Solent Transport Joint Committee
Wessex Route Study

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What are we trying to achieve?

- Your support for a better railway!
- Engagement and understanding
- Clarity and agreement on the options
- Continue our successful approach.
  - We are delivering 35% additional capacity on Suburban routes from 2018
- But this is not a ‘pitch’
  - SWT franchise ends in 2017/19

What else are we looking to achieve?

- **Off-Peak Connectivity – To provide a minimum 3/4tph (<30 miles to central London)** Specific suburban routes only

- **Freight: Accommodate cross-boundary freight paths**
- As set out in national forecasts

- **Off-Peak Connectivity - Reduce (generalised) journey times (longer distance journeys to central London ie Portsmouth & Southampton)**
- Specific routes only

- **Off-Peak Connectivity – Improve non-London connectivity**
- Key lines of route only - including to Gatwick and Heathrow Airports

- **Off-Peak Connectivity – Improve Connectivity**
- Accommodate cross-boundary passenger services: Various Cross Country flows.

- **Station Capacity – Improve level of station congestion**

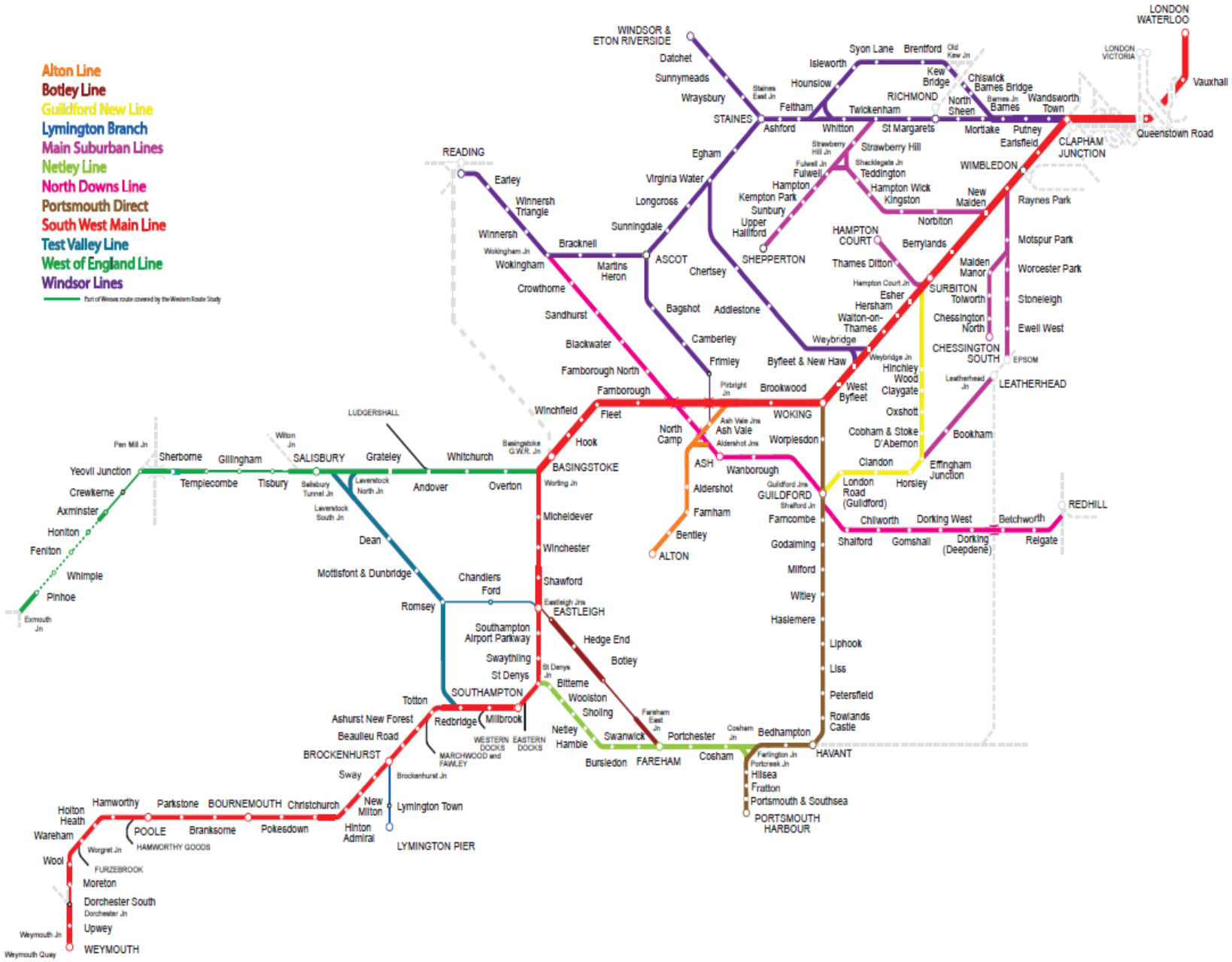
Market study demand forecasts

- To 2043: 40% growth to London Waterloo + 20% overcrowding (Main Line – high peak)

- To 2043: 40% growth to London Waterloo (Main Suburban – high peak)

- To 2043: 37% growth to London Waterloo (Windsor Lines – high peak)

