Annex A – Table of figures

Figure 1: Enhancements to London’s transport infrastructure
Source: TfL

Figure 2: Mode share
Source: From 2006 daily trips estimate in TfL Travel in London, report number 1; 2031 based on trip growth from London Transport Studies (LTS) transport model, with estimate to reflect growth in cycle trips. The LTS is a four-stage model used in London for trip generation, trip distribution, mode split and assignment.

Figure 3: Proposed outcomes
Source: TfL

Figure 4: Travel demand and levels of transport networks serving London
Source: Journey purpose and mode share data from TfL

Figure 5: London’s transport geography at the international, national and inter-regional level
Source: TfL

Figure 6: London’s economic inter-relationship with the Greater South East
Source: TfL

Figure 7: Places which are dominant in the London economy
Source: TfL derived from the London Plan

Figure 8: London-wide transport geography
Source: TfL

Figure 9: London-wide transport connectivity
Source: TfL

Figure 10: Town centres in the CAZ, Inner and Outer London
Source: TfL derived from the London Plan

Figure 11: Spatial pattern of travel across London, with mode shares
Source: TfL, Travel in London, report number 1. Percentages are daily 2005 to 2008 average proportion of all trips made from, or within, London. Figures include trips by London and non-London residents and excludes freight. For more information, go to tfl.gov.uk

Figure 12: Daily average number of trips (millions) in London, 2007
Source: TfL Travel in London, report number 1. Daily average number of trips in London (including trips to/from London). For more information, go to tfl.gov.uk

Figure 13: Population and employment distribution and forecast growth
Source: TfL derived from the London Plan. Figures supplied by the GLA and represent the best view at the time of writing. The CAZ encompasses parts of 10 London boroughs (Kensington & Chelsea, Wandsworth, the City of Westminster, Lambeth, Camden, Islington, City of London, Southwark, Hackney, Tower Hamlets). The boundary of the CAZ is not contiguous with either boroughs or wards – the only areas for which there are employment statistics for
the years between Censuses (every 10 years). An estimate of 2007 and 2031 employment was based on a ‘backcast’ of CAZ employment using the growth rate of aggregate employment in three boroughs partially or wholly included in the CAZ (Camden, City of Westminster, City of London). Employment in the zone was then projected to 2031, using trend-based forecast growth rates for aggregate employment in the same three boroughs

**Inner London** comprises the following boroughs, and rest of Inner excludes the area defined as CAZ: Camden, Kensington & Chelsea, City of Westminster, City of London, Greenwich, Hackney, Hammersmith & Fulham, Islington, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets, Wandsworth

**Outer London** comprises: Barking & Dagenham, Barnet, Bexley, Brent, Bromley, Croydon, Ealing, Enfield, Haringey, Harrow, Havering, Hillingdon, Hounslow, Kingston upon Thames, Merton, Redbridge, Richmond upon Thames, Sutton, Waltham Forest

**Figure 14:** Spatial distribution of population growth, 2007 to 2031
Source: Based on population projections for 2031 supplied by the GLA. These were used to estimate 2006 to 2031 growth factors which were applied to 2006 population and employment figures allocated to the London Transport Studies (LTS) transport model zones. (The LTS is a four-stage model used in London for trip generation, trip distribution, mode split and assignment)

**Figure 15:** Spatial distribution of employment growth, 2007 to 2031
Source: Based on employment projections for 2031 supplied by the GLA. These were used to estimate 2006 to 2031 growth factors which were applied to 2006 population and employment figures allocated to the London Transport Studies (LTS) transport model zones. (The LTS is a four-stage model used in London for trip generation, trip distribution, mode split and assignment)

**Figure 16:** Growth areas in the Greater South East
Source: TfL, derived from the London Plan, South East England Development Agency (SEEDA) and East of England Regional Assembly (EERA)

**Figure 17:** London trends and forecast in population, employment and trip making, index from 1993
Source: TfL. Trend from midweek daily trips reported in TfL Travel in London report. Projected daily trips based on London Transport Studies (LTS) transport model. GLA population and employment projections and TfL Freight Unit data are also used. (The LTS is a four-stage model used in London for trip generation, trip distribution, mode split and assignment)

**Figure 18:** Public transport accessibility levels (PTALs), 2006
Source: TfL PTAL model – data combining walk and service wait time calculated for a grid of points at 100-metre intervals
Figure 19: Tube and DLR crowding, 2006
Source: TfL. Morning peak period crowding from TfL Railplan public transport assignment model, using travel demand matrices from the London Transport Studies (LTS) transport model. Diagram shows categories representing the number of passengers standing per square metre.

Figure 20: Tube and DLR crowding, 2031 (with committed funding/reference case)
Source: TfL. Morning peak period crowding from TfL Railplan public transport assignment model, using travel demand matrices from the London Transport Studies (LTS) transport model. Diagram shows categories representing the number of passengers standing per square metre.

Figure 21: Rail crowding, 2006
Source: TfL. Morning peak period crowding from TfL Railplan public transport assignment model, using travel demand matrices from the London Transport Studies (LTS) transport model. Diagram shows categories representing the number of passengers standing per square metre (on train).

Figure 22: Rail crowding, 2031 (with committed funding/reference case)
Source: TfL. Morning peak period crowding from TfL Railplan public transport assignment model, using travel demand matrices from the London Transport Studies (LTS) transport model. Diagram shows categories representing the number of passengers standing per square metre (on train).

Figure 23: Local trips to metropolitan town centres
Source: TfL – London Transport Studies trips by zone to each Outer London metropolitan centre – displayed as a series of dots proportional to the number of trips within each zone.

Figure 24: Enhanced links to, and between, metropolitan town centres
Source: TfL.

Figure 25: Highway congestion, average vehicle delay, 2006
Source: TfL. Output from the London Transport Studies (LTS) transport model, showing average vehicle delay in minutes per vehicle kilometre in each LTS model zone (in the morning peak). This is based on comparison with free flow travel times.

Figure 26: Highway congestion, average vehicle delay, 2031 (with committed funding/reference case)
Source: TfL. Output from the London Transport Studies (LTS) transport model, showing average vehicle delay in minutes per vehicle kilometre in each LTS model zone (in the morning peak). This is based on comparison with free flow travel times.

