

DIAL-A-RIDE APPLICATION IN GREAT BRITAIN

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Following the development and demonstration of demand-responsive public transport systems in North America, a number of authorities in Great Britain expressed interest in the system. British Railways in particular would like to establish whether such a system can be effective as a means of inducing additional rail use. In the London area this means off-peak services only because during peak times the railways in this area are already at or close to absolute capacity. Away from this area the service is viewed by British Railways as a feeder to its main lines, which are under increasing competition from road-based transport as more motorways are opened.

A number of subsidiaries of the National Bus Company have also become interested, particularly for small towns. At present these are usually served by longer distance routes that pass through them, but the patronage available is not sufficient to justify the use of conventional vehicles (40+ seats) on in-town services.

Finally, a number of taxi and hire-car firms are also considering the use of dial-a-ride, particularly since the Maidstone application by a taxi company was approved.

None of the services proposed has yet become operational, and the success or otherwise of demand-responsive transportation still remains problematical in the United Kingdom. However, judging by the response to the publicity that occurred when the first 2 proposals (Maidstone and Abingdon) were approved, there seems little doubt that demand-responsive transportation will spread if the early services are successful.

The following sections summarize the 6 dial-a-bus studies that, to date, have progressed the furthest. Locations are shown in Figure 1.

MAIDSTONE

Operator: Denis Hire Car Company
Service: Many-to-two, off peak, Monday to Saturday, 2 vehicles plus 1 standby
Fares: 20 pence flat fare and 10 pence for children 3 to 14
Status: Application granted by South Eastern Area Traffic Commissioners May 3, 1972; service scheduled to commence August 30, 1972

Figure 1. Dial-a-ride study locations as of May 1972.



The service operates between the residential areas of Loose and Coxheath (population 6,000) on the south side of Maidstone and the center of the town. The 2 drop-off points in the town center are at the western end of the main shopping street and at Maidstone East Railway Station. The two pickup points are at the railway station and a midway point on High Street. The hours of operation are 9 a.m. to 4 p.m. and 5:20 to 11 p.m. Monday to Saturday; there is no Sunday service.

The timing of the dial-a-ride bus arrivals and departures at the railway station is designed to meet all off-peak London trains because one of the looked-for results of the service is the increased use of these off-peak trains. They run on headways of approximately 30 minutes.

Passenger requests for journeys from the service area to the town center may be made by telephone to the control office, which is situated at Maidstone East Railway Station. Passengers must call at least 60 minutes prior to the departure times of the trains they wish to catch, although later requests will be accepted if service permits. For the reverse journey passengers may either make their requests direct to the control office (the bus standing bay is immediately outside the office) or telephone if they wish to be picked up on High Street. A free direct-line phone is available by the High Street pickup point. The vehicles are 15-passenger buses built to normal PSV regulations and fitted with 2-way radios.

ABINGDON

Operator: City of Oxford Motor Services, Ltd. (National Bus Company)
 Service: Many-to-two, Tuesday to Sunday, 1 vehicle plus 1 standby

Fares: 8 pence flat fare
 Status: Application granted by South Eastern Area Traffic Commissioners April 26, 1972; service starts June 4, 1972

The service operates from the residential areas of Abingdon to the town center on Tuesdays and Sundays between 9 a.m. and 9 p.m. On the other days of the week the bus operates on a fixed-route, fixed-schedule basis with a flat fare of 5 pence between the hours of 9:50 a.m. and 3:30 p.m. For the purposes of the dial-a-ride service, this small country town of approximately 18,000 population has been divided into 3 zones, each of which is serviced in sequence.

The control office is situated in the main shopping precinct in the center of the town, and 1 of the 2 pickup and drop-off points is immediately behind it. The other dial-a-ride stop is on the south side of the shopping area by the bus stops used by longer distance bus services.

Requests for service into the town center are made by telephone to the control office (a phone recorder is used when the office is not manned). In the reverse direction, passengers register their requests with the bus driver who does his own scheduling on the outbound tours.

BRISTOL

Operator: Bristol Omnibus Company, Ltd., under contract to British Railways
 Service: Many-to-one, Monday to Friday, 2 to 3 vehicles
 Fares: 40 pence provisionally
 Status: Application to the Traffic Commissioners' Court to be heard in August 1972

The service centers on Bristol Parkway, a new main line railway station that was opened to traffic on May 1, 1972. Most trains run from South Wales to London, but there are also a small number that run to North West England.

The service is designed to meet all train arrivals and departures to and from London and to serve the northern sector of Bristol. The station itself lies about 1 mile beyond the built-up area and at present has only 1 scheduled (30 minutes) bus service. There are no fixed routes for the dial-a-ride buses, but 2 or 3 specific pickup points may be designated at which the buses always call. Otherwise, use of the service to get to the station is by telephone request made to the station booking office. The ticket clerk doubles as a dial-a-ride dispatcher. In the reverse direction, passengers purchase tickets at the booking office, board the bus, and give their destinations to the driver.

At present, 3 share taxis are being operated under a temporary license by the Bristol Omnibus Company pending the introduction of the buses. A flat fare of 40 pence is charged for this service, but it is possible that this may be reduced when the buses are brought into use.

