

SYS-461

Alaska Airlines

Operating costs and
Productivity

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Airline Business Model

- Is an airline based in the Seattle suburb of SeaTac, Washington
 - Major, low-fare U.S. carrier
 - Seventh-largest U.S. carrier
 - Founded: 1932, in Anchorage, Alaska
 - Hubs: Seattle (main hub); Anchorage, Alaska; Los Angeles; Portland, Ore.

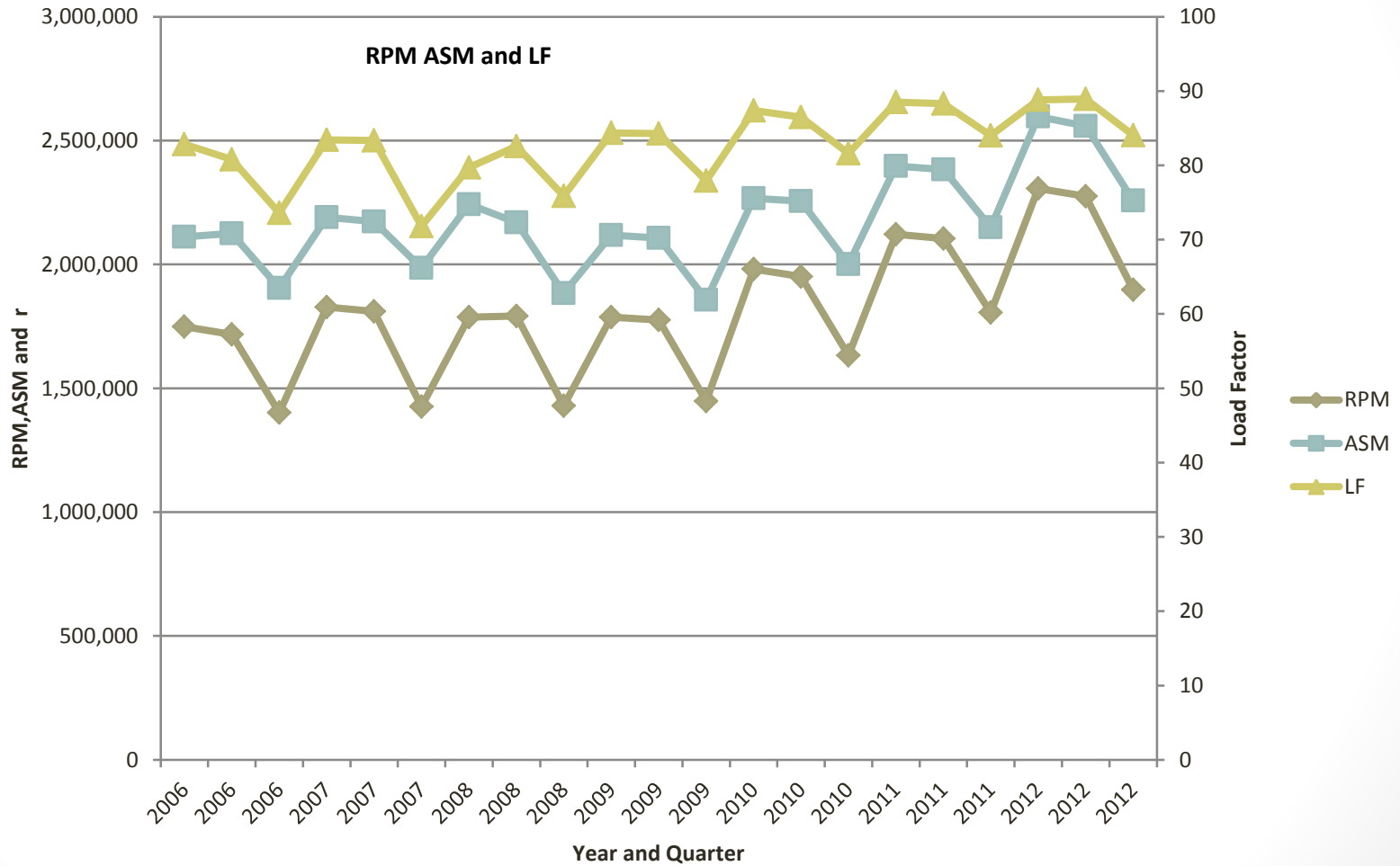
Term Definitions

- RPMs = revenue passenger miles
 - $\sum(\text{number of passengers per flight } i)(\text{distance flown by flight } i)$
- ASMs = available seat miles
 - $\sum(\text{number of seats per flight } i)(\text{distance flown by flight } i)$
- RASM = revenue per available seat mile or unit revenue
 - $(\text{total revenue})/\text{ASM}$
- CASM = cost per available seat mile or unit cost
 - $(\text{total operating expenses})/\text{ASM}$
- Yield = average fare paid per passenger per mile
 - $(\text{passenger airfare revenue})/\text{RPM}$
- PRASM = passenger revenue per available seat mile or passenger unit revenue
 - $(\text{passenger revenue})/\text{ASM}$