Figure 27: Public transport journey relative time differential to/from Bank by physically accessible route in comparison to quickest route
Source: TfL – comparison of generalised travel times for a 2006 constrained and unconstrained network – reflecting travel times for disabled people requiring step-free access.
Figure 28: Transport’s contribution to London’s CO₂ emissions  
Source: TfL Environment Report. An estimate from the London Greenhouse Gas Emissions Inventory. For more information, go to tfl.gov.uk

Figure 29: Layout of the expanded Tottenham Court Road station  
Source: TfL, go to www.crossrail.co.uk

Figure 30: Crossrail route connections and regional maps  
Source: TfL, go to www.crossrail.co.uk

Figure 31: Committed enhancements to London’s rail network  
Source: TfL, derived from DfT Rail White Paper, July 2007

Figure 32: National Rail and Tube ‘stress’ on radial corridors into central London  
Source: TfL. The crowding value for each corridor has been calculated by estimating the flow on each link due to trips between the corridor in question and central London (during the three hour morning peak from 07:00–10:00) and using this data to estimate a weighted average of the crowding measure (passengers per sq metre). The grading is:  
Highly stressed (red) – crowding more than 2.25 passengers per sq metre  
Stressed (amber) – crowding 1.70–2.24 passengers per sq metre  
Moderately stressed (green) – crowding under 1.69 passengers per sq metre  
Note that the definition of the corridor and CAZ relates only to the origin and destination of the trips, thus the links that are used in the calculation are not bound by the geographic definition of the areas

Figure 33: Further rail capacity needed in London  
Source: TfL

Figure 34: The potential benefits from implementing measures beyond those in the TfL Business Plan and HLOS to reduce crowding on London’s rail and Tube network  
Source: TfL, analysis, including modelling using London Transport Studies (LTS) and Railplan. Crowding at morning peak

Figure 35: National Rail punctuality (London and southeast operators total, including peak services)  
Source: TfL, derived from the Office of Rail Regulation punctuality of all train services

Figure 36: London Overground route map (2012)  
Source: TfL

Figure 37: London bus use since 1971  
Source: TfL, Travel in London report, number 1, using service performance data of total passenger journey stages per year (a passenger journey stage is a component part of a trip using a single mode of transport between interchanges. Walking is counted as a separate mode)
Figure 38: Improving bus journey experience  
Source: TfL, Travel in London report, number 1, customer satisfaction survey

Figure 39: Selected orbital and other bus services in Outer London  
Source: TfL. For more information, go to tfl.gov.uk

Figure 40: Transport for London Road Network  
Source: TfL

Figure 41: Causes of unusual congestion by proportion of duration  
Source: London Traffic Control Centre 2008/09

Figure 42: Mitigation of increased road congestion (average vehicle delay)  
Source: TfL. Congestion in 2006, 2031 with the reference case, and 2031 with the strategy based on TfL LTS modelling. 2031 with no interventions based on LTS modelling of effect of funded public transport investment, and including one per cent estimated effect of funded measures to support increases in cycling, travel choices and changes in travel behaviour. Impact of strategy measures for road network management and cycling, including smarter choices and changes in travel behaviour, estimated at one per cent reduction each

Figure 43: The London Blue Ribbon Network  
Source: TfL

Figure 44: Options for new river crossings in east London  
Source: GLA, the London Plan

Figure 45: Strategic interchange concepts  
Source: TfL

Figure 46: Examples of key strategic interchange locations outside central London  
Source: TfL

Figure 47: Olympic Park legacy international, national, regional and local connections  
Source: TfL, based on planning submissions by the ODA (non-exhaustive)

Figure 48: Trends in road casualties, 1991 to 2008  
Source: TfL, derived from Stats 19 casualty data collected by the Metropolitan and City Police

Figure 49: Road casualties by casualty category  
Source: TfL, derived from Stats 19 casualty data collected by the Metropolitan and City Police

Figure 50: Casualties by mode, 2008  
Source: TfL, derived from Stats 19 casualty data collected by the Metropolitan and City Police

Figure 51: An example of road safety campaign material  
Source: TfL

Figure 52: Speed limits on London’s roads  
Source: TfL
Figure 53: Crime rates on Tube/DLR and buses since 2004/05
Source: TfL. All reported crimes per million passenger journeys

Figure 54: Six principles for ‘better streets’
Source: TfL

Figure 55: Five stages to improve streets
Source: TfL

Figure 56: Illustrative town centre improvements
Source: TfL

Figure 57: NO₂ annual mean concentrations (µg/m³), 2008
Source: TfL, derived from GLA, London Atmospheric Emissions Inventory. Concentration of NO₂ by mean concentration of micrograms per cubic metre. Analysis undertaken for TfL by ERG Kings College

Figure 58: PM₁₀ annual mean concentrations (µg/m³), 2008
Source: TfL

Figure 59: London NOₓ emissions 2009 to 2015
Source: TfL

Figure 60: Central London PM₁₀ emissions in 2008, 2011 and 2015
Source: TfL

Figure 61: Mid-range estimates of CO₂ reduction impacts of transport policy areas by 2025
Source: TfL, derived from the GLA, London Atmospheric Emissions Inventory. Concentration of NO₂ by mean concentration of micrograms per cubic metre. Analysis undertaken for TfL by ERG Kings College

Figure 62: Projected transport sector CO₂ emissions to 2025
Source: TfL, modelling of vehicle kilometres and emissions assumptions

Figure 63: CO₂ emissions by mode: 2008/09 emissions and 2025 projections
Source: TfL, modelling of vehicle kilometres and emissions assumptions

Figure 64: Annual road transport CO₂ emissions reductions by 2025, compared to 2007, due to improved vehicle efficiency
Source: TfL, modelling of vehicle kilometres and emissions assumptions

Figure 65: Areas at risk of tidal and fluvial flooding in London
Source: Environment Agency

Figure 66: Extent of the Western Extension to the Congestion Charging zone
Source: TfL

Figure 67: How the strategy would support population and employment growth
Source: TfL
Figure 68: How the strategy would enhance transport connectivity  
Source: TfL

Figure 69: How the strategy will deliver an efficient and effective transport system for people and goods  
Source: TfL

Figure 70: Anticipated change in crowding levels on the National Rail network by 2031 with the strategy  
Source: TfL, morning peak period crowding from TfL Railplan public transport assignment model using travel demand matrices from the London Transport Studies (LTS) transport model. Diagram shows categories representing number of passengers standing per square metre

Figure 71: Anticipated change in crowding levels on the Tube and DLR network by 2031 with the strategy  
Source: TfL, morning peak period crowding from TfL Railplan public transport assignment model, using travel demand matrices from the London Transport Studies (LTS) transport model. Diagram shows categories representing number of passengers standing per square metre

Figure 72: How the strategy will improve journey experience  
Source: TfL

Figure 73: How the strategy will enhance the built and natural environment  
Source: TfL

Figure 74: How the strategy will improve noise impacts  
Source: TfL

Figure 75: How the strategy will improve health impacts  
Source: TfL

Figure 76: How the strategy will improve air quality  
Source: TfL

Figure 77: How the strategy will reduce crime, fear of crime and antisocial behaviour  
Source: TfL

