



**Proposed Development at Penine Way**  
Matchday Transport Strategy

Hemel Stags RLFC  
February 2008

Prepared and ..... Approved by: .....  
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# 1 Introduction

# 1 Introduction

## 1.1

### Background

Faber Maunsell have been commissioned to assist with the development of the Matchday Transport Strategy / Travel Plan in connection with the proposed development of a new stand at the Penine Way site.

The key development proposals are the provision of a new grandstand (capacity 500 persons) and associated ground improvements to provide a potential maximum capacity of 2,000 persons. In addition the proposals are likely to include the provision of new public changing rooms, a new multi-sports area, hospitality, fitness / rehabilitation and education facilities together with additional car parking spaces.

In order to satisfy the planning and highway authority that the proposed development will not lead to unacceptable transportation impacts, a Match Day Transport Strategy rather than a more traditional Transport Assessment has been produced. This will address the following scenarios

- Typical Anticipated Matchday Capacity – 300 to 500 spectators
- Major Event up to 2,000 spectators (eg Cup Match against Major Side)

The development of a clear and coherent match day transport strategy is essential and will consider mode of travel, traffic management arrangements and access requirements. The matchday transport strategy is to be used as the basis for initial discussions and negotiations between the club and the highway and planning authorities.

## 1.2

### Scope of Work

The scope of work has included consideration of the following at a strategic level.

- • transport strategy: key principles;
- • spectator characteristics;
- • arrival and dispersal profiles;
- • bus, rail and coach services and frequencies;
- • car and coach parking;
- • potential shuttle bus arrangements for major events;
- • arrangements for emergency vehicles;
- • traffic management arrangements; and
- • information and marketing

The key elements of the Transport Strategy are set out in section 2 along with the key commitments to help with the delivery of the Strategy. A summary of the Transport Strategy and key commitments is provided in section 3 along with key target modal splits.

## 2 Transport Strategy

## 2 Transport Strategy

### 2.1 Transport Strategy – Key Principles

The Match day Transport Strategy for the proposed development has the following key objectives;

- To provide efficient transport facilities for arriving and departing spectators;
- To minimise adverse impacts on the local community and transport facilities;
- To reduce the impact of the event on the local network and residents;
- To ensure the safe dispersal of all spectators within the minimum possible time.
- To encourage and maximise the use of non-car modes;

It is proposed that a package of measures will be put in place to ensure the successful implementation of the Transport Strategy. These measures will be discussed and agreed with the local planning and highway authorities, the local Police and key transport operators before implementation. The key package of measures are summarised in the following sections below, along with key relevant assumptions.

### 2.2 Event Profile

The Hemel Stags currently play in the Rugby League Conference National League 3. The current senior fixtures include the following;

- Rugby League Conference National League Matches – 8 home matches played on Sunday afternoons between April and September – 2pm kick offs
- Northern Rail Cup – 3 group matches played on Sunday afternoons

The current home fixture list and approximate attendances are summarised below. Based on available information for this season, the maximum attendance is of the order of 130 spectators, with an average attendance over the season of 106.

**Table 2.1 – Current Home Fixtures and Approximate Attendances**

Date	Fixture	Approximate Attendance	Estimated Away Support (%)
11-Feb-07	<b>Northern Rail Cup</b> Bramley Buffaloes	130	10% approx
04-Mar-07	Warrington Wizards	50	
10-Mar-07	Dewsbury Celtic	100	
21-Apr-07	<b>Rugby League Conference National League</b> Leeds Akademiks	130	10% approx
12-May-07	Gateshead Storm	130	
26-May-07	East Lancashire	110	
16-Jun-07	Dewsbury Celtic	100	
22-Jul-07	Warrington Wizards	100	
05-Aug-07	Bramley Buffaloes	tbc	
02-Sep-07	Huddersfield	tbc	
09-Sep-07	Featherstone Lions	tbc	
Average to Date		106	10% approx

Travel surveys were undertaken by the club in May in order to establish the existing mode of travel for players, officials, staff and spectators. The trip generation of this fixture was as follows:

- Players and match officials – 43 persons
- Spectators – 132 persons (typically about 10% are away supporters)
- Matchday staff and Club Members – 13 persons
- Overall total – 188 persons

The results, in terms of main mode of travel, are summarised in Table 2.3.

