RUNWAYS FOR PROSPERITY?

The Role of Planning in Defining the Local Economic Effects of Airports in Britain

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ABSTRACT

Planning can only play a minor part in defining the economic effects of an airport. This is primarily because government policy has prevented the planning system from responding adequately to the impacts or opportunities created by airport development.

This study assesses what the economic effects of an airport development are, how they interrelate, and how they manifest themselves in different situations. In order to do this the study draws upon information collected from around the world by many different organisations.

The study investigates the difficulties which have been caused by government policy, particularly in terms of the often competing interests of its airports and regional planning objectives.

A comprehensive typology of British airports is provided, both in terms of the functions which they perform, and the planning response to them. This typology is intended as an indication of the potential effects of each airport.

The assessment then draws further upon experiences at two of the country's major airports - Gatwick and Manchester. It investigates in detail the formulation of policies with respect to all of the economic aspects of each and seeks to identify the potential implications.

The study concludes that serious problems exist in the state of airport planning in Britain, and that a basic lack of direction or national framework in government airport policy is primarily responsible for these difficulties. Alternative solutions to the airports debate are offered in the form of a range of future scenarios.
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CHAPTER ONE

THE STUDY

1.1 Aims of the Study

1.1.1 Airports are a growing global phenomenon. Demand for air transport is increasing rapidly, and according to the International Air Transport Association (1991) a forecast massive rise in demand is not yet upon us. The availability of air transport has revolutionised the world economy during the short time that it has been available.

1.1.2 This study seeks to investigate just a small part of the global aviation machine. It concentrates upon the economic effects that airports have upon the areas they occupy, and the role that the planning system in Britain might play in defining these effects.

1.1.3 The study is based upon the central hypothesis that planning can only play a minor part in defining the economic effects of airport development.

1.1.4 The central hypothesis is accompanied by a set of associated assertions: That airports are powerful economic forces; that the British planning system has been made impotent by government policy disarray and contradictions; and that airport planning in Britain is consequently adhoc.
1.2 The Structure of the Study

1.2.1 The structure of the study is necessarily complex. In order to reach reasonable conclusions on each of the matters detailed it is divided into a number of stages, each with specific aims. The results of each stage are used to determine the course of action in the next.

1.2.2 The first stage investigates the airport economic system, the way in which the airport impacts economically upon its local area. It draws upon information obtained from airport studies carried out around the world and reviews the approaches taken. It defines the various elements of an airport's economic impact and determines the basis upon which to proceed by providing a simple model of the airport economic system.

1.2.3 The second stage examines the airport scene in Britain. It investigates the evolution of government policy in relation to airports, and demonstrates the basic difficulties which may be associated with the government position. It then examines the British airports in detail and pursues their key characteristics which might determine economic role. Finally it looks at planning policies at the local level, identifying a range of approaches to dealing with the airports. It provides a typology of British airports as a basis for further analysis.

1.2.4 The third stage uses two contrasting case studies - Gatwick and Manchester airports - and looks in much more depth at government and local action. It draws out the differences between the cases and the problems and opportunities created at both.

1.2.5 The fourth stage looks at the relationships which exist between the airport and the local economy in each case. It draws out the consequences of
planning approaches, and identifies the areas where planning has succeeded or failed to achieve an influence.

1.2.6 The fifth and final stage draws from the findings of the previous stages in order to assess the validity of the central hypothesis and associated assertions. It then provides a range of future planning scenarios and recommendations.

1.3 What the Study Should and Should Not Do

1.3.1 As well as testing the central hypothesis and associated assertions, the study should aid the understanding of the airport economic system, and the role the planning system plays in defining that system.

1.3.2 The study should provide a categorisation of airports in Britain according to their potential and likely impact together with an assessment of the current state of airport planning policy.

1.3.3 The study should provide an insight into the machinations of the airport planning process at two airports and an indication of the degree to which planning has achieved its aims at each.

1.3.4 The study is not intended as a means by which the economic impact of an airport can be predicted. It is not an airport economic impact study. This has been done many times before with varying degrees of success.

1.3.5 The study is not intended as a judgement on whether the objectives of the planning process are right or wrong. It avoids at all cost any comment upon the acceptability of policies which are drawn up not just in view of the local
economy, but also in view of the environmental, social and physical effects which airports have upon the surrounding area. This study refers only to economic and developmental effects.
CHAPTER TWO

THE ECONOMIC DEVELOPMENT IMPACT OF AIRPORTS

2.1 Aviation and Air Transport

2.1.1 The health of the world economy depends upon aviation. In the 21st century this dependence will grow stronger, at least until new technologies allow alternative means of transportation, or the need for transportation diminishes as a result of startling telecommunications advances.

2.1.2 Since the first jet airliner flew in 1949, commercial aviation has grown nearly sixty fold (International Air Transport Association, 1991). Forecasts for future air transport demand suggest that this growth will be eclipsed in real terms in just the next 20-30 years (IATA, 1991). Forecasts suggest growth of over 60% by the turn of the millennium.

2.1.3 Statistics compiled by IATA(1991) suggest that in 1990 1.25 billion passengers were carried by world airlines, as well as over a quarter of the world’s manufactured exports (by value). IATA estimate that around the world 21 million jobs are dependent upon aviation, which produces over 700 billion US dollars in annual gross output.

2.1.4 The accuracy of these figures cannot be tested by this study, but what seems certain is that aviation is a catalyst for massive worldwide leisure and business activity. Much of this activity would never have developed were it not for the availability of air transport.
2.2 Airports, Impacts and Impacts Studied

2.2.1 Not everyone, of course, is in favour of air transport growth. Those least in favour are people who live close to a busy airport, and who suffer from noise interference, traffic congestion and environmental pollution. These impacts are beyond the remit of this study.

2.2.2 The aspect of the airport impact applicable to this study is related to economic and developmental issues. This aspect is one which has had less attention in the media than the more emotive issues of noise and environmental pollution, but is nonetheless well documented.

2.2.3 The issue is not, however, widely discussed in academic literature. This part of the 'airport debate' has eluded the attention of academics with great resilience.

2.2.4 The economic effects of other forms of transport provision are, on the other hand, well researched in academic literature. In Britain roads, rail and public transport are associated with rich and varied literature (Parkinson, 1981, Vanke, 1986). The Docklands Light Railway, Tyne and Wear Metro, Midlands Metro, Manchester's Metrolink - all have been accompanied by a deluge of literature (Henley Centre, 1986, West Midlands Enterprise Board, 1988). This is simply not the case, to the same extent, with airports.

2.2.5 Most research carried out into airport impacts in Britain has been produced or commissioned by those most directly affected by, or involved in the airports. Most of the major British airports have associated with them vociferously active local action groups, conservation campaigns, and consultative committees. However, the great bulk of research is carried out by local authorities, national government departments and the airport
companies themselves.

2.2.6 Overseas, literature is generally even more abundant, particularly in the United States, and elsewhere when major airport proposals are under consideration. Again, however, literature is usually of a strictly technical nature.

2.3 Aviation and Economic Development Initiatives

2.3.1 Major initiatives for the encouragement of economic development in regions around the world have had as a central guiding principal need for air transport facilities to be made available.

2.3.2 The 'Techopolis' programmes in both Japan and France lay particular emphasis upon the locational precondition that economic development based upon technological innovation should be targeted on areas served by air transport, among other factors.

2.3.3 In the United States the link between airports and economic development initiatives is much more explicit. Airports, such as Hartsfield Atlanta, Kansas City International or Dallas Fort Worth, have been built not just to improve air transport services to city regions, but to raise the economic profile of the cities and make them more attractive to investors. Vast areas of land have been set aside and developed around both Atlanta and Dallas airports to accommodate high technology and research based industry, regional administration of multinational companies, and executive housing (Colorado National Banks, 1989).

2.3.4 At Atlanta Hartsfield 10 redevelopment parcels were assembled in the area around the airport and packaged specifically to attract international investors. Organisations in cities across the world were targeted, and the city
authorities lobbied the major US airlines, particularly Delta who use Hartsfield as their main base, to provide an expanded portfolio of destinations.

2.3.5 At Dallas Fort Worth a Mayors Commission on International Development was set up. It recommended the establishment of a regional trade centre, a capital development corporation and an annual international trade fair in order to lever investment.
2.4 Studies of Airport Economic Impact

2.4.1 The economic impact of airports is a subject studied on a worldwide basis. Impact studies have been produced for most of the world's airports. This section seeks to provide a broad overview of these studies and assess their merits and demerits in order to produce a simple model of airport impact.

2.4.2 In order to obtain copies of the impact studies required a circular was sent out to the authorities responsible for the operation of a number of the world's largest airports. The circular was not sent to airports where any impact report was likely to be in a foreign language and a translated version was unlikely to be available. The circular was sent to 25 airport authorities in January 1993 and by the end of February 16 responses were received, a rate of 64%. Reports were not available for all of the respondent airport authorities, and all of the responses came from airport authorities in the United States, where a number of major studies were known to have been produced.

2.4.3 In all reports were received from authorities covering the following airports:-

- Atlanta Hartsfield
- Baltimore Washington International
- Chicago O'Hare
- Dallas Fort Worth
- Denver Stapleton
- Kansas City
- Los Angeles International
- Newark
- New York John F Kennedy
- New York La Guardia
2.4.4 Additional reports were received from Renfrewshire Enterprise covering Glasgow Airport, and York Consulting covering Manchester Airport. Reports covering Paris Roissy-Charles De Gaulle (translated) and Sydney Kingsford Smith were received from the Secretariat of the London and South East Regional Planning Conference (SERPLAN).

2.4.5 The studies were all produced at different times, using a range of approaches and giving a variety of results. The studies were produced for different purposes, and this often moulded the approach taken and therefore the results. A large proportion of the reports were intended simply as straight technical impact estimates and provided little of value other than in terms of methodological signposting. Others were more discursive of the 'airport economic system' and the effects of upon it of historical development, land use planning, surface access, etc.

2.5 Elements of the Airport Impact

2.5.1 This section concentrates on the main elements of the economic impact of an airport. It has three main purposes:-

- To review the various approaches to categorising the elements of an airports economic impact, as detailed in the impact studies assessed.

- To review the definitions used to describe the various elements of the impact, what activities are included in each, and how each is
assessed.

To establish, on the basis of the evidence available, a simple model which shows how the various parts of the airport economic impact interrelate.

2.5.2 The first step in this process is to identify the various approaches to categorisation which have been identified.

2.5.3 Major differences in approach can be identified among the reports studied. Discrepancies were observed, not just in the arrangement and relationships of the elements, but also in the definition of individual elements.

2.5.4 The United States Federal Aviation Administration (FAA, 1987) defines the total economic impact as constituting:-

- Regional economic activity
- Employment
- Payrolls, revenue and expenditure.

These can be described as the diagnostics of the total impact. However, not all activity, employment, payrolls, revenues and expenditures in the area around an airport will be attributable to the presence of the airport. Conversely, part of the effects attributable to the airport will be felt outside of the local area.

2.5.5 Within the local area some activities will be directly related to the operation of the airport, while others will only be indirectly related. Further activity will
be induced by the spending of employees whose jobs are dependent on the airport. Additional activity might be attracted to the airport area in order to obtain air transport.

2.5.6 In total, the various elements of the airport economic system generate revenues for local and national government in the form of local and national rates and taxes.

2.6 Towards a Categorisation

2.6.1 Three frameworks for the assessment of the economic impact are considered. Each are dealt with briefly in this section.

2.6.2 The FAA provided in 1986 a model approach which it was intended should be applied to all of the airports in the United State, although many authorities, such as those at Denver, developed their own approach. As shown in FIGURE 1 it includes three main component parts relating to direct, indirect and induced activity. Direct activity is derived from expenditure of the air transport industry, whereas indirect activity results from the expenditure of passengers. The induced effect results from successive rounds of expenditure by people employed in direct and indirect activities.

2.6.3 The International Air Transport Association provided a similar model in 1991. This is shown in FIGURE 2. Like the FAA model it relates direct activity to the expenditure of the air transport industry and indirect activity to the movement of goods and passengers. However it also includes a government income and expenditure component. Government expenditure is added to direct and indirect employment to induce additional activity and employment.
FIGURE 1
The US Federal Aviation Administration Model of Airport Economic Impact

AIR TRANSPORT

Aviation Activity
Spending by Passengers

DIRECT IMPACT
Air transport firms and spending by air transport firms

INDIRECT IMPACT
Firms providing services to passengers and spending by these firms

DIRECT AND INDIRECT EMPLOYMENT

Spending by direct and indirect employees calculated using a multiplier

INDUCED IMPACT

INDUCED EMPLOYMENT

Derived from Regional Economic Significance of Airports 1986 United States Federal Aviation Administration
FIGURE 2

The International Air Transport Association Model of Airport Economic Impact

Derived from The Economic Benefits of Air Transport 1991 International Air Transport Association
2.6.4 The City and County of Denver (1987) take an entirely different approach in relation to Denver Stapleton Airport, as shown in FIGURE 3. The difference relates specifically to an alternative form of distinction between direct and indirect activity. Although the approach is somewhat ambiguous, it is suggested that direct employment activity is derived from the business revenue resulting from activity at Stapleton Airport, i.e., it includes both the activity resulting from the expenditure of the air transport industry plus the activity resulting from expenditure on the movement of goods and passengers. Indirect activities, it suggests, are derived from expenditure of direct activities on the goods and services which they require to provide business services.

2.6.5 The Denver model lends itself to greater flexibility than either the FAA or IATA approach. The reasons why this is so will become apparent when the various components of the airport impact are discussed.

2.6.6 The simple model which has been established for use in this study draws upon the Denver model heavily, but improves upon it. As FIGURE 4 shows, it includes a link between indirect and induced activity which was missed out in the Denver model. It also includes an airport attracted component which refers to firms not otherwise related to the airport which are attracted to the area because, among other reasons, of the availability of air transport.

2.7 Direct Impact

2.7.1 A number of studies (FAA, 1987, City and County of Denver, 1987, Port Authority of New York and New Jersey, 1990) agree that direct impacts of airport development are those which would vanish if the airport operation
FIGURE 3
The Denver Stapleton Model of Airport Economic Impact

Activity at Stapleton Airport

Business Revenue

- Business Taxes
- Retained Earnings
- Stockholder Dividends
- Investments

DIRECT EMPLOYMENT

Personal Income

Spending

Induced Activity

INDIRECT EMPLOYMENT

Purchase of Goods and Services to Provide Business Services

Derived from The Regional Economic Impact of Stapleton International Airport and Future Airport Development 1987 City and County of Denver
FIGURE 4

The Airport Economic System

ATTRACTION ACTIVITY AND JOBS

AIR TRANSPORT

Indirect Activity

Direct Activity

Taxation

Government Revenues

INDIRECT JOBS

DIRECT JOBS

Induced Activity

INDUCED JOBS
were to cease. They are activities, revenues and expenditures which would not have occurred in the absence of the airport. The United States Federal Aviation Administration (FAA, 1987) consider that the direct impact relates to the direct economic consequences of the aviation presence. Studies agree that direct impacts are felt both on and off the airport site.

2.7.2 As already shown, however, there are differences in the more detailed definition of the direct element. Two principal schools of thought can be identified, although various shades of opinion exist in reality:

**School 1**

The US FAA and the International Air Transport Association (IATA) primarily relate the direct impact to those activities engaged in air transport. That is those activities which facilitate the air transport of people and cargo. This would include airlines, airport operators, customs, immigration, flight catering, baggage handlers, and similar activities. They consider that other airport activities are indirect. These are concerned with the facilitation of movement and accommodation of people and cargo goods. This would include retail outlets, hotels, ground transport, freight distribution and similar activities.

**School 2**

The authorities at a number of US airports (State of California Department of Transportation, 1992, City and County of Denver, 1987) relate the direct impact to all activities immediately engaged in the facilitation of air transport and the accommodation and movement of people and goods. This would include activities included by
school 1 in both the direct and indirect categories. The California Airport Economic Impact Model (State of California, 1990) describes direct impacts as the 'first round' or initial spending impacts, irrespective of what activities this spending might be directed towards.

2.7.3 It is difficult to reconcile the differences in approach to the definition of the direct impact as both are compelling. However, the exact classification is not crucial providing a clear definition is given to what type of activities are included in this category. For the purposes of this study a new definition has been derived:

**Definition One**

The direct impact relates to those activities which exist to provide goods and services directly to aviation and to aviation customers in connection with the customers use of aviation, and which would disappear if the airport were to close. Aviation customers are:

1. Passengers using the airport,
2. Organisations whose products are transported via the airport.

Direct impacts occur both on and off the airport site. The local element of the direct impact is the part of the direct impact which is felt within a given local area.
2.7.4 The definition is more in line with the school 2 approach. Activities included under this definition are:-

- airlines
- general aviation
- airport administration
- flight catering
- security
- retail
- customs and immigration
- car parking
- freight distribution
- haulage
- couriers
- car rental
- bus and coach transport to and from the airport
- rail transport to and from the airport
- hotels
- restaurants

2.7.5 The activities listed might include a number, such as retail, hotels and restaurants, which have the potential to serve customers other than those using the airport. The direct impact should only include those activities whose existence is dependant on the airport customers. This will typically mean those activities which are located on or very close to the airport site.

2.7.6 Part of the direct impact will occur outside of the local area, although not to the same extent as in other categories. For example, the operator of a passenger coach company which serves the airport may be based elsewhere.
2.8 On Site Direct Impact

2.8.1 Notwithstanding the different definitions of what the direct impact is, there is much agreement on what usually occurs within the airport site. It usually involves a limited number of activities within the airport boundaries.

2.8.2 The on site direct impact relates to economic activities carried out on the airport which generate employment and revenue which would not otherwise have occurred in the area (City and County of Denver, 1987). Any activity, employment or revenue which would have occurred in the area in the absence of the airport cannot be included.

2.8.3 There is necessarily a substantial overlap between what activities occur on or off the airport site, and at any given airport some will occur both on and off. However, the City and County of Denver (1987) identify those which can be found on the site:-

- airlines
- freight airlines
- freight forwarders
- general aviation
- airport administration
- flight catering
- security
- retail tenants
- government departments
- car parking

Under the definition of the direct impact adopted for this study the following activities should also be included:-
Observation has shown that all of these activities can be found on the airport at, for example, Gatwick.

2.8.4 The assessment of the on site impact at any one airport should be easy given the limited number of activities which will take place within its boundaries. However, providing a broad predictive measure of what the impact should be at all airports would prove to be a difficult task.

2.8.5 York Consulting's report on the potential of Manchester Airport (1991) quotes Ecole National De L'Aviation Civile, stating that there is a usually a common relationship between the level of activity on an airport and its passenger throughput. This manifests itself in a ratio of on site jobs to throughput of 1000 jobs per million passengers per annum. The ratio is extremely widely used and has gained considerable credence.

2.8.6 The research contained in this study suggests that the use of this ratio on a universal basis may be misleading. A number of factors have been identified which will influence the level of activity on the airport site. These are as follows:-

1. The size of the airport site and the way in which airport boundaries are drawn. Manchester Airport, for example, is constrained by the size of its site, resulting with many firms, which would otherwise be on the airport, occupying premises off site.
The role and function of the airport. Additional activity such as aircraft maintenance, and airline administration will only locate at an airport of a size above a certain threshold.

The maturity of the airport. As an airport grows it may reach productivity thresholds beyond which the number of jobs per million passengers needed diminishes. For instance, an under used terminal will require almost as many staff as a terminal at capacity.

The location of the airport. Planning policies or environmental constraints may prevent the airport activity from 'overspilling' into the surrounding area.

The policy of the airport operator. This factor is becoming increasingly important. Three, not necessarily complimentary forces appear to be at work:-

a High rents on the airport many force activities such as flight catering, freight distribution etc to locate on cheaper adjacent non airport land.

b The privatisation of the airport operators in the UK, and their subsequent quest of profitability has seen the increasing diversification of airport activity. For instance BAA Plc is now a retail landlord at Heathrow for 250,000 sq ft of shop space, and at Gatwick for 152,000 sq ft (Estates Times Survey, 1993). This has been the tendency at airports across the world. Robbin and Netter (1992) detail a number of examples:-
i  Charles De Gaulle - antique sales and art exhibitions in the departures lounge.

ii  Frankfurt Main - 130 retail outlets, 3 cinemas and a bowling alley.

iii  McCarran Las Vegas - casino in baggage claim area.

Authorities at Dallas Fort Worth have reviewed their airport development policies in view of the need to develop ancillary revenues to secure maximum returns for their shareholding airlines (Colorado National Banks).

c  The need for profitability has seen in some cases the relinquishment of airport land and its development for other purposes. Lynton, the development arm of BAA Plc is seeking to develop airport sites when it can, wherever this is operationally feasible. The Beehive site, to the south of Gatwick Airport, is now allocated for a business park development.

2.8.7 Figures published by the US FAA (1987) suggest that whilst the 1000:1 mppa relationship is a useful one, there is a great amount of variation among US airports. FIGURE 5 shows that there is a positive relationship between throughput at US airports with throughput of over 4 million passengers per annum.
FIGURE 5

Passenger Throughput and Employment Levels at United States Airports 1986

![Graph showing passenger throughput vs. employment levels.]

Derived from *The Regional Economic Significance of Airports*, United States Federal Aviation Administration 1986

However FIGURE 6 suggests that the 1000 jobs per million passenger does not hold true. Although the average may be close to 1000 jobs, the variation is so wide as to make the simple relationship meaningless.
FIGURE 6

Passenger Throughput and Employment Levels per Million Passengers at United States Airports 1986

Jobs per Million Passengers Per Annum

Derived from The Regional Economic Significance of Airports United States Federal Aviation Administration 1986
2.9 Off Site Direct Impact

2.9.1 The off site direct impact relates to activities carried out off the airport which would not have occurred in the area in the absence of the airport (City and County of Denver, 1987) and which are related to the airport under Definition One.

2.9.2 This element is not as well researched as on site activity. Again it will vary between airports and depends upon the amount of development accommodated on the airport site. The City and County of Denver (1987) identify those direct impacts which can be found off site:

- freight airline administration
- freight forwarders
- air couriers
- trucking firms
- car rental
- bus and coach transport to and from the airport
- rail transport to and from the airport
- building and engineering contractors
- airport consultants

Observation has shown that the following activities also take place off airport around Gatwick:

- airline administration
- flight catering
- car parking
- hotels
2.9.3 Assessment of the off site element requires all of the caution involved in on site estimates, and more. It will be affected by many of the factors which influence the level of on airport activity, but in reverse. A large and spacious airport site will mean less off airport activity, as will low on-site rents. Irrespective of these factors there may be positive reasons why activities choose to locate off the site, such as better access, proximity to suppliers, or a more attractive environment.

2.9.4 York Consulting (1991) estimate that for every 2 jobs on site there will be 1 off site. For all of the reasons already given in relation to on site employment, it is clear that this cannot apply to every airport.

2.10 Indirect Impact

2.10.1 The California Economic Impact Model (State of California, 1990) describes the indirect impact as the result of successive rounds of spending by activities constituting the direct impact. It relates to activities which supply goods and services to direct activities as described under Definition One.

2.10.2 This element still represents activities which would not have occurred in the absence of the airport. However, it is likely that supply businesses will have a number of customers, only some of which are airport firms, and so not all employment, revenue and expenditure within a given indirect firm is airport attributable. Given that some activities serve more than just the airport it is unusual for any to be located on the airport although many might desire a location close by (Nathaniel Litchfield and Partners, 1979)
2.10.3 The definition of indirect impact for the purposes of this study is as follows:-

**Definition Two**

The indirect impact relates to those activities which exist to provide goods and services to direct activities as described in Definition One. It includes only that proportion of employment, revenue and expenditure of activities which would disappear if the airport were to close. The local indirect impact is that part of the indirect impact which is felt within a given local area.

2.10.4 This definition is line with the approach adopted by the City and County of Denver in 1987. Activities constituting the indirect impact include cleaning firms, laundry and linen suppliers, laundry services, wholesale food distribution, food production, aviation parts manufacture and supply, airline cabin accessory suppliers and manufacturers, retail suppliers and office suppliers.

2.10.5 The magnitude of the local indirect impact is related to two factors:-

1. The magnitude of the direct impact

2. The proportion of the direct impact revenues which are spent locally, as against the proportion which are spent on imports.

Point 2 can be illustrated by using the example of the supply of food to a flight catering company. Only a small proportion of what is paid by the company will stay in the local area. The storage and the part of the food distribution
which occurs locally will represent the local indirect impact, whereas the production and the part of the food distribution which occurs externally will represent activities and revenues lost externally.

2.10.6 The assessment of the magnitude of the indirect impact is a complicated task, which would involve obtaining precise information from direct activities about the goods and services which they purchase within the local area. The difficulties associated with this task mean that the majority of impact studies apply a multiplier to the direct impact.

2.11 Induced Impact

2.11.1 Most of the take-home pay of the employees engaged in direct and indirect activities will be spent in the local area in which the employees live, according to the majority of studies assessed. The studies (Illinois Department of Transportation, 1982) also conclude that the vast majority of employees will live within a half-hour journey time of their place of work, and over half will live within 10-20 minutes.

2.11.2 Induced activity is that which results from this spending. It is less discernible than either direct or indirect elements, as activity is not identifiably linked with the airport. The definition assumed in this study is as follows:-

**Definition Three**

The induced impact relates to the activity, employment, revenue and expenditure generated by the successive rounds of expenditure of employees engaged in direct and indirect activity as described in Definitions One and Two. The local induced impact relates to that part
of the induced impact which is felt in a given local area.

