Coal Transportation by Rail – Outlook for Rates and Service

Presentation to:

NEMS/AEO Annual Conference

Energy Information Administration, March 12, 2002

Presented by:

Stan Kaplan

PA Consulting Group

Washington, DC

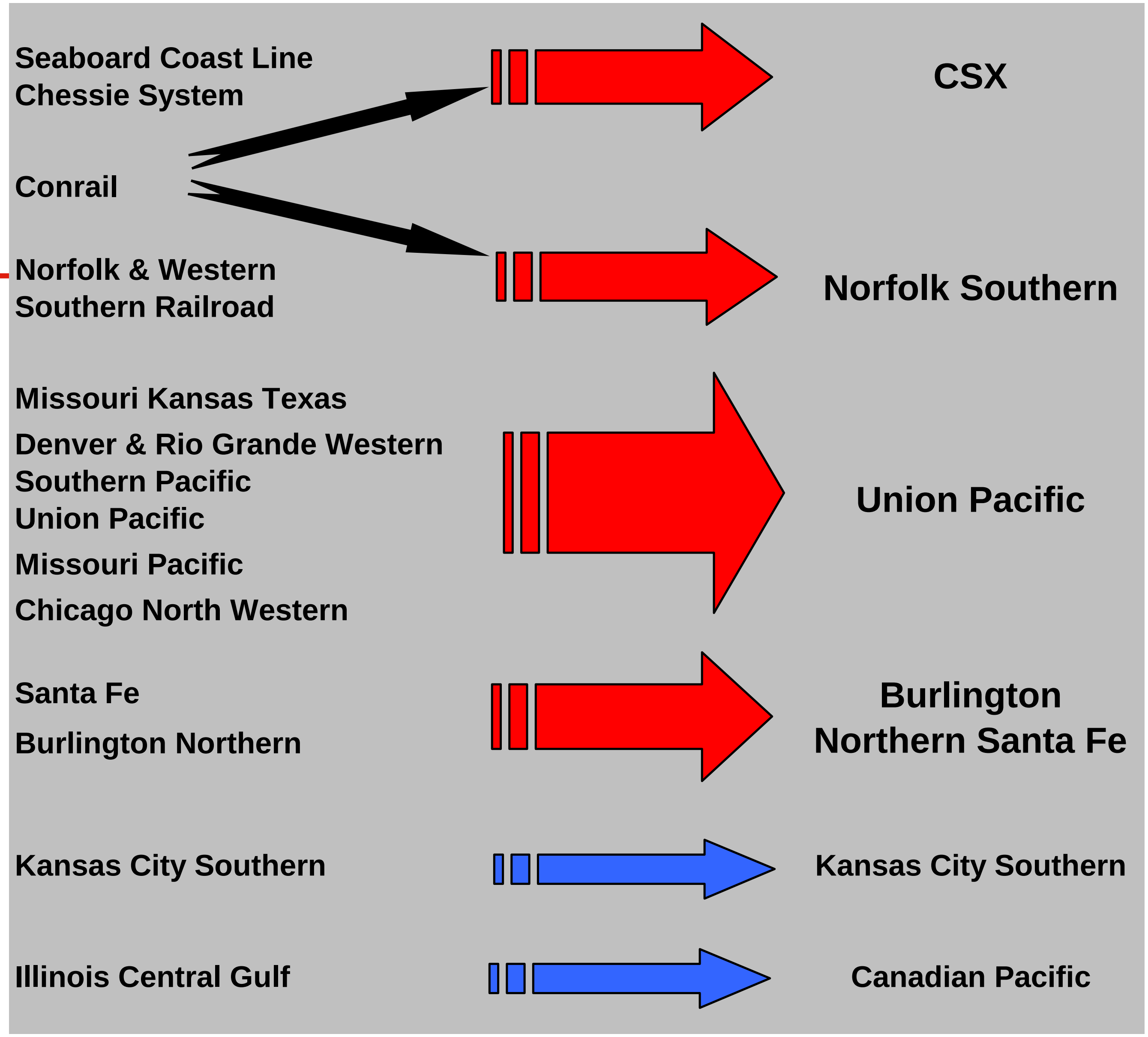
202-442-2553 stan.kaplan@paconsulting.com

Agenda

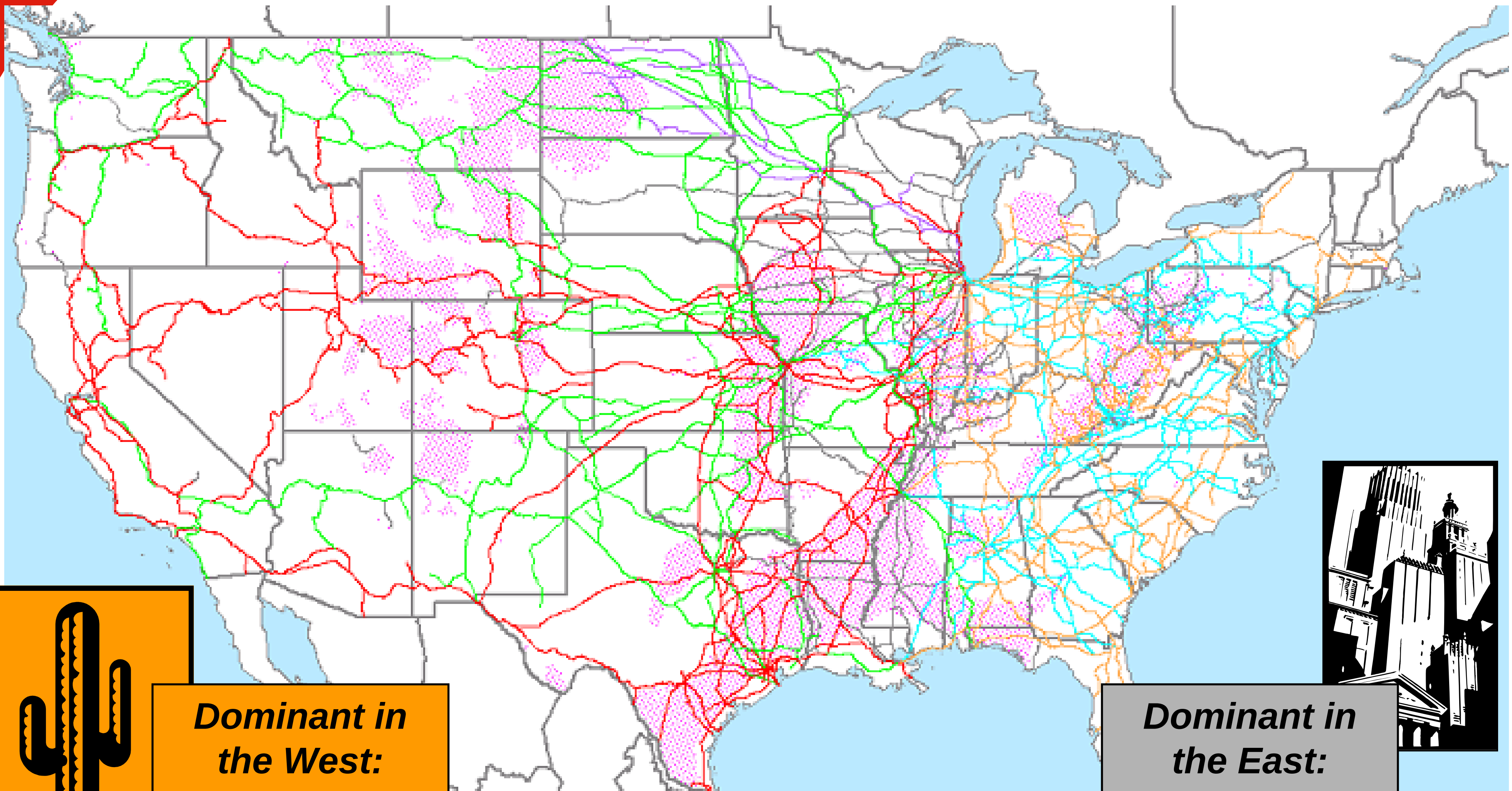
- Background –Rail, Coal and Power
- The Rail Industry – Running into a Dead End?
- Railroad Business Strategy
- Implications for Coal and Power

Background – Rail, Coal and Power

The Railroad Implosion



Rail Network and Coal Fields



Map from RDI *PowerMap*

Dominant in the West:

UP and BNSF

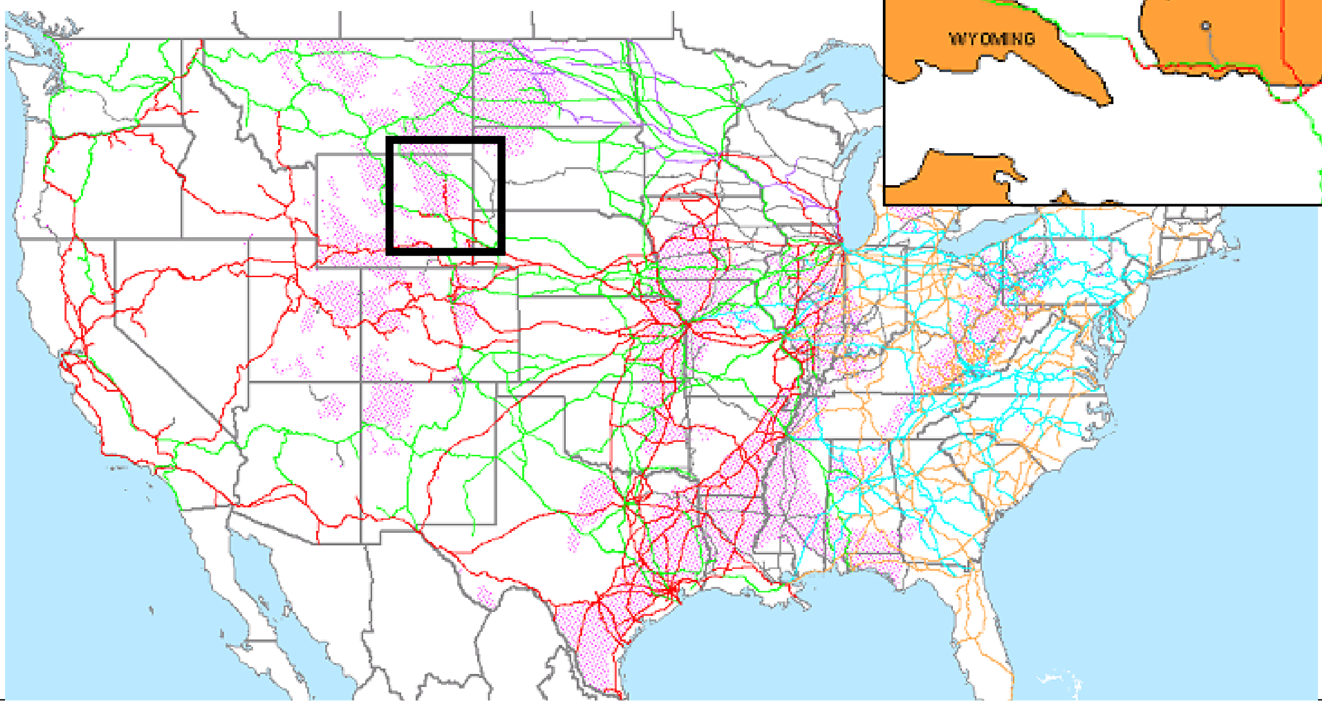
Dominant in the East:

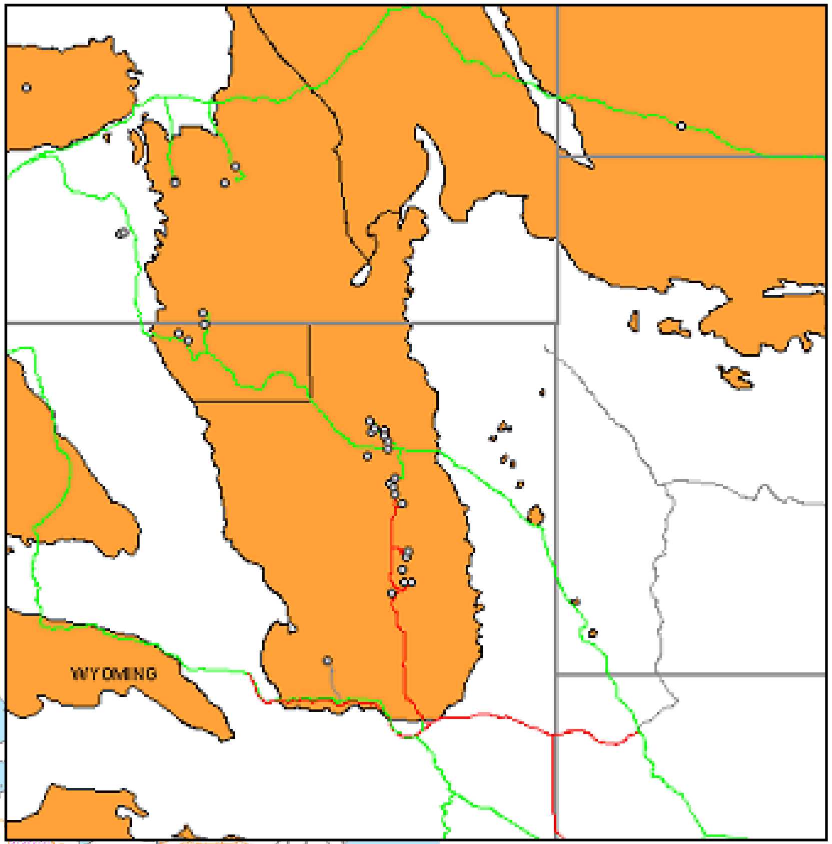
CSX and NS

Powder River Basin – A Third of the Nation's Coal

Est'd 2002 Production: over 380 million tons

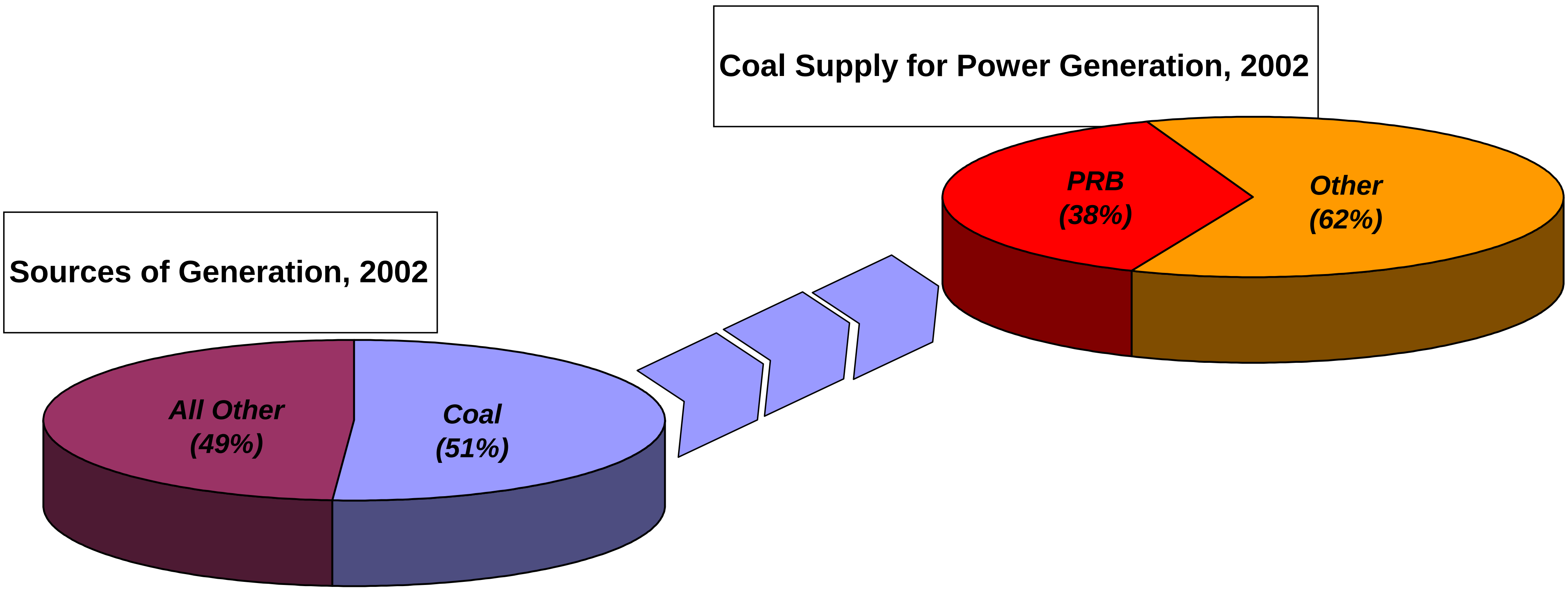
Est'd 2002 US Production: 1132 million tons





Maps from RDI *PowerMap*

The PRB Supplies Over a Third of Coal for Generation



Source: EIA, *STEO*

The Rail Industry – Running into a Dead End?

