"THIS YEAR, NEXT YEAR, SOMETIME, NEVER?" (LONDON'S CROSSRAIL)

by Eric Stuart

'Like old Father Thames, the story of Crossrail keeps a-rollin' along, just one of the many rail **fiascos** we have had to endure of late.

The current proposals for what is now to be termed the Elizabeth Line go way, way back, incorporating the proposal of an east-west railway on the basis of the Paris RER and other continental cross-city railways. These are a level of railway that is above what were originally called 'metros' and more akin to a main line railway. (This terminology is confused today with the use of 'Metros' for suburban railways: by this recent terminology, the Elizabeth Line will be a Metro). I can recall a proposal (about 1960, I think) for loops starting at one London terminus and returning to another on the same side of the city, with central London stations en route. There would have been one northern loop and one southern one. Liverpool has a loop like that and there are such in Australia. However, cross-City lines are much more effective. They already exist in Liverpool and Glasgow and nearly did in Manchester¹. Indeed, as I say elsewhere, Glasgow had opened two cross-city lines, closed one and re-opened it before London's got off the drawing board. See you, Jimmy!

Readers will know that most of the underground lines that are now part of LUL are of the cross-city format, but Crossrail was the second project for a 'main line' type line.

Thameslink was earlier and was itself a revival of Victorian services that ended at the time of the First World War. Only after many European cities had built such lines did Britain get a 'second wind' and seek to emulate the concept.

Up until 1939, there were trains from the Great Western Railway (GW) lines in the Thames Valley to/from the City, although they had reduced to just a few peak-hour examples by the Second World War. Also, the Ealing – Southend service was a limited Crossrail service that could have been developed rather than abandoned. Effectively, a cross-city service was provided by diverting trains from the Loughton and Fairlop Loop lines in the east into the Central Line; whilst a parallel was the balancing new line out to West Ruislip that took over service from the main lines. The service was slower but saved time by avoiding the interchange at Liverpool Street, Paddington or Westbourne Park. Much earlier, there had even been a brief period when trains ran through Liverpool Street Main Line onto the north side of the (Inner) Circle, joining at the west end of Liverpool Street Met. (née Bishopsgate) platforms.

Getting back to the present project, one can't help thinking that some civil servant looked at a rail map of Greater London, saw the Great Eastern (GE) and Great Western (GW) lines heading east and west and thought "we could join them together", without thinking much further. Once the idea of an east-west cross London main line size tunnel was floated, variations were suggested. Frankly, although I approve of the basic idea of cross-city links, Crossrail has seemed at times to verge of being a solution looking for a problem. The demographics are the first issue.

Of course, a service of this kind is needed, but is the central core going to be best used? The number of people using the GE and GW suburban lines has always been vastly different and their train services likewise disparate. Under the 1949 electrification, the peak-hour service on the GE Shenfield line was every 5 minutes and about 10 minutes off-peak with 9-car trains, roughly as today, plus faster trains from/to further afield. Even in steam days, the service was very intense, with 8- and 10-car trains. The equivalent peak hour GW suburban service was much less than the GE and the off-peak intervals were one per hour all stations and one semi-fast, with six coach trains or less. Compare rush-hour photographs of Liverpool Street against one of a corridor train, hauled by a Castle Class steam loco, heading for Henley-on-Thames – and even the stopping trains were far more roomy than the GE ones. One has only to see the type of housing in the catchment areas to see why. Likewise, a comparison of Stratford Main Line with Ealing Broadway shows a vastly different level of interchange.

¹ Footnote: Manchester got Metrolink instead, but that is not really an alternative. The Castlefield Curve has failed to do what it should because of the cost-cutting in the central area.

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Originally it was envisioned that there would be one line of Crossrail origin to the east, but an extra branch of to the west, including the north end of the Metropolitan Line, taking over the Amersham, Aylesbury and Chesham trains. An alternative was to feed into the West Coast Main Line (WCML). This would tend to balance up the east-west passenger potential. Now, with the addition of the Abbey Wood branch to the east and the deletion of trains to the Chiltern/Met. or WCML, the imbalance is even greater. Consequently, there is the proposal to reverse many trains west to east at Paddington or Old Oak. This seems a waste of an incredibly expensive but useful asset. The addition of the Heathrow branch does not appear to redress the imbalance. It has been suggested that deleting the Chiltern/Met. option was to avoid taking traffic from Chiltern, seen as the great success of rail privatisation, although objectively that option is a good idea.

