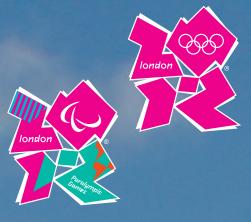
Olympic Delivery Authority
Transport Plan for the London 2012
Olympic and Paralympic Games
Second edition consultation draft

December 2009





MOVE

#### The Transport Plan

This second edition of The Transport Plan for the London 2012 Olympic and Paralympic Games is published for consultation and your comments are invited.

#### Have your say

The Olympic Delivery Authority (ODA) invites written views and comments on the issues raised in this document by 5pm, 19 March 2010.

Responses should be sent, preferably in Word format, by email to: transportplan@london2012.com

Alternatively responses can be sent by post to: Transport Plan Transport Olympic Delivery Authority Level 23, One Churchill Place Canary Wharf, London E14 5LN

If you submit a response by email there is no need to send a paper copy as well. We will acknowledge your response.

It would be helpful if you can explain why you hold these views and describe the potential impact of the transport proposals on you or your organisation. Please reference your comments using the relevant chapter, paragraph and/or figure number.

Respondents should indicate whether they wish any part of their response to be treated as confidential; otherwise all responses will be considered to be non-confidential.

Please note that responses to this consultation may be made available for public inspection.

Further information is available from: Iain Killingbeck: 020 3 2012 000; transportplan@london2012.com

#### **Olympic Games pictograms**



Artistic Gymnastics

Athletics

Badminton

Basketball

Beach Volleyball

₹ BMX

Boxing Boxing

Canoe Slalom

Canoe Sprint

Diving

Dressage

Eventing

**Fencing** 

🏂 Football

>> Handball

**K** Hockey

Judo

🏂 Jumping

Modern Pentathlon

Mountain Bike

- Rhythmic Gymnastics
- Road Cycling

🍇 Rowing

Sailing

Shooting

Synchronised Swimming

Swimming

Table Tennis

Taekwondo

Tennis

Track Cycling

**Trampoline** 

Triathlon

Yolleyball

Water Polo

Weightlifting

Wrestling

#### **Paralympic Games pictograms**

5 a side Football

7 a side Football

Archery

Athletics Athletics

🙏 Boccia

Equestrian

式 Goalball

Judo

Powerlifting

👟 Road Cycling

Rowing

**Sailing** 

Shooting

Sitting Volleyball

Swimming

🏂 Table Tennis

🌃 Track Cycling

Wheelchair Basketball

Wheelchair Fencing

Wheelchair Rugby

Wheelchair Tennis

### Foreword

Our aim is to host the first 'public transport' Olympic and Paralympic Games. To make this a reality, a huge programme of transport upgrades is underway, with many projects already delivered or nearing completion.

While the core of our investment is within London, the benefits will be felt by public transport users, as well as cyclists and walkers, right across the city and the UK before, during and after the Games.

For example, there is major work underway to increase capacity and accessibility at Stratford Regional Station. Passengers are already experiencing better access, more space and an easier interchange.

Other projects are moving apace. The new Docklands Light Railway railcars that will increase capacity by 50 per cent across its accessible network are in service. Improvements to the Underground will see the Victoria and Jubilee Lines able to carry more passengers. Above ground, the East London Line is being extended and the North London Line upgraded. Improvements to walking and cycling paths linking to Games venues have also began.

The new High-Speed 1 link between London and Kent is getting ready to start. During the Games, the Javelin® service will use these tracks to speed spectators from central London to the Olympic Park. We tested the Javelin® this summer and it beat its estimated seven-minute journey time. So we are on track.

The first major transport project to be completed – the relocation of the railway sidings from the heart of the Olympic Park to a new facility at Orient Way – was finished ahead of time and well within budget.

With infrastructure improvements on track and under the 1,000 days to go mark, transport operational planning is now moving up a gear. Maximising the frequency and choice of transport options across the nation is at the forefront of these plans, with work on firming-up timetables and service patterns progressing.

As you can see from this document, plans are also coming together on the Olympic Route Network and park-and-ride options through our bus and coach strategy. Meanwhile, the first test event for the Transport Coordination Centre has been set as New Year's Eve 2010.

The Olympic Games will be the equivalent to hosting 26 World Championships simultaneously, followed by a further 19 for the Paralympic Games, along with hundreds of cultural celebrations. Transport and road networks during the Games will be busier and under more pressure than normal.

However, we are committed to 'keeping London and the UK moving'. We will be working with businesses and giving passengers the information they need to plan their journeys during the Games.

Next year we will publish the second full edition of the Transport Plan. It will incorporate comments to this second edition consultation draft. As we get ever closer to hosting the world's greatest sports event, your feedback is vital to the development of our plans and the delivery of a robust and efficient transport system.

Moving hundreds of thousands of spectators and tens of thousands of athletes, media, officials and Games workers is a huge logistical challenge. We do not underestimate it and we are not complacent in any way. We are confident the foundations for success are coming together through working with our transport delivery partners and Government at every level. We are very grateful for all your support.

**John Armitt** Chairman

Olympic Delivery Authority

Seb Coe

Chair

London Organising Committee of the Olympic and Paralympic Games

Foreword



### Contents

Contents	Page
1 Introduction	5
2 Background	9
3 Roles and responsibilities	21
4 Transport strategy	27
5 Games Family transport	31
6 Spectator and workforce transport	39
7 Competition venues	85
8 Road events	163
9 Regional football stadia	165
10 Paralympic Games	169
11 Ceremonies and cultural events	177
12 Freight and servicing	179
13 Transport safety	183
14 Transport security	187
15 Contingency planning and testing	193
16 Sustainable transport	197
17 Transport legacy	201
18 Programme and operational assurance	205
Appendices	213
A Section 10 (2) of the London Olympic Games and Paralympic Games Act 2006	214
<b>B</b> Code of Practice on Consultation	215
C Template franchise wording for the Olympic Games Clause and definition of Olympic services delivery plans	216
<b>D</b> ORN Engagement Programme	217
Glossary	219



## Introduction

Chapter 1

### Chapter 1 Introduction

#### The Olympic Games and Paralympic Games

- 1.1 The Olympic Games is the world's largest sporting event. In the summer of 2012, the Games of the XXX Olympiad will be held in London. Around 10,500 athletes from over 200 nations will compete in 26 different sports. Over the 16 days of the Olympic Games approximately 7.7 million tickets will be available for the various competition events.
- 1.2 The Olympic Games will be followed by the Paralympic Games, which is also one of the world's largest sporting events. The Paralympic Games provides an arena for competition between the world's top 4,000 athletes with a disability. By 2012, around 150 countries in 19 sports could be represented. Over the 11 days of the Paralympic Games nearly 1.5 million tickets will be on sale.
- 1.3 The Olympic Games and Paralympic Games have been described as a country's largest peacetime logistical operation and present London and the UK with a huge transport challenge.

#### This document

- 1.4 This document is the consultation draft of the second edition of the Transport Plan for the London 2012 Olympic and Paralympic Games (the 'Transport Plan'). It presents an overview of the proposed transport arrangements during the Games for spectators and public transport users and the Olympic Route and Paralympic Route Networks for the Games. It is anticipated that the second edition will be published towards the end of 2010.
- 1.5 The first edition of the Transport Plan was published in autumn 2007 following a comprehensive consultation exercise. This consultation draft provides further detail on particular topics and gives an update on the progress made in developing and implementing the Transport Plan. It builds upon and amplifies the

- information presented in the first edition. However, it does not constitute the very detailed operational plans that will or do sit behind it.
- 1.6 This draft has been prepared by the Olympic Delivery Authority's (ODA's) Transport team in association with the London Organising Committee of the Olympic Games and Paralympic Games (LOCOG). It presents the vision, objectives and key strategic directions that will form the basis of the forthcoming planning and delivery of transport for the Games.
- 1.7 The Transport Plan consists of strategic guidelines and operational principles for transport systems and operations, covering every mode of transport. It includes contributions from key transport delivery partners and stakeholders, including Transport for London (TfL), the Department for Transport (DfT), the Highways Agency, Network Rail and London & Continental Railways.
- 1.8 Transport planning for the Games will continue between the publication of this consultation draft of the second edition and summer 2012. The plans will be refined and increase in detail over this period. This document sets out the overarching transport strategy for the Games and the spectator transport operations plans for each venue as they stand at this point in time.

### **London Olympic Games and Paralympic Games Act** 2006

- 1.9 The ODA was established by the London Olympic Games and Paralympic Games Act 2006 (the 'Act').
- 1.10 The Act requires the ODA to prepare and keep under review an 'Olympic Transport Plan' for addressing transport matters relating to the London 2012 Olympic and Paralympic Games. The Transport Plan must, in particular, make provision for the matters set out in Section 10(2) of the Act, as described in Appendix A.

1.11 This document has been developed in response to these requirements. The Act requires the ODA to publish the Transport Plan and any revision to it. The ODA is implementing the Transport Plan in accordance with its powers under the Act.

#### Consultation

- 1.12 Before the Transport Plan is revised, the Act requires the ODA to consult:
- the Secretary of State;
- the Mayor of London;
- the London Organising Committee of the Olympic Games and Paralympic Games Limited;
- the Commissioner of the Police of the Metropolis;
- the Commissioner of Police of the City of London;
- the Chief Constable of the British Transport Police Force;
- the Association of Chief Police Officers;
- the Office of Rail Regulation;
- Transport for London;
- a local highway authority, local traffic authority or street authority for a road in England which the ODA thinks is likely to be affected by the implementation of the plan; and
- such other persons as the ODA thinks appropriate.
- 1.13 In addition to the consultees specified in the Act, the ODA is also consulting those organisations that will be implementing the Transport Plan, and those whose remit includes matters to be addressed by the Transport Plan.
- 1.14 Through this consultation the ODA seeks to:
- explain the scope of the Transport Plan by describing the transport responsibilities of LOCOG, the ODA and the transport delivery partners, while also identifying the transport constraints and opportunities;

- communicate the transport planning process and who is responsible for each element;
- describe and obtain feedback on the planned approach; and
- encourage challenge in order to improve the Transport Plan.
- 1.15 Views on the content of this consultation draft are invited. The responses received will help to shape the content of the second edition which will be published towards the end of 2010.
- 1.16 This consultation draft has been prepared in accordance with six consultation criteria contained within the Cabinet Office's Code of Practice on Consultation. Appendix B sets out the six consultation criteria.
- 1.17 Following the consultation process, a Consultation Report will be published. It will include details relating to the consultation responses, how they were taken into account and how the resulting Transport Plan changed. The Consultation Report will be published alongside the second edition of the Transport Plan in 2010.
- 1.18 London 2012<sup>1</sup> is involved in an ongoing process of engagement and continues to work closely with its stakeholders. London 2012 is listening carefully to the views of its client groups, the organisations involved in implementing the plans, local authorities, local communities and many others. Consultations on specific issues are being carried out at the appropriate times.

#### Structure of this document

- 1.19 Following this introductory chapter, Chapter 2 provides a background to the scale and nature of the transport challenge presented by the Games.
- 1.20 Chapter 3 describes the roles and responsibilities of the organisations involved in
  - 1 LOCOG and the ODA together form 'London 2012'

- delivering transport for the Games. It also describes how the ODA works with its delivery partners and stakeholders.
- 1.21 Chapter 4 outlines the key strands of the transport strategy for the Games.
- 1.22 Chapter 5 describes the transport arrangements that are proposed by LOCOG for the Games Family client groups and outlines the Olympic Route Network.
- 1.23 Chapter 6 describes the proposed arrangements for spectator and workforce transport. An overview of the arrangements for rail, bus, park-and-ride, river, cycle and pedestrian transport modes is provided. A summary of how these modes will be supported by an accessible transport network is also included.
- 1.24 Chapter 7 sets out the proposed spectator transport services and strategies for competition venues with maps and data.
- 1.25 Chapter 8 considers the spectator transport for road events. These events include the Marathon, Road Cycling, Race Walk and Triathlon.
- 1.26 Chapter 9 presents information relating to the spectator transport services for the rounds of the Football competition that will take place at regional football stadia across the UK.
- 1.27 Chapter 10 provides an overview of the proposed transport plans for the Paralympic Games.
- 1.28 Chapter 11 describes the spectator transport plans for the Opening and Closing Ceremonies and the cultural events associated with the Games.
- 1.29 Chapter 12 considers the impact of the Games on freight and servicing.
- 1.30 Chapter 13 gives the strategic approach to spectator transport safety.

- 1.31 Chapter 14 outlines the transport security arrangements for spectator transport. It also summarises the plans that will be put in place for the Transport Coordination Centre (TCC) for the coordination of transport during the Games.
- 1.32 Chapter 15 gives a précis of the proposed approach to contingency planning and how this element will be developed in the future.
- 1.33 Chapter 16 summarises the sustainability issues associated with transport for the Games and how they are being addressed.
- 1.34 Chapter 17 draws together all the aspects that relate to transport legacy. It describes the transport benefits and improvements that will remain after the Games.
- 1.35 Chapter 18 concludes this document with an overview of how the delivery of the ODA's transport operations will be planned, delivered and monitored. It also describes how risk will be managed.
- 1.36 A glossary is provided at the back of the document, including acronyms and abbreviations used throughout the document.

Chapter 1: Introduction 7



# Background Chapter 2

## Chapter 2 Background

#### Introduction

2.1 This chapter presents background information and an indication of the scale of the transport challenge during the Games. It gives the key dates for the London 2012 Games and information relating to the key competition venues.

#### History

- 2.2 In May 2003, the Government announced its decision to support a bid, to be made by the Mayor of London and the British Olympic Association (BOA), to host the 2012 Olympic and Paralympic Games.
- 2.3 On 15 January 2004, London 2012 responded to the International Olympic Committee's (IOC's) pre-qualification questionnaire. The response gave preliminary details outlining the proposed venues and other information on London's plans to host the Games.
- 2.4 On 18 May 2004, the IOC announced that five cities had been shortlisted to move into the next round of the competition. The five cities were London, New York, Madrid, Moscow and Paris.
- 2.5 A Candidate File containing London's formal bid to host the 2012 Games was submitted to the IOC in Lausanne on 15 November 2004. Following that, the IOC's Evaluation Commission visited all five Candidate Cities. The Commission visited London during February 2005 when it heard presentations from the bid team and visited venues and sites associated with the Games.
- 2.6 In Singapore, on 6 July 2005, the IOC awarded the 2012 Olympic and Paralympic Games to London.

- 2.7 Immediately after the announcement, a Host City Contract was signed by the IOC, the Mayor of London and the BOA. This contract specifies in detail the obligations incumbent upon London to organise the Games. The commitments made to the IOC in the Candidate File are deemed to be an integral part of the contract. The London Organising Committee of the Olympic Games and Paralympic Games (LOCOG) subsequently signed the agreement on 5 October 2005.
- 2.8 In March 2006 the London Olympic Games and Paralympic Games Act received Royal Assent. The Act puts in place the legal powers needed to deliver the Games.
- 2.9 The ODA was established on 30 March 2006. It is responsible for delivering the new venues, infrastructure, and spectator transport for the London 2012 Games while contributing to a sustainable legacy.

#### **Key dates**

- 2.10 The London 2012 Olympic Games will be officially opened during the Opening Ceremony at the Olympic Stadium on Friday 27 July 2012. The Olympic Games will be held over 16 days from Saturday 28 July, ending with a Closing Ceremony on Sunday 12 August.
- 2.11 The Olympic Village, where the athletes and team officials will be accommodated, will open on 15 July 2012, two weeks prior to the Opening Ceremony.
- 2.12 Olympic Games athletes and team officials will leave the Village over a three-day period following the Closing Ceremony.

- 2.13 Following that a transition period will begin. This period will last for approximately two weeks before the Paralympic Games start on Wednesday 29 August. The Paralympic Games will run for 11 competition days, ending on 9 September 2012. The Paralympic Village will close on 12 September 2012.
- 2.14 In the lead up to the 2012 Games a Testing Programme will be held to test different competition venues and infrastructure. The schedule for the Testing Programme will be determined by LOCOG in consultation with the individual International (sports) Federations. Most of these will take place in the summer of 2011. Olympic and Paralympic sports will be tested. Non-sporting events may also be used to test Games operations.

#### **Event schedules**

2.15 Figures 2.1 and 2.2 illustrate the indicative event schedules for the London 2012 Games. They also indicate the gross spectator capacities of the venues. The schedules are currently being developed by LOCOG and are subject to change. The daily competition schedule will be finalised in early 2010 and more detailed session and event planning will take place throughout 2010. The Badminton and Rhythmic Gymnastics will be held at Wembley Arena subject to approval from the International Badminton and Rhythmic Gymnastics Federations.

Figure 2.1 London 2012 Olympic Games daily competition schedule (draft)

		Sport		Capacity <sup>1</sup>	July								August												
Zone	Venue		Discipline		Wed 25	Thu 26	Fri 27	Sat 28	Sun 29	Mon 30	Tue 31	Wed	Thu 2	Fri 3	Sat 4	Sun 5		Tue	Wed 8	Thu 9	Fri 10	Sat 11	Sun 12		
		Opening/Closing Ceremony		80,000																					
	Olympic Stadium		Track and Field	80,000																					
	Stadium	Athletics	Marathon	Road Event																					
			Road Walk	Road Event																					
			Diving	17,500																					
	Aquatics	Aquatics	Swimming	17,500																					
О	Centre		Synchronised Swimming	17,500																					
<u>.</u>		Modern Pentathlon	Swimming	5,000																					
Olympic Park	Water Polo	Aquatics	Water Polo	5,000																					
0	Basketball Arena	Basketball		12,000																					
	BMX Circuit	Cycling	BMX	6,000																					
	Hallaball	Handball		7,000																					
		Modern Pentathlon	Fencing	7,000																					
	Hockey Centre	Hockey		15,000																					
	Velodrome	Cycling	Track	6,000																					
		Boxing		10,000																					
		Fencing		8,000																					
		Judo		10,000																					
		Table Tennis		6,000																					
	ExCeL	Taekwando		6,000																					
a e		Weightlifting		6,000																					
Zo		Wrestling	Freestyle	10,000																					
River Zone		Wrestling	Greco-Roman	10,000																					
Z	Dayrel Antillany		Rifle/Pistol	7,500																					
	Royal Artillery Barracks	Shooting	Shotgun	7,500																					
	NI. d.		Artistic	16,500																					
	North Greenwich	Gymnastics	Trampoline	16,500																					
	Arona	Basketball		20,000																					
					Day -2	Day -1	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16		

Chapter 2: Background

Figure 2.1 (continued) London 2012 Olympic Games daily competition schedule (draft)

Zone	Venue	Sport	Discipline		July									August									
				Capacity <sup>1</sup>	Wed 25	Thu 26	Fri 27	Sat 28	Sun 29	Mon 30	Tue 31	Wed	Thu 2	Fri 3	Sat 4	Sun 5	Mon 6	Tue 7	Wed 8	Thu 9	Fri 10	Sat 11	Sun 12
River Zone			Dressage	23,000																			
		F	Eventing	23,000																			
	Greenwich Park	Equestrian	Eventing (Cross-Country)	75,000																			
/er	Greenwich Park		Jumping	23,000																			
2		Modern	Riding	23,000																			
		Pentathlon	Shooting/Running	23,000																			
<u>a</u>	Earl's Court	Volleyball		15,000																			
Zon	Horse Guards Parade	Beach Volleyball		15,000																			
<u>   </u>	Hyde Park	Triathlon		3,000																			
Central Zone	Lord's Cricket Ground	Archery		6,500				1															
O	Central London	Cycling	Road	Road Event																			
	Broxbourne	Canoe	Slalom	12,000																			
	Eton Dorney	Canoe	Sprint	30,000																			
<b>Les</b>	Rowing		30,000																				
en en	Hadleigh Farm	Cycling	Mountain Bike	20,000																			
Other venues	Weymouth and Portland	Sailing		tbc																			
吉	Wimbledon	Tennis		30,000																			
	Wembley Arena	Badminton <sup>2</sup>		tbc																			
	Wellbley Arend	Gymnastics <sup>2</sup>	Rhythmic	tbc																			
us	Hampden Park			52,000																			
.5	Millennium Stadium			74,600																			
tag	Old Trafford			75,000																			
	St. James' Park	Football		52,000																			
<del>d</del>	Wembley Stadium			90,000																			
Football stadiums	Additional stadium in West Midlands (tbc)			tbc																			
					Day -2	Day -1	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16

Note: <sup>1</sup> The capacity of spectator areas is to be confirmed

<sup>2</sup> Subject to the approval from the international Badminton and Rhythmic Gymnastics Federations Daily competition schedule under review at time of print

Figure 2.2 London 2012 Paralympic Games daily competition schedule (draft)

		Sport				Augus	t	September										
Zone	Venue		Discipline	Capacity	Wed 29	Thu 30	Fri 31	Sat 1	Sun 2	Mon 3	Tue 4	Wed 5	Thu 6	Fri 7	Sat 8	Sun 9		
		Opening/Closing Ceremony		80,000														
	Olympic Stadium	Athletics	Track and Field	80,000														
	0.00.000	Amierics	Marathon	Road Event														
논	Aquatics Centre	Swimming		17,500														
Pa	Basketball Arena	Wheelchair Rugby		10,000														
pig		Wheelchair Basketball		10,000														
Olympic Park	Handball Arena	Goalball		7,000														
0		Football Seven-a-side		15,000														
	Hockey Centre	Football Five-a-side		5,000														
	Eton Manor	Wheelchair Tennis		10,500														
	Velodrome	Cycling	Track	6,000														
		Boccia		5,000														
	ExCeL	Judo		10,000														
		Powerlifting		6,000														
စ္		Table Tennis		6,000														
Zoı		Volleyball (Sitting)		6,000														
River Zone		Wheelchair Fencing		10,000														
Ş	Greenwich Park	Equestrian	Dressage	6,000														
	North Greenwich Arena	Wheelchair Basketball		18,000														
		Archery		2,500														
	Royal Artillery Barracks	Shooting		5,000														
_	Eton Dorney	Rowing		6,000														
Other	Weymouth and Portland	Sailing		17,400														
0	Regent's Park	Cycling	Road	3,000														
					Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11		

Note: Daily competition schedule under review at time of print

Chapter 2: Background

#### **Competition venues**

- 2.16 The London 2012 Olympic Games will be staged at 33 competition venues across the UK. Figures 2.3 and 2.4 highlight the locations of each venue and the sports to be held there. The competition venues are clustered together into the following zones:
- the Olympic Park;
- the River Zone;
- the Central Zone;
- other venues; and
- regional football stadia.

#### **Olympic Park**

2.17 The Olympic Park will feature eight competition venues for the Olympic Games. Seven of these will be used for the Paralympic Games. The locations of the venues are highlighted in Figure 2.5 along with the main elements of the spectator transport system serving the Olympic Park.

#### **Paralympic Games venues**

2.18 A smaller number of competition venues will be used for the Paralympic Games. Figure 2.6 shows the locations of these competition venues.

#### Non-competition venues

- 2.19 In addition to the competition venues, the Games will generate substantial transport demands to and from a number of other non-competition venues. These will include accommodation venues, such as:
- Villages where athletes and team officials will be accommodated. There will be three villages, the Village at Stratford, which will accommodate the majority, and two satellite villages. The first at Royal Holloway College, for the athletes and team officials associated with the Rowing and

- Canoe Sprint events at Eton Dorney, and one at Weymouth and Portland for the athletes and team officials associated with the Sailing events.
- IBC/MPC in the Olympic Park, which will be the working base for press and broadcast clients during the Games.
- Hotels which will accommodate press, broadcast, technical officials, Olympic and Paralympic Family and marketing partners.
   During the Olympic Games, Bloomsbury will be a significant hub for press and broadcast clients, and Park Lane for Olympic Family clients.
- Ports (air and rail) where Games Family will enter the Games environment, and which will also see considerable spectator traffic.

#### Client groups

- 2.20 With respect to planning transport services for the Games, there are four main groups of people to consider:
- 1. The Olympic Family and the Paralympic Family, together they form the 'Games Family'
- 2. Spectators, attending both sports and cultural events
- 3. London 2012 workforce
- 4. Regular or 'background' transport users

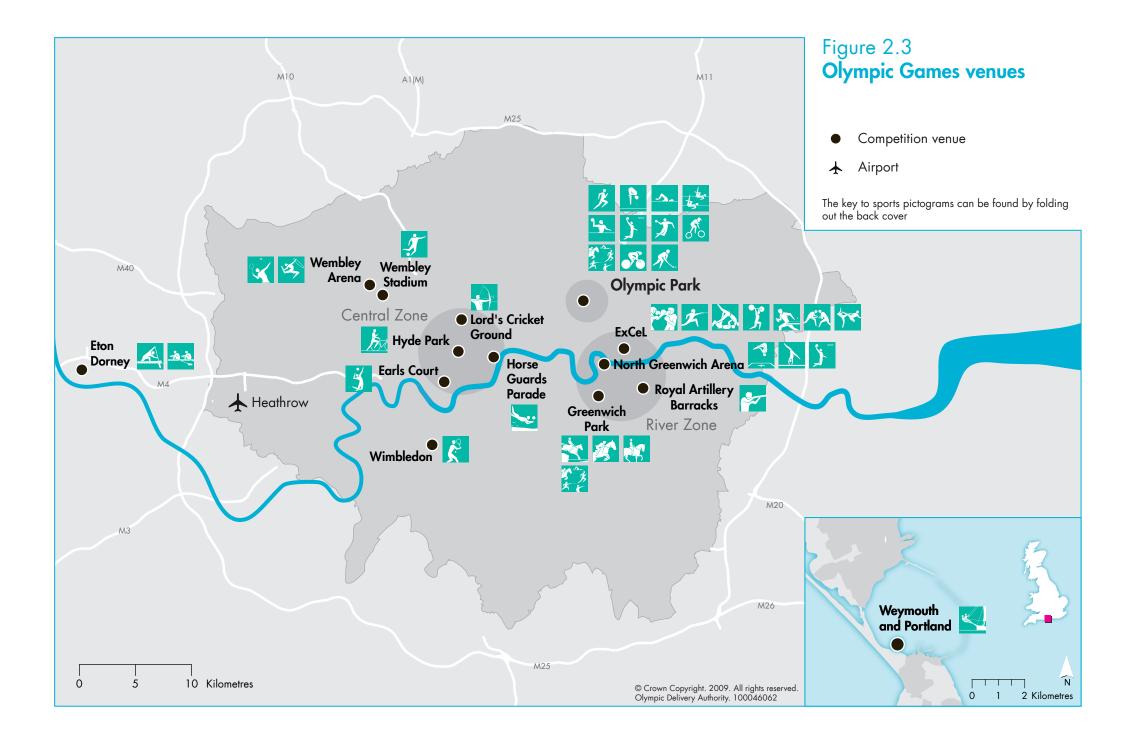
#### **Games Family**

2.21 The 'Games Family' describes the people from a wide range of organisations that make the Games happen. This term is used to describe both the Olympic Family and the Paralympic Family. The Games Family includes athletes and team officials, technical officials, press, broadcast, IOC and IPC members and staff, World Anti-Doping Agency (WADA), Court of Arbitration for Sport (CAS), IOC Medical Commission, members of National Olympic Committees and National Paralympic Committees and International sports Federations and marketing partners.

