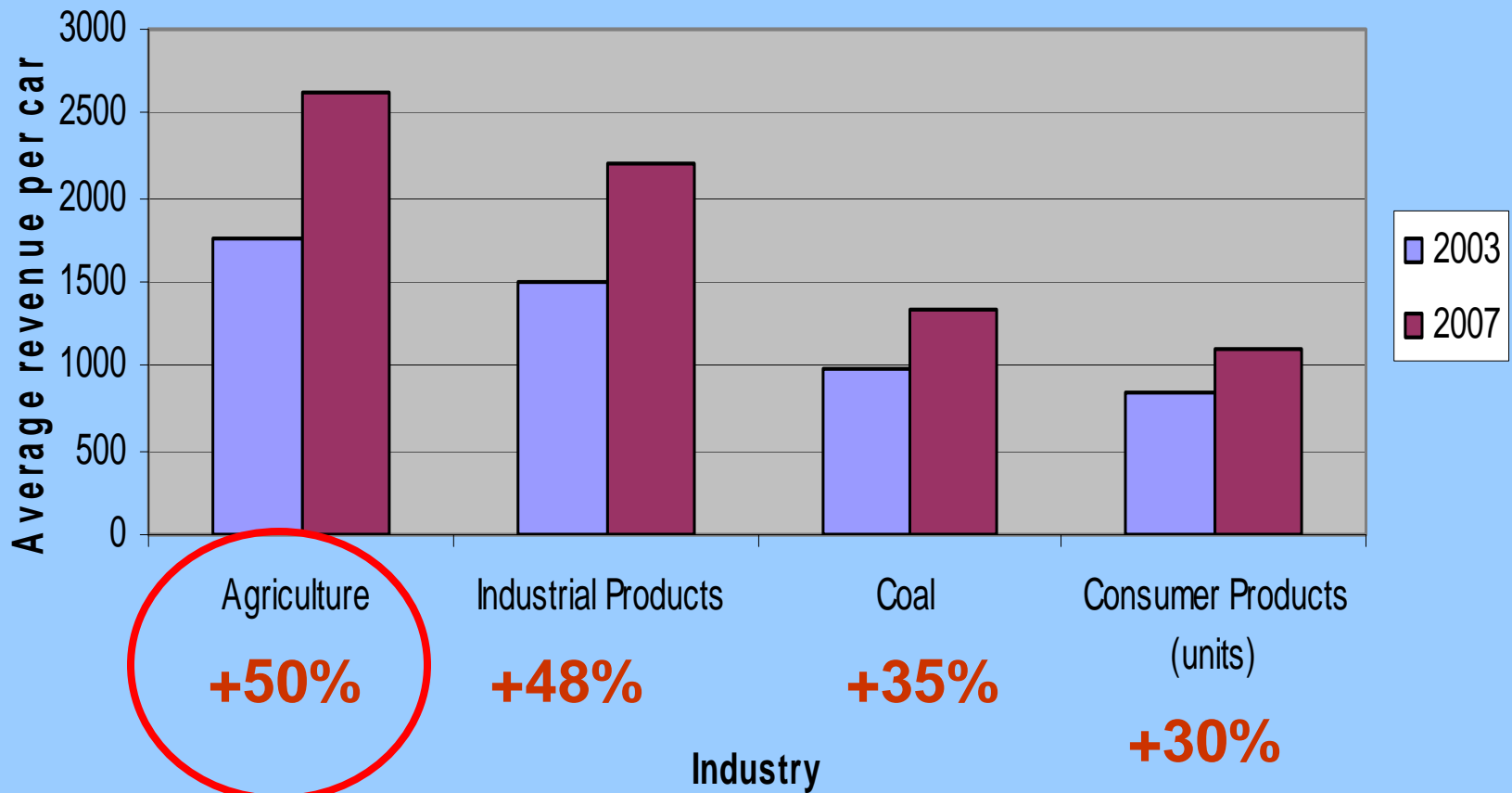
## Average Rate Per Unit CSX Railroad



# Average Revenue Per Unit Union Pacific



# Average Revenue Per Unit BNSF

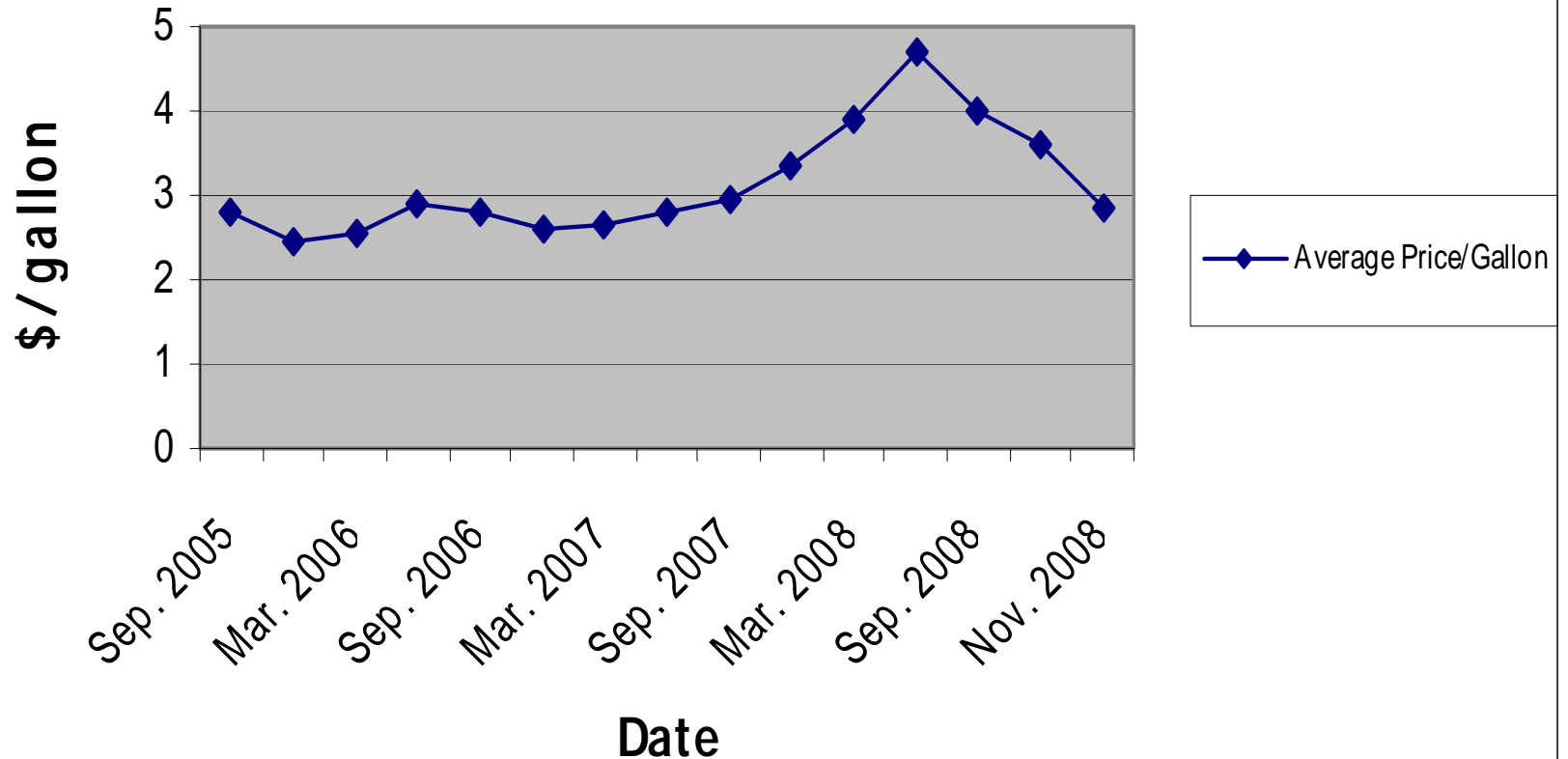




# Rail Transportation Pricing

- Surcharges

# Highway Fuel Price (\$/gallon)



## Rail Transportation Pricing

- Rates
- Surcharges
- Accessorial charges
- Private railcars
- Switching
- Industrial Development

