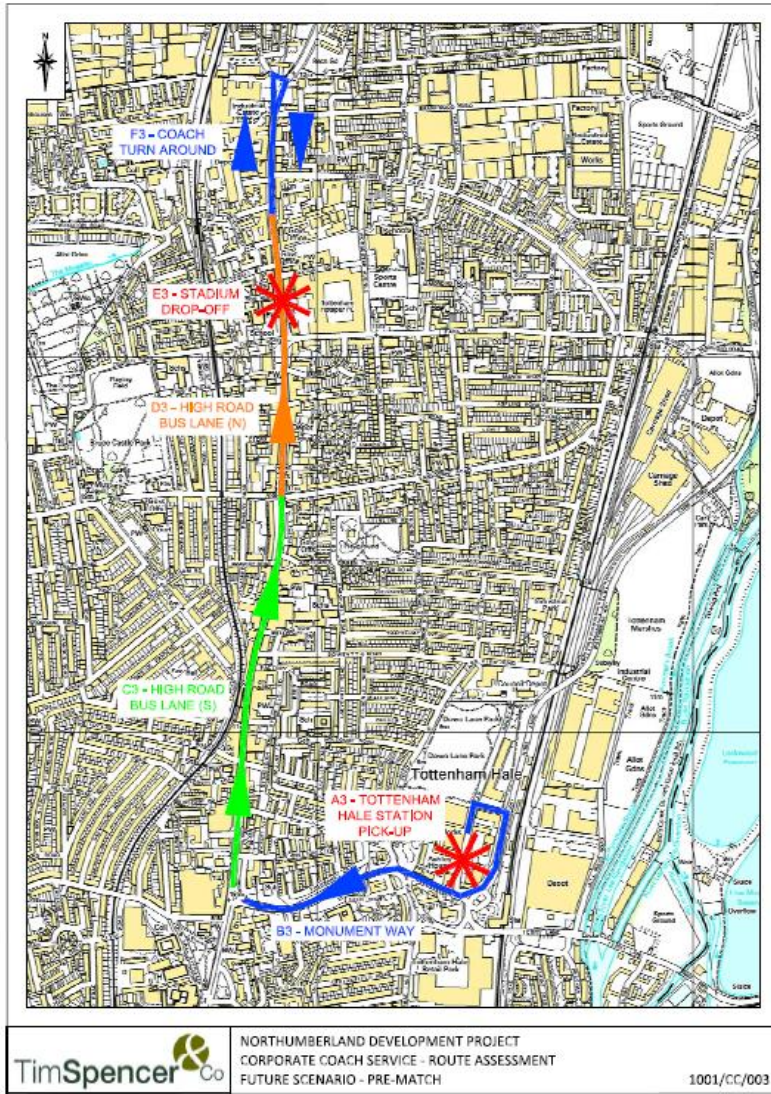


THFC New Stadium Shuttle Bus Analysis

Service A i Tottenham Hale



⌘ The Tottenham Hale shuttle bus is designed to be a Premium Service, in line with the Hospitality proposals for the new stadium. The Stadium proposals include up to 9,000 seats at Box and Club levels. The scaling of the Premium Service is intended to provide capacity for a similar proportion of total spectators approaching via Tottenham Hale or environs. A Shuttle service open to all spectators travelling via these routes could not be sustained.

⌘ Note that as the service is aimed at principally those with access to hospitality, it is assumed that during the post-match period a different profile will apply to those using other modes of transport.

Service B i Alexandra Palace



⌚ The Alexandra Palace shuttle bus is designed to be a standard service, intended to capture spectators travelling on rail routes whose alternative route would be to interchange in Central London and arrive via Seven Sisters or Tottenham Hale..

⌚ All services will pick up at both Alexandra Palace and Wood Green, with the anticipated share of demand being split 75%:25% between Alexandra Palace and Wood Green station.

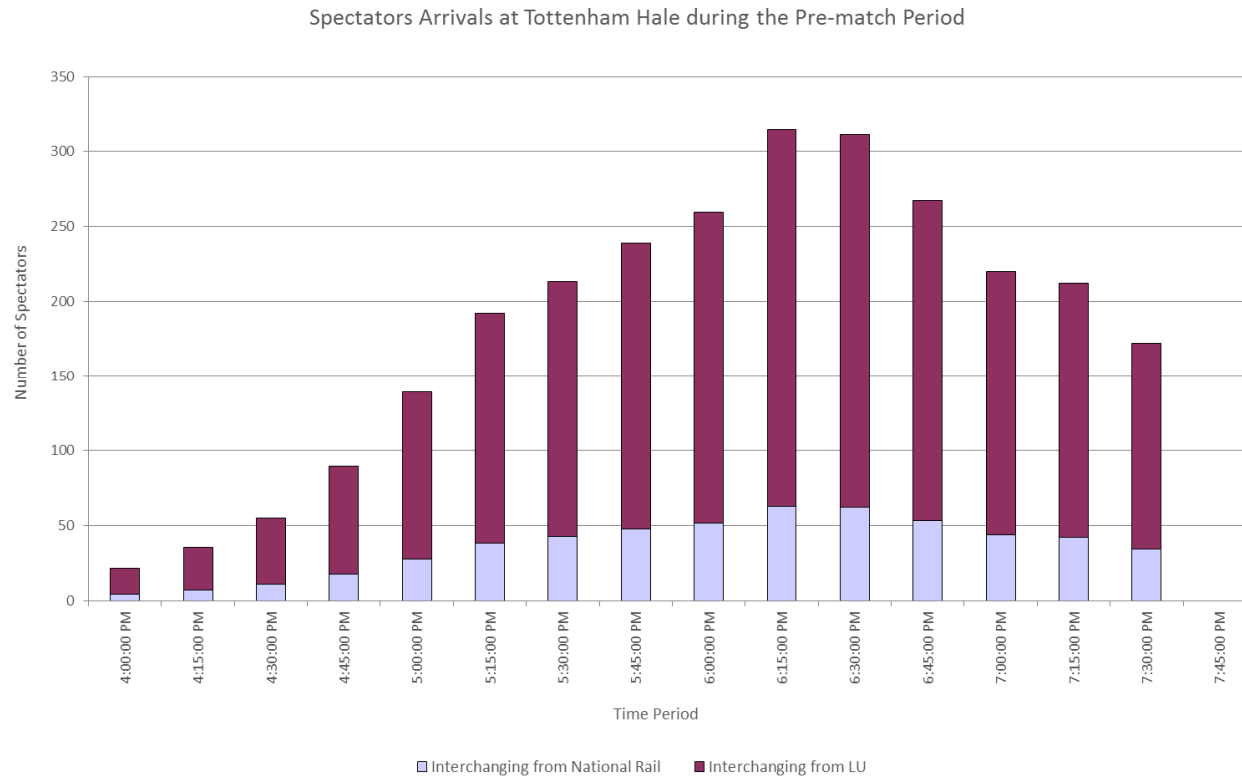
General Assumptions

- ⚠ The operational configuration of the services will be discussed and agreed with TfL at a later stage, once THFC has contracted with a specific operator.
- ⚠ The key assumption is regarding availability of loading/unloading facilities at Tottenham Hale, where proximity and visibility will be key to the delivery of a Premium Service.
- ⚠ Assumptions regarding loading, unloading and turnaround times will be verified with the operator once selected.



