

# **Effects of Deregulation on Airports**

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# **Effects of Deregulation on Airports**

- **Objective: To explore implications of airline deregulation on airports operations and management**
- **Topics**
  - **Hub-and-Spoke Operations**
  - **Instability of Traffic**
  - **Short Term Horizons**
  - **Conclusions**

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## Essence of Economic Deregulation

- **Consumer Orientation**  
to define objectives
- **New Decision-Makers**  
companies not governments
- **Faster changes**  
more risk

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## Consumer Orientation

- **When governments cannot determine profit levels (by fare levels, route protection)**
- **Consumer desires will define criteria for efficiency**
- **Main consumer desires:**
  - **Business Market**
    - Speed: time saved = money
    - Comfort: third party pays
    - Frequency: schedule flexibility
  - **Consumer Market**
    - Cheap fares
    - Speed and access secondary
    - Package deals

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# Hub - and - Spoke Operations I

- **One way to satisfy consumer desires**
- **Description**
  - **Drop direct flights between secondary points**
  - **Substitute flights via hubs central to market, system**
    - **Higher fuels costs**
    - **Passengers change at hubs (maybe not to same airline - examples: Continental - SAS at New York/Newark; KLM - NW at Amsterdam)**

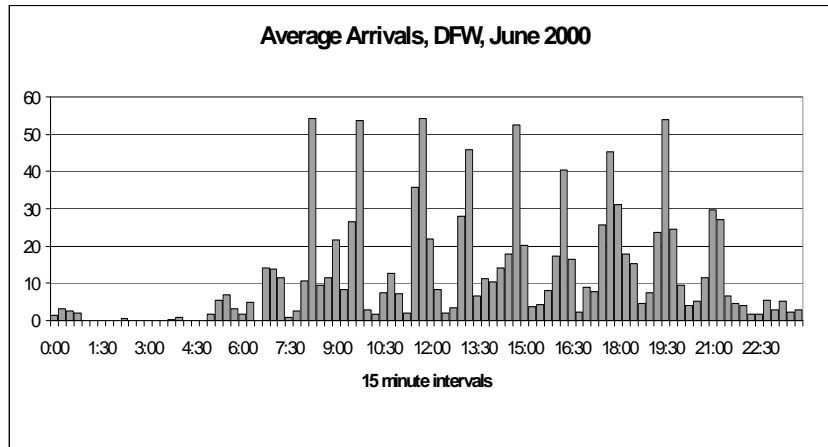
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# Hub - and - Spoke Operations I (cont.)

- **Description (cont.)**
  - **Concentrate traffic to hubs**
    - **More frequency on routes**
    - **Larger aircraft -- lower cost per seat-km.**
    - **Higher load factor - lower breakeven per flight**
    - **Economies in crew basing, inventories**

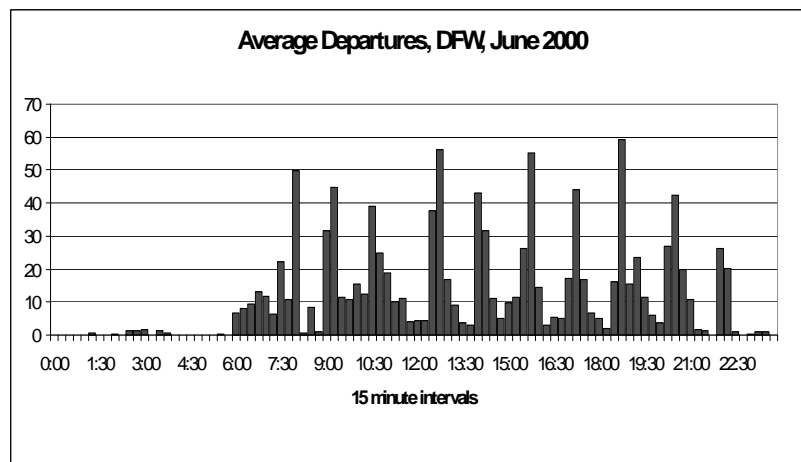
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# Waves or Banks



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# Waves or Banks (2)



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## Hub - and - Spoke Operations II

- **Net Effects:**

- Lower Overall Costs, Fares for network
- More Frequency
- Lower average speed (maybe not more time when schedule delay included)

- **Hub - and - Spoke operations**

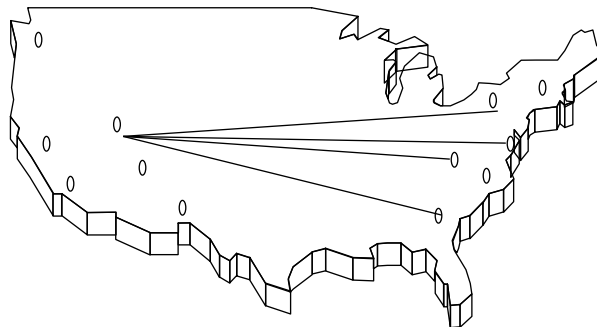
- Cost-Effective
- Pattern in US, Increasing in Europe, Somewhat in Asia

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## Point to Point Service

- **Direct Flights, Thin Routes**

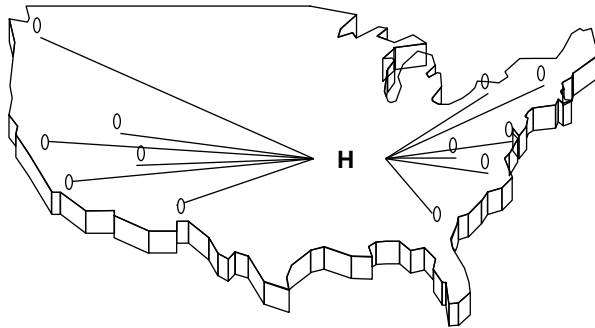
- Low Frequency
- Low Load Factor
- Smaller Aircraft



