Turley

20th June 2025

Via Email

Tim Wilson Planning Officer Planning Department London Borough of Richmond upon Thames Civic Centre 44 York Street Twickenham, TW1 3BZ

Dear Tim,

PA25/1465 ALLIANZ STADIUM, REQUEST FOR EIA SCREENING OPINION - CLARIFICATIONS

Thank you for your correspondence via Charlotte Orell (DP9), in relation to the EIA Screening Request submitted regarding proposals at the Allianz Stadium, Twickenham. We have set out a summary of progress with EIA Screening Request below, along with a response to your queries.

In summary:

- On 2nd May 2025 and in accordance with Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, as amended, the Applicant submitted a request for an EIA Screening Opinion.
- On 6th May the Applicant agreed to an extension of time for an EIA Screening Opinion until the 27th June, at the request of London Borough of Richmond upon Thames (LBRuT) under Regulation 6, Paragraph 7.
- On 12th June, in accordance with Regulation 6, Paragraph 5, LBRuT requested additional information.
- On 17th June a number of additional queries were also provided.

We have set out each of the requests for additional information below, along with the Applicant's response. Rather than submit an updated EIA Screening Report, please consider this letter to supplement the report. It should be placed on the register alongside the report, and the information contained herein as part of the evidence base on which to adopt an EIA Screening Opinion.

"1. Please provide further information regarding potential socio-economic effects.

The information set out in the Screening Report does not include any details about the socio-economic baseline, nor demonstrate in detail how it has been concluded there will be an increase in economic productivity. It has long been recognised that the use of the stadium can bring positive benefits, particularly to the wider hospitality sector (eating and drinking and visitor accommodation), however it also brings dis-benefits. On event days the profile of visitors to some destinations outside of the stadium e.g. comparison shopping, will be altered due to the impacts of visitors

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and local congestion, and in the past, it has been known that some businesses have closed/relocated. There should be some consideration to disaggregate by the type of event, whether for music, conference or religious event etc. as these will vary."

Annex 1 to this letter has been prepared by IPW, the Applicant's Economic Consultant, and sets out a full response to this query. This provides a socioeconomic baseline and sets out, along with a response to broader points raised, an evidence base for the conclusions drawn in the EIA Screening Report.

"2. There is no reference under the biodiversity section of Table 3.1 of the report to the Duke of Northumberland's River SINC. The report should be updated and the SINC assessed accordingly."

The Duke of Northumberland's SINC is located on the western boundary of the site.

As set out within the EIA Screening Report, no habitat removal or alterations are proposed. The proposals will be implemented at the established Allianz Stadium, which already hosts major non-sporting events. There will be no change to the baseline environment. The site will continue to be hardstanding and drain by existing mechanisms so there will be no effect on the nearby designated sites. There will be no significant effects to the SINC.

The remaining queries are set out below and are all addressed in **Annex 2**, prepared by WSP, the Applicant's transport consultant.

- *"3. Please provide more information on where people might be coming from via rail and where people are likely to go following an event. For example, how many more trains will be needed in the Windsor direction or Clapham Junction to change on to other services, as well as for Vauxhall and Waterloo."*
- "4. In terms of the shuttle bus, where does it run from, where does it drop off, what is its total capacity per hour in number of seats, and how many people make use of it per hour on a weekday evening event?"
- "[5.] In terms of Transport Impacts, we have been in touch with South Western Railway, Network Rail and Transport for London. The feedback we have received is that SWR and NR have serious concerns that they will not be able to provide the required levels of service during weekday concerts. TfL have also highlighted concerns that if the trains are not able to be utilised as assumed by WSP, then the knock-on effects to the road network could be significant.
- [...]
- 1. For the proposed concerts, what time will the main event start (in relation to graph on P23 of proposal)?
- 2. We need more reliable estimated arrival profiles for a proposed weekday gig, Friday gig, Saturday gig & Sunday gig (this separation is required because people might behave differently on Friday versus other weekdays, and Saturday v Sunday). The current proposed profiles are each based on just one event which is insufficient
- a. Is there data based on modelling or similar venues?
- b. Can this data be provided in a non-graph form, as it's hard to get numbers off the graph.
- 3. We need estimated numbers for people using Twickenham station for an average proposed concert, and estimated numbers for which direction they would be coming from/going to (e.g. how many people are coming from Waterloo/Vauxhall/Clapham direction vs how many are coming from Reading/Staines/Windsor direction).



- 4. Postcode data for past concerts would be useful. If there's a model of postcode data for proposed concerts that'd be helpful
- 5. A model of station distribution for proposed concerts, or an average from previous concerts is needed so we can know how many people to expect at each of our stations (the bar chart based only on the Rihanna concert is not helpful enough). Seeing as the intention is to promote alternative stations, is there a modelled version that takes that into account as well as a version based on how the station distribution would be without that promotion?
- 6. What data is the mode share info for concerts based on (P24 of proposal)?"
- [7.] Please provide more information about how the estimates for the net impact of vehicular trips generated by the development on the four links was derived and regarding the forecast number of HGV trips per event.

In summary, the additional information requested in line with Regulation 6, Paragraph 5, has been provided in full and confirms the findings of the EIA Screening Report. No significant effects are anticipated as a result of the proposals.

We would be grateful of confirmation of receipt of this information and the date on which the Screening Opinion will be adopted.

Yours Sincerely,

Andrew Malcomson

Director, Head of EIA

and rew.malcomson@turley.co.uk

Enclosures: Annex 1 Socioeconomic Response Annex 2 Transport Response

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Annex 1



The information set out in the Screening Report does not include any details about the socioeconomic baseline, nor demonstrate in detail how it has been concluded there will be an increase in economic productivity.

