



MIT International Center for Air Transportation

Impacts of 9/11 on US Airline Performance

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US Airline Industry Before 9/11

- **Current industry “crisis” began before 9/11:**
 - Dot.com bubble burst, stock market slide, and softening economy
 - Industry losses forecast for 2001 even before 9/11 attacks
- **Other airline industry concerns at the time:**
 - Air transportation system capacity constraints led to record flight delays in 2000
 - Consumer perceptions of poor service and airline indifference, exacerbated by delays
 - Dominance of large network airlines, accusations of anti-competitive actions vs. new entrants

- **Unprecedented use of aviation for terror:**
 - Hijacking by suicide terrorists
 - Aircraft as missiles flown into buildings
- **Most airlines reduced operations almost immediately after 9/11:**
 - 80,000 layoffs by US airlines alone, many more since then
 - US airline capacity (ASMs) cut by 25%, hundreds of aircraft retired/parked
 - US airline traffic (RPMs) initially dropped by 45% due to passenger fears, security hassles

- **Invasion of Afghanistan (Oct 01)**
- **Iraq War (Mar 02)**
- **SARS epidemic (Spring 03)**
- **US Terror Alerts keep security concerns in passengers' minds**
- **Airline fuel prices soared to record levels (2004-05)**

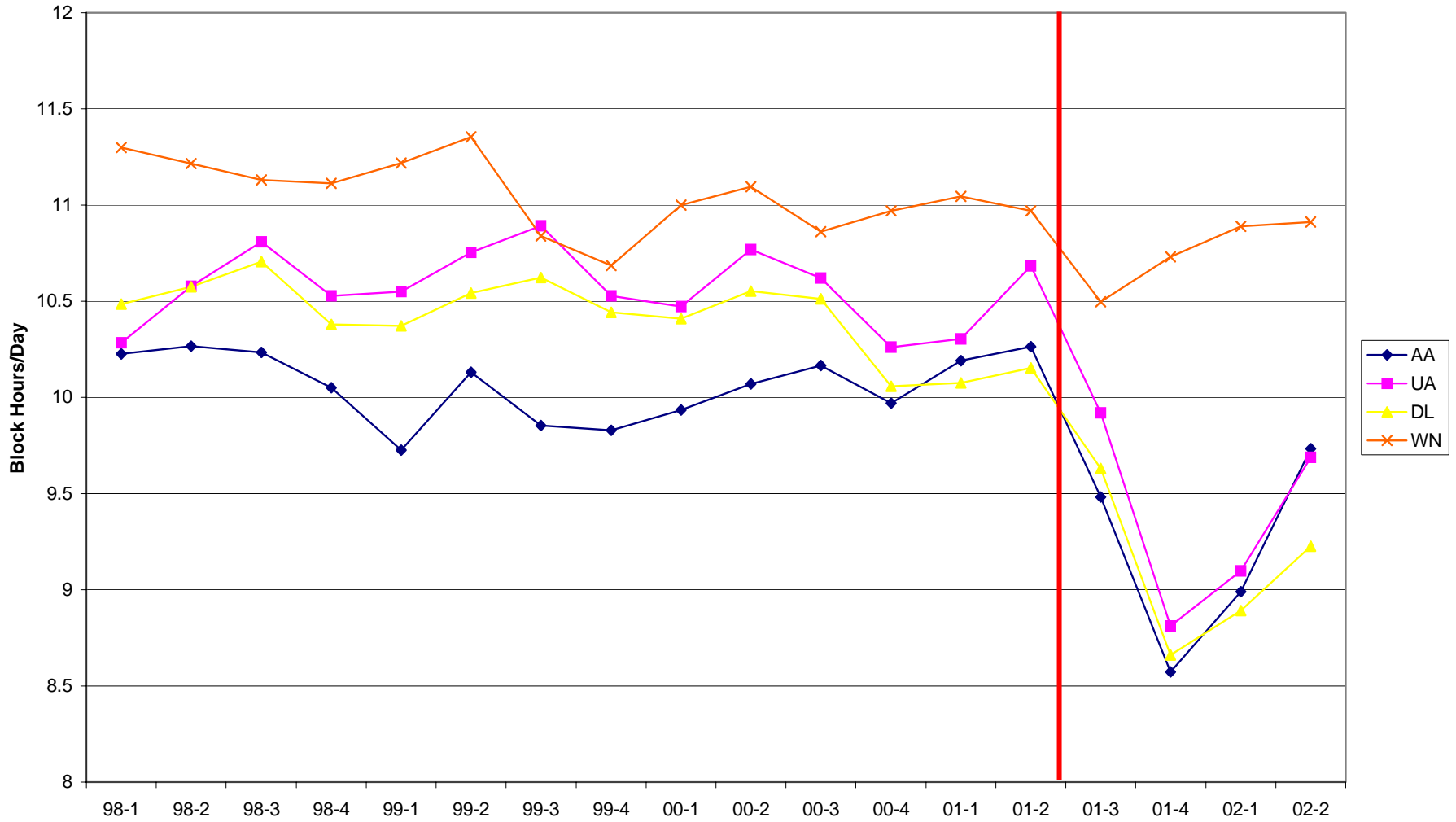


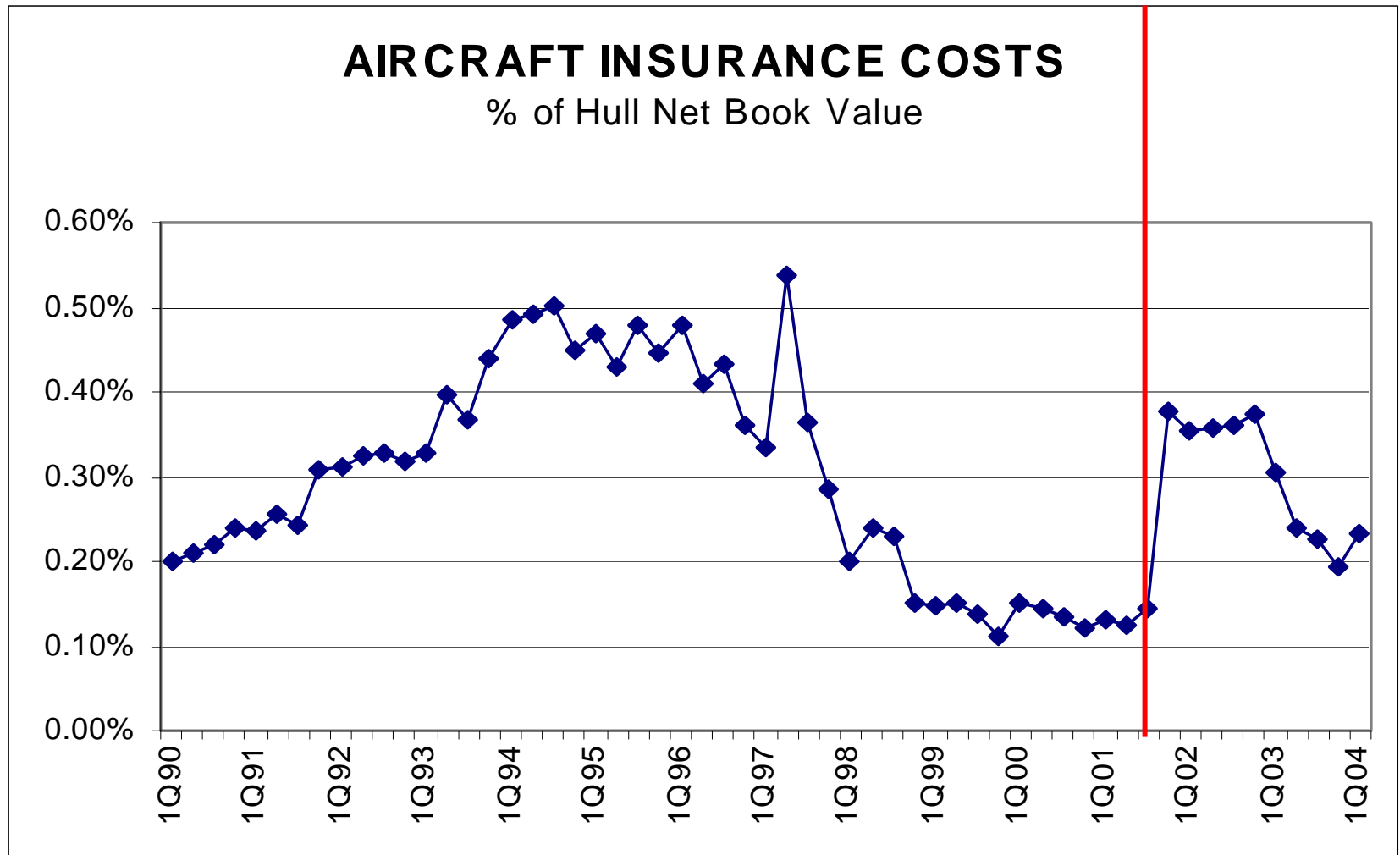
Cost Impacts of 9/11

- **Operating costs increased substantially:**
 - Lower aircraft utilization due to schedule cuts increased unit costs
 - Added security requirements and associated delays further affected productivity
 - Higher aircraft and liability insurance costs
- **New security fees also imposed:**
 - Passenger Security Fee added to passenger tickets
 - Airlines pay Aviation Security Infrastructure Fee to cover TSA screening costs (\$315 million in FY04)



