



Massachusetts
Institute of
Technology

UPDATE: US AIRLINE COST AND PRODUCTIVITY TRENDS

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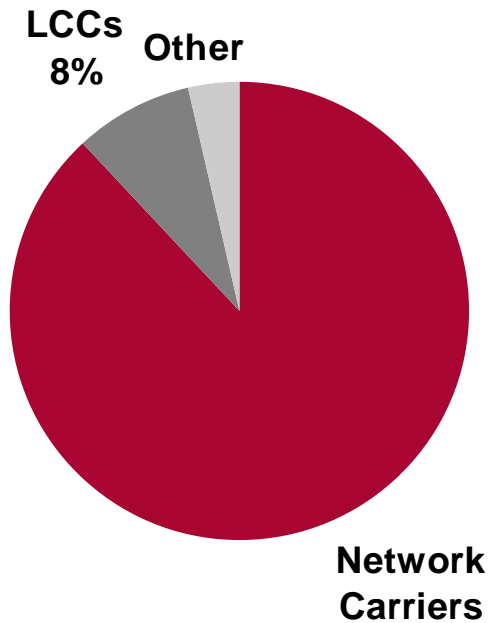
US AIRLINES: A Tale of Two Sectors

- **US Network Legacy Carriers**
 - Between 2000 and 2007, mainline capacity reduced. But some was shifts to smaller aircraft and commuter affiliates.
 - Bankruptcies at US, UA, DL and NW were the first wave of capacity reductions, allowed for labor cost reductions and increased productivity
 - AA and CO re-structured to remain competitive without Chapter 11
 - All network carriers have reduced exposure to domestic flying
- **Low Cost Carriers**
 - LCC share of domestic passengers has increased to over 26%, from 16% in 2000 and only 5% in 1990
 - But unit cost advantages of new entrants tend to disappear as both aircraft and employees mature
 - Fuel cost is proving to be a great equalizer in today's world
 - ASM growth has facilitated lower unit costs, but not clear there are enough market opportunities for all of the narrow body aircraft on order by LCCs.