Given the absence of locally-commissioned survey data (for example 'STEAM' local area tourism forecasting service) we have used Visit Britain and NOMIS data to establish a socioeconomic baseline. The most recent Visit Britain data is based on a three-year average for the period 2017-2019 (Table 1).

Table 1: Tourism sector baseline

Local area	Day visits (m)	Day value (£m)	Overnight value (£m)	Total visits (m)	Total value (£m)
Richmond	6.8	£282	£65.3	7.6	£347.3
Hounslow	6.7	£200	£52.7	7.2	£253.0
Total	13.4	£482.4	£118.0	14.9	£600.4

Source Visit Britain (average for 2017 to 2019)

Visit Britain does not provide jobs estimates. A baseline of employment in relevant key sectors within the tourism economy is provided by NOMIS (Table 2) with some 20,000 employee jobs across the two local authority areas in the accommodation and food sectors.

Table 2: Baseline tourism related sectors

Selected sectors	Accommoda Serv		Arts, Entertainment & Recreation				
Local authority	Number of employees	% of all employees	Number of employees	% of all employees			
Richmond	8,000	10	7,000	8.8			
Hounslow	12,000	7.3	3,000	1.8			

Source NOMIS 2025

The RFU commissioned a report to examine the socio-economic impact of the Stadium in 2023 (examining the period 2015/16 to 2018/19) and this provides a baseline for the Stadium. The assessment estimated for Richmond and Hounslow a baseline Gross Value Added (GVA) of £91m, 1,270 jobs and 1.2m venue attendees related to the Stadium.

With respect to an increase in economic output and productivity the socio-assessment estimated the number of non-resident attendees as a result of additional events being held (see Table 3). For example for 12 events it is estimated that there would be an extra 882,000 attendees annually. This level of net additional economic activity is estimated to drive additional spend of £34m, Gross Value Added (GVA) of £20m and employment equal to 345 FTEs (on and off-site across sectors).



Sector productivity indicators	Baseline metric	Number of events, value & % change over baseline (in brackets)						
	metric	6	12	15				
Tourism volume (visits)	14.868m	0.441m (3.0%)	0.882m (5.9%)	1.1025m (7.4%)				
Tourism value (£m ¹)	£639.5m	£17.2m (2.7%)	£34.7m (5.4%)	£43.3m (6.8%)				
Productivity value (GVA, £m) ²	£364.5m	£10.1m (2.8%)	£20.4m (5.6%)	£25.4m (7.0%)				
F&B and accommodation jobs (FTEs)	14,975	173 (1.2%)	345 (2.3%)	431 (2.9%)				

Table 3: Economic baseline and productivity uplift

For the local area an increase in additional expenditure has the potential to improve the productivity of local businesses and increase the local employment base in related sectors. It is estimated for 12 events that there will be uplift in export volume of 5.9% translating into a similar economic output. The extent to which there will be an increase in output per worker will be dependent on how businesses respond to the additional demand for services generated. If fully translated into extra demand for staff there could be an increase in employment of circa 2.3% over the NOMIS employment baseline³.

The expansion of events will improve the overall utilisation of the Stadium, annual income and its operational surplus, supporting investment in the game locally and nationally.

The socio-economic assessment indicates that an increase in the number of non-sporting events can provide a positive overall impact on the local economy, estimated at c. 5% over the tourism economy baseline (based on 12 event days per year). An increase in local expenditure can help improve the overall productivity of the local tourism sector and provide an opportunity for local businesses to encourage new visitor segments to extend their stay and visit other local attractions. Through working with local businesses and representative bodies the benefits from the additional footfall can be fully realised, alongside appropriate mitigations to address particular concerns. Whilst notable, socioeconomic effects are not considered to be 'significant' when weighing them in the context of EIA.

 1 VB value data has been uprated to 2025 using the BoE inflation calculator with values adjusted for VAT 2 The GVA estimate uses the off-site GVA/output ratio from the RFU 2023 Socio Economic Contribution of

³ The employment data is used to provide a baseline to compare the scale of employment change and is independent of a jobs estimate that might be derived from Visit Britain data. The jobs figure reported is a FTE equivalent for comparison purposes (BRES data April 2023).

Twickenham study.



It has long been recognised that the use of the stadium can bring positive benefits, particularly to the wider hospitality sector (eating and drinking and visitor accommodation), however it also brings dis-benefits. On event days the profile of visitors to some destinations outside of the stadium e.g. comparison shopping, will be altered due to the impacts of visitors and local congestion, and in the past, it has been known that some businesses have closed/relocated.

We recognise that the introduction of new events and an associated increase in visitors raises important considerations for Richmond's existing retail and hospitality businesses. Our approach is designed to ensure that the activity complements, rather than competes with, the existing economy, and supports the long-term vitality of local centres.

The BID (Discover Twickenham), Whitton Business Association and Chambers of Commerce in both boroughs are very supportive of our proposals and aspirations.

