

SOUTH EAST ENGLAND REGIONAL TRANSPORT BOARD

Date: 27 October 2006

Subject: **Brighton Main Line Route Utilisation Strategy**

Report of: Planning Implementation Director
South East England Regional Assembly

Recommendations:

It is recommended that the Board:

1. Support Option One to be taken forward and implemented at the earliest possible opportunity.
2. Express its disappointment and frustration at the continuing delay regarding implementation of the Route Utilisation Strategy for the corridor.
3. Express its concern that the delay in implementing improvements to the Brighton Main Line services is preventing service improvements elsewhere on the network.

Purpose of the Report

To advise the Board of the contents of the Department for Transport consultation on implementing the Brighton Main Line Route Utilisation Strategy and to agree a response.

Key Issues:

At its last meeting, the Board expressed the urgent need for the Department for Transport (DfT) to action the Ministerial decision to implement the Brighton Main Line RUS. In September DfT published a further round of consultation into this matter. This report summarises the four options put forward by the Department and considers their merits in terms of the original objectives for the Route Utilisation Strategy.

1. Background

- 1.1 Prior to the implementation of the Railways Act in 2005, Route Utilisation Strategies (RUS) were the responsibility of the Strategic Rail Authority (SRA). In 2003 the SRA began the process of looking at how passenger overcrowding and overall capacity on the Brighton Main Line (BML) should be addressed. The services covered by the RUS are those which operate from London Victoria and London Bridge (via East Croydon and Gatwick Airport) to Brighton and those on the Mid Sussex Lines, the East and West Coastways.
- 1.2 The principal concern on the BML is one of overcrowding and passenger capacity. A particular concern is the overcrowding of services north of Gatwick where demand far outstrips capacity. The number and pattern of train movements on this section of the line leads to an additional impact on performance. This is compounded by low patronage on some services. The majority of services are operated by Southern trains, which regularly run with seating occupancy of 125% in the peak hours. In comparison Gatwick Express services achieve occupancy figures of only 43%. Annex A provides further information on patronage of services. In summary, train paths are being used inefficiently due to the pattern and types of services in operation.
- 1.3 Following a long period of strategy development, Department for Transport (DfT) published the BML RUS in February 2006. Its proposals would maximise use of the existing rail infrastructure by changing service patterns to better reflect current and future demand.
- 1.4 The RUS set out four key objectives for the route:
 - i) To reduce overcrowding/accommodate current and anticipated future growth in passenger demand and increase carrying capacity on the BML, and suburban commuter services, where it can be achieved within the existing infrastructure;
 - ii) To continue to improve operational performance of BML services to give passengers a better service, and contribute towards national performance targets;
 - iii) To maintain a high quality London Victoria – Gatwick Airport service; and
 - iv) To achieve sustainable value for money within the constraints of the overall rail budget.

2. The DfT Consultation

- 2.1 Notwithstanding the fact that the original study included a comprehensive stakeholder consultation the DfT has embarked on a further round of consultation. The consultation document acknowledges that there were differing views on the document published by the Government. Long

distance travellers were broadly happy with the published document's aim to 'spread the benefit' of the available capacity to more people over a wider area. This is to be achieved by replacing the dedicated Gatwick Express service with an enhanced service between London and the South Coast, calling at Gatwick Airport. The proposal to remove the dedicated Gatwick Express service gave rise to concerns from the aviation industry as to the impact this would have on the quality and level of service available to airport users.

2.2 Government's attempts to implement the published RUS have been frustrated by the inability to reach agreement with the incumbent rail operators on the way forward. The new round of consultation seeks to resolve this by setting out four options on which the views of stakeholders are sought. Although none of the options have been consulted upon in their exact form before, it is fair to say that they are very similar to those in the original consultation. The key features of each option are summarised below, with more detail provided in Annex B to this report.

2.3 Option One – Extra South Coast trains

2.3.1 The Gatwick Express services would be replaced with an enhanced service linking London with the South Coast of 10 trains per hour (tph) calling at Gatwick made up of:

- 2 tph - calling at Redhill, East Croydon and Clapham, London, with an increased journey time of 8 minutes;
- 2tph – originating at Horsham with a 5 min stop at Gatwick and then calling at East Croydon and London, plus
- 2tph – originating on the East Coastway and travelling to Gatwick via Haywards Heath;
- 2tph – originating on the West Coastway and travelling to Gatwick via Haywards Heath, and
- 2 tph from Brighton.