Midweek Matchday Scenario

Pre-Match: Tottenham Hale Service



2,741 Spectators in Total

- 548 interchanging from National Rail services
- 2,193 interchanging from London Underground services

Pre-Match: Tottenham Hale Service

Analysis

- 50 pax/coach
- 2 minute loading time
- 3 minute frequency

Queue duration: N/A

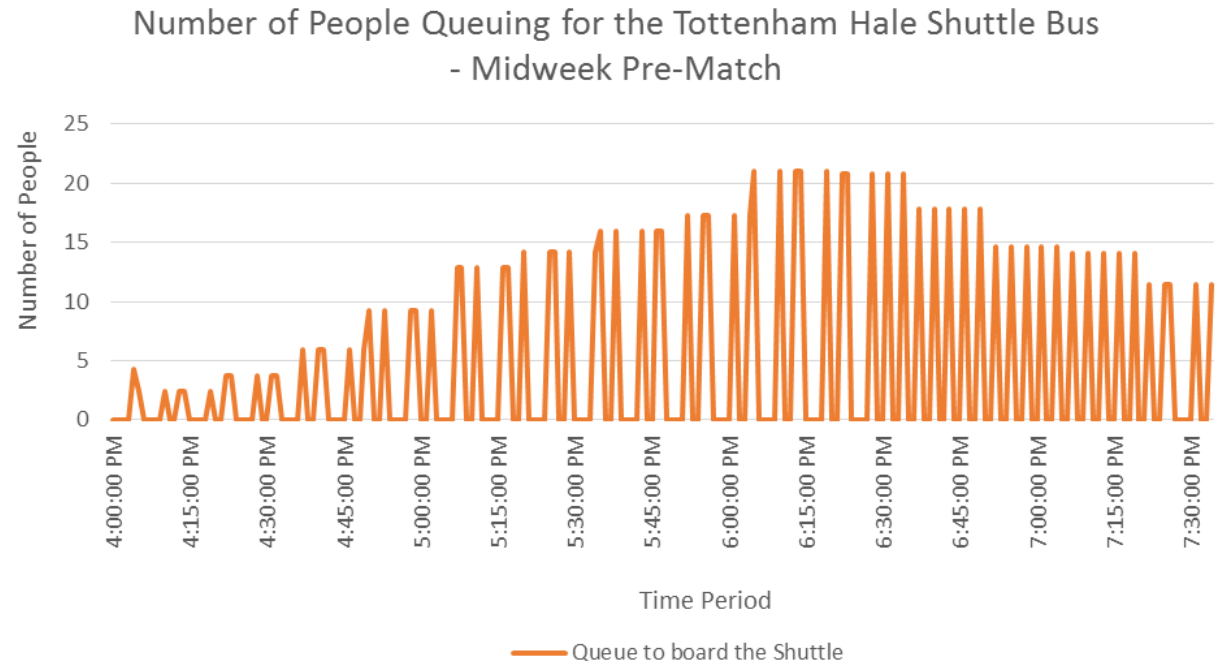
Max Queue: 21 ppl

Max Wait Time: 3 mins

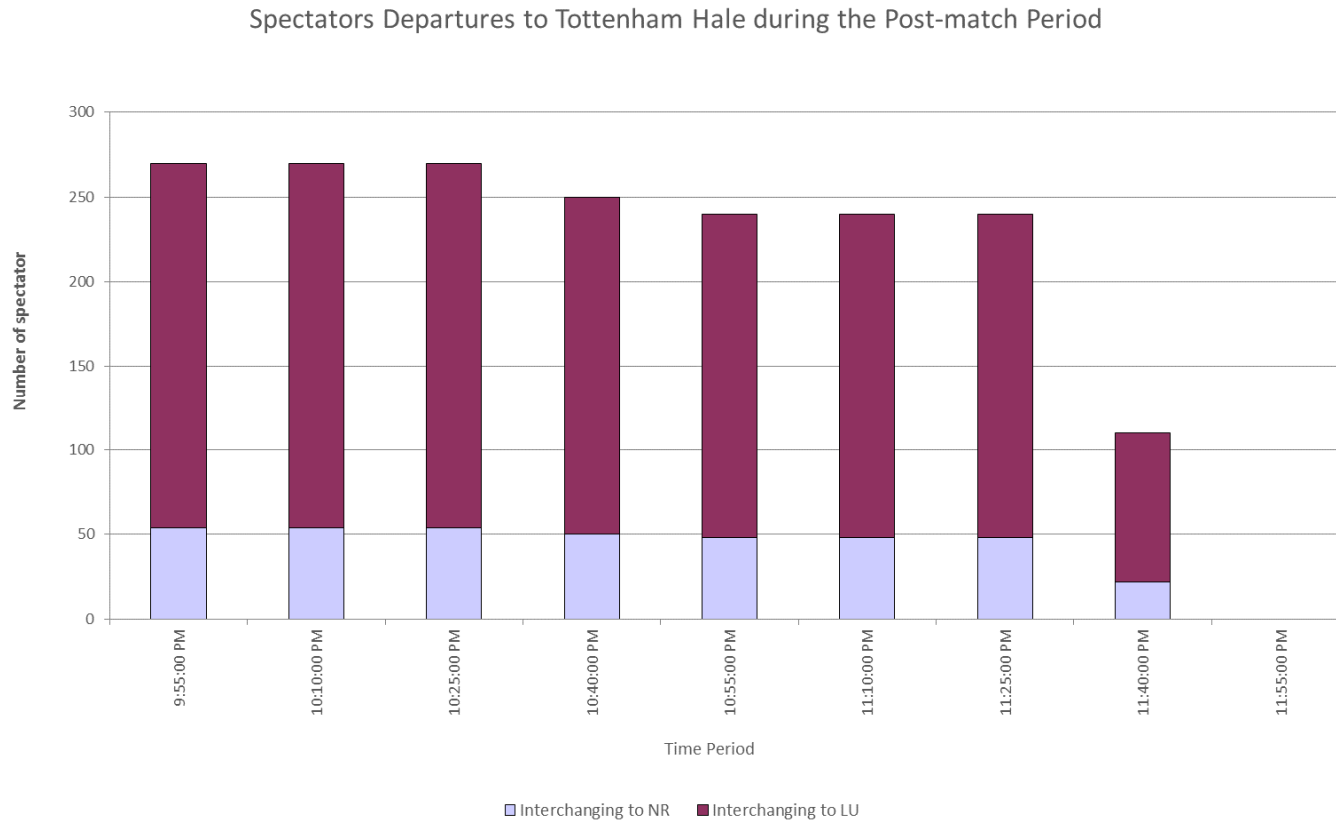
- i.e. everyone boards the first coach

Queue footprint: 9m²

- At 0.5m²/person



Post-Match: Tottenham Hale Service



1,890 Spectators in Total

- 378 interchanging to National Rail services
- 1,512 interchanging to London Underground services

Post-Match: Tottenham Hale Service

Assumptions to represent
typical premium spectators
profile

Analysis

- 50 pax/coach
- 2 minute loading time
- 2 minute frequency for the first 24 minutes, then 3 minute frequency

