Snapshot Review

All change

A snapshot review of sustainability and transport across the London 2012 programme

June 2010

Published by the Commission for a Sustainable London 2012

www.cslondon.org
Overall, the Commission welcomes the excellent and, in some cases, innovative work being undertaken by the London 2012 transport teams in planning to deliver against the stated sustainability objectives of a public transport Games, minimising CO$_2$ emissions, and an inclusive and accessible Games. The Commission is particularly impressed by the commitment to specific targets and how these are being used to drive planning and innovation.

Many of the plans, particularly around Accessible Transport and the Active Travel Programme, require resources to continue to be committed to them in order to capture the benefits at Games-time and beyond. The Commission will continue to monitor these topics as part of its ongoing assurance programme.
2 Introduction

2.1 Aim

The Commission for a Sustainable London 2012 (‘the Commission’) was established to provide independent assurance and commentary to the Olympic Board, and publicly, to enable the sustainability objectives of the Games to be achieved and to support a sustainable legacy.

The aim of this report is to provide a snapshot of the sustainability of the London 2012 Games-time transport plans as they stood at the end of 2009. This differs from previous reviews by the Commission which have delved into greater detail around specific processes or issues. Much of the detailed planning and delivery still lies ahead for the London 2012 transport teams as they start to activate programmes with their commercial partners and as ticket sales allow more accurate forecasting and travel planning. Consequently at this point in time it seemed more appropriate for the Commission to provide an overview and comment on current plans. The Commission will revisit transport closer to the Games in a review of Games Operations.

2.2 Approach

The London 2012 Sustainability Policy has five key themes: climate change, waste, biodiversity, inclusion and healthy living. Of these five, LOCOG and ODA Transport have decided that climate change, healthy living and inclusion are the areas most relevant to the London 2012 transport work.

The majority of the information in this report was gathered from a series of presentations by the London 2012 Transport Team over the course of one day in December 2009 followed by meetings with the key individuals. The main publications relating London 2012 transport were also reviewed.

The first section of this paper summarises the key commitments and planned activities of London 2012 against the themes of climate change, healthy living and inclusion. The second section provides details of findings by the Commission, on the work to date against these themes and on the activities that the Commission expects to see in these areas. It should be noted that there is overlap between these themes in some areas.

2.3 Roles and Responsibilities

During Games-time, from the opening of the Media Centre on 27 June 2012 until the Olympic Park closes on 14 September 2012, London 2012 and other delivery partners will manage the movements of around nine million spectators and 77,000 members of the Olympic and Paralympic family, as well as a 170,000 strong workforce.

In December 2009, the ODA published the consultation draft to the second edition of the Transport Plan for the London 2012 Olympic and Paralympic Games.
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
- achieve maximum value for money for every pound spent on transport.

During 2010, London 2012 will publish an issue of PACE focussing on sustainable transport followed by a Sustainable Transport Plan which will present all the sustainability aspects of transportation of people and goods.

The Key Stakeholders involved with London 2012 are: the Olympic Delivery Authority (ODA) and the London Organising Committee for the Olympic Games and Paralympic Games (LOCOG) – who together comprise London 2012, the Greater London Authority Group (GLA) – which includes Transport for London (TfL) and the London Development Agency (LDA), the Government Olympic Executive (GOE) and the British Olympic Association (BOA) and British Paralympic Association (BPA).

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 such as TfL, Network Rail and others. Under the Host City Contract, LOCOG Transport is ultimately accountable 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. The ODA’s Transport team is responsible for:

- planning and delivering spectator transport for the Games;
- planning and delivering the Olympic Route Network (ORN) and Paralympic Route Network (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.

2.4 Constraints

Constraints will be covered in more detail where appropriate in the report but it is worth noting at this point that London 2012 has some commitments relating to transport that must be met. The Host City Contract between the Mayor of London, LOCOG, the British Olympic Association, and the International Olympic Committee, (IOC) requires fulfilment of the bid commitments which includes standards for service provision, for example, regarding journey times for athletes when travelling between the Olympic Village and competition venues. Security constraints are also a major factor, for example, when transporting athletes.
### 3 Commitments and Planned Activities

This section sets out the main documented transport commitments made by London 2012 against the themes of climate change, healthy living and inclusion. The table also includes planned activities, i.e. programmes which London 2012 plan to undertake but which are not formal commitments. Progress against these commitments and plans is covered in section 4.