Term Definitions

- Fuel Consumed = amount of fuel consumed over some time t
 - e.g., gallons/quarter, pounds/hour
- Fuel Costs per ASM = cost of fuel per available seat mile
 - $(\text{total fuel cost})/\text{ASM}$
- Non-Fuel Costs per ASM = non-fuel cost per available seat mile
 - Wages, salaries, etc.
 - Other rentals and landing fees
 - Depreciation and amortization
 - Maintenance materials and repairs
 - Commissions, booking fees, credit card expense
 - Aircraft rentals
 - Food service
 - Other operating expenses/special charges/grants

RPM, ASM and LF

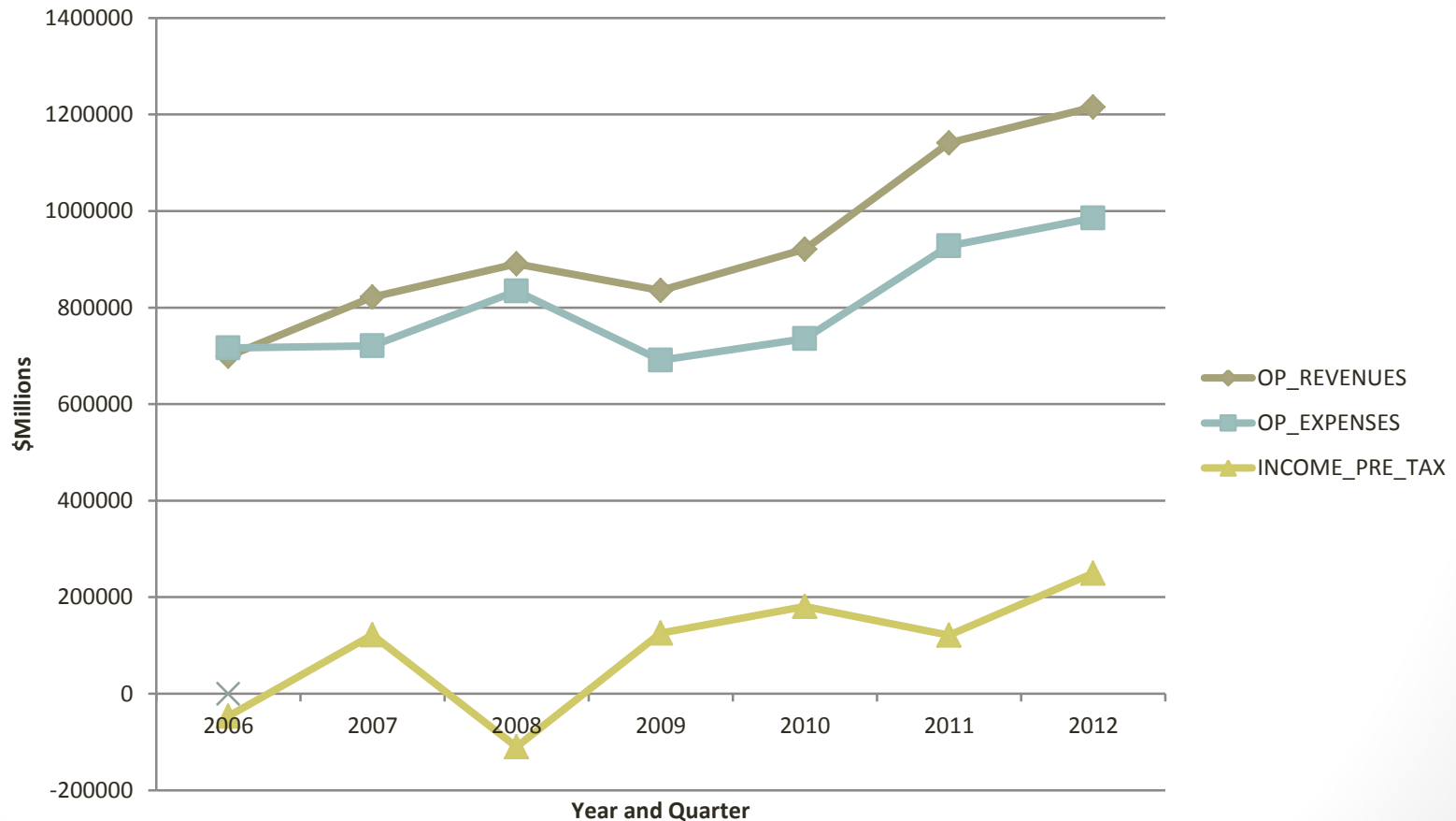


Observations from Chart 1

- ASM is always greater than RPM (load factor is less than 100%); logical as the number of enplaned passengers cannot exceed the number of available seats.
