ITS New Zealand Summit

London 2012 Olympics Travel Demand Management, ITS .... And what happened next...

People Management at Major Events using ITS

Jon Harrod Booth
Harrod Booth Consulting Ltd.
jon@harrodbooth.com

Chair, BSI EPL/278 – Intelligent Transport Systems
Despite £6.5bn of transport upgrades, transport will be a challenge during the Games

Unprecedented demand:

- 20 million additional trips will be made during the Games
- 3 million additional trips will be made on the busiest day of the Games
- 3.5 million trips currently made on London Underground

At certain times, at certain locations on the transport network, demand is expected to exceed capacity, creating demand hotspots

“From the moment in 2005 when London won its bid to host the Olympics, transport has been recognised, alongside security, as the biggest risk to a successful Games”
Financial Times, 24 July 2012
Scope of the Travel Demand Management Programme

Capacity Creation
- Infrastructure schemes
- Service enhancements
- Park and ride
- Hard shoulder running
- Operational management of network
- Events location
- HOV lanes
- Transport
- Ticketing
- Marketing and awareness campaign
- Alternate number plates
- Organisation shut downs
- Public holidays
- Spectator guides
- Active spectator programme
- Advice to businesses
- Location of live sites
- Personal journey plan
- Information guides
- Stewards
- Real time info
- Signage
- Journey planning tools
- Games family vehicle management
- Non-games freight management
- Games freight management
- Traffic management plans
- Traffic management and operation of ORN/PRN
- Scheduling games events
- Road user charging
- CPZs
- Travel and Traffic Management
- Influencing Travel Behaviour
Influencing Travel Behaviour

Step 1: Discard the unfeasible

Capacity Creation

- Infrastructure schemes
- Service enhancements

Park and ride

Operational management of network

Marketing and awareness campaign

Traffic Management and operation of ORN/PRN

- Games freight management
  - Non-games freight management
  - Games family vehicle management
- Traffic management plans

Games freight management

- Signage
- Journey planning tools
- Stewards
- CPZs
- Information guides

Real time info

- Location of live sites
- Personal journey plan
- Advice to businesses

Spectator guides

Active spectator programme

Journey planning tools

Location of live sites

Personal journey plan

Advice to businesses

Active spectator programme

Step 1: Discard the unfeasible
Scope of the Travel Demand Management Programme

Step 2: Coordinate with measures managed elsewhere

Capacity Creation
- Infrastructure schemes
- Service enhancements
- Park and ride

Traffic Management and operation of ORN/PRN
- Games freight management
- Non-games freight management
- Games family vehicle management
- Traffic management plans

Influencing Travel Behaviour
- Marketing and awareness campaign
- Signage
- Journey planning tools
- Stewards
- CPZs
- Information guides
- Real time info
- Location of live sites
- Personal journey plan
- Advice to businesses
- Active spectator programme
- Spectator guides

Step 2: Coordinate with measures managed elsewhere
Step 3: Implement remaining measures

Scope of the Travel Demand Management Programme

Capacity Creation

Travel and Traffic Management

Marketing and awareness campaign

Real time info

Journey planning tools

Personal journey plan

Information guides

Advice to businesses

Influencing Travel Behaviour
Objective

“to influence enough people, enough ...”

in order to free up capacity on the transport system to accommodate the increased demand generated by the Games.

Influencing:

• Regular Travellers
• Businesses
• Spectators (both ticketed and unticketed)
TDM Approach

The 4Rs:

- Reduce
- Re-time
- Re-route
- Re-mode
Comms Approach
- Get folks to listen
- Be honest (based on evidence and modelling)
- Be consistent
- Be positive
- Be helpful

No “don’t travel” messages

‘Know’
Aware of need to change

‘Plan’
Plan change, explore and trial alternatives

‘Do/Sustain’
Make change and sustain through Games

‘Legacy’
• Many stunning humourous images (200 hours each)
• Get Ahead of the Games strapline
• 4.3M unique visitors, 15M page views, 1,300 pages
  GetAheadoftheGames.com
• @GAOTG twitter 60,000 followers
• Messaging to 4.5M registered TfL customer
• 107M emails sent
• 5M maps distributed