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Climate Change – Documented commitments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>London 2012 Sustainability Plan</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Transport Games</td>
<td>ODA</td>
<td>• 100% of spectators to reach the Games by public transport or by walking or cycling (with the exception of those with specific access requirements).</td>
</tr>
<tr>
<td></td>
<td>LOCOG</td>
<td>• Spectators for events within and around London will be provided with a ticket for travel within the London public transport network.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Games family entitled to free public transport within the London network for the period of the Games</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No provision for private parking at any venues (with the exception of those with specific access requirements).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Long-distance domestic and near continental visitors (including teams and officials) encouraged to use rail rather than air transport</td>
</tr>
<tr>
<td>Carbon emissions</td>
<td>LOCOG</td>
<td>• Fleet average target of 120gm CO₂/km for category M1 Games family vehicles (8 or fewer passengers).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CO₂ emissions standards to be set for other vehicle categories.</td>
</tr>
<tr>
<td>Low Emission Zone (LEZ)</td>
<td>LOCOG</td>
<td>• All competition venues operated as ‘low-emissions venues’ at Games-time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An information guide on the LEZ to be provided for partners and suppliers.</td>
</tr>
<tr>
<td>Logistics</td>
<td>LOCOG</td>
<td>• A Logistics Sustainability Plan to be developed with UPS.</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>ODA</td>
<td>• Exploring the use of energy harvesting in the temporary staircases being constructed for Games-time at West Ham Station</td>
</tr>
</tbody>
</table>
### London 2012 Transport Plan

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Transport Games</td>
<td>ODA</td>
<td>• Shuttle buses to be used to take spectators between main transport link and the venue when the distance is too far to walk.</td>
</tr>
<tr>
<td></td>
<td>ODA</td>
<td>• Park and ride and park and rail services to be provided.</td>
</tr>
<tr>
<td></td>
<td>LOCOG</td>
<td>• Members of the Olympic and Paralympic family and the press to be brought to and from venues by bus, coach or car. Buses and coaches as well as public transport will also be needed for the London 2012 workforce and officials.</td>
</tr>
</tbody>
</table>

### Climate Change – Planned activities

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Transport Games</td>
<td>LOCOG</td>
<td>• Athletes, when spectating at events and not competing will be encouraged to use public transport rather than bus services. This is currently being agreed with National Athletes’ Commissions.</td>
</tr>
<tr>
<td>Olympic Fleet</td>
<td>LOCOG</td>
<td>• BMW, the London 2012 automotive partner and a sustainability partner, to provide just over 4000 vehicles for the Games. 98% to be passenger cars, plus some small minibuses, vans, motorcycles and bicycles. Up to 200 will be battery electric vehicles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• BMW will meet and aim to exceed the target of a fleet average of 120gm CO₂/km.</td>
</tr>
<tr>
<td>Carbon Management</td>
<td>ODA</td>
<td>• Measuring the carbon footprint for different transport methods at each Games-time venue.</td>
</tr>
</tbody>
</table>

### Inclusion – Documented commitments

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible Transport</td>
<td>ODA/ LOCOG</td>
<td>• Games Mobility Service at all venues, which will provide assistance from spectator entry points, in public areas and in venues.</td>
</tr>
</tbody>
</table>

---

Commission for a Sustainable London 2012 | All change | June 2010
<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
</table>
| Accessible Transport             | ODA            | • Accessible Transport Strategy, to cater for approximately 15–20 per cent of spectators (24,000–32,000) who are expected to have specific access needs (including disabled people; older people; parents with infants; children; and first time visitors to the UK or London).
|                                  |                | • The Accessible Transport Strategy focuses on:                                                                                         |
|                                  |                |   - Promoting an inclusive approach to transport, rather than a segregated system;                                                      |
|                                  |                |   - Developing new ideas for Games-time;                                                                                                  |
|                                  |                |   - Focusing the plans and improvements in one document                                                                                 |
|                                  |                |   - The Games Network of Accessible Transport (GNAT) which will bring together accessible public transport, complementary services and dedicated shuttle services and will be promoted using an Accessible Transport Portal highlighting the accessible elements of mainstream transport services. Accessible hubs, mainly at major rail / bus stations, will be part of the network. |
| Inclusion – Planned activities   |                |                                                                                                                                         |
| Accessible Transport             | ODA/LOCOG      | • Use the power of the Games to improve the accessibility of transport networks across London and the UK.                                  |
| Affordability                    | ODA            | • Discussion with Train Operating Companies about rail ticketing options during Games-time.                                              |
| Volunteer Drivers                | LOCOG          | • 5,000 volunteer drivers will be recruited for Games-time. 50 adapted vehicles to be provided by BMW so disabled people can volunteer as drivers. |
|                                  |                | • Sustainable driving and disability awareness training will be provided for all volunteers.                                            |
| Minibuses                        | LOCOG          | • Adapted minibuses that can be used by both disabled and non-disabled people at the same time.                                           |
## London 2012 Sustainability Plan