Daily Aircraft Utilization by Legacy Carriers Plunged After 9/11 (not for Southwest)

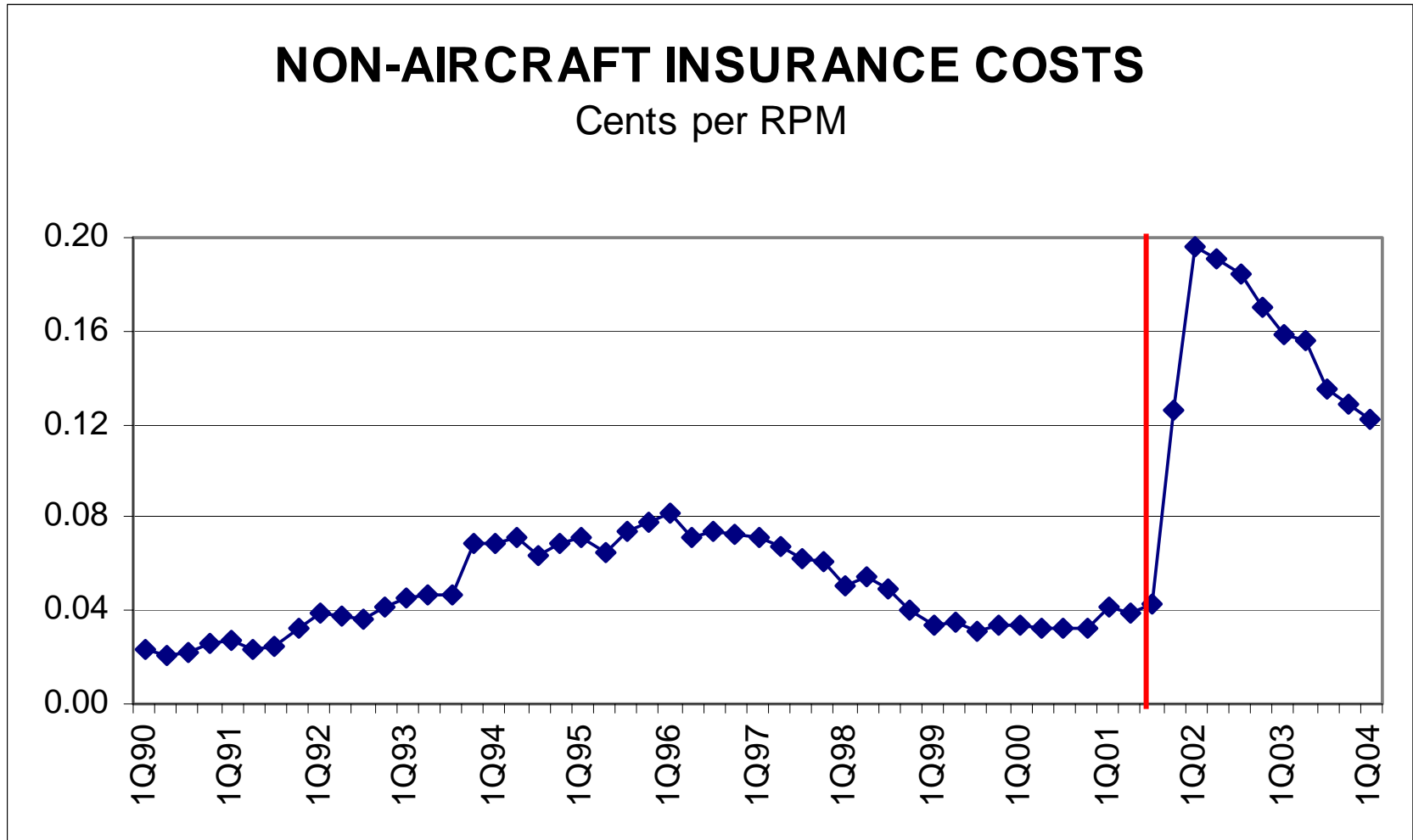




Source: ATA data

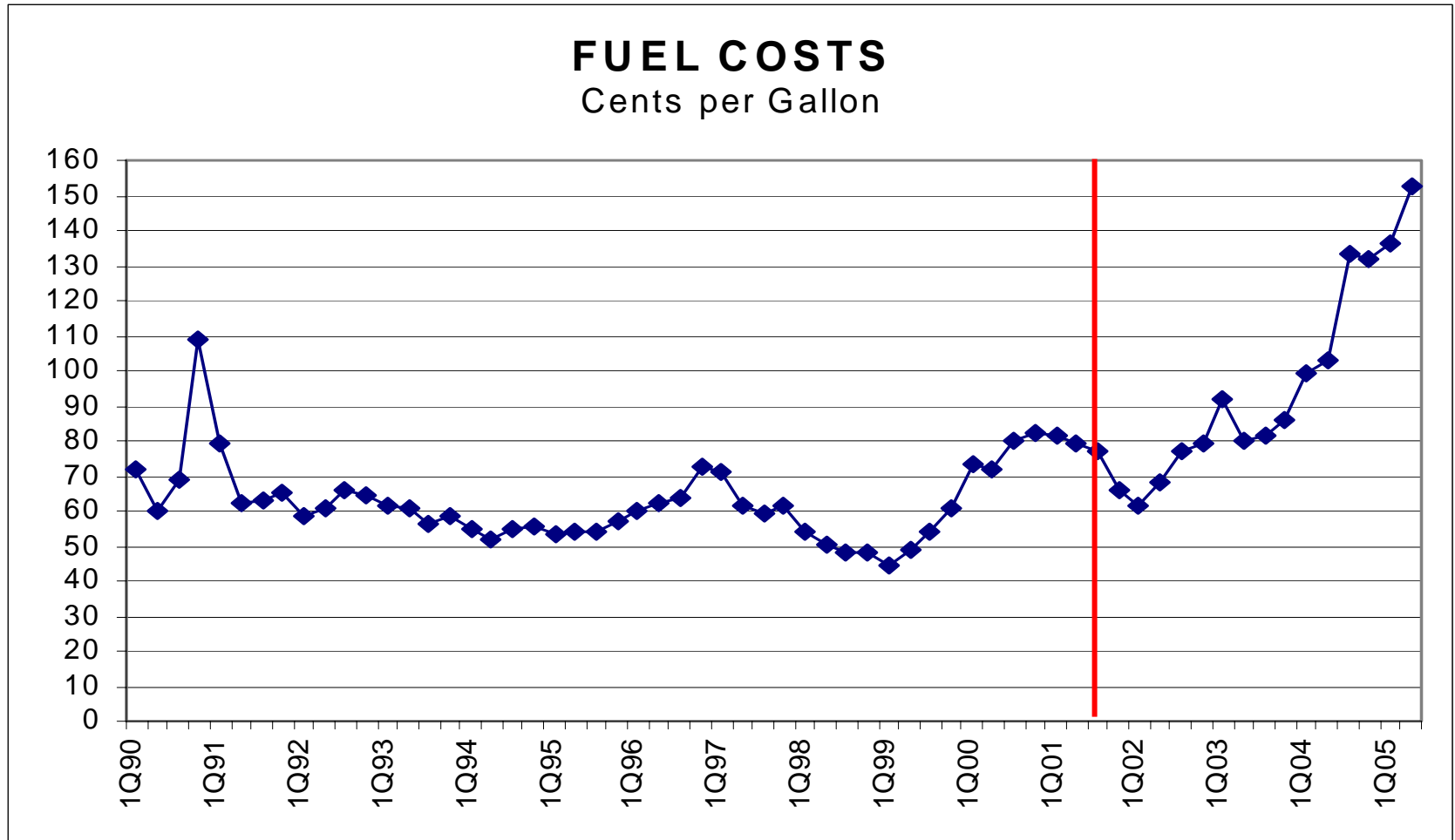
NON-AIRCRAFT INSURANCE COSTS

Cents per RPM



Source: ATA data

Jet Fuel Prices Up 100% Since Q3 2001



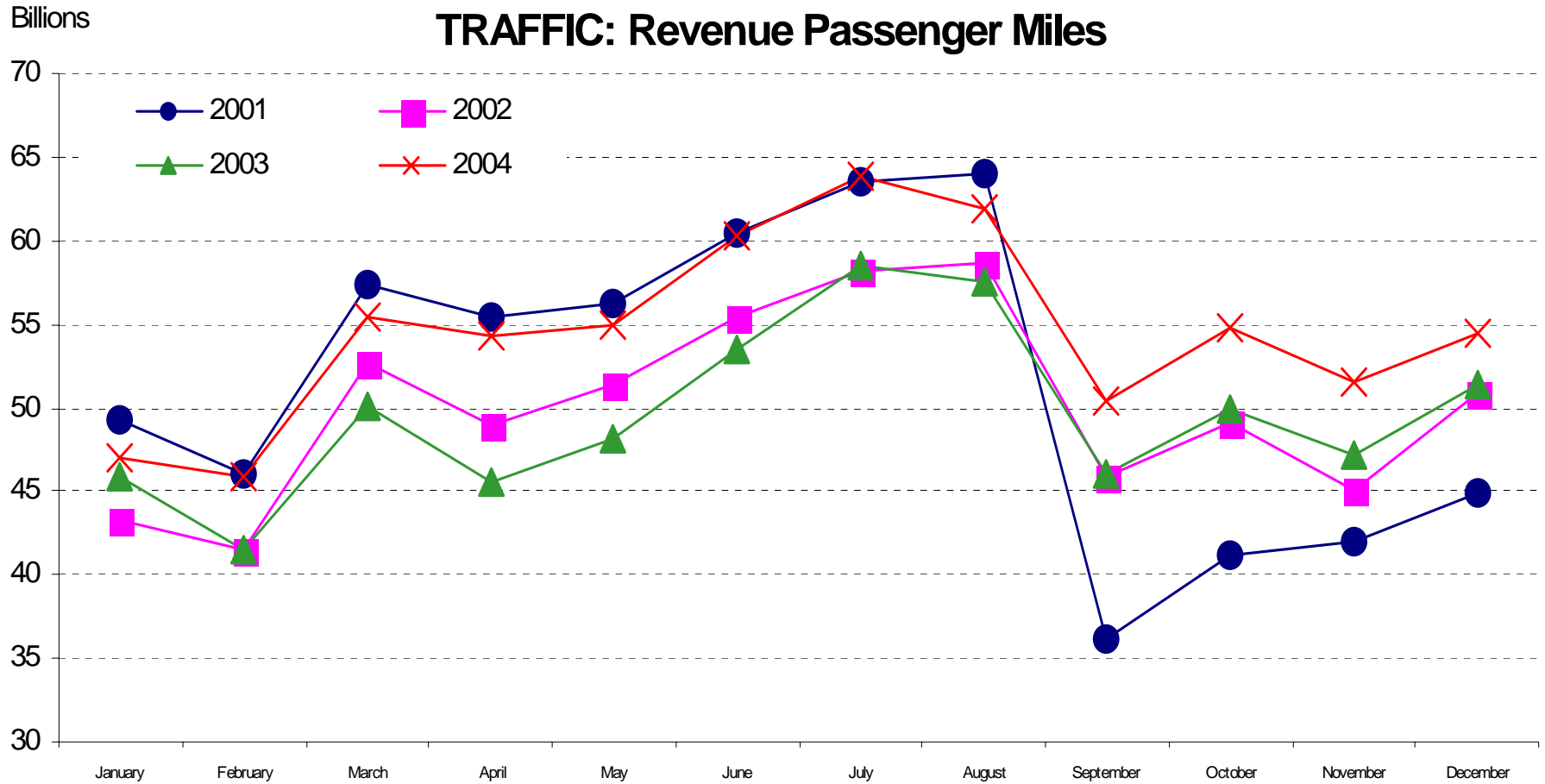
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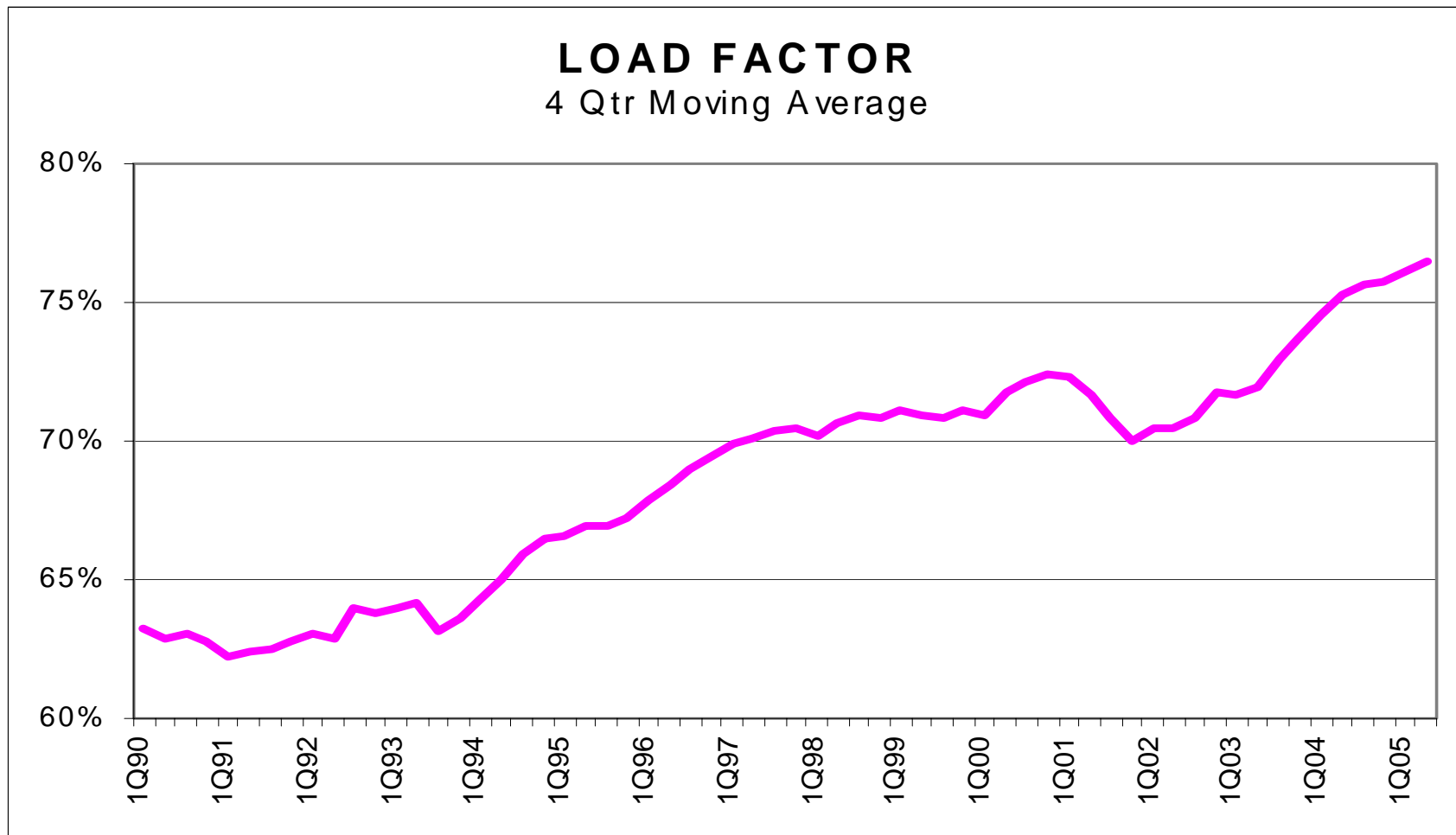
4 Years Later, Traffic Has Recovered

- **US airline RPMs returned to 2001 levels in mid-2004**
 - But August 2005 US airline capacity still 6% lower than August 2001
 - Average load factors are now above pre-9/11 levels – 85.1% ALF in July 2005 is highest month on record
- **No expectation of US industry profits in 2005:**
 - Revenue mix of traffic is weak, despite recovery of traffic and load factors
 - Average fare (yield) is still running about 15% lower than in 2000
 - Record fuel prices have wiped out hopes for profits