**Table 2.2 – Current Trip Generation Mode (Hemel Stags v Gateshead Storm 12 May 2007)**

Category	Current Mode of Travel (number)				
	Car	PT	Coach	Cycle/Walk	Total
<b>Players / Staff</b>					
Home players / staff	14	0	1	5	20
Away players / staff	0	0	20	0	20
Match officials	3	0	0	0	3
sub total	17		21	5	43
<b>Spectators</b>					
Home spectators	56	6	0	58	120
Away spectators	2	0	10	0	12
sub total	58	6	10	58	132
<b>Other</b>					
Matchday staff	1	0	0	5	6
Club Members	4	0	0	3	7
sub total	5	0	0	8	13
<b>Overall Total</b>	<b>80</b>	<b>6</b>	<b>31</b>	<b>71</b>	<b>188</b>

Assuming an average car occupancy of 2.7 for spectators and 1.1 for all other trips, this equates to a vehicular trip generation of;

- Private cars drivers – 41
- Private cars passengers – 39
- Coaches – 2

Based on the surveys, the trip generation associated with a typical matchday attendance of approximately 130 spectators is as follows (see table 2.3);

- Players / Match Officials
  - Private car – 22 persons (39%)
  - Public Transport – 0 persons (0%)
  - Coach – 21 persons (38%)
  - Cycle / Walk – 13 persons (23%)
- Spectators
  - Private car – 58 persons (44%)
  - Public Transport – 6 persons (5%)
  - Coach – 10 persons (8%)
  - Cycle / Walk – 58 persons (44%)

**Table 2.3 – Current Modal Split**

Actual Modal Split	Car Driver	Car Pax	Car Total	Coach	PT	Walk/Cycle	Total
<b>Players / Match Officials</b>	15	2	17	21	0	5	43
Matchday Staff / Club members	5	0	5	0	0	8	13
sub total	20	2	22	21	0	13	56
percent	36%	4%	39%	38%	0%	23%	100%
<b>Spectators</b>							
Home spectators	21	35	56	0	6	58	120
Away spectators	1	1	2	10	0	0	12
sub total	21	37	58	10	6	58	132
percent	16%	28%	44%	8%	5%	44%	100%

## 2.3

### Arrival and Departure Profiles

It is anticipated that the arrival profile will be relatively concentrated, spread over the 60 minute period in the run up to the match with the majority of spectators arriving at the ground between 1330 and 1400 hours. In order to provide a robust test of the transport strategy we have assumed that 75% of spectators would arrive between 1330 and 1400 hours.

The post match dispersal profile will also be fairly concentrated and we would anticipate the majority percent of spectators departing in the first half hour or so after the finish of the match. However the departure time of those using the bar / hospitality facilities would be slightly later and we have therefore assumed a robust assumption that all spectators would depart in the hour after the match.

Based on the above, the assumed arrival and departure profiles for spectators are as summarised in Table 2.4.

**Table 2.4 – Assumed Arrival and Departure Profile**

Time Period	Typical Maximum Matchday Capacity (500 attendance)		Major Event up to 2,000 attendance	
	Percent	No	Percent	No
Before Match				
1300 to 1330	25%	125	25%	500
1330 to 1400	75%	375	75%	1500
After Match				
1530 to 1600	75%	375	75%	1500
1600 to 1630	25%	125	25%	500

## 2.4

### Public Transport

#### 2.4.1

##### *Local Bus Services*

There are no local bus routes that provide a regular serve to the Rugby Club or its immediate environs on a Sunday afternoon. The current conventional bus services that pass within the vicinity of the site at other times, other than Sundays, are listed below. These services are provided by Arriva, with the exception of the Green Line 758 service.

The club are committed to lobbying operators to provide improved conventional bus services on Sundays to serve potential demand on a typical matchday and provide improved public transport accessibility between the Rugby Club, the town centre, the rail station and outlying residential areas.

**Table 2-5 – Existing Bus Services and Frequencies (minutes)**

Service	Route	Mon-Fri (daytime)	Mon-Fri (evenings)	Sat	Sun
2	Woodhall – Grovehill – Highfield – Old Town – Town Centre – Gadebridge – Long Chaulden – Rail Station	20	60	30-60	None
3	Woodhall – Grovehill – Highfield – Old Town – Town Centre – Rail Station – Long Chaulden – Gadebridge	20	60	30-60	None
4/5	Grovehill – Town centre – Bennetts End	15	30	15-30	30?
46	Luton – Hemel Hempstead	5 per day	None	5 per day	None
758	Hemel Hempstead – London Victoria	60	tbc	60	None

#### 2.4.2

##### *Rail Services*

Hemel Hempstead station is served by a rail station located to the south west of the town centre. The station is on the London (Euston) to Birmingham line with direct connections to Watford Junction, Milton Keynes Central, Northampton and Rugby.