- Key indicators that should drive rail transportation pricing for Agriculture and other industries

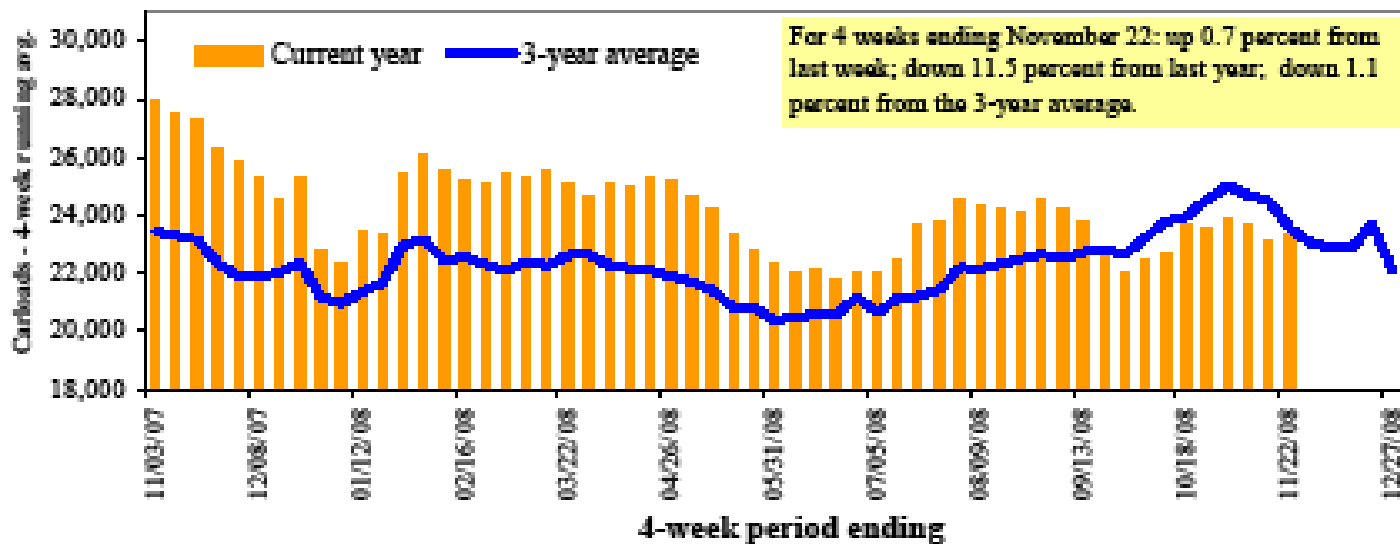


## Rail Industry Growth: 2007 to 2008

<i>Product Line</i>	<i>48 Week 2008</i>	<i>QTD 2008</i>	<i>YTD 2008</i>
Grain	<b>-26.3%</b>	<b>-11.6%</b>	<b>0.5%</b>
Intermodal	<b>-23.9%</b>	<b>-4.8%</b>	<b>-2.5%</b>
Coal	<b>-8.2%</b>	<b>-2.9%</b>	<b>2.1%</b>
Chemicals	<b>-31.9%</b>	<b>-11.1%</b>	<b>-2.5%</b>
Metals	<b>-30.2%</b>	<b>-14.8%</b>	<b>0.6%</b>
Forest Products	<b>-29.1%</b>	<b>-11.3%</b>	<b>-12.1%</b>
Industrial	<b>-30.8%</b>	<b>-12.2%</b>	<b>-3.8%</b>
Automotive	<b>-51.3%</b>	<b>-29.2%</b>	<b>-20.3%</b>
Building Materials	<b>-45.3%</b>	<b>-6.2%</b>	<b>-4.9%</b>
<b>Total</b>	<b>-24.1%</b>	<b>-6.0%</b>	<b>-2.2%</b>