### Healthy Living – Documented commitments

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Impact Study</td>
<td>ODA</td>
<td>• Subject to funding, planning a longitudinal study into the health impacts of transport improvements linked to the Games.</td>
</tr>
<tr>
<td>Olympic Cycle and Walk Route Enhancements</td>
<td>ODA</td>
<td>• 80km of walking and cycling routes upgraded or created around venues in London, particularly the Greenway routes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 20km of walking and cycling routes upgraded or created around venues outside London.</td>
</tr>
</tbody>
</table>

### PACE issue 4

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Travel Programme</td>
<td>London 2012</td>
<td>• Promote and encourage spectators and workforce to use active forms of travel to get to and from venues and specifically aims to encourage people to walk and cycle to the Games.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expect 4 – 7 % of visitors to cycle or walk all the way to the Games, with more walking or cycling part of the way.</td>
</tr>
</tbody>
</table>

### Healthy Living – Planned activities

<table>
<thead>
<tr>
<th>Area</th>
<th>Owner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Travel – Routes and Infrastructure</td>
<td>ODA</td>
<td>• Work with TfL and the London Boroughs to ensure that existing programs are in place and if relevant extended by London 2012, for example TfL’s new cycle super highways.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>ODA</td>
<td>• Carry out a range of studies to monitor impacts on Air Quality as identified in the Strategic Environmental Assessment of the ODA Transport Plan.</td>
</tr>
</tbody>
</table>
4 Findings

4.1 Roles and Responsibilities

The ODA and LOCOG transport teams work closely together and have been working to ensure that sustainability is embedded into transport planning since winning the bid. The Commission welcomes the proactive approach that the two organisations have taken, for example in challenging the IOC, on sustainability grounds, regarding some of the transport requirements and standards set for host cities, for example around transportation of officials by car.

4.2 Public Transport Games

The bid commitment to hold a ‘Public Transport Games’ whereby 100% of spectators will travel to the Games using public transport for all or the last leg of their journey and without parking at venues for spectators (other than blue badge holders) is operationally in keeping with best practice at major urban sporting events but is by no means common practice. Opportunistic informal car parking provision can often be found in the vicinity of venues, outside the scope of local parking restrictions; managing this will be a challenge. Encouraging visitors to the Games to use public transport will have a net benefit in terms of CO₂ emissions and congestion, and sends a clear signal to the public about the importance of sustainability for London 2012.

LOCOG’s differentiation between athletes competing at events and athletes spectating is innovative. Athletes, when they are just spectating at events, should be encouraged to use public transport, walk or cycle; this would send a strong message to the visiting public and sets a precedent for future events.

London 2012 currently measures modal split on the basis of final mode of transport to the venue. However some visitors may take their bikes on trains and cycle from mainline stations slightly further afield. While possibly tricky to analyse, measuring by modal mile may be a useful comparator against mode for the final mile. However, this is dependant on sufficient information being available about the modes of transport used by visitors to the Games.

International spectator, athlete and team transport to London 2012 is an area which requires further work between now and the Games. Given the number of teams who will be coming to the Games from training camps in the UK and Northern Europe, rail services should be the option of choice, taking logistics into account, over internal UK flights and short haul flights from Europe. Working with National Olympic Committees and providing them with support and information to encourage them to use rail and having a target for teams arriving by rail would focus activities on enabling this and would avoid CO₂ emissions. There was a bid commitment for a carbon offset programme for all Olympic and Paralympic travel. London 2012 has decided no longer to pursue formal offsetting schemes as part of its core Carbon Management Strategy. The Commission’s carbon review recommended ‘Gold standard offsets, or other equally robust method, for flights
for competitors and officials, in accordance with the bid commitments. If flights are not to be offset, mitigation of these emissions must be achieved using alternative means.' This mitigation or compensation is to form part of the London 2012 Carbon Management Strategy.

