

Enterprise and Business Committee meeting, 5 November 2015

England 2015 Rugby World Cup - Transport

Evidence provided by England Rugby 2015 Ltd

Introduction

This written evidence is provided by England Rugby 2015 Ltd, the organisers of the 2015 Rugby World Cup. It covers the following areas;

1. Roles and Responsibilities
2. Transport Planning for Matches at Millennium Stadium Cardiff
3. Stakeholder Involvement
4. Key Transport Objectives for the Rugby World Cup
5. Key Transport Challenges for the Rugby World Cup
6. Pre-Tournament Transport Plan and Investments
7. Transport Operations during the Tournament
8. First In-Tournament Review
9. Australia v Fiji 23rd September 2015
10. Post Australia vs Fiji Discussions
11. Monitoring of Transport and Changes made after Australia v Fiji
12. Lessons Learned
13. Financial Contribution by England 2015

1. Roles and Responsibilities

Rugby World Cup Ltd, under the control and direction of World Rugby (formerly the International Rugby Board), is the owner of all rights associated with the Rugby World Cup.

England Rugby 2015 Ltd is the Tournament Organiser for the 2015 Rugby World Cup held in England and Wales. England 2015's Transport team is responsible for delivering transport for accredited client groups (eg Teams, sponsors, guests) and ensuring that suitable transport arrangements are provided for spectators at all venues.

Within the governance arrangements for the Tournament, Host City Agreements were signed between City Local Authorities and England 2015. Under the terms of the Host City Agreement, which gives Cardiff the right to host 2015 Rugby World Cup matches, Cardiff City Council was responsible for producing the Venue Transport Operating Plan for the matches at Millennium Stadium in conjunction with England 2015 and for making arrangements for the spectator transport provisions.

2. Transport Planning for Matches at Millennium Stadium Cardiff

England 2015 commenced detailed transport planning for matches at Millennium Stadium in September 2013, two years before the Tournament. The Transport function was headed by a Tournament Transport Manager and the transport team included staff with direct experience of transport at Cardiff from the successful London 2012 Olympic Games. England 2015 have been supported by Christopher Garnett OBE (Former Chairman of the Olympic Delivery Authority Transport Board) and transport consultancy Steer Davies Gleave (including the ex-Head of Transport Planning for the Olympic Delivery Authority).

England 2015 appointed a National Transport Manager for City Transport planning along with City specific Transport Managers to facilitate specifically the transport planning with City authority representatives, Transport Operators, Highways Wales and relevant government departments. Cardiff had a dedicated transport manager allocated by England 2015

England 2015 also appointed a specialist Travel Demand Management (TDM) Team with experience of delivering TDM at the London 2012 Olympics and Glasgow Commonwealth Games 2014.

The transport planning process for Cardiff (mirrored for all Rugby World Cup Venues and Host Cities) involved the following key steps;

- i) Review of existing transport operations for rugby international matches at Millennium Stadium;
- ii) Survey of transport operations and travel behaviour of spectators attending matches at the Millennium Stadium;
- iii) Demand forecasting of travel patterns likely to be generated by each match of the Rugby World Cup;
- iv) Development of bespoke transport planning tool for the Tournament, 'TRACME' (Transport Capacity Model for England 2015);
- v) Sharing of information and forecasts with transport stakeholders;
- vi) Working with stakeholders to secure additional transport capacity where and when needed;
- vii) Updating of TRACME forecasts to reflect actual match ticket sales data (where spectators would be likely to be travelling from) and additional planned transport service provision (including additional train services, park & ride, shuttle buses);
- viii) Regular meetings to review progress with transport stakeholders.
- ix) Development of an integrated Venue Transport Operating Plan – covering planned transport operations for client groups – teams, officials, Tournament Guests, Sponsors, Press, Broadcast and Workforce – and spectators
- x) Development of a co-ordinated Travel Demand Management Plan to include:
 - Messages to spectators via multi-media channels including the development of a bespoke Spectator Journey Planner
 - Co-ordinated Multi Agency travel advice
 - Co-ordinated multi agency messaging campaign to background users of transport systems advising of the potential impact of the Rugby World Cup on journeys
 - Co-ordinated messaging campaign to residents and businesses advising on the implications of the Rugby World Cup on the conduct of their day to day activities

