

RAILWAY DEVELOPMENT SOCIETY

PROPOSALS  
FOR AN  
EAST-WEST  
RAIL ROUTE



**1**

## MIDDLE ENGLAND *Growing Fast*

The phrase Middle England, and references to its inhabitants has joined the nation's vocabulary in recent months. There have been many interpretations of the term, but for the purpose of this report, it is taken to mean the ring of towns and cities, including Ipswich, Cambridge, Huntingdon, Bedford, Milton Keynes, Oxford and Swindon, that are 50 miles or so to the north and west of London.

This region has seen rapid growth over the last twenty years (see Table 1), and if forecasts by the Office of Population Censuses and Surveys (OPCS) are to be believed, this growth is expected to continue (Table 2). At present, the Districts between Ipswich and Oxford have a total population of 1,875,751 people. The OPCS predicts an average growth of 18% in these Districts by 2011. In addition to the population increase, the region has seen growth in tourism and in student numbers at existing and new universities.

One effect of this development has been a great increase in movement between the main centres. Recent studies have however disputed the established principle that the best, if not the only way to meet this demand is by new road construction. The Royal Commission on Environmental Pollution has set targets on reducing the dependence on road transport.

Additionally the concept that new roads solve traffic congestion has been questioned and the link between new roads and economic growth disputed.

In many parts of the country, new rail links, such as Nottingham to Mansfield, are helping to provide some of the solutions to these problems. The RDS consider that a new East West rail link can achieve the same result for the region of Middle England.

**Table 1: District Population Growth 1971-1991**

District	Population 1971	Population 1991	% Increase
SWINDON	139,606	167,641	17.0%
OXFORD	122,271	124,058	1.5%
CHERWELL	94,017	115,773	19.0%
AYLESBURY VALE	114,586	144,264	21.0%
MILTON KEYNES	66,849	172,969	61.0%
N. BEDFORDSHIRE	124,541	132,644	6.0%
LUTON	161,405	167,009	3.0%
HUNTINGDONSHIRE	97,018	141,008	31.0%
PETERBOROUGH	105,462	149,402	29.0%
S. CAMBRIDGESHIRE	89,713	118,692	24.0%
CAMBRIDGE	98,840	101,643	3.0%
FOREST HEATH	39,600	57,045	30.0%
ST. EDMUNDSBURY	71,364	90,363	21.0%
MID SUFFOLK	60,753	77,300	21.0%
IPSWICH	123,023	115,940	-5.0%
<b>TOTAL</b>	<b>1537,083</b>	<b>1875,751</b>	<b>18.0%</b>

Data from OPCS

**Table 2: Predicted County Growth**

County	Projected growth to 2011
CAMBRIDGESHIRE	21%
NORTHAMPTONSHIRE	15%
BUCKINGHAMSHIRE	17%
OXFORDSHIRE	15%

Data from OPCS/Cambridge Evening News 30.11.94

**2**

## THE PRESENT RAIL NETWORK *Enormous Potential*

Each of the main towns and cities in the Districts listed in Table 1 is connected to the rail system. However with a few exceptions, all the routes radiate out of London and therefore do not form a rail network. As there are no direct links between these places, journeys have to be made via London or by heading north and changing trains at Leicester, Nuneaton or Birmingham (Map 1). At present there is little incentive to use rail between these places and few do so. Accessibility by rail in the region is poor when compared with other regions.



## SCOPE OF THE WORK *Strengthening the links*

The work required on each section of the proposed route is detailed below. Various County Councils have already carried out some studies on parts of the route.

### **Ipswich-Cambridge:**

Existing route used by both passenger and freight traffic. Generally double track except between Newmarket and Cambridge. A joint Suffolk/Cambridgeshire CC report of this line has recently been published which suggests a number of schemes to improve the track and signalling.

### **Cambridge-St Ives:**

Disused freight line with the track still in place. Cambridgeshire CC is pressing ahead with the re-opening of this section to passenger traffic. The County study indicated re-opening would cost £15m with a potential 3,600 users per day. These figures are currently being checked by Railtrack. For an East-West link double track will be required, for which there is space available.

### **St Ives-Huntingdon:**

New construction required. The Cambridgeshire CC study for the St Ives section estimated that an extension to Huntingdon would cost around £12m. This price would however, exclude a connection onto the East Coast Main line. An alternative to using the original track bed would be to run alongside the A14. At Huntingdon, the former Kettering line could be used as the basis of a flying junction on to the main line.

