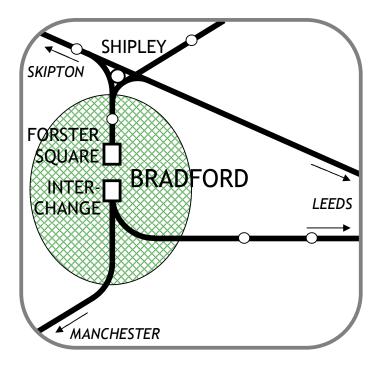
## BRADFORD : HIGH SPEED RAIL CONNECTIVITY PROSPECTS

## **Existing Rail Connectivity**

Bradford is a major West Yorkshire city of circa 300,000 population, located 13km to the west of Leeds. Its proximity to its larger neighbour, and its unfavourable local topography, on the fringes of the Pennines, have combined to prevent the development of high quality intercity rail links. Bradford has a total of 5 daily intercity trains to London, and no direct trains - either intercity or regional to any principal regional centres other than Leeds and Manchester; and with these links achieved along the secondary Calder Valley route, accessing the Manchester Victoria Station (rather than Piccadilly), Bradford is primarily reliant for its national rail connectivity upon interchange at Leeds City Station.



Another indicator of Bradford's poor rail connectivity is its status, unique amongst English cities, of having two disconnected terminus stations ie the south-facing Interchange, on the Calder Valley route, and the north-facing Forster Square, linking to the Aire Valley lines. This is a fundamentally inefficient situation, in terms of both train operations and cross-connectivity for passengers, that the Victorian railway engineers devoted massive efforts to resolving in most cities. The Midland Railway planned for many years to construct its direct route to Scotland (linking the Midland Main Line near Wakefield to the Leeds-Settle-Carlisle line at Shipley) through Bradford, to bypass the necessary reversal at Leeds' Wellington Street terminus; however, the scheme - requiring major lengths of tunnelling to avoid property demolition in Bradford city centre - was never realised.

Bradford's economic decline in recent years, relative to the nearby Leeds, has resulted in major city centre property clearances, to the extent that a clear corridor for new railway construction now exists between the two stations. The Westfield retail development,

planned to occupy much of the clear space, stalled for many years, and although construction has recently recommenced, there is still a brief 'window of opportunity' to create a surface link between Bradford's two disconnected rail systems.

This link - locally promoted as 'Bradford CrossRail' - would not prevent the Westfield development; it merely demands the construction of the structural frame with the necessary 'slot' (at first floor level and at the less commercial extreme east side of the development) to permit future establishment of CrossRail. Indeed, with a new and vibrant central station constructed adjacent to the new development, Westfield would seem to benefit massively from CrossRail.

Regrettably, despite these self-evident advantages, the local planning authority (Bradford Metropolitan District Council) and the local transportation authority (West Yorkshire Metro) remain determined to redevelop the city centre in such a way as to prevent any prospect of creating a cross-city rail link. There seems to be no recognition either of the apparent linkage between the city's economic decline and its poor local and longer-distance rail connectivity (probably the worst of any comparable UK city), or of the massive connectivity benefits that CrossRail will bring, not just to Bradford, but to the entire West Yorkshire region.

## Prospects under HS2

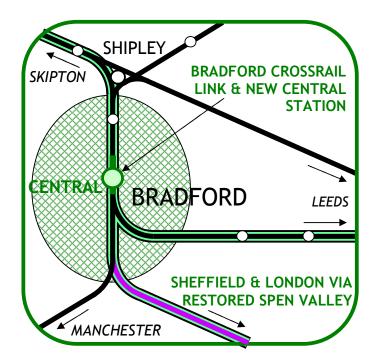
Under the HS2 proposals, Leeds would represent the closest possible approach of high speed rail services to Bradford. If an integrated high speed terminal at Leeds City Station had been proposed, then some small 'satellite' benefit might accrue; but with the remote 'New Lane' terminus being proposed, with a long walkway link from Leeds City Station, then any benefits on journey times to London would be compromised by greater inconvenience for passengers in making the transfer between the two stations.

Taken overall, with connectivity concentrated at the disconnected New Lane terminus, economic development would seem likely also to concentrate there, to the detriment of satellite communities such as Bradford.

## Enhancements under High Speed UK (refer Yorkshire Rail Strategy)

As detailed in the item concerning Leeds, congestion pressure creates a major incentive to develop the West Yorkshire network in such a way as to create a more diversified system with reduced focus upon its most critical hub ie Leeds City Station. Any initiative that improves direct intercity links to Bradford, and reduces the need to change trains at Leeds, must be good for both cities.

Bradford CrossRail is one of these initiatives, part of a wider comprehensive strategy for enhancements to aid diversification of West Yorkshire's rail network and reduce dependency upon Leeds. Another necessary element in this strategy is restoration of the Spen Valley route through the communities of Heckmondwike, Liversedge and Cleckheaton to enable a direct approach to Bradford from the Calder Valley, near Dewsbury.



With these improvements in place (which will also deliver radically improved local services), it will become possible to establish direct spur connections to Bradford from High Speed UK. These will:

- Diverge from the Leeds branch of High Speed UK as it follows the alignment of the M1 crossing the Calder Valley west of Wakefield.
- Follow the abandoned Horbury Chord to join the Calder Valley line at Horbury Bridge, and continue westwards past Healey Mills Yard.
- At Thornhill, turn north-west onto restored Spen Valley line, joining existing Halifax-Bradford line at Low Moor and entering Bradford from south through Bowling Tunnel.
- Call at Bradford's new Central Station (replacing existing Interchange and Forster Square facilities).
- Continue north to Shipley, and turn west onto Aire Valley lines.
- Call at Keighley en route to final termination at Skipton.

This new intercity route to Bradford and the Aire Valley will operate as a portion of a high speed service from London, splitting at Meadowhall (with the other portion perhaps routed to Huddersfield-East Lancashire or Wakefield Kirkgate-Castleford-York). A journey time of 1h56 will apply, as opposed to circa 3 hours at present. Connections at Meadowhall and at Leicester will deliver much wider intercity connectivity towards more southerly destinations.

This through routeing strategy comprehensively addresses the many dysfunctionalities inherent in current provision of intercity services to Bradford. The lack of crossconnectivity makes Bradford inevitably the final destination for the few trains from London that serve the city, and neither existing station presents an attractive entry point, either to Bradford or its Yorkshire Dales hinterland (for which Skipton is the natural terminating point). The East Coast services that extend from Leeds up the Aire Valley cannot serve both destinations; neither of course can the 4 daily Grand Central services, circuitously approaching from the south via Pontefract, Wakefield and Halifax.

It is clear that services routed through Bradford to Aire Valley destinations are far more viable than services which must of necessity terminate in Bradford; hence Bradford CrossRail and its new and attractive central station seem vital to ensuring high quality intercity services to Bradford and its wider hinterland.

The following service pattern is projected:

HS Yorkshire	London Eu-Brent Cross-Leicester-Meadowhall <i>(splitting for)</i> Kirklees Interchange- <b>Bradford</b> -Keighley-Skipton <i>(and)</i> Wakefield K-Castleford-York	
HS CrossCountry Wales	<b>Bradford</b> -Leeds-Meadowhall-Derby-Birmingham NS- Cheltenham-Bristol P-Newport-Cardiff-Swansea	
HS Airport Express	Heathrow-Brent Cross-Meadowhall <i>(splitting for)</i> Leeds- <b>Bradford</b> <i>(and)</i> Manchester-Liverpool	
Average Journey Time Reduction	No of Primary Cities Directly Connected	Direct Connection to Heathrow??
38%	4	Yes