3. Stakeholder Involvement

England 2015 established a regular transport working group – Venue Transport Working Group - involving the following key transport stakeholders;

- England 2015 and its advisors;
- Cardiff City Council;
- Arriva Trains Wales;
- Great Western Railway (formerly First Great Western);
- Cross Country
- Association of Train Operating Companies;
- Welsh Assembly;
- British Transport Police

- South Wales Police
- South Wales Trunk Road Agency
- Millennium Stadium
- Highways Agency

In addition to regular transport working group meetings for the Cardiff venue, key stakeholders from Cardiff and Wales were invited to England 2015's transport oversight group, the National Transport Coordination Group which met on a quarterly basis.

In addition, a series of 'Rail Review Days' were held where it was sought to address issues of capacity and timetabling with all of the appropriate train operating companies, Network Rail, the Welsh Government and Cardiff Council. Dates: 07/03/2014, 12/08/2014, 05/11/2014, 25/11/2014, 12/01/2015, 19/08/2015.

4. Key Transport Objectives for the Rugby World Cup

England 2015 set the following as the key transport objectives for the Tournament

- i) All England 2015 client groups to be able to get to the right place, at the right time, every time, in the safest and most efficient manner;
- ii) Spectators and workforce able to travel to and from each venue safely in adequate time and comfort;
- iii) Egress clearance times to be targeted at less than 2 hours to be able to leave the City and to achieve normal 'freeflow' at station and on roads within this timeframe
- iv) Host cities are not unduly disrupted and any potential impacts on local residents and businesses are minimised"

5. Key Transport Challenges for the Rugby World Cup

Every major event generates its own patterns of spectator transport. The Rugby World Cup is very different to 'typical' international rugby matches at the Millennium Stadium. Key differences include;

- Matches on different days of the week (Wed, Thurs, Fri, Sat and Sun);
- Matches on concurrent days;
- Kick off times (13.00, 14.30, 16.45 and 20.00);
- Teams involved (2 matches involving Wales, 6 without Wales);
- Match ticket sales method;
- Fan Zone at Cardiff Arms Park.

These key differences resulted in much larger proportions of match ticket holders from outside Wales than would normally be the case for events at Millennium Stadium, meaning that many more trips would be made to Cardiff from England, particularly London and the South of England. Based on the best available data from Ticketmaster, the proportion of tickets sold to people with a postcode in Wales varied between around 5% for matches not involving the Wales team and 25% for matches when Wales were playing. This key information was shared with stakeholders on a regular basis as ticket sales progressed.

Three different passenger train operating companies operate through Cardiff Central Station on a large number of different routes. This complexity is usually exacerbated on match day by special charter trains and also freight trains passing through the station.

England 2015 had studied the Cardiff transport operations for previous Wales matches and for other non-Wales match events – such as the Heineken Cup Final in 2014. The conclusion was reached that significant improvements would need to be made to cater for

- i) Train operations – insufficient trains provided to move the audience size and destination / origination
- ii) Queuing arrangements at Cardiff Central station – impacted by the proximity of the Stadium to the station and therefore lack of buffer space and subsequently compounded by the decision to approve a new building on the forecourt – previously used as a bus station - and providing increased queuing area – and which therefore was to be boarded up as a building site during the Rugby World Cup Tournament
- iii) Provision of sufficient parking through Park and Ride schemes – business as usual is not pre-sold and therefore did not facilitate audience pre-planning of their parking
- iv) Travel Demand Management – to influence background users and spectators alike in their travel behaviours given
 - the traffic congestion associated with the singular route in via the M4 and the bottle-neck of the Brynglas Tunnels
 - the limitations of Cardiff Central Station and the complexity of routing through the station

6. Pre-Tournament Transport Plan and Investments

To address concerns England 2015 agreed the following with the relevant stakeholders

- i) To fund the hiring of 3 additional Charter trains to supplement the proposed train provision from Arriva Trains, Cross Country Trains and First Great western. Net cost of **£429k**
- ii) To provide a financial guarantee to Cardiff City Council of **£80k** to stand up additional Park and Ride sites / capacity and to have spaces pre-sold
- iii) To provide Travel Demand Management services including radio adverts, Billboard campaigns, highway messaging, a Spectator Journey Planner **£90K**
- iv) To provide an advanced payment website for park and ride / park and walk car parks.

