

Demand Responsive Transport: users' views of pre-booked community buses and shared taxis

Management summary

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Introduction

Project context

Cuts to local authority budgets have made some reconsider their spending, including their public transport budgets. As a result, in some areas, local authorities have moved away from subsidising conventional bus services and instead invested in demand responsive transport (DRT).

The mode of DRT introduced includes a greater reliance on community transport services, minibuses and taxis and varies across and within councils.

Qualitative research was required to help understand the impact of the introduction of different DRT models on passengers, and their views on the changes to public transport in their area. The approach taken was to provide case studies of example DRT services in a selection of different areas.

This work is part of a wider study being undertaken by Transport Focus. Facts and information given are 'as reported' by passengers interviewed within the sample. Facts, findings and recommendations therefore need to be considered in the context of the wider research report.

Case study services

Six services across three geographic regions were selected due to key characteristics of interest. The services selected and the reason for their inclusion in the research followed by a short description of each service is summarised in the table below.

Location	Services	Characteristics
Worcestershire	Community Action Malvern Minibus to Cheltenham & Gloucester	Both services: <ul style="list-style-type: none">• minibus to Cheltenham and Gloucester• crosses county borders• weekly service (Thursday)• run to timetables• fixed route• set pick up and drop off locations• multiple, easily accessible stops• booking generally required but regular passengers can turn up and go• multiple passengers accommodated (generally multiple passengers on each journey)
	Tenbury Transport Trust Minibus to Kidderminster	

		<ul style="list-style-type: none"> discounted rate (not free) for holders of an older person's bus pass
Suffolk	Suffolk Links Brecks	<p>Both services:</p> <ul style="list-style-type: none"> minibus covers an area rather than a particular route no fixed route, determined by overall requirement of bookings on day no fixed timetable, demand-based (advertised as a 'link' service connecting passengers to onward travel) Monday - Saturday service pick up from home or nearby drop off anywhere within a designated area booking required bookings can be made up to seven days in advance two return bookings can be held at a time up to six bookings more than seven days in advance allowed per year multiple passengers accommodated (generally multiple passengers on each journey) fares based on bus prices but free holder of older person's bus pass
	Suffolk Links Wilford	
Hampshire	Fordingbridge Taxi Share 61/62	<p>Both services:</p> <ul style="list-style-type: none"> service provided by taxi rather than minibus each service runs once a day on particular days of week fixed route pick up from either home or bus stops in set locations set drop off locations booking required: <ul style="list-style-type: none"> can be made as far in advance as the user wishes, then up to an hour before travel multiple passengers accommodated (however, generally single passengers on each journey)
	Southwick Taxi Share 38	

		<ul style="list-style-type: none"> • set fares but free for holders of older person's bus pass
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Method and sample

A mixed qualitative method approach was taken consisting of:

- depth interviews with current DRT service users (19 in total comprising 6-7 interviews in each location)
- depth interviews with potential DRT services users in each location (12 in total comprising 4 interviews in each location), defined as those who are not currently using the service but are open to public transport use
- qualitative door to door interviews with current and potential users (45 in total with 13 – 17 in each location).

Key findings

While there are differences between the DRT models explored in this research, there are some common themes about how DRT is working and elements that assist with meeting passenger needs and satisfaction.

In general terms:

- Any DRT service tends to be welcomed where the alternative is loss of public transport.
- Whilst free use for holders of the older person's bus pass is appreciated, fares were generally accepted as reasonable and legitimate in order to sustain a public transport service in the area.
- Overall, current service users appear to be those who are retired and have no other transport options, as they are more able to accommodate the limitations of the DRT service. These specific DRT models have limitations which prevent them being seen as a viable public transport alternative to a wider range of passengers.
- However, how a change from conventional bus to DRT is introduced, and how it is communicated ongoing, influences how passengers view their particular service. Communication can contribute to both satisfaction and understanding of the service.
- Despite DRT services meeting basic needs – and, in some cases, having some specific positive features – there is evidence that a reduced public transport service does impact on lifestyle possibilities as some passengers are unable to make spontaneous or onward journeys.