It is not anticipated that there will be a significant mode share by rail. However the available rail services do offer an alternative mode of transport to those not travelling by car. Taxis services are available to provide connections between Hemel Hempstead station and the ground, although on major event days it may be desirable to provide a regular shuttle bus service, subject to be sufficient demand. Rail services are operated by Silverlink and provide the following services;

- Semi-Fast Services typically serve key stations between Northampton, Milton Keynes Central, Leighton Buzzard, Berkhamsted, Hemel Hempstead, Watford Junction, Harrow and Wealdstone and London Euston.
- Slow Services typically serve most intermediate stations between Northampton and London Euston.

Full details of relevant available pre and post match rail services to / from Hemel Hempstead are provided in Table 2.6.

**Table 2.6 – Existing Rail Services to/from Hemel Hempstead Station**

	Time at Hemel	Operator	Service Origin	Service Destination	Service	Capacity*
ARRIVAL (1100 - 1400)	11:06	Silverlink	London Euston	Northampton	Semi-Fast	230 - 240
	11:13	Silverlink	Northampton	London Euston	Stopping	230 - 240
	11:39	Silverlink	London Euston	Northampton	Stopping	230 - 240
	11:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240
	12:06	Silverlink	London Euston	Northampton	Semi-Fast	230 - 240
	12:13	Silverlink	Northampton	London Euston	Stopping	230 - 240
	12:39	Silverlink	London Euston	Northampton	Stopping	230 - 240
	12:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240
	13:06	Silverlink	London Euston	Northampton	Semi-Fast	230 - 240
	13:13	Silverlink	Northampton	London Euston	Stopping	230 - 240
	13:39	Silverlink	London Euston	Northampton	Stopping	230 - 240
	13:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240
DEPARTURE (1530 - 1900)	15:39	Silverlink	London Euston	Northampton	Stopping	230 - 240
	15:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240
	16:06	Silverlink	London Euston	Northampton	Semi-Fast	230 - 240
	16:13	Silverlink	Northampton	London Euston	Stopping	230 - 240
	16:39	Silverlink	London Euston	Northampton	Stopping	230 - 240
	16:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240
	17:06	Silverlink	London Euston	Northampton	Semi-Fast	230 - 240
	17:13	Silverlink	Northampton	London Euston	Stopping	230 - 240
	17:39	Silverlink	London Euston	Northampton	Stopping	230 - 240
	17:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240
	18:06	Silverlink	London Euston	Northampton	Semi-Fast	230 - 240
	18:13	Silverlink	Northampton	London Euston	Stopping	230 - 240
18:39	Silverlink	London Euston	Northampton	Stopping	230 - 240	
18:40	Silverlink	Northampton	London Euston	Semi-Fast	230 - 240	

\* Capacity based upon Class 350 4 carriage service. Class 321 carriages also operate along this route with 4 carriage capacity of 299 persons

**Commitment 1 - The club are committed to working with the highway authority and local transport operators to provide improved public transport service levels on a Sunday to serve potential additional matchday demand**

## 2.5

### Access by Non Car Modes

Pedestrian access to the ground is provided from the east via Penine Way which connects to Redbourn Road. A footpath is provided on the southern side of Penine Way. There is an existing bus stop to the south of the Penine Way / Redbourn Way junction.

Penine Way is closed to vehicular traffic to the west of the site, although pedestrian and cycle access is maintained via the public path on the former road.

Given the infrequency and relatively small impact in terms of pedestrian activity on matchdays, it is not considered that permanent improvements to pedestrian and cycle facilities are justified. However the club will continue to support the council in providing improved access by non car modes as part of the wider transport strategy for the area.

**Commitment 2 - The club will continue to support the council in provided improved access by non car modes as part of the wider transport strategy for the area**

## 2.6

### Parking Strategy and Access Arrangements

It is understood that the emerging parking strategy, following initial discussions between the club and the council, is that on matchdays the official car park would be used to accommodate players and officials, emergency vehicles and coaches plus spectator parking.

The site currently has 80 car parking spaces. The current proposals are to accommodate retain a similar level of parking with coach parking for up to 2 coaches on-site and a further 20-30 car parking spaces given over to official parking for players and match officials. Accordingly there would be some 40-50 on-site car parking spaces available for spectators, which equates to 108-135 spectators assuming a typical car occupancy of 2.7.

Free on-street car parking is available in the vicinity of the site on Penine Way and adjacent residential areas. Penine Way currently experiences significant parking levels on weekdays, associated with the adjacent employment and commercial uses, and on weekends when the sports grounds are in use. However, on a major matchday, it is understood that there is an agreement that the adjacent sports fields would not be in use and being a Sunday, parking associated with adjacent employment uses would be negligible. It may be possible to allow some limited on-street parking on Penine Way, provided appropriate access is maintained for the emergency services.