Figure 78: How the strategy will improve road safety  
Source: TfL

Figure 79: How the strategy will improve public transport safety  
Source: TfL

Figure 80: How the strategy will improve accessibility  
Source: TfL
Figure 81: Anticipated difference in access to jobs between 2006 and 2031
Source: TfL – calculations combining journey times estimated from Railplan model coding (RP54 – coding as of September 2009) and population and employment forecasts produced by the GLA

Figure 82: How the strategy will support regeneration and tackle deprivation
Source: TfL

Figure 83: How the strategy will reduce ground-based transport CO₂ emissions
Source: TfL Planning

Figure 84: How the strategy will support adaptation to climate change
Source: TfL

Figure 85: How the strategy will support the Olympic legacy
Source: TfL

Figure 86: Transport Strategy Implementation Plan (indicative list)
Source: TfL

Figure 87: Accessibility Implementation Plan (indicative list)
Source: TfL

Figure 88: Delivery process
Source: TfL

Figure 89: Framework of indicators
Source: TfL

Figure 90: Indicators proposed to monitor the outcomes of the MTS
Source: TfL
### Annex B – Cross-reference of policies, proposals and London Plan policies

<table>
<thead>
<tr>
<th>Policy No.</th>
<th>Policy</th>
<th>Reference</th>
<th>Page No.</th>
<th>Reference to policies in the draft replacement London Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Mayor, through TfL, and working with the DfT, Defra and other government agencies, regional development agencies, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to develop London’s transport system in order to accommodate sustainable population and employment growth.</td>
<td>This policy is taken forward by proposals throughout chapter five.</td>
<td>67</td>
<td>1.1</td>
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<td>2</td>
<td>The Mayor, through TfL, and working with the DfT, government agencies, Network Rail, train operating companies, London boroughs, coach operators and other transport stakeholders, will support sustainable capacity enhancements to inter-regional, national and international rail and coach services, high-speed rail hubs and the strategic road network serving London.</td>
<td>This policy is taken forward by proposals: 1, 2, 3, 4, 5, 6, 7, 8, 11, 28, 48, 49 and 50.</td>
<td>68</td>
<td>6.4, 6.6</td>
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<td>3</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to improve public transport accessibility and conditions for cycling and walking in areas of lower PTAL, where there is an identified need for improving accessibility; and to improve access to economic and social opportunities and services for all Londoners.</td>
<td>This policy is taken forward by proposals: 9, 15, 16, 22, 23, 36, 45, 46, 51, 52, 54, 57, 58, 59, 60, 83, 84 and 85.</td>
<td>70</td>
<td>6.2, 6.4, 6.7, 6.9, 6.10</td>
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<td>4</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to improve people’s access to jobs, business’ access to employment markets, business to business access, and freight access by seeking to ensure appropriate transport capacity and connectivity is provided on radial corridors into central London. In particular, the Mayor will seek to maximise public transport connectivity and capacity benefits on the two main east-west and north–south corridors (incorporating the Crossrail and Thameslink projects respectively). The Mayor will also explore opportunities to make greater use of the Thames for east-west passenger and freight transport across the city.</td>
<td>This policy is taken forward by proposals: 5, 6, 7, 8, 9, 11, 15, 17, 19, 22, 23, 36, 37, 38, 54 and 128.</td>
<td>71</td>
<td>2.17, 6.1, 6.2, 6.4, 6.7, 7.24, 7.25, 7.26</td>
</tr>
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<td>Policy No.</td>
<td>Policy</td>
<td>Reference</td>
<td>Page No.</td>
<td>Reference to policies in the draft replacement London Plan</td>
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<td>5</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to ensure efficient and effective access for people and goods within central London through providing improved central London connectivity and appropriate capacity. This will include improving access to major public transport interchanges for pedestrians, cyclists and by public transport.</td>
<td>This policy is taken forward by proposals: 5, 7, 9, 11, 15, 17, 19, 22, 23, 26, 30, 31, 32, 33, 36, 37, 45, 54, 56, 60, 124, 126 and 129.</td>
<td>77</td>
<td>6.1, 6.2, 6.4, 6.7</td>
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<td>6</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other transport stakeholders, will seek to provide appropriate connectivity and capacity on radial transport corridors into current and potential metropolitan town centres and to Strategic Outer London Development Centres.</td>
<td>This policy is taken forward by proposals: 16, 23, 30, 31, 34, 45, 52, 54 and 127.</td>
<td>78</td>
<td>2.15, 2.16, 6.2, 6.4, 6.7</td>
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<td>7</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other transport stakeholders, will seek to increase public awareness of existing and planned orbital public transport connectivity in Inner London; and seek to improve orbital connectivity in Outer London, particularly between adjacent metropolitan town centres, where shown to be value for money.</td>
<td>This policy is taken forward by proposals: 14, 15, 16, 23, 34, 39, 45 and 46.</td>
<td>80</td>
<td>2.6, 2.7, 2.8, 6.2</td>
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<td>8</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other transport stakeholders, will support a range of transport improvements within metropolitan town centres for people and freight that help improve connectivity and promote the vitality and viability of town centres, and that provide enhanced travel facilities for pedestrians and cyclists.</td>
<td>This policy is taken forward by proposals: 24, 26, 27, 30, 40, 45, 54, 57, 60, 61, 79, 80, 84, 85, 115, 119, 124 and 126.</td>
<td>82</td>
<td>2.15, 6.7, 6.9, 6.10</td>
</tr>
<tr>
<td>Policy No.</td>
<td>Policy</td>
<td>Reference</td>
<td>Page No.</td>
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| 9         | The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other transport stakeholders, will use the local and strategic development control processes to seek to ensure that:  
a) All high trip generating developments are located in areas of high public transport accessibility, connectivity and capacity (either currently or where new transport schemes are committed)  
b) The design and layout of development sites maximise access on foot, cycle and to public transport facilities, for example, via safe walking and cycling routes and provision of secure cycle parking  
c) Access for deliveries and servicing, maximise the opportunities for sustainable freight distribution where possible  
d) Land for transport use is safeguarded in line with London Plan policy and Supplementary Planning Guidance  
e) Planning contributions are sought for transport improvements where appropriate | This policy is taken forward by proposals: 2, 9, 15, 22, 36, 37, 38, 39, 45, 48, 49, 50, 51, 54, 57, 58, 60, 97, 99, 119 and 126. | 83       | 6.1, 6.2, 6.3, 6.5, 6.9, 6.10, 8.2, 8.3 |
<p>| 10        | The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders including the private sector, will seek to improve the efficiency and effectiveness of the operation of the transport system, bring transport assets to a good state of repair, and then maintain them in that condition. | This policy is taken forward by proposals: 10, 11, 12, 13, 17, 18, 19, 21, 23, 24, 30–39, 45, 46, 115, 116, 117, 118, 119, 121, 122, 123, 129 and 130. | 86       | 6.1, 6.2 |
| 11        | The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to reduce the need to travel, encourage the use of more sustainable, less congesting modes of transport (public transport, cycling, walking and the Blue Ribbon Network), set appropriate parking standards, and through investment in infrastructure, service improvements, promotion of smarter travel initiatives and further demand management measures as appropriate, aim to increase public transport, walking and cycling mode share. | This policy is taken forward by proposals: 51, 52, 53, 54, 57, 59, 61, 83, 115, 116, 120, 125 127, 129 and 130. | 87       | 6.1, 6.2, 6.3, 6.7, 6.9, 6.10, 6.13 |</p>
