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# Agricultural Outlook Forum

## Rail Transportation Issues



February 27, 2009

*Paul Hammes – VP & GM Agricultural Products  
Marketing & Sales*

BUILDING AMERICA™





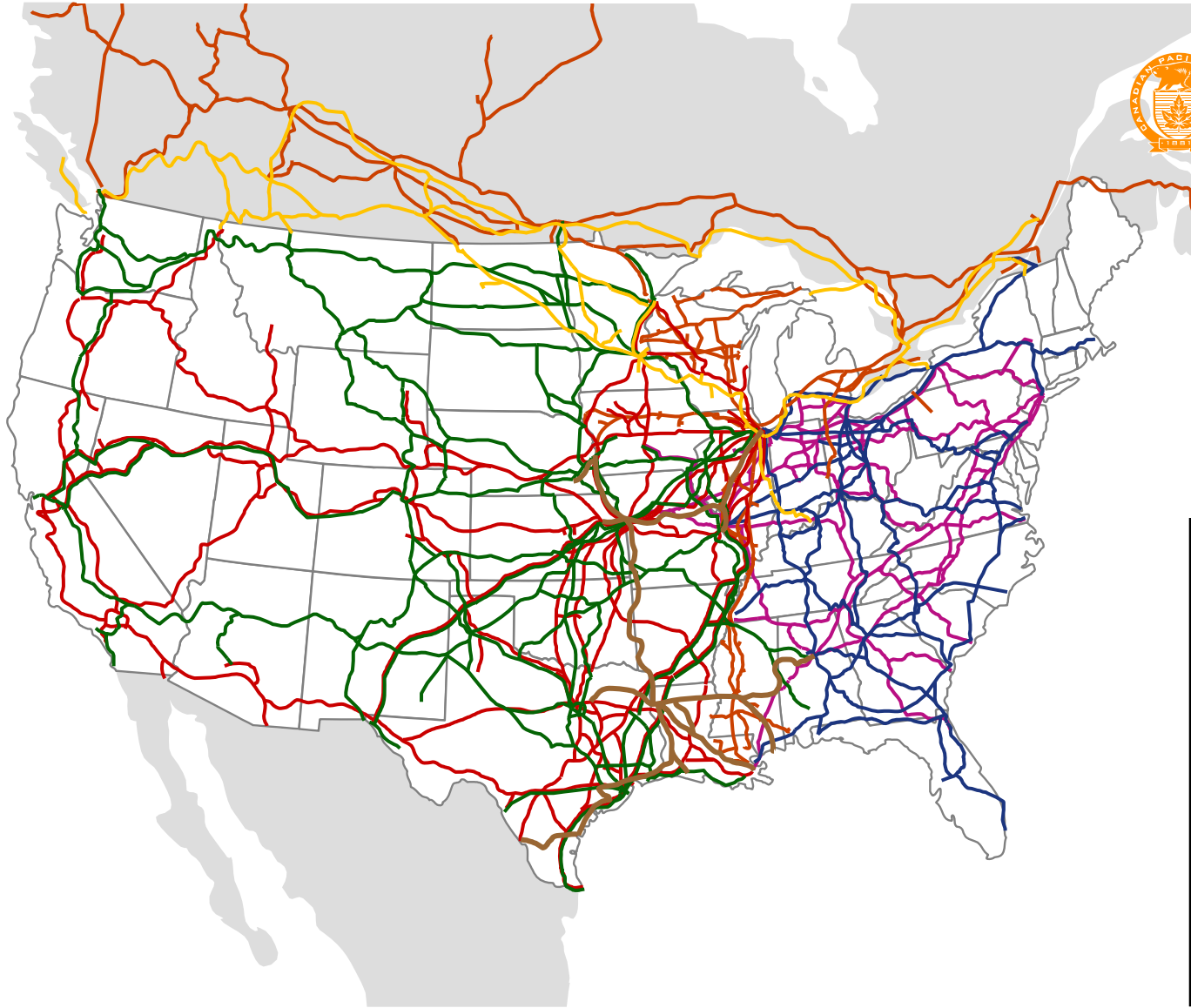
# America's Transportation Solution

- Safest Form of Ground Freight Transportation
- Moves 1 Ton 790 Miles on 1 Gallon of Diesel
- Reduces Greenhouse Gas Emissions by 67%



**Congested Highway System  
Creates “Infrastructure Tax” on  
America - \$8 Billion Annually**

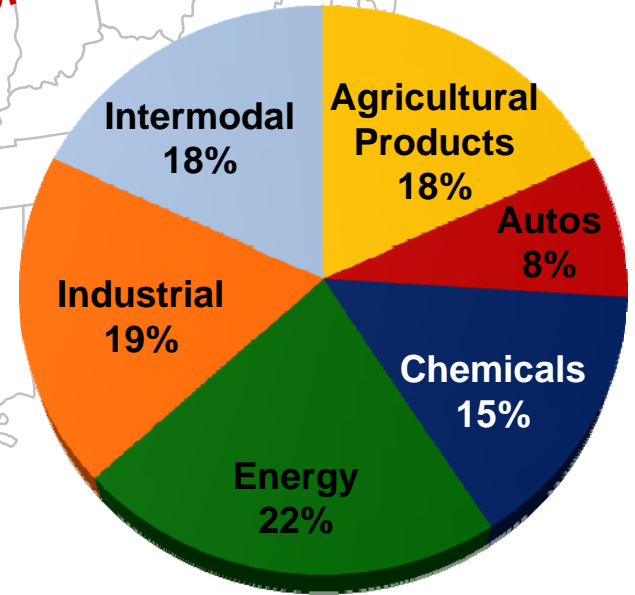
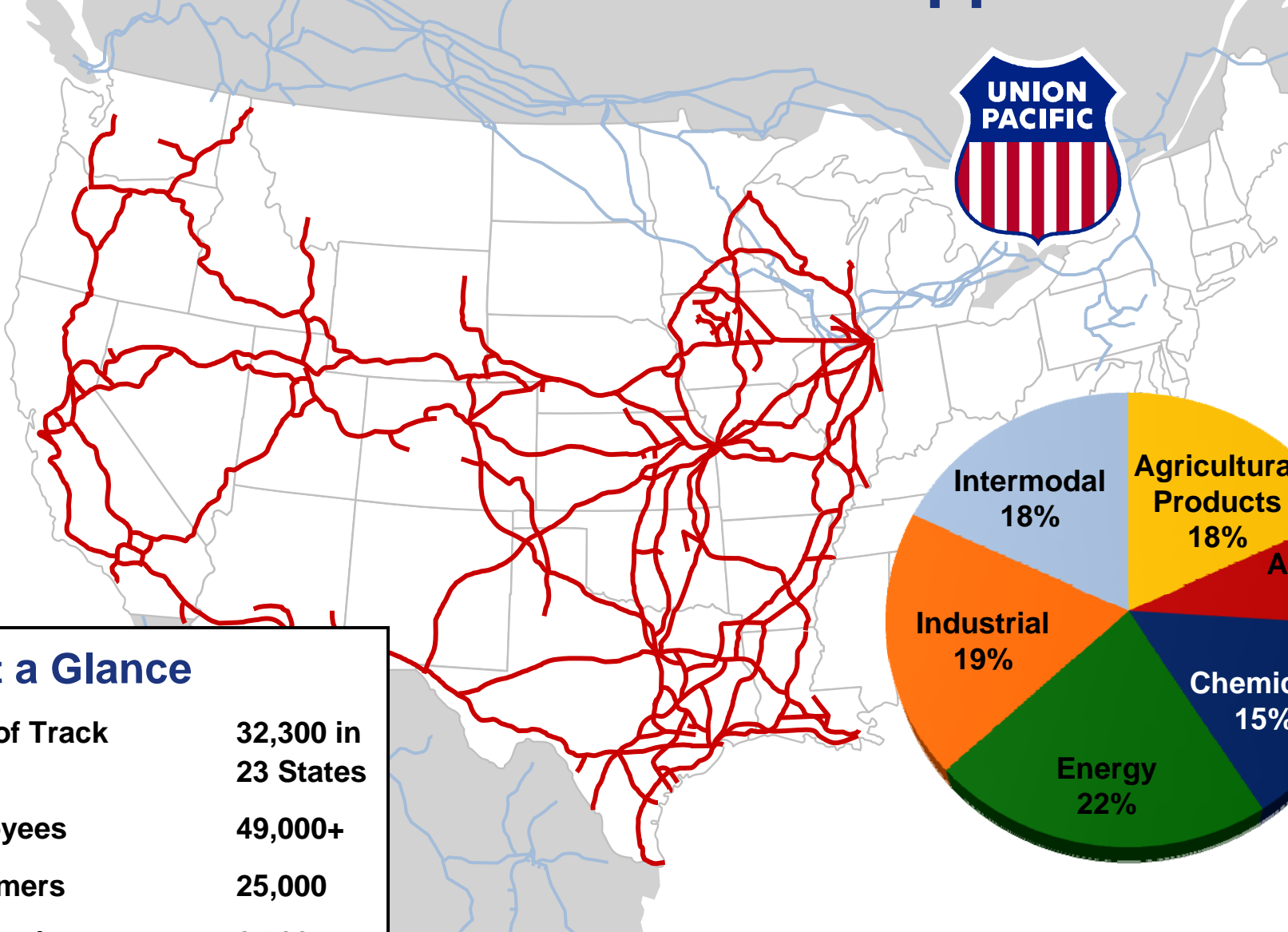
# Major North American Class I Railroads



