

## **COMMUNITY-RUN RURAL BUS SERVICES: CAN THEORETICAL CROSS SECTOR BENEFITS BE REALISED IN PRACTICE**

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### **SUMMARY**

The paper describes some lessons from a research project – Evaluation of Direct and Cross-Sector impacts of Accessible Public Transport in Rural Areas- (ELIXIR). The project examined the continued operation of a community managed accessible bus service set in a remote area of northern England and reported to the TRANSED 2001 conference (Brown and Tyler 2001).

Recommendations concerning the smooth running of a bus service are given based on experience together with results selected from local and national surveys carried out to confirm the current attitudes to the use of public transport to get to and from medical out-patient appointments.

The paper concludes with some observations concerning administrative obstacles which appear to prevent the realisation of theoretical cross-sector benefits in the healthcare sector resulting from investment in the public transport sector.

## **INTRODUCTION**

Every country in the world, even the most urbanised, has a problem with delivering rural public transport. This arises because of the small numbers of people involved, the sparseness of the population and the cost of providing a transport system under these circumstances. Traditionally, the way in which this problem was resolved was either (1) to rely on people to provide their own means of transport (e.g. car in more developed countries, bicycle, animal, human modes in developing countries) or (2) to suppose that people in these areas should reduce their travel activity to that which could be supported by either sharing/borrowing transport or the use of scarce public transport (usually provided infrequently if at all by the State). In the UK, the latter often meant a reduction to one or two services a week where it had not ceased altogether. The social exclusion aspects of this approach have been highlighted elsewhere (SEU 2003). Thus people living in rural areas were increasingly less likely to participate fully in, and benefit from society because their local facilities proved uneconomic and public transport was not available to take them elsewhere to find replacements.

Much of the research carried out to address the potential impacts of cross sector benefits has consisted of general studies of macroscopic or desktop studies which pose an idea and then test it in theory. An example of the latter is Fowkes *et al.* 1994, which considers the effects of improved accessibility to public transport on cross sector benefits. However, Fowkes *et al.* did not explore the way in which individual people actually function on a day-to-day basis or the practical difficulties of trying to transfer the benefit obtained as a result of spending in another sector. Thus the idea of cross-sector impacts, which is the basis of much expenditure on socially necessary services (including accessibility provision for disabled and older people) has not been tested on the ground.

The ELIXIR project set out to move the agenda forward by investigating the reality of the impacts of cross sector issues in the context of healthcare at the level of individuals living within a local community in the north west of England. This aim was to suggest possible solutions to generic problems, and, where these were frustrated, point to possible reasons why such barriers existed. Although the project was set in a specific area of one country, the implications are far-reaching.

## **THE BUS SERVICE AND METHODOLOGY**

The ELIXIR project was designed to investigate 'real' transport use rather than pose a hypothetical example and attempt to assess how this might work. Accordingly, use was made of an existing accessible public transport system which had been put in place seventeen months earlier and to study how the local population continued to react to the opportunities it provided especially in relation to healthcare issues. In addition, the opportunity was taken to study reactions from various agencies involved with the provision of healthcare facilities and/or transport for people living in rural areas.

The population as a whole continued to use the frequent daily bus service as reported in the APTRA project (Brown & Tyler 2001).

All passenger movements throughout the project were recorded using the ticket machine on the bus which was set up to record information such as the use of concessionary fares in addition to the more usual ticket data. There was hardly any use of the national concessionary fares scheme because of the relatively low bus fares.

It is also interesting to note that, although the Foot and Mouth epidemic in 2001 affected the local area very severely, it made little impact on the use of the bus service, reinforcing the point that the bus service was providing transport for daily needs such as essential shopping, work and education which had to continue even when movement around the area was otherwise highly restricted. However as we shall see later, when the bus route and time table were amended in August 2002 it had a significant effect on both passenger numbers and fare revenue.

## LOCAL SURVEYS

Several local surveys were conducted during the ELIXIR project. Given the low population of the catchment area, inevitably sample sizes were small but it was also apparent that the variability of responses and the comparison of these against the general 'average' outcomes were both necessary to obtain a better understanding of the transport issues pertaining to use of a local bus service. The potential for gaining cross-sector benefits and thus to the impacts of these on any subsequent investment decision should be seen in this light.

