

Network Performance Delivery Timing Review Technical Note

R105 – Hammersmith Gyratory

London Borough of Hammersmith and Fulham

Type of Review	Scheme Implementation	Network Manager	Stephen Bennett
Approver	Amy Imeson	Date completed	1 st December 2022
Corridor	N/A	TLRN / SRN	SRN

Technical Categories (*tick all that apply, include new, reviewed or deleted facilities*):

Region

- SCTI
- MINC / MAXC
- SCYP

Node

- Ghosting
- MINS / MAXS
- Multi-noding
- NSAP / NOAP
- ISAT / TSAT
- Ped Advance

Link

- SPWT
- Composites
- Reduced SCOOT
- SOFT
- SCOOT Gold
- CLNKs
- Inhibits / DEFI
- Biasing
- OFWT
- CGWT
- DETPD

Special Facilities

- BP
- SASS
- Gating
- ATM

Controller Timings

- CLF plans
- VA MAX sets
- L/A links
- Other...

For all ticked categories above, please describe actions)

MINC/MAXC – the MINC and MAXC are both set at 104s from the start of the AM Peak till the end of the PM peak. Before the scheme was implemented the region operated at a MAXC of 96s.

Biasing:

- 11/102Q Offset from Queen Caroline Street to Shepherds Bush. Offset measured and set with a bias of 126. Allows traffic from 11/102 heading towards 11/105 to go straight into a green and clear out from the gyratory. Without this the queue from 11/105 would block Beadon Road from entering the gyratory.
- 11/102B offset measured and set to a bias of 126 to allow most of the traffic which comes out of Beadon Road a green at 11/104 circulating around the gyratory. This improves progression and keeps the road space between 11/102, and 11/105, 11/104 clear.

SASS: New SASS has been set up with 2 levels of severity. Hammersmith Clearance and Hammersmith Clearance Heavy Clear. The only difference between the SASSs are the cycle times, Hammersmith Clearance jumps the cycle time to 112s while Hammersmith Clearance Heavy Clear jumps the cycle time to 120s. Both SASSs have the same three trigger links and reduce the entry links to the same values.