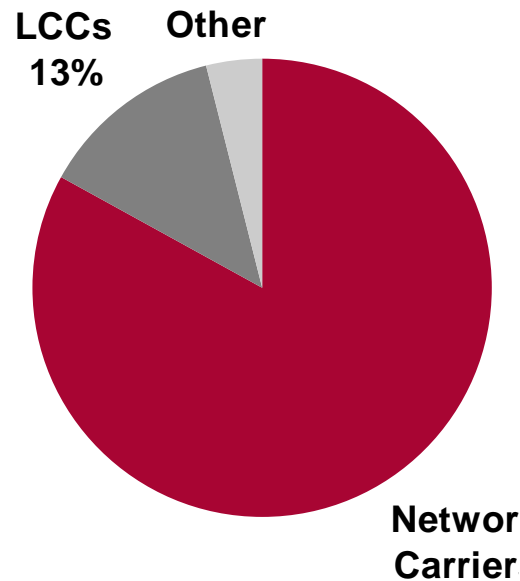
The Growth of LCC Market Share

Domestic ASMs by Industry Sector

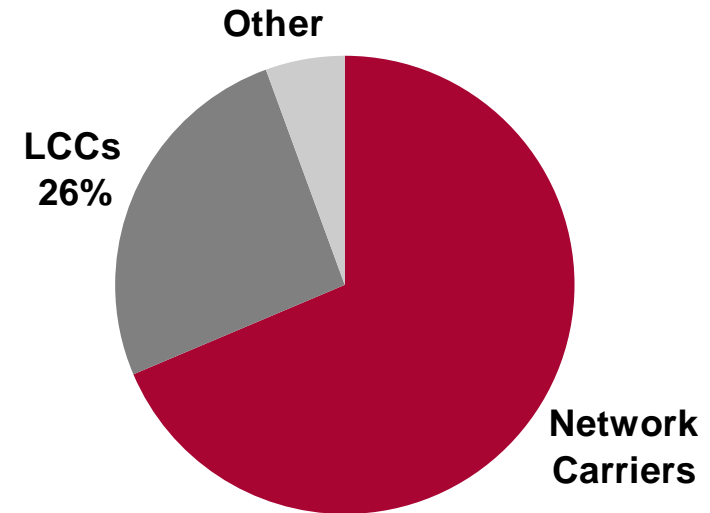
1995



2000



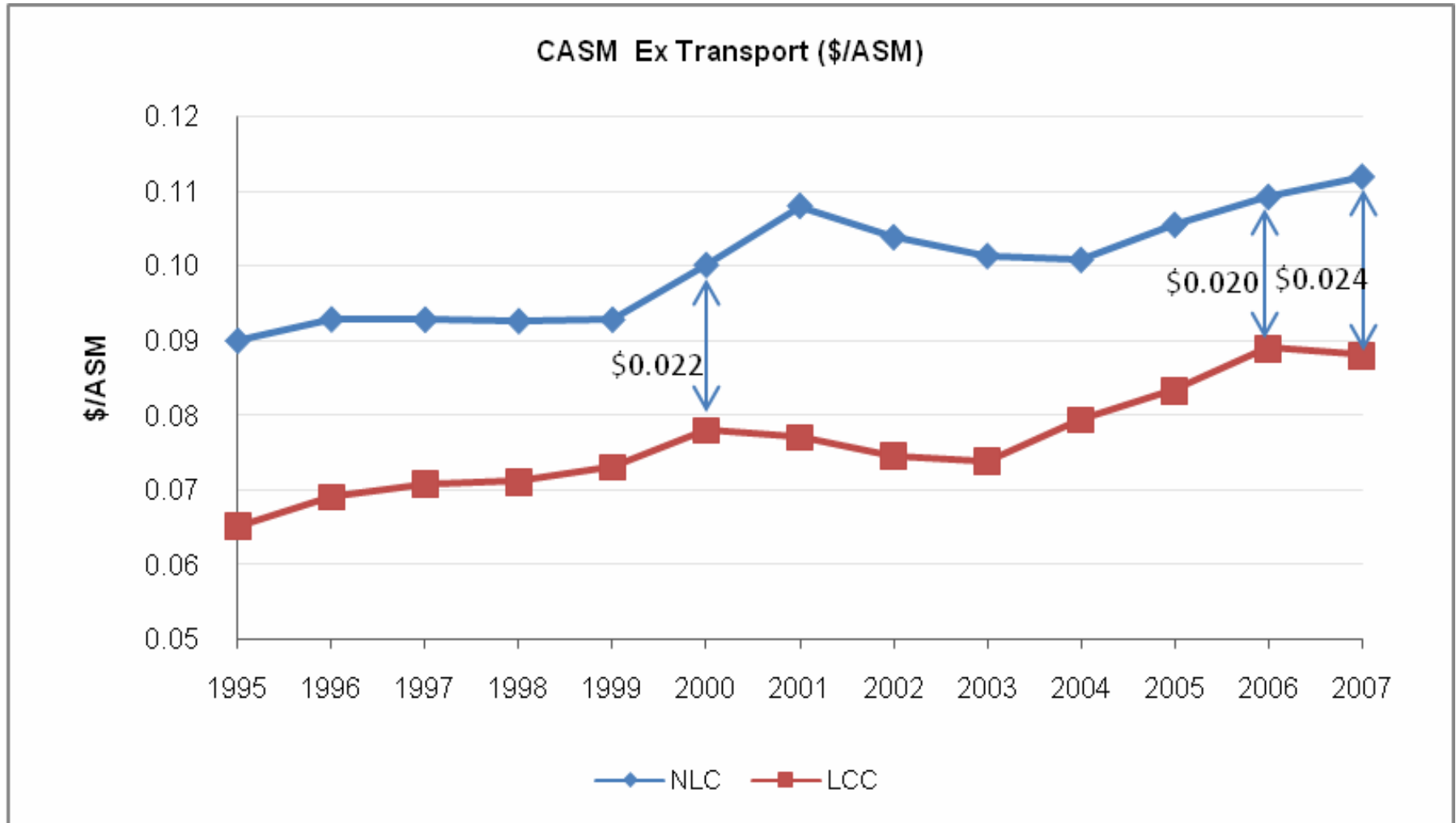
2007



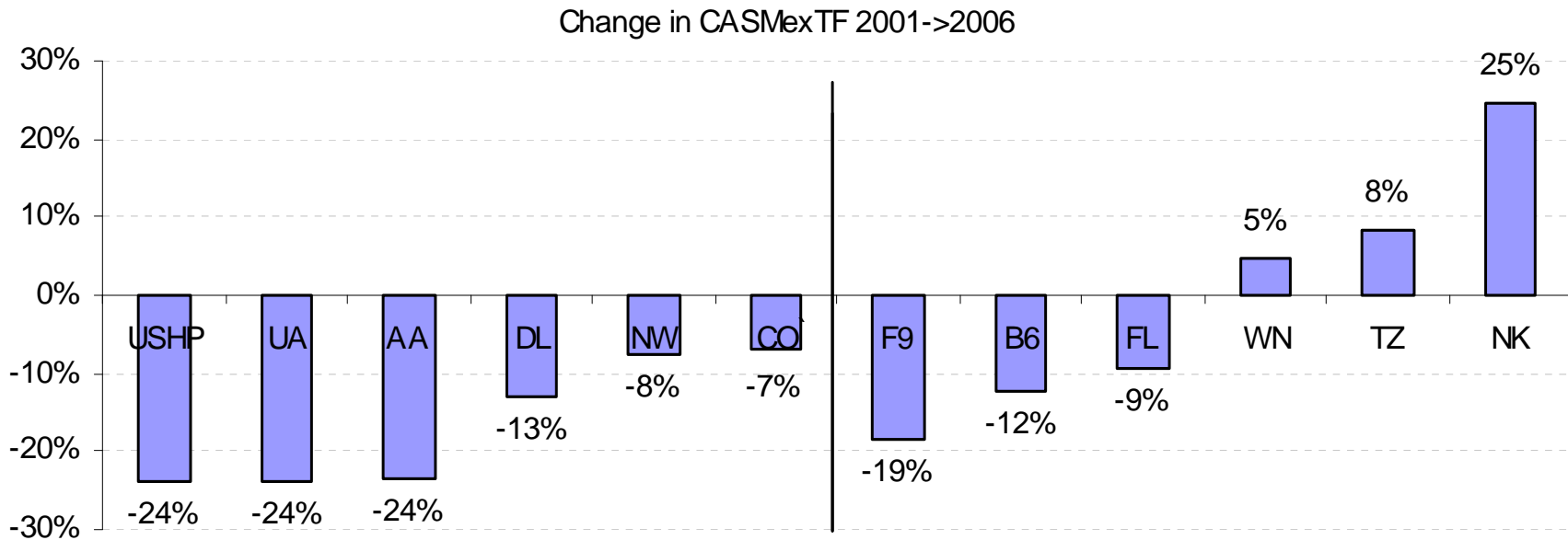
Cost and Productivity Convergence

- **Lower costs and improved productivity allowed NLCs to return to profitability in 2006 and 2007**
 - Network Legacy Carriers re-structured, reduced/outsourced capacity, and cut costs while improving productivity at the mainline level
 - The network legacy carriers were once again more profitable than the LCC sector (operating profits)
- **The unit cost gap has narrowed dramatically**
 - NLCs have seen large drops in labor and other cost components
 - LCCs still have lower total unit costs than NLCs
- **New 2007 data shows that convergence has slowed**
 - Labor unit costs remain very similar
 - Non-labor (“structural”) unit costs for NLCs are still at least 1 cent per ASM higher than LCCs
 - Just not many areas of cost left to cut