In terms of differences between DRT models:

- Services which replicate a conventional bus service more closely (fixed timetable, route and multiple passengers) seem to be best received as expectations are relatively low. Delivery by voluntary organisations increases passenger willingness

to accommodate limitations and provides benefits which help offset limitations in service.

- Services which allow for greater flexibility but (as a result) reduced predictability are harder to use, which reduces satisfaction.
- Services which are furthest removed from the previous service, such as taxi-share, offer a significantly different service with specific limitations and drawbacks which contributes to lower satisfaction as a public transport option.

As might be expected from this, experience and satisfaction between the three DRT models and areas in this study varied, highlighting how the particular mix of factors surrounding each DRT solution impacts its passengers.

More detail on each of the above points is given below.

Within the context of historic bus services, DRT solutions can be seen by passengers as an improvement on the previous service.

Bus services to rural communities are often seen as a lifeline to those who need them. Therefore, the provision of an alternative rather than the loss of public transport completely has been a relief for public transport users.

Beyond this historic bus services to areas now served by Demand Responsive Transport (DRT) services are also seen to have been limited in their ability to fully meet passenger needs.

They were recalled as infrequent, typically running once a week and to take relatively long routes, which had become longer as services were merged to try and reach more passengers. There was also a perception amongst some that services were unreliable and could not be depended on to arrive.

Overall the inflexibility of these services also means they are not used by those who have other options. In light of this, DRT services that are perceived to be more reliable and take shorter routes offer an improvement.

While free use by concessionary pass holders was appreciated, any fares currently charged for use of DRT were felt to be acceptable.

Most respondents were not paying to use the DRT services as they were typically old enough to have an older person's bus pass and most services were offered free to this group.

Where passengers were aware of the fares to use DRT services, these were felt to be in line with or lower than any previous bus services, and significantly less than a taxi (often the only alternative passengers have). As such, fares for DRT services are generally felt to be reasonable.

Some older person's pass holders in Suffolk and Hampshire had paid to use the service as they had needed to travel before 9.30am and were happy to pay the fares charged.

In Worcestershire passengers with an older person's bus pass are paying a supplementary fare to use the DRT services and seem willing to do so in order to maintain access to a public transport service.

The passenger profile for DRT in the case study services appears to be primarily those who have reached state pension age and therefore also entitled to concessionary travel.

All DRT services explored in this study seem to be mainly serving retired passengers and each of these specific services currently appears to have limited ability to appeal to passengers outside of this group.

These passengers appear to have highly flexible lifestyles and relatively limited demands on their time, which means that DRT services can go some way to meeting their travel needs.

Retired passengers in this study typically needed to travel once a week for essential grocery shopping. Some passengers were using DRT to visit relatives and some over 65 were travelling to part-time work.

Amongst these passengers, the primary users of DRT services seem to be those who have no alternative transport. Other users have alternative transport and use DRT as an option. These passengers may own a car and use DRT for the convenience of not having to think about parking, or may have access to transport through a friend or family member but prefer to use DRT to preserve their independence.

Wider use and awareness of DRT seems to be affected by lack of publicity but there is evidence that some potential users (particularly those who are not retired) also have specific barriers to use.

Across all areas included in the research there was a general lack of awareness about the services amongst potential users. This could be due to a lack of ongoing communication publicising services and a lack of visual cues for those who are new to an area e.g. a centralised bus stop or timetable on display.

It seems that DRT services have been publicised at the time of launch, primarily amongst users of the bus service which it is replacing. However, in order to attract a sustainable passenger base DRT needs to maintain ongoing awareness too. Word of mouth is relatively limited and so using communications to widen reach will help. Appropriate communications can also set positive expectations and perceptions of relevance about the service may also help ensure services attract the broadest range of users possible.

Potential users who fit with the current audience profile of DRT users (that is retired and with limited alternative transport) were most likely to feel that DRT is relevant to them. However, amongst some of these potential users there was a perception that

the services would be high effort to use, due to having to book and restricted service times.

Amongst other users, DRT tended to be perceived as targeted to the elderly or infirm, creating an impression amongst some potential passengers that they would not be welcome on the service with children or a buggy or that it was not aimed at them. For some of these passengers, perceived drawbacks (see below) were also sufficient to deter use.