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<tr>
<th>Policy No.</th>
<th>Policy</th>
<th>Reference</th>
<th>Page No.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders including business and the freight industry, will seek to improve the distribution of freight through the provision of better access to/from Strategic Industrial Locations, delivery and servicing plans, and other efficiency measures across London.</td>
<td>This policy is taken forward by proposals: 3, 2, 30, 31, 32, 33, 38, 39, 50, 117, 118, 119, 124, 129 and 130.</td>
<td>88</td>
<td>2.17, 6.11, 6.12, 6.14</td>
</tr>
<tr>
<td>13</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will expand the capacity and quality of public transport services, improve passenger comfort and customer satisfaction, reduce crowding, and improve road user satisfaction.</td>
<td>This policy is taken forward by proposals in sections: 5.2, 5.3, 5.4, 5.5, 5.6, 5.9, 5.10, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.24, 5.25, 5.26 and 5.27.</td>
<td>89</td>
<td>6.3, 6.11</td>
</tr>
<tr>
<td>14</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to improve transport’s contribution to the built and natural environment.</td>
<td>This policy is taken forward by proposals: 83, 84, 85, 90 and 113.</td>
<td>90</td>
<td>7.5, 7.6, 7.19</td>
</tr>
<tr>
<td>15</td>
<td>The Mayor, through TfL, and working with Defra, the DfT, Network Rail, train operating companies, freight operators, London boroughs and other stakeholders, will seek to reduce emissions of air pollutants from transport.</td>
<td>This policy is taken forward by proposals: 25, 91 – 100, 103, 105, 108, 109, 113, 129 and 130.</td>
<td>91</td>
<td>7.14</td>
</tr>
<tr>
<td>16</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, freight operators, London boroughs and other stakeholders, will seek to reduce noise impacts from transport.</td>
<td>This policy is taken forward by proposals: 48, 86, 87, 88, 89 and 113.</td>
<td>93</td>
<td>7.15</td>
</tr>
<tr>
<td>17</td>
<td>The Mayor, through TfL, and working with the DfT and other government agencies, the London boroughs, health authorities and other stakeholders, will promote healthy travel options such as walking and cycling.</td>
<td>This policy is taken forward by proposals: 51, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 68, 115 and 116.</td>
<td>94</td>
<td>3.2, 6.9, 6.10</td>
</tr>
<tr>
<td>18</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to reduce the rate of crime, the fear of crime and antisocial behaviour on London’s transport system.</td>
<td>This policy is taken forward by proposals: 13, 18, 21, 26, 27, 41, 42, 60, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83 and 84.</td>
<td>95</td>
<td>6.2, 7.3, 7.13</td>
</tr>
<tr>
<td>Policy No.</td>
<td>Policy</td>
<td>Reference</td>
<td>Page No.</td>
<td>Reference to policies in the draft replacement London Plan</td>
</tr>
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<td>19</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders including the police and road safety partnerships, will seek to improve road safety for all communities in London and implement measures that contribute to any targets that may be set by the Mayor from time to time.</td>
<td>This policy is taken forward by proposals: 54, 60, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 83, 84, 129 and 130.</td>
<td>95</td>
<td>6.2</td>
</tr>
<tr>
<td>20</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will implement measures that seek to improve operational safety and security on public transport.</td>
<td>This policy is taken forward by proposals: 18, 20, 63, 110, 111 and 112.</td>
<td>95</td>
<td>6.2, 7.3, 7.13</td>
</tr>
<tr>
<td>21</td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to increase accessibility for all Londoners by promoting measures to improve: a) The physical accessibility of the transport system, including streets, bus stops, stations and vehicles b) Information provision, staff service and the travelling environment</td>
<td>This policy is taken forward by proposals: 5, 9, 13, 18, 19, 21, 22, 23, 24, 25, 26, 27, 29, 40, 41, 42, 43, 44, 45, 60, 83, 84 and 115.</td>
<td>98</td>
<td>7.2</td>
</tr>
<tr>
<td>22</td>
<td>The Mayor, through TfL, and working with the LDA, DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek to enhance connectivity, reduce community severance, promote community safety, enhance the urban realm and improve access to jobs and services in deprived areas.</td>
<td>This policy is taken forward by proposals: 5, 6, 7, 8, 9, 12, 14, 15, 19, 22, 23, 34, 39, 50, 60, 74, 76, 77, 80, 83 and 85.</td>
<td>100</td>
<td>2.14</td>
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<td>23</td>
<td>The Mayor, through TfL, and working with the LDA, DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will support regeneration of Opportunity Areas and Areas for Intensification as described in the London Plan.</td>
<td>This policy is taken forward by proposals: 2, 5, 8, 9, 14, 15, 16, 17, 19, 22, 23, 34, 38, 39, 46, 50, 54 and 60.</td>
<td>102</td>
<td>2.13, 6.4</td>
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<td>24</td>
<td>The Mayor, through TfL, and working with the DfT, Defra and other government agencies, Network Rail, train operating companies, freight operators, London boroughs and other stakeholders, will take the necessary steps to deliver the required contribution from ground-based transport to achieve a 60 per cent reduction in London’s CO2 emissions by 2025 from a 1990 base; and to contribute to further targets that may be set by the Mayor from time to time.</td>
<td>This policy is taken forward by proposals: 1, 2, 4, 7, 8, 9, 12, 14, 17, 22, 25, 26, 27, 30, 31, 33, 38, 39, 45, 46, 47, 50–54, 57–62, 87, 91, 92, 93, 95–109, 113, 115–119, 125, 127, 129 and 130.</td>
<td>103</td>
<td>5.1, 6.1</td>
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<td>Policy No.</td>
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<td>25</td>
<td>The Mayor, through TfL, and working with the DfT, Defra and other government agencies, Network Rail, train operating companies, London boroughs and other stakeholders, will take necessary steps to adapt the transport system and improve its resilience and public safety to the anticipated impacts of climate change.</td>
<td>This policy is taken forward by proposals: 110, 111, 112, 113 and 114.</td>
<td>105</td>
<td>5.11, 5.12, 5.13</td>
</tr>
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<td>26</td>
<td>The Mayor, through TfL, and working with the ODA, DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will ensure delivery of the committed transport infrastructure required for the London 2012 Olympic and Paralympic Games, and its successful operation during the Games; and will maximise the benefits of its physical and behavioural legacy to support the principle of convergence.</td>
<td>The behavioural legacy of the Games will be taken forward by proposals 1, 47, 54 and 116.</td>
<td>106</td>
<td>2.4</td>
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<td>27</td>
<td>The Mayor and all parties involved in the delivery of this transport strategy will follow the spirit of the London City Charter and the principles (originally set out in ‘Way to Go!’) which underpin the strategy. These are: to provide value for money, work in partnership, ensure appropriate integration and phasing of programmes, a fair allocation of available resources across modes and delivery agents, London’s regions and boroughs, and a fair funding regime for taxpayers and fare and chargepayers.</td>
<td></td>
<td>309</td>
<td>8.1</td>
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<td>28</td>
<td>The Mayor, through TfL, and in consultation with the London boroughs and other stakeholders, will develop a London sub-regional transport plan for each of the five sub-regions of London.</td>
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<td>311</td>
<td>2.5</td>
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<td>29</td>
