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Managing Airports

# Managing Airports

an international perspective

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Graham



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# 1

## Introduction

Airports are an essential part of the air transport system. They provide all the infrastructure needed to enable passengers and freight to transfer from surface to air modes of transport and to allow airlines to take off and land. The basic airport infrastructure consists of runways, taxiways, apron space, gates, passenger and freight terminals, and ground transport interchanges. Airports bring together a wide range of facilities and services in order to be able to fulfil their role within the air transport industry. These services include air traffic control, security, fire and rescue in the airfield. Handling facilities are provided so that passengers, their baggage and freight can be successfully transferred between aircraft and terminals, and processed within the terminal. Airports also offer a wide variety of commercial facilities ranging from shops and restaurants to hotels, conference services and business parks.

As well as playing a crucial role within the air transport sector, airports have a strategic importance to the regions they serve. In a number of countries they are increasingly becoming integrated within the overall transport system by establishing links to high-speed rail and key road networks. Airports can bring greater wealth, provide substantial employment opportunities and encourage economic development – and can be a lifeline to isolated communities. However, they do have a very significant effect, both on the environment in which they are located and on the quality

of life of residents living nearby. Growing awareness of general environmental issues has heightened the environmental concerns about airports.

The focus of this book is on management issues facing airport operators. These operators vary considerably in their ownership, management structure and style, degree of autonomy and funding. Typically the actual airport operators themselves only provide a small proportion of an airport's facilities and services. The rest of these activities will be undertaken by airlines, handling agents, government bodies, concessionaires and other specialist organizations. The way in which operators choose to provide the diverse range of airport facilities can have a major impact on their economic and operational performance and on their relationship with their customers.

Each airport operator will thus have a unique identity – but all have to assume overall control and responsibility at the airport. Each will be faced with the challenging task of co-ordinating all the services to enable the airport system to work efficiently. The providers of services are just some of the airport stakeholders which operators need to consider. Others include shareholders, airport users, employees, local residents, environmental lobbyists and government bodies. A complex situation exists with many of these groups having different interests and possibly holding conflicting views about the strategic role of the airport. All the stakeholder relationships will be important but, clearly, the development of a good relationship with the airlines will be critical, as ultimately this will largely determine the air services on offer at the airport.

Globally the airport industry is dominated by North America and Europe (Figures 1.1, 1.2 and 1.3). According to the Airports Council International (ACI), North American airports handled 1386 million passengers in 1999, which represented 47 per cent of the total 3003 million passengers. There were 912 million passengers in Europe, accounting for a further 30 per cent of the total traffic. As regards cargo, North America is again the largest market with 27 million tonnes of the global 61 million tonnes – again with a market share

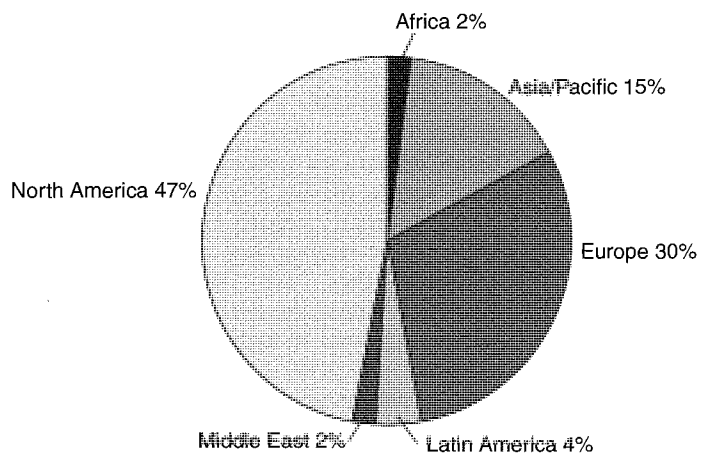


Figure 1.1 Airport passengers by world region, 1999  
Source: ACI.