Queue duration: 1h11min

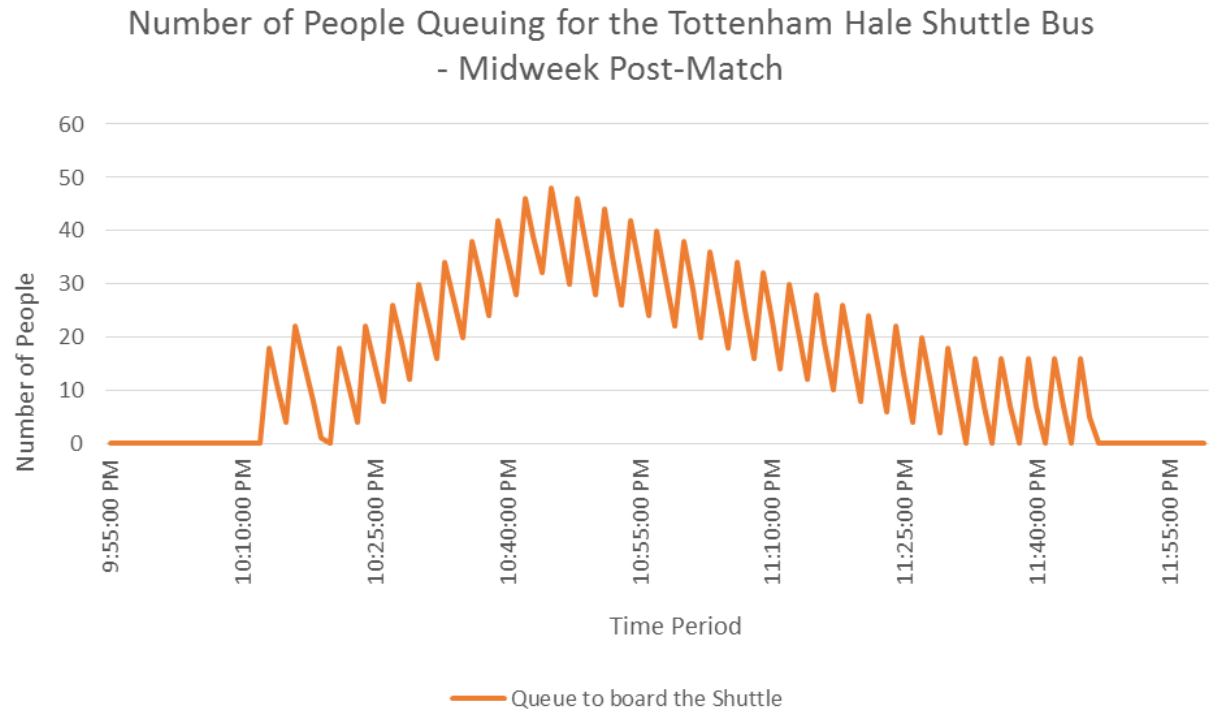
Max Queue: 48 ppl

Max Wait Time: 3mins

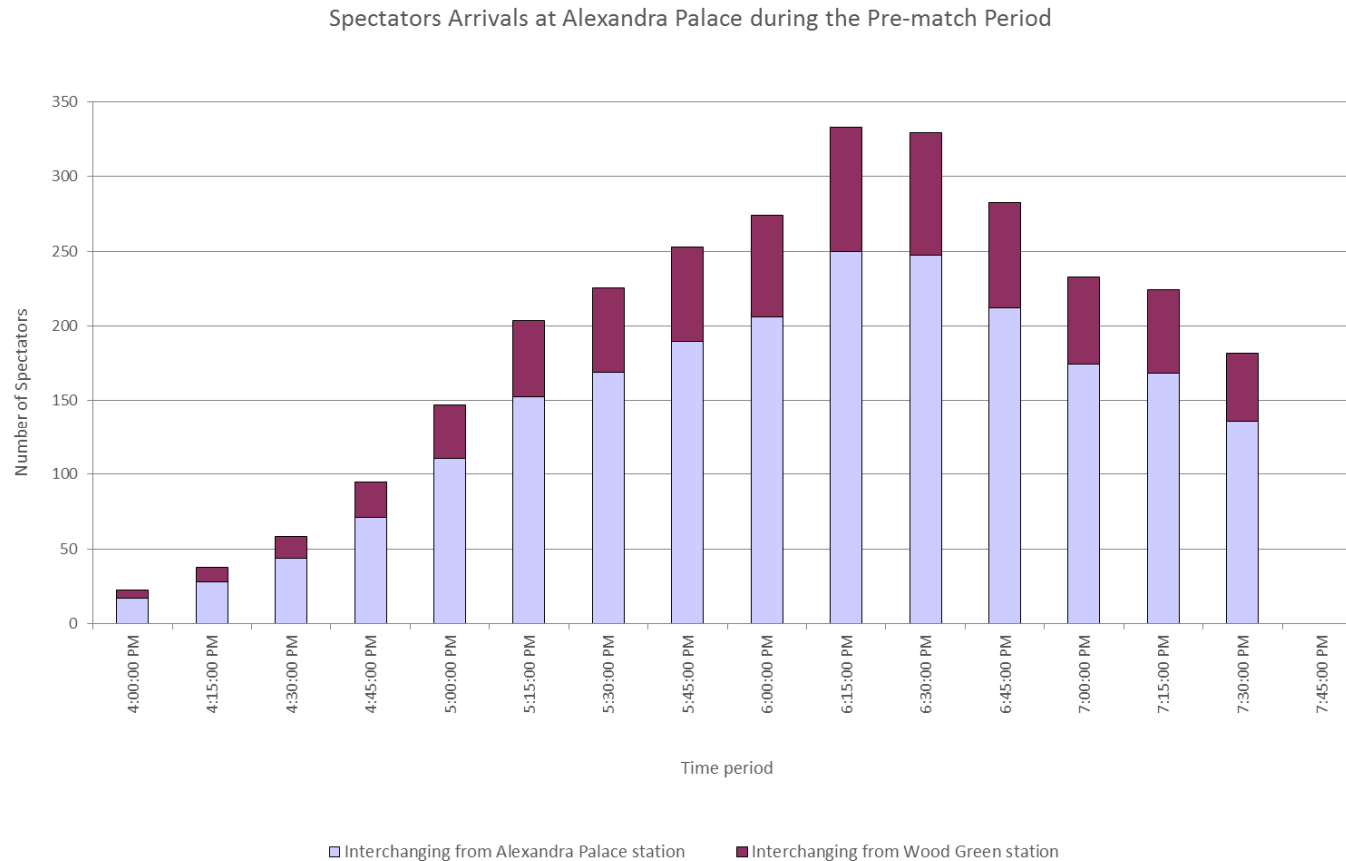
- i.e. everyone boards the next bus

Queue footprint: 24m²

- At 0.5m²/person



Pre-Match: Alexandra Palace Service



2,900 Spectators in Total

2,175 boarding at Alexandra Palace

725 boarding at Wood Green

Pre-Match: Alexandra Palace Service

Analysis of queuing at Alexandra Palace station

- 67 pax/coach (75% of bus capacity)
- 2 minute loading time
- 3 minute frequency

