South Western Rail Timetable: anticipated implications for Epsom and Ewell – Summary note.

Key frequencies

The tables below show how frequently trains will call at key stations in the network under the new timetable.

| | Arrivals at Waterloo 0800-0859 | | | | | | | | | |
|---------------------------|--------------------------------|----------|---------------|--|--|--|--|--|--|--|
| | May 2019 | May 2021 | December 2022 | | | | | | | |
| Basingstoke (fast trains) | 4 | 4 | 4 | | | | | | | |
| Epsom | 6 | 4 | 4 | | | | | | | |
| Guildford (fast trains) | 6 | 4 | 4 | | | | | | | |
| Putney | 10 | 10 | 10 | | | | | | | |
| Richmond (fast trains) | 8 | 5 | 8 | | | | | | | |
| Staines (fast trains) | 8 | 5 | 7 | | | | | | | |
| Surbiton | 10 | 7 | 11 | | | | | | | |
| Wimbledon | 18 | 14 | 16 | | | | | | | |
| Winchester (fast trains) | 5 | 4 | 4 | | | | | | | |
| Woking (fast trains) | 12 | 10 | 11 | | | | | | | |

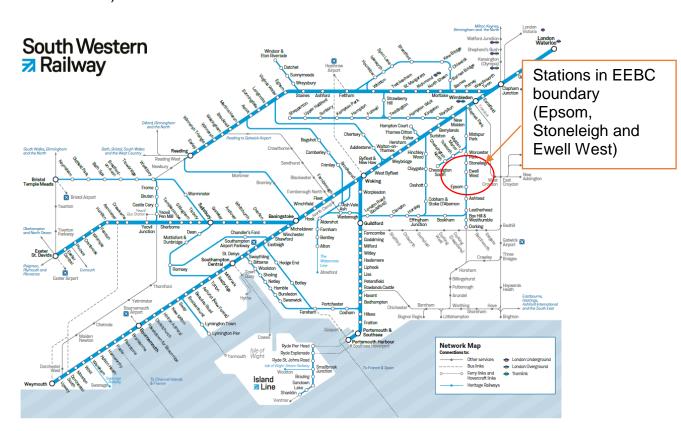
| | Off peak arrivals at Waterloo per hour | | | | | | | | | |
|---------------------------|--|----------|---------------|--|--|--|--|--|--|--|
| | May 2019 | May 2021 | December 2022 | | | | | | | |
| Basingstoke (fast trains) | 5 | 3 | 5 | | | | | | | |
| Epsom | 4 | 2 | 2 | | | | | | | |
| Guildford (fast trains) | 4 | 3 | 3 | | | | | | | |
| Putney | 10 | 6 | 8 | | | | | | | |
| Richmond (fast trains) | 4 | 4 | 4 | | | | | | | |
| Staines (fast trains) | 4 | 4 | 4 | | | | | | | |
| Surbiton | 10 | 10 | 10 | | | | | | | |
| Wimbledon | 16 | 14 | 14 | | | | | | | |
| Winchester (fast trains) | 4 | 3 | 4 | | | | | | | |
| Woking (fast trains) | 12 | 10 | 11 | | | | | | | |

1. Frequencies in the context of all stations in EEBC (which Dec. 22 timetable will be based on).

| Station | On Peak t | rains into L | ondon | Off Peak trains into London | | | | | | |
|-------------------|------------------------------|----------------------|-------|------------------------------|----------------------|-------|--|--|--|--|
| | South Western Services | Southern Services | Total | South Western Services | Southern Services | Total | | | | |
| Epsom | 4 | 7 | 11 | 2 | 5/6* | 7/8 | | | | |
| Stoneleigh | 4 | 0 | 4 | 2 | 0 | 2 | | | | |
| Ewell | 4 | 0 | 4 | 2 | 0 | 2 | | | | |
| West | | | | | | | | | | |
| Ewell East | 0 | 5 | 5 | 0 | 4 | 4 | | | | |
| Cheam | 0 | 7 | 7 | 0 | 5/6 | 5/6 | | | | |

^{*}Based on snapshot of two hours during off peak period according to Southern Rail timetables.