Based on the current modal splits, it is anticipated that a significant proportion of spectators would arrive by non car modes.

In planning for an event of up to 500 spectators, it is proposed that additional spectator parking would be made available within walking distance of the ground.

The level of off-site parking demand would be dependent on a wide number of factors. Our initial forecasts have been based on the following key assumptions;

- Attendance of 500 spectators;
- Official car parking would be available for cars and coaches arriving at the ground with a pre-booked ticket with further off-site parking at the Hammond Primary School (or another suitable park-and-walk site);
- Given the level of free on-street parking in the surrounding areas, it is inevitable that a proportion of people, particularly those familiar with the area, will choose to park in freely available on-street spaces regardless of what additional temporary off-street parking facilities are provided. Accordingly it is assumed that up to 10 percent of supporters may park free on-street;
- The current matchday travel surveys indicate up to 44 percent of supporters will be relatively local and be able to walk / cycle to the ground. However it is recognised that for larger attendances, spectators are more likely to be attracted from beyond the local catchment area and are therefore potentially less likely to arrive on foot, as is currently the case. Accordingly in addition to the 'Current Modal split' scenario, a lower figure of 22 percent has also been assumed ('High Car Use' scenario) for the purposes of robustness;
- Up to 2/3 percent may arrive by taxi or be dropped off with a further 3 percent arriving by conventional bus services and / or shuttle us connections to Hemel Hempstead rail station, subject to appropriate demand;

Full details of initial modal split forecasts are provided in the appendices for a potential capacity of 500 spectators for the following scenarios:

- Table A1a - Typical Anticipated Matchday Capacity – 500 spectators assuming Current Modal Split
- Table A1b - Typical Anticipated Matchday Capacity – 500 spectators assuming High Car Use

Based on the above analysis, it can be concluded that the proposed off-site car parking requirement would be of the order of 40-50 car parking spaces to accommodate a typical matchday attendance of 500 spectators. Traffic management measures would be required to ensure appropriate access for emergency service vehicles.

The club have reached agreement with the Hammond Primary School, immediately to the north west, that a further 50 spaces would be made available on a matchday which would accommodate a further 135 spectators.

In the unlikely event of a Major Event Day with up to 2,000 spectators (eg Cup Match against Major Side), additional off-site car parking would be required. On these occasions, the club are

committed to providing an appropriate level of additional off-site parking spaces to accommodate potential additional parking demand. These could consist of peripheral parking site(s) with shuttle bus connections between the ground and the parking site(s) or, alternatively, suitable parking sites within walking distance of the ground. Further details are provided in section 2.7 although a Major Event Transport Strategy would be developed in consultation with the highway and planning authorities in the run up to the event.

The proposed on-site car parking strategy for Major Events is that no parking will be available for cars arriving at the ground without a pre-booked parking ticket in order to minimise the potential for congestion at key access points.

***Commitment 3 – The club are committed to working in partnership with the key relevant authorities to ensure that the impacts on those living around the ground are minimised through appropriate parking and access arrangements***

***Commitment 4 – On major matchdays, the club will use reasonable endeavours to ensure that all official car parking spaces are specifically allocated through advanced booking***

***Commitment 5a - The club will make the following commitment with regard to additional parking sites for an event of up to 500 spectators;***

- ***To work with the local authority, local businesses and land owners to provide up to 40 to 50 additional parking spaces***

## 2.7

### **Potential Additional Parking Sites for Major Events up to 2,000 Spectators**

As detailed above in planning for a major event of up to 2,000 spectators, it is proposed that additional parking would be provided. The level of additional parking demand would be dependent on a wide number of factors. Our initial forecasts have been based on the following key assumptions;

- Maximum attendance of 2,000 spectators;
- Official car parking would be available for cars and coaches arriving at the ground with a pre-booked ticket;
- Given the level of free on-street parking in the surrounding areas, it is inevitable that a proportion of people, particularly those familiar with the area, will choose to park in freely available on-street spaces regardless of what additional temporary off-street parking facilities are provided. Accordingly it is assumed that up to 15 percent of supporters may park free on-street;
- The current matchday travel surveys indicate up to 44 percent of supporters will be relatively local and be able to walk / cycle to the ground. However it is recognised that for larger attendances, spectators are more likely to be attracted from beyond the local catchment area and are therefore potentially less likely to arrive on foot, as is currently the case. Accordingly a lower figure of 22 percent has been assumed;
- Up to 3 percent may arrive by taxi or be dropped off with a further 3 percent arriving by conventional bus services and / or shuttle bus connections to Hemel Hempstead rail station, subject to appropriate demand;

Full details of initial modal split forecasts are provided in the appendices for a potential maximum capacity matchday of 2,000 spectators.