Queue duration: N/A

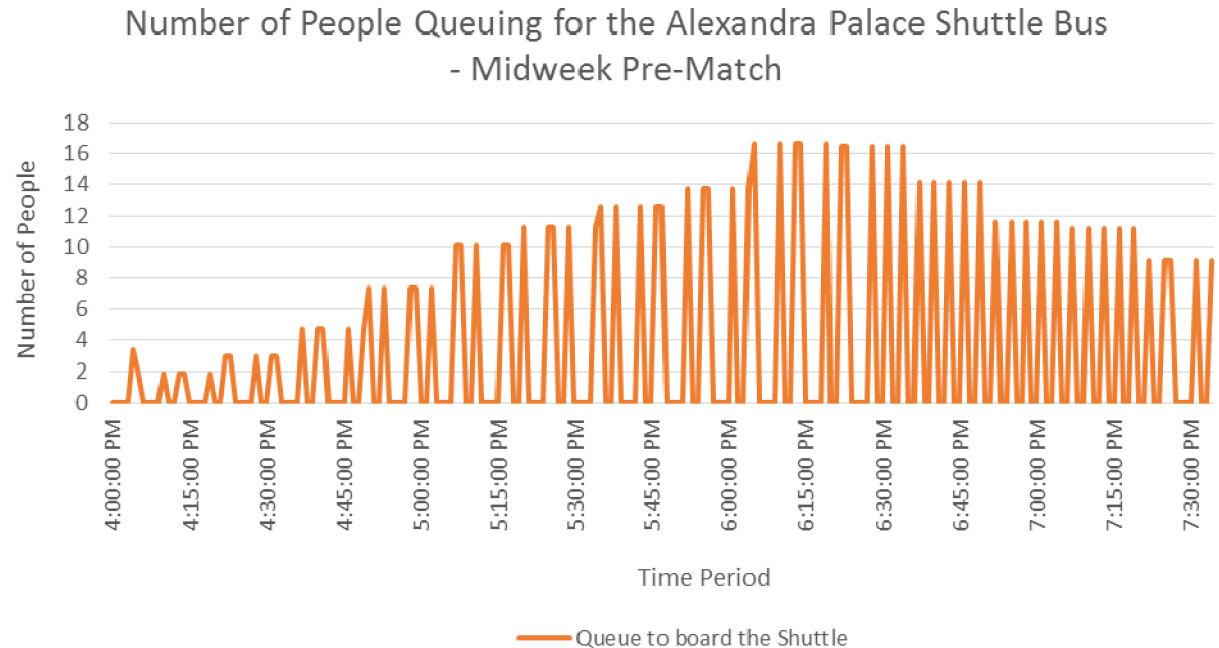
Max Queue: 17 ppl

Max Wait Time: 3 mins

- i.e. Everyone boards the first coach

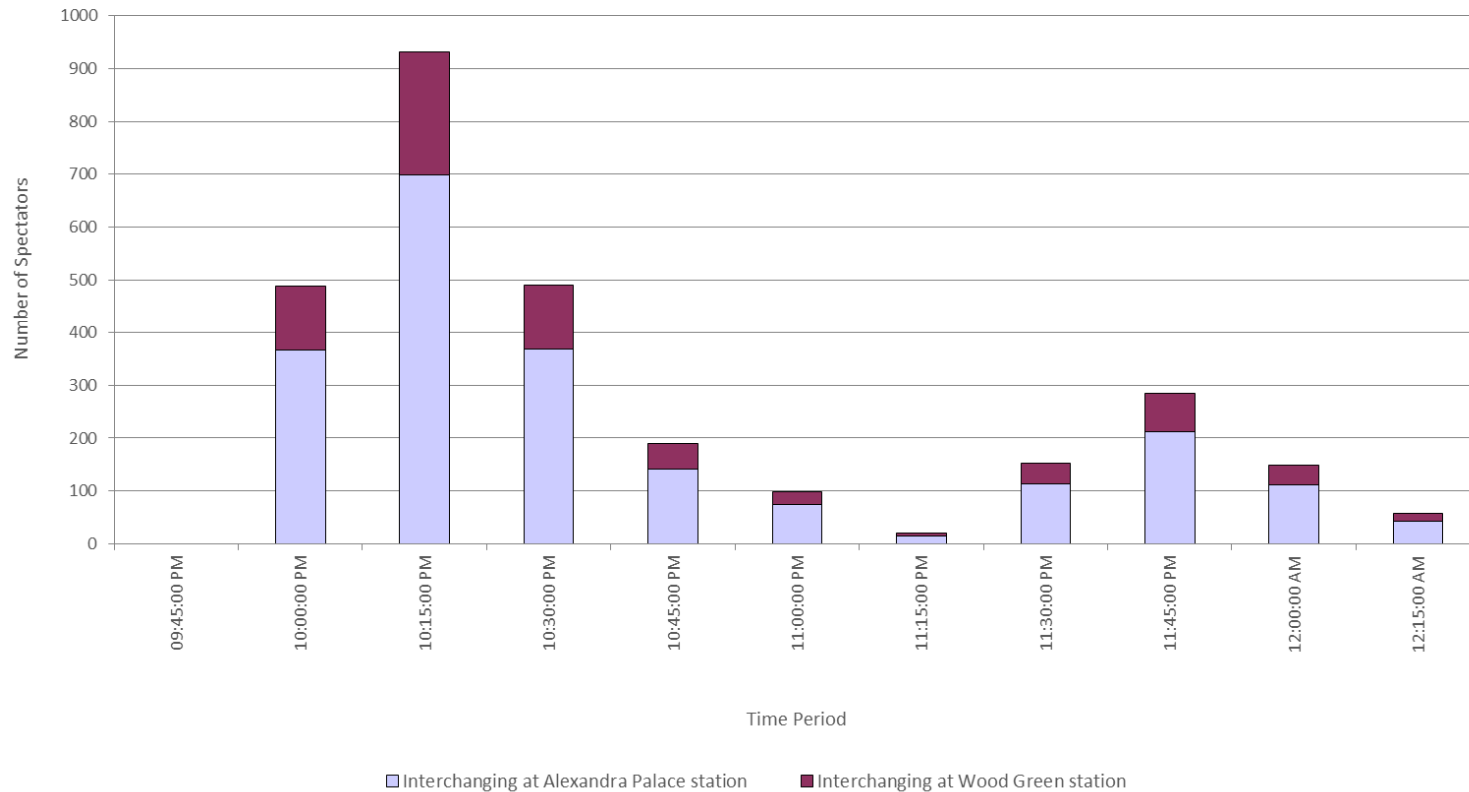
Queue footprint: 8m²

- At 0.5m²/person



Post-Match: Alexandra Palace Service

Spectators Demand for the Alexandra Palace Shuttle Bus service during the Post Match Period



2,900 Spectators in Total

2,175 alighting at Alexandra Palace

725 alighting at Wood Green

Post-Match: Alexandra Palace Service

Analysis

- 90 pax/bus
- 2 minute loading time
- 2 minute frequency for the first 24 minutes, then 3 minute frequency

