



# *Coal, Railroads & the Surface Transportation Board*

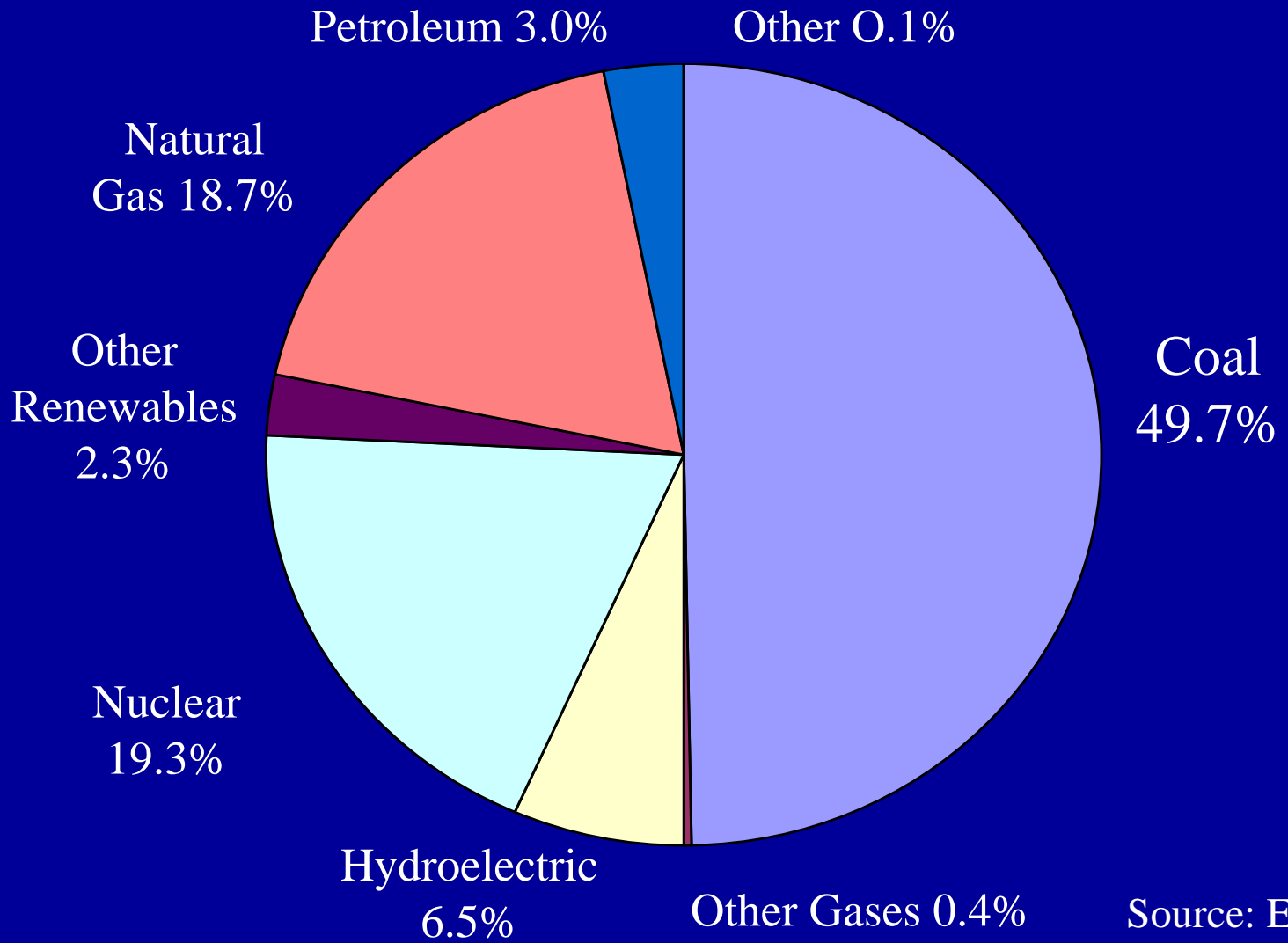
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Commissioner Francis P. Mulvey

