



MIT International Center for Air Transportation

CONVERGENCE OF LEGACY AND LCC PERFORMANCE

**Gerry Tsoukalas
Bill Swelbar
Peter Belobaba**

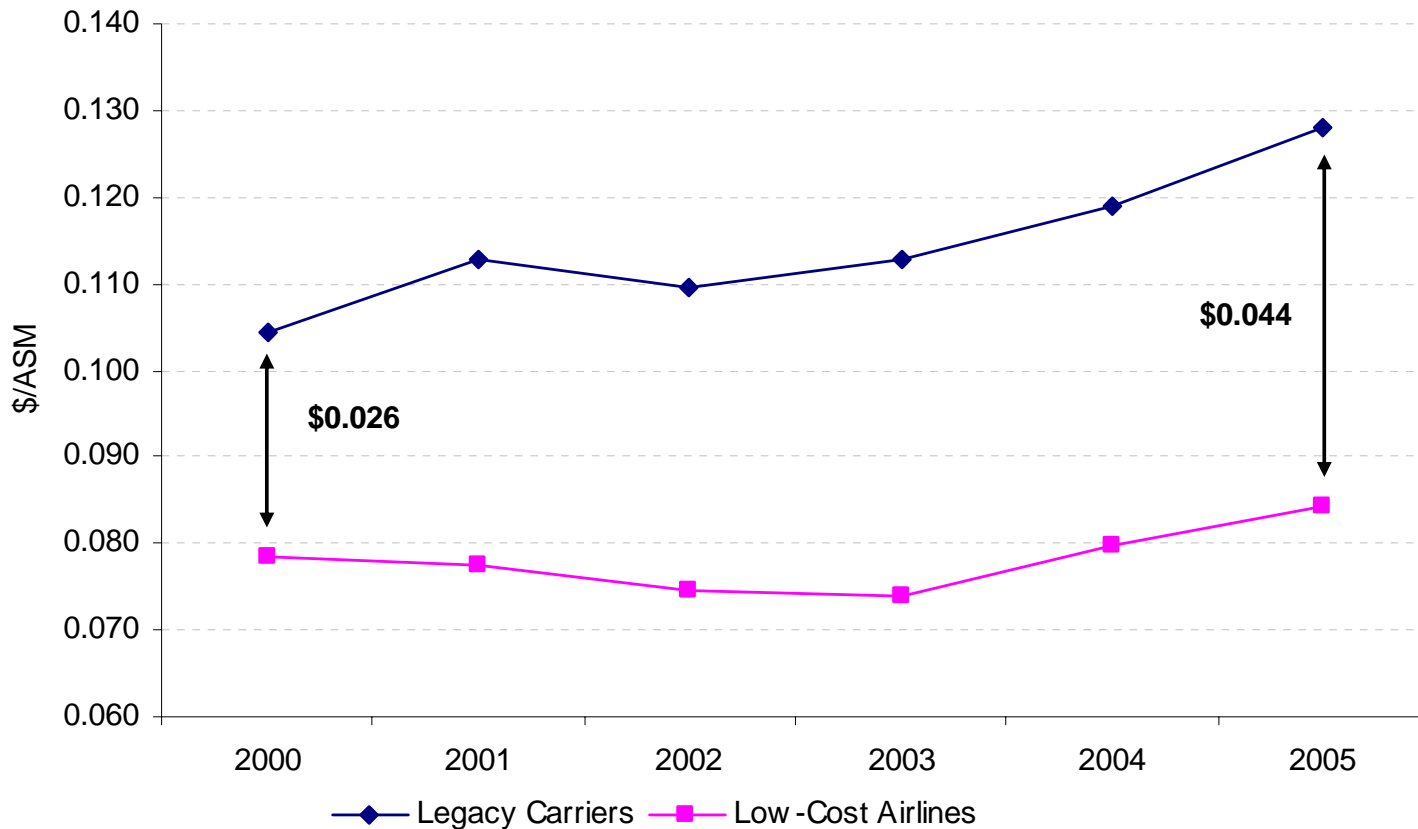
**IAB/Airline Industry Consortium Meeting
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Cost and Productivity Challenges

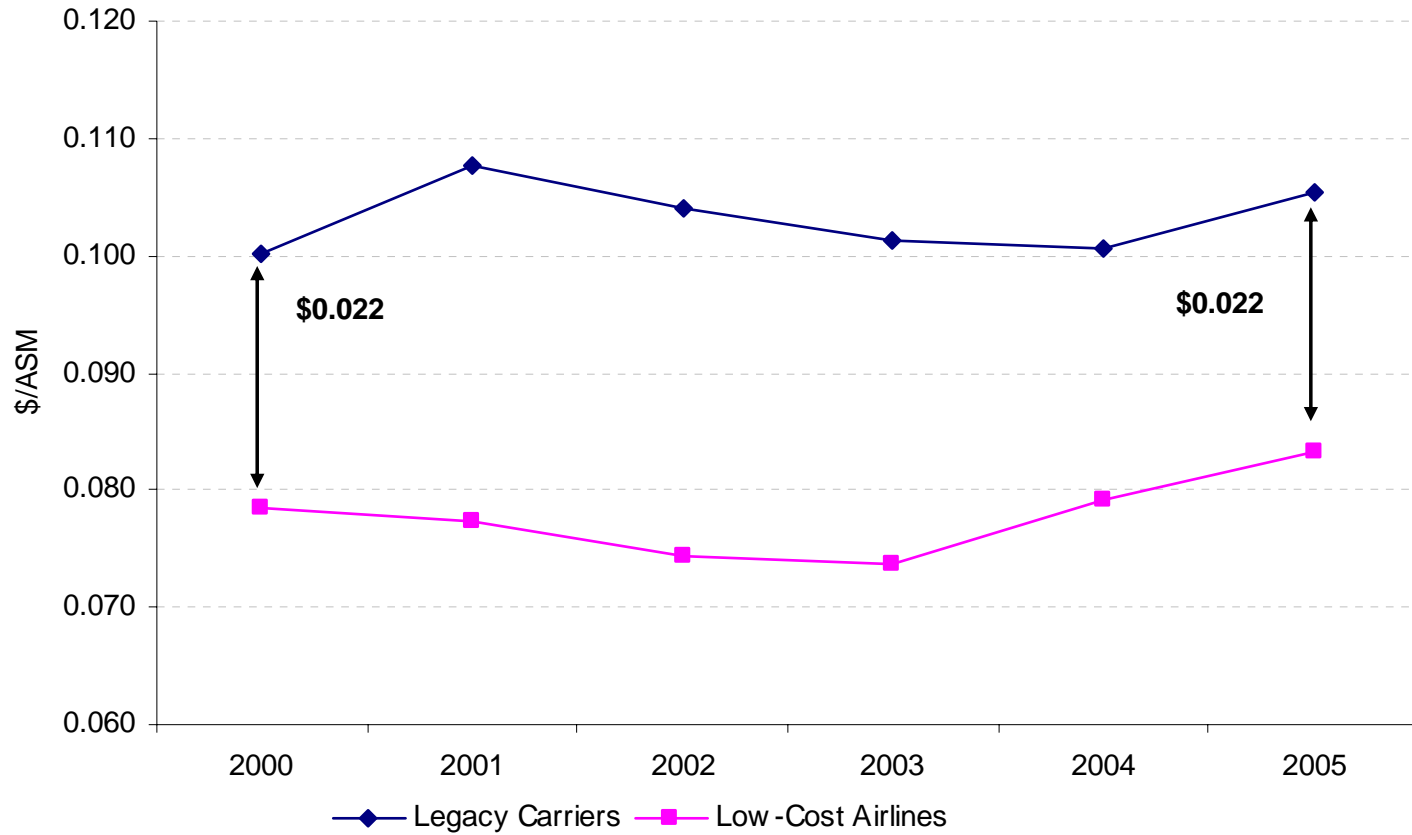
- **Shifts in demand and increased LCC competition lowered fares and total revenues since 2000**
 - Pricing and competitive impacts discussed previously
- **Given shortfall in revenues, legacy airlines have cut costs and increased productivity:**
 - Low-cost carriers often used as “benchmark” for unit costs
 - Changing work rules, reducing workforce and cutting wage rates are all options for reducing labor unit costs (\$ per ASM)
 - Unit cost differences are also due to aircraft productivity
- **Analysis of unit costs legacy vs. LCCs 2000-2005**
 - Evidence of convergence depends on cost elements examined
 - More dramatic convergence is in Labor Unit Costs