- Seasonal correlation; business appears to improve during the months of April through September; logical as many people take vacations during this time period and students are available to travel.
- Load factor appears to improve steadily over time

Operating Expenses and Income chart

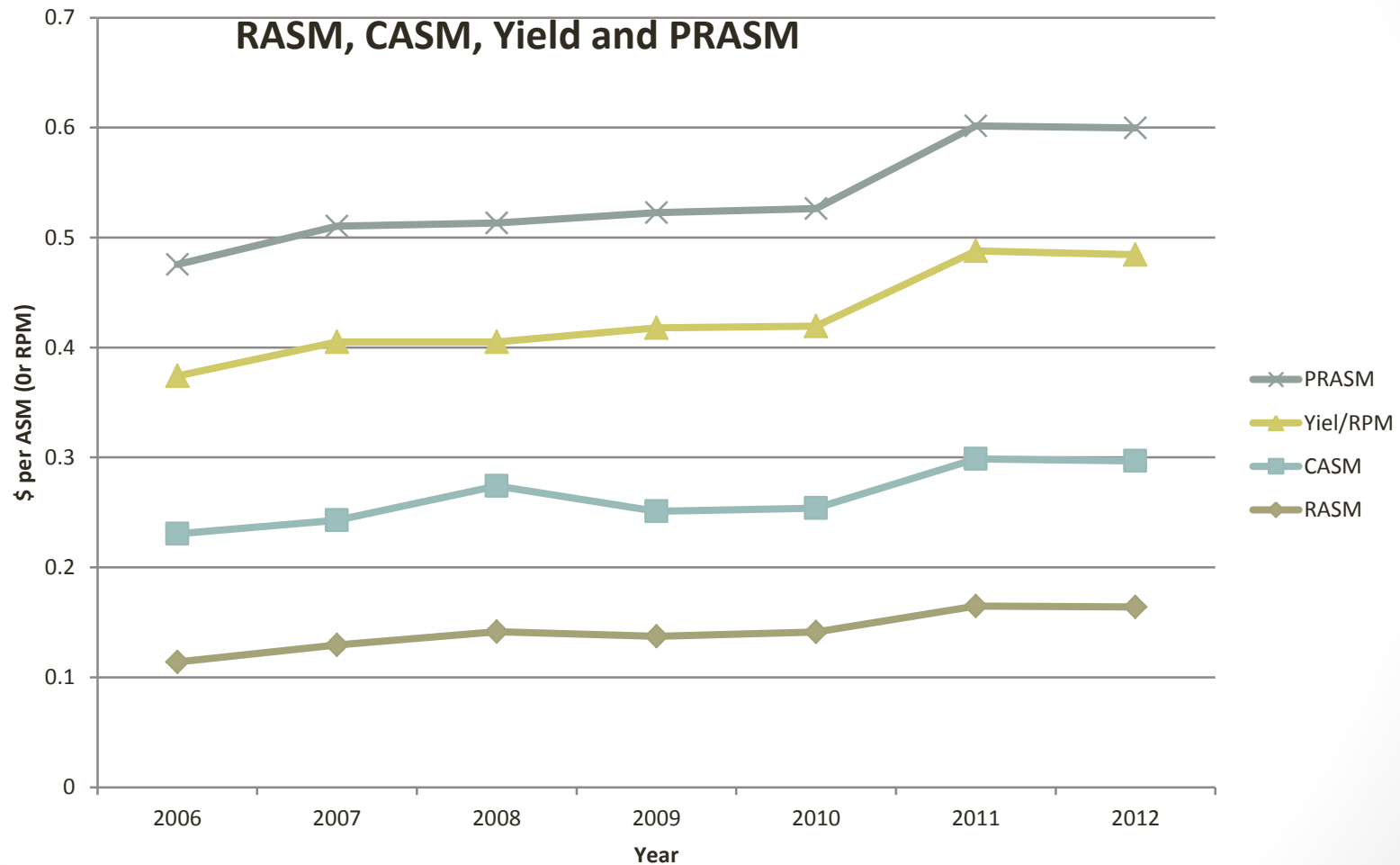
OP-REV, OP-Exp and Income



Observations from Chart2

- Total operating revenue minus total operating expenses = operating income (different parameter in data file). Income before taxes includes the following:
 - Operating income
 - Interest income, interest expense, interest capitalized and some other costs
- The trend shows that Alaska airlines has shown significant improvement in showing profitable quarters
- Alaska has shown some positive gains in income compared with the early years on the graph such as 2006-2008