### **Huntingdon-North of Sandy:**

Part of the 4 track electrified East Coast Main Line. Flyovers will be required to avoid conflicting train movements on this busy section of line.

### **Sandy Area-Bedford:**

New construction required. The original route has been cut by the A1 and by the new Bedford southern by-pass currently under construction. The proposed A1(M) will also cross the line. It may be more practical to build a completely new route direct to Bedford.

### **Bedford-Milton Keynes (Bletchley):**

Existing double track line used for passengers and freight. This section would need to be upgraded and resignalled to allow higher speeds. A flyover exists at Bletchley to cross the West Coast Main line.

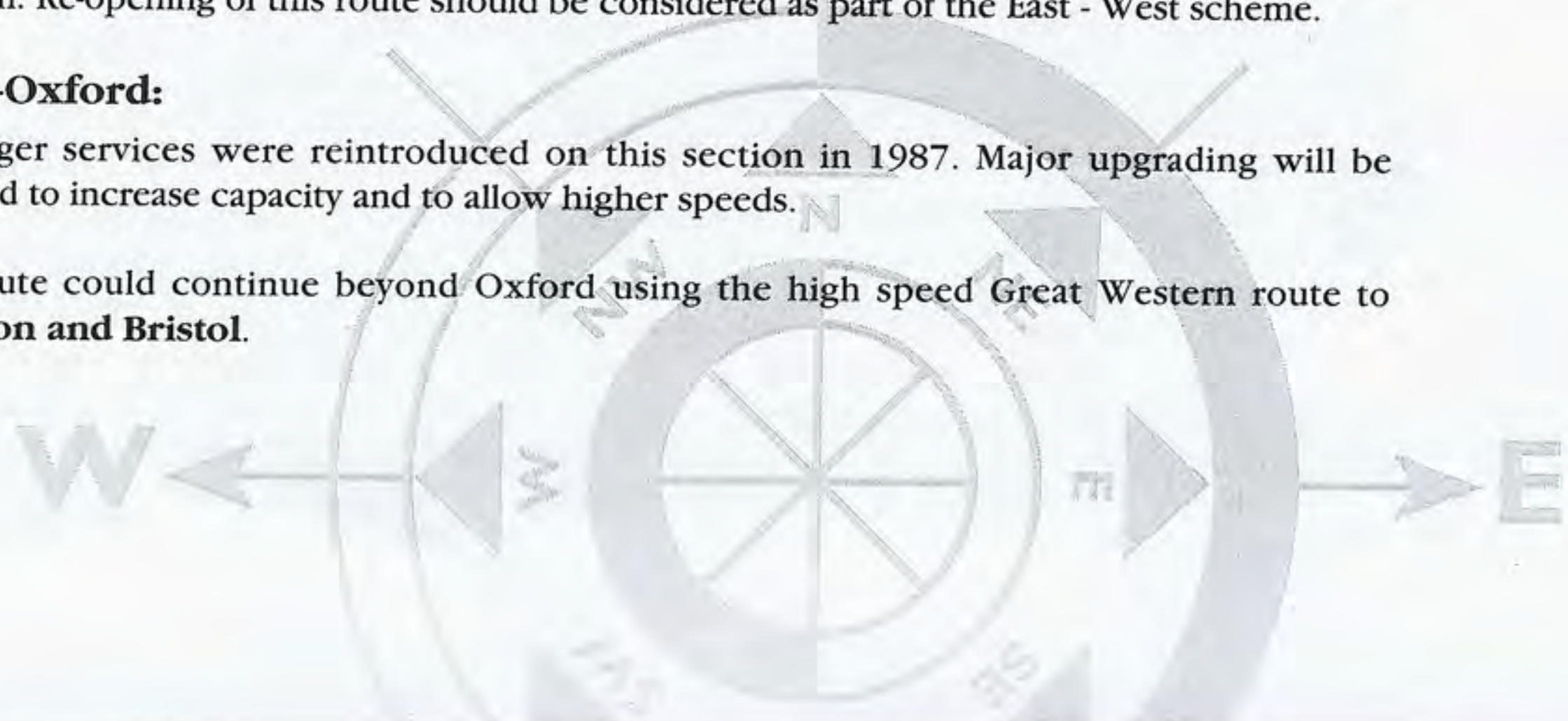
### **Milton Keynes-Bicester:**

Disused freight line with track still intact. However double track would need to be reinstated and resignalled. Studies into the re-opening of this section have been carried out by Buckinghamshire CC. An existing freight only line from Aylesbury joins this route at Claydon. Re-opening of this route should be considered as part of the East - West scheme.