Unit Cost (CASM) by Airline Group

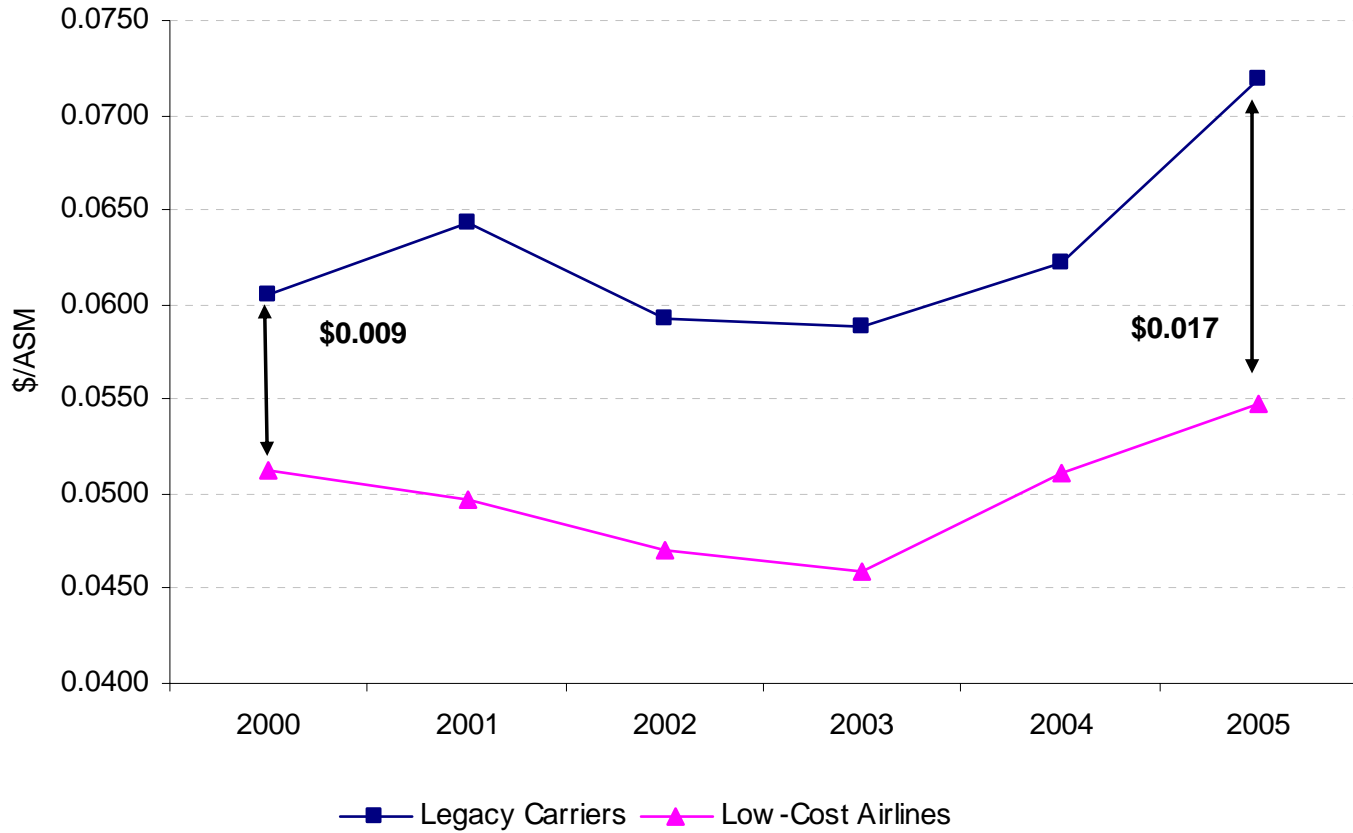




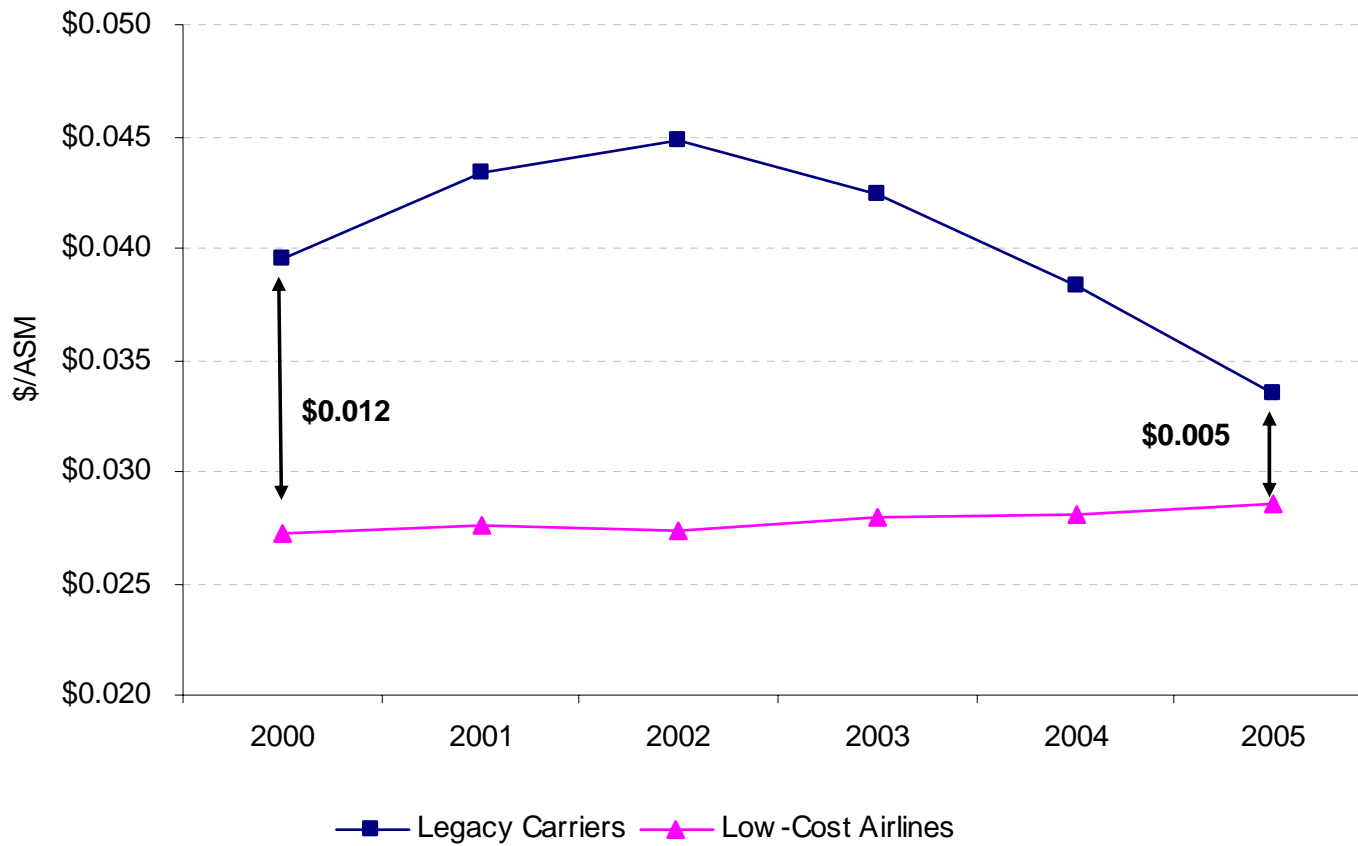
Unit Costs (excl. "Transport Related")