2.3.2 In addition the existing pattern of services operated by First Capital Connect linking Brighton via Gatwick to London Bridge would be retained. In the high peak there would be an additional 4tph serving East Coastway, West Coastway, Brighton and Mid-Sussex lines (not stopping at Gatwick).

2.3.3 The consultation document suggests that this option reduces crossing movements, eliminates splitting trains at Haywards Heath, and improves capacity use at Gatwick and Victoria Platforms, the net result of which would be improved reliability and performance on the route.

2.4 Option Two – Retention of dedicated Airport Service

2.4.1 This option would retain the current service pattern of Gatwick Express with 4 tph serving Gatwick, although these would now commence from Three Bridges and run non stop between Gatwick and London.

2.4.2 The option is assessed as having very limited benefits, with the only potential benefit arising from the as the only benefits to performance and capacity are the transfer of passengers at Three Bridges away from Southern Trains. This option would also result in the significant degradation of Redhill-London services.

2.5 Option Three – Splitting and Joining services at Gatwick Airport

2.5.1 This option would partially retain the benefits of a dedicated service to Gatwick Airport by:

- Scheduling 2tph to split/join carriages at Gatwick Airport. Under this arrangement services from London would decouple carriages for 'airport passengers' in Gatwick Station. These carriages would then return to London with the next service. This approach would retain some of the benefits of having carriages waiting in the station for airport passengers.
- This would be supplemented by 2tph serving Gatwick to London non stop.

2.5.2 The consultation document highlights the potential disadvantage of this option in that delays arising from trains splitting/joining would be quickly transferred across the network thereby contributing to poor reliability. The DfT is undertaking further assessment work on this option as there remains concerns as to whether it is actually workable.

2.5.3 Under this option the rest of costal service remains as option one, although some services will no longer stop at East Croydon and Clapham Junction in order to 'make up time' for splitting/joining trains at Gatwick Airport. All Redhill services will lose the opportunity to interchange at East Croydon and Clapham.

2.6 Option Four – Peak/Off Peak option

2.6.1 This option has been developed in response to claims that network performance has improved with the introduction of new trains and attempts to address the remaining problem of overcrowding. In essence this option is a combination of option one in the peak and the retention of today's service pattern in the off peak.

2.6.2 The consultation highlights the difficulty for the public to understand differing service patterns, the missed opportunity in the off peak to make better use of the available capacity and the possibility of delays being spread between service patterns.

3. Proposed Consultation Response

3.1 The document is clear that a 'do-nothing' position is not an option. In terms of the objectives of the RUS, continuing to improve operations performance remains an important objective. Whilst significant progress in performance

has been made with the use of trains since the original study was undertaken it is still limited by the available infrastructure. In terms of maintaining high quality London Victoria - Gatwick Airport service, the consultation makes it clear that the only way to make significant impact on providing additional seating for passengers is to make changes to existing under used dedicated service. The consultation document notes that the Department considers that the BML is currently inefficiently using stock and capacity.

- 3.2 It is clear that in terms of 'spreading the benefits' and alleviating the overcrowding issues on the BML, Option One provides the best outcome. It retains a high level of service from Gatwick to London while providing enhanced capacity along the rest of the route. It enables a doubling of capacity on the East and West Coastway services and removes the need to split/join carriages at Haywards Heath. These changes will lead to an overall improvement in the level of service, with significant improvements to services south of Gatwick. The number of services calling at Gatwick Airport will increase, as will the number of services calling East Croydon and Clapham Junction thereby increasing travel choices. This option offers a more robust and easier to understand service pattern as well as leading to a significant increase in the number of seats available across the network.
- 3.3 The remaining options are unlikely to fully deliver the overall aims of the RUS as a whole. Options Two and Three have disbenefits in terms of services to Redhill, one of the hubs identified in the South East Plan, while DfT themselves have operational concerns in respect of Option 3. Option 4 also fails to address the aims of the RUS and risks the additional complication of service patterns changing twice within a day.
- 3.4 The consultation document notes that the earliest date for any change to take place will be summer 2008. Bearing in mind that the original SRA consultation anticipated service enhancements being introduced in 2005, the Board should express its disappointment and frustration that the implementation will be delayed by a minimum of three years. Putting aside the fact that this delay means that passengers on the BML continue to experience overcrowding, it is now having an adverse impact on other services, most notably the ability of First Group to operate a franchise commitment to double direct services from Reading to Gatwick.

