



TRANSPORT FORUMS TO DEVELOP AIRPORTS AS MULTI-MODAL HUBS PROVIDING SUSTAINABLE TRANSPORT FOR EMPLOYEES AND AIR PASSENGERS

Category: Workshop

In case of a workshop: Economic community

Name: Alastair Duff

Organisation: Chairman, Heathrow Area Transport Forum

Country: England

E-mail address: alastair_duff@baa.com

TRANSPORT FORUMS TO DEVELOP AIRPORTS AS MULTI-MODAL HUBS PROVIDING SUSTAINABLE TRANSPORT FOR EMPLOYEES AND AIR PASSENGERS

1. Introduction

The purpose of this Paper is to explain how, using Heathrow as the key example, Transport Forums can be used to develop the potential of airports to act as transport interchanges, the partnership approach used to bring together the wide range of interested organizations, the issues faced and the successes achieved. The measure of success achieved by the Heathrow Area Transport forum is indicated in two ways. Firstly, the UK's 10 Year Transport Plan, which notes that *Airports are important transport hubs within their regions...they need to be better integrated into the wider transport network to maintain and improve access...the largest airports have the potential to become important surface transport hubs in their own right, not just as destination points, but as interchanges between car, bus, coach and rail.* Secondly, the UK Government's recent White Paper on Transport, which identified, from the experience of this Forum, the benefits airports will derive from establishing forums in order to enable them to reach their full potential as transport hubs.

2. Background

Airports like Heathrow, by the nature of their activity, require good surface access links in order to ensure that air passengers can make their connections, and employees are in place to handle aircraft, traffic services and air passengers. Unfortunately, existing urban transportation planning takes little note of their specific needs and the development of an inter-modal strategy on surface access for airports, aimed at creating an integrated hub, had to be developed. The concentration of a wide variety of businesses on and around an airport, and the air passenger flows, must offer opportunities for the providers of bus, coach and rail services to enhance their operations. However, these opportunities are not always apparent to them, due either to a lack of data regarding the potential market, inappropriate assumptions about the airport's needs or a lack of consensus amongst the wide range of agencies associated with the delivery of public transport improvements.

Partnerships are vital to making progress but how to create an effective one? In 1995 BAA Heathrow set out with the specific objective of establishing a Transport Forum that would bring together all the key players in London and the South-East. This would allow a regular dialogue with local authorities, transport authorities and operators, business and environmental interests in order to find ways in which surface access, both to the airport and within the surrounding area, could be improved, whilst also identifying other options such as car-sharing and cycling which would also reduce car dependence. This should be seen in the context of the present (2002) figures of 64 million air passengers, and 68,000 staff employed by 435 companies on airport. It should also be noted that Heathrow is the busiest bus/coach hub in the UK and has 5 railway stations on airport.

3. Forum Structure and Operation

The Heathrow Area Transport Forum now comprises over 80 organisations. Managed through a Steering Group are a number of Working Groups covering bus route development, rail planning, air quality, telematics, demand management corridors, travel planning, cycling/greenways and freight quality partnerships. The Steering Group includes Transport for London, SEEDA, SEERA, Strategic Rail Authority, Highways Agency, BA, BAA, Stockley Park Consortium, Thames Valley Economic Partnership, the London Boroughs of Hounslow and Hillingdon, Surrey and South Bucks County Councils, Spelthorne and Slough Unitary Authorities.

The three key objectives for the Forum are:

- to agree short and long term targets;
- to devise a strategy to achieve them;
- oversee and monitor implementation of the strategy.

The transport strategy should take a holistic view and needs to promote the economic development of the airport whilst reflecting the wider business, social and environmental considerations relevant to its Region. In this context the Forum decided that its core strategies should be:

- setting a target for increased use of public transport by air passengers
- providing customer-focussed facilities that encourage use of public transport
- reducing single-car occupancy by staff
- ensuring that operators are encouraged to provide more services through innovative financing and development schemes
- developing an inter-modal approach that integrates all forms of transport
- establishing effective partnerships with local planning authorities, transport authorities and operators, the local business community and others, to develop area-wide, cost-effective and mutually beneficial strategies to exploit the full potential of public transport, with the airport as an integrating hub.