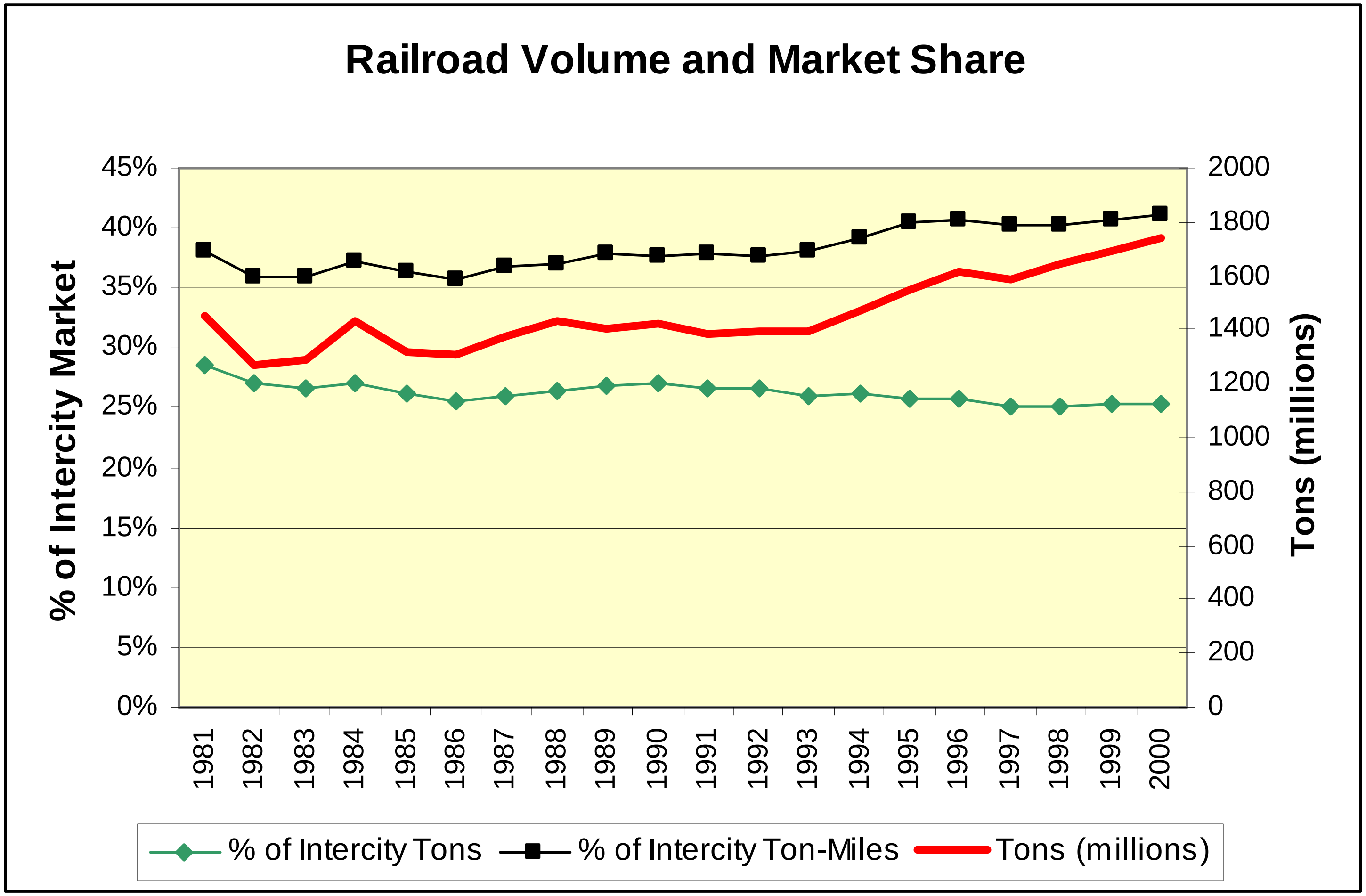
State of the Railroads

- Staggers Act of 1980 was intended to save the rail industry through partial deregulation.
- Rail industry today is far healthier than 21 years ago.
- The railroads have pursued several paths to financial success:
  - Cost-cutting and productivity improvements
  - Merger
  - Differential pricing
  - Diversification
  - New Services
  - Investment

Several of the Key Railroad Business Strategies of the Past 21 Years Have Run Out of Steam

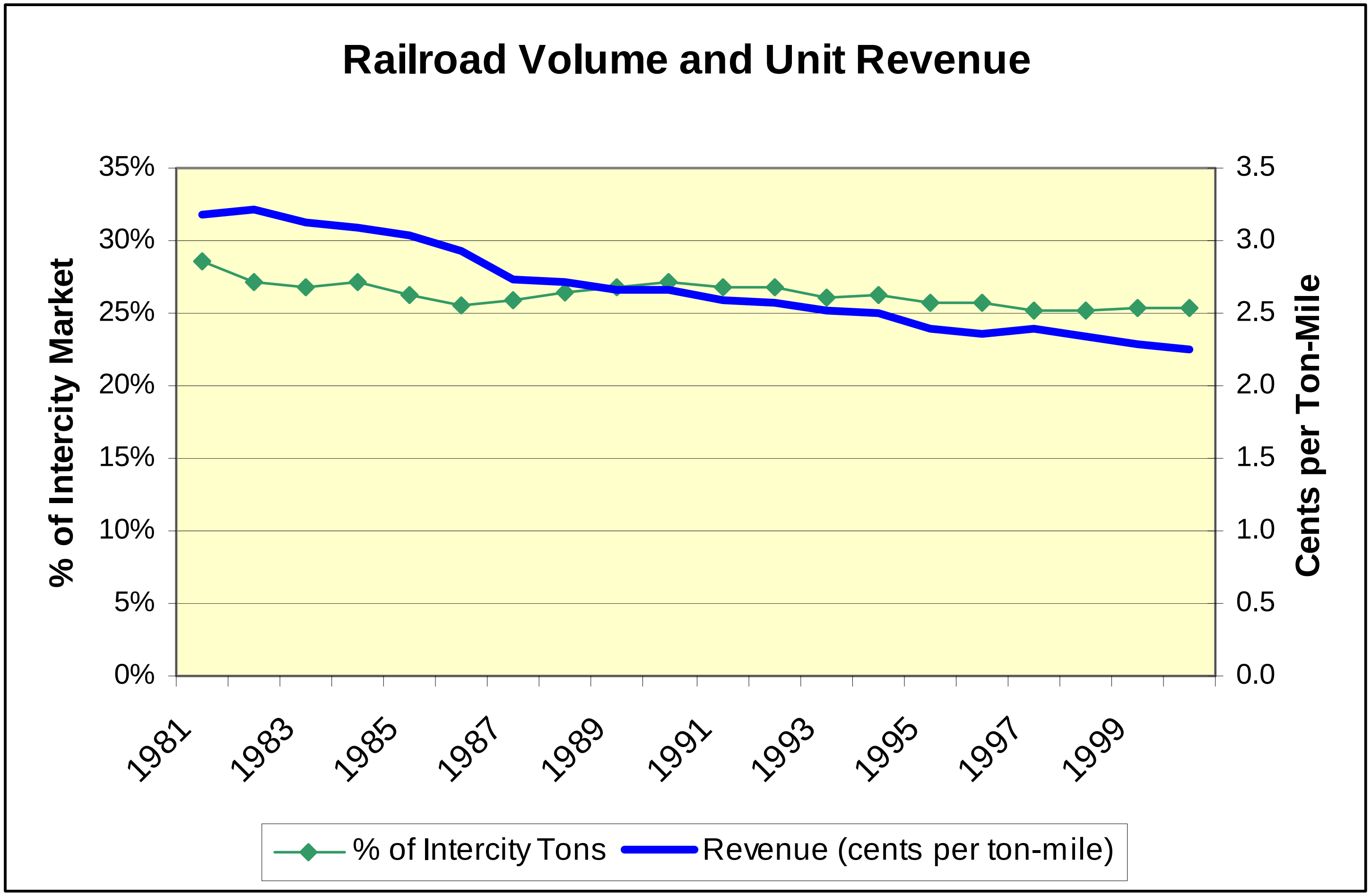
- Diversification is being abandoned by the carriers.
- Cost cutting may be reaching a point of diminishing returns.
- The mergers have not proved to be the ticket to financial success:
  - UP with Chicago North Western: 1995
  - BN with Santa Fe: 1996
  - UP with Southern Pacific: 1996
  - CSX and NS division of Conrail: 1999

Growth has Been Elusive...