- To 2043: 6% per annum freight growth

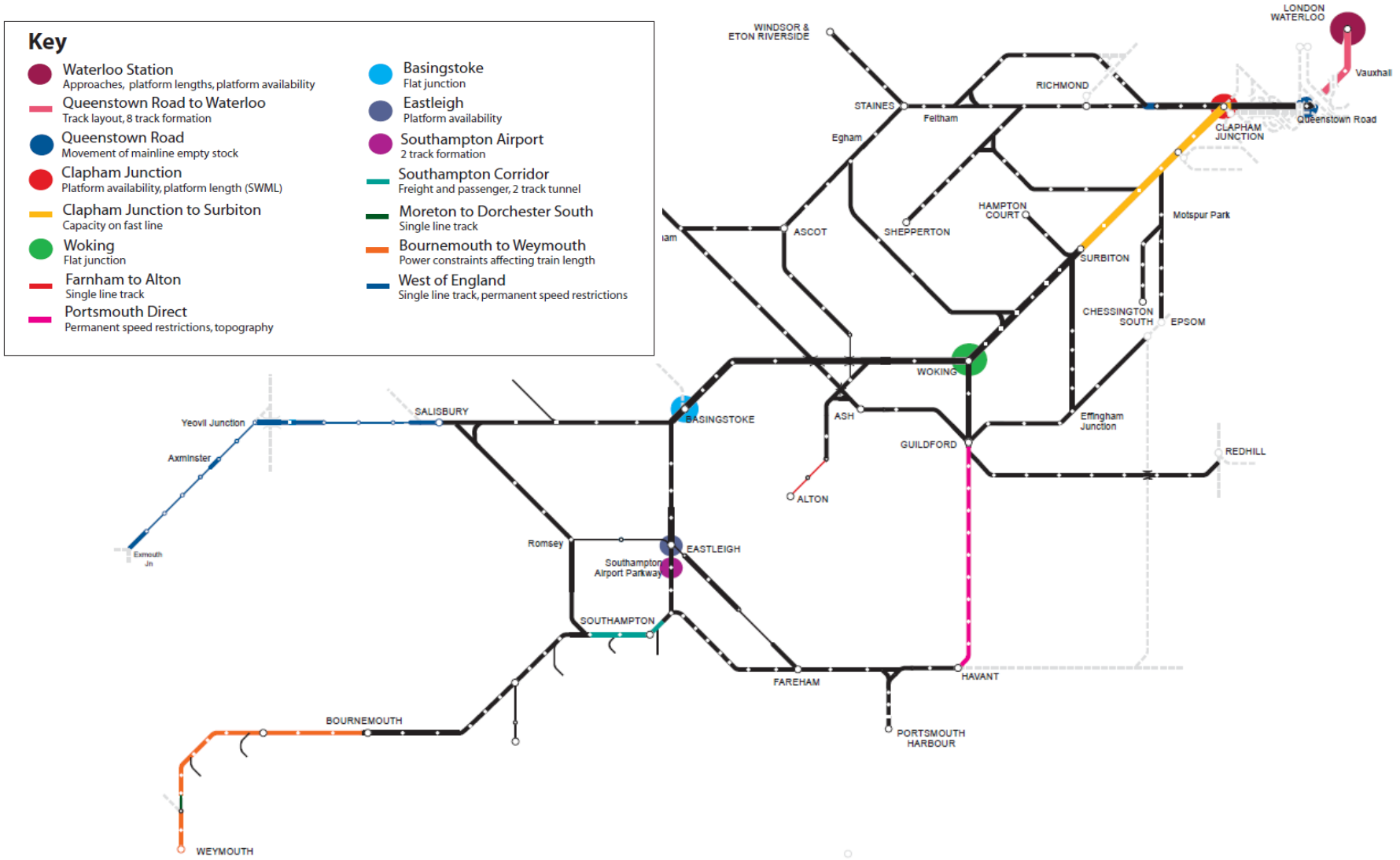


SOUTH WEST TRAINS

THE **SOUTH WESTERN** RAILWAY

Network Rail

Current Rail Network Constraints



How do we met the future needs?