### **Bicester-Oxford:**

Passenger services were reintroduced on this section in 1987. Major upgrading will be required to increase capacity and to allow higher speeds.

The route could continue beyond Oxford using the high speed Great Western route to Swindon and Bristol.



## 4 ALTERNATIVE ROUTES

Are there any practical alternatives to the route detailed on pages 2 & 3?

The original railway between Cambridge and Bedford ran direct to Sandy via Potton. However much of this route is now used by the Radio Astronomy Observatory making restoration difficult. The proposed route via St Ives and Huntingdon, although longer by 12 miles, has advantages in that it serves a greater population (around 75,000) and less new construction is required.




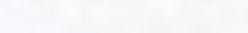

A second route would be to use the existing freight only lines from Kettering via Corby to Peterborough. (Map 2) If trains were to reverse at Oakham, this route would avoid the need for new construction, however the distance between Bedford and Cambridge would increase from 43 to 125 miles (Table 3) making this route far less attractive to through passengers. We therefore do not consider this route suitable for an East-West strategic rail link capable of serving all East Anglia's major centres. There is merit in the introduction of a local inter-urban Bedford-Oakham-Leicester/Peterborough service.

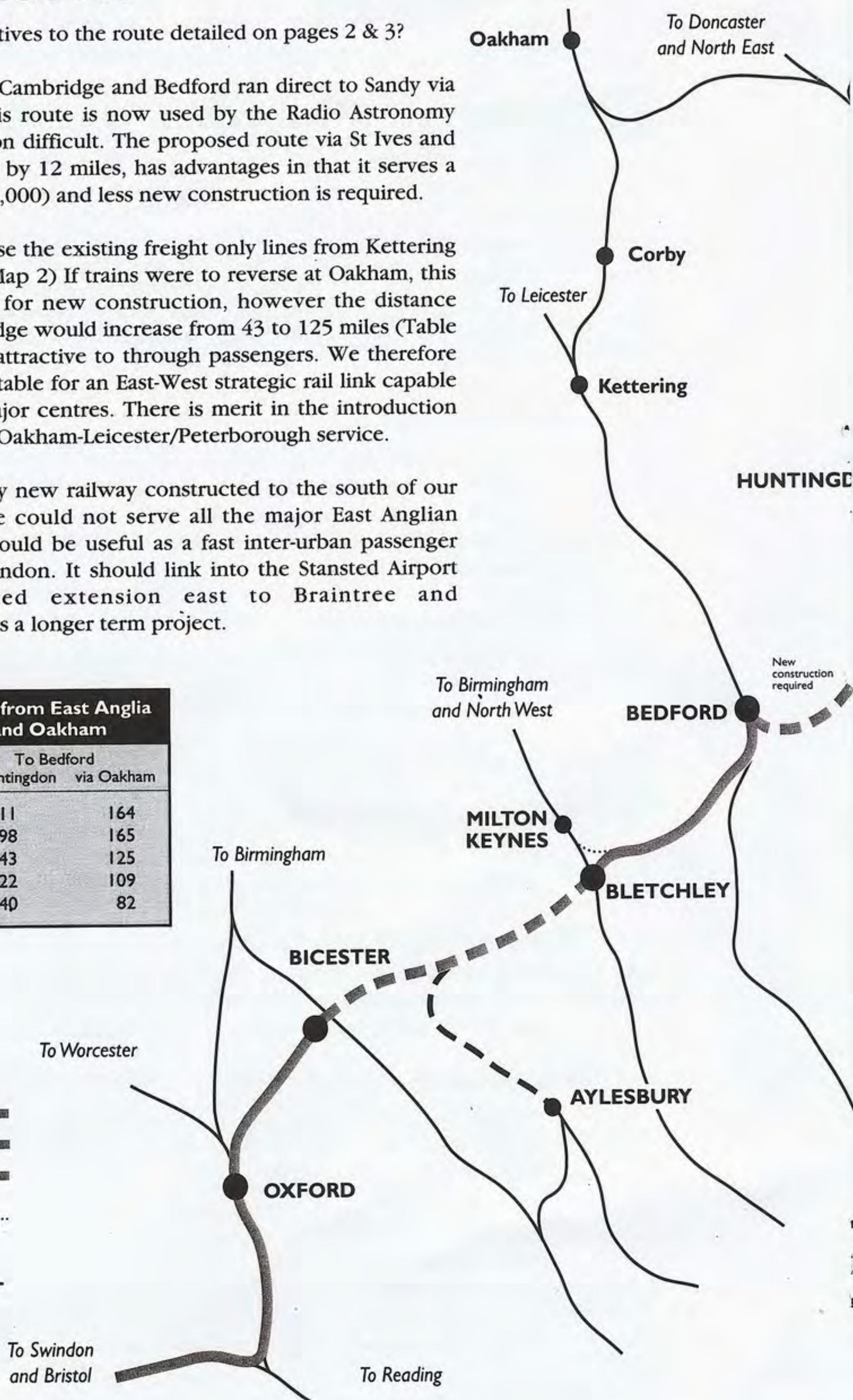
A third option is a completely new railway constructed to the south of our preferred option. This route could not serve all the major East Anglian regional centres though it would be useful as a fast inter-urban passenger route just to the north of London. It should link into the Stansted Airport branch and its projected extension east to Braintree and Colchester/Chelmsford. This is a longer term project.