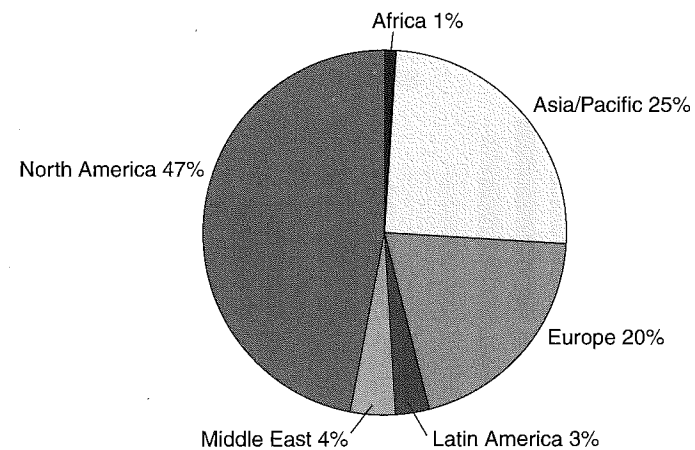


Figure 1.2 Airport cargo tonnes by world region, 1999  
Source: ACI.

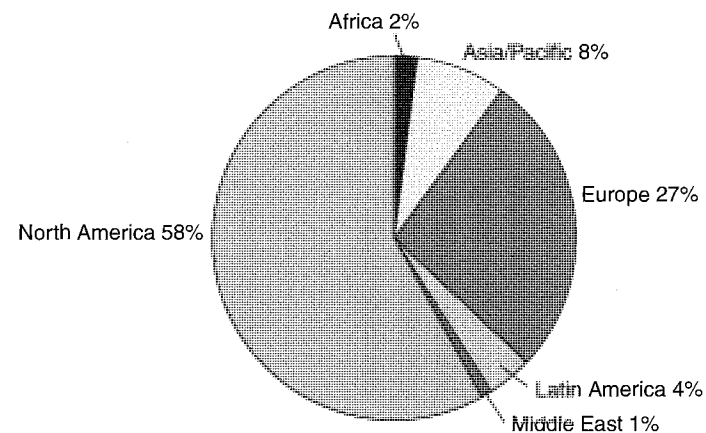


Figure 1.3 Airport aircraft movement by world region, 1999  
Source: ACI.

of 47 per cent. Asian/Pacific airports have the second highest volume of cargo with a global share of 25 per cent, reflecting the importance of this area in the global economy. North America has a larger share of the total 58 million aircraft movements (58 per cent) since the average size of aircraft tends to be smaller due to competitive pressures and the dominance of domestic traffic.

The importance of the North American region is reflected in the individual traffic figures of the various airports. For example out of the twenty largest global airports, fourteen are US airports in terms of passenger numbers, ten with cargo and seventeen when air transport movements are being considered (Figures 1.4, 1.5 and 1.6). However, when just international traffic is being

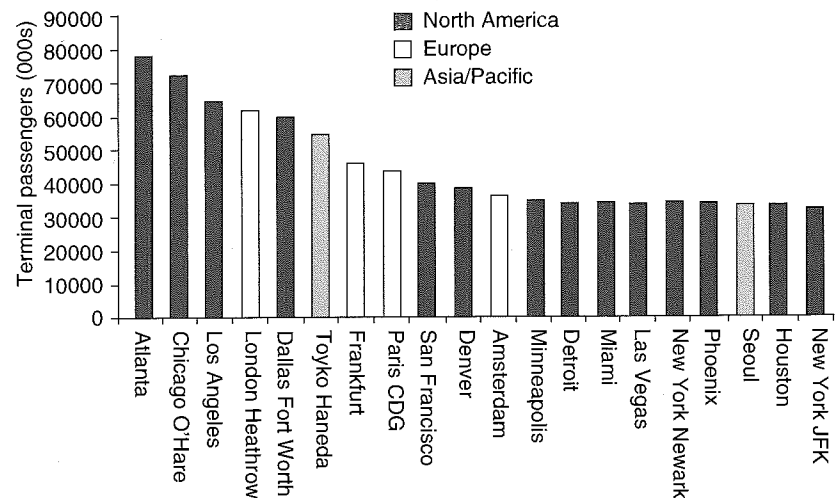


Figure 1.4 The world's twenty largest airports by terminal passengers, 1999  
Sources: ACI and BAA plc.