There was a project for a 'Super-Crossrail' (also known as Superlink), with branches to various lines east and west of the capital, more on the lines of Thameslink. However, the Crossrail line as currently planned does have the advantage of simplicity. The Thameslink service spreads to numerous termini, even well beyond the Home Counties, giving the threat of perturbations from one line spreading like a virus to many other lines by delaying one set of Thameslink trains, which in turn can 'infect' the other lines as they run through the St. Pancras – Blackfriars central section². Neither Crossrail nor Thameslink have a place in the central area where trains can be re-sorted into the correct order if they arrive out timetabled order, but this should be less of a problem with Crossrail with its simpler route system. Only time will tell which of the two lines will be more operationally sound and less prone to problems.

It seems there will still be many trains from the GE suburban area terminating at Liverpool Street Main Line station, after many others are fed into the Crossrail tunnel. In the west, the trains were originally only extending to Maidenhead, but are now going to serve Reading. But who will use a Crossrail train from Reading to London, when there are many non-stop trains? Is it just a ploy to feed more cash into the TfL coffers that are in need of topping up? Will there be a price differential between the TfL and 'Main Line' services? As I understand it, one objective of the Piccadilly Line extensions was to bring revenue from the suburban sections to cross-subsidise the expensive central area sections.

Another issue is the all-day use of nine-car trains (12 on the majority of Thameslink services). I understand that there are economies and efficiencies in not coupling/uncoupling, but is all the extra energy being expended good – or even acceptable in this age of reducing energy – with very empty trains heading up and down, especially in the far reaches of the Thames Valley? Furthermore, the Crossrail trains are toilet-less and, with their mainly inward facing seats and many large doorways, are designed more for the central tunnel stations rather than outer suburban passengers³.

Will Crossrail trains stop at all stations, or will faster trains from the further-out stations remain? If the latter, will the faster trains catch up with the slower ones, given the frequency. Will the problem be such as on the Underground with the erstwhile 'Non-Stop' trains on some lines? Very tight timetable adherence will be needed. Also, freight trains will still use the Crossrail lines with further speed differential issues. But the politicians are optimistic. It reminds me of the adage: "If you can keep your head when all about you are losing theirs, then you probably haven't understood the size of the problem!". Our Department for Transport certainly seem to be in that category.

There was the incredible proposal to save the cost of the Crossrail central tunnel by diverting the trains via the north side of the Circle Line between Whitechapel and Paddington: another idea that presumably came from a map-gazer, who saw there was already a railway line between the two places already, so why not use it?! I recall my boss on LUL being taken off his day job and asked to make a detailed analysis to refute the concept. To virtually double the number of trains along that section of track, with four flat junctions, would have been well-nigh impossible to manage, yet it had serious consideration. Would we have been considering the 'City Widened Even More Lines'!? And the Crossrail trains would have had to conform to the existing LUL tunnel and curve parameters.

As we have now seen (for example, *Underground News*, February 2019), those managing the project made serious errors and/or seriously underestimated how far reality was from the stated

² This will also be a consideration with Crossrail 2, if and when it is built.

Passengers requiring a 'comfort stop' have been advised to 'hop off' at an intermediate station, where there will be toilets, and 'hop on' the next train, as they will be at Metro frequency!

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opening dates, such that everything is likely to be 18 months or even more later than envisaged. Even opening in 2020 is not now guaranteed. The enormity of the deception (known in the trade as "Terminological Inexactitudes") that is suggested to have been foisted on very senior people in government, the civil service and ordinary Londoners appears incredible, and even the revelations that are now being made do not answer all queries. It's a bit like a train announcer telling you your train is on time, when it is actually 20 minutes late; the excuse being that "we thought it would make up time", despite the fact that it was so far away that making up time was impossible! It now seems that the train wasn't just late, it wasn't even on the line! Indeed, so bad was the situation that train testing was suspended pending more reliability. Staff who had already been "released" (had their contracts terminated) are now having to be re-engaged or replaced. Now we are told that none of the central stations are finished, the trains still cannot converse with the signalling and, as for running more than one train in the tunnel at the same time ...

Mark Wild, currently (March 2019) Chief Executive of Crossrail, recently made the following statements (amongst others):

"... it is now clear that the management team did not have a good enough grip or understanding of the work to do",

and

".. you should have had more people from a railway background who are used to sensing what these risks are".

These requirements are so obvious that it is beyond belief that they were not fulfilled from the start. But so it has been.

We can but wait for the project to be delivered and start to work to prove or disprove the qualms. It will be great to travel on when it's opened and possibly, in time, the 'challenges' will be forgotten. However, a use for the trains that are proposed for reversing in the Old Oak area will surely be demanded. Will it come?