For international spectator transport, the carbon footprinting study undertaken by London 2012 assumed around 127,000 tonnes CO₂ associated with spectators flying from North West Europe and around 215,000 tonnes CO₂ associated with spectators flying from the rest of the world. The Commission’s view is that the actual emissions for North West Europe could be substantially lower if information is provided in advance regarding alternative transport options, such as that provided by www.seat61.co.uk and people are encouraged to use these alternative methods.

4.3 Vehicles

4.3.1 Buses/Coaches

Both the ODA and LOCOG will use buses and coaches to fulfil their transport responsibilities and need around 1,000 and 1,500 buses and coaches respectively.

The ODA and LOCOG are separately procuring bus and coach services, with the ODA announcing, in February 2010, First Group as the preferred bidder to provide buses and coaches to transport spectators during the London 2012 Games. LOCOG is part way through its procurement to lease buses and coaches. This procurement offers an opportunity for both the ODA and LOCOG to encourage the bus and coach industry to raise their standards in terms of emissions. First Group have committed to providing the ODA with all Euro IV compliant vehicles that are less than five years old, following the ODA including sustainability criteria in their specification and tender evaluation. LOCOG are also seeking vehicles that meet these criteria. The London Low Emission Zone minimum standard for buses and coaches is the Euro III standard and by 2012 it will be Euro IV. Currently, very few buses or coaches better this standard but by 2012, Euro IV or V will represent good practice in the industry.

The bus and coach industries have very different characteristics. TfL and local authorities have been driving improvements in the environmental performance of buses, with the introduction of hybrid and more efficient buses. The coach industry is very fragmented, with largely single operators, a large pool of aging vehicles, and has fewer incentives to change than the bus industry. There are currently no plans for any funding for operators to improve their emissions performance; the Commission understands that London 2012 has broached this issue with the Department of Transport and TfL but that this is not likely to change.
4.3.2 The Olympic Fleet

BMW’s commitment to meet the London 2012 target of a fleet average of 120gm CO₂/km is impressive. The EU target is for 65% of new passenger cars in each manufacturer’s vehicle fleet to average 130gm CO₂/km in 2012, rising to 100% of their fleet in 2015. BMW will work with BP, another London 2012 Sustainability Partner, on fuel options to improve on the fleet average target. The fleet will also meet the Euro VI emissions standard and BMW will showcase electric vehicles. BMW bicycles will be available at Games-time for use by athletes in the Athletes’ Village and by staff, and motorcycles will also be used. A proportion of the fleet will be wheelchair-accessible and BMW will convert a number of vehicles for use by disabled drivers and passengers making them accessible for volunteers and accessible for passengers. The Commission is impressed by this joined up approach to inclusion; the conversion of vehicles for disabled drivers being a first for any Games.

LOCOG will be working with their branding and communications departments to ensure that the sustainability message around Games-time vehicles is communicated and the Commission would encourage London 2012 to do this as clearly as possible. There is a wider expectation that green vehicles equal electric vehicles. However, use of a large number of electrical vehicles currently presents specific operational challenges to London 2012. These include ensuring sufficient vehicles are charged to meet scheduling needs given constraints in the range that the vehicles can cover on a single charge, the need for recharging infrastructure to be suitable for legacy needs, that the vehicle technology will largely be new and have had limited operational testing and safety and security considerations. Vehicles must be charged in a secure compound which could mean significant additional load on local electrical supply infrastructure in that area. Additional renewable electricity would also be required so as not to displace CO₂ emissions from the vehicle exhaust to the power station chimney. However, the Department for Transport states that research suggests using the current UK power mix, electric vehicles could realise up to a 40% benefit in CO₂ savings compared with a typical petrol family car in the UK over the full lifecycle. Where new charging infrastructure is required to be installed, this would also need to be factored into lifecycle CO₂ calculations.

