THE EAST SUSSEX TRANSPORT BROKER
A PRELIMINARY REPORT

by H E H DAVIES

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THE EAST SUSSEX TRANSPORT BROKER:
A PRELIMINARY REPORT

ABSTRACT

Many agencies provide transport for their clients: the role of a transport broker is to improve the level of coordination between them. Agencies include Social Services and Education Departments in the County Council itself, the Health Authority and Voluntary organisations. The broker receives transport requests from staff in participating agencies on behalf of clients, employs a computerised directory of available transport to select a suitable vehicle, then uses specially developed software to make bookings and produce driver schedules showing who is to be picked-up on each journey.

The report describes the setting-up and operation of the broker system and is aimed at those who are considering similar arrangements. A full evaluation, including financial and operational aspects, will follow later.

1 INTRODUCTION

This report describes the setting-up and early operation of the East Sussex Transport Broker. It is intended mainly for those who are considering similar arrangements in other areas. It is too early to provide a full operational and financial evaluation of the concept. Such a study is in progress and will be reported in due course.

2 BACKGROUND

2.1 WHAT IS TRANSPORT BROKERAGE AND WHERE DOES IT HAPPEN?

Most journeys are made in private vehicles, either as drivers or passengers, or as passengers on public transport. However a substantial number of journeys are arranged by statutory or voluntary agencies for their clients, using their own or specially hired vehicles. This class of transport is sometimes referred to as tertiary, on the basis that long distance and local transport whether private or public, can be described as primary and secondary respectively. It is in the planning and provision of tertiary transport that the term brokerage is usually encountered.

A transport broker is someone who arranges journeys for people, and the term is becoming widely used. However the name alone gives little clue to the job itself because of the wide variety of ways in which tertiary transport is organised. In some places tertiary transport is highly centralised in which case the broker's job is likely to consist of making bookings and planning vehicle routes. On the other hand there may be no central planning at all, each agency dealing with its own bookings and vehicle planning. In such cases the broker may act as an agent, collecting information and encouraging cooperation. The East Sussex broker falls somewhere between these extremes: there is no central planning covering all tertiary transport, so that agencies generally arrange their own vehicle routing. However there is agreement between some agencies to have central booking, at least for a proportion of journeys. It is this central booking role which is the basis for the East Sussex brokerage system.

2.2 HOW THE IDEA AROSE IN EAST SUSSEX

In 1979 the Lewes Area Public Transport Study (LAPTS) was set up to investigate the extent to which passenger transport services met the needs of residents. One of its main achievements was to identify the size and scope of the tertiary sector. In the study area around Lewes this sector accounted for over 2 000 000 passenger journeys per year, divided up as shown in Table 1.

<table>
<thead>
<tr>
<th>Agency supplying transport</th>
<th>Passenger journeys per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Services</td>
<td></td>
</tr>
<tr>
<td>Ambulance</td>
<td>270 000</td>
</tr>
<tr>
<td>Hospital Car</td>
<td>390 000</td>
</tr>
<tr>
<td>Social Services</td>
<td></td>
</tr>
<tr>
<td>(own vehicles)</td>
<td>23 000</td>
</tr>
<tr>
<td>Voluntary Organisations</td>
<td>10 000</td>
</tr>
<tr>
<td>Schools Services</td>
<td></td>
</tr>
<tr>
<td>Contract Vehicles</td>
<td>780 000</td>
</tr>
<tr>
<td>Other (mainly scheduled bus)</td>
<td>670 000</td>
</tr>
<tr>
<td>Total</td>
<td>2 143 000</td>
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</tbody>
</table>

Note: Employers' transport is not included, while taxi and community bus services are counted as public transport.

TABLE 1

Size of the tertiary sector in the Lewes Area during 1978/79. (LAPTS Final Report: extract from Table 7.1)
2.3 COUNTY RIDER SERVICES

One of the conclusions of LAPTS was that scope existed to combine secondary and tertiary services. Though the scheduled bus network was quite extensive there were villages not served because access to them was difficult for large vehicles. Also many people were given special transport because they could not board the standard bus. People using wheelchairs or walking frames, or who needed personal attention in getting to and from bus stops tended to travel in minibuses with wheelchair lifts provided by county or health authorities, or in private cars driven by volunteers who claimed expenses from these authorities. In particular places it seemed possible that a small bus, of perhaps 20 seats, equipped with wheelchair lift, could provide a public service along a normal route, divert to reach previously inaccessible villages and at specific times of day substitute for school and social service minibuses or voluntary cars. The proposal held out the prospect of providing a more efficient and economical solution, with the added advantage that journeys previously restricted to clients of the agency providing the transport would now be open to the public. Also handicapped people would now have direct access to public services for private journeys.