At the commencement of the Tournament, England 2015 still rated Cardiff (along with Twickenham and Birmingham) as a RED venue on a RAG risk scale. This was due to ongoing concerns about transport arrangements and the applied capability to achieve the tournament transport objectives at this venue

7. Transport Operations during the Tournament

For the first two matches on the weekend of 19/20 September significant criticism was expressed from spectators of the rail services provided at Cardiff and such comment was reflected in the media.

Both matches kicked off at 14.30 and finished at approximately 16.20. Queues for trains outside Cardiff station cleared over a 3-4 hour period after the final whistle.

Queuing arrangements were regarded as unacceptable at both Paddington on ingress and then on egress at Cardiff Central Station

For context, the target clearance time for spectators achieved at the Tournament at Wembley Stadium (90,000 capacity) was between 60 and 90 minutes. At Twickenham Stadium (82,000 capacity) clearance times through Twickenham Station typically ranged between 1 and 2 hours.

8. First In- Tournament Review

A review was held at Arriva Trains Wales offices in Cardiff on 22nd September 2015. This was attended by Arriva Trains Wales; First Great Western; Cardiff City Council; Welsh Government; British Transport Police; England 2015.

At this review England 2015 expressed concern that the experience for spectators had been unacceptable and a request for a 'step change' in operational performance was made

Proposed improvements for the next match – Australia v Fiji on Wednesday afternoon 23rd September 16.45 kick off – were made including

- i) Increased train capacity plan from First Great Western
- ii) Provision of supplementary bus capacity to transport spectators to Bristol and free up capacity for London bound trains / passengers
- iii) Opening of the hoardings surrounding the bus station to provide additional queuing space

A further request was also made for the consideration of more radical initiatives such as the use of Queen Street station for loading of west bound services. This was considered but later dismissed

9. Australia v Fiji 23rd September 2015

Egress arrangements for the match resulted in an unacceptable experience for the spectators

- i) Disorganised queues extending onto Wood Street and along St Mary's Street with no visible signage or safety barrier containment
- ii) Train capacities underutilised due to loading techniques
- iii) Poor communications on the ground and lack of integrated command resulting in distressed customers

Significant complaints were taken on the ground from spectators (and subsequent written complaints from spectators)

10. Post Australia vs Fiji Discussions

24th September 2015

England 2015 wrote to the First Minister for Wales copying Cardiff City Council, Arriva Trains Wales, First Great Western, Millennium Stadium and Visit Wales expressing frustration and requesting support for a step change in operations A response was received from the First Minister

A meeting was called for the 25th September inviting representatives from all of the above along with British Transport Police and other police commanders

A pre-meeting was called by Cardiff City Council on the evening of 24th September attended by representatives from Welsh Government and England 2015. England 2015 were asked to outline the key changes required to address the spectator experience for upcoming matches and requested to outline these in a documented proposal for consideration at the meeting to be held on 25th September (see appendix A)

25th September 2015

A meeting was held at Millennium Stadium with senior representatives of the key stakeholders. The 14 point plan (See Appendix A) was presented by England 2015 and initial reactions from stakeholders were taken with enhanced proposals for

- i) train capacity
- ii) Loading systems
- iii) Revised queuing systems
- iv) Coach support operations
- v) Traffic management and stewarding
- vi) Command and control changes

11. Monitoring of Transport and Changes made after Australia v Fiji (23rd September 2015)

Each subsequent week during the Tournament, England 2015 and key transport stakeholders met to review the transport operations for the previous match(es). These meetings included reviews of the number of passengers carried for previous matches, forecasts for the forthcoming matches and the transport services required to meet the expected demand.

Following the first 3 matches when a high number of complaints were received, train operating companies, particularly GWR, increased the number of trains that they ran both to and from Cardiff.

In addition, England 2015 organised and funded the provision of 100 shuttle buses to help transport spectators from Cardiff to Bristol Parkway and Bristol Temple Meads in order to help ease the pressure on the rail services and reduce queuing times.

In order to better manage the queues of spectators outside Cardiff Station after the matches the temporary canopies were removed to increase the space available for queuing and a new barrier system was introduced with additional man power, signage and overhead gantries.