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# Hub and Spoke Service

- **Indirect, Heavy Routes via Hub Central to Market**
  - **High Frequency**
  - **Higher Load Factor**
  - **Larger Aircraft**



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# Hub - and - Spoke Operations III: Descriptions

- **US Transcontinental**
  - **Traffic from one coast (San Francisco, Los Angeles...)**
  - **Sent to a Midcontinental Airport (Chicago, Denver, Dallas/Ft. Worth...)**
  - **Distributed to Destinations (Boston, Philadelphia...)**
- **Intercontinental**
  - **Traffic from Europe**
  - **Goes to Distribution hubs (Bangkok, Singapore...)**
  - **Distributed to - Australia, Japan, Hong Kong**

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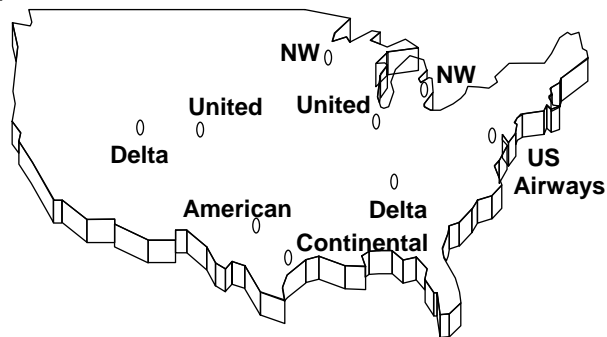
# Hub - and - Spoke Operations IV

- **Criteria for a good Hub**
  - Centrality to Market
  - High Capacity
  - Reliability for Schedules --uncongested, good weather
  - Control by Airline -- to maintain schedules
- **Airports with 3/4 traffic with one airline**
  - Minneapolis -- Northwest/KLM
  - Houston/Bush -- Continental
  - Dallas/Fort Worth -- American
  - Atlanta, "Cincinnati" -- Delta

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## Major US East-West Hubs

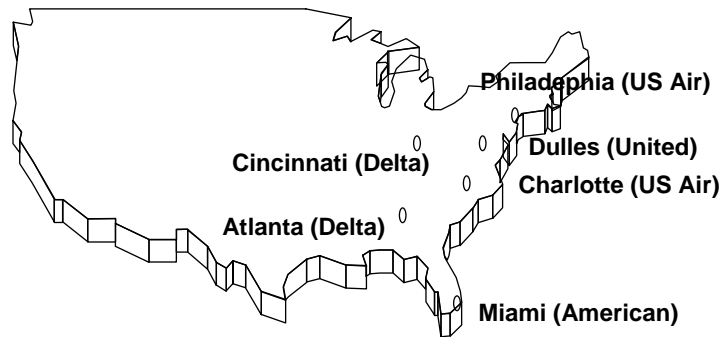
- An Airline dominates at each major US East-West Hub
- Hubbing Airline may have up to 80% of the traffic at hub airport



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## East Coast North-South Hubs

- Specific markets have their own Hubs
- Along US East Coast, most serve US
  - Miami serves US-Latin America and is central to its market



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## Major European Hubs



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## Major East Asian Hubs



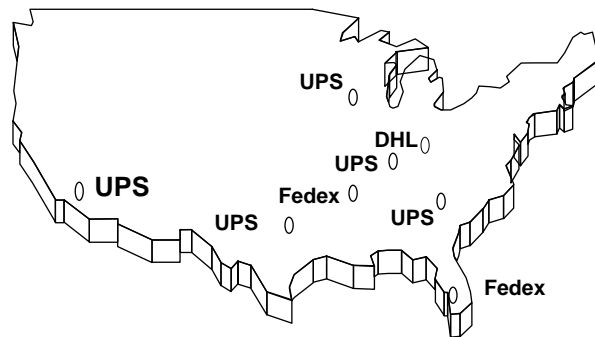
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## Hub - and - Spoke Cargo Operations

- **UPS in United States**
  - Louisville (1 billion items/day)
  - Regional Hub – Cologne, Germany --  
Rockford, IL - Ontario, CA - Columbia SC  
- Dallas, TX
- **Fedex Memphis**
  - Guangdong Paris
- **Emery Dayton**
- **TNT Liege (Belgium)**
- **DHL Cincinnati East Midlands (UK)**

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## Major US Cargo Hubs



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## Instability of Traffic I

- **Deregulation removes barriers to change**
  - immediate readjustments
  - frequent bumps
- **Automobile Analogy**
  - Regulation like shock absorbers
  - Taking shock absorbers out
    - adjustment to new level
    - you feel every bump

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## Instability of Traffic II Examples

- **“Southwest effect”**
  - Providence 1 to 5 million in a few years
  - Liverpool -- similar effect with easyjet
- **Memphis**
  - Fedex creates it (Likewise UPS and Louisville)
- **Boston -- Northwest**
  - Many ‘definitive’ choices
- **Hub operations appear, disappear**
  - New York/Newark -- Peoples Express
  - Raleigh-Durham -- American

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## Short Term Horizons

- **Because of Uncertainties**

Airlines less ready to make long term commitments only good for short term leases
- **Incompatibility with**

long term capital investments
- **Therefore, need for**
  - smaller building additions
  - more flexible space
  - more operational solutions
  - more aggressive management!!!

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# Summary

**Deregulation had and does mean:**

- **Significant reorganizations**
- **Strategic planning required**
- **Greater risks than ever**
- **...and less security!!!**