

# Brighton Main Line Upgrade Programme

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Scrutiny Streets, Environment & Homes Sub-Committee  
9 July 2019



Unblocking the Croydon bottleneck



Working for you

Agenda Item 5

# Headlines

- Network Rail continues to develop our proposals for a major upgrade to the Brighton Main Line railway
- The main component of this would be the Croydon Area Remodelling Scheme (CARS)
- CARS is only funded for design, not implementation
- We had very high levels of public support in our initial consultation on the concept – the most common response being “just get on with it”
- We have subsequently provided the public with more detail of the Norwood Junction element of our proposals
- We hope to start construction of CARS from 2023 – subject to funding
- Some initial land purchases by Network Rail have occurred for the project – including the former Royal Mail building at East Croydon

# The performance challenge

Punctuality on the BML has not been where it should be.

- Recent factors have included the **London Bridge construction works**, GTR's **industrial action**, the biggest **timetable change** in a generation and Network Rail's **asset condition**

## Looking further ahead...

- Longer term performance will be constrained by the underlying infrastructure constraints on the BML (**e.g. trains needing to wait at junctions or for platforms to be free**)
- These mean that the BML will continue to experience a far higher level of **"knock on delay"** per incident than other comparable routes
- Addressing the **Croydon bottleneck** would make a substantial difference

## Knock on delays

The issues at Croydon magnify the impact of even the most minor incident or delay, making it much harder to recover the service when things go wrong.

It's also why passengers on the Brighton Main Line experience 60% more knock-on delays when an incident occurs compared to the South West Main Line, which has similar passenger numbers and service frequencies.