From	To Bedford	
	via Huntingdon	via Oakham
NORWICH	111	164
IPSWICH	98	165
CAMBRIDGE	43	125
HUNTINGDON	22	109
PETERBOROUGH	40	82

Data from British Rail Timetable 1956

### KEY

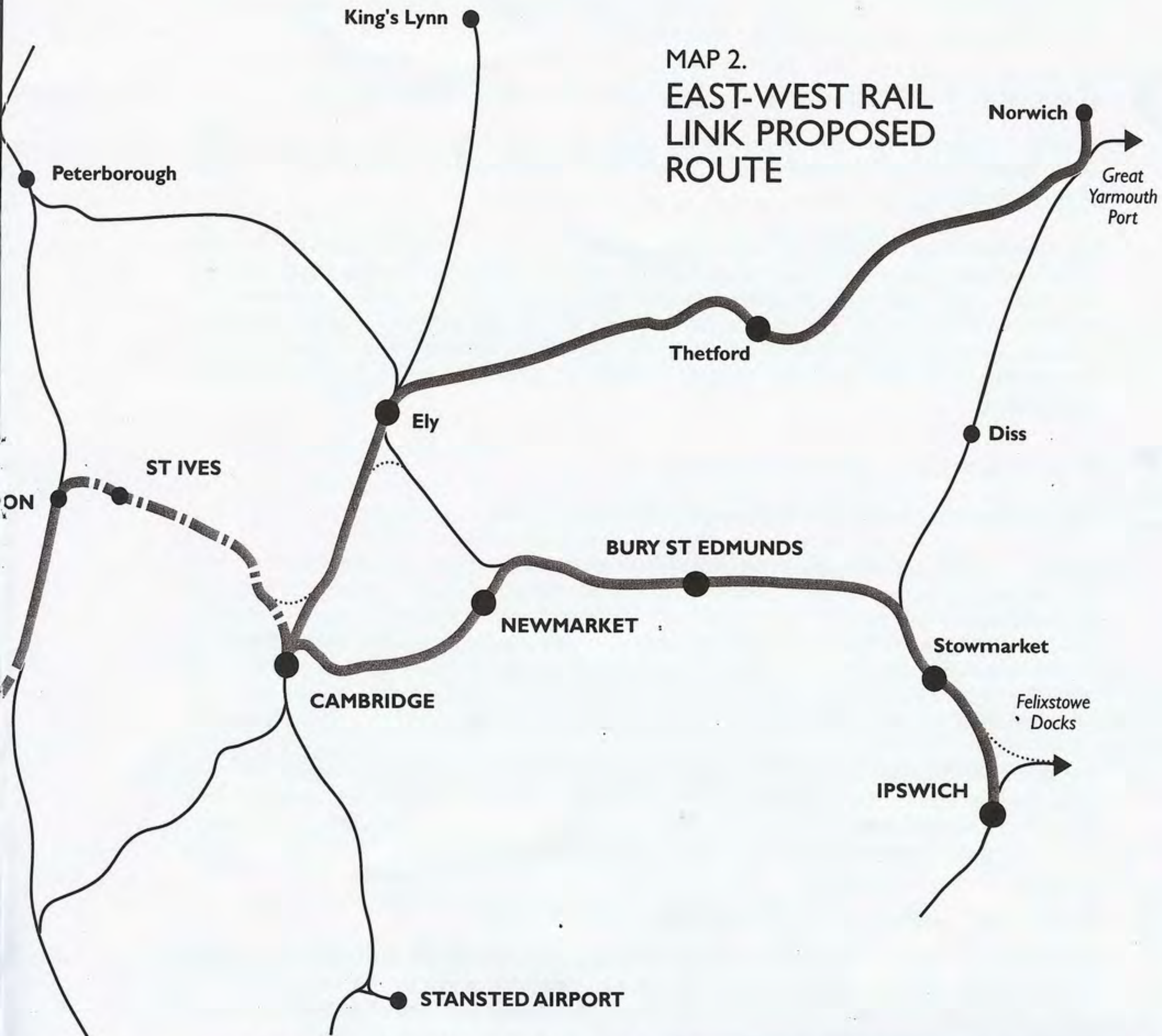
- Passenger lines 
- Upgrading needed 
- Planned re-opening 
- Suggested curves for E/W Freight Services 
- Connecting lines 