It was felt necessary to redefine the perception of Heathrow as being “only an airport.” It is now defined as “a place where networks meet, integrating very different scales of distance and modes of transport, from walking to flying.” Six key points then emerge about this type of interchange. It:

- is a major focal point, playing a fundamental territorial role in its environment
- relieves practical interchange problems and offers an image of quality
- is a service orientated space, where travellers can make the most of their journey through facilities that complement the transport function
- is developed through partnership between the various agencies and providers
- operates co-operatively between the service providers to provide high levels of customer satisfaction
- is innovative, looking to integrate organisational, economic, technological and service elements.

In 1999, after extensive discussions and a lot of hard work by all parties, a 5 Year Airport Surface Access Strategy was approved by the Forum and agreed with the 12 Borough, District, Unitary, County Authorities and service providers involved, setting out commitments, objectives and targets. This has been incorporated into the Local and Regional Transport Plans. Heathrow’s surface access needs, and its role in transport development, is now part of the regional and local transport planning process. An Annual Review of progress is issued.

The Forum’s access development strategy has focused on:

- building partnerships with key regional and local organisations
- understanding customer needs
- understanding key regional movement patterns and social issues.
- working with stakeholders to identify holistic strategies within which the Forum strategy can sit.
- working with all parties on the delivery of successful quality transport services.
- improving key interchange points on and around the airport.

Looking at transport options rail is inherently attractive on several grounds. It offers high capacity per movement, high frequency if required, reliability of service schedule and the opportunity to build in specific air passenger service products. In general terms it has a much higher acceptance factor with the public. But there is one very serious issue with regard to new provision; it is very expensive and time consuming to achieve. It is essential to choose

the right type of rail mode for the airport's needs, although of necessity one has to start with what is available, and ensure that the track interface with the network maximises throughput. The relative merits of light rail/intermediate mode, urban metro, heavy rail and high-speed train are well understood.

Bus and coach have certain inherent advantages. In comparison to rail they are relatively inexpensive to provide, are flexible in operation and have low sunk costs. And there will usually be some form of existing network of services to build upon. Local bus services offer an excellent alternative to the car for staff, especially within the 8 to 10 mile radius, providing that the schedules reflect the shift-working pattern of the airport. Also, if developed in association with the local authorities, there is the opportunity to realise benefits to the local community through an improved bus network. Express coaches offer opportunities to link the airport along strategic motorway and trunk routes, giving a wider catchment area to attract passengers. But these services should also reflect the airport's arrival and departing peaks and offer some form of airline style service that will be attractive to the air passenger.

The Heathrow Forum has pursued a focused policy of bus service support through the use of focused pump priming rather than total control. By working in partnership with the bus industry it has encouraged them to develop new services by taking part of the risk, and once established the Forum's role in the project drops back to marketing support. There are clearly cases where operators will try innovative services and the Forum approach means that, for a relatively small investment, major initiatives can be put in place. BAA financial support also means that, through the Forum, it is often possible to lever in additional funding from other parties.

4. The Starting Point

At regular intervals the CAA carries out major passenger and employee surveys which provide, amongst other data, information as to how they access the airport. From the 1992 survey it can be seen that car use was continuing its relentless climb, bus use and cycling were declining and walking non-existent.

Employee Mode Share			
	1975	1986	1992
	%	%	%
Car	71.2	75.7	78.0
Car-share	7.6	5.3	4.0
Underground	1.2	3.8	6.0
Bus	12.8	11.0	6.0
Motorcycle	3.1	1.8	2.0
Bicycle	1.7	0.1	1.0
Walk	1.3	0.6	-
Rail	-	-	-
Taxi	-	0.7	1.0
Air	-	-	1.0

Air Passenger Modal Split		
	1991	1996
	%	%
Car	46	43
Taxi	20	24
Rail	-	-
Underground	20	16
Bus & Coach	13	16

The initial activity was to acquire as much data as possible so as to understand the network and user behaviour; this occupied between 1992 and 1994. There was simply not enough understood about how people traveled, what their desires were, what the network could do and what the capacity was. There was the need to spend time and money to understand this. By 1999 the Forum was able to use the Surface Access Monitoring System; a very large database developed by BAA Heathrow into which is poured all relevant data. Using GIS mapping principles it is possible to get down to postcode level. This enables the Forum to more quickly estimate the potential of any given proposal in terms of rider-ship.

At the same time a number of focus groups were carried out to identify airport user attitudes and propensity to change mode. Unsurprisingly it was found that they regarded public transport as being unreliable, unsafe, uncomfortable, infrequent and expensive. Much of this was of course untrue but such was the perception. However, 37% said that they would use it if it was more reliable, 24% if the timings were more flexible and 36% if it offered good access

from home. On this basis the Forum set out to improve service schedules and frequency, primarily on bus but also on the Underground.