Brighton Main Line

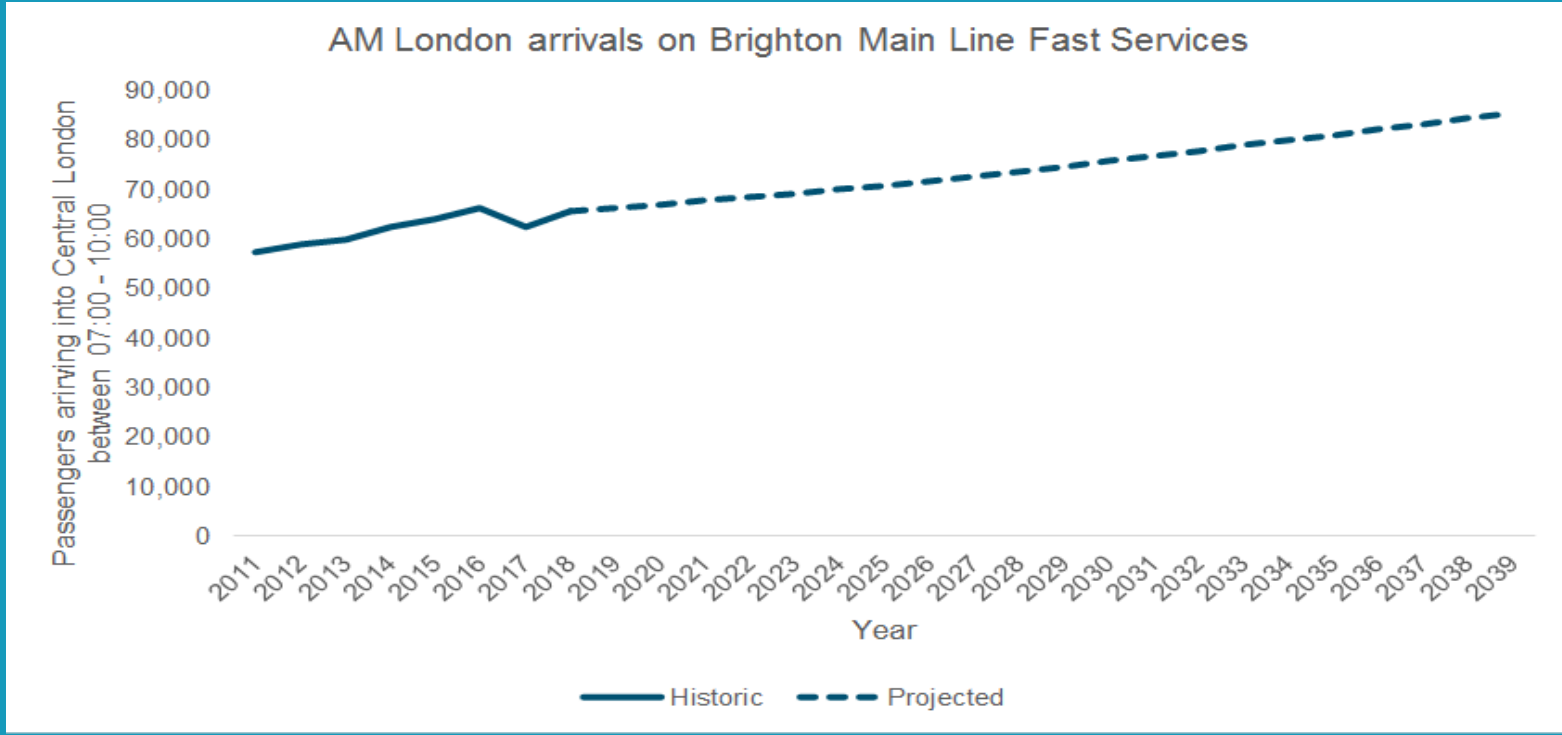
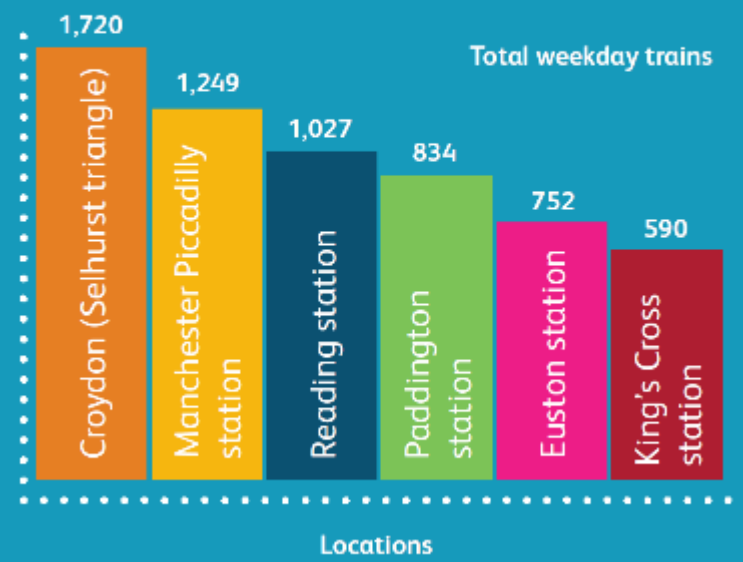
South West Main Line

Knock on delays comparison

# The capacity challenge

- ▶ Over last 20 years, **strongest growth rates ever** on the railway, **~3% annual increase** on the BML in the last decade
- ▶ Passengers **regularly stand**, often for around an hour
- ▶ The BML route is now **full**, no space for more trains

