

A large blue semi-truck is shown from a side-front perspective, moving along a highway. The truck has a white grille and a large fuel tank. The number '4081' is visible on the side of the cab. The background is a clear blue sky.

# Trucking & Congestion: A Complex Issue

A photograph of a multi-lane highway with a significant traffic jam. The cars are packed closely together. In the background, a city skyline with several tall buildings is visible under a hazy sky.

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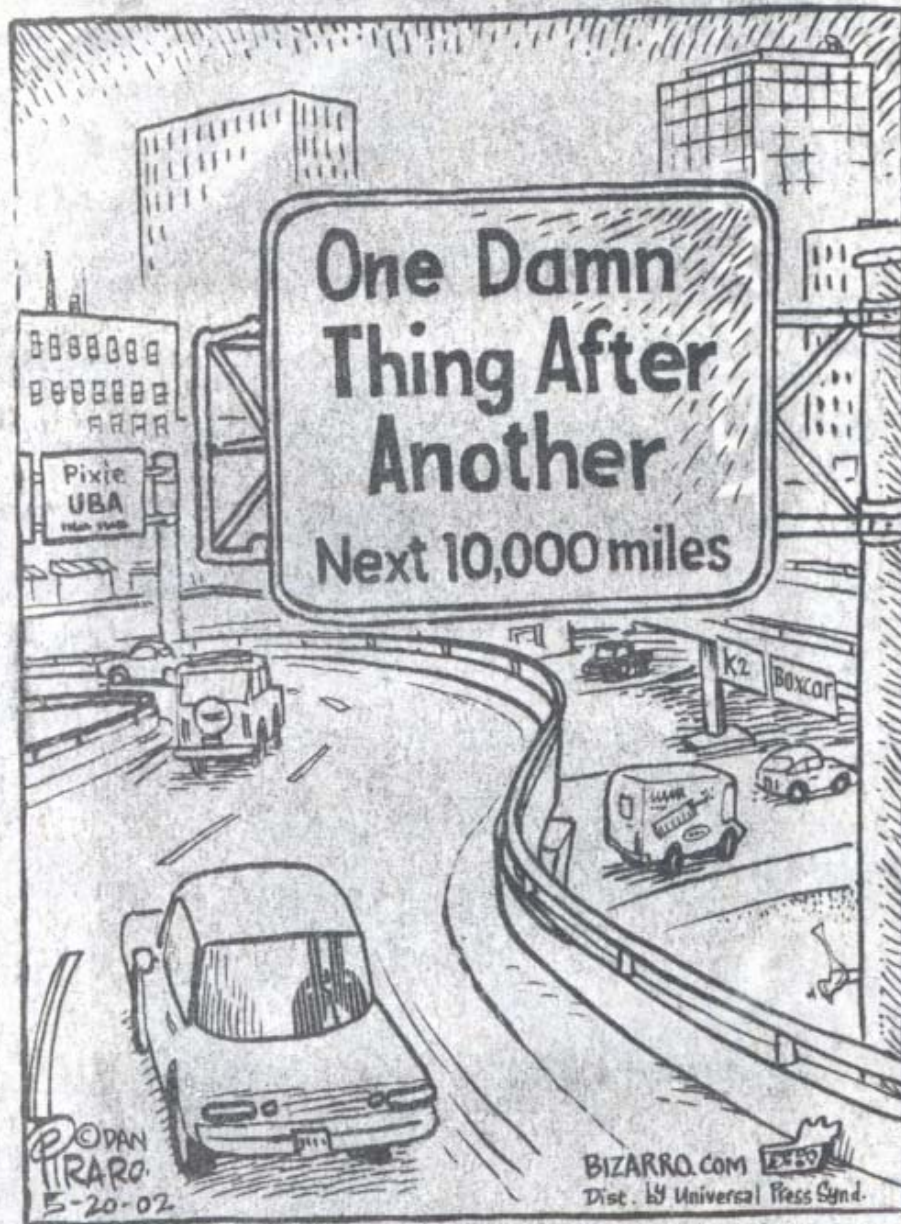
**April 12, 2007**