The way in which DRT meets passenger needs is mixed, reflecting the range of perceived benefits and drawbacks in the way each service operates. While each DRT service is meeting basic needs (sometimes better than a conventional bus service) wider transport needs are not always met and aspects of the service can be difficult to use.

In terms of delivering to minimum needs for transport services, some DRT services are meeting passengers' needs in ways which conventional bus services do not. However, there are also some ways in which DRT services are felt to place more limitations on passengers' ability to travel than a conventional bus service. These benefits and drawbacks are consistent across the case study areas and models researched in relation to: booking, collection and drop off, travelling experience, routes and service frequency.

Having to book has perceived benefits but the extent to which the system meets needs varies by individual and DRT model. Passengers often feel that booking offers a guarantee that the service will arrive and also means that they are expected by the driver, meaning they can't miss the service. However, booking also prevents the possibility of making spontaneous journeys.

Allocated collection and drop off points were generally accepted as appropriate. However, DRT services often go further and pick passengers up and drop them off at their door (even when this is not an advertised service). As passengers were older they sometimes had mobility issues and would find walking to a central collection stop challenging. Therefore, in this way DRT exceeds passenger expectations of a public transport system and better meets their needs than a conventional bus service.

Some passengers feel that the smaller vehicles and regular drivers provided in DRT services offer a highly personalised service, with friendliness from drivers and a pleasant social environment on board. However, using smaller vehicles such as a mini-bus or taxi can also lead to perceptions of reduced accessibility both for those with mobility needs and potential users such as families with pushchairs.

Routes were broadly perceived to balance a direct route with a scenic one, enhancing the user experience. However, on DRT models which do not follow a fixed route journey, times can be variable, which is seen to make planning challenging. Lack of ability to plan limits the suitability of services for those who have less flexibility in their schedule.

Services were generally perceived to be well planned, allowing sufficient time for basic shopping at their destination. However, limitations around the return service means

that there is no room for spontaneity or extended leisure trips if relying on public transport.

In some cases the introduction of DRT has resulted in reductions to destinations and service frequency, significantly curtailed opportunities to travel.

For potential users the drawbacks seem to act as particularly strong barriers to use.

Despite experiencing both benefits and drawbacks in their service, across areas and DRT models in this research, passenger satisfaction appears relatively high.

Overall, DRT users in Worcestershire appeared very satisfied with their despite the service offering being the most limited.

In Suffolk, passengers were also often satisfied with the service. However, for some, a mismatch in the flexibility of services advertised and passenger experience is leading to discontent on some occasions.

Passengers in Hampshire are grateful to have a public transport service available. However, there is a feeling that the removal of bus services and introduction of the DRT services was poorly explained and this seems to have contributed to some ill-feeling about the service. The new DRT service is also far more restricted than the previous bus service which may be contributing to less satisfaction with the service overall.

The different case study services highlight how different variables can impact on overall satisfaction and whether a DRT is perceived as meeting needs.

Timetabled, fixed route minibuss services in Worcestershire

Overall, timetabled minibuss services in Worcestershire seem to be meeting passenger needs well, however they do serve a very limited audience type and a number of other factors appear to be contributing to satisfaction:

- DRT Services researched in Worcestershire are closest to a conventional bus service as they run to a timetable, once a week and regular passengers do not need to book.
- The DRT services in Worcestershire were an almost exact replacement of the conventional bus service which had served these routes in the past, which means the introduction of DRT has had a limited impact on their existing travel ability. There has been no loss to service and passengers still benefit from sociability of mixing with other passengers taking the same transport option.
- As the DRT services are now the only ones which operate along these routes, passengers are incredibly grateful to have the service. However, there was a sense amongst some that it would be ideal to have slightly more flexibility on occasion,

for instance to travel on a Saturday or return at a later time which would allow for onward travel and for more opportunity for leisure and shopping activities

- Both routes in Worcestershire are run by community transport organisations. In both instances this meant that passengers understood that there may be limitations on the service as they are run by volunteers. It also seems to contribute to a very personal experience. Drivers on both routes will collect and drop passengers at their door and are felt to create a pleasant atmosphere during the journey.
- Passengers on both routes seemed aware that the previous services had not been busy enough and so accepted the need for a change.