## Fast Facts

- Miles of Track  
161,114
- Originated Carloads  
31.46 M
- Freight Revenue  
\$52.9 B

# UP Franchise – Tremendous Opportunities

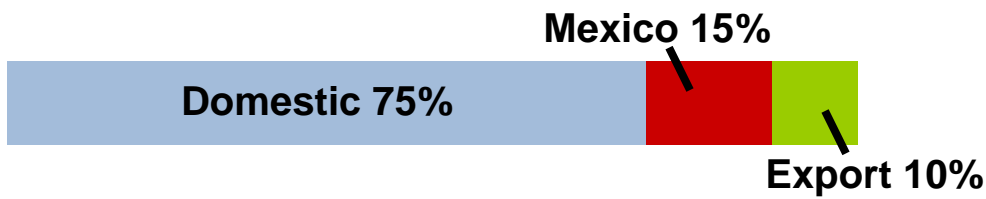
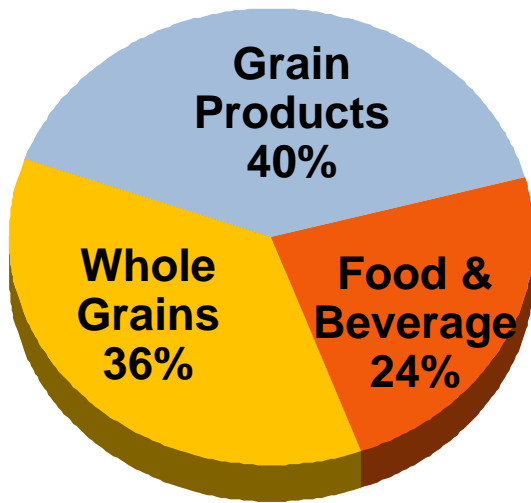


## UP at a Glance

▪ Miles of Track	32,300 in 23 States
▪ Employees	49,000+
▪ Customers	25,000
▪ Locomotives	8,700+
▪ Freight Cars	94,000+