4.4 ODA Transport Carbon Management Planning

Transport carbon impacts arise from both the embodied CO₂ related to investment in transport infrastructure, as well as CO₂ associated with movement, whether by rail, vehicle or air. The ODA are aiming to reduce carbon emissions associated with transport infrastructure and their client group travel patterns by considering carbon at a strategic level. With transport infrastructure the extent to which this can be achieved is limited by the areas that the ODA has control over. For example, the Orient Way project was entirely controlled by the ODA and achieved the highest ever CEEQUAL score so far for a rail project, with 99% of the demolition and site clearance waste from the project being...
recycled, whereas the ODA has much less control over projects led by other partners such as the Stratford station upgrades. However, the ODA has used TfL climate change funding to install automatic metering linked to a Building Energy Management System at Stratford Regional Station. This allows for automatic and remote control of lighting, heating, escalators and other power consuming assets to manage energy consumption. With transport infrastructure, the ODA’s aim has been to make small changes with the potential for larger impacts across the industry through replication. To manage carbon associated with spectator movements, Venue Transport Managers will be able to measure the carbon impact of transport planning decisions for their venues and will seek to optimise this. This will be of legacy benefit to future venue operators and hosts of other large events.

West Ham Case Study

The ODA team responsible for the upgrading of West Ham station for the Games were tasked with undertaking a CEEQUAL assessment and consideration of the environmental impacts. They are considering an innovative solution, the use of footfall technology, which converts kinetic energy in high footfall areas into electricity. It is estimated that it could power 15% of the lighting load at the station. If the technology is tested and used at West Ham, there will be a legacy benefit as it could be used at other London stations. Provided it has a positive whole life carbon cost, i.e., saves more energy than that used to manufacture and install it, using such a technology, increases the visibility and public awareness of the importance of sustainability to the Games.

The use of this technology at West Ham is an excellent example of sustainability objectives leading to innovative solutions. It is also an instance of London 2012 providing opportunities for innovative technology and small companies.

4.5 Logistics

UPS is the London 2012 Logistics Partner and will provide the majority of logistics services. Some London 2012 Partners may run their own logistics programmes, e.g., Coca Cola; these will be managed by London 2012 logistics team. LOCOG and UPS started planning work in late 2009 and in terms of sustainability they are currently focusing on deliverables such as the best locations for warehouses and how to minimize distribution mileage.

UPS provided the logistics services in Beijing which means that elements of the 2008 Games can be used as a reference scenario. Whilst it will not always be possible to make direct comparisons, having this data means there is an opportunity for LOCOG and UPS to set sustainability targets, particularly CO$_2$-related, for the London 2012 Games against a real benchmark. The Commission understands that UPS currently employs a telematics system to collect and analyse data from delivery trucks in order to help identify ways to reduce energy and emissions. UPS also owns world’s ninth largest airline UPS Airlines;
these emissions would need to be included in targets, although it is not yet known whether any equipment will need to be flown to the UK for the Games.

UPS and LOCOG would both benefit from communicating more clearly their plans to improve sustainability performance of Games logistics, such as the use of electric vehicles. The use of waterways for transportation during Games-time is also being considered; by Games-time the rail heads used during the Construction phase will have been removed. In our waste review, the Commission recommended that LOCOG report on how materials under its direct control and influence are transported from venues during all phases of its Games operations and maximise the use of more sustainable transportation modes (e.g. low / zero emission road vehicles, rail and water).

LOCOG will be developing an internal Logistics Sustainability Plan in partnership with UPS during 2010. The Commission will review this document and looks forward to understanding what will be regarded as a success in terms of sustainable logistics and how this will be measured, together with targets.

4.6 Inclusion

4.6.1 Accessible Transport for visitors

The Accessible Transport Strategy was published in 2008 and implementation is currently in development. It will benefit disabled people, older people, visitors with buggies or small children and those carrying luggage. An Accessible Transport Plan was published in January 2010 to build upon the Strategy and provide further details of how the accessible journey options are to be addressed, along with details of some of the work that has already been achieved.

The Department for Transport (DfT) are trying to add a layer to the Transport Direct journey planner to provide accessible journey information. This will form the basis for the Games journey planner. If fully resourced, this will be very welcome, as it will enable individuals to plan the most appropriate route for travel to the Games and will also provide a legacy benefit after the Games, when the information will remain in the Transport Direct journey planner and be maintained by DfT. To enhance this journey planner, the Commission believes the information provided should also include the carbon impact of journey options.

Other legacy benefits from the Accessible Transport plans include improvements to the DLR and London Underground and across the whole UK rail network. The ODA is hoping to use the Games to drive improvements in travel signage and timetables which will assist people with learning difficulties. In legacy it is also hoped that the Olympic Park will be an attractive place for disabled people to visit – slopes are less than 1 in 20, homes are being built to lifetime homes standards and venues will be accessible.