2.11.3 The induced impact is assessed in most of the impact reports studied using a simple multiplier. Each report uses a different multiplier to reflect differing local circumstances. This is not important. On the other hand it is important that the multiplier is applied to the correct multiplicand. The following definition has been assumed in this study:

**Definition Four**

The multiplier used to assess the magnitude of the induced impact should be applied to employment engaged in the direct and indirect impacts as described in Definitions One and Two.

2.11.4 The International Air Transport Association (IATA, 1992) report that around the world, multipliers of between 0.4 and 2.40 have been used. York Consulting (1991) estimate 3 induced jobs for every 10 on the airport, or a multiplier of 0.15.

2.11.5 The assessment of what multiplier to use should properly relate to the characteristics of the local area. Where an area produces a large proportion of the goods and services consumed by its residents, and so has a low level of importation, the multiplier and so the induced demand should be proportionately higher. Where an area produces a small proportion of the goods and services consumed by its residents, and so has a high level of importation, the multiplier and so the induced demand should be proportionately lower. The implication of this is that remote areas, such as northern Scotland, will have a high multiplier, and accessible integrated areas, such as west London, will have a low multiplier.
2.12 Attracted Impact

2.12.1 Without exception, the United States impact reports studied conclude that airports attract firms, which are otherwise unrelated to aviation, to the local area. The exact definition of the attracted impact differs from study to study, and some even call it 'induced' impact (State of California, 1992) but the general view is clear. The use of the word 'attracted' best fits the relationship the activity has with the airport.

2.12.2 The definition which has been assumed for the purposes of this study is as follows:-

**Definition Five**

The attracted impact relates to the employment, revenue and expenditure created by activities which are otherwise unconnected with the airport, but which have located, for one reason or another, in order to be close to the airport.

2.12.3 The attracted element is potentially the most important of all. If there is a link between the location of an airport and the attraction of firms then those regions which have an airport are at a distinct advantage over those which have not. The Chicago Airport Authority, like so many others across the United States believe the airport is vital, stating that:-

"Without a viable airport you cannot have a viable regional economy"

(IATA *The Economic Benefits of Air Transport*, 1992)
2.12.4 This category of impact does not relate to any specific activities, but most of the studies agree that the type of functions within it include headquarters, regional offices, high technology, research, design and development, conferencing, training and data processing.

2.12.4 IATA (1992) argue that the possession of an airport can benefit an area in three ways. These are expanded upon below:-

1 The facilitation of personal contact in organisations with dispersed operations and long distance markets.

2 The means by which organisations can secure 'just-in-time' stock distribution. This might particularly be the case with firms manufacturing technologically advanced but light weight and non bulky products - such as the micro chip.

3 The development of entirely new industries which, although not related to the airport, need to locate close to the airport. The example given is the import and processing of high value fruits and vegetables from Africa to Europe.

2.12.5 IATA believe that the attraction of an airport is related to the availability of good transport links, and the availability of a range of connections and destinations.

2.12.6 This element is by far the least discernible. It is also an area where a large amount of research has taken place, and where results have varied the most. There is much conjecture and exaggeration but a number of studies have suggested that a link exists.
2.12.7 The York (1991) report on Manchester concluded that the time saved in the movement in people or goods is the most measurable benefit, and the 'key test' is how important, in this sense, the availability of air transport is to the locational decisions of firms not otherwise related to the airport. York note that there is a lack of 'hard evidence'.

2.12.8 A study carried out by Prism Research (1984) on the mobility of industry from South East England concluded that nearness to an airport was a much less important factor in a firm's locational decision than, say, quality and suitability of premises, ground access, or the environment and quality of life. LCCI (1983) reached similar conclusions in a study of relocation activity from central London, finding that proximity to air transport links was very low down the order of priorities of many firms. However, the 'Golden Triangle' Survey conducted by Henley Management College and Price Waterhouse (1991) reached an entirely different conclusion, suggesting that over 60% firms around the west, south west and south of London felt that proximity to Heathrow and Gatwick Airports was important in their locational decision, second only to surface transport infrastructure.

2.12.9 Assessment of the attracted impact has been shown to be a difficult task. It will relate to many factors, amongst them:-

1 The size, importance and nature of the airport. Firms may have specific requirements in seeking an airport location, such as the availability of flights to particular destinations, or the need for a wide range of destinations to be available. Airports which would meet these criteria best are those which have achieved intercontinental 'hub' status. These airports serve as the point at which major world airlines concentrate domestic, international and intercontinental
services. Examples of major Hubs include Chicago O'Hare (American) Atlanta Hartsfield (Delta) Denver Stapleton (Continental) Heathrow (British Airways) Charles De Gaulle (Air France) Schiphol (KLM) Frankfurt Main (Lufthansa) and Hong Kong (Cathay Pacific).

2 The location of the airport in relation to infrastructure and large centres of population, and the quality of the local environment.

3 Planning policies in the local area. This particularly relates to the availability and suitability of sites. A number of the studies assessed suggested that the provision of the right type of accommodation of investing businesses was an important factor (Colorado National Banks, 1989). This accommodation is described as high quality, of superior design, in a landscaped or parkland setting.

2.13 The Next Stage

2.13.1 This chapter has set out the various element of an airports economic impact, and how these elements interrelate.

2.13.2 The next stage of the study looks at the airports in Britain. It seeks to demonstrate that a range of factors will influence the impacts set out in this chapter.
CHAPTER THREE

AIRPORTS IN BRITAIN

3.1 Aims of the Chapter

3.1.1 This chapter seeks to establish the 'state of play' with regard to the airports in Britain. It does this first by identifying the main airports, then detailing the evolution of government policy with regard to airports. It then provides a typology of airports based upon matrices of airport size, location and local policy, which will serve to identify the likely magnitude of the role that each airport has the potential to play in its area.

3.1.2 From the typology, two representative airports will be selected for a more detailed comparative analysis of policy and outcomes. This will be presented in Chapters Four and Five.

3.2 The British Airports

3.2.1 Britain has a significant number of operational airports. It has even more aerodromes and general aviation airfields. These are not covered in this study.

3.2.2 The operational airfields covered in the study are listed below according to region. A number of airports which are, strictly speaking, outside of Britain, but within the United Kingdom, have been included for reference.
South East  *Heathrow, Gatwick, Stansted, Luton and Southampton*

South West  *Bristol*

West Midlands  *Birmingham*

East Midlands  *East Midlands*

Yorkshire Humberside  *Leeds Bradford*

North West  *Manchester and Liverpool*

North  *Newcastle and Tees-side*

Wales  *Cardiff Wales*

Scotland  *Glasgow, Edinburgh, Aberdeen and Sumburgh*

Northern Ireland  *Belfast and Belfast City*

Other  *Isle of Man*

3.2.3 The operational airports included in the study all handled over 300,000 passengers during 1991, according to the Civil Aviation Authority (CAA CAP 604, 1992). Those operational airports which did not handle 300,000 - *Bournemouth, Blackpool, Exeter, Humberside, Inverness, Kirkwall, Newquay, Norwich, Coventry, Cambridge, London City, Barrow-in-Furness, Dundee, Scilly Isles, and Penzance* - are excluded from the study. It was essential to provide a 'cut off' at some point, and 300,000 passengers per
annum gave a study sample of 21 airports.

3.3 United Kingdom Airports Policy

3.3.1 The United Kingdom has no national airports policy. National airport policy in this sense means a comprehensive framework in which to set the operation, role, expansion, and effects of each and every airport in the country. That is not to say that genuine attempts to establish such a policy have not been made in the past. This section briefly sets out the way in which the government attitude has developed.

3.3.2 Shortly after World War Two Heathrow Aerodrome, to the west of London, was designated as the main airport to serve commercial aviation for the capital. Its major role grew and in 1953, Gatwick, to the south, was selected as being the main alternative airport. Passenger traffic grew, and as early as 1957, the possible need for a third London airport was identified (Millburn Committee, 1957). By 1961 a government interdepartmental committee had recommended that Stansted, to the north east of London, should serve the third airport role.

3.3.3 A public inquiry was held into the Stansted proposal in 1966, but the proposal was rejected. Nevertheless, a government white paper, 'The Third London Airport', the following year again backed Stansted, and a final decision was only deferred when revised passenger forecasts were produced showing demand increasing less rapidly.

3.3.4 The government, realising that the third airport issue would eventually re-emerge, established the Roskill Commission in 1968 in order to investigate more thoroughly the need for, and possible location of, a third London
airport. After three years of intense deliberation and a vast amount of work and expense, the Roskill Commission recommended that a new airport would be required by the early 1980’s and it should be built at Cublington, to the north west of London. The government accepted that a new airport would be required but rejected the Roskill site. Instead it opted for a site recommended by a dissenting splinter group of the Commission at Foulness on the Essex coast, later renamed Maplin. The airport would be built on sand banks some distance from land.

3.3.6 In 1973 the Civil Aviation Authority (CAA) produced revised forecasts of air traffic and capacity at airports in the London Area, suggesting that capacity would be sufficient to meet demand for sufficiently long to put off the need for a new airport. The Maplin project ground to a halt and was never to re-emerge.

3.4 The 1978 Airports Policy White Paper

3.4.1 The Labour Government of 1974-79 made the first genuine attempt to provide a comprehensive national airports framework. In 1975 a set of consultation papers ‘Airport Strategy for Great Britain’ were produced, covering airports not just in the South East, but in the regions, Scotland and Wales. The consultation exercise lasted some time and in 1978 a white paper, ‘Airports Policy’ eventually emerged.

3.4.2 ‘Airports Policy’ provided for the first time a framework for a nationwide airports strategy. It set out to determine what type of airports were required for each region, although it was never intended to be a rigid plan of airport development. The classification was set out as follows:-
A  **Gateway International Airports**

Airports providing a wide range and frequency of international services, including inter-continental services and a full range of domestic services.

B  **Regional Airports**

Airports catering primarily for the demands of one part of the country. Some short haul international services, domestic links to international gateways and charter services.

C  **Local Airports**

Airports catering for local needs, including domestic feeder and some charter services, together with general aviation, including business and recreational flying.

D  **General Aviation Aerodromes**

Aerodromes providing general aviation facilities only.

3.4.3 In order to implement the strategy the aim was to classify the airports according to these categories. This classification would form the basis of future policy. The white paper included an undertaking by the government, and an instruction to the CAA, to take into account the policy when issuing permits for services by operators. Publicly owned airport authorities were expected to relate development of their airports to the policy. Crucially, local planning authorities were expected to have regard to airports policy in their consideration of proposals for development at and around airports - both on
and off the airport site - and government policies relating to employment, housing, roads and other infrastructure would be co-ordinated with the strategy.

3.4.4 The policy sought to reconcile conflicts of interest between local, regional, and national requirements. The primary objective in this sense was to establish limits to expansion at the South East airports, and to encourage growth at the regional airports, particularly those in areas which had Assisted Area status. The consultation exercise which preceded the white paper included an assessment of potential demand around the country, and the best ways in which to meet this demand, or redirect it to secure the governments overall objectives. The following decisions were made:-

**Heathrow** should be restricted to two runways and expanded to no more than four terminals. Approval for a fourth terminal was given in the same year.

**Gatwick** should be restricted to one runway and expanded to two terminals.

**Stansted** should be expanded to accommodate no more than 4 million passengers per annum. Further expansion would be subject to an assessment of how best to meet demand in the London area. The long term options included a major expansion of Stansted, the development of an existing military airfield, or the construction of a new airport. The Maplin project would not be reintroduced.

**Luton** should be expanded to no more than the full capacity of one terminal at 5 million passengers per annum.
3.4.5 Regional airports were classified according to the strategy framework:-

- Manchester: Category A
- Liverpool: Category C
- East Midlands: Category B (Category A long term)
- Birmingham: Category B
- Leeds Bradford: Category B
- Norwich: Category C
- Blackpool: Category C
- Humberside: Category C
- Coventry: Category D
- Newcastle: Category B
- Tees-side: Category C
- Carlisle: Category D
- Cardiff: Category B
- Bristol: Category C
- Exeter: Category C
- Southampton: Category C
- Bournemouth: Category D

(The government did not present a strategy for the Scottish airports since at the time it intended to devolve power to a Scottish Assembly)

3.4.6 The 1978 White Paper represented the first genuine attempt to provide a national framework within which to set plans for the expansion of individual airports. It provided the means by which growth at regional airports could be supported and at Heathrow and Gatwick resisted. If it had been fully implemented the results today would probably have been as follows:-

- No further growth at Heathrow above four terminals and two run-
ways.

No further growth at Gatwick above two terminals and one runway.

The full expansion of Stansted as third London airport.

The relief of pressure in the South East by the expansion of East Midlands Airport.

The expansion of Manchester to serve as major international airport for the north.

The return of a Conservative government in 1979 heralded the abandonment of a national airports strategy.

3.5 The 1985 Airports Policy White Paper

3.5.1 The vehement market-led approach of the Thatcher government made any notion of a national interventionist plan for airports a ‘non starter’. The government acted swiftly to privatise the British Airports Authority (now BAA Plc) and to transfer ownership of local authority run airports into private companies. It was not going to tell these private companies how to run their businesses, although they would have to operate within the constraints of the planning system. The government firmly believed that it was for these firms to bring forward proposals, in the form of planning applications, which would then be subject to public inquiry.

3.5.2 Inquiries relating to Heathrow, Gatwick and Stansted were held during the early years of the government. Approval was given for the wholesale
expansion of Stansted as London's third airport, and for the construction of a second terminal at Gatwick. Proposals for a fifth terminal at Heathrow were refused, primarily because of timing, but not ruled out totally.

3.5.3 A long awaited White Paper was published in 1985. It built upon the findings of the earlier public inquiries, and maintained the government's faith in the market. Critically, it constituted the overall means by which airport capacity could be provided where it was needed, ensuring that market conditions and commercial viability were the primary factors in considering what, where and when proposals should come forward. Support for the leading international role of Heathrow and Gatwick, and the encouragement of development of regional airports, was reaffirmed. However, it did state that the environmental impact of airports was to be minimised, and that planning policies should take into account both airport development needs and environmental consequences. Significantly, and perhaps in contradiction to other aspects of the statement, second runways were ruled out at Gatwick and Stansted.

3.5.4 The government have made no policy statements on airports since 1985, but their market orientation has been maintained as they have sought to deregulate the airport and airline system. In 1990 some airline restrictions were removed at Heathrow, leading to the overnight transfer of a number of important services from Gatwick.

3.5.5 The dramatic change in government attitude which came after the 1979 General Election left airport planning in a difficult position. The framework which had been carefully established by Labour had been left to gather dust. Meanwhile, an enormous number of proposals for airport expansion were emerging in the absence of any real guidelines on whether or not, in the national context, they should be accepted or rejected. Consequently pres-
sure for expansion was once again placed upon the South East airports. This became particularly intense at Heathrow given the undertakings regarding no second runways at Gatwick or Stansted.

3.6 Runway Capacity to Serve the South East

3.6.1 In the summer of 1988 the then Secretary of State for Transport Paul Channon asked the Civil Aviation Authority (CAA) to advise the government on, amongst other things, the need for and possible siting of a new runway in the South East. This followed new passenger demand forecasts which suggested that in the early years of the next century existing facilities would not cope. Sir Christopher Tugendhat, chairman of CAA responded in July 1990 with CAP 570 ‘Traffic distribution policy and airport and airspace capacity: the next 15 years’. Greenfield sites were not requested and so it identified a range of options short-listed on the basis of safety, airspace management, air traffic control, and the economic interests of the passenger. The short-listed sites were as follows:-

- A second runway at Gatwick
- A third runway at Heathrow
- A second runway at Stansted
- A runway extension at Luton
- Greater use of the runway at Lydd
- Greater use of the runway at Manston
- Greater use of the runway at Bristol Filton
- Greater use of the runway at Bristol Lulsgate
- Greater use of the runway at Bournemouth

The greater use of the runway at Southampton was later added to the short-list.
3.6.2 In November 1990 Channon's replacement, Cecil Parkinson, announced that a South East Runway Capacity Working Group (RUCATSE) had been established to build on the advice contained in CAP 570. The group, to be chaired by the Department of Transport, would look at 'the implications for regional development and the environment, surface access, aircraft noise, and practical matters' and in the light of these considerations advise the Secretary of State on the possible course. The group included a vast array of organisations, including representatives of the London and South East Regional Planning Conference (SERPLAN), other government departments, and the air transport industry.

3.6.3 The progress of RUCATSE has been extremely slow. In response to parliamentary questions in December 1992, the Government announced that the Bristol, Bournemouth and Southampton options had been effectively ruled out. Lydd and Manston were looking doubtful, and so more detailed work was to be completed on the core options of Heathrow, Gatwick, Stansted and Luton. This work was expected to be completed during the summer of 1993. Additionally the promoters of an offshore airport in the Thames Estuary - Marinair - are expected to present a report which will be considered alongside the RUCATSE findings.

3.6.4 The final sentence in the 1992 parliamentary answer is of crucial importance. The government reaffirmed its view that it is for promoters rather than government to make specific proposals, which would then be subject to the usual planning scrutiny. The clear implication of this is that the RUCATSE report will be undecided in its findings, and rather than presenting a preferred option will simply list the merits and demerits of each option.

3.6.5 In April of 1993 a promoter, BAA Plc, brought forward a proposal for a fifth terminal at Heathrow Airport which would increase its capacity to 80 million
Passengers per annum.

3.6.6 Although the RUCATSE exercise is primarily aimed at the provision of capacity in the long term, it seems almost certain to fail to resolve the difficulties which have dogged the national airport system for so many years. Since RUCATSE will most probably not recommend a preferred option it is quite possible that in the late 20th or early 21st century BAA Plc will submit a planning application for a third operational runway at Heathrow.

3.7 A Basic Lack of Direction

3.7.1 It has been clearly demonstrated that the history of national airports planning has been something of a policy debacle. It is an example of a policy area which is treated significantly differently depending on which political party is in power. Hence Labour attempts to implement a national interventionist strategy, albeit weak, followed by sharp shifts back to reliance upon the operation of the market under the Conservatives. This oscillation in policy has led to a potentially damaging lack of direction for the UK’s airports.

3.7.2 If the role of airports in the economies of localities is to be fully assessed and then airport growth is to be moulded to meet the varying requirements of these places - a central issue raised in this study - then this may be done within the overall guiding principals of a national airports plan. If planning is to play a worthwhile part in defining economic effects then it may require a coherent national airports policy context in which to work.
3.8 A Role For Planning?

3.8.1 The aim of this study is to investigate the role that planning plays in defining the economic effects of airports. However, the first part of this chapter has demonstrated an absence of basic national context in which to set airports growth. Consequently planning, at regional, strategic and local levels, must contend with forces which may well be beyond its control, such as decisions to expand capacity at Gatwick, Heathrow and Stansted airports.

3.8.2 The second part of this chapter seeks to demonstrate that planning must also compete with a multiplicity of other factors, relating to the local area and the airport itself, each of which plays an important part in moulding the economic effects. These include airport size and role, policy of the airport operator, remoteness of the airport, surface access, and state of the local economy. This report therefore looks at the all of the factors involved, including planning, before attempting to draw out any contribution which planning might make.

3.8.3 A straightforward way of demonstrating the various factors is to develop a matrix, or more properly a series of matrices. The assessment of the locational setting of each airport against these matrices should provide the basis of a typology of airports.

3.8.4 The aim of producing a typology is not to predict exactly the economic impact of each airport. Chapter Two has shown that this may well be a difficult, and any predictive model would be almost impossible to test given the resources available to this study. It should, however, demonstrate how the various factors influencing an airports impact interrelate and compete. It will also provide an indication of the potential magnitude of each airports effect in its local area, from which it will be possible to develop a hierarchy
of airports according to their potential economic importance.

3.8.5 The variables to be examined fall into two broad groupings:-

1 Airport Factors

This group includes all of the factors relating to the airport which will determine the size of its impact. They include the passenger throughput, the number of air transport movements, the amount of cargo handled and the number of destinations available.

2 Locality Factors

This group includes all of the attributes of the local area which may determine the size of an airport's impact. They include the planning policy attitude to the airport, the state of the local economy, and the location of the airport in relation to population centres and employment areas. It is expected that the planning attitude to the airport and the state of the local economy will be closely interrelated.

3.8.6 In order to complete this section of the study two surveys were undertaken, of airport operators and of strategic planning authorities covering the main airports. The details of how and when these surveys were undertaken are provided at the relevant point.

3.9 Airport Factors

3.9.1 This element of the assessment relates to the size, role and importance of the airport and seeks to categorise airports accordingly. It builds upon the findings of the research detailed in Chapter Two which discusses the
Various categories of airport impact. The constituent parts of the overall impact were defined as direct, indirect, induced and attracted. All four categories of impact will be affected by variables relating to the airport operation. For the purposes of simplicity, direct and indirect impacts are dealt with together.

3.9.2 Direct and Indirect Impacts

Direct and indirect impacts are dealt with together because the on-airport variables which affect the size and nature of the indirect impact do so via the direct impact.

Gatwick Airport Ltd (1991) forecasts of on airport employment are based upon a number of assumptions which may prove of use. They make their forecasts on the basis of what aspect of the operation of the airport various categories of employment are dependant upon. This 'dependency factor' may be helpful. The forecasts are made as follows:-

1 Activity of airlines, airport administration and government departments is dependant upon the number of air transport movements. Effectively this means that a certain level of expenditure or employment in these activities is necessary for each air transport movement, irrespective of the number of passengers it carries.

2 Activity in concessionaires is dependent upon the number of passengers handled by the airport. This means that shops, restaurants and banks on the airport will gauge expenditure and employment according to the number of passengers passing through the terminals irrespective of how many air transport movements these passengers come from.
In order to cover all of the direct and indirect activities covered in Chapter Two this concept has been extended to include impacts which, in the case of Gatwick, occur off the airport site.

Cargo activities have been been added as being dependent upon the amount of cargo handled. Although activities involved with the loading and unloading of cargo from aircraft at the airport, will be dependant upon the number of air transport movements, the vast majority of activity, including freight distribution and storage, courier services and bonded warehousing, will be dependant upon the amount of cargo handled by the airport. Cargo activity is not included in the Gatwick employment forecasts because cargo throughput is relatively small at that particular airport.

FIGURE 7 shows the dependence relationships as described.

3.9.3 Induced Impact

Airport operations only affect the induced impact in one way, that is in determining the size of the direct and indirect impacts. This multiplier is controlled by factors relating to the airport locality.

3.9.4 Attracted Impact

Given the conclusions of the studies detailed in Chapter Two it is important to include consideration of the likely factors affecting the size and nature of the attracted impact. However, it is probably not possible to determine the variables, on or off airport, upon which its size and nature will depend. The best that can be achieved is the provision of variables which may influence the location of attracted activity. These can be defined as follows:-
**FIGURE 7**

**Dependence Relationships Between Direct Indirect and Attracted Activities and Airport Operations**

<table>
<thead>
<tr>
<th>AIR TRANSPORT MOVEMENTS</th>
<th>PASSENGER THROUGHPUT</th>
<th>CARGO TONNAGE</th>
<th>DESTINATIONS SERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airlines</td>
<td></td>
<td></td>
<td>Cargo Airlines</td>
</tr>
<tr>
<td>General Aviation</td>
<td></td>
<td></td>
<td>Freight Forwarding</td>
</tr>
<tr>
<td>Government Departments</td>
<td></td>
<td></td>
<td>Haulage</td>
</tr>
<tr>
<td>Airport Management</td>
<td></td>
<td></td>
<td>Couriers</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
<td>Vehicle Maintenance and Parts</td>
</tr>
<tr>
<td>Flight Catering</td>
<td></td>
<td></td>
<td>Packaging</td>
</tr>
<tr>
<td>Aviation Parts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabin Accessories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft Cleaning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Wholesale and Distribution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Equipment Supply</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1 The **size** of the airport. The size of airports the world over is most commonly measured by passenger throughput.

2 The importance of the airport to international firms. Most of the studies detailed in Chapter Two referred to the range of services, particularly international scheduled services, available at an airport as being important in attracting firms. This can be measured conveniently in terms of the number international and intercontinental scheduled destinations served.

The relationship between airport operations and induced and attracted impacts also illustrated in FIGURE 7.

### 3.10 Measures of Airport Size and Role

**Sources**

3.10.1 Statistics concerning passenger throughput, air transport movements, cargo throughput and destinations served are provided by the Civil Aviation Authority on an annual basis. This study refers to data from CAP 604 (1991).

3.10.2 In order to test the assumptions made concerning direct activity it was also necessary to obtain information regarding the level and type of activity found on-site at airports. Chapter Two has demonstrated that the factors which affect the balance of direct activity between on and off site are numerous. However, the provision of data regarding the level of on site activity, when viewed alongside airport operational data, and when viewed against locality factors, should provide a broad indication of the level of activity to be expected off site.
3.10.3 Information regarding on site activity can only be obtained from airport operators. It was decided, therefore, that a survey of airport operators would be required. The most accessible information considered likely to be available related to on site employment and so questions concentrated upon employment matters. The survey was used to obtain information regarding passenger throughput, air transport movements, and cargo throughput to check against the CAA statistics. Additionally the survey was used to provide details of historical trends, the airport operators own forecasts, and their perception of the airports role in the local area. This information will be referred to in later chapters.

3.10.4 The Survey of Airport Operators was carried out during the summer of 1992. Questionnaires, together with reply paid envelopes were despatched to the operators of the 21 largest airports in the UK as listed in CAP 604 on the basis of the number of passengers handled per annum (Mppa). Once reminders had been sent out the total number of responses received was 15, a rate of 71%. Not all of the respondents were able to provide all of the data required. This was either because the data was not known to them or was confidential.

3.10.5 A copy of the questionnaire is included as Appendix 1. The survey was intended as an information gathering exercise and in order to obtain only the information required the questionnaire was designed to be as simple and straightforward as possible.