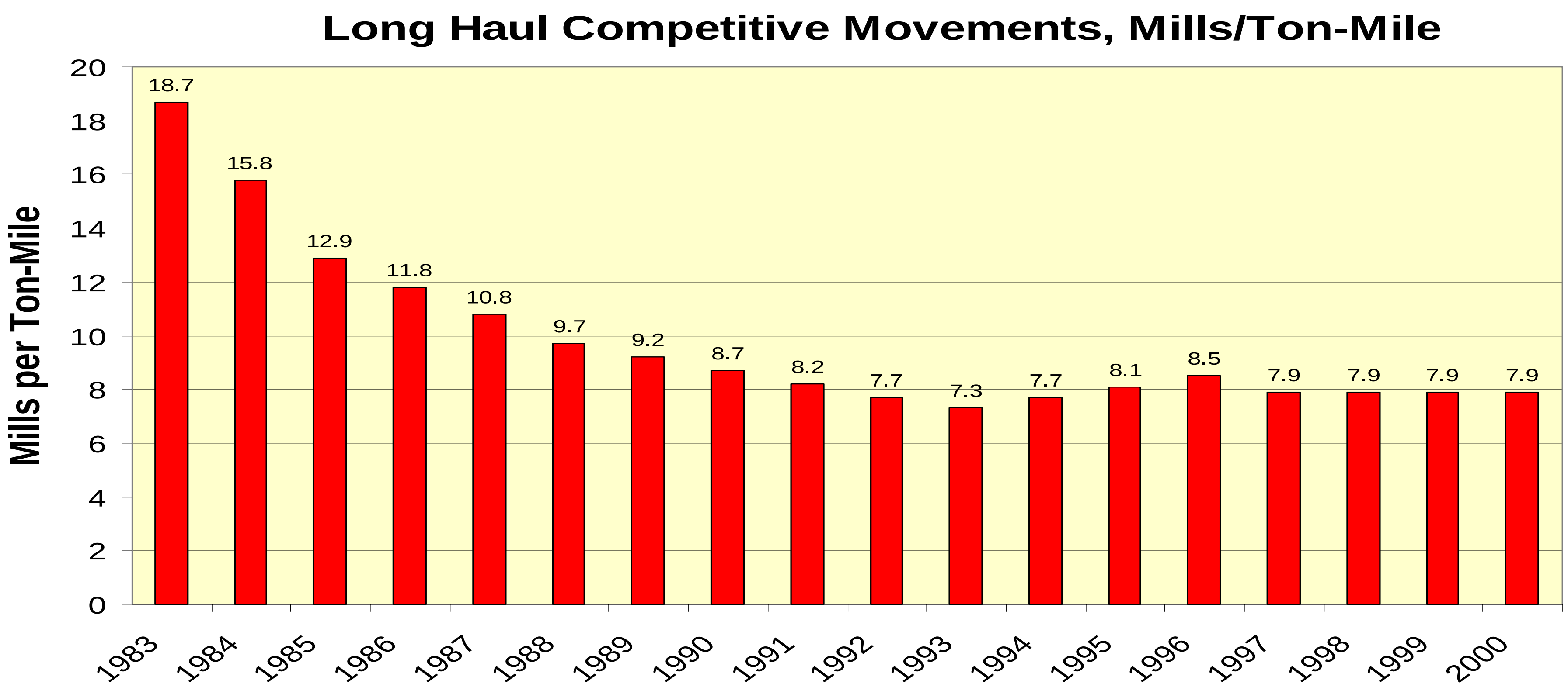
Source: AAR, *10-Year Trends* and web site

... and Unit Revenues Have Been Declining



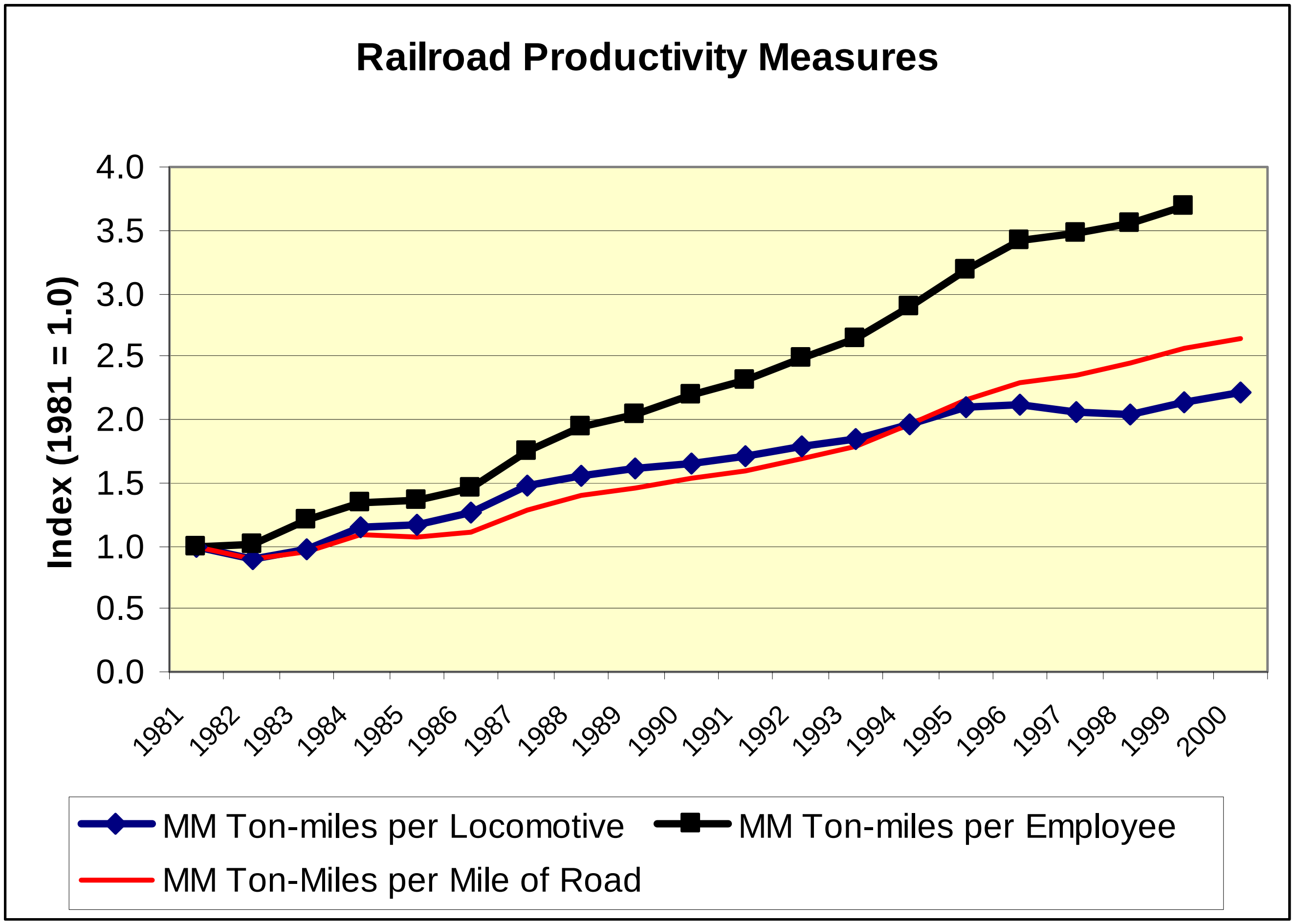
Source: AAR, *10-Year Trends* and web site