Some of the major challenges going forward for the ODA relating to accessible transport will involve:

- enabling people to feel confident to use public transport
• dealing with London’s congested platforms (where staff and volunteer training will be key)
• accurate forecasting of demand for accessible transport (neither Beijing or Athens provide figures appropriate for London)
• managing transport to existing venues where temporary overlay and temporary improvements are being considered at relevant local stations
• improved communications

Both the ODA and LOCOG are working with a range of stakeholders and partners on accessible transport including, TfL, London Underground, Network Rail, GOE, Public Carriage Office, Train Operating Companies, Community Transport, Accessible Transport Panel, Disabled Persons’ Transport Advisory Committee. We understand that a Games-time mobility service is in development but have not yet seen detailed plans.

4.6.2 Affordability of Transport Options
London 2012 tickets will include free public transport within London on the day of the ticketed event. However, for visitors coming from further afield, the affordability of public transport to the Games is an important issue for both inclusion and climate change. Price will determine the extent to which visitors opt to travel by train or coach rather than car. Differential pricing can also be used to encourage those opting to use Park & Ride services to ensure that their vehicles are fully occupied, spreading the CO₂ load.

4.6.3 Volunteer Drivers
With the provision of some adapted vehicles by BMW (the first time for an Olympic or Paralympic Games), disabled drivers will be able to volunteer during Games-time; the only constraints on volunteer drivers will be those set by proximity, time availability and insurance. The adaptations made will be linked to the recruitment of individual volunteer drivers with up to 50 adapted vehicles being provided. Volunteering opportunities will be advertised on the London 2012 volunteer website and the Commission hopes that London 2012 will reach out to the community and particularly more excluded members and encourage them to volunteer.

In terms of legacy benefits, all volunteer drivers will be up-skilled as they will be trained in sustainable driving techniques and also in disability awareness. UPS, the London 2012 logistics partner, has some good programmes for safe and sustainable driving and LOCOG are hoping to use similar training programmes for other driver groups. After Games-time the volunteer drivers should be encouraged to continue volunteering and signposted to ways in which they can do this, for example as drivers for hospitals.
4.7 **Travel Demand Management**

The ODA’s Games-time Travel Demand Management (TDM) programme aims to change travel behaviour during the Games in order to free-up capacity on the transport systems and help accommodate increased demand generated by the Games. This includes:
- traveller information and guidance to spectators, residents and workforce;
- a programme of travel advice to business; and
- a programme of marketing and communications to support the TDM objectives.

Several posts are currently being recruited to in the ODA Transport team to manage this programme.

4.8 **Healthy Living**

4.8.1 **ODA Health Impact Study**

No previous Games have thoroughly studied the health impacts of transport infrastructure improvements linked to hosting the Games. This would be an interesting and potentially very useful piece of work for the UK, the IOC and future host cities of major sporting events going forwards if funding partners can be brought on board. This would benefit from being connected to the health-related work of NHS London and the Five Host Boroughs.

4.8.2 **London 2012 Active Travel Programme**

The London 2012 Active Travel Programme is a UK-wide programme that will consist of a number of projects that encourage walking and cycling as a means of transport in the lead-up to, at Games-time and in legacy.

The programme aims to use the Games to accelerate the longer term development of active travel across the UK. It is currently being developed in line with the London 2012 Sustainability Plan and Spectator Transport Strategy for the Games and will focus primarily on Games competition and non-competition venues across the UK.

The ODA, which leads this programme, and LOCOG, have been working with a wide range of partners, including CLM (the ODA delivery partner on the Olympic Park), TfL, the Five Host Boroughs and user groups such as the London Cycling Campaign and Sustrans. The ODA and LOCOG have also established an Active Travel Advisory Group (ATAG) which includes the regional and national user groups and engages with local user groups and borough representatives. The Commission understands that several organisations involved with the Active Travel Programme plan to second resources to support co-ordination.

When London 2012 tickets begin to be sold, depending on availability of information from ticketing providers, the ODA will be able to work out where people will be travelling from. It should be possible to provide individualised travel plans for ticketholders to optimise their journeys, including information in respect to accessibility, walking and cycling. Much of
the work being carried out is a first for a Games and in order to ensure a learning legacy for future Games and major sporting events the ODA and others should create a ‘how to guide’ based on their experience.