# Union Pacific Railroad *Agricultural Products*

## Revenue Mix



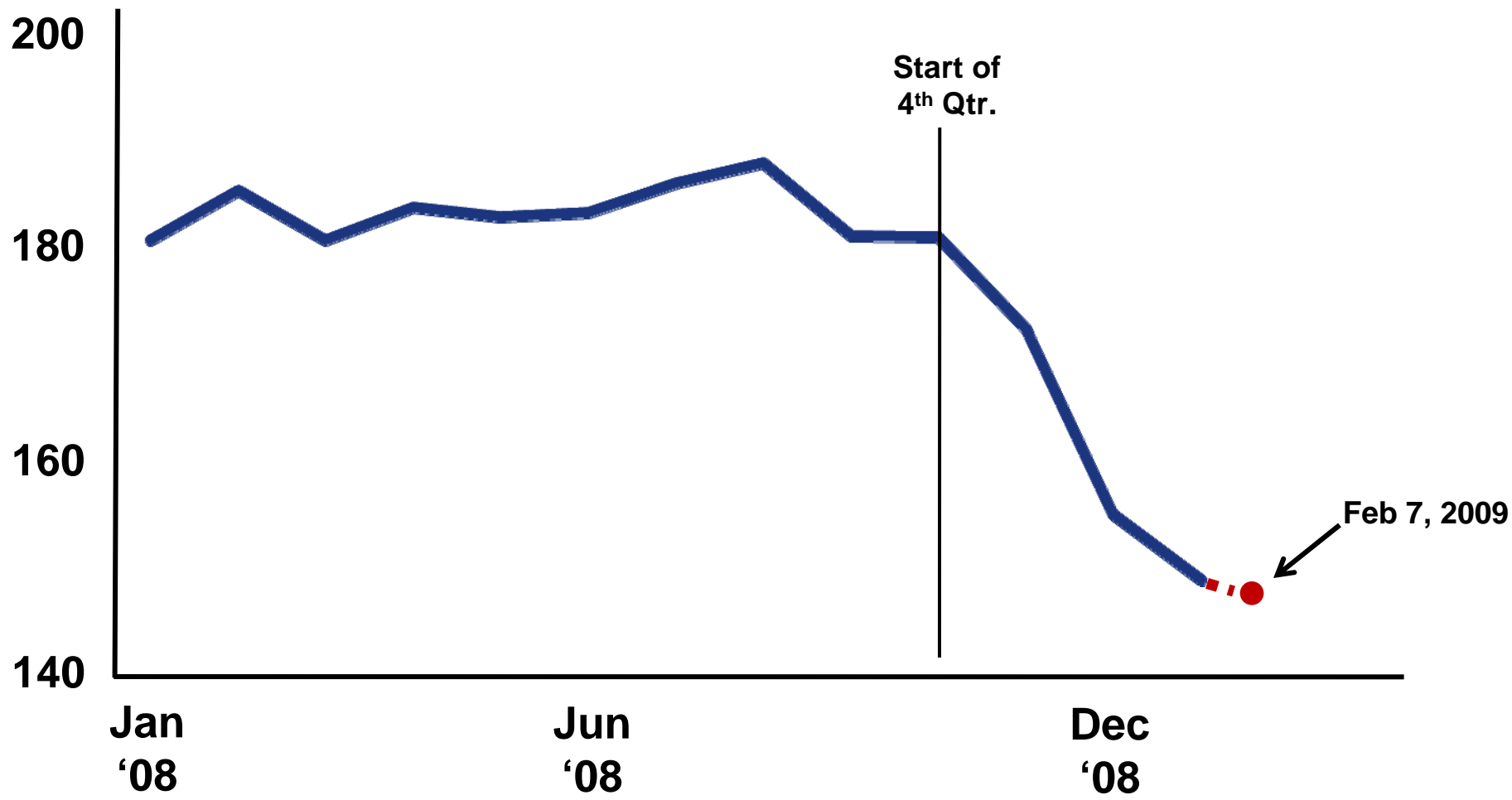
## Agricultural Density Map

Lane thickness depicts carload density



# Rapid Volume Decline

## 7-Day Carloadings (000s)

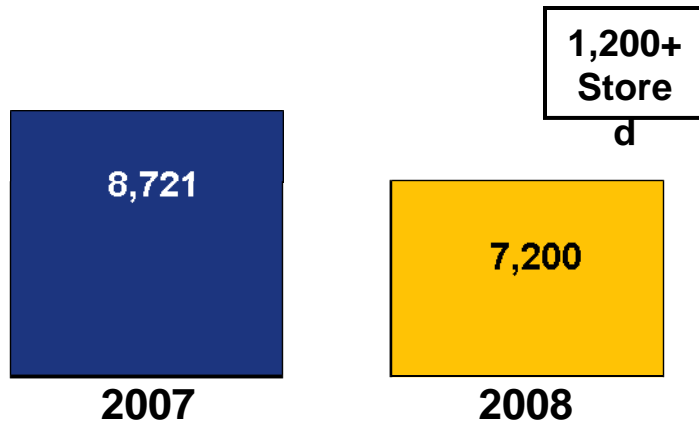




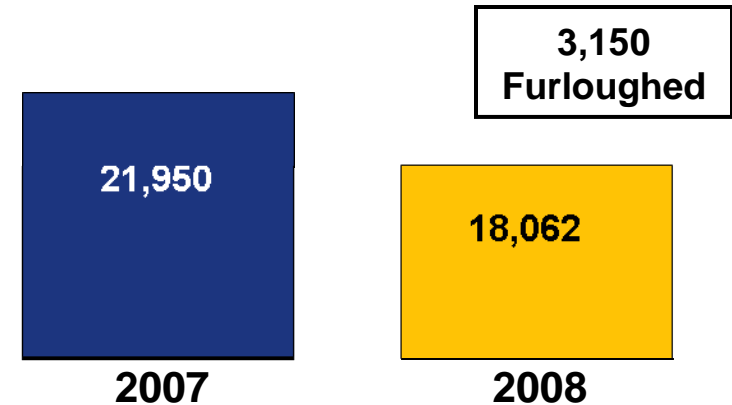
# Resource Update

## Year-End

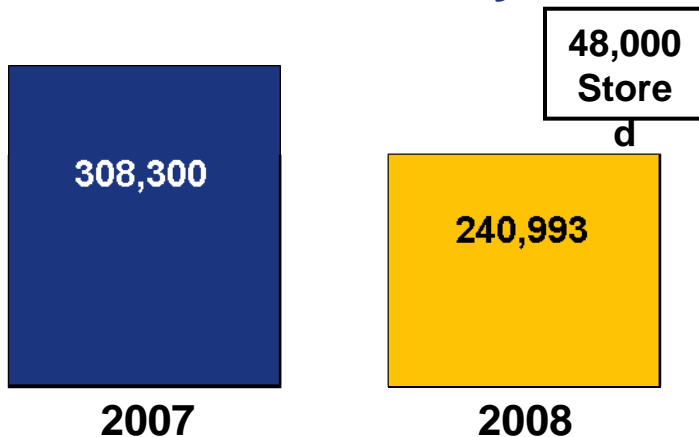
### Locomotives



### TE&Y Employees



### AAR Inventory

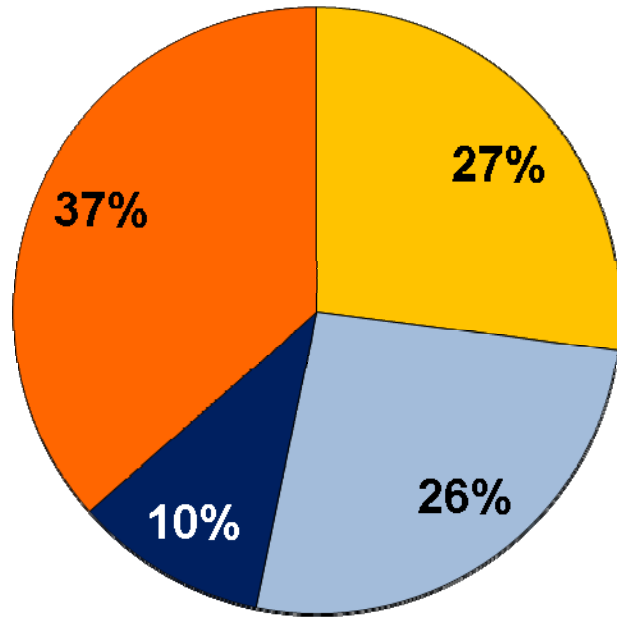


\* Represents Year-End Levels Minus Extra Resources



# Rail Impact on Transportation

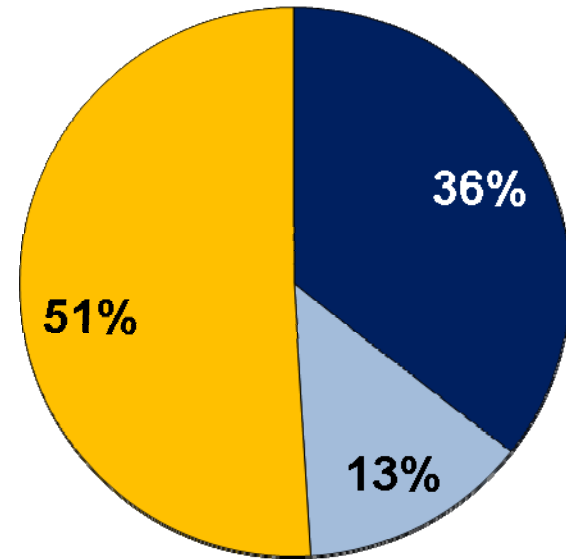
## US Rail Shipments



- Intermodal
- Coal
- Ag
- Other Carload

Source: AAR, 2008

## Modal Share Ag Freight

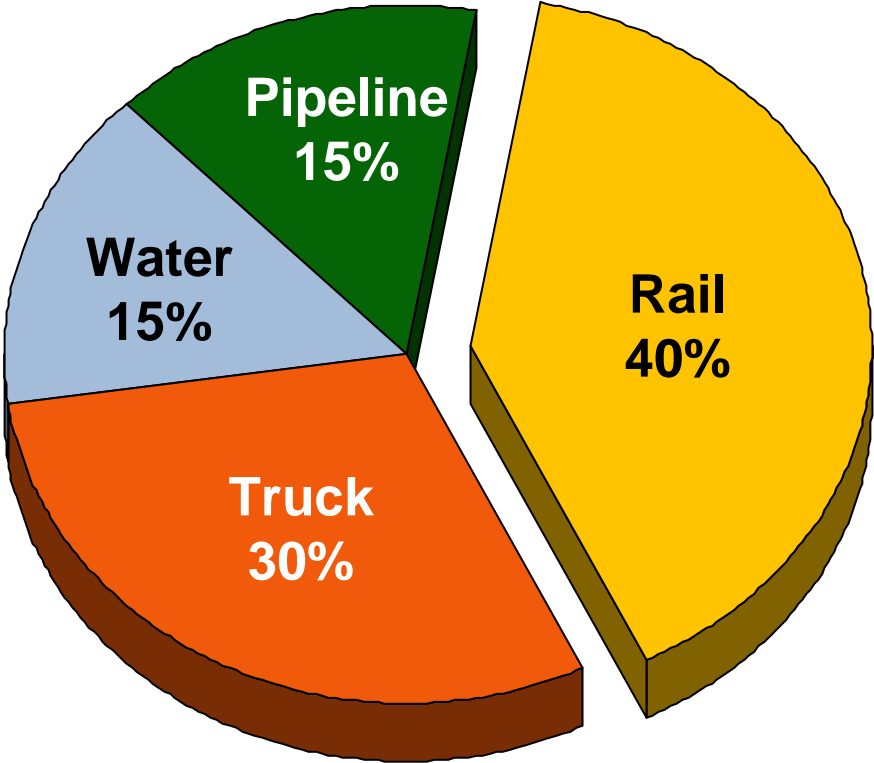


- Rail
- Barge
- Truck

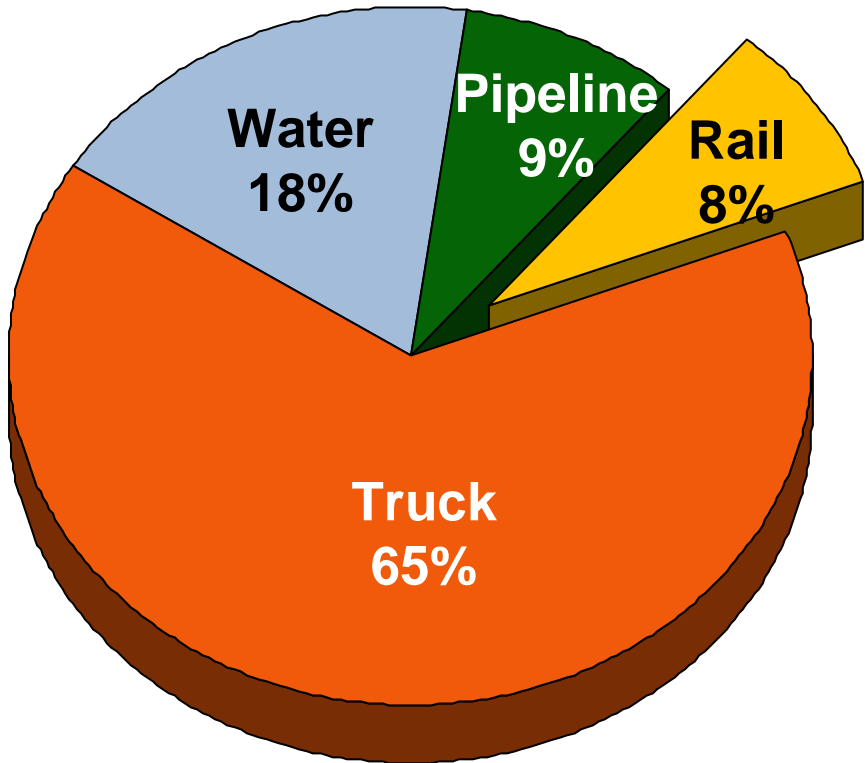
Source: USDA – Ag Marketing Service, 2006