We would highlight the following key elements of our proposal:

- Complementary footfall: The majority of music event-related activity will occur outside peak retail hours, particularly in the evenings and weekends. Visitors are likely to spend time and money in the local area before or after events, supporting local cafés, restaurants, and independent retailers. Data from non-sporting events shows a flatter arrival profile compared to sporting events, creating an opportunity for Stadium visitors to spend time in the local area and support local businesses ahead of a concert. This is supported by gate line data from previous concert events at the Stadium, which indicates a more evenly spread arrival pattern, with visitors tending to arrive earlier than they would for sporting events.
- Business partnerships: The RFU is not aware of a single business which has closed or relocated directly due to Stadium events, nor have any of the business associations raised any such examples. The RFU is committed to working with local businesses. Building on existing relationships with local partners the RFU is keen to develop ideas raised as part of the consultation process. This could lead to working towards developing a partnership plan similar to a Business Charter.
- Monitoring and engagement: A monitoring framework will track visitor patterns, parking use, and local business feedback. The RFU will maintain open dialogue with the business community to ensure that operational practices remain responsive and supportive.

There should be some consideration to disaggregate by the type of event, whether for music, conference or religious event etc. as these will vary.

Based on our research into events hosted at Wembley Stadium, Tottenham Hotspur Stadium, Emirates Stadium and London Stadium (Summer 2022 - Summer 2024 i.e. three years):

- 68/103 events were concerts
- 4/103 events were other forms of entertainment (e.g. Wrestling)
- 2/103 events were 'core sport' i.e. football in a football stadium but not tenant matches
- 26/103 events were 'non-core sport' e.g. American Football in a football stadium.

Since the Stadium's application relates solely to non-sporting events, effectively 68/74 events in the analysis set (92%) were concerts. Based on our wider market knowledge we consider this percentage to be representative of the stadium events market in the UK, where concerts are the predominant type of non-sporting event.



We are not aware of any conferences globally that would be large enough to require a stadium bowl-level plenary capacity, and we are focused on hosting conferences and exhibitions in our existing range of flexible meeting spaces in the South and East stands. The Stadium has hosted one religious/ prayer event in the bowl (based on our research period to our knowledge none of the other London stadia have hosted a bowl-level capacity equivalent in the last three years, (if ever) and these are extremely rare. We have therefore prepared our analysis on the basis of the anticipated increase being fundamentally driven by concerts rather than any other event type.

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Annex 2

ALLIANZ SMP – Response to Queries on EIA Transport Screening Note

DATE:	19 June 2025	CONFIDENTIALITY:	Public
SUBJECT:	Response to Queries on EIA Transport Screening Note		
PROJECT:	Allianz SMP	AUTHOR:	СС
CHECKED:	LS	APPROVED:	TG

The following provides a response to comments received from the London Borough of Richmond upon Thames (LBRuT), including some forwarded on from South Western Railway (SWR), Network Rail (NR) and Transport for London (TfL), on the EIA Transport Screening note issued in connection with the Allianz Stadium Licensing application.

Questions received from the LBRuT (12th June, 2025 via email)

Please provide more information on where people might be coming from via rail and where people are likely to go following an event. For example, how many more trains will be needed in the Windsor direction or Clapham Junction to change on to other services, as well as for Vauxhall and Waterloo.

WSP Response:

The exact details of where visitors to the Stadium travel from and to, as well as where they interchange on the rail network, will vary depending on the specific event and will be informed by varying factors such as which artist is performing, the event timings, the demographic characteristics of the spectators, and the spectator arrival patterns. Nevertheless, using the available data gathered at previous events held at the Stadium, typical behaviours have been identified.

Data from previous events shows that, at Twickenham Station, approximately 15% of spectators using the station originate from the Reading / Windsor direction, while the majority of spectators (85%) originate from the Central London direction (including those using Waterloo station, or interchanging at Vauxhall and Clapham Junction stations). In terms of numbers of spectators, this equates to the following for an existing and proposed concert (based on the 55.9% rail mode share recorded at previous concerts, of which 93.2% use Twickenham Station):

- Existing concert (total capacity of 55,000): 28,654 spectators estimated to use Twickenham Station, of which 24,356 travel to/from the Central London direction and 4,298 travel to/from the Reading direction
- **Proposed concert (total capacity of 75,000):** 39,074 spectators forecast to use Twickenham Station (with no mitigation in place), of which 33,213 travel to/from the Central London direction and 5,861 travel to/from the Reading direction



 Net change in spectators between existing and proposed concert (uplift of 20,000): an additional 10,420 spectators may use Twickenham Station (with no mitigation in place), of which 8,857 travel to/from the Central London direction and 1,563 travel to/from the Reading direction

For spectators travelling to/from the Central London direction, further analysis has been carried out using postcode data from previous event attendees, mapping likely rail journey routes to and from Twickenham Station based on postcode area. This has been assessed against the arrival profile for both existing and proposed concerts.

A robust, worst-case scenario has been modelled, based on a concert with one support act. For concerts with two support acts, a flatter arrival profile would occur, resulting in a less concentrated impact on rail services. The results (shown in **Table** 1 below) show that spectators use a wide variety of stations across the rail network when travelling to/from the Stadium, with Clapham Junction and Vauxhall stations expected to see the highest increases in interchange demand.

