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ROADMAP FOR OUR RAIL FUTURE.

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Building a better future for the Lewisham & Bexleyheath railway.



Foreword

The railway between Lewisham, Eltham, Bexleyheath and Dartford is arguably the most important strategic transport artery of the three 'North Kent' lines. It is the most recent of the three built and offers the best levels of service and destination variety in the event of perturbation on either the Sidcup or Greenwich arterial lines.

The purpose of this document is to understand the pressures, the projected demands, infrastructure needed explicitly for the Bexleyheath line, the infrastructure interventions needed in the wider region and how we wish to see the future rail franchise be shaped. There are several possibilities, but what is equally important is political willpower to deliver such a wide-ranging set of ideas and build on the success of the routes to now and improve for the future.

The document is independently constructed by Nicholas Hair, railway operations and business professional and Chairman of the Partnership.

Pressures: passenger numbers.

The number of passengers using the route is presently as follows:

Station	2013/14	2017/18	% rise/fall
Lewisham	8,670,000	10,713,000	↗ 24
Blackheath	3,056,000	3,351,000	↗ 10
Kidbrooke	1,125,000	1,526,000	↗ 36
Eltham	2,424,000	2,210,000	↘ 9
Falconwood	1,123,000	1,112,000	↘ 1
Welling	2,525,000	2,576,000	↘ 2
Bexleyheath	3,173,000	2,947,000	↘ 8
Barnehurst	1,696,000	1,745,000	↗ 3
<i>Line total</i>	<i>23,792,000</i>	<i>26,810,000</i>	<i>↗ 11</i>

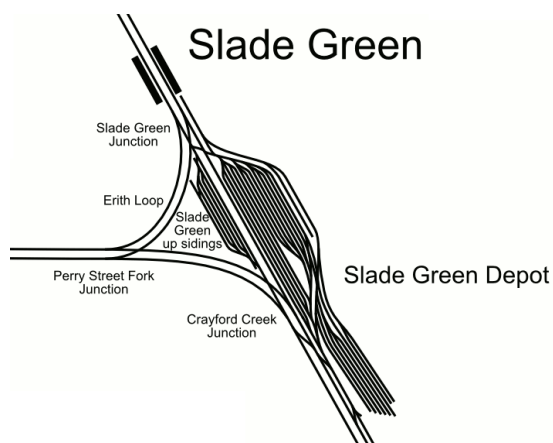
The decline in passenger numbers affecting 'middle' stations such as Eltham and Falconwood is mirrored on the Sidcup line with decline in use at New Eltham and Sidcup in the same period; as well as significant decline at Charlton, Woolwich Dockyard, Plumstead and Abbey Wood on the Greenwich line as examples.



Falconwood station has experienced a 1% decline in passengers since 2013.

Reversing decline, which is likely to be as a result of changing passenger habits, is important. Equally important is a sound understanding that the opening of Crossrail from Abbey Wood and Woolwich should not be a solution to crowding on other lines: this will rapidly absorb new housebuilding in areas such as Erith, Slade Green, Greenhithe and Rochester to name a few. Few who live in areas such as Bexleyheath or Welling are likely to amend their existing commuting patterns to take in a bus or even road journey to alternatives on the Greenwich line as traffic will cause uncertainty and unreliability to journeys; whilst positive and improved connections at stations such as London Bridge to Thameslink makes journeys on the legacy railway attractive.

Pressures: infrastructure and service



Significant numbers of capacity 'pinch points' exist towards Dartford.

The route will continue to suffer as a result of a number of infrastructure 'pinch points'. These include, but are not limited to the plethora of junctions between Barnehurst and Dartford (along with Dartford only having four platforms); the lack of turning facilities to allow a level of service to continue during serious service perturbation; some stations which lack the ability to continue high levels of throughput of

passengers (e.g. Lewisham); the flat junction at Lewisham station which is a major bottleneck and cause of unreliability; and further flat junctions and conflicting movements that take place near St Johns, New Cross and Borough Market (to name a few).



Continuing to provide capacity for rail freight is extremely important.

How to effectively deal with this remains an important question. The need to continue to enable the operation of freight traffic (many terminals exist in the vicinity of North Kent: Angerstein Wharf, Hoo Junction, Cliffe Marine, Isle of Grain (fuel and bulk commodities)) to remove heavy goods vehicles from roads is vital to the region; as is

the obvious continued reliance on significant proportions of the South East's network for peak travel despite a trend towards flexible working which creates a need for stabling space, contra-peak stock movement capacity and maintenance.