Queue duration: 16mins

Max Queue: 68 ppl

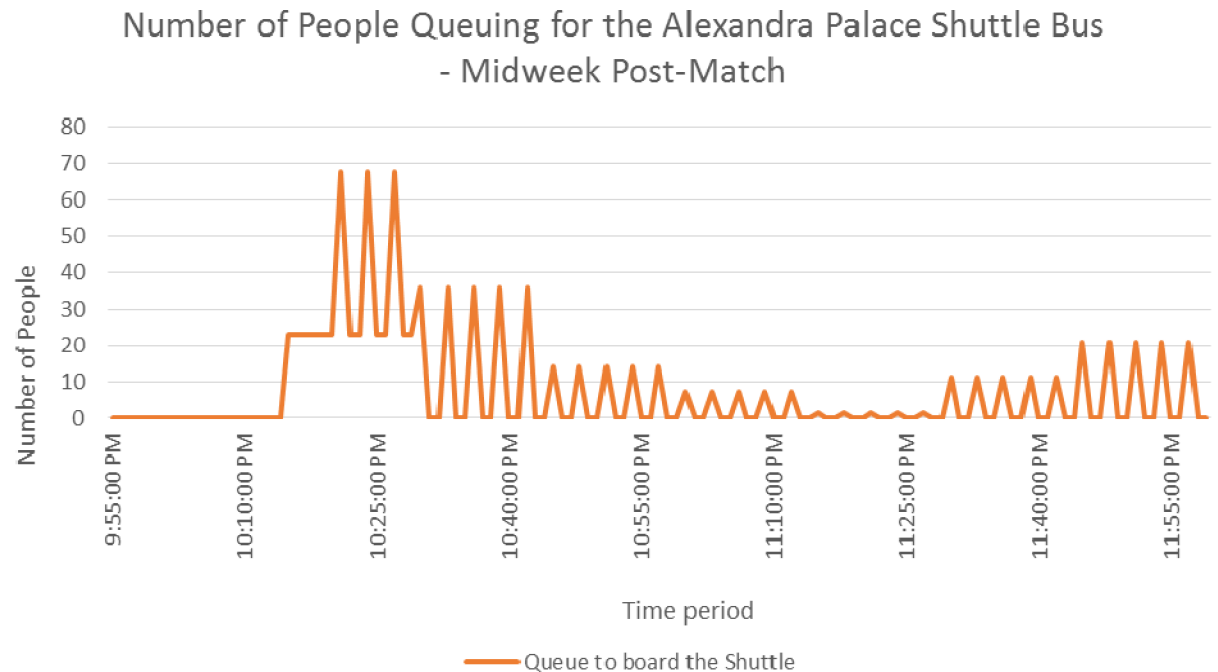
Max Wait Time: 4 mins

- i.e. 2 coaches

Queue footprint: 34m²

- At 0.5m²/person

NB: 5 tph northbound from Alexandra Palace station for a maximum of 3,050 users (approx. 610 per train)

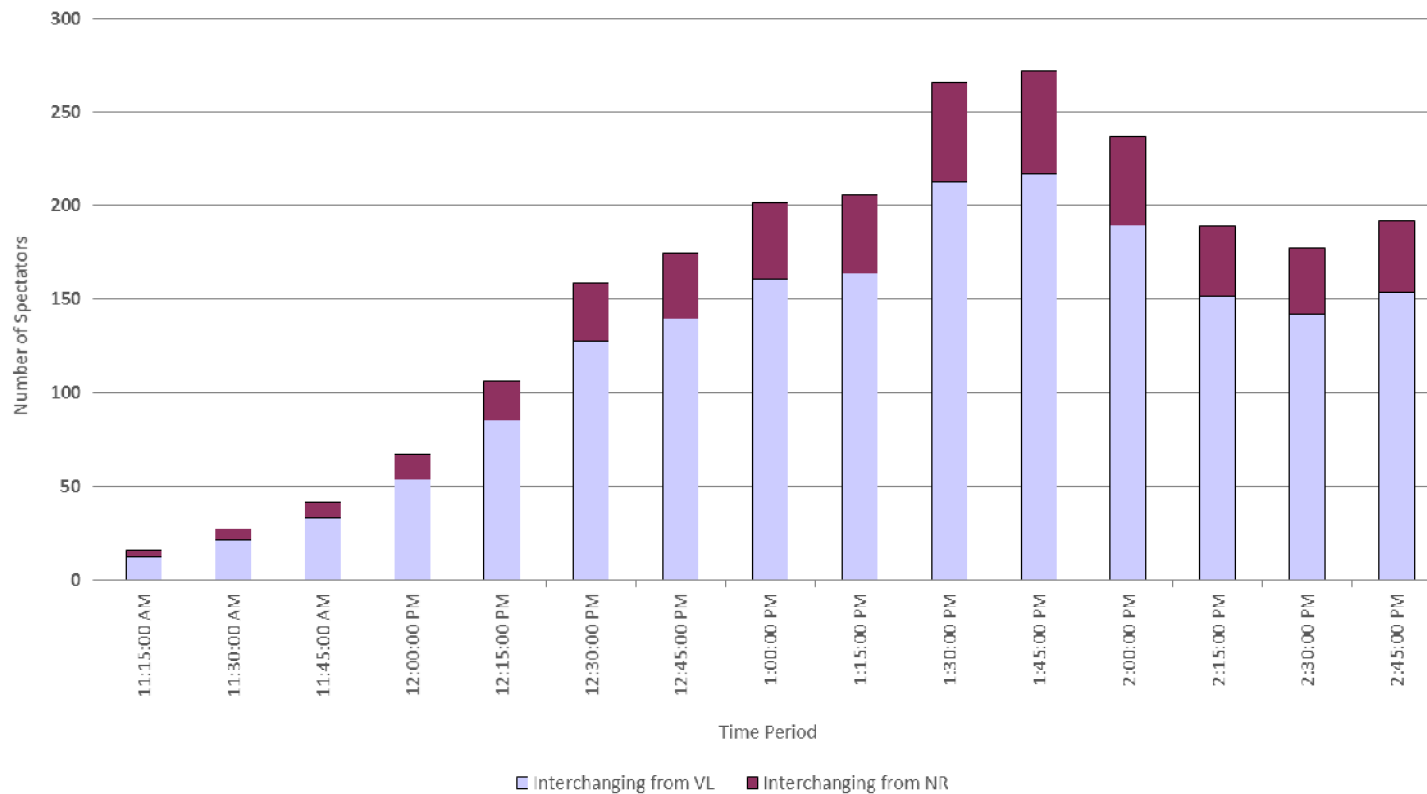




Weekend Matchday Scenario

Pre-match: Tottenham Hale service

Spectator Demand for the Tottenham Hale Shuttle Bus service during the Weekend Pre-Match Period



2,327 Spectators in Total

- 465 interchanging from National Rail services
- 1,862 interchanging from London Underground services (609 NB, 609 SB)