Rate Trends for PRB Movements



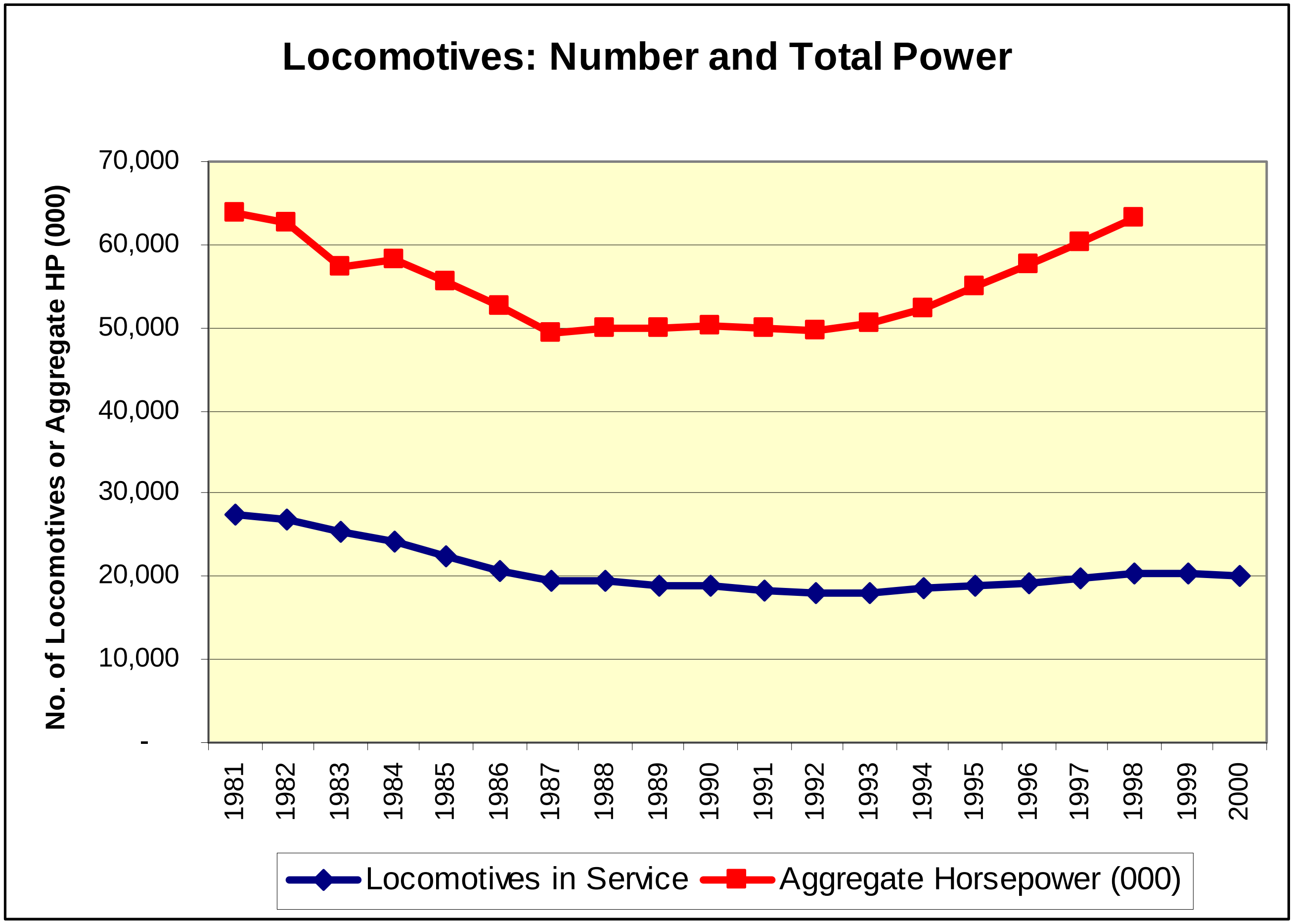
Source: PA Consulting Estimates

Productivity Gains are Beginning to Flatten



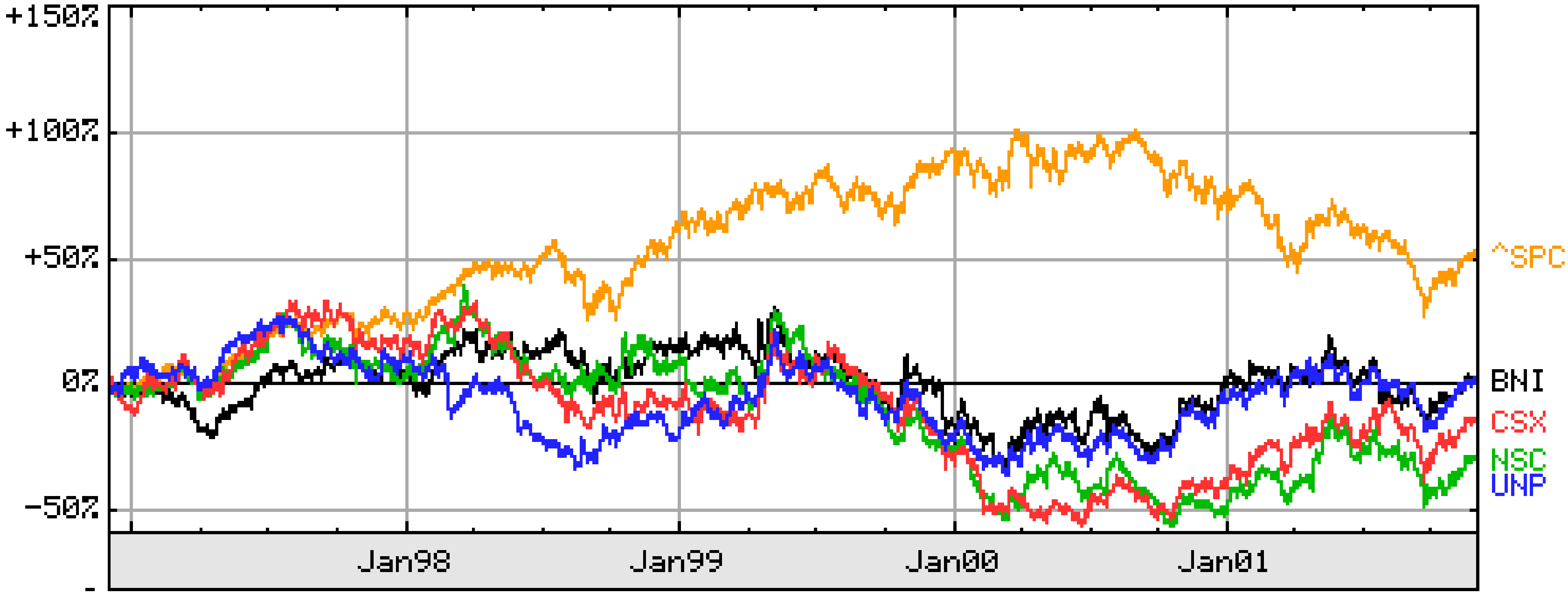
Source: AAR, *10-Year Trends* and web site