• 150 business groups representing over 200,000 business received information
• 22,000 business received direct presentations
• 535 businesses (600k employees) requested direct support for travel plans

• 125,000 leaflets distributed to freight drivers directly (+23.5k by indirect means)
• 7,300 leaflets in 5 languages distributed via ferry ports
• 200 workshops, 3000 freight business representatives

• By 1-Sept-12, 2.5M unique visitors to Spectator Journey Planners
• 215,000 signs installed around the transport network
A few of the techie bits... ITS

- Phased strategy of messaging
- Daily playbook of messages
- Strong monitoring, review and adaptation

Games Travel Pages

Journey Planners

Web pages

Apps

Variable Message Signs

Data syndication

On station / at stop information

Social media

Planned & real-time information provision via travel partners

Media channels

Variable Message Signs
- On station / at stop information

Newspapers

Variable Message Signs
- On station / at stop information

Journey Planners

Data syndication

Very strong policy of data syndication (see data.london.gov.uk)

Completely new for Olympic Games
– reuse by over 300 travel partners, SAT NAV suppliers, national and regional journey planning systems, travel information service providers

<table>
<thead>
<tr>
<th>ORN/PRN – geometry of network</th>
<th>LATMP - geometry of perimeter of zone</th>
<th>ODAT_ORN_DIVROUTES_1105</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLZ Geometry - geometry of perimeter of zone</td>
<td>Games road event geometry</td>
<td>TAB 60 Second Junction Delays</td>
</tr>
<tr>
<td>Road Restrictions data ORN/PRN</td>
<td>Road Restrictions data LATMP</td>
<td>Olympic Cycle Event Route – Road Race</td>
</tr>
<tr>
<td>Road Restrictions data CLZ</td>
<td>Road Restrictions data Games Road Event</td>
<td>Olympic Cycle Event Route – Time Trial</td>
</tr>
<tr>
<td>Competition Venue Footprints</td>
<td>Olympic spectator cycle routes</td>
<td>Olympic Event Route – Marathon</td>
</tr>
<tr>
<td>LOCOG VTO - Blue badge parking locations</td>
<td>LOCOG VTO - Cycle Parking</td>
<td>Olympic Event Route – Triathlon</td>
</tr>
<tr>
<td>LOCOG VTO - Routes for blue badge holders</td>
<td>LOCOG VTO - Temporary Cycle Routes</td>
<td>Games Time Tourist Points of Interest</td>
</tr>
<tr>
<td>LOCOG VTO - Private Coach Drop Off Points</td>
<td>LOCOG VTO - Kiss and Ride Sites</td>
<td>Games Network of Accessible Transport (GNAT) and Venue Rail Stations</td>
</tr>
<tr>
<td>LOCOG VTO - Private coach parking</td>
<td>LOCOG VTO - Park &amp; Ride Bus Routes</td>
<td>Paralympic Event Route – Cycling (Provisional)</td>
</tr>
<tr>
<td>LOCOG VTO - private coach routes</td>
<td>LOCOG VTO - Park &amp; Ride Site</td>
<td>Olympic Event Route – Walking</td>
</tr>
<tr>
<td>LOCOG VTO - Marshalled Pedestrian Crossing Points</td>
<td>LOCOG VTO - Shuttle Bus Route</td>
<td>LOCOG Torch Relay Stops</td>
</tr>
<tr>
<td>LOCOG VTO - Shuttle Bus Stop</td>
<td>LOCOG VTO - Taxi ranks</td>
<td>Torch Relay Route</td>
</tr>
<tr>
<td>LOCOG VTO - Spectator Sites (road event viewing areas etc.)</td>
<td>LOCOG VTO - Transport Hubs</td>
<td>LOCOG VTO - Venue access points (spectator and other)</td>
</tr>
<tr>
<td>LOCOG VTO - Spectator walking routes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TDM Programme – It Worked