Traffic Returned to 2001 Levels in 2004



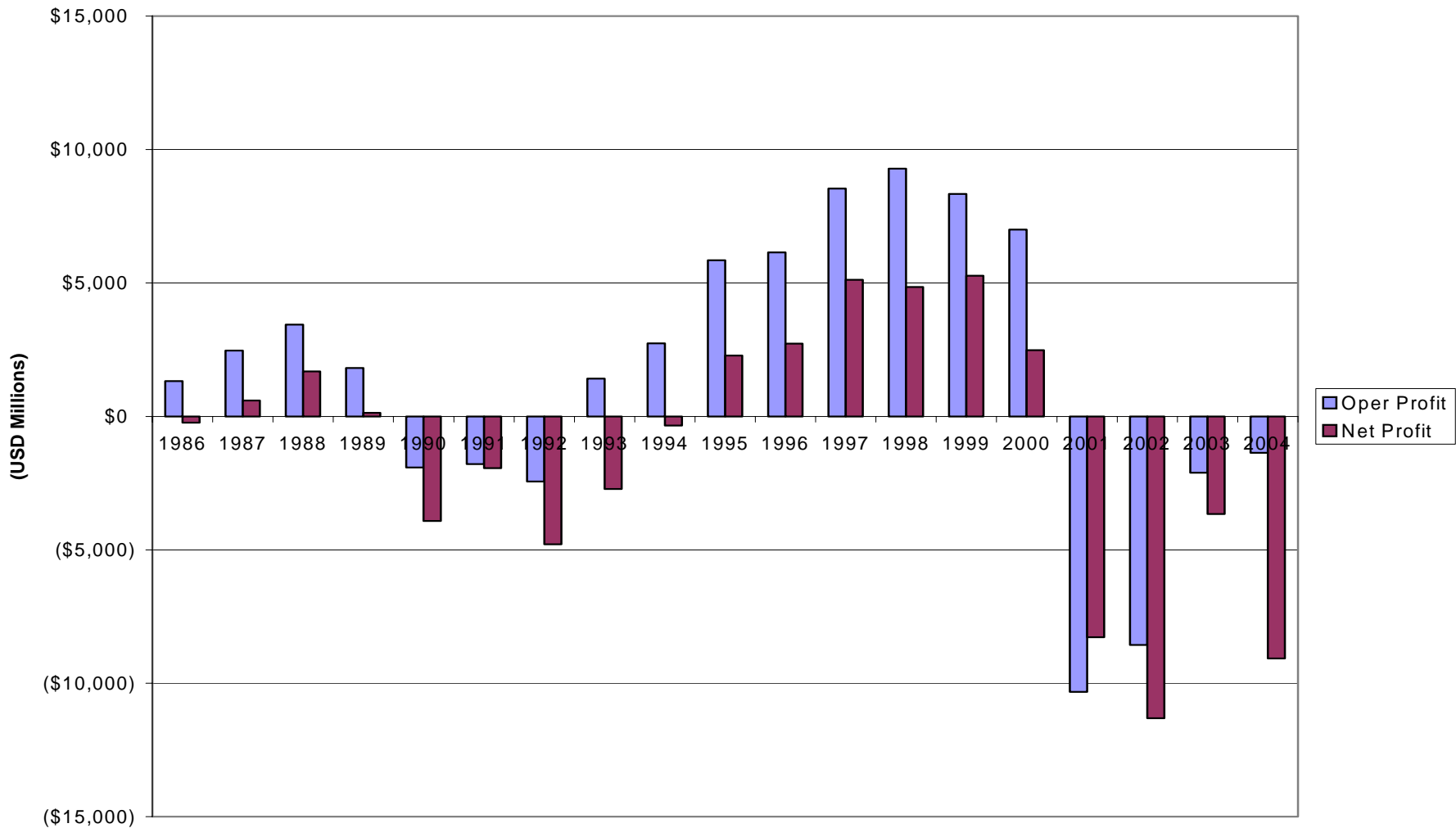
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US Industry Losses Over \$30 Billion Since 2001



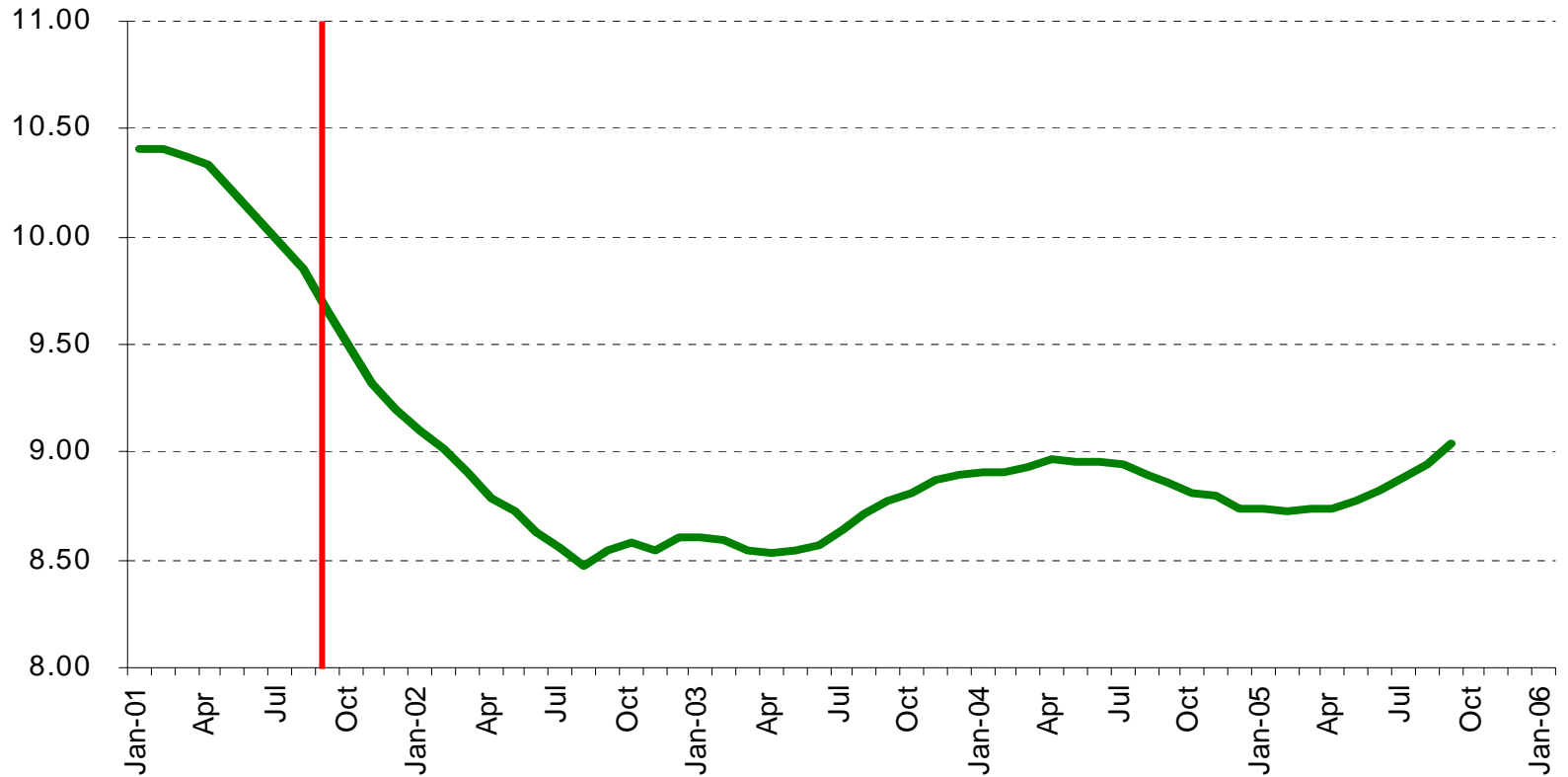


Revenue Challenges: “The Perfect Storm”

- **Revenue power of legacy airlines has disintegrated, with little relation to 9/11:**
 - Business passengers no longer willing to pay 5 to 8 times the lowest available fare
 - Internet distribution channels give more passengers more information about air travel options
 - Cutbacks have reduced service quality differences between network and low-cost carriers
- **Low-fare airlines have taken advantage:**
 - LFA share of domestic passengers increased to 25% in 2004, from 16% in 2000 and only 5% in 1990