	% of	Total nu	umber of Sp	ectators	16:00 – 17:00			17:00 – 18:00			18:00 – 19:0	0		19:00 – 20:0	0	:	20:00 – 21:0	0	>21:00			
Station	Spec.	Current	Future	Net Change	Current	Future	Net Change	Current	Future	Net Change	Current	Future	Net Change	Current	Future	Net Change	Current	Future	Net Change	Current	Future	Net Change
Vauxhall	30%	7,419	10,117	+2,698	62	85	+23	1,932	2,634	+702	2,238	3,052	+814	2,730	3,723	+993	451	615	+164	5	7	+2
Clapham Junction	26%	6,299	8,590	+2,291	53	72	+19	1,640	2,236	+596	1,900	2,591	+691	2,318	3,161	+843	383	523	+139	5	6	+2
Direct to Twickenham	15%	3,639	4,963	+1,323	31	42	+11	948	1,292	+345	1,098	1,497	+399	1,339	1,826	+487	221	302	+81	3	4	+1
Euston	14%	3,359	4,581	+1,222	28	38	+10	875	1,193	+318	1,014	1,382	+369	1,236	1,686	+450	204	279	+74	2	3	+1
Other	14%	3,359	4,581	+1,222	28	38	+10	875	1,193	+318	1,014	1,382	+369	1,236	1,686	+450	204	279	+74	2	3	+1
Kings Cross	13%	3,080	4,199	+1,120	26	35	+9	802	1,093	+292	929	1,267	+338	1,133	1,545	+412	187	255	+68	2	3	+1
Waterloo	9%	2,240	3,054	+814	19	26	+7	583	795	+212	676	921	+246	824	1,124	+300	136	186	+50	2	2	+1
Victoria	8%	1,960	2,672	+713	16	22	+6	510	696	+186	591	806	+215	721	983	+262	119	163	+43	1	2	+1
Richmond	6%	1,400	1,909	+509	12	16	+4	364	497	+133	422	576	+154	515	702	+187	85	116	+31	1	1	+0

Table 1 – Arrival Profile and Station Distribution for an Existing and Proposed Concert (Numbers of Spectators)

There is precedent for holding weekday concerts at the Stadium, with events of up to 55,000 spectators successfully managed using existing event day transport arrangements. In addition, it should be noted that the Stadium already has permission to host 82,000-capacity rugby matches at the Stadium on weekdays. The proposed concert event capacity of 75,000 represents an increase but remains below the typical 82,000 attendance for major rugby matches, which the stadium and surrounding transport network accommodate regularly (albeit rugby matches typically, but not exclusively, occur on weekend days).

The forecast increase in spectators using Twickenham station for a future concert event (75,000 spectators) when compared with an existing concert event (55,000 spectators) is 10,420; however, when compared with an existing rugby match event at the Stadium, the increase is 5,490 passengers (as a higher proportion of spectators for concert events use rail services when compared with a rugby match). This is equivalent to approximately six additional trainloads (based on current 8-car rolling stock carrying 1,000-1,100 passengers), or approximately an additional 30-minutes time to clear spectators using the station following an event (assuming the current frequency of 12 trains per hour). The impact of the uplift in spectators associated with a proposed concert is analysed in a more granular level of detail in the response the feedback received from SWR / NR below, looking at the impact per service for the busiest interchange stations (Vauxhall and Clapham Junction).

It should be noted that the forecasts for travel patterns and rail patronage associated with future concert events at the Stadium presented above do not take into account the additional travel management and transport interventions that are proposed as part of the Stadium Masterplan Project (SMP). These seek, in part, to reduce reliance on Twickenham station (by promoting the use of other stations local to the Stadium) and on SWR train services using the Twickenham line (by promoting the use of Richmond (for LUL and Overground services), Hounslow and Hounslow East (for LUL services) stations).

We understand that the network already operates close to the maximum number of services to Twickenham and other stations local to the stadium during the weekday PM peak period, and believe that these existing services will be able to accommodate the increase in demand generated by these very occasional weekday concert events in light of:

- Confirmation from SWR during pre-application discussions that the network coped adequately with the increase in demand generated by the Stadium during previous, 55,000 capacity weekday concert events
- The increase in capacity provided by the gradual introduction of 10-car trains on the line serving Twickenham station (up from the existing 8-car trains)
- The impact of the existing Stadium transport management measures implemented on major event days (including advance warnings of events leading to changes in travel timing and routeing, or a reduction in background travel demand altogether on these days)
- The future impact of additional Stadium transport management measures and interventions that are focused on reducing reliance on Twickenham station and the rail services that use the station



In terms of the shuttle bus, where does it run from, where does it drop off, what is its total capacity per hour in number of seats, and how many people make use of it per hour on a weekday evening event?

WSP Response:

On event days, the RFU operates special shuttle bus services between the Stadium (boarding/alighting adjacent to the North Car Park) and both Richmond and Hounslow East stations. These services typically run for three hours before and after each event. The Richmond route operates approximately 20 buses, while the Hounslow East route usually operates 3 buses, typically using Stagecoach double-decker vehicles with a capacity of c.90 passengers (seated and standing).

Services run continuously during the post-event period, with each vehicle completing multiple return trips (although actual peak-hour capacity can vary depending on traffic conditions – something that is being addressed as part of the SMP transport interventions mentioned above). Based on mode share data from previous concert events, approximately 1.9% of spectators typically use the shuttle bus services, which equates to 1,045 spectators for an existing concert event (55,000 capacity), and 1,425 spectators for a proposed concert event (75,000 capacity).

While this figure reflects previous concert patterns, a package of transport interventions has been developed to support the event planning and the licensing applications. This includes an enhanced shuttle bus strategy with improvements such as a more efficient boarding process, improved traffic management leading to more reliable journey times to Richmond station, and the potential introduction of a new traffic-free route for shuttles via the Mogden Sewage Treatment Works site providing better access to Hounslow East Underground station. In addition, the shuttle bus services will be promoted more widely alongside ticketing information, on the Stadium's website, and using the Stadium's smartphone app. These measures aim to improve journey times and boarding efficiency, enhance access to Hounslow East and Richmond stations, and increase future shuttle bus patronage. In turn, this will help to reduce pressure on Twickenham station by encouraging the use of alternative local stations. The proposed shuttle bus strategy is show below in **Figure 1**.