The 'Lewisham Conundrum' remains one of the single greatest question marks across the future of the Bexleyheath line (with regards future capacity and service modelling), as does the integration of the Bakerloo line into the Hayes route; the extension of Crossrail to Ebbsfleet or Gravesend; fluctuations in rail freight traffic and significant housebuilding in areas such as Kidbrooke.



The flat junction at Lewisham station prevents effective peak operations.

The immediate term problems:

The line suffers from many problems which must be addressed immediately. These include:

- ⇒ The inability to award a new franchise as a result of significant pressures to the franchising system and awaiting the outcome of the Williams Rail Review. The lack of a new franchise is stopping positive investment in new trains, with each delay adding many months or years to procurement of rolling stock when you consider the existing 'backlog' of rolling stock at many manufacturers and the testing regimes required to accept new rolling stock.
- ⇒ Maintenance and stabling pressures which are preventing the production of twelve carriage formations for peak service as the main maintenance depot, Slade Green, is not able to provide twelve

carriage trains due to infrastructure constraints and the existing fleet is ageing.

- Infrastructure pressures including many conflicting movements at Dartford, Crayford Spur, Crayford Creek, Blackheath, Lewisham, St Johns, Tanners Hill and North Kent; along with Borough Market and Ewer Street. This makes effective planning of timetables difficult but also means trains from any one of many destinations in the region could import significant delays to the rest of the network.
- Stations are frequently unstaffed, regular revenue protection is not supplied and passengers do, rightly, feel unsafe at times. Passengers are more likely to take part in modal shift with better station staffing, availability of better information and patrols at night and on weekends. It is likely that with low-level investment in more revenue patrols and station gate staffing, the actual number of passenger journeys recorded will ‘skyrocket’ – with little actual growth in actual passenger numbers.

Crossrail

It is without doubt the case that we need absolute certainty in the extension of Crossrail (‘The Elizabeth line’) from Abbey Wood towards Erith, Dartford and Gravesend.

There are many reasons for this:

- Journey times from Abbey Wood to Canary Wharf (11 minutes), Liverpool Street (17 minutes), Tottenham Court Road (23 minutes) and Paddington (28 minutes) will be significantly shorter than current equivalents (estimated at peak times to be 33 minutes, 48 minutes, 53 minutes and 55 minutes respectively). This will make travel from many stations in North Kent (such as Dartford, Greenhithe and Gravesend) to Abbey Wood vastly more attractive to connect with this new railway and thus direct trains are a small step beyond.
- The opportunity to invest in new infrastructure in the Slade Green and Dartford areas is significant, improving reliability for existing ‘legacy’ services via Sidcup and Bexleyheath but also supporting new and more frequent Crossrail services.



Effective integration of Crossrail to North Kent is vital.

⇒ Some passengers in areas currently between Bexleyheath and Greenwich line stations will change journeys and thus stations such as Erith and Slade Green will require investment but also new Crossrail services. Examples of areas expected to produce these sorts of changes include Northumberland Heath (split Erith and Barnehurst), Lesness Heath (split Belvedere and Bexleyheath), East Wickham (split Plumstead and Welling) and Shooters Hill (split Woolwich Arsenal and Eltham). The attractiveness of Crossrail will release capacity on legacy Greenwich and Bexleyheath line services, also.



New bus routes such as the 301 will change hundreds of daily journeys.

⇒ More frequent services between North Kent, Dartford and areas such as Ebbsfleet or Gravesend are positive; and extends links for leisure and business travel towards Medway and Thanet. Effective links to Ebbsfleet also enable quicker leisure and business journeys to the Continent.



Effective links to the Channel Tunnel could drive business growth in the area.

⇒ Housing growth in Belvedere, Erith and Slade Green as part of Bexley Council's "Zone of Opportunity" here means extension of Crossrail and provision of a frequent, five-minutely service from Dartford towards the Crossrail core is vital.

Effective integration of Crossrail

In order to successfully integrate Crossrail, at least one significant infrastructure change must be made. This would entail the extension of the 'new' four-tracking between Church Manorway and Abbey Wood to Northwood Primary School; offering a flexible approach to Abbey Wood and enabling trains to accelerate quicker. It would also provide for a three-track and three-platform flexible layout at Slade Green station; and then a four-track formation between Crayford Creek Junction and Dartford station.