Non-Labor Unit Costs (excl. "Transport Related")

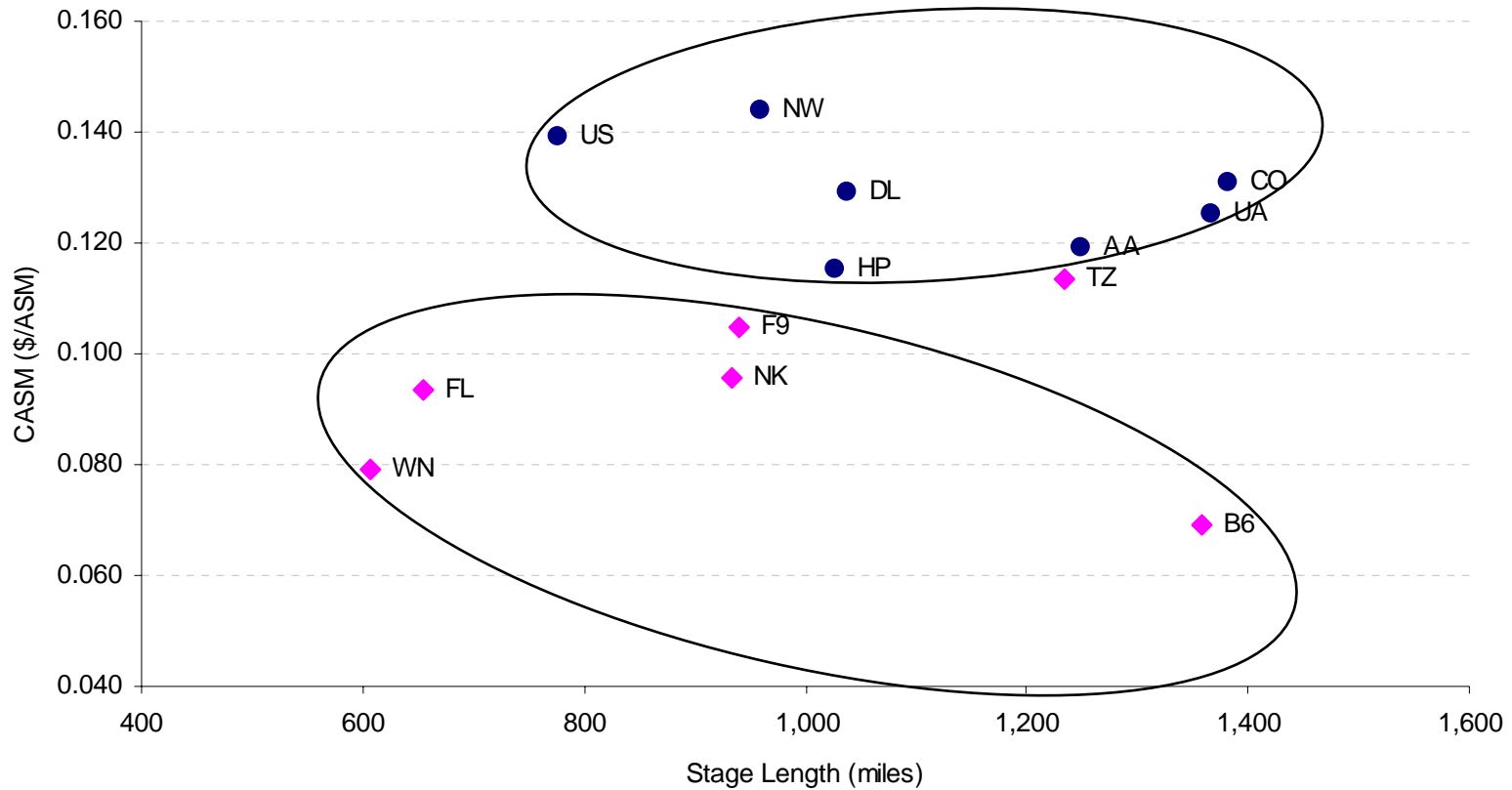


Labor Unit Costs



Low Cost Carriers have lowest CASM across all average stage lengths

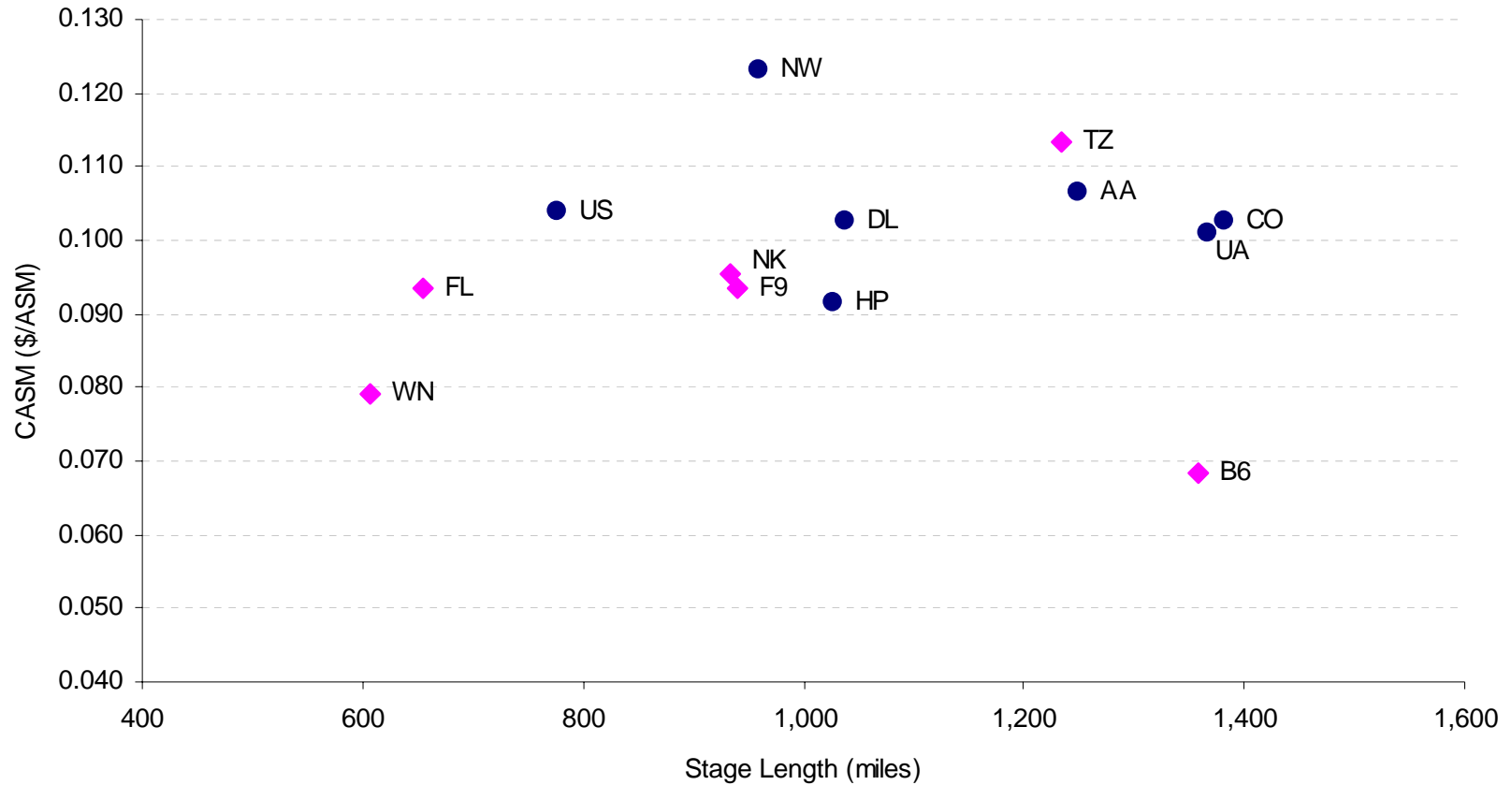
CASM vs. Stage Length 2005





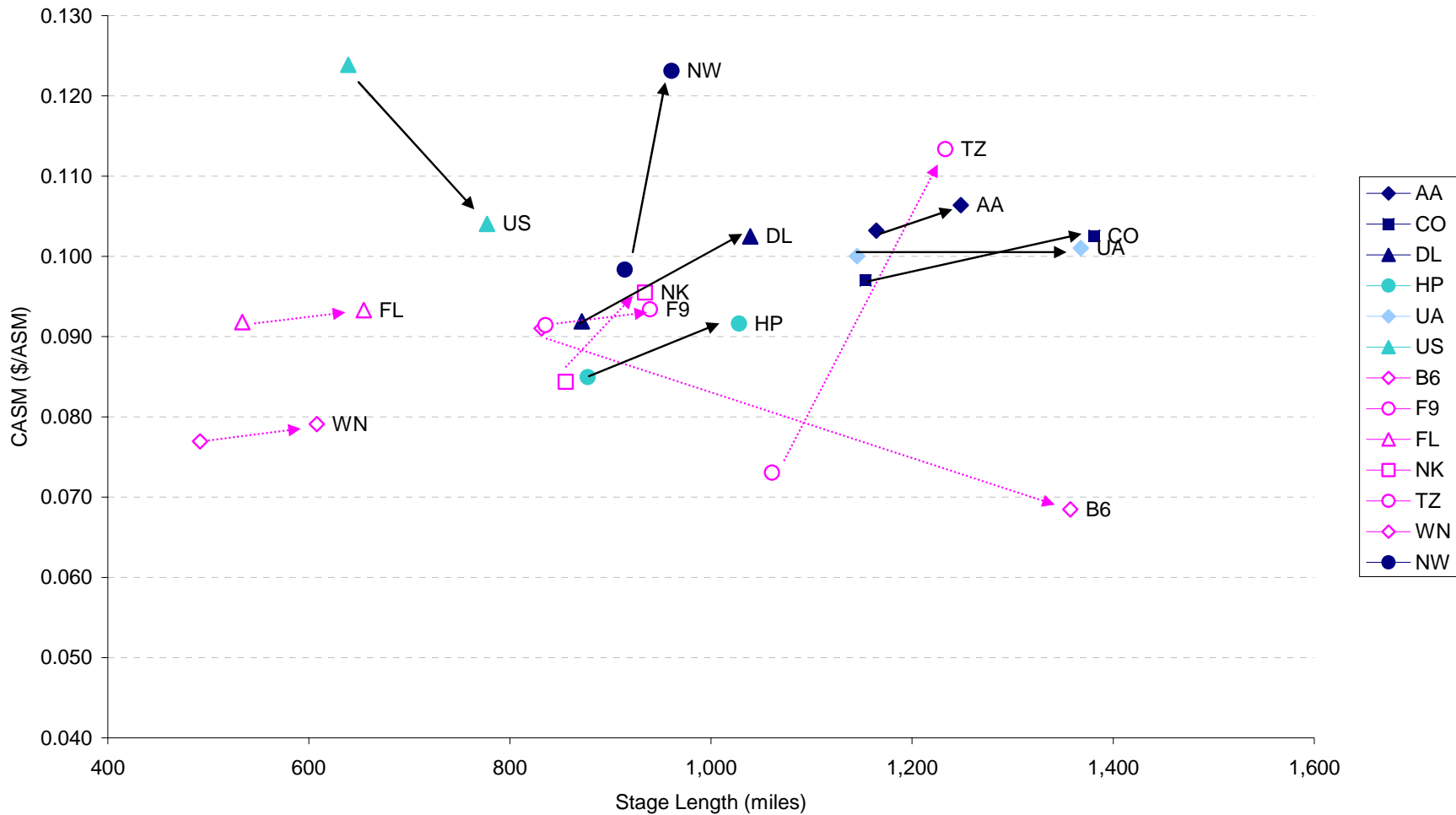
ex-Transport Related CASM 2005 – Distinction is much less clear

CASM ex-Transport vs Stage Length 2005 (\$/ASM)