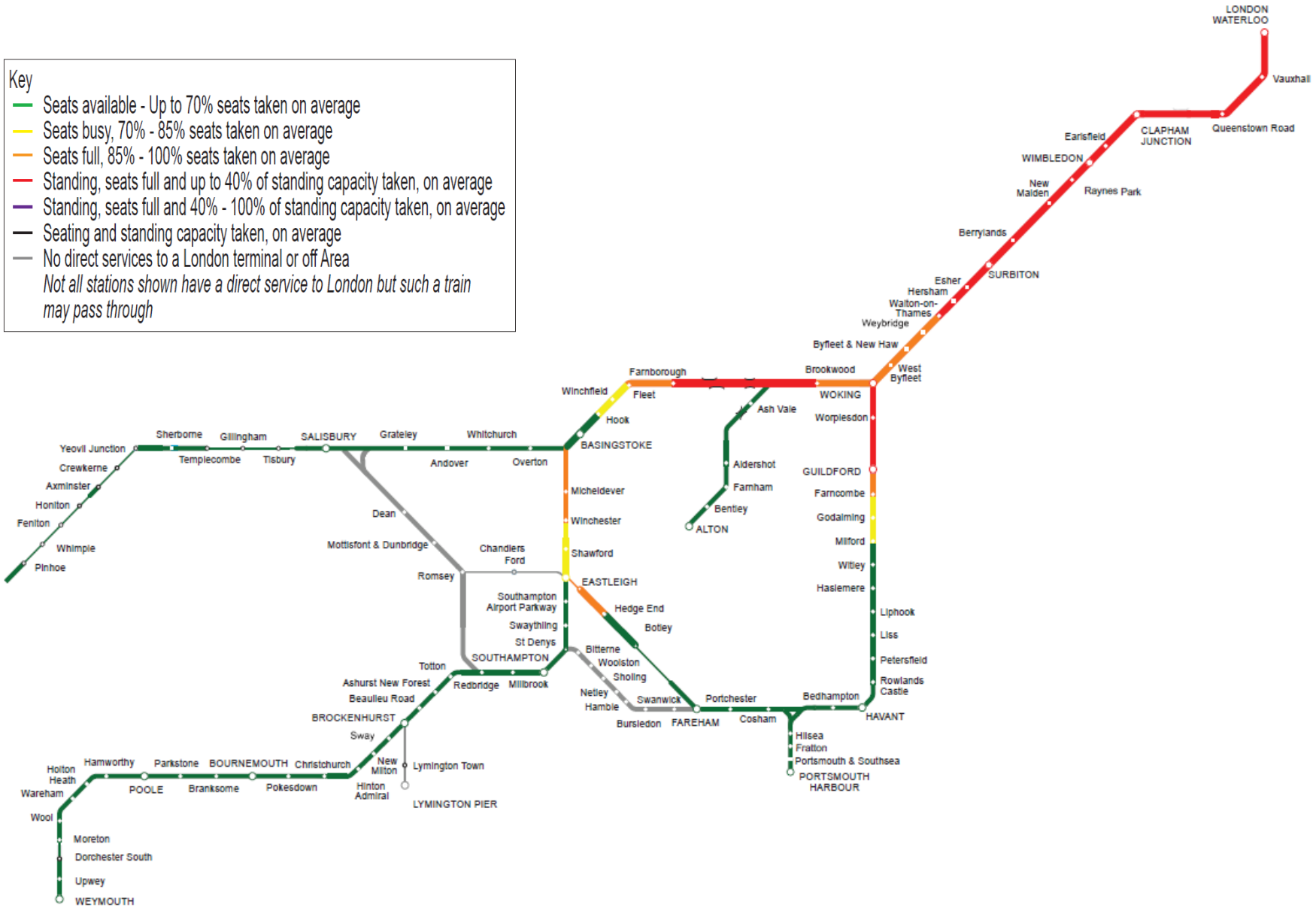
Wessex Route Study

- capacity requirements in the high peak hour

Route	Capacity gap to 2024	Capacity gap to 2043
Main Line long distance	6 trains	13 trains