Provision of the four-tracking between Crayford Creek Junction and Dartford station provides two key benefits, namely:

- ⇒ Reliable operation of a quarter-hourly 'rounder' service from the Bexleyheath line to the Sidcup line (and vice versa) at peak times without interfering with Crossrail services to/from Dartford.
- ⇒ Provides a dedicated two tracks between Crayford Creek and Dartford for Bexleyheath line trains to operate a quarter-hourly peak service without interfering with Crossrail trains that would operate over a neighbouring pair of tracks.
- ⇒ It also assists with the operation of a quarter-hourly service between Dartford and Sidcup at peak times, only having a small level of conflicting movements at high peak with Bexleyheath services also starting/terminating at Dartford.



Four tracking and a new bridge would be needed at Thames Road in Crayford.

Provision of a flexible three-track layout and three platforms at Slade Green also allows for the operation of up to a quarter-hourly peak service between the Greenwich and Bexleyheath lines (an expansion of the existing service, also enabling passengers in Barnehurst to easily move to/from Abbey Wood for Crossrail connections); without excessively hindering Crossrail capacity. Crossrail services in each direction would need to be effectively pathed so as to provide the necessary capacity for a quarter-hourly 'legacy' service between the Greenwich and Bexleyheath lines (also enabling through journeys from stations such as Erith and Belvedere to Greenwich and London Bridge); and this is expected to be split approximately 4 – 4.5 – 6.5 minute gaps; with the 6.5 minute gap accommodating the legacy services.

The four-tracking between Crayford Creek and Dartford station would require significant work in the Thames Road area; but can be completed as part of a wider package designed to accommodate not only more road lanes, easing congestion; but also could be the springboard to introducing freight from a future multimodal facility on the Marshes to/from the Greenwich line.

Dartford station would require to be re-built to enable five twelve-carriage platforms (up from the present four). This would result in the provision of a



Dartford station requires significant rebuild to integrate Crossrail.

‘Down’ (towards Kent), ‘Reversible’ (for terminating trains returning to Crossrail’s central core) and ‘Up’ (towards London from Gravesend etc.) platform; and then an island platform for services to/from Sidcup and Bexleyheath which would all terminate. These platforms would,

therefore, be already linked to the existing carriage sidings and works would enable four twelve-carriage trains to stable between peaks or during night periods.

In addition, this re-build would give a significantly larger space for passenger flows, and form part of a wider transport interchange for passengers arriving/departing on local buses to a plethora of destinations.

Opportunities further exist for the construction of a four-platform ‘Dartford Parkway’ station between Thames Road and Crayford Spur; such as to create a significant interchange point between Sidcup/Bexleyheath trains and Crossrail trains outside of



An opportunity exists for an interchange at Thames Road (a Parkway for Dartford).

Dartford. It would also increase journey opportunities (between the Sidcup and Greenwich lines) and could act as a catalyst for public transport interchange for buses and cycling between parts of Dartford (including Temple Hill, The Bridge and Barnes Cray) reducing the numbers of passengers using Dartford and Crayford among others. Employees of local businesses, including the new multimodal facility and in local industrial and commerce units could use such a station, also.

Whilst a Crossrail link to Ebbsfleet International could be desirable, it is unlikely to be achievable; and it would also not provide easy integration and journey opportunities further towards Medway and North Kent via the High-Speed services. It is also important to consider the effective commuting needs of people in the Swanscombe and Northfleet area: these individuals will be better served by services proceeding at least as far as Gravesend as

opposed to having to use Ebbsfleet. Equally, journeys from Ebbsfleet to Farringdon etc. would be quicker via High-Speed trains and a change at St Pancras; as are journeys to parts of East London via Stratford International. Thus, Gravesend and other stations in the area would be better served by Crossrail from this location and not to/from Ebbsfleet.

Creation of a dedicated ‘walkway’, well-lit and potentially segregated from normal pedestrian traffic could be supplied from Northfleet to Ebbsfleet International with appropriate disabled-friendly facilities such as elevators; and a further such walkway could be supplied from Swanscombe to a new theme park in the Northfleet Peninsula. All these facilities would therefore realistically be served by Crossrail services without having to cause a negative loss to stations such as Gravesend or Northfleet; and enables possible extensions of Crossrail to the Medway towns and Maidstone.



A walkway from Northfleet to Ebbsfleet provides better connections for all.



Stations such as Snodland could benefit from direct Crossrail services in future.