Ex-transport related CASM 2000-2005

Change in CASM ex. Transport vs. Stage Length 2000-2005



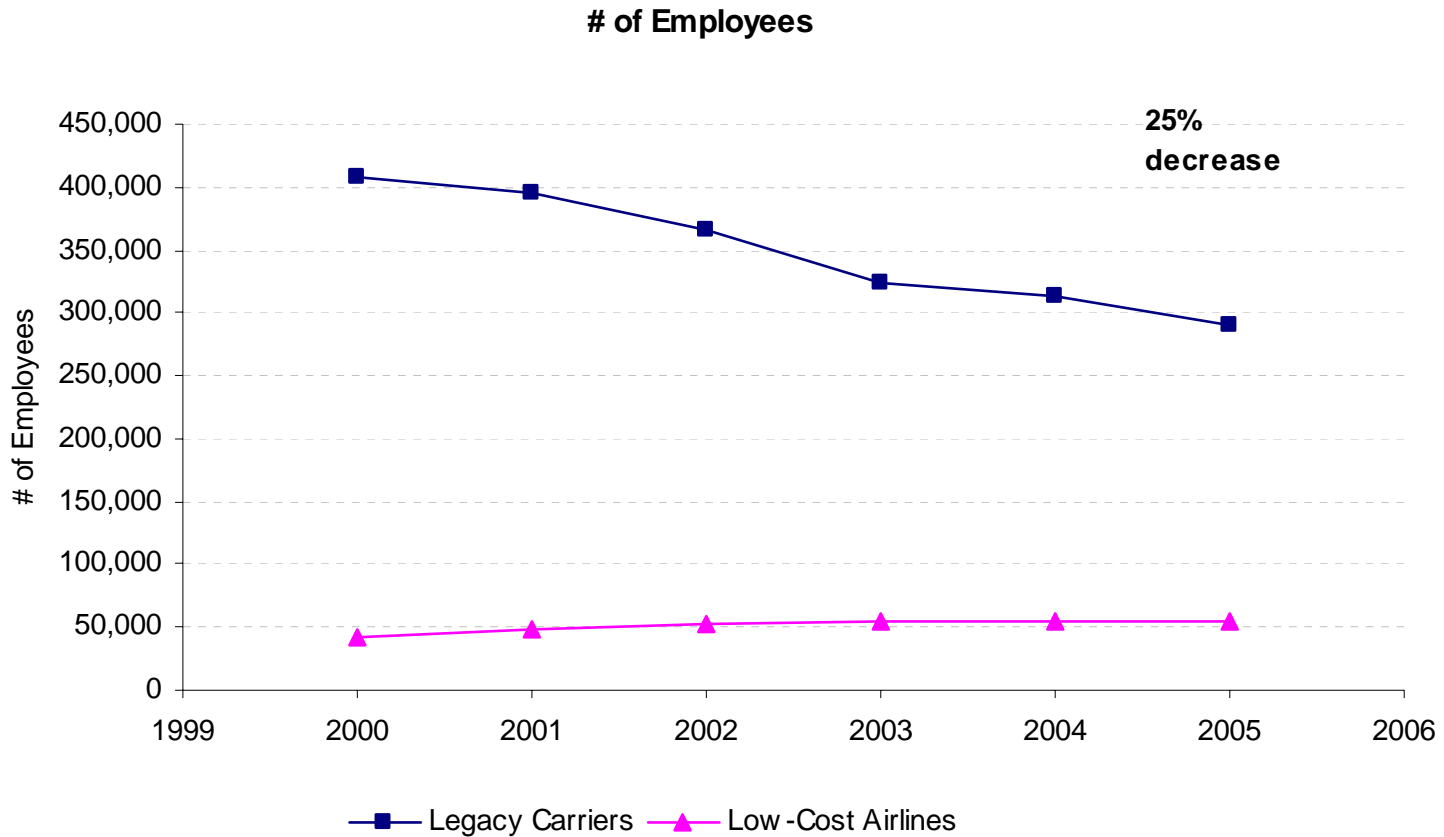


Employee Productivity Has Increased

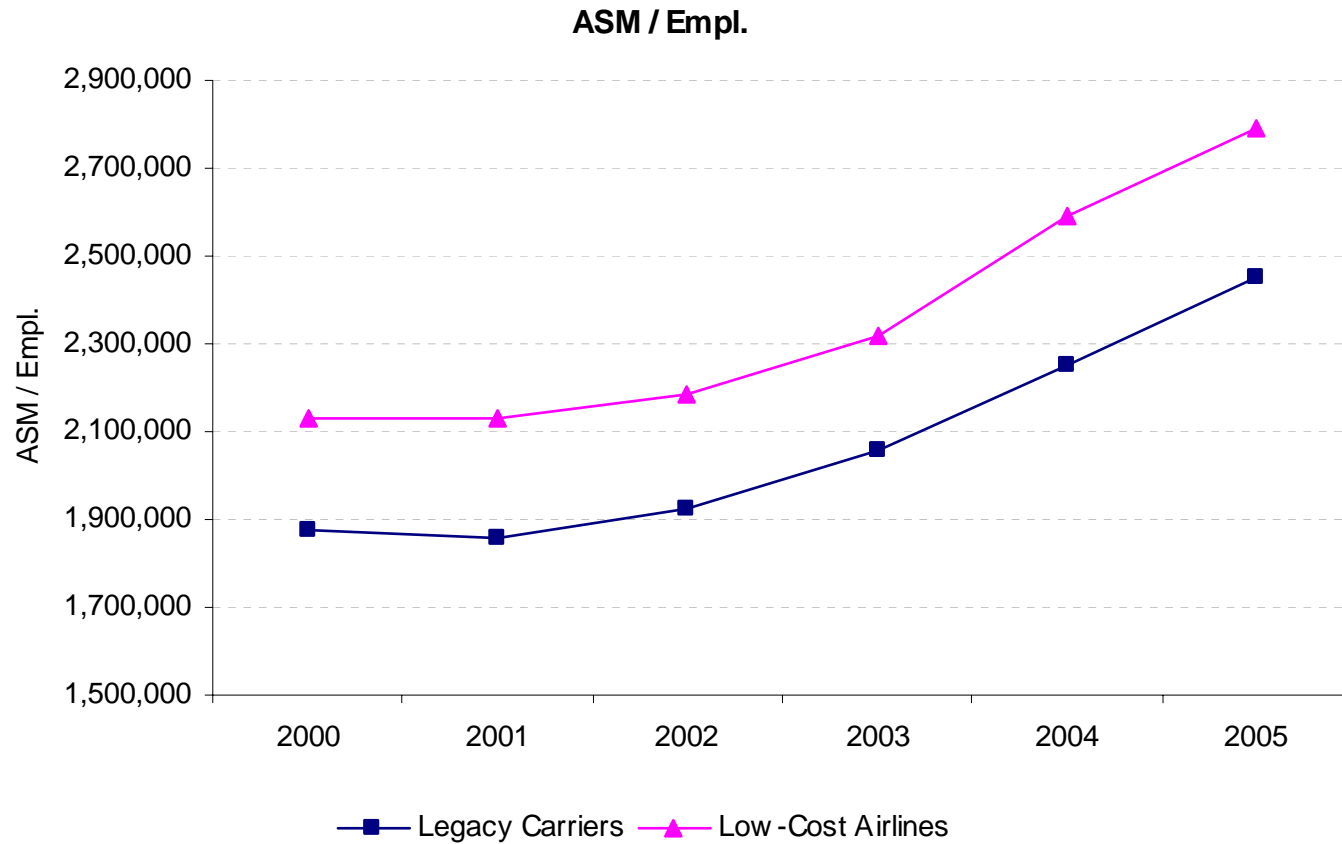
- **Typically measured in ASMs per employee per period**
 - Increases in this measure can be driven by both fewer employees and larger aircraft, longer stage lengths
 - In addition to less restrictive work rules, etc.
- **Legacy carrier employee productivity is up almost 35% since 2000, but still lags LFAs**
 - 25% reduction in legacy workforce
 - Salary & benefit gap with LFAs has narrowed dramatically
 - ASMs produced per dollar of salary+benefits is converging also