3.10.6 The data obtained from the survey generally matched that available in CAP 604, and in those instances where there was a discrepancy, the airport operators were contacted again to clarify which data should be used.
The Results

Results Regarding Airport Operations

3.10.7 The information obtained regarding the levels of passenger throughput clearly suggest that Heathrow is by far the largest airport in the UK, that Gatwick is about half the size of Heathrow, and that Manchester is about half the size again. All other airport operations are on a very much smaller scale.

3.10.8 However, although airport size is commonly equated with passenger throughput, its impact upon the local area has also been shown to be a function of the number of air transport movements and the cargo throughput.

3.10.9 Figures for passenger throughput, air transport movements and cargo throughput are shown in FIGURE 8.
### FIGURE 8

**Terminal Passengers, Air Transport Movements and Cargo Tonnage at UK Airports 1991**

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>Terminal Passengers</th>
<th>Air Transport Movements</th>
<th>Cargo Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>40 245 000</td>
<td>362 032</td>
<td>654 625</td>
</tr>
<tr>
<td>Gatwick</td>
<td>18 690 000</td>
<td>162 894</td>
<td>202 436</td>
</tr>
<tr>
<td>Manchester</td>
<td>10 101 000</td>
<td>124 269</td>
<td>66 045</td>
</tr>
<tr>
<td>Glasgow</td>
<td>4 154 000</td>
<td>71 187</td>
<td>14 893</td>
</tr>
<tr>
<td>Birmingham</td>
<td>3 247 000</td>
<td>65 513</td>
<td>26 000</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>2 340 000</td>
<td>49 504</td>
<td>1 100</td>
</tr>
<tr>
<td>Belfast</td>
<td>2 168 000</td>
<td>35 986</td>
<td>18 121</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>2 020 000</td>
<td>86 135</td>
<td>5 851</td>
</tr>
<tr>
<td>Luton</td>
<td>1 957 000</td>
<td>27 725</td>
<td>25 305</td>
</tr>
<tr>
<td>Stansted</td>
<td>1 685 000</td>
<td>35 770</td>
<td>32 549</td>
</tr>
<tr>
<td>Newcastle</td>
<td>1 527 000</td>
<td>28 560</td>
<td>942</td>
</tr>
<tr>
<td>East Midlands</td>
<td>1 145 000</td>
<td>27 869</td>
<td>8 410</td>
</tr>
<tr>
<td>Bristol</td>
<td>783 000</td>
<td>21 955</td>
<td>138</td>
</tr>
<tr>
<td>Leeds Bradford</td>
<td>683 000</td>
<td>18 829</td>
<td>400</td>
</tr>
<tr>
<td>Belfast City</td>
<td>537 000</td>
<td>18 434</td>
<td>825</td>
</tr>
<tr>
<td>Cardiff Wales</td>
<td>513 000</td>
<td>11 231</td>
<td>506</td>
</tr>
<tr>
<td>Isle of Man</td>
<td>473 000</td>
<td>16 439</td>
<td>3 526</td>
</tr>
<tr>
<td>Liverpool I</td>
<td>457 000</td>
<td>21 152</td>
<td>13 069</td>
</tr>
<tr>
<td>Sumburgh</td>
<td>433 000</td>
<td>21 094</td>
<td>1 035</td>
</tr>
<tr>
<td>Southampton</td>
<td>401 000</td>
<td>18 416</td>
<td>1 017</td>
</tr>
<tr>
<td>Tees-side</td>
<td>300 000</td>
<td>11 413</td>
<td>53</td>
</tr>
</tbody>
</table>

*Source: CAP 604, 1992 Civil Aviation Authority*

3.10.10 In order to provide a clearer indication of the order of magnitude of each airport according to each of the variables, values were converted into indices, with the highest value reduced to one and all other values calibrated.
accordingly between zero and one. Figure 9 shows the indices.

**FIGURE 9**

**Indices of Terminal Passengers, Air Transport Movements and Cargo**

**Tonnage at UK Airports 1991**

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>Terminal Passengers</th>
<th>Air Transport Movements</th>
<th>Cargo Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>Gatwick</td>
<td>0.4604</td>
<td>0.4323</td>
<td>0.3092</td>
</tr>
<tr>
<td>Manchester</td>
<td>0.2454</td>
<td>0.3222</td>
<td>0.1008</td>
</tr>
<tr>
<td>Glasgow</td>
<td>0.0965</td>
<td>0.1709</td>
<td>0.0227</td>
</tr>
<tr>
<td>Birmingham</td>
<td>0.0738</td>
<td>0.1547</td>
<td>0.0396</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>0.0511</td>
<td>0.1019</td>
<td>0.0016</td>
</tr>
<tr>
<td>Belfast</td>
<td>0.0468</td>
<td>0.0706</td>
<td>0.0276</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>0.0431</td>
<td>0.2135</td>
<td>0.0089</td>
</tr>
<tr>
<td>Luton</td>
<td>0.0415</td>
<td>0.0470</td>
<td>0.0386</td>
</tr>
<tr>
<td>Stansted</td>
<td>0.0347</td>
<td>0.0700</td>
<td>0.0496</td>
</tr>
<tr>
<td>Newcastle</td>
<td>0.0307</td>
<td>0.0494</td>
<td>0.0014</td>
</tr>
<tr>
<td>East Midlands</td>
<td>0.0212</td>
<td>0.0474</td>
<td>0.0128</td>
</tr>
<tr>
<td>Bristol</td>
<td>0.0121</td>
<td>0.0306</td>
<td>0.0001</td>
</tr>
<tr>
<td>Leeds Bradford</td>
<td>0.0085</td>
<td>0.0217</td>
<td>0.0005</td>
</tr>
<tr>
<td>Belfast City</td>
<td>0.0059</td>
<td>0.0205</td>
<td>0.0012</td>
</tr>
<tr>
<td>Cardiff Wales</td>
<td>0.0053</td>
<td>0.0000</td>
<td>0.0007</td>
</tr>
<tr>
<td>Isle of Man</td>
<td>0.0043</td>
<td>0.0148</td>
<td>0.0053</td>
</tr>
<tr>
<td>Liverpool</td>
<td>0.0039</td>
<td>0.0283</td>
<td>0.0199</td>
</tr>
<tr>
<td>Sumburgh</td>
<td>0.0033</td>
<td>0.0281</td>
<td>0.0015</td>
</tr>
<tr>
<td>Southampton</td>
<td>0.0025</td>
<td>0.0205</td>
<td>0.0015</td>
</tr>
<tr>
<td>Tees-side</td>
<td>0.0000</td>
<td>0.0005</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Derived from CAP 604, 1992 Civil Aviation Authority
3.10.11 The clear implication of this information is that there is a significantly greater proportional variation between airports in terms of passenger throughput and cargo handled than in terms of air transport movements. It also shows that airports vary their position in the order considerably depending upon which variable is measured. For instance, Glasgow Airport is the fourth largest in terms of passenger throughput, but fifth largest in terms of air transport movements, and only the eighth largest in terms of cargo throughput.

3.10.12 A number of the airports which record low scores according to passenger throughput in relation to the number of air transport movements record high scores for freight. These airports, primarily located towards the bottom of the hierarchy are likely to have a proportionately large amount of cargo dependent direct activity. Stansted and Liverpool provide the best examples of this type of airport. The very large airports - in terms of passenger throughput - where cargo is carried in the underbellies of passenger aircraft, record the highest scores for cargo. Heathrow, for example, rivals the sea port of Dover as the largest cargo port in the country.

3.10.13 Information obtained regarding the number of direct international destinations served by each airport sets Heathrow, Gatwick and Manchester quite apart from all other airports. Figure 10 sets out the number of international destinations served by each airport, split between European and Intercontinental services:-


### FIGURE 10

**European and Intercontinental Scheduled Destinations Served by UK Airports**

**1991**

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>European Destinations</th>
<th>Intercontinental Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>Gatwick</td>
<td>73</td>
<td>62</td>
</tr>
<tr>
<td>Manchester</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>Glasgow</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Birmingham</td>
<td>29</td>
<td>0</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Belfast</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Luton</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Stansted</td>
<td>29</td>
<td>0</td>
</tr>
<tr>
<td>Newcastle</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>East Midlands</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bristol</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Leeds Bradford</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Belfast City</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cardiff Wales</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Isle of Man</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Liverpool</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sumburgh</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Southampton</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Tees-side</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Calculated from CAP 604, 1992 Civil Aviation Authority

3.10.14 Less than half of the airports have a significant range of international scheduled services available and only four serve intercontinental scheduled destinations. This data was also converted into indices, as shown in FIGURE 11.
<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>European Destinations</th>
<th>Intercontinental Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Gatwick</td>
<td>0.760</td>
<td>0.633</td>
</tr>
<tr>
<td>Manchester</td>
<td>0.542</td>
<td>0.153</td>
</tr>
<tr>
<td>Glasgow</td>
<td>0.208</td>
<td>0.051</td>
</tr>
<tr>
<td>Birmingham</td>
<td>0.302</td>
<td>0.000</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>0.094</td>
<td>0.000</td>
</tr>
<tr>
<td>Belfast</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>0.042</td>
<td>0.000</td>
</tr>
<tr>
<td>Luton</td>
<td>0.135</td>
<td>0.000</td>
</tr>
<tr>
<td>Stansted</td>
<td>0.302</td>
<td>0.000</td>
</tr>
<tr>
<td>Newcastle</td>
<td>0.104</td>
<td>0.000</td>
</tr>
<tr>
<td>East Midlands</td>
<td>0.031</td>
<td>0.000</td>
</tr>
<tr>
<td>Bristol</td>
<td>0.063</td>
<td>0.000</td>
</tr>
<tr>
<td>Leeds Bradford</td>
<td>0.042</td>
<td>0.000</td>
</tr>
<tr>
<td>Belfast City</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Cardiff Wales</td>
<td>0.052</td>
<td>0.000</td>
</tr>
<tr>
<td>Isle of Man</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Liverpool</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Sumburgh</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Southampton</td>
<td>0.021</td>
<td>0.000</td>
</tr>
<tr>
<td>Tees-side</td>
<td>0.021</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Derived from *Civil Aviation Authority* CAP 604, 1992
On Site Activity

3.10.15 The Survey of Airport Operators, in addition to providing a check for the information contained in CAP 604, provided information on the nature and breakdown of employment on the airport.

3.10.16 Only 9 of the 21 airport operators surveyed carried out any monitoring of employment on the airport site. This is much lower than expected. Of the 9 authorities who provided an employment total, only 5 were able to break it down by function. The total employment at the respondent airports is shown in FIGURE 12.

FIGURE 12

On Site Employment at Responding Airports 1991

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>52272</td>
</tr>
<tr>
<td>Gatwick</td>
<td>20620</td>
</tr>
<tr>
<td>Manchester</td>
<td>10600</td>
</tr>
<tr>
<td>Glasgow</td>
<td>3460</td>
</tr>
<tr>
<td>Birmingham</td>
<td>4552</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>2727</td>
</tr>
<tr>
<td>Luton</td>
<td>4800</td>
</tr>
<tr>
<td>Newcastle</td>
<td>1500</td>
</tr>
<tr>
<td>East Midlands</td>
<td>3500</td>
</tr>
</tbody>
</table>
3.10.17 Employment in activities dependant upon passenger throughput and the number of air transport movements was investigated in more detail. The number of airport authorities which undertook separate monitoring of cargo dependent activities was too few to merit further analysis. FIGURE 13 shows employment in passenger dependent activities, while FIGURE 14 shows employment in air transport movement dependent activities.

FIGURE 13

Employment in Passenger Dependent Activities at Responding Airports
1991

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>6473</td>
</tr>
<tr>
<td>Gatwick</td>
<td>3906</td>
</tr>
<tr>
<td>Manchester</td>
<td>1484</td>
</tr>
<tr>
<td>Glasgow</td>
<td>3460</td>
</tr>
<tr>
<td>Birmingham</td>
<td>4552</td>
</tr>
<tr>
<td>Newcastle</td>
<td>760</td>
</tr>
</tbody>
</table>
FIGURE 14

Employment in Air Transport Movement Dependent Activities at Respondent Airports 1991

Employment

AIRPORT

Heathrow  43805
Gatwick    16478
Manchester 6996
Glasgow   2820
Birmingham 2874
Newcastle  760

3.10.18 Clearly the data in FIGURES 13 and 14 suggests that the number of air transport movements is the single most important determinant of the level of activity on an airport, and the number of passengers handled is of only secondary importance. *Despite this, most airport impact studies relate employment estimates to passenger throughput.*

**Making Use of the Results**

3.10.19 The results of the CAP 604 analysis and the airport survey was assessed in three steps:-

1. The employment results from the survey were used to check whether there is a relationship between the airport operations variables of
passenger throughput, air transport movements, and cargo tonnage, and the activity categories which were adjudged to be dependent upon them.

2  The CAP 604 data was used to construct a categorisation of airports.

3  The categorisation was used to provide an indication of the likely local impact of each airport in the absence of external factors.

3.11  Relationships Between Airport Operations and Employment

3.11.1 The common relationship of 1000 on site airport jobs per million passengers per annum identified by Ecole National De L'Aviation Civile in Paris was questioned in Chapter Two. The results of the analysis in this section show that no simple relationship exists in the British airports covered. The number of jobs per million passengers per annum varied from 833 at Glasgow to 3057 at East Midlands. The average number was recorded at over 1500, although the average for the four airports with the highest passenger throughput was 1071, which would suggest that the more mature British airports accord with the French model.

3.11.2 The relationship between activity and operations cannot, however, be so simple. Earlier in this chapter the various categories of airport activity were grouped according to what aspect of airport operations they were considered to be dependent upon. The results of the analysis suggest that there is a clear relationship between employment in two of the categories and the corresponding aspects of airport activities.
3.11.3 Employment in those categories which were adjudged to be dependent upon passenger throughput was investigated first. The number of jobs in these categories per million passengers at each airport was plotted against the airports passenger throughput. Figure 15 suggests that a negative relationship exists. Larger airports, such as Heathrow would appear to require substantially less passenger dependant activity for every million passengers handled that smaller airports, such as Newcastle. The implication of this is that economies of scale are usual in this employment category.

FIGURE 15

Employment Per Million Passengers Per Annum in Passenger Throughput Dependant Activities by Total Passenger Throughput 1991
3.11.4 Employment in those categories considered to be dependent upon the number of air transport movements were then investigated. Figure 16 suggests that in this case there is a positive relationship. Larger airports, such as Heathrow would appear to display a much higher level of air transport movement related activity for every ten thousand movements handled than smaller airports, such as Newcastle. This reflects the tendency for the larger airports to have greater concentrations of airline functions such as maintenance, administration and book facilities. It also suggests that economies of scale are not achieved in this category. This runs contrary to the position known to be held by BAA Plc who consider that larger airports require fewer workers per unit than smaller ones.

FIGURE 16

Employment Per 10,000 Air Transport Movements in ATM Dependant Activities by Total Number of ATM's 1991
3.11.5 A similar relationship could not be demonstrated between cargo throughput and jobs dependent upon it because data was not available, although one may well exist. Given the dramatic differences in the level of cargo throughput at the airports which is not necessarily related to their size, in terms of passenger throughput, an arbitrary relationship will have to be assumed. Given that the level of cargo related employment on all of the airports surveyed was proportionately low this assumption should not distort the overall assessment.

3.11.6 In order that the study can proceed on this basis a standard ratio has been adopted for cargo related employment. The average of the four airports which recorded cargo employment was 74 jobs per 10,000 tonnes of cargo handled. There was no clear relationship between the total amount of cargo handled and the number of jobs per unit tonnage.

3.12 A Categorisation of Airports

3.12.1 There is no universally acceptable system for classifying airports, although the intentions of the 1978 Airports Policy White Paper went a way towards achieving a classification. This study aims to sort airports into categories according to the attributes which have been assessed in this Chapter.

3.12.2 The categories are similar to those described by Renfrewshire Enterprise (1992) in relation to their study of the role of Glasgow Airport. They divided airports into five categories, described as tiers relating to the passenger throughput, destinations served and level of development at each airport. The categories are summarised as follows:-

1 Origin-Destination Airport. Under two million passengers using short haul services. Small amount of airport industry including a small hotel
close to the airport.

2 **Regional Gateway.** 1.5 to 2.5 million passengers per annum. Short haul services and transfer point to smaller airport within the region. Routine aircraft maintenance, small hotel, 10-15 freight forwarding companies.

3 **Regional Interchange/Small International Gateway.** 4.5 to 7.5 million passengers per annum, serving 15-35 international destinations and 5-10 intercontinental destinations. Modest aircraft maintenance facilities, aircraft parts activities, medium sized hotels, 25-50 major freight forwarders, regional or national headquarters of businesses not otherwise related to the airport.

4 **International Gateway.** National gateway and transfer point to other parts of the country. 7.5-15 million passengers per annum, 35-90 international destinations, 10-40 intercontinental destinations. Specialised maintenance facilities, airline reservations centres, 5-10 large hotels, 50+ freight forwarders, substantial number of high tech companies, airlines and headquarters functions attracted to the area.

5 **Large International Gateway.** Largest airports in the world which serve intercontinental air travel as the gateway to a continent. Over 15 million passengers per annum, 100 international destinations, 40 intercontinental destinations.

3.12.3 The Renfrewshire classification is useful. On the basis of the assessment done, however, the number of air transport movements has been shown to be the single most important determinant of airport size and impact. Consequently the framework has been modified to account for this. Addi-
tionally the number of categories has been altered. The Renfrewshire category of Regional Gateway is not really appropriate to British airports, apart from in remoter areas of the country, such as northern Scotland where Aberdeen serves a similar purpose. This category has therefore been merged with the Origin-Destination category to form a new Regional Airports category. Beneath that a new category has been formed to cover small airports which only cater for general aviation and a small amount of passenger traffic. The Regional Interchange category has been altered to refer to Transitional Airports. Other minor changes have also been made in relation to the definition of each category. The new categorisation is as follows:-

**Level One**  
**Local and General Aviation Airports**

Airports catering primarily for general aviation but with a small number of domestic destinations available and one or two international services to destinations fairly close by. Airports serve a limited local area or island community. Passenger throughput up to one million but usually significantly less. Less than 25,000 air transport movements.

According to the data assessed in this chapter **Belfast City, Isle of Man, Liverpool, Sumburgh, Southampton** and **Tees-side** fit into this category. All serve a limited local areas and are partly dependant upon general aviation activity. The small number of passenger destinations are provided by charter services to European holiday resorts (CAP 604, 1991). Each airport has only one or two international scheduled services available.
Level Two Regional Airports

Airports serving a region. A range of domestic destinations and up to 20 international scheduled destinations across Europe. Passenger throughput of up to 2.5 million passengers per annum and up to 50,000 air transport movements per annum.

The data suggests that the airports which fit most comfortably into this category are Edinburgh, Belfast, Aberdeen, Newcastle, and East Midlands. Each serves an easily definable regional or sub-regional area and in addition to a modest number of scheduled European destinations each airport offers a wide range of charter holiday destinations including some in the United States (CAP 604, 1991).

Bristol, Leeds Bradford and Cardiff Wales can also be defined as Regional Airports, but their role is less discernible. All three have a low level of passenger throughput and a number of air transport movements which is less than the definition allows. However, they offer more international scheduled destinations than would be expected for a Local airport.

Luton and Stansted are currently operating as Regional airports for the South East. Stansted, however, has a much higher number of international scheduled destinations than would be expected. This is in line with the intention of BAA Plc to operate it eventually as an International Gateway airport.

Level Three Transitional Airports

Airports in the process of developing from regional to international gateway status. A wide range of domestic services and more than 20 scheduled
European services. A small number of Intercontinental scheduled services. Passenger throughput of between 2.5 and 7.5 million per annum, and between 50,000 and 100,000 air transport movements.

**Birmingham** and **Glasgow** Airports fall into this category. Both have a range of European scheduled services and Glasgow offers a small number of intercontinental services.

**Level Four** International Gateway Airports

Airports serving as gateways to Britain. A full range of domestic destinations and over 50 scheduled destinations across Europe, and more than 10 intercontinental scheduled destinations. Passenger throughput of between 7.5 and 15 millions per annum, and between 100,000 and 150,000 air transport movements.

**Manchester** is the only British airport in this category. It has a large range of European and fifteen intercontinental destinations.

**Level Five** Large International Gateway Airports

Airports serving as a main intercontinental gateway to Europe. A full range of domestic services and over 50 scheduled destinations in Europe. Over 50 intercontinental destinations. Passenger throughput of over 15 million, and over 150,000 air transport movements per annum.

**Heathrow** and **Gatwick** are Britain's two Large International Gateway Airports. Both airports have a very large number of European and intercontinental scheduled services available.
3.13 Relating the Airport to the Local Impact

3.13.1 The Renfrewshire Enterprise categorisation provided a simple indication of the level of activity likely to be associated with each airport category. This study seeks to provide a similar guide, but one which takes into account non-airport Locality factors.

3.13.2 The role that airport factors play has been discussed both in this Chapter and in Chapter Two. In order to provide a guide to the likely local impact of each airport - in the absence of Locality factors - the categorisation and index approaches have been brought together into a simple model.

3.13.3 Details of the model are shown in FIGURE 17.

3.13.4 The model is only intended to be ‘broad brush’ and illustrative. It is split into two sections dealing with direct and indirect impact in one half and attracted impact in the other. Each half is formed from the airport operational indices already identified as being important.

3.13.5 The direct and indirect impact section is formed of indices of passenger throughput, air transport movements, and cargo throughput. These indices have been weighted according to the average level of importance of each operational aspect at the respondent airports. This was derived simply by calculating the average proportion of employment across the airports studied dependant upon each operational aspect. The weightings were made as follows:-

- Passenger throughput determines 16% of employment and is weighted 3 times.
FIGURE 17

Model of Potential Impact of Airports Studied

<table>
<thead>
<tr>
<th></th>
<th>Passenger Index</th>
<th>ATM Index</th>
<th>Cargo Index</th>
<th>Direct Europe Index</th>
<th>Intercontinental Index</th>
<th>Attracter Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatwick</td>
<td>0.4604</td>
<td>0.4223</td>
<td>0.3092</td>
<td>0.4304</td>
<td>0.750</td>
<td>0.633</td>
</tr>
<tr>
<td>Heathrow</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
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<td>0.1006</td>
<td>0.2996</td>
<td>0.542</td>
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<tr>
<td>Glasgow</td>
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<td>0.1709</td>
<td>0.0227</td>
<td>0.1523</td>
<td>0.208</td>
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<tr>
<td>Birmingham</td>
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<td>0.1547</td>
<td>0.0396</td>
<td>0.1366</td>
<td>0.302</td>
<td>0.000</td>
</tr>
<tr>
<td>Aberdeen</td>
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<td>0.2135</td>
<td>0.0089</td>
<td>0.1777</td>
<td>0.042</td>
<td>0.000</td>
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<td>Belfast</td>
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<td>Stansted</td>
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<tr>
<td>Edinburgh</td>
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<td>Luton</td>
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<td>Newcastle</td>
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<tr>
<td>Leeds Bradford</td>
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<td>0.0005</td>
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<td>Cardiff Wales</td>
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<td>0.0007</td>
<td>0.0006</td>
<td>0.052</td>
<td>0.000</td>
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<td>East Midlands</td>
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<td>0.0128</td>
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<td>0.031</td>
<td>0.000</td>
</tr>
<tr>
<td>Bristol</td>
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<td>0.0306</td>
<td>0.0001</td>
<td>0.0263</td>
<td>0.063</td>
<td>0.000</td>
</tr>
<tr>
<td>Sumburgh</td>
<td>0.0033</td>
<td>0.0281</td>
<td>0.0015</td>
<td>0.0231</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Southampton</td>
<td>0.0025</td>
<td>0.0205</td>
<td>0.0015</td>
<td>0.0166</td>
<td>0.021</td>
<td>0.000</td>
</tr>
<tr>
<td>Liverpool</td>
<td>0.0039</td>
<td>0.0283</td>
<td>0.0199</td>
<td>0.0242</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Teesside</td>
<td>0.0000</td>
<td>0.0005</td>
<td>0.0000</td>
<td>0.0004</td>
<td>0.021</td>
<td>0.000</td>
</tr>
<tr>
<td>Isle of Man</td>
<td>0.0043</td>
<td>0.0148</td>
<td>0.0053</td>
<td>0.0128</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Belfast City</td>
<td>0.0059</td>
<td>0.0205</td>
<td>0.0012</td>
<td>0.0174</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>
- Air transport movements determine 81% of employment and is weighted 16 times.

- Cargo handled determines 3% of employment and is given a weighting of 1.

3.13.6 The indices for each operational variable were multiplied according to their weighting, added together and then divided by 20 (the total of the weightings). The resulting figures for each airport were then ranked.

3.13.7 The direct and indirect ranking represents a hierarchy of airports according to their potential direct and indirect impact. It does not accord exactly with the categorisation of airports described in 3.12.3. Aberdeen performs well as a consequence of the large number of air transport movements to the North Sea oil fields, and Liverpool because of its relatively large number of movements. Conversely, Cardiff Wales underperforms because of its low number of movements, as does Leeds Bradford. However, generally all other airports conform to the categorisation.

3.13.8 The attracted impact section was formed from indices of passenger throughput and European and Intercontinental destinations served. This 'attraction' index is intended to demonstrate the potential attractiveness of a location at each airport in the absence of all other factors. Passenger throughput is used as a proxy for the level of airport use and destinations served as a proxy for international accessibility. None of the indicators were given a weighting.
3.13.9 This ranking is intended to be an illustrative hierarchy of airports according to their ability to attract firms not otherwise related to aviation in the absence of all other factors. The airports perform exactly according to the categorisation.