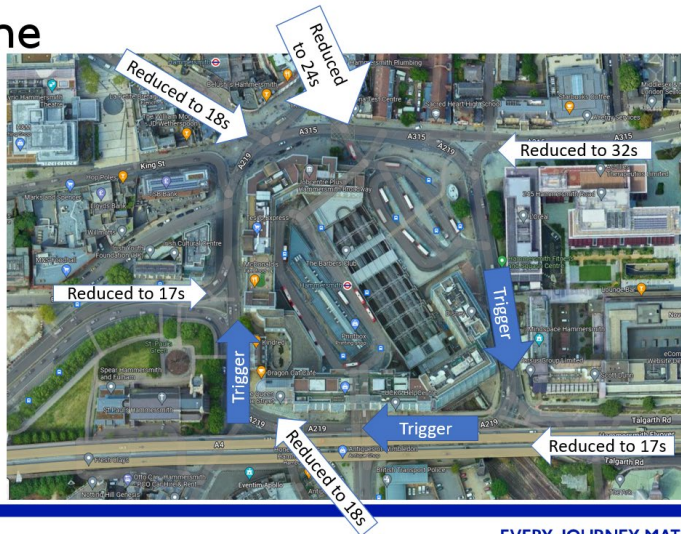


After Scheme

SASS

Hammersmith – Clearance – clear
Jumps CT to 112s

Hammersmith – Clearance – Heavy Clear
Jumps CT to 120s



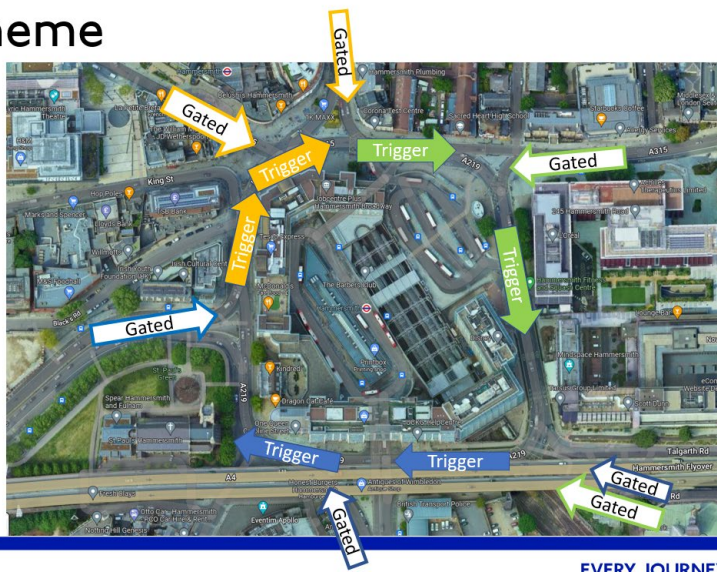
Gating: New Gating has been set up:

- C501, has two trigger links both on the south side of the gyratory (11/085p and 11/097p). This gates Hammersmith Bridge Road, Fulham Palace Road, Talgarth Road (11/084o, 11/085d, 11/097n). This is used when the south side of the gyratory becomes congested and reduces entries which would add traffic to this queue.
- C502, has two trigger links one on the north side and one of the east side of the gyratory (11/084q and 11/106n). This gates Hammersmith Road and Talgarth Road (11/084n and 11/106e). This is beneficial when there is congestion on Butterwick towards 11/084.
- C503, has two trigger links on the northwest side of the gyratory (11/102c and 11/102p). This gates Sheppards Bush and Beadon Road (11/102b and 11/102d).

After scheme

Gating

- C501 – Gates EB and NB entries
- C502 – Gates WB entries
- C503 – Gates SB and SEB entries



CLF Plans:

The CLF plans were updated and put into the Controllers on site at 11/106 and 11/102. The nodes on the south side of the gyratory had their CLF updated as part of the scheme implementation before the TR.

Other: As part of the review the region has been split in 2. The nodes effected during construction of the cycle lane were placed into a new R1205, while the rest of the region remained in R105. After the scheme had been built the cycle time in R105 had to be increased to a MINC of 96s or 104s, however 11/122, 11/076, 11/052 and 11/123 which are to the southwest of the gyratory can run a lower cycle time of 88s. So in order to keep cycle times lower at these sites they were put into R1205 when the rest of Hammersmith Gyratory was moved into R105.



Plans

(Please describe important changes/points of note, e.g. forced stages, MOC changes, use of contingency stages, different cycling status by time of day etc.)

New SCOOT plans were created to allow for the operation of SCOOT.

11/102, 11/103, 11/104 and 11/105 – SCOOT stage 1 allows for the optimisation of Beadon, SCOOT stage 2 allows for the optimisation of Shepherds Bush Road, SCOOT stage 5 allows for the optimisation of Hammersmith Gyratory. SCOOT stages 3 and 4 are fixed.

New SCOOT plans were also created for 11/106, 11/107, 11/097 and 11/189 which copied the pre SCOOT plans timings but allow for optimisation.

Timetable

(Please describe important changes/points of note, e.g. Time of day procedures, dropping sites to LC, running FT plans, SPAR commands, alternative peak plans, use of TRND etc.)

RI 05:

The timetable was updated to change the operation from fixed time plans to SCOOT plans. The old fixed time events have been retained in the TT but unselected.

RI 205:

A new timetable was created for this region alongside new SCOOT plans which now means the nodes in RI 205 now operate SCOOT.

Operational Constraints

(Please describe all relevant constraints on the network that the review was not able to overcome/affect e.g. Heavy queuing / congestion not resolved due to Borough request to maintain a low cycle time)

As part of the cycleway scheme a general traffic lane was removed from King Street and replaced with the 2-way cycle lane. This has contributed to congestion and queuing on King Street reaching the western side of the gyratory. This couldn't be fixed as most of the time the queue was caused by buses stopping at the bus stop and general traffic unable to pass because its now a single lane.