National Coal Transportation Association  
Denver, Colorado  
September 11, 2007



# U.S. Electric Power Industry Net Generation

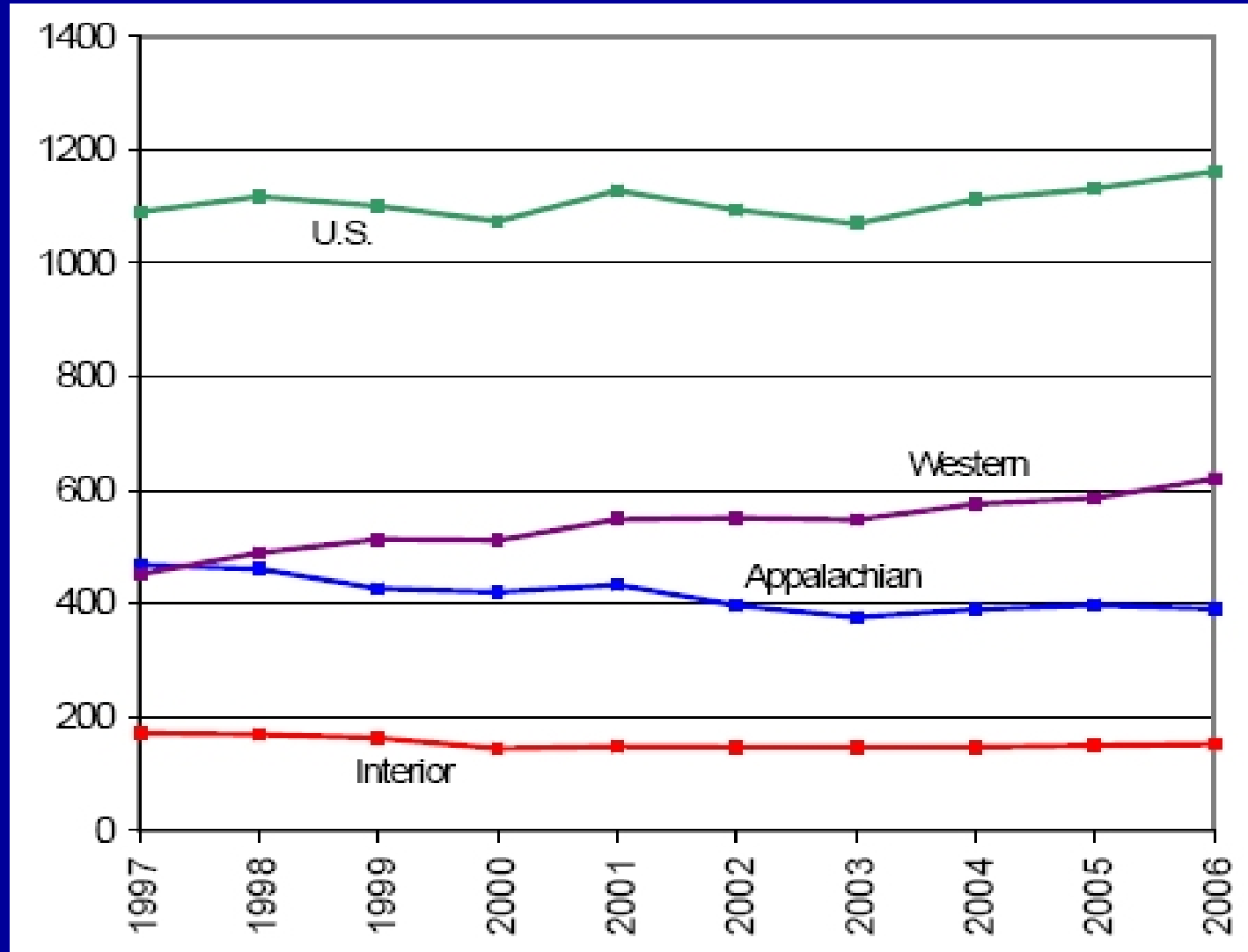


Source: EIA



# Coal Production by Region

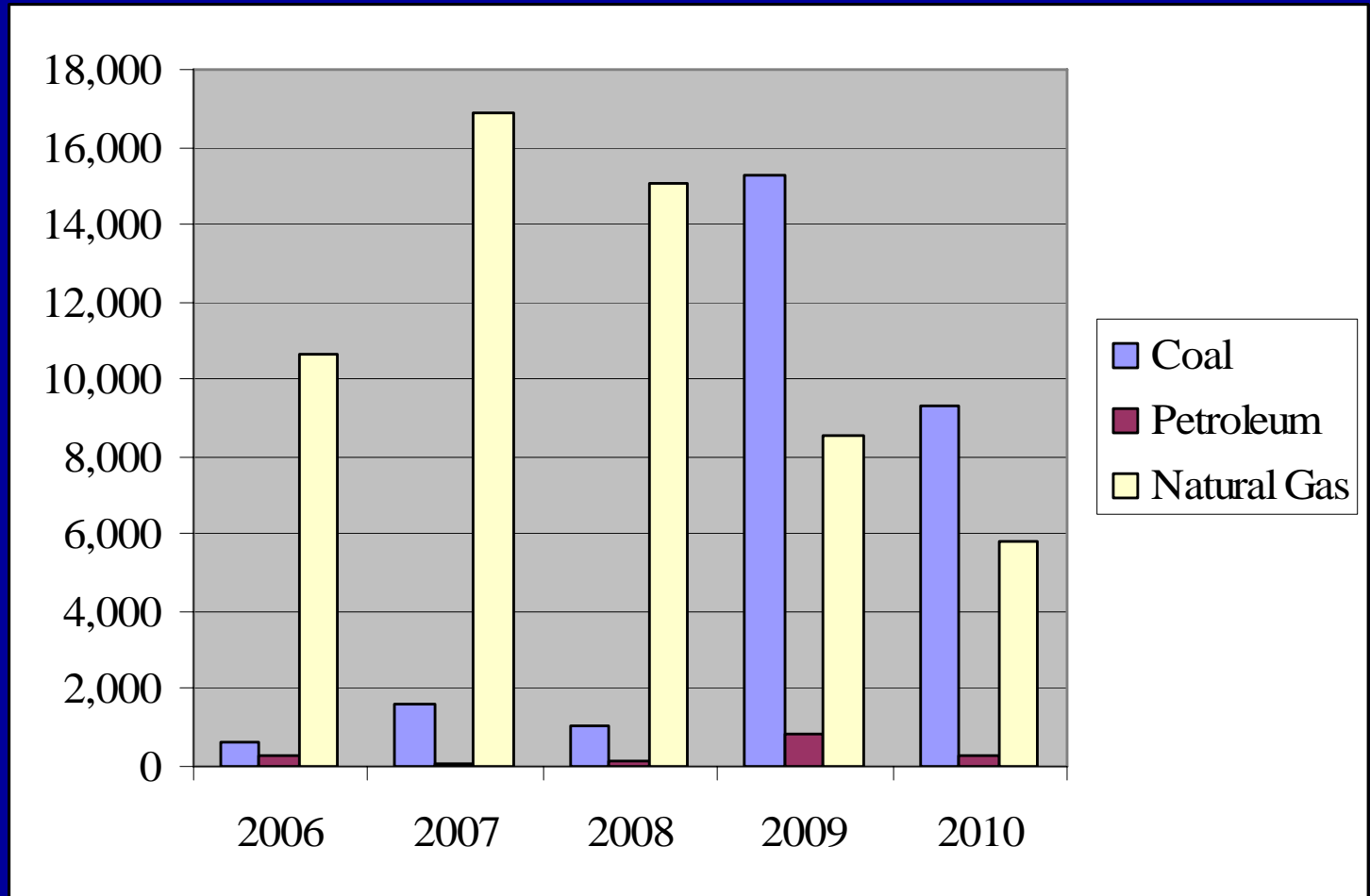
## Millions of Tons



Source: EIA



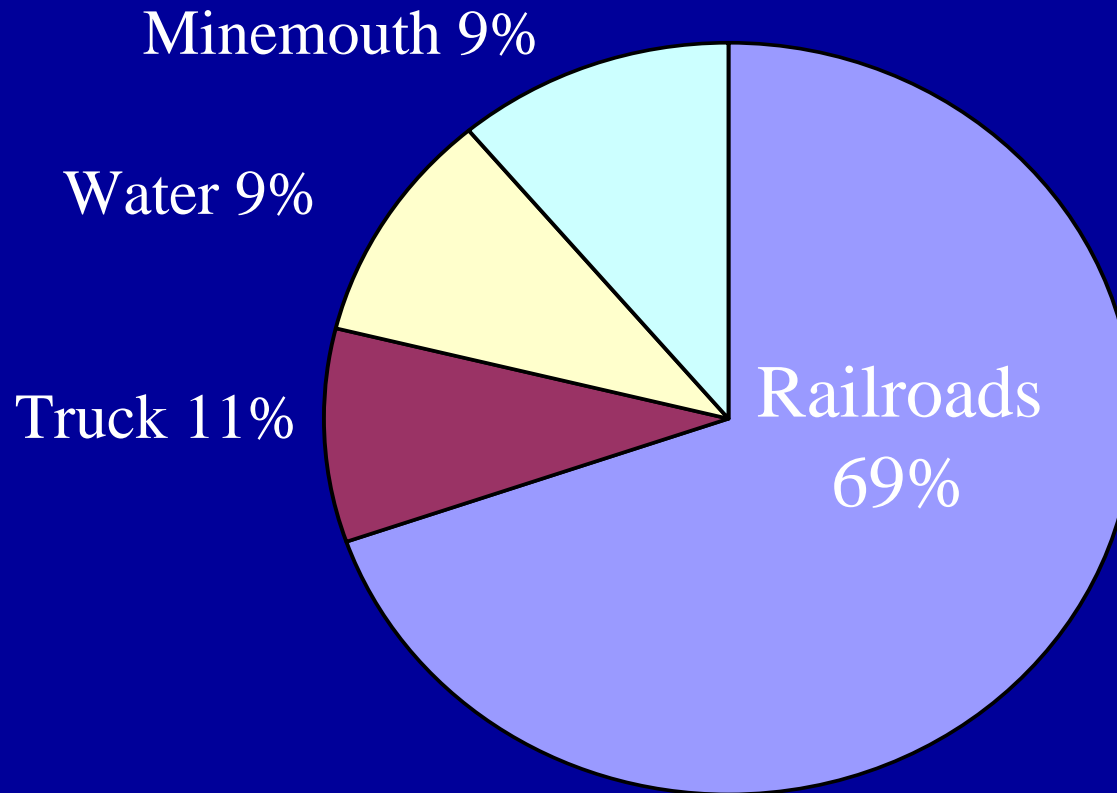
# U.S. Planned Generating Capacity Additions 2006-2010 (Megawatts)



Source: EIA



# U.S. Coal Shipments to Final Destination by Mode 2005



Source: EIA



# 2006 Coal Rail Transport Data

- 7.57 million carloads shipped – highest level ever & a 5% increase from 2005