3.13.10 It would be possible only with difficulty to combine fully the two indexes, and this was not attempted. The combined model would have indicated a hierarchy of airports according to their potential impact in the absence of other factors. Heathrow and Gatwick are clearly shown as having the most powerful potential, with Heathrow showing a potential of around twice that of Gatwick in both categories. Manchester would show a potential of around half that of Gatwick in both categories, and Glasgow and Birmingham would show about half the potential of Manchester in both. Most other airports show a relatively minor potential in comparison.

3.1.3.11 The categorisation established fits well into the hierarchy which emerges from this simple model. For this reason it is used alongside other factors discussed later.

3.13.11 It is not wise to deduce too much from these findings. Although the size and role of the airport will be important determinants of its effects in the local area, there will clearly be other factors at play. These are dealt with in the remainder of this chapter.
3.14 **Locality Factors**

3.14.1 The effects of an airport upon its local area will depend not only on its size and role, but also on the nature of the local area. This section deals with the key features of an airports setting which are likely to influence its impact. These are planning policy and economic background.

3.14.2 In attempting to separate out the role that planning plays from other economic factors it has become clear that planning policy and economic circumstance are intrinsically linked. Prevailing economic conditions in all airport localities are the most important factors in defining planning approach. Consequently the two have been dealt with together.

3.14.3 Other local considerations include the level of urbanisation in the area around the airport, its location in relation to major population centres, and the level of surface accessibility. These are not dealt with directly but are generally reflected in planning policies for the area around each airport.

3.15 **Planning Policy and the Local Economy**

3.15.1 This section assesses the role of planning. There are two primary objectives in doing this:-

1. To feed into the categorisation of airports a matrix which represents planning policy, alongside all other factors being considered,

2. To provide a typology of planning policies with regard to airports which stands in its own right.
3.15.2 In fact it is necessary to categorise planning policy approaches to airport development in order to meet the first objective. This is not a straightforward task, and has been completed in three distinct stages:-

1. Find a model which categorises planning approaches generally,

2. Dismantle the elements of the model and assess which can be utilised in this study,

3. Reconstruct the model with respect to policy attitudes to airports.

Stage One

3.15.3 A versatile categorisation of planning styles was obtained from Brindley et al (1989). They categorise approaches to planning according to what they believe are growing ideological and economic cleavages in society. In all they identify six styles of planning, relating to three economic cleavages, and two ideological responses to each. They admit that the typology is a simplification, and that in reality the approaches are part of a continuum. Nevertheless, the structure of the approach is suitable for use here.

Stage Two

3.15.4 The model has two groups of elements, one concerning the attitude of planning authorities and the other relating to the economic circumstances of the locality in which the planning authorities operate. Together these elements form a matrix in which approaches to planning are identified.

The matrix produced by Brindley et al is replicated in FIGURE 18.
FIGURE 18

A Typology of Planning Styles

<table>
<thead>
<tr>
<th>Attitude to Market Process</th>
<th>Market Critical</th>
<th>Market Led</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Redressing the imbalances and inequalities created by the market</td>
<td>Correcting inefficiencies while supporting the market process</td>
</tr>
<tr>
<td>Buoyant Area</td>
<td>Regulative Planning</td>
<td>Trend Planning</td>
</tr>
<tr>
<td>Marginal Area</td>
<td>Popular Planning</td>
<td>Leverage Planning</td>
</tr>
<tr>
<td>Derelict Area</td>
<td>Public Investment Planning</td>
<td>Private Investment Planning</td>
</tr>
</tbody>
</table>

Source: 1989 Brindley, T, Rydin, Y & Stoker, G *Remaking Planning: The Politics of Urban Change in the Thatcher Years*
3.15.5 The ideological elements of the model provide a useful basis for the approach developed in this study, but no more. In the Brindley et al model ideological cleavages are identified according to the authorities view of the market. Two cleavages are described, as follows:-

1. Planning with a positive view of the market process which seeks only to correct inefficiencies in its operation,

2. Planning which attempts to redress the inequalities of the market.

Ideally these cleavages would need to be translated into the authorities attitude to the airport rather than the market, but this would be far to simplistic a methodology. Similarly, any attempt to categorise authorities according to their view of the market process, and then assume that their view of the airport was similar, would be dangerous and subjective. Consequently it is necessary to create a new set of cleavages which apply specifically to the authorities attitude to airport matters. It may well be that authorities who take a positive view of the market generally take a more negative view in relation to an airport, with all of its implications. The Authority attitude to the airport manifests itself most usually in planning policies, but also in strategies, action plans, and promotional exercises.
3.15.6 The economic elements of the model could prove more useful. They are identified as follows:

1  Buoyant. Areas where private companies will invest without subsidy.

2  Marginal. Areas where private companies will invest if subsidies are available.

3  Derelict. Areas where subsidies will not ensure investment.

Although the third category is not likely to apply to this study, as Brindley et al intended it to relate primarily to inner urban areas, this classification is a reasonable framework for the classification of localities. However, for the purposes of this study the definitions of each type of area require amplification and some alteration.

Stage Three

3.15.7 In order to reconstruct the model according to airport planning policy it was necessary to obtain information regarding specific policies from local authorities covering airport areas. It was adjudged that strategic policy attitude would be more relevant to this study.

3.15.8 In order to obtain this information a Survey of Strategic Planning Authorities was carried out. The survey covered those county and unitary authorities covering or very closely adjacent to the largest 21 airports in terms of passenger throughput. 31 authorities were contacted in all, although 3 authorities were contacted twice reflecting the location of 2 airports close by. 34 Questionnaires, together with reply paid envelopes, were despatched during the autumn of 1992. Once reminders had been sent out the total
number of responses received was 28, a rate of 82%. All of the respondents provided full details of their policy position.

3.15.9 A copy of the questionnaire is included as Appendix 2. As with the previous survey, the Survey of Strategic Planning Authorities was intended as an information gathering exercise. The questionnaire asked a series of questions relating to policies for on-site direct activity, off site direct activity, and attracted activity. Each element was described in simple terms and examples of each were given. Questions also related to initiatives launched by authorities to encourage development in relation to the airport, monitoring which might have been undertaken in relation to airport activity and studies undertaken into the wider local effects of the airport.

3.15.10 The results of the survey suggest that authorities take one of three broad attitudes to their airport and its effects. This attitude may vary according to different aspects of the airport impact, and depends upon the level of awareness the authority has of the airport and the level of distinction the authority makes between the airport and other local activities. Generally the authorities covering smaller airports have a less focused attitude in reflection of their perception of the airports lesser importance to the wider area.
3.15.11 Specific assessment was made of local authorities attitudes relating to three issues:-

1 Policy concerned with the airport itself, whether it should expand and whether its growth has the support of the authority.

2 Policy concerned with direct impacts off the airport site, how the authority views them, whether the authority seeks to restrict them or accommodate them, and whether the authority makes specific allowance for them.

3 Policy concerned with inward investment, whether the authority encourages inward investment in connection with the airport, whether airport locations are promoted and whether specific provision is made for the accommodation of attracted firms close to the airport.

3.15.12 Three broad attitude categories were identified, and named as restrictive, reactive, and pro-active. Each can be defined according to which one of the airport issues identified in 3.15.1 is applicable.
3.16 Policies Relating to Airport Expansion

3.16.1 The attitude to the airport expansion differed markedly among authorities surveyed. The following categorisations were made:-

Restrictive

3.16.2 The authority is broadly opposed to the expansion of the airport and seeks to prevent growth above its existing capacity through policy measures. Other planning policies may be based upon an airport capacity below that assumed by the airport operator.

3.16.3 The authorities which fall into this category are West Sussex and Surrey relating to Gatwick; Surrey, Hounslow and Hillingdon relating to Heathrow; and Essex relating to Stansted. All five authorities have policies which restrict the throughput of the respective airports. For example, Essex have permitted a throughput of 8 million passengers per annum, and a rise to 15 million would require parliamentary approval. However, this compares to a potential capacity of at least 30 million in the estimation of BAA Plc. The London Borough of Hillingdon Unitary Development Plan includes Policy A1 which seeks to contain further expansion at Heathrow Airport within its present runway capacity, as constrained by existing hours of operation, limitation of night flying and current noise restrictions. Hillingdon, therefore, seek to contain the airport at a throughput below is potential full operational capacity for these reasons.

Reactive

3.16.4 The authority has no clearly defined attitude to the airport and its expansion. No specific policy exists which is aimed at restricting expansion of airport
capacity. The authority reacts to expansion proposals when they come forward. The authority may not view the airport as an important planning priority.

3.16.5 The majority of the authorities surveyed fall into this category, primarily reflecting the fact that a significant number are not at all 'geared up' for dealing with the airport. Others, however, base their position on a detailed awareness of the role the airport plays in the local area, and seek to view expansion proposals on their merits and balance them with other local objectives.

3.16.6 For example, Leicestershire County Council would appear to be fully aware of the potential of East Midlands Airport. They have policies which presume against airport expansion until there are firm proposals for the future of the airport which contemplate the extension of facilities on a scale which would change the character of the airport and have significant implications for the surrounding areas. If such proposals do come forward then the County Council states that it would react by producing a revised Structure Plan for submission to the Secretary of State.

3.16.7 Avon County Council support Bristol Airport as the civil airport for Avon, and do not have any specific policies aimed at restricting airport growth. The airport falls within the West Avon Green Belt yet development proposals within the airport boundary have in the past been considered as an exception to Green Belt policy. Hampshire County Council Approved Structure Plan Policy T11 supports the continued sub regional role of Southampton Airport.
3.16.8 The authority supports the expansion of the airport and seeks to benefit as far as possible from the expansion. Long term planning is formulated on the basis that the airport is vital to the local economy.

3.16.9 For example, South Glamorgan County Council Approved Structure Plan Policy M16 presumes in favour of the continued development of Cardiff Wales Airport. Newcastle City Council have placed no planning restrictions upon the throughput of Newcastle Airport. The Draft Newcastle Unitary Development Plan 1991 proposes to allow for the expansion of the airports capacity for passengers and cargo in order that the airport retains its role as a regional gateway. Manchester City Council support the provision of additional capacity at Manchester Airport including second operational runway. Solihull Borough Council support in their Unitary Development Plan 1990 reasoned proposals for the development of the airport for passenger and freight services at Birmingham Airport.

3.16.10 The attitude of all of the local authorities surveyed fitted into one of these categories. FIGURE 19 allocates local the local authorities according to the category in which they best fit. Appendix 3 contains a full list of the policies which were provided by the local authorities relating to airport expansion.
FIGURE 19

The Attitude of Local Authorities to Airport Expansion

<table>
<thead>
<tr>
<th>RESTRICTIVE</th>
<th>REACTIVE</th>
<th>PRO-ACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opposed to airport expansion</td>
<td>No clearly defined attitude to airport expansion</td>
<td>Supports airport expansion</td>
</tr>
</tbody>
</table>

- HEATHROW
  - Surrey
  - Hounslow
  - Hillingdon
- GATWICK
  - West Sussex
  - Surrey
- STANSTED
  - Essex
- BRISTOL
  - Avon
- SOUTHAMPTON
  - Hampshire
- TEES-SIDE
  - Durham
- ABERDEEN
  - Grampian
- EAST MIDLANDS
  - Leicestershire
- LUTON
  - Bedfordshire
- CARDIFF WALES
  - South Glamorgan
- LIVERPOOL
  - Liverpool*
- BIRMINGHAM
  - Solihull
- NEWCASTLE
  - Newcastle
- MANCHESTER
  - Manchester
- CHESHIRE
  - Cheshire
- GLASGOW
  - Strathclyde

* Liverpool City Council support the expansion of Liverpool Airport, but await the intentions of the owners, British Aerospace.
3.17 **Policy Relating Direct and Indirect Impacts in the Local Area.**

3.17.1 A similar range of attitudes was observed in relation to direct and indirect effects of the airport in the local area. Attitudes tended to manifest themselves in policies for or against off site airport related development. The same set of attitude categories were considered to be appropriate. The following categorisations were made:

**Restrictive**

3.17.2 The authority is against the spread of airport effects across the local area. This will manifest itself in policies which aim to prevent development related to the airport from occurring off the airport site. The authority may specifically have policies which restrict airport related development to the site itself.

3.17.3 For example, Avon County Council consider that proposals for the development of ancillary facilities in proximity to Bristol Airport, and therefore in the West Avon Green Belt, are likely to be treated as inappropriate. The Essex County Structure Plan Policy T25 makes provision for all development directly related to the airport to be located on the site of Stansted Airport. The London Borough of Hounslow Draft Unitary Development Plan contains policy T4.3 which states that 'development at Heathrow Airport, which is directly related to its functioning and operation, must take place within the airport boundary'.
Reactive

3.17.4 The authority is not opposed to the development of airport related activity off the airport site. Authorities in this category do not have policies to restrict development to the airport site, but may also not have specific proposals for accommodating this development. They do not allocate land for these purposes and assume that direct and indirect activities will locate on land included in provisions for employment development more generally. The degree to which authorities make specific reference to off site airport activities differs markedly.

3.17.5 For instance, the West Sussex Replacement Structure Plan 1993 allows for airport related development to take place on land allocated for commercial and industrial development generally. This is in the context of an overall strategy which seeks to restrain the amount of land available for development. The Strathclyde Structure Plan, on the other hand, does not specifically mention airport related development, but seeks more generally to provide an adequate supply of land for industrial and office premises in the area around Glasgow Airport in order to positively anticipate and enable development. Grampian Regional Council have no policy to deal with airport related development, but do not seek to prevent off site airport activities from taking up development opportunities on adjacent industrial sites.

Pro-active

3.17.6 The authority is in favour of the airports direct impacts spreading across the local area and may provide encouragement for this. The authority will usually have policies aimed at providing land specifically to meet the needs of airport related development off the airport site.
3.17.7 For example, the Solihull Unitary Development Plan 1990 Policy E3 provides for the allocation and safeguarding of land adjacent to Birmingham airport to allow for the development of related uses. The Draft Unitary Development Plan of Newcastle City Council (1991) proposes an Airport Development Zone adjacent to Newcastle Airport to accommodate airport related development. South Glamorgan County Council support the Cardiff Wales Airport Development Strategy 2001 which includes the identification of new development opportunities for airport related industry.

3.17.8 The attitude of all of the local authorities surveyed fitted into one of the three categories. The breakdown of authorities is shown in FIGURE 20. A full list of the policies provided in the survey is given in Appendix 4.

3.18 Policies Relating to the Airport and Inward Investment

3.18.1 Attitudes relating to the use of the airport as an inward investment tool represent the greatest dichotomy. Attitudes tend to manifest themselves in policies for the promotion of the area around the airport, and in the extreme will involve the allocation of land for the accommodation of attracted firms.

Restrictive

3.18.2 The authority does not seek to encourage inward investment and makes no effort to use the airport for these purposes. Authorities may specifically discourage development in the immediate area of the airport. These authorities consider that the economic costs of the airport, in terms of development pressure and congestion, outweigh the benefits.
FIGURE 20
The Attitude of Local Authorities to Direct and Indirect Airport Impacts in the Local Area

<table>
<thead>
<tr>
<th>RESTRICTIVE</th>
<th>REACTIVE</th>
<th>PRO-ACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opposed to the spread of airport impacts</td>
<td>Not opposed to the spread of airport impacts but no specific allowance made in plans</td>
<td>In favour of spread of airport impacts with specific land allocation to accommodate firms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRISTOL Avon</th>
<th>SOUTHAMPTON Hampshire</th>
<th>MANCHESTER Manchester Cheshire</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANSTED Essex</td>
<td>TEES-SIDE Durham</td>
<td>NEWCASTLE Newcastle</td>
</tr>
<tr>
<td>HEATHROW Surrey</td>
<td>ABERDEEN Grampian</td>
<td>BIRMINGHAM Solihull</td>
</tr>
<tr>
<td>GATWICK Surrey</td>
<td>EAST MIDLANDS Leicestershire Derbyshire Nottinghamshire</td>
<td>CARDIFF WALES South Glamorgan</td>
</tr>
<tr>
<td></td>
<td>LUTON Bedfordshire Hertfordshire</td>
<td>LIVERPOOL Liverpool</td>
</tr>
<tr>
<td></td>
<td>HEATHROW Hounslow Hillingdon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GATWICK West Sussex</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIRMINGHAM Birmingham</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NEWCASTLE Northumberland</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GLASGOW Strathclyde</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STANSTED Hertfordshire</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIVERPOOL Knowsley</td>
<td></td>
</tr>
</tbody>
</table>
3.18.3 West Sussex and Surrey County Councils in relation to Gatwick are good examples of this approach. Neither County Council offers any incentives to firms wishing to invest in the area, nor do they actively promote the airport area as a business location. Both seek only to meet the growth needs of existing firms. Essex maintain a similar position in relation to Stansted.

Reactive

3.18.4 The authority seeks to encourage inward investment but does not make any specific efforts to link this to the airport. These authorities have either decided not to take advantage of airport as an inward investment attraction, do not consider it to be an advantage, or are unaware of the potential role it might play.

3.18.5 Durham and Northumberland County Councils have no policies relating to Tees-side and Newcastle airports respectively, yet both are keen to encourage inward investment. Other Structure Plan policies dictate that the areas close to each of the airports area not suitable for allocation for employment growth. The Newcastle airport site is surrounded by Green Belt on its Northumberland side; the area around Tees-side airport is subject to Durham policies for the countryside.

Pro-active

3.18.6 The authority seeks to encourage inward investment through long term planning including the promotion of the airport and the allocation of sites in its vicinity. The authority will be fully involved in publicity of the airport area as a business location, and may make specific provision for the development of business park facilities.
3.18.7 For example, Solihull Borough Council see Birmingham Airport as being an important contributant to the regeneration of the West Midlands. A large number of business development allocations have been made in the immediate airport locality. The Leicestershire Structure Plan reflects the Regional Strategy for the East Midlands in seeking to provide suitable and accessible sites for business which would benefit from proximity to the airport. South Glamorgan County Council via input into the Cardiff Wales Airport Development Strategy support the identification of sites for business development adjacent to the airport. They also undertake marketing and publicity in conjunction with the airport company and the Welsh Development Agency. Even the London Borough of Hounslow have economic development policies which promote the area on the basis of its proximity to Heathrow Airport and the links which can be established with it.

3.18.8 Again, the attitude of all of the authorities surveyed fitted into one of the three categories, as shown in FIGURE 21. A full list of policies provided is included in Appendix 5.
## FIGURE 21

### The Attitude of Local Authorities to the Airport and Inward Investment

<table>
<thead>
<tr>
<th>RESTRICTIVE</th>
<th>REACTIVE</th>
<th>PRO-ACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inward investment not encouraged</strong></td>
<td><strong>Inward investment encouraged but not linked to the airport</strong></td>
<td><strong>Inward investment encouraged in association with the airport</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANSTED</th>
<th>SOUTHAMPTON</th>
<th>MANCHESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essex</td>
<td>Hampshire</td>
<td>Manchester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cheshire</td>
</tr>
<tr>
<td>HEATHROW</td>
<td>TEES-SIDE</td>
<td>GLASGOW</td>
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<td>Surrey</td>
<td>Durham</td>
<td>Strathclyde</td>
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<td>GATWICK</td>
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<td></td>
</tr>
<tr>
<td>ABERDEEN</td>
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<td>NEWCASTLE</td>
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<td>Newcastle</td>
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<td>LUTON</td>
</tr>
<tr>
<td>Hillingdon</td>
<td></td>
<td>Bedfordshire</td>
</tr>
<tr>
<td>BRISTOL</td>
<td></td>
<td>EAST MIDLANDS</td>
</tr>
<tr>
<td>Avon</td>
<td></td>
<td>Leicestershire</td>
</tr>
<tr>
<td>LUTON</td>
<td></td>
<td>Derbyshire</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td></td>
<td>Nottinghamshire</td>
</tr>
<tr>
<td>LIVERPOOL</td>
<td></td>
<td>BIRMINGHAM</td>
</tr>
<tr>
<td>Knowsley</td>
<td></td>
<td>Solihull</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Birmingham</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CARDIFF WALES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Glamorgan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIVERPOOL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liverpool</td>
</tr>
</tbody>
</table>
3.19 The Overall Attitude of Authorities

3.19.1 The overall attitude of local authorities to airport planning was gauged according to a notional 'average' of local authorities attitudes to each airport on the three aspects covered. This average was derived on the basis of a simple scoring system, with a score allocated to each airport according to each aspect of policy. Where an airport was covered by more than one authority, a score was allocated to each authority, and the average of these was applied to the airport. The scoring system used is detailed below:

| Restrictive | Score 1 |
| Reactive    | Score 2 |
| Pro-Active  | Score 3 |

3.19.2 Scoring in relation to attitudes to airport expansion applied to only one authority for most airports, with the exception of Gatwick, Heathrow and Manchester. The following scores were allocated:

| Heathrow       | Surrey   | 1  |
|               | Hounslow | 1  |
|               | Hillingdon | 1 |
|               | Average  | 1  |

| Gatwick       | West Sussex | 1 |
|               | Surrey      | 1 |
|               | Average     | 1 |

<p>| Stansted      | 1 |
| Bristol       | 2 |
| Southampton   | 2 |</p>
<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tees-side</td>
<td>2</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>2</td>
</tr>
<tr>
<td>East Midlands</td>
<td>2</td>
</tr>
<tr>
<td>Luton</td>
<td>2</td>
</tr>
<tr>
<td>Cardiff Wales</td>
<td>3</td>
</tr>
<tr>
<td>Liverpool</td>
<td>3</td>
</tr>
<tr>
<td>Birmingham</td>
<td>3</td>
</tr>
<tr>
<td>Newcastle</td>
<td>3</td>
</tr>
<tr>
<td>Manchester</td>
<td>3</td>
</tr>
<tr>
<td>Cheshire</td>
<td>3</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
</tr>
<tr>
<td>Glasgow</td>
<td>3</td>
</tr>
</tbody>
</table>
3.19.3 Scoring in relation to the other two aspects of policy, concerned with direct and indirect impacts (A), and the airport and inward investment (B), applied to more than one authority at most airports. The following scores were allocated:

<table>
<thead>
<tr>
<th>Location</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrey</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hounslow</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Hillingdon</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Average</td>
<td>1.7</td>
<td>2</td>
</tr>
<tr>
<td>Gatwick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Sussex</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Surrey</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Average</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Stansted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essex</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Average</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Bristol</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Southampton</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Tees-side</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>East Midlands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leicestershire</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Derbyshire</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Average</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>City</td>
<td>Region</td>
<td>2</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>----</td>
</tr>
<tr>
<td>Luton</td>
<td>Bedfordshire</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Hertfordshire</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>Cardiff</td>
<td>Average</td>
<td>3</td>
</tr>
<tr>
<td>Liverpool</td>
<td>Liverpool</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Knowsley</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>2.5</td>
</tr>
<tr>
<td>Birmingham</td>
<td>Solihull</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Birmingham</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>2.5</td>
</tr>
<tr>
<td>Newcastle</td>
<td>Newcastle</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Northumberland</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>2.5</td>
</tr>
<tr>
<td>Manchester</td>
<td>Manchester</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Cheshire</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>3</td>
</tr>
<tr>
<td>Glasgow</td>
<td>Average</td>
<td>2</td>
</tr>
</tbody>
</table>
3.19.4 The overall notional average for each airport was calculated to be as follows:

<table>
<thead>
<tr>
<th>Airport</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>1.57</td>
</tr>
<tr>
<td>Gatwick</td>
<td>1.17</td>
</tr>
<tr>
<td>Stansted</td>
<td>1.17</td>
</tr>
<tr>
<td>Bristol</td>
<td>1.67</td>
</tr>
<tr>
<td>Southampton</td>
<td>2.00</td>
</tr>
<tr>
<td>Tees-side</td>
<td>2.00</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>2.00</td>
</tr>
<tr>
<td>East Midlands</td>
<td>2.34</td>
</tr>
<tr>
<td>Luton</td>
<td>2.17</td>
</tr>
<tr>
<td>Cardiff Wales</td>
<td>3.00</td>
</tr>
<tr>
<td>Liverpool</td>
<td>2.67</td>
</tr>
<tr>
<td>Birmingham</td>
<td>2.83</td>
</tr>
<tr>
<td>Newcastle</td>
<td>2.67</td>
</tr>
<tr>
<td>Manchester</td>
<td>3.00</td>
</tr>
<tr>
<td>Glasgow</td>
<td>2.67</td>
</tr>
</tbody>
</table>

3.20 Planning Attitude and the Regional Economy

3.20.1 In order to complete the second element of the planning approach typology, account was taken of the economic circumstances of each of the airport areas. This required an indication of whether each of the areas was buoyant or marginal under the Brindley (et al, 1989) classification.

3.20.2 This presented a problem. Given that this part of the study seeks to establish a categorisation of airports according to potential impact, caution was required in using economic statistics relating to the immediate local area where the airport has the potential to be dominant. The presence of an airport
may well result in low unemployment in that area and would suggest a degree of economic well being.

3.20.3 For this reason, therefore that the use of a regional indicator would reduce this difficulty substantially, given that it is less likely that individual airports would have an overriding impact upon an entire region.

3.20.4 A simple measure was required in order to define regions as buoyant or marginal. The definitions used by Brindley et al were modified, as follows:

1 Buoyant Regions are those where the rate of region wide unemployment is below the national average.

2 Marginal Regions are those where the rate of region-wide unemployment is above the national average.

3.20.5 Although highly simplistic and open to question, these definitions were considered to be sufficient to meet the requirements of this part of the study.