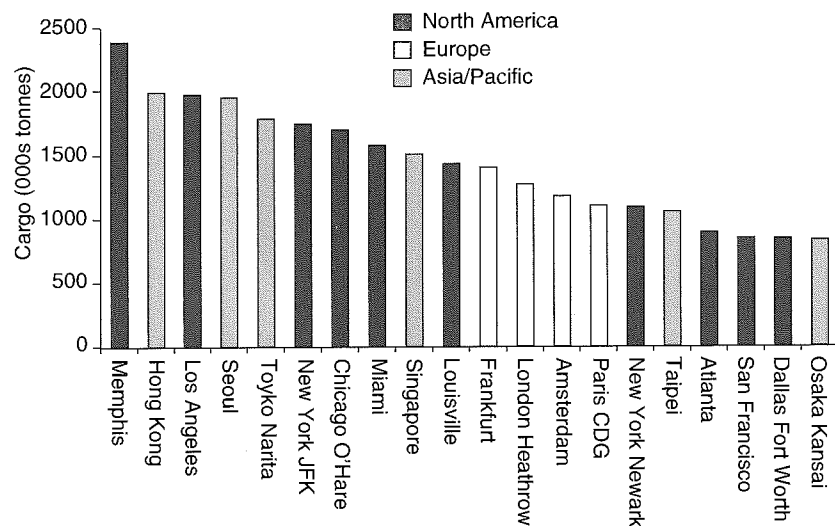


Figure 1.5 The world's twenty largest airports by cargo tonnes, 1999  
Sources: ACI and BAA plc.

examined, the European region's significance becomes much more important (Figure 1.7).

Heathrow has the most international traffic, while Atlanta, Chicago and Los Angeles have the largest passenger throughput. The largest passenger airport in Asia is Toyko Haneda, which is dominated by domestic traffic. Not all the

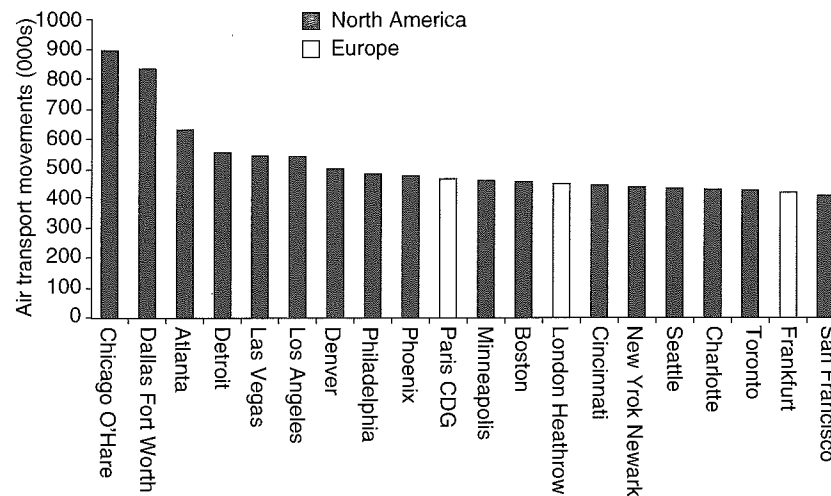


Figure 1.6 The world's twenty largest airports by air transport movements, 1999  
Sources: ACI and BAA plc.