**Martin Tugwell, Planning Implementation Director
South East England Regional Assembly**

4 October 2006

Contact: Andy Barton, Regional Planner
T: 01483 555215 E: andybarton@southeast-ra.gov.uk

TRAIN LOADING DATA

			SOUTHERN			
Period	Direction	Time	Demand	Average Load	Max Load	Min Load
AM PEAK	Arriving Victoria	7am-10am	15583	125%	183%	78%
		7am-8am	2979	135%	172%	86%
		8am-9am	8423	136%	158%	98%
		9am-10am	4181	104%	183%	78%
PM PEAK	Departing Victoria	4pm-7pm	14526	115%	191%	80%
		4pm-5pm	3316	107%	191%	80%
		5pm-6pm	6298	100%	139%	99%
		6pm-7pm	4912	123%	160%	83%

			GATWICK EXPRESS			
Period	Direction	Time	Demand	Average Load	Max Load	Min Load
AM PEAK	Arriving Victoria	7am-10am	1773	43%	87%	8%
		7am-8am	315	23%	31%	8%
		8am-9am	746	55%	87%	36%
		9am-10am	713	52%	69%	43%
PM PEAK	Departing Victoria	4pm-7pm	2547	62%	85%	36%
		4pm-5pm	996	73%	85%	55%
		5pm-6pm	942	69%	75%	65%
		6pm-7pm	610	45%	56%	36%

Loading data in these tables refer to the busiest time of day and year.

Southern data was captured on autumn weekdays, and Gatwick Express on summer Fridays.

Source : DfT Consultation Document

SUMMARY TABLES FOR EACH OPTION

OPTION I – EXTRA SOUTH COAST TRAINS
High Level Train Service Structure
<ul style="list-style-type: none"> ▪ Reduction of Gatwick-starter service from 4tph to 2tph and loss of there always being a dedicated train in the platform ▪ Doubling of East and West Coastway service paths by the elimination of splitting and joining at Haywards Heath ▪ More high peak South Coast to London services to call at Gatwick Airport ▪ Principal stations (eg Clapham Junction & East Croydon) between Gatwick Airport and London Victoria gain additional services ▪ 10 fast trains per hour from Gatwick Airport to London Victoria
Operational Performance
<p>Simplification of the operation of the route due to :</p> <ul style="list-style-type: none"> ▪ Reduction in conflicting moves at key junctions ▪ More efficient platform occupation at Gatwick and London Victoria ▪ Elimination of splitting and joining of trains at Haywards Heath ▪ Removal of Brighton-Watford service south of Clapham Junction
Train Capacity and Crowding
<ul style="list-style-type: none"> • Making full use of all 18 high peak-hour trains will reduce overcrowding into and out of London • Difficulty in segmenting passengers to allow for on train ticket purchase for Gatwick Airport when no platform dedication and barriers in use
Journey times and calling patterns
<ul style="list-style-type: none"> • Some reductions in journey times for West and East Coastway services to/from London • Additional calls at stations between Gatwick Airport and London including Redhill, East Croydon and Clapham Junction • Mid-Sussex line trains – the longer dwell times at Gatwick Airport are compensated by taking a direct route from Gatwick Airport to East Croydon, omitting the Redhill stop
Overall conclusion
<p>Whilst the ‘dedicated’ service to the Gatwick Airport is reduced from 4 tph to 2tph, this is compensated by the provision of extra calls at Gatwick Airport by other long distance trains and the extension of dwell times by services from the Mid Sussex Line.</p> <p>Operational performance should be improved by simplification of the operation and overcrowding is reduced by the provision of extra calls at a number of principal stations, including Redhill, East Croydon and Clapham Junction.</p>