Trains per day - a comparison

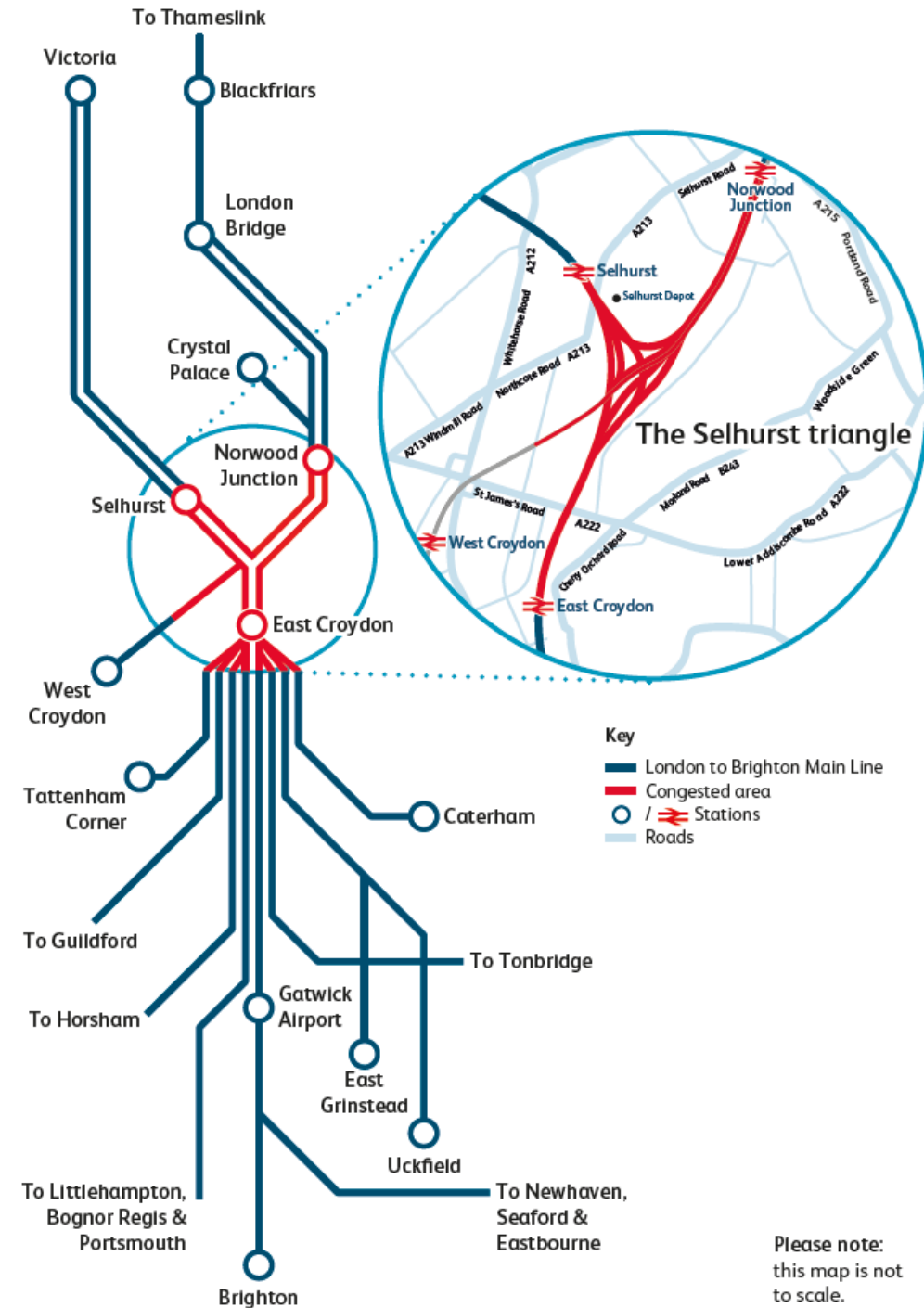


Annual passenger journeys through East Croydon (millions)





# The Croydon bottleneck



Please note:  
this map is not  
to scale.