Initial assessments indicate a potential demand for a minimum of 150 to 300 additional parking spaces, which would accommodate 400-800 spectators assuming a car occupancy of 2.7 per car. Some flexibility will be required in the event that actual demand exceeds the initial forecasts. Potential additional parking sites could include the following;

- The Gadebridge park-and-ride site is located a few km to the west of the ground with vehicular access from the A4146 Leighton Buzzard Road. The current capacity is believed to be in excess of 200 spaces, although availability and occupancy levels on a typical Sunday would need to be confirmed. Shuttle bus connections to and from the ground would be required
- There may a number of temporary parking sites within walking distance of the ground that could be used for a major event, subject to the consent of local businesses and land owners, and the introduction of appropriate traffic management arrangements.

Based on the following assumptions the potential passenger demand and shuttle bus requirements will be determined, once the locations of the additional parking sites are confirmed;

- Assumed maximum bus occupancy – 40 -70 passengers
- Average speed – 20-30mph
- Loading / Unloading Time – 10 mins

It will be essential that appropriate measures are put in place to assist the shuttle buses and to minimise any potential for conflict with pedestrians and other vehicular traffic. Key issues that will need to be addressed will include bus routes, appropriate bus turnaround arrangements at the ground and parking locations, pick up and drop off areas, stewarding and directing of pedestrians and priority arrangements for the shuttle buses, particularly to avoid vehicle queues exiting the car park.

***Commitment 5b - The club will make the following commitment with regard to additional parking sites and shuttle bus services for a major event up to 2,000 spectators;***

- ***To work with the local authority, local businesses and land owners to provide up to 150 to 300 additional parking spaces at appropriate park-and-ride or park-and-walk sites***
- ***To work with operators to provide an appropriate number of shuttle buses to serve peripheral park and ride site(s);***
- ***To liaise with operators to provide appropriate arrangements to ensure the safe and efficient movement of shuttle bus vehicles and users.***

## 2.8

### **Traffic Management Arrangements**

For major events, the club will work in consultation with the highway and planning authorities and the local police with regard to the implementation of an appropriate temporary highway direction signage scheme to additional parking areas to ensure vehicles travelling to the sites use the most appropriate route.

***Commitment 6 – The club are committed to working in partnership with the key relevant authorities to ensure that the impacts on those living around the stadium are minimised through appropriate policing, stewarding and traffic management arrangements.***

***Commitment 7 - The club are committed to the funding of and implementation of a temporary highway direction signage scheme to peripheral parking areas, where appropriate, to ensure that vehicles travelling to the sites use the most appropriate route (Major Events only)***

## 2.9

### **Information and Marketing**

Appropriate ticketing, information and marketing initiatives will reduce the impact of the matches for all affected groups by encouraging appropriate use of available transport modes.

Awareness is the key to the success of any new transport initiative. Access to good transport information is important. It should be straightforward for someone attending a match to find out the best means of travelling to the ground and then be able to make the appropriate choice.

The club are committed to the following;

- Transport information to be provided which includes details of access arrangements, travel information, details of car parking arrangements and key do's and don'ts and advises of the appropriate routes to access the peripheral parking sites;
- Liaison with the Shuttle Bus operators with regard to opportunities for improved travel arrangements;
- Advertisements actively promoting proposed transport services including local radio campaigns and information in the local press would be organised for major events.

***Commitment 8 – The club will attempt to raise awareness of transport to and from the ground through promotional marketing, ticketing literature, public announcements the website and advertisements***

### 3 Key Commitments and Targets

# 3 Key Commitments and Targets

## 3.1

### Key Commitments

The club have made the following commitments to ensure that the key objectives of the Transport Strategy are met. These commitments are summarised below together with an indication of the key players.