3.20.6 The average rate of unemployment in each region over the last five years was calculated from data contained in the Employment Gazette. The data is shown in FIGURE 22. An average over the last five years was chosen in order to reduce any discrepancies caused by the lag between regional unemployment rates during the recent recession.
FIGURE 22

Unemployment Rates by Region 1989-91

% Workforce

January

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South East</td>
<td>4.4</td>
<td>3.6</td>
<td>5.0</td>
<td>8.3</td>
<td>10.5</td>
<td>6.4</td>
</tr>
<tr>
<td>East Anglia</td>
<td>3.8</td>
<td>3.4</td>
<td>4.8</td>
<td>7.0</td>
<td>8.6</td>
<td>5.5</td>
</tr>
<tr>
<td>South West</td>
<td>5.2</td>
<td>4.1</td>
<td>5.7</td>
<td>8.7</td>
<td>10.0</td>
<td>6.7</td>
</tr>
<tr>
<td>West Midlands</td>
<td>7.3</td>
<td>5.9</td>
<td>6.7</td>
<td>9.8</td>
<td>11.5</td>
<td>8.2</td>
</tr>
<tr>
<td>East Midlands</td>
<td>6.3</td>
<td>4.9</td>
<td>5.9</td>
<td>8.5</td>
<td>9.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Yorks Humbs</td>
<td>8.3</td>
<td>6.8</td>
<td>7.6</td>
<td>9.4</td>
<td>10.6</td>
<td>8.5</td>
</tr>
<tr>
<td>North West</td>
<td>9.6</td>
<td>7.6</td>
<td>8.1</td>
<td>10.3</td>
<td>10.9</td>
<td>9.3</td>
</tr>
<tr>
<td>North</td>
<td>10.9</td>
<td>8.6</td>
<td>9.2</td>
<td>10.8</td>
<td>12.2</td>
<td>10.3</td>
</tr>
<tr>
<td>Wales</td>
<td>9.2</td>
<td>6.7</td>
<td>7.3</td>
<td>9.5</td>
<td>10.3</td>
<td>8.6</td>
</tr>
<tr>
<td>Scotland</td>
<td>10.3</td>
<td>8.3</td>
<td>8.0</td>
<td>9.3</td>
<td>9.9</td>
<td>9.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>7.0</td>
<td>5.7</td>
<td>6.6</td>
<td>9.2</td>
<td>10.6</td>
<td>7.8</td>
</tr>
</tbody>
</table>


3.20.7 On the basis of these figures the regions which were included in the buoyant category were the South East, East Anglia, South West and East Midlands. Those considered marginal were the West Midlands, Yorkshire and Humber-side, Wales, Scotland, North West and North regions.

3.20.7 FIGURE 23 shows the airports arranged into a typology according to the region in which they are located and the notional score given to each according to planning attitude in the section 3.19. It shows that there are four broad groupings of airports, and that these relate to particular attitude and
Typology of Airport Planning Strategies According to Overall Attitude of Local Authorities and Regional Economic Cleavages

Notional average score according to attitude of local authorities

Planning Strategies

Control

Contain

Enable

Encourage
economic cleavages. These combinations result in each being associated with a type of strategy for dealing with the airport. They are as follows:

*Control Strategy.* These airports are found in buoyant regions where planning authorities take generally restrictive view. Consequently their action can be seen as attempting to control the airport and its effects.

*Containment Strategy.* These airports are also found in buoyant regions, but generally planning authorities take a reactive view. In buoyant areas the reactive view attempts to contain the airport and its effects.

*Enabling Strategy.* These airports are found in marginal regions where planning authorities take a reactive view. Their action can be seen as attempting to enable the airport and effects to grow.

*Encouragement Strategy.* These airports are also found in marginal regions, but where planning authorities take a pro-active view. Consequently their action can be seen as attempting to encourage the airport and its effects to grow.
3.21 Planning Strategies and Airport Size

3.21.1 The final part of this chapter brings together the findings of airport factors and locality factors sections.

3.21.2 FIGURE 24 shows a typology of the airports which were studied in both sections. The typology is based upon each airport’s position in relation to the categorisation of airport size and role, and the classification of planning strategies.

3.21.3 The economic effects will be determined by a combination of these two factors. For example, the potential impact of Heathrow and Gatwick has been shown to be much greater than other airports, but the local authorities around Heathrow and Gatwick seek to control their effects. Conversely, airports such as Liverpool or Cardiff Wales have been shown to have a relatively minor potential impact, but the local authorities around these airports seek to encourage their effects as far as possible. In terms of this study, which seeks to assess the role of planning in defining an airport’s local economic effects, the two extremes of these strategies would be the most valuable as comparative case studies. In very crude terms this would allow for a comparison between broadly ‘pro’ and ‘anti’ airport development strategies.

3.21.4 Gatwick and Manchester airports have been selected for further study. Gatwick was considered to be representative of the control strategy group, resulting from a generally, although not exclusively, restrictive attitude among local authorities in the area. Manchester, on the other hand, was considered to be representative of the encouragement strategy group, resulting from a generally pro-active attitude amongst local authorities. The airports were chosen, therefore, on the basis of the starkly contrasting planning approaches to each. Gatwick and Manchester are also both large airports (3.12.3)
FIGURE 24

Table of Airports According to the Categorisation of Airport Size and Role, and the Classification of Planning Strategies

<table>
<thead>
<tr>
<th>Airport Size and Role</th>
<th>Planning Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
</tr>
<tr>
<td>Large International Gateway</td>
<td>Heathrow</td>
</tr>
<tr>
<td>International Gateway</td>
<td></td>
</tr>
<tr>
<td>Transitional</td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td>Stansted</td>
</tr>
<tr>
<td>Local and General Aviation</td>
<td></td>
</tr>
</tbody>
</table>
3.22 The Next Stage

3.22.1 This chapter has dealt with the British airports. The first part of the chapter highlighted the difficulties caused by the lack of a national airports policy. The second part of the chapter demonstrated the range of factors which might determine the economic effects of the airports. Planning was shown to be just one of these factors.

3.22.2 The next stage of the study looks at two case studies in more detail. The case studies chosen are Gatwick and Manchester airports, which are considered to be representative of the controlling and enabling planning strategies respectively.
CHAPTER FOUR

GATWICK AND MANCHESTER: A POLICY APPRAISAL

4.1 Introduction to the Chapter

4.1.1 Gatwick and Manchester have been shown to be most appropriate and relevant examples for further examination. This examination will involve a much closer look at planning policy relating to each airport and attempt to detail as accurately as possible the various potential outcomes. Chapter Five will assess actual outcomes.

4.1.2 This chapter is split into two broad sections, one dealing with government regional planning guidance, the other looking at planning at the local level.

4.1.3 Gatwick and Manchester are Britain’s second and third largest airports respectively. In 1991, Gatwick handled 18.69 million passengers, compared to 10.10 handled by Manchester. Gatwick Airport has one operational runway and two terminals, and a large amount of land on the airport site is still undeveloped. Manchester also has one runway and will soon have two terminals. However, the Manchester site is heavily constrained.

4.1.4 Passenger throughput increased very rapidly during the 1980’s at both airports. According to the Survey of Airport Operators Gatwick throughput rose by 114% 1980-90, compared to a rise of 75% at Manchester. In terms of 1991 international passengers handles, Gatwick ranks as the world’s fourth international airport, and Manchester ranks twentieth (Department of Transport, 1992).
4.1.5 The Survey of Airport Operators shows that employment levels at both airports have grown steadily at both airports, with the exception of the last few years at Gatwick which has been hit particularly hard by the recession in the airline industry, as shown in FIGURE 25 below:

FIGURE 25

**Employment Levels at Gatwick and Manchester**

<table>
<thead>
<tr>
<th>Year</th>
<th>Gatwick</th>
<th>Manchester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>6283</td>
<td>n/a</td>
</tr>
<tr>
<td>1975</td>
<td>10859</td>
<td>n/a</td>
</tr>
<tr>
<td>1980</td>
<td>15521</td>
<td>n/a</td>
</tr>
<tr>
<td>1985</td>
<td>16526</td>
<td>n/a</td>
</tr>
<tr>
<td>1986</td>
<td>17141</td>
<td>n/a</td>
</tr>
<tr>
<td>1987</td>
<td>16368</td>
<td>n/a</td>
</tr>
<tr>
<td>1988</td>
<td>21222</td>
<td>8730</td>
</tr>
<tr>
<td>1989</td>
<td>22550</td>
<td>9000</td>
</tr>
<tr>
<td>1990</td>
<td>22360</td>
<td>10000</td>
</tr>
<tr>
<td>1991</td>
<td>19841</td>
<td>10600</td>
</tr>
</tbody>
</table>

4.1.6 Both airports are expected to expand their passenger throughput in coming years. The Survey of Airport Operators showed that by the year 2000 passenger throughput at Gatwick is forecast to rise to 30 million, and at Manchester to rise to 22 million.

4.1.7 Long term plans are less certain. At Gatwick, other than in the context of the RUCATSE exercise, there has been no suggestion of a second runway.
However, in preparing to submit its application for a fifth terminal at Heathrow, BAA Plc, who are also the owners of Gatwick, used passenger throughput forecasts for all of its airport which showed Gatwick handling 42 million passengers per annum by 2016 (BAA Plc, 1992). Manchester Airport Plc are expected to submit a planning application for a second runway in the summer of 1993, although the impact of this expansion upon passenger throughput is not yet clear, and would depend upon the provision of additional terminal facilities.

4.2 Planning Policy History and Context

4.2.1 Both Gatwick and Manchester airports are set within a complex planning context. This section investigates the situation at both airports and seeks to establish whether the planning framework is coherent, giving reasons for any inconsistencies.

4.2.2 The section will investigate whether difficulties arise from primarily from government policy. Chapter Three has already demonstrated the degree to which the country lacks co-ordinated national action on airports. Two main areas of concern are investigated:

1. Whether the demonstrated lack of a National Airports Policy as a basis for the planning of all airports is a problem. Neither Gatwick nor Manchester can be set within a nationally recognised aviation policy context.

2. Whether the Government approach to the provision of regional planning guidance is a problem, and in particular the degree of co-ordination with its regional planning objectives with its tacit accept-
ance of UK aviation growth.

4.2.3 The section then investigates the difficulties which have arisen as local planning authorities attempt to plan around airports in the absence of any genuine guidance. It looks at the way in which policy has been formulated around both airports, and seeks to identify inadequacies where they have occurred.

4.3 Government Planning Guidance

4.3.1 The Government system of providing planning guidance to Local Authorities is not a particularly new phenomena. However, regional planning guidance coverage of the country is patchy. Guidance for the regions relevant to this study differs significantly. Progress is documented in PPG12 ‘Development Plans and Regional Planning Guidance’ (February 1992). Full guidance exists in the South East, where new draft guidance is in preparation. No regional guidance exists for the North West, only strategic guidance for the metropolitan areas of Merseyside and Greater Manchester.

4.3.2 The lack of regional guidance in the Manchester case is likely to be very significant in terms of the planning response to the expanding airport. At Gatwick that response is likely to be far more related to government objectives for the whole region.
4.3.3. Regional Planning Guidance in the South East is the most well developed in the UK. Cyclical deliberations have gone on over a number of years between the Department of the Environment and SERPLAN (The London and South East Regional Planning Conference) which is made up of all local authorities in the region. After public consultation SERPLAN submits advice to the Secretary of State who, in response, publishes Draft Regional Guidance. This is open to further public consultation before emerging in its final form as a framework for the preparation of development plans in the region.

4.3.4 The last guidance for the South East (outside London) was published in its final form in February 1989 (RPG9) and for London in September 1989 (RPG3) although the preparation of new guidance is now well underway. SERPLAN presented its advice, 'A New Strategy for the South East' to the Secretary of State in 1990, and the Department of the Environment draft response was published for consultation in March 1993.

Guidance for the Crawley Gatwick Area

4.3.5 The designation and expansion of Crawley as a New Town in the early post war period resulted in the Crawley Gatwick area, including most of Central Sussex and part of East Surrey, being identified as a regional growth point. This approach was formalised in the 1970 Strategic Plan for the South East. Crawley was identified among five other areas to accommodate major regional growth. The Crawley Expansion Study, commissioned in 1965, and the Crawley/Gatwick Sub-Regional Study which was initiated in 1970, sought to deal with projected growth on a consistent sub-regional basis.
4.3.6 The late 1970's heralded a change in attitude and in 1976 Crawley Gatwick was removed from its regional growth role. The Review of the Strategic Plan for the South East prioritised the accommodation of local growth, including that resulting from the expansion of Gatwick Airport. However, growth continued and accelerated so that by the late 1980's urban and economic expansion had become too rapid, and had begun to outpace the provision of infrastructure and services by a significant margin.

4.3.7 Serious concern grew amongst Local Authorities. The 1989 Government Regional Guidance reflected in part this concern. PPG9 made no mention of the Crawley Gatwick area for continued growth over and above that elsewhere in the South East.

4.3.9 SERPLAN's New Strategy for the South East (1990) went further in advising the Secretary of State that growth in the area should be restrained to a rate much lower than had previously been experienced. This reflected a growing view amongst the Local Authorities, particularly those around the south and west of London, that the rate of growth experienced during the late 1980's was not capable of being sustained indefinitely. In the Draft Regional Guidance (March 1993) the Secretary of State appears to have accepted this advice.
4.3.10 Paragraph 7.30 of the draft identifies the 'Western Sector' of the region for a reducing rate of development, in order that infrastructure and services might catch up with past growth. The Crawley Gatwick area is specifically identified. The Draft Guidance states that:

At Crawley Gatwick, despite infrastructure and services improvements to cope with recent rapid growth, constraints on development and policy constraints in adjoining areas, make regionally significant expansion undesirable

Department of the Environment Consultation Draft: Regional Planning Guidance for the South East 1993, p.27

4.3.11 The note gives no indication of what 'regionally significant expansion' might be. It is fair to assume, however, that it is referring to the type of expansion which was allowed to occur for many previous years, reaching a peak in the late 1980's. If this is the case, then it is interesting that the guidance does not link the growth of the area with the expansion of Gatwick Airport, and more significantly does not identify the further expansion of the airport as being 'regionally significant'.

The Regional Guidance Attitude to Gatwick Airport

4.3.12 In the past government regional planning initiatives have taken great heed of airports and their role in the economies of regions. Airports were viewed as elements of a region's infrastructure and were subject to investment on the same basis as, say, roads.
4.3.13 The system of regional planning guidance at first appeared to have severed this link, although more recently the link has re-emerged in a rather obscure and potentially problematic form.

4.3.14 Regional guidance up to PPG9 (1989) gave airports only fleeting mention, and then only in connection with the management of housing growth linked to expansion at Stansted. Even the SERPLAN advice (1990) contains only minimal reference to the importance of international airports to the economy of the region.

4.3.15 The RUCATSE study, which is detailed in Chapter Three, appears to have heralded a change in approach. For the first time, the 1993 Draft Regional Guidance includes extended reference to the regions airports, relying primarily on statements made in the government white paper 'Airports Policy' (1985). It acknowledges the importance of Heathrow and Gatwick as major international airports, and the contribution they make to the UK economy by increasing accessibility to the South East and so providing for inward investment. It recognises that the position of Heathrow and Gatwick should be maintained. Furthermore, it acknowledges that, whilst the best use should be made by airports of existing facilities, there should be provision of enough additional airport capacity where it is needed, when this is economically justified. It goes on to state that it would be for the operators of airports (Gatwick Airport Ltd, a subsidiary of BAA Plc) to bring forward proposals for additional facilities 'in light of their own views of the market and of the commercial prospects of those facilities' (Paragraph 6.27). This position has also been replicated in the guidelines for, and statements concerning, the RUCATSE exercise.
4.3.16 It is remarkable that statements of this nature have been made given the general intention of the guidance to restrain growth around both Heathrow and Gatwick. Whilst it is stated that any proposal for airports expansion would need to be assessed against the objectives of the planning guidance, it also makes quite clear the importance of 'the benefits which such development might bring, both to the region and to the UK more generally' (Paragraph 6.28).

An Inherent Contradiction?

4.3.17 The policies contained in the draft regional guidance would appear to be an inherent contradiction to the government's clear market led approach to the provision of airport capacity.

4.3.18 The airports element of the draft guidance seems quite out of place when set against the general line of the strategy which supports policies for strong restraint in the Crawley Gatwick area. The government seems unwilling, or politically unable to deal with this contradiction by attempting to reconcile its two objectives or giving one of them definite priority - for the time being at least.

The North West

4.3.19 Manchester Airport is not set within the context of any regional planning guidance as nor has been issued for the north west. Strategic guidance exists for the metropolitan areas of Merseyside (PPG11 October 1988) and Greater Manchester (RPG4 December 1989).

4.3.20 According to PPG12 'Development Plans and Regional Planning Guidance' (1992) it is the intention of the Secretary of State to have regional guidance
in place for most regions by the end of 1993. In the case of the North West this seems optimistic as the preparation of advice to the government by the local authorities is only just underway.

4.3.21 Advice, when it does emerge, is likely to have as its basis the main elements of the North West Regional Economic Strategy (Pieda, January 1993) which has been produced after six months of deliberation by all of the local authorities and a number of important businessmen in the region.

4.3.22 The absence of regional guidance has left local planning authorities in a difficult position, unaware as they are of what the likely reaction of the Secretary of State might be to proposals they bring forward. Its absence also appears to have engendered some uncertainty in the Department of the Environment North West Regional Office in its dealings with various regional matters, such as County Structure Plans. Any criticism of local authority action must be set within the context of this lack of basic direction in the region as a whole.

**Guidance for the South Manchester North Cheshire Area**

4.3.23 The absence of regional guidance means that it is impossible to accurately set the South Manchester/North Cheshire area into its proper regional planning context, as was possible in the case of the Crawley Gatwick area. It has been shown earlier in this chapter than the area around Manchester Airport has had the lowest rate of unemployment in the whole of the North West for a number of years, but it is fair to say that this does not preclude it from the type of development and encouragement of inward investment which characterises the region as a whole. Strategic Guidance for Greater Manchester (RPG4 December 1989) bears this out, requiring the boroughs which make up the conurbation to undertake a search for regionally important development sites.
4.3.24 The general vein of policy in the North West would appear to be to pursue the interests of the regional common good, even in the event of local costs. There is no indication in any government or other document that development and growth in the area around Manchester Airport should be restrained, other than under limited environmental constraints such as Green Belt restrictions. The presence of the Greater Manchester metropolitan area has made this approach more easily acceptable in providing in the past seemingly unlimited opportunities for development.

The Regional Role of Airports in the North West

4.3.25 Again, the absence of regional planning guidance makes it difficult to place Manchester Airport into its regional planning context. Given that Manchester is a rapidly expanding airport, and is forecast to become a very large airport, this is a perilous situation, and one which seems likely to have created substantial uncertainty amongst local authorities.

4.3.26 In the past this was certainly the case, but more recently the level of coordination between local authorities on key region wide issues has increased markedly. This is particularly the case in relation to airports. The most striking example of this co-ordination is the region wide Economic Strategy (Pieda, 1993) which is expected to form the backbone to regional advice to the Secretary of State in the near future (See paragraph 4.3.21). The strategy makes quite clear its objectives in relation to the role of airports.

4.3.27 Manchester Airport is identified as a 'hard' infrastructure issue which works to 'bind' the region together, and which acts as a key strength in the North West's ability to attract inward investment. The strategy calls for the 'current advantages offered by first class airport facilities' to be maintained and expanded.
4.3.28 The strategy, particularly the way in which it was formulated, gives rise to just one concern. During its preparation one disagreement emerged between authorities, which crystallised into a straight Manchester versus Liverpool disagreement. Authorities around Liverpool Airport, some 40 miles to the west of Manchester, have sought to include support for its expansion in the regional strategy. This position clearly compromises the potential support for Manchester as the focus of airport growth in the region. In view of this division it is significant that there is no overriding government policy to define the way forward for the North West airports. Only when the government adopts an official position can the role that Manchester Airport might play be properly defined and exploited.

Potential Sub-Regional Outcomes

4.3.29 A number of potential outcomes, which arise in relation to the regional planning frameworks around Gatwick and Manchester, can be established when the regional strategies for each airport area is viewed in the context of government airports policy.

4.3.30 At Gatwick the objectives of government airports policy and regional planning guidance run contrary to one another. While growth at Gatwick airport was extremely rapid during the 1980’s the government, with the support of local authorities, was coming to the view that planning restraint should be applied to the area around Crawley Gatwick, with a reducing rate of development. The government were not, however, prepared to address the issue of whether the rapid growth in the area was in any way related to the airport.
4.3.31 The 1985 Airports White Paper affirmed the government view that a second runway should not be constructed at the airport. However, the establishment of the RUCATSE working party has undermined this affirmation. Moreover, the government has made no reference, either in policy statements or in its regional planning guidance, to the issue of whether an expanded throughput at Gatwick of 42 million passengers per annum, twice the existing throughput, would have economic or developmental implications for the sub-region.

4.3.32 The potential sub regional outcomes at Gatwick relate, in the crudest sense, to the competing aims of the two branches of policy. The scenarios identified are as follows:-

1. The airport has a potentially important but not overwhelming impact upon the local area. Restraint policies help to prevent the spread of its effects across the local area.

2. The airport has an important but not overwhelming impact upon the local area. Restraint policies do little to prevent the spread of its effects across the local area.

3. The airport has the potential to have an overwhelming effect upon the local area. Restraint policies help to control the spread of its effects across the local area.

4. The airport has an overwhelming impact upon the local area. Restraint policies do little to control the spread of its effects across the local area. Other aspects of the local economy suffer as a consequence.
The airport has an overwhelming impact upon the local area. Restraint policies do little to control the spread of its effect across the local area. All aspects of the local economy expand.

4.3.33 At Manchester the local response is moulded in the context of a basic lack of direction. Growth at Manchester Airport during the 1980's was extremely rapid but the government did not respond with guidance, either in relation to regional planning or national airports policy. The government were not prepared to address the issue of whether the airport constituted a major investment and economic development opportunity in the North West.

4.3.34 Not since the 1978 Airports White Paper has the government paid serious attention to the potential role of Manchester Airport. Under the Conservative's it has been considered on the basis that it is a 'regional' airport, yet this study has clearly demonstrated that it ranks in global terms as an International Gateway airport.

4.3.35 The potential sub-regional outcomes at Manchester relate, again in a very crude sense, to the lack of direction in regional planning and the role of Manchester Airport. The scenarios identified are as follows:-

1 The airport has the potential to have an important impact which has not yet been significantly realised in the local area.

2 The airport has had an important impact in the local area which has occurred despite the lack of policy direction.
3 The airport has the potential to have an important impact which has not been realised because of the lack of policy direction.

4 The airport does not have a potentially important important impact upon the local area.
4.4 The Sub-Regional Patchwork

4.4.1 Both airports, like many others in Britain, are located on or very close to the administrative boundaries of more than one local authority. The result of this is more than one planning policy approach for each airport, varying degrees of tolerance and intolerance and different levels of experience and awareness of the airports importance to the local areas concerned. The planning authorities which are relevant to Gatwick and Manchester are shown on FIGURE 26 and FIGURE 27 respectively.

4.4.2 Strategic and local planning policies have to be set within the guidelines set by government regional guidance, but within these there is considerable scope for local authorities vary their policy response. In Chapter Two, local planning policy has been shown to be potentially important in three key areas:-

1 Approach to the growth and expansion of the airport itself,

2 Approach to the growth and expansion of direct and indirect activities connected with the operation of the airport, and their location on or off the airport site,

3 Approach to the use of the airports as a tool for the encouragement of inward investment.
FIGURE 26
Local Authorities Covering the Gatwick Area
FIGURE 27
Local Authorities Covering the Manchester Airport Area
4.5 Policies Relating to Airport Expansion

4.5.1 Authorities around the two airports differ in their general approach to airport expansion. Around Gatwick there is a desire to see future growth restricted, while around Manchester there is a willingness to encourage further growth. The issue of a second runway is applicable to both airports, and it can be clearly demonstrated that Manchester authorities are far more willing to accept this.

Gatwick

4.5.2 As shown in FIGURE 26 Gatwick Airport is located entirely within Crawley Borough in West Sussex. However, both West Sussex and Surrey County Councils have policies relating to the growth of the airport.

4.5.3 The West Sussex Replacement Structure Plan contains Policy T10 which enables Gatwick to operate efficiently as a single runway two terminal airport. It allows for the development necessary to secure this to be permitted, subject to other policies. The plan seeks to accommodate the development pressures generated by Gatwick as far as this is consistent with the Plan's other objectives of protecting the environment and restraining growth in the wider local area.

4.5.4 West Sussex consider that many of the facilities required to allow the full use of the existing runway are already in place, but the Plan allows for other facilities to enable the runway capacity to be used effectively. They must, however, be in accord with with an agreed land use plan for the airport. The Gatwick Masterplan (1990) has not been agreed by the local authorities.
4.5.5 The policies contained in the Structure Plan are based upon a County Council assumption that the full use of the existing runway will accommodate 25 million passengers per annum. There is no contingency currently in place for the possibility for a higher achievable throughput of 30, 35 or 42 million passengers per annum as has been suggested by BAA Plc (1992).

4.5.6 The Surrey Replacement Structure Plan Deposit Version (1993) Policy MT18 states that airport development proposals should comply with Government regional guidance. Surrey acknowledge that BAA Plc have suggested a new capacity of 42 million.

4.5.7 West Sussex and Surrey are united in their opposition to the provision of an additional runway at the airport. West Sussex stand by the legal agreement they signed with the then BAA in 1979 preventing a second runway at or adjacent to the airport for forty years. Nevertheless, both authorities are fully involved, via SERPLAN, with the RUCATSE exercise. It is quite possible that RUCATSE may recommend that additional capacity in the South East is not required until as late as 2020. By then the BAA West Sussex legal agreement will have lapsed.