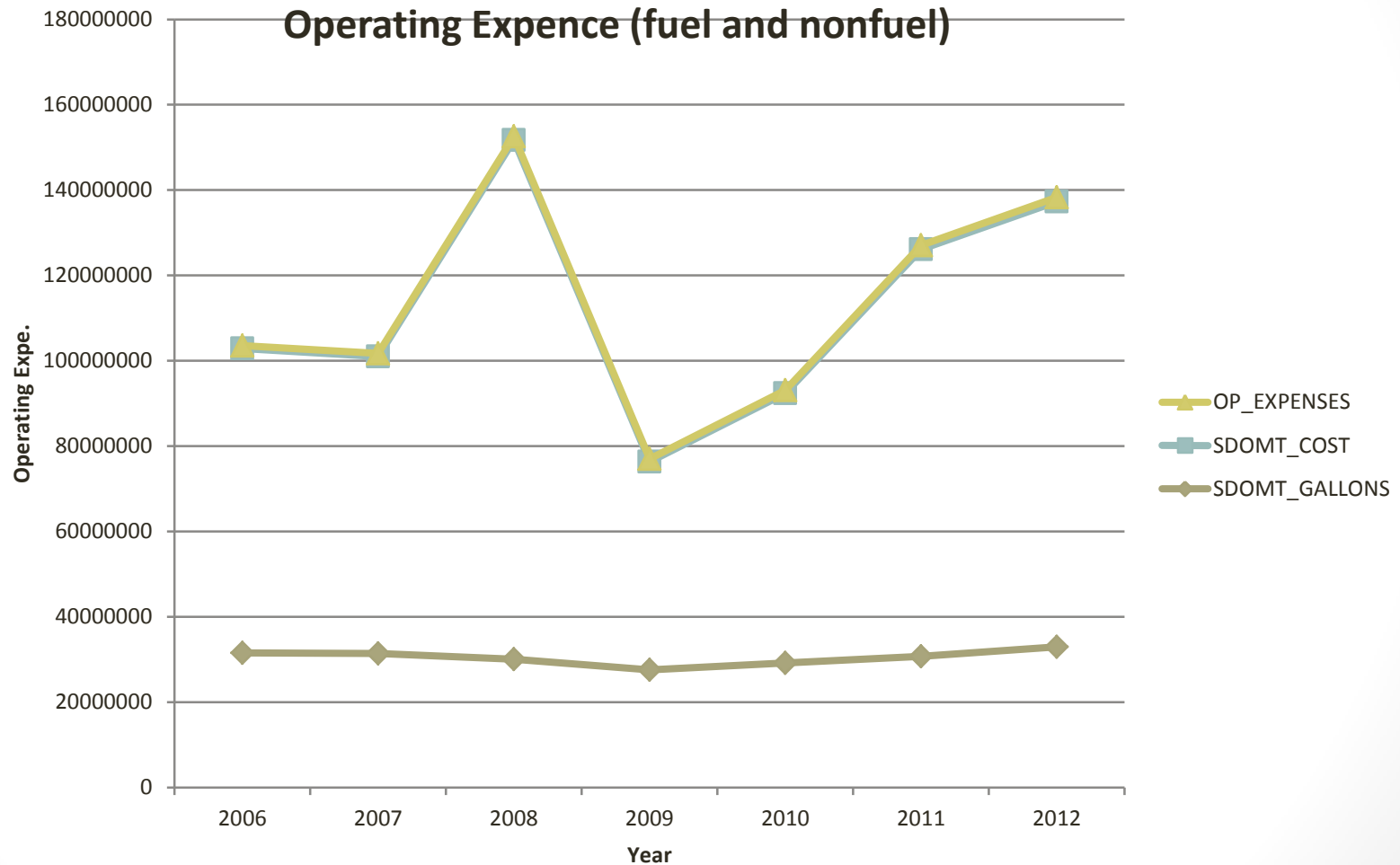
RASM, CASM, Yield and PRASM



Observations from chart 3

- Cost per available seat mile (CASM) tends to exceed revenue per available seat mile (RASM)
- The overall trend shows that the Yield per RPM has increased since 2006 which shows the increase in fares and the cost exceeding the revenue
 - $CASM > RASM$