Increased Commitment of Resources

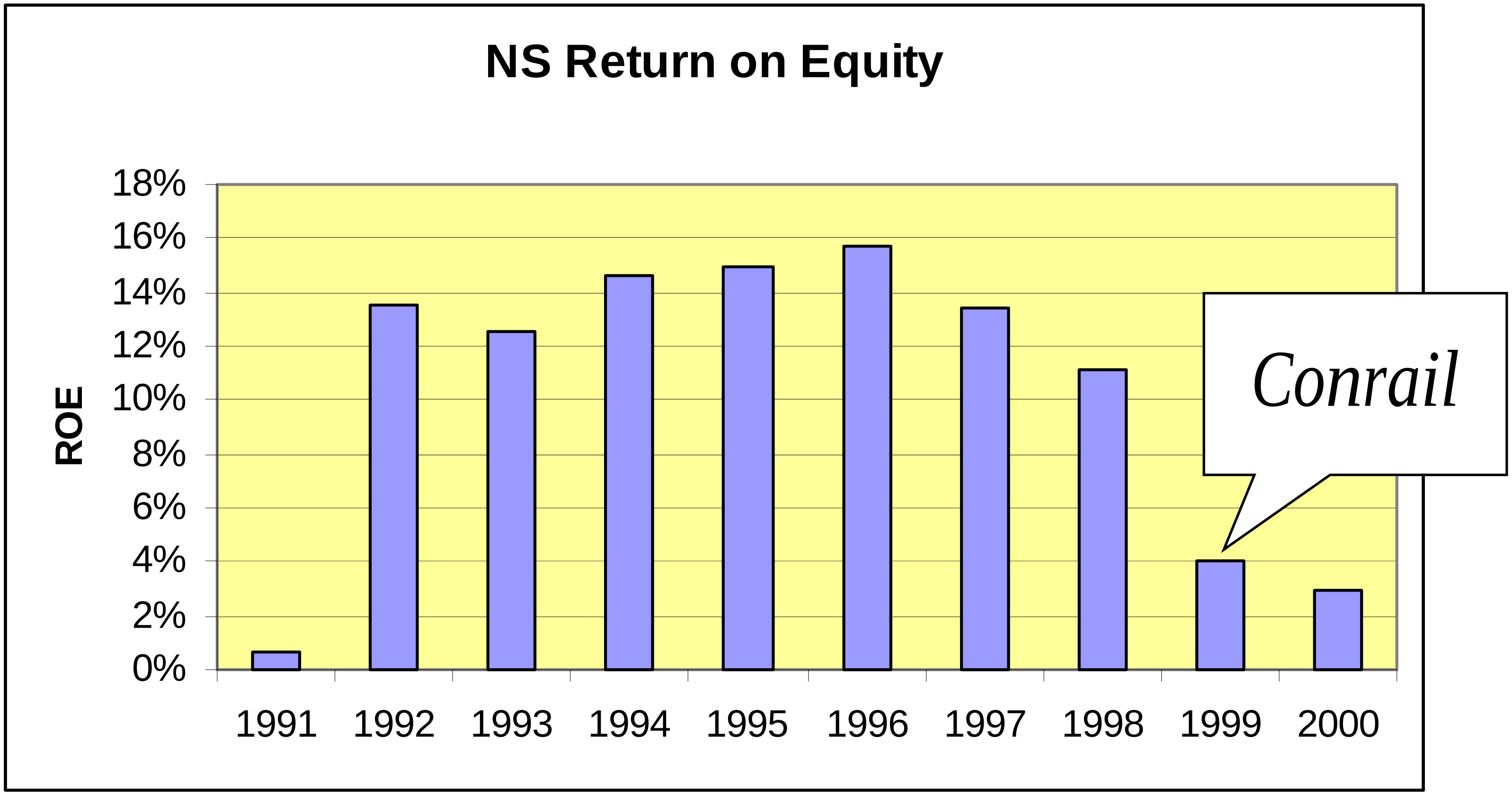


Source: AAR, *10-Year Trends* and web site

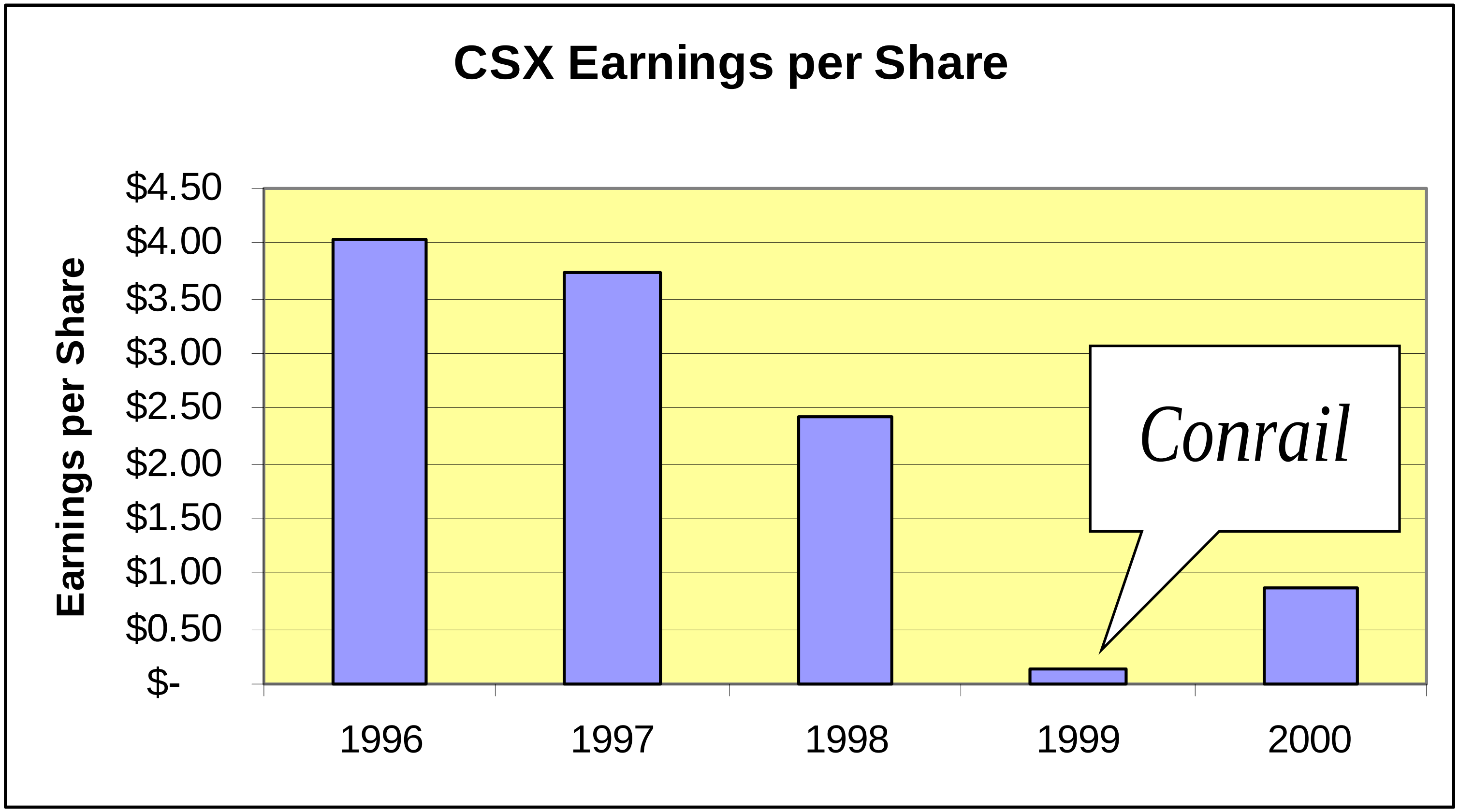
Railroads: Share Value has Lagged the Market