2. Stations on South Western Rail Routes impacted (not Ewell East or Cheam):



Background

- Proposed timetable changes are based on findings of Network Rail South West Main Line Strategic Study (looking forward to 2050) published July 2021.
 - a. Expected that commuter travel from Dec 2022 is expected to recover to 60% of Pre Covid demand.
 - Study found that "Performance and satisfaction improve significantly when fewer trains run while still meeting demand for our services"

What's proposed:

- 4. Introducing 90 new *Arterio* trains to network. They carry more people, use 30% less energy, have onboard wifi, real-time travel updates. For every five-car train, 3 bike spaces will be available (6 for every 10 car train).
- 5. Reduction in frequency of trains from pre pandemic levels, crucially for Epsom, on the "Main Suburban" routes to ease congestion at points on the network closer to Waterloo. Aiming to retain 2 trains per hour off peak. NB: South Western Rail is one of two companies operating out of Epsom Station (the other is Southern Rail).
- 6. The consultation document does not provide a breakdown of how the new trains compare with existing services on the lines running through Epsom specifically. However, a cursory search reveals that Arterio trains comprise either 5 or 10 carriages. The existing trains operating on the lines through Epsom are "Class 455" models, which, by comparison, are 4 carriages long.
- 7. Though only speculation, it is considered likely that the 4 carriage 455 models will be replaced with 5 Arterio carraige trains (rather than the 10 car ones).
- 8. Based on this assumption, the new trains will actually have **5 seats** less in total. According to information available online, 5 car Arterio trains offer 330 standing spaces, giving a total passenger capacity of 599. Unfortunately the standing capacity of class 4 models is not available. Therefore, although it would appear that Arterio trains could accommodate 325 more passengers than the class 455 ones, at this stage we cannot verify this.
- 9. In terms of cycle spaces, the information for the class 455 trains is not available. It would appear that there are no dedicated cycle spaces (it is assumed that passengers share the vestibule areas) and so the new trains will be significantly better in terms of bike capacity.

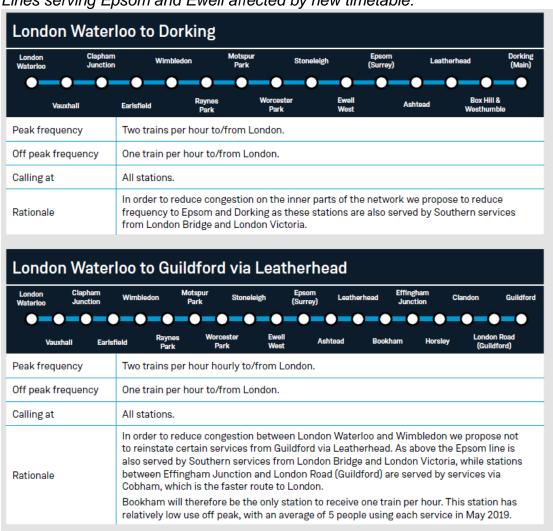
Summary of findings

| Model | Carriages | Seats | Standing | Priority Seats | Total capacity | Bicycle spaces |
|------------------------------------|-----------|-------|--------------|-------------------|----------------|------------------|
| Class 455 model ¹ | 4 | 244 | Not known | 30 | 274 | Non dedicated |
| Arterio ² | 5 | 556 | 740 | Not known | 1296 | 3 |
| Arterio ³ | 10 | 269 | 330 | Not Known | 599 | 6 |

https://www.southwesternrailway.com/travelling-with-us/our-trains/class-455
"Britain's New Trains". Britain's New Trains (1): 39. 16 December 2018. Cited on Wikipedia accessed 19/8/21

³ "Britain's New Trains". Britain's New Trains (1): 39. 16 December 2018. Cited on Wikipedia accessed 19/8/21

Lines serving Epsom and Ewell affected by new timetable:



Basis of assumption for frequency of Southern Services.