The concept was described in 1983 (Charnock, Robbins and Brown 1983) and the first County Rider Service started in September of that year. The service linked Peacehaven, Newhaven and Lewes, using a bus purchased by the county and loaned to Southdown Motor Services. A TRRL report (Watts 1985) describes the first year’s experience, including social, operational and financial aspects. Since then the original Rider has been combined with a Rider to Seaford, and several other Riders are running or being planned.

An essential element of this type of service is that bookings need to be centralised. Transport is being provided by several agencies, and there needs to be a link with the drivers to tell them who is travelling on a particular day. The transport broker provides this booking service in East Sussex as part of the role in promoting the closer coordination of local authority sponsored transport.

2.4 TRRL CONTRIBUTION

TRRL had for some time been keen to develop cooperation and coordination between the many different agencies and organisations which provide passenger transport journeys. Developments in East Sussex which followed LAPTS were seen as a valuable opportunity to try out a coordination scheme in practice. Accordingly a contract was signed in 1983 to provide East Sussex County Council with technical and financial support for the Broker concept. The contract was set to run for two and a half years during which time it was hoped the scheme could be planned, established and run for a long enough time to allow it to be assessed. In the event progress has been slower than planned and an extension has been negotiated to take the period of TRRL support to March 1987. The contract covers costs of the broker’s salary, accommodation, development of computer software, telephones etc. TRRL also participates actively in the development of the scheme and will assess and report the overall benefits and costs at the end of the contract. At that stage it will be for the County Council to decide whether to continue with the brokerage operation.

3 THE EAST SUSSEX TRANSPORT BROKER

3.1 THE BROKER’S ROLE

The job of the transport broker is to contribute towards the better use of transport facilities, with the two objectives of improving the service and reducing costs. The broker receives requests for transport from authorised staff on behalf of clients of agencies participating in the scheme. The broker responds to these requests by endeavouring to find suitable transport whether it be on
existing public services, transport already provided by the requesting agency, transport already provided by another participating agency, or new transport.

The broker works within a framework of agreements between participating agencies regarding such matters as the personnel who are authorised to make transport requests, the type of client who can be provided with transport or who can share with other groups of clients, the vehicle onto which bookings can be made and the method of making charges. In agreed circumstances the broker may book new transport for clients. The broker is responsible for producing schedules of pick-up and set-down details for drivers of vehicles for which bookings have been made. The broker provides invoices to each agency showing the trips which have been provided for it by another agency.

The broker is not seen as providing an emergency service; thus a period of notice of 24 hours is required for requests for transport or notification of alterations. Longer notice is requested where possible. There will of course be occasions when less notice is unavoidable, or when emergencies such as vehicle breakdown occur. In such circumstances the broker is authorised to take what action is needed to deal with the situation.

Authorised staff communicate their transport requirements to the broker either by telephone or using forms. The broker usually contacts the requesting officer to discuss available transport options before reaching a decision and making a booking. Staff such as Social Workers are thus freed from the time-consuming task of arranging transport for their clients while still being able to ensure that what is provided is suitable. The broker is able to arrange the most efficient means of transport for the client.

3.2 DEVELOPMENT OF THE CONCEPT

Planning of the broker system began in 1982, with consideration of operational requirements and first development of computer software. In July 1983 the East Sussex transport broker was appointed. There followed a period of detailed development, and the new system went ‘live’ in September 1984. Since then the broker’s role has increased, both in the nature of operations and in the geographical area covered.

Currently the broker has the following responsibilities:

3.2.1 County Rider

The broker has sole responsibility for making bookings on all County Rider services, whether for clients of participating agencies or for handicapped members of the public.

3.2.2 Social Services Department

The broker has sole responsibility for deciding on bookings for all Social Service clients in the agreed area of the County. See paragraph 3.4 for present coverage. This applies whether the booking is made on transport run by the Social Service Department or on school vehicles under contract to Education Department. In agreed circumstances the broker is authorised to provide new transport, e.g. voluntary car or taxi.