Manchester

4.5.8 As shown in FIGURE 27 Manchester Airport is located mainly in the City of Manchester although part of the site is within Macclesfield Borough in Cheshire, and the boundaries of Stockport and Trafford Metropolitan Boroughs are very close by. There is general support for the expansion of Manchester Airport amongst most local authorities in its vicinity. The local authorities have formed a joint member-level group to discuss issues associated with the committed growth of the airport with one runway.
4.5.9 Manchester City Council have the most to gain if the airport is to succeed. The City are shareholders in the airport company and have a close working relationship with the airport planners. The City Council supports the continued expansion of the airport, including the provision of a second runway, which it considers would raise the profile of the area and the city substantially. It views the continued growth of an important international airport to be an intrinsic component of the cities economic growth and specifically its bid to host the 2000 Olympic Games.

4.5.10 Cheshire County Council are also highly supportive of the continued development of the airport. The Cheshire Replacement Structure Plan (1992) Policy T22 states that the County Council will support the expansion of air traffic usage at the airport within the capacity of the existing runway. In November 1991 the County’s Environmental Services Committee issued a ‘Statement of Principles’ supporting the further expansion when there is a proven need, recognising the importance of planning ahead for necessary future growth in air traffic. When Manchester Airport bring forward an application for a second runway during the summer of 1993, Cheshire County Council will take a neutral stance.

4.5.11 Of the authorities around Manchester Airport Macclesfield Borough are the least enthusiastic about airport expansion, and are implacably opposed to a second runway. They are, nevertheless, involved in the inter-authority working group aimed at harnessing the potential of the airport. Trafford Metropolitan Borough are generally in support of the airport expansion, but Stockport Metropolitan Borough, who suffer the greatest noise effects, are opposed to a second runway.
4.6 Policy Relating to Direct and Indirect Airport Impacts

4.6.1 This section deals primarily with policies relating to land for the accommodation of activities constituting the direct and indirect impacts as defined in Chapter Two, but which are located off the airport site. Policies in development plans usually refer to ‘airport related development’. The definition of what this refers to differs from authority to authority, and one authority gets the definition wrong.

4.6.2 The amount of space for development on an airport site is a function of both its size, traffic levels, and the use to which the site has been put in the past. If this space is in short supply, such as at Manchester, although not so much at Gatwick, then there is pressure for new and existing industries connected to the airport to locate off site - as discussed in Chapter Two. High airport rents have also been known in the past to encourage firms to locate off site (Survey of Airport Related Firms, WSCC 1978)

4.6.3 Planning policy with respect to on and off site activity at both Gatwick and Manchester is, and has been, complex and in places unclear. Issues arise in three key areas:-

1 The definition of activity at both airports is problematic. Authorities around both airports have pursued policies for airport related development, and around Gatwick they have attempted to provide definitions of what they consider airport related development to be. These definitions differ between authorities, and through time, and do not entirely match those developed in this study.

2 Different attitudes exist as to whether airport activity should take place entirely on the airport site, some should be allowed off the site,
or land should be allocated to accommodate airport activity off the site. Authorities around both airports differ in the detail of their attitudes.

2 There appears to be insufficient definition of what type of development is required to meet the needs of off site industries, and where this development should appropriately be located. This is primarily the case at Manchester.

4.6.4 The consequence of these difficulties is that overall policy at both airports is at best unclear and at worst fragmented. Both airports display a 'patchwork' of policy approaches. Chapter Five should provide an indication of what the implications of this might be.

**Policy Around Gatwick**

4.6.5 Development of off site airport activities around Gatwick is referred to in the strategic policies of West Sussex and Surrey County Councils. Both counties have policies concerned with 'airport related development'.

4.6.6 The West Sussex Replacement Structure Plan (1993) makes reference to categories of activity described as 'airport associated' and 'airport related'. The Structure Plan does not, however, define what constitutes 'airport associated' or 'airport related' development. No definition is available in earlier drafts of the plan or in preparatory background papers.
4.6.7 In the past, however, West Sussex have made clear their definition of the various airport activity categories. The definition adopted by the Inspector at the Gatwick Second Terminal Inquiry (1981), which has been accepted and used since by West Sussex and Gatwick Airport Ltd, splits activity into three broad groupings:-

1  **On Airport Activity**

   Employment within the operational boundaries of the airport, as defined in the relevant local plan. This element is considered to include airport management, airlines, concessionaires, government departments, car parking and contractors.

2  **Airport Associated Activity**

   Activity whose existence is directly related to the operation of the airport and explicitly requiring a location as close as possible to it, usually on adjacent industrial land. This element is considered to include the off site offices of airlines, flight catering firms, car parking and car hire firms, freight forwarding and courier firms, and hotels.

3  **Intermediate Activity**

   Activity exclusively engaged in providing goods and services to activities directly related to the operation of the airport, but not necessarily requiring a location close to it - although usually within 10-15 miles. This element is considered to include food manufacturers and suppliers, wholesalers, laundry and cleaning services, and all other firms supplying goods and services to the airport.
4.6.8 In providing for 'airport related' development the West Sussex Structure Plan is referring to all of the activities included in this classification. In restricting development on the airport site to 'airport associated' activity the Structure Plan is assumed to be referring to Category 2 and Category 1, which is included in Category 2.

4.6.9 The Surrey Replacement Structure Plan Deposit Version (1993) also includes reference to 'airport related development', in Policy MT19. For the purposes of the policy 'airport related development' is defined as including passenger and cargo terminals, maintenance facilities, oil storage depots, administrative offices, warehousing, storage and distribution facilities, car parking and catering facilities.

4.6.10 The key difference between the definitions used are as follows:-

1. The Surrey Structure Plan does not classify activity types in the way the West Sussex Plan does. There is no distinction between 'airport associated' and 'airport related' activity and so different allowance for the possibly differing needs of firms in each category is not made.

2. The Surrey Structure Plan definition includes only those activities which are classified by Second Terminal Inspector as 'on airport' and 'airport associated'. It does not include the 'intermediate' activity.
4.6.11 The classifications used differ marginally from that established in this study. Chapter Two has set out in detail the various elements of an airports economic impact. Amongst these are the direct and indirect impacts. The type of firms included in the direct category are very similar to those described by West Sussex as on airport or airport associated. The indirect impact includes, amongst other activities, the type of firms described by West Sussex as intermediate.

A Difference in Policy

4.6.12 There is good reason for the difference in approach. It is likely to be a direct result of different policies relating to whether activity should be located on or off the airport site. The definitions used by each authority are moulded to fit the policy stance adopted.

4.6.13 The West Sussex Replacement Structure Plan (1993) Policy T12 allows for development on the airport only if it is for a purpose 'associated' with the airport, and is thus included in Category 2, which includes Category 1, of the classification.

4.6.14 Policy T12 goes on further to allow for 'business development related to Gatwick airport' on land provided for business development generally under Policies E1 and E5. Policies E1 and E5 relate to the amount and type of employment floorspace allocated during the Structure Plan period. Under the West Sussex classification 'airport related development' includes all activities referred to in all three categories.

4.6.15 This policy does not allow for the allocation of land specifically for 'airport related' development. West Sussex consider that overall commercial and industrial development allocations are more than enough to meet these
needs (WSCC 1991). Crawley Borough Council consider that these activities are an integral part of the local economy and should be treated as similar to any other development (Local Plan Deposit Draft, 1990).

4.6.16 The Policy is a re-iteration of previous Policy IC17 of the 1988 West Sussex Structure Plan. However, both policies represent a relaxation of the position taken in the 1978 and 1980 Structure Plans, which did not allow for 'airport related' development off the airport site.

4.6.17 The Crawley Borough Local Plan Deposit Draft (1990) contains Policy E9 which reflects the current West Sussex policy. The same positions exists in the Draft Horsham Local Plan (1992) and in the more up to date Mid Sussex Local Plans (189-92).

4.6.18 The Surrey Replacement Structure Plan Deposit Version (1993) adopts a different stance, which is in principal similar to the old West Sussex position. Policy MT19 states that

Provision for airport related development should normally be made within the airport. Local Plans will not normally identify industrial and commercial land for this purpose outside the airport boundaries. In considering applications for such development, local planning authorities will need to be satisfied that it cannot be located within the airport.

Surrey County Council Replacement Structure Plan Deposit Version 1993, pp 54-55

4.6.19 Policy MT19 effectively prevents new development for purposes connected to the airport off the airport site. This policy has evolved, with the exception
of the second sentence, from previous policies 49 of the 1980 Structure Plan and A1 of the 1989 Plan. These are reflected in the Local Plans of Reigate and Banstead (Deposit Draft, January 1991) and Tandridge (South of the Downs Local Plan First Alteration Deposit Version, February 1991). The Mole Valley Rural Areas Local Plan contains a policy which, although not materially different in intention, is markedly stronger in tone. ICD4 states that:

There will be a strong presumption against any industrial or commercial development in the plan area associated directly or indirectly with Gatwick Airport...The Council will not depart from the policies in the plan...where it appears that the development concerned and its intended siting arise primarily from the proximity of the airport.

Mole Valley District Council Mole Valley Rural Areas Local Plan 1988, p27

4.6.20 The need for local planning authorities to be satisfied that development cannot be located on the airport would seem to effectively preclude many off site airport activities, since there are few operational reasons why 'airport related' activity, under the restricted Surrey definition, cannot be located on the airport. However, the Gatwick Master Plan (Gatwick Airport Ltd, 1990) does not mention all of the activities included in the Surrey policy in its inventory of acceptable activities.
4.6.21 At the Examination in Public into the Deposit Version of the plan in March 1993 the issue of aviation was discussed, in connection with whether Policy MT19 was appropriate or airport related development should be provided off airport. Surrey County Council gave four reasons why they had decided to maintain a restrictive policy. These were as follows:-

1 to allow for more efficient use of airport land,

2 to constrain the spread of airport activity into surrounding areas,

3 because there was ample land on the airport,

4 because there was more scope for development in adjacent areas, ie West Sussex.

4.6.22 At the Examination in Public, BAA Plc made it clear that it did not consider that some of the activities included in Surrey Policy MT19, such as administrative offices, warehousing, storage and distribution were necessarily entirely airport related. Crawley Borough Council also stated that the policy included some activities which as Local Planning Authority for the airport, they would not necessarily expect to be located on the airport.

4.6.23 West Sussex County Council objected to Policy MT19 as being too restrictive and inconsistent with the policies contained in the West Sussex Structure Plans. They argued that there was no reason in principal why ‘airport related’ development should not be allowed on land allocated or already in use, as there were already a substantial number of ‘airport related’ firms occupying premises around Horley and Hookwood in Surrey. These activities, it argued, were compatible with other warehousing, office and light industrial uses to be found in the area. Significantly, however, West
Sussex stated that their own policy was relaxed because it was found at the local level to be increasingly difficult to ascertain whether applications for 'airport related' development could or could not be located on the airport site. They considered it inappropriate for Local Planning Authorities to question the locational decisions of private companies.

4.6.24 The Surrey Structure Plan has not yet been approved by the Secretary of State, although there is no reason to assume that the intentions of the old Structure Plan are likely to be significantly altered.

**Policy Around Manchester**

4.6.26 The policies contained in the development plans of authorities around Manchester Airport are in no way intended to try to control the off site impacts of the airport. The Cheshire County Council view, for example, is that planning should not control but provide for a managed outcome through support and provision of land for off site activities.

4.6.27 Manchester Airport occupies an extremely constrained site with very little scope for additional development. Consequently a very large proportion of the direct activity has had to locate off site.

**Policy in Cheshire**

4.6.28 The Cheshire Draft Structure Plan 1990 policy GS2 provided for sufficient land to be made available for employment purposes to take advantage of the development opportunities arising from expansion at the airport.

4.6.29 In addition Policy EMP2 provided for 30 hectares of land to be made available for airport related activities in a business park setting. This was a
result of the Cheshire view that development related to the airport was becoming increasingly adhoc, and proliferating randomly in the corridor linking Manchester Airport with the city.

4.6.30 This business park proposal, although stated as being for airport related firms bears all of the hallmarks of being for airport attracted rather than airport related firms. For this reason it is dealt with in more detail in the section concerned with policies for airport attraction.

4.6.30 In formulating Policy EMP2 Cheshire County Council appear to have misinterpreted the meaning of the term 'airport related' and confused it with 'airport attracted'. The Explanatory Memorandum of the Draft Structure Plan 1990 describes airport related development as 'office, light industry, distribution and research uses for firms needing to be near the airport'. This study, on the other hand, concludes that airport related development is that which accommodates firms constituting the Direct and Indirect Impact as described in Definitions One and Two, Chapter Two.

4.6.31 Both policies GS2 and EMP2 were deleted in modifications to the Structure Plan in 1992. The then Secretary of State, Michael Heseltine, recognised that land allocations for development should have regard for the airports requirements, but also stressed the importance of safeguarding the environment. He recommended that the local authorities in the area undertake a sub-regional search for sites to accommodate airport related development, and that this development should not simply take the form of a business park.

4.6.32 Cheshire County Council seem to have made a clear error in seeking to provide for airport related development in the form of a business park. It is possible that this policy was placed into the Structure Plan in order to
generate a debate in the wider area about the provision for development related to the airport. However, if this was the intention then the tactic would seem to have achieved its aims, as discussed in 4.7.34.

Policy in the Manchester Conurbation

4.6.33 The Unitary Development Plans of the three most important Boroughs - Manchester, Trafford, and Stockport - are not as well progressed as the Cheshire Structure Plan. All three plans provide a large amount of land for commercial and industrial development generally, including allowance for airport related development.

4.6.34 The Manchester Plan (Deposit Draft, 1992) divides policies according to sub areas of the city. Allowance is made within each for airport related development. Additionally, and more significantly, Manchester City Council are willing to view every development application in the airport area on its own merits, irrespective of whether the land has been allocated.

Co-ordinated Action

4.6.35 Co-ordinated work amongst local authorities in the Manchester Airport area has begun to bring results in terms of an economic potential report in 1991 and a draft economic strategy report in 1992. This work is given more attention under 4.7.

4.6.36 The Economic Development Potential of Manchester Airport (York Consulting, 1991) established the basis for a strategy for dealing with the requirements of airport related activity. In response to this the five local authorities (Cheshire, Manchester, Trafford, Stockport and Macclesfield) together with Manchester Airport Plc have prepared 'Towards an Economic Strategy for
the Manchester Airport Area which identified the need to prepare a portfolio of sites constituting 200 acres of land for off-site airport activities over the next ten years. The authorities felt that without concerted action these activities would be unable to grow or would be pushed further away from the airport.

4.6.37 The authorities express a concern that there is no real control of what activist occupy the land in the area around the airport. They feel that the allocation of land specifically for airport related purposes will ameliorate this problem.
Potential Local Outcomes

4.6.38 A number of potential outcomes, which arise in relation to the local policy approaches around Gatwick and Manchester can be established.

4.6.39 At Gatwick the planning policies of West Sussex and Surrey County Councils are not complementary. The Surrey policy for airport related development is more restrictive than that in West Sussex, which is itself set within an overall policy of restrained development.

4.6.40 The potential consequences of this dichotomy are identified as follows:-

1. Airport related activities concentrate in the West Sussex part of the Gatwick area. Given the overall constraints on development, other types of development are reduced as a consequence.

2. Airport related activities concentrate in the West Sussex part of the study area but find it difficult to compete with other types of development for land. Airport related activities are therefore prevented from growing, or is forced to locate further away from the airport.

3. Airport related activities have proliferated throughout the local area. The planning policies have been of little or no consequence.

4.6.41 At Manchester the planning policies of the local authorities are not in contradiction and are certainly not restrictive. They are aimed at encouraging airport related development, and providing sufficient land to meet its needs. However, problems have been identified in the extent to which these aims have materialised into planning policies.
4.6.42 The potential outcomes relating to this position are as follows:-

1. Airport related activities have been unable to grow properly around Manchester Airport, and some have been forced to locate further afield.

2. Airport related activities have proliferated around Manchester Airport irrespective of difficulties experienced by local authorities in achieving a particular policy stance.
4.7 Policies relating to Airport Attraction

4.7.1 Discussion of provision for direct employment off the airport site around Manchester Airport has raised the question of business parks. The review of previous studies in Chapter Two has shown that many airports around the world have, as a feature of their surrounding area, large tracts of land dedicated to the attraction of high profile activities such as high technology firms, national and regional headquarters functions, research and development, etc.

4.7.2 This section does not seek to deal with the validity of claims that such activities require a location close to an airport, but instead is aimed at providing a summary of the main arguments which have been put forward in the Gatwick and Manchester airport areas. Neither does it intended to suggest that firms attracted to an area with an airport will only locate there if a business park environment is provided.

Policy in the Gatwick Area.

4.7.3 Neither Surrey nor West Sussex County Councils seek to encourage inward investment in any form. As already demonstrated, the Crawley Gatwick area is now seen as an area of planning restraint, and Structure Plans seek primarily to meet the needs of the existing economy, including existing firms.

4.7.4 No efforts are made to attract new firms into the area. The area immediately around the airport has been kept clear from development, through West Sussex Strategic Gap policies, and Surrey policies which seek to maintain the open setting of the airport.
4.7.5 The question of business park provision has arisen in the Crawley area, but only in West Sussex. The Surrey part of the area has been relatively free from this type of concerted business development pressure.

4.7.6 The 1991 West Sussex Replacement Structure Plan Submission Draft Policy E3 provided for one business park in the Crawley area, to the north of Crawley to accommodate high technology and other firms.

4.7.7 This provision was considered to be in line with the requirements of Policy IC4 of the existing Approved Structure Plan 1988, which was modified by the then Secretary of State, Nicholas Ridley, to include a business park site. Policy IC4 provides for a low density, well landscaped business park.

4.7.8 The site earmarked was that contained in the Crawley Local Plan Deposit Draft 1990 Policy E4. Known as the beehive, because it contains the original Gatwick passenger terminal of the same name, the site is 30 hectares in size. This is significantly smaller than sites for which applications for alternative business parks were made around that time. These applications were refused in view of the proposed site contained in the Local Plan, and the applicants lodged appeals.

4.7.9 The Examination in Public into the West Sussex Structure Plan and the Public Inquiry into the Crawley Local Plan, together with the business park appeals, were all held during the same period in late 1991 and early 1992. Since the Structure Plan had not been approved, the Local Plan Inquiry was set in the context of the Approved 1988 Structure Plan.
The Appellants

4.7.10 Submissions were made on behalf of all the major Crawley appellants at the Structure Plan EIP and the Local Plan inquiry. The strategic issues raised at the EIP are pertinent to this study.

The main appellants were as follows:-

Arlington Securities
Sir Alfred McAlpine
British Steel Pension Fund

The proposer of the Beehive was:-

Lynton

4.7.11 For the purposes of this study the Arlington case will be used as an example of the developers view. The Arlington Securities proposal for a business park at Forge Farm, to the north east of Crawley, was the largest of all the development applications.

4.7.12 The statement made at the EIP listed the aims, amongst others, of the proposal as being:-

1. To assist in the development of new technology and the expansion of national output. ‘New technology’ activities are considered to include assembly, communications, data processing, demonstration, design, development, manufacture, administration, research, servicing and training.
2 To accommodate top quality office and business use and meet the needs of international high technology companies who have a strong preference for sites close to airports.

3 To accommodate firms which would otherwise choose to locate elsewhere in the UK or more likely abroad to the detriment of the national economy.

4.7.13 Arlington emphasised the key importance of the role Gatwick airport would play in attracting such activities but did not supply any data which supports this contention. They suggested that companies require a location which provides them with rapid access to their market. This market is typically international and so air transport is required to be accessible.

The Decisions

4.7.14 The Inspectors report into the Local Plan came just before the Secretary of States final modifications to the Structure Plan in March 1993. The inspector recommended that Policy E4 of the local plan be amended and the reference to the Beehive site be deleted. In its place would be reference to a new site which would better meet the needs of Policy IC4 of the 1988 approved Structure Plan. He decided that the best site was that proposed by Arlington, which he considered would be a truly international business park. He regretted that the County and Borough Councils had been “avoiding any attempt to implement Policy IC4 in a proper and satisfactory way”.

4.7.15 However, the Secretary of States final modifications to the Structure Plan in late March 1993 supported policy E3 for a business park at the Beehive, not because it was the best proposal put forward, but because the main
appellants sites were considered to be too large. They would therefore generate too much employment, and so housing demand, and would be contrary to the rest of the policies contained in the Structure Plan and the regional planning guidance. The Panel at the EIP had accepted that the scheme for a business park could have been very important but that it would alter the strategy for the entire region. The Secretary of State accepted that:-

"If a major business park was not constructed in the Crawley area, the panel thought it unlikely that any proposal in another part of the region could offer an immediate attraction for those presumably few international companies for whom a few minutes drive from a major international airport is a determining consideration in their locational decisions."

Department of the Environment West Sussex Replacement Structure Plan Decision Letter 1993

4.7.16 The Secretary of State also noted the developers view that Gatwick was now the prime location in the entire country without a high quality business park but questioned whether a few minutes drive from an airport was a determining rather than just a desirable locational attribute.

The Implications

4.7.17 Concerted market led pressure for a major business park development close to Gatwick has been resisted by the Local Authorities and the Government. In line with its role in the planning strategy for the region as an area of restraint, the ideal conditions for attracting high profile activities to the area have not been put in place. The position which the local authorities had taken was entirely within government guidance.
4.7.18 The government stance once again highlights the inherent contradiction between its policy for airports and its strategy for planning in the South East.

**Policy in the Manchester Airport Area**

4.7.19 The inward investment positions in the Manchester Airport area is very different to the Gatwick case. Virtually no authority in the area will turn away non-green Belt development proposals, and many will be prepared even to release Green Belt to secure development.

4.7.20 Metropolitan Authorities of Manchester, Trafford and Stockport have been happy to support pressure for the proliferation of B1 (Use Classes Order 1987) office development, viewing each application on its individual merits. Manchester City Council have been prepared to allow office development in residential areas provided developments are suited to their proposed site. These sites have included playing fields and other open space.

4.7.21 Deliberations in the Manchester Airport area have been concerned with the location of, rather than the need for a business park close to the airport.

**Policy in Cheshire**

4.7.22 Cheshire County Council's stance has been established as being broadly pro-airport. However, in formulating their most recent structure plan they demonstrated their concern that development in the area around the airport had become adhoc.

4.7.23 The Draft Cheshire Structure Plan ‘Cheshire 2001’ Written Statement 1990 sought in Policy GS2 to provide sufficient land in the county to capitalise on
particular development opportunities such as those arising from the growth and development of Manchester Airport, particularly in the interests of promoting the local and regional economy. The accompanying explanatory memorandum made it clear the County Councils view that Cheshire should play a regional role by contributing to regional economic growth. This it could do by capitalising on its potential to attract inward investment which might otherwise not locate in the North West region. Manchester Airport is cited as a prime example of an inward investment opportunity.

4.7.24 Policy EMP5 of the draft provides for a business park in the vicinity of Manchester Airport in Macclesfield Borough for the development of airport related activities. The problems in definition have already been dealt with in an earlier section of this Chapter.

2.7.25 The site earmarked in Macclesfield Borough was at Wilmslow. The Plan considered that business park sites were typified by high quality landscaping, low density, and accommodating a mixture of business, storage and distribution uses. This differs from the Arlington definition of a business park in relation to Gatwick, which did not include reference to storage and distribution uses. These were considered to be unsuitable for a business park environment given the type of buildings which would be required to house them.

Macclesfield Borough - A Joker in the Pack?

4.7.26 Macclesfield Borough Council opposed the business park proposal at the Cheshire EIP. They accepted the premise that Manchester Airport offers new opportunities for inward investment which would otherwise not have occurred in a region which has consistently underperformed economically. However, they considered that large scale development opportunities close
to the airport - ie in Macclesfield Borough - did not exist.

4.7.27 Yates, Macclesfield's Chief Planner asserted in 1991 that although the airport was a major attractor of international companies seeking to locate in the North West, there was only a selection of small sites and a shortage of large development opportunities which were required. Consequently, he suggested that the planning framework, as with airport related development was insufficient to deal with demand. He stated that:-

"This issue is one which is suffering from any regional planning framework. This is essential if the development planning system is to take on board the need to identify large, high quality greenfield locations"

Adding that:-

"The airport is a regional resource that transcends local authority boundaries"


4.7.28 At the examination in Public into 'Cheshire 2001' Macclesfield Borough claimed the proposal to locate the business park in Wilmslow was not justified in published evidence and that it would weaken Greater Manchester regeneration objectives. They also contended that the objectives of establishing a business park did not exactly complement the aim of providing accommodation for airport related firms. Macclesfield suggested that there was plenty of scope for the development of airport related 'sheds' in the Manchester conurbation.
The Metropolitan View

4.7.29 At the time of the Cheshire Structure Plan Examination in Public the Unitary Development Plans for the three most crucial Metropolitan Authorities - Manchester, Trafford and Stockport - were in only the very early stages of preparation. While all three authorities accepted the need for a business park type development close to the airport, at the EIP each took a sufficiently different stance over the business park issue to suggest total incoherence:-

1 Stockport Metropolitan Borough Council opposed Policy EMP5 stating that any airport related business park should be in Greater Manchester.

2 Manchester City Council did not specifically oppose the proposal but objected to the uncontrolled release of land in Cheshire at the expense of potential development in Manchester. They called for a complimentary approach to be adopted.

3 Trafford Metropolitan Borough supported the policy in principal, stating that if the proposal was to be deleted then another site would have to be found somewhere in the Green Belt.