Spectator Experience Survey results demonstrated a dramatic improvement with Transport Experience ratings rising as follows:

Satisfaction Rating		0-6	7-8	9-10
Australia v Fiji	23 rd Sept	50%	23%	27%
France v Ireland	11 th Oct	23%	31%	41%

Train Passenger Data

Arriva Trains Wales collect count data for the number of passengers alighting at Cardiff Station before the match and boarding after the match.

Appendix B (Table 1) presents the data provided to England 2015 by Arriva Trains Wales, broken down by route. On the busiest match, over 31,000 people travelled by train after the match away from Cardiff Central Station. On average across the 8 matches 22,000 people travelled by train after the match.

Appendix B (Table 2) compares the number of passengers counted boarding trains at Cardiff Central Station after each match with the numbers that were forecast by England 2015's transport consultants. Whilst there were inevitably differences between the forecast numbers and the actual demand, it is clear that in most cases the forecasts were remarkably accurate given the challenge of such a forecasting exercise.

12. Lessons Learned

Several important lessons can be learned from the transport operations for the Rugby World Cup in relation to future events in Cardiff. The key lessons as suggested by England 2015 are listed below;

- i. Major events such as the Rugby World Cup generate different patterns of spectator travel than are normally experienced for a Wales international rugby match and require different transport arrangements (over 75% tickets for the RWC were from people based outside Wales).
- ii. Arriva Trains Wales stated that the capacity of Cardiff Central Station is about 10,000 passengers per hour. On busy days when over 30,000 spectators are expected to use the services, this would take over 3 hours (at least) to load spectators onto trains after the event. Measures should therefore be examined on how to increase the throughput of the station, and train services serving it, to load passengers more quickly, as demonstrated successfully during the final five matches of the RWC in Cardiff.
- iii. Changes to the normal operation of Cardiff Central station can help significantly. Specifically;
 - a. Suspending freight train movements through the station during peak post event 3-hour period
 - b. Controlling/managing the operation of commercial charter trains at the station at peak times
 - c. Optimisation of train boarding (eg pre-loading platforms)
 - d. Having at least two trains for the primary direction of post-event travel waiting on the platforms at the finish time of the event
 - e. Optimisation of queuing outside the station to reflect the likely demand for different routes
- iv. Spectator travel patterns were forecast and shared with stakeholders. Train services could have been planned better to provide adequate capacity on those routes that were forecast to be heavily used.
- v. Most spectators do not book their rail travel tickets a long time in advance, so relying on rail ticket sales data to plan rail service capacity is not recommended.
- vi. Pre-event communications, particularly emails to ticket holders, can be used to successfully influence spectators to travel early in the day thereby spreading the peak load more evenly.
- vii. It is helpful if all transport operators point spectators towards an official event transport advice on the event website and/or journey planner (if provided) to achieve consistency of message.

- viii. Coordination of transport planning for major events across all the different agencies and operators is required to provide an integrated transport plan. The Welsh Government could play a stronger role in this regard.
- ix. Welsh Government to agree transport operating budget at bid phase with Cardiff City Council and event organisers
- x. Welsh Government to appoint a transportation specialist to lead the coordination of all operator planning and integration with event organisers
- xi. Sufficient space in the optimum location should be provided for the staging and loading of buses on those occasions when bus operations are required to supplement rail capacity.
- xii. Technical improvements for Queen Street station should be explored to enable egress operations to be simplified for the Cardiff Central queuing options and create improved queuing space
- xiii. A review of the queue management systems at Cardiff Central Station is recommended which should consider dynamic management/positioning of the queue systems in the light of the most up to date intelligence on the weight of spectator movement origins as opposed to the previous, fixed location queuing mechanisms.
- xiv. Park & ride facilities should be reviewed and secured well in advance of the event with guarantees in place that the sites will be available irrespective of any industrial disputes. Pre-payment options should be considered.
- xv. Personnel to be deployed and visible along whole length of the queue (inside and outside of the external queuing concourse) to provide information on connecting trains, latest timetables.
- xvi. There should be an Integrated Command Structure in order to be clear on the full footprint command and communication.
- xvii. An open minded and positive pro-active attitude to planning and resolving issues should be maintained
- xviii. Comprehensive briefing and messaging to be undertaken through the organisation structures of all parties to ensure clarity of purpose and operation on the ground - prior to the event.