The Social Service Department remains responsible for running its bus and minibus services, and for making bookings where these fall outside the agreed scope of the broker’s operation. Where the broker makes bookings on Social Service vehicles, she provides the necessary information to drivers about pick-ups and set-downs and is authorised to book scholars sponsored by Education Department where this is appropriate and where there is spare capacity.

Where public transport is either not available or suitable, and no existing transport provided by either Social Services or Education Departments is available, the broker has sole authority to provide suitable new transport using voluntary drivers or taxis.

3.2.3 Education Department

Education Department remains responsible for arranging transport for scholars who are entitled to it, except that

(i) for those education contracts within the broker area it is agreed that the broker may book Social Service clients where this is appropriate and where there is spare capacity. The broker notifies Education Department of any such booking and Education Department notifies the broker of any changes made to these contracts.

(ii) Education Department can ask the broker to try to arrange a booking on a Social Service vehicle, voluntary car or taxi.

3.3 HOW THE BROKER OPERATES

3.3.1 Receiving Transport Requests

Authorised staff may make requests for transport by completing one of two forms, depending on whether a new booking is required or an existing one is being cancelled or altered. Alternatively direct contact may be made by telephone. Except for cancellations, the broker makes contact with the requesting officer to discuss possible courses of action. Once the broker has made a decision this is confirmed to the requesting officer and the passenger is notified.

3.3.2 Selecting a Suitable Vehicle

The broker has a directory of vehicles making regular journeys stored on a computer. Also available are
public transport routes and timetables and details of voluntary car drivers and journeys. When making a selection of a vehicle in response to a transport request the broker aims to find the cheapest mode of transport which is suitable for the client. Vehicles are considered in the following order of priority:

- **Scheduled public transport**
- Transport already provided by the agency requesting the journey
- Transport already provided by another agency in the scheme
- **Voluntary cars**
- **Hospital cars**
- **Taxis**

Some of these modes, even if available, may not be suitable for the client, eg a wheelchair lift may be needed. This type of requirement is taken into account. Also special restrictions may have been agreed on the use of particular vehicles, eg highly disturbed clients of Social Services Department may be on a vehicle at a particular time and are not felt to be suitable for mixing with other people. Provision is made for these restrictions to be taken into account, though it is hoped that attitudes to mixing among the agencies will not be too rigid. Experience on County Rider seems to show that mixing can have positive benefits. (See Watts 1985).

Though the broker can use the computer to display the routing and available capacity of a vehicle by entering the appropriate identifier, there is no facility which can search automatically for a suitable vehicle to meet a specific transport request. Such a facility may be included in the future, possibly enabling the software to display a number of likely alternatives for consideration.

### 3.3.3 Making a Booking

When the broker has made a decision about a specific request the booking is entered in the computer. The machine displays previous bookings when new ones are being considered and ensures that over-booking does not occur. The software permits many options for displaying information and making new bookings, alterations and cancellations. A more detailed description is given in Section 3.5.

### 3.3.4 Preparing Vehicle Schedules

The broker is responsible for preparing a list of scheduled pick-ups and set-downs for any vehicle onto which bookings have been made. These are prepared during the afternoon of the day preceding the journey by using a facility in the computer software. The printed schedules are in a form suitable for use by drivers, and are either delivered to, or collected by, the particular operator concerned. They are then ready for use by the drivers on the correct day. In the case of voluntary drivers using their own cars, all contact is through the appropriate voluntary coordinator unless specifically agreed otherwise.

### 3.3.5 Dealing with Emergencies

**Late Transport Requests.** Every effort should be made to give at least 24 hours’ notice of transport requests, cancellations or alterations. There will however be occasions when this is not possible; the broker treats each request on its merits, alterations or cancellations being notified to the driver if possible. New bookings may have to be deferred unless a trip is of particular importance in which case the broker may arrange a voluntary car or taxi.

**Vehicle Breakdown.** A transport organiser should contact the broker when a vehicle for which bookings have been made breaks down. If the broker hears of this event first, the operator is immediately contacted. In the first instance it is the organiser’s responsibility to seek an alternative; if this is not possible, another agency may be approached for help, through the broker. Such problems will be best solved by ensuring good contact between the broker and those who provide transport services.

**Computer Failure.** Failures of short duration do not normally cause difficulties, but a potentially serious problem would occur if the computer was not available at the time when vehicle schedules for the following day are printed. As a safeguard schedules for two days ahead are printed along with those for the following day. If no failure occurs the two day ahead printouts are discarded.