The Government Decision

4.7.30 The Secretary of State modified the Cheshire Structure Plan in 1991 and deleted Policies GS2 and EMP5. Whilst he recognised the enhanced contribution the airport might make in the regional economy, he considered that authorities should also have regard for the protection of the environ-
ment in the area around the airport.

4.7.31 The business park proposal was deleted because the Panel at the Examination in Public considered that a site in Macclesfield Borough was not the best. They considered that the area of search for a business park should extend to a twenty minute drive in all directions, and so cover a number of areas in the Greater Manchester Conurbation which would probably hold advantages over the site earmarked. The Panel concluded that the Wilmslow site should be deleted and the Secretary of State agreed.

4.7.32 The Panel considered that in order to find the ideal site, and sub regional search should be carried out. This search, as stated earlier, would be for the accommodation of all airport related activity, not just the business park. The Panel recommended that the local authorities around the airport establish a working group to achieve the best solution.

4.7.33 The Secretary of State acknowledged that local authorities had already established joint working relationships. He saw this as an opportunity to provide a framework within which strategic choices could be made before specific proposals were brought forward in development plans.

4.7.34 The Cheshire business park proposal, despite being deleted, seemed to have achieved one of its objectives. This was to raise the profile of the issue at a regional level and ensure a co-ordinated approach to the provision of land for development to capitalise on the airport. In this sense the Wilmslow business park was an 'aunt sally' proposal.

Unitary Development Plans

4.7.35 Since the modifications to and approval of the Cheshire Structure Plan in
1992, the Unitary Development Plans of the three Metropolitan Authorities have proceeded towards their final stages.

4.7.36 The Manchester Plan (Deposit Draft, 1992) is the most well advanced and is expected to go to Inquiry in the summer of 1993. The plan includes provision for business parks including one of 20 hectares adjacent to the airport.

4.7.37 Policy EW12 allocates land immediately north of the airport adjoining Woodhouse Park as one of the major strategic sites for high technology industry. The site should incorporate a 'generous high quality parkland setting' and was chosen in response to the regional guidance requirement for Manchester authorities to identify sites for major high technology industry. The plan states that the Woodhouse Park site benefits from its size, its location in relation to the airport and the strategic highway network and its attractive open setting. Critically Manchester consider it to be a site capable of attracting high quality business which might not otherwise locate within the city or the conurbation. The only site contained in the Manchester Plan which is considered to be of greater importance is the Eastlands site, allocated to accommodate the Olympic Stadium.

4.7.38 The Trafford Unitary Development Plan Deposit Draft (1993) is not as well advanced. However, it also includes proposals for a major business park close to the airport. The Trafford proposal is for 32 hectares at Davenport Green, of highly landscaped park aimed at attracting high technology firms. The Plan states that the site benefits from its close proximity to Manchester Airport giving the site unique attraction and advantage.

4.7.39 The Stockport Draft Unitary Development Plan (1992) is the least advanced. Once again, however, provision is made for a major business park
close to the airport. The Stockport site is at Cheadle Royal, covering 25 hectares and is intended to accommodate demand from incoming firms. The plan acknowledges the primary advantage of the site is its proximity to the airport, whose growth has 'added to the attraction of south Manchester and north Cheshire as an office location'.

4.7.40 It is worth noting that the sites contained in the three UDP's are primarily a response to the Strategic Guidance for Greater Manchester which required the authorities to allocate land for high technology activity. They are not a consequence of the Secretary of States modifications to the Cheshire Structure Plan calling for a co-ordinated approach to the provision of a business park to accommodate airport attracted firms. If this was the case there would not have been three competing proposals. In truth the sub regional search advocated and accepted has not yet been fully realised.

A Sub Regional Strategy

4.7.41 Progress on co-ordinating policy has nonetheless been initiated as has been shown previously in this chapter. The process of formulating a strategy for the Manchester Airport area started in 1990. Working groups of council members and officers were formed and consultants were appointed to coordinate the exercise.

4.7.42 The document 'Towards an Economic Strategy for the Manchester Airport Area' (1992) indicates quite clearly the way in which the local authorities together are intending to proceed. The report, which was mentioned briefly in connection with airport related activity, also sets out a broad action programme for the attraction and accommodation of firms which might be encouraged to locate close to the airport. This includes a proposal for the specific targeting of international 'high tech' firms which the authorities
considered were not being successfully attracted to the area.

4.7.43 The strategy proposes to provide a portfolio of city centre, regeneration, suburban and greenfield business parks to meet the needs of these companies. In addition the authorities propose to pay particular attention to the location, programmed release, and the marketing of sites.

Entirely Different Approaches

4.7.44 The business park debate at each airport provides an absolute crystallisation of the great differences in planning strategy at each of the airports. Planning at each is quite clearly based upon the requirements of the wider regional economy. Hence the role of Manchester is to be promoted vigorously, and Gatwick's role is to be continued to be underplayed.

4.7.45 In terms of the more direct airport effects authorities in the two areas are not so far apart in their approach. Planning at Gatwick is more restrictive than at Manchester. However, Manchester authorities have been unable so far to provide the type of accommodation which they consider to be essential to airport related activities.
Potential Local Outcomes

4.7.44 A number of potential outcomes, which arise in relation to the strategies of local authorities around each of the airports, can be established.

4.7.45 At Gatwick policy relating to the role of the airport as an attraction to inward investment is closely related to the position of Crawley Gatwick as an area of restraint. Local authorities have no need to encourage inward investment. Their objective is to discourage it.

4.7.46 The provision of major business park facilities would have indicated the intention of local authorities to encourage inward investment. The provision of a very small site for this type of development maintains the authorities' adherence to restraint policies.

4.7.47 This study must also, however, consider the possibility that the airport acts as an attractor of inward investment irrespective of planning provision for this type of development environment. There is no simple means by which the study can determine the difference the provision of business parks would have made.
4.7.48 The potential local outcomes have been identified as follows:-

1. Airport attracted businesses locate in the area irrespective of local planning policy, and despite the lack of a business park environment.

2. Airport attracted businesses locate in the area but do not specifically require a business park environment.

3. The airport is not a significant attractor of business to the local area, and so planning policy in relation to this aspect is not important.

4.7.49 In the North West inward investment is strongly encouraged and local authorities are beginning to seize the initiative in using Manchester Airport as a key inward investment tool. Deliberations on the location of business park developments have restricted progress.

4.7.50 The potential outcomes relating to this matter are identified as follows:-

1. Airport attracted activities locate in the area despite the lack of a full range of business park facilities.

2. Airport attracted activities locate in the area but do not require a business park environment.

3. The airport is not a significant attractor of inward investment to the area.
4.8 **The Next Stage**

4.8.1 This Chapter has demonstrated the problems which are associated with the planning framework in which airports operate. It has identified a number of ways in which planning may have a role to play in defining the airports effects.

4.8.2 The Chapter has indicated that the planning approaches to both airports are complex. The main points worth noting are as follows:-

1. Planning around Gatwick is based upon a notional capacity of 25 million passengers per annum. This is in contradiction with the BAA Plc forecast that the airport may handle 42 million passengers per annum. No government policy statements have been made which might resolve this difficulty.

2. Planning around Manchester is generally in support of the rapidly growing airport. However, the government have not been clear in their view of the future role of the airport and the part it might play in rejuvenating the North West regional economy.

3. Policies concerned with airport related development around Gatwick are contradictory.

4. Planning authorities' aims of accommodating and encouraging airport related development have not manifested themselves into a solid policy framework.
Planning authorities around Gatwick have successfully resisted intense pressure from developers for a business park which may have increased the potential for inward investment to the area. The government supports this position in line with its policy for restraint in the Crawley Gatwick area. This contradicts the government airports policy which, despite the second runway assurance, still by implication allows for more growth at Gatwick Airport.

Planning authorities around Manchester Airport have sought to provide a range of facilities for attracting inward investment around the airport area. This effort has received only minimal guidance from national government and has consequently proceeded tentatively.

4.8.3 The next stage of the study seeks to examine the actual outcomes in each of the areas around the case study airports as far as it is possible within the study framework.
CHAPTER FIVE

OUTCOMES AND POTENTIAL AT GATWICK AND MANCHESTER

5.1 Introduction to the Chapter

5.1.1 This chapter aims to investigate possible outcomes in the Gatwick and Manchester Airport local areas. It attempts to determine from each case study whether the planning objectives have been met and, inter alia, whether planning has played a significant role in defining the local economic effects of each airport.

5.1.2 The chapter also attempts to look forward. It establishes a number of future scenarios and the potential policy responses to each. It then seeks to identify possible ways in which difficulties and conflicts might be reconciled in the form of a series of recommendations.

5.1.3 Although the chapter contains reference to specific areas of planning policy, it seeks primarily to compare the outcomes of two very different broad approaches to airport planning. Chapter Three has provided a typology of airports according to planning strategy which describes the approach at Gatwick as to control the airport’s effects, and at Manchester as to encourage the airport’s effects.

5.1.4 This chapter is not aimed at establishing the economic impact of each airport. Chapter Two has demonstrated that such a task would be beyond the means of this study, let alone one chapter of the study. Consequently the assessment concentrates upon those aspects of an airport’s effects
which are covered in the policy appraisal included in Chapter Four. The areas of investigation have been established as follows:-

1  The relationship of policy objectives concerned with the expansion of the airport and the actual outcome in terms of airport expansion.

2  The interaction between policies for airport related development and the actual patterns of development observed in the local area.

3  The interaction between policies for the attraction of inward investment in association with the airport, and actual patterns in the locational decisions of businesses.

A Survey of Local Business

5.1.5 In order to assess the role and importance of each airport within its local area a survey was undertaken. The survey was aimed particularly at providing data relating to areas 2 and 3, airport related development and airport attracted development. The response to this survey, however, was weak and the results obtained from it, although interesting, have been treated with caution. A combination of factors, including the recession, and the fact that a number of firms stated that they were becoming tired of responding to surveys, can be identified in seeking to explain the tardy response.
5.1.6 The Survey of Local Business was carried out in February and March of 1993. The firms at each airport which were targeted in the survey were as follows:

1 Firms in the local area which were considered to be part of the direct and indirect impacts as described in Definitions 1 and 2, Chapter Two. The survey concentrated on firms which were located off the airport site, given that information regarding on site activity had been obtained from the Survey of Airport Operators.

These firms were identified using a number of sources, including the Annual Census of Employment, telephone and trade directories, aviation magazines, the West Sussex County Council Industrial Estates Directory, and the Cheshire County Council database of airport related firms.

The types of activities identified included hotels, flight catering, freight forwarding, couriers, taxi and car hire firms, ground passenger transport, and bonded warehouses. The types of activities identified in the indirect category were cleaning contractors, wholesale food distributors, and aviation parts distributors.

Chapter Two demonstrated that a consensus existed among studies that direct activities generally occupied premises as close as possible to the airport site, and indirect activities were located within a few minutes drive. On this basis the area of search was limited to areas around each airport which could be reached from the airport by car within 20 minutes. The twenty minute isochrone was approximated to district and borough boundaries, and for each airport constituted the following areas:
Gatwick

Crawley Borough, Horsham District, Mid Sussex District, Reigate and Banstead District, Tandridge District and Mole Valley District. These areas are shown in FIGURE 26, Chapter 4.

Manchester

Manchester City, Trafford Metropolitan Borough, Stockport Metropolitan Borough, Macclesfield Borough, Warrington District, Vale Royal District and Congleton Borough. These areas are shown in FIGURE 27, Chapter 4.

These sources provided a list of 360 potentially direct and indirect firms in the Gatwick area. This list was reduced to 250 firms which were almost certainly linked to the airport.

A list of 370 firms in the Manchester area was drawn up. Further investigation reduced this list to 258.

Large firms in the local area. These firms, a proportion of which may have chosen to relocate into the area around the airport, were considered to be representative of the type of businesses which are able to make locational decisions on the basis of a comprehensive range of factors. Smaller firms, it was concluded, were less likely to have made the same type of locational decision.

The survey sample was restricted to those businesses employing over 100 people, and who were located in the local authority areas covered in the direct and indirect activities sample. Chapter Two did
not determine the distance from the airport at which a location cannot be considered to be attractive to firms wanting to be close to the airport. It is possible that firms will be attracted to the airport would be prepared to locate further away, but it was considered that distance decay factors might operate and other locational attributes may become important. Moreover, a wider area of search would have resulted in a sample of firms too large given the resources available to this study.

Details of firms were obtained from the Annual Census of Employment (1989), the West Sussex County Council Large Firms list (1993), the Surrey County Council Principal Employers Directory (1992), the Cheshire County Council Large Firms Database (1993) and large firms databases held by Manchester City, Trafford Borough and Stockport Metropolitan Borough Councils.

These sources provided a list of 161 large firms in the Gatwick area, and 160 around Manchester Airport.

5.1.7 Questionnaires, together with reply paid envelopes were dispatched to firms in March 1993. The questionnaires were designed to be completed by firms from both categories. A copy of the questionnaire for firms in the Gatwick area is included in Appendix 6. A copy of the questionnaire sent to Manchester firms is included in Appendix 7.
5.1.8 The response to the survey was poor. The response in each category is detailed in FIGURE 28 below:-

FIGURE 28

Response to the Survey of Local Business

<table>
<thead>
<tr>
<th>Firms Contacted</th>
<th>Firms Responding</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatwick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct and Indirect Firms</td>
<td>250</td>
<td>66</td>
</tr>
<tr>
<td>Large Firms</td>
<td>161</td>
<td>60</td>
</tr>
<tr>
<td>Manchester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct and Indirect Firms</td>
<td>258</td>
<td>54</td>
</tr>
<tr>
<td>Large Firms</td>
<td>160</td>
<td>60</td>
</tr>
</tbody>
</table>

5.1.9 The response to the survey was not considered to be large enough to draw any substantive conclusions from its results. The survey questionnaire was divided into four sections, as follows:-

1 Your Firm

This section was aimed at providing basic information about the firm including its address, what activity it was involved in, details of changes of location and other branches.
2 **Employment and Turnover**

This section was aimed at providing the type of information which would be required if a more detailed assessment of the airport impact had been possible. As a reflection of the low response rate, the information provided in this section by firms was not used.

3 **The Local Area**

This section was aimed at providing information about the locational decisions made by firms in the survey. It applied only to firms which had moved into each of the airport areas. The response was sufficient in this section to merit some attention.

4 **Links with the Airport**

This section was aimed at providing information on the relationship between firms and the airport, seeking to establish whether the firm used the airport in any way, or whether it supplied the airport or airport firms with goods and services. The response in this section was sufficient to merit attention.
5.2 Policy and Airport Expansion

5.2.1 Chapter Four established a number of potential sub-regional outcomes of policy in relation to airport expansion at Gatwick and Manchester.

5.2.2 In seeking to determine the most applicable outcome, this study does not aim to provide an exact assessment of economic impact, and so much of the discussion is qualitative rather than quantitative. Furthermore the judgements made in this section are intended only to feed into the wider policy discussion of the study.

Outcomes at Gatwick

5.2.3 The principal outcomes at Gatwick can be identified as follows:

1. Policies aimed at the restriction of development on Gatwick Airport have failed. West Sussex and Surrey County Councils have consistently opposed additional infrastructure developments at the airport. Public inquiries have been held into the major proposals, such as that for the North Terminal in the early 1980's. The County Councils' position has consistently been rejected by Inspectors, including that on the North Terminal, and developments have gone ahead.

2. Policies establishing limits to the passenger throughput of the airport have been repeatedly breached. The existing Structure Plan of West Sussex (1993) is based upon the assumption that the operational capacity of the airport is 25 million passengers per annum. The RUCATSE exercise is now working on the assumption that the single runway can handle 35 million passengers per annum, and BAA, in submitting their application for Heathrow Terminal Five, have indi-
cated that they intend to stretch the throughput to 42 million by 2016 by 'taking up the slack' of the runway, i.e. encouraging its greater use at times of the day, week and year when it is not so busy, and increasing the aircraft load factors. West Sussex County Council do not consider that within the existing infrastructure constraints of the airport this throughput is achievable. However, if the BAA plc assumption is accurate, then there will be little the local authorities can do to prevent what would be a 100% increase in passenger throughput.

Outcomes at Manchester

5.2.4 The same type of conflict between 'airport and area' does not exist at Manchester. Planning authorities have not sought to place restrictions upon capacity, and have indeed favoured increased throughput. These aims have been achieved.
5.3 Policy and Direct and Indirect Impacts

5.3.1 The scenarios established in Chapter Four relating to the interaction between policy and patterns of direct and indirect airport development in the local area are dealt with briefly in this section. The tentative findings of the Survey of Local Business are worth noting, although extreme caution is required in the credence given to the results provided.

5.3.2 Although the response to the survey was disappointing a number of aspects of the response by firms constituting direct and indirect airport activities are of interest.

5.3.3 One significant question which was answered by 53 of the direct and indirect firms surveyed at Gatwick, and 36 at Manchester related to the factors which would prevent the firm from expanding in the future. The answers provided differed markedly between airports. The answers given are shown in FIGURE 29
### FIGURE 29

**Factors Affecting the Ability of Direct and Indirect Firms to Expand.**

<table>
<thead>
<tr>
<th>Factor</th>
<th>% Gatwick Firms</th>
<th>% Manchester Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Controls</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Labour/Skills Shortage</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>Property Prices</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Transport Infrastructure</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Airline recession</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>No problems</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

5.3.4 A second question which provided interesting answers asked firms how they would be affected if the airport were to close down tomorrow. 32 Gatwick and 27 Manchester firms answered this question. The answers provided clearly suggest more dependence upon the airport amongst the Gatwick firms than those at Manchester. The answers provided are shown in FIGURE 30.
FIGURE 30

The Implications for Direct and Indirect Firms of Airport Closure

<table>
<thead>
<tr>
<th></th>
<th>% Gatwick</th>
<th>% Manchester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some Redundancies</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Falling Income</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Closure</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>Relocation</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Unaffected</td>
<td>19</td>
<td>78</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Outcomes at Gatwick

5.3.5 The suggestion that direct and indirect activities will concentrate in the West Sussex part of the Gatwick area appears to be borne out. Of the survey sample of 250 direct and indirect firms, 171 were registered as having an address in West Sussex compared to just 79 in Surrey. However, it is not possible to say whether this is because of the Surrey policy of restricting airport related development to the airport site. The survey sample shows that the majority of the firms contacted (162) occupied premises which were not subject to planning policies permitting or restricting airport related development. These premises included those which firms had purchased from a previous owner, those which had been occupied for many years by the firm and those which had undergone a change of use prior to occupation by the firm.
5.3.4 The implication of these tendencies is that direct and indirect airport impacts proliferate around the Gatwick area, and that planning policies to contain these impacts are irrelevant.

Outcomes at Manchester

5.3.5 The survey sample of direct and indirect activities around Manchester Airport would suggest that a number have been forced to locate further away from the airport because they have been unable to compete with 'higher grade' uses, primarily B1 office development which have been allowed to proliferate, particularly in the southern part of the conurbation. Almost a half of the firms contacted had addresses which were in Vale Royal, Congleton, Macclesfield, or North Trafford.

5.3.6 This would suggest that the concern expressed by authorities in the Manchester Airport area is justified, and that there may be a requirement for land to be allocated and restricted in its use to airport related activities.
5.4 Policy and Airport Attraction

5.4.1 The scenarios established in Chapter Four concerning the relationship between policy and outcomes in terms of the airport as an inward investment attraction a briefly assessed in this section. One question in the Survey of Local Business is of relevance. Again the survey results must be treated with absolute caution.

5.4.2 The Survey of Local Business contained a question which asked large firms if they had changed location and, if they had, what the reasons behind their locational decision were. They were given a choice of ten answers, plus the freedom to add additional answers of their own, and were asked to allocate a score of between one and ten to each reason, giving one to the least important reason, five to moderately important reasons, ten to the most important, and so on.

5.4.3 The answers given differed between firms around each airport. Of the 60 Gatwick large firms which took part in the survey, 23 had moved into the area in the last ten years. Of the 60 Manchester large firms surveyed only 5 had recently moved. The number of firms which recorded a ten for the importance of the airport in determining their locational decision was, however, only two at each airport. In order to determine the overall importance of the airport in relation to other factors, the score allocated to each by all responding firms was totalled for each airport. The most important factor identified at Gatwick was road and rail infrastructure, followed by good communications to London. Proximity to Gatwick Airport was only the fifth most important factor according to the response of firms. At Manchester, on the other hand, the importance of proximity to the airport ranked a close second after good communications to the main centres. The full list of factors for each airport are listed in FIGURE 31.
FIGURE 31

Factors Affecting the Locational Decisions of Large Firms Recently Occupying Premises Close to Gatwick and Manchester Airports.

<table>
<thead>
<tr>
<th></th>
<th>Gatwick Score</th>
<th>Manchester Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Potential Score</td>
<td>230</td>
<td>50</td>
</tr>
<tr>
<td>Communications to Main Centres</td>
<td>137</td>
<td>46</td>
</tr>
<tr>
<td>Proximity to Airport</td>
<td>100</td>
<td>44</td>
</tr>
<tr>
<td>Links to Channel Tunnel</td>
<td>47</td>
<td>14</td>
</tr>
<tr>
<td>Road and Rail Infrastructure</td>
<td>146</td>
<td>38</td>
</tr>
<tr>
<td>Links with Local Suppliers</td>
<td>53</td>
<td>41</td>
</tr>
<tr>
<td>Importance of Local Markets</td>
<td>61</td>
<td>34</td>
</tr>
<tr>
<td>Goods Supply of Labour</td>
<td>130</td>
<td>43</td>
</tr>
<tr>
<td>Pleasant Environment</td>
<td>115</td>
<td>37</td>
</tr>
</tbody>
</table>

Outcomes at Gatwick

5.4.3 The results of the survey would suggest that the airport is not a major attractor of investment to the local area. However, it is not easy to separate out the role of the airport from the roles of infrastructure, suppliers and markets which might themselves be affected by the presence of the airport. A majority of the firms in the survey, for instance, recorded scores of 8, 9, or 10 for more than one attribute, suggesting that a combination of factors determined their decision.
5.4.4 It is not possible to determine whether the lack of large scale business park accommodation would make a difference at Gatwick. The fourth most important locational attribute of the area according to the large Gatwick firms surveyed was an attractive environment.

Outcomes at Manchester

5.4.5 It was not possible to draw conclusions from the Manchester large firms response. The number of firms who had relocated as a proportion of firms surveyed was, however, very low compared to the Gatwick proportion. Again, a range of factors were identified by most firms in defining the nature of their locational decision.
5.5 Future Scenarios

5.5.1 This section details a number of potential future scenarios for airport growth at Manchester and Gatwick, a range of possible planning responses to these, and the likely implications, in overall policy terms, of the planning response. It then provides an indication of the course of action which would best reconcile the various policy conflicts at each airport.

The Future At Gatwick

5.5.2 All of the future scenarios are based upon the assumption that demand for air transport will increase and will manifest itself in demand for increased capacity at Gatwick. The airport currently handles around 20 million passengers per annum, and 25 million is assumed by West Sussex as the capacity of the single runway. It has already been indicated, however, that BAA Plc feel that a throughput of 42 million can be achieved with the existing runway. If a second runway is constructed as a consequence of the RUCATSE exercise then capacity will increase to as many as 80 million passengers.

Scenario One

The airport is pegged back in local authority plans to a capacity at or around that assumed in the existing West Sussex Structure Plan. This will allow the local planning authorities to achieve their objectives more easily, in terms of controlling the airports effects. However, this would be contrary to government airports policy in that it would prevent the provision of airport capacity when required by market conditions and based upon commercial viability.
Scenario Two

The government intervene by modifying future local authority Structure Plans to allow for an increased throughput of the airport of 42 million passengers. This throughput may not be achievable with the existing two terminals and if a third was required a planning application would be submitted. A public inquiry would result in government policy winning through and an increased throughput being achieved. In this situation the local authorities would have no option but to review all aspects of their planning policies. The most likely outcome would be a relaxation of policy in West Sussex and a partial relaxation in Surrey. Government regional guidance would have to be revised to end the role of Crawley Gatwick as an area of growth restraint.

Scenario Three

In the unlikely event that as a consequence of the RUCATSE exercise an application for a second runway was made, together with eventually up to two new passenger terminals, local authorities would oppose the expansion. Again, a public inquiry would be held. During the public inquiry the findings of the RUCATSE exercise would become a material consideration, although they might require updating and revision. The Inspector would again favour the government line and the expansion would be permitted. The consequences of this for planning policy would be unimaginable. The government regional planning strategy would need to be abandoned and the Crawley Gatwick area remolded as a nationally significant growth point. Local authority policies seeking to restrain growth, and control the effects of the airport, would become irrelevant and would likely be abandoned.
The Way Forward

The following measures are recommended as a possible way forward for the Gatwick area:-

1  The reconciliation of government airports and planning objectives. This could take two forms:-

   a  Accept that the airport will expand and abandon measures to control its effects.

   b  Accept that the area should be one of restraint and place restrictions upon the use of the airport. Divert traffic demand to other airports.

2  The standardising of the local authority policy response. Again, this could take two forms:-

   a  If the airport expands then land should be allocated specifically for airport related development close to the airport in both West Sussex and Surrey.

   b  If the airport growth is restricted then the effects should be accommodated within the overall development provisions of each county.
The Future at Manchester

5.5.3 All of the future scenarios are based upon the assumption that demand for air transport will increase and will manifest itself in demand for further capacity at Manchester. The airport currently handles around 10 million passenger per annum, but Manchester Airport Ltd forecast that this will rise to 30 million in the early years of the next century. A successful application for a second runway will substantially increase this capacity.

Scenario One

An application for a second runway is made in the summer of 1993. At the public inquiry the decision is made in the context of a lack of firm government guidance on the national role of Manchester Airport and the role of the Manchester Airport area in the North West region. The runway application is rejected. Local authorities are only able to take advantage of the services provided in part.