Existing High-Speed services operate from Maidstone West to St Pancras via Strood, Gravesend and Ebbsfleet; giving the County Town a faster commuter link, particularly to the Docklands. That said, the future franchise has already proposed services instead from Maidstone West to Charing Cross or Cannon Street via Strood, Gravesend, Dartford and Abbey Wood; giving

connections from Maidstone and significant housebuilding in Snodland to Crossrail. This is also beneficial as services can be longer, accommodating more passengers but also freeing up further capacity for the Medway towns to St Pancras as more ‘train slots’ (paths) appear for them.

We therefore find hugely in favour of Crossrail services not only to Gravesend; but at peak times also to Maidstone West. Services to Rainham via Chatham both at peak and off-peak would also be heavily used.

More rolling stock would require to be ordered for the Crossrail route to supply such a significant increase in passenger routes and traffic with destinations such as Dartford, Gravesend, Rainham and Maidstone West; however these can be ‘followed on’ as part of the existing Aventra platform order and would also significantly reduce the overall order of new stock for the South East franchise.

Re-routing Thameslink

In response to the creation of a highly effective new transport network for the South East of London and parts of North West Kent; the existing ‘Thameslink’ service from Rainham to Luton would require to be re-routed between Medway and London. We are therefore of the opinion that such a service should operate from Gillingham (Rainham becoming a Crossrail destination) to the Thameslink Core via Longfield. This would directly replace existing services at stations such as Sole Street and Swanley; boosting the service from hourly to half-hourly off-peak and providing state-of-the-art rolling stock to stations such as Meopham. The services could be routed via Herne Hill or Catford and would also give the option of a call at stations such as Herne Hill or Denmark Hill, giving faster connections to London Overground, the Thameslink suburban network and other local stations and bus routes.



Thameslink services to/from Medway need to be rerouted via Longfield and Bromley.

The Bakerloo Line

It is without question that the Bakerloo line should be funded for extension directly through to Hayes and Beckenham Junction, allowing up to sixteen trains per hour (16tph) from Lewisham to New Beckenham; with a further eight trains per hour (8tph) starting/terminating at Lewisham as excellent ‘crowd buster’ services at peak times. This service also provides the benefit of giving direct services from Lewisham to the West End including Waterloo and Charing Cross, which partially negates direct



Commitment to the Bakerloo line extension is needed immediately.

services from the Bexleyheath line to Charing Cross. By ensuring high levels of passenger throughput at Lewisham and the creation of a near five-minutely service from Cannon Street to Barnehurst (and vice versa) at peak times, passengers will be able to use the Bakerloo line and have a true ‘turn up and go’ service between the West End and the Bexleyheath line; and this would also heavily reduce conflicting / crossing movements at Lewisham.

As part of providing the Bakerloo line to Hayes (and the subsequent major rebuild of Lewisham station and operation of all Bexleyheath line trains to Cannon Street), vast capacity increases would result to the rest of the existing South Eastern network. Six trains per hour could operate into/out of Cannon Street and Charing Cross as a result of the Hayes line being converted; and the loss of conflicting movements at Lewisham would supply large numbers of additional paths for trains on the Grove Park and Sidcup lines in the Lewisham area.

Whilst the existing line between Lewisham station and Ladywell Junction could be severed and removed; the existing ‘chord’ between Parks Bridge Junction and Ladywell should be retained (albeit only a single track) for diversion of trains during scheduled engineering work as is currently the case between London and Tunbridge Wells on some weekends. These trains can also therefore operate over the Beckenham Spur, which would be doubled between New Beckenham and Beckenham Junction.

Rebuilding Lewisham

Lewisham Station should be totally rebuilt to remove the subway (this is too congested at peak times and is no longer fit for purpose), withdraw the ineffective lift access to Platform 1 from the street and to enable the station to prepare for its role as major interchange hub.



Lewisham station requires significant rebuild.

We propose the London end (near the DLR and existing ticket office) be entirely overhauled; providing escalators and lifts to an ‘upper level’ over the existing Network Rail tracks for access between platforms; and thence escalators down from the central hall to the Bakerloo line. This will be entirely suitable for the thousands of extra journeys that could be made through Lewisham each hour.

Links to Victoria

We are in favour of services running every fifteen minutes all day, every day between Lewisham and Victoria via Peckham Rye. These services will require to originate from an alternative source to the Bexleyheath or Hayes lines; and thus, Sidcup or Orpington could be suitable destinations.

In order to give wider journey connectivity, it is proposed to build new platforms at Brockley and Brixton to enable passengers from areas such as Lewisham, Sidcup and Dartford to easily transfer to the East London Line, Croydon and South London.