The capacity gap to 2043 can not be met without further investment in the capability of the network

Demand Overlay: Main Line 2013



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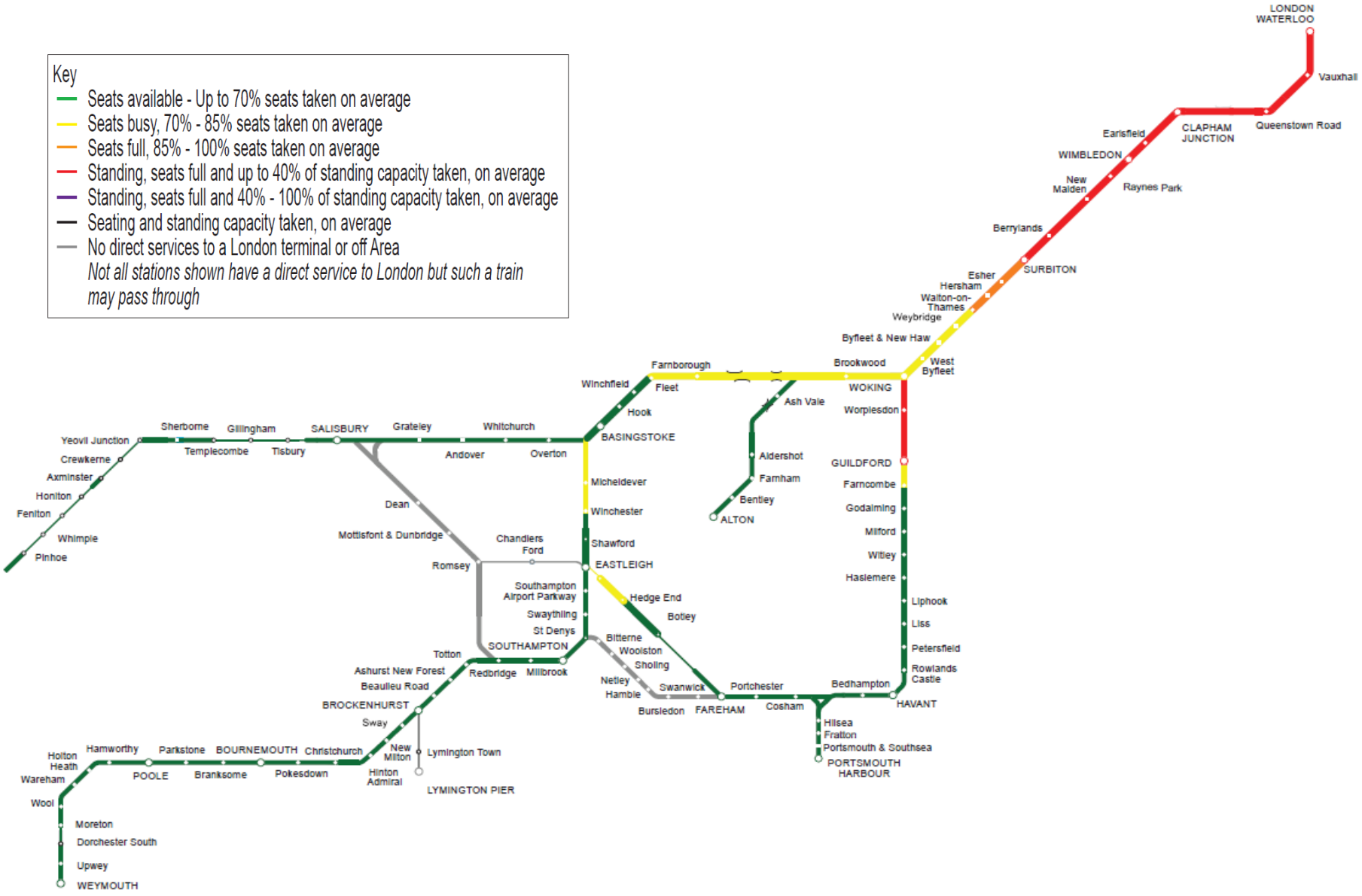
Demand Overlay: Main Line 2019



