Heathrow International
Airport
Terminal 5 Expansion
London

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HEATHROW INTERNATIONAL AIRPORT
Heathrow Fact Sheet

- Largest and busiest airport in the U.K.
- Used by 90 airlines flying to 170 destinations
- 67 million passengers annually
  - 11% UK travelers
  - 43% Short Haul
  - 46% Long Haul
- Site covers 12 km² (4.7 mi²)
- Owned and operated by BAA Limited
  - International consortium led by Ferrovial Group
Magnitudes & Costs: T5

- Construction began summer 2002
- Phase I completed March 2008
  - Opened to public on March 27, 2008
  - Constructed to accommodate Airbus A380
- Phase II estimated completion 2010
- £4.3 billion ($8.5 billion 2008)
- Reserved for British Airways
- 30 million passengers annually
Social & Economic Benefits

- Expansion generated 60,000 jobs throughout the 19 year project duration
  - Consultation
  - Evaluation and Analysis
  - Planning
  - Construction

- In general, Heathrow entirely produces 68,000 permanent jobs
Social & Economic Benefits

- Landing fees collected by BAA
  - 2008: £12.80 per person ($22.30, 2008)
  - Corporate responsibility programs
    - T5 charity
    - Sustainability education and awareness
Social & Economic Benefits

- Ease of Access
  - Connecting to Motorways & Railways
    - Reduced in and out congestion
  - London Underground Station directly under T–5
Innovative Design: T-5

- Terminal 5 Main Building
  - Largest free-standing shell superstructure in UK.
    - Roof area covers 5 soccer fields
    - Houses 4 floors
  - Aesthetically pleasing glass façade gives travelers unobstructed view of airport activity and runways
Innovative Design: T–5

- **Roof system:**
  - Structure consists of single-spanned undulating steel frames.
  - Triangular pyramid-like support pillars hold up the roof system.
Innovative Design: T–5
Technical Issues: T–5

- Large conventional cranes interfere with the airport’s radar field.
- Custom built hydraulic jack towers were used to lift roof sections
Technical Hiccups: T–5

- British Airways opening operations
  - 500 flights were cancelled
  - 28,000 bags did not travel with their owners.
- Cause of Hiccup in operations
  - IT system
  - Insufficient testing and staff training
- Not running on full schedule until April 8, 2008
Social Problems

• Noise and air pollution
• Local communities were against the expansion
  - Concerned that the government understated the environmental impact and overstated the economic benefits
• Initial proposal allowed 480,000 atms
• Prior to construction it was changed to 650,000 atms without evaluation
Policy Challenges

- Landing fee regulations by CAA
  - 23.5% increase as of April 1st 2008
  - Allowed to increase by inflation + 7.5% per year

- Lack of competition in the UK
  - BAA is forced to sell 3 airports in the UK
  - Sales are likely to raise £3.5–4 billion ($5–5.7 billion)

- Public Inquiry Period:
  - 4 Years
IN SUMMARY

- MAGNITUDES & COSTS OF T-5 EXPANSION
- SOCIAL & ECONOMIC BENEFITS
- TECHNICAL ISSUES
- INNOVATIVE DESIGN
- SOCIAL ISSUES
- POLICY CHALLENGES