### *a) An accessible bus is a resource for the whole community*

A user survey was conducted in Spring 2002, (prior to any route and timetable changes) to provide a comparison with the user survey carried out in 2000 (Brown & Tyler 2004a). This showed that after three years of operation, users had become familiar with the limited service and had learnt how to make best use of it. For example, in 2000 they tended to use the bus for one direction and a taxi for the other whereas in 2002 they used the bus in both directions, filling in the time with other activities, many of them social. In contrast many new services elsewhere are set up as pilots for only six or twelve months and this outcome suggests that such periods are likely to be far too short for people to make the adjustments and learn how to use a new the service to their best advantage. People also need to feel that there is a reasonable future for the service if use of the bus is likely to influence their decision to take lifts from neighbours or family (the psychology of lift giving and lift taking is raised in Brown & Tyler (2002) and discussed further in Tyler (2004)). Thus to reap any cross-sector benefits a learning period of about 2 years is important.

### *(b) Hypothetical cases are poor indicators of actual use of a bus service and Complex timetables discourage use*

In 2001 a non-user survey was conducted by the bus management company, consisting of a series of structured interviews, conducted both individually and in groups, over a period of three months. This was targeted at young families, particularly young mothers, who were thought to be an important future market for the service. People were very supportive of the existence of the service but many did not use it for a variety of reasons – usually their perception of the timetable. However this information was used by the management company to back its decision to alter the route and timetable in August 2002. Lessons learnt from this exercise were: (1) verbal indications of level of future use based on hypothetical route and timetable changes do not necessarily presage increased demand and (2) the amended timetable, in attempting to meet the stated preferences, became too complex for people to understand. The result was that increased ridership failed to materialise as promised.

Recalling that it took 2-3 years for people to become acquainted with the simpler clockface timetable, it may be that at some future date hypothetical demand will turn into real demand. However, at present it seems that some existing users have been lost to the service as a result of the changes. This emphasises the need for simplicity in timetabling as well as the need to be very careful about any changes to a service that has taken a long time for people to learn to use in order to gain additional direct and cross sector benefits.

*(c) Travel diaries*

We studied the detailed travel patterns of five individuals chosen by the local health centre because of the potential for them to use the bus service for visits to health care facilities. This study consisted of daily travel diaries maintained over prolonged periods (up to 65 weeks) backed up by periodic interviews with a research assistant.

The travel diaries were simple, recording all travel whether using the bus service or not, including origin and destination, time of journey, journey purpose, mode, and the fare paid. The diaries showed a variety of travel types in the community. These ranged from one person who made one trip per week throughout the period to another who travelled a lot by whatever means were available (including the bus) to many destinations within the area and elsewhere until a fall temporarily reduced their confidence about going out and the travel stopped. Towards the end of the study, confidence was regained and the travel restarted. The diaries showed that the bus service played a significant role in the life of most of the individuals particularly for their social needs in the area. However, much of their healthcare travel was by car, whether it was to the local health centre based in the market town or to the 'local' hospital (about 75 km away). Although there were different styles of travel and thus use of the bus, these remained remarkably constant for each individual. The diaries also emphasised the need (noted in the APTRA project) for public transport to be available every day to provide a realistic transport option.

It has already been noted that the route and timetable changes had an adverse effect on the use of the service. As far as the travel diary respondents were concerned it made little difference to their regular habits but we were unable to attract additional respondents from areas which were now visited by the bus for the first time as a result of the route change.

In relation to cross sector benefits in the field of healthcare provision, this survey indicates that at a local level people were not very keen to use bus public transport for medical purposes, except as a last resort.

*(d) In rural areas, patients will use 'tried and tested' means of transport to attend a healthcare appointment because of the difficulty and delay involved if an alternative appointment is required.*

An outpatient questionnaire survey was undertaken in early 2003 at the local healthcare centre. This provided data about the appointments people attended over a five week period, covering different days each week. Patients were asked for their means of travel to their appointment, including the time, journey origin and any other purpose associated with the journey. The survey revealed that the bus service could have been used for about 80% of the appointments, particularly from certain villages, although some appointments would have had to be rearranged. However, the reality was that most people attended health centre appointments by car. When people were asked why

this was so, the general response was that health was such an important issue and appointments were so difficult to make that they would accept almost any time that was suggested to them and find whatever means to reach it.

The survey also revealed that appointments generally formed a continuous block of work for each doctor thereby maximising the use of valuable resources.

This demonstrates at a local level that cross sector benefits for rural public bus transport may not be realised in the healthcare sector. (see also national survey below).