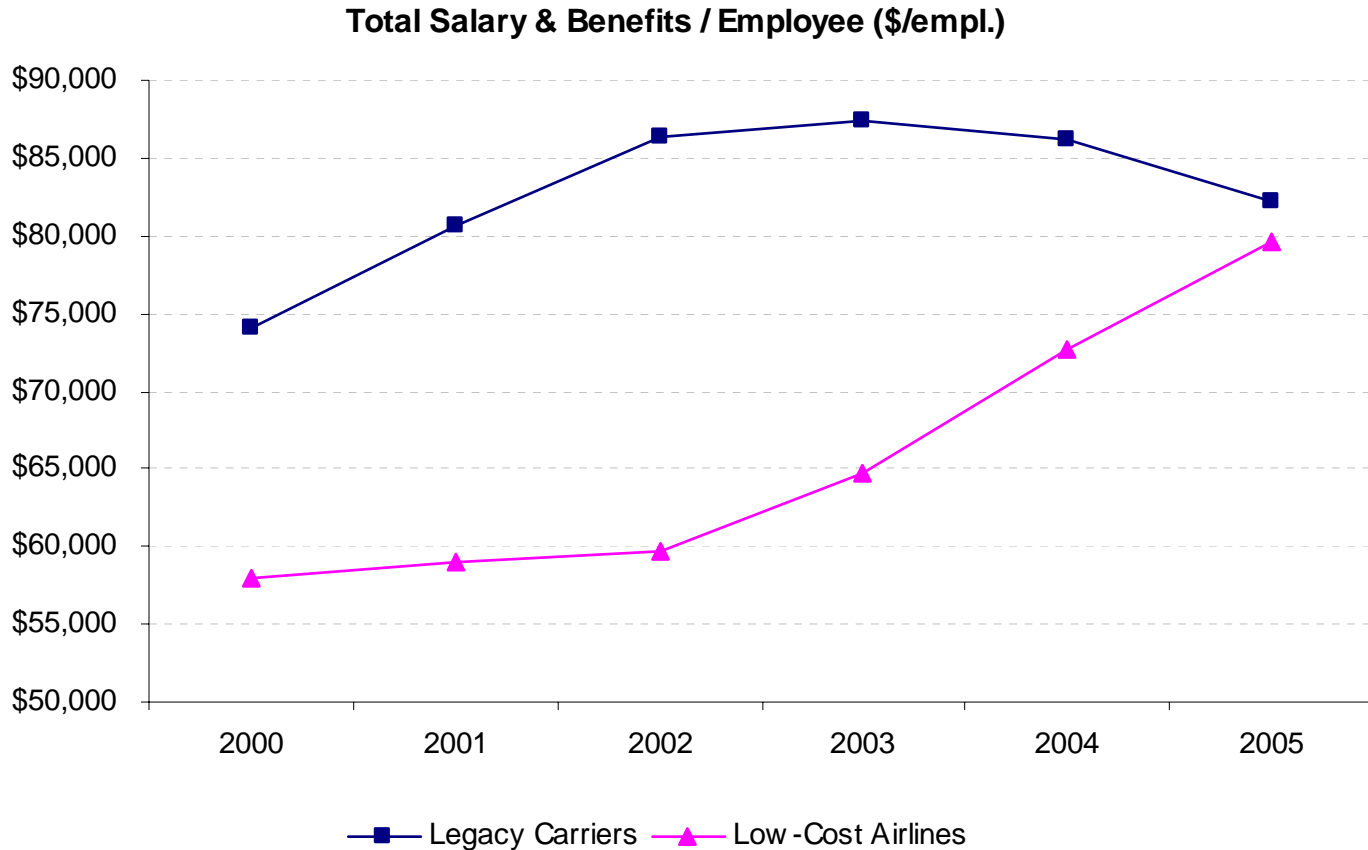
Legacy carrier employment down by 25% since 2000, a loss of 100,000 jobs