If normal printing cannot be done the two day ahead printouts, with any necessary manual amendments, become the normal schedules.

### 3.3.6 Invoicing

The broker supplies a periodic invoice to each agency showing which transport has been provided for it by another agency and what the charge is. The basis and rate of charging is a matter for agreement between agencies.

Bills for taxi firms and expense sheets for voluntary drivers are checked by the broker and forwarded to the Finance Departments of the appropriate agency.

### 3.4 GEOGRAPHICAL AREA COVERED BY THE BROKER

In the original LAPTS project an area of the county comprising parts of the Lewes and Wealden District Council areas was identified as a basis for the study. This is shown in Figure 1, and has been used as the basis for planning the East Sussex transport broker. When the service started in September 1984 the Social Service Department local area offices in Peacehaven and Newhaven began to make bookings through the broker. Also the County Rider Service which had by then begun to run from Peacehaven through Newhaven to Lewes was included, with
bookings being made by the broker. Since that time
the operation has been extended to the Lewes patch
office of Social Services Department, and the several
other County Rider Services now running are also
included.

3.5 SOFTWARE SUPPORT
As part of the broker system an extensive computer
program has been developed to run on the County
Council's ICL main frame computer. The
specification, planning and writing of the program has
been a joint activity between TRRL and the County
Council, and the programs are written in such a way
that they could be used by other organisations. The
main functions of the software are best described on
the basis of the menu of options which is presented
to the broker when the computer is first switched on.

*Book a Passenger Journey.* The broker enters details
of who is requesting the journey, and which
department will pay for it. The name and address of
the passenger are entered, if this is not already in the
computer file, and the details of the time of day and
the pick-up and set-down points for the journey. Also
entered are any special requirements, such as the
need to have a wheelchair lift, and any personal
characteristics which might limit the scope for sharing
of the vehicle. The broker then refers to the directory of vehicle journeys to decide which would be appropriate. Entering the code number for a specific vehicle journey causes the computer to check the route and time against the booking requirements. It also checks whether there is room on the vehicle. If a diversion from the standard route is required any existing pick-ups and set-downs at that point are displayed so that the new passenger can be included in the correct sequence. The broker can instruct the computer to make a booking for any frequency from once a day to once a month, or every school day. The computer enters details of the booking and ensures that the passenger is shown as travelling on the vehicle on the appropriate day. A multiple journey can be booked including changing from one vehicle to another. This has been included to take account of a County Rider service which includes an interchange at Newhaven for passengers travelling from Peacehaven to Lewes.

Add a new Vehicle Journey. The area covered by the broker operation is divided into numbered zones. These are used as the basis for storing the route of each vehicle in the directory. Each zone can be specified as a start or finish point for the journey, part of the normal route or a zone to which the vehicle can be diverted if necessary to make a pick-up or set-down. The time of the vehicle at each zone on its route is also stored. Options are given to alter or delete vehicle journeys.

Delete a Passenger Journey. This is used when cancellation of a journey is made and can be either temporary, when someone misses one particular journey, or permanent, when no more journeys are required by the passenger on that vehicle.

Make a Change to a Passenger Journey. This may entail travelling at a different time, or a change of start or finish points of the journey.

Produce a Driver Schedule. This is the option which causes the printout of a schedule for each vehicle in the directory. It is in a form which can be used by drivers, being arranged so that the driver can read down the printout as he proceeds along his route, showing at each stop those who need to alight and those who need to board. A special indication is given when a passenger is travelling for the first time.

A schedule for two days ahead is produced at the same time. It is normally discarded but in the event that computer failure prevents the printing of a schedule the back-up copy printed the day before can be used. Some manual amendment may be needed.

Display Report, Menu. This option is used by the broker to study the existing records in the computer store, without necessarily making any changes.

Prepare Invoices. All bookings made on the machine are recorded by an automatic routine which is called each time the broker’s software program is started up, usually at the beginning of each working day. A separate program can be run to make an analysis of bookings for constructing an invoice. This will usually be done each month, all agencies being informed of bookings made for them on transport run by other agencies. The broker is able to amend the file of bookings, to take account of cancelled bookings which occur too near to the time of the journey to be entered in the driver schedule. These invoices are sent to those staff who have responsibility for authorising transport within each agency. In Education Department one unit deals with all transport arrangements for the County, whereas in the Social Services Department responsibility is delegated to Centre Managers or Local Area Team Leaders.