## **INSTITUTIONAL ISSUES**

Several quasi governmental agencies were involved in the ELIXIR project. The research team were interested in studying how these agencies interacted with a community-run bus service and the effects on cross sector impacts. The main agencies were represented on the Advisory Group for the project and included the local county council, which acted in three capacities (public transport, social services and as the channel for local Health Action Zone funds) the Countryside Agency (which contributed funding to the project), and the local District Council Planning Department. An analysis of the material discussed at the Advisory Group Meetings and various policy documents disclosed the institutional approaches to dealing with a community run local public transport service. It also led to suggestions concerning the institutional arrangements that would need to be in place for cross sector benefits to be realised.

### *(a) Locally managed transport systems find it difficult to attract genuine support from County Councils*

The relevant County Council has one of the lowest spends on public transport in the UK. The public transport officer considered that the level of service was too high for the local community and that although it was not overpriced, it was too expensive for the Council to maintain into the future. For this reason the County Council never provided any direct financial support from their public transport funds. The research team contacted another county council with a reputation of being positive about rural public transport to see how they would have reacted to this sort of project. In our view the outcome would probably have been similar but for slightly different reasons. In both cases we believe the local management of the service was seen as a threat to the County Council official's function – dealing with local pressure on the council (in the former case) and obstructing the council's predetermined transport policy (in both cases). It seems that the idea of local community management, decision-making and particularly locally-controlled actions, has yet to be accepted at a practical level by county councils. Thus possible direct or cross sector benefits to be derived from involving local communities in 'hands on' decision and financial management of local transport are likely to be frustrated at present unless County Councils are required to take a more enlightened view of devolving some financial power to local communities.

### *(b) Local Authority Social Services administrative arrangements seem to work against the realisation of cross sector benefits.*

The second County Council remit was Social Services. In this case the flexibility was constrained by the nature of the contracts they organised with 'providers' of services. One example was a contract with a local charity to provide day care services for older people in the project area. The Social Services department was keen to involve the bus,

but the charity felt that if they used the (potentially cheaper) local bus service, the Council would reduce its contract payment. This case suggests that the Council might not have been sufficiently specific about the transport element of the service provision to be delivered: the contractor was able to manage the contract in a way which precluded obtaining transport benefits for the service users or financial advantage for the Council on the basis of a change in the transport provision in the area. The impact on cross-sector benefits is therefore clear: these will not be realised except where the County Council drafts and monitors the operation of the specification of the transport element of the contract with this objective in mind. A more general service provision contract – albeit including transport – runs the risk of making it impossible to obtain cross-sector benefits from investments in transport.

The County Council provided another example of a transport contract in the project area involving a taxi company contracted to provide a non-accessible taxi for a wheelchair user from their house to the local day care centre on two days each week. Both the house and the day centre were on the bus route and the social worker felt that it would be more appropriate for the client to use the bus because it was wheelchair accessible. This resulted in a reduction in price for the door-to-door return journey from £30/day for the taxi to £0.25 per day for the bus fare. The County Council could not unpick the taxi contract so they had to pay the taxi company and could not pay the bus company. In the end, the client (preferring to use the less embarrassing and more accessible bus) would have paid the bus fare, but the bus operator was so shocked by the whole story that it covered the fare. The cross-sector impact for the social services should have been to cease payment to the taxi company, and pay the average net cost of a passenger's bus journey (currently about £4) to the bus company. This would have reduced the social services department's transport cost in this case by £26 and provide a useful income to help sustain the bus service. However, as with the general contract described above, it proved to be impossible to realise the cross sector benefit in practice.

*(c) The Countryside Agency*

The Countryside Agency (CA) was the most forthcoming of the agencies, not least because it provided substantial funding for the project. However, it was clear that it found it difficult to work with the bus management company. Sufficient staff time was simply not available in the CA to provide the level of guidance and support that the company needed. The main difficulty for the CA was having to work with the County Council which was antagonistic to the possibility of a local community having financial control of public transport. Thus they had to tread an institutional tightrope in order to maintain their portfolio of projects with the County Council, yet remain able to respond to the local issues. Whatever the proposed financial arrangements, it seems that there is a governmental political/strategic/tactical decision framework already in place which reduces the effectiveness of the actual support that bodies (even the Countryside Agency) can give to local community control of systems such as public transport.

This has implications for the management of local funding – for example Parish Transport Grants administered by the Countryside Agency – which are intended to allow Parish Councils to act on their own decisions about transport issues independently of wide-scale county council initiatives. These will fail if they meet with institutional resistance to local initiatives and thus resources are likely to be wasted or unclaimed.

*(d) The District Council*

The District Council was constrained administratively from interfering in transport-related decisions apart from its statutory role as the planning authority. However it did find ways of providing a small amount of financial support for capital expenditure during the APTRA project.