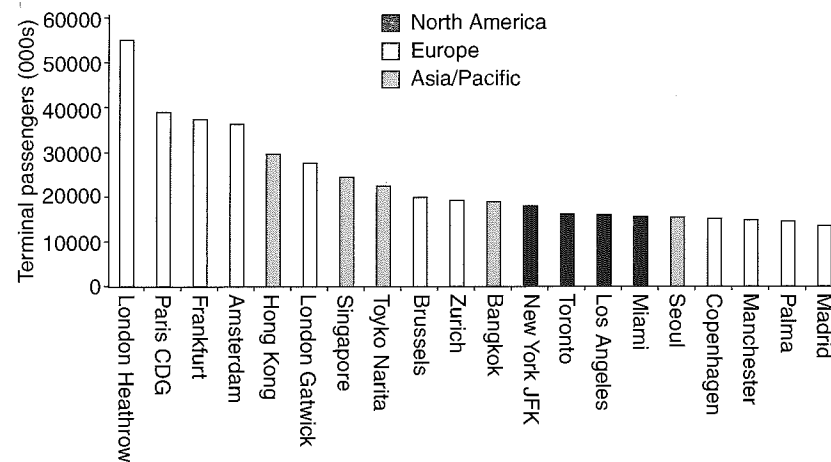


Figure 1.7 The world's twenty largest airports by international terminal passengers, 1999  
Sources: ACI and BAA plc.

major cargo airports coincide with the major passenger airports. Memphis is the world's largest cargo airport because Federal Express is based here. Similarly UPS has its base at Louisville. The cargo market is more widespread with six of the important cargo airports situated in Asia. The larger than average aircraft size in Asia means that none of the busiest airports in terms of movements are situated in this region. All the twenty busiest airports, whether measured in passengers, cargo or movements are in North America, Europe or Asia/Pacific, with none in any other global region.

**Table 1.1 Growth in passenger numbers at the world's twenty largest airports**

	1980	1990	1999	% average annual change, 1990/1980	% average annual change, 1999/1990
1 Atlanta	40 180	48 015	77 744	1.8	5.5
2 Chicago O'Hare	44 425	60 118	72 157	3.1	2.0
3 Los Angeles	33 038	45 810	64 280	3.3	3.8
4 London Heathrow	27 472	42 647	61 975	4.5	4.2
5 Dallas Fort Worth	21 951	48 515	60 000	8.3	2.4
6 Tokyo Haneda	20 810	40 188	54 307	6.8	3.4
7 Frankfurt	16 873	28 862	45 400	5.5	5.2
8 Paris CDG	10 091	22 506	43 439	8.4	7.6
9 San Francisco	21 338	30 388	39 586	3.6	3.0
10 Denver	20 849	27 433	38 034	2.8	3.7
11 Amsterdam	9 401	16 178	36 425	5.6	9.4
12 Minneapolis/St Paul	9 252	20 381	34 216	8.2	5.9
13 Detroit	9 883	21 942	33 968	8.3	5.0
14 Miami	20 505	25 837	33 899	2.3	3.1
15 Las Vegas	10 302	18 833	33 669	6.2	6.7
16 New York Newark	9 223	22 255	33 623	9.2	4.7
17 Phoenix	6 586	21 718	33 554	12.7	5.0
18 Seoul	n/a	16 821	33 284	n/a	7.9
19 Houston	10 695	17 438	33 051	5.0	7.4
20 New York JFK	26 796	29 787	31 701	1.1	0.7
Average				5.6	4.8

Sources: ACI and BAA plc.

The aviation industry has been growing virtually continuously since the Second World War and continues to grow – albeit at lower growth rates now. This growth in demand and subsequent need for additional airport capacity is undoubtedly one of the major influences on the airport business. Table 1.1 shows the growth at the major international airports of the world for the last twenty years. The average annual growth was 5.6 per cent in the 1980 and 4.8 per cent in 1990s. Some of the US airports, particularly those not to have benefited substantially from US deregulation, such as New York JFK and Miami, have experienced relatively low growth rates. Within Europe, Paris and Amsterdam airports have grown faster than both London Heathrow and Frankfurt.