**Table 3.1 – Transport Strategy Key Commitments**

No	Commitment	Key Players
1	The club are committed to working with the highway authority and local transport operators to provide improved public transport service levels on a Sunday to serve potential additional matchday demand	Hemel Stags / Local Transport Operators / Herts CC
2	The club will continue to support the council in provided improved access by non car modes as part of the wider transport strategy for the area	Herts CC / Dacorum BC
3	The club are committed to working in partnership with the key relevant authorities to ensure that the impacts on those living around the ground are minimised through appropriate parking and access arrangements	Hemel Stags / Herts CC / Dacorum BC
4	On major matchdays, the club will use reasonable endeavours to ensure that all official car parking spaces are specifically allocated through advanced booking	Hemel Stags
5a	The club will make the following commitment with regard to additional parking sites for an event of up to 500 spectators; <ul style="list-style-type: none"> <li>▪ To work with the local authority, local businesses and land owners to provide up to 40 to 50 additional parking spaces</li> </ul>	Hemel Stags / Local Transport Operators / Herts CC / Dacorum BC
5b	The club will make the following commitment with regard to additional parking sites and shuttle bus services for a major event of up to 2,000 spectators; <ul style="list-style-type: none"> <li>▪ To work with the local authority, local businesses and land owners to provide a minimum of 200 to 360 additional parking spaces</li> <li>▪ To work with operators to provide an appropriate number of shuttle buses to serve park and ride car park(s);</li> <li>▪ To liaise with operators to provide appropriate arrangements to ensure the safe and efficient movement of shuttle bus vehicles and users.</li> </ul>	Hemel Stags / Local Transport Operators / Herts CC / Dacorum BC

No	Commitment	Key Players
6	The club are committed to working in partnership with the key relevant authorities to ensure that the impacts on those living around the stadium are minimised through appropriate policing, stewarding and traffic management arrangements.	Hemel Stags / Herts CC / Dacorum BC / Emergency Services
7	The club are committed to the funding of and implementation of a temporary highway direction signage scheme to peripheral parking areas, where appropriate, to ensure that vehicles travelling to the sites use the most appropriate route (Major Event only)	Hemel Stags / Herts CC
8	The club will attempt to raise awareness of transport to and from the ground through promotional marketing, ticketing literature, public announcements the website and advertisements	Hemel Stags

## 3.2

### Modal Split Targets

Based on the proposed Transport Strategy and key commitments detailed above, mode split targets have been prepared based on the following scenarios;

- Typical Anticipated Matchday Capacity – 500 spectators
  - Current Modal Split
  - High Car Use
- Major Event up to 2,000 spectators (eg Cup Match against Major Side)
  - Current Modal Split
  - High Car Use

The strategy has been devised to encourage and maximise the use of non-car modes and to provide efficient transport facilities for arriving and departing spectators in order to minimise adverse impacts on the local community and transport facilities and reduce the impact of the event on the local network and residents. However it is recognised that for larger attendances, spectators are more likely to be attracted from beyond the local catchment area and are therefore potentially less likely to arrive on foot, as is currently the case.

The proposed modal split targets are summarised in Tables 3.2 and 3.3 along with a summary of the potential available capacity by mode.

Table 3.2 – Modal Split Targets – Based on Current Modal Split Assumptions

Mode of Arrival	Available Capacity	Scenario			
		Typical Max Attendance 500 spectators		Major Event up to 2,000 spectators	
		No	%	No	%
<b>Private Car</b>					
Official Car Park	Up to 80 spaces available less 5-10 (for coaches) and less 20-30 for players and match officials	108	22%	135	7%
Free On-Street	Up to 10 - 15% may park free on-street elsewhere	0	10%	300	15%
<b>Sub Total – Private Car</b>		<b>108</b>	<b>22%</b>	<b>435</b>	<b>22%</b>
<b>Bus/Coach/Rail</b>					
Park and Walk / Park and Ride	Additional off-site parking to be provided at appropriate sites	108	22%	405	20%
Local Bus / Rail	Up to 1-3 percent may arrive by local bus	10	2%	60	3%
Coach	Provision for coach spaces will be provided within the official parking area	40	8%	160	8%
<b>Sub Total - Bus / Coach</b>		<b>158</b>	<b>44%</b>	<b>625</b>	<b>31%</b>
<b>Others</b>					
Taxi	Up to 1-3 percent may arrive by taxi	13	3%	60	3%
Walk / Cycle	Up to 44 percent may originate within local area and walk / cycle	220	44%	880	44%
<b>Sub Total - Others</b>		<b>233</b>	<b>47%</b>	<b>940</b>	<b>47%</b>
<b>TOTAL</b>		<b>500</b>	<b>100%</b>	<b>2,000</b>	<b>100%</b>

## Notes:

- (1) Full details of the assumptions and detail underpinning the above targets are provided in section 2 and the appendices
- (2) Vehicle occupancies are assumed to be 2.7 – private cars / taxis, 70.0 - shuttle buses and 50.0 – coaches.
- (3) Table may contain rounding errors