# ATRI...

- Research Arm of the ATA Federation
- 501(c)3 NFP
- Government & Industry Sponsors
- Research Categories:
  - Safety & Human Factors
  - Technology & Training
  - Environmental Factors
  - Transportation Security
  - Economic Analyses



**BIZARRO** / Dan Piraro



# Freight Industry Snapshot..

- 6 Class 1 railroads; 550 Total
  - 1.2M freight cars
  - 200K employees
  - 170K miles of track
- 51 Deep Water Ports; 148 Total
  - 8000 ships
  - 12K miles of commercial waterways
- 12M – 20M Containers
  - Truck-Rail now fastest growing
- 75% air cargo moved by non-U.S. carriers
  - Fastest-growing sector over time
  - Expedited: Truck vs. airplane?
- 640,000 Trucking Companies
  - 10.1M employees; 3.2M truck drivers
  - 2.8 million large trucks; 20M commercial trucks
  - 4.9M trailers



# Key Realities

- Trucking
  - Heavily Regulated
    - HOS
    - Equipment
    - Routing
    - Insurance
  - Highly Competitive
    - 640K Carriers with U.S. DOT; 100K in last 3 years
  - Safety Issues Complex
  - 68% of Tonnage; 86% of Revenue
  - 7% of vehicles; 15.5% of VMTs

# Top Industry Issues: 2005 vs 2006

## Top Industry Issues – 2005

1. Fuel Costs
2. Driver Shortage
3. Insurance Costs
4. Hours-of-Service
5. Tolls/Highway Funding
6. Tort Reform/Legal Issues
7. Overlapping/Burdensome Regulations
8. **Congestion**
9. Environmental Issues
10. Truck Security

## Top Industry Issues – 2006

1. Driver Shortage
2. Fuel Issues
3. Driver Retention
4. Hours-of-Service
5. **Congestion**
6. Government Regulations
7. Highway Infrastructure
8. Tort Reform
9. Tolls/Highway Funding
10. Environmental Issues

# Strategic Issues

- Insurance Costs
  - Post-9/11: 20% - 50% increases for “good” carriers
- New Regulations: HOS; HM Endorsements, etc.
- Fuel Cost Volatility
  - Jan. '02 - \$1.16/Gallon
  - Oct. '04 - \$2.20/Gallon
  - May '06 - \$2.89/Gallon
  - March '07 - \$2.79/Gallon