# ***The Brighton Mainline – short and longer term plans***



# *Recently completed – BML Improvement Project*

- ▶ Major project to improve reliability and performance for passengers on the Brighton Main Line
- ▶ Key part of a £300 million government-funded programme
- ▶ Autumn 2018 – Spring 2019
- ▶ For more information: [brightonmainline.co.uk](http://brightonmainline.co.uk)



**The Brighton Main Line  
Improvement Project**





# *Recently completed – May 2019 timetable*

- ▶ Additional Thameslink services successfully added
- ▶ Cambridge to Brighton now every 30 minutes





# Short-term schemes – lifts at Selhurst

- ▶ £3.5m investment to improve accessibility as part of Access for All programme
- ▶ 3 new lifts creating obstacle-free routes to all four platforms
- ▶ Works started on 8<sup>th</sup> April, due to finish in November 2019



# Mid-term – Our plans for CP6 (2019 – 2024)

- ▶ Record **£4.3bn for the maintenance, operation and renewals** over the next five years
- ▶ Digital '**traffic management**', to help our signallers manage trains on this busy railway
- ▶ **Resignalling** schemes, to improve the condition of our assets
- ▶ Major concourse improvements at **Gatwick Airport**



# Longer term – Unblocking the Croydon bottleneck

- ▶ CARS is the **largest** and **most complex** part of our long-term route upgrade proposals
- ▶ Would remove the **operationally most challenging bottleneck** on Britain’s railway
- ▶ The BML Upgrade also includes other works along the route; notably Reigate (extra platform), Wallington (new siding to allow terminating trains to be extended from West Croydon), Gatwick Airport (track layout capacity) and elsewhere



Key-

- London to Brighton Main Line
- Congested area
- Stations
- Roads



# Unblocking the bottleneck – Selhurst triangle

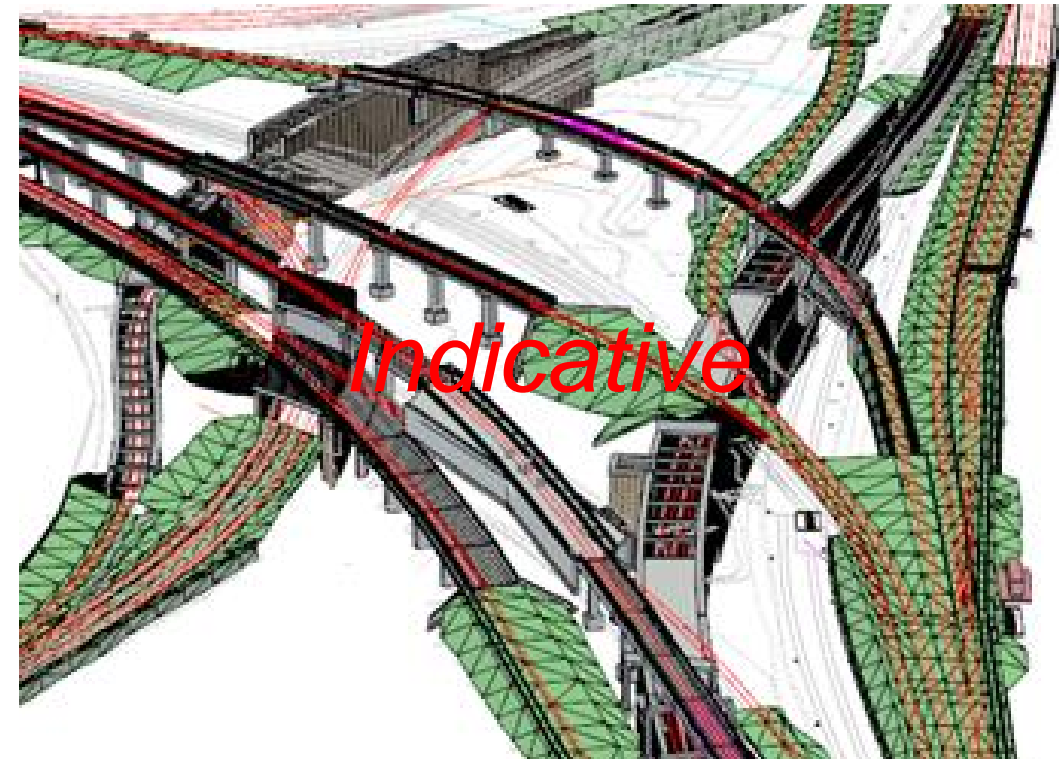


Constraints we want to fix:

- ▶ Restricted capacity flat junctions – six in total
- ▶ Insufficient tracks for the train service
- ▶ Low speeds

Our proposal here is for:

- ▶ New fly-overs & dive-unders
- ▶ More tracks and better signalling
- ▶ Improving reliability and adding capacity

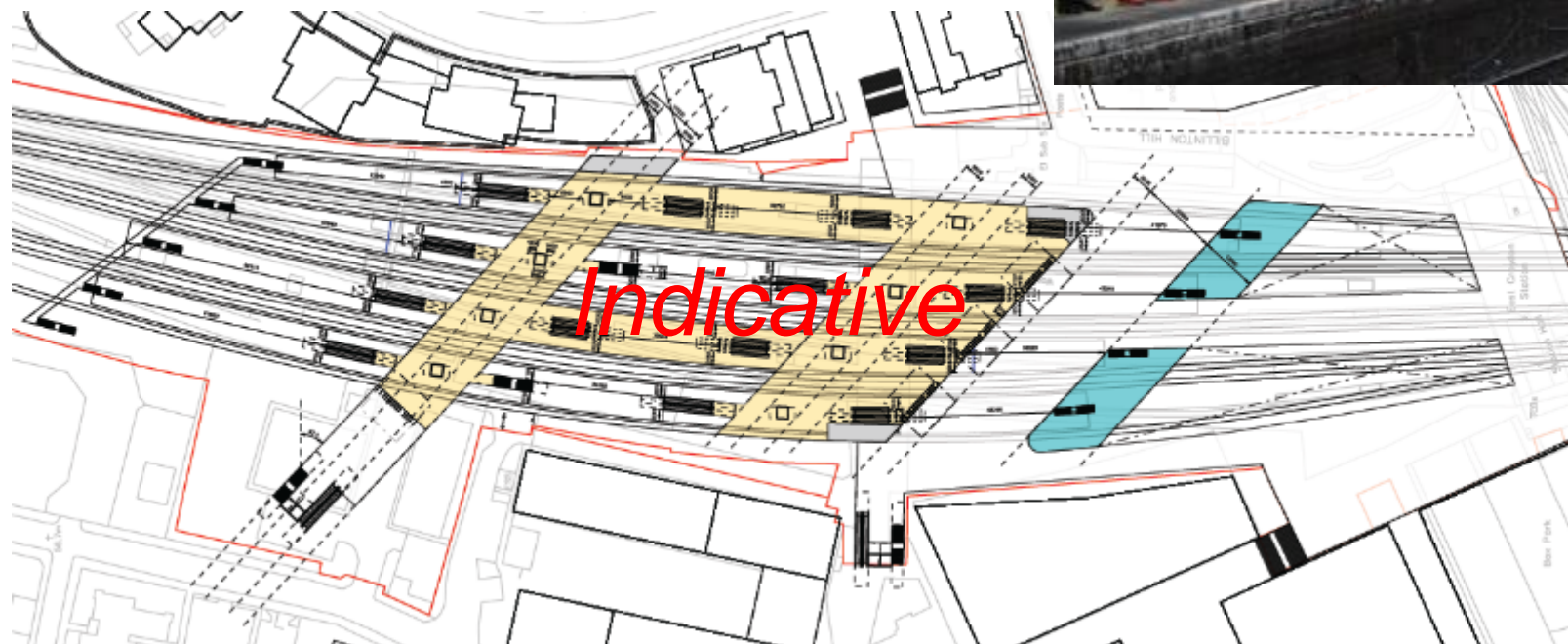




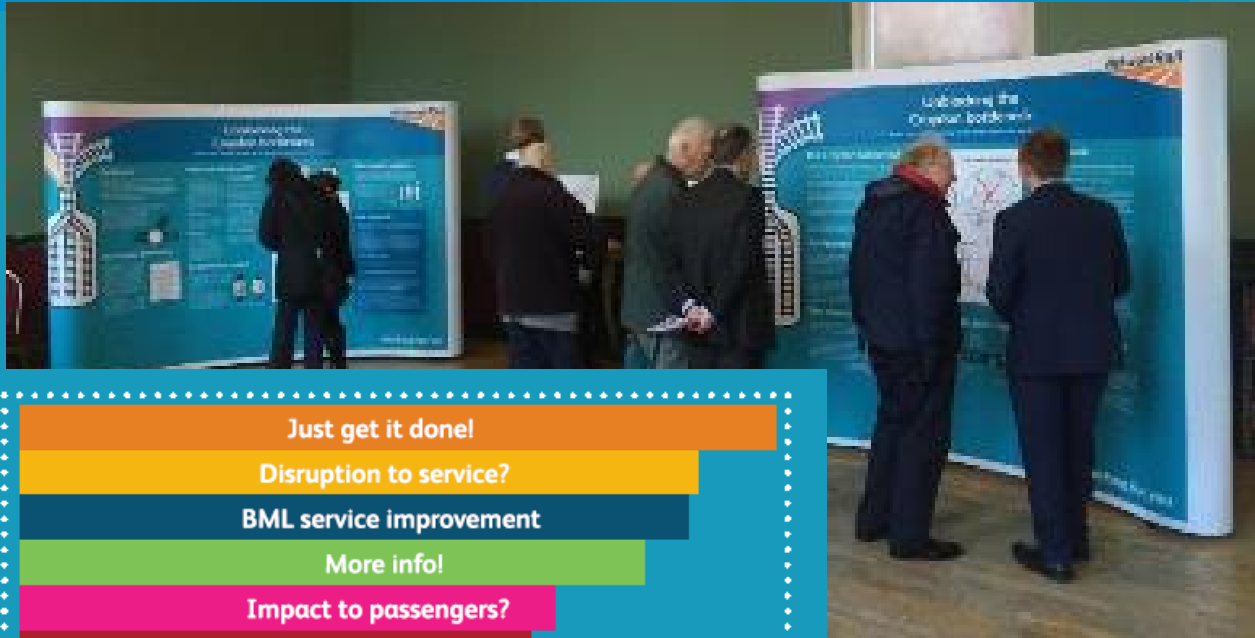
# Unblocking the bottleneck – East Croydon

A bigger, better East Croydon:

- ▶ 2 extra platforms (8 in total)
- ▶ A larger concourse
- ▶ Better passenger facilities
- ▶ Integrated with the surrounding area and major new developments



# Consultation feedback



“ Over **90%** of people who responded either agreed or strongly agreed with the proposals ”

## Key feedback themes

Get it done sooner

More detailed information

Support for Norwood Junction station improvements in reliability, capacity and accessibility

Will the train service be disrupted?

Lower Addiscombe Rd / Windmill bridge rebuild - how will road traffic be managed during the rebuild