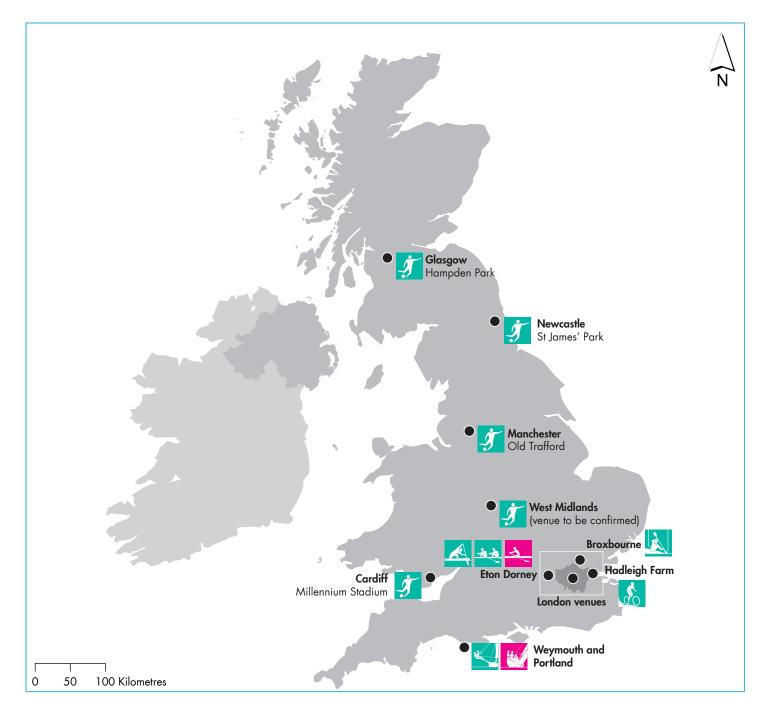
2.22 During the Olympic Games the Games Family will number around 77,000 people across the whole period. During the Paralympic Games the Games Family will number about 12,000 people. LOCOG Transport is responsible for planning and delivering transport services to Games Family client groups. Chapter 5 provides further details on the Games Family.

#### **Spectators**

- 2.23 Around 7.7 million tickets are expected to be sold across the UK and internationally for competition events during the 16 days of the Olympic Games. For the busiest days around 800,000 tickets are expected to be sold.
- 2.24 During the Paralympic Games, it is estimated that a total of 1.5 million tickets will be on sale, with up to 145,000 spectators attending on the peak day.
- 2.25 The sports competitions are organised in sessions. The session times will vary by sport and by venue. Some venues will host only one session per day, others will host two or more sessions. The Olympic Stadium, for example, will typically host two sessions per day; one in the morning, then another starting mid-afternoon and lasting through the evening.
- 2.26 All spectators visiting competition venues will be ticketed. Ticket and security checks will be made at the entrance to the venues. For road events and for the Sailing in Weymouth and Portland, significant numbers of non-ticketed spectators are expected to view the events from public areas.
- 2.27 Some spectators will purchase tickets for more than one event on one day, particularly for events staged within the Olympic Park. This will affect the actual number of people attending the Olympic Park per day.



Chapter 2: Background 15

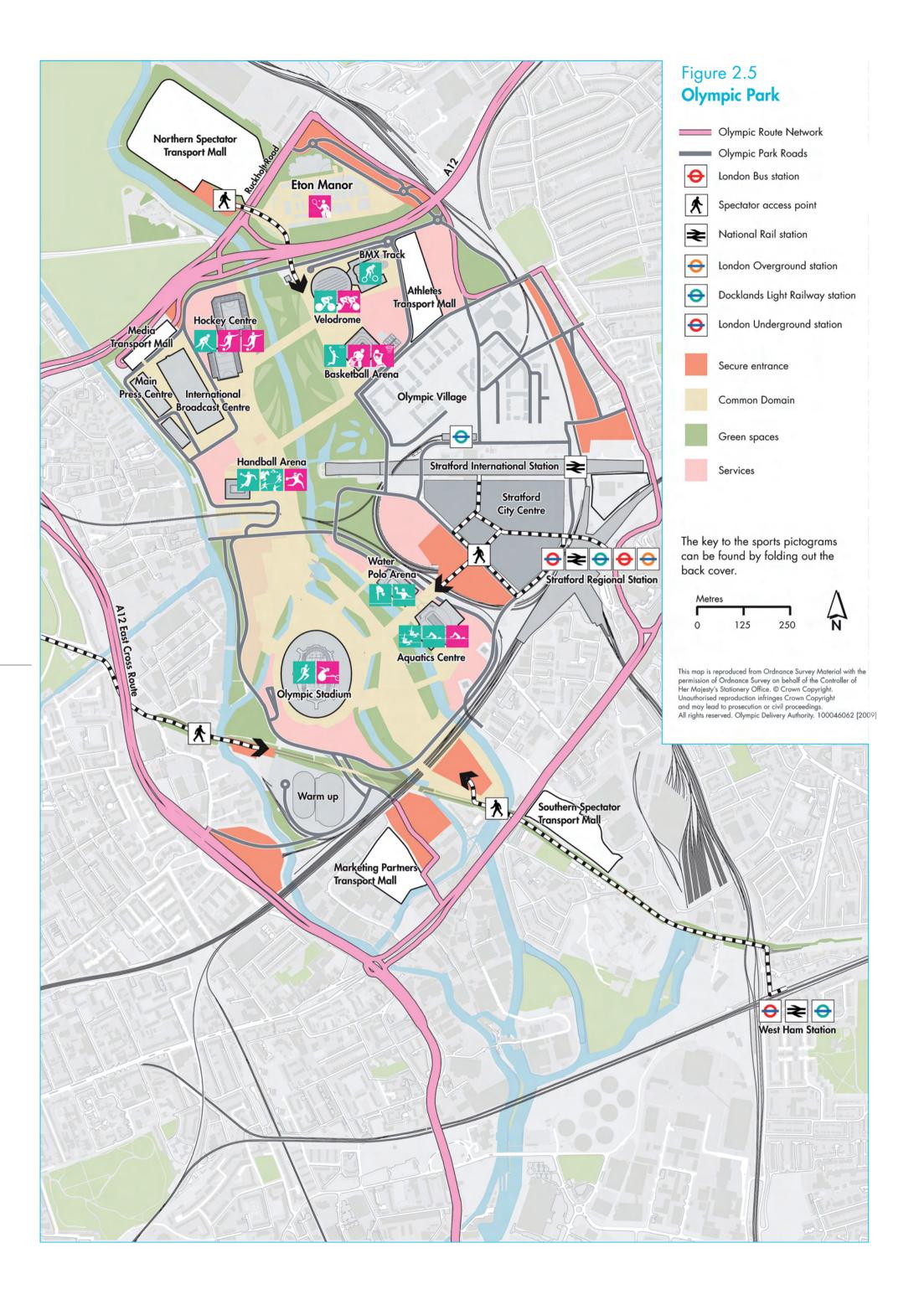


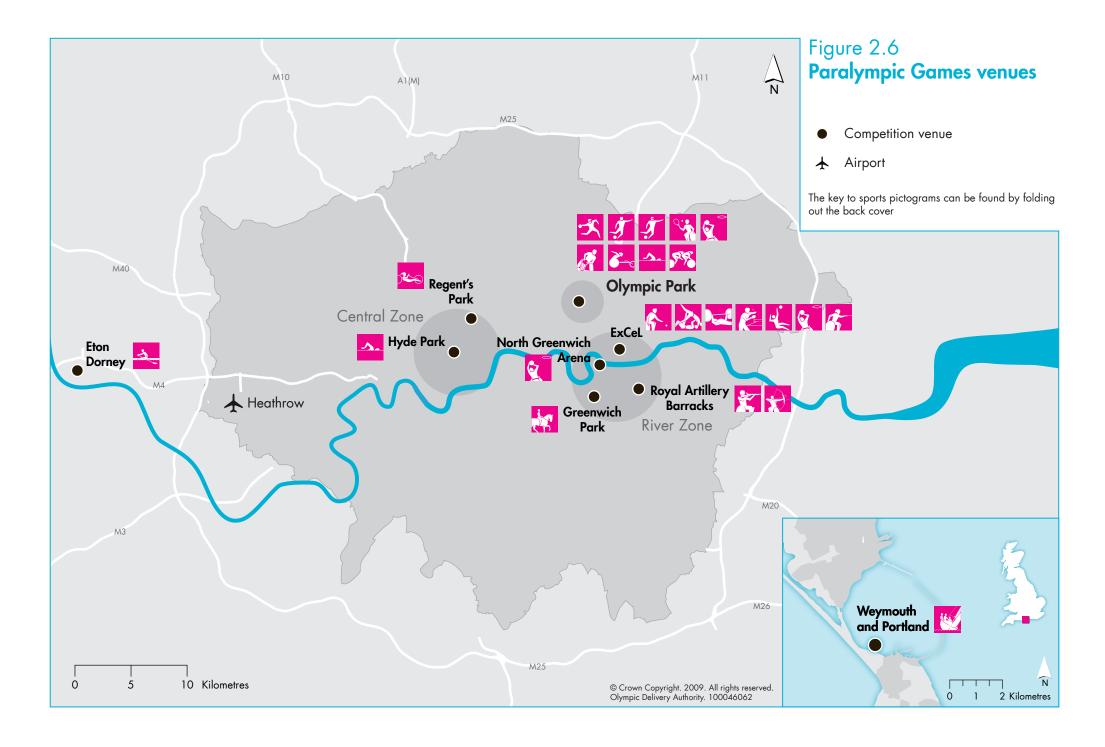
## Figure 2.4 **UK Olympic Games venues**

Competition venue

The key to sports pictograms can be found by folding out the back cover

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2.28 On certain non-peak days of the Games, non-event tickets may be sold. These tickets will allow people to visit the Olympic Park to experience the 'Games atmosphere' but not view any of the sporting competitions inside the venues.

#### Workforce

- 2.29 For the purposes of this Transport Plan, the term 'workforce' is used to describe accredited London 2012 staff, volunteers and contractors. The workforce is a large group of people that has specific transport requirements during the Games.
- 2.30 The current working assumption is that there will be a LOCOG workforce of more than 170,000 people including some 70,000 volunteers, 100,000 contractors and up to 3,000 paid staff totalled for both the Olympic and Paralympic Games. The workforce will need to travel to various venue locations across London and the UK every day, adding to the demand for transport.

Chapter 2: Background



# Roles and responsibilities

Chapter 3

### Chapter 3 Roles and responsibilities

#### Introduction

- 3.1 The task of providing transport for the Games impacts on the whole of the transport sector across the UK and in London. Many organisations were involved in the development of the transport strategy during the bid to host the Games. These same stakeholders, and many more, have been and will be involved during the detailed planning and operations phases.
- 3.2 Stakeholders are defined as those individuals and organisations interested in, involved in, or affected by the transport projects that must be delivered for the Games.
- 3.3 This chapter outlines the roles and responsibilities of the organisations involved in delivering the Games. It explains how responsibilities for delivering Games transport are split between LOCOG's Transport team, which is planning and will deliver transport for the Games Family, and the ODA's Transport team, which is planning and delivering transport infrastructure and transport for spectators.

#### **Games vision**

3.4 The overarching vision of the London 2012 Games is:

'to host an inspirational, safe and inclusive Olympic Games and Paralympic Games and leave a sustainable legacy for London and the UK'.

#### **Games structure**

3.5 A partnership of organisations is involved in the delivery of the Games and their legacy.

- 3.6 The International Olympic Committee (IOC) is an international non-governmental not-for-profit organisation. It is the creator and umbrella organisation of the Olympic Movement. It owns all the rights to the Olympic symbols, flag, motto, anthem and Olympic Games. Its primary responsibility is to supervise the organisation of the Summer and Winter Olympic Games. The International Paralympic Committee (IPC) organises, supervises and coordinates the Paralympic Games.
- 3.7 The London Organising Committee of the Olympic Games and Paralympic Games (LOCOG) is a limited company responsible for preparing and staging the 2012 Games on behalf of the Olympic Movement under the terms of the Host City Contract. Funding for the Organising Committee comes mainly from the private sector from sources including ticket sales, sponsorship, broadcasting rights and merchandise sales.
- 3.8 The British Olympic Association (BOA) is the British representative of the Olympic Movement, and is responsible for British participation in Summer and Winter Games, safeguarding Olympic values and ensuring sports elements are protected. The British Paralympic Association (ParalympicsGB) is responsible for selecting, preparing, funding and managing Britain's competitors at the Paralympic Games and its interests are represented by the BOA on the Olympic Board.
- 3.9 The Greater London Authority (GLA) was one of the bid's three central stakeholders and has committed funding to deliver the Games. The Mayor of London, together with LOCOG and the BOA, is jointly responsible for delivering the Games under the terms of the Host City Contract, agreed with the IOC.
- 3.10 The Olympic Board comprises the Olympics Minister, the Mayor of London and the Chairs of LOCOG and the BOA. The Chairman of the ODA also attends. The Board is responsible for

- coordinating the work of the key stakeholder organisations, including LOCOG and the ODA, for resolving and determining issues raised by members and for ensuring a sustainable legacy following the Games.
- 3.11 The delivery partners for the London 2012 Games are organisations that will deliver the Games alongside London 2012. These include:
- Government departments;
- Non-departmental public bodies such as OFCOM;
- Members of the GLA family such as Transport for London (TfL), London Development Agency (LDA), London Fire and Emergency Planning Authority (LFEPA), Metropolitan Police Authority, Visit London, and the Olympic Park Legacy Company;
- Members of the Games Family, such as The Olympic Partner Programme (TOP Programme), OBS, IFs/IPSFs, NOC/NPCs, World Anti-Doping Agency (WADA);
- British Paralympic Association (BPA);
- London boroughs (funding via public purse not necessarily directly through Mayor of London);
- Other UK Host Cities, and Host Councils; and
- Organisations reached through the Nations and Regions Group delivering on legacy.
- 3.12 The Olympic Delivery Authority (ODA) is the public body responsible for developing and building the new venues and infrastructure for the Games. The ODA is a statutory corporation and is also a non-departmental public body accountable to the Secretary of State for Culture, Media and Sport (DCMS).
- 3.13 The responsibilities of the ODA are to: build new permanent venues; build arenas that will be relocated after the Games; undertake permanent works to existing sports venues; plan and deliver both transport infrastructure and services to support the 2012 Games; convert the Olympic Park for

long-term use after the Games; and make sure the project sets new standards for sustainable development.

#### **ODA** mission

#### 3.14 The ODA's mission is to:

'deliver venues, facilities, infrastructure and transport for the London 2012 Olympic and Paralympic Games on time, to budget and to leave a lasting legacy'.

- 3.15 This mission incorporates three overarching themes, which are supported by six priority areas. The overarching themes are:
- on cost working within the agreed budget;
- on time working to an immovable deadline; and
- fit-for-purpose ensuring design and construction quality meet Games and legacy specifications and deliver effective transport.
- 3.16 The six priority areas that support these themes are:
- Legacy providing infrastructure and viable venues and facilities that are retained after the Games for the benefit of local communities.
- Sustainability the ODA aims to maximise the opportunities presented by its activity, while minimising adverse environmental, social and economic impact.
- Equality and inclusion promoting equality and inclusion, involving local communities and promoting the creation of accessible environments and access to training and employment opportunities for all.
- Health, safety and security maintaining the highest standards of safety and security during construction, operation and maintenance.
- Design and accessibility creating venues fit for the world's greatest sporting events and their long-term use afterwards.

 Employment and skills – ensuring the Games give people in London and the UK access to new jobs and skills, and create a positive employment and economic legacy.

#### **ODA funding**

- 3.17 The ODA is funded chiefly by the public sector with contributions from the National Lottery, the Mayor of London, LDA and central Government. The ODA's Games transport budget is split almost equally between capital and operational expenditure. The transport delivery strategy has been developed to make best use of existing transport infrastructure and improvements that were already planned. Where the ODA is paying for improvements itself, it will deliver the greatest legacy benefit by building on schemes that are valuable irrespective of the Games.
- 3.18 The Games bring a fixed deadline and some specific, temporary, requirements to this planned investment. To obtain the greatest possible long-term benefits from the investment, Games expenditure is generally made as a contribution to wider schemes, thereby leveraging a far greater overall investment.

#### Other external stakeholders

- 3.19 In addition to the organisations listed above, the ODA works with a range of other stakeholders including:
- the LDA, which led the land acquisition activity for the Olympic Park;
- Transport for London (TfL), the Highways Agency, Network Rail, the Department for Transport (DfT), local authorities, train operating companies and BAA which are involved in delivering transport schemes;
- local authorities (particularly those in and around the Olympic Park), the London Thames Gateway Development Corporation and Lee Valley Regional Park Authority, which will help the ODA provide a sustainable legacy;

- private sector organisations and businesses across the UK, working with the ODA through contracts or other commercial arrangements;
- voluntary and non-governmental organisations whose continued support and advice will be needed, for example trade unions; and
- the people and communities who live in the areas that will be affected by the Games and whose support will be as critical to successful delivery as it was to winning the bid.

#### **Olympic Park delivery**

3.20 The ODA actively manages the transport needs of construction to deliver the Olympic Park venues and associated infrastructure. This covers the movement of materials by road, rail and water as well as the construction workforce. The ODA has prepared, and regularly updates, a Construction Transport Management Plan. The Management Plan sets out the physical enabling works to provide the transport infrastructure to deliver the Olympic Park and the relevant transport and highway authorities have been consulted. The document incorporates elements of the Transport Plan where appropriate.

#### Games transport objectives

3.21 The five key Games transport objectives are to:

- provide safe, secure, inclusive, fast and reliable transport for the Games Family client groups;
- provide frequent, reliable, friendly, inclusive, accessible, environmentally friendly and simple transport for spectators and visitors from all around the UK and overseas;
- leave a positive legacy and to facilitate the regeneration of east London;
- keep London and the rest of the UK moving during the Games and thus make it a positive experience to host the Games; and
- achieve maximum value for money for every pound spent on transport.

- 3.22 Transport for the Olympic Games and Paralympic Games will be delivered through a partnership between LOCOG's Transport team, the ODA's Transport team and a number of transport authorities and operators. The structures put in place to deliver Games transport have been informed by the experiences of other host cities, such as Sydney, Athens, Turin, and Beijing.
- 3.23 LOCOG Transport has the ultimate accountability to the IOC for the Transport services delivered to all client groups. LOCOG Transport is responsible for planning and delivering Transport services for Games Family clients. These services will operate on the Olympic Route Network (ORN) and Paralympic Route Network (PRN) which the ODA will deliver and for which LOCOG is the ODA's client.
- 3.24 The scope of the ODA's Transport team may be summarised as the movement of people during the London 2012 Games period. This period begins approximately four weeks before the Olympic Games Opening Ceremony and ends five days after the Paralympic Games Closing Ceremony. However, it should be noted that some activities, for example, the decommissioning of some temporary measures, may fall outside these dates. The ODA's Transport team is responsible for:
- planning and delivering spectator transport for the Games;
- planning and delivering the ORN and PRN to ensure that the Games Family services delivered by LOCOG achieve the journey times required by its Games Family clients;
- coordinating transport operations during the Games through the Transport Coordination Centre (TCC) to keep London and the rest of the UK moving;
- effectively managing demand on transport networks during the Games; and
- delivering transport infrastructure for the Games.

- 3.25 TfL is a major transport service operator in London. Its principal responsibilities during the Games will be to facilitate the transport of spectators and workforce who will use TfL's services, and managing the ORN used to transport the Games Family within London. Before the Games, TfL will deliver some of the background transport projects.
- 3.26 The DfT supports the delivery of transport for the Games through the funding and delivering of specific projects and work streams. For example, it has put in place the secondary legislation needed to establish the ORN.

#### **City Operations**

3.27 The City Operations programme was initiated in April 2009 by the GLA. It recognised that the impacts of Olympic and Paralympic events on London need to be assessed and managed, and balanced against both the day to day running of the capital and the quality of the Games-time experience throughout the city for visitors and residents. The vision for the London 2012 City Operations programme is:

'To provide an inspirational citywide experience for everyone participating in the Games in London, to safeguard the smooth running of London in Games time, and to maximise the opportunities for legacy from this work.'

3.28 The programme is led by the London City Operations Steering Group and is chaired by the GLA. The GLA has a coordination role which is based on acknowledgement that neither the Mayor nor any other single authority has the powers to deliver all the services on which the programme relies, or the powers to direct the agencies which do.

#### The ODA Transport team's delivery partners

3.29 The ODA's Transport team is working with a range of delivery partners to develop and implement the Transport Plan.

- 3.30 One of the philosophies that underpins the transport strategy is to use the mechanisms that already exist and work well in the transport industry. The ODA's Transport team provides a focus to integrate and coordinate the delivery of the schemes that form part of this Transport Plan. The organisations that contribute to the delivery of the Transport Plan are the ODA's transport delivery partners. The ODA's Transport team will work with these partners to ensure integrated planning throughout their projects and programmes, and the delivery of these projects.
- 3.31 The transport delivery partners currently include:
- TfL:
- the Highways Agency;
- DfT;
- Network Rail;
- Train Operating Companies (TOCs);
- London & Continental Railways (LCR) including HS1 Limited; and
- other transport providers, including London boroughs and local authorities and transport operators across the UK.
- 3.32 Each of the transport delivery partners has nominated a lead person to coordinate its involvement, and a structure of formal and informal meetings has been set up.
- 3.33 Later chapters of this Transport Plan explain the involvement of each of the transport delivery partners. Other transport organisations and operators will become delivery partners as the ODA's programme of work and procurement progresses.

#### **Highway Traffic and Street Authority duties**

3.34 The London Olympic Games and Paralympic Games Act 2006 requires the following to cooperate with the ODA for the purpose of implementing the Transport Plan and providing or facilitating transport services in connection with the London Olympic and Paralympic Games:

- the Mayor of London;
- Transport for London;
- the Secretary of State;
- the local highway authority for a road;
- the street authority for a road; and
- the local traffic authority for a road.
- 3.35 The Secretary of State has power to issue a direction to an authority which fails to cooperate with the ODA and, if the authority fails to comply with a direction, the Secretary of State can exercise the relevant function or make arrangements for the ODA or any other person to do so.
- 3.36 In addition, the Act requires the local highway, local traffic or street authority to obtain the consent of the ODA in relation to the exercise of any of its functions that might affect:
- the implementation of the Transport Plan;
- any part of the ORN;
- travel to or from a London 2012 event; or
- other travel for a purpose connected with the London 2012 Games.
- 3.37 The ODA can take steps to reverse or change anything done in contravention of this requirement and may recover the reasonable cost of doing so from the relevant authority.

#### **Background schemes**

3.38 Some projects included within this Transport Plan are being planned, procured and funded by Government or other transport bodies, such as Transport for London, outside of Games-specific

funding. These projects, known as 'background schemes', have been included in the guarantees to the IOC. These projects would have been delivered irrespective of the Games. Examples include the East London Line extensions, Jubilee Line improvements and the delivery of High Speed 1. The ODA is assuming a watching brief over the background schemes to ensure that they will deliver the necessary outputs upon which additional Gamesspecific transport schemes will rest.

#### Publicly funded schemes under development

3.39 The ODA also has an interest in the progress of some projects that are not included in the guarantees to the IOC, but are under development by Government or other transport bodies outside Games-specific funding. The ODA is working in partnership with the promoters of these projects to maximise any potential joint benefits and minimise any potential risks to the budget, programme or operational plans for Games schemes. Further details are given in chapter 6.

#### Consultees and stakeholders

- 3.40 This Transport Plan is likely to be of greater relevance to those people and organisations that will be implementing the Transport Plan or those whose remit may include matters to be addressed by it, rather than to the general public. A wide range of people and organisations were involved in the development of the first edition. Further consultation, including community and public consultation, will be carried out by the ODA and its delivery partners in the lead up to the Games during the detailed planning stages and implementation of projects. A number of groups have been established to consult on transport issues across all modes. Some of these groups include:
- Borough Transport Forum This forum of London borough transport officers has been established by the ODA, working in partnership with London Councils. It is a working group that informs, advises and assists those London boroughs in

- which Games venues are located, through which the ORN will run on borough roads and through which road events, such as the Marathon, will pass. The ODA is also working with local authorities outside London, either individually or in groups, as the transport plans to serve all venues are developed.
- Transport Security Steering Group This group, supported by a Transport Security working group and modal sub-groups, oversees the delivery of the transport security project within the Home Office-led Olympic and Paralympic safety and security programme.
- Accessible Transport Panel This panel includes individuals with specialist technical and practical expertise in accessible transport issues. The panel provides technical advice to the ODA. The chair of the panel is a member of the ODA's wider Access and Inclusion Forum, which is used to coordinate the activities of all the related access panels within the ODA.
- Transport Sustainability Forum This forum brings together organisations that will play a part in ensuring that sustainability issues are fully considered during the planning and implementation phases. It comprises a range of transport delivery partners and other stakeholders.
- 3.41 London 2012 wishes to work with local authorities to combine its programme of improvements and with local authority programmes of activity to ensure that both a great sporting event and a transport legacy are delivered.
- 3.42 Funding and support is being provided by London 2012 and TfL for local transport investments that will directly benefit the Games. Where improvements for the Games are required, discussions are already underway with the relevant parties and mechanisms are being put in place to ensure delivery. These negotiations will continue and develop in the lead up to the Games.