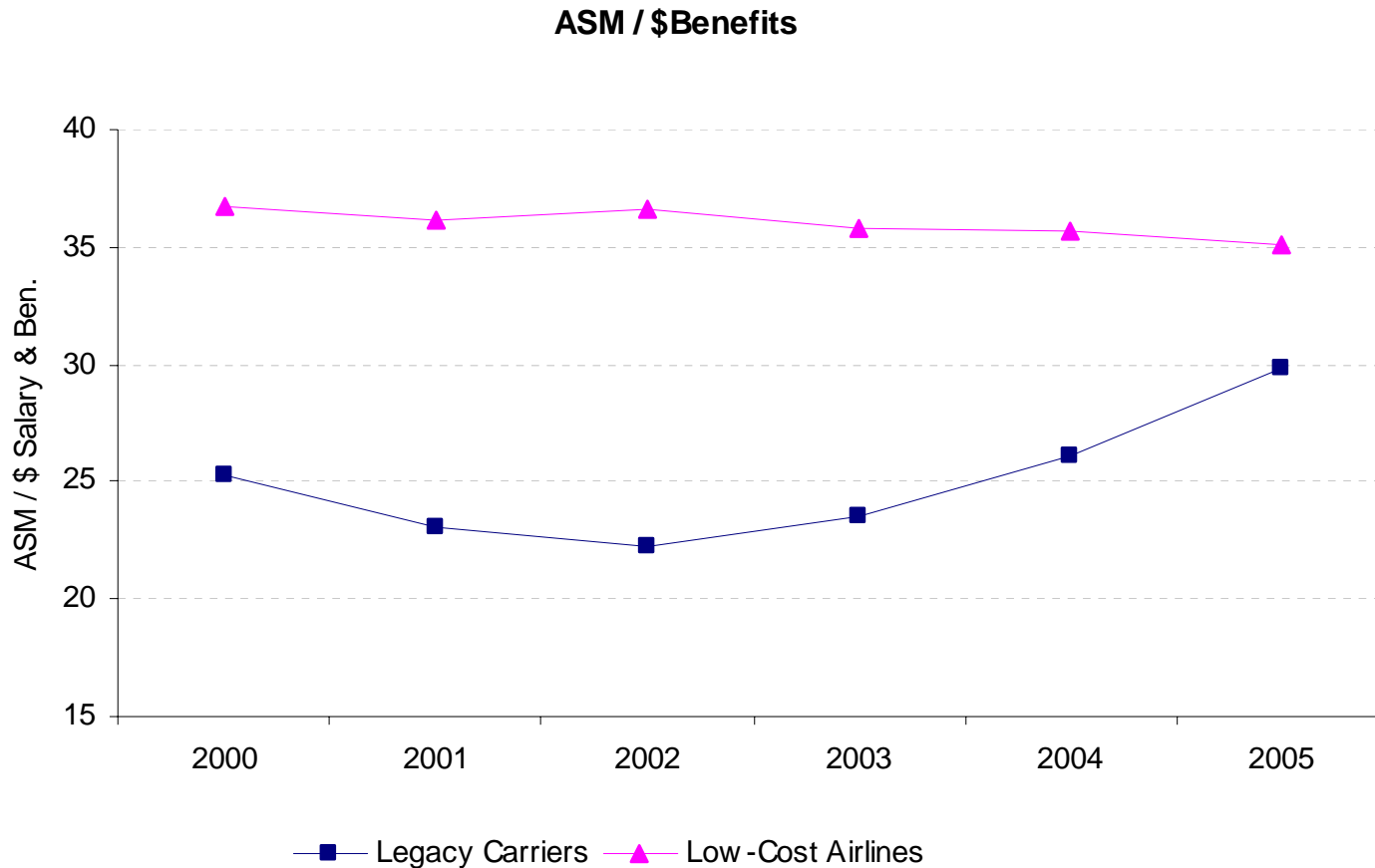
ASM per Employee 2000-2005



Gap in Salaries/Benefits per Employee is Narrowing Rapidly



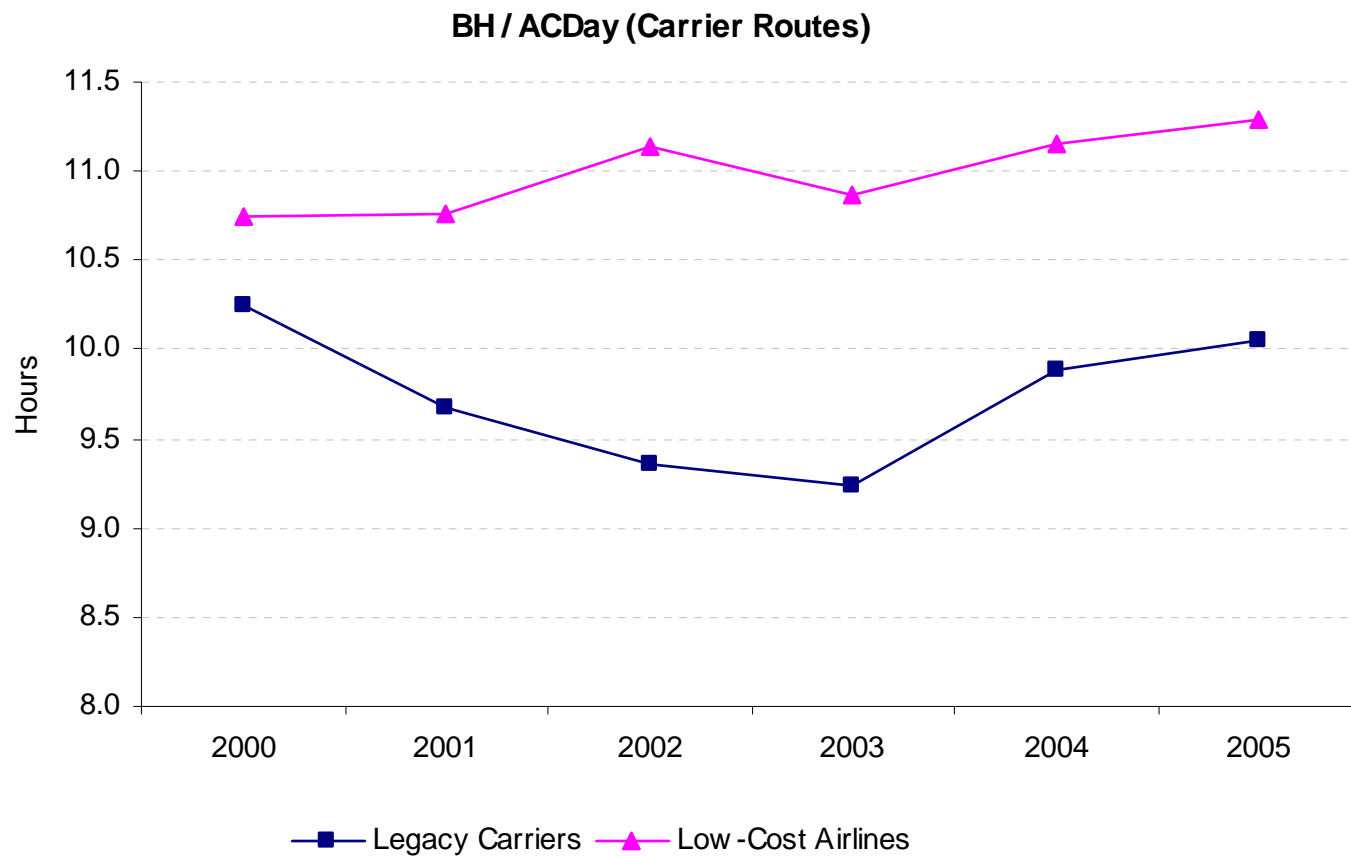
ASM per \$ Salary and Benefit





Gaps in Aircraft Productivity Remain

- **Traditional measures of aircraft productivity:**
 - Aircraft “utilization” in block-hours/day
 - ASMs per aircraft per day
= (# departures) X (average stage length) X (# seats)
- **Legacy airlines utilization increasing after big decline**