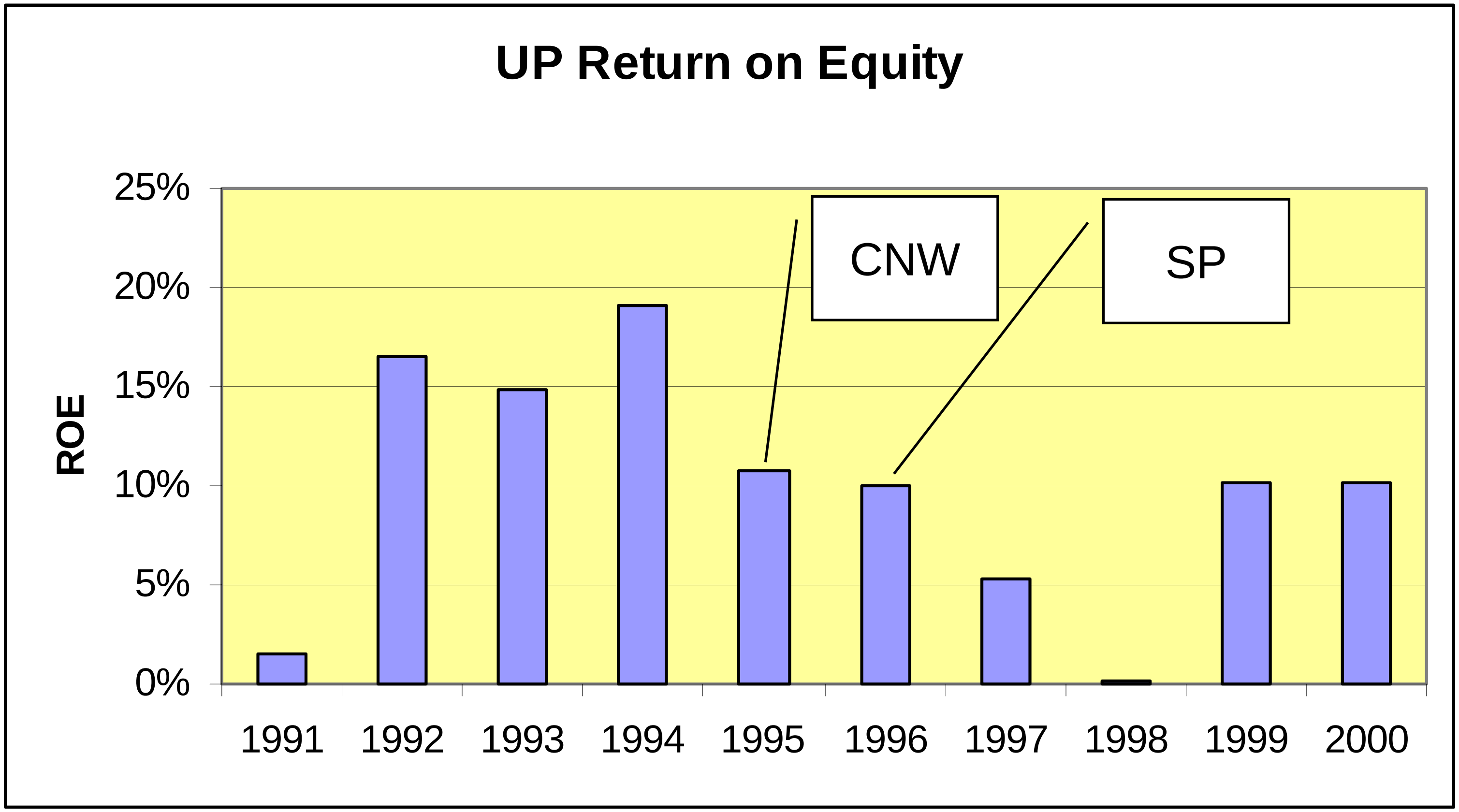
Impact of the Conrail Breakup -- NS



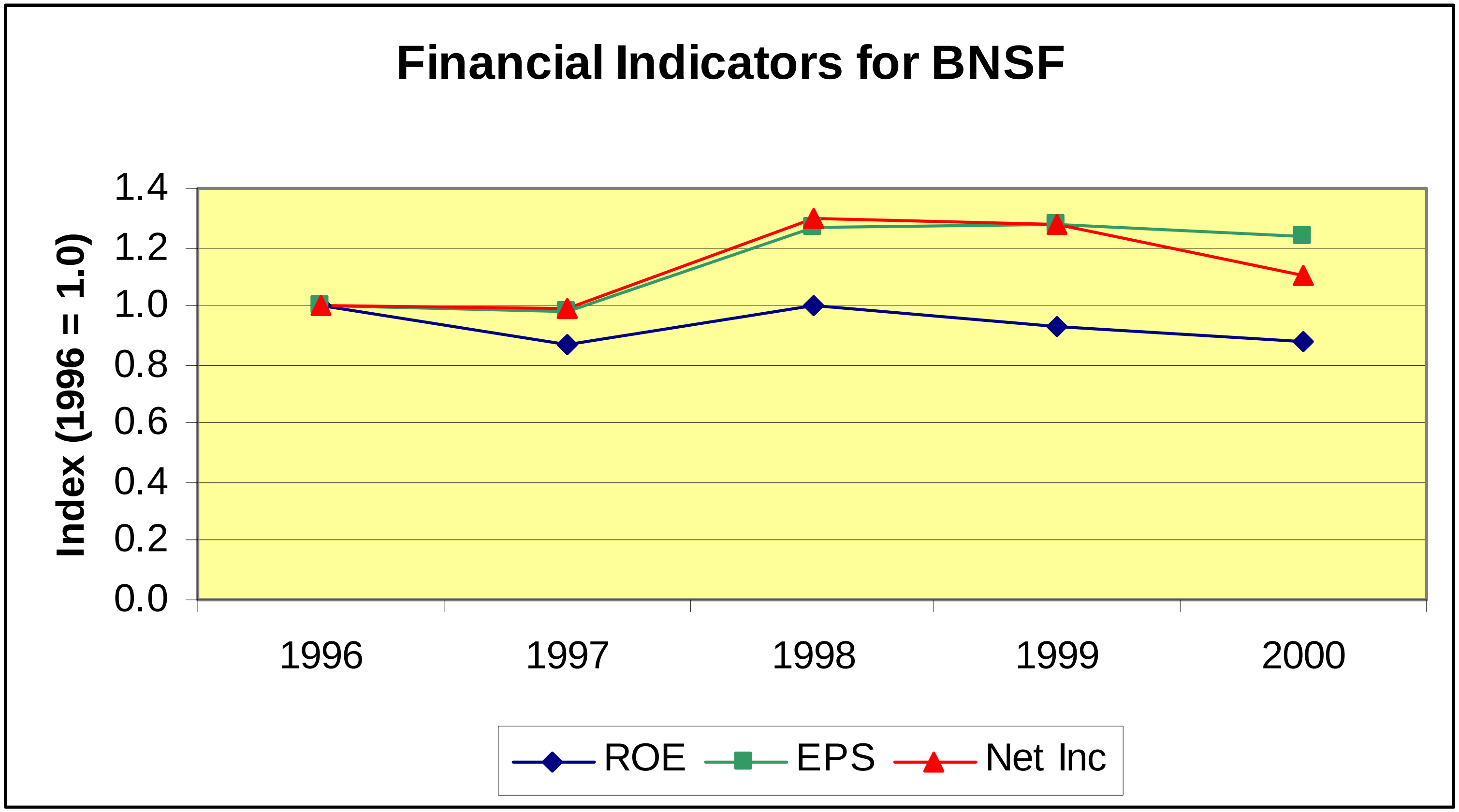
Impact of the Conrail Breakup -- CSX



UP After Two Acquisitions



BNSF: Avoided Disaster, But Growth is Elusive



Railroad Business Strategy

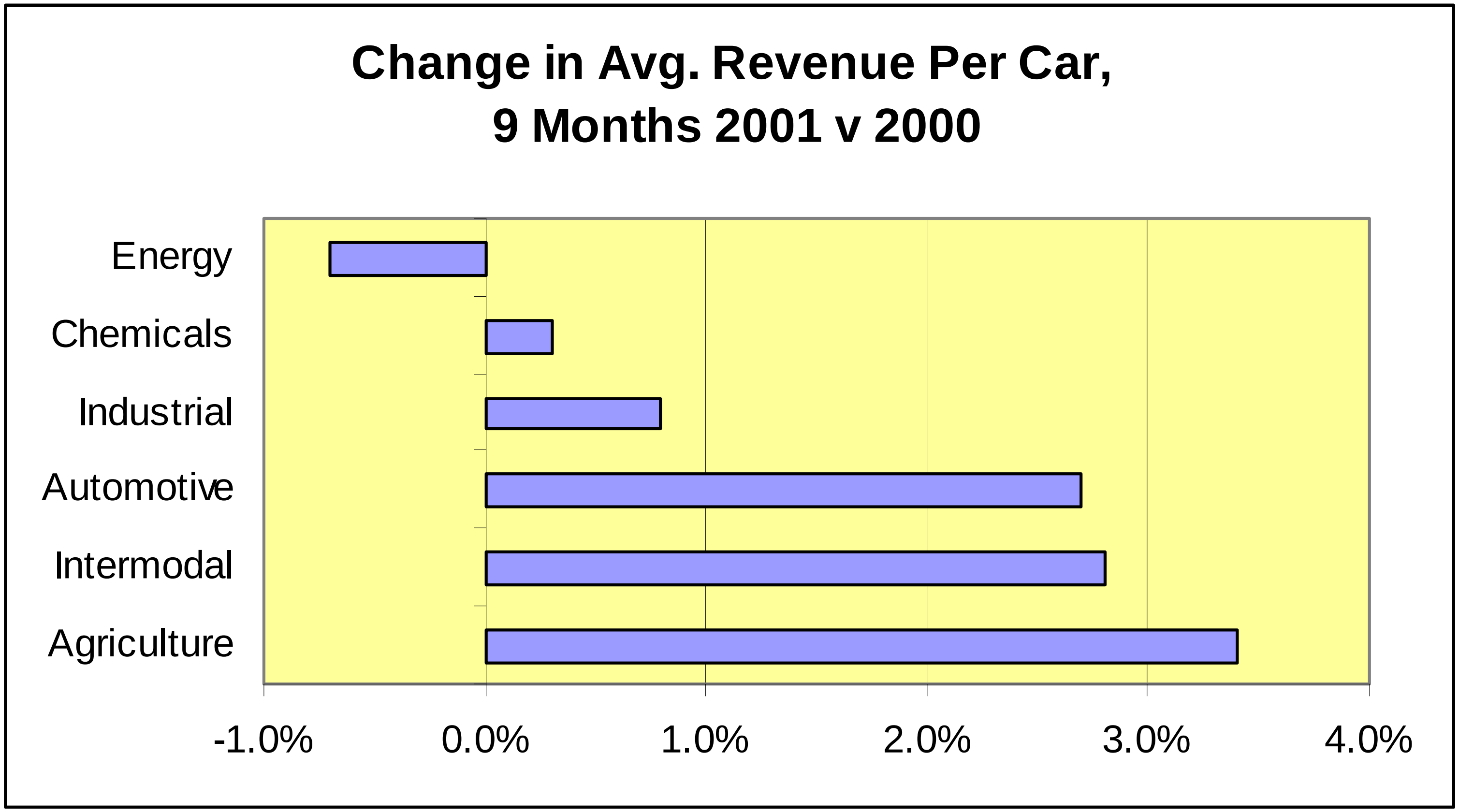
Now What?

- Cost-cutting and productivity improvements
- Merger
- Differential pricing
- Diversification
- New Services
- Investment

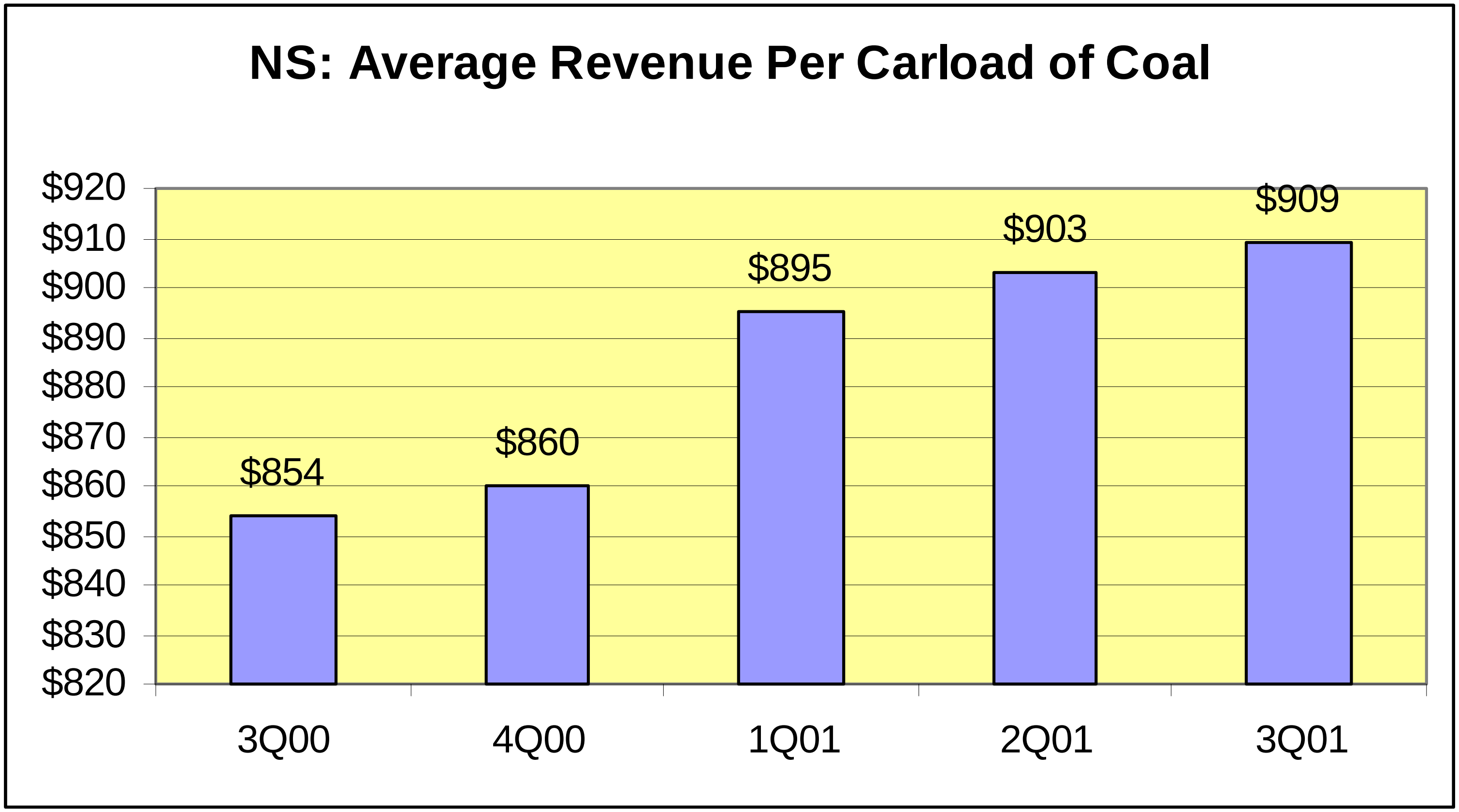
“Yield Management”