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Figure 1 - Proposed Shuttle Bus Strategy



Based on these proposed improvements, both low and high target shuttle bus mode share scenarios have been calculated for future concert events at the Stadium. A target of 4% (c.3,000 spectators) is proposed for the low scenario and 5.5% (c.4,125 spectators) for the high scenario. These mode shares will be reviewed annually based on data collection and analysis.

The shuttle bus strategy will be informed by post-event feedback and operational observations, allowing for continuous refinement and improvement of the service. It is important to note that the RFU maintains full control over the shuttle services and can increase the number of buses as required, subject to operating costs.

In terms of Transport Impacts, we have been in touch with South Western Railway, Network Rail and Transport for London. The feedback we have received is that SWR and NR have serious concerns that they will not be able to provide the required levels of service during weekday concerts. TfL have also highlighted concerns that if the trains are not able to be utilised as assumed by WSP, then the knock-on effects to the road network could be significant.

WSP Response:

An analysis of how spectator demand associated with existing and future events at the Stadium is forecast to be distributed across key railway stations in Southwest London is shown in Table 2 in the Transport EIA Screening note (reproduced in **Table 2** below). This sets out the forecast number of spectators interchanging at each station for both the existing and proposed concert scenarios, together with an existing rugby event.

				Total Spectators	5	Net Cha	ange
Station	Mode	Mode Share	Concert (Existing)	Concert (Existing) Rugby (Existing) Conce		Concert (Existing vs Proposed)	Rugby vs Proposed Concert
Twickenham	National Rail	93.2%	28,654	33,584	39,074	+10,420	+5,490
Richmond	National Rail	1.7%	523	613	713	+190	+100
Richmond	Underground / Overground	1.5%	461	541	629	+168	+88
Hounslow East	Underground	1.8%	553	649	755	+201	+106
Hounslow	National Rail	0.4%	123	144	168	+45	+24
Whitton	National Rail	0.2%	61	72	84	+22	+12
St Margarets	National Rail	0.8%	246	288	335	+89	+47
Other	-	0.4%	123	144	168	+45	+24
Total	100.0%	100.0%	30,745	36,034	41,925	+11,180	+5,891

Table 2 – Rail and Underground Mode Share Station Distribution

To further understand the hourly impact on rail services, various arrival profiles for both existing and proposed concerts have been compared with one another, together with an existing rugby event, as shown below in Figure 2. This is based on gate line data collected at the Allianz Stadium. The chart shows that weekday concerts have a flatter arrival profile than weekend events. Even the proposed weekday concert with one support act (red dashed line), which displays the most pronounced weekday peak arrival trend, only slightly exceeds the arrival peak associated with the existing weekend concert (solid black line). This demonstrates that weekday arrivals are more spread out, thereby reducing pressure on the transport network when compared with a weekend concert event.



Figure 2 - Comparison of Arrivals Profiles for Existing and Proposed Events

Due to the more gradual arrival pattern typically associated with concert events (particularly on weekdays as people actively seek to avoid typical commuter peak hours), demand is spread over a longer period and has been successfully accommodated by the existing rail network during previous weekday concert events (e.g. Rolling Stones in 2018, Metallica in 2019). Similarly, the departure demand associated with previous weekday concert events held at the Stadium has also been managed effectively.

The proposed uplift in concert capacity of 20,000 spectators (55,000 to 75,000) will result in increased rail demand; however, given that the current transport management strategy deployed by the Stadium on major events days is tried and tested, and when combined with the proposed transport interventions that aim to promote alternative travel options (by using different stations and routes) and improve the efficiency of the network (including a review of Twickenham

Station operations, promotion of additional local stations, and the use of digital ticketing and pre event travel information), it is anticipated that the transport demand generated by future weekday concert events at the Stadium would be accommodated on the existing network.

To further inform this assessment, additional analysis using the arrival profiles in **Figure 1** and the station distribution data from **Table 1** above has been undertaken to assess the rail interchanges that would be impacted most by Stadium events, namely Clapham Junction and Vauxhall. Examining evening peak hour service frequencies from these stations (which coincides with concert arrivals), the forecast number of additional passengers per service has been calculated (comparing an existing concert against a proposed concert).

For Vauxhall, Underground (Victoria line) services have been considered (which provide onward connections to Central London, including Euston and Kings Cross stations), and for Clapham Junction, Overground and National Rail services have been considered. This is shown in **Table 3** below.

The table shows that, during the peak hour of arrivals (1900–2000), there is forecast to be an additional c.30 passengers interchanging onto each Twickenham-bound service from these stations.

Stadium-bou	Stadium-bound Passengers per Interchanging Service																	
16:00 - 17:00				17:00 – 18:00			18:00 – 19:00		19:00 – 20:00		20:00 – 21:00			>21:00				
Station	Existing	Proposed	Net Change	Existing	Proposed	Net Change	Existing	Proposed	Net Change	Existing	Proposed	Net Change	Existing	Proposed	Net Change	Existing	Proposed	Net Change
Clapham Junction	2	3	+1	61	83	+22	70	96	+26	86	117	+31	14	19	+5	0	0	+0
Vauxhall	2	2	+1	54	73	+20	62	85	+23	76	103	+28	13	17	+5	0	0	+0

Table 3 – Additional Stadium-bound Passengers Interchanging from Other Services

When the additional rail passengers from the proposed concerts are distributed across stations, interchanges, and services, the uplift is considered manageable within the existing network capacity. This takes into considerations the following:

- There is precedent for hosting 55,000-capacity concert events at the Stadium on weekdays, when the existing transport management overlay accommodated the temporary increase in transport demand on the network
- The transition from 8-car to 10-car trains on the Twickenham line will further increase capacity on the network
- The transport interventions associated with the SMP project includes an enhanced digital and communications strategy, which will inform rail users of upcoming events at the Stadium, allowing them to re-time / re-route their journeys, or avoid travelling on event days altogether (noting that this would only occur on a handful of days each year given most future concert events at the Stadium are expected to occur on weekend days)
- Another key objective of the transport interventions proposed at the Stadium is to promote greater use of alternative local stations (other than Twickenham), including Hounslow East, to help ease pressure on services from the station

It is also important to emphasise that the impact of the future concert events held at the Stadium, together with the effectiveness of the proposed transport interventions, will be continuously monitored and reviewed. Event data, combined with stakeholder and user feedback, will be used to assess performance and guide future refinements. Where needed, additional or adjusted measures will be considered to address emerging challenges or opportunities.

Additional questions received from NR and the LBRuT (17th June, 2025 via email)

1. For the proposed concerts, what time will the main event start (in relation to graph on P23 of proposal)?

WSP Response:

While exact timings will vary from event to event, an indicative event schedule for a future concert is provided in **Table 4** below. This has been developed based on data collected at previous events held at the Stadium.

Table 4 – Indicative Concert Timings

Info	Concert With 1 Supporting Act	Concert With 2 Supporting Acts
Gates Open	17:00	16:00
Support Act (Start Time)	-	17:30 - 18:00
Support Act (Start Time)	18:30 - 19:00	18:30 - 19:00
Main Event (Start Time)	20:00 - 20:30	20:00 - 20:30
Event Finishes	22:30	22:30



- 2. We need more reliable estimated arrival profiles for a proposed weekday gig, Friday gig, Saturday gig & Sunday gig (this separation is required because people might behave differently on Friday versus other weekdays, and Saturday v Sunday). The current proposed profiles are each based on just one event which is insufficient
 - a. Is there data based on modelling or similar venues?

WSP Response:

The arrival profile data that is available from the RFU consists of the following concert events:

- The Rolling Stones (Tuesday, 2018)
- Metallica (Thursday, 2019)
- Depeche Mode (Saturday, 2023)

These datasets represent the only available information for concert events at Allianz Stadium and is considered robust, offering a representative mix of event types (weekday and weekend, and with one or two support acts). It is also more reliable than data from other venues, given the unique characteristics of each venue and their surrounding transport networks. While data is not available for the requested days (Friday and Sunday), the days analysed, such as Thursday, are considered a robust worst-case scenario, as Thursdays typically see high commuter volumes and greater baseline demand across the transport network. As part of the event planning and licensing process, a monitoring programme is proposed to record arrival profiles and mode share data for future concerts, which will inform the continued development of management plans, strategies and transport interventions.

b. Can this data be provided in a non-graph form, as it's hard to get numbers off the graph.

WSP Response:

The arrival profile for a weekday concert with 1 support act, a weekday concert with 2 support acts, and a weekend concert is presented below in **Table 5**. This is shown for both an existing concert event with a capacity of 55,000 spectators, and a proposed concert with a capacity of 75,000 spectators.

Table 5 – Arrival Profile and Spectator Numbers

Time	Weekday C	oncert with 1	Support Act	Weekday C	oncert with 2	Support Acts	Weekend (Concert	
Time	%	Existing Proposed		%	Existing	Proposed	%	Existing	Proposed
16:00	0.4%	243	332	6.1%	3335	4548	0.1%	61	83
16:15	0.2%	83	113	4.5%	2468	3366	0.0%	17	24
16:30	0.1%	51	69	4.5%	2492	3399	0.0%	16	22
16:45	0.2%	85	116	4.2%	2313	3155	0.0%	21	28
17:00	9.2%	5,081	6,929	4.7%	2579	3517	5.8%	3198	4361
17:15	6.1%	3,381	4,610	4.9%	2703	3686	4.0%	2204	3005
17:30	5.0%	2,747	3,746	5.9%	3261	4446	3.9%	2122	2894
17:45	5.7%	3,110	4,242	6.0%	3274	4464	5.1%	2824	3851
18:00	6.6%	3,637	4,959	6.8%	3735	5093	6.1%	3358	4579
18:15	7.1%	3,894	5,310	7.0%	3855	5257	6.8%	3754	5120
18:30	7.7%	4,259	5,807	6.9%	3792	5171	8.0%	4407	6010
18:45	8.7%	4,804	6,550	7.4%	4054	5528	9.2%	5041	6874
19:00	9.5%	5,217	7,114	7.4%	4049	5522	9.2%	5081	6928
19:15	9.8%	5,411	7,378	7.9%	4333	5908	10.3%	5670	7732
19:30	9.7%	5,335	7,275	7.2%	3954	5392	13.9%	7626	10398
19:45	7.8%	4,277	5,832	4.2%	2313	3155	10.2%	5598	7634
20:00	4.1%	2,252	3,070	2.9%	1593	2172	4.5%	2449	3340
20:15	1.5%	816	1,113	0.9%	510	695	1.8%	994	1356
20:30	0.4%	193	263	0.3%	142	194	0.7%	366	499
20:45	0.2%	85	116	0.1%	47	64	0.2%	120	164
21:00	0.0%	18	24	0.1%	33	44	0.1%	35	47
21:15	0.0%	4	6	0.1%	33	44	0.0%	23	31
21:30	0.0%	8	11	0.1%	56	77	0.0%	14	19
21:45	0.0%	9	13	0.1%	63	86	0.0%	1	1
22:00	0.0%	1	1	0.0%	13	18	0.0%	0	0
TOTAL	100.0%	55,000	75,000	100.0%	55,000	75,000	100.0%	55,000	75,000



3. We need estimated numbers for people using Twickenham station for an average proposed concert, and estimated numbers for which direction they would be coming from/going to (e.g. how many people are coming from Waterloo/Vauxhall/Clapham direction vs how many are coming from Reading/Staines/Windsor direction).