<td>The Mayor, consistent with the approach of the London City Charter, will work with TfL and London Councils to seek to ensure the requirements for a LIP demonstrate consistency with the policies and proposals set out in this MTS, and that other legal requirements are kept to a minimum. The boroughs will develop LIPs which set out their transport objectives, a delivery plan and a performance monitoring plan. The goals that are required to be addressed by the London boroughs in their LIPs, are: 1. Supporting economic development and population growth 2. Enhancing the quality of life for all Londoners 3. Improving the safety and security of all Londoners 4. Improving transport opportunities for all Londoners 5. Reducing transport’s contribution to climate change and improving its resilience</td>
<td>313</td>
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<td>30</td>
<td>The Mayor, and TfL, will make the case to Government for long-term investment in the transport network to secure the outcomes set out in this strategy.</td>
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<td>31</td>
<td>The Mayor, and TfL, will maximise any available efficiencies, subsidise services at appropriate levels and ensure that value for money is otherwise achieved from the existing and planned transport network, while reviewing fares levels to provide, if required, a residual means of achieving the goals of this transport strategy. Innovative ways of financing investment and services, including making the most of the value of transport infrastructure, will be explored.</td>
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<td>316</td>
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<td>32</td>
<td>The Mayor, through TfL, will keep the level of subsidy for bus operations under constant review to ensure the correct balance between fares income, bus service levels and quality, social benefits and affordability, in the context of the overall level of funding available for transport.</td>
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<td>33</td>
<td>The Mayor, through TfL, will work to secure the investment necessary to remove the backlog of life-expired assets and to deliver the transformation of the Tube.</td>
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<tr>
<td>34</td>
<td>The Mayor, through TfL, will work with the DfT, Network Rail, the train operating companies and other stakeholders to secure the necessary investment in London’s rail network, including new stations where feasible, through additional capital funding and enhancements to rail services through rail franchises.</td>
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<td>35</td>
<td>The Mayor, and TfL, will work with the London boroughs to secure developer contributions to transport through planning obligations in order to secure the success of each development and to mitigate any negative impacts on the existing transport system in accordance with relevant legislation and policy guidance. As set out in the proposed London Plan policy, where it is appropriate to seek a Crossrail contribution, this should generally be given higher priority than other public transport improvements. TfL will work with the GLA and boroughs to develop a protocol to implement the policy.</td>
<td></td>
<td>319</td>
<td>6.5, 8.2, 8.3</td>
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<td>36</td>
<td>The Mayor, and TfL, will work with the London boroughs and other stakeholders, to seek to secure further investment from a variety of sources that help improve the quality and range of transport services available to Londoners.</td>
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<tr>
<td><strong>1</strong></td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, the operators of international rail services and other transport stakeholders, will encourage the provision of direct international rail services to a wider range of European destinations, with some of those new services serving Stratford International station.</td>
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<td><strong>2</strong></td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, freight operating companies, London boroughs and other transport stakeholders, will support the development of more rail freight terminals in or near London, including connections to HS1 for international freight, in line with the London Plan policy to identify new sites for strategic rail freight interchanges.</td>
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<td><strong>3</strong></td>
<td>The Mayor, through TfL and working with the DfT, Network Rail, train operating companies, freight operating companies, London boroughs and other transport stakeholders, will support the development of National Rail routes that relieve London of freight without an origin or destination in the Capital.</td>
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<td><strong>4</strong></td>
<td>The Mayor and TfL support the development of a national high-speed rail network and will work with the DfT, Network Rail, High Speed Two and other transport stakeholders to ensure that the main London terminal for any new high-speed line is centrally located, well-connected to the existing public transport network, and widely accessible to maximise access to jobs and London’s population. It is currently considered that Euston best meets these criteria. Further evaluation will be made of this and other potential termini, in particular, in relation to links to Heathrow.</td>
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<td><strong>5</strong></td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, freight operating companies, boroughs and other transport stakeholders, will seek to ensure that Crossrail is delivered by 2017, and that it is fully integrated with the rest of London’s public transport system; that the impacts of construction on residents and businesses are minimised as far as possible; and that the future benefits Crossrail brings are monitored to ensure the rail link achieves its objectives.</td>
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<td><strong>6</strong></td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies and other stakeholders, will consider future extensions of Crossrail that reduce congestion and improve connectivity on London commuter routes.</td>
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<td><strong>7</strong></td>
<td>The Mayor, through TfL, will seek to ensure that Network Rail and the train operating companies deliver the committed improvements to the rail network and services in London as set out by the DfT’s High Level Output Specification for the period 2009 to 2014.</td>
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<td><strong>8</strong></td>
<td>The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other transport stakeholders, will seek further rail capacity across London’s rail network, beyond those schemes already committed. The highest priorities in the medium term are to further increase capacity on London Overground; on southwest routes; on West Anglia routes, including access to Stratford; on Great Northern services; and at congested stations. In the longer term, further capacity solutions may be required on a number of rail corridors, such as the Brighton Main Line.</td>
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<td><strong>9</strong></td>
<td>The Mayor will support new rail capacity in the broad southwest to northeast corridor, for example, new lines or services using the Chelsea Hackney line safeguarded alignment. TfL will undertake a review of the route to ensure it is providing the maximum benefits, including helping the onward dispersal of passengers from central London termini and value for money.</td>
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<td><strong>10</strong></td>
<td>The Mayor, through TfL, will seek to ensure that the DfT, Network Rail and the train operating companies achieve the HLOS ‘public performance measure’ for reliability, as well as an overall reduction in significant lateness and cancellations for London and southeast services.</td>
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Annex B – Cross-reference of policies, proposals and London Plan policies