*(e) Maximising out-patient throughput is a much higher priority than suiting patient's travel arrangements when Healthcare system set appointment times.*

To gain a clearer national picture of the views of the public transport system taken by Social Services and Health care bodies, a postal questionnaire survey of all health and social services bodies in England was carried out in 2003 (Brown & Tyler 2004b). Various types of health body (including Hospital Trusts, Primary Care Trusts, Mental Health Trusts and Ambulance Trusts and (to much lesser extent) a number of social services departments responded. The survey asked amongst other things about the proximity and availability of public transport facilities, the providers and funders of any transport used and if public transport was considered in setting appointment times. The results show that in most cases there is at least a willingness to think about public transport but the reality was that most appointments were set without regard to public transport schedules and it seemed to be easier to arrange for a taxi than to facilitate the use of cheaper public transport. A small minority felt that public transport was inappropriate, 'too inconvenient' or too far away to be useful. Although there are clearly cases where the public transport is insufficient the main institutional target is to maximise throughput by over-booking appointments rather than to resolve non-attendance resulting from patients' travel problems.

Given the current demand especially for outpatients clinics, there is very little incentive for hospitals to concern themselves with the means of arrival: their view is that the main task is to concentrate on obtaining better use of consultants' time in clinics rather than reducing the transport costs for the patients or society.

This survey reinforces and mirrors the views of patients seeking medical appointments at the local health centre (see above) and demonstrates how difficult it is to realise cross sector benefits in healthcare due to investments in public transport.

## **CONCLUSIONS**

- 1 In addition to conclusions stated in the APTRA paper (Brown & Tyler 2001), to achieve, maintain and improve ridership and revenue on new community run local bus services it is recommended that:
  - a) the service should be set up for a minimum of two years based on full community consultations concerning frequency, costs, fare structure, funding and bus stops
  - b) timetables should be as simple as possible
  - c) amendments to timetables, routes and fares should be minimal, after full community participation.

- 2 Institutional issues affecting realisation of cross sector benefits:
  - a) County Councils should be required to encourage and support financially, innovations in the field by local community run transport systems
  - b) County Councils Social Services/Healthcare service contracts should permit public transport to be substituted for dedicated transport facilities where the former is cheaper so that local communities can benefit.
  - c) the interaction between County Councils and bodies such as the Countryside Agency should be clarified because both administer funding in the transport sector. At present this overlap can and does lead to conflicts of policy, discouraging local community initiatives.
  - d) at both local and national levels it appears that cross sector benefits in the healthcare sector due to public transport investment cannot be realised at present. This is because they conflict with direct benefits achieved by increased throughput of out-patients at medical establishments.
3. Applicability of Conclusions

Carrying out a research project in the public domain carries a lot of risks because of the dependence on actions and events beyond the control of the research team. However, the outcomes are 'real' and provide good information for policy-makers and other stakeholders advocating or attempting to implement transport schemes on the basis of their ability to attract cross-sector benefits. It is also important to note that although the findings may be confined to the local area in which the research was undertaken, the generic principles identified transcend national boundaries (Tyler 2003).

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## REFERENCES

- Brown I.E.W., N.A. Tyler (2004a) *Similarities and differences between the results of user surveys carried out in 2000 and 2002*, Centre for Transport Studies Working Paper, UCL (in press)
- Brown I.E.W., N.A. Tyler (2004b) *Public transport for rural health care services: ELIXIR project survey questionnaire 2003*, Centre for Transport Studies Working Paper, UCL (in press)
- Brown, I., Tyler, N. (2002) *An accessible rural bus service: the Cumbria Plusbus*, in Tyler, N. (ed.), *Accessibility and the bus system*, London, Thomas Telford.
- Brown I.E.W., N.A. Tyler (2001) *Users' Responses to the Implementation of an Innovative Accessible Bus Service in a Remote Rural Area*. Ninth International Conference on Mobility and Transport for Elderly and Disabled People, Warsaw, July



Fowkes A., P.Oxley, B.Heiser O (1994) *Cross-sector Benefits of Accessible Public Transport*, Cranfield University School of Management Report.

SEU (2003) *Making the Connection: Transport and Social Exclusion*, Social Exclusion Unit, The Stationery Office, London.

Tyler N.A. (2003) Practical Experience of Public Participation: Evidence from Methodological Experiments, *Innovation: The European Journal of Social Science Research*, Vol. 16, No 3, pp.253-270.

Tyler N.A. (2004) Justice in Transport Policy, in *Policy and Practice*, School of Public Policy Proceedings, University College London (in press)