SOUTH WEST TRAINS

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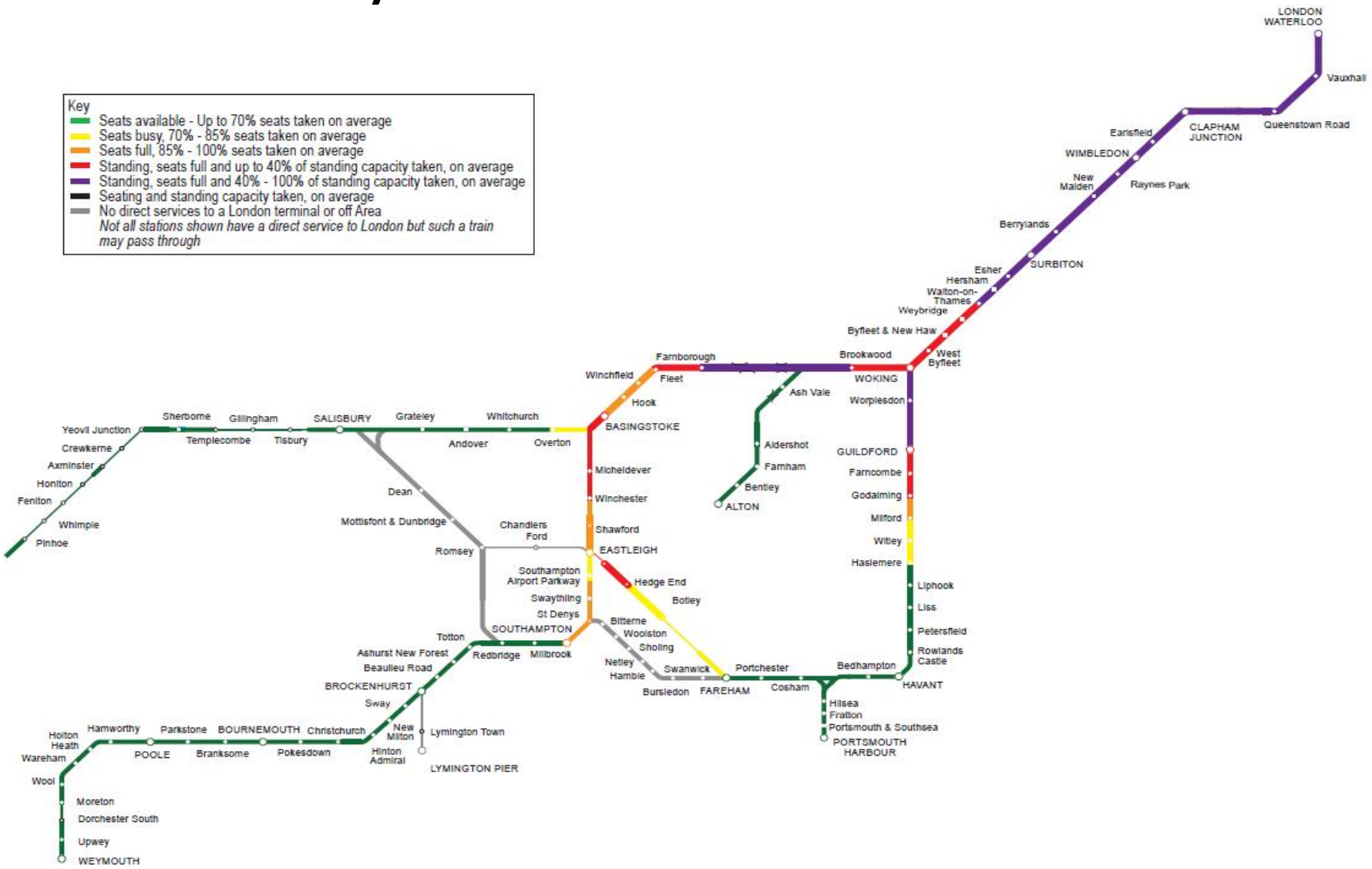
Demand Overlay: Main Line 