- Class I's originated coal - 852 million tons, up 6% from 2005
- Class I gross revenue from coal - \$10.8 billion



# Coal Shipments by Rail

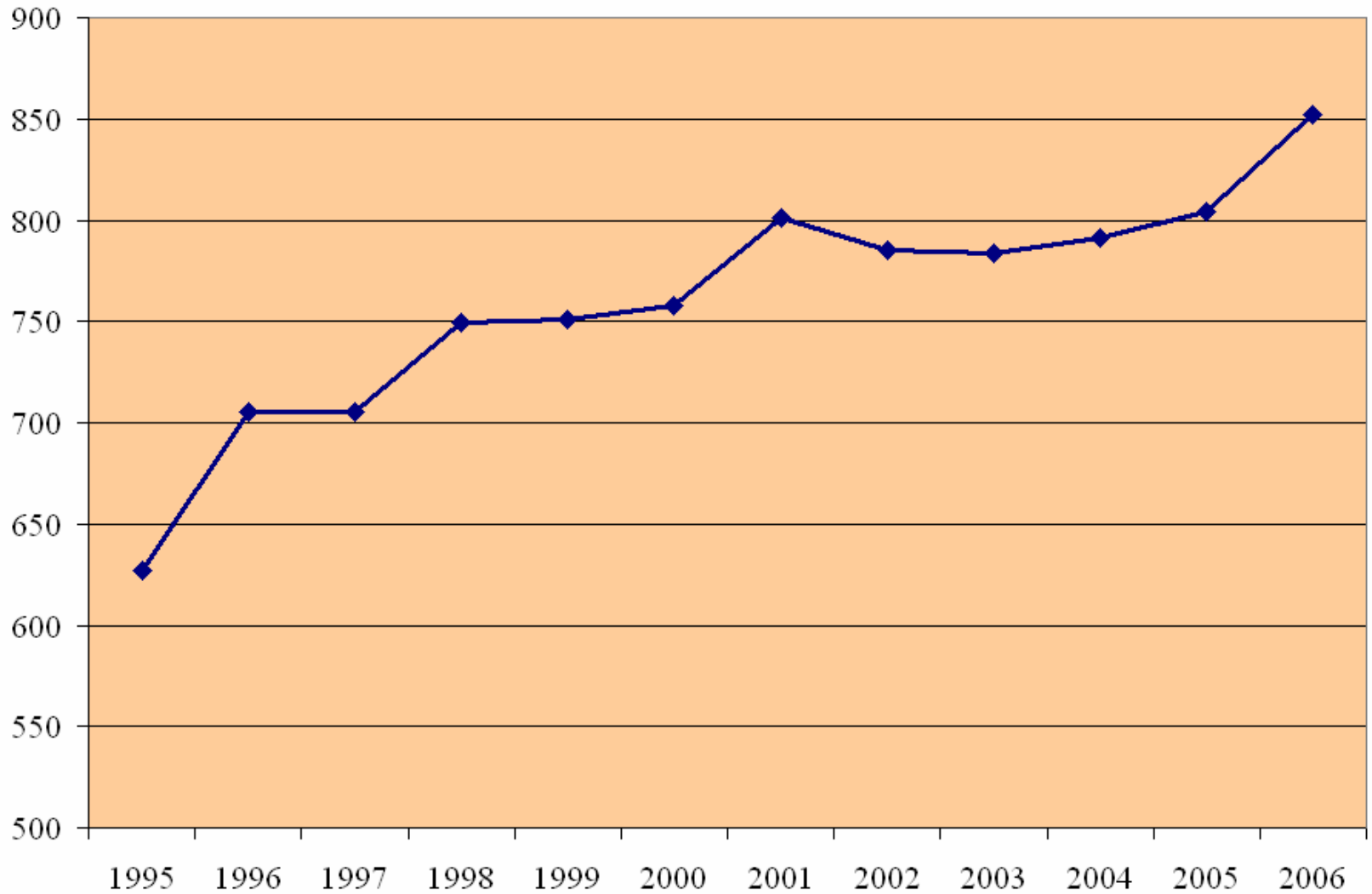
- Coal is the railroads single largest commodity by tonnage but not by revenue
- In 2006 coal represented:
  - 44% of total tonnage moving by rail
  - 24% of Total Rail Carloads
  - 21% Gross Revenue for Class I railroads
- 95% of coal transported by railroads moves in unit trains
- 2006 Average coal rail car carried 112.5 tons
  - Up 15% from 98.2 tons in 1990