• On London Underground 62 millions journeys made during the Games – 35% up on normal summer traffic
• Tue. 7-Aug 4.7M journeys made on LU – greatest number in 149 years of operation
• Dockland Light Railway and Overground Rail also up (100% & 26%)

• An average of 35% of Londoners changed their most important regular journeys
  • Evidence of road rerouting and retiming (13%) away from morning peak
  • Cyclists up 22-23%
TDM Programme – Lessons learned

Aligned
Honest, informative and helpful is key
Unbiased multi-modal advice on alternative travel options
Consistent messages across many channels, both planned and real-time
With cross-organisation consensus using existing infrastructure and processes
Single authoritative version of the truth

“London, you didn’t half do a decent job. These Olympics had Sydney’s vibrancy, Athens’s panache, Beijing’s efficiency and added British know-how and drollery. With apologies to Sydney, they might just represent a new PB for the Olympics… Moving masses of people around a mazy city was expected to be a nightmare but London made it look effortless”

Sydney Morning Herald, 13 August 2012

@GAOTG I love you but sometimes… you do sound like my mum :) Thanks for all the helpful tweets though ♥
And since London 2012...
As a World City London wants to host major events and regularly does.

Recognising London is an attractive venue to host major events – challenge is prioritizing events traffic/movements – 24M commuter journeys daily; hosting successful events; good news stories.

Goal:
To increase customer satisfaction, minimise disruption and keep London moving during events and engineering works.

Objective:
To ensure customers have consistent travel advice and alternatives to make informed travel choices around events and engineering works that impact their travel.

Strategy:
To develop a coordinated and standardised TDM response to events and engineering works.

...continuous stream of events disruption plus redevelopment of key London commuter interchange station, rolling programme of road improvement schemes.

Keep London moving, working and growing
Making life in London better
The TDM approach was event specific ‘one-off’ before the Games

… it has been ‘productionised’, all major events and major works are subject to assessment and categorised

- The categories define the nature, scale, broad timescales and expected levels of resources required to address specific events/works
- Strengthening processes
- Strengthening of modelling analysis undertaken (O/D, routes, journey times, passenger flows, capacity)
- Strengthening of standard channels of communication both TfL and syndication with travel partners
- Maintain partnerships & communities of interest
- Consistency of messages within events and across events
<table>
<thead>
<tr>
<th>Events</th>
<th>Surface</th>
<th>Rail &amp; LU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumiere</td>
<td>CS East-West</td>
<td>ELL Closure</td>
</tr>
<tr>
<td>Chinese New Year</td>
<td>Shanghai</td>
<td>ELL Closure</td>
</tr>
<tr>
<td>London Marathon</td>
<td>CS North-South</td>
<td>Easter Closures</td>
</tr>
<tr>
<td>North London Half Marathon</td>
<td>CS 1</td>
<td>DLR</td>
</tr>
<tr>
<td>Pride</td>
<td>Oval Triangle</td>
<td>Thameslink</td>
</tr>
<tr>
<td>Queen's 90th</td>
<td>Archway</td>
<td>Cannon St</td>
</tr>
<tr>
<td>State Opening of Parliament</td>
<td>Elephant and Castle</td>
<td>Camden Points</td>
</tr>
<tr>
<td>Tour of Britain</td>
<td>Stockwell</td>
<td>Euston-Watford Jnct</td>
</tr>
<tr>
<td>Notting Hill Carnival</td>
<td>Bow</td>
<td>ELL Closure</td>
</tr>
<tr>
<td>New Year’s Eve/Day</td>
<td>Tower Bridge</td>
<td>Festive Travel</td>
</tr>
</tbody>
</table>
TfL Digital Products & Tools

Interactive mapping module

Real-time train loading

Journey Planner messaging

Online calendar
TDM continues to work for London