OPTION 2 – RETENTION OF A DEDICATED AIRPORT SERVICE
High Level Train Service Structure
<ul style="list-style-type: none"> Retention of ‘dedicated’ 4 tph Gatwick Airport service but loss of there always being a train in the platform waiting for Gatwick Airport passengers Peak hour ‘dedicated’ services extended to/from Three Bridges to provide core fast service to/from this location 8 fast trains per hour from Gatwick Airport to London Victoria London Victoria to Caterham services diverted to Gatwick Airport to provide stopping service to London Victoria from Redhill
Operations Performance
<ul style="list-style-type: none"> Simplification of the operation of the route should deliver improved performance due to: <ul style="list-style-type: none"> Reduction in conflicting moves at key junctions More efficient platform occupation at Gatwick Airport (but not London Victoria) Elimination of splitting and joining of trains at Haywards Heath Removal of Brighton-Watford service south of Clapham Junction Running Redhill services to London Victoria via the Slow Lines, calling at all stations
Train Capacity and Crowding
<ul style="list-style-type: none"> Morning peak Three Bridges to London Victoria passengers transferred from Southern services to Gatwick Express TOC services
Journey times and calling patterns
<ul style="list-style-type: none"> Peak hour fast services to/from Three Bridges provided primarily by ‘dedicated’ Gatwick Airport trains Redhill-London Victoria trains call at all intermediate stations Lack of even-interval departures from London Victoria Reduction in services calling at Clapham Junction from current service (and thus even less than other options)
Overall conclusion
<p>Whilst the ‘dedicated’ Gatwick Airport service is maintained at 4 tph and there is some simplification of operation on the route, the crowding benefits are limited to the transfer of passengers from Three Bridges away from Southern trains to Gatwick Express TOC trains. This option would result in a significant degradation of the Redhill-London service.</p>

OPTION 3 – SPLITTING AND JOINING SERVICES AT GATWICK AIRPORT
High Level Train Service Structure
<ul style="list-style-type: none"> • Retention of ‘dedicated’ 4 tph Gatwick Airport service provided by portion working of some ‘coastal’ services • 10 fast trains per hour from Gatwick Airport to London Victoria • Coastal services increased as in Option 1
Operations Performance
<ul style="list-style-type: none"> • Further analysis to be undertaken in tandem with the consultation exercise • Risk that additional delay may be imported on to the route due to additional splitting and joining at Gatwick Airport • Simplification of operations due to: <ul style="list-style-type: none"> – More efficient platform occupation at Gatwick Airport and London Victoria – Elimination of splitting and joining of trains at Haywards Heath – Removal of Brighton-Watford service south of Clapham Junction
Train Capacity and Crowding
<ul style="list-style-type: none"> • Efficient use of capacity on the route by having the potential to operate 12-car trains on most services between London Victoria and Gatwick Airport • For “up” services to London Victoria, Gatwick Airport passengers have empty carriages waiting, but passengers arriving on to the platform close to departure time will have to wait while doors are closed and the vehicles attached before opening again • For “down” services from London Victoria, it will be difficult to segment Gatwick Airport and commuter flows and will be difficult to allow for ticket purchases on board the train for Gatwick Airport passengers whilst using gated access to platforms
Journey times and calling patterns
<ul style="list-style-type: none"> • Loss of East Croydon and Clapham Junction stops from some coastal trains • Some reductions in journey times to Coastway destinations
Overall conclusion
<p>This option has the potential to meet the specific needs of Gatwick Airport passengers whilst simultaneously addressing the needs of wider rail users. Exceptions are Redhill passengers and those passengers who use services from the coast that lose stops (and the potential to interchange) at East Croydon and Clapham Junction.</p> <p>Some operations performance risks with splitting and joining of services that need to be analysed further.</p>

OPTION 4 – PEAK/OFF PEAK
High Level Train Service Structure
<ul style="list-style-type: none"> • Maintenance of ‘dedicated’ Gatwick Airport service at 4 tph and a train in the platform waiting for Gatwick Airport passengers, after 10.00 in the morning • Morning peak services from Gatwick Airport to make additional stops en route to London Victoria, including at Redhill, East Croydon, and Clapham Junction to address overcrowding • Principal stations between Gatwick Airport and London Victoria gain additional morning peak services • At least 8 fast trains per hour from Gatwick Airport to London Victoria throughout the day • Involves a different train service pattern in the morning peak
Operations Performance
<ul style="list-style-type: none"> • Simplification of the operation of the route would apply only during the morning peak • Bigger disparity between morning peak and other service levels may require either more empty train movements to and from the coast or the provision of more stabling in London between the peaks for trains not in passenger service
Train Capacity and Crowding
<ul style="list-style-type: none"> • Better use of the morning peak period’s route capacity to reduce overcrowding on trains into London Victoria
Journey times and calling patterns
<ul style="list-style-type: none"> • Different train service pattern during the weekday, compared with other services throughout the day and at weekends
Overall conclusion
<p>Crowding and performance improvements confined to the morning peak (where overcrowding is most likely to occur). Conversely, dedicated Airport service retained for most of the day.</p>

Source : DfT Consultation Document