- 3.43 In 2009 nearly 500 meetings or events have been held through structured meetings, various forums, workshops and seminars. Meetings will develop and intensify in the lead up to 2012.
- 3.44 The remit of London 2012 extends across the UK. Successful working relationships have been established with a range of local agencies including local authorities, regional development agencies, emergency services, and the Highways Agency.
- 3.45 Discussions between London 2012 and the regional Football stadia which will host the Football competitions are underway.
- 3.46 London 2012 will work closely with local authorities to implement and enforce existing and new Traffic Regulation Orders (TROs). New TROs, temporary TROs or deviations to current TROs will be required for both the ORN and local traffic management plans around venues.
- 3.47 Local authorities will also play a key role in obtaining planning permissions and licences. London 2012 will be engaging with local authorities to ensure that the planning application process is as smooth as possible.

#### Interest groups

3.48 There are many groups that will be interested in the development of the transport arrangements for the Games or will be affected by them. Engagement plans for interest groups have been developed, in conjunction with the development of wider ODA and LOCOG strategies for communications and community engagement.

#### Planning, transport and economic policy

3.49 During the development of the transport strategy for the Games, one of the key objectives was to ensure that transport is developed and delivered in line with wider transport and planning policy. UK policy is articulated at a number of levels, with national Government setting out the strategic framework and more detailed and locally

relevant policies formulated at a regional level. The transport strategy for the Games will continue to be developed in line with national, regional and local policy guidance. The following policy documents are of particular relevance:

- Government White Paper Delivering a Sustainable Transport System (2008)
- The Mayor's London Plan: Spatial Development Strategy for Greater London (2004) and A new plan for London: Proposals for the Mayor's London Plan (2009);
- The Mayor's Transport Strategy (2004) and the Mayor's Draft Transport Strategy (2009);
- Planning Policy Guidance Note 13 (2001);
- Regional Transport Strategy for the South East (2004); and
- London's Economic Development Strategy (2005), prepared by the London Development Agency.
- 3.50 It is considered that the strands of this transport strategy are consistent with, and supportive of, the policy directions communicated through these plans.
- 3.51 Transport policy will be continuously reviewed throughout the Games planning process. This will ensure that transport arrangements around the country, and in London in particular, are in harmony, and relevant bodies and authorities are not asked to deliver conflicting plans.

# Transport Strategy

Chapter 4

## Chapter 4 Transport strategy

#### Introduction

- 4.1 The importance of transport to a successful Games was recognised at an early stage during the bid. Transport for London (TfL) and the then London 2012 Ltd, the company set up to bid for the Games, began transport planning for a 2012 Games in 2003 when TfL established the Olympic Transport Strategy (OTS) team. The current transport strategy is based upon, and has been developed from, the work undertaken at that time.
- 4.2 This chapter outlines the key strands of the transport strategy for the Games.

#### **Strategy**

- 4.3 The transport strategy for the London 2012 Games has evolved over the past six years in response to the requirements of the IOC, the different International Sports Federations, LOCOG and the key objectives developed by it, the ODA and their forerunners. Each of the following strands of the transport strategy has been adopted to meet one or more of the key transport objectives, described in chapter 3. These are to:
- ensure that the athletes are the top priority;
- aim to achieve 100 per cent of ticketed spectators travelling to competition venues by public transport, walking or cycling;
- keep London and the UK moving during the Games:
- ensure that the Games are accessible from all parts of the UK;
- leave a lasting, positive legacy; and
- achieve maximum value for money.

#### **Games Family transport**

- 4.4 The needs of the Games Family are at the heart of the transport strategy. The Games will not happen without the athletes and team officials, press, broadcast and other officials. These clients require fast, reliable and secure transport services between their accommodation and their destination. LOCOG will provide bespoke transport services appropriate to the needs of each client group.
- 4.5 To keep journey times, especially for the athletes and team officials, to a minimum and ensure the reliability of the journeys, the transport strategy involves the implementation of an Olympic Route Network (ORN), similar to that operated at previous Games. The ORN will comprise a network of roads that will link Games Family accommodation areas with all competition venues and key non-competition venues, such as Heathrow Airport. A wide range of temporary traffic management measures, including dedicated lanes on some stretches of the network and alterations to traffic signal timings, will be used to ensure Games vehicles can move quickly and reliably to and from venues.
- 4.6 All Games Family clients will also be able to use the public transport system within Greater London free of charge. They will be encouraged to use it where appropriate.

#### **Spectator transport**

4.7 The spectator transport strategy is based around the concept of transporting all ticketed spectators to all competition venues by public transport, walking or cycling. There will be no private car parking for spectators at any venue, except for some Blue Badge parking. Strict parking controls will be implemented on a temporary basis around each venue to support this strategy.

4.8 The strategy involves making best use of all existing or upgraded public transport services and supplementing them, where necessary, with enhanced service levels or temporary additional services, such as park-and-ride or shuttle buses during the Games.

#### **Competition venues**

- 4.9 Any new venues, such as those within the Olympic Park, that are constructed will be designed to ensure that adequate provision is made for public transport, walking and cycling to maximise the accessibility of the venue by non-car modes. Indeed, when the existing and planned venues were chosen for the Games, one of the key criteria in the decision-making process was the public transport accessibility of the sites.
- 4.10 A further criterion in choosing which venues should be used was the minimisation of journey times between athlete accommodation and their training and competition venues.
- 4.11 For most competition venues the strategy for spectator and workforce travel is to maximise the use of the rail networks (National Rail, Underground and Docklands Light Railway) due to the high passenger capacity that these modes already offer. Bus and coach modes, including local bus services, coach operations, park-and-ride and shuttle bus services will be used to supplement the rail services. The Active Travel Programme will promote walking and cycling to all venues. Where appropriate, the transport opportunities provided by the River Thames will be utilised to provide an additional transport option.

#### Managing demand

4.12 As in previous Games, a strategy of managing background (non-Games) travel demand will be implemented. This will involve a wide variety of measures to reduce background travel on key routes during the Games.

4.13 To coordinate all modes of transport for the Games Family, spectators, workforce and for all those travelling for reasons unconnected with the Games, the transport strategy involves establishing a Transport Coordination Centre (TCC). This will assist London 2012, TfL, other transport operators, the emergency services, local authorities and those running the Games to deliver outstanding Games transport.

#### Infrastructure

4.14 To meet the immovable deadlines of the Games and to achieve best value for money, the transport strategy is based on the concept of making the maximum use of existing transport infrastructure and services, and building new infrastructure only where it is essential and leaves an appropriate legacy. Wherever possible, cost-effective temporary operational solutions will be used to meet temporary peaks in travel demand generated by the Games. Where new transport infrastructure or services are needed, the strategy is to make use of existing expertise and processes to deliver them. Therefore, the ODA has made agreements with a range of delivery partners within the UK's well-established transport industry to deliver transport schemes on its behalf

4.15 An important element of the strategy has been to invest in new transport infrastructure where it will have a strong benefit after the Games. The strategy seeks to bring forward planned investment in transport infrastructure or services wherever possible in time for the Games. For example, the ODA has worked with TfL to bring forward the procurement of new rolling stock for the Docklands Light Railway (DLR) so that it is available in time for the Games and benefits passengers earlier than would have otherwise been the case.

#### Integrated planning

4.16 To achieve best value for money and ensure that transport plans work equally well for both the Olympic Games and Paralympic Games, an

integrated approach to transport planning for both Games has been adopted. The strategy is to minimise the need for transition works between the end of the Olympic Games and the start of the Paralympic Games. With regard to accessible transport, the transport strategy will ensure that all competition venues are fully accessible, Blue Badge parking is provided and that an accessible network based on public and community transport is established to provide accessible transport options to every venue.

#### Consultation

4.17 To develop the transport strategy and the detailed transport plans for each venue, the ODA consults widely and regularly with all its delivery partners, relevant local authorities and other key stakeholders.

#### **Testing strategy**

4.18 There can be no movement to the deadline for the start of the Games transport operation. Therefore, all necessary transport infrastructure improvements and services will be delivered in time so they can be adequately trialled during a Testing Programme before the Games.

#### Sustainability

- 4.19 Sustainability principles have been incorporated into the development of the transport strategy for the Games from the start of the planning process. The following are examples of these principles:
- all ticketed spectators will travel to competition venues by non-car modes apart from some disabled spectators;
- the transport strategy makes best use of existing infrastructure;
- the need for transition between the Olympic Games and the Paralympic Games has been minimised;

- a compact Games means that the need for travel between venues is reduced and journeys are shorter; and
- the Active Travel Programme is promoted.
- 4.20 The consideration of sustainable transport issues is integrated into the transport planning processes. Chapter 16 includes further details.

#### Transport challenge

4.21 Although the Games present significant transport challenges, London and the UK has an excellent base upon which to build its transport strategy. London's public transport system caters for around 12 million trips each day and large events are regularly held in the capital. The existing National Rail, Underground and DLR services provide a comprehensive network of rail services and substantial capacity. The Olympic Park will be particularly well-served by rail, with 12 different services operating in the area during the Games. Across London the well-developed network of TfL's bus routes provides additional public transport provision. During the Games some bus services will be enhanced to meet demand. For venues outside London the ODA is reviewing public transport provision and is working with its delivery partners to implement enhancements as necessary.

4.22 During the bid phase the likely total demand for transport during the Games and the capacity that could be made available to accommodate it was analysed. This included both Games demand and background travel demand. This analysis work is still ongoing and is being continually refined as more detailed information regarding the Games becomes available. The work carried out to date provides confidence that the proposed transport arrangements will accommodate the demands of the Games, while continuing to provide for other users of the UK's transport systems.



# Games Family transport

Chapter 5

## Chapter 5 Games Family transport

#### Introduction

- 5.1 'Games Family' is the term used to describe all the people who play a part in making the Olympic and Paralympic Games happen. Generally, they will receive official accreditation during the Games. The Games Family is categorised into seven client groups. These are:
- athletes and team officials;
- technical officials;
- press;
- broadcast;
- Olympic and Paralympic Family;
- marketing partners; and
- workforce.
- 5.2 LOCOG's Transport team is responsible for planning and delivering safe, secure and reliable transport services for these client groups. In most cases, these transport services will use the Olympic Route Network (ORN) and the Paralympic Route Network (PRN). However, members of the workforce will mostly use public transport. Accredited members of the Games Family will also be able to use public transport services within Greater London free of charge if they wish to do so. They will be given information on public transport services and encouraged to use it.
- 5.3 This chapter gives further detail relating to these client groups and focuses on their transport requirements to enable them to carry out their work during the Games.

#### Athletes and team officials

5.4 This client group comprises around 18,000 Olympic and 6,000 Paralympic athletes and team officials. It includes supporting team officials, such as coaches, medical, technical and administrative personnel, training partners and press officers.

- 5.5 The athletes and team officials participating in the Games are accredited as members of a National Olympic Committee (NOC) or National Paralympic Committee (NPC). The 205 NOCs and 162 NPCs are responsible for bringing their athletes and team officials to the Games.
- 5.6 Athletes are at the heart of the Games. An athlete's primary concern is their performance on the day of their event. LOCOG's objective is to ensure that all services provided to them recognise this priority. This is especially true for athlete transport services, which must enable athletes to get to training and competition venues on time and with consistent journey times.
- 5.7 LOCOG will provide secure bus services to transport athletes and team officials from their accommodation to training and competition venues. Reliability of service and consistent journey times are crucial for these clients and the operation of the ORN and PRN will play a vital part in ensuring that each athlete can perform at their best.

#### **Technical officials**

- 5.8 The technical officials at the Games (around 5,000) will be drawn from the different International Federations (IFs) and International Paralympic Sports Federations (IPSFs). They officiate in the field of play and athlete areas.
- 5.9 This group includes Technical Delegates (TDs) who are generally considered the highest International Federation authority in relation to all technical sport matters. It also includes International Technical Officials (ITOs), who are the independent international judges, referees, umpires and jury members nominated to perform senior officiating positions for competition, and National Technical Officials (NTOs) who play an important support role to the ITOs.
- 5.10 Technical officials support the delivery of a fair and timely competition for athletes. They need to be at the venue on time so that they can start each

competition promptly for athletes, spectators and the hundreds of millions of viewers around the world. LOCOG is committed to providing technical officials with comprehensive, comfortable and efficient provision of support services including transport.

5.11 Bus services for technical officials will use the ORN or PRN between accommodation and competition venues.

#### **Press**

- 5.12 Press comprises representatives of the photographic and written press from the UK and overseas, as well as broadcasters that are not part of rights holding organisations. It includes IOC recognised international news agencies, journalists, photographers (including technicians and photo editors) and accredited non-rights holding broadcast organisations, who are treated as press because they are granted similar access and services. This client group totals about 8,000 people.
- 5.13 Press operations run 24 hours a day during the Games and start several weeks before the Opening Ceremony. Many people work long shifts across different time zones with early and late starts to meet the deadlines for sport specific coverage across the world. The press must be able to perform their duties efficiently and in a trouble-free environment.
- 5.14 Around-the-clock bus services using the ORN and PRN will transport press and their equipment between accommodation and competition venues and the Main Press Centre (MPC) where they will work to record and share the stories of the Games with the world.

#### **Broadcast**

5.15 There are two main parts to the 20,000-strong broadcast client group. Firstly, the Olympic Broadcasting Services (OBS) is chiefly responsible for providing the pictures and images of the Games as a service to all broadcast organisations who

have purchased the television and radio rights to the Games. Secondly, it includes the Rights Holding Broadcasters who purchase the right to transmit pictures and images provided by OBS in certain countries. This part also includes the Paralympic Games broadcasters.

- 5.16 Like the press, operations for broadcasters start weeks before the Opening Ceremony and often operate on a 24-hour basis across many different time zones. Most broadcasters operate daily out of the same venue for the duration of competition. They also work from the International Broadcast Centre (IBC) where many of the Rights Holders have studios and to where the TV signals from all the venues are sent back. Broadcasters must be able to perform their duties efficiently and effectively to provide the best viewing experience.
- 5.17 Around-the-clock bus services will transport broadcast clients between accommodation, the IBC, and competition venues using the ORN.

#### **Olympic and Paralympic Family**

- 5.18 The Olympic and Paralympic Family comprises a diverse population of around 6,000 participants at both Games including the members and staff of the IOC and the IPC. However, it also includes international and domestic dignitaries, such as Presidents and Secretaries General of the NOCs/NPCs, International sports Federations (IFs) and International Paralympic Sports Federations (IPSFs), WADA the Court of Arbitration for Sport (CAS) and the IOC Medical Commission.
- 5.19 This client group plays a vital role in the lead up to and during the Games and has a range of different and varied service needs and expectations. They may represent a country, a sport or a specific organisation and in many cases a combination of these at the same time. The Games provide a unique opportunity for whole organisations to come together

in the same city. As a result many executive board meetings and business meetings are held, often in transit between venues where they are required to present medals to athletes across a number of sports disciplines and locations.

- 5.20 The Olympic and Paralympic Family will be provided with fit-for-purpose, cost-effective services to support them leading up to and during the Games. Members therefore require a flexible and efficient transport service that meets these requirements.
- 5.21 A mixture of bus, shared car and dedicated car services will help the Olympic and Paralympic Family clients to conduct their roles during the Games. A car is often used as a mobile office, and ease of travel and reliability of journey times between venues and other key locations is essential.

#### **Marketing partners**

- 5.22 Almost all of LOCOG's budget to stage and host the 2012 Games is raised from the private sector. This commercial revenue comes from several sources including a significant amount from the worldwide Olympic partners and the domestic sponsorship programme. The marketing partners client group of around 25,000 people includes guests of worldwide partners and guests of the domestic partners.
- 5.23 Marketing partners typically arrange for their guests to visit the Games in 'waves' that last about four or five days. During this time they will experience many aspects of the Games and the host city, including the sport competitions and the Cultural Olympiad. Depending on their programme, marketing partners, and their guests, may travel in coaches arranged by their hosts or by public transport.

#### Workforce

- 5.24 The Games workforce comprises LOCOG and ODA paid employees, volunteers and suppliers contracted by LOCOG to directly deliver Games services. They will be distributed across every competition venue and non-competition venue where services for accredited Games Family and spectators are being delivered. The workforce will work shifts, which might start early in the morning before public transport has started or might end after the last public transport services run.
- 5.25 Workforce provide services to other client groups and therefore will be provided with the training, information, and infrastructure support that enables them to perform their duties.
- 5.26 The Games workforce is likely to consist of up to 170,000 people in total across the Olympic and Paralympic Games. The workforce will be able to use public transport to travel to and from their place of work during the Games free of charge. For some people working certain shifts at certain locations there may not be a public transport service available. In these cases a suitable alternative will be provided.

#### **Public Transport**

5.27 In addition to the services described above, all accredited clients will have access to the London public transport network during the Games. They will be given information on public transport services and encouraged to use it where possible.

#### **Olympic and Paralympic Route Networks**

- 5.28 The Games Family must be moved safely, quickly and reliably between the competition venues, accommodation and other key locations. To achieve this, an Olympic Route Network (ORN) will be implemented. In addition, a Paralympic Route Network (PRN) will be implemented during the Paralympic Games. Although the PRN will be reduced in scale, the same principles will be applied to develop and implement it as those for the ORN. Enabling powers are contained in the London Olympic and Paralympic Games Act 2006.
- 5.29 The ORN will comprise a network of roads linking all competition and key non-competition venues. In general the roads will still be available for use by all traffic during the Games. On the busiest sections of the ORN, traffic lanes will be reserved for Games vehicles. However, in many cases, apart from Games signage and branding, the ORN will be indiscernible to other road users. Figure 5.1 shows a map of the ORN.
- 5.30 The ODA, in partnership with TfL, the Highways Agency, the emergency services, and those highway authorities through which it will pass, is designing and delivering the ORN. The ORN has been formally designated by the Secretary of State for Transport. The ODA has a range of temporary powers, defined in the London Olympic Games and Paralympic Games Act 2006, to manage traffic and ensure the smooth operation of the road network during the Games.

#### Roads in the ORN

5.31 Over the past two years, detailed planning of the ORN has been undertaken and significant amendments have been made to the ORN since publication of the Transport Plan in October 2007. Additionally, the venue for the Mountain Bike event has been moved from Weald Country Park to Hadleigh Farm in Essex, generating a requirement for changes to the ORN.

- 5.32 The ORN is made up of four different categories of route.
- 1. Core ORN: comprises the main roads between Games Family accommodation, the Olympic Park and other main venues and will be heavily used by Games traffic throughout the Olympic Games period. These roads are entirely within London.
- 2. Venue-specific ORN: routes to other London venues and venues outside London such as Weymouth and Portland, Eton Dorney, Broxbourne, Hadleigh Farm and the route to Heathrow Airport. A number of these venues will be in use for only part of the Games period.
- **3. Alternative routes ORN:** included as a contingency against disruption on one of the core or venue-specific routes and only used if needed.
- 4. Preferred training venues ORN: includes roads that are off the other ORN routes and need to be free from obstruction prior to and during the Games so that athletes can get to and from their training venues.

#### **ORN** programme

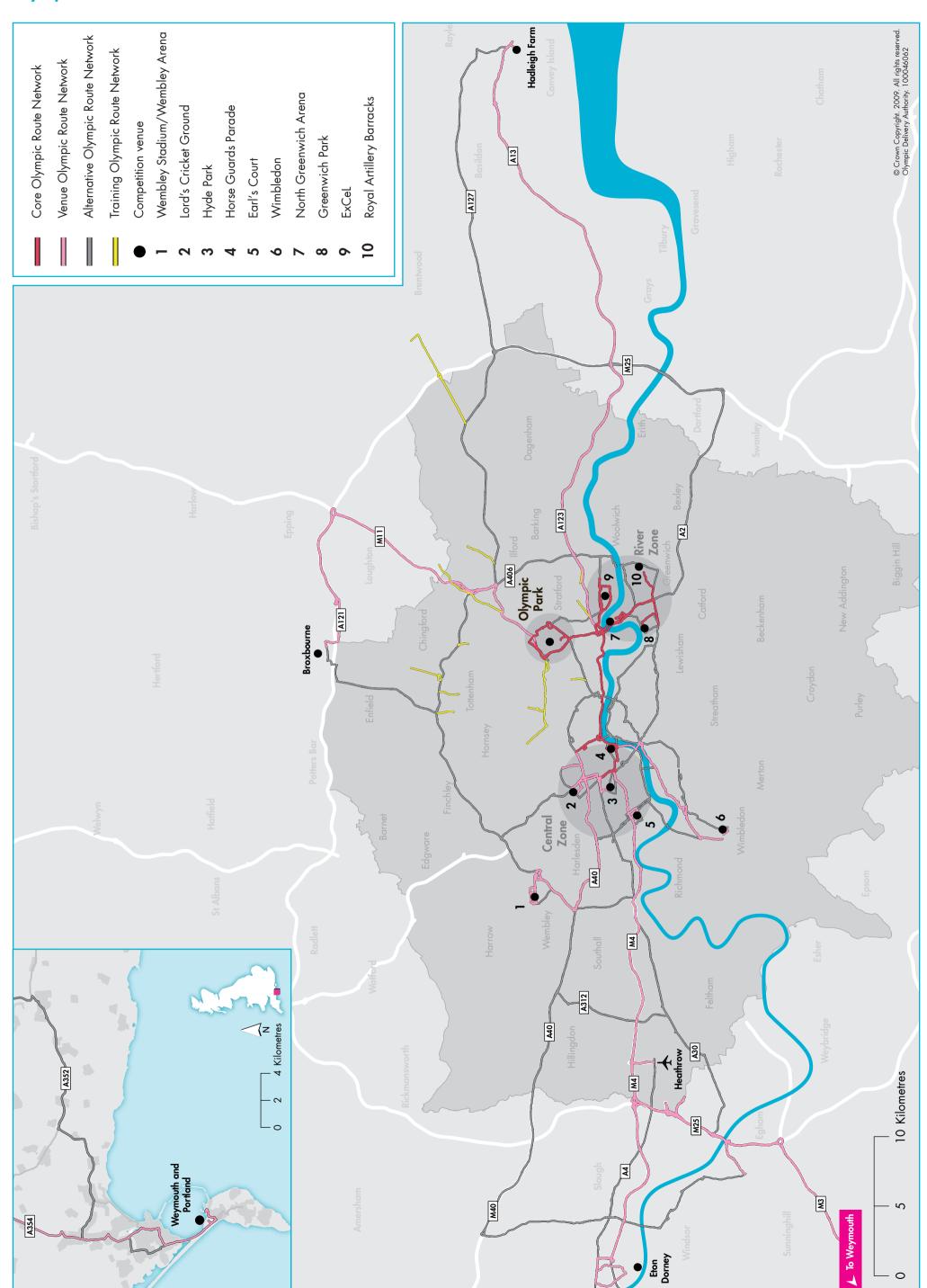
- 5.33 The ORN programme consists of a number of different, but connected, projects that will collectively assist journey times for the Games Family. The objectives of the ORN programme are to enable safe, secure and efficient transportation of the Games Family between venues and accommodation whilst minimising the impact of the Games on residents, businesses and visitors to London and the rest of the UK. The different elements of the programme are:
- 1. Designation of the ORN completed in July 2009
- 2. Junctions and carriageway improvements (temporary traffic measures) preliminary designs to be completed by July 2010
- 3. Traffic signal technology upgrade substantially completed
- 4. Communications and travel information

- 5. Management of third party projects
- Management of utilities' street works and roadworks
- 7. Traffic compliance a strategy to be completed by July 2010
- 8. Stakeholder engagement

#### **Designation of the ORN**

- 5.34 The ORN was formally designated in summer 2009 by the Secretary of State for Transport in a Statutory Instrument under the provisions of the London Olympic Games and Paralympic Games Act 2006. Consultation on the roads to be included as part of the ORN was carried out by the Department for Transport, working closely with the ODA, between December 2008 and March 2009.
- 5.35 Although not defined separately in the Statutory Instrument, the DfT's consultation identified four types of route that comprise the ORN and described the types of measures likely to be implemented on each route. The consultation did not address specific measures on individual roads; these are subject to further work and separate consultation by the ODA.
- 5.36 In light of the consultation responses some changes were made to the ORN: a few routes were changed, one route was switched with its alternative and some roads were added. A number of the suggestions made by consultees needed further information or investigation before a final decision could be taken. The ODA is working up these suggestions in conjunction with LOCOG and local authorities, but in the meantime the original roads are kept in the network.

Figure 5.1
Olympic Route Network



- 5.37 The Statutory Instrument for the initial designation of the ORN came into effect on 22 July 2009. The ODA expects that it will need to make some changes to the network after its further work has been completed but only after consultation, as required by the 2006 Act, and with the consent from Secretary of State.
- 5.38 The experience of previous Host Cities has shown that the key to a successful ORN is good preparation and early and effective communication with those who may be affected, even though the network is primarily an operational measure for the Games. The designation of the route three years ahead of the Games is significant because it:
- creates certainty, allowing utility companies, local authorities, the public and businesses to see well in advance which roads are to be included in the ORN and to plan accordingly;
- allows the ODA to see any proposed changes that might affect the network, so it can address the proposed changes well in advance of the Games; and
- provides time for the ODA to work with stakeholders, including businesses and individuals, to mitigate any impact of the ORN.
- 5.39 The London Olympic Games and Paralympic Games Act 2006 gives the ODA a range of temporary powers to help manage traffic on the ORN roads during the Games including:
- approval powers over the exercise of highway, traffic or street authority functions that could have an effect on the ORN or the delivery of the Transport Plan;
- powers to make Traffic Regulation Orders (TROs) for the ORN; and

- the requirement for a number of bodies to cooperate with the ODA to help deliver the Transport Plan and facilitate transport for the Games. The Secretary of State has a power of direction over an authority which fails to comply with this.
- 5.40 The ODA is working with key stakeholders, such as local highway authorities, to develop the processes by which the ORN-related powers are progressively implemented in the run up to and during the Games. All powers associated with the ORN will expire after the Paralympic Games.