## 5 PASSENGER SERVICES *Fast and Comfortable*

The proposed passenger service would comprise fast diesel trains over the core route between Cambridge and Oxford at frequent intervals, say every 30 minutes. To reduce journey times, trains would only call at the major centres giving a typical journey time of around 90 minutes between the two cities (60mph average). Services should alternate between Norwich and Ipswich in the east and continue to Swindon and Bristol in the west. Stansted International Airport will surely be an important rail traffic centre in the future and could be linked to this network.

MAP 2.  
EAST-WEST RAIL  
LINK PROPOSED  
ROUTE



The through service would connect with 7 main lines radiating out of London creating a significant new railway network. Such connections will enable a wide range of regional destinations to be reached by train. (Table 4)

Train should be based on either Class 158 Sprinter or Class 166 types. Tilting train technology should be considered too.

In addition to the main through service, the potential exists for new local services to operate over parts of the route. As mentioned above, a Cambridgeshire CC study has shown great demand for a frequent local service between Cambridge and St Ives, which would be even more useful as part of a circular King Cross-Huntingdon-Cambridge-Kings Cross service. Further west, a new service could run between Aylesbury and Milton Keynes.

Existing local services between Ipswich / Cambridge and Bedford / Bletchley would continue. The latter would especially benefit from the renewed infrastructure, reducing costs and increasing revenue from improved speeds.

**Table 4: Connecting Services from Main Interchange Points**

NORWICH	Yarmouth, Lowestoft, Cromer
IPSWICH	Colchester, Felixstowe
CAMBRIDGE	Stansted Airport, Kings Lynn
HUNTINGDON	Peterborough
ST NEOTS	Stevenage
BEDFORD	Luton, Luton Airport, Kettering
MK/BLETCHLEY	MK Central, Northampton, Watford, Aylesbury, High Wycombe, Coventry, Birmingham
OXFORD	Reading, Worcester
SWINDON	Gloucester, Cheltenham, Newport, Cardiff, Swansea
BRISTOL	South West England

Calculation of the number of potential passengers would be complex because of the wide range of journeys created by the new route. Estimates could be based on rail's share of the traffic on other long distance regional corridors such as Portsmouth-Cardiff and Norwich-Liverpool.

## 6

### FREIGHT TRAFFIC *A chance to reduce lorry traffic*

There is potential for the expansion of freight traffic from Haven Ports. There are constraints on traffic growth owing to congestion to the busy Great Eastern line to Stratford and across the North London Line.

The Piggyback Consortium, in its recent report, suggests using the western end of the East-West route for its traffic from the Channel Tunnel to the Midlands and North. There is great concern in East Anglia about heavy lorry movements from the ports of Great Yarmouth and Felixstowe. The whole of the route from East Anglia to Bletchley should be at a Piggy-Back and international container gauge. Curves at Ely Dock Junction and Cambridge Chesterton Junction would enable a tunnel free route to be operated. The route should be included in the E.U.'s Trans European Rail Network.

## 7

### POTENTIAL OPERATORS

There are two main methods of building and operating this route.