The main barrier to wider use of the service amongst those without a car seems to be lack of awareness. For those with access to cars, findings indicate the service is seen as being too inflexible to present a viable public transport alternative.

Non-timetabled, fixed area (not route) minibuss DRT services in Suffolk

The Suffolk Links Brecks and Suffolk Links Wilford services appear to be perceived in very similar ways with no clear differences in passenger experiences between the two services.

For current passengers in this study, DRT tended to be their only option of transport. As such, they are very grateful for the service and, as in other areas, retirement meant most passengers are able to be extremely flexible with travel and journey times. Furthermore, those with specific commitments such as work or appointments are often happy to travel earlier than needed.

Overall, however, there seems to be more dissatisfaction amongst passengers with service availability and times, compared to the minibuss service in Worcestershire which has different characteristics.

The key element that appears to be contributing to this dissatisfaction is lack of predictability. The Suffolk Links services differ from a conventional bus service and offer flexibility in terms of travel times and collection/drop off routes for passengers. As such, the service can feel more like, and has been compared to, a taxi.

This flexibility, however, also means lower predictability in terms of service times, availability and overall journey planning which can lead to frustration and needs sometimes not being met:

- some passengers are finding it difficult to book a service at a time they require as the service is already booked
- journey lengths can also vary significantly depending on who else is booked on to the service and this is also felt to be a drawback of this model.

Issues with predictability appear to be the main barrier to use amongst potential users, who reported that having to book in advance and being unclear on journey times reduced viability of this DRT service as a transport option for them.

Fixed destination, timetabled taxi-share DRT services in Hampshire

Within this research, passengers using the taxi-share service model were most critical of their DRT service. However, these DRT services also seem to meet passenger needs less well than the other examples researched.

Dissatisfaction appears to stem from three key reasons: a significant reduction in terms of travel opportunity, how the change to the service was introduced and the specific use of private taxis as the transport solution.

Some residents felt that the limitations to the timetable and destinations offered have severely curtailed the way in which they can use the service. At least one former bus passenger has stopped using public transport and now uses their car instead.

Some respondents were critical of the way the change to the service had been introduced. Passengers in the Southwick area in particular felt that they had not been consulted on the changes by their local authority.

Use of private taxi firms to provide the services was felt to create several specific issues:

- Some older passengers who find it harder to get in and out of a car experienced accessibility issues. They also worried about bringing their shopping on the service as they do not feel there is enough space if they need to share with another passenger.
- In the taxi-share model passengers tend to travel alone and go directly to their destination. This means that the social elements offered by the conventional bus services have been lost.
- Finally, paying a private taxi firm is felt by some to be a poor use of public money as taxis are assumed to be expensive.

Overall, there seem to be fewer perceived positives with this type of service for passengers to offset against its limitations.

There appear to be some core elements of DRT services which are received in a broadly positive way and may provide guidance for selecting or developing future DRT services.

Elements shared by all services researched and received in a broadly positive way by passengers included:

- **Advance booking:** whilst perceived as a barrier to non-users, passengers feel that this is very low effort. Further it is seen to offer a guarantee that the service will arrive.
- **More direct routes than conventional bus services:** DRT services seem offer a slightly more direct and quicker service than historic conventional bus services which is seen as a benefit by passenger as it saves them time.

- **Personal service which can be tailored to passenger needs:** drivers seem to be helping passengers in and out of the vehicle and with their shopping and also offering to drop passengers at their door even when this is not an advertised service.

Other elements which can be considered beneficial to the implementation of a DRT service are:

- **Running the service on a minibus rather than a taxi.** This seems to help maintain both the social element of travelling on a bus which is important to passengers and the expectation that the service provided will be in line with a bus.
- **The service being offered by a community transport organisation.** This appears to help passengers accept limitations on the service and create a positive relationship between passengers and drivers.
- **The service being introduced to passengers in a way which feels open,** so passengers understand why the changes are being made and also feel that action is being taken to preserve their access to public transport.

When these criteria are in place there is evidence to suggest that passengers can see the introduction of DRT as a positive change to improve local services or find a better solution to public transport in an area, rather than a response to reduced funding.