WSP Response:

Table 2 above, which was included in the EIA Transport Screening note, provides details on how spectator demand associated with rail travel is anticipated to be distributed across key stations in Southwest London.

In summary, data from previous events shows that at Twickenham Station, approximately 15% of spectators travel to/from the Reading and Windsor direction, while the majority of spectators (85%) travel to/from the Central London direction. In terms of numbers of spectators, this equates to the following for an existing and proposed concert (based on the 55.9% rail mode share recorded at previous concerts, of which 93.2% use Twickenham Station):

- Existing concert (total capacity of 55,000): 28,654 spectators use Twickenham Station, of which 24,356 travel to/from the Central London direction and 4,298 travel to/from the Reading direction
- **Proposed concert (total capacity of 75,000):** 39,074 spectators use Twickenham Station, of which 33,213 travel to/from the Central London direction and 5,861 travel to/from the Reading direction
- Net change in spectators between existing and proposed concert (uplift of 20,000): an additional 10,420 spectators use Twickenham Station, of which 8,857 travel to/from the Central London direction and 1,563 travel to/from the Reading direction
- 4. Postcode data for past concerts would be useful. If there's a model of postcode data for proposed concerts that'd be helpful

WSP Response:

Postcode data collected from ticket sales for the U2 concert in 2017 is presented in **Table 6** and illustrates that attendees travel significant distances for major concert events. The geographic distribution of spectators for future concerts is likely to be similar to this, though will differ from event to event depending on the artist and target demographic.

Table 6 – Geographic Distribution of Ticket Sales

Region	Spectators		
Region	Percent	Existing	Proposed
Inner London	16%	8,800	12,000
Greater London	26%	14,300	19,500
South	7%	3,850	5,250
Southeast	3%	1,650	2,250
Southwest	5%	2,750	3,750
Midlands	11%	6,050	8,250
East	6%	3,300	4,500
West	2%	1,100	1,500
Northeast	4%	2,200	3,000
Northwest	10%	5,500	7,500
North	3%	1,650	2,250
Scotland	4%	2,200	3,000
Wales	3%	1,650	2,250
Total	100%	55,000	75,000



5. A model of station distribution for proposed concerts, or an average from previous concerts is needed so we can know how many people to expect at each of our stations (the bar chart based only on the Rihanna concert is not helpful enough). Seeing as the intention is to promote alternative stations, is there a modelled version that takes that into account as well as a version based on how the station distribution would be without that promotion?

Response:

The station distribution for both the existing and proposed concert scenarios is shown in **Table 7**.

As expected, Twickenham Station is forecast to accommodate the majority of the uplift in spectators, with a total of 39,074 attendees expected to use the station during a proposed concert event.

The table also presents "Low" and "High" redistribution scenarios, which assume moderate and substantial shifts to other routes/stations, depending on the effectiveness of the RFU's proposed additional (new) transport interventions. These interventions include improved digital communications highlighting alternative route/station options, upgraded signage and wayfinding, and enhanced shuttle bus operations, all aimed at supporting more balanced crowd dispersal, improving overall transport network performance and reducing the reliance on Twickenham Station.

NSD

Table 7 – Allianz Stadium Spectators: Forecast Rail Station Redistribution (Existing vs. Future Concert Events)

		Existing and	Proposed Cor	ncerts		Low Scenari	0			High Scenario				
Station	Mode	(No Transpor	t Interventions)			(Moderate Im	pact of Transpo	ort Interventions	3)	(Substantial Impact of Transport Interventions)				
Station	Mode	Mode Share	Spectators (Existing)	Spectators (Proposed)	Uplift (From Existing)	Mode Share	Change	Spectators (Proposed)	Uplift (From Existing)	Mode Share	Change	Spectators (Proposed)	Uplift (From Existing)	
Twickenham	National Rail	93.20%	28,654	39,074	+10,420	85.00%	-8.20%	35,636	+6,982	75.00%	-18.20%	31,444	+2,789	
	National Rail	1.70%	523	713	+190	1.70%	-	713	+190	1.70%	-	713	+190	
Richmond	Underground / Overground	1.50%	461	629	+168	3.60%	2.10%	1,509	+1,048	6.80%	5.30%	2,851	+2,390	
Hounslow East	Underground	1.80%	553	755	+201	3.90%	2.10%	1,635	+1,082	7.10%	5.30%	2,977	+2,423	
Hounslow	National Rail	0.40%	123	168	+45	2.40%	2.00%	1,006	+883	4.20%	3.80%	1,761	+1,638	
Whitton	National Rail	0.20%	61	84	+22	2.20%	2.00%	922	+861	4.00%	3.80%	1,677	+1,616	
St Margarets	National Rail	0.80%	246	335	+89	0.80%	-	335	+89	0.80%	-	335	+89	
Other	-	0.40%	123	168	+45	0.40%	-	168	+45	0.40%	-	168	+45	
Total	100.00%	100%	30,745	41,925	+11,180	100%	-	41,925	+11,180	100%	-	41,925	+11,180	



6. What data is the mode share info for concerts based on (P24 of proposal)?

WSP Response:

Mode share data from the 2013 Rihanna concert at Allianz Stadium has been used to inform the transport assessment work. While the data is several years old, there have been no significant changes to local transport provision in the area since that time. It is acknowledged that broader travel trends, such as the expansion of ULEZ and increased cycling uptake, may influence behaviour; however, the 2013 data is considered a robust basis for the assessment. It is also worth noting that the 2011 Census remains widely used in transport assessments, given the limitations of the 2021 Census data due to the impacts of COVID 19. In this context, the use of 2013 mode share data is considered consistent with standard industry practice.