Scenario Two

The second terminal planning application is allowed despite the uncertainty engendered by government lack of direction. The airport grows to become a major international gateway facility. Local authorities attempt to obtain maximum benefits from the expansion but are held back to an extent by the lack of government guidance.

Scenario Three

The government position becomes clearer as regional guidance is provided for the North West indicating that the Manchester Airport area should...
become a major growth point, and the advantages of a location close to the airport should be promoted. Government airports policy remains market oriented and so the second runway application is allowed. Manchester becomes a major international gateway airport and local authorities are able to obtain the maximum benefits of this expansion.

The Way Forward

The following measures are recommended as a possible way forward for the Manchester Airport area:-

1  The government policy in relation to the provision of capacity is modified to direct demand to regional airports, and to secure the use of Manchester as the intercontinental gateway for the north of the country.

2  Government regional guidance is provided which forms the framework required for local authorities to achieve their goals.
CHAPTER SIX

WHAT WAS GAINED FROM THE STUDY

6.1 This study sought to investigate just a small part of the global aviation machine. It concentrated upon the economic effects of airports at the local level, and the role that planning might play in defining these effects.

6.2 The study's central hypothesis, that planning can only play a minor part in defining the economic effects, has been shown to be reasonable. The study has shown that planning must operate alongside a multiplicity of other factors which combine to produce the overall impact.

6.3 The assertions which accompanied the central hypothesis have also been demonstrated as being reasonable. Studies around the world show that airports can represent very powerful economic forces. This study has shown that national government failed to respond in Britain, and that consequently policy at a local level is formulated in the absence of any overall guidance.

6.4 The study has provided a typology of airports in Britain based upon the size and role of each airport, and the planning approach to it. It has also identified the difficulties and opportunities which have arisen around two of the county's most important airports - Gatwick and Manchester.

6.5 The study has recommended possible ways forward in both the Gatwick and Manchester areas. These recommendations have at their core the need for national government to take a lead in formulating a national airports policy which sets acceptable growth targets for each and every airport in the country. The recommendations also imply the need for government re-
gional planning guidance to be co-ordinated with the objectives of this airports policy. The two are currently contradictory.
References in **bold** denote where author is also the publisher


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APPENDIX ONE

Survey of Airport Operators
## AIRPORTS IN THE UNITED KINGDOM

### SURVEY OF AIRPORT OPERATORS

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Airport</td>
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<td>Full postal address</td>
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<td>Organisation</td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td></td>
</tr>
<tr>
<td>Is any information provided here of a confidential nature?</td>
<td>Yes □ No □ If so, please specify</td>
</tr>
<tr>
<td>Name of local planning authority</td>
<td></td>
</tr>
<tr>
<td>Existing airport passenger capacity (in mppa)</td>
<td></td>
</tr>
<tr>
<td>Is there any restriction upon this capacity?</td>
<td>Yes □ No □</td>
</tr>
<tr>
<td>If yes, what is this restriction based upon?</td>
<td>Terminal capacity □ Runway capacity □ Planning permission □ Financial considerations □ Site area □ Other please state □</td>
</tr>
</tbody>
</table>

*Mppa = Million passengers per annum*

*Please delete as appropriate*
What was the passenger throughput of the airport during each of the following years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td></td>
</tr>
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<td>1985</td>
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<td>1989</td>
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<tr>
<td>1990</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td></td>
</tr>
</tbody>
</table>

What approximate passenger throughput do you expect the airport to reach during each of the following years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
</tbody>
</table>

What was the approximate level of total on airport employment during each of the following years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td></td>
</tr>
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<td>1990</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td></td>
</tr>
</tbody>
</table>

What levels of on airport employment do you expect the airport to reach during each of the following years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
</tbody>
</table>
What is the current level of on airport employment, broken down into the following broad categories?

- Airport Operations
- Airlines - Ground
- Airlines - Crew
- Concessionaires
- HM Government
- Contractors

What level of cargo, in metric tonnes, did the airport handle during each of the following years?

1970
1975
1980
1985
1986
1987
1988
1989
1990
1991

What level of cargo do you expect the airport to reach during each of the following years?

1995
2000
2005

How many ATMs did the airport handle during each of the following years?

1970
1975
1980
1985
1986
1987
1988
1989
1990
1991
How many ATMs do you expect the airport to handle during each of the following years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
</tr>
</tbody>
</table>

What plans do you have for the expansion of the airport in coming years?

What effect do you expect this expansion to have in terms of passenger throughput and employment on the airport?

Do you anticipate any changes in the employment structure of the airport, or in levels of productivity, in coming years?
Do you have any information on the residential location of airport workers in the local area?

Are you aware of any recent studies conducted on the employment impact of the airport upon the local area?

What is your view of the role of the airport in the local area and of its impact upon the local economy?

Many thanks for participating in this survey. The answers which you provide may require further investigation.

Contact telephone number

Do you wish to be kept informed of the results of this survey? Yes [ ] No [ ]
APPENDIX TWO

Survey of Strategic Planning Authorities

<table>
<thead>
<tr>
<th>Name of Local Authority</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Is any information provided here of a confidential nature?</th>
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</table>

| If so, please specify                                      |
|                                                           |

<table>
<thead>
<tr>
<th>What is the existing passenger throughput of the airport?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

| The impact and how does this relate to its permitted capacity? |
|                                                               |

<table>
<thead>
<tr>
<th>Do you have planning policies relating to activity on the airport?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>No</th>
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</thead>
</table>

If Yes please give details below
<table>
<thead>
<tr>
<th>Airport</th>
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<tbody>
<tr>
<td>Name of Local Authority</td>
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<tr>
<td>Full Postal Address</td>
</tr>
<tr>
<td>Person completing questionnaire</td>
</tr>
<tr>
<td>Position</td>
</tr>
<tr>
<td>Is any information provided here of a confidential nature? If so, please specify</td>
</tr>
<tr>
<td>What is the existing passenger throughput of the airport (in mppa) and how does this relate to its permitted capacity?</td>
</tr>
<tr>
<td>Do you have planning policies relating to activity on the airport? Yes / No If Yes please give details below</td>
</tr>
</tbody>
</table>
Where relevant please include policies on land allocations or restrictions, particularly concerning airport related activity such as airline offices, freight companies, hotels, car parking, and flight caterers.

Do you have any planning policies which cover the location and effects of airport supply/feeder firms in the area? If so, please give details.

Do you have planning policies aimed at encouraging or accommodating airport attracted firms in the local area? If so, please give details.

In addition to statutory planning policies, does the authority undertake any other activity aimed at encouraging or accommodating development in association with the airport? If so, please give details.

Do you undertake monitoring of airport related activity - either on or off the airport site?

Yes

No  If Yes please give details on the next page
Have you undertaken any studies into activity on the airport? Particularly in the following areas:-

On airport employment/productivity trends

Yes [ ] No [ ]

Residential location of airport employees

Yes [ ] No [ ]

Growth of non operational employment (such as retail concessionaires)

Yes [ ] No [ ]

If you answer Yes to any of these please give details below.
Have you undertaken any studies into the wider local effects of the airport? *Particularly in the following areas:*

- Nature, extent and location of airport supply/feeder firms and employment [ ] Yes [ ] No
- Multiplier effects of the spending of airport related employees [ ] Yes [ ] No
- Nature and distribution of airport attracted firms and employment [ ] Yes [ ] No

*If you answer Yes to any of these questions please give details below*

Many thanks for participating in this survey. The answers which you have provided here may require further investigation.

Contact telephone number

Do you wish to be kept informed of the results of this survey? [ ] Yes [ ] No
APPENDIX THREE

Inventory of Local Authority Policies Relating to Airport Expansion

As obtained from the Survey of Strategic Planning Authorities where the wording of the policy was stated.

Avon County Council
Avon County Structure Plan
November 1981

Policy TR 16

Lulsgate Airport will remain as the civil airport for Avon

Bedfordshire County Council
Bedfordshire County Structure Plan Alterations No3
Date not given

Policy 76

The local planning authorities will give favourable consideration to proposals for development of Luton Airport with a view to accommodating throughput of up to 5 million passengers a year, should demand exist, subject to the conditions that:

(i) noise levels continue to be reduced and no increase beyond recent peak levels should take place;
(ii) traffic problems are not exacerbated by such a development.

Cheshire County Council
Cheshire 2001: Draft Structure Plan
1990

Policy T22

The County Council will support the expansion of air traffic usage at Manchester and Liverpool Airports within the capacity of the existing runways.

Derbyshire County Council
Derbyshire Structure Plan
1990

Transport Policy C5.68

The County Council will encourage the further development of the East Midlands International Airport and promote its use by Derbyshire residents whilst being concerned to minimise environmental disturbance.
Grampian Regional Council
Structure Plan
Date not given

Supporting Policy T28

The Regional Council will continue to support the development of domestic and international services from Aberdeen Airport, and remains committed to the improvement of access.

Policy T29

There will be a presumption against development which prejudices the operational integrity of Aberdeen Airport.

London Borough of Hillingdon
Draft Unitary Development Plan
Date not given

Policy A1

The local planning authority will seek to contain further expansion of Heathrow Airport within its present runway capacity, as constrained by existing hours of operation, limitation of night flights and current noise restrictions.
Policy T4.1

In considering proposals for increases in runway or terminal capacity, either inside the Borough or outside the Borough on which it might be consulted, the Council will fully assess their environmental, land use, transport and other relevant implications for the Borough.

Policy T4.1(a)

The Council, having regard to the criteria it would use to assess proposals for increases in runway capacity, is of the view that a proposal resulting in increased air traffic movements forecast by the Civil Aviation Authority in CAP 570 would be unacceptable. It would, therefore, oppose such a development or any other runway development proposal which it judged not to meet the criteria.

Paragraphs 9.16 and 9.17

Until there is greater certainty about the future scale of operations at the airport there will be a general presumption against:-
(a) Any development of additional ancillary facilities at or near the airport, except warehousing facilities.

Northumberland County Council
Northumberland County Structure Plan
1988

Policy T29

The County Council will support the expansion of terminal facilities at Newcastle Airport in accordance with its role as a regional airport.

Solihull Metropolitan Borough Council
Solihull Unitary Development Plan
1990

Policy E3

Reasoned proposals for the development of the Airport, for passenger and freight services...will be supported by the Council as important contributions to the economic regeneration of the West Midlands.
Policy MT18

Major proposals for airport development should comply with the general strategy of the plan and Government Regional Guidance. Local planning authorities will oppose any airport development proposals which are considered to have an adverse impact on Surrey.

West Sussex County Council

West Sussex Replacement Structure Plan

Policy T10

The Planning Authorities will support the provision of facilities to enable Gatwick to operate safely and efficiently as a single runway two terminal airport. They will grant permission for development necessary for this where permission is required, subject to compliance with other relevant policies and to the provision and use of the facilities being consistent with a general land use plan for the development of the airport which has been approved by the Authorities.
APPENDIX FOUR

Inventory of Local Authority Policies Relating to Direct and Indirect Airport Impacts in the Local Area

As obtained from the Survey of Strategic Planning Authorities where the wording of the policy was stated.

Cheshire County Council
Cheshire 2001: Draft Structure Plan
1990

Policy GS2

Sufficient land will be provided for employment purposes to...capitalise on the particular development opportunities arising from...the growth and development of Manchester Airport

Durham County Council
Approved Durham Structure Plan
1981

Policy 4A

Light industry and warehousing which is related to the development of the airport may be appropriate at Tees-side Airport.
Essex County Council
Approved Essex Structure Plan First Alteration Draft
1991

Policy T25

Provision is made for all development directly related to, or associated with
the airport to be located on the site of Stansted Airport. Industrial and
commercial development unrelated to the airport will not be permitted on the
site.

Leicestershire County Council
The Leicestershire Structure Plan
Date not given

Paragraphs 9.16 and 9.17

Until there is greater certainty about the future scale of operations at the
airport there will be a general presumption against:-

(a) Any development of additional ancillary facilities at or near the
airport, except warehousing facilities.
Policy A3

The local planning authority intends that all activities essential to the operation of Heathrow Airport should keep within its boundary. It will not consider the refusal by eligible tenants of the terms of tenancy offered by Heathrow Airport Ltd to be of itself a sufficient reason to justify a location elsewhere. The airport is also an appropriate location for other airport-related activities including hotels and conference facilities, provided these do not displace essential activities.

Policy T4.3

Other than in exceptional circumstances, any development at Heathrow Airport, which is directly related to its functioning and operation, must take place within the airport boundary as defined on the Proposals Map.
**Solihull Metropolitan Borough Council**

**Solihull Unitary Development Plan**

**1990**

**Policy E3**

The Council will allocate and safeguard land adjacent to the Airport...for..longer term expansion and to allow for the development of related uses.

---

**Surrey County Council**

**Surrey Replacement Structure Plan Deposit Version**

**1992**

Provision for all airport related development should normally be made within the airport. Local plans will not normally identify industrial and commercial land for this purpose outside the airport boundaries. In considering applications for such development, local planning authorities will need to be satisfied that it cannot be located within the airport and is compatible with the local infrastructure and environment.
Policy T12

Business development related to Gatwick Airport may...be permitted elsewhere on land provided for business development generally under policies E1 and E5.
APPENDIX FIVE

Inventory of Local Authority Policies Relating to Airport Expansion

As obtained from the Survey of Strategic Planning Authorities where the wording of the policy was stated.

Cheshire County Council
Cheshire 2001: Draft Structure Plan
1990

Policy EMP5

In addition to provision made in policy EMP1 30 ha is allocated in the vicinity of Manchester Airport in Macclesfield Borough for the development of airport related activities in a business park setting.

Derbyshire County Council
Derbyshire Structure Plan
1990

Economy Policy A4.84

The County Council will continue to urge Leicestershire County Council to allocate sufficient land in the vicinity of M1 Junction 24 to enable the full employment creation potential of the area to be realised.
Policy EW12

Land immediately north of the airport adjoining Woodhouse Park is allocated as one of the major strategic sites for high technology industry.
APPENDIX SIX

Survey Of Local Business
Gatwick
A survey is aimed at assessing the importance of Gatwick Airport to firms in its vicinity. Please answer the questions with a number, tick or short description in appropriate box, or by writing on the dotted line. This survey is strictly confidential. When information is recorded on computer, the name and address of your business will not be included. The data collected will only be used in aggregate form with information from other firms. A reply paid envelope has been provided for your convenience. If for any reason this is not used, please return the completed questionnaire to:-

Planning Department, West Sussex County Council, The Grange, Tower Street, Chichester, West Sussex PO19 1RL

**OUR FIRM**

This section deals with basic information about your firm. This information will help to classify the firm in terms of sector and location, and assist with the interpretation of other answers which you provide.

Name of Firm

Person completing questionnaire

Position in company

What does the firm make or do? Please give main activity

What is the function of this unit? Please tick one box:-

- Head office
- An independent unit without branches
- Branch or subsidiary
- Other (please state below)

How does the firm mainly utilise the unit? Please tick one box:-

- Production
- Storage or warehousing
- Offices
- Other (please state below)

Full Postal Address (Including Postcode) and contact telephone number

Date of occupation of premises

Details of previous location(s)

If the firm has any other units elsewhere, please give details of their location and the function(s) they perform.
EMPLOYMENT AND TURNOVER

This section deals with information regarding levels of employment, turnover and payrolls. If latest information is unavailable, or is too sensitive to release please give most recently published figures, or indicate on the charts provided the estimated level or figure. A number of questions refer to the local area - this is defined on a map on the back page.

How many people are currently employed:

- by the company?
- at this unit?
- at other units in the local area?

How many people (full plus part time) were employed at the following times:

- by the company?
- at this unit?
- at other units in the local area?

What was the total gross turnover of the company during the most recent full financial year?

If you are unable to provide an exact answer please give an estimate by placing a cross on the chart

What proportion of this turnover is attributable to the unit contacted in this survey? Please provide an estimate by placing a cross on the chart

What proportion of turnover was spent in goods and services from firms in the Deal area during the most recent full financial year? Please provide an estimate by placing a cross on the chart

What was the total payroll (gross wages/salaries) at this unit during the most recent full financial year?

If you are unable to provide an exact answer please give an estimate by placing a cross on the chart

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<th>Turnover (£’s)</th>
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<th>100,000</th>
<th>1M</th>
<th>10M</th>
<th>100M</th>
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<th>Payroll (£’s)</th>
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<th>100,000</th>
<th>1M</th>
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<th>Payroll (%)</th>
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<th>75%</th>
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</table>
The company transferred from another location, why did it choose to move to this area? Set out below are a number of possible reasons behind the firms decision to locate a unit in the area. Please indicate the importance of each factor by placing a tick in the relevant box. If you consider any of the options to be very important then tick 10, if they are moderately important tick 5, if they of no importance tick 1, and so on. Please provide only one tick for each option and try not to leave any options blank.

- Good communications to London
- Proximity to Gatwick Airport
- Good communications to the Channel Tunnel
- Good road and rail infrastructure
- Links with local suppliers
- Importance of local markets
- Good supply of suitable labour
- Attractive environment
- Other reasons (please state)

Why did the firm choose to occupy this particular unit? Set out below are a number of possible reasons behind the firms choice of premises. As with the previous question, please indicate the importance of each factor by placing a tick in the relevant box.

- Suitable land or buildings
- Good access to transport networks
- Near to the Airport
- Other reasons (please state)

Has the firm experienced any difficulties in recruiting sufficient staff in this area? Please tick

Yes [ ]
No [ ]

If Yes, please give the number the firm was short staffed by, and the year in which this occurred

200 [ ]
An approximate proportion of employees at your unit live within the local area as defined on map on the back page? Please provide an estimate by placing a cross on the chart.

NKS WITH GATWICK AIRPORT

This section deals with information regarding possible links between your company, the airport and its passengers, and firms on the airport. There may be no relationship at all, but if there is please pay particular attention to these questions.

0 of the following statements A-E apply to your firm? Please tick either Yes or No for each. Answers will usually require further investigation.

1. The firm makes no use of Gatwick Airport

2. The firm uses Gatwick Airport for the regular transport of personnel

   Regular = Once a month or more

   If Yes, how often? Please circle as appropriate Daily Weekly Fortnightly Monthly

   If No, why, and what other means of personnel transport are utilised?

3. The firm uses Gatwick Airport for the regular transport of goods

   Regular = Once a week or more

   If Yes, what proportion of total goods transported go through the airport? Please indicate by placing one tick on the table below.

   0 20% 40% 60% 80% 100%

   If Yes, what types of goods are transported, and why does the firm use the airport rather than other transport modes?
The firm receives goods and services from the airport and airport firms

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
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</table>

If Yes, what proportion of total goods purchased? Please indicate by placing one tick on the table below

<table>
<thead>
<tr>
<th>0</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
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The firm supplies goods and services to the airport, airport passengers, or airport firms

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
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</table>

If Yes, please answer the questions below:-

What proportion of your business is airport related? Please indicate by placing one tick on the table below

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<tr>
<th>0</th>
<th>20%</th>
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<th>100%</th>
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What types of goods and services are supplied?

Gatwick Airport currently handles around 20 million passengers per annum

Is the level of business conducted by your firm related to passenger numbers at the airport? Please circle Yes or No

If Yes, how would your firm be affected if Gatwick were to expand? Please indicate the likely employment implications in the boxes provided:

- If the Airport expanded to 42 million passengers employment at the firm would increase to around
- If the Airport expanded to 80 million passengers employment at the firm would increase to around

If No, what other factors on the airport affect the level of your business?
Apart from the state of the economy, what local factors might affect the ability of the firm to expand in the future? (e.g., labour, land supply, planning controls)

If Gatwick Airport closed tomorrow, what do you consider would be the likely consequences for your firm? Please tick any of the statements below which are appropriate:

- [ ] The firm would have to make some employees redundant
- [ ] The firm’s income would fall
- [ ] The firm would have to close down
- [ ] The firm would have to relocate
- [ ] The firm would be unaffected
- [ ] Other (please state)

Many Thanks for taking part in this survey. Every response is important.

The map below shows the local area as defined for the purposes of this study. It relates to those places which can be reached from the airport by car in about 20 minutes.
APPENDIX SEVEN

Survey of Local Business
Manchester
This survey is aimed at assessing the importance of Manchester Airport to firms in its vicinity. Please answer the questions with a number, tick or short description in the appropriate box, or by writing on the dotted line. This survey is strictly confidential. When information is recorded on computer, the name and address of your business will not be included. The data collected will only be used in aggregate form with information from other firms. A reply paid envelope has been provided for your convenience. If for any reason this is not used, please return the completed questionnaire to:-

Planning Department, West Sussex County Council, The Grange, Tower Street, Chichester, West Sussex PO19 1RL.

YOUR FIRM

This section deals with basic information about your firm. This information will help to classify the firm in terms of sector and location, and will assist with the interpretation of other answers which you provide.

Name of Firm

Position in company

What does the firm make or do? Please give main activity

What is the function of this unit? Please tick one box:-

- head office
- an independent unit without branches
- a branch or subsidiary
- other (please state below)

How does the firm mainly utilise the unit? Please tick one box:-

- production
- storage or warehousing
- offices
- other (please state below)
EMPLOYMENT AND TURNOVER

This section deals with information regarding levels of employment, turnover and payrolls. If latest information is unavailable, or is too sensitive to release please give most recently published figures, or indicate on the charts provided the estimated level or figure. A number of questions refer to the local area - this is defined on a map on the back page.

How many people are currently employed?

- by the company?
- at this unit?
- at other units in the local area?

How many people (full plus part time) were employed at the following times:

- by the company?
- at this unit?
- at other units in the local area?

What was the total gross turnover of the company during the most recent full financial year?

If you are unable to provide an exact answer please give an estimate by placing a cross on the chart.

What proportion of this turnover is attributable to the unit contacted in this survey? Please provide an estimate by placing a cross on the chart.

What proportion of turnover was spent on goods and services from firms in the local area during the most recent full financial year? Please provide an estimate by placing a cross on the chart.

What was the total payroll (gross wages/salaries) at this unit during the most recent full financial year?

If you are unable to provide an exact answer please give an estimate by placing a cross on the chart.
**IF LOCAL AREA**

This section deals with the firm's attitude to the area in which it is located, and the ways in which local conditions affect the firm. Reference made in a number of questions to the local area - this is defined on the back page.

The company transferred from another location, why did it choose to move to this area? Set out below are a number of possible reasons behind the firm's decision to locate a unit in the area. Please indicate the importance of each factor by placing a tick in the relevant box. If you consider any of the options to be very important then tick 10, if they are moderately important tick 5, if they are of no importance tick 1, and so on. Please provide only one tick for each option and try not to leave any options blank.

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<td>Attractive environment</td>
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Why did the firm choose to occupy this particular unit? Set out below are a number of possible reasons behind the firm's choice of premises. As with the previous question, please indicate the importance of each factor by placing a tick in the relevant box.

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<td>Suitable land or buildings</td>
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<td>Good access to transport networks</td>
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Has the firm experienced any difficulties in recruiting sufficient staff in this area? Please tick

Yes [ ] No [ ] If Yes, please give the number the firm was short staffed by, and the year in which this occurred
at approximate proportion of employees at the unit live within the local area as defined on the map on the back page? Please provide an estimate by placing a cross on the chart.

NKS WITH MANCHESTER AIRPORT
This section deals with information regarding possible links between your company, the airport and its passengers, and firms on the airport. There may be no relationship at all, but if there is please pay particular attention to these questions.

Do any of the following statements A-E apply to your firm? Please tick either Yes or No for each. Answers will usually require further investigation.

1. The firm makes no use of Manchester Airport

2. The firm uses Manchester Airport for the regular transport of personnel
   Regular = Once a month or more
   If Yes, how often? Please circle as appropriate: Daily, Weekly, Fortnightly, Monthly
   If No, why, and what other means of personnel transport are utilised?

3. Does the firm more regularly use Heathrow and Gatwick rather than Manchester for the regular transport of personnel? Please circle as appropriate.

4. The firm uses Manchester Airport for the regular transport of goods
   Regular = Once a week or more
   If Yes, what proportion of total goods transported go through the airport? Please indicate by placing one tick on the table below.
   If Yes, what types of goods are transported, and why does the firm use the airport rather than other transport modes?
The firm receives goods and services from the airport and airport firms

If Yes, what proportion of total goods purchased? Please indicate by placing one tick on the table below

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<tr>
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<th>0</th>
<th>20%</th>
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The firm supplies goods and services to the airport, airport passengers, or airport firms

If Yes, please answer the questions below:

What proportion of your business is airport related? Please indicate by placing one tick on the table below

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What types of goods and services are supplied?

Manchester Airport currently handles around 12 million passengers per annum

Is the level of business conducted by your firm related to passenger numbers at the airport? Please circle Yes or No

If Yes, how would your firm be affected if Manchester were to expand? Please indicate the likely employment implications in the boxes provided:

If the Airport expanded to 30 million passengers, employment at the firm would increase to around

If the Airport expanded to 60 million passengers, employment at the firm would increase to around

If No, what other factors on the airport affect the level of your business?
Apart from the state of the economy, what local factors might affect the ability of the firm to expand in the future? (eg labour, land supply, planning controls)

If Manchester Airport closed tomorrow, what do you consider would be the likely consequences for your firm? Please tick any of the statements below which are appropriate

- [ ] The firm would have to make some employees redundant
- [ ] The firm's income would fall
- [ ] The firm would have to close down
- [ ] The firm would have to relocate
- [ ] The firm would be unaffected
- [ ] Other (please state)

Many Thanks for taking part in this survey. Every response is important.

The map below shows the local area as defined for the purposes of this study. It relates to those places which can be reached from the airport by car in about 20 minutes.