#### **Traffic management measures**

- 5.41 The ODA has responsibility for delivering the effective operation of the ORN in partnership with TfL, the DfT, the Highways Agency and those highway, traffic or street authorities through which the ORN will pass. The ODA is developing temporary traffic management measures with the relevant authorities and other stakeholders.
- 5.42 This work has already been in progress for some time. Further work is now taking place to work up proposals in detail, consult with affected parties and take them through the necessary statutory processes for the TROs, where these are required.
- 5.43 A variety of temporary traffic management measures will be implemented along the ORN. These measures will ensure reliable journey times for Games vehicles and minimise the impact of Games traffic on other road users. They will be developed by considering, among other matters, the needs and safety of pedestrians. These measures might include:
- alterations to traffic signal timings;
- banned turns and/or road closures;
- junction improvements;
- alterations to kerbside controls;
- Games Lanes; and
- diversion routes.

5.44 The requirement for such measures is currently being investigated in detail by the ODA and its delivery partners in consultation with the relevant highway authorities and other key stakeholders. Detailed traffic modelling is being carried out to determine the specific requirements for any traffic management measures. The effect of any measures and of the additional demand created by Games vehicles on local traffic conditions during the Games period will be assessed and mitigating measures designed where required. The effect on any temporarily displaced facilities such as bus lanes, cycle lanes, pedestrian facilities and parking and loading spaces will also be considered. All proposals will be subject to safety audit procedures and testing of the operation of the ORN will be undertaken prior to the Games where feasible.

#### **Traffic signal timings**

- 5.45 About 3,000 sets of London's traffic signals can be controlled and signal timings adjusted remotely. Over 1,800 key sets of traffic signals have Split Cycle Offset Optimisation Technique (SCOOT) adaptive software, which constantly monitors traffic flows and adjusts signal timings at each junction. Other supporting dynamic traffic management technology is also utilised.
- 5.46 Traffic signal timings will be developed for the Games to provide greater capacity and journey reliability for Games vehicles. These measures will be carefully developed taking into account, and mitigating as far as possible, the impacts on other road users. These Games-time plans will conform to current road safety standards. London benefits from having one of the most advanced technological traffic management systems in the world. The London Streets Traffic Control Centre (LSTCC) is a fully integrated traffic control centre responsible for controlling London's road traffic. The LSTCC has been co-located alongside CentreComm, London Buses' emergency command and control centre, and MetroComm, part of the Metropolitan Police's operational command unit.

#### Banned turns and road closures

5.47 Where required, temporary banned turns will be implemented to improve traffic flow along the ORN. It may also be appropriate to lift existing bans temporarily, where there is a benefit to either Games or other traffic.

5.48 To give priority to Games Family vehicles, side road closures will be required. These proposals will be subject to further development and consultation as part of the formal statutory consultation process for TROs.

#### **Junction improvements**

5.49 The ODA and its partners may implement junction improvements to assist the reliability of the ORN. These may be temporary or permanent works depending upon the effect on traffic capacity after the Games. Where improvement schemes are already planned and are of benefit to the Games, they may be brought forward to be completed before the Games.

#### **Kerbside controls**

5.50 Much of the highway that will make up the ORN is already subject to parking, waiting and loading restrictions. The need for further restrictions, or changes to the times of operation, will be reviewed and temporary restrictions implemented to maximise the efficiency of the ORN when necessary. The requirements for special parking arrangements, such as Blue Badge parking, and parking for local residents and businesses, will be considered in consultation with highway authorities and other stakeholders, such as residents. Alternative facilities will be provided where appropriate to maintain a balance between the ORN requirements and to keep traffic moving. Plans for the strict enforcement of stopping, parking and waiting restrictions will be developed in consultation with the relevant enforcement agencies.

#### **Games Lanes**

5.51 Temporary Games Lanes have been successfully used in previous Games to ensure safe, fast and reliable journeys. These are road lanes that are clearly identified by temporary road markings and signing and are available for the sole use of accredited vehicles. Games Lanes will only be in force as required to meet the individual circumstances. Games Lanes will be used on key sections of the ORN that require high levels of priority to ensure the reliability of journey times for Games vehicles. The requirements for Games Lanes are being developed in consultation with the relevant highway authorities and the emergency services.

5.52 Games Lanes will need to be implemented when and where required and they will be strictly enforced. The priority has to be to get athletes to their event on time. Details of the compliance strategy are being developed in consultation with the police, TfL and local highway authorities. It will be proportionate.

#### **Diversion routes**

5.53 Where required, some or all non-Games traffic may be diverted away from the ORN on to other suitable routes. Advance publicity and clear diversion route signing will be implemented where necessary. Variable Message Signs and other driver information systems may be used both within London and on motorway and trunk road sections of the ORN to inform drivers of traffic conditions and implement diversion routes where required.

#### Traffic signal technology upgrades

5.54 The LSTCC has access to 1,200 roadside CCTV cameras, providing a live picture of traffic movement. It is also fed by an automatic traffic monitoring system from over 3,000 points on London's road network. This monitoring allows an incident management team to respond to accidents, breakdowns and other obstructions quickly and take the necessary action.

5.55 TfL is delivering signal upgrades to enable the ORN in London to be managed in real time through remote computer control. This will make it easier to react swiftly to congestion during the Games. The work includes the connections back to the LSTCC which will in turn provide an information feed to the new Transport Coordination Centre (TCC) being set up for the Games (see chapter 14).

5.56 Considerable work has already been completed. Additional signal upgrades and CCTV installations have been identified, taking account of changes to the network as a result of the designation process.

#### Management of third party projects

5.57 The ODA is working closely with facilitators of major projects to make sure that their work streams do not conflict with ORN works.

5.58 The ODA has identified several key projects that could potentially conflict with the ORN objectives. These include Crossrail, Thameslink, Victoria Station redevelopment and Thames Water upgrades. Discussions are underway to remove potential conflicts.

5.59 The ODA is pursuing interface agreements. These agreements will provide reassurance that potential work that may conflict with the ORN objectives will be addressed and suitable measures identified.

5.60 The ODA is also working closely with TfL to ensure that low-scale major and minor projects affecting the ORN are managed effectively to avoid disruption. Equally the ODA is working with the Highways Agency and local authorities outside London to set up a similar management control process for their projects.

#### Management of utilities' street works and roadworks

- 5.61 One of the powers associated with the designation of the ORN is the ODA's ability to influence and mitigate street works and roadworks by highway authorities that could affect the ORN.
- 5.62 Under a project called Clearway 2012, the ODA is working with authorities and utility companies to ensure that non-essential works do not take place during the Games. Where they are unavoidable, procedures are being developed to minimise the amount of time that the road space is required for these works.
- 5.63 A key reason for designating the ORN is to allow authorities and statutory undertakers to understand which roads are most important for the Games and to plan their works to minimise disruption to Games planning and operation. This will also help keep costs to a minimum.
- 5.64 The strategies adopted for managing works are shaped according to the types of works. Three types have been identified:
- Major planned works These include substantial asset maintenance or installation activities, which are typically planned by the promoter well before implementation.
- Connection works Utilities are regulated industries and are required to meet standards of service. They also have commercial pressures to respond rapidly to requests for connections or changes in supply. The requests may come from domestic or commercial properties and can require substantial works.
- Emergency works It is highly likely that there will be a need for emergency repair works during the Games. The ODA's aim is to return the road to traffic-carrying capability as soon as possible.

- 5.65 Contingency routes will be planned for each section of the ORN. Contingency routes are being developed in consultation with the emergency services, highway authorities, TfL and the Highways Agency.
- 5.66 The ODA is assessing all schemes proposed for implementation prior to the Games that could have an adverse effect on the ORN. This will be carried out through the works controls channels and will be considered on a case by case basis. The ODA will ensure that safety is not compromised in its assessments.

#### **Traffic compliance**

- 5.67 The compliance project aims to ensure that the ORN is free of obstruction and to maximise the compliance of road users with the terms of the TROs. A safe and effective ORN will be achieved through a visible on-street presence, a vehicle removals service and an effective communications strategy.
- 5.68 Highway authorities and the Police will be responsible for traffic enforcement on the ORN.
- 5.69 A service will be provided to rapidly remove illegally parked, broken down, accident damaged or abandoned vehicles from the ORN. Arrangements will also be in place to deal with obstructions, such as skips and refuse.
- 5.70 There will be signs in place to inform road users where they can and can not park.

#### Stakeholder engagement

- 5.71 The ODA is committed to engaging with those who may be affected by the operation of the ORN during the Games.
- 5.72 Engagement between now and the Games will allow the knowledge and views of interested parties to be fed into the development of the ORN. It will also give time for alternative arrangements to be made for those people affected.

- 5.73 Consultation and engagement with stakeholders, especially with businesses and residents along the highway authorities and ORN, will be an important part of the process, not only as part of the formal consultation for TROs but in the early development of measures. This will ensure that measures are appropriate for their location and that any impacts on individuals (whether members of the public or businesses) can be mitigated.
- 5.74 Consultation plans build on the ORN awareness-raising activity that began through formal and informal consultation with the 900 stakeholders involved in the first edition of the Transport Plan. This work started in late spring 2006 and is formally captured in the responses to that plan. The following wide range of methods will be used to engage with the ORN stakeholders going forward:
- the quarterly Borough Transport Forum involving all London local authorities covered by the ORN;
- frequent meetings with walking and cycling campaigning and delivery organisations;
- frequent meetings with those campaigning for and delivering improved access and inclusion projects for the Games:
- the UK road freight industry;
- the UK coach industry and leading bus operating groups;
- local business organisations;
- police and emergency services;
- local politicians;
- site-specific local residents and community groups;
- third parties near venues, including local authorities and the emergency services; and
- briefings to other organisations. These currently number approximately 70.
- 5.75 As the project develops and moves closer to the Games, there will be increased engagement activity with local residents, businesses and other institutions.

# Spectator and workforce transport

Chapter 6

# Chapter 6 Spectator and workforce transport

#### Introduction

- 6.1 London 2012 wants all spectators from across the UK and overseas visiting the Games to have frequent, reliable and accessible transport. There is also an undertaking to deliver the Games in the most environmentally friendly and value for money manner possible.
- 6.2 With these objectives in mind, the transport strategy for spectators attending the London 2012 Games seeks to maximise the use of public transport, walking and cycling and minimise the use of private cars. This will also apply to the thousands of workforce (paid staff, volunteers and contractors) who will help to deliver the Games. Car parking for spectators will not be provided at competition venues except for some Blue Badge parking.
- 6.3 This chapter outlines the task of transporting spectators and workforce to the Games and how London 2012 will maximise the use of a wide range of transport modes to meet this task. These modes include:
- Rail, including London Overground, London Underground (LU), Docklands Light Railway (DLR) and National Rail services;
- bus;
- coach;
- park-and-ride;
- taxi and private hire;
- river;
- walking and cycling; and
- powered two wheelers.

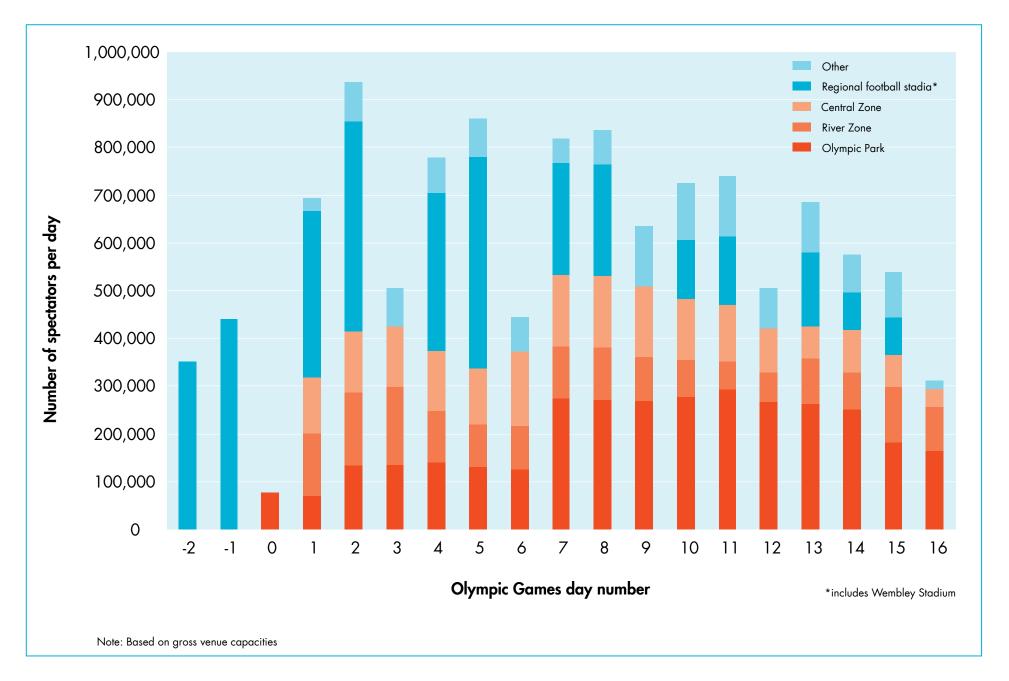
6.4 It also considers the arrangements to be put in place for accessible transport.

#### Spectator demand

- 6.5 The competition schedule is currently being developed by LOCOG and is subject to change. The daily competition schedule is being finalised in early 2010 and more detailed session and event planning will take place throughout 2010. It should be noted that the demand forecasts presented in this document are based on assumptions that may be slightly different to those set out in the event schedule presented in Figure 2.1.
- 6.6 There will be around 7.7 million spectator tickets available over the period of the Olympic Games, with around 800,000 available for events taking place on the busiest day. LOCOG will be publishing more details about its ticketing strategy in 2010.
- 6.7 Figure 6.1 shows the estimated total number of spectators expected to attend each day of the Olympic Games, broken down into five venue groups: the Olympic Park; River Zone; Central Zone; other venues; and regional Football stadia. This is based on the total gross capacity of each venue, multiplied by the number of sessions per day. It is important to note that these figures do not include spectators attending non-ticketed events, such as Road Events, or those spectators visiting 'Live Sites'. It should also be noted that a proportion of tickets will be taken up by Games Family members and that some spectators will purchase tickets for more than one event on the same day.
- 6.8 Figures 6.2 and 6.3 illustrate the proportion of spectators expected to attend each competition venue in London and the UK during the Olympic Games.

- 6.9 The ticketing arrangements for the Paralympic Games will lead to different patterns of spectator transport. However, latest estimates suggest that there will be around 1.5 million spectator tickets available over the 11 days of completion of the Paralympic Games.
- 6.10 In addition to spectators who have tickets for competition events at a specific venue, the ODA has taken into account transport demand from those who may be travelling to a non-ticketed event. These events include some competition events, such as the Marathon and Road Cycling, as well as cultural events and Live Sites. Plans for these events are at a very early stage. However, the consideration of the travel generated by these events is being included in Games transport planning.

Figure 6.1 Expected number of spectators per day (gross)



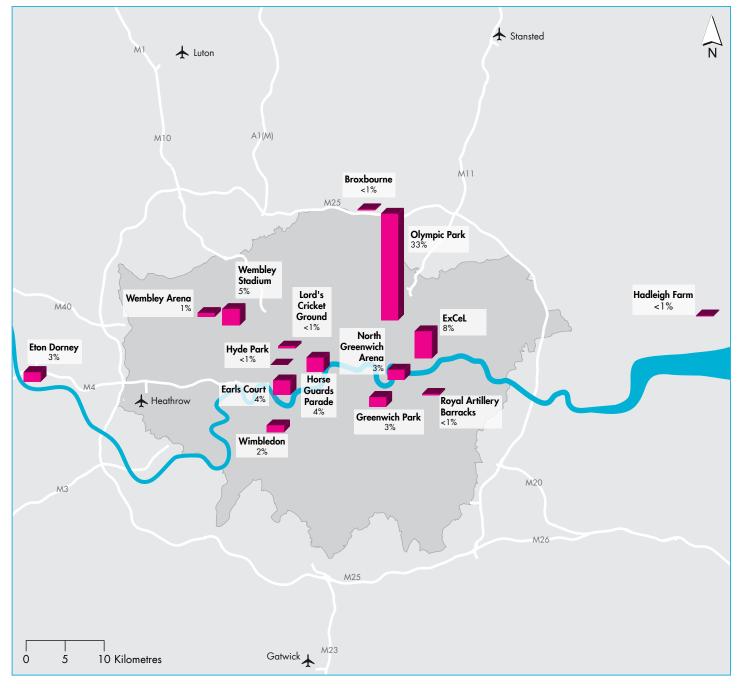


Figure 6.2

Proportion of spectators at competition venues during the Olympic Games – London

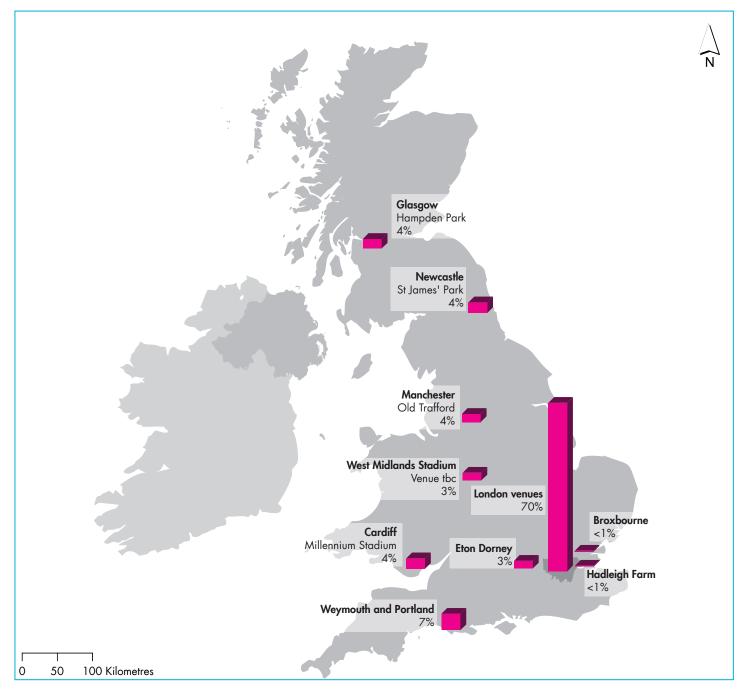


Proportion of spectators at competition venues during the Olympic Games.

Note: Based on draft competition schedule which will be finalised in Spring 2010.

 $\downarrow$ 

Airport



# Figure 6.3 Proportion of spectators at competition venues during the Olympic Games – UK



Proportion of spectators at competition venues during the Olympic Games.

Note: Based on draft competition schedule which will be finalised in Spring 2010.

#### Geographical distribution

- 6.11 During the development of London's bid to stage the Games, assumptions regarding the geographical spread of spectator journey origins and destinations were made. These assumptions have been reviewed and revised using a specially constructed transport model. The ODA also runs an extensive data collection programme across the UK and overseas, and this and other existing data sources have been used as the basis for updating the models. A similar approach was used for the demand forecasting of previous Olympic Games and Commonwealth Games. When ticket sales begin in 2011, there will be more accurate information the split of ticket distribution. However, for the purpose of the transport planning, a number of assumptions have been made based on experience of other major events and current best estimates. It is predicted that approximately 33 per cent of tickets will be purchased by people living in the Greater London area. A further 42 per cent is estimated to be purchased by people living elsewhere in the UK and the remaining 25 per cent will be purchased by people living outside the UK.
- 6.12 The distribution of spectator journey origins will vary according to the location of the venue. For example, the Sailing events at Weymouth and Portland are expected to attract a higher proportion of people from south-west England than events in London. The ODA has therefore developed journey origin estimates for all competition venues across the UK. It has also developed estimates on the likely number of spectators who will make both day trips and stay overnight in the London area.
- 6.13 Figure 6.4 shows the predicted distribution of the home locations of UK spectators attending London venues (based on day 13 of the Olympic Games). Figure 6.5 illustrates the predicted distribution of where spectators will travel from on the day of the event.

#### Number of journeys

- 6.14 As indicated above, there will be a certain number of spectator tickets available for each day of the Games. However, this is not the same as the number of journeys that will be undertaken by spectators on the public transport network.
- 6.15 For example, people travelling to Live Sites, cultural events or non-ticketed events will create demand for additional journeys over and above those generated by spectators at competition events.
- 6.16 There will also be a significant proportion of spectators who will see more than one event on a single day. If these events are in the same venue then the total number of transport journeys will be reduced. However, if they are in different venues then there will also be a connecting journey to be planned for and managed.
- 6.17 The level of spectator transport demand will ultimately be driven by the venue capacities. The geographical distributions of venues and spectator origins will influence the flows of demand on the transport networks and the timing of peaks and troughs of travel demand will be related to the Games competition schedules.
- 6.18 Although the modal share will vary from venue to venue, rail transport will be used by the majority of spectators for journeys within Greater London. Outside London, the accessibility to venues by different modes and the likely spectator origins have informed the assumptions made for the proportion of spectators using different modes of transport.
- 6.19 Based upon the experience of previous major events in London, it is estimated that around 80 per cent of spectators attending Greater London venues will travel by rail.
- 6.20 Direct coach (chartered and scheduled services) and park-and-ride (bus based), local buses, walking and cycling and river transport will provide other transport options. Figure 6.6 indicates the

- typical mode shares that are currently expected for spectators attending venues in the Olympic Park, River Zone and Central Zone. The shares show the main mode of transport that spectators will use to reach the venues and do not take into account the fact that many spectators will use more than one mode during their journey. For example, a spectator who travels on the District Line from Earl's Court to West Ham and then walks to the Olympic Park is included in Figure 6.6 within the rail mode share. Figure 6.7 illustrates the typical mode shares that are currently expected during the Paralympic Games.
- 6.21 The mode shares indicated in Figures 6.6 and 6.7 are based upon the experience of previous major events in London and represent the current planning assumptions. However, these mode shares do not take into account the impact of a range of London-wide initiatives currently underway or planned to start before 2012 that aim to increase walking and cycling. It is therefore the ODA's intention to achieve higher walking and cycling levels than those shown in the tables and to maximise the use of river services for spectator travel to competition venues. Details of the initiatives under consideration are provided later in this chapter.
- 6.22 The tables also do not currently show the mode share for river services. Work is currently being undertaken on demand for river services and will be used to update the mode share forecasts.

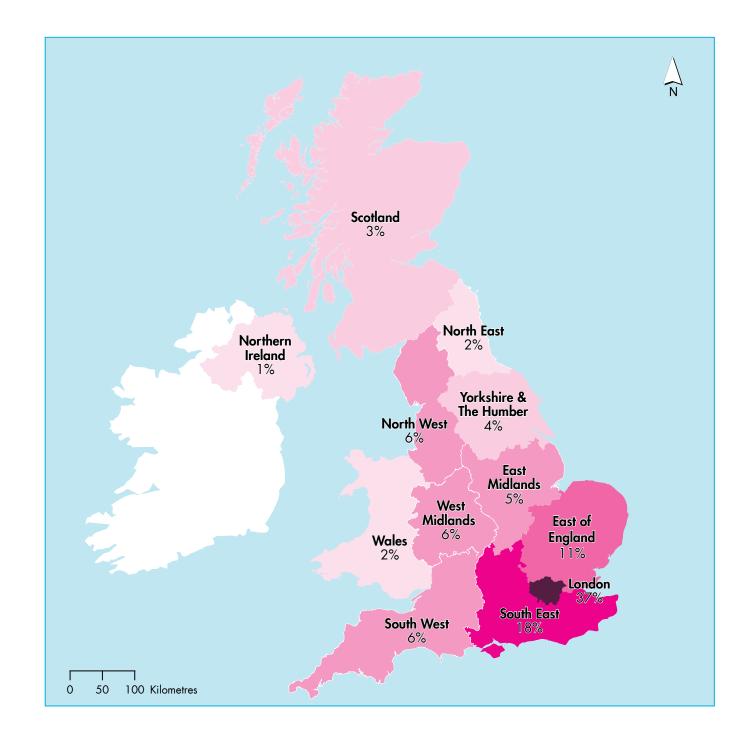


Figure 6.4

Predicted distribution of home locations of UK spectators attending London venues (Day 13)

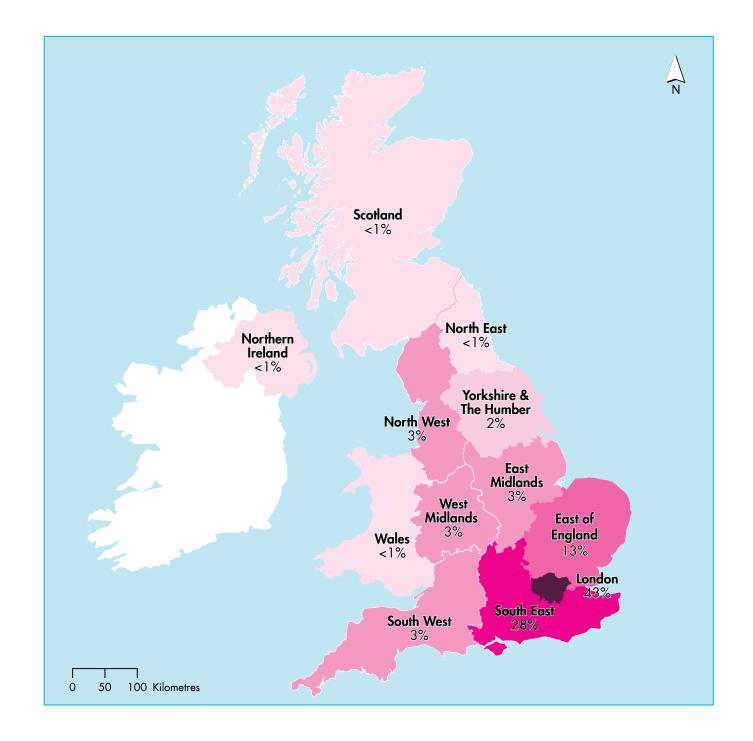


Figure 6.5

Predicted distribution of where spectators will travel from on the day of the event (London venues Day 13)

6.23 The latter half of the Paralympic Games will take place during the school term and it is assumed that a significant proportion of spectators will be schoolchildren. Therefore it is likely that the mode share for direct coach services will be greater for the Paralympic Games than the Olympic Games. Figure 6.7 shows the current planning assumptions for mode shares to the Paralympic Games on a weekday. At weekends, it is estimated that the mode shares will be similar to those for the Olympic Park during the Olympic Games.