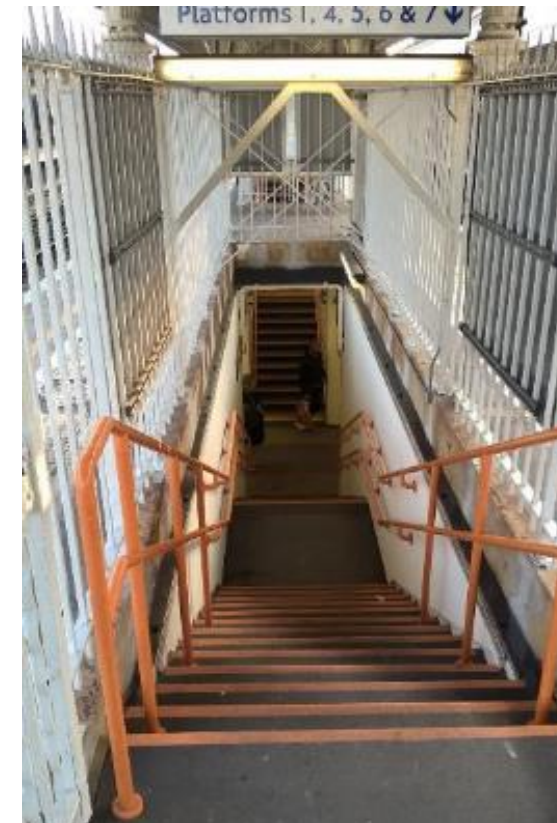


# Unblocking the bottleneck – Norwood Junction

St Chad's Church 5 Whitworth Road, London SE25 6XN	Mon 17 June	4pm - 9pm
South Norwood Primary School 34 Crowther Road, London SE25 5QP	Tues 18 June	5pm - 9pm
Stanley Halls 12 South Norwood Hill, London SE25 6AB	Wed 19 June	11.30am - 5.30pm
South Norwood Primary School 34 Crowther Road, London SE25 5QP	Sat 22 June	11am - 5pm

The Norwood Junction component:

- ▶ A better track layout: 3 tracks in each direction to allow more trains to call
- ▶ Step free access to all platforms

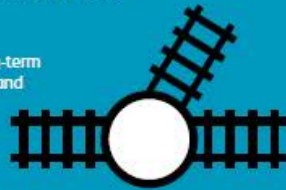


# Norwood Junction public information

## Background

Network Rail is proposing to upgrade Norwood Junction station to provide more frequent and reliable services, as well as a modern, accessible station fit for the 21st Century.

The proposals are part of Network Rail's long-term strategy to upgrade the Brighton Main Line and unblock the Croydon bottleneck.



## Our upgrade proposal

### Modify the existing track and platform layouts

- Provide a track layout that allows more trains to run through and stop at the station.
- Reconfigure the platforms to provide dedicated island platforms for northbound and southbound services.
- Provide dedicated tracks away from the platforms, for fast non-stopping trains.



### Lengthen and widen platforms

- Lengthen platforms to allow full length (12-car) trains to stop and open all their doors at the station.
- Widen all platforms to provide more space for passengers.

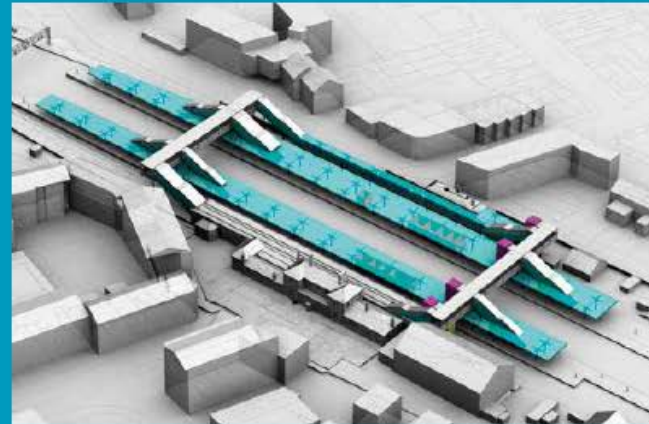
### Provide step-free access

- Provide two new footbridges, one with lifts to provide step-free access to all platforms from Station Road and Clifford Road.

### Upgrade the signalling

- Upgrade the signalling system to give our signallers the ability to recover the service more quickly when delays occur.