13. Financial Contribution by England 2015

England 2015 contributed a significant amount of funding towards the spectator transport operation at Cardiff for the Rugby World Cup. Table 3 below summarises what was spent.

Services	£
Great Western Charter Services	£0.4m
Bristol Shuttle Bus Services	£0.6m
Cardiff City Council Revenue Guarantee	£0.08m
Travel Demand Management	£0.5m
Park and Ride Operations and Traffic Management Services	£0.2m
Consultancy and design services	£0.25m
Overlay, Signage and Equipment	£0.15m
Crowd Management Personnel	£0.2m
Total	£2.4m

Appendix A

Summary Position Paper for Suggested Cardiff Transport Step Change Improvements

24th September 2015

- i. Complete revision of the current Queue Management and release / pulsing operation at Cardiff Central. Removing the restriction of only one queue movement at a time. The current system can only facilitate very slow loading of trains **after** their arrival at the station. The resultant impact creates unreasonably long queues, stretching to St Mary's Street at peak (with possible H&S and welfare concerns). A pre-loading system, as utilised at many other high demand stations, would facilitate a more rapid loading and reduced queue time
- ii. Provision of a Coach loading/staging area for ER2015 supplied coaches to use on the Bristol routes. Suggestion is a Tudor street loading area and Fitzhammond Embankment/Castle Street as bus staging to transport spectators to Bristol Parkway and Temple Meads
- iii. Use of Queen Street station for egress operations to be revisited in relation to simplifying the Cardiff Central queuing options and create improved queuing space
- iv. Queue system and queue management including barriers, further overhead gantries and stewarding to extend into Wood Street. To manage and organise the spectators earlier, to enable a systematic approach to the station and prevent possible H&S issues in this area
- v. Dynamic management/positioning of the queue systems at Cardiff Station, in the light of the most up to date intelligence on the weight of spectator movement origins as opposed to the current, fixed location queuing mechanisms.
- vi. Further review of the capability to use Central Square/Bus Station access, to facilitate further options to queue spectators, along with a review of other station land options
- vii. Additional Park & Ride and additional Park &Walk locations to be identified, provided and managed with pre-payment capability for the audience
- viii. Arriva train personnel to be deployed and visible along whole length of the queue (inside and outside of the external queuing concourse) to provide information on connecting trains, latest timetables, and to be accountable for performance progress live to customers etc.
- ix. Integrated Command Structure – to be clear on the full footprint command and communication and clarity on where the overall command is actually being managed from (who has primacy in decisions, are the primary decision makers located together, so timely decisions can be made to and from the ground to react/prevent issues).
- x. Operational Communications to include all the various stakeholders having the capability to communicate together real time to manage the operation on the ground – through integrated radio distribution (at a command level).
- xi. List of FAQ's to give to our volunteers and Sword Stewards.
- xii. An open minded and positive pro-active attitude to planning and resolving issues.
- xiii. Comprehensive briefing and messaging to be undertaken through the organisation structures of all parties to ensure clarity of purpose and operation on the ground - prior to the event.
- xiv. Establish queue access points for supervisors and removal of eg. ill spectators out of the queues