# Rail Efficiency

U. S. Freight Ton-Miles by Mode\* 2005



Energy Consumption by Mode\*\* 2005



\*Source: U. S. Bureau of Transportation Statistics

\*\*Source: U. S. Department of Transportation

# Role of Railroads with U.S. Agriculture

- Infrastructure and Equipment
- Service
- Productivity
- Market Access





# Infrastructure and Equipment



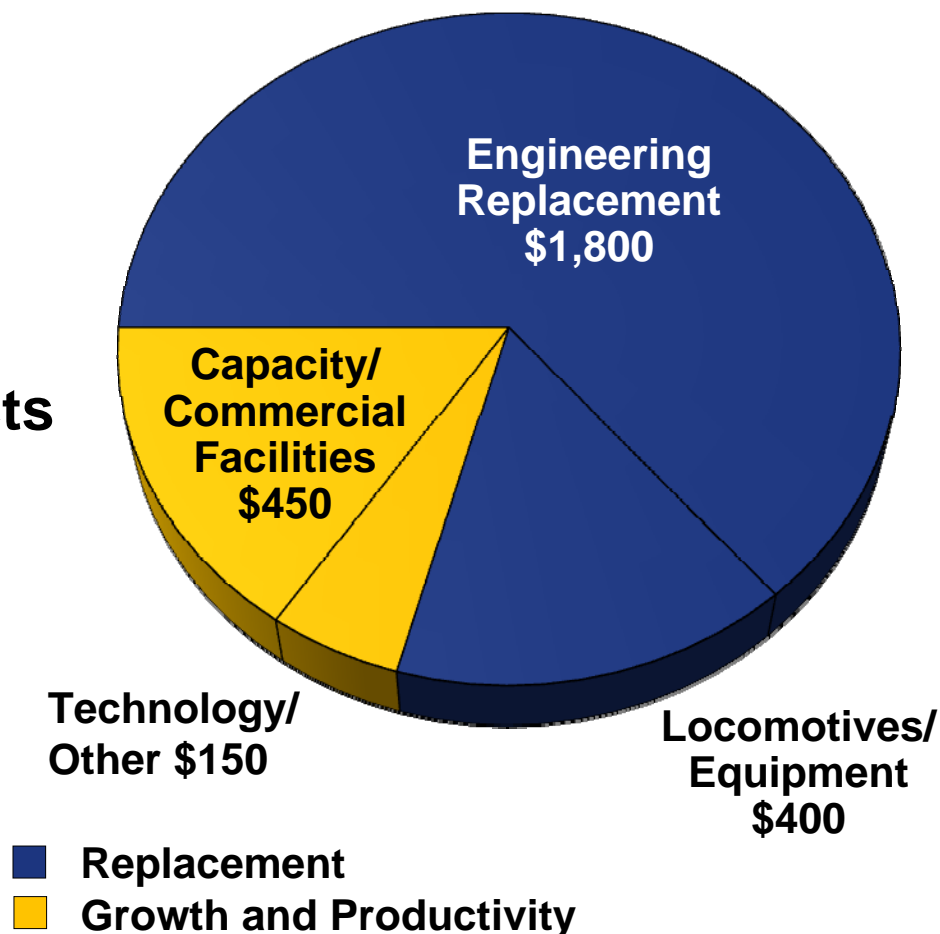


# Infrastructure and Equipment

## 2009 UP Capital Investments

- Replacement /Renewal Programs
  - Safety
  - Velocity
  - Throughput
- Long Term Growth Projects
  - Sunset /Intermodal
  - Coal Capacity/Red X
- Enhance Throughput Productivity

**\$2.8 Billion Capital Plan - UP**  
*In Millions*



# Infrastructure and Equipment

## *Impacting UP Agricultural Products*

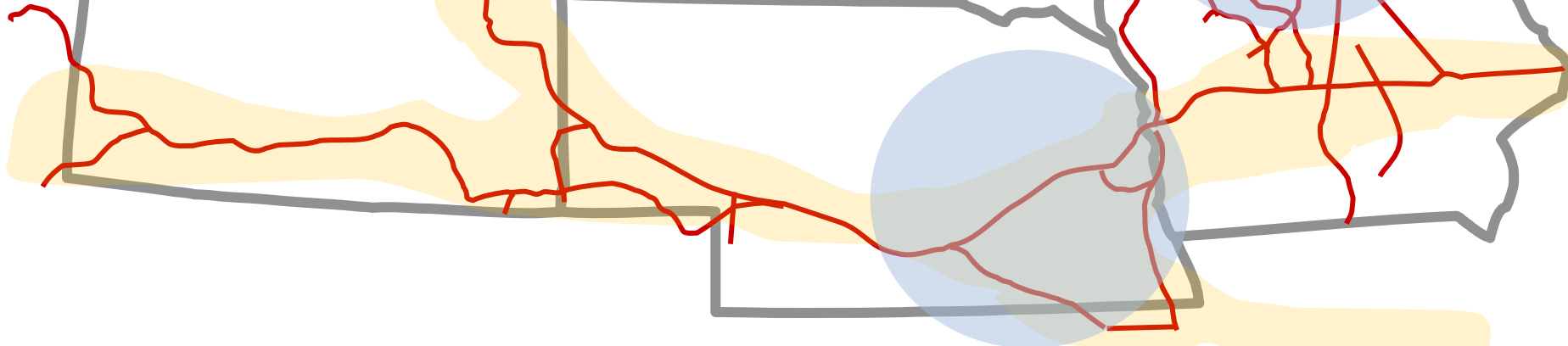


### Red "X"

- 40% of UP Business Traverses Corridor
- Large Capital Spend Will Benefit Ag Products

### Capital Spend to Support Ag Products Growth

- \$75 Million in IA/ MN
- \$19 Million in NE



# Service



## Ag Unit

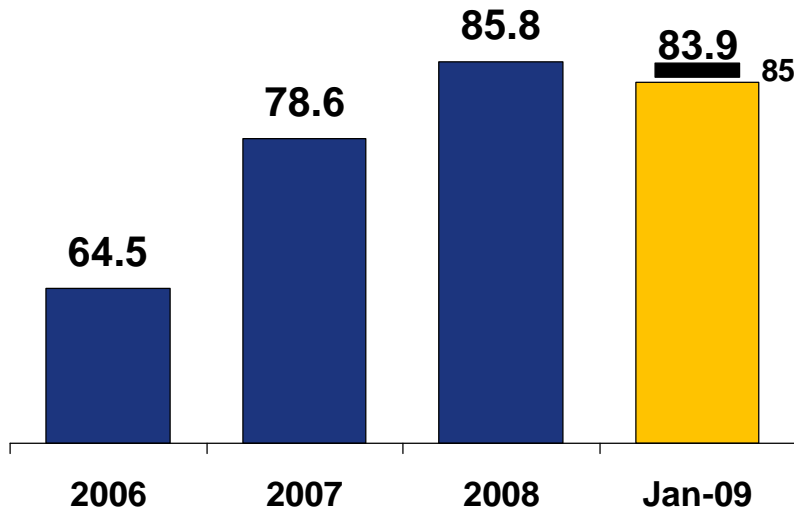
Release to Train Arrival – 4%

Good ↑

Best:

Yr: 86.1 (2008)

Mth: 95.0 (5/08)



## Ag Manifest

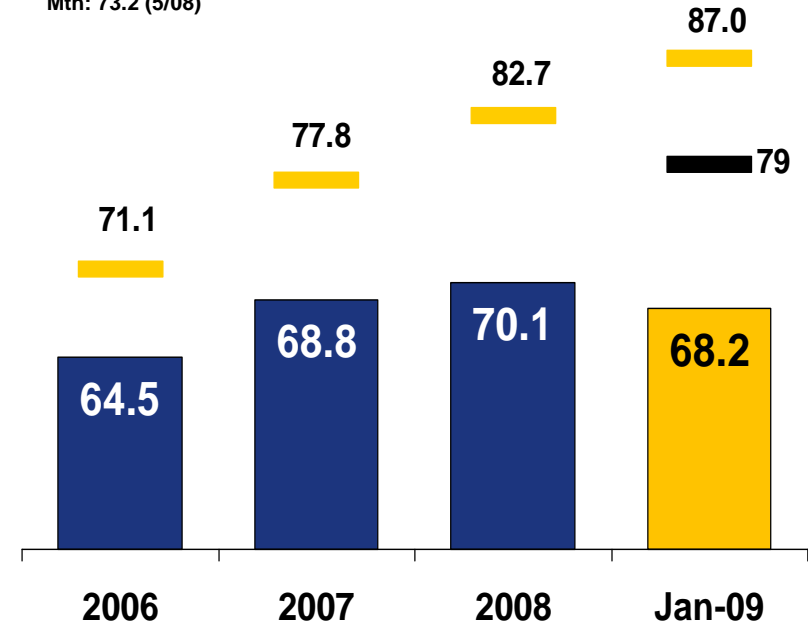
TPC – 8%

Good ↑

Best:

Yr: 70.1 (2008)

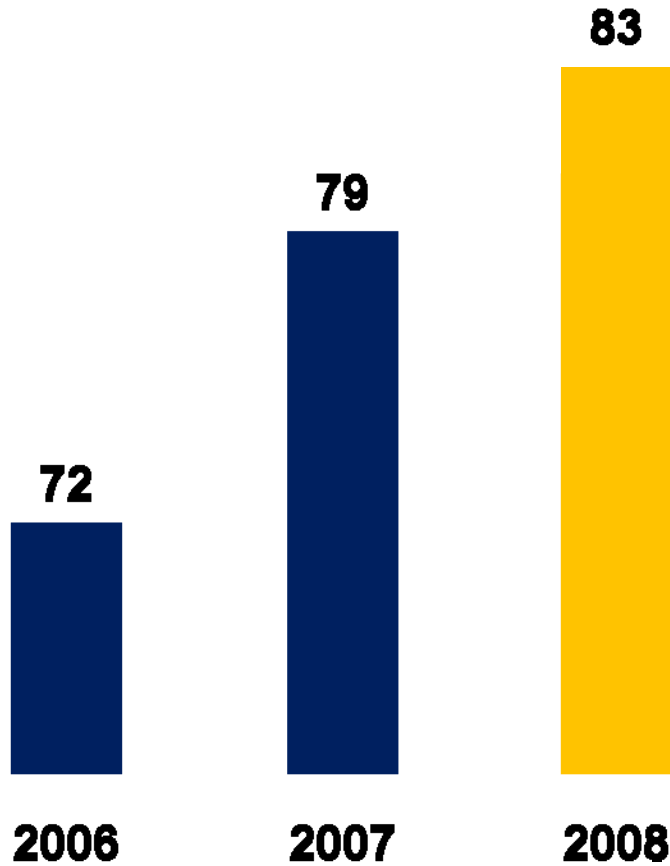
Mth: 73.2 (5/08)