6.24 The prediction of mode shares can never be completely accurate, so different scenarios have

and will be tested for different venues to ensure that the transport systems are robust. The formulation of these scenarios and validation of assumptions will be based upon an increasingly comprehensive analysis of:

- the capacity of the public transport networks;
- existing data on travel patterns within and outside London and the impacts of sporting events;
- ongoing surveys and monitoring of travel choice and behaviour during the Games planning period; and
- ticket sales data as it becomes available.

6.25 The comprehensive information and ticketing strategy that will be used for the Games will provide London 2012 and transport operators with the ability to manage travel demand actively and influence the proportion of spectators that travel by different modes and on particular routes.

Figure 6.6 Typical mode share planning assumptions for the Olympic Park, River Zone and Central Zone

Zone	Rail	Park & Ride	Coach	Walk	Cycle	Local bus	River services
Olympic Park	80%	8%	8%	1%	1%	2%	0%
River Zone (excludes ExCeL)	80%	0%	5%	1%	1%	8%	5%
Central Zone	85%	0%	4%	2%	2%	6%	0%
ExCeL	85%	5%	4%	2%	1%	3%	0%

Figure 6.7 Paralympic Games typical mode share planning assumptions for the Olympic Park, River Zone and Central Zone

Zone	Rail	Coach	Other
Olympic Park	60%	30%	15%
River Zone	60%	25%	15%
Central Zone	70%	20%	10%

6.26 There are a number of steps that can be taken to encourage users to plan their travel and consider their travel choices. Mode, route and time of travel can each be altered in a very small way to have a large beneficial impact on the network overall. London 2012 will be encouraging people to consider potential alternative routes to get to their destinations, where these exist, through the provision of credible and up-to date journey planning information to both spectators and regular commuters. This will ensure that people can plan their journeys and make optimal use of all modes across the public transport network. The ODA will also work closely with businesses to ensure that travel to work for their staff during the Games is maintained while enabling spectators to get to the various venues.

#### Workforce demand

- 6.27 The Games workforce, made up of more than 170,000 people for both Games comprising paid staff, contractors and volunteers, will add a significant demand for transport on top of that generated by spectators. In all cases, demand is considered in terms of both spectators and workforce, thus providing a picture of total demand for public transport for the Games.
- 6.28 Assumptions regarding shift patterns and overall numbers of staff have been developed in conjunction with LOCOG and are subject to change as and when resource strategies are updated. Similarly, the ODA seek to influence resource decisions as they impact on transport operations as and when appropriate.

#### Inclusion

6.29 An important element of the transport planning for the Games is an assessment of the demand for accessible travel by disabled spectators and workforce of all impairments.

6.30 Based on information from the ODA's delivery partners and from previous Games, it is estimated that around seven per cent of spectators at the Games will have some difficulty using the transport system without assistance, with a further one per cent unable to use stairs or escalators. On the busiest day of competition of the Olympic Games, this could mean that around 23,000 ticket holders could have some difficulty using, or be unable to use, stairs or escalators. The provision of a Games network of accessible transport will benefit a wide range of passengers including:

- disabled people;
- children;
- people whose first language is not English;
- passengers with luggage;
- parents with infants; and
- older people.

6.31 Detailed analysis of route choices for spectators with greater access requirements is ongoing and will inform specific mode and service share assumptions. The results of this demand forecasting work will assist in service planning and in identifying where additional temporary or permanent infrastructure may be required. In addition, the Olympic and Paralympic Games will have different spectator travel patterns and each event will be planned to provide suitable transport in all circumstances.

#### **Background demand**

- 6.32 Spectators and workforce will be using transport networks alongside regular passengers not travelling to the Games. As such, the impacts of the Games on this background demand and vice versa must be understood.
- 6.33 The ODA has undertaken detailed analysis to understand the likely levels of background demand during the summer months and if the Games will have any effect on this demand. The analysis indicates that there is likely to be some reduction in

peak hour travel, but an increase in travel during the late morning and afternoon period. These assumptions have been included within the planning framework and will be subject to further analysis to ensure that they remain sufficiently robust to inform planning.

#### Seasonality

6.34 The assumption that background traffic will decline during the Games due to the summer holidays, the 'seasonality effect', was derived from an assessment of both rail and road traffic count data provided by TfL during the time of the bid. This work has been reviewed and refined to understand the likely patterns throughout the day. However, it is important to note that while the overall daily background demand is likely to be reduced during the summer months, there are times during the day when background demand could experience a slight increase. A range of data sources from different modes and from different locations has informed a range of assumptions to be made regarding the likely non-Games travel demand in the summer of 2012

#### 'Games' effect

6.35 Evidence from previous Games and other major events indicates that, during the period of the event, the Host City experiences a drop in background travel. The cause of this drop can be attributed to two aspects: some residents, commuters and other visitors to the city decide to travel less because they expect it to be busier and more difficult to travel; and because Host Cities often encourage people to travel less, travel at a different time, or use a different mode or route.

#### **Transport ticketing**

6.36 Spectators and accredited members of the Games Family will receive 'free' travel on London's travel system on the day of the event for all events in the London area. The commercial arrangements that are necessary to put this in place are being discussed with TfL and other transport operators.

- 6.37 This 'free' travel will be limited to the holder of an event ticket on the day of the event. It will apply to LU services, DLR, London Overground railway and the London Bus network. It will also apply to those parts of the National Rail network where travel is provided in the London travelcard area. In addition spectators will be entitled to the discounts for river services available at the time. However, spectator and workforce travel will not include taxis, private hire cars, or Heathrow Express services.
- 6.38 For the purposes of the Games, the venues at Hadleigh Farm (Leigh on Sea), Broxbourne (Cheshunt) and Eton Dorney (Windsor) will be treated as part of the London travel commitment on event days provided sensible ticketing, anti-fraud and commercial arrangements can be put in place to allow this to happen seamlessly.
- 6.39 There are many other events and attractions that will take place during the Games that will not be included in this 'free' travel commitment. Road Events, for example, the Marathon, and Live Sites that feature big screen public viewing points, are such events that will either not be ticketed or will be non-event tickets.
- 6.40 Travel to London or travel to venues outside London, such as Weymouth and Portland and regional Football stadia, will be at the expense of the spectator. London 2012 is encouraging train operators to put in place commercial ticketing arrangements that will encourage spectators to use public transport.
- 6.41 London 2012 will encourage spectators to purchase their tickets in advance to minimise pressure on station ticket offices during the morning peak.

#### Rail strategy

- 6.42 Rail services, such as the London Underground (LU) network, the DLR, the London Overground network and National Rail services, will play an important role during the Games. Figure 6.8 and 6.9 shows rail services to London and UK venues.
- 6.43 The overall rail strategy contains the following elements:
- Provision of safe, clean and reliable train services during the Games by all operators.
- Adjustments and improvements to relevant train service capacity in and around London at different times of day as required.
- 'Free' London-wide travel for spectators on the day of their event ticket.
- Provision of transport away from Olympic Park venues until at least 01.00 and possibly later.
- A realistic time lag between events finishing and the last trains from London terminal stations.
- Flexibility to cater for over-running events, for example through the provision of 'standby' trains that can be brought into use at short notice.
- A deliverable train plan that does not inhibit the ability to run services for background users during the Games.
- Late night services that can allow most visitors from south-east England to get home again without needing to stay in London.
- Enhancements to late night services to outer suburban locations about two hours from London.
- Services compatible with the Accessible Transport Strategy.
- 6.44 The strategy is based upon the concept of improving capacity and increasing options only where and when it is needed to avoid a wholesale and unnecessary change to the existing arrangements. This objective applies equally to the Paralympic Games as well as the Olympic Games.

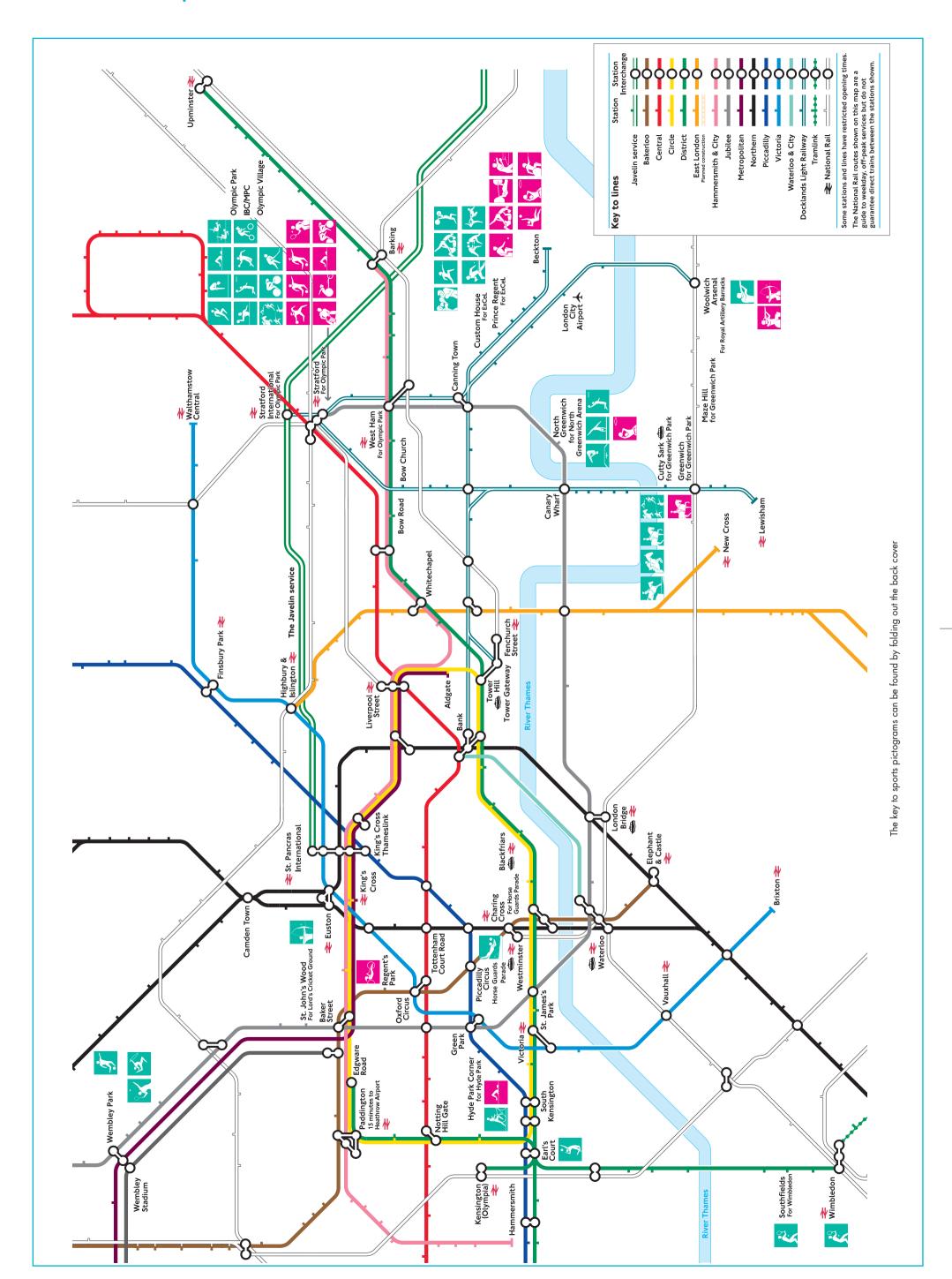
- 6.45 Of the UK spectators attending events in London, 33 per cent are expected to come from the Greater London area and a further 29 per cent from the south and east of the country. It is proposed that comprehensive train services for the majority of spectators from these London, suburban and outer suburban areas will be provided. Improvements to transport options available to spectators from other locations are also being considered. This includes cities such as Bristol, Cardiff, Birmingham, Manchester, Leeds and the areas close to them.
- 6.46 The travel plans of Games spectators from around the UK will be influenced by a number of factors, including the information provided, timetabling and the ticketing policy. To help spectators plan their travel, the ODA aims to make Games timetables available by summer 2011.

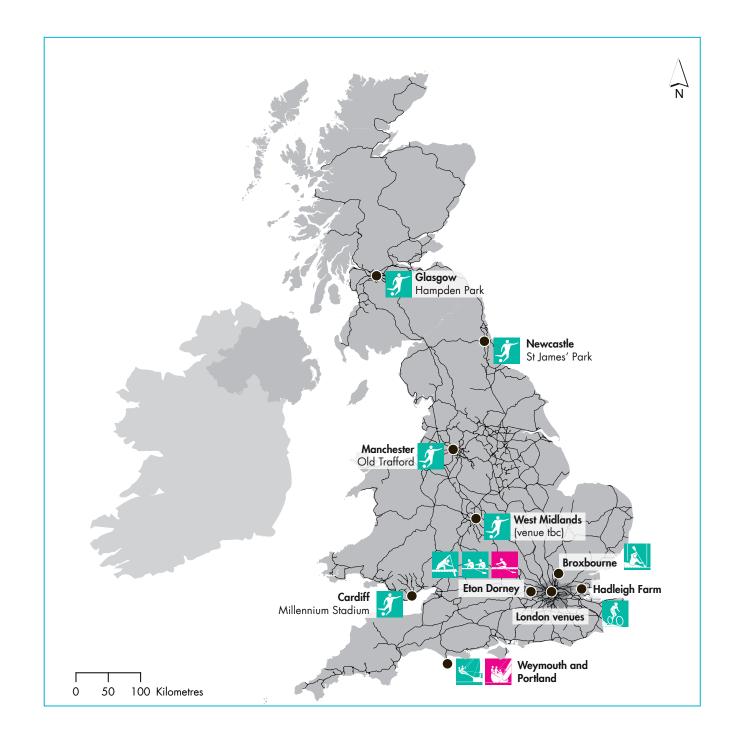
#### Rail service delivery

- 6.47 All of the London and National Rail services will be delivered through commercial agreements with all the relevant operators. London 2012 is in the process of negotiating cost-effective services, while aiming to minimise disruption to the networks and regular passengers. Figure 6.10 shows a summary of spectator rail services.
- 6.48 LU and the DLR form the core capacity resource and capability that will underpin rail services in London during the Games. The ODA has been working very closely with both LU and the DLR to ensure that services accommodate background users and spectators with minimal disruption to their networks. These services need to fit in with the wider Games transport services and objectives.

Figure 6.8

Rail services to competition venues





# Figure 6.9 **UK rail connections to sports venues**

**Broxbourne** 

National Express East Anglia

**Eton Dorney** 

First Great Western South West Trains

Hampden Park

First ScotRail
National Express East
Coast
Arriva Cross Country

Millennium Stadium

Arriva Trains Wales First Great Western

**Old Trafford** 

Northern Trains Virgin West Coast London Midland Arriva Trans Pennine Express Arriva Trains Wales St James' Park

First Trans Pennine Express Northern Trains Arriva Cross Country

Hadleigh Farm

c2c

National Express East Anglia

Wembley Stadium London Overground London Underground Chiltern Railways

Weymouth and Portland

First Great Western South West Trains

The key to sports pictograms can be found by folding out the back cover

- 6.49 During the planning and delivery of these services, the following considerations are being taken into account.
- While the capacity at peak periods cannot be enhanced, service levels can be improved during other periods throughout the day.
- Regular service timetables will be altered as little as possible to minimise disruption. Only the Javelin® service and DLR services will require significant change.
- Where possible, and when agreed with operators and other relevant parties, a small number of services may run beyond normal operating times, including at night, for short periods.
- Normal operational safety framework of all operators will not change.
- Some flexibility to maintenance regimes may be required, such as for rolling stock.
- 6.50 Given these constraints and Games transport requirements, the basic train operating framework that the ODA aims to deliver is, in principle, as follows:
- The start of services in the morning will reflect the regular timetable in 2012.
- Additional earlier Sunday morning services on key routes into London will operate
- The off peak timetable will run as per the regular timetable – but may stay at peak resource levels on key routes rather than the usual reduction in train lengths.
- The evening peak train formations will continue through the evening at normal off peak frequencies.
- Additional trains may run after the evening peak but before the last service where significant gaps in the service appear.
- Later running trains on LU and DLR services that directly serve venues will be required on most days of the Games but will not run all night.

- On a number of suburban routes some last trains are already late enough to accommodate Games requirements. Additional late services will be provided on those key routes where late services do not exist.
- Some specific additional services to cities broadly within two hours from London will be sought on inter-city routes.
- 6.51 On some principal routes there maybe a standby train capability late at night in case of events overrunning or operational delays.
- 6.52 On routes that serve a particular venue, appropriate adjustments will be made to cater for any venue specific demand requirements such as increased capacity and frequencies.

#### Key stakeholders in the rail industry

6.53 The ODA's Transport team continues to work with the rail industry through the planning process to ensure that a successful strategy is delivered. The key stakeholders within the rail industry are described below.

#### **London Underground**

6.54 London Underground Limited (LU) is a subsidiary of Transport for London (TfL). Operations on the Jubilee, Piccadilly and Northern lines are supported by the Public Private Partnership (PPP) contractor, Tube Lines, which is responsible for maintaining, renewing and upgrading infrastructure and trains.

#### **Docklands Light Railway**

6.55 Docklands Light Railway Limited (DLR) is a subsidiary of TfL. It manages a Franchise Agreement under which Serco-Docklands Limited provides train services. DLR also procures and manages infrastructure enhancements through concession and traditional construction contracts.

#### Passenger rail operators

6.56 Since 2004, rail Franchise Agreements have included an 'Olympics' clause which sets out how train operating companies (TOCs) are expected to cooperate in the development and execution of Service Delivery Plans for the Olympic Games and Paralympic Games¹. Where operators have a pre-2004 Franchise Agreement without the 'Olympics' clause, the ODA and Government look to those operators to act as though they did.

6.57 The ODA is working closely with train operating companies and the Department for Transport (DfT) to develop a specification which will form the basis of Service Delivery Plans for the Olympic Games and Paralympic Games. This specification will be informed by the demand forecasting being carried out by the ODA as well as the outputs from the rail operations planning workstreams detailed below.

#### **London Overground**

6.58 London Overground services are operated on behalf of the TfL subsidiary Rail for London Limited (RfL) by its concessionaire London Overground Rail Operations Limited (LOROL). RfL is part of the 'London Rail' division of TfL; London Rail is responsible for securing improvements to the national rail system in London, as well as having responsibility for the DLR and Croydon Tramlink. Apart from London Overground, London Rail is not directly responsible for national rail services in London and improvements are achieved through working in partnership with organisations such as the DfT, Network Rail and the train operating companies.

<sup>1</sup> Template franchise wording for the Olympic Clauses and definition of the Olympic Services Delivery Plans can be found in Appendix C.

# Figure 6.10 **Summary of spectator rail services**

	Journeys within London (LU, DLR)	Journeys from London suburbs and south east England	Journeys from the rest of the country to London venues (intercity routes)	Journeys to venues outside central London
Tickets	Free for London sports event ticket holders, on the day of the event.	Free in London Zones 1–6 for event ticket holders. Outside of London, rail tickets to be purchased in advance.	Rail tickets to London to be purchased in advance. Timetable for Games-time transport to be published in 2011 to influence spectator 'get home' or 'stay overnight' decisions.	Rail tickets to venues purchased in advance.
Service level	Services to run at peak capacity throughout the day for the Olympic Park. Olympic Park services to operate until circa 01:00.	Suburban and outer suburban services from London termini to operate until 01:30. May require strengthening for some operators.	Intercity services from London termini to operate last trains broadly as now, ie, until around 23:30. Some selective late night services to medium distance locations (<2 hours) until 00:30.	TOCs serving football stadiums to implement existing rail 'special' timetable arrangements. Bespoke and varied public transport arrangements for all other venues.
Early morning services	Services to start at normal time but with possibly quicker ramp up to full peak service in some cases.	Services to start at normal time but with possibly quicker ramp up to full peak service in some cases.	Services to start at normal time but with possibly quicker ramp up to full peak service in some cases.	No fundamental change to existing service plans – but special event timetables to be used.
Middle day service	Utilise normal off-peak train plan but some Games location changes.	Utilise normal off-peak train plan but with peak level service train lengths in some cases.	Current intention to not fundamentally change existing service plans.	No fundamental change to existing service plans – but special event timetables to be used.
Evening service	Relevant lines to be strengthened from 22:00.	Utilise normal timetable but with peak level service train lengths.	Current intention to not fundamentally change existing service plans.	No fundamental change to existing service plans – but special event timetables to be used.
Late night service	Games venues need an extra 'peak frequency' service around 22:00–23:00 (or 00:30) with lower frequency services until 00:30 (DLR) and 01:30 (LU).	Late evening services after 22:00 to have selective increased frequencies to key locations. Will require strengthening and additional services for most operators.	Late night services (00:30) planned for medium distance locations. The list of cities is still being determined. No service for long distance locations planned.	No fundamental change to existing service plans – but special event timetables to be used.
Sweepers	Some operators to have contingency arrangements for later 'sweepers' if required.			

6.59 The London Overground rail concession includes the North London Line group of services (which includes the West London Line and the Gospel Oak - Barking route as well as the North London Line itself), the Euston - Watford DC line and the extended East London Line (Highbury and Islington to West Croydon, Crystal Palace, New Cross and Clapham Junction, opening from mid-2010 onwards). London Rail is funding the capacity upgrade to the North London Line (in conjunction with the ODA and Network Rail) and the East London Line in its entirety and is providing new rolling stock for all Overground services.

#### **Freight operators**

6.60 The Games will present both an opportunity and a challenge for freight operators and the ODA is keen to continue to discuss both of these elements with freight operators and other interested bodies. The North London Line capacity upgrade (one-third funded by the ODA) includes significantly enhanced facilities for freight trains. Additionally, gauge enhancement of the Gospel Oak – Barking route by Network Rail has created a diversionary route for container services avoiding the Gospel Oak – Stratford section of the NLL.

6.61 Freight operators will be an important stakeholder in the development of rail operations plans, not only for the Games period but in relation to the construction period for the Olympic Park. Two railheads are moving up to 60 per cent of materials into the construction sites.

#### **Network Rail**

6.62 Network Rail is an essential delivery partner both for the infrastructure works and the Service Delivery Plans for the Olympic Games and Paralympic Games workstreams. Network Rail recognises the importance of the successful delivery of London 2012 Games rail schemes and services and has put in place a dedicated team focused on Games delivery.

6.63 Current workstreams with Network Rail include the North London Line improvements, a major part of the Stratford Regional Station upgrade, including the extension of platforms 10a, 11 and 12, the Angel Lane new freight loop and the Lea Valley Line signalling improvements. It will also play a key role in timetabling and managing the UK rail network during the Games.

6.64 Network Rail is also closely involved in the wider development work on the Olympic Park to ensure that the interface with the railway is managed safely and efficiently.

#### Her Majesty's Government

6.65 The ODA will work with its partners across Government to ensure that the objectives and outputs are joined up to facilitate delivery.

6.66 The DfT is a key partner. It has the contractual relationship with train operators that will allow the Service Delivery Plans for the Olympic Games and Paralympic Games to be put in place. The Highways Agency and TRANSEC are also part of the DfT. The DfT is also responsible for furthering Government transport policy and the ODA will continue to work closely with it to deliver the respective organisations' objectives.

#### Office of Rail Regulation

6.67 The ODA is working with the independent Office of Rail Regulation (ORR) on a broad range of issues relating to the Transport Plan. The London Olympic Games and Paralympic Games Act 2006 has given the ORR an additional duty of '... facilitating the provision, management and control of facilities for transport in connection with the London Olympics.'2

6.68 The ODA has had an early dialogue with the ORR on how the Transport Plan and its funding is compatible with the ORR's work on the Periodic Review of Network Rail's finances. The ORR will

2 Section 17 (1) of the London 2012 Olympic Games and Paralympic Games Act 2006 monitor progress on planning the Games timetable and what impacts this will have on the track access regime. The ORR also has a role in ensuring the safety of the railway (HM Railway Inspectorate), including the operation of the Games services.

#### Proposed enhancements to the rail system

6.69 A wide range of schemes is underway to enhance the different rail systems in time for the Games and also to enhance services temporarily during the Games. These schemes can be categorised as:

- Major rail schemes to enhance rail access to the Olympic Park – Stratford Regional Station upgrade, West Ham Station capacity enhancement, Stratford International Station works, North London Line (North Woolwich Branch) conversion to DLR between Stratford and Canning Town and major capacity increases for the London Overground services on the North London Line between Willesden Junction and Stratford.
- Mode-specific schemes set out by mode, such as LU, DLR, National Rail.
- Other station schemes across the rail network.

6.70 Some schemes are 'background' schemes that are being delivered and funded by organisations other than the ODA, while other schemes are 'Games' schemes that are funded, at least in part, by the ODA.

#### **Major rail schemes for the Olympic Park** Stratford Regional Station

6.71 Stratford Regional Station is the main 'gateway' station to the Olympic Park and a major east London interchange.

6.72 Stratford Regional Station currently experiences occasional periods of passenger congestion. As well as during the Games, the number of people using the station is expected to increase significantly by 2016, as forecast in the

Mayor's London Plan and due to the large Stratford City development being built adjacent to the station.

6.73 A package of improvements to increase capacity and accessibility at Stratford Regional Station is well underway. These improvements, due to be finished by the end of 2010, will help the station accommodate spectators during the Games, and also provide benefits to regular passengers before and long after 2012. This work complements works related to the Stratford City development and the DLR extension to Stratford International Station.