England 2015 – 24th September 2015

Appendix B

Table 1: Cardiff Central Station, Passenger Count Data

OBSERVED STATION COUNT DATA																	
Route	TRAC ME link	Saturday 19th September 14.30 Ireland v Canada		Sunday 20th September 14.30 Wales v Uruguay		Wednesday 23rd September 16.45 Australia v Fiji		Thursday 1st October 16.45 Wales v Fiji		Friday 2nd October 20.00 New Zealand v Georgia		Sunday 11th October 16.45 France v Ireland		Saturday 17th October 20.00 QF2 New Zealand v France		Sunday 18th October 13.00 QF3 Ireland v Argentina	
		Inward	Return	Inward	Return	Inward	Return	Inward	Return	Inward	Return	Inward	Return	Inward	Return	Inward	Return
London	B3	4,033	5,525	5,482	4,580	11,070	6,100	4,724	3,530	11,372	2,426	8,548	6,901	8,468	2,925	7,748	8,514
Bristol Parkway			1,792		1,780		2,900		982		2,375		1,600		1,104		1,024
Bristol Temple Meads	B4	5,183	4,962	3,444	4,160	5,964	4,545	7,200	4,289	9,477	3,878	3,304	3,724	6,369	3,300	3,164	3,766
Ebbw Vale	B0	2,512	831	1,622	463	1,729	222	1,602	483	1,142	287	300	0	1,581	177	390	222
Newport Shuttles	B1	1,699	1,956	1,670	2,200	2,005	2,152	0	1,522	599	1,800	2,058	1,098	1,019	1,481	934	1,084
Marches		2,089	1,244	1,034	1,066	2,599	861	1,199	917	1,926	603	1,880	252	1,473	319	171	624
North Wales		1,445	253	356	170	2,375	150	1,264	500	1,300	0	107	300	616	-	-	242
Birmingham	B2	3,896	1,661	1,892	1,335	2,653	857	2,253	932	1,772	388	1,929	802	1,501	100	877	882
Gloucester		1,769	1,487	953	1,025	2,296	1,599	1,666	1,069	1,084	1,284	1,350	755	1,321	887	745	422
West Wales	D	3,892	3,510	2,602	2,179	3,517	1,598	5,214	3,277	4,075	1,500	2,201	1,355	4,701	1,681	1,976	1,598
Valleys	A + C	5,778	8,350	4,192	5,200	5,667	2,800	7,552	5,930	6,057	3,000	2,760	2,051	7,735	3,407	3,531	2,900
Cardiff Queen Street		5,390		2,081		790		5,491		5,780		3,304		5,731	-	1,956	-
Total		37,686	31,571	25,328	24,158	40,665	23,784	38,165	23,431	44,584	17,541	27,741	18,838	40,515	15,381	21,492	21,278

Table 2: Actual vs Forecast Passenger Numbers at Cardiff Central Station

Route	TRACME link	Saturday 19th September Ireland v Canada		Sunday 20th September Wales v Uruguay		Wednesday 23rd September Australia v Fiji		Thursday 1st October Wales v Fiji		Friday 2nd October New Zealand v Georgia		Sunday 11th October France v Ireland		Saturday 17th October QF2		Sunday 18th October QF3		
		Counted	Forecast	Counted	Forecast	Counted	Forecast	Counted	Forecast	Counted	Forecast	Counted	Forecast	Counted	Forecast (revised)	Counted	Forecast (revised)	
The Valleys	A + C	8,350	1,954	5,200	10,342	2,800	1,177	5,930	5,957	3,000	247	2,051	1,005	3,407	6,000	2,900	3,000	
Ebbw Vale	B0	831	165	463	138	222	116	483	148	287	16	-	63	177	-	222	-	
Newport	B1	1,956	2,333	2,200	3,608	2,152	1,558	1,522	2,910	1,800	1,588	1,098	1,352	1,481	3,300	1,084	3,300	
Marches		1,244		1,066		861		917		603		252		319		624		
North Wales		253		170		150		500		-		300		-		242		
Gloucester	B2	1,487	4,836	1,025	4,694	1,599	4,245	1,069	3,853	1,284	4,678	755	3,529	887	3,000	422	2,000	
Birmingham		1,661		1,335		857		932		388		802		100		882		
London	B3	5,525	8,820	4,580	10,125	6,100	8,627	3,530	7,726	2,426	7,133	6,901	10,861	2,925	9,000	8,514	10,000	
Bristol Parkway		1,792		1,780		2,900		982		2,375		1,600		1,104		1,024		
Bristol Temple Meads	B4	4,962	5,304	4,160	5,713	4,545	6,563	4,289	5,613	3,878	6,418	3,724	3,565	3,300	5,500	3,766	4,000	
West Wales	D	3,510	3,494	2,179	8,734	1,598	1,511	3,277	5,949	1,500	758	1,355	1,717	1,681	3,000	1,598	2,000	
Total		31,571	26,906	24,158	43,354	23,784	23,797	23,431	32,156	17,541	20,838	18,838	22,092	15,381	29,800	21,278	24,300	
Additional "spectating spectators" added to forecasts for matches involving Wales only					15,000						8,000							
Total Forecast without additional "spectating spectators" added					28,354						24,156							

NB. Forecasts for the last two (quarter final) matches were revised following learnings from the first six matches.