Proposal No. | Proposal
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11 | The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies and London boroughs, will seek to deliver capacity enhancements at some of London’s most congested stations. The highest priorities include:
   a) Central London termini station congestion relief and onward distribution enhancements (the potential of all onward modes will be considered)
   b) Clapham Junction station capacity enhancement (new improved links between platforms, additional entrances and more ticketing facilities)
   c) Improved capacity at National Rail stations with severe congestion, including Finsbury Park, Bromley South, Wimbledon, Vauxhall and Barking
   d) Improved capacity at National Rail stations with moderate congestion, including Willesden Junction, Balham, West Croydon, Putney, Norwood Junction and Surbiton

12 | The Mayor, through TfL, and working with Network Rail, the train operating companies and other transport stakeholders, will encourage the achievement of a seven-day railway by better planning and management of necessary engineering and maintenance work on the railway.

13 | The Mayor, through TfL, and working with Network Rail, the train operating companies and other transport stakeholders, will encourage the provision of rail services in London that meet common service standards, including improved ambience, amenities and wayfinding at all stations, and staff availability at each station. It is intended these improvements will be rolled-out as franchises are renewed. However, they would be better achieved if the Mayor had more control over suburban rail services in the London area.

14 | The Mayor, through TfL, working with the DfT and Network Rail, will deliver the committed investment in the Overground network, investigate the feasibility of providing further capacity to assist orbital movement, and will review potential benefits of extensions to the network of services.

15 | The Mayor, through TfL, will support safeguarding the route of the DLR Dagenham Dock extension as part of the housing proposals for Barking Riverside, and will investigate the feasibility of further capacity and network expansion of the DLR including options south of Lewisham, west of Bank and north of Stratford International.

16 | The Mayor, through TfL, and working with the London boroughs and other transport stakeholders, will investigate the feasibility of providing extra capacity on the Tramlink network and will review potential benefits of extensions to the system.

17 | The Mayor, through TfL, will seek to deliver upgrades to all Tube lines in a phased programme to provide a significant increase in network capacity. This will involve a combination of new rolling stock and/or signalling systems and other asset replacement. As part of this, continued investment to bring the network to a good state of repair and maintain it at that level will be supported.

18 | The Mayor, through TfL, will continue to deliver an ongoing programme of Tube station refurbishments and asset stabilisation to ensure stations are operable and deliver customer service requirements, and continue to improve station accessibility over the life of the strategy.
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<th>Proposal No.</th>
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| 19          | The Mayor, through TfL, and working with the London boroughs, private developers and other transport stakeholders, will develop and implement a prioritised programme to deliver station capacity and accessibility enhancements at London’s most congested Underground stations, including:  
   a) Congestion relief schemes to complement Tube line upgrades and/or integrate with Crossrail at the key central London interchanges of Victoria, Tottenham Court Road, Bond Street, Paddington (Hammersmith & City) and Bank  
   b) Schemes at further strategic Tube interchanges that are critical to London’s transport system (for example, Vauxhall, Finsbury Park, Highbury & Islington, Holborn, Camden Town, Oxford Circus, Edgware Road and Northern line City branch, in particular Old Street and Moorgate)  
   c) Major strategic multi-modal/National Rail interchanges on to the Underground network to disperse onward demand arising from National Rail proposals (HLOS2 and HS2 proposals), for example, London Bridge, Euston, Liverpool Street, Paddington, Elephant & Castle and Waterloo |
| 20          | The Mayor, through TfL, will implement the following measures to cool the Underground:  
   a) New air-conditioned rolling stock across the sub-surface (Metropolitan, Circle, Hammersmith & City and District) lines, introduced progressively from 2010  
   b) Improved ventilation shafts and replacement of out of service fans |
| 21          | The Mayor, through TfL, will continue to develop and implement measures to deliver the highest standards of customer care on the Underground, including the provision of high quality information about engineering works that affect regular Tube services, and improved information on the accessibility of the Tube network highlighting step-free and mostly step-free routes. |
| 22          | The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek longer-term enhancements and extensions to the Underground network, including:  
   a) A privately funded extension of the Northern line to Battersea to support regeneration of the Vauxhall/Nine Elms/Battersea area  
   b) A potential southern extension to the Bakerloo line will be reviewed further. This would utilise spare line capacity, improve connectivity and journey times, while providing relief to congested National Rail approaches to central London from the south/southeast, subject to resources and the results of further study  
   c) A link at Croxley to join the Watford branch of the Metropolitan line to Watford Junction (funding to be secured by Hertfordshire County Council in conjunction with the DfT) |
| 23          | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will keep the development of the bus network under regular review, including reviews of the strategic priorities underlying the process approximately every five years, to ensure it caters for growth in population and employment, while maintaining ease of use, attractive frequencies and adequate capacity, reliable services, good coverage and good interchange with other modes. All proposals for change will be appraised to ensure that they deliver good value for money and that the funds available are being invested in optimum service improvements. |
### Proposal No. | Proposal
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24 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, including developers, will improve bus passengers’ journeys by measures, including:
   a) Incentivising bus operating contracts and expanding staff training in order to consolidate reliability improvements
   b) Introducing measures such as bus priority at critical locations
   c) Ensuring that the appropriate enforcement of bus priority is carried out
   d) Implementing the Countdown 2 project to deliver expanded access to real time information and develop further integration with digital communications to provide real time bus information

25 | The Mayor, through TfL, will upgrade its bus fleet to meet increased emissions standards and will appoint bus manufacturers as part of the New Bus for London project. It is intended that the first prototype will enter service during 2011.