Two issues quickly emerged. Firstly, a jurisdictional barrier that the Forum was ideally suited to resolve. Because of the boundaries between the Greater London Area and the Home Counties, and between the Counties themselves, no one transport authority was responsible for the provision of all-round public transport planning to Heathrow. The Forum proved to be an ideal mechanism to resolve this, aided by Heathrow's legal role as both a Traffic authority and a Bus/Coach Licensing Authority. Secondly, that there was actually quite a good bus network in place but it was based on the supposition that the airport worked like an industrial estate; five days a week from 0700 to 1800. Of course Heathrow is a 24 hour, 7 day a week operation, with around 75% of its staff working shift. The challenge was to change the network to meet user needs.

5. Forum Initiatives

- Starting with the 285 service to Kingston in 1995, a programme of selective and focused financial investment was undertaken on core services to improve frequency and capacity. The 285 results were so encouraging that the Forum was able to attract funding for, amongst others, the 140, 105 and the very successful A10 Uxbridge to Heathrow semi-express route. But the tendering process must consider of quality as well as cost. Where it does not, as with the re-tender on the 285, the benefits painfully gained withered rapidly on the vine and had to be rescued in co-operation with the operator. All bus routes into Heathrow received significant marketing investment through leaflets, radio advertising and route specific mail-shots.
- Ticketing is crucial to success. Starting in 1997 for Heathrow staff, the Airports Travelcard is now a co-operative effort involving 42 bus, coach and rail operators, available to over 100,000 staff at Heathrow, Gatwick and Stansted. It offers remarkable value for money in terms of discounted fares, enables inter-changeability between operators without the need to buy an additional ticket and encourages a shift away from car use. This is not subsidised by the Forum nor does it require the Forum to apportion fares, and has achieved its success through the willing participation of the service providers via the Forum Bus Working Group.
- A key factor in improving access is ensuring the ability of mass transport to compete in terms of speed with the private car...in other words providing priority systems. The first priority bus lane on a motorway in Britain was on the M4 Spur leading to Heathrow, planned, built and paid for by BAA. Working through the Heathrow Transport Forum we were able to create an effective partnership with the Highways Agency to construct this innovative solution, which now saves a guaranteed 10 minutes in the peak hours for the 7 million passengers who come to Heathrow by coach. A new initiative is the shortly to be constructed bus slip off the Bath Road at the airport's East Entrance.
- A survey was conducted on behalf of the Forum into on-airport travel habits and it was found that 15%-18% of staff were driving to work because they needed to go to other sites during the day. A further survey mapped the routes being used and cross-referred them to the existing bus network. Two initiatives resulted. Firstly, the Bus working Group examined the schedules and it was found that with some tweaking the vast majority of on-airport connections could be made with only one change of bus, principally at Hatton Cross. Furthermore, the densest demand lay along existing direct routes. The necessary schedule amendments were introduced with the co-operation of the bus operators. Secondly, and following detailed discussions with London Transport and an agreed payment, a Free Travel Zone was introduced, whereby all red bus services on the airport and along the adjacent Bath Road section would be free to all users.
- Accurate and easily available travel information is essential if car users are to be persuaded to try mass transport. On behalf of the Forum BAA Heathrow has developed the largest interactive travel database in Europe, which brings together 15 existing journey planners, including TfL, National Express and Railtrack. This provides journey information for up to three connections on bus, coach and rail services within a 50 mile

radius of the airport. Due to go live in March 2002 it will be available to Forum members via an Intranet connection. An Internet version is being developed.

- Heathrow has 435 companies based on site, as well as many others located in the surrounding area. Via the Forum Travel Planning Group active promotion of travel plans, working with key companies, is now underway. Car-sharing or pooling is a major element in this and since its re-launch in April 2001 the Heathrow Car Share Scheme is now the largest in the UK with over 1100 registered sharers.
- Many schemes that come before the Forum only need relatively modest financing to be successful. But where to find the money? The Forum is able to bid for finance from the Heathrow Transport Fund, derived from the surcharge on public and staff airport car parking. This Fund is hypothecated to improving local transport needs. It paid for the M4 Spur bus lane, supports many bus routes into the airport and contributed £1m to the Feltham rail-head improvement scheme.
- Similar partnership working at Manchester has seen a significant shift away from single – occupied cars since the launch of its Commuter Plan, down to 71% from 88%, with solid growth in local bus use. As with Heathrow the Manchester team positioned its investment in bus services in order to improve frequency and provide early and late services that match shift times. And the operators have made their vital contribution with new buses that are attractive to users.
- BAA Gatwick is a partner in the FASTWAY scheme: a £24m high quality, part guided bus project. Contributing £4m towards the infrastructure costs BAA sees this as an essential link connecting key employment areas with the airport and Crawley. This major project, to which other private sector partners are contributing, underpins the recently published Airport Transport Strategy. It started construction in 2001 with the first services operating in 2002.