 - But LFA aircraft utilization still 12% higher, across all average stage lengths
 - Legacy carriers as a group have increased their stage length, but this has not translated into higher aircraft utilization
- **Legacy carrier aircraft ASMs/day have surged**
 - Due in large part to use of larger aircraft on longer (international) routes



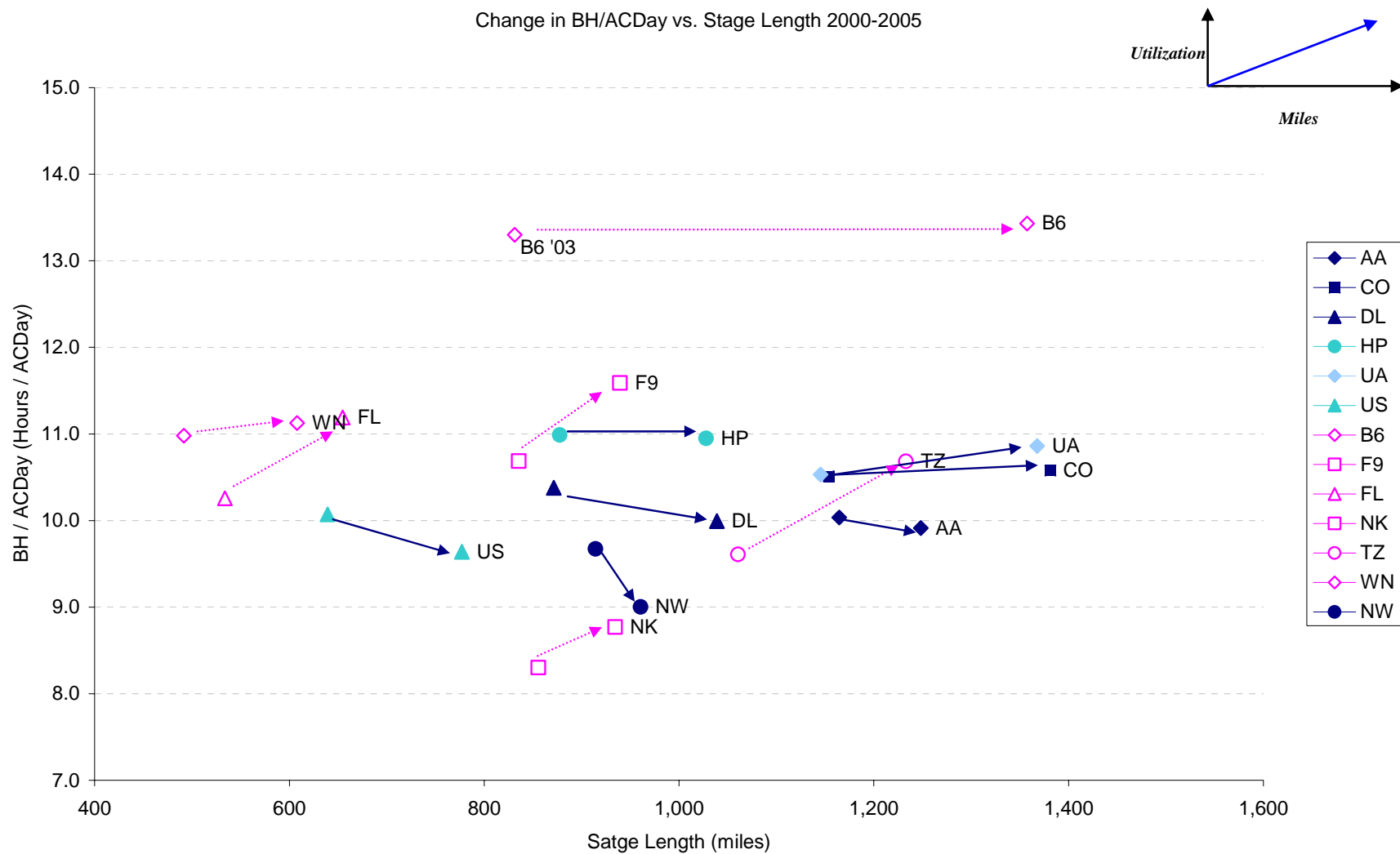
Most Low Cost Carriers have higher utilization at all average stage lengths

BH / ACDay (2005)