**Table 3.3 – Modal Split Targets – Based on Higher Car Use Assumptions**

Mode of Arrival	Available Capacity	Scenario			
		Typical Max Attendance 500 spectators		Major Event up to 2,000 spectators	
		No	%	No	%
<b>Private Car</b>					
Official Car Park	Up to 80 spaces available less 5-10 (for coaches) and less 20-30 for players and match officials	135	27%	135	7%
Free On-Street	Up to 10 - 15% may park free on-street elsewhere	50	10%	300	15%
<b>Sub Total – Private Car</b>		<b>185</b>	<b>37%</b>	<b>435</b>	<b>22%</b>
<b>Bus/Coach/Rail</b>					
Park and Walk / Park and Ride	Additional off-site parking to be provided at appropriate sites	135	27%	805	40%
Local Bus / Rail	Up to 1-3 percent may arrive by local bus	10	2%	60	3%
Coach	Provision for coach spaces will be provided within the official parking area	45	9%	200	8%
<b>Sub Total - Bus / Coach</b>		<b>190</b>	<b>38%</b>	<b>1065</b>	<b>53%</b>
<b>Others</b>					
Taxi	Up to 1-3 percent may arrive by taxi	15	3%	60	3%
Walk / Cycle	Up to 22 percent may originate within local area and walk / cycle	110	22%	440	22%
<b>Sub Total - Others</b>		<b>125</b>	<b>25%</b>	<b>500</b>	<b>25%</b>
<b>TOTAL</b>		<b>500</b>	<b>100%</b>	<b>2,000</b>	<b>100%</b>

**Notes:**

- (1) Full details of the assumptions and detail underpinning the above targets are provided in section 2 and the appendices
- (2) Vehicle occupancies are assumed to be 2.7 – private cars / taxis, 70.0 - shuttle buses and 50.0 – coaches.
- (3) Table may contain rounding errors





# Appendix A – Potential Mode of Travel Forecasts

500

**Table A1 - Hemel Rugby League Stadium - Potential Mode of Travel  
Typical Maximum Attendance - 500 persons - Current Modal Split**

Mode of Arrival	Details / Assumptions	Capacity	Assumed Occupancy	Unit	Assumed Usage (500 Persons)	Percent	Vehicles (cars)
<b>Private Car</b>							
On-Site Spaces	Upto 80 spaces available in official car park less 5-10 (for 1-2 coach spaces and less 20 for players / officials)	40	2.7	per car	108	22%	40
Free On-Street	Upto 10 - 15% may park free on-street elsewhere	0%	2.7	per car	0	0%	0
<b>Total - Private Car</b>					<b>108</b>	<b>22%</b>	
<b>Park and Walk</b>	Upto 50 spaces available at nearby schools(s)	40	2.7	per car	108	22%	40
<b>Local Bus</b>	Upto 1-3 percent may arrive by local bus which equates 5-15 persons for a 500 attendance	2%			10	2%	
<b>Coach</b>	Provision for 1-2 coach spaces will be provided within the official parking area or on Penine Way	1	50.0	per coach	40	8%	2
<b>Total - Bus / Coach</b>					<b>158</b>	<b>32%</b>	
<b>Others</b>							
Taxi / Drop Off	Upto 1-3 percent may arrive by taxi which equates 5-15 persons for a 500 attendance	3%	2.0	per taxi	13	3%	6
Walk / Cycle	Upto 44 percent may walk / cycle which equates to 220 persons for a 500 attendance	44%			220	44%	
<b>Total - Others</b>					<b>233</b>	<b>47%</b>	
<b>TOTAL (Including Park and Walk)</b>					<b>499</b>	<b>100%</b>	

500

**Table A1a - Hemel Rugby League Stadium - Potential Mode of Travel  
Typical Maximum Attendance - 500 persons - High Car Use**

Mode of Arrival	Details / Assumptions	Capacity	Assumed Occupancy	Unit	Assumed Usage (500 Persons)	Percent	Vehicles (cars)
<b>Private Car</b>							
On-Site Spaces	Upto 80 spaces available in official car park less 5-10 (for 1-2 coach spaces and less 20 for players / officials)	50	2.7	per car	135	27%	50
Free On-Street	Upto 10 - 15% may park free on-street elsewhere	10%	2.7	per car	50	10%	19
	<b>Total - Private Car</b>				<b>185</b>	<b>37%</b>	
<b>Park and Walk</b>	Upto 50 spaces available at nearby schools(s)	50	2.7	per car	135	27%	50
<b>Local Bus</b>	Upto 1-3 percent may arrive by local bus which equates 5-15 persons for a 500 attendance	3%			10	2%	
<b>Coach</b>	Provision for 1-2 coach spaces will be provided within the official parking area or on Penine Way	1	50.0	per coach	45	9%	1
	<b>Total - Bus / Coach</b>				<b>190</b>	<b>38%</b>	
<b>Others</b>							
Taxi / Drop Off	Upto 1-3 percent may arrive by taxi which equates 5-15 persons for a 500 attendance	3%	2.0	per taxi	15	3%	8
Walk / Cycle	Upto 44 percent may walk / cycle which equates to 220 persons for a 500 attendance. Worst case: assume only 22%	44%			110	22%	
	<b>Total - Others</b>				<b>125</b>	<b>25%</b>	
<b>TOTAL (Including Park and Walk)</b>					<b>500</b>	<b>100%</b>	