2007 Update: Unit Costs (excl. "Transport Related")

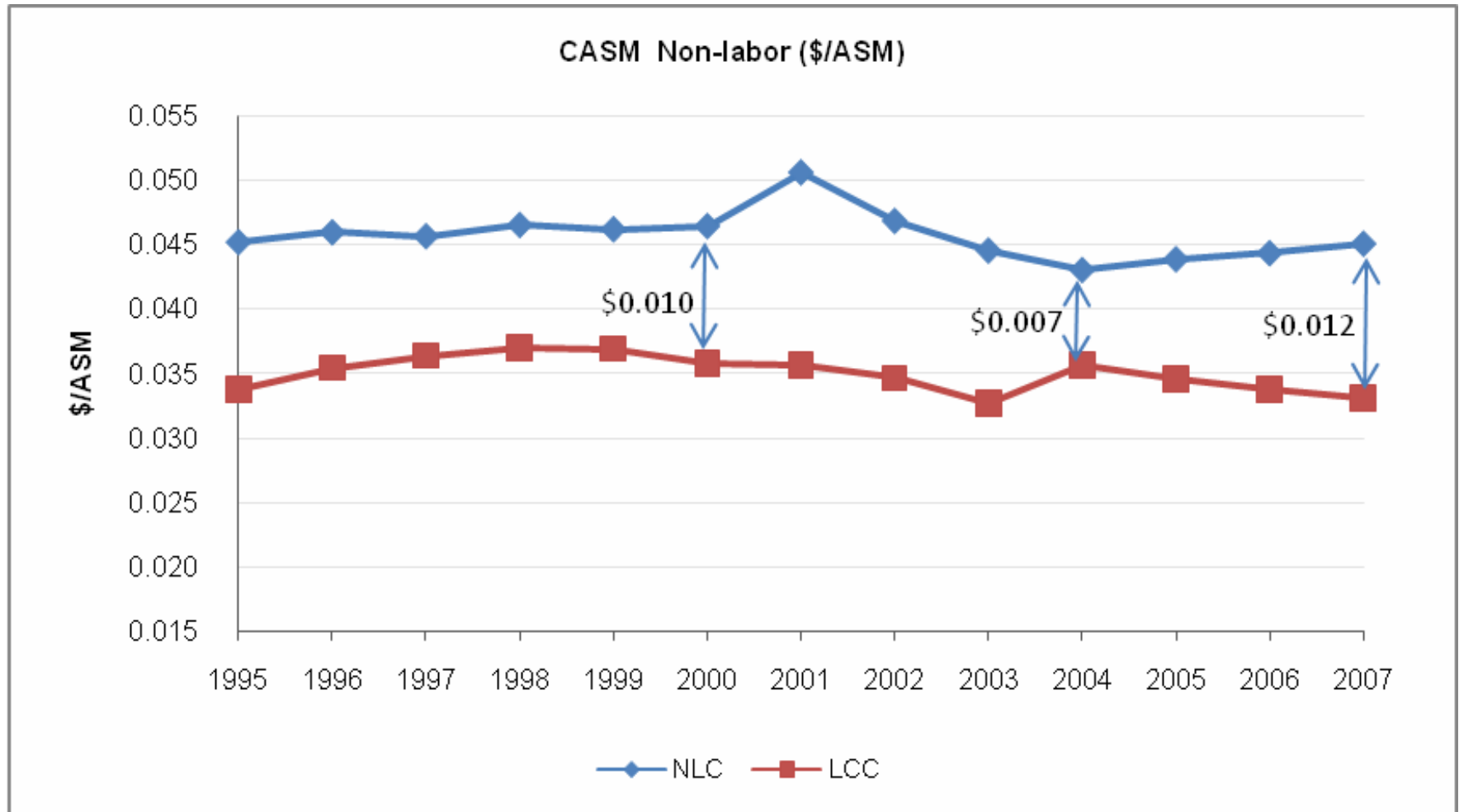


Changes in CASM (ex Transport & Fuel) by Airline 2001-2006

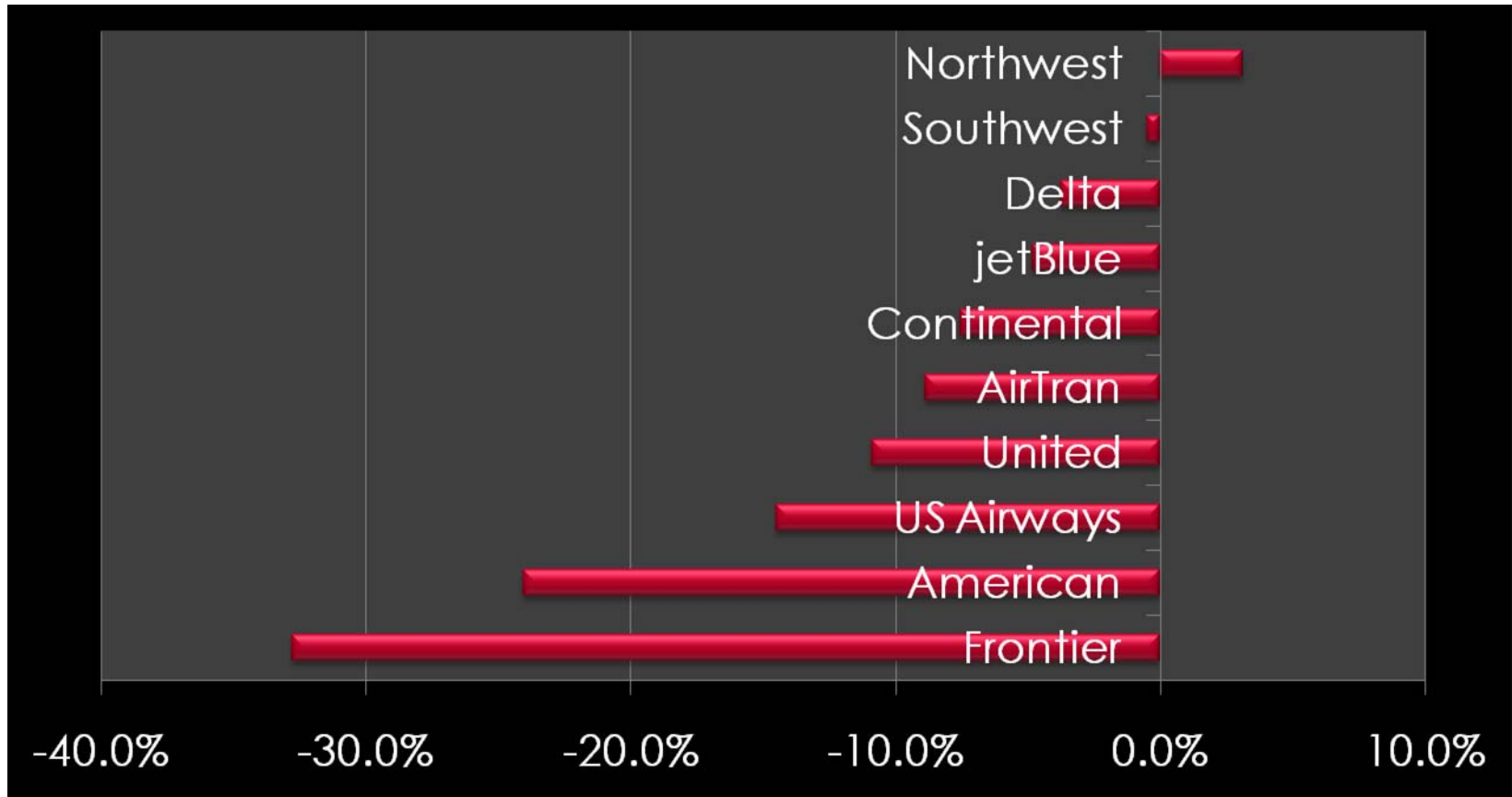


- All NLCs cut CASM exTF, with US Airways, United and American achieving almost 25% reductions.
- LCCs showed mixed unit cost performance – reductions at newer carriers (Frontier, JetBlue) and increases at older LCCs (Southwest)

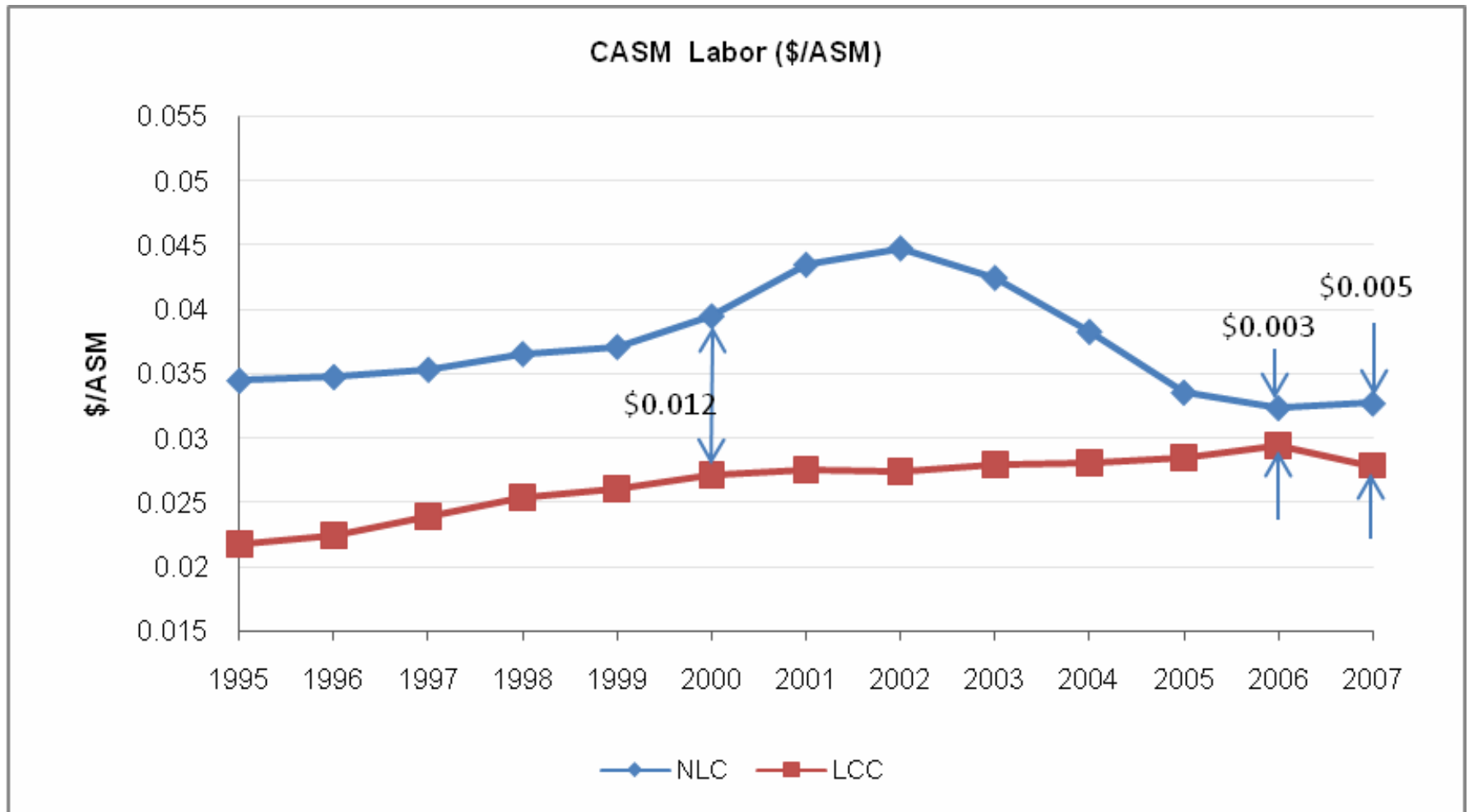
2007 Update: Non-Labor Unit Costs (excl. Transport, Fuel and Labor)