2043 (no interventions)



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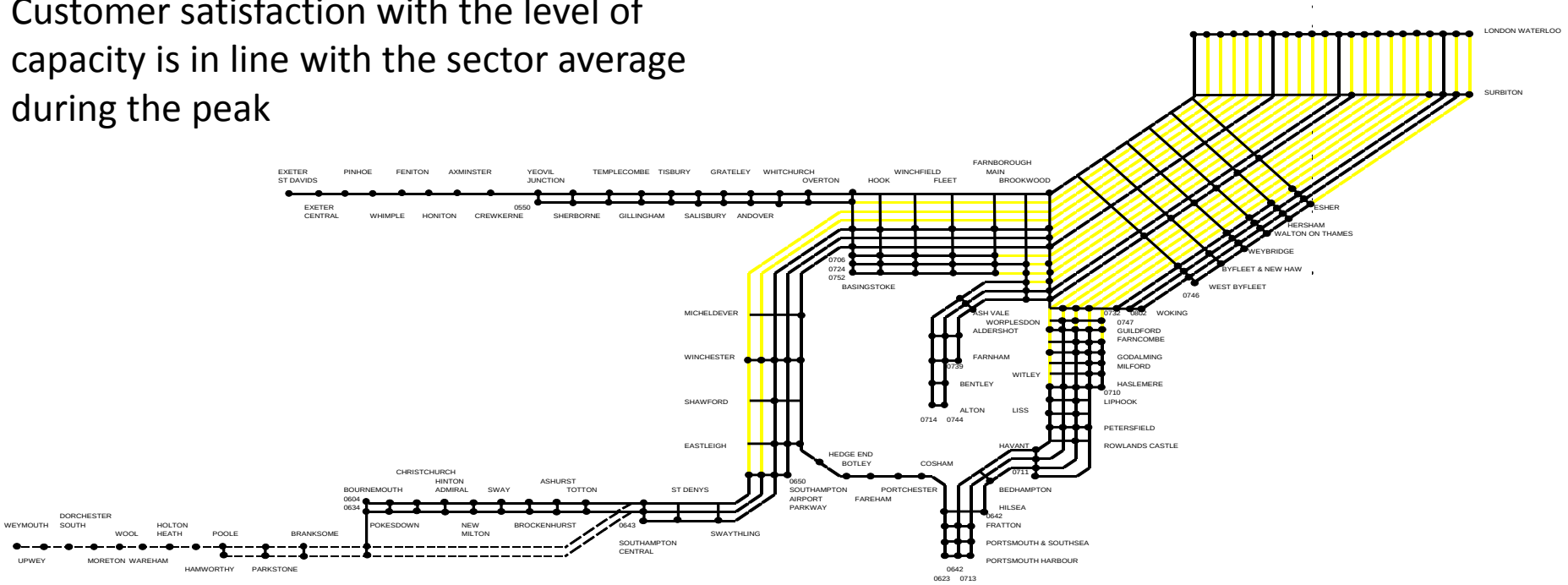
How Are We Doing?