Source: AAR



# Coal Tonnage Shipped 1995 – 2006

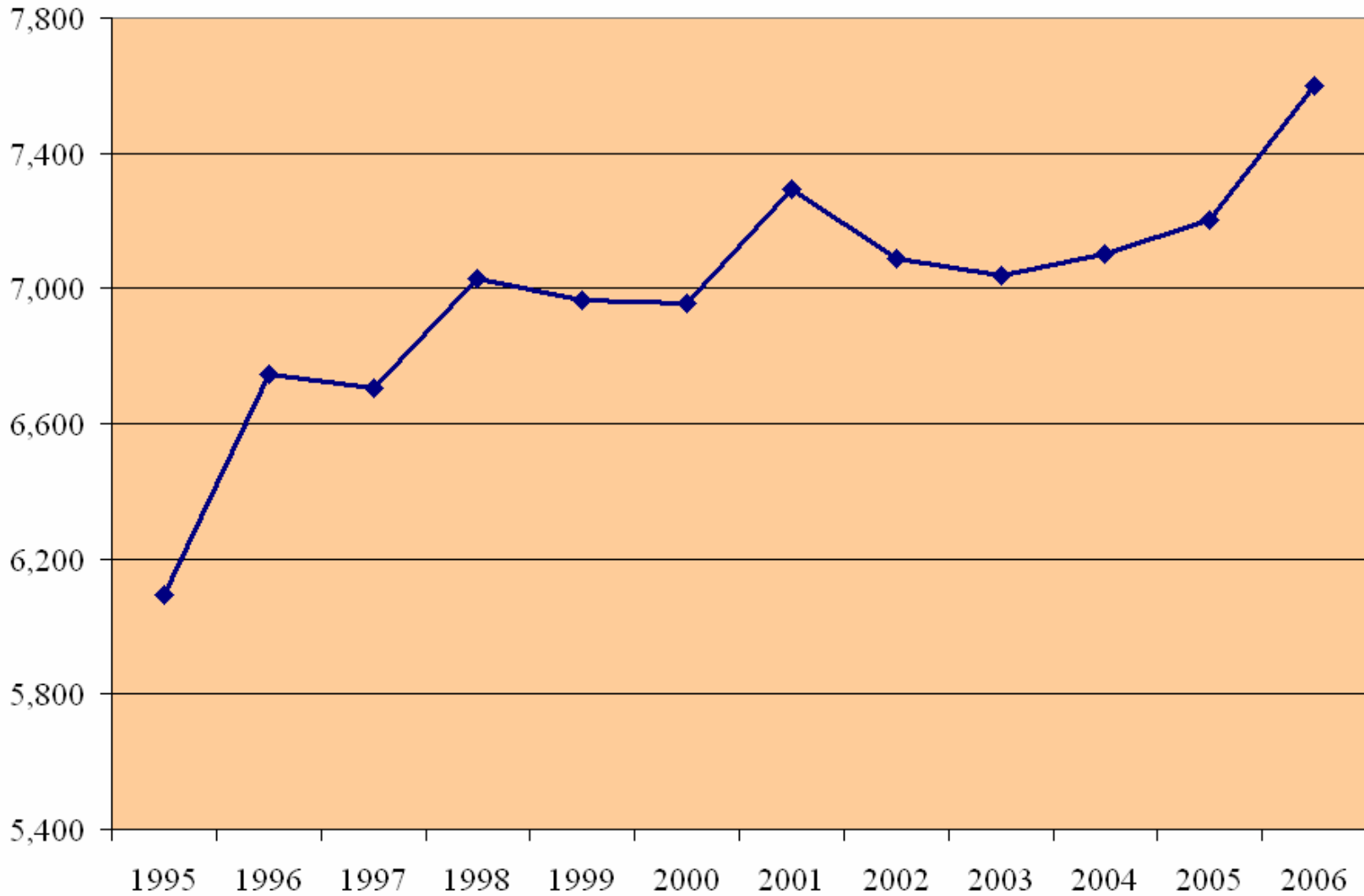
## Data (Millions)





