- Airline costs are made up of many categories
- Most costs can be "unitized" to get a clearer understanding of underlying trends
- Different units (ASMs, BHs, Departures, Aircraft, etc.) can make sense to unitize a cost number based on what drives the number. Pilot costs may make sense to divide by hours, since pilots are paid by the hour. But Landing Fees might make more sense to divide by number of landings.
- Costs tend to rise as airlines age for several reasons:
  - More senior employees become more expensive but don't necessarily produce more
  - Older airplanes require more maintenance and are capable of less overall utilization
  - Airport costs tend to rise over time
  - Aircraft costs tend to rise over time
- Facing this reality, airlines use multiple strategies to control costs over time:
  - Outsourcing to keep control of longer term labor costs
  - Growth to offset aging costs by blending in new costs (first year labor, new airplanes)
  - Increasing utilization to produce more "units" – more seats on each plane, fewer ticket counters per airport, fewer gates without reducing flight frequency, etc.
- Profit = Revenue – Costs:
  - But for an airline, terms like "revenue" and "costs" make sense at a company level but it is less clear how to divide these among various activities (flights, customers, service offering)
  - To address this, airlines must make assumptions about how to divide costs and revenues appropriately among subsets of the total network (a specific flight, a set of flights in one market, a hub, etc.)
- As it relates to measuring airline profits, Accounting and Finance are two different things
  - Accounting is focused on the accurate and transparent reporting of financial information
  - Finance works to provide information to schedule planners about route performance, or marketing about customer or service performance
  - Finance uses accounting data for this purpose but the results are not accounting statements
- When determining flight profitability accurately, the proper question to ask is this: If I change this (route, flight, or hub), what revenues will be lost and what costs will be saved?
- Allocating revenues to subsets of the full network requires some estimates:
  - Any revenue completely generated only by the subset is of course included
  - Any revenue shared by the subset and another part of the network must be allocated between these two
  - Any revenue not related specifically to the segment can be allocated to the segment if desired
  - Example: What revenues should be allocated to the flights that operate the flight segment LGA-ORD?
    - All the ticket revenue for anyone who flew only on this segment in their journey ("local revenue")
    - A prorated portion of the revenue for any tickets from this segment tied to other segments on the same journey (someone who flew LGA-LAX connecting at ORD, for example) ("flow revenue")
    - Ancillary revenues specifically tied to the LGA-ORD segment
    - A prorated portion of any ancillary fees paid for this segment plus others (a single bag fee paid for the LGA-ORD-LAX passenger for example)
    - Possibly an allocation of revenues not tied to any specific segment (fare club fees, for example)
    - Possibly an allocation or removal of revenues based on frequent flier economics
- Allocating costs to subsets of the full network also requires estimates but is often easier:
  - Subset-specific labor, fuel, and airport costs are generally easily available
  - Aircraft costs are typically charged a portion of the total costs based on time. If a flight uses 30% of an aircraft's available time, it would be charged 30% of the aircraft ownership cost, for example. Or this could be done by ASMs, creating an aircraft ownership by ASM and applying back to individual subsets. This is especially helpful with a variety of different individual aircraft costs.
  - Maintenance costs are typically determined by hour and applied on that basis
  - Overhead or other non-direct costs are typically added on an ASM-share basis
  - Some airlines spend a lot of time to detail very specific costs by network subset
  - In all cases, understanding which costs are variable based on the subset operations (happen because the subset operates) or fixed (happen if the subset operates or not) is important.
- Levels of profit measurement can then be created to help answer different kinds of questions:
  - Can be simple, looking only at direct revenues and costs
  - Can be more complicated considering network impacts of connecting flights
  - Can be even more complicated by considering opportunity cost of connecting flights

- Schedule planners use flight profitability data to make schedule changes to improve overall profitability. The right measurement depends on the question being considered:
  - o To decide if a specific flight should continue flying, it would be best to look to see if that flight is generating net cash to the airline. You would include only variable costs generated by the flights and all revenues that can be tied to the operation of that flight. This is the lowest "hurdle".
  - o To decide if all services to a specific city should be closed, it would be best to look at the profits as defined above for every flight into that city plus any city-specific costs
  - o To decide if a service is viable in the long term, you want to verify that it covers all of its direct costs plus its full fair share of all allocated costs.
- Airlines often decide to continue flights that cover all of their direct costs but don't contribute their "fair share" of other costs, allowing other more profitable flights to cross-subsidize
- Some airlines develop profitability for other activities of the business
  - o What is the profitability of each customer that flies the airline?
  - o What is the profitability of our baggage-handling services?
  - o What is the profitability of our frequent flier program?
- Obviously, the profits of an airline can divided among many different factors. The economically important determinant is that revenues and costs unique to that factor can be created.
- Please review the Syracuse-Omaha example in the reading on Airline Profitability (written by yours truly) and ask questions in class if you don't understand this!

An important generalization:

- To manage any business well, the business must know where it makes money and where it is losing money.
- Businesses that survive and thrive measure this accurately, and do more of what works and less of what doesn't.
- John Dasburg, former CEO of Northwest Airlines, once stated, "The fastest way to stop losing money is to stop doing things that lose money." He's right, but you have to know where you're losing money to be able to do this!
- Have you noticed that certain companies stay in business but stop selling certain products? That's because those specific products didn't earn the profits required so the company stopped producing the product. They knew this because they measured their profits by product. Companies that don't go out of business completely.