HARLOW NEW TOWN

Operator: London Country Bus Services, Ltd.
 Service: Many-to-few, 7 days per week, 17 hours per day, 6 vehicles
 Fares: 3 to 12 pence suggested range
 Status: Proposal approved by the Harlow Urban District Council and at present lodged with the Department of the Environment for consid-

eration for a government grant

The Harlow-Kingsmoor service is proposed to operate between the Kingsmoor residential neighborhood (population 5,000), a local shopping center (Staple Tye), and the Harlow Town Center (the High). Dial-a-ride vehicles operate on a fixed route through the neighborhood with deviations from that route in response to requests for doorstep service. In some places of the area where it is not possible to provide actual doorstep service because of the physical layout of the area, collection points for small groups of dwellings have been identified. It is proposed to discontinue the existing scheduled bus that serves Kingsmoor after the first few weeks of dial-a-ride operation. Because of the need still to provide a service that can be used by people who do not have access to a telephone, the dial-a-ride service will operate on fixed headways.

The old Harlow service serves the High, a local shopping center (the Stowe), and the Harlow Mill Railway Station (off-peak times only). Unlike the Kingsmoor proposal, the service is routed in response to requests, and fixed scheduling occurs only during off-peak times when London train arrivals and departures are served at the Mill station.

The control office for both services is situated in the center of Harlow and is in contact with the vehicles via mobile teleprinters with radio communications reserved for emergency use. The question of the use of a computer for backup to the manual dispatch system is currently under consideration.

CHELMSFORD

Operator: Eastern National Bus Company, Ltd.

Service: Many-to-few, 7 days per week, 17 hours per day, 4 to 5 vehicles
 Fares: Not yet determined
 Status: Proposal under consideration by the operating company

Traffic Commissioners' Court July 20, 1972; service starts September 25, 1972

The service operates between a residential area (Galleywood) on the outskirts of Chelmsford and a number of stops in the center of the town including the main bus station, the railway station, and the principal shopping street. It is a fully demand-responsive service in response to telephoned requests for service. Minor changes are proposed to the regular buses that operate in or close by the service area including turning short the one service that penetrates into the area.

The service area has a population of approximately 6,000 and a very wide range of housing types. Second-phase plans have been proposed for extending the service area to cover an adjoining suburb (Great Baddow) and for providing a local many-to-many service within the 2 areas. Such a service involves the use of as many as 14 vehicles.

HARROGATE

Operator: West Yorkshire Road Car Company, Ltd.
 Service: Many-to-one, Monday, Tuesday, Wednesday, a.m., Thursday, Friday, Saturday; 2 to 3 vehicles
 Fares: 10 pence for adults (15 cents return) and 5 pence for children 3 to 14; short-ride single fares: 5 pence for adults and 3 pence for children
 Status: Proposal approved by

The service, known as "Chauffeur Coach," runs among 5 residential areas and the shopping center of Harrogate. Each residential area has 2 inbound and 2 outbound buses per day; for example, the Knox area service is served by inbound buses leaving the service area at 9:10 a.m. and 2:10 p.m. and by outbound buses leaving the town center at 11:05 a.m. and 4:05 p.m.

The service is designed specifically for the shopper, and within the town center the buses follow a fixed route but will pick up and drop off passengers wherever requested. In the residential service areas, the buses follow a fixed route but will deviate in response to requests for doorstep service. There is no premium fare for the doorstep service. Passengers wishing to be picked up at their doors may telephone their requests to a control office; in the reverse direction, they simply hail the bus and tell the driver where they wish to be dropped off. So that stop time will be minimized in the town center, fares from outbound passengers are taken when they leave the bus and not when they board it.

OTHER PLACES

Further dial-a-ride applications that are still in the study stage include East Kilbride New Town, Basildon New Town, Eastbourne, where the proposal was recently approved by the Borough Council, and London.

INFORMAL DISCUSSION

Question: Telephones are not so universally distributed in the United Kingdom

as in the United States. Does the lack of telephones give you any problems?

Answer: It is a problem. The average telephone ownership in the United Kingdom is about 40 percent of the households. Some of the areas we are servicing, of course, are significantly higher than that. In some of the better residential areas it is nearly 100 percent. Because there are no telephones, we are cutting off, in effect, a part of the population, or at least making it difficult for them. One possible way around this is to make provision for people to book well in advance; the other way is, of course, to do what we are doing with the Kingsmoor, and that is to introduce some element of fixed routing and fixed scheduling. Telephone ownership is increasing at the rate of, I think, 6 or 8 percent per year so that one must realistically look at dial-a-ride as a service that, if it is going to succeed, will only succeed in perhaps 5 or 10 years. For the moment, we have to accept that we are, in fact, cutting off some of the people.

Question: Will the systems cover costs out of the fare box?

Answer: I think you will have to ask me that in about 3 months. I really do not know yet. The general principle that is being followed in Abingdon is that service ought to pay for its operating costs out of the fare box, but I think the bus company, in this case, would expect that it would not have to cover its capital costs as well. Whether it will cover its operating costs I do not know. It has operated only 1 day so far, to my knowledge, and it did not cover its operating costs on its first day.