2000

**Table A2 - Hemel Rugby League Stadium - Potential Mode of Travel  
Absolute Maximum Attendance - 2000 persons - Current Modal Split**

Mode of Arrival	Details / Assumptions	Capacity	Assumed Occupancy	Unit	Assumed Usage (500 Persons)	Percent	Vehicles (cars)
<b>Private Car</b>							
On-Site Spaces	Upto 80 spaces available in official car park less 5-10 (for 1-2 coach spaces and less 20 for players / officials)	50	2.7	per car	135	7%	50
Free On-Street	Upto 10 - 15% may park free on-street elsewhere	15%	2.7	per car	300	15%	111
<b>Total - Private Car</b>					<b>435</b>	<b>22%</b>	
<b>P&amp;R / Park and Walk</b>		<b>150</b>	2.7	per car	<b>405</b>	20%	150 plus shuttle buses
<b>Local Bus</b>	Upto 1-3 percent may arrive by local bus which equates 20-60 persons for a 2000 attendance	3%			60	3%	
<b>Coach</b>	Provision for 1-2 coach spaces will be provided within the official parking area or on Penine Way		50.0	per coach	160	8%	3/4
<b>Total - Bus / Coach</b>					<b>625</b>	<b>31%</b>	
<b>Others</b>							
Taxi / Drop Off	Upto 1-3 percent may arrive by taxi which equates 20-60 persons for a 2000 attendance	3%	2.0	per taxi	60	3%	30
Walk / Cycle	Upto 44 percent may walk / cycle which equates to 880 persons for a 2000 attendance	44%			880	44%	
<b>Total - Others</b>					<b>940</b>	<b>47%</b>	
<b>TOTAL (Excluding Park and Ride)</b>					<b>1,595</b>	<b>80%</b>	
<b>TOTAL (Including Park and Ride)</b>					<b>2,000</b>	<b>100%</b>	

2000

**Table A2a - Hemel Rugby League Stadium - Potential Mode of Travel**  
**Absolute Maximum Attendance - 2000 persons - High Car Use**

Mode of Arrival	Details / Assumptions	Capacity	Assumed Occupancy	Unit	Assumed Usage (500 Persons)	Percent	Vehicles (cars)
<b>Private Car</b>							
On-Site Spaces	Upto 80 spaces available in official car park less 5-10 (for 1-2 coach spaces and less 20 for players / officials)	50	2.7	per car	135	7%	50
Free On-Street	Upto 10 - 15% may park free on-street elsewhere	15%	2.7	per car	300	15%	111
<b>Total - Private Car</b>					<b>435</b>	<b>22%</b>	
<b>P&amp;R / Park and Walk</b>		<b>298</b>	2.7	per car	<b>805</b>	40%	298 plus shuttle buses
<b>Local Bus</b>	Upto 1-3 percent may arrive by local bus which equates 20-60 persons for a 2000 attendance	3%			60	3%	
<b>Coach</b>	Provision for 1-2 coach spaces will be provided within the official parking area or on Penine Way		50.0	per coach	200	10%	3/4
<b>Total - Bus / Coach</b>					<b>1,065</b>	<b>53%</b>	
<b>Others</b>							
Taxi / Drop Off	Upto 1-3 percent may arrive by taxi which equates 20-60 persons for a 2000 attendance	3%	2.0	per taxi	60	3%	30
Walk / Cycle	Upto 44 percent may walk / cycle which equates to 880 persons for a 2000 attendance. Worst case: assume only 22%	22%			440	22%	
<b>Total - Others</b>					<b>500</b>	<b>25%</b>	
<b>TOTAL (Excluding Park and Ride)</b>					<b>1,195</b>	<b>60%</b>	
<b>TOTAL (Including Park and Ride)</b>					<b>2,000</b>	<b>100%</b>	