New trains

We suggest the introduction of a new, world-class fleet of six carriage multiple units. These would therefore be able to easily operate in multiple to give twelve carriage formations; and would give effective people-moving capability at peak times. It would also mean a homogenous fleet of trains, with more economic maintenance costs and, unlike with Thameslink trains where an entire twelve carriage single unit can be cancelled, at least 50% of capacity can be provided in stock shortages.



The Class 717 represents a good base for future South Eastern Metro fleet design.

On board amenities would include high-density seating with wide circulation space in doorways; walk-through capability; a disabled toilet; high-speed wireless internet connectivity; USB power ports and flip-down tables. This would represent a huge step forward in passenger experience but also suits all journey lengths including services as far as Sevenoaks from London. In addition, the Metro unit could form a basis for a differently configured Main Line-style train including more toilets, first class seating, tables and bay seating and plug sockets.

New stations

In order to prove a new model for stations on the Metro route and further investment, the Partnership proposes effectively demolishing existing stations (or integrating their design into bigger facilities where they are of historic or listed nature) and replacing them with bigger, brighter, newer

ones. Examples might include Barnehurst, where the existing footbridge is life-expired and there is no option of putting in place ticket gates; or Kidbrooke, which with huge housebuilding is likely to cause further capacity pressures and this station also lacks ticket gates or a permanent ticket office.

Each station should be staffed from first to last train, every day of the week. Ticket offices should be staffed at least from 0600 to 1200 on weekdays; although they could be staffed permanently in locations where they also have control over ticket gates (see Shepherds Bush, London Overground). Ticket barriers on secondary platforms (e.g. non-station building platforms) where there is direct access to street would require ticket barriers also.

Stations should be constructed with due care to environmental benefits; such as the ‘living roof’ (see Dartford Football Club), water recycling (for gardens) and solar panels. As much space as is practicable should be given over to the community in the form of gardens or allotments, including on embankments.



A living roof is a positive design step for nature.



Putney station is a good example of refurbishment.

Stations should also consider passengers: lifts, wide staircases, warm waiting areas, good retail space (such as for cafes, community groups or shops) and should, where possible, allow integration of

other public transport and safe cycle storage. Good retail facilities, in tandem with a sense of safety and security from station staffing, can all form part of encouraging more people back to rail and to change passenger habits.

Bexleyheath, Falconwood, Eltham, Kidbrooke and Lewisham all represent key opportunity stations for public transport (local bus) integration.

Staffing of trains and stations

As has been discussed, we propose stations be staffed from first to last train, seven days a week. We are also proposing that the new franchise have written into its contract terms that there must be much higher numbers of Revenue Enforcement officers for 'spot checks' at stations and on trains (particularly the latter), and we are keen to see the franchise fund more British Transport Police officers for evening and weekend patrols.

Depots, stabling and train crew

In order to achieve Crossrail to Gravesend (and beyond), it is suggested that due to the track layout in the Slade Green area, Slade Green Depot would become a re-built Crossrail facility. Stabling of trains would also take place in the existing Up Sidings. Train crew would all be based at Slade Green, providing a suitable and sensible 'South East' base for Crossrail crew for trains to all destinations including Maidstone West and Rainham.

South Eastern franchise trains would therefore need new stabling, suitable for twelve carriage operation. Plumstead's existing sidings could be re-built for this (with exit/entry at each end), and South Eastern trains could also be stabled on the incumbent Crossrail engineering site. In order to gain further twelve carriage stabling, trains would need to use Grove Park (re-built for twelve and twenty-four carriage formations) 'Up' and 'Down' sidings as well as the carriage shed; and a new maintenance depot location be found.



It is proposed to repurpose the Plumstead Crossrail construction site for South Eastern.

Bellingham Sidings would need to be rebuilt for Thameslink trains, allowing three fixed-length Class 700 trains to be stabled overnight. The sidings at Orpington would need to be returned to use for South Eastern trains as they are twelve carriages in length; necessitating some Class 700 stabling elsewhere. It is proposed to construct two eight-carriage sidings in Swanley, adjacent to the Kent-bound Maidstone line; and the continuation of two eight-carriage stabling sidings in Sevenoaks. Some stabling could continue in Orpington station for Thameslink trains overnight.

South Eastern's Metro reach would realistically extend only as far as Dartford or Sevenoaks from all London terminals.



Stewarts Lane no longer services the Gatwick Express fleet. It could be a hub for South Eastern Metro trains.