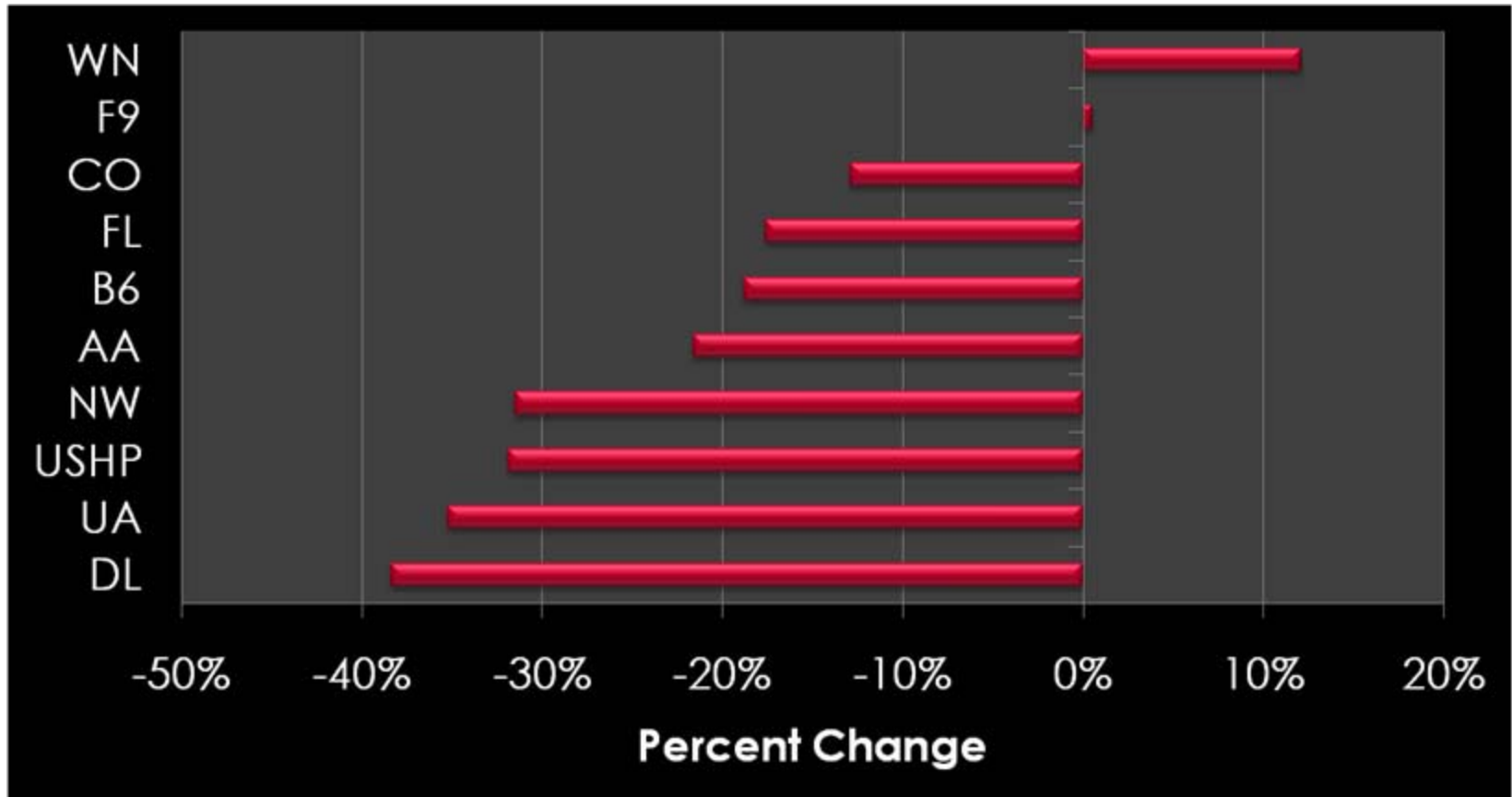
Percent Change in Unit Non-Labor Costs 2001 - 2007



2007 Update: Labor Unit Costs

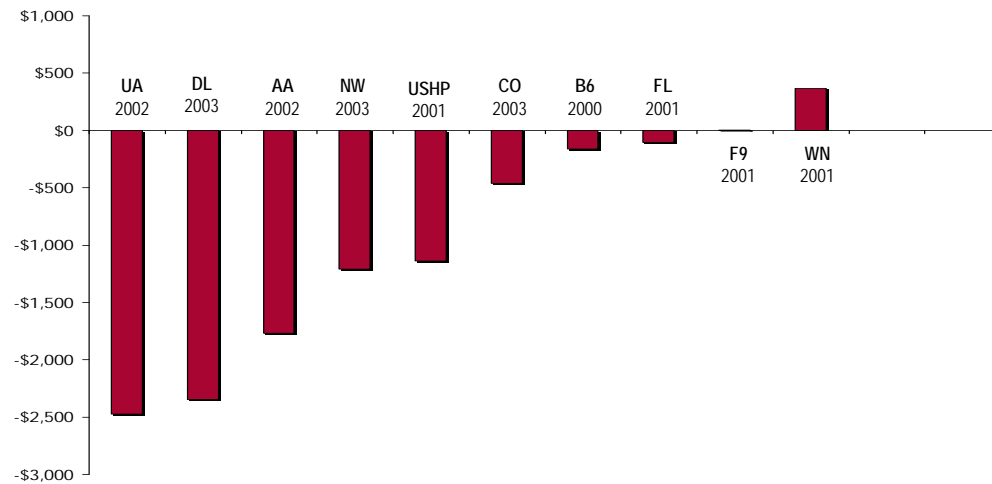


Percent Change In Unit Labor Costs 2001 - 2007

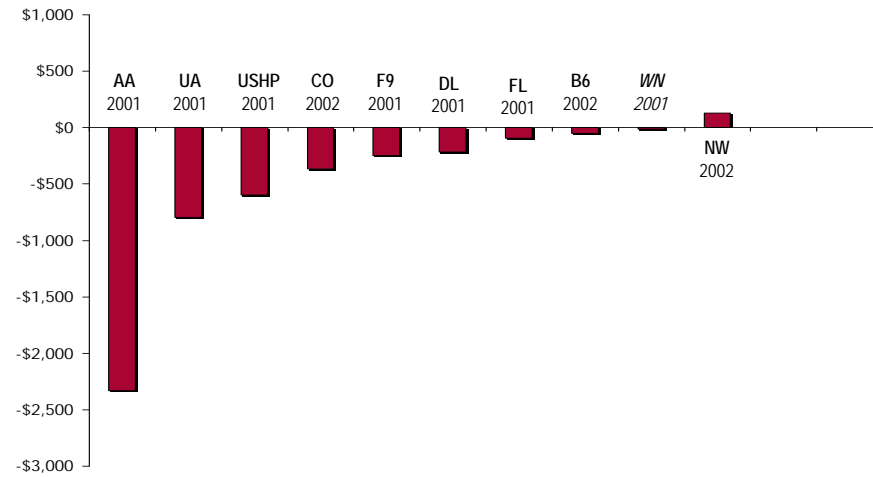


The Pending Labor Question: Who Paid for the Brief Recovery?

