

SHOPMOBILITY: A CRITICAL LINK BETWEEN THE VEHICLE AND THE PEDESTRIAN ENVIRONMENT FOR PEOPLE WITH IMPAIRED MOBILITY

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1. INTRODUCTION

1.1 Aim of this Paper

The aim of this paper is to draw attention to a quiet revolution which is taking place in the field of accessible transport provision for people with impaired mobility - the rapid expansion of 'shopmobility' schemes across the UK.

On the face of it, shopmobility schemes are simply voluntary-sector projects that hire or lend pavement vehicles (such as powered wheelchairs or scooters) to elderly and disabled people. In the main they are situated in the retailing centres of urban areas - hence the 'shop' part of shopmobility.

However there is more to shopmobility than first meets the eye. For the past 20 years people involved in the development of accessible transport services have tended to concentrate upon the vehicular components of people's journeys (or 'trip chains'). As a result, significant advances have been made in terms of vehicle design and technology. The majority of mobility impaired people experience difficulty walking and, in response, dial a ride or dial a bus systems have been designed to provide door-to-door transport, minimising the need for walking.

Shopmobility services take this one stage further by providing independent walk-substitutes for people at low (or no) cost. They complement accessible transport services, extending the opportunities for localised trip making. Most critically, however, they allow for enhanced interaction with the pedestrian environment and encourage town centre planners and others involved with shaping the urban form (and, in particular, the layout of retail areas) to consider the needs of elderly and disabled people.

Improved urban accessibility benefits all pedestrians, not just elderly and disabled people. Through shopmobility, elderly and disabled people will increasingly be present in our town centres and this will usefully contribute to the promotion of good practice in terms of the accessibility of urban design.

1.2 Structure of the Paper

In this paper, shopmobility schemes are considered through three selected case studies and a summary of the key features of a further 24 schemes. The case studies illustrate

how schemes have developed in response to local circumstances although, in the main, shopmobility services tend to operate to a common model.

The economics of shopmobility is considered in the context of the benefits to traders from local service provision. In terms of providing a justification for the development of new services, this suggests that some form of cost-benefit analysis could be used to evaluate proposals.

Finally, some issues of current relevance to shopmobility nationally are introduced and suggestions are made as to how the long-term survival of schemes could be secured.

2. SHOPMOBILITY

2.1 Researching the Case Studies

Steer Davies Gleave is a leading, independent transport consultancy. We have extensive experience in the field of transport for elderly and disabled people - from location-specific feasibility studies through to countywide reviews of service provision.

In 1993 we were commissioned by Bath City Council to undertake a feasibility study for the development of a local shopmobility service. As part of our research, we compiled a series of case studies from services across the UK. Although the study was conducted some time ago, most of the data remains accurate and, for the purposes of this paper, relevant. After presenting the case studies, we bring the situation 'up to date' by considering more recent events in the development of shopmobility services nationwide.

2.2 A Brief History

The first shopmobility service to open in the UK was in Milton Keynes (1979). By 1991, 37 shopmobility services were being provided. More recently, services have been launched at an increasing rate and, by the end of 1994, some 109 shopmobilities were operating and a further 38 were at various stages of planning. The location of existing schemes is presented in Figure 1.

3. CASE STUDIES

3.1 Cardiff

The Cardiff scheme was opened in 1984 and operates from an at-grade location in a multi-storey car park in the City centre, adjacent to a large shopping mall. It has 3 paid staff: 2 full-time and one part-time; and provides approximately 6,000 rentals annually. Unlike many other schemes, Cardiff does not use volunteer helpers. In terms of equipment, it has 15 scooters, 10 powered wheelchairs and 30 manual wheelchairs.

This scheme was one of the first shopmobilities to be launched. It costs £30,000 annually and receives funds from local authorities, retailers and public donations. Retailers have sponsored the purchase of some of the scooters.

The service is available, at no cost, to anyone who has limited mobility. Users are advised to book the service in advance (by telephone) and leave a deposit of £2.50 when borrowing any of the aids.

All of the services who were contacted during our research were asked what advice they would give to others considering starting a new shopmobility service? The answer from the Cardiff scheme reflects the responses received from many other services:

- Ensure that minibuses can gain access to the shopmobility centre. The headroom in the Cardiff multi-storey car park allows for this but, at other locations, users have to leave minibus (eg. dial a ride) services at the car park entrance and then make their own way to the centre.
- In terms of equipment, ensure that powered wheelchairs and scooters are sufficiently powerful for their use (bearing in mind the local urban form) and that a variety of machines (meeting different needs) is offered.
- For a scheme to succeed, it has to be part of a broader initiative considering accessibility in town centres. The provision of dropped kerbs at pedestrian crossing areas and wide aisles in shops, for example, will enhance a scheme's success.

3.2 Redditch

The service in Redditch (to the south of Birmingham) opened in 1987. In terms of the number of rentals per year, Redditch (at 25,000) is the largest scheme in the UK. It is run by 2 full-time and 3 part-time staff members and makes extensive use of over 50 volunteers; including local schoolchildren who volunteer as helpers/escorts.