Domestic Unit Revenues Are Down 15%

**RASM (¢) -- Mainline Domestic
12 Months Ended**



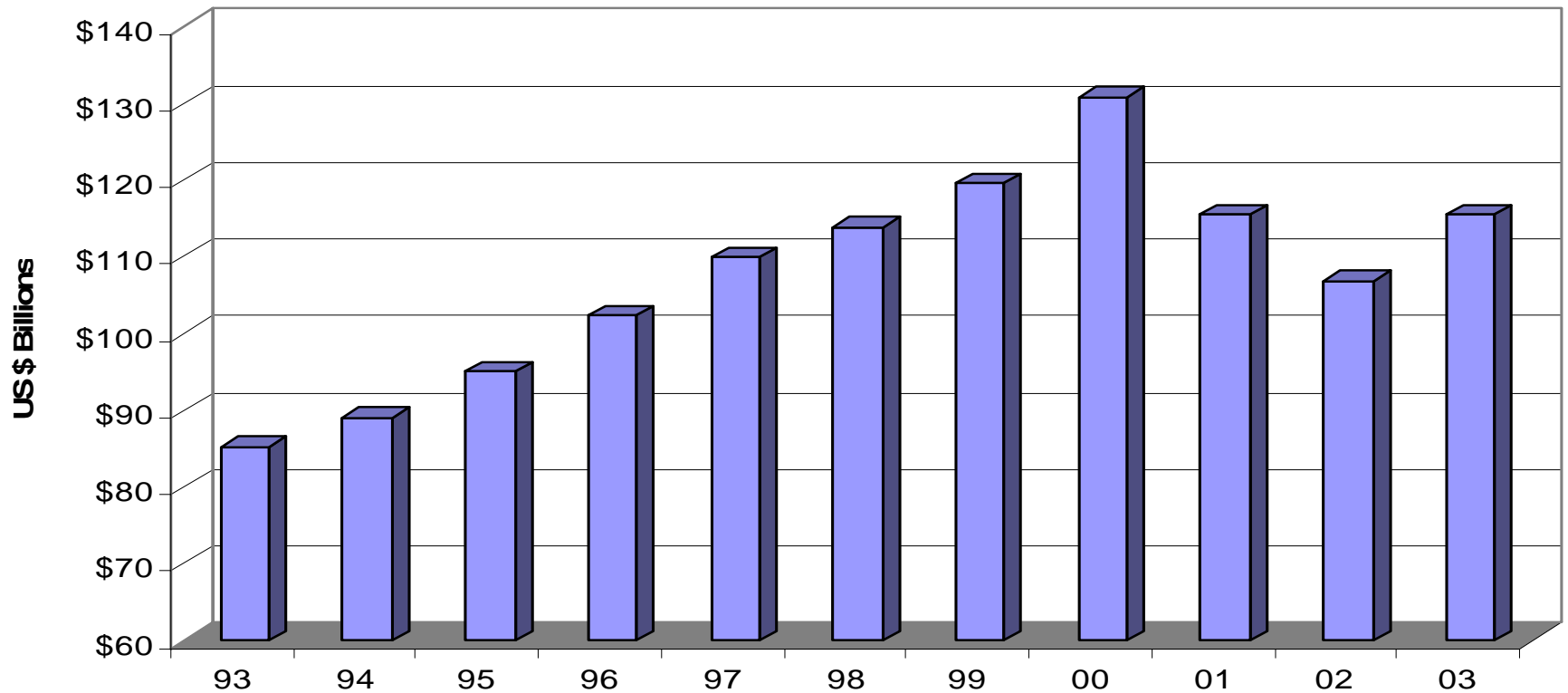
Source: ATA data



Growth of Low Fare Carriers in US

- **Recent conditions favorable for low-fare airlines:**
 - Less business travel overall, reduced willingness to pay for premium services
 - More stable demand for price-sensitive leisure travel
 - Leisure travel demand less affected by post 9/11 “hassle factor”
- **Low-fare carriers threaten the viability of legacy network carriers:**
 - Desperate search for new “business models” to respond and compete with low-fare airlines

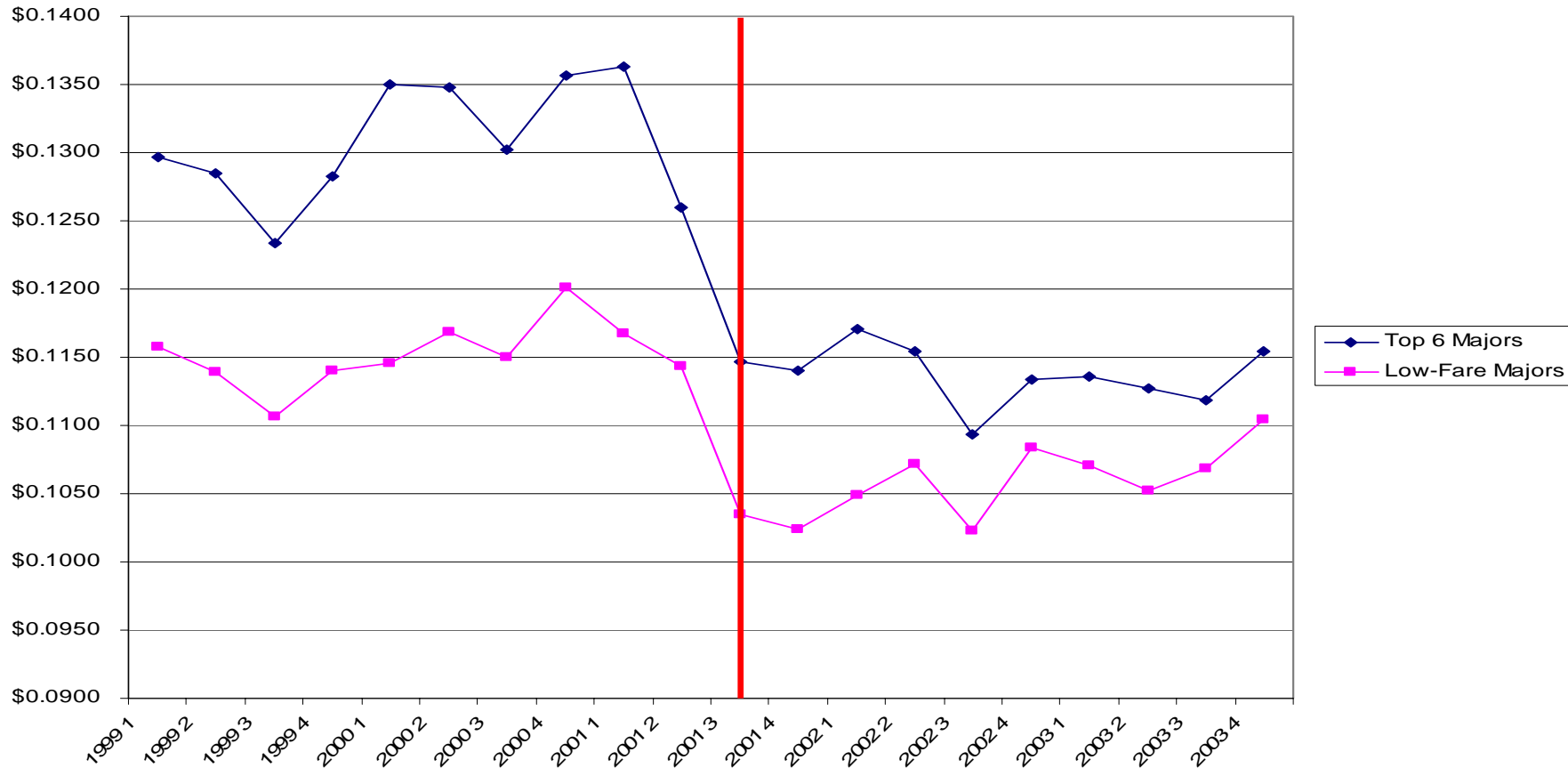
US Airline Industry Revenues



Source: Air Transport Association

Total industry revenues dropped by almost 20% and are still 12% lower than in 2000

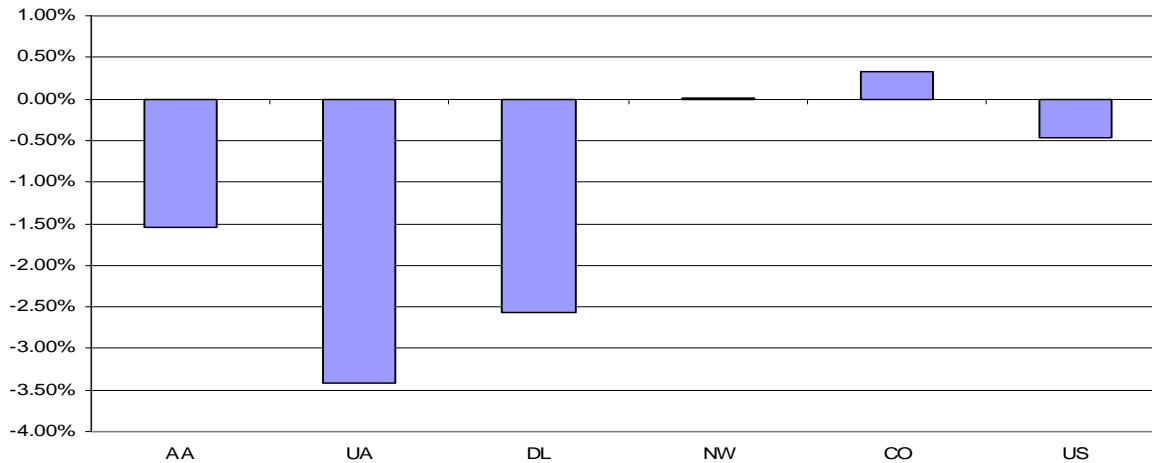
US Airline Yields (Revenue/RPM)



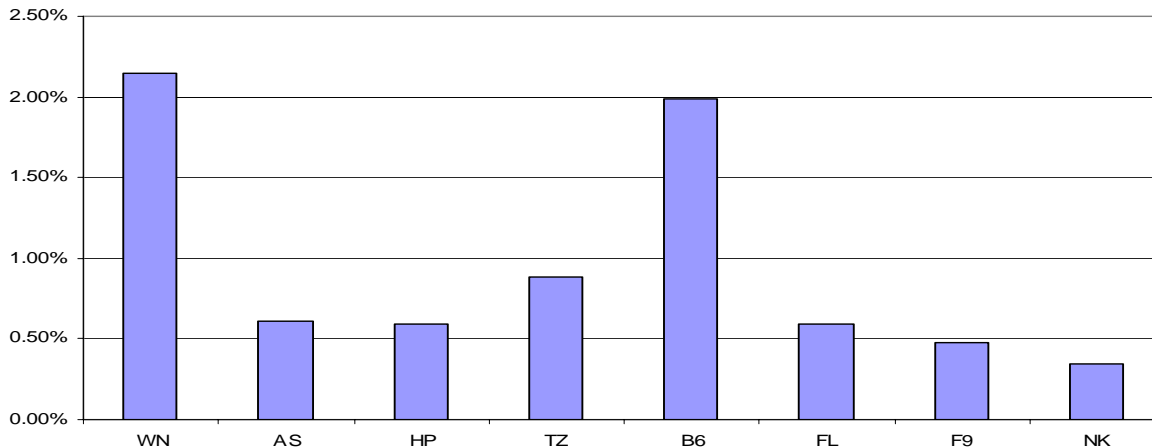
Yields began decreasing prior to 9/11 and have shown little sign of recovery