26 | The Mayor, through TfL, and working with the London boroughs and other stakeholders will support improvements to the taxi service through a number of measures, including:
   a) Continued highway priority for taxi services, for example, access to bus lanes
   b) Reduced taxi vehicle emissions and development of low emission taxis
   c) Provision of parking and waiting facilities, including rest facilities
   d) Provision of ranks and facilities at interchanges
   e) Taxi marshalling
   f) Action against touting and illegal cabs
   g) Improved driving behaviour, to be encouraged through the licensing procedure of taxi drivers
   h) Ensuring regulated taxi fares changes allow drivers and owners to continue to recover the costs of providing the taxi service and provide a sufficient incentive for taxi provision to meet demand, in particular at night
   i) Continuous process improvements to provide a modern and cost effective licensing service

27 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will support improvements to private hire services (especially minicabs) through the following:
   a) Initiatives that deliver further the success of the Safer Travel at Night scheme
   b) Provision of facilities to pick up as well as drop off passengers where appropriate
   c) Action against plying for hire, touting, un-roadworthy vehicles and illegal cabs
   d) Continuous process improvements to provide a modern and cost effective licensing service
   e) Lower emissions from PHVs

28 | The Mayor, through TfL, and working with the London boroughs, coach operators and other stakeholders, will seek to maximise the use of the existing facilities to increase capacity for coaches, given the anticipated growth in demand for their use and to develop parking standards for coaches. In the longer term, the Mayor will work with all relevant partners to investigate the feasibility of developing a series of coach hubs or the potential for alternative locations for coach station facilities to provide easier access to the coach network, while retaining good access to central London for coach operators.

29 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will encourage and support the community transport sector’s contribution to the development and provision of transport services in London.
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<td>30</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will introduce measures to smooth traffic flow to manage congestion (delay, reliability and network resilience) for all people and freight movements on the road network, and maximise the efficiency of the network. These measures will include: a) Further investment in intelligent traffic control systems (such as the urban traffic control system, SCOOT) and the infrastructure to support them. b) Allowing motorcycles and scooters to use TLRN bus lanes subject to a trial period and evaluating its impact. c) Upgrading, rationalising or removing traffic management equipment and optimising timings at signal controlled junctions to keep traffic moving. d) Working with the DfT to pilot and develop the concept of pedestrian countdown at traffic signals to optimise the amount of ‘green time’ for both pedestrians and road traffic. e) Planning and implementing a targeted programme of improvements to the existing road network, including junction upgrades to improve traffic flow on the most congested sections of the network, and to improve conditions for all road users.</td>
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<td>31</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will utilise advances in ITS technology to better manage the road network, improve real time traffic management capability, lay the foundations for communication with in-vehicle systems and develop state-of-the-art traffic signal control systems.</td>
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<td>32</td>
<td>The Mayor, through TfL, and working with the London boroughs and utility companies, will seek to minimise the adverse impact of planned interventions on the road network on the movement of people and goods, by: a) Strengthening the Mayor’s Code of Conduct for Roadworks to further improve coordination between different highway authorities and utilities across London. b) Utilising ‘LondonWorks’ to improve roadworks planning, coordination and information availability. c) Encouraging collaboration between utility companies and the use of innovative road engineering techniques such as minimum dig technology and temporary plating over roadworks. d) Implementing the concept of ‘lane rental’ charges for utilities to reflect the value of their temporary possession of road capacity (in terms of cost of delay to the road user) and to incentivise reductions in the duration of roadworks.</td>
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<td>33</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will improve the real time management of unplanned interventions and incidents on the road network, and improve communications to minimise the disruption and raise levels of public satisfaction with road network management.</td>
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<td>34</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will work in collaboration to maintain cost-effectively London’s road network assets in a good state of repair in order to maximise their operational safety and effectiveness, and to promote road user satisfaction. This will include: a) Conducting programmes for the maintenance of roads, pavements, bridges, tunnels and traffic systems so that the TLRN and borough road network is serviceable. b) Ensuring highway structures are inspected regularly. c) Developing a Tunnels Safety Enhancement Programme taking account of, among other matters, fire risks, lighting, communications and surveillance.</td>
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Proposal No. | Proposal
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35 | The Mayor, through TfL, and working with the London boroughs and other stakeholders will give consideration to new road schemes where there is an overall net benefit when judged against the following criteria:
   a) The contribution to London’s sustainable development/regeneration including improved connectivity
   b) The extent to which congestion (average vehicle delay, unreliable journey times and poor levels of network resilience) is reduced
   c) How net benefit to London’s environment can be provided
   d) How conditions for pedestrians, cyclists, public transport users, freight transport and local residents can be improved
   e) How safety for all is improved
   All proposals will demonstrate how any disbenefits will be mitigated.

36 | The Mayor, through TfL, and working with the Port of London Authority, ODA, boat operators, pier owners, riparian boroughs and other interested parties, will continue by means of the River Concordat to work to enable the development of London’s river services to reach their full potential and to better integrate river services into the land-based public transport network.

37 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will encourage the provision of more pier capacity, particularly in central London and will seek financial support for new piers when considering development proposals in the vicinity of the Thames. The Mayor, through TfL, will also work with the Port of London Authority, boroughs and operators to identify and promote suitable boat yard facilities in London.

38 | The Mayor, through TfL, and working with the Port of London Authority, London boroughs and operators, will seek to ensure that existing safeguarded wharves are fully utilised for waterborne freight (including waste), and will examine the potential to increase the use of the Thames and London’s canal network for waterborne freight transport.

39 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will take forward a package of river crossings in east London, including:
   a) A new fixed link at Silvertown to provide congestion relief to the Blackwall Tunnel and provide local links for vehicle traffic
   b) An upgraded Woolwich Ferry and consideration of a new vehicle ferry at Gallions Reach to improve connectivity
   c) Local links to improve connections for pedestrians and cyclists
   d) Consideration of a longer-term fixed link at Gallions Reach to improve connectivity for local traffic, buses, cyclists and to support economic development in this area
   e) The encouragement of modal shift from private cars to public transport, using new rail links including High Speed One domestic services, Crossrail and the DLR extension to Woolwich, reducing road demand, and so road congestion at river crossings, where possible
   f) Support for Government proposals to reduce congestion at the Dartford crossing