The scheme has 35 scooters, 12 powered wheelchairs and over 60 manual wheelchairs and costs £55,000 annually. It is based in the Kingfisher Shopping Centre where, of the 230 shops, only three are inaccessible to people using the larger scooters. Funding is provided by local authorities, the shopping centre itself and a significant fund-raising effort.

2,000 members are currently registered to use Redditch Shopmobility. The service is free and no deposit is required from users. As before, users are advised to telephone in advance to book the service. A survey conducted at the Kingfisher Centre revealed that, in total, disabled people were spending approximately £1.3m per annum per annum in its shops. Of the 23,000 disabled people using the Centre's facilities, the average spend per head was £44 per visit (£4 more than the average reported by the British Council of Shopping Centres). This introduces the scale of economic benefit

which can be attributed to shopmobility schemes - a point that will be returned to later.

The survey also revealed that 30% of disabled shoppers visited the Centre more than once a week and that 61% brought a companion with them (who also purchased goods from the shops).

Unlike many other services, there is a very strong 'social side' to the project which includes arranging group holidays for members to Europe and the USA. Indeed, social activities form an integral part of the project and are viewed in the context of providing wider therapeutic or 'social care' benefits to users.

3.3 Edinburgh & Lothian

The Edinburgh & Lothian shopmobility scheme departs from the 'conventional' model insofar as the service is a mobile facility. A fully-equipped van transports scooters and wheelchairs to pre-arranged locations on specific days. The service was started in late 1991, has 2 full-time and 1 part-time staff members, and provides over 5,000 rentals per year.

The service estimates the cost of purchasing and equipping a suitable 'transporter' (converting a second-hand minibus or small bus) to be in the region of £12,500. Combining this with other set-up costs (such as the purchase of scooters) took the capital costs associated with the project to £30,000. In addition, the project runs with an annual (revenue) budget of £30,000 from Lothian Regional Council and Edinburgh City Council.

The original reason for the provision of a mobile facility was that central Edinburgh shop and office properties did not lend themselves to conversion to a shopmobility base. Large parts of the City centre are listed and this precludes much development work. However the idea has subsequently been adopted by (a) single schemes having to serve particularly large urban areas, and (b) those serving rural or isolated communities.

3.4 Key Features of Other Shopmobility Schemes

Table 1 presents the key features of 24 other shopmobility schemes selected at random. The purpose of this presentation is to highlight the significant differences between different schemes although most operate to a common 'model'. As noted at the outset of this paper, these differences reflect the different circumstances under which schemes have been developed, the different levels of resources at their disposal and the different emphases of the schemes themselves. Thus, comparisons between schemes should be drawn cautiously.

On average, a shopmobility scheme costs in the region of £35,000 per annum, although the range is considerable (from just over £1,000 to £100,000). Invariably the number of paid staff is low (typically 1 or 2 people, perhaps working part-time) and the extent of voluntary participation is high.

In terms of the number of scooters and powered wheelchairs provided, however, the range between schemes is considerably less, with an average of 10 scooters and 5 or 6 powered wheelchairs per project. Notable exceptions, however, do exist. The project in Redditch has 46 powered vehicles and the one in Plymouth has 70.

The number of rentals that schemes achieve is related to many factors:

- the number and type of resources at their disposal;
- the attractiveness of the location and size of the catchment population;
- cost to the user;
- the length of time that the project has been running.

Typically, new schemes take some time for their usage to build-up as people become aware of the service and 'experiment' with the powered wheelchairs/scooters.

From this sample of shopmobility schemes (which appears to be broadly representative of the country as a whole) it would appear that some £4m is currently being devoted to shopmobility initiatives annually. Considering this level of investment, the author of this paper continues to be amazed that, nationally, shopmobility has such a low profile.

3.5 The Economics of Shopmobility

Earlier, consideration was briefly given to the amount of retail spend which a shopmobility scheme can attract to an area. Certain shopmobility schemes have conducted surveys in an attempt to quantify and understand this attraction. The project in Wolverhampton estimates that spend per person per visit is about £25. Surveys in other locations suggest figures of £20 - £30 (Arnold), £44 (Redditch) and up to £50 (Burton upon Trent).

The Burton scheme estimates that it attracts an additional £300,000 of retail spend annually to the locality and, as mentioned earlier, estimates from Redditch (the largest scheme in the country) suggest a figure in excess of £1m. On the face of it therefore, considering the cost of providing a shopmobility service, there would appear to be a type of multiplier-effect at work; investment in shopmobility services bringing wider (and greater) financial benefits to local economies. Further research would be required before this 'conclusion' could be confirmed and, in this context, certain facts should be borne in mind:

On questioning shopmobility users, a significant component of this spend turns out to be impulse buying. Prior to shopmobility, people were not exposed to the range of products available and, by their own admission, relatives and friends concentrated upon buying essential goods or "the basics".