The first is for the infrastructure to be built and maintained by Railtrack, with perhaps a separate franchise holder to run the core passenger service between Ipswich and Bristol. Existing train operating units would run the local services for themselves and as required by Local Authorities and the Rail Regulator. They may even join together to operate the core route. For example, the Cardiff to Birmingham service is jointly operated by Regional Railways Central and Regional Railways South Wales and West. This option has the advantage of using Railtrack's expertise, but would be subject to Railtrack's construction costs and access charges.

The alternative method is to award a design, build and operate concession to a private company to run the core service. This company would have to negotiate with Railtrack over access to their routes, but should in turn offer access rights to other train operating companies and freight users. This option appears more in line with current Government thinking.

## 8

### COSTS *£93m or £753m? Take your choice*

Various County Council studies have already calculated the costs for parts of the works. Using these rates, the RDS has estimated the costs for the other sections shown in Table 5. The estimated cost for the a new 137 mile Ipswich to Oxford railway via Cambridge and Huntingdon would be approximately £93m.

It should be noted that Transport Minister John Watts M.P., in a House of Commons Reply on 19 October 1994 stated that the average cost of a new dual carriageway road is £5.5m per mile excluding design costs. On this basis, an equivalent new road would cost £753.5m, excluding design costs.

Funding for the project could come from the European Union and Government Grants, County and District Council funding, the private sector, potential freight users and the Millennium Commission.

Table 5: Estimated Costs

Route Section	Source	Approx Cost £M	Notes
IPSWICH-CAMBRIDGE	Suffolk CC	3.00	
CAMBRIDGE-ST IVES	Cambs CC	15.00	1
EXTRA FOR DOUBLE TRACK	RDS	4.00	2
ST IVES-HUNTINGDON	Cambs CC	12.00	
CONNECTION TO ECML	RDS	2.00	2
ST NEOTS-BEDFORD	RDS	20.00	2,4
BEDFORD-BLETCHLEY	RDS	10.00	2,4
BLETCHLEY-OXFORD	RDS	15.00	2,4
<b>TOTAL</b>		<b>81.00</b>	
ADD 15% CONTINGENCY AND DESIGN COSTS		93.15	

#### NOTES

1. This sum should be omitted from the total if the St Ives re-opening proceeds the main scheme.
2. RDS estimates using the rates quoted in other rail re-openings.
3. Costs do not include rolling stock. Stock would be leased. Allow ten trains for a half hourly Cambridge-Oxford Service. Allow fifteen trains for a half hourly Ipswich-Bristol Service.
4. Costs allow for renewed double track.

9

**BENEFITS**

The East-West route would create new rail journey possibilities such as Cambridge to Bedford or between Bletchley and Oxford. Timings for other journeys would be reduced as shown in Table 6.

The historic towns and cities along the route would be relieved of much heavy road traffic. In addition to the improved accessibility and connectivity of the rail network, the new rail link would be consistent with the objectives of sustainable transport outlined in the recent report by the Royal Commission on Environmental Pollution.

The improved transport links with other parts of the country will encourage new employment throughout the region served by the new railway. The 'hi-tech' industries concentrated in some parts of this region would be able to expand to other locations and the necessary skilled workers could be recruited from a wider base.

The important and growing industry of international tourism could more easily spread to towns in the region from the very popular cities of Cambridge, Oxford and Bath. This rail network would encourage more 'long stay' visitors, not day trippers based in London.

From	To	Existing journey time (mins)	New journey time (mins)
Norwich	Bedford	215	113
	Bletchley	220	110
	Bicester	230	125
	Oxford	230	140
Ipswich	Bedford	170	103
	Bletchley	175	120
	Bicester	185	135
	Oxford	185	150
Cambridge	Bedford	130	43
	Bletchley	160	60
	Bicester	175	75
	Oxford	175	90