6. Results to date

In terms of cross-boundary operations from Heathrow, the Forum plays a pivotal role in the development and promotion of such services, and will continue to do so. The results of the last 6 years show that the Forum partnership approach has provided a mechanism to bridge jurisdictional and legal boundaries in order to enable a focused approach to be taken towards increasing bus and rail use and reducing car dependency.

In particular it has shown that the highly-focussed, route by route funding process has been able to reverse the trend of the last twenty years. The table below shows that bus use has recovered, as have, to a smaller extent, cycling and walking. The improved scheduling of the Underground has increased rider-ship a little and the use of Heathrow express by staff is encouraging. There is clearly much work still to do but at least all the indicators are moving in the right direction.

Employee Modal Split				
	1975	1986	1992	1999
	%	%	%	%
Car	71.2	75.7	78.0	71.5
Car-share	7.6	5.3	4.0	4.0
Underground	1.2	3.8	6.0	6.3
Bus	12.8	11.0	6.0	11.7
Motorcycle	3.1	1.8	2.0	2.1
Bicycle	1.7	0.1	1.0	1.3
Walk	1.3	0.6	-	0.6
Rail	-	-	-	0.8
Taxi	-	0.7	1.0	0.8
Air	-	-	1.0	0.9

Air Passenger Modal Split			
	1991	1996	2000
	%	%	%
Car	46	43	37
Taxi	20	24	26
Rail	-	-	8.5
Underground	20	16	13.7
Bus & Coach	13	16	14

Core passenger needs are reliability, frequency and predictable journey times. By providing these, as well as innovative ticketing and accessible information, it is possible to persuade and encourage car users to give public transport a go, and then retain them. Quality must be an integral part of the product offered to the public, including higher levels of staff training. With bus, for example, the Forum's aim has been to promote bus travel as the first choice for all, not the home for those with no choice.

A key theme in the work of the Forum has been the importance of marketing. Not only marketing the improved services themselves, though that is vital, but equally the marketing of progress towards better services, the need for change and the whole concept of travel planning. Some learning points have been identified. These include the need to:

- establish solid and reliable relationships with all parties.
- be highly interactive.
- bridge institutional and jurisdictional barriers.
- develop quality-based, customer-focussed improvements.
- celebrate successes
- get early quick wins
- understand the data thoroughly
- learn from beacons of good practice
- avoid the law of unintended consequences
- set clear and achievable targets

7. Conclusion

The conclusion is that no one organization can increase the use of public transport and reduce car dependency on its own. The area-wide perspective, the inclusive approach towards tackling these challenging issues, the opportunities for attracting additional funding, the ability to target corridors most likely to see high levels of mode-shift; all these make the Transport Forum an attractive addition to transport planning in the 21st Century.

By the nature of their operation airports offer special potential for development as interchanges. It is in everyone's interest to encourage this process. By setting out to become a regional or sub-regional transport hub the airport is acting a good neighbour, working with others to improve network conditions; offering customer-focussed, quality-driven transport services that collect air passengers and staff at as early a stage in their journey as possible and providing swift and efficient routes to the airport.

Airport development, properly handled, can be an asset to the transport needs of its region. A key element in achieving this will be the creation of effective partnerships between the airport and all the other players, that take a holistic approach to developing transport solutions, recognising that to achieve mode shift requires more than just the provision of services to achieve success. Ticketing, information and marketing techniques...all skills very familiar in civil aviation...will need to be deployed.

My conclusion is that airports should be seen, in the context of evolving regional transport plans, as having a positive role to play in an integrated regional transport strategy that will lead to the creation of effective multi-modal networks. Airport growth should not be seen as a negative; airports offer solutions to transport development and interchange that will be to the benefit of everyone in the Region.