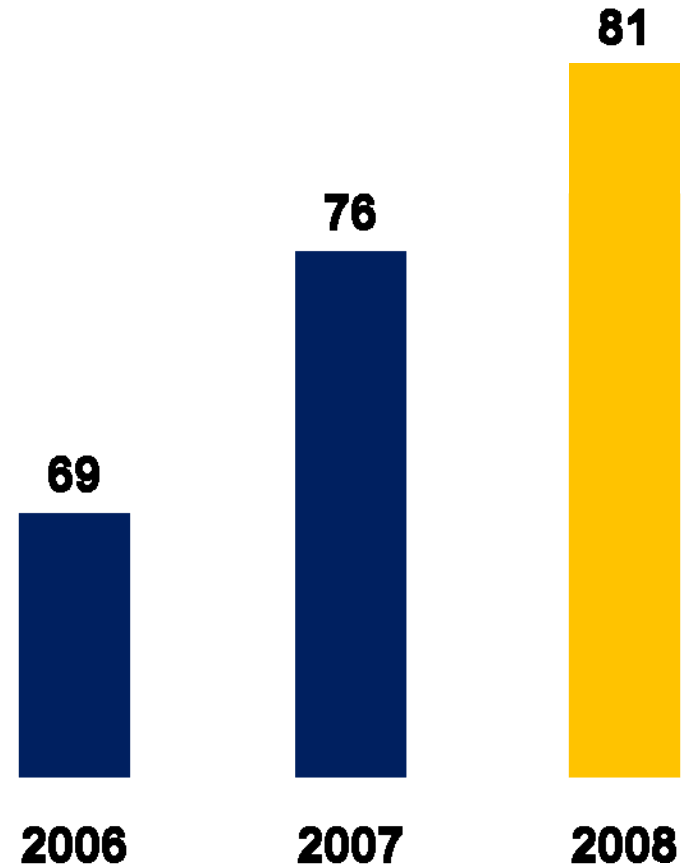
# Service

## *Customer Satisfaction Index – Union Pacific*

Total Union Pacific



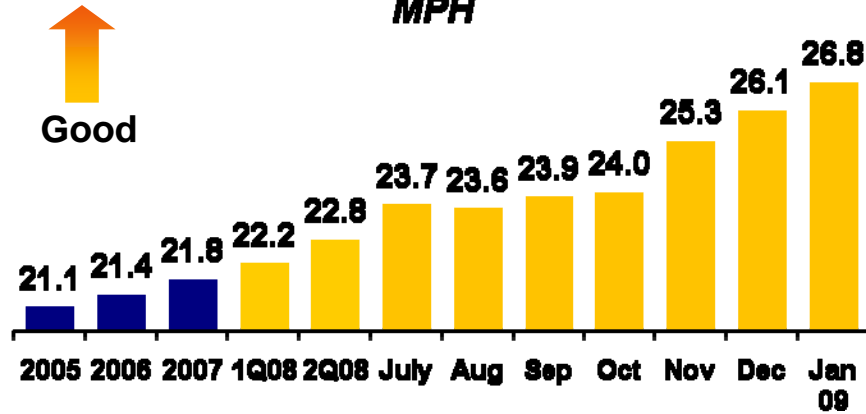
Union Pacific Ag Products



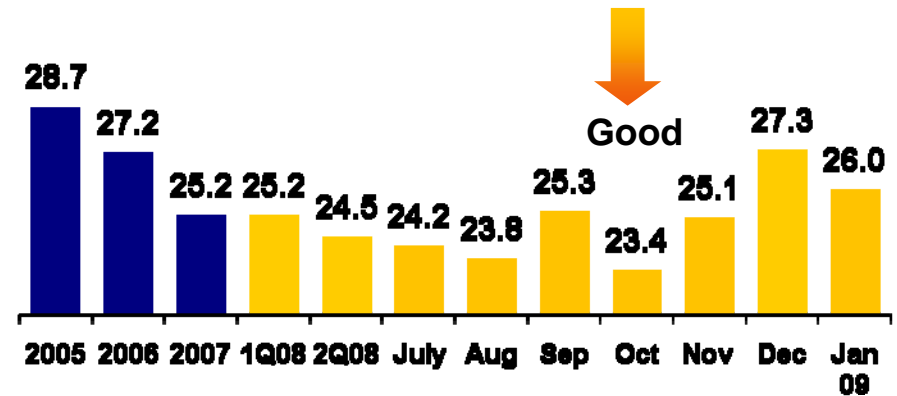


# Productivity Measures

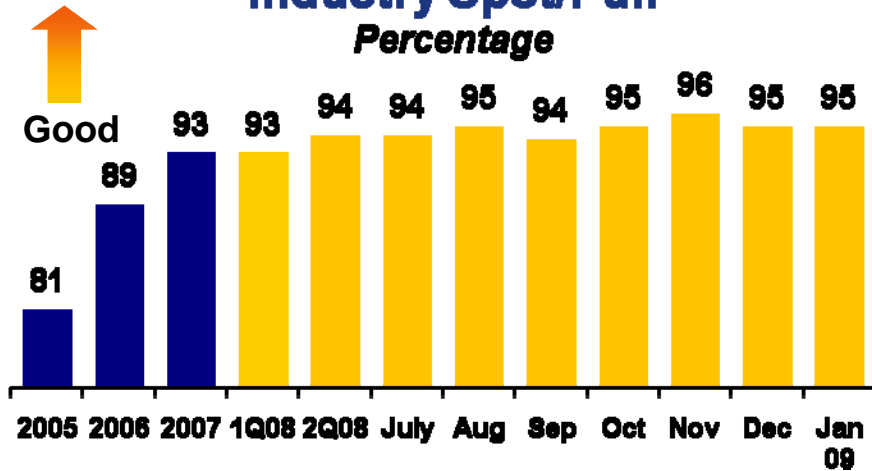
## AAR Velocity MPH



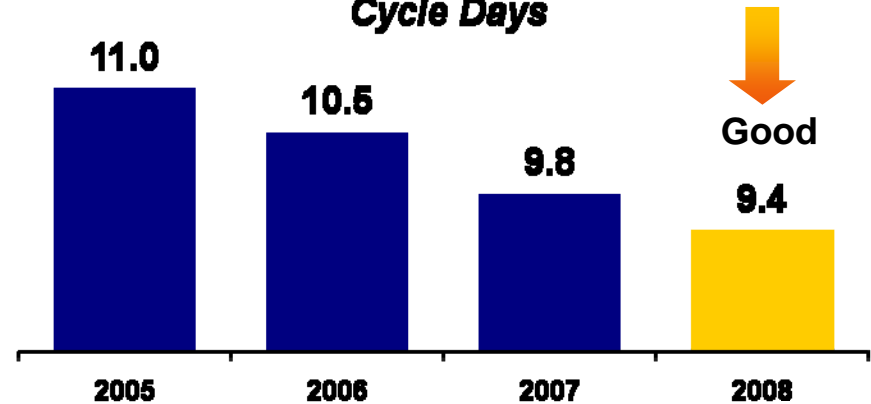
## AAR Terminal Dwell Hours



## Industry Spot/Pull Percentage

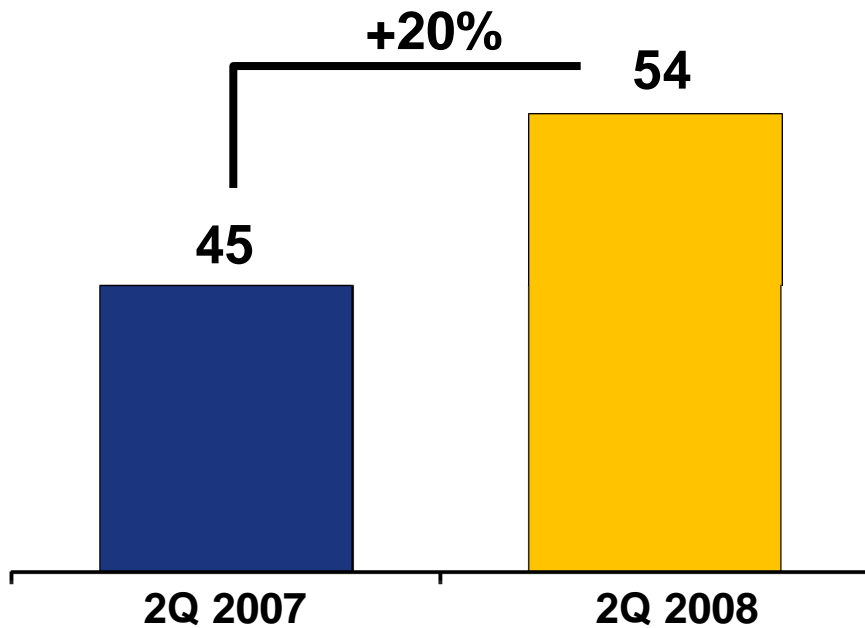


## Freight Car Utilization Cycle Days

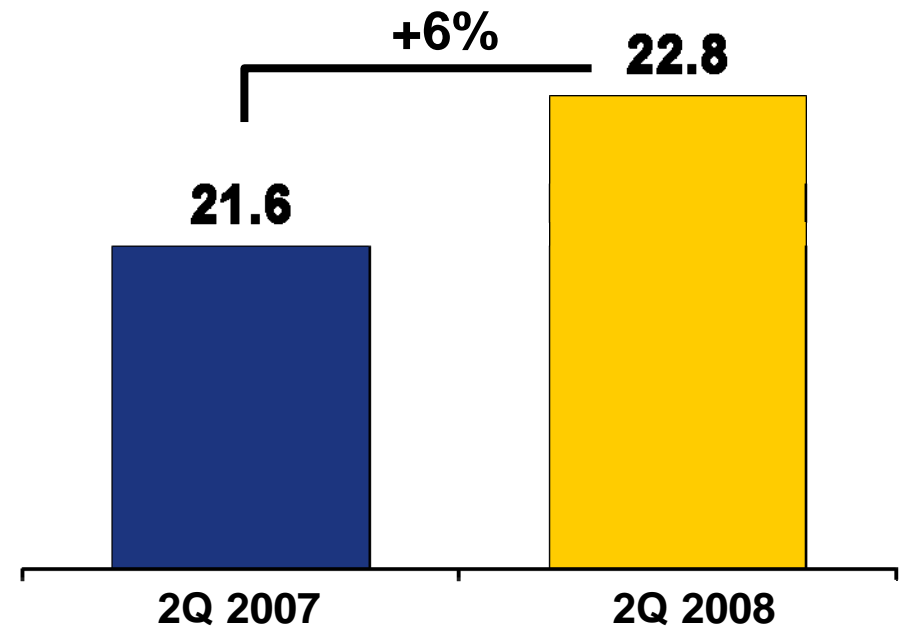


# Recoverability & Process Initiatives

## Network Interruption Days\*



## Velocity (MPH)



\*Defined as a day with Hours Held  $\geq$  50Hrs for Weather and/or Incident