Pre-match: Tottenham Hale service

Analysis

- 50 pax/coach
- 2 minute loading time
- 3 minute frequency

Queue duration: 44 mins

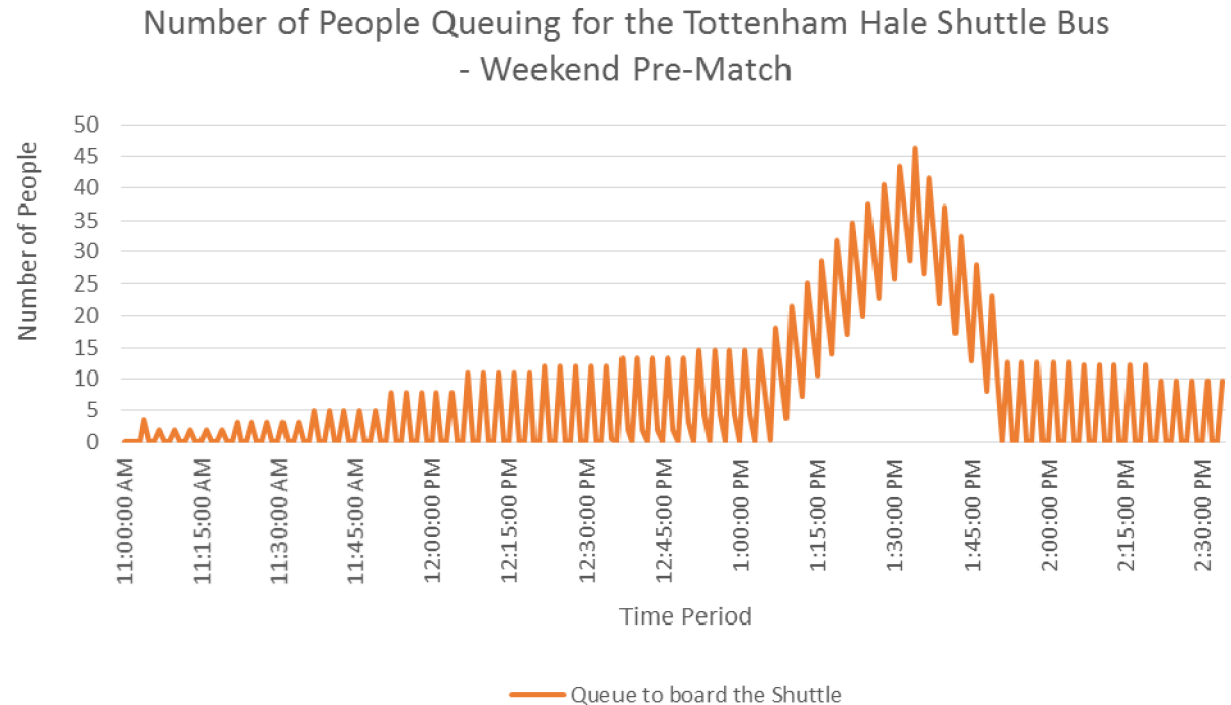
Max Queue: 46 ppl

Max Wait Time: 3mins

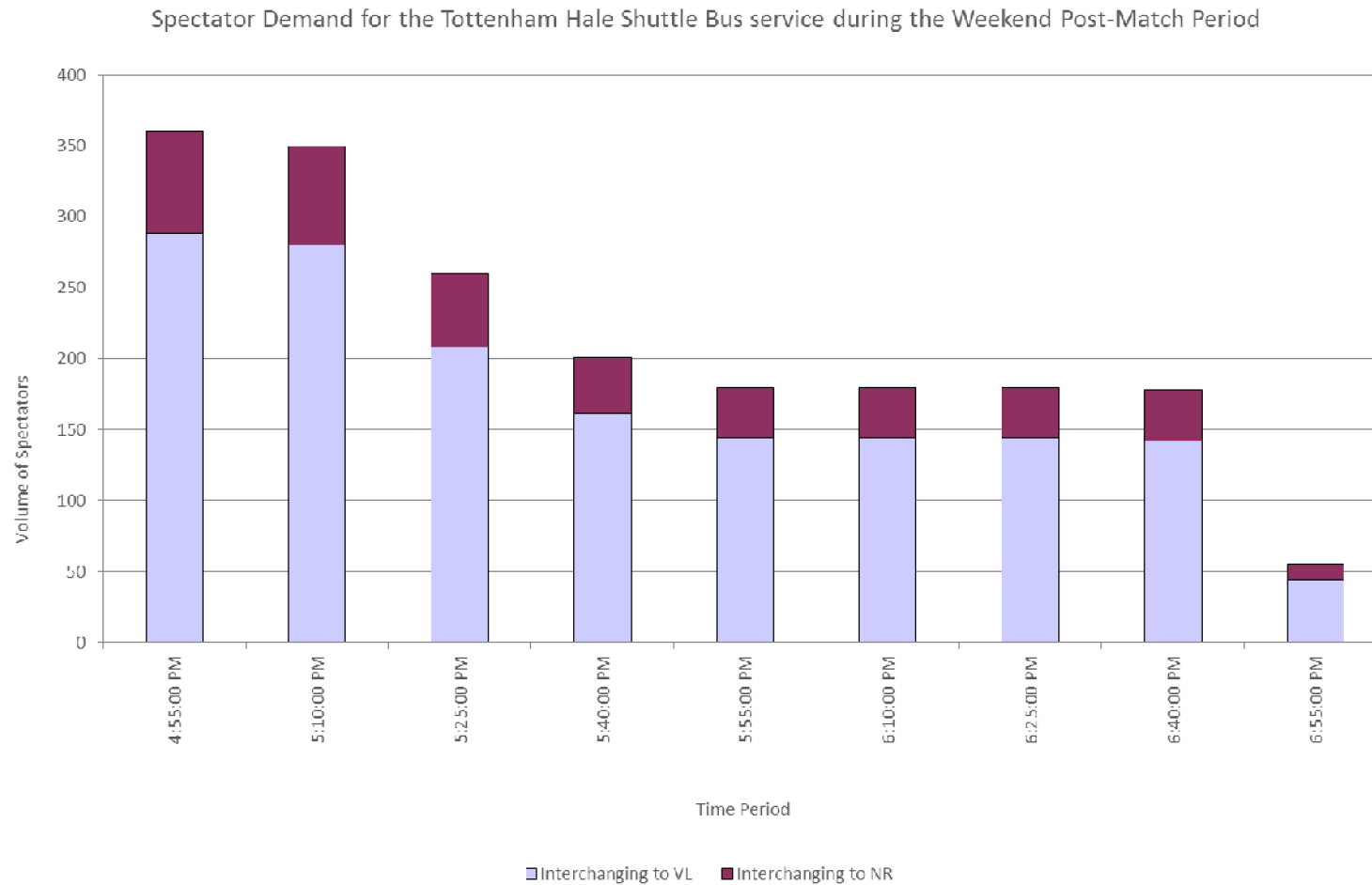
- i.e. 1 coach

Queue footprint: 10m²

- At 0.5m²/person



Post-match: Tottenham Hale service



1,944 Spectators in Total

- 389 interchanging to National Rail services
- 1,555 interchanging to London Underground services

Post-match: Tottenham Hale service

Assumptions to represent
typical premium spectators
profile

Analysis

- 50 pax/coach
- 2 minute loading time
- 2 minute frequency for the first 24 minutes, then 3 minute frequency