We strongly suggest that, following fleet changes in the South Central area (currently Southern and Gatwick Express), Stewarts Lane Depot could be fully rebuilt. The area around Stewarts Lane provides a good base for the Metro fleet overnight and during the weekends; as well as a smaller facility at Plumstead (on the Crossrail site). Improved stabling in the Stewarts Lane and Grosvenor

areas would enable daytime stabling of 'Main Line' trains, and overnight stabling of 'Metro' trains.

A rebuild of Grove Park would also supply the requisite number of twelve and potentially twenty-four carriage stabling for the Metro fleet. It could also be used during daytime for 'Main Line' trains.

If possible, two six-carriage sidings could be supplied at Cannon Street.

South Eastern Metro train crew would therefore be based at Dartford, Plumstead, Cannon Street, Victoria and Grove Park.

Freight enhancements

In order to supply the correct freight capacity for trains to/from the Isle of Grain, Hoo Junction, Angerstein Wharf and Slade Green multimodal facility (if built), it is the case that work will be needed to supply regulating positions on the Greenwich and Sidcup lines. The Bexleyheath line is not an effective route for this, although freight could use this line if required.

It is proposed that the Sidcup line continue its role as primary route for freight traffic; not least as it offers direct access from North Kent to Hither Green's freight yard. It also lacks the heavier gradients that exist between Crayford Creek and Barnehurst. Therefore, it is the case that a new goods loop should be provided in each direction between Crayford and Lee. In the 'down' direction, it should be between Bexley and Crayford; and in the 'up' direction, it should be between Mottingham and Lee.

Freight to/from Slade Green's potential multimodal terminal would enter the Network Rail network in the vicinity of the existing Slade Green country-end 'headshunt' line. Conflicting movements to/from the Bexleyheath line here would prove untenable due to slow speeds; and therefore, trains should operate to/from the Greenwich line and then use the Charlton to Blackheath line and operate over the diamond junction at Lewisham. Trains would be limited to off-peak periods (between 1000 and 1500) and then between 1930 and 0530. Provision of further goods loops for regulation of trains will be needed on the Greenwich line and exploration of options is required. That said, a fully-flexible four-track layout between Harrow Manorway and Northwood Primary School via Abbey Wood station would provide space for at least one freight service to be regulated in either direction at a time; and the possibility exists for a third track between Harrow Manorway and Plumstead station to give a 'middle road' for regulation in either direction. This corridor is significantly wide enough to allow for all of this.



The width of the corridor near Abbey Wood provides space for high levels of passenger and some freight service.

Lewisham Station avoiding scheme

In order to allow for freight traffic to continue for longer periods during the day, and to give effective capacity and infrastructure for other services (such as stock transit to/from Victoria at contra-peak), it is suggested that a new piece of railway be constructed near Lewisham.



Scenes such as this would mostly disappear if a new chord was built avoiding Lewisham.

Under this scheme, a single-track line would be placed between Bertrand Street and Somerset Gardens (Lewisham Vale Junction). It would allow freight traffic to bypass Lewisham station; and allow off-peak traffic to reduce conflicting movements with freight in the Lewisham area. As the track begins to rise

over the A20, it would climb and be suspended over Thurston Road. At Lewisham Vale Junction, trains would not be able to route to/from Tanners Hill Junction but would only operate to/from Nunhead. This means freight traffic in the 'down' direction could operate simultaneously with a service towards Charing Cross where now they would be unable. It would also provide high levels of capacity for diversion and operation during serious service perturbation as part of a wider disruption plan.

Whilst some intermodal trains could be operating via Lewisham, Blackheath and Woolwich as part of a new Slade Green multimodal gateway; at off-peak times these services could be accommodated across the Lewisham flat junction.

Borough Market and Cannon Street capacity enhancement

We strongly suggest four-tracking between Borough Market Junction and Cannon Street station along with reinstating an eight platform at Cannon Street. This will allow 26tph to more reliably operate with parallel movements across Borough Market Junction on each pair of tracks; and each track pair feeding four platforms. It would be possible to 'sever' the Metropolitan Junction chord and provide a twelve-carriage stabling siding as well as two six-carriage stabling sidings; each 'fed' from Platforms 7 and 8 (currently 6 and 7). This work is necessary to allow 26tph at high peak between 0750 and 0850 and 1700 and 1800.



Charing Cross rebuild [non-essential]

We support closing Charing Cross and Waterloo East stations and creation of a six-platform, 'over-river' station with direct links to Waterloo and Embankment London Underground and Network Rail stations. This will give greater passenger flow and aid capacity in the area with up to 28tph at high peak if required; and the possibility of two twelve-carriage stabling sidings between the track pairs in the Waterloo East area. Charing Cross station's sale will support a large proportion of the cost of this work.