Southern services arriving in London between 0800-08:59 (On Peak) (8)

| Alerts | | | | | | | | | | | | | | | | | |
|-----------------------|----|----------|-----|---|---|-----|------|------|------|------|------|------|------|------|------|------|------|
| Operator | | | | | | SN | SN | SN | SN | SN | SN | SN | SN | SN | SN | SN | SN |
| Facilities | | | | | | | | | | | | | | | | | |
| Notes | _ | | HRH | - | F | | | | | | | = | | | | | |
| Horsham | 4 | | | _ | | | 0645 | | | 0713 | | | | | | 0814 | |
| Warnham | | | WNH | _ | | | 0649 | | | 0718 | | | | | | 0818 | |
| Ockley | | | OLY | - | | | 0655 | | | 0724 | | | | | | 0824 | |
| Holmwood | | | HLM | _ | | | 0659 | | | 0728 | | | | | | 0828 | |
| Dorking | | | DKG | _ | | | 0706 | | | 0735 | | | | | | 0835 | |
| Dorking | 4 | | DKG | _ | 0 | 657 | 0706 | | | 0736 | | | 0807 | | | 0836 | |
| Box Hill & Westhumble | | | BXW | _ | | | 0709 | | | 0739 | | | | | | 0839 | |
| Leatherhead | | | LHD | _ | | | 0714 | | | 0744 | | | 0814 | | | 0844 | |
| Ashtead | _ | | AHD | _ | | | 0718 | | | 0748 | | | 0818 | | | 0848 | |
| Epsom | | | | a | | | 0723 | | | 0753 | | | 0823 | | | 0853 | |
| Epsom | 3 | | | d | | | 0723 | | 0745 | 0753 | | | 0824 | | | 0853 | |
| Ewell East | | | EWE | _ | | 719 | | | 0749 | | 0805 | | | | 0849 | | 0905 |
| Cheam | | | CHE | d | | | | | 0752 | | | | | | | | |
| Sutton (Surrey) | 4 | | | a | | | 0731 | 0741 | 0755 | 0801 | 0811 | | 0832 | 0841 | | 0901 | 0911 |
| Carshalton Beeches | | | | a | | 728 | | | 0758 | | | 0828 | | | 0859 | | |
| Wallington | | | WLT | _ | 0 | 731 | | | 0801 | | | 0831 | | | 0901 | | |
| Waddon | | | WDO | - | | 735 | | | 0805 | | | 0834 | | | 0905 | | |
| West Croydon | | — | | - | | 739 | | | 0809 | | | 0839 | | | 0909 | | |
| Norwood Junction | - | | NWD | _ | 0 | 745 | | | 0815 | | | 0845 | | | 0915 | | |
| London Bridge | 4 | 0 | LBG | _ | 0 | 758 | | | 0828 | | | 0858 | | | 0928 | | |
| Carshalton | | | CSH | - | | | 0735 | 0745 | | 0805 | 0815 | | 0835 | 0845 | | 0905 | 0915 |
| Hackbridge | | | HCB | a | | | 0738 | 0748 | | 0807 | 0818 | | 0838 | 0848 | | | 0918 |
| Mitcham Junction | | å | | a | | | 0741 | 0751 | | 0811 | 0821 | | 0841 | 0851 | | | 0921 |
| Mitcham Eastfields | | | | a | | | 0745 | 0754 | | 0814 | 0824 | | 0845 | 0854 | | | 0924 |
| Balham | 4 | 0 | BAL | a | | | | 0802 | | | 0832 | | | 0903 | | | 0933 |
| Clapham Junction | 10 | | CLJ | a | | | 0754 | 0807 | | 0825 | 0837 | | 0855 | 0907 | | 0923 | 0937 |
| London Victoria | 10 | 0 | VIC | a | | | 0804 | 0816 | | 0833 | 0845 | | 0903 | 0919 | | 0932 | 0945 |

Southern services arriving to London (Voctoria and London Bridge) Off Peak (between 5 and 6 per hour)