# Technology Improvements

- Distributed Power
- Unit Train
- Customer Interface
- Computer Aided Dispatching III
- Electronic Control Pneumatic Braking
- Communication-based Train Control

## Conventional Train Operations



## Distributed Power Train Operations



# Market Access

## *Linking Production and Consumption - Ag Products*

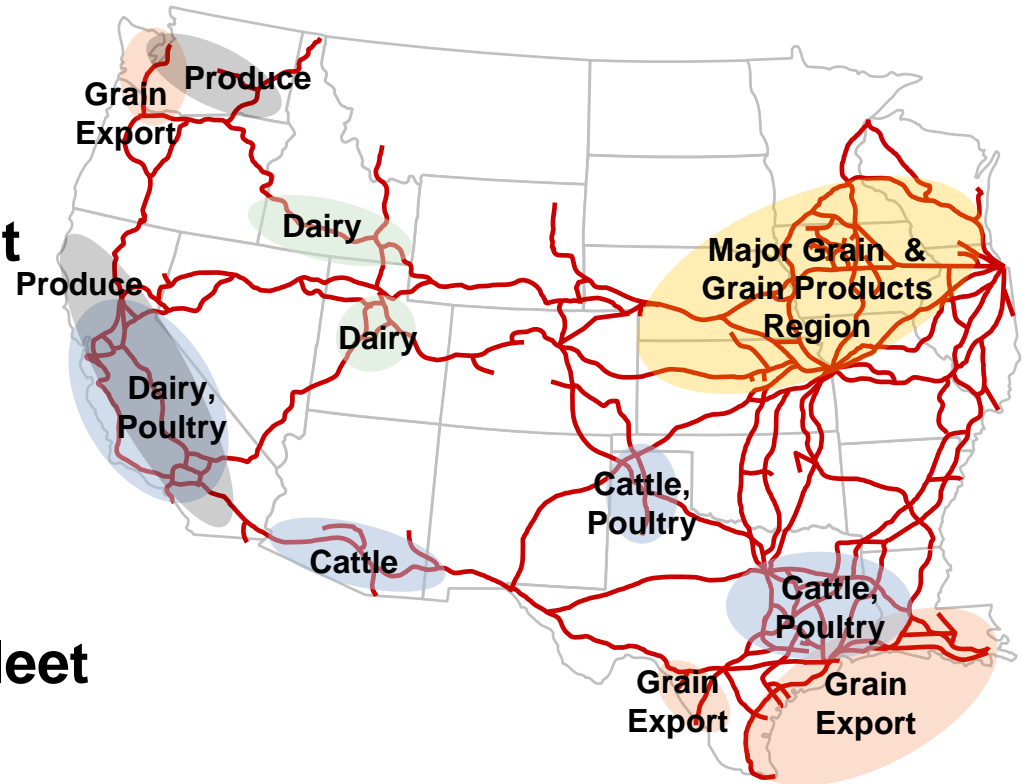
### ■ Access

- Major Grain and Produce Regions
- Flexibility to Meet Demands of the Market

- Ethanol
- Feed/Processors
- Export

### ■ Infrastructure

- Refrigerated Boxcar Fleet



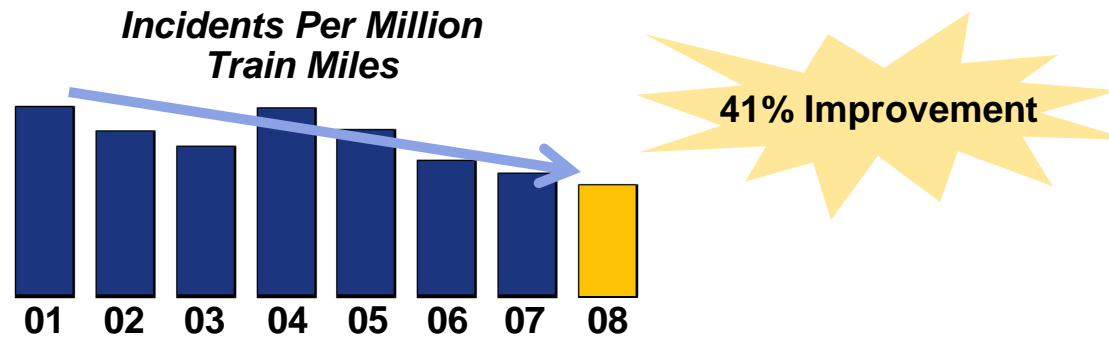
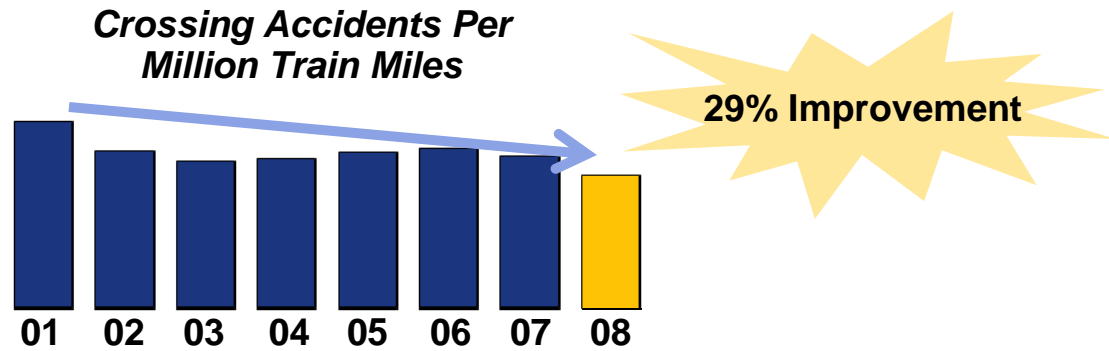
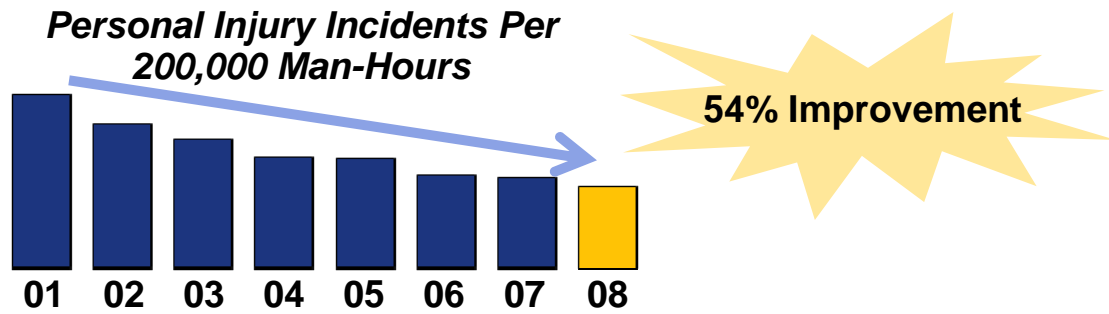