# 6.74 Improvements at Stratford Regional Station include:

- re-opening the eastern subway with new stairs to platforms 3/5 and 6/8;
- an additional westbound platform for the Central Line;
- widening the eastern end of platforms 6/8;
- platform extensions and associated network works for platforms 10a, 11 and 12;
- improved accessibility and connect to, and between, platforms through the provision of additional lifts and staircases;
- a new upper-level entrance structure to link the DLR, Jubilee and Central Lines with the new Town Centre Link bridge;
- upgraded station domestic power supplies, increased station command and control facilities; and
- de-cluttering of platforms 3/5 and 6/8.
- 6.75 Other improvements to the station, some of which are already completed or well underway, are also taking place:
- DLR has built two new replacement platforms for use by the North London Line London Overground services. The platforms will be connected to all subways, which have been extended together

- with a connection between the central and eastern subways.
- DLR has started to convert the existing North London Line lower-level platforms to use for its new extension from Canning Town to Stratford International.
- DLR has upgraded the existing mezzanine level platform to two terminating platforms for services to Poplar.
- As part of the Stratford City development, a new northern ticket office for the station is being built. It will connect to all three subways, and the new Town Centre Link bridge, which will link Stratford town centre with the new Stratford City development.
- 6.76 The planned works will increase the peak capacity of Stratford Regional Station for existing and new services. A comparison of existing and planned peak service levels available during the 2012 Games is shown in Figure 6.11.
- 6.77 The infrastructure works at Stratford Regional Station will provide much needed additional capacity but it will also be essential to develop robust operational plans for each of the modes.
- 6.78 The first of the ODA-funded works, the widening of platforms 6 and 8, was completed in August 2007. The second new staircase to the western subway will be completed by the end of 2009, and the two additional lifts brought into service in early 2010, along with the extensions to platforms 11 and 12. Two of the new lifts are already in service. All major works will all come on stream between spring and autumn 2010. This includes the remaining lifts and stairways, the reopened and extended Eastern Subway, North East Corner (platforms 10A and 11) works, the Link Subway and the extensions of the Western and Central Subway, the new platform 3A, as well as systems and signage.

#### West Ham Station

- 6.79 Work carried out at West Ham Station will provide new passenger links that allow spectator access to the Olympic Park along The Greenway. The Greenway is a public walkway which will be used by spectators accessing the Olympic Park from West Ham Station.
- 6.80 The ODA is working with the London Borough of Newham and LU to enhance access between the District Line and Hammersmith & City Line platforms, which will be used by the majority of spectators using West Ham Station to reach the Olympic Park. Planning permission was granted in November 2009. Work is scheduled to start in mid-2010.
- 6.81 Work at West Ham Station is designed to create a clear route for spectators from the District Line and Hammersmith & City Line platforms to outside the station and on to The Greenway. Spectators will then reach the southern entrance of the Olympic Park via a 1.6km (one mile) walk along The Greenway.

#### 6.82 Works at West Ham include:

- a staircase, overbridge and elevated walkway from the District Line platform to Manor Road;
- a safe, high-volume pedestrian route along Manor Road with relevant traffic protection and restrictions;
- a temporary, wide staircase and lifts up to The Greenway; and
- permanent CCTV and lighting improvements to Manor Road and landscaping improvements following removal of the temporary works.

Figure 6.11 Comparison of rail services at Stratford Regional Station

Line	2006 Peak frequency (trains per hour, per direction)	2012 Peak frequency (potential trains per peak hour, per direction)
North London Line	4	8
Great Eastern Mainline	9	17
Great Eastern Local	16	15
Lea Valley Line	2	2
Central Line	27	30
Jubilee Line	18	30
Docklands Light Railway (Poplar to Stratford Regional Station)	8	10
Docklands Light Railway (Canning Town to Stratford International Station)	N/A	27

Figure 6.12 Comparison of rail services at West Ham Station

Line	2006 Peak frequency (trains per hour, per direction)	2012 Peak frequency (potential trains per peak hour, per direction)
North London Line	4	N/A*
DLR (Canning Town to Stratford International)	N/A	27
London Tilbury Southend	6	12
District Line/Hammersmith & City Line	26	30

<sup>\*</sup>North London Line services replaced by Docklands Light Railway.

- 6.83 By 2012, LU service enhancements to the District Line will include the introduction of new, higher capacity stock. Planned signalling enhancements for C2C (mainline rail) services will increase the number of passengers able to board and alight at West Ham Station during the peak hours. In developing these proposals the impact on station circulation has been assessed and fed into the rail operations plans.
- 6.84 The scheme will be delivered directly by the ODA. A detailed implementation programme is being developed.
- 6.85 A comparison of existing (2006) and planned peak service capacity available during the London 2012 Olympic Games at West Ham Station is shown in Figure 6.12.

#### Stratford International, Ebbsfleet and St. Pancras International Stations

- 6.86 Eurostar services began operating from St. Pancras International Station in November 2007. Domestic services from Stratford International Station are due to start in December 2009.
- 6.87 During the Olympic Games a rail shuttle service will be operated from King's Cross/St. Pancras to Stratford International Station (for the Olympic Park) and on to Ebbsfleet in Kent. This temporary Games-time service, branded as the Javelin®, will use the new, class 395, high-speed trains currently being introduced to the Integrated Kent Franchise services. The first train arrived in the UK in August 2007. All 29 units have now arrived in the UK, and a preview service is currently in operation.
- 6.88 To maximise the Javelin® service, works are being undertaken at Stratford International Station. Passengers using the Javelin® will be able to use a new access at the eastern end of the domestic platforms. This new access has been jointly funded by LCR, the DfT and the ODA. It will shorten the walking distance between Stratford International

- and Stratford Regional Stations for those passengers who walk, rather than use the new DLR link, between the two stations. It will be opened before the Games, providing early benefits to passengers.
- 6.89 For the period of the Games, Eurostar services will not be able to stop at Stratford International Station as all four platforms will be needed for Javelin® shuttle services. International visitors travelling to Stratford will interchange at Ebbsfleet and join one of the Javelin® services for the remainder of their journey.
- 6.90 Temporary works will be required at Ebbsfleet to facilitate the flows of international and Games passengers. Detailed operational plans for St. Pancras International during the Games will be developed.
- 6.91 The majority of the works at Stratford International and Ebbsfleet Stations are expected to be temporary. This includes decking used on the international platforms and ramps at Stratford International Station to provide access between the international platforms and the Javelin® service. Further work is underway to understand Games, background and legacy demand and infrastructure at these stations with LCR, the DfT and Southeastern Railway.
- 6.92 Key to the delivery of the operational plans for the Javelin® service will be the continued close working of a number of stakeholders and delivery partners, including Southeastern, HS 1, Network Rail-CTRL and the DfT. Figure 6.13 shows the comparison of services at Stratford International.

#### Changes to the North London Line

6.93 The North London Line provides an orbital route, which does not pass through central London. It is becoming increasingly important as a passenger route and is an arterial freight route, linking the east coast ports to the West and East Coast Main Lines and providing a multitude of cross-London freight connections.

- 6.94 The North London Line will undergo two significant changes before 2012. Firstly, the section between Willesden Junction and Stratford will be completely resignalled and upgraded, enabling a doubling of the number of passenger trains (which, being longer and larger, will result in a tripling of capacity) and an increase in freight capacity. Secondly, the section of the line between Stratford Regional Station and Canning Town Station (the former North London Line North Woolwich Branch) will be converted from National Rail to DLR operation and extended from Stratford Regional Station to Stratford International Station. For details, see the Docklands Light Railway and London Overground sections below.
- 6.95 TfL is supervising the works being delivered by Network Rail. Site works started in February 2009. The work is interfacing with parallel works to extend the new East London Line north of Dalston Junction through to Highbury and Islington. The upgrade is scheduled for completion in early 2011.

# Mode-specific schemes London Underground (LU)

- 6.96 The LU network currently serves 275 stations. On an average day it carries more than three million passengers, and on occasions the total has exceeded four million. The Games competition events together with the various cultural events will increase the demand on the Underground network, albeit at a time of year when passenger levels are generally lower during the summer holiday period.
- 6.97 The package of background schemes which will benefit the Games, including line upgrades to enhance capacity, station refurbishment and modernisation, and infrastructure renewal, is being delivered largely through the existing PPP contracts and there is a contractual delivery programme for these.

Figure 6.13 Comparison of rail services at Stratford International

Line	2009 Peak frequency (trains per hour, per direction)*	2012 Peak frequency (potential trains per peak hour, per direction) Javelin® operation
To St Pancras International	7	12
To Ebbsfleet International	4	10

<sup>\*</sup>advertised timetable frequency to start on 14 December 2009

### Figure 6.14 London Underground schemes

Line	Enhancement	Project completion date
Jubilee Line	Introduction of a seventh car (January 2006) and a new signalling system allowing higher train frequency to increase capacity by 33%.	By December 2009
Central Line	Capacity enhancement scheme to improve resilience and allow a peak service level of 30 trains per hour.	Completed September 2006
Piccadilly Line	Extension to Heathrow Terminal 5.	Completed March 2008
District Line	Refurbishment of all 150 units of District Line D-Stock (75 trains).	Completed March 2008
Hammersmith & City/Circle Line	Revised and merged service to double frequency to Hammersmith and aid Circle Line reliability.	By December 2009
Northern Line	A new signalling system will increase train frequency, upping line capacity by 20%.	By January 2012
Victoria Line	Fleet replaced by 47 new, air-conditioned trains.	By mid-2011
Metropolitan Line	Fleet replaced by 58 new, air-conditioned trains.	By mid-2011

- 6.98 TfL's commitment to LU is around £1 billion per year up to 2012. TfL and the ODA have agreed that the ODA's contribution to investment in the Underground network prior to the Games will be taken forward as part of TfL's overall investment programme and they will work together to ensure successful scheme development and implementation.
- 6.99 A wide range of Underground enhancement schemes that are already planned will directly benefit the Games. Figure 6.14 illustrates these schemes.

#### Docklands Light Railway (DLR)

- 6.100 The DLR currently provides a fully accessible public transport service in east London. The DLR operates from Beckton/Woolwich in the east to Bank/Tower Gateway for the City of London in the west, and from Lewisham in the south to Stratford in the north.
- 6.101 To meet Games demand, DLR capacity is being increased through a number of improvement schemes. These schemes fall into two categories: background schemes, funded by TfL; and London 2012 Games schemes, funded by the ODA. Figure 6.15 illustrates these schemes, which will be delivered and provide benefits well before the Games.
- 6.102 Due to the nature and location of the DLR, the proposed enhancements will benefit both the Olympic Park and River Zone venues, as well as contributing to the delivery of the rail strategy for the Central Zone and cultural events.
- 6.103 The DLR will be extended from Canning Town to Stratford Regional Station (along the former North London Line North Woolwich Branch) then onwards to a new station (Stratford International) in the heart of the Olympic Park. Four new stations will be built as part of this DLR extension Star Lane, Abbey Road, Stratford High Street and Stratford International. The converted route will also serve the existing stations at Canning Town, West Ham

- and Stratford Regional Station. New DLR services will run between Stratford International and Woolwich Arsenal Stations, and between Stratford International and Beckton Stations.
- 6.104 This new DLR route, to which the ODA is contributing funding, will provide capacity and flexibility for future growth in the area and be an important part of the rail network serving the Olympic Park and River Zone venues. The DLR Stratford International extension will open in summer 2010.

#### London Overground

- 6.105 The London Overground Concession covers services on the North London Line (NLL), the West London Line (WLL), the Gospel Oak Barking line, the Euston Watford DC line and the new East London Line (ELL). Overground services are operated on behalf of TfL by London Overground Rail Operations Limited.
- 6.106 During the Games, up to eight trains per hour will run on the busiest section of the North London Line, from Willesden Junction to Stratford. Four trains per hour will operate between Stratford and Richmond and four trains per hour will operate between Stratford and Clapham Junction. This represents almost a doubling of services compared to current levels on both the NLL and WLL.
- 6.107 The former LU East London Line will be brought under the London Overground banner. TfL is converting the line from LU to national rail standards. At the south end, East London Line services will join the national rail network at New Cross Gate and will be extended to Crystal Palace and West Croydon. In the north, the line will be extended from Whitechapel initially to Dalston Junction, then on to Highbury and Islington on the North London Line. To maximise capacity, the new ELL will parallel the NLL between Canonbury and

- Highbury and Islington, where a short connecting line will allow the transfer of rolling stock between the routes.
- 6.108 On the East London Line, the former LU six trains per hour service will be replaced by a 16 trains per hour Overground service.
- 6.109 TfL is purchasing all new rolling stock for London Overground services. Initially delivered as three-car units, the new class 378 trains will be extended to four-car formation in 2010.

#### National Rail services

- 6.110 National Rail services are those run by train operating companies (TOCs) on the UK rail network. The network carries 2.75 million passengers per day, half a million of these commute into London. There are over 2,500 stations across the network. As well as directly serving a large number of the competition venues, National Rail services will also play a key part in the multi-modal journeys made by spectators from across the UK, particularly to and from London.
- 6.111 A number of Games-funded schemes have or will enhance the capability of the network (Games schemes), as well as rail schemes that are funded by other parties (background schemes, for example Thameslink, New Street Station in Birmingham), which will facilitate the delivery of Games transport.
- 6.112 There will also be a need for temporary rail service enhancements across the UK to accommodate the peaks of passenger demand generated by the Games.
- 6.113 Figure 6.16 indicates the different National Rail schemes that will benefit the Games.

# Figure 6.15 **Docklands Light Railway schemes**

Line	Enhancement Control of the Control o	Project completion date
Network wide	Entire DLR network made three-car compatible (various schemes, see below).	March 2011
Network wide	55 new vehicles for three-car operation, line extensions and enhanced Games-time services; 22 of the 55 vehicles 50% funded by the ODA.	October 2010
Network wide	Improved system resilience through 'Non-Communicating Train' software upgrade to reduce instances of trains losing contact with the signalling system; part-funded by the ODA.	July 2011
West Route	Improved system resilience by construction of a siding for a stand-by train next to Tower Gateway Station; funded by the ODA.	January 2010
West Route	Improved system performance by doubling of Royal Mint Street Junction to reduce conflicts between Tower Gateway and Bank services; funded by the ODA.	January 2010
West Route	Complete rebuilding of Tower Gateway Station and remodelling of trackwork to accept three-car trains.	Completed February 2009
West and South Route	Infrastructure works to allow three-car operation between Bank and Lewisham by extending platforms/installing walkways and resiting South Quay station.	June 2010
South Route	Upgrade to Delta Junction (adjacent to West India Quay Station) by constructing 'dive-under', reducing conflicting moves and increasing junction capacity by 25%.	Completed August 2009
North Route	Construction of two new three-car platforms to replace single two-car platform at Stratford Regional Station and walkways direct to Central Line platforms.	Completed August 2007
North Route	Infrastructure works to allow three-car operation between Poplar and Stratford Regional Station by extending platforms/installing walkways.	Completed September 2009
East Route	Extension of platforms at East India and Blackwall stations and power supply upgrade to enable three-car operation from Poplar to Woolwich Arsenal and Beckton; fully funded by ODA.	Completed September 2009
Beckton Branch	Infrastructure works to allow three-car operation to Beckton by extending platforms or installing walkways; installation of two crossovers at Prince Regent to allow operation of high-intensity service to ExCeL. Funded by the ODA, DCLG and LDA.	March 2011
Beckton Branch	Increase in station capacity by installation of an additional lift at both Prince Regent and Custom House Stations and widening stairs at Prince Regent; funded by the ODA.	March 2011
Beckton Branch	Installation of covered link bridge from ExCeL central circulation area to Prince Regent Station footbridge; funded by ExCeL.	Completed August 2009
Woolwich Arsenal Branch	New branch to London City Airport (opened Dec 2005) and 2.6km extension to Woolwich Arsenal (major interchange with national rail network), five new stations.	Completed February 2009
Stratford International Branch	Conversion to DLR specification of national rail line from Canning Town to Stratford Regional Station, three new stations and extension to Stratford International; part-funded by the ODA.	June 2010

#### Other rail station enhancements

6.114 A range of station enhancements will be made to facilitate the delivery of rail services for the Games. These schemes are a mixture of works especially for the Games and schemes already planned by delivery partners.

#### Railway possession planning

- 6.115 The construction work being carried out in and around the Olympic Park and across London and the UK requires efficient planning in relation to any railway possessions and road closures.
- 6.116 The ODA continues to work closely with all its stakeholders to ensure an integrated approach to railway possessions planning that maximises utility of possessions and minimises disruption and cost.

#### Games rail services for competition venues

6.117 Rail improvements will allow rail services to a number of competition venues to be enhanced. The following sections describe the rail services that will be available for each venue or group of venues.

#### Olympic Park

- 6.118 During the Games the Olympic Park will be served by 12 different rail services as set out in Figure 6.17 and 6.18. These services will be delivered by LU, the DLR and providers of National Rail services.
- 6.119 Figure 6.19 presents the rail capacity to the Olympic Park on Day 7, the busiest day during the Olympic Games, during the morning peak.
- 6.120 National Rail services into the Olympic Park will be delivered by a variety of operators from a number of geographic areas. Figure 6.20 sets out the current operators and the areas their services cover. Figure 6.21 shows rail services to Rive Zone venues. Figures 6.22 and 6.23 show rail services to Central Zone venues and other venues.

6.121 Should there be changes to the franchises before 2012, the ODA will continue to work closely with the DfT on franchise replacement matters, as well as TfL.

#### The Javelin® service

- 6.122 During the Olympic Games a rail shuttle service will be operated from St. Pancras International Station to Stratford International Station (for the Olympic Park) and on to Ebbsfleet International in Kent. This temporary Games-time service, branded as the Javelin®, will use the class 395, high-speed trains which are operated by London and South Eastern Railway on its domestic high-speed services. The Javelin® service is planned to operate with 10 trains an hour for most of the day and at 12 trains an hour at the late night 'bump out' period. To maximise the capacity available for Javelin® services, both the domestic and international platforms will need to be used at Stratford International Station, Eurostar services are not planned to stop at Stratford International Station during the Games.
- 6.123 The Javelin® service represents an important contribution to the transport capacity at the Olympic Park. The operation of the Javelin® represents the only significant timetabling revision because it is not possible to operate the normal domestic high-speed services at the same time as the Games Javelin® services.
- 6.124 Eurostar services began operating from St. Pancras International Station in November 2007. London and Southeastern domestic high speed train services will commence full operation from St Pancras International and from Stratford International Station in December 2009.
- 6.125 In order to maximise the utility of this highspeed link for the dedicated Javelin® service, additional infrastructure work has been undertaken at Stratford International Station.

- 6.126 Temporary infrastructure works will also be required to facilitate the flows of passengers. Temporary works are likely to be required at St. Pancras International, Stratford International and Ebbsfleet International stations. Most temporary works will relate to passenger queue management. Further work is underway to understand the Gamestime demand and the queuing strategies needed at the three stations to ensure that high volumes of people can use the stations safely and efficiently. Temporary works at Stratford International station will provide the international platforms with decking and/or ramps to provide access between the train and the platform. The best way of achieving this is currently being explored.
- 6.127 Key to the delivery of the operational plans for the Javelin® service will be the continued close working of a number of stakeholders and delivery partners, including Southeastern, HS1, Eurostar and Network Rail CTRL.

#### Bus and coach services

- 6.128 Spectators travelling directly to the Olympic Park will be served by a number of bus and coach options. It is expected that for journeys to the Olympic Park around 10 per cent of spectators will use direct coach services, with a further 11 per cent likely to use some kind of park-and-ride service. Figure 6.24 shows bus routes to London venues.
- 6.129 Buses and coaches can offer flexible alternative travel options where rail is not the first or most practical choice. It is also attractive for those who are travelling in groups or who are disabled.
- 6.130 During the Games the following types of service will be offered:
- Direct coach services
- Strategic park-and-ride to the Olympic Park
- Venue local park-and-ride
- Venue shuttle services
- Enhanced local bus service

# Figure 6.16 Background National Rail schemes

Scheme	Enhancement Control of the Control o	Project completion date
Asset renewals	A range of asset renewals being carried out by Network Rail to improve the performance of the network.	Ongoing 2006 – 2012
High Speed 1 (HS1) Phase 2	Completion of the HS1 link from Fawkham Junction to St. Pancras International, including new stations at Ebbsfleet and Stratford International.	Completed
West Coast Mainline upgrade	Line speed improvements and increased capacity between London, the West Midlands, the North West and Scotland.	Completed
East London Line Extension Phase 1	Conversion of the existing East London Line to maintain standards and extension north to Highbury and Islington and South to Crystal Palace and West Croydon, allowing the operation of high frequency services. Infrastructure and new rolling stock funded by TfL.	July 2010
North London Line capacity upgrade	Enhancement of the North London Line to a metro-style service. Re-signalling and upgrade to enable a metro-style service, tripling passenger capacity by Games time whilst increasing freight capacity. Joint TfL/ODA/NR scheme with new rolling stock provided by TfL.	Spring 2011
Thornton's Field relocation	A facilty to replace the carriage sidings at Thornton's Field (near Stratford).	Completed
Signalling and platform works at Stratford Regional Station	Expanding platforms 11 and 12 to eight-car capacity so that longer services from Stanstead Airport and other locations can access Stratford Station.	Spring 2009
New High-level platforms at Stratford Regional Station	Two proposed new platforms for terminating North London Line services to be delivered by Docklands Light Railway as a replacement for the current low level platforms 1 and 2 used by North London Line passengers.	Completed
Enhanced Signalling scheme at West Ham Station	Signalling scheme to increase the number of trains that stop westbound in the peak period to eight trains per hour.	Autumn 2009
Station works at Stratford Regional Station	Capacity upgrade works.	End 2010
Signalling and platform works at Stratford Regional Station 10a	Extending platform 10a and associated signalling works to increase the number of Great Eastern mainline services that can stop at the platform during peak hours.	End 2010
New freight loop at Stratford Regional Station	Provide capacity to stand a freight train within a new freight loop. The loop will include new track to the east of platform 10a.	Spring 2010

# Figure 6.16 (Continued) Background National Rail schemes

Scheme	Enhancement Company of the Company o	Project completion date
Station works at Stratford International Station	Temporary works including decking of the international platform to raise the level to meet that of the domestic platforms and temporary ramps to enhance station access capacity. A new exit has been added to the eastern end of the station from the domestic platforms. This additional facility was being jointly funded by the DfT, TfL, LCR and the ODA.	Spring/Summer 2012 Eastern Egress complete, close to target
London termini temporary station works	Temporary works to facilitate the increased flows of people using London termini during the period of the Games.	Spring/Summer 2012 on target

Figure 6.17 Games-time rail services to the Olympic Park

System	Line	Olympic Park Gateway Station
London Underground	Central Jubilee Hammersmith and City District	Stratford Regional West Ham and Stratford Regional West Ham West Ham
Docklands Light Railway	Prince Regent – Stratford International Poplar – Stratford Regional	West Ham, Stratford Regional and Stratford International Stratford Regional
National Rail	Great Eastern Mainline Great Eastern Electric Lines North London Line Essex Thames-side Lea Valley High Speed 1 rail Link (Javelin® service)	Stratford Regional Stratford Regional Stratford Regional West Ham Stratford Regional Stratford International

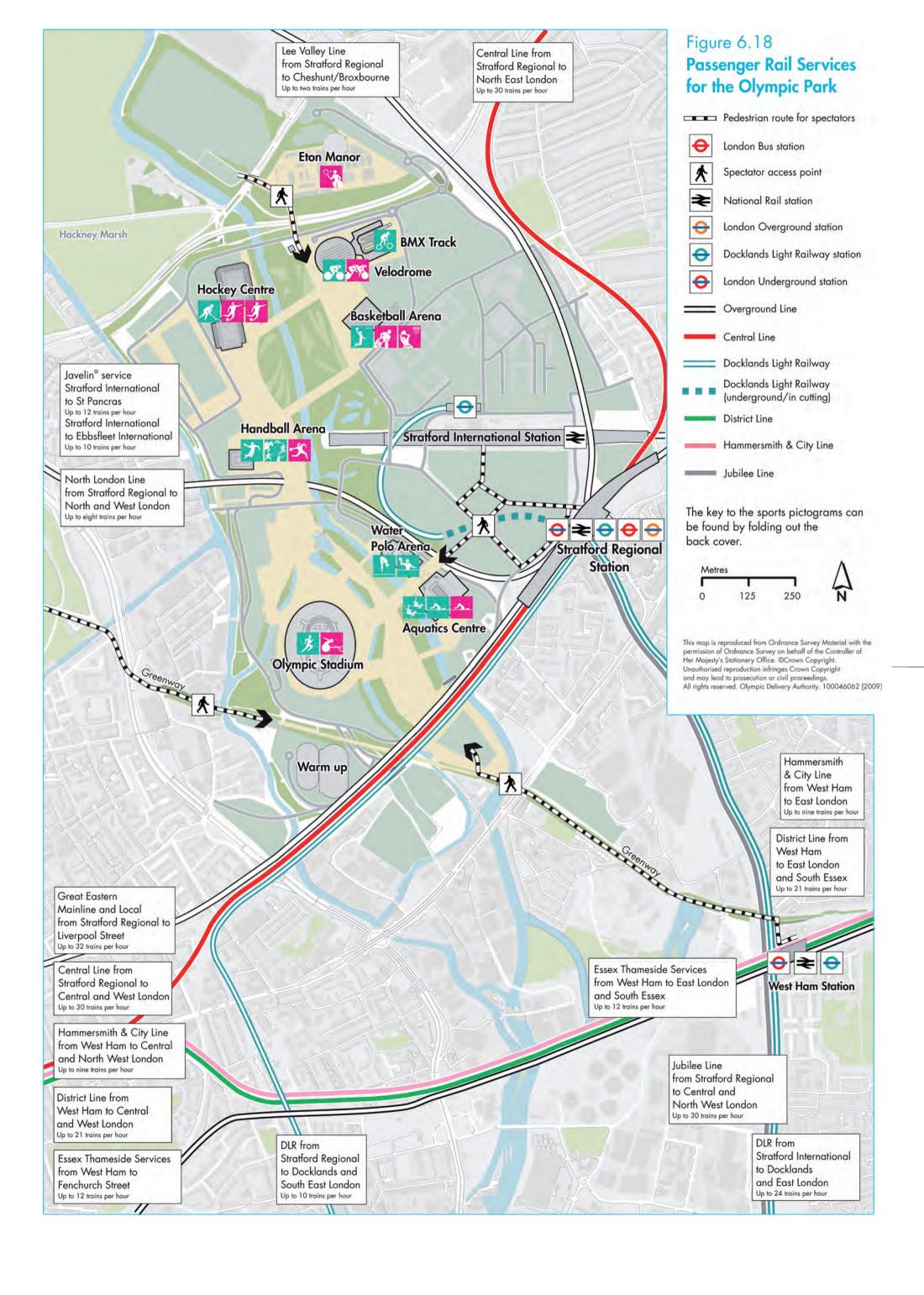


Figure 6.19 Rail capacity arriving at the three Olympic Park gateway stations on Olympic Games Day 7, morning peak arrivals 07:00 –10:00



Figure 6.20 National Rail train operators serving the Olympic Park

Line	Operator	Area served
Great Eastern Mainline	National Express East Anglia	Essex and east Anglia
Great East	National Express East Anglia	East London and Essex
London Tilbury Southend	c2c	East London and south Essex
Lea Valley	National Express East Anglia	North-east London and Hertfordshire
North London Line	London Overground Railway Operations Ltd	West, north and east London
High Speed 1 (HS1) (for the Javelin® service)	Southeastern	Kent and central London

Figure 6.21 Stations directly serving River Zone venues

Line	Jubilee Line	Docklands Light Railway	National Rail stations
ExCeL		Custom House Prince Regent	
North Greenwich Arena	North Greenwich		
Greenwich Park		Greenwich Park Cutty Sark	Greenwich, Maze Hill, Blackheath
Royal Artillery Barracks		Woolwich Arsenal	Woolwich Arsenal, Woolwich Dockyard

## Figure 6.22 Services and stations directly serving Central Zone venues

Competition venue	London Underground services	London Underground station(s)	National Rail service(s)	National Rail station(s)
Earls Court	District, Piccadilly	Earls Court, West Brompton		Kensington Olympia, West Brompton
Horse Guards Parade	Bakerloo, Northern, District, Circle and Jubilee	Charing Cross, Green Park, Picadilly Circus	Southeastern	Charing Cross
Hyde Park	Central, Piccadilly	Green Park, Marble Arch, Hyde Park Corner, Knightsbridge	First Great Western	Paddington
Lord's Cricket Ground	Bakerloo, Jubilee	Maida Vale, St John's Wood, Warwick Avenue, Marylebone	Chiltern, First Great Western	Marylebone, Paddington

# Figure 6.23 Services and stations directly serving other venues

Competition venue	Croydon Tramlink	London Underground service(s)	London Underground station(s)	National Rail service(s)	National Rail station(s)
Wembley Stadium/ Wembley Arena		Metropolitan, Jubilee, Bakerloo	Wembley Park, Wembley Central	Chiltern, London Overground	Wembley Stadium, Wembley Central
Wimbledon	Tramlink	District	Southfields	South West Trains	Wimbledon
Eton Dorney				First Great Western South West Trains First Great Western	Taplow Windsor & Eton Riverside Windsor & Eton Central
Broxbourne				National Express East Anglia	Broxbourne
Weymouth and Portland				South West Trains	Weymouth
Hadleigh Farm				c2c National Express East Anglia	Leigh-on-Sea Rayleigh

#### Direct coach services

- 6.131 Direct coach services can be characterised by two principal types of operation:
- network coach services designed for individual travellers; and
- private charter and 'ad hoc' operations more typically for pre-arranged groups.