**Annual Labor Cost Change
\$ Millions
Peak Labor CASM
At YE 2007**



**Annual Non-Labor Cost Change
\$ Millions
Peak Non-Labor CASM
At 2007**



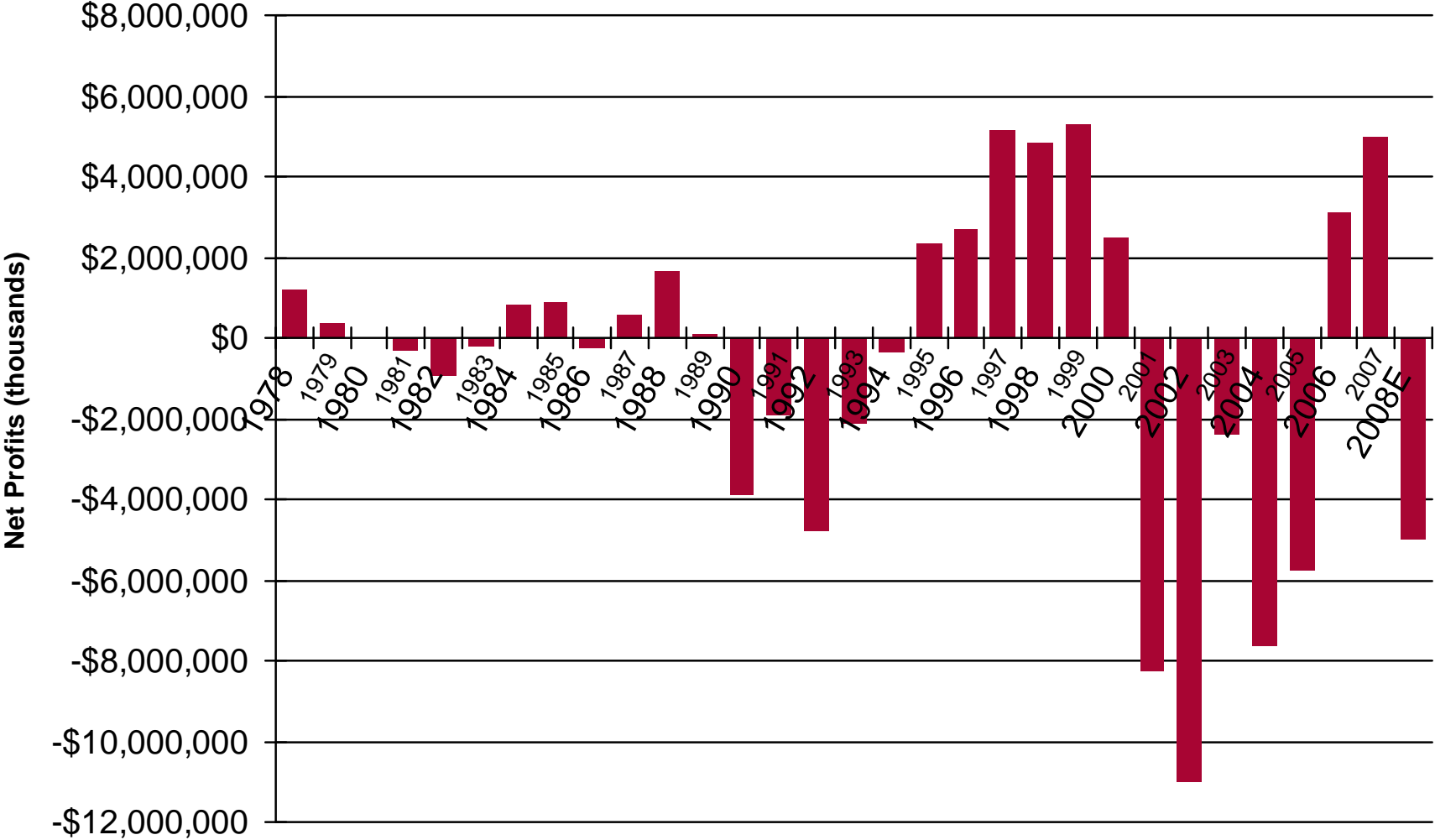
*Peak CASM is defined as highest unit cost since 2001.
Annual expense reduction calculated using 2007ASMs.*



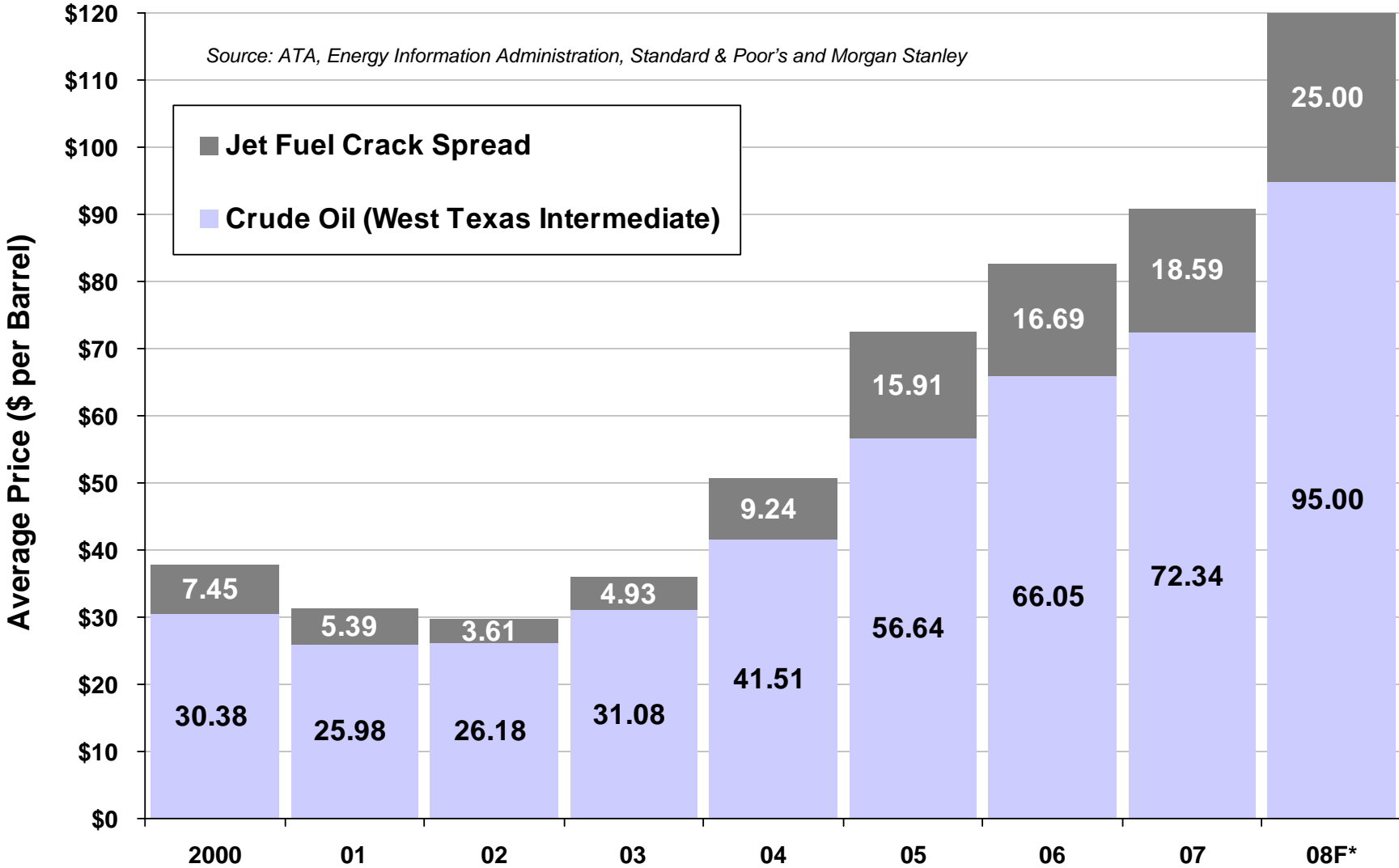
Jet Fuel Has Forced Continued Restructuring of the Industry

- **Lower costs + improved productivity (+ revenue premium) = only a brief return to profitability for NLCs**
 - Network Legacy Carriers have been re-structuring, shifting/outsourcing capacity, and cutting costs while improving productivity
 - But not enough to offset the surge in the cost of jet fuel
- **Jet fuel though, has had a most significant impact on the LCC sector**
- **Capacity reductions will result in the most inefficient aircraft being removed from the system**
 - Financial positives in fuel, maintenance, overall fleet utilization and operational performance?

