AIRPORTS IN THE 21ST. CENTURY

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OUTLINE

• BACKGROUND
• PROSPECTS FOR FORECASTS
• FUTURE
  → TRAFFIC
  → AIRPORT DESIGNS
  → INDUSTRY ORGANIZATION
BACKGROUND (1)

- GROWTH IS THE KEY FEATURE

- PROPELLED BY
  - PRICE DROPS
  - LOWER ACCIDENT RATES
  - MORE CONVENIENT SERVICE

STABLE GROWTH OF TRAFFIC

![Graph showing steady growth of traffic](chart.png)

Sources: Air Transport Association, ICAO Bulletin, ICAO Journal (various)
TRAFFIC RISES AS PRICE DROPS

U.S. Domestic Passengers vs. Cost of Air Travel

BACKGROUND (2)

- GLOBALIZATION
  - AIRLINE PARTNERSHIPS
    - STAR, ONEWORLD
    - KLM / ALITALIA / N’WEST / CONTINENTAL
    - AIR FRANCE / DELTA / AEROMEXICO / CSA
  - AIRPORT COMPANIES
    - BAA, SCHIPHOL, FRAPORT, MILAN, ROME
    - SPECIALIZED OPERATING COMPANIES

Source: Air Transport Association www.air-transport.org
BACKGROUND (3)

- AIRPORT CAPACITY INCREASES
  - MORE CONTROL AND EFFICIENCY
  - LONGER HOURS
- ENVIRONMENTAL ISSUES
  - RELATIVELY BENIGN -- STAGE 3
- MULTI-AIRPORT SYSTEMS
  - PROVIDE CAPACITY
  - ENABLE NICHE AIRPORTS

PROSPECTS FOR FORECASTS

- “FORECAST IS ALWAYS WRONG”
  - UNPREDICTABLE EVENTS COMMON
  - VOLATILITY OF DEREGULATED ECONOMY

- TECHNOLOGY?
  - NEW LARGE AIRCRAFT …
  - Radical changes: GIS? MLS…. SST’S,
POST- DEREGULATION VOLATILITY


FORECAST ERRORS ARE LARGE


*Source: ICAO Bulletin 1968, Vol.XXIII, No.1
FUTURE TRAFFIC DRIVERS

- **PLUSSES:**
  - WEALTH, COST DROPS, FREE TIME
  - INTERNATIONAL GROWTH

- **QUESTION MARKS:**
  - ENVIRONMENT, FUEL SCARCITY
  - VIDEOCONFERENCING

FUTURE TRAFFIC GUESS

- “BY 2025, 2 TO 3 TIMES TODAY”
  - 1500 +/- 500 MILLION EMLANEMENTS

- **MORE INTERNATIONAL**

- **MORE SPECIALIZED CARGO**
  - UPS, FEDEX ALREADY HUGE
MARKET CAPITALIZATION OF US AVIATION COMPANIES

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Source: yahoo.com.financial, Nov. 11, 1999

AIRPORT DESIGN -- AIRSIDE (1)

- **NEW CLASS OF MEGA-AIRPORTS**
  - LONG PARALLEL RUNWAYS
  - DENVER, ORLANDO, DALLAS /FW
  - PARIS, ATHENS, SEOUL, K. LUMPUR

- **INTERNATIONAL NLA HUBS?**
  - FAR FROM CITIES, 24 HR OPS
  - NON-TRADITIONAL GATEWAYS
AIRPORT DESIGN -- AIRSIDE (2)

• NICHE AIRPORTS

• CARGO
  ➔ LA/ONTARIO, LOUISVILLE,
  ➔ TORONTO/HAMILTON, LIEGE, MANILA

• LOW COST CARRIERS
  ➔ BOSTON/PROVIDENCE
  ➔ MIAMI/FT.LAUDERDALE

AIRPORT DESIGN -- LANDSIDE (1)

• ELECTRONIC TICKETING
  ➔ FASTER, THUS FEWER COUNTERS
  ➔ DISTRIBUTED
  ➔ LESS NEED FOR LARGE SPACES

• DEPARTURE HALLS OBSOLETE?
  ➔ SAN FRANCISCO, TORONTO?
AIRPORT DESIGN -- LANDSIDE (2)

- PASSENGER BUILDING AS MALL
  - MORE RETAIL SPACE
  - VERY DIFFERENT CONFIGURATION

- LIMITS TO TREND?
  - UNNECESSARY CLUTTER
  - WHY SHOP AND SCHLEPP ON TRIP?

AIRPORT DESIGN -- LANDSIDE (3)

- CHANGES IN SPACE NEEDS
  - USES -- CHECK-IN, MALLS
  - OPS -- INTERNAT’L DEPARTURES
  - ALLIANCES -- WHICH AIRLINES SHARE?

- MORE FLEXIBILITY NECESSARY
  - “SWING GATES”; “SWING SPACE”
INDUSTRY ORGANIZATION -- AIRLINES

- GLOBAL PARTNERSHIPS
  - STAR, ONEWORLD, KLM ETC.....

- AIRLINE BLOCKS ON AIRPORT
  - INTERNAT’L / DOMESTIC DISTINCTION FOR BUILDINGS OBSOLETE?

- PRESSURE AIRPORT MANAGERS
  - WORLDCLASS, CONSISTENT SERVICE

INDUSTRY ORGANIZATION -- AIRPORT COMPANIES

- BRANDED WORLD COMPANIES WILL MANAGE AIRPORTS
  - COMPARE TO HILTON, SHERATION MANAGEMENT OF HOTELS
  - ECONOMIES OF SCALE, IN TRAINING

- LOCAL, POLITICAL AIRPORT MANAGEMENT OBSOLETE?
CONCLUSION: 3 MAIN DRIVERS

- **GROWTH IN TRAFFIC**
  - “‘BY 2025, 2 TO 3 TIMES TODAY’
  - 1500 +/- 500 MILLION EMLANEMENTS

- **GLOBALIZATION**
  - AIRLINE PARTNERSHIPS
  - AIRPORT COMPANIES

- **COMMERCIALIZATION**
  - GREATER FOCUS ON BUSINESS

CONCLUSION: 3 MAIN EFFECTS

- **MULTI-AIRPORT SYSTEMS**
  - LARGER AIRPORTS
  - NICHE AIRPORTS

- **AIRLINE BLOCKS**
  - MAJOR CLUSTERS ON AIRPORTS
  - MAJOR PRESSURES ON MANAGEMENT

- **GLOBAL AIRPORT COMPANIES**
  - WORLD CLASS AIRPORT MANAGEMENT