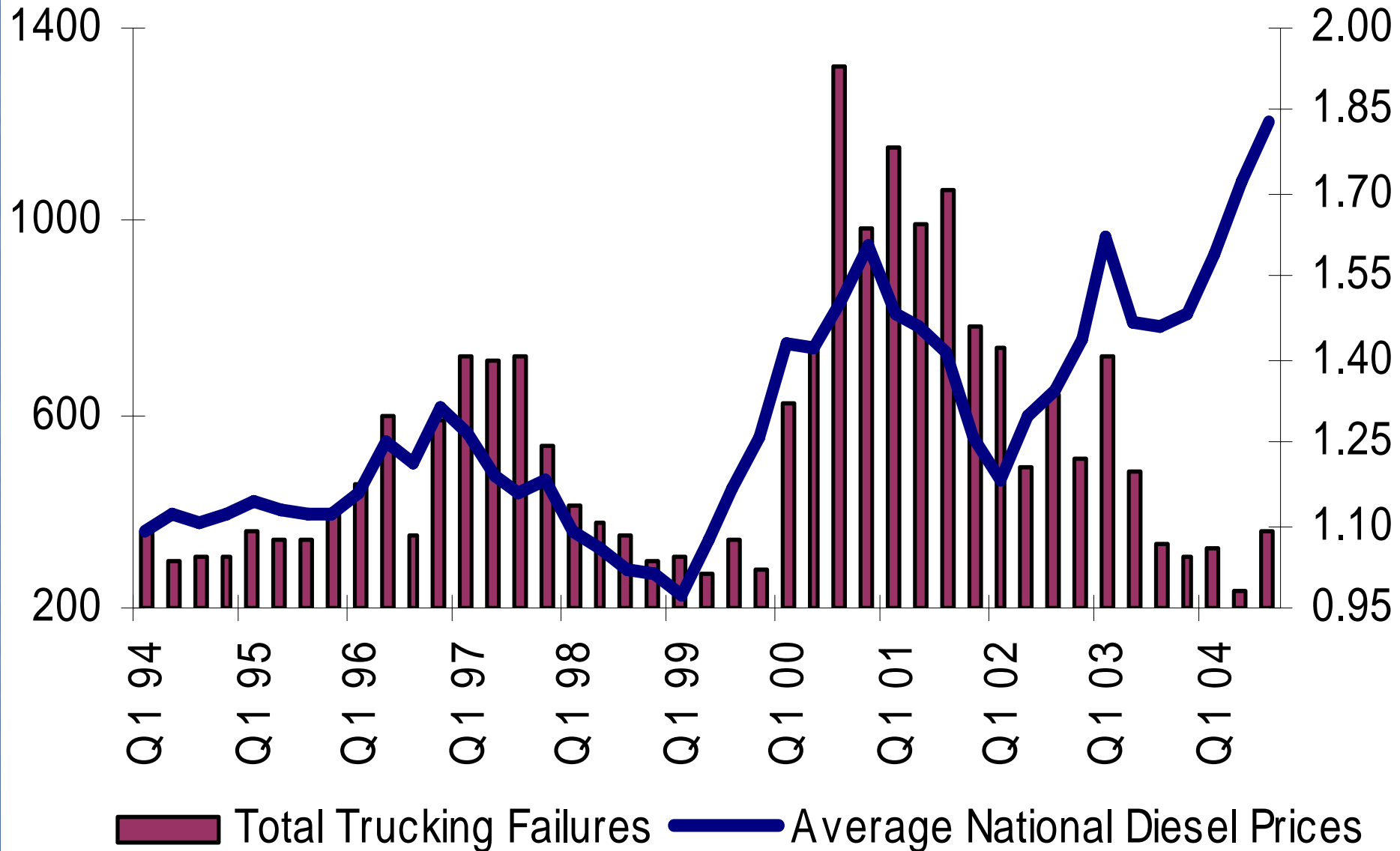


# Strategic Issues

- Operating Margins
  - Average: 3.6%; 1.8% - 5.6%
- Shipper Contracts Dictate Operations/Costs
- Is Six Sigma/TQM Backfiring?
  - Supply Chain Elasticity/Flexibility/Dynamism is Disappearing
- Fuel Cost Volatility
  - Jan. '02 - \$1.16/Gallon
  - Oct. '04 - \$2.20/Gallon
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# Higher Diesel Prices Lead To More Trucking Failures



# Congestion Issues

- Driving trucks to alternative routes
  - Safety
  - Pavement Damage
- Congestion Pricing: Driving trucks to other times??
  - Regressive & Inflationary since economy can't handle it
- Impacts economic growth
- No new capacity: 70% growth in tonnage vs 3%-4% in infrastructure capacity
- Congestion is a calculated business cost... 50% of the time (non-recurring)
- Relatively level Playing Field within regions/MSAs



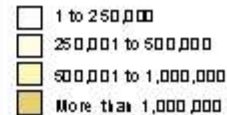


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 Office of Freight Management and Operations  
 Operations Core Business Unit

## DETROIT

International Truck Flows for  
 Border Crossings  
 (1998)