Annual Net Profits 1978 – 2008E



But, There Is Not Enough Cost Cutting Left that Can Offset the March of Fuel Prices



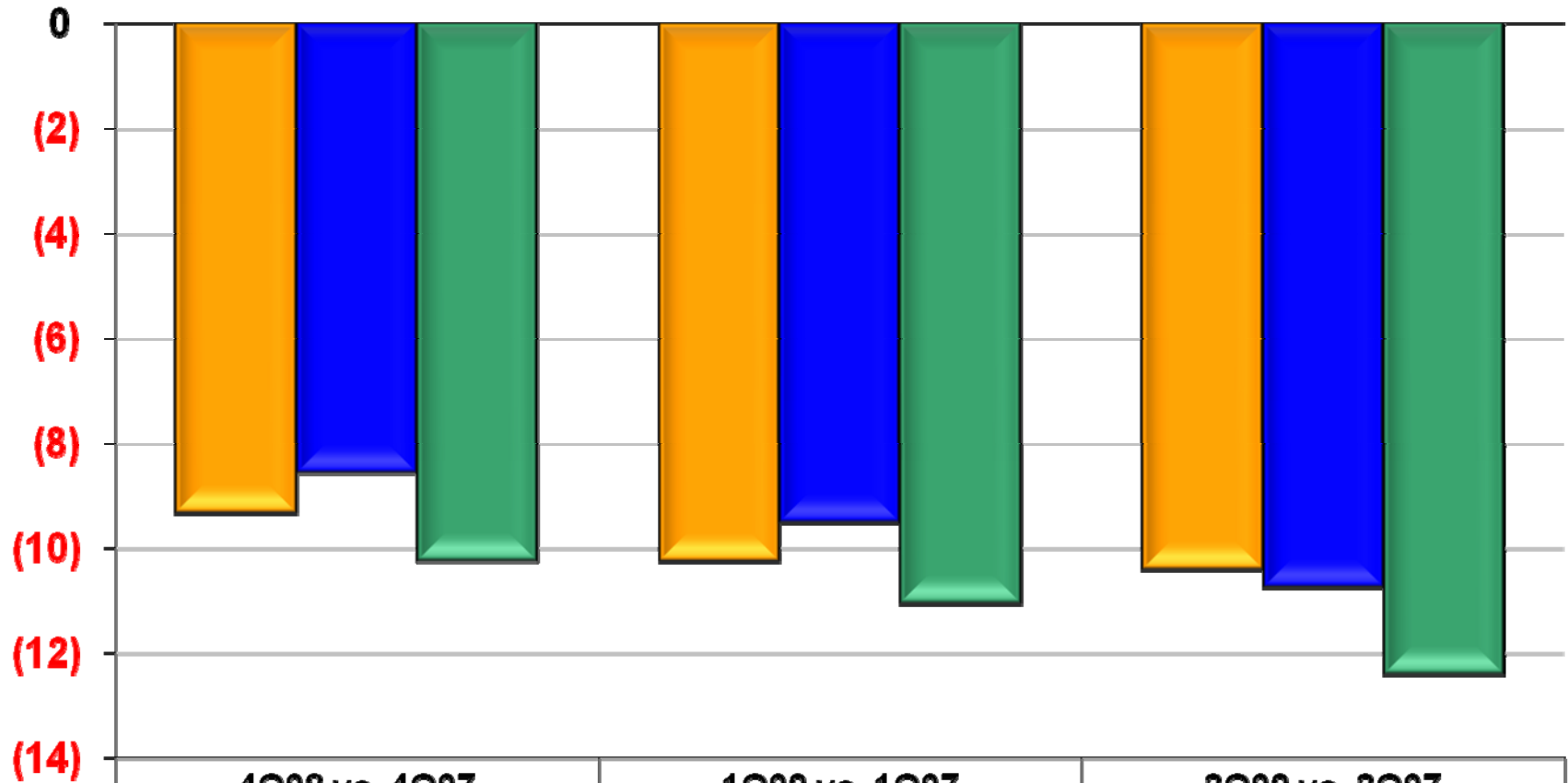


So, Absent Structural Change in the Industry

- Continued focus on cost-cutting will remain paramount
 - But the historic pools of cost are not as readily available
 - Labor costs are not a source of saving; labor will push hard to get back
 - Distribution costs have largely been wrung out of the system
 - Fear is maintenance costs will head up; materials costs already an issue
 - The infrastructure is not the industry's friend; will continue to mute efficiency efforts
 - And fuel is an uncontrollable cost
 - So, the industry will look to cut capacity
 - Not as easy outside of bankruptcy when contracts cannot be altered
 - The industry spends in excess of \$15 billion per year with regional carriers
 - Really only large pool of expense to consider
- Capacity cuts have risk
 - Political
 - Financial

Economic Circumstances Sustaining Industry Contraction

Reductions in Scheduled Domestic Air Service vs. Same Quarters in 2007



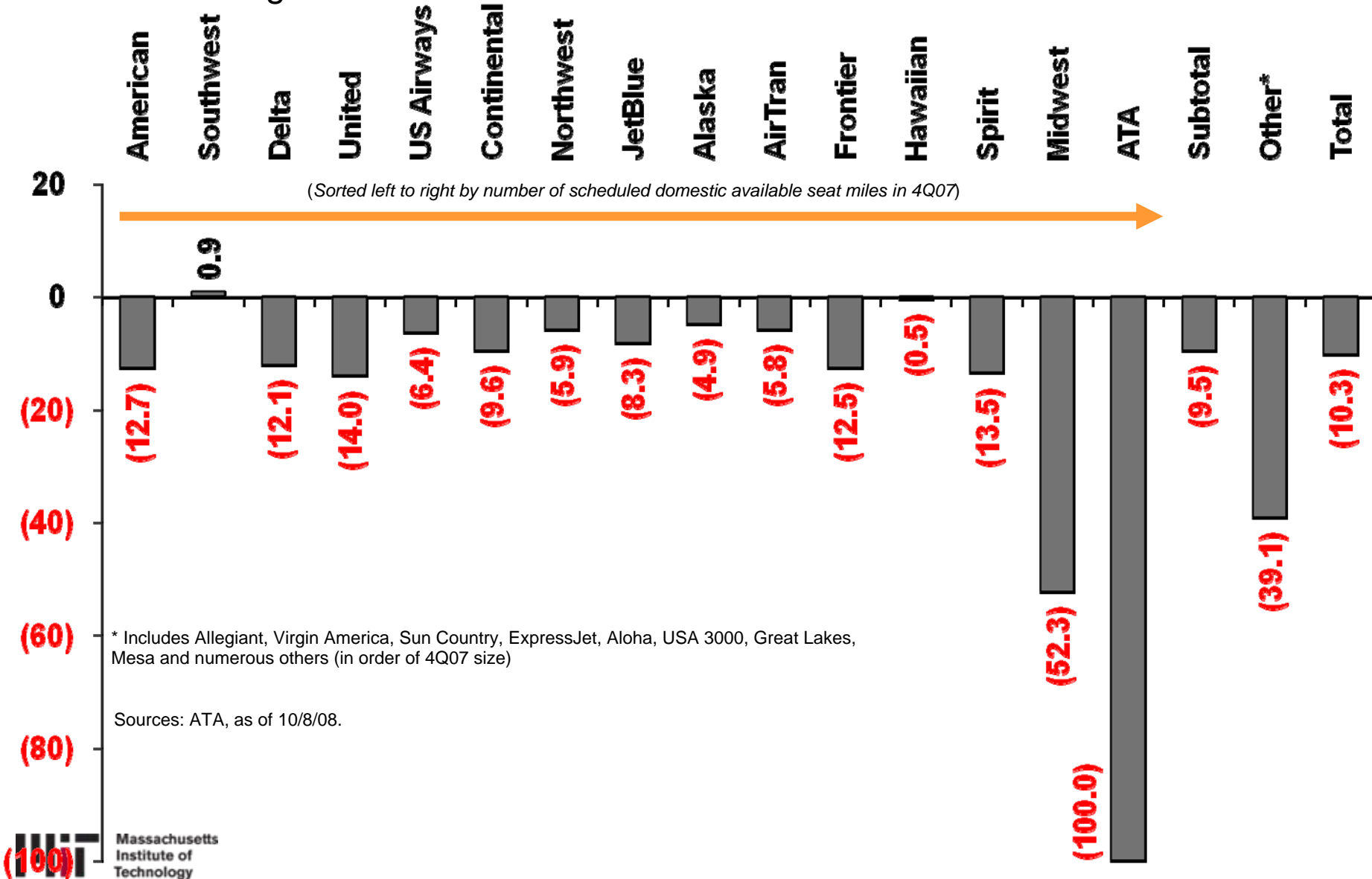
	4Q08 vs. 4Q07	1Q09 vs. 1Q07	2Q09 vs. 2Q07
Flights	(9.3)	(10.2)	(10.4)
Seats	(8.5)	(9.5)	(10.8)
ASMs*	(10.2)	(11.1)	(12.4)