The growth in demand for air transport has had very significant economic and environmental consequences for both the airline and airport industries. Moreover, since the 1970s there have been major regulatory and structural developments, which have affected dramatically the way in which the two industries operate. Initially most change was experienced within the airline sector as a consequence of airline deregulation, privatization and globalization trends. The pace of change was slower in the airport industry, but now this sector, too, is developing into a fundamentally different business.

The trend towards airline deregulation began in 1978 with the deregulation of the US domestic market. Many more markets subsequently have been

liberalized or deregulated. In some places this has been the result of the adoption of more liberal bilateral air service agreements, as has occurred on a number of the North Atlantic and Pacific routes. In the European Union (EU), deregulation has been achieved with a multilateral policy which has evolved over a number of years with the introduction of the three deregulation packages, in 1987, 1990 and 1993. The 1993 package, which did not become fully operational until 1997, was the most significant package and has had the most far-reaching impact.

At the same time, airline ownership patterns have changed. Most airlines, with the notable exception of those in the USA, traditionally were state owned and often subsidized by their government owners. However, this situation has substantially changed as an increasing number of governments have opted for partial or totally private sector airline ownership, primarily to reduce the burden on public sector expenditure and to encourage greater operating efficiency.

The other most significant development within the airline industry, partly due to deregulation and privatization trends, is the globalization of the industry and the emergence of transnational airlines. Five major alliance groupings, namely Star, Oneworld, 'Wings', Sky Team and Qualifyer, have emerged with global networks. These are dominating the airline business – accounting for two-thirds of all traffic. Moreover, many other airlines are aligning themselves to these groupings with code-sharing, franchising or other co-operative arrangements.

The airports have now found themselves being caught up in this environment of change. Radical restructuring has occurred, which in many ways mirrors that which has fundamentally changed the airline industry. Three key developments have been witnessed within the airport sector:

- 1 *Airport commercialization.* The transformation of an airport from a public utility to a commercial enterprise and the adoption of a more businesslike management philosophy.
- 2 *Airport privatization.* The transfer of the management of an airport, and in many cases the ownership as well, to the private sector by a variety of methods. These include share flotations, the adoption of strategic partnerships or the introduction of private management contracts.
- 3 *Airport globalization.* The emergence of a few global airport companies who are operating at an increasing number of airports around the world. Some of these global players are traditional airport operators whereas others are new to airport management.

This book discusses the implications of the development of the airport sector, which is moving from an industry characterized by public sector ownership and national requirements, into a new era of airport management which is dominated by the private sector and global players. Airports are now complex enterprises that require a wide range of business competencies and skills – just as with any other industry. Airports can no longer see their role simply as providers of infrastructure but, instead, as providing facilities to meet the needs of their users.

Chapter 2 describes the privatization and globalization processes that are taking place. These developments are having a major impact on both economic performance and service provision. This is considered in Chapters 3 and 4. The

sweeping changes, occurring concurrently within both the airline and airport industries mean that the traditional airline-airport relationship has been irreversibly changed. Chapter 5 looks at this, focusing primarily on airport charging and slots issues.

A major consequence of airport commercialization and privatization trends is that airport operators are devoting much more time and effort to building up the non-aeronautical or commercial areas of the business. Chapter 6 looks in detail at this area of operation. Airport competition, hardly considered to be a relevant issue by many airports just a few years ago, is also becoming increasingly important. Marketing, which for so long has been a basic business competence in most other industries but ignored by many airports, is now a firmly accepted management practice at airports. Chapter 7 considers airport marketing.

The remaining chapters of the book take a broader view of the airport business and consider the role that airports play on the environment and surrounding community. This role needs to be clearly understood if future growth in the airport industry is to continue. Chapter 8 discusses the economic impacts of airports and how airports can act as a catalyst for business and tourism development. Chapter 9 goes on to consider the environmental impacts and ways in which airports are attempting to minimize the adverse effects. The concept of sustainability and environmental capacity is introduced. Finally, the key issues of each chapter are brought in Chapter 10 in order to make predictions for the coming years and to assess the future prospects for the industry.