













Agenda



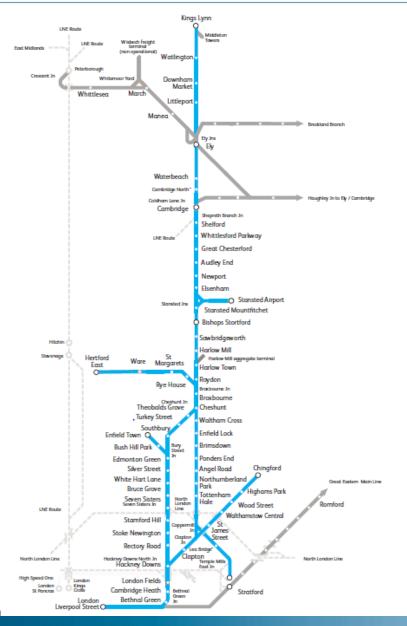
 Update on current schemes (Control Period 5 2014-2019) – progress/next steps

How railway will support growth – CP6 (2019-24), and beyond (2024 +)

External aspirations

West Anglia Mainline and the challenge

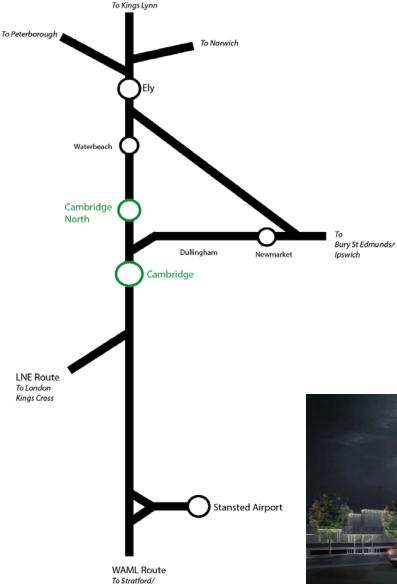




- London Liverpool Street Kings Lynn
 - Two-track railway Liverpool Street to Ely
 - Mixture single line/two-track Ely Kings Lynn
- Busy for both leisure to Stansted and commuter travel into London and Cambridge
- Important route for connectivity
- Large volume of high tech industry
- Potential for large housing growth (39-70000 houses) unlocked by major interventions

Cambridge North





- Provide better connectivity
- Serves business to north of Cambridge
- To be open May 2017
- For GTR and EA franchise
- 3000 passenger journeys a day
- Parking for 450 vehicles and 1000 cycles

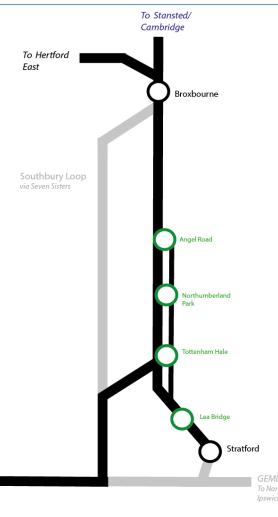




London Liverpool Street

Stratford to Angel Road (StAR)





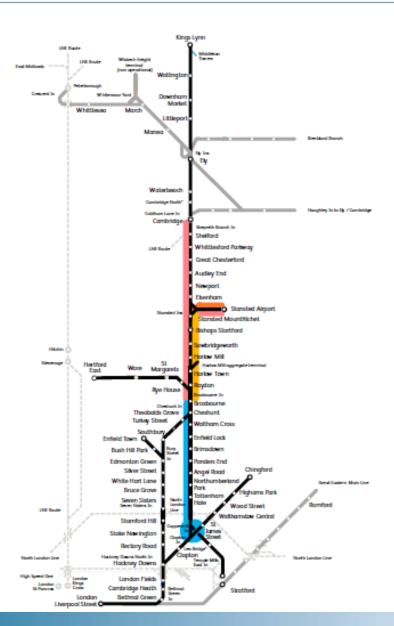
- Serves Meridian Water development.
- Complete for December 2018 Timetable Change
- New line between Stratford and Angel Road allows for the running of an additional 2 trains per hour
- Lea Bridge station now open!
- 1st key component in WAML expansion and potential journey time improvements



London Liverpool Stree



- A number of interventions are required to meet different conditional outputs
- Increase in train services and/or infrastructure enhancements
- Some of which prioritised for CP6 (2019-24)
- Rest identified for CP7 and beyond (2024 onwards)
- Schemes are identified as choices for funders – do not have allocated money and are not committed



WAML CAPACITY (WACO1, WACO2, WACO5)

CP6 - 22tph passenger into Liverpool Street

- Langthening of two services to 12-carriages on WAML (btw Cambridge/Stansted Airport - Liverpool Street)
- Early investment in Crossrail 2 on West Anglis to support longer term outputs and unlock growth on the route earlier
- CP7 or beyond 22tph passenger into Liverpool Street
- Crossrail 2, including four-tracking between Coppermit Jn and Broxbourne and turnel into Central London and grade separation at Coppermit Jn
- Infrastructure enhancements required for improved Stansted connectivity:

 Doubling of the Stansted Airport Line

WAML JOURNEY TIME IMPROVEMENT (WACO3)

Sharter Ierm options

- Infrastructure enhancements required:
- Line speed improvements
- Non-infrastructure modifications required:
- Minor changes to off-peak timetable calling patterns
- Rolling stock (assumed as Class379)

Longer term options

 - Crossrail 2, including four-tracking between Coppermit Jn and Broxbourne and tunnel into Central London and grade separation at Coppermit Jn

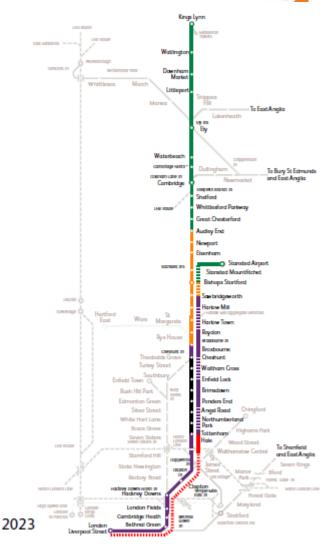


CP6 choices for funders

Peak - Stansted & Cambridge - Shortfall 1,000 passengers. **Recommended** 2 longer trains (8 to 12 car)

Passenger & Suburban – Shortfall 1,700 passengers. **Recommended** changes to timetable/calling patterns





NetworkRail

CP6 choices for funders – Early Investment (four tracking)

- Four tracks from Broxbourne Tottenham Hale
- Additional platform(s) at Stratford*
- 3rd track Stratford Ruckholt Road*

These can enable early growth in housing and employment prior to Crossrail 2

West Anglia Taskforce examining early four tracking both Crossrail 2 and standalone

*not required for Crossrail 2 but enables extra capacity in the interim; however growth in housing and employment would be significantly lower without Crossrail 2.







CP6 choices for funders – Journey time improvements Interventions required:

- New trains (potential through EA Franchising)
- Line speed increases for faster journeys
- Changes to calling patterns

Can be done individually or collectively

Benefit of the above is limited without four-tracking south of Broxbourne

✓ Improve journey times by 2-5 minutes



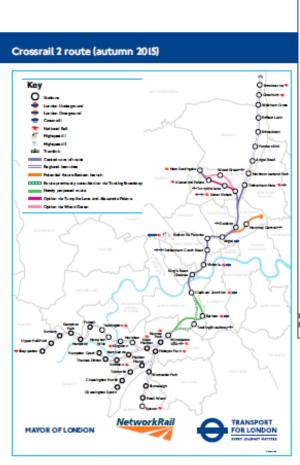


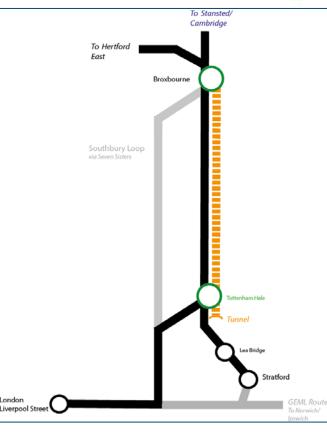
NetworkRail

Long Term

Crossrail 2

- Working with TfL and West Anglia Taskforce
- Generate housing and economic growth and improve connectivity in East Anglia
- More trains need more track
- Constrained by two-track railway and limited opportunities to overtake
- 4 tracks Broxbourne Tottenham Hale, and then tunnel across central London (to Wimbledon and beyond)
- Enable separation of fast/slow trains







Long Term

- Forecasts show Stansted reaching 35mppa in next 10 years.
- Four-tracking/ Crossrail 2 would be of benefit to get more trains towards Stansted
- Connectivity constrained
 North of Stansted
- Journey time improvements

Requires new tunnel to achieve more than the current 6tph



External Aspirations



Addenbrookes station

- Proposed new station south of Cambridge
- External aspiration
- Serve expansion to south of city
- Timetabling work & pre-feasibility work being carried out by consultants in collaboration with Cambridgeshire County Council

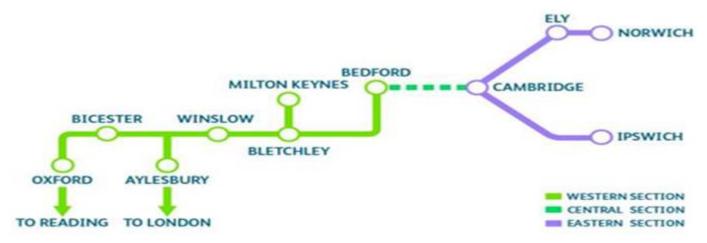


- Key questions:
 - Can it be accommodated in today's infrastructure?
 - Is there a business case?

External Aspirations



Long Term - East West Rail



- Provides connectivity
- Western section funded to introduce passenger and freight services as far as Bedford
- Central section: preferred corridor selected Bedford-Sandy-Cambridge
- Further development dependent on external funding
- Addenbrookes station improve connectivity to Cambridge
- Potential for rerouting of cross-country services



Thank you for listening