5.18 GWM 1.4.6 Remove Swindon 2tph from Swansea / Bristol Trains

5.18.1 Specification

To achieve journey time savings between London and South Wales and Bristol, Swindon calls are reduced from 4tph to 2tph (3tph when Cheltenham train runs) by withdrawing the calls from the Swansea and faster Bristol trains.

The following westbound trains will have the calls at Swindon removed and will arrive at stations west of Swindon 3 mins earlier:

Paddington – Swansea 0745, 0845, 0945, 1045, 1145, 1245, 1345, 1545, 1645, 1745

Paddington – Bristol TM 0700, 0800, 0900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900

The following eastbound trains will have the calls at Swindon removed and will arrive at stations east of Swindon 3 mins earlier:

Swansea – Paddington 0630, 0730, 0830 (0734 Carmarthen), 0930, 1030, 1130, 1230, 1330, 1430, 1530, 1630

Bristol TM – Paddington 0600, 0700 (0628 WSM), 0800 (0528 Plymouth), 0900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800.

There are no changes in resources.

5.18.2 Qualitative Criteria: Deliverability and Performance

There may be a slight performance benefit from using the through lines at Swindon station in the up direction.

5.18.3 Qualitative Criteria: Other

This option is generally neutral with respect to other qualitative criteria.

5.18.4 Financial and Economic Appraisal

Costs (£kPV)	-1,635
Total Revenue (£kPV)	-5,752
User Benefits (£kPV)	-7,767
Non- user Benefits (£kPV)	-2,009
Net financial effect (£kPV)	-4,117
Net economic effect (£kPV)	-13,893
Benefits : cost Ratio	9.5
NPV / K	-3.37
Subsidy / passenger mile (£)	-0.24
Subsidy / passenger journey (£)	-4.59

- Significantly worse in financial terms

- Substantially worse in economic term.

These services alterations are intended to achieve journey time savings between London and South Wales and Bristol. Swindon calls are reduced from 4tph to 2tph (3tph when Cheltenham train runs) by withdrawing the calls from the Swansea and faster Bristol trains. As a result the large Swindon market faces a significant reduction in service level (Eastbound and Westbound) this leads to a substantial reduction in revenue and user and non-user benefits. There is a slight fall in costs due to the reduction in train hours but this is not even large enough to compensate for the fall in revenue. (costs estimated to fall by £1.6 million (PV), revenue by £5.7 million (PV)).

5.18.5 Recommendation

Reject as specified (consider in context of further work on Option 1.2.4) Further consider as part of the optimum calling pattern for GWML at detailed stage.

5.19 GWM 1.4.7a Withdraw 1tph London – Cardiff

5.19.1 Specification

This option tests the value of the hourly off-peak Cardiff train.

The following trains are withdrawn:

Paddington – Cardiff Cen 0715, 0815, 0915, 1015, 1115, 1215, 1315, 1415

Cardiff Cen – Paddington 1055, 1155, 1255, 1355, 1455, 1555, 1655, 1755

In addition to the significant reduction in train mileage, one HST diagram may be saved.

5.19.2 Qualitative Criteria: Deliverability and Performance

This option is easily deliverable as it represents a simple lift-out of a number of trains with no alteration to any others required. This would provide a performance benefit as one less train per hour would operate over the key Paddington to Swindon and Severn Tunnel sections.

5.19.3 Qualitative Criteria: Other

This option makes a marginally negative impact on NATA economy, access/social inclusion, and is inconsistent with some stakeholder objectives.

5.19.4 Financial and Economic Appraisal

Costs (£kPV)	-70,843
Total Revenue (£kPV)	-16,690
User Benefits (£kPV)	-25,048
Non- user Benefits (£kPV)	-5,409
Net financial effect (£kPV)	54,152
Net economic effect (£kPV)	23,695
Benefits : cost Ratio	0.7
NPV / K	n/a
Subsidy / passenger mile (£)	0.81
Subsidy / passenger journey (£)	44.27

- Substantially better in financial terms
- Substantially better economic terms
- Substantially improves the affordability position

This option would result in a significant cost reduction (£71 million (PV)), as one HST set is removed and operating miles fall. Although some of this cost saving would be negated by a revenue fall (£17 million (PV)) there is still a substantial gain in the overall financial effect. Although there is a user and non-user disbenefit, the cost saving is such that overall there is a sizeable positive net economic effect. This option appears to offer a significant improvement to the affordability position.

5.19.5 Recommendation

Progress to detailed development and examine crowding impacts especially in the shoulder peak. It was noted that observed loadings on these services appeared to be increasing, and that there would be political sensitivities to manage with the Welsh Assembly.

5.20 GWM 1.4.7b Divert 1tph Paddington – Cardiff trains to Bristol TM

5.20.1 Specification

In this option the hourly off-peak Cardiff trains are diverted from Swindon to serve Bristol TM via Bath Spa:

Paddington – Cardiff Cen 0715, 0815, 0915, 1015, 1115, 1215, 1315, 1415

All call at Chippenham XX30, Bath Spa XX43-45, Bristol TM XX00

The following trains are diverted to run from Bristol TM via Bath Spa:

Cardiff Cen – Paddington 0955, 1055, 1155, 1255, 1355, 1455, 1555, 1655

Bristol TM dep 1020 and hourly until 1720, Bath Spa XX30-XX32, Chippenham XX45

1755 Cardiff Cen – Paddington withdrawn throughout.

There is no change in resources.

5.20.2 Qualitative Criteria: Deliverability and Performance

The change to the timetable is confined to the west of Swindon only. Pathing of the diverted trains is not likely to be a problem between Bath and Bristol although satisfactory platforming at Bristol TM may be more difficult to achieve.

The reduction by 1tph over the Hullavington route will give a performance benefit through the Severn Tunnel and at Cardiff Central although this is likely to be partially countered by some performance dis-benefit over the Bath to Bristol TM section.

5.20.3 Qualitative Criteria: Other

This option makes a marginally negative impact on NATA economy, access/social inclusion, and is inconsistent with some stakeholder objectives.

5.20.4 Financial and Economic Appraisal

Costs (£kPV)	-12,686
Total Revenue (£kPV)	-3,699
User Benefits (£kPV)	-4,673
Non- user Benefits (£kPV)	-803
Net financial effect (£kPV)	8,987
Net economic effect (£kPV)	3,511
Benefits : cost Ratio	0.7
NPV / K	n/a
Subsidy / passenger mile (£)	0.91
Subsidy / passenger journey (£)	-33.29

- Substantially better in financial terms

- Significantly better in economic terms

This option has the potential to have a significant, positive financial effect. It reduces operating costs through reduced train miles. Although there are user and non-user dis-benefits associated with this option, due to the loss of one Cardiff-London train per hour the cost saving outweighs this consideration by a reasonable margin leading to a slight net gain in the overall economic effect.

5.20.5 Recommendation

Progress to detailed development