- Another catch phrase is “charging rates that reflect the value of the service.”
- Translation: rate increases.
- This has been pushed by Wall Street, and is a common strategy element for the Big Four.

Yield Management -- UP



Yield Management -- NS



Capturing Value -- BNSF

- From remarks made by BNSF President Matt Rose at Salomon Smith Barney, November 5, 2001:
  - Clear that cost-cutting alone will not produce financial success. A new, more balanced business strategy is needed.
  - Elements of balanced strategy: greater efficiency, greater volume, and higher rates (made possible by improved service and elimination of excess capacity).
  - Long-term, confidential rail contracts have contributed to low coal pricing by obscuring price signals. More transparent pricing will help to encourage rate increases – this is one goal of the BNSF's coal transportation options auctions.
  - Decline in rail rates for coal must stop. Rates should reflect value of service.

PA

Growing the Top Line – New and Improved Services

- Much of the focus is on improved intermodal and other truck-competitive services.
- Object in part is to win back business lost to trucks due to merger problems, and in part to expand market share.
- Even a small shift in market share from trucks would yield enormous benefits to the railroads:
  - For example, in the western US the Union Pacific estimates the total size of the potential market at $90 billion, of which trucks control 78%
  - Each percent of market share would boost revenues by almost $1 billion

UP's "Blue Streak"

- High-speed intermodal service from LA to Atlanta.
- Seamless service via an alliance between UP and NS.
- Three levels of service and pricing:
  - SuperFlyer: on-time or free
  - Premium: priority call on train space and other services
  - Standard: capacity available to price sensitive customers as available.

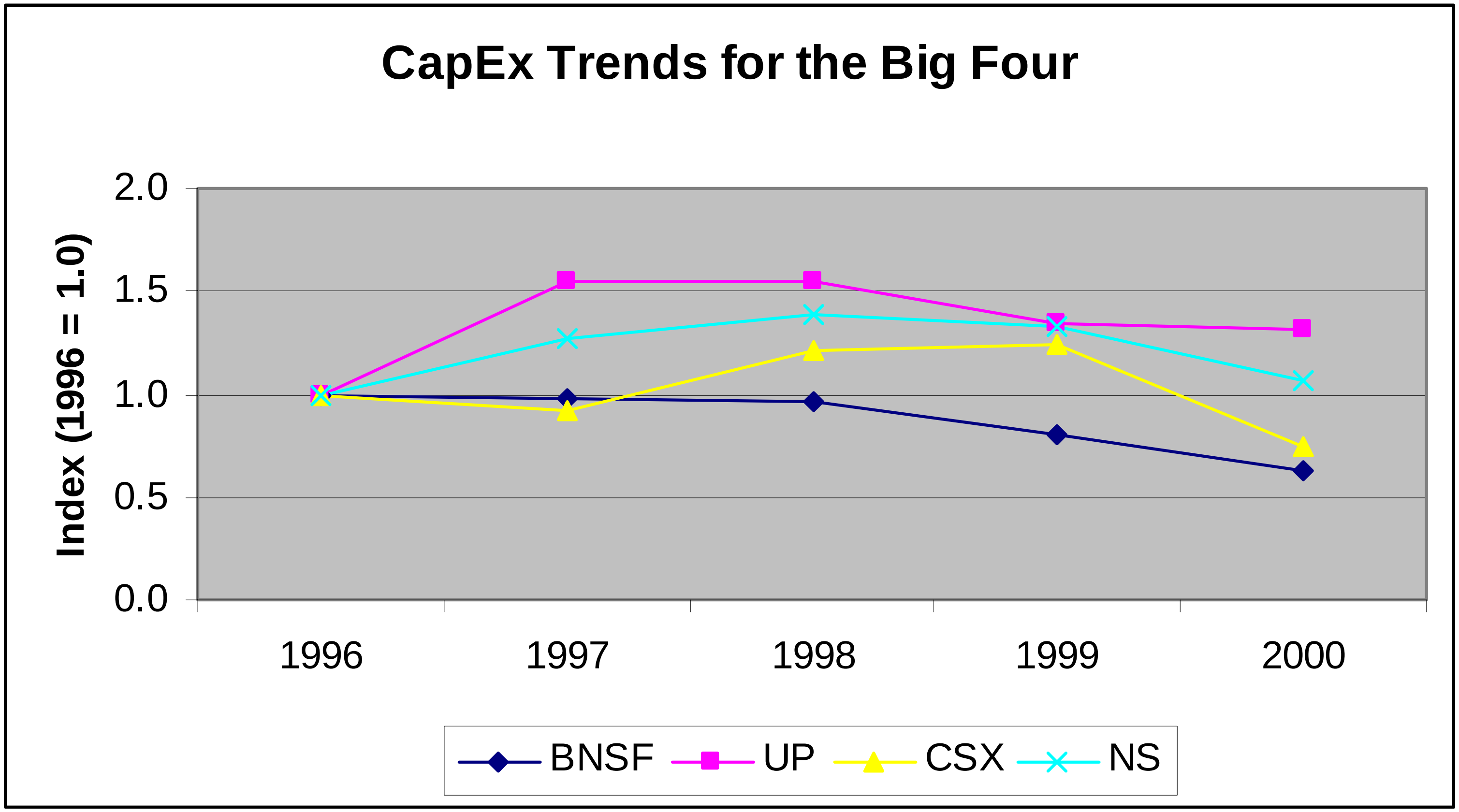
Key Characteristics of Premium Services

- Generally aimed at trucks.
- Essential elements are speed, certainty, and consistency.
- Object is to convert a commodity service into a differentiated product that will attract new business at profitable rates.

Who Needs Top-Flight Service?

	United Parcel Service	Coal Shipper
Truck Option	Yes	Generally No.
Speed	Essential	Nice to have.
On-Time Service	Essential	Not Critical
Consistency	Essential	Not Critical
Can Rely on Inventory	No	Yes
Will Pay for Service	Yes	???

Who Will Get the Money?



Implications for Coal and Power

The Path not Taken? (1)

- Market and Cooperative Solutions to Increasing Capacity at a Low Capital Cost:
  - Rationalize the allocation of railroad capacity to reflect buyer's willingness to pay
  - Give railroads flexibility to allocate private rail fleets to meet system needs.
- Examples Include:
  - Seasonal pricing
  - Pricing tied to service quality
  - Auctions of blocks of railcar capacity
  - Railcar pooling

The Path not Taken? (2)

- Some market-based innovations have been tested, but generator response has been tepid, and the railroads move at a glacial pace.
- The strategic focus of the railroads – concentrate on truck-competitive traffic, cut capital investment even as demand grows, and push to increase rates – is a formula for confrontation, not cooperation.

Implications (1)

- Coal service will continue to take a lower priority to intermodal and other truck-competitive, time-sensitive services.
- In an effort to increase ROI and placate Wall Street, the railroads will seek to minimize CapEx, and will focus available funds on *truck-competitive* growth opportunities and high-value targets (e.g., chemical business). This does not bode well for coal shippers.

Implications (2)

- The railroads have been unable to consistently provide a reasonable level of service. Tight rationing of investment dollars increases the likelihood of future service disruptions.
- Bad service is more than an inconvenience. In the worst case, generators have had to back-down coal plants and use gas plants or purchased power to meet commitments – this can get very expensive very fast, and can undermine system reliability
- Captive shippers are also likely to face aggressive efforts by the railroads to increase rates.

Implications (3)

- At a minimum, the current railroad business strategy is unfavorable to coal-burning utilities, and is likely to lead to increased contention over rates and service.
- Contention will be inimical to cooperation and joint innovation, which will inhibit steps that could improve reliability or decrease costs.
- The increases concentration in the rail and power industries may increase the possibility that a misstep by a few key players could play havoc with coal service, generation reliability and costs.