* An available seat mile (ASM) is one seat flown one mile and is the standard unit of capacity in the passenger airline sector

Source: ATA analysis of Seabury APGDat airline schedules as of Oct. 27, 2008

Domestic Seating Capacity Cuts Span the Industry

% Change in Scheduled Domestic Available Seat Miles: 4Q08 vs. 4Q07

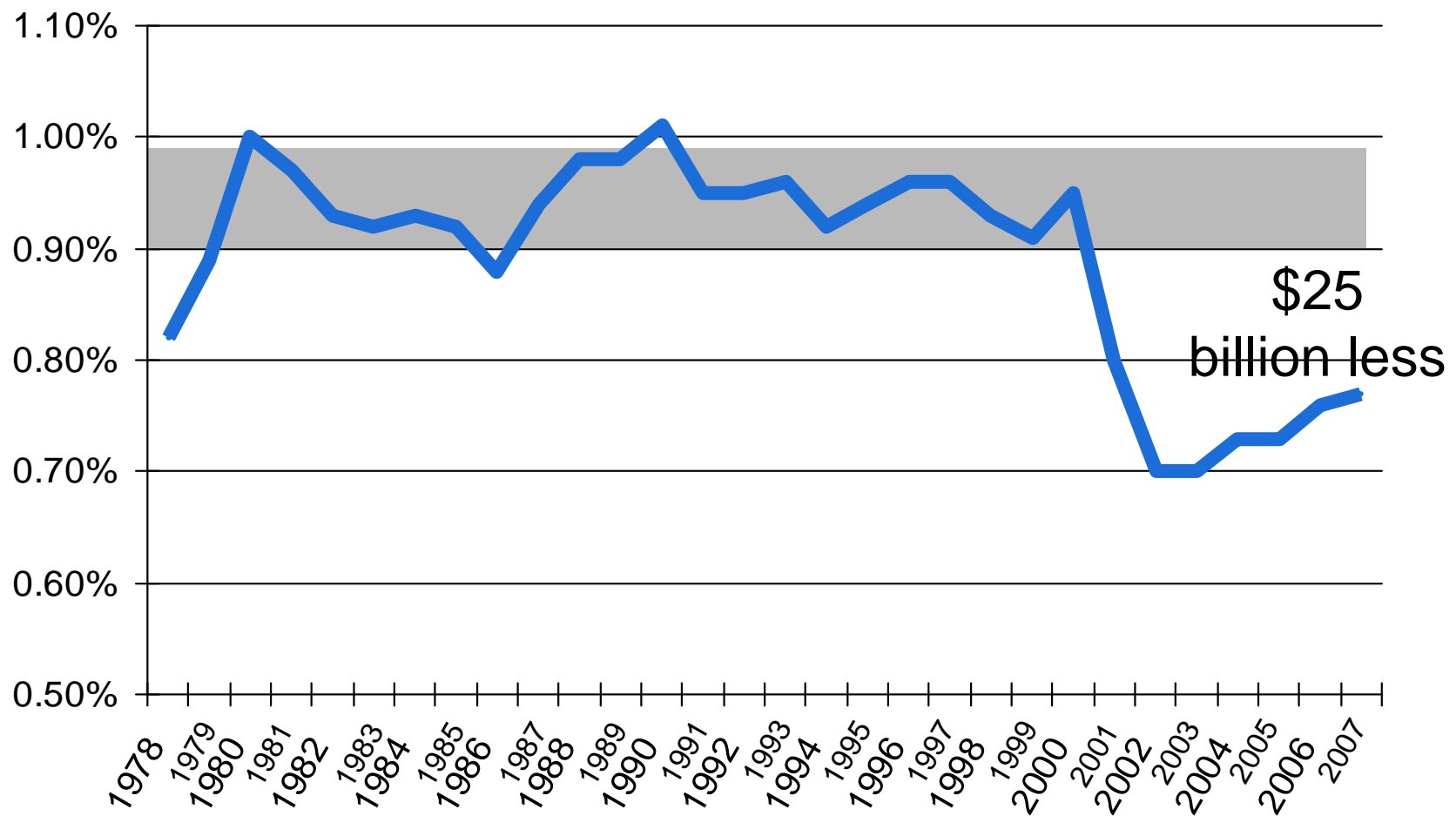




The Revenue Environment

- **To many, the fix is a simple raise of fares. Fares are going up.....but**
 - The intense level of competition signals that this is not a viable option
 - Transparency makes increasing fares only difficult
 - Therefore the ancillary fees
 - Operating profit for both NLCs and LCCs is elusive when expenses are subtracted from passenger revenue only
 - New revenue sources sought by all
- **The absolute level of fare reductions realized by the NLC sector since 2000 is significant**
 - With fare reductions of this order of magnitude, the revenue line cannot yet write the check that labor expects in the next round
 - Moreover, fare premiums exist but against a much smaller base fare for the NLC sector
- **The LCC sector has been increasing their fares to compensate for increasing costs**
 - But still have to price well below their direct competition
 - Given current statements about demand by the LCC sector, will their decision to slow capacity plans have a negative impact on profitability?

Passenger Revenue as a Percent of GDP Fewer Seats Finally Aligning with Less Revenue?