## Indicative concept



Indicative aerial view of the proposed Norwood Junction station

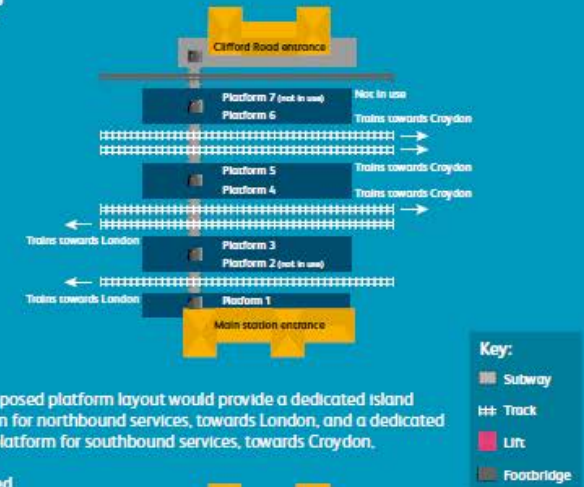
To make the station accessible and safer for all passengers we would remove the subway which currently allows access to platforms. Two new footbridges would be built, at the south and north ends of the station. The bridge at the south end would have lifts, providing step-free access to all platforms from Station Road and Clifford Road.

The public subway (outside of the station) linking both sides of the station would be unaffected by the proposal.

Trains would no longer stop at existing platform 1, but this area will be used to help improve passenger circulation within the station. The proposed island platforms would be accessed via the new footbridges.

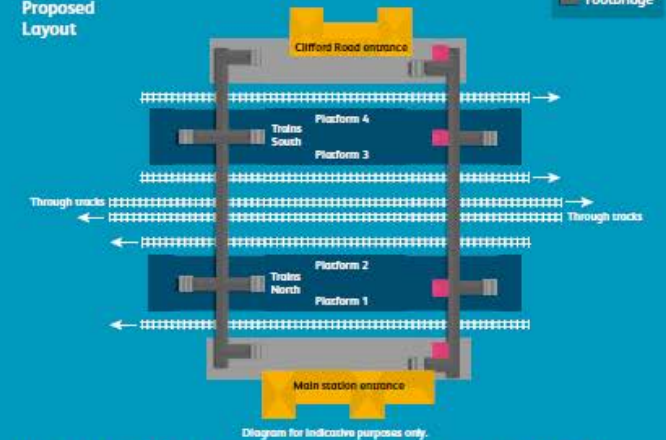


### Existing Layout



The proposed platform layout would provide a dedicated island platform for northbound services, towards London, and a dedicated island platform for southbound services, towards Croydon.

### Proposed Layout



The layout would allow passengers to quickly and safely interchange between fast and suburban stopping services.



# Benefits

- ✓ **More reliable journeys:** Elimination of the Croydon bottleneck would reduce delays on the BML
- ✓ **More services:** Once we improved reliability, the industry could then consider options to run more trains in response to forecast growth
- ✓ **Faster journeys:** As signals would be red less often journeys for passengers would be faster.
- ✓ **Better stations:** The proposed works at East Croydon and Norwood Junction would be transformative
- ✓ **Regional economic growth:** The proposals would address the governing bottleneck on the BML, a route vital to the region's economy.
- ✓ **Local regeneration:** The redevelopment of East Croydon station would be a catalyst for the local area; we are working closely with LB Croydon to maximise the effect of this.

# *How would we implement it?*

We recognise that:

- ▶ **Disruption** to rail users and lineside neighbours must be **kept to a minimum**
- ▶ We must **learn the lessons** from previous projects
- ▶ **Communication** and **engagement** is vital to the success of this project

What this means:

- ▶ **“Offline” construction** is the only viable means of unblocking the Croydon bottleneck
- ▶ To do this we need to **acquire land** through a Transport & Works Act (TWA) process
- ▶ Those affected by land acquisition through the TWA would be **compensated**, as defined by the legislation
- ▶ We also aim to **deliver benefits in phases**

# *Funding status*

- CARS is currently funded up to end 2019
- Decision expected soon on potential funding to allow us to continue the design and property acquisition stage into next year
- TWA application would be in 2021, this would require an “in-principle” level of full funding commitment to the scheme by that point

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