Earlier services

We propose that the incumbent first service towards London (0528 from Barnehurst) be improved to around 0445. Last train(s) from London at 0045.

Service levels

We propose that services between Abbey Wood and Cannon Street via Greenwich be reduced in scope to a train every 6-9 minutes (eight trains per hour), with no peak service via Blackheath. This is due to constraints between London Bridge and Cannon Street (better planning to give more service resilience) but also due to the fact that high levels of passengers are expected to use Crossrail from 'east', freeing up large amounts of capacity on legacy trains from Woolwich, Charlton and Greenwich to London. There is also a reduced need for services via Lewisham when passengers can use the Docklands Light Railway between Lewisham and Greenwich to complete their journeys; and very few numbers of passengers require travel via Lewisham from the North Kent line. Whilst potentially unpopular in theory, the reality is that this is a positive step and that off-peak connections can be retained.

Turning facilities

We are of the opinion that not enough turning facilities exist on the Bexleyheath line (only one at Barnehurst) for trains to offer partial service during engineering work or serious service perturbation.

We therefore propose fully signalled crossing points at Eltham (allowing trains to return to Dartford) and Bexleyheath (allowing trains to return to London). This would mean that during weekends, trains could operate between Dartford and Eltham before passengers use local or replacement buses to Woolwich for Crossrail and the legacy network; or would be able to travel as far as Bexleyheath from London before using replacement buses towards Dartford. It would also protect against problems such as landslides, as trains would get to such a location as Bexleyheath before having to turn back. As part of an effective disruption



We propose a new turning facility for trains at Bexleyheath.

plan, high levels of service could continue to be achieved even during short-notice disruption.

Conclusions

This is not an expensive list of transportation schemes: it is expenditure that will mostly be needed in any event to support increases in passenger numbers generally; whilst also being part of arresting any small declines in passenger usage in Bexleyheath line stations.



Crossrail's extension towards Medway is vital to the region. This is Maidstone West.

It opens stations up to the community, improves the environmental impact of rail and its stations, improves amenities, integrates better the existing services with other routes and prepares for new infrastructure. It uses positive, natural next steps such as the Bakerloo line extension and Crossrail extension to

provide for high levels of service on the Bexleyheath line and other routes; as well as being well-designed for growth.

The new franchise, investment in trains and stations, commitment to infrastructure spending and such will all enable high levels of connectivity and promote more rail use. Off-peak trains from Bexleyheath to Charing Cross could continue to be supplied in line with the wider train service specification; but with a roughly five-minutely Metro service to Cannon Street only at peak times.

Commitment to the extension of Crossrail (and services thereafter) and the Bakerloo line to Hayes and Beckenham (and the resulting capacity freed) will be extremely positive to tens of thousands of passengers, many of whom will be new to rail. This is the sort of investment that is needed to stimulate local jobs and modal shift; and will prove entirely beneficial in the form of greater fare income. There is also consideration to be made for improved on-board experience as a result of better, longer trains.

We believe this is a proportionate array of commitments, designed to support operationally sensible interventions. Examples include the mostly illogical yet alluring extension of Crossrail to Ebbsfleet when it would be

more logical and proper to extend to Gravesend and beyond. Further investigation is needed, and therefore we require a post-election commitment to immediately study these possibilities, produce studies and then implement the results.

It is, though, of pivotal importance that all infrastructure commitments be put in place such that all of the benefits of this document be realised in one: piecemeal construction or extension of some schemes which creates uncertainty within franchise periods and also prevents the effective ordering of an appropriately-sized rolling stock fleet and construction/amending of stabling and depot facilities for the legacy South Eastern network is not acceptable.

We hope to realise this document's potential rapidly and give it the political credence it deserves.

Appendix One: Train Services post-implementation (High Peak)

Crossrail

2tph Maidstone West to Paddington

Will not call at Stone Crossing, Swanscombe or Northfleet.

2tph Rainham (Kent) to Paddington

Will not call at Stone Crossing, Swanscombe or Northfleet.

4tph Gravesend to Heathrow Airport

4tph Dartford to Reading

North Kent Line

4tph Slade Green to Cannon Street via Greenwich

‘Rounder’ service to/from Bexleyheath line.

4tph Abbey Wood to Cannon Street via Greenwich

No peak services via Blackheath/Lewisham.

Bexleyheath Line

8tph Barnehurst to Cannon Street

‘Rounder’ service to/from Sidcup line every 15 minutes.