#### Network coach services

- 6.132 Network coach services will be used by individual travellers who will book and reserve seats on services from a variety of origin points and travel directly to the venue.
- 6.133 The origin points are yet to be finalised, but planning will take into account the availability, costs and journey time for alternative modes and forecast demand. It is likely that the origin points will be key towns and cities that have existing and good links with surrounding areas, thus making the services attractive to a wide geographical area.
- 6.134 Although an early indication of the likely networks can be given, further work will be undertaken to enable a full appraisal of the geographical spread of the origin points and the days of operation.
- 6.135 Currently, it is expected that there will be three distinct groups of services. The first will be from longer distance origin points, typically two and a half hours from the Olympic Park. The second will be a group of services from east Kent that will feed passengers into the Javelin® service from Ebbsfleet. The third group will originate from an area roughly bounded by the 'home counties', the north and north-west London, with a typical journey time of up to one hour.
- 6.136 For Weymouth and Portland, there will be a further network from origin points throughout the south-west and this will be defined by building on the existing coach demand.

6.137 Services will be pre-booked to enable efficient operation and to maximise use of vehicles. The ODA will work closely with the appointed contractors to develop the operations, the network designs and the passenger management once demand data is refined.

#### Private charter and other operations

- 6.138 Although the network services will effectively service the demand for individual seats, some of the demand for coach travel will emerge from groups that wish to travel together, for example, sports clubs, local interest groups or older people. Operators may wish to offer advertised tours or excursions or integrate a visit to the Games as part of a broader tourist itinerary.
- 6.139 The ODA will support these operations by facilitating the use of the spectator transport malls and associated infrastructure. To ensure efficient management at all venues, a permit system will be in force to enable operators to pre-book arrival and departure 'slots' at the malls, both to give the spectator a better experience and also to manage the demand for space.
- 6.140 It is anticipated that this type of service will be an attractive option for those arriving from northern Europe in addition to passengers from the UK. The ODA will be working closely with operator groups to ensure operators in Europe are well-placed to maximise the opportunities available.

#### Strategic park-and-ride to the Olympic Park

6.141 The ODA recognises that even with a comprehensive rail network and additional coach services, there will still be some spectators who will find it difficult to make their entire journey to and from the Games by public transport. As another alternative, a number of park-and-ride sites are planned to provide a facility for those travelling into the Olympic Park from the north, north-west and north-east London, and the south-east.

- 6.142 The sites currently identified are at Redbourne in Hertfordshire, and at the Lakeside and Bluewater shopping centres. These sites have been carefully chosen taking into account a wide range of factors, including expected demand on the local road network, the availability of spaces and the cost effectiveness of the infrastructure and the work required.
- 6.143 Car parking spaces will be provided at a modest cost with coaches or buses operating regular shuttle services taking spectators directly from Redbourne or Lakeside to the Olympic Park. Limited provision for Blue Badge parking will be included at these sites.
- 6.144 From Bluewater, a bus shuttle service will transfer spectators to the Javelin® service at Ebbsfleet.
- 6.145 The ODA is working closely with both the landowners of the sites and the relevant local highways authorities to ensure smooth operation of the sites and services, particularly at peak arrival and departure times.

#### Venue local park-and-ride

- 6.146 At some venues outside the Olympic Park and particularly outside London, the use of public transport directly to the venue is more challenging. However, to encourage as much of the journey by public transport as possible, local park-and-ride services will be provided.
- 6.147 The locations of the park-and-ride sites for each venue are still being planned and are subject to further work on seeking agreements with landowners.

#### Venue shuttle services

6.148 In addition to the above, where public transport cannot serve the venue directly, bus shuttles will be provided to connect the nearest rail or public transport hub with the venue.

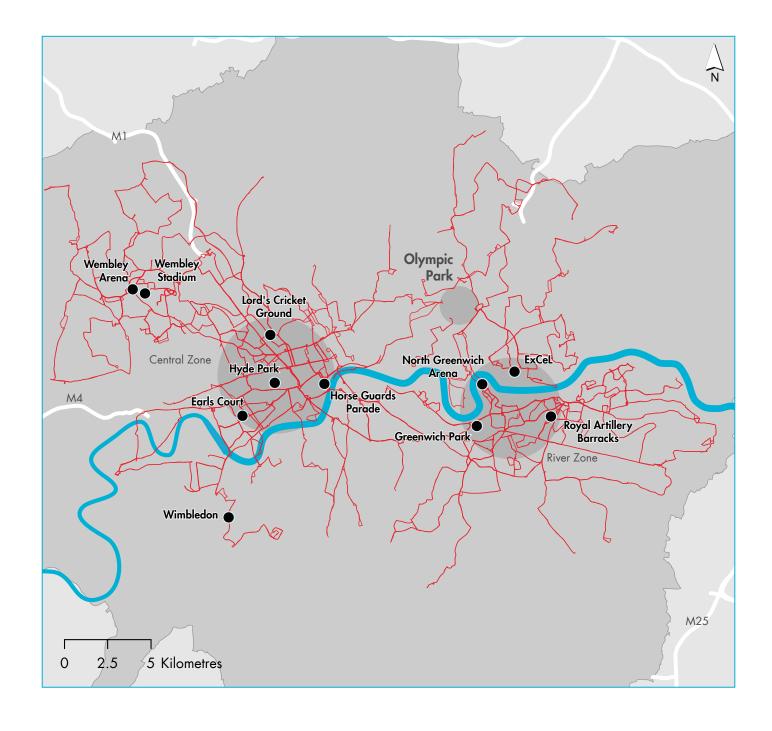
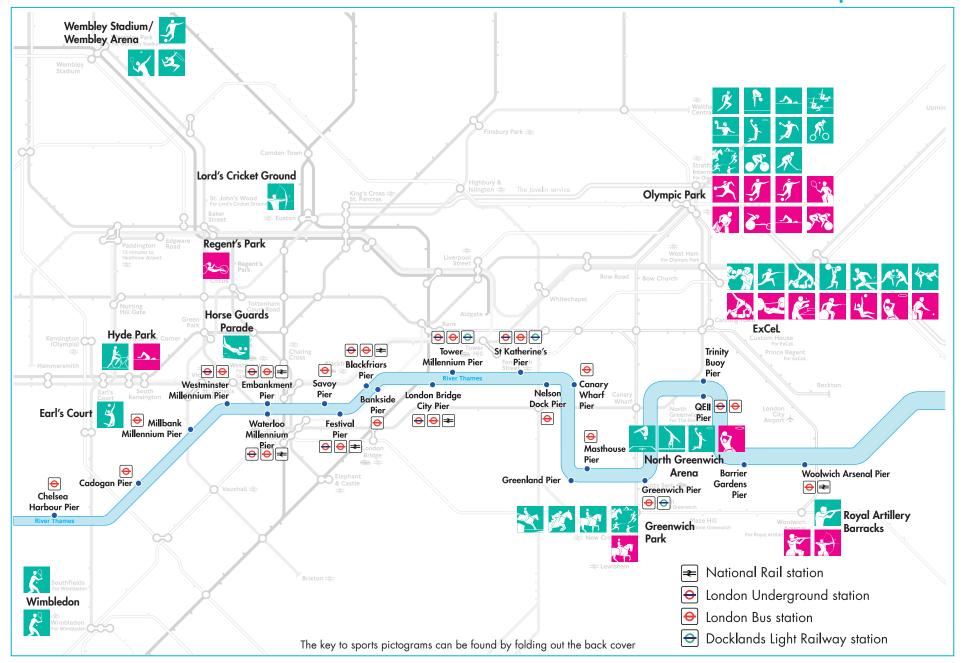


Figure 6.24 **Bus routes serving London Games venues** 

- Competition venue
- Bus routes serving London
  Games venues

Figure 6.25 **London river pier locations** 



- 6.149 Buses may also be used to relieve demand or congestion on other modes at certain venues, such as ExCel.
- 6.150 These services will be provided by the ODA as part of the spectator management process and are identified within each individual venue transport plan.
- 6.151 The park-and-ride shuttle services for individual venues are shown on the maps in chapter 7.

#### **Enhanced local bus services**

- 6.152 Where special services are unnecessary due to expected travel patterns or demand profiles, existing bus services will be enhanced either by providing additional services on existing timetables, with modest re-routing if it is expeditious to do so through the provision of limited stop services along parts of the route.
- 6.153 Within London, London Buses (TfL) will deliver these enhancements. For venues outside London, the ODA will work with the relevant local transport authorities and local operators to ensure a solution appropriate to meet local spectator needs.

#### Taxis and private hire vehicles

- 6.154 Taxis and private hire vehicles will be required for the Games where individuals require a level of flexibility not offered by public transport modes. In particular, taxis provide an accessible travel alternative for disabled people of all impairments.
- 6.155 London has a pool of 25,000 licensed taxi drivers, and 22,000 licensed taxis, all of which are wheelchair accessible. London also has around 47,000 private hire vehicles and drivers. Some 161 million trips are made by either taxi or private hire vehicles in London per year.

- 6.156 August is traditionally a relatively quiet month for the London taxi trade, but the Games will create an increased demand for taxi and private hire travel.
- 6.157 It is expected that there will be some demand for taxis to make various types of trips. These could include airport transfers, sightseeing tours, and journeys between accommodation and venues.
- 6.158 More work is being undertaken to establish the likely demand for taxi travel to the Games. The ODA continues to work closely with its delivery partners and stakeholders to identify and plan for the role of taxis and private hire vehicles during the Games.
- 6.159 Since the first edition of the Transport Plan, London 2012 has established a taxi and private hire vehicle working group. This group facilitates clear communication between operators, TfL, local authorities and the ODA.
- 6.160 The ODA ensures that the latest good practice guidance on the integration of taxi ranks into interchanges is used when designing venue infrastructure. While TfL will lead on taxi facilities at rail interchanges within London, the ODA will liaise with TfL to ensure that the requirements for the Games are taken into account.
- 6.161 It is envisaged that taxis and private hire vehicles will be able to drop off and pick up passengers at specific zones at all London 2012 venues. There will also be facilities at public transport interchanges. The taxi rank at Stratford Regional Station has been completed.
- 6.162 The ODA will investigate the potential for taxi share schemes already used at some venues such as the Wimbledon Tennis Championships to be used at London 2012 venues. The precise details have yet to be developed, but the ODA will work with the industry to maximise the opportunities available.

- 6.163 The ODA will ensure that adequate Games-related information is provided to drivers. This will relate to venue access, location of ranks and other pick-up/drop-off points, event scheduling and other relevant information. The use of the latest proven technology, including integrated tracking, dispatching and navigation aids, will be used where appropriate to facilitate the management of services.
- 6.164 The taxi emissions strategy was introduced by TfL to help improve air quality in the city. Since July 2008, all London's taxis have been required to meet 'Euro III' emissions standards as a minimum. The ODA will encourage, wherever practical and possible, the private hire sector to provide vehicles of at least equivalent emissions standard and will encourage the use of alternative fuels and technologies whenever possible.
- 6.165 Under current traffic regulations, taxis are permitted to use bus lanes. It is proposed that taxis and private hire vehicles will not be permitted to enter or use Games Lanes. Games Lanes are for accredited vehicles and emergency vehicles responding to an emergency.

#### Caravans and motorhomes

- 6.166 The use of caravans and motorhomes as a method of combined travel and accommodation is commonplace for major sporting events. The ODA has initiated plans to deal with this demand as it is likely that this will be a popular choice for many spectators, in particular from Europe where motorhome and caravan ownership is high.
- 6.167 Consultations and discussions have been held with the leading industry bodies and other parties, such as tour operators, which plan to operate campsites near venues, to establish the level of demand and fully understand their transport needs.

6.168 Where appropriate, the ODA will work alongside these operators to assist with the planning and coordination of services, providing shuttle bus operations specifically to serve the sites or, alternatively, utilising the direct coach network wherever it can be used. These services will be funded by users paying an appropriate fare set at market prices.

#### Waterborne transport

6.169 While waterborne transport is likely to play a relatively limited role in getting large numbers of spectators to the Games, it is an attractive transport option and the ODA aims to maximise its usage within the overall available capacity of boats, piers and waterways. Waterborne transport could also assist in reducing demand on some busy sections of the rail network.

#### **River Thames passenger transport**

- 6.170 The River Thames has an existing well developed network of passenger services that carries more than five million passengers a year by boat. Thames River services break down into two main areas of operation:
- scheduled services for both leisure and commuting purposes; and
- chartered services.
- 6.171 Scheduled passenger services will provide the main form of waterborne transport for spectators travelling on the Thames. Scheduled passenger services will offer an attractive and leisurely journey option for Games spectators travelling to River Zone competition venues.

#### **Planning for Thames river services**

- 6.172 Competition venues in London that could be served by river services are those in the River Zone:
- Maritime Greenwich (Greenwich Pier)
- Greenwich Peninsula (QEII Pier)

- Royal Artillery Barracks (Woolwich Pier)
- ExCeL (via Canary Wharf Pier and connecting coach)
- 6.173 In addition to the River Zone venues, some of the central London venues such as Horse Guards Parade and some cultural events could be served by river transport via the central London piers. It is also possible that spectator journeys to the Olympic Park could be made by river via the Canary Wharf Pier with a connecting public transport journey. However, the interchange and additional time required is likely to make this option unattractive to most spectators.
- 6.174 Work has been undertaken by the ODA to provide an understanding of the Games-time spectator demand for Thames river services. The demand forecasting work to date indicates that there is a relatively low demand for river passenger services when compared to the overall spectator demand for public transport. However, at certain River Zone competition venues, particularly Maritime Greenwich and Greenwich Peninsula, river services will play an important role in spectator transport plans.
- 6.175 The Games coincide with the river industry's peak summer season. Demand for river travel can be increased on sunny days, at the weekend and in the late afternoon for upstream trips returning from Greenwich to central London.
- 6.176 The numbers of additional spectators forecasted to use river services varies from day to day based on spectator numbers at River Zone competition venues for different events and days. Forecasting work indicates that an average 6,000 additional river passenger trips will be made by spectators travelling to and from competition venues on the river.

- 6.177 Despite the fact that the Games coincide with the Thames river industry's busiest period, competition event session times are, in most cases, different to the peak times for background river travel demand. This means there is some capacity on the existing scheduled passenger services for Games spectators. It is likely that further capacity will also need to be created through additional services being provided at particularly busy times of the day, for instance late afternoon and early evening sailings in an upstream direction towards central London.
- 6.178 A major attraction of river transport for spectator journeys will be the quality of the journey experience. This could be promoted through the use of both scheduled leisure tripping boat services on certain routes, as well as faster scheduled commuter type services which could provide more competitive journey times.
- 6.179 It is anticipated that the existing network of scheduled Thames river services, subject to any planned enhancements in frequency or capacity between now and 2012, will provide the basis for meeting Games-time requirements for spectators. Given the existing service patterns and the short duration of the Games, a likely Games time scenario will be to utilise spare capacity, increase frequencies based on venue session times and run later and earlier services as necessary. The river industry on the Thames is a dynamic environment and further forecasting and planning work is being undertaken to ensure all elements of this mode are understood in detail. The ODA will continue to work through the Mayor's River Passenger Services Concordat Working Group, and specifically the London 2012 sub-group with key river operators, TfL, London River Services (LRS) and the Port of

London Authority in this respect. By the end of 2009 an agreed 'concept of operations' for Games-time river services will have been agreed by operators and other stakeholders, based on the updated demand forecasting figures. This will then be further developed into a timetabled service or services for the Games.

- 6.180 It is likely that a single jointly promoted and operated Games-time service will be the most appropriate way forward. This type of operation would be most beneficial to the movement of large numbers of spectators from a user perspective.
- 6.181 In addition to providing transport for spectators through enhanced scheduled services, some use could also be made of charter boats by Games Family client groups. It is likely that there will be some demand from London 2012 partners and sponsors for hiring boats for leisure and entertainment purposes. These services fall beyond the remit of the ODA but need to be taken into account in relation to the combined impact of various forms of waterborne transport on river and pier capacity and navigational safety. The ODA will work with LOCOG, Port of London Authority and others to ensure demand for these types of services is understood and taken into account for Games operations.
- 6.182 The Games offer the opportunity to leave a positive legacy by helping to raise the profile of the Thames as a transport and leisure resource. In conjunction with London River Services and the river industry, the ODA and LOCOG are reviewing ways of promoting river use during the Games. This will include ensuring that river services are fully promoted as part of the Games travel information portfolio.

#### Pier infrastructure and management

- 6.183 London has an extensive network of river piers. This network is illustrated in Figure 6.25. With the exception of ExCeL, which is not directly served by a scheduled river service, all the other River Zone venues are served by existing piers. Central London is also well served by piers.
- 6.184 In conjunction with London River Services, and through utilising the Piers Action Plan undertaken for the Concordat working group, the ODA has reviewed where some capacity or other enhancements may be required on existing piers to support Games-time requirements. The conclusion of this work is that the ODA will be making a financial contribution to the capacity enhancement of Tower Pier and improvements to Greenwich Pier. These pier enhancement projects are subject to confirmation through a business planning process and to all necessary consents being obtained by the promoter of these projects, LRS.
- 6.185 In addition to infrastructure enhancements the ODA will shortly start more detailed work with pier owners, notably LRS, to ensure adequate provision is made for the management of busy piers during the Games.

#### Canals and other waterways

- 6.186 Planning work has been undertaken to review whether the canals and waterways of east London could operate limited volume spectator transport services to the Olympic Park during the Games. The review examined:
- a shuttle service from Limehouse Basin along the Limehouse Cut and Lee Navigation to below Old Ford Lock (adjacent to the Olympic Park); and
- a shuttle service from Tottenham Lock along the Lee Navigation to above Old Ford Lock (adjacent to the Olympic Park).

- 6.187 These services could be considered for water taxi operations, subject to commercial operators considering there to be a viable business case during the Games period.
- 6.188 British Waterways has principal responsibility for the canals and waterways in the vicinity of the Olympic Park. Further development work on the Limehouse and Tottenham service proposals is currently taking place, including a review of security and mooring arrangements. These canal services would not make a large contribution to the movement of spectators to the Olympic Park and cannot be considered a mass form of transport. It is likely that their usage may be equally attractive for leisure and sightseeing purposes, in addition to being a form of transport. They do, however, offer an attractive form of transport as part of a 'London 2012' day out experience.

#### **Cruise ships**

- 6.189 The Port of London Authority (PLA) has indicated that there has already been interest from operators of cruise ships in mooring in the Thames during the Games. Cruise ship facilities currently exist on the Thames at Greenwich, and in the Pool of London adjacent to HMS Belfast. Bookings have been taken for both these mooring facilities for the duration of the Games.
- 6.190 The London Cruise Terminal at Tilbury also offers mooring for cruise ships and the Port of Tilbury is reviewing the potential for converting some of the space normally used for commercial shipping to passenger operations during the Games. It is understood that around six berths could be made available for cruise ships during the Games.

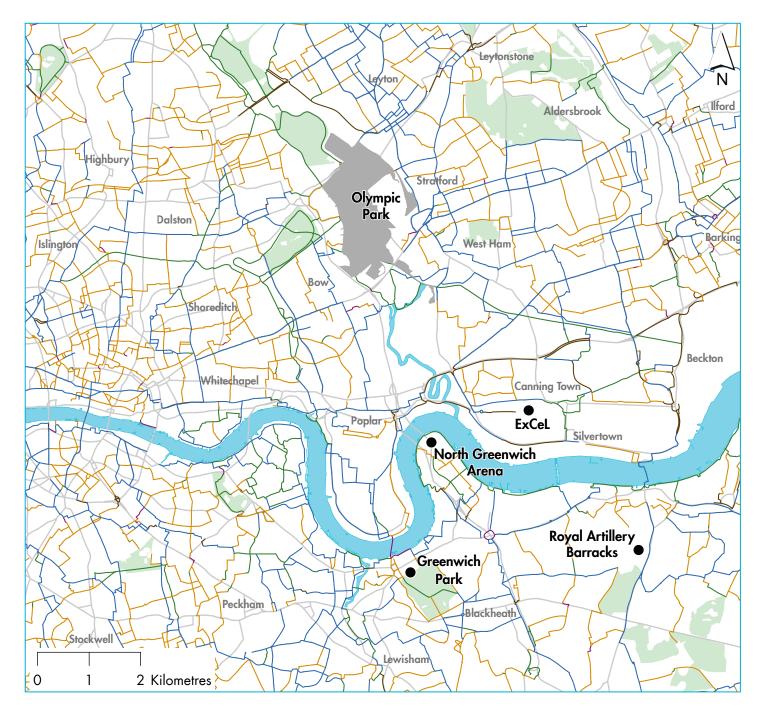
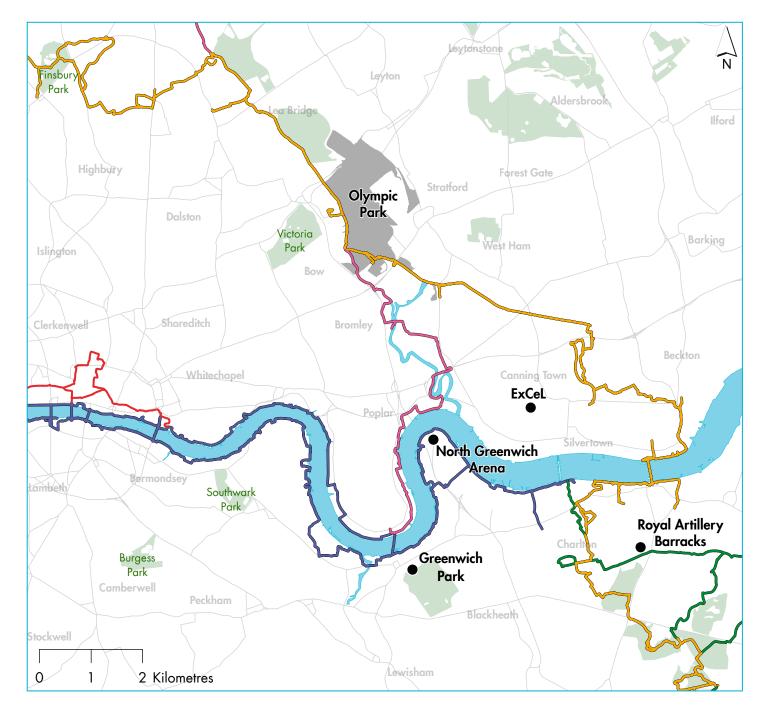


Figure 6.26

London Cycle Guide routes to the Olympic Park and River

Zone





# Figure 6.27 London advisory walking routes

Lee Valley Walk

Capital Ring Road

Thames Path

Jubilee Walkway

Green Chain Walk

Competition venue

Olympic Park

6.191 Once through immigration and customs controls, cruise ship passengers could use a range of public transport options to reach Games venues.