A (possibly significant) component of this spend represents a change in the 'type' of shopping; from catalogue shopping to high street (or shopping centre) shopping.

Certain disabled people have relatively high levels of disposable income. Shopping bills in excess of £100 are not uncommon. Therefore, although there is a correlation between old age and poverty, it is incorrect to regard disabled or elderly people as a homogenous group with low spending powers.

Commonly, elderly or disabled people are accompanied by friends or relatives on their shopmobility trips, and these 'escorts' are also spending money in the local area.

A component of this spend will be 'geographical transfers' - people choosing to shop in locations where shopmobility is provided at the expense of less attractive, alternative areas. In terms of the objectives for the economic regeneration of an area, however, this may be perfectly acceptable.

At this stage, therefore, it is difficult to determine how much of the spend represents 'new' money or simply 're-located' money. There is no doubt that additional money is attracted to shopmobility localities and, indeed, a number of shopmobility services pass the 'market test' - retailers contributing to costs to encourage the provision of the shopmobility service.

4. THE FUTURE FOR SHOPMOBILITY

4.1 Recent Events

On the face of it, the future for shopmobility schemes in the UK appears to be particularly 'bright'. Schemes continue to open in new areas at a considerable rate and an increasing number of people are becoming (slowly) aware of the benefits of shopmobility. The Department of Transport has designed a symbol for highway signs to indicate the location of schemes and this is being increasingly used.

One particularly exciting development is that the National Federation of Shopmobility is about to employ its first National Officer. Previously all of the Federation's work has been undertaken on a part-time, voluntary basis and the appointment of a full-time (paid) officer will enhance the Federations work; particularly in the area of advising new (or potential) schemes.

However (in common with much of the voluntary sector), the majority of shopmobility schemes are grant-aided on an annual basis from their local authorities and have concerns over their longer-term funding. Year-on-year funding can make it difficult for schemes to consider development plans or long-term business strategies and it would be unfortunate if the full benefits of shopmobility were not realised because of this uncertain funding environment.

4.2 The Planning Process

The planning process itself could make a more significant contribution to the development and promotion of shopmobility schemes. If it were a requirement for all new retailing developments (or re-developments) above a certain size to establish and maintain (over the development's life) shopmobility services, those services would be developed directly in response to local needs and worries about long term funding would be negated. In financial terms, the cost of a providing a shopmobility service would be a fraction of the overall costs commonly associated with such developments.

This concept could be extended to consider one-off events (such as exhibitions or country fairs) over a certain size. If one of the requirements of gaining permission to hold such an event was that a mobile shopmobility resource be sub-contracted to provide walking aids, this would benefit elderly and disabled visitors enormously and could contribute to the development of commercial shopmobility services designed specifically to cater for such requirements.

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TABLE 1. KEY FEATURES OF SELECTED SHOPMOBILITY SCHEMES (1995)

Location of Service	Annual Budget	Number of Staff (and volunteers)	Equipment			Number of Rentals per Year	Number of Members
			Scooters	Powered Wheelchairs	Manual Wheelchairs		
Aberdeen	£65,000	1 (10)	5	7	9	1,500	2,000
Arnold	£2,000	0 (18)	7	1	3	550	100+
Ashington	£18,000	1 (40)	0	4	10	no set time	40
Barrow-In-Furness	£20,000	0 (12)	5	6	7	1,500	225
Basildon	£4,500	0 (10-20)	8	3	8	2,500	400
Bath	£34,000	2 (0)	4	1	6	1,200	275
Bedford	£36,000	1 (20)	10	2	10	2,250	1,041
Birkenhead	£20,000	1 (1)	7 (+3)	3	4	3,000	400
Birmingham	n/a	1 (0)	2	0	5	75	
Burton Upon Trent	£11,000 (not inc. wages)	1 (14)	13	4	8	20,000	700
Cambridge	n/a	6 (0)	11	5	22	2,000	800
Croydon	n/a	2 (0)	7	2	8	1,250	78
Kingston Upon Thames	£65,000	5 (0)	8	10	25	7,500	1,600
Liverpool	£1,000+	1 (8)	8	2	4	3,500	300+
Milton Keynes	n/a	3 (0)	0	17	45	12,500	
Nottingham	n/a	4 (0)	7	4	9	8,000	4,000
Peterborough	£21,000 (not inc. wages)	1 (60)	12	8	33	6,000	3,000
Plymouth	£100,000	2 (40)	70	incl. in last	15-20	10,000	
Sandwell	n/a	5 (0)	21	3	26	2,000	2,400
Taunton	n/a	3 (0)	8	4	5	n/a	170+
Telford	n/a	2 (0)	4	4	13	5,000	n/a
Woking	£60,000	2½ (30)	15	6	19	7,500	2,000
Wolverhampton	£70,000	5 (4)	12	8	22	12,500	1,400
Worthing	£15,000	1 (2)	3	2	2	1,020	140

**Location of Shopmobility Schemes
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(map courtesy of the National Federation of Shopmobility)