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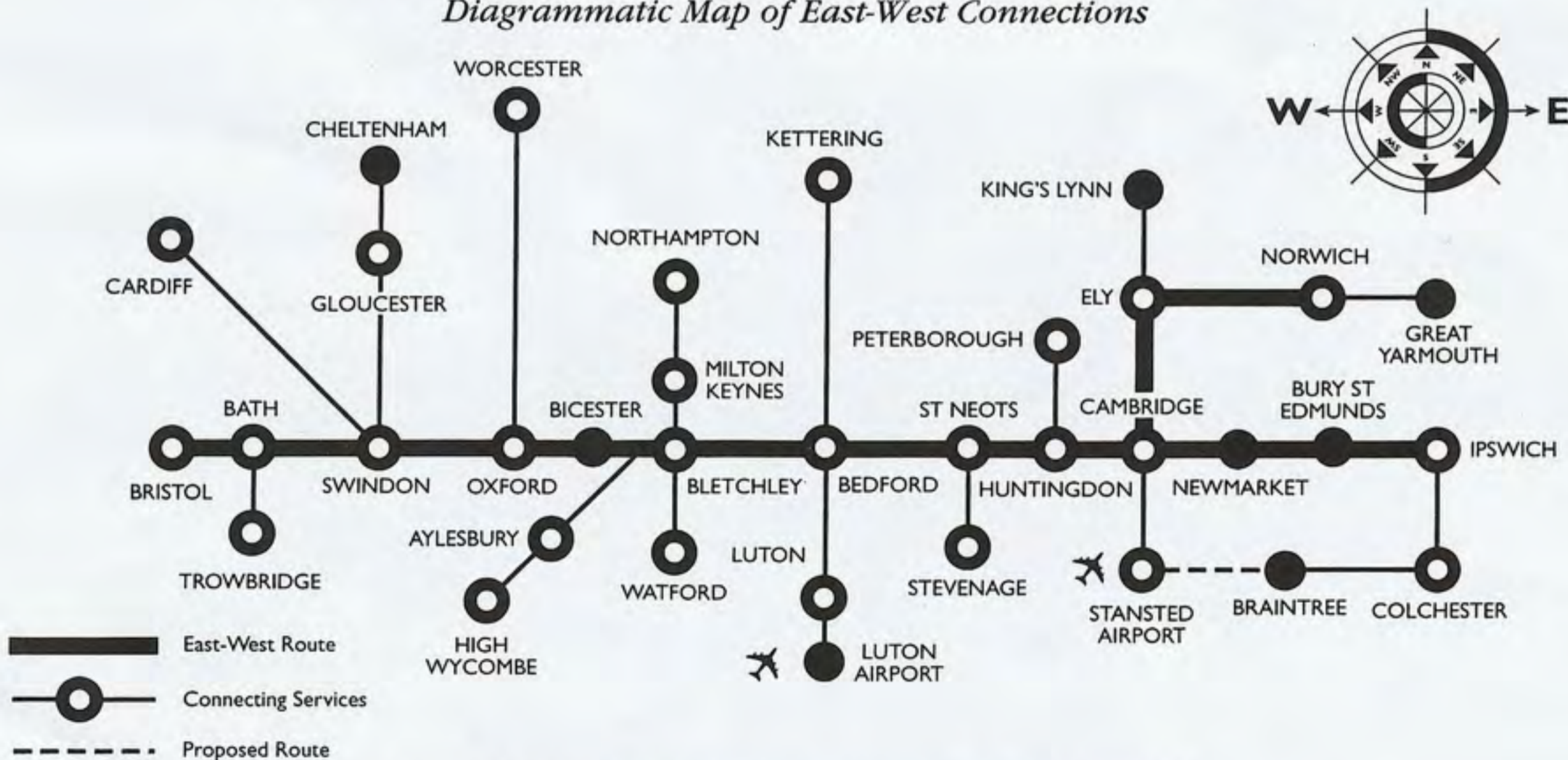
**THE NEXT MOVES**

A detailed study should be commissioned by the various local authorities along the route. This should establish the most viable and useful route with an estimate of the costs and potential usage. Talks have already taken place between the Standing Conference of East Anglian Local Authorities (SCEALA) and other councils along the route. MPs, councillors and other interested parties are urged to support and actively encourage these talks.

Although the project is relatively long term, it is essential that in the short term the route is defined and protected from other development.

**REAL IMPROVEMENTS - REGIONAL CONNECTIVITY**

*Diagrammatic Map of East-West Connections*



Many of the longer distance journeys will be easier too.  
For example: Birmingham, Reading, Bournemouth, South Wales

The Railway Development Society is the only national pro-rail pressure group independent of both British Rail management and unions.

It was formed in 1978 by the amalgamation of two long-established voluntary associations, and today acts both as a campaigner for a fairer share of transport investment in the railways, and as a consumer organisation representing rail users nationwide.

It is not linked with any political party, and has members of all shades of political opinion.

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**EAST ANGLIAN BRANCH**