Queue duration: 19min

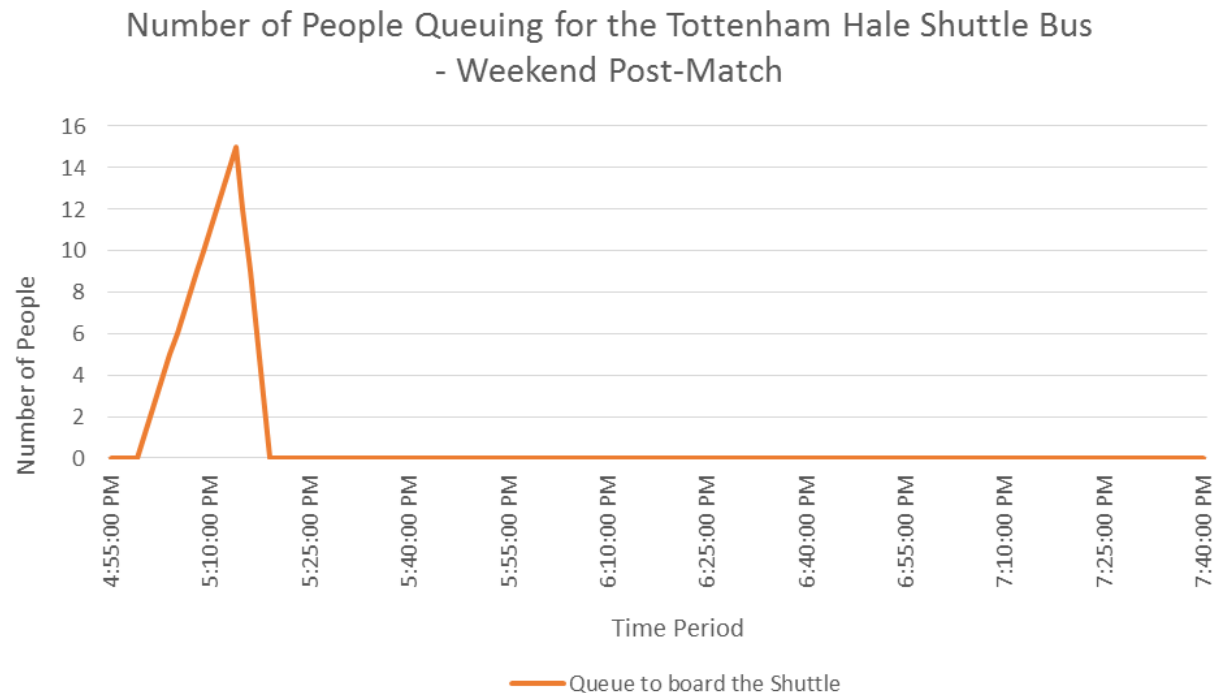
Max Queue: 15 ppl

Max Wait Time: 2 mins

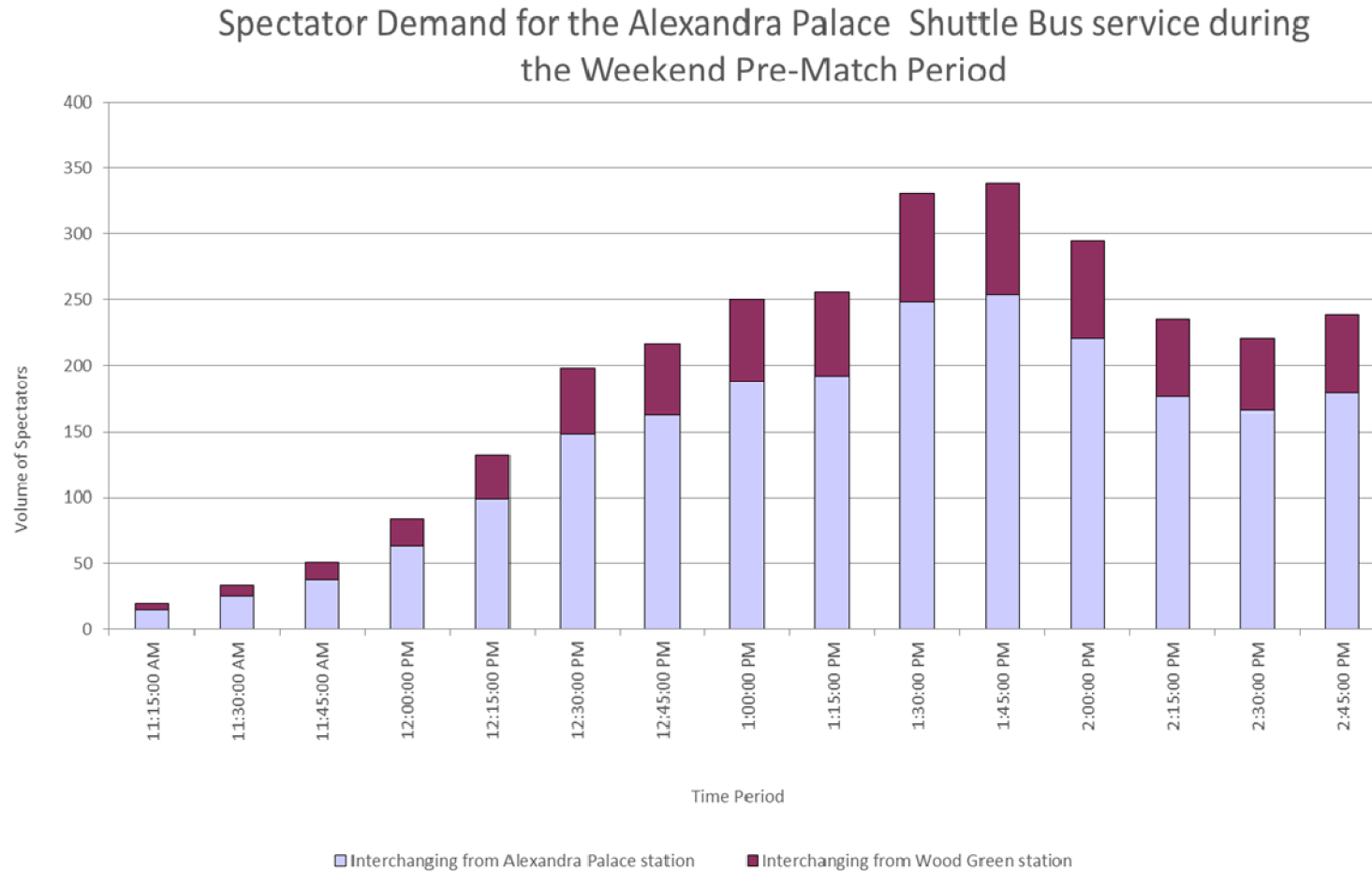
- i.e. everyone boards the next bus

Queue footprint: 8m²

- At 0.5m²/person



Pre-match: Alexandra Palace service



2,989 Spectators in Total

- 2,242 assumed to board at Alexandra Palace
- 747 assumed to board at Wood Green

Pre-match: Alexandra Palace service

Analysis of queuing at Alexandra Palace station

- 67 pax/coach (75% of bus capacity)
- 2 minute loading time
- 3 minute frequency