Please provide more information about how the estimates for the net impact of vehicular trips generated by the development on the four links was derived and regarding the forecast number of HGV trips per event.

WSP Response:

Baseline traffic flows are based on existing DfT counts in the local area, with a first principles approach applied to the distribution of development traffic. It should be noted that in assessing allocated and unallocated parking, the high proportion of unallocated parking, largely outside RFU control, makes accurate vehicle routing analysis unfeasible. This is particularly true for driveway rentals, which account for a significant share and cannot be practically modelled at an individual level. Additionally, unlike typical development scenarios without event overlay, this project includes extensive pre-event, during event, and post-event traffic management, which further limit the ability to accurately model traffic flows. Also, background traffic patterns are likely to change as drivers respond to pre-event warnings by adjusting routes or travel times (or not travelling at all), further limiting the reliability of accurate routing analysis.

Nevertheless, a high-level routing analysis has been undertaken, reflecting a worst-case scenario based on available data. The methodology for this assessment is outlined below:

General

- DfT count data has been factored up to 2026 using TEMPRO, representing the first year in which the additional concert events could be implemented
- Development-related vehicle trips have been assessed across the following modes: private cars (both parked and drop-off) and taxis. All relevant demand has been fully accounted for in the analysis
- An assumed occupancy of 3 passengers per vehicle has been applied to all modes (as agreed with LBRuT during pre-application discussions)



A316 Chertsey Road

- A robust worst-case scenario has been tested, which assumes that all spectator vehicle traffic uses the A316 at some point in their journey
- Based on a review of ticket sales distribution data for the U2 2017 concert and route mapping via online navigation tools, it is assumed that 61% of vehicle traffic approaches from the east (travelling westbound on the A316) and 39% from the west (travelling eastbound)

Whitton Dene / London Road

- It is assumed that all taxis and vehicles accessing allocated parking (North Car Park and Tesco Car Park) route via the Whitton Dene / Mogden Lane roundabout, using either Whitton Dene or London Road (again, this is a high-level robust scenario)
- The arrival distribution to this area follows the same directional split of 61% from the east and 39% from the west

Exclusions

• Drop-offs and unallocated parking have not been assigned to specific local roads in the model but have been accounted for on the A316 corridor to reflect their contribution to overall network demand

While it is possible to estimate vehicle numbers and likely routes using journey origin data, real-time variability means that both event and baseline traffic will differ between events. As a result, detailed traffic modelling would be highly inaccurate and offer limited (if any) value. Overall, the analysis shows that the proposed concert would increase vehicle numbers compared to existing concerts, but the associated traffic increase remains well below 10% (as shown in Table 3 of the EIA Screening transport document).

Based on standard IEMA assessment criteria, which states '*Rule 1 Include highway links where traffic flows will increase by more than 30%* (or the number of *heavy goods vehicles will increase by more than 30%*)' and '*Rule 2 Include highway links of high sensitivity where traffic flows have increased by 10% or more*', this level of change is considered negligible in terms of impact, and future events are expected to have similar effects to those experienced at existing events at the Stadium. It is also important to emphasise that this impact will be temporary, occurring only on a limited number of days per year, and is therefore not considered to have a significant effect on annual traffic patterns or impact in the area.

With regard to HGV movements, these have not been specifically modelled; however, the proposed increase in concert capacity is not expected to generate additional HGV trips, as a similar set-up and take-down operation is required for both existing and proposed concerts, and is not directly correlated with event capacity. While it is proposed to increase the number of annual events, these will largely be multiple non-sporting event days grouped together (for example, a run of three concerts over a week), and therefore would not generate significantly more HGV trips compared to a single standalone concert which the Stadium

already operates. Furthermore, the HGV movements associated with the events will predominantly relate to set-up and take-down activities, occurring in the lead-up to and following each event. As such, they will not coincide with the peak in traffic associated with event attendees. As with general traffic, the impact of any additional HGV movements will be temporary, occurring only on a limited number of days per year.

Summary

In summary, we do not believe the proposed event changes at the Stadium triggers a 'significant' impact within the meaning of the EIA Regulations or the requirement for an ES Transport chapter due to:

- The additional and considered rationale set out within this note
- The occasional nature of the weekday events proposed, which are unlikely to occur more than a handful of times each year
- The short-term, temporary impact of these events, which are confined to a few hours before and after the event
- The fact that the Stadium already hosts regular, major concert and sporting events of up to 82,000 spectators, with tried and tested transport management plans already in place
- The fact that the Stadium already has permission to host 82,000-capacity events on weekdays
- The additional (new) transport interventions and management that is proposed by the Stadium to further minimise the impact of all future events, including a commitment to adopting a monitor and manage approach to Stadium-related travel planning moving forwards