Domestic Fare Profile

All Domestic Markets
CONTINENTAL

Year	Continental Pax Share	Other Network Carrier Share	LCC Share	Other Carrier Share	Continental Revenue Share	Continental Average Fare	OA Fare	Continental Fare Premium	Average Passenger Trip Length	Coupons	Total Market Revenue (\$Mils)	Total Market Pax (Mils)
1995	9.8%	64.6%	17.7%	0.9%	9.7%	\$159.81	\$162.83	(1.9%)	1,156	1.35	\$ 9,187	56.5
1996	8.9%	61.8%	19.7%	2.2%	9.1%	\$154.98	\$150.28	3.1%	1,180	1.26	\$ 9,552	63.4
1997	8.9%	62.0%	19.4%	2.0%	9.1%	\$168.87	\$164.38	2.7%	1,221	1.24	\$ 10,703	65.0
1998	9.6%	64.3%	19.7%	1.5%	10.0%	\$180.17	\$171.57	5.0%	1,231	1.32	\$ 12,068	70.0
1999	9.6%	66.1%	18.4%	1.2%	10.4%	\$192.00	\$175.05	9.7%	1,238	1.32	\$ 13,237	74.9
2000	8.8%	64.6%	20.8%	1.4%	10.1%	\$212.16	\$182.53	16.2%	1,265	1.33	\$ 15,075	81.4
2001	8.9%	61.0%	22.2%	3.5%	10.3%	\$185.32	\$158.35	17.0%	1,322	1.36	\$ 12,190	75.8
2002	9.0%	61.7%	24.3%	1.7%	10.3%	\$184.02	\$158.56	16.1%	1,328	1.34	\$ 11,557	71.8
2003	9.5%	58.9%	26.7%	2.0%	10.7%	\$188.20	\$163.72	15.0%	1,379	1.36	\$ 12,330	74.3
2004	8.6%	58.0%	27.1%	3.4%	10.1%	\$184.37	\$153.82	19.9%	1,352	1.33	\$ 13,222	84.5
2005	8.6%	54.4%	30.7%	3.2%	10.2%	\$191.89	\$159.55	20.3%	1,355	1.32	\$ 14,733	90.8
2006	10.3%	55.6%	27.5%	3.5%	11.6%	\$204.23	\$178.39	14.5%	1,343	1.30	\$ 15,157	83.7

Source: US DOT DB1B via BTS for the third quarters of each year.

Domestic Fare Profile

All Domestic Markets
SOUTHWEST

Year	Southwest Pax Share	Network Carrier Share	Other LCC Share	Other Carrier Share	Southwest Revenue Share	Southwest Average Fare	OA Fare	Southwest Fare Premium	Average Passenger Trip Length	Coupons	Total Market Revenue (\$Mils)	Total Market Pax (Mils)
1995	38.8%	44.1%	7.0%	5.4%	25.0%	\$71.18	\$135.80	(47.6%)	525	1.13	\$ 3,329	30.1
1996	34.8%	47.7%	6.9%	5.0%	22.6%	\$72.64	\$132.98	(45.4%)	560	1.13	\$ 4,128	36.9
1997	31.9%	51.1%	7.1%	4.1%	20.0%	\$80.64	\$151.11	(46.6%)	568	1.12	\$ 5,259	40.9
1998	32.6%	51.4%	6.7%	4.5%	21.3%	\$86.75	\$154.91	(44.0%)	616	1.15	\$ 5,767	43.5
1999	31.6%	52.8%	7.0%	4.4%	21.3%	\$91.60	\$156.38	(41.4%)	623	1.15	\$ 6,431	47.3
2000	33.2%	52.3%	7.0%	4.0%	22.1%	\$97.61	\$171.24	(43.0%)	652	1.15	\$ 7,373	50.2
2001	34.7%	49.6%	7.9%	4.3%	25.2%	\$92.36	\$145.91	(36.7%)	688	1.16	\$ 6,030	47.4
2002	35.6%	47.7%	9.2%	4.8%	26.4%	\$94.93	\$146.80	(35.3%)	717	1.16	\$ 5,921	46.1
2003	37.9%	44.9%	9.9%	5.1%	27.5%	\$98.33	\$158.49	(38.0%)	729	1.15	\$ 6,172	45.5
2004	35.1%	47.6%	11.0%	4.4%	26.9%	\$101.27	\$149.11	(32.1%)	763	1.16	\$ 6,868	51.9
2005	30.2%	49.9%	13.7%	4.0%	22.1%	\$107.26	\$163.68	(34.5%)	788	1.16	\$ 10,214	69.6
2006	30.9%	49.6%	12.9%	4.5%	23.1%	\$120.52	\$179.57	(32.9%)	818	1.16	\$ 11,465	71.1


Source: US DOT DB1B via BTS for the third quarters of each year.

Domestic Fare Profile

All Domestic Markets
AMERICAN

Year	American Pax Share	Other Network Carrier Share	LCC Share	Other Carrier Share	American Revenue Share	American Average Fare	OA Fare	American Fare Premium	Average Passenger Trip Length	Coupons	Total Market Revenue (\$Mils)	Total Market Pax (Mils)
1995	15.8%	56.5%	18.5%	2.3%	19.0%	\$192.35	\$153.56	25.3%	1,363	1.44	\$ 10,446	65.4
1996	15.3%	54.8%	19.3%	2.8%	19.2%	\$188.93	\$143.72	31.5%	1,388	1.43	\$ 10,473	69.5
1997	15.9%	54.6%	19.0%	2.2%	18.7%	\$194.40	\$159.72	21.7%	1,384	1.41	\$ 11,511	69.7
1998	15.0%	56.4%	20.4%	3.1%	18.2%	\$205.67	\$162.95	26.2%	1,381	1.42	\$ 12,531	74.0
1999	13.6%	57.1%	20.1%	3.8%	16.5%	\$204.16	\$162.68	25.5%	1,367	1.39	\$ 13,878	82.4
2000	13.7%	54.6%	23.9%	3.7%	17.2%	\$221.74	\$169.64	30.7%	1,340	1.38	\$ 15,934	90.1
2001	13.3%	51.9%	25.7%	4.9%	16.0%	\$185.63	\$150.03	23.7%	1,368	1.39	\$ 12,537	81.0
2002	17.9%	48.7%	28.1%	2.2%	20.2%	\$175.99	\$151.05	16.5%	1,367	1.41	\$ 12,336	79.3
2003	16.6%	47.9%	28.8%	3.7%	18.6%	\$180.67	\$157.38	14.8%	1,409	1.40	\$ 12,585	78.0
2004	15.9%	45.6%	30.1%	5.5%	17.9%	\$172.36	\$148.86	15.8%	1,400	1.36	\$ 13,829	90.6
2005	16.1%	43.6%	31.3%	5.8%	18.2%	\$181.69	\$157.14	15.6%	1,366	1.37	\$ 15,437	95.8
2006	15.9%	44.2%	31.1%	5.8%	17.4%	\$191.87	\$172.73	11.1%	1,344	1.35	\$ 16,740	95.2

Source: US DOT DB1B via BTS for the third quarters of each year.



The Restructuring Refuses to Stop Honestly, It Cannot

- **The historic relationship of GDP as a predictor of US airline industry health breaks down**
 - The revenue breakdown caused the industry to resort to cost-cutting as we had never experienced – as there was little to no choice
- **The Growth of the Low Cost Carriers**
- **The legacy network carriers shift/outsource capacity to their regional partners**
- **The restructuring that occurred between 2002 and early 2007, removed approximately \$20 billion in expense**
 - But the restructuring began when fuel was an equivalent of \$30 per barrel “in the wing”; and today we are paying \$40 billion more
 - The new economic order is all about \$100+ per barrel “in the wing” jet fuel
- **Tomorrow, global forces will shape our domestic services**



Some Concluding Thoughts

- **Domestically, there will be a changing of the guard**
 - Particularly in leisure-oriented markets like Las Vegas, Orlando, Tampa and quite possibly San Francisco
 - And we should not just assume that it will be today's LCCs that will inherit the domestic market
 - What about today's regional carriers?
 - What about a combination of US Airways and jetBlue being the US domestic provider for the STAR alliance?
- **Cost and Productivity Convergence No Longer a Nicety**
 - It is a necessity unless ancillary revenues can make for fare premiums similar to those in the late 90's
- **There will be more airline deaths**
 - More than sufficient replacement capacity and competition will remain
 - This market has proven that time and time again

Cumulative Net Profits 1978 – 2008E