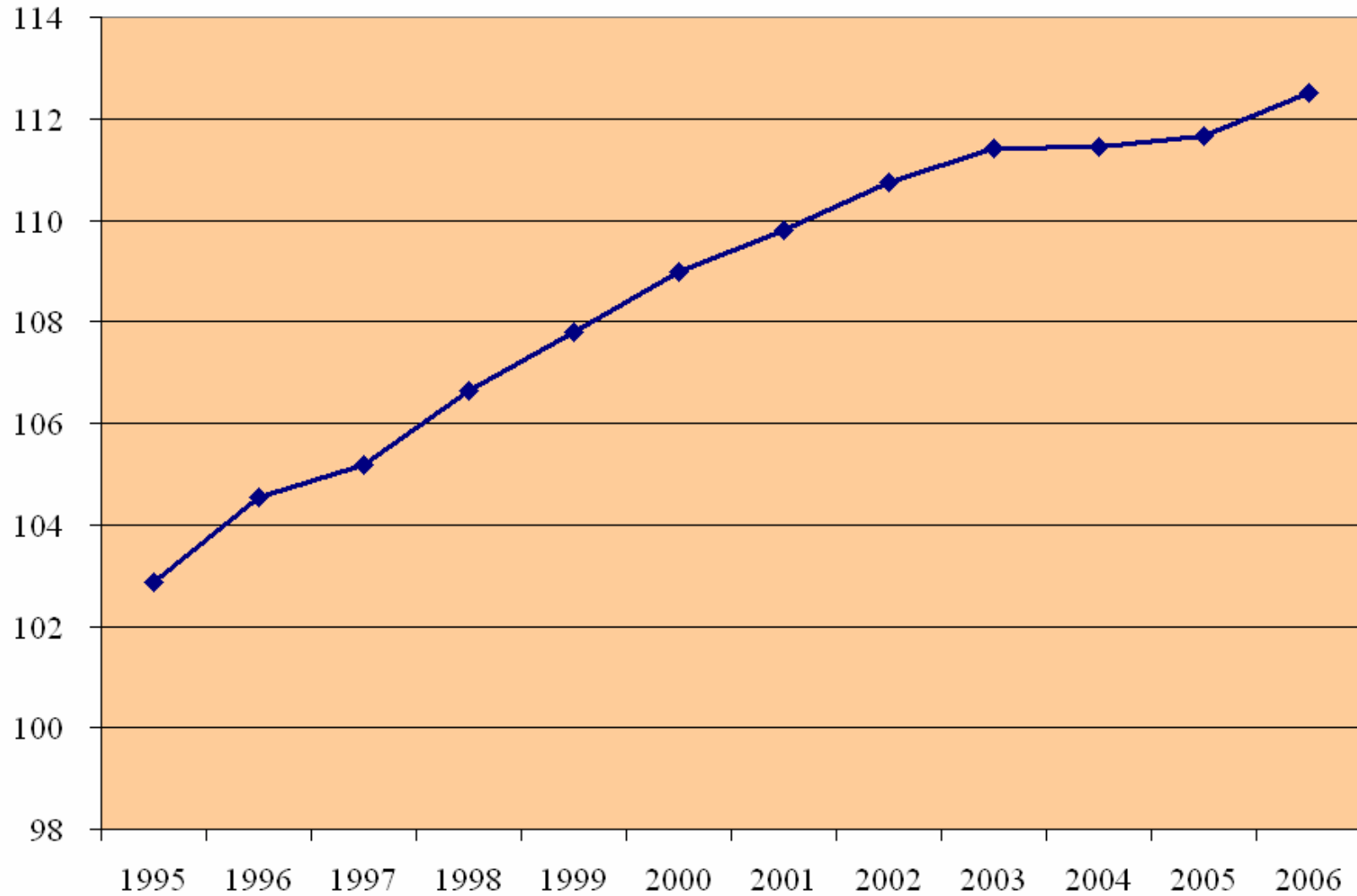


# Coal Shipments Rail Carloads Originated (Thousands)



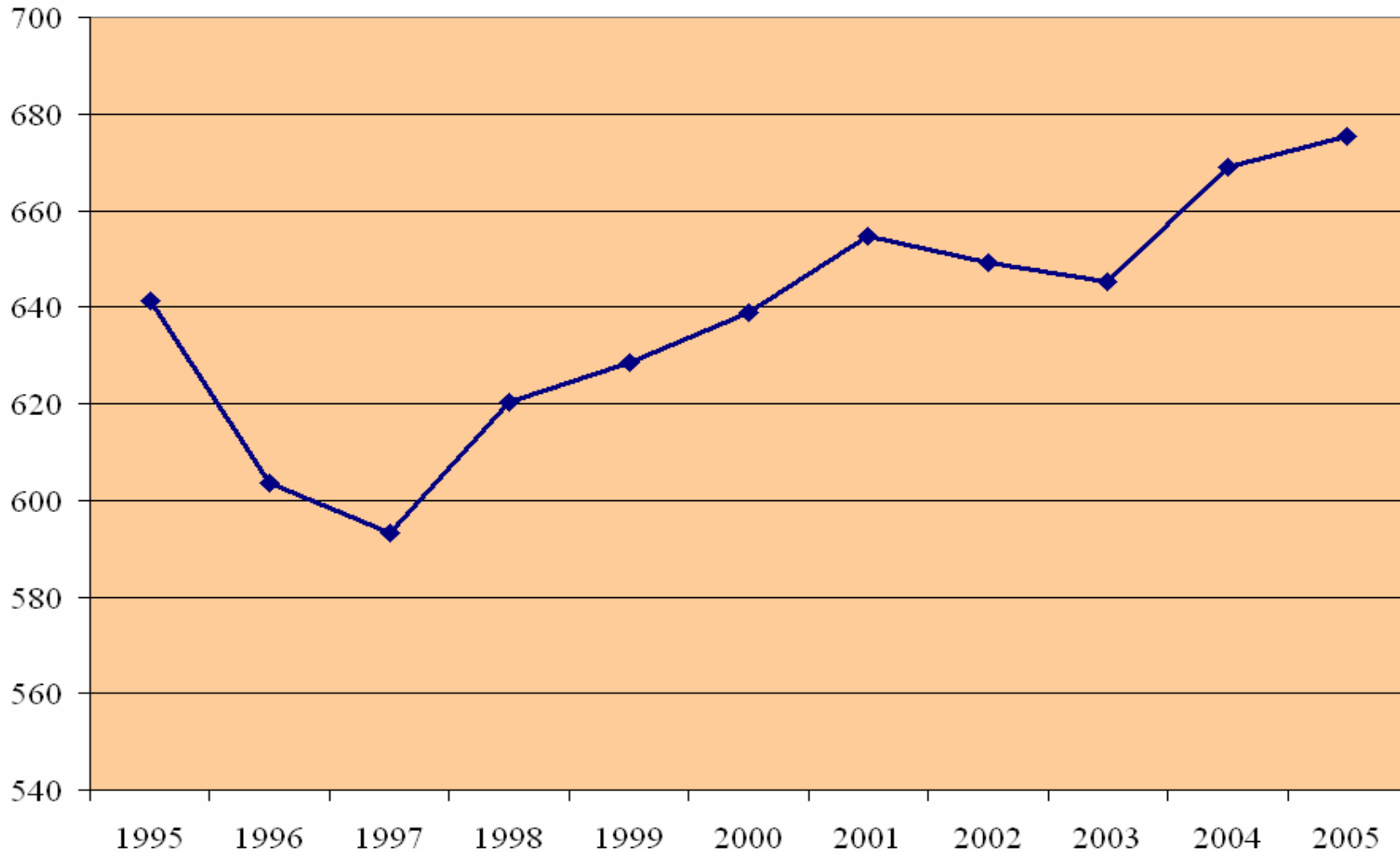


# Coal Shipments Tons Per Rail Car



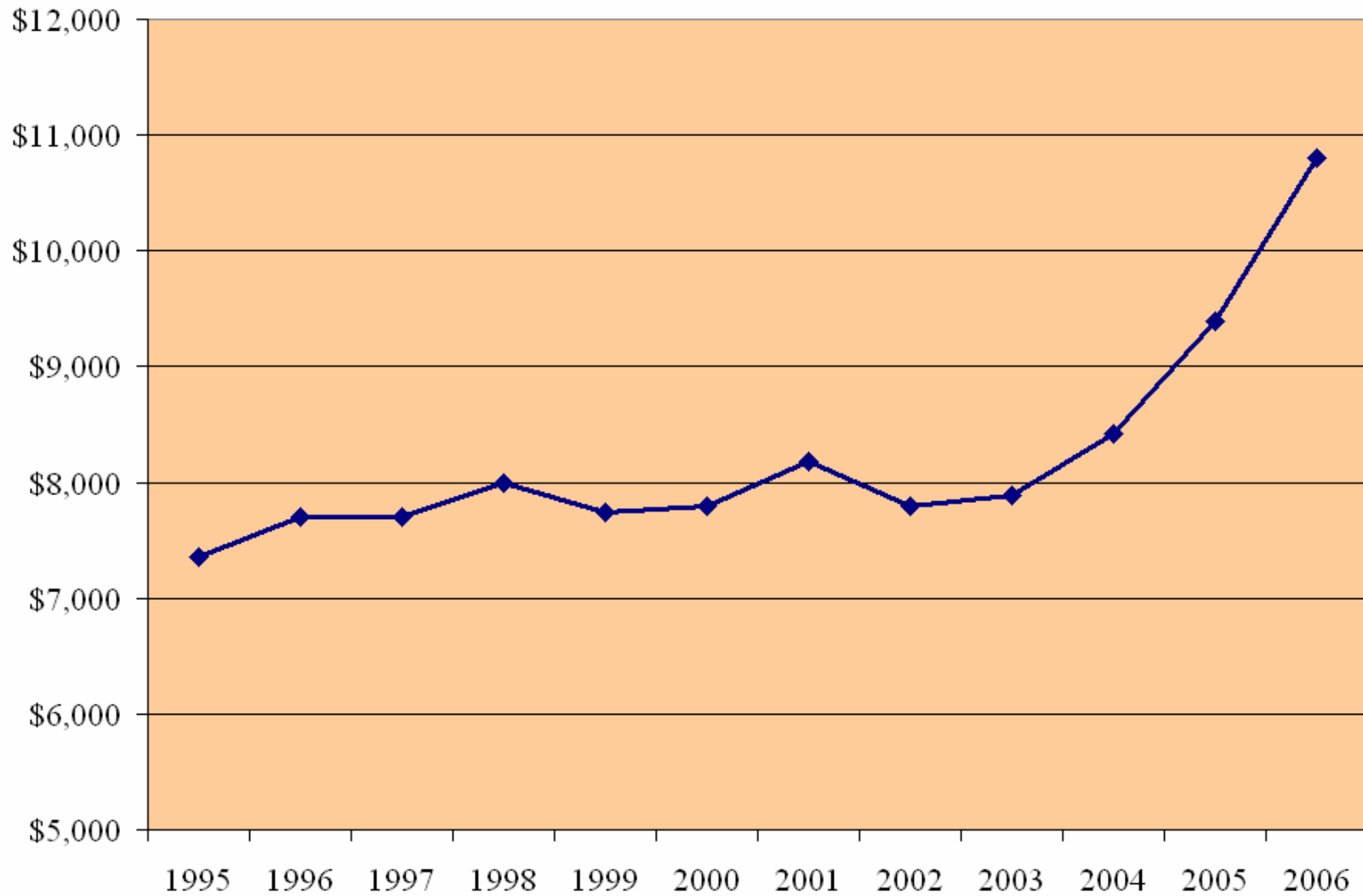


# Coal Shipments Average Length of Haul (Miles)



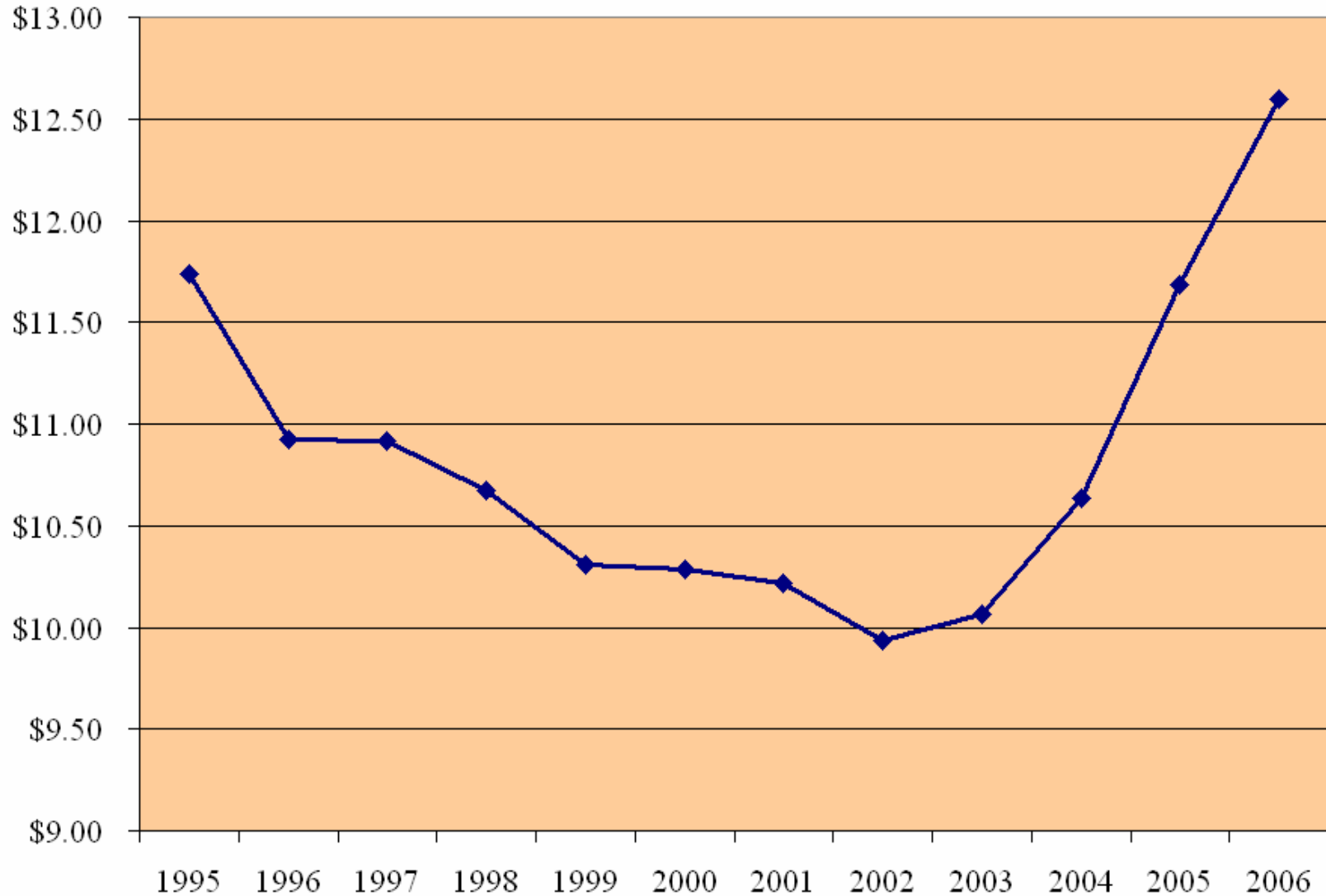