4.8.3 Active Travel Routes and Infrastructure
The ODA’s investment to upgrade and improve the Greenway routes and routes in central London and around other venues, such as Weymouth, Broxbourne and Hadleigh Farm, will leave a clear benefit for legacy as well as encouraging people to walk and cycle during Games-time. Other benefits include the linkages made with existing programmes. TfL, the ODA and LOCOG may wish to explore extending TfL’s cycle hire scheme into the area around the Olympic Park. Tickets will include free use of public transport in London on the day they are valid. To encourage cycling use, this could be extended to the cycle hire scheme. The two main benefits from the programme for the Olympic Park in transformation and legacy will be enhanced connectivity into and across the park and access to parklands and recreational areas. An issue that requires further consideration is the ease of travel north-south across the Thames in East London both during Games-time and in the future.

4.8.4 Behaviour Change
Whilst infrastructure investment will bring multiple benefits, the real challenge of behaviour change still lies ahead. The Commission hopes that the Olympic Games and Paralympic Games will boost existing behavioural change programs. LOCOG and the ODA also consider that by bringing so many groups together they are creating a basis for collective action which could lead to a radical rise in the number of people walking and cycling. It remains to be seen whether this will have the desired effect.

4.9 Low Emissions Zone
The Olympic Park will be designated as a LEZ and the standards will apply to all vehicles, whether they enter the Olympic Park or not. It will complement the GLA’s existing LEZ in London, setting standards only for those vehicles which are not covered by the GLA LEZ criteria. Euro emissions standards for PM10 will apply and are planned to be Euro V for light vehicles and Euro IV for heavier vehicles. LOCOG aims to go beyond these standards for procurement which they control directly. Motorbikes are proving to be an issue; BMW are providing a small number of motorbikes as part of their sponsorship deal and these are Euro III standard. LOCOG are working with client groups and partners who will be bringing vehicles on to the park to help them start planning to meet the LEZ criteria well in advance of London 2012.

Air quality is further discussed below but it is likely that the London 2012 LEZ is too limited and of too short a duration to have any notable impact on London’s air quality. It does however send a very clear message about the importance of air quality to London 2012.
4.9.1 Air Quality

We recognise that air quality is a contentious issue across London and concern about the impact of London 2012’s transport plans cannot be ignored, given that air quality levels regularly breach EU standards in certain areas of London.

The Strategic Environmental Assessment of the Transport Plan for the London 2012 Olympic and Paralympic Games is being updated. This will include the Olympic Route Network (ORN) and will identify additional measures to be taken as a result of the Games-time transport activities.

LOCOG and the ODA consider that London’s air quality is an issue that extends beyond their remit and is for the GLA and wider government to address. The Mayor and TfL are actively looking into air quality issues and the Commission would like to be assured that there will be no negative impacts as a result of London 2012’s activities. In addition, the Commission looks forward to seeing a clearer analysis of how the transport plans and, in particular, the ORN will affect air quality. While the ORN will not result in road closures, the impact of cars potentially idling in queues due to the ORN and London 2012 traffic will need to be considered. Travel demand management during Games-time will be critical to minimise any air quality (and congestion) impacts.
# Appendix

## A Attendees at the 8 December 2009 briefing

| Presenting | LOCOG | Phil Cumming  
|           |       | Wilben Short  
|           |       | Adele Stach-Kevitz  
| ODA       | Mark Dyer  
|           | Neil Earnshaw  
|           | Simon Jay  
|           | Mike Sinclair-Williams  
|           | Mostyn Woodhouse  
| Pavegen   | Laurence Kemball-Cook  
|           | Mark Wane  
| Observers | Commission Chair | Shaun McCarthy  
| Commissioners | Andrew Myer  
|           | Robin Stott  
|           | Ben Wilson  
| Co-opted Expert | Val Chinn  
|           | Jill Savery  
| Commission Secretariat | Jane Durney  
|           | Deborah Morrison  
|           | Jonathan Turner  
| Transport for London | Jeanette Baartman  
|           | Helen Woolston  
| GOE      | Paul Woolford  

B Core Transport-related documents

London 2012 Transport information can be found at http://www.london2012.com/making-it-happen/transport/index.php

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
</table>

Regular updates “Pace” and “On track” are published and available at the London 2012 website.