Change in Market Share by Carrier

Change in % Market Share from 1st Qtr 99 to 3rd Qtr 03



Change in % Market Share from 1st Qtr 99 to 3rd Qtr 03

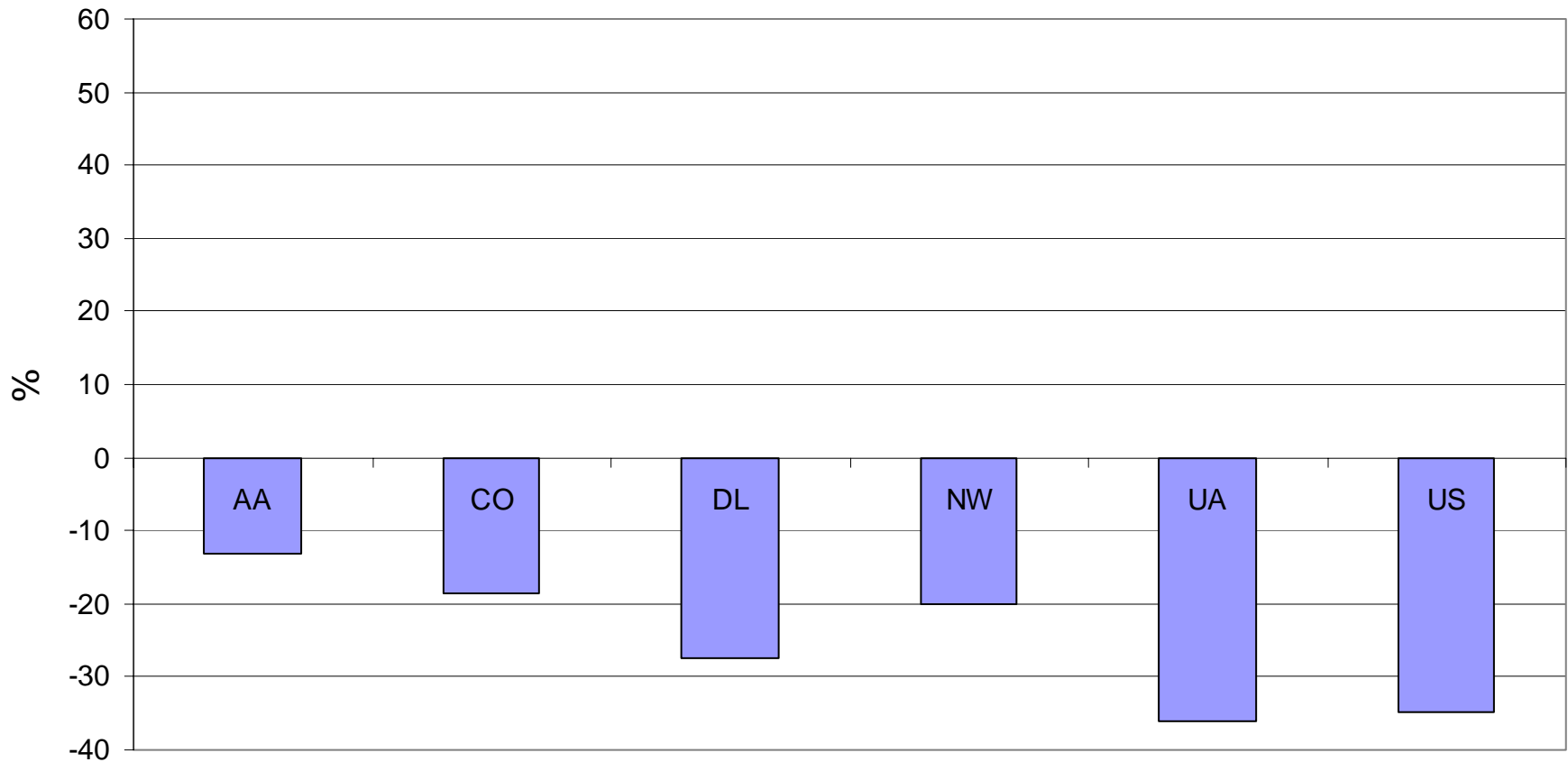


While 4 out of 6 network carriers have lost market share since 1999, all low-fare airlines gained market share during this period, led by Southwest and JetBlue



All Legacy carriers have lost revenues; UA and US revenues down by over 30%

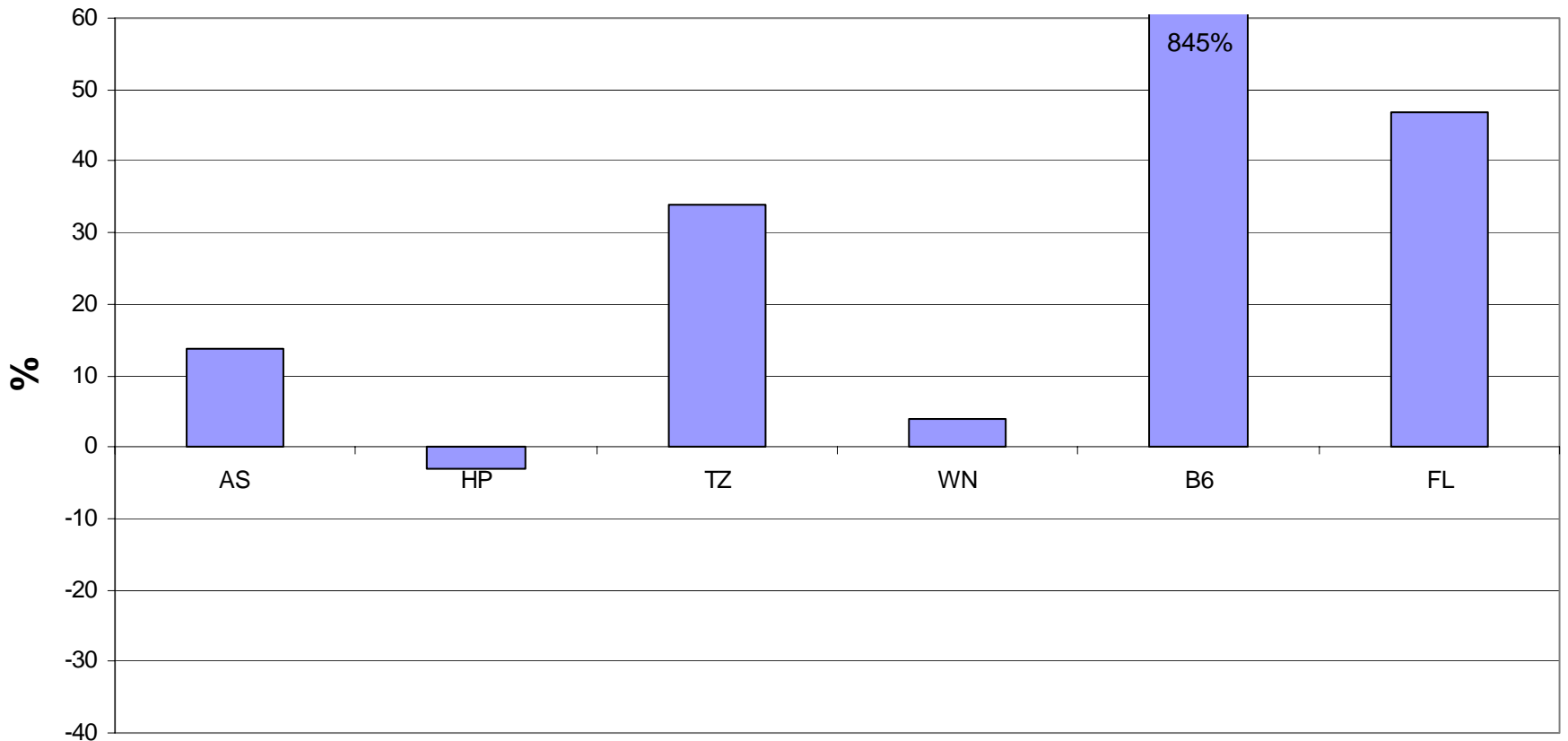
Change in Passesnger Revenues -- Legacy Carriers
2003 vs 2000