# Coal Revenue Millions of Current Dollars



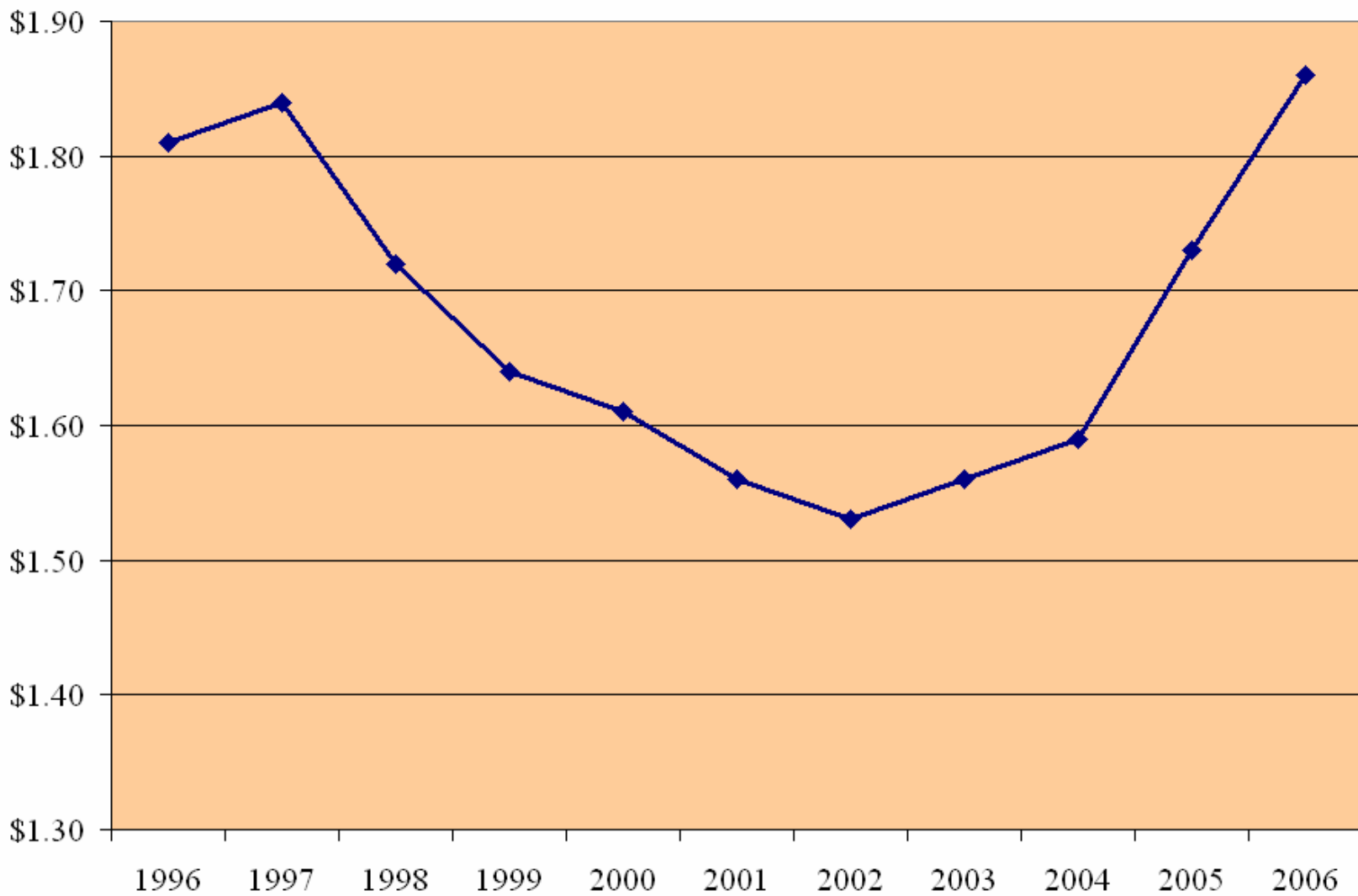


# Coal Revenue Per Ton (Constant Dollars)





# Coal Revenue Per Ton Mile (Constant 2005 Dollars)





# Coal Transportation YTD

- Coal capacity and efficiency have been increased by improvements in train operations, including
  - 24 hour shuttle trains
  - Longer trains
  - Reduction in crews
  - Larger cars
  - Distributed power
  - Improved signaling and dispatching
  - Faster loading and unloading
  - More double track
- Revenue per ton-mile for coal was 40% lower in 2005 than in 1990