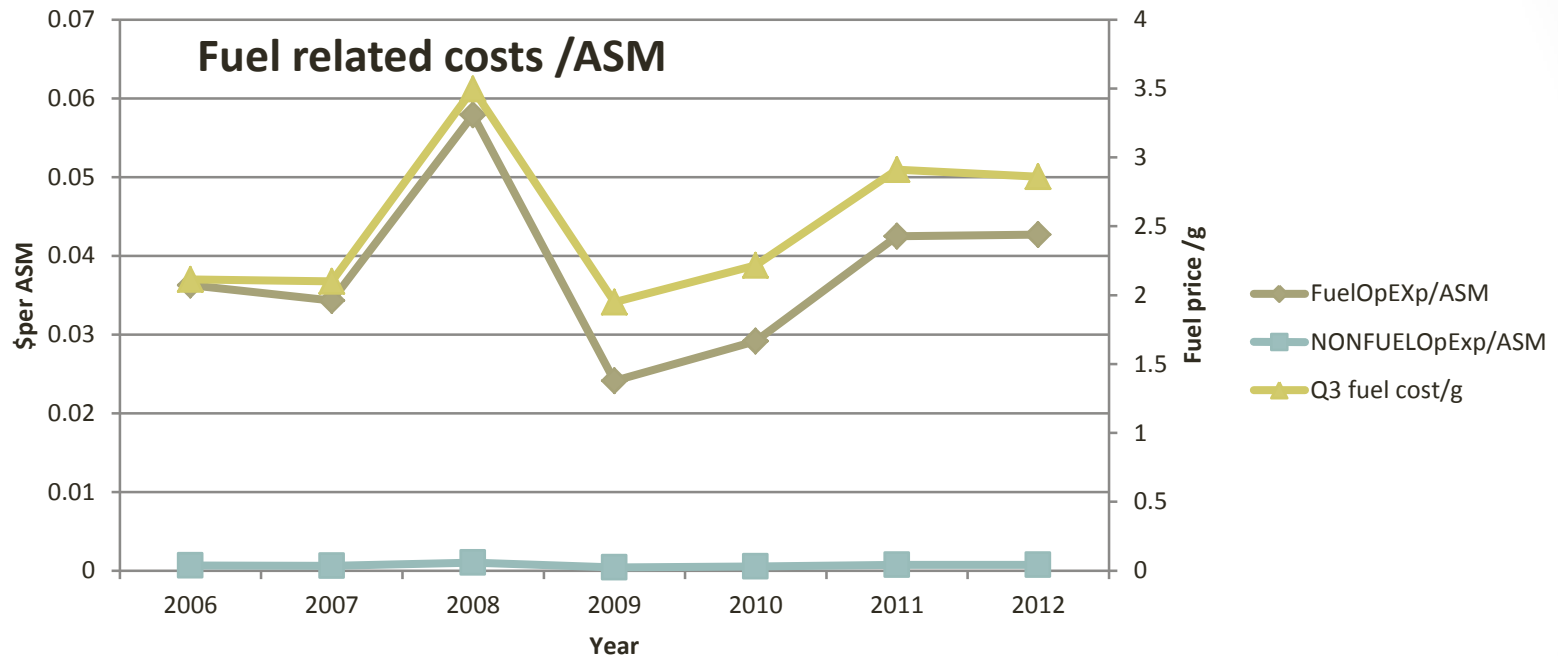
Fuel and Non-fuel related expenses



Observations from chart4

- Overall, Non operating fuel expenses shows fluctuation
- However, fuel related cost which covers the large amount for airlines, has shown an increase starting from 2006
- fuel operating expenses continued to climb significantly increasing total operating expenses

Fuel Related Costs



Observation from that chart

Non-fuel expenses per ASM tend to remain fairly stable; fuel operating expenses per ASM tend to continuously increase

- Effects of fuel prices
- Charts 3,4,5 have shown that the operating expenses, CASM and aircraft operating cost related with fuel prices shown increase through the years
- Airlines Finance
 - Chart two indicated that Alaska Airline's net income before related with operating expense and revenue has show an increased since 2006. This is an indication that the Alaska is in the making the right decisions to make improvements for profit maximization.
- Airline Network structure
 - Increased load factor can result from use of smaller aircraft (less seats available for some given passenger demand) or reduction of number of flights