Low fare group has maintained or increased revenues – led by JetBlue, AirTran

Change in Passenger Revenues -- Lowfare Carriers
2003 vs 2000





Summary: Revenue Challenges

- **Pricing actions increased unit revenues, but not to previous levels:**
 - Price cuts to stimulate leisure demand have led to record load factors but did not improve revenue quality
 - Efforts to “simplify” fares by removing restrictions have likely re-attracted some business passengers
 - But, fare simplification still leaves unit revenues 10-15% below levels of 2000
- **Conclusion: Pricing actions alone cannot return the network airlines to profitability**

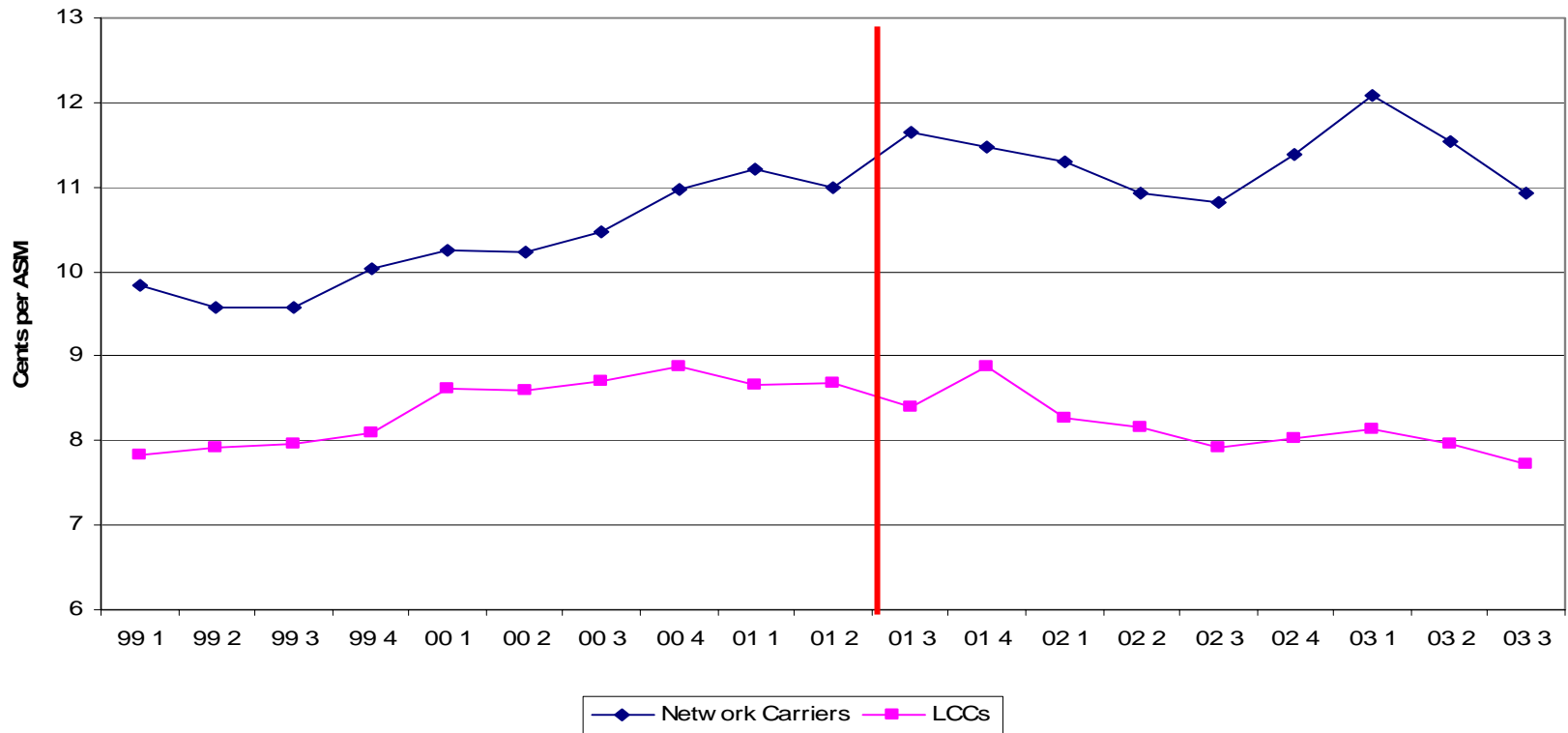


Cost and Productivity Challenges

- **Given revenue shortfall, legacy airlines must cut costs and increase productivity:**
 - Low-cost carriers often used as “benchmark” for unit costs
 - Changing work rules, reducing workforce and cutting wage rates are all options for reducing labor unit costs
 - Unit cost differences also due to aircraft productivity:
 - Point-to-point vs. hub-spoke networks
 - Seating density
 - Scheduling and aircraft ground turn-around times

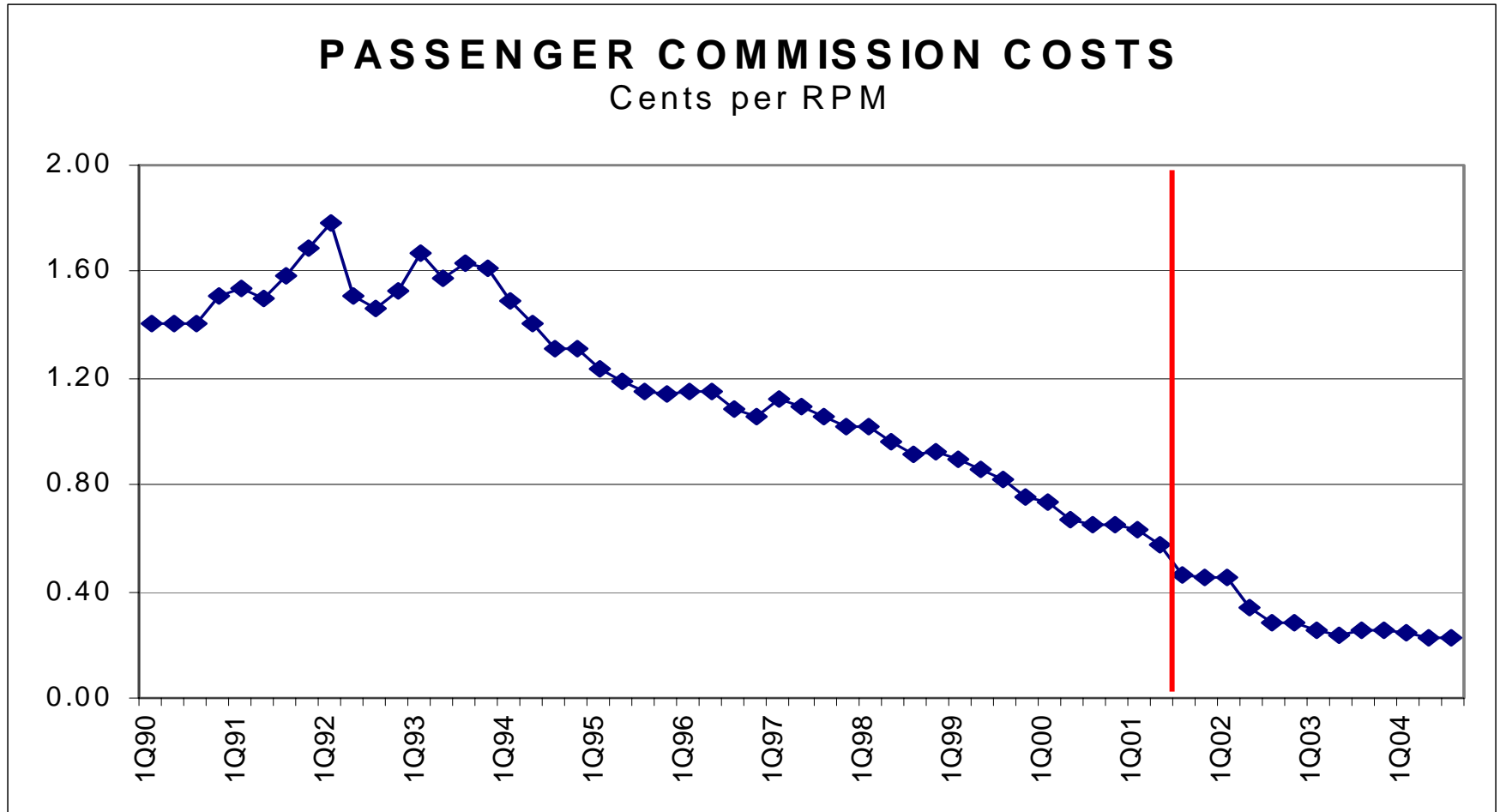
US Airline Unit Costs (per ASM)

Cost per Available Seat Mile (CASM)