3.5 SCALE OF OPERATIONS

On average there are about 360 passenger journeys each day on the broker file divided approximately as follows:

- Social Services Department 113
- Education Department 240
- Health Authority 7

There are 200 vehicle journeys stored, provided by 8 operators. A vehicle journey is defined as a single link between terminus points.

4 FUTURE DEVELOPMENTS

Experience to date has shown that the concept of a transport broker within a county council has considerable potential. Some time has been needed to set up the office, establish the necessary organisation and develop the required software. All this has now been done in East Sussex, and the broker system has reached a stage where further developments and responsibilities can be added. The geographical scope of the broker has been extended beyond the study area of the original LAPTS project and there is no reason why this should not be widened further. Also the range of broker operation could be extended by developing the degree of cooperation between existing agencies and by increasing the number of agencies taking part.

There is scope for closer coordination between the County’s own agencies, Education, Social Services and Engineer’s, responsible for the provision of transport for scholars, the elderly and handicapped, and the general public respectively. The broker could assist in achieving such a change, the extent of which is determined by internal County policy. A recently completed review, occasioned by the change from Road Service Licensing to Registration for buses, has resulted in a large increase in the number of scholars
whose transport is planned through the broker. This development will be described and evaluated in a future report.

Closer links with Social Services Department are also possible, though because responsibility for transport activities is not centrally planned it is likely that greater use of the broker will be achieved in a piecemeal manner.

The original planning for the broker envisaged coordination between agencies within the County Council together with Health Authorities and voluntary bodies. So far the latter two groups have had little involvement, but there is clearly scope and benefit from developing links with them. The main health agency is likely to be the Eastbourne Ambulance Service which organises a considerable amount of non-emergency transport, mainly to get patients to hospital for day care. The service runs a centralised planning system for the whole county based in Eastbourne and there seems no reason in principle why a link should not be made between the county transport broker and the Ambulance Centre. Obviously the basis for such a link would need to be agreed at a policy level between the County and the Health Authority, so that day-to-day contact could be conducted on a routine basis. Such matters as which vehicle(s) could be used for sharing of clients, whether there were limits on the type of clients who could be booked, and the basis of any charging between the agencies would need to be settled in advance.

There are many voluntary agencies providing transport within the county, including the WRVS, Red Cross and Age Concern. Again benefit could be derived from reaching agreement with many of these agencies so that sharing could take place between them and the county council. This would need to be done on the basis of a formal agreement, and in the case of voluntary agencies it is particularly important that such an agreement demonstrates that there is no infringement of the essential independence of agencies to provide transport for clients for whom they are particularly responsible. There are some agencies for which their Charter may forbid transport being shared with anyone other than clients of that agency, but it seems that in the majority of cases sharing should be possible provided the main purpose of the transport provision is for clients of the agency concerned.

Advantages demonstrated so far include the following:

- Provision of a booking service for County Rider operations, together with production of driver schedules
- Selection of the most efficient mode of transport for clients of agencies. This includes sharing where possible.
- Freeing of agency staff from the time-consuming task of finding suitable transport for their clients.
- Provision of invoices showing the transport journeys provided by one agency for another.
- The ability to deal quickly with an emergency such as a vehicle breakdown.

The work so far has shown that there is considerable potential for development of the concept. This potential can be realised by bringing together the County’s own agencies more closely, so that their activities are coordinated both at a policy and every day planning level, and by increasing the number of agencies taking part by bringing in health and voluntary bodies.

This report does not attempt a quantitative analysis of the broker’s activities, or to balance the cost against the financial benefits. These matters will be the subject of a later report, by which time the full potential of the broker system should be apparent. It should also be possible by then to show what impact the replacement of Road Service Licensing by Registration for buses will have on the overall concept of transport brokerage.

6 ACKNOWLEDGEMENTS

The author wishes to acknowledge the assistance of staff in the County Engineer’s, Education and Social Services Departments of the County Council in the preparation of this report. In particular to Mrs P Hogg, the transport broker, and Mr Alan Gower for developments with the broker software.

The work reported was carried out in the Transport Planning Division of the Safety and Transportation Department at TRRL.

5 CONCLUSIONS

This report shows how the original concept of transport being shared between different agencies by the use of a central brokerage system has been put into practice.

7 REFERENCES