Planning for the cumulative effect of waterborne

activities on the Thames during London 2012
6.192 In addition to likely increases in scheduled river transport, charter transport and potentially cruise ships on the Thames during the Games, there will also be demand for other forms of private transport and potentially cultural or ceremonial events on the Thames. The ODA understands that there is likely to be an increase in the number of yachts and private recreational craft in and around the Thames during the Games. The ODA will work with organisations, such as the Royal Yachting

Association, to obtain a clearer idea of the likely

number of private boats in London around this time.

#### Waterborne transport outside London

6.193 The ODA has held discussions with a river operator currently serving the River Thames, in the vicinity of Windsor and Eton Dorney, about the possibility of river transport playing a role for spectators attending this competition venue. This was a positive discussion and it is hoped that a Windsor to Boveney Lock waterborne transport service for spectators can be operated during the Rowing competition at Dorney Lake. More work is required to obtain a clearer understanding of the likely demand for this service and how it fits with the wider venue transport strategy for Eton Dorney.

6.194 Weymouth and Portland Borough Council has made enquiries with local and regional waterborne transport operators concerning the potential for waterborne transport to play a role as part of the spectator transport arrangements for the Sailing competition at Weymouth and Portland. At this stage, it seems unlikely that longer distance services (for example, Poole Harbour to Weymouth Harbour) will be commercially viable. There may, however, be some opportunity for more local water taxi type services in the Weymouth area. Should private

operators wish to run these services and they are deemed acceptable from a safety and navigation viewpoint, then the ODA will promote them through the Games travel information package.

#### Walking and cycling

6.195 Sustainability is a key part of the transport strategy. Walking and cycling play a major role in this respect as carbon-neutral modes for spectators and workforce travelling to Games venues. They also make significant contributions to a number of the ODA's sustainability objectives, including tackling climate change, promoting inclusivity and health and well-being. Walking and cycling will be practical and attractive ways for spectators to access Games competition and other venues. These modes have a role in helping to relieve pressure on other public transport systems during the Games. A significantly larger number of spectator trips will include walking, and to a lesser extent cycling, when combined with rail or other modes, for a part of their journey to the venue.

6.196 In recent years cycling has been steadily increasing in London. There has been a 107 per cent increase in cycling in London since 2000. The Games present an excellent opportunity to build on the ongoing work by TfL, local authorities and other groups to further develop walking and cycling and to leave a legacy benefit. In addition to LOCOG, the ODA, TfL and other stakeholders promoting active travel, a number of other organisations are using the Games as a catalyst to increase walking and cycling levels in the lead up to, during and after the Games. This activity supports the ability for more people to choose active forms of travel to get to the Games.

6.197 The existing network of promoted cycle routes included in the London Cycle Guide that serves the Olympic Park and River Zone venues is shown in Figure 6.26. The London advisory walking routes serving the Olympic Park and River Zone venues are shown in Figure 6.27. These networks will be promoted to spectators attending Games competition events.

#### Planning for walking and cycling

6.198 Planning for walking and cycling infrastructure and operations for the Games is the ODA's overall responsibility, with key support from TfL as a delivery partner, and assistance from local authorities and walking and cycling groups. Two groups have been set up to assist with the planning and delivery of Games walking and cycling plans. These are the London 2012 Active Travel Advisory Group (ATAG) and the London 2012 Walking and Cycling Programme Delivery Partner Forum.

6.199 It is important to note that although walking and cycling is set out jointly in this chapter, the ODA recognises that they are very different and unique forms of transport, requiring different approaches.

6.200 A scoping paper setting out the principles and approach to planning walking and cycling for the Games was developed and endorsed by the Active Travel Advisory Group in 2006. In summary the principles are as follows:

 Legacy – ensuring that a legacy of local and strategic cycle and walking routes and associated infrastructure, as well as an increased awareness of the benefits of walking and cycling as viable transport modes, particularly to sporting venues and major events, remains after the Games.

- Integration of programmes and modes ensuring the integration of new walking and cycle infrastructure with existing networks and venues, promoting walking and cycling as part of longer public transport trips and ensuring Games-specific programmes are integrated with existing partner programmes and initiatives.
- 'Hard' and 'soft' measures London 2012 walking and cycling plans will include 'hard' and 'soft' measures. Hard measures focus on physical infrastructure such as new and upgraded routes, secure cycle parking, and signs and wayfinding systems. Soft measures include a programme of awareness-raising initiatives promoted under the Active Travel Programme.
- Cooperation and coordination ensuring a range of stakeholders continue to be engaged in the planning and delivery of walking and cycling measures. The Active Travel Advisory Group will be the main forum for engagement of walking and cycling groups, health representatives, TfL and the Greater London Authority. Local authorities will be engaged either through the London 2012 Walking and Cycling Programme Delivery Partner Forum or through one-to-one dialogue in connection with specific venues.
- Mode share and target setting spectator and workforce demand forecasting work undertaken during the bid stage suggested differing mode shares for walking and cycling at the various competition venues for both spectators and workforce at between one and five per cent. This was largely based on evidence from previous sporting and other large events where observed demand for walking and cycling was generally low. The ODA recognises that the demand for walking and cycling for the London 2012 Games will be based on a range of factors. These include the quality and extent of routes and facilities, the level of promotion undertaken in the build-up to the Games, and background trends in walking and cycling in London by 2012. Work has been undertaken to refine the demand forecasts

for walking and cycling to Games competition venues. This indicates that given the existence of good quality infrastructure, the development of a successful promotional campaign and ready access by spectators to facilities such as cycle hire, then walking and cycling could obtain combined mode shares of around five per cent at selected venues, notably the Olympic Park. This figure should be treated as a target mode share that will be challenging, but potentially achievable.

6.201 As part of demand forecasting work, analysis was undertaken of the ability of existing and planned future infrastructure around venues such as the Olympic Park to cope with predicted levels of Games-time demand. This work revealed that broadly, once the infrastructure enhancements being delivered through the London 2012 programme are in place (described in more detail below), the network is able to cope with the forecast numbers of additional walkers and cyclists. There are, however, likely to be a number of 'hotspots' that will require enhanced management during the Games as part of walking and cycling operational arrangements.

#### **Outline programme**

6.202 The London 2012 walking and cycling delivery programme breaks down into three main areas. These are integration and planning, routes and infrastructure enhancements and the Active Travel Programme (which includes Games-time operations for walking and cycling modes). In addition to the ODA-led Games specific activities and investment, there are a considerable number of other schemes, programmes and initiatives being delivered in advance of 2012 that will benefit cyclists and pedestrians in the build-up to and during the Games. Other initiatives will be delivered by different organisations, with a wide range of objectives. An example is the NHS London-led 'Go London' campaign which seeks to use the festival effect of the Games to promote more everyday physical exercise. Where appropriate, the ODA and LOCOG will work with other organisations to realign or provide access to a non-commercial version of the London 2012 brand through the Inspire programme to support these new or existing active travel projects.

6.203 An outline of the three main programme elements is included below. In developing this outline programme reference has been made to the aspirations set out in the Active Travel Advisory Group's document 'Active Travel Delivery Framework for London 2012'.

#### Integration and planning

6.204 This topic relates to both the physical integration of infrastructure and ensuring programmes and projects are integrated. Walking and cycling will be promoted for spectators both as 'walk all the way' or 'cycle all the way' trips to venues and also combined with other public transport options. Improvements are being made to the routes and surrounding environment and adequate signage from transport interchanges into the spectator entrances at venues. An example of where this is happening is the improvements currently being undertaken to the Elevated Greenway between West Ham Station (Manor Road) and the southern entrance to the Olympic Park. New walking and cycle infrastructure will be designed to integrate with entrance and cycle parking locations at both new permanent venues and temporary venues.

6.205 The ODA will work with TfL and other stakeholders to align existing programmes that encourage the integration of walking and cycling with other public transport modes. For example, a review of the potential for providing cycle parking at relevant park-and-ride sites will be undertaken. Where opportunities exist, the ODA will look to work with Network Rail and others to develop new cycle parking at key stations, such as Stratford Regional, for use during the Games and in legacy.

6.206 The ODA and TfL will ensure that the Olympic Cycle and Walking Route Enhancements

Programme is integrated with existing TfL and partner programmes. This includes ensuring new schemes and route proposals link with:

- TfL Greenways;
- the London Strategic Walk Network;
- Jubilee Greenway;
- London Cycle Network+;
- Cycle Superhighways;
- cycle hubs; and
- other programmes.

6.207 Certain Games-specific measures may be delivered through these existing programmes. Figure 6.28 shows the London Cycle Network+ in London and the location of the competition venues.

#### **Routes and infrastructure**

Cycle and walking route enhancements 6.208 TfL is leading on the planning and programme management of walking and cycling route enhancements for London 2012 on behalf of the ODA.

6.209 Existing on- and off-road walking and cycling routes serving competition venues will be promoted for spectator access during the Games. In addition to the existing network, a strategic planning exercise has been undertaken for the Olympic Park and River Zone venues, involving the identification of potential new and improved routes focusing on off-road routes and quiet roads (greenways). A number of greenway routes leading to the Olympic Park and River Zone venues have been identified. Figure 6.29 shows these proposed routes to be enhanced for use by spectators during the Games and remaining as a valuable legacy asset. With the exception of the potential Epping Forest route (the alignment of which is subject to further agreement) and the Hackney Parks route, these greenway routes are existing routes where enhancements are proposed.

6.210 These greenway routes have been the subject of TfL-led audits through the CRISP (Cycle Route

Implementation Stakeholder Plan), PERS (Pedestrian Environment Review System) or LAMS (London Access Management System) methodologies to assess current quality of routes and identify appropriate enhancement schemes.

6.211 A scheme prioritisation process was undertaken based on the extensive recommendations emerging from the cycle and pedestrian route audits. It led to the creation of a programme of walking and cycling schemes known as the Olympic Cycle and Walk Route Enhancements Programme (OCWRE). The 150 schemes comprising this programme will be delivered on the ground by various local authorities and other stakeholders such as British Waterways and Lee Valley Regional Park Authority.

6.212 It is important to note that the ODA will not be funding route upgrades along the whole length of these routes, but rather at specific, priority locations where barriers currently exist to cycling or walking. Enhancements included within the OCWRE programme include improved access points, surface treatments, pedestrian and cyclist crossing facilities and footway relaying. Generic signage enhancements along the length of certain routes will also be delivered.

6.213 The ODA's Transport team is also working with relevant local authorities and other stakeholders to identify and deliver walking and cycle route enhancements in the vicinity of venues outside London, such as Eton Dorney, Weymouth and Portland, Hadleigh Farm and Broxbourne.

6.214 It is important to note that all route enhancements delivered through this investment will be for permanent infrastructure that delivers benefits beyond the Games. The ODA is also delivering other projects that will provide benefits for walkers and cyclists. The Elevated Greenway enhancement project within and adjacent to the Olympic Park between Manor Road and Wick Lane is an example. This will also provide considerable

benefits to pedestrians during the Games, and to pedestrians and cyclists in legacy.

6.215 The options for promoting all relevant cross-river links for pedestrians and cyclists will be reviewed as part of the Games-time operations planning.

#### Cycle parking and other infrastructure

6.216 Either permanent cycle parking, where it exists, or temporary, secure cycle parking for spectators and workforce will be provided at all competition venues. At the Olympic Park cycle parking will be provided in the Northern (circa 2,000 spaces) and Southern (circa 200 spaces) Spectator Transport Malls. Around 5,000 spaces will also be provided at Victoria Park near the western entrance. Additional provision close to Stratford Regional Station, or in Stratford town centre near the eastern entrance, could also be promoted. Cycle parking requirements at other venues has been reviewed through the Venue Transport Strategy process and secure parking will be provided as necessary. The permanent venues being built by the ODA for during and after the Games will have sufficient numbers of permanent secure cycle parking facilities although these will only be available for use in legacy.

### Active Travel Programme (including walking and cycling operations)

6.217 The Active Travel Programme will encourage and facilitate walking and cycling as viable modes for spectators and workforce travelling to Games venues. A commitment to deliver an Active Travel Programme was included in the London 2012 bid. As well as having a Games focus, the Active Travel Programme will also aim to encourage more people to use active travel before and after the Games.

- 6.218 Several organisations including the ODA, LOCOG, TfL and other stakeholders will be involved in the delivery of different parts of the Active Travel Programme. It is likely the programme will be delivered through a combination of other major programmes, such as the London 2012 Travel Demand Management Programme, venue transport operations and bespoke initiatives implemented on the run up to and during the Games. An overview of some of the proposed programme elements that are subject to further project development are:
- Games Journey Planner Walking and cycling will be promoted as forms of transport for spectators travelling to competition venues through the Games journey planner.
- Games travel marketing and communication campaign – Walking and cycling will be fully promoted as part of the transport publicity campaign for spectators during the Games.
- Spectator guides Routes and cycle parking locations will be promoted in the travel sections of spectator information on a venue by venue basis.
   A more bespoke active travel guide may also be produced.
- Cycle hire The potential scope for enhancing the central London cycle hire scheme (due to be operational in summer 2010) is being investigated to understand whether it can be used by spectators cycling to Games competition venues.
- Guided cycle rides and walks Guided cycle rides and walks using the routes around the Olympic Park and other venues could be held during the Games. Cycle rides to the VeloPark and Road Cycling events are likely to be particularly popular.
- Traffic management arrangements TfL and the ODA will explore opportunities with boroughs for road management around venues to facilitate improved pedestrian and cyclist access.

#### Walk and cycle operations

6.219 Good operational planning and delivery are key parts of the effort to promote walking and cycling for spectators during the Games. The operational plans for walking and cycling will be set out in detail for each venue. The ODA is in the early stages of operational planning for these modes and will work with LOCOG, TfL, relevant boroughs and others to develop detailed plans on a venue by venue basis. This will include provision and management of cycle parking, promotion of appropriate walking and appropriate cycling routes into venues, reviewing integration with the ORN and signage.

#### Powered two wheelers

6.220 In recent years the use of motorcycles and mopeds, powered two wheelers, has risen in the UK. The DfT has identified powered two wheelers as a sustainable alternative to the car. Local authorities are required to develop strategies to promote their use and consider specific measures to assist motorcyclists in making integrated journeys.

6.221 It is also acknowledged that where public transport is limited and walking unrealistic, motorcycling can provide an affordable and more sustainable alternative to the car. The motorcycle is also the preferred form of transport for some people.

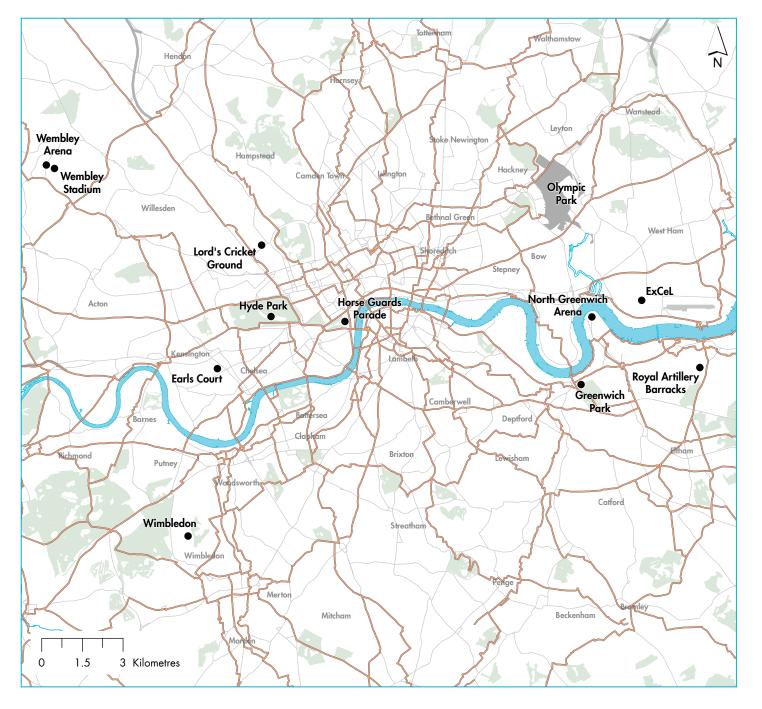
6.222 However, it is also recognised that incorporating motorcycles into an integrated transport strategy will need to be planned carefully. The planning carried out will consider crowd safety, road safety and ensure the operational resilience of transport facilities - for example, the Northern and Southern Spectator Transport Malls - to accommodate powered two wheelers. Secure parking will be provided at park-and-ride venues for motorcycles. It is anticipated that options for providing spectator parking for powered two wheelers at competition venues will be explored.

#### **Games Network of Accessible Transport**

6.223 In May 2008, London 2012 launched its Accessible Transport Strategy. The strategy outlined how it would deliver accessible transport options for everyone travelling to the London 2012 Games.

6.224 The objectives of the Accessible Transport Strategy are to:

- ensure that a wide variety of accessible journey options to and from London 2012 events are available to spectators, the Games Family and workforce; and
- develop and promote a philosophy of inclusion among London 2012 staff and transport delivery partners throughout the planning and operation of Games transport.
- 6.225 London 2012 is committed to helping everyone travel to the Games more easily. Planned access improvements are designed to benefit disabled people, elderly people, passengers with buggies or small children and those carrying luggage.
- 6.226 There are four key areas that are being developed to deliver accessible transport during the Games. These are:
- public transport infrastructure;
- the Games Network of Accessible Transport;
- making best use of accessible elements of public transport; and
- making best use of complementary transport modes, such as Community Transport and Dial-a-Ride.



## Figure 6.28 London Cycle Network+

London Cycle Network+

Competition venue

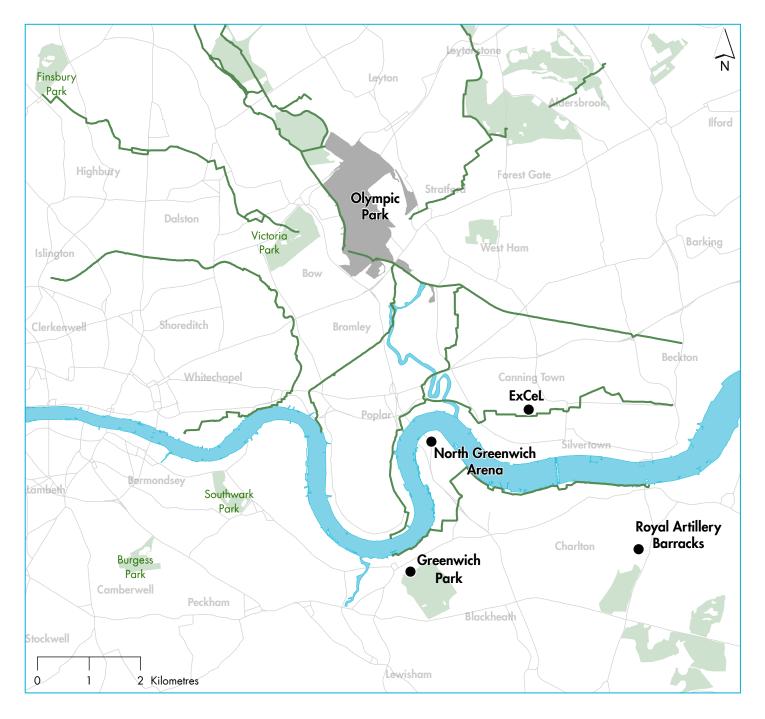


Figure 6.29
Greenway routes to be used during the Games

Greenway routes

Competition venue

Olympic Park

#### **Progress to date**

- 6.227 Since the strategy was published, good progress has been made across these areas. Core infrastructure improvements by the ODA and its delivery partners are already benefiting passengers. Other areas of London 2012's access plans, such as the Games Network of Accessible Transport, have also developed.
- 6.228 The improvements being made to Stratford Regional Station are designed to boost accessibility at the station. The first of the nine new lifts planned for the station are now in service. The majority of the remaining lifts are due to be up and running by spring 2010, with the last due to be installed that summer.
- 6.229 The new entrance and exit at Stratford International Station to which the ODA has contributed funding will improve access. Located at the eastern end of the station, the new entrance and exit will provide additional access options and improve passenger flow through a lift, two escalators and a fixed staircase. This new entrance has now been installed.
- 6.230 The fully accessible DLR is an excellent transport option for disabled spectators travelling to a number of London 2012 venues. The ODA is working with the DLR to make the best use of the network.
- 6.231 The ODA has worked with LU to bring two stations on its step-free programme forward in time for the Games. The scheme at Southfields Station, which will serve the Tennis competition at Wimbledon, is one of these. Work has started at Southfields and it is due to be step-free by autumn 2010.
- 6.232 The other is Green Park Station, which will serve central London cultural events and sports

- venues, including Beach Volleyball at Horse Guards Parade, and the Triathlon and 10km Open Water Swim at Hyde Park. Planning permission was recently secured for step-free access and wider improvements at Green Park Station. The upgrade will be completed by the end of 2011.
- 6.233 Figures 6.30 and 6.31 show step-free rail stations on the London Underground serving Olympic and Paralympic venues.
- 6.234 The ODA is working with local transport operators and local authorities at London 2012 venues in the capital and around the UK to help everyone get to the Games more easily.
- 6.235 The types of transport and different services that will provide accessible options for spectators travelling to the Games can be broadly grouped into three areas:
- public transport;
- complementary transport services; and
- Games-specific transport.
- 6.236 The Accessible Transport Strategy outlined plans for the development of a Games Network of Accessible Transport. This will allow disabled people to make informed choices about the full range of accessible transport options available to them for travel to and from the Games.
- 6.237 The network, including the promotion of access hubs, will bring together the accessible elements of existing public transport and temporary accessible measures introduced for the Games, such as accessible shuttle buses between venues and rail stations. Complementary transport services are then factored into the network to give a full range of accessible transport options.

Figure 6.30 **Step-free rail stations for the Olympic Games** 

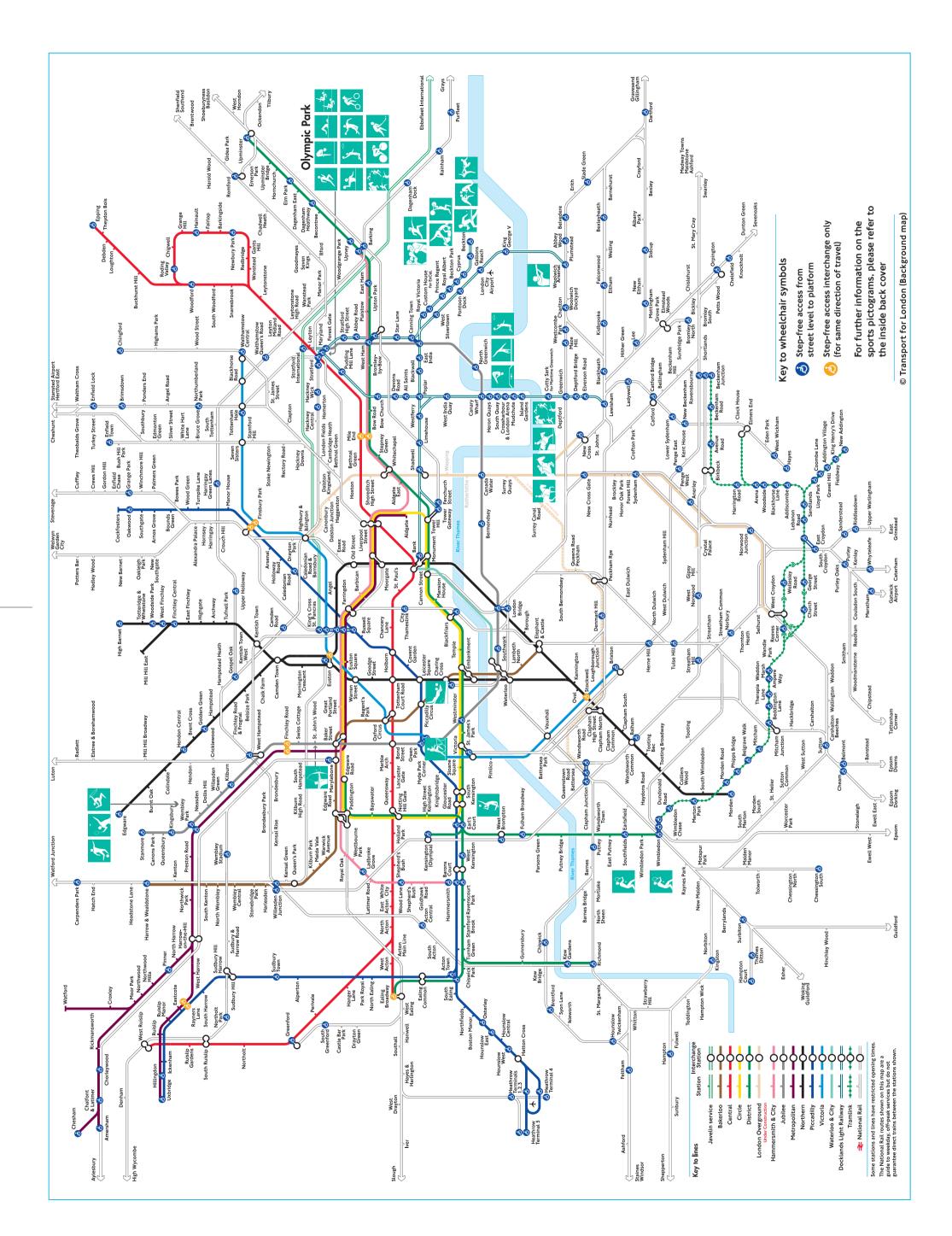


Figure 6.31 **Step-free rail stations for the Paralympic Games** 