# Total Weekly US Class 1 Grain Loadings

**Figure 3**  
**Total Weekly U.S. Class I Railroad Grain Car Loadings**

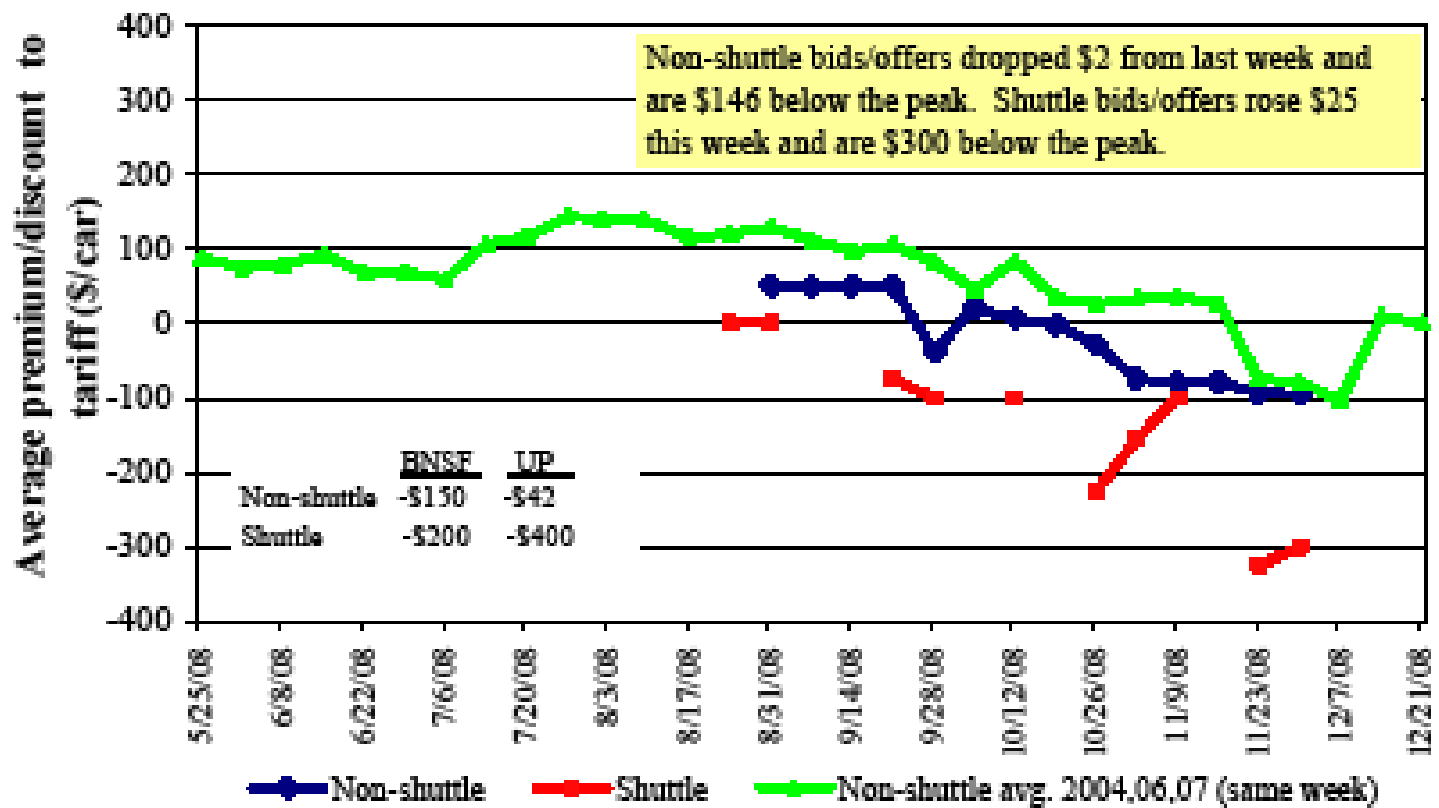


Source: Association of American Railroads

# Grain Shuttle Freight Values

Figure 4

Bids/Offers for Railcars to be Delivered in December 2008, Secondary Market



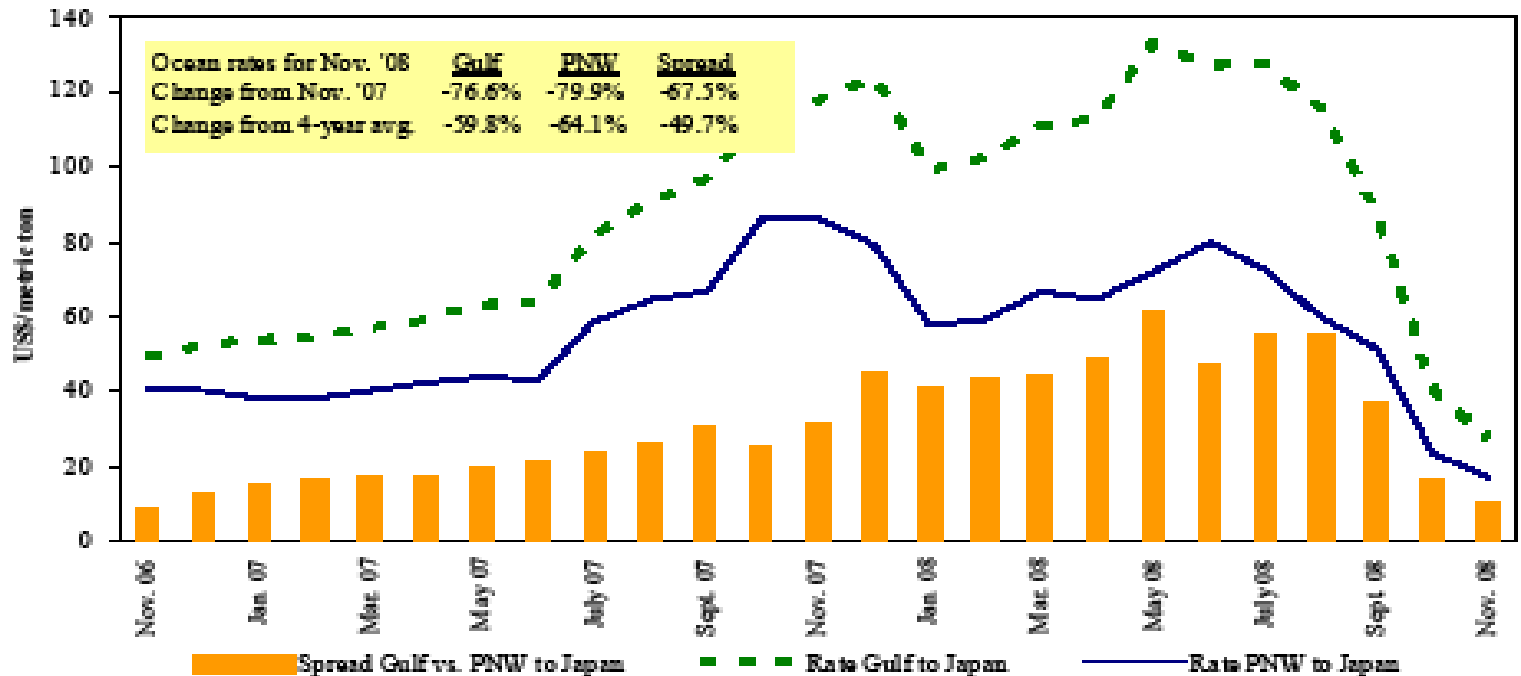
Excludes 2005 from the 3-year non-shuttle average due to abnormally high rates following Hurricanes Katrina and Rita. Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

# Ocean Freight Values & PNW/Gulf Spread

Figure 17

Grain Vessel Rates, U.S. to Japan



Source: Baltic Exchange ([www.balticexchange.com](http://www.balticexchange.com)) / Drewry Shipping Consultants Ltd ([www.drewry.co.uk](http://www.drewry.co.uk)) / O'Neil Commodity Consulting



**Thank You**