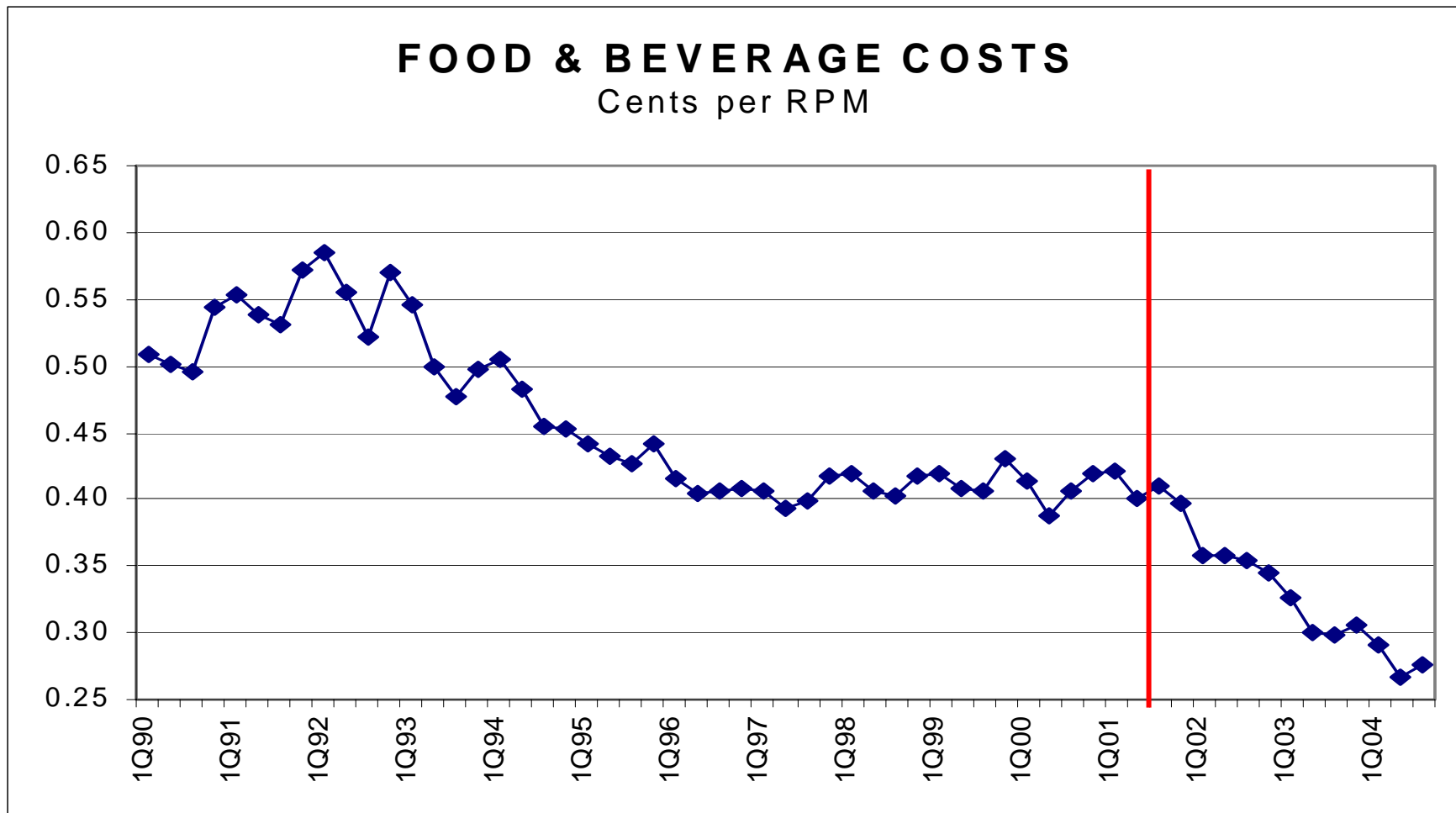
Unit Costs differences between network carriers and LCCs remain despite cost-cutting efforts

Travel Agency Commissions All But Eliminated – Down 85% Since 1994



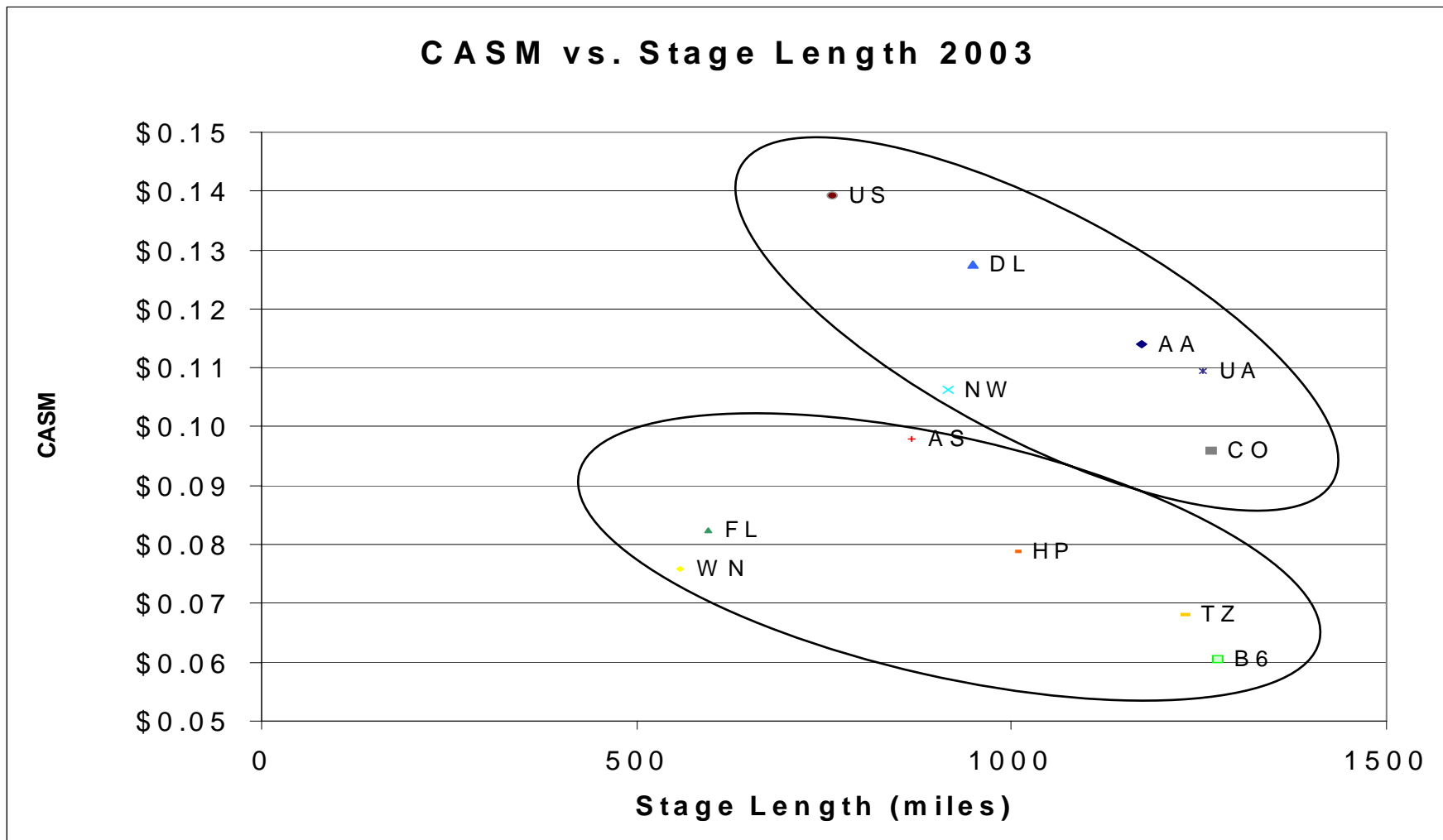
Source: ATA data

Food and Beverage Costs Cut in Half



Source: ATA data

Lowfare carriers have lowest CASM across all average stage lengths





US Airline Performance Since 9/11

- **US airline industry is in the midst of its greatest transition in history**
 - Fundamental shifts in airline business models
 - More efficient new entrants with much lower costs
 - Changes envisioned by architects of deregulation more than 25 years ago
- **9/11 was not the primary cause of this “crisis”**
 - It did lead to increased operating costs
 - Subsequent unfortunate events have not helped
 - But new competition is transforming the industry



Key Questions for the Future

- **What industry structure will emerge?**
 - Will (most) network carriers be able to adapt and survive?
- **What are the new revenue/operating paradigms for network carriers?**
 - Are LCC pricing and operating models broadly applicable?
- **What will be the impact on small markets?**
 - Most domestic O-D pairs can only be served with a hub network
- **Should the government intervene?**
 - Disruption of “re-structuring” process spurred by market forces



Questions for This Forum

- **Are we ready for another 9/11?**
 - Even if we are, unlikely that the next major terror attack will mirror the events of September 2001
- **Can airlines survive another terror attack?**
 - Return of traffic worldwide after 9/11 and subsequent setbacks illustrates the tremendous resiliency of air transportation
 - But, not all airlines (both US and elsewhere) will survive the current industry restructuring, and this has little to do with 9/11