Queue duration: N/A

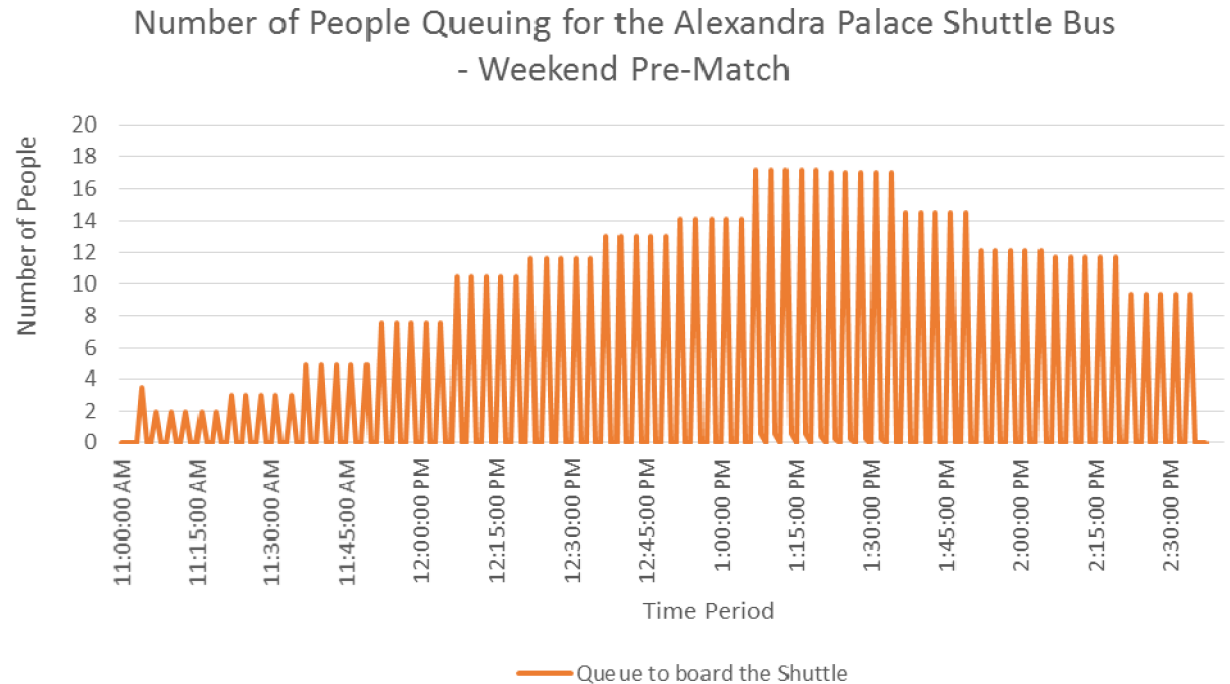
Max Queue: 16 ppl

Max Wait Time: 3 mins

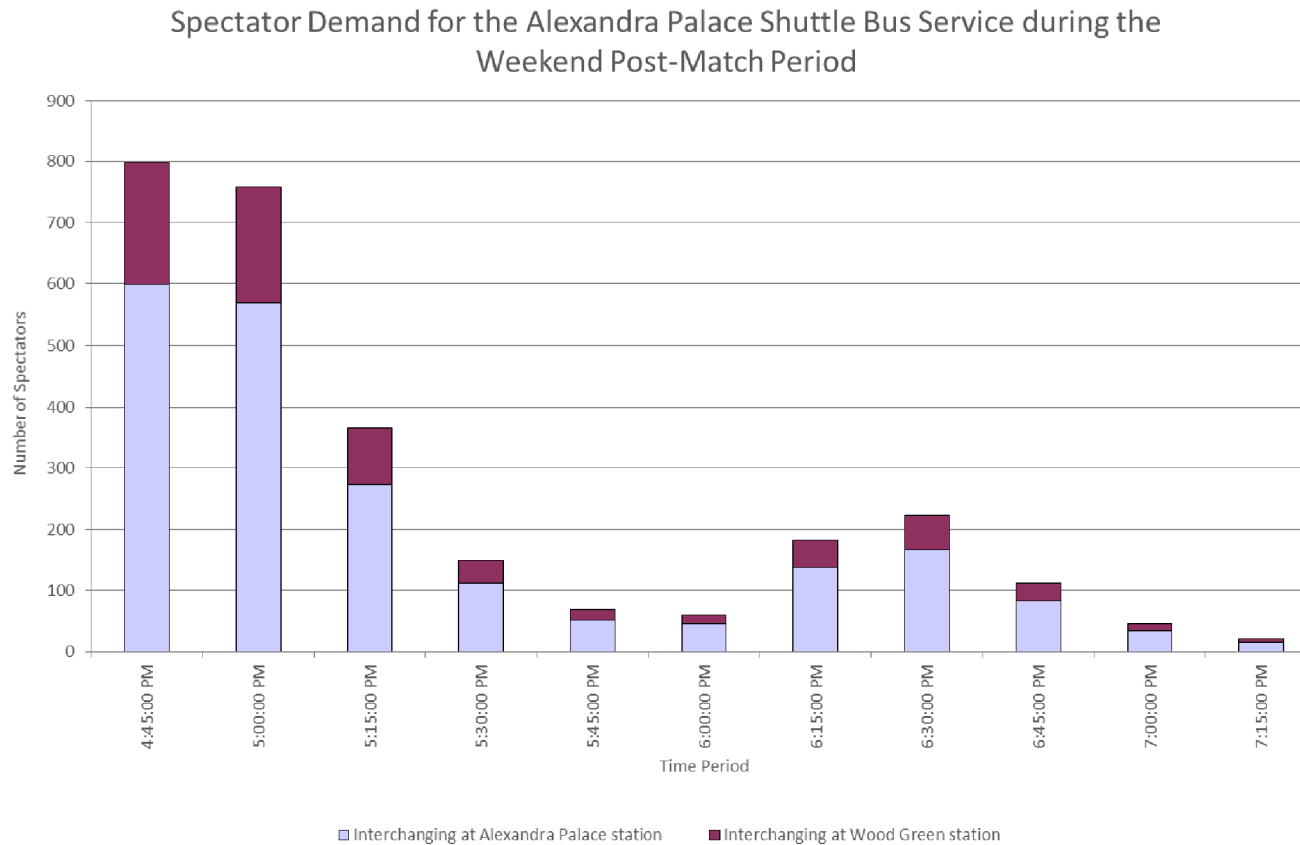
- i.e. 1 coaches

Queue footprint: 8m²

- At 0.5m²/person



Post-match: Alexandra Palace service



2,784 Spectators in Total

2,088 alighting at Alexandra Palace

696 alighting at Wood Green

Post-match: Alexandra Palace service

Analysis

- 90 pax/bus
- 2 minute loading time
- 2 minute frequency for the first 24 minutes, then 3 minute frequency

Queue duration: 41 mins

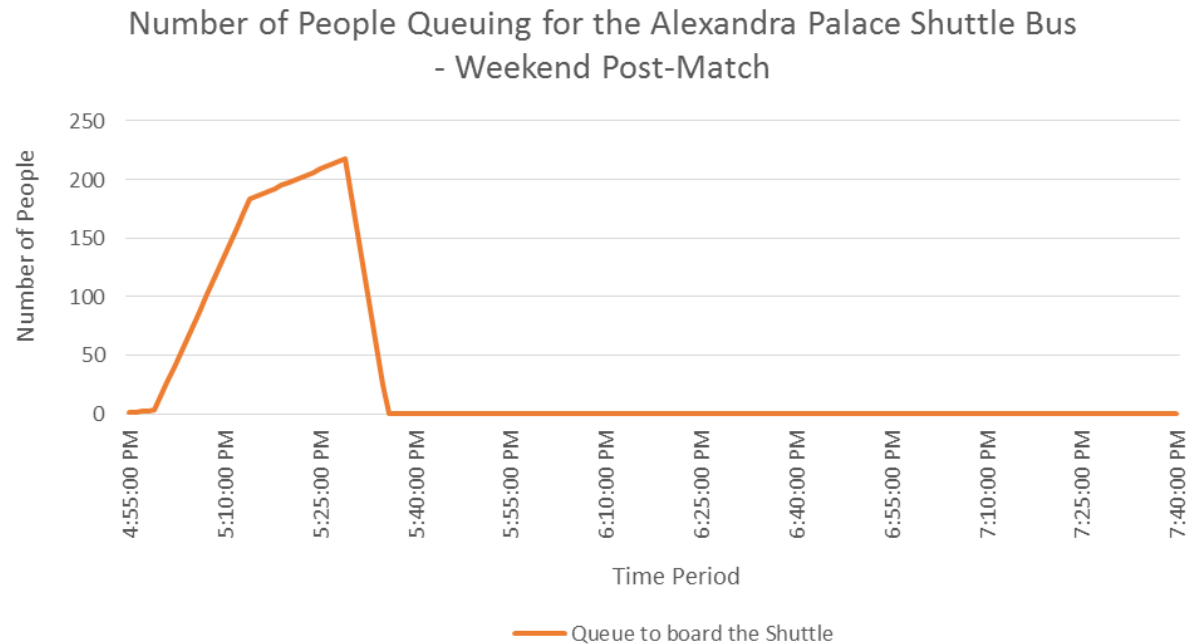
Max Queue: 218 ppl

Max Wait Time: 8 mins

- i.e. 4 coaches

Queue footprint: 109m²

- At 0.5m²/person



Conclusions

- ⚠ The Shuttle Bus service plays an important role in the transport mix, and if successful, will reduce the spectator impact on other parts of the network, most notably the Seven Sisters/Tottenham Hale axis.
- ⚠ The frequencies and capacities highlighted in these notes have been generated to provide the best fit with anticipated demand, and therefore show that in most instances, limited delays would be experienced. The longest delays would be associated with post-match clearance, but in the scenario assessed, this is no more than ten minutes for any individual.
- ⚠ The ability to deliver these frequencies with minimal queuing will be driven by the efficiency of the operation and the operator who has not yet been contracted. Operational space requirements would need to be negotiated at that time.

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