‘Rounder’ service to/from Greenwich line every 15 minutes.

4tph Dartford to Cannon Street

Sidcup Line

4tph Dartford to Charing Cross

Non-stop from New Eltham to London Bridge.

4tph Crayford to Cannon Street

‘Rounder’ service to/from Bexleyheath line every 15 minutes.

4tph Sidcup to Victoria

Via Lewisham. Six carriage trains.

Grove Park Line

4tph Orpington to Charing Cross

Via Lewisham.

4tph Sevenoaks to Charing Cross

Non-stop from Grove Park to London Bridge.

High Speed

2tph St Pancras International to Broadstairs/Ramsgate

Fast from Stratford International to Chatham.

2tph St Pancras International to Rochester

Appendix Two: Train Services post-implementation (Off Peak)

Crossrail

2tph Rainham to Maidenhead

Will not call at Stone Crossing, Swanscombe or Northfleet.

2tph Dartford to Reading

4tph Gravesend to Heathrow Airport

North Kent Line

4tph Abbey Wood to Cannon Street via Greenwich

4tph Plumstead to Cannon Street via Lewisham

New bus route 335, among other transport connections, affords stations such as Westcombe Park more journey options at off-peak times.

Bexleyheath Line

4tph Dartford to Charing Cross

4tph Barnehurst to Cannon Street

‘Rounder’ service to/from Sidcup line every 15 minutes.

Sidcup Line

4tph Dartford to Victoria

Via Lewisham. Six carriage trains.

4tph Crayford to Charing Cross

Not via Lewisham. ‘Rounder’ service to/from Bexleyheath line.

Grove Park Line

2tph Sevenoaks to Charing Cross

2tph Orpington to Charing Cross

Both services via Lewisham.

High Speed

2tph St Pancras International to Faversham

Service extended up to half-hourly towards Thanet or Dover.

Appendix Three: Service Levels

High Peak Frequency

Monday to Friday 0615 – 0845, 1645 – 1915.

Contra Peak Frequency

Monday to Friday 0515 – 0615, 0845 – 0915, 1615 – 1645, 1915 – 2015.

Off Peak Frequency

Monday to Friday 0915 – 1615, 2015 – 2215.

A reduced service operates until 0515 or from 2215 to close.

Appendix Four: Station Staffing

‘Grade A Stations’ (Lewisham, Blackheath, Eltham, Bexleyheath)

Ticket office 0600 – 2000, ticket gates first-last train.

‘Grade B Stations’ (Kidbrooke, Falconwood, Welling, Barnehurst)

Ticket office 0600 – 1300, ticket gates first-last train.

Appendix Five: Critical Infrastructure

- ⇒ Plumstead Depot rebuild and repurpose
- ⇒ Grove Park Depot rebuild and stabling
- ⇒ Dartford Station rebuild and stabling
- ⇒ Slade Green Depot rebuild and stabling
- ⇒ Bellingham Sidings stabling
- ⇒ Stewarts Lane Depot rebuild and stabling
- ⇒ Cannon Street sidings
- ⇒ Slade Green station three-tracking
- ⇒ Crayford Creek to Dartford four-tracking
- ⇒ Plumstead to Harrow Manorway three-tracking
- ⇒ Church Manorway to Northwood four-tracking
- ⇒ Lewisham Freight chord (Vale to Parks Bridge)
- ⇒ Sidcup Line freight goods loops
- ⇒ Greenwich Line freight holding facilities
- ⇒ Ladywell chord singling
- ⇒ Bexleyheath turning facility
- ⇒ Eltham turning facility
- ⇒ Bexleyheath line stations rebuild
- ⇒ Access for all
- ⇒ Lewisham Station rebuild and interchange
- ⇒ Bakerloo line extension
- ⇒ Northfleet – Ebbsfleet walkway
- ⇒ Thames Road new station

Appendix Six: Peak Capacity Utilisation

Charing Cross, Metro: 12tph

Cannon Street, Metro: 24tph

This would allow the continuation of 2tph from Cannon Street at high peak to Thanet; with 12tph from Charing Cross. This would provide the same number of peak paths per hour from London Bridge but as part of a wider twelve-carriage railway, would give more capacity overall. Medway would also benefit from more High-Speed slots per hour.

With additional work on the Chatham Main Line and Catford Loop lines, new services could be commenced. Examples might include a service from the Maidstone East line to/from Charing Cross as an 'express' service or the incorporation of the Hastings line 'express' service throughout high peak.