Source: STB



# Coal Stockpiles YTD 2007

- As of June 2007 utilities had rebuilt their stockpiles to 135.1 million tons, almost 20 million tons over June 2005
- These stockpiles have been growing larger all year as coal companies have been producing 3.8% more coal while utilities have increased consumption by only 2.6%





# Coal & The Environment

- As plans for new coal-powered plants move forward an increasing number are being canceled or development slowed due to concern over global warming
  - Texas – 9 out of 11 plans canceled
- Clean Air Act Amendments that went into effect in 1995 and 2000 reduced the maximum allowable sulfur content of coal burned by utilities from 2.5 pounds to 1.2 pounds per million BTU
- Coal produces approximately twice the greenhouse gases as natural gas
- If we internalized the greater pollution costs via a carbon tax, the projected price of coal and natural gas are approximately the same



# The Railroad Capacity Problem

- Shrinking workforce and infrastructure partially offset by productivity improvement but... continuous increase in traffic begins to absorb “excess capacity”
- Network becomes more vulnerable to stochastic events
- *Will current traffic decline and concurrent relaxation of capacity constraints be short lived?*



# The Railroad Capacity Problem

- Improved earnings yet most not “revenue adequate” as STB measures it
- Historically RR’s ‘punished’ by Wall Street for making capital investments
- RR’s often found that prior infrastructure investments failed to generate sufficient income
- L/T strategy to reduce size of workforce
- Added rail infrastructure is long-lived while demand increases can be short-lived



# Carrier Responses to Recent Capacity Problem

- More railcars and locomotives purchased and leased
- Accelerated hiring and training of crews
  - Railroad industry is creating 80,000 new jobs in the next five years\* but size of workforce is unlikely to change
- Some infrastructure expansion efforts
  - “Class I railroads invested 17.8 percent of their revenues in capital improvements.”\*\*
- Price rationing of available capacity
- RR’s choosing who they will serve and the common carrier obligation

\*AAR/AASHTO



# Examples of RR Infrastructure Improvement Projects

- UP Los Angeles Basin – \$59 Million on 80 Miles of track in LA Basin in two years
- BNSF Coal Route – Adding 60 miles of 3<sup>rd</sup> and 4<sup>th</sup> main track on PRB Joint Line
- NS Locomotive Fleet – \$321 Million to purchase 53 locomotives
- CSX Charlotte Intermodal terminal – \$8 million in planned improvements will double capacity from 80,000 lifts to 160,000 annual lifts
- KCS Meridian Speedway – \$300 million joint venture with NS to increase capacity and improve service between Meridian, Miss. and Shreveport, La.



# U.S. Railroad Capital Spending

## Estimated Distribution of Railroad 2007 Capital Expenditures

	Maintenance	Equipment	Growth	Other
BNSF	58%	13%	27%	2%
CN	50%	22%	19%	9%
CP	70%	17%	6%	7%
CSXT	58%	18%	18%	6%
NS	60%	30%	6%	4%
UP	55%	15%	25%	5%
Average	59%	19%	17%	5%



# Approaches to the Transportation Capacity Problem

- Build more physical infrastructure
- Adopt technological innovations
  - *Can RR's do this and maintain profitability?*
- Better utilize existing facilities
- Promote shipper/traveler behavioral changes
- Public/Private Partnerships
- Greater role for the Federal Government?



# Railroad Cost of Capital

- STB has found that revenues are generally inadequate
- STB combines cost of debt and cost of equity to estimate cost of capital
- WCTL petition to reexamine our method-- alleges that STB overstates cost of equity capital by using Discounted Cash Flow (DCF)
- WCTL alleges that most analysts use Capital Asset Pricing Model approach not DCF





# Proposed Revisions to Cost of Capital Methodology - STB EP 664

- STB EP 664 - NPR issued August 14
- Proposes changing calculation for cost of equity
- Utilizes CAPM – Capital Asset Pricing Model instead of Discounted Cash Flow Method
- Initial results indicate RR's closer to revenue adequacy
- Comments due September 27; reply comments due October 29



# Current Activities at the Board and Impact of Legislative Proposals on the Board's Operations



# Ex Parte 657 – Rulemaking to Streamline Major Coal Rate Cases

STB October 2006 Decision called for:

1. Replacing of the percent reduction approach for calculating maximum lawful rates to eliminate gaming
2. Adopting of an "average total cost" method to allocate revenue
3. Shortening the analysis period to 10 years
4. Changing the method of forecasting operating expenses to account for future productivity improvement
5. Limit cost adjustment
6. Adopting new standards to govern when to reopen rate cases



# Simplified Standards for Rail Rate Cases STB Ex Parte No. 646 (Sub-No. 1)

- STB Decision – September 5, 2007
- Provides access to the rate reasonableness process for all sizes of rail rate disputes, and in particular, to the estimated 73% of challengeable rail traffic for which the large rate case process would be financially impracticable
- Requires, for all rail rate disputes, mandatory, nonbinding mediation—a mechanism that has been used successfully in previous cases to arrive at negotiated settlements



# Simplified Standards for Rail Rate Cases STB Ex Parte No. 646 (Sub-No. 1)

- Allows rail customers to choose the methodology that is most appropriate for consideration for their complaint:
  - A rail customer choosing the simplest approach, the “Three-Benchmark” methodology, will be eligible to recover up to \$1 million over a 5-year period.
  - A rail customer choosing the “Simplified Stand-Alone Cost” methodology will be eligible to recover up to \$5 million over a 5year period



# Pending Legislation Involving the STB

- H.R. 2125 - Attempts to
  - Increase competition in the rail industry
  - Increase the reliability of rail service
  - Provide customers with additional processes for challenging rate and service disputes
- H.R. 1300 – STB expanded jurisdiction over shared track between passenger and freight rail
- S. 1125 – Rail Infrastructure Investment Tax Credit
- S. 294 – Amtrak Reauthorization – expanded STB role in mediating the parties for Amtrak access



Thank you

Questions?