# Rail Transportation Issues

- **Safety**
- **Shipment Variability**
- **Capacity**
- **Capital**
- **Legislative Policy**



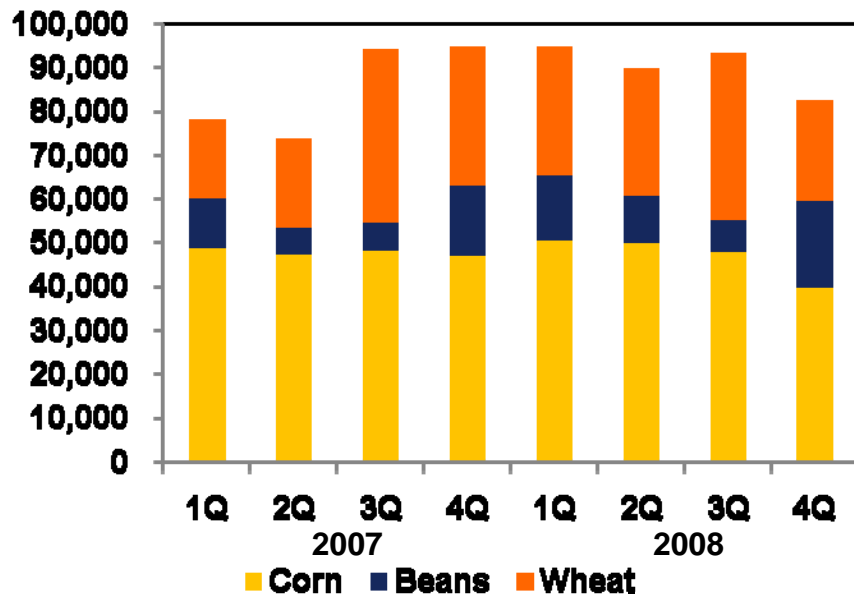
# Safety- “Zero Tolerance”



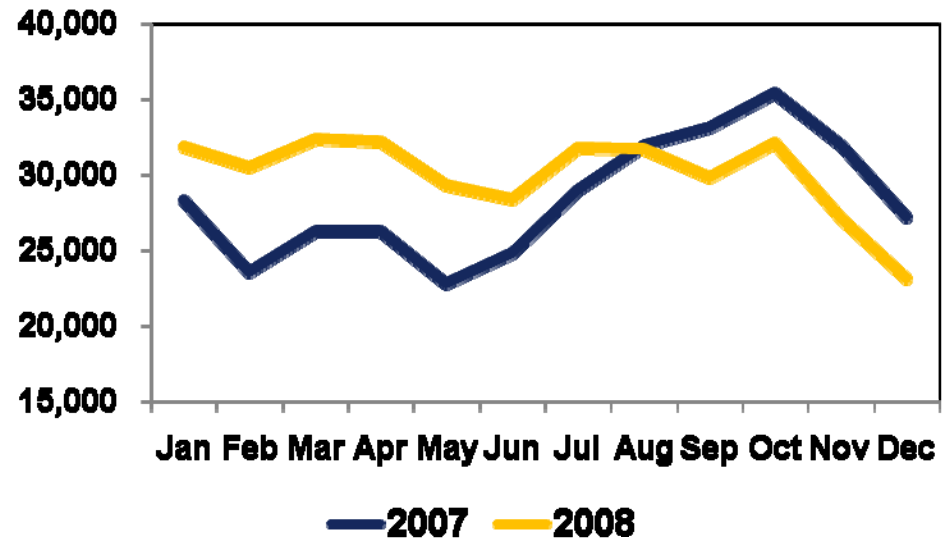
# Railroad Issues

## Shipment Variability - Grain

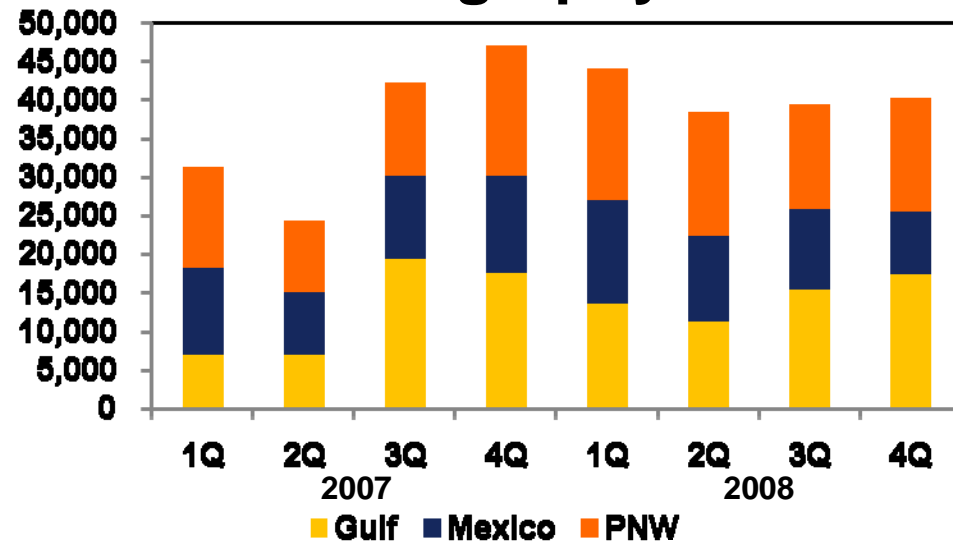
### Commodity



### Time



### Geography



# 5 Critical Resources

## Shared & Interconnected



**Workforce**



**Main Lines**



**Locomotives**



**Freight Cars**

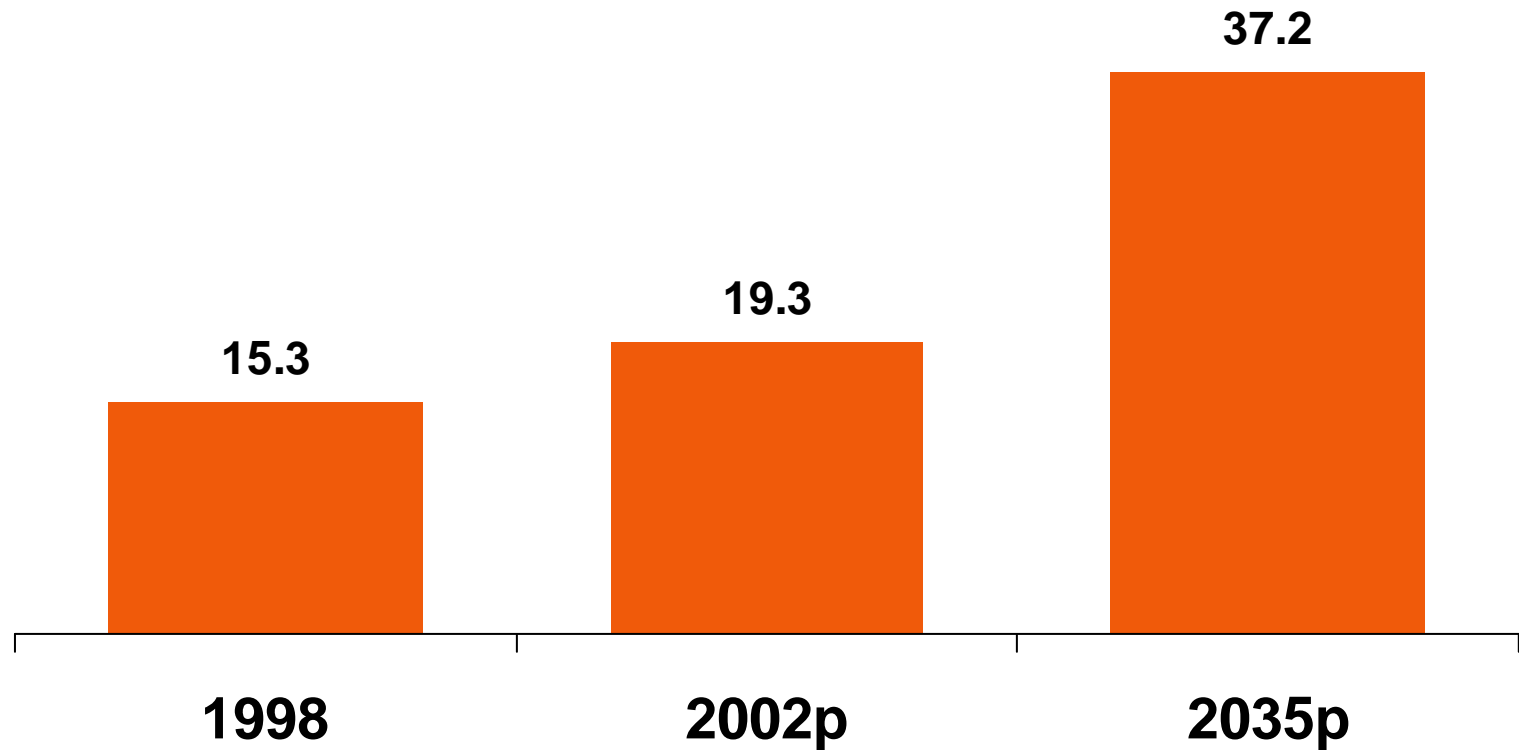


**Terminals**

# Railroad Issues

## *Freight Demand Growing....*

Billions of Tons of Freight Transported in the U.S.