### Border Crossing to State Flows (Tons)



### Network Flows (Tons)



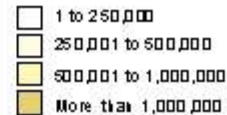


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## WESTERN WASHINGTON

International Truck Flows for  
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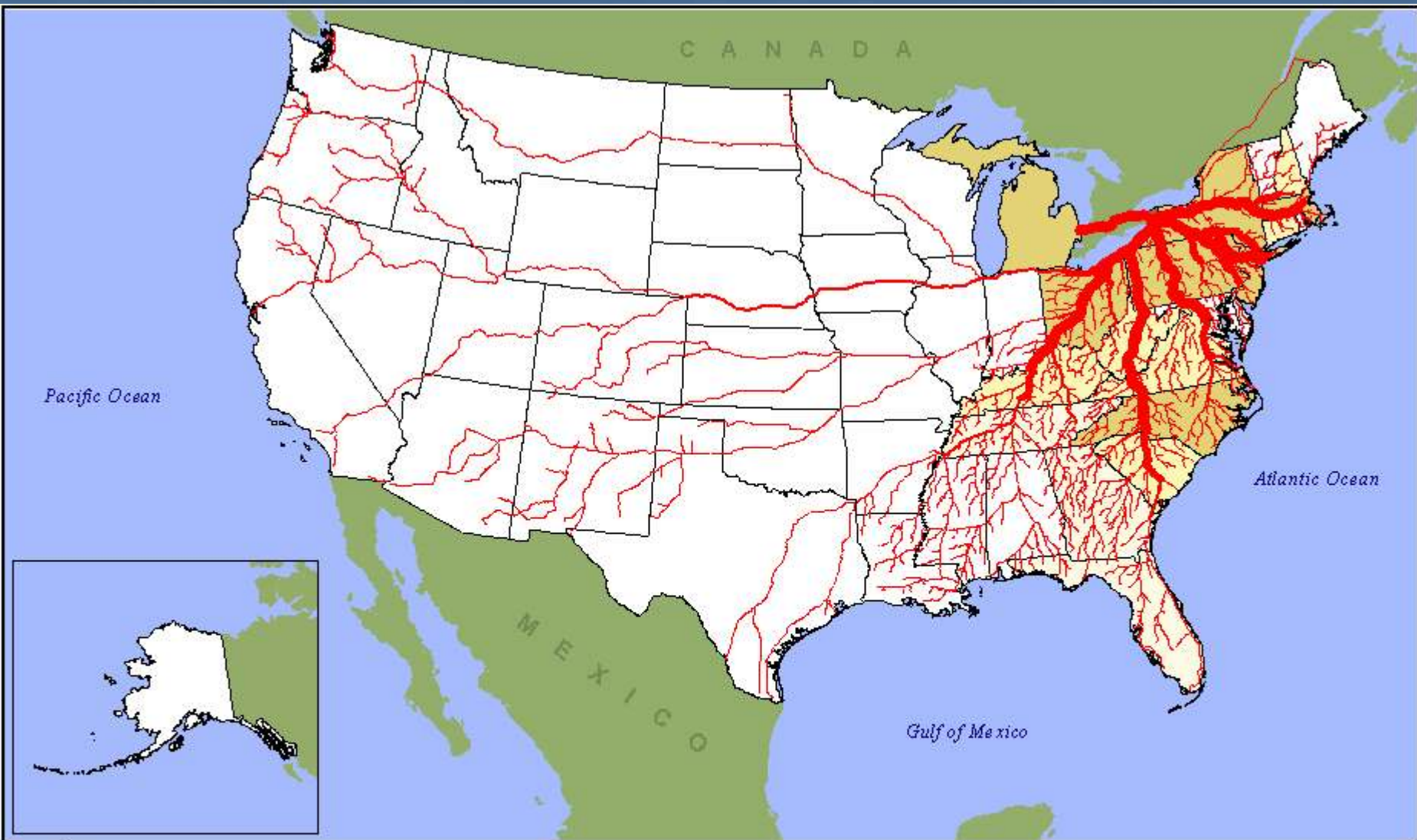
### Border Crossing to State Flows (Tons)



### Network Flows (Tons)





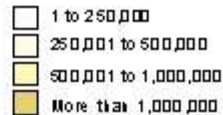


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## BUFFALO

International Truck Flows for  
 Border Crossings  
 (1998)

### Border Crossing to State Flows (Tons)



### Network Flows (Tons)



# Last Word...

- Transportation economics all wrong: transportation is a social program, not consumable good
  - Transit/dependents
  - DOD
  - Emergency Vehicles
  - Disparate funding schemas
- Privatization
  - Square Peg: Objectives all wrong
    - Maximize profit; minimize business exp



# Solutions?

- Maximize existing transportation revenues
  - Gas tax vs. creative financing
  - Eliminate diversions
- Maximize transportation investments
- Truck Network?

# MORE INFORMATION

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