Main Line long distance AM high peak (2013)

- The number of passengers already exceeds capacity in the high peak, and as a result standing occurs on most services
- Standing occurs from as far away as Southampton Airport Parkway (on fast services to Waterloo)
- Customer satisfaction with the level of capacity is in line with the sector average during the peak

"Sufficient room for all the passengers to sit/stand" - % of peak passengers saying satisfied or good (source: Passenger Focus 2013)	
South West Trains – Mainline	43%
South West Trains – Portsmouth	49%
South West Trains – West of England	47%
London and South East sector	42%



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The Capacity Crunch

To cope with growing demand, options for the railway including running:

- **Longer trains** – All trains on the main line will be at **maximum length** by 2017
- **More trains** – The track and signalling infrastructure does not have the capacity for more trains. At the busiest times the infrastructure is **FULL.**

<u>The key limiting factors include:</u>

When/how to do the work!
Investment Capital
Access to Waterloo – track layout outside the station, known as the 'throat' and lack of platform space,
Bottlenecks at junctions (like Woking, Basingstoke and Eastleigh),
Lack of capacity at Clapham Junction and other stations.
Punctuality suffers which reduces capacity!

So what do we need to do?

Overall key Conclusions from Wessex Route Study

Passenger Volumes will grow by a further 40%

Outer

- Woking Flyover & Station Capacity
- Basingstoke Flyover
- Guildford Station Capacity
- Southampton Central Station Capacity
- Basingstoke to Eastleigh Line Capacity

Inner

- A 5th Track Surbiton – Waterloo?
- Crossrail 2 (Wimbledon – Victoria line)
- 'In cab' signalling / 'automatic' trains!

With the aim of 12 additional trains per peak hour

Other options:

Making best use of the network (capacity):

- Further deployment of unpopular 3+2 seating on main line long distance services?
- Operate up to an additional two main line long distance trains in the high peak

Radical!

- Double deck trains during peak hours – Basingstoke to Waterloo
- Replace slow diesel trains on Salisbury route
- Accelerated implementation of European Train Control System (ETCS)
- Full electrification of the North Downs Route

The Investment

- Comes at a bad time for UK PLC and the Railway
- This area has had the lowest spend in absolute terms for many years!

Key choices for local routes

- Freight:
  - Longer and more frequent trains
  - ‘Overhead’ electrification to Southampton? !
- Rail links to Heathrow and Gatwick Airports
- South Hampshire Metro
  - Southampton – Portsmouth stands out
- Station Capacity – Improve level of station congestion

Wessex Route Study Programme

- Consultation published: 10 November 2014
- 90 day consultation period ended : 18th February 2015
- Final document published: May 2015