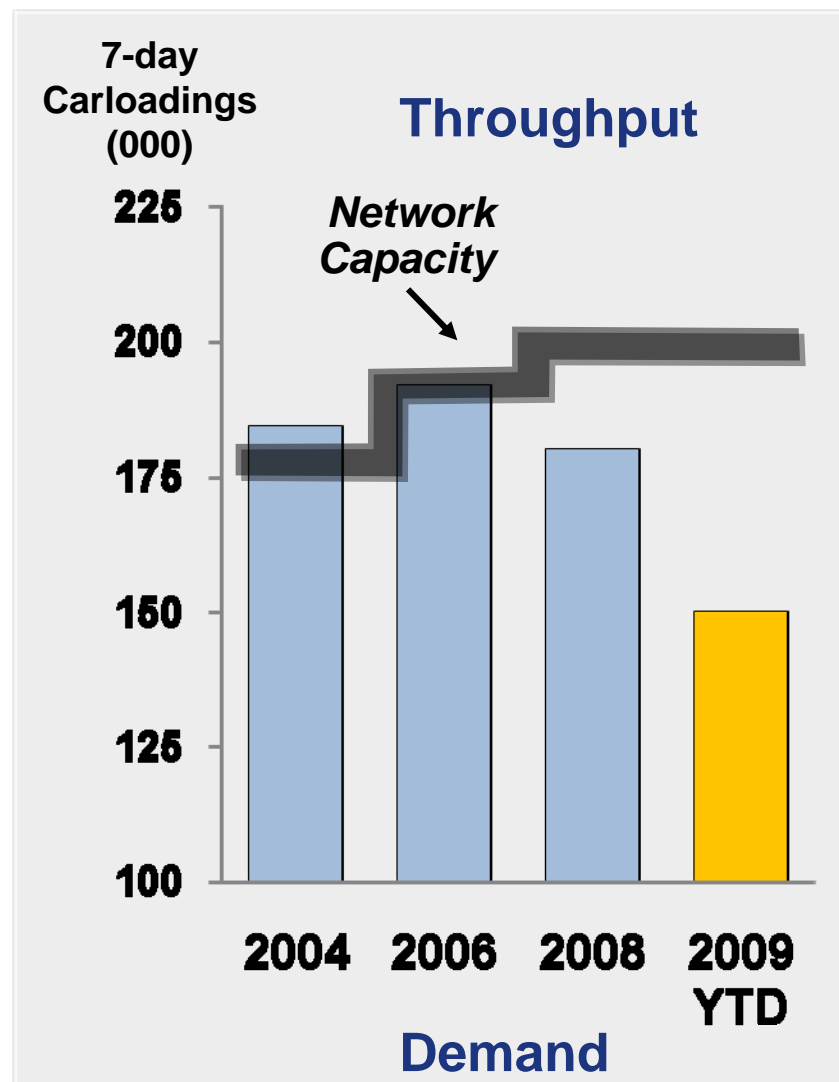
*p – preliminary*

Source: U.S. DOT - Freight Analysis Framework, 2002 & 2006



# Capacity Challenges

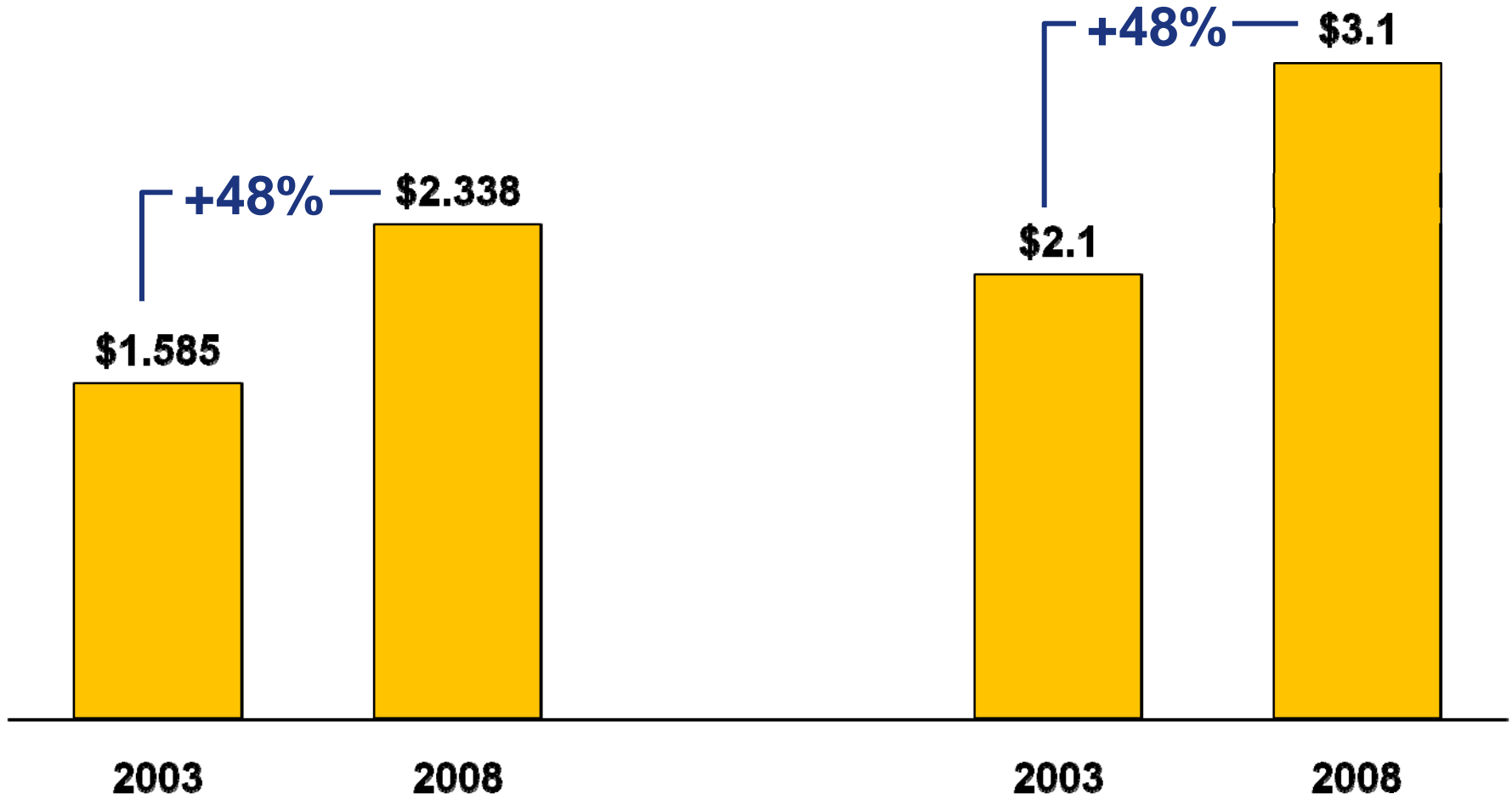
- **Economy**
  - Recession hasn't hit bottom
  - Costly assets in storage
- **Washington**
  - Balanced regulation
  - Conflicting oversight with anti-trust bill
- **State & local government**
  - Increased interest in commuter rail
  - Rail expansion



# Railroad Issues

## Capital Spending - UP

Net Income  
(\$ in billions)



*\*Includes cash capital, non-cash capital and lease financings*

# Rail Issues

## *Legislative Policy*

- **Anti-Trust Exemption**
  - Mergers
  - Equipment Pooling
- **Investment Tax Credit**
  - 25%
  - New Construction That Expands Rail Capacity
  - Railroads, Shippers, Receivers All Eligible

# 2009 Outlook

- **Overall US Economy**
- **Exports**
- **Domestic Feeding**
- **Bio-fuels**
- **Ocean Freight**



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Marketing & Sales***

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