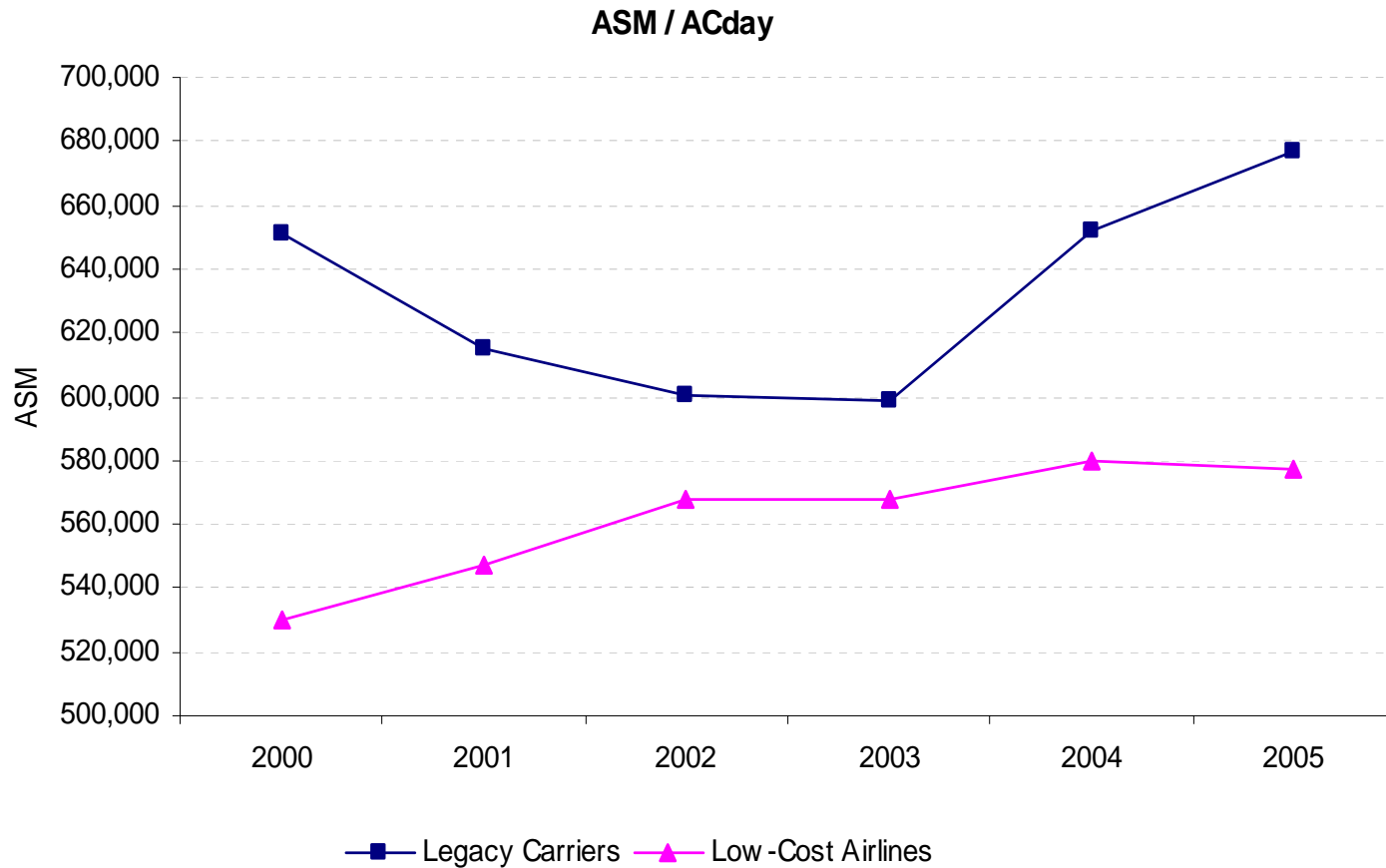


Change in Utilization and Stage Length by Carrier 2000-2005

Change in BH/ACDay vs. Stage Length 2000-2005

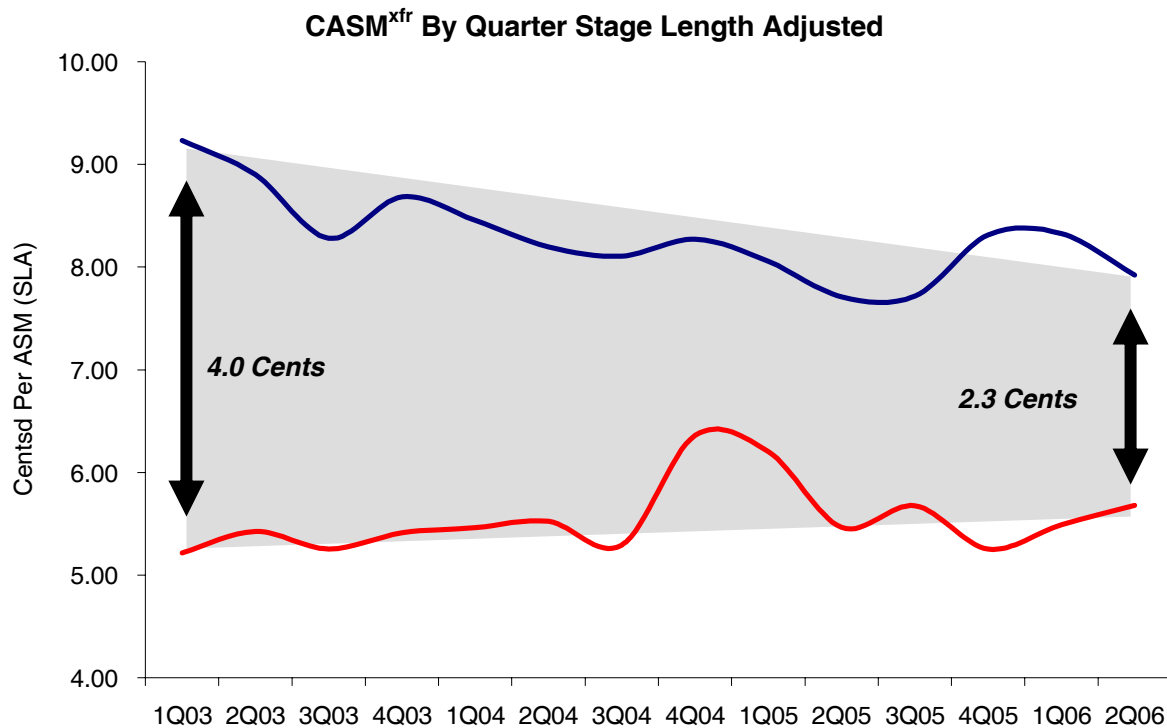


US Major Airlines Aircraft Productivity



U.S. Network Carriers' Costs Approaching Low-Cost Rivals

- U.S. Network Carriers Have Reduced Cost Differential by 42 Percentage Points (1.7 Cents)
- Low Cost Carriers Have Maintained Unit Cost Advantage
- Other Network Carrier Restructurings Will Close The Gap Further





Next Steps for Analysis: Legacy vs. LCC Convergence?

- **Is aircraft productivity a more important driver of lower labor or non-labor unit costs?**
 - Develop productivity measures that account for changes in fleet and network structure
- **How important is network growth in achieving lower unit costs and improved productivity?**
 - Compare productivity and cost performance by growing vs. shrinking airlines
- **Is there room for LCC growth in international markets?**
 - Compare legacy airline unit costs at longer stage lengths with potential LCC costs



Applicability of Analysis

- **For upcoming labor negotiations**
 - Management will have targets for unit labor costs, while labor will point to non-labor cost performance
 - Pressure will continue to maximize work (output) and minimize headcount
- **Structural impediments to further cost and productivity improvements for network carriers:**
 - Limits to aircraft productivity
 - Value vs. cost of hub/spoke networks
- **Cost convergence analysis must be combined with revenue premium analysis**
 - Are yield and hub premia sustainable for legacy carriers?