40 | The Mayor, through TfL, and working with the DfT, Network Rail, the London boroughs and others will improve the physical accessibility of the transport system by prioritising step-free access at strategic interchanges, improving street accessibility in town centres and around accessible stations and maximising the accessibility benefits of new transport schemes, such as Crossrail. In doing so, the Mayor will seek to maximise the benefits of investment by ensuring that resources are focused on improving accessibility for the maximum number of people, while ensuring an equitable balance across London.
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<td>41</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will improve the availability, quality, quantity and timeliness of information about the transport system to remove barriers to travel.</td>
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<td>42</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will improve attitudes of transport staff and travellers towards each other to ensure excellence in customer service and a courteous, safe and friendly travelling environment that does not present a barrier to travel.</td>
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<td>43</td>
<td>The Mayor, through TfL, will work to ensure a greater staff availability to provide direct assistance to customers and continue to improve customer experience, by enhancing staff training to ensure that the access needs of disabled passengers are understood by all frontline staff.</td>
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<td>44</td>
<td>The Mayor, through TfL, will support door-to-door services for people with mobility problems who require this form of transport service.</td>
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| 45          | The Mayor, through TfL, and working with Network Rail, the train operating companies, London boroughs and other stakeholders, will improve the customer experience and physical accessibility at interchanges across London through the application of the principles set out by the TfL Interchange Best Practice Guidelines of ‘efficiency’, ‘useability’, ‘understanding’ and ‘quality’ to all interchange schemes in London. Such measures include:  
  a) Provision of consistent and enhanced travel information  
  b) Improved walking and cycling facilities at, and on routes to, public transport stations and stops  
  c) Improved integration of public transport services in London, both in terms of service planning and physical location  
  d) Improved efficiency, effectiveness and quality of interchanges across London to further integrate London’s transport system  
  e) Provision of consistent customer service delivery standards  
  f) Assurance that interchange facilities have sufficient capacity to meet travel demand |
| 46          | The Mayor, through TfL, and working with Network Rail, the train operating companies, London boroughs and other stakeholders, will prioritise improvements to strategic interchanges, that will:  
  a) Provide opportunities for orbital public transport services  
  b) Provide interchange opportunities before arriving in central London, in order to reduce interchange capacity pressure at London’s rail termini  
  c) Provide opportunities to accommodate population and employment growth, with developer contributions towards the interchange improvements sought in appropriate circumstances |
| 47          | The Mayor in partnership with the London boroughs, TfL and Olympic Park Legacy Company, will develop a Transport Legacy Action Plan and monitoring programme to ensure the benefits of the legacy of the 2012 Games are maximised and that transport interventions support convergence as set out in the five Olympic Boroughs Strategic Regeneration Framework. The plan will be monitored for 10 years after the Games, and will define:  
  • Partners and their responsibilities  
  • The monitoring area within the five Olympic boroughs  
  • Key indicators and targets within the monitoring area and London-wide  
  • Actions and interventions required to meet the targets  
  • Annual review of targets |
### Annex B – Cross-reference of policies, proposals and London Plan policies

#### Proposal No. | Proposal
--- | ---
48 | The Mayor recognises that the provision of adequate airport capacity serving the South East is critical to the competitive position of London in a global economy, but will oppose any further increases in runway capacity at Heathrow.
49 | The Mayor believes the aviation industry should meet its full environmental and external costs and supports the position of ‘The Future of Air Transport’ White Paper published in 2003. This states that airport operators should be responsible for paying the costs of upgrading or enhancing road, rail or other transport networks or services where these are needed to accommodate additional passengers travelling to, and from, expanded or growing airports.
50 | The Mayor, through TfL, and working with the London boroughs, DfT, airport operators, Network Rail, train operating companies and other stakeholders, will seek to improve access to London’s airports for passengers and staff by public transport, particularly from those parts of London which do not currently have good access by rail or bus; and for goods through better management of the road network, development of consolidation/break-bulk centres and encouragement of access by rail and waterway.
51 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will provide support, including sharing best practice, to enable and empower employers, schools, community groups, other organisations and individuals to deliver the improvements necessary to create a cycling revolution in London.
52 | The Mayor, through TfL, and working with the London boroughs that are keen to pilot the Biking Borough approach, will develop the Biking Borough scheme including measures such as cycle hubs and marketing initiatives to promote cycling.
53 | The Mayor, through TfL, will work with the DfT, London boroughs and stakeholders to raise the profile of cycling, using information and behavioural change measures, including smarter travel initiatives and major events.
54 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will deliver improvements to cycling infrastructure and training to support the cycling revolution, including:
   a) The launch of the central London Cycle Hire scheme in 2010
   b) Twelve Cycle Superhighways will be developed for commuters and others to cycle to central London, improving the capacity of the radial network
   d) Further phases of the Cycle Hire scheme introduced in Inner and Outer London subject to sufficient demand and feasibility
   e) Increased provision of secure bicycle parking facilities, particularly at stations, workplaces, schools, retail and leisure sites
   f) Improving permeability for cycling by further integrating the road network and open spaces
   g) Delivering road enhancements to make cycling easier and safer, including managing car access to residential areas, through physical or design measures, to create pleasant and safer cycling environments
   h) Offering cycle training for people of all ages
55 | The Mayor, through TfL, and working with the police, London boroughs and DfT, will encourage changes to be made to the Highway Code and road traffic regulations, where necessary, to make cycling more convenient and to encourage a culture of mutual respect between all road users.
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<td>56</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will press for specific primary legislation to establish an effective legal framework for pedicabs, including specific licensing powers for the boroughs.</td>
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| 57          | The Mayor will seek to use his planning powers and work with the London boroughs to encourage cycling by supporting development that:  
  a) Provides cycle parking to an appropriate standard  
  b) Integrates the needs of cyclists into the design  
  c) Promotes the co-location of key trip attractors to make cycling a more viable and attractive travel option  
  d) Provides cycle hire docking stations dependent on sufficient demand and feasibility studies |
| 58          | The Mayor, through TfL, and working with Network Rail, the train operating companies and London boroughs, will review cycle parking standards and aim to implement ‘best-practice’ levels of cycle parking provision at any new station or as part of any comprehensive station redevelopment works. Additional cycle parking provision will also be provided at other stations to meet demand, wherever possible. |
| 59          | The Mayor, through TfL, and working with the London boroughs, employers, schools, community groups, other organisations and individuals, will bring about a step change in the walking experience in London to make walking count. |
| 60          | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will improve the walking experience by enhancing the urban realm and taking focused action to ensure safe, comfortable and attractive walking conditions, including:  
  a) Development of the ‘key walking route’ approach, to encourage walking and improve corridors between local destinations where people want to travel, encapsulating squares and open spaces where appropriate (for example, London parks)  
  b) Providing direct, convenient pedestrian access (for example, with surface crossings) where appropriate  
  c) Street audits to identify pedestrian needs and guidance (such as pedestrian comfort levels)  
  d) Delivery of the seven Strategic Walk Network routes, separate from, but alongside the development of, Greenways  
  e) Training for those involved in the design and delivery of schemes that impact walking conditions  
  f) Enhancing pavement space for pedestrians and removing guardrails and other obstacles  
  g) Seeking to manage car access to residential areas, through physical or design measures, to create pleasant and safer walking environments  
  h) Tackling the fear of crime and feeling unsafe on the streets  
  i) Supporting major projects such as high street revitalisation through good quality public realm designed to support regeneration of small businesses and encourage local shopping and activity  
  j) Improving access, safety and security between the station and surrounding areas for pedestrians (and cyclists) to encourage active and smarter travel  
  k) Encouraging the extension of a network of linked green spaces (namely, the All London Green Grid)  
  l) Supporting developments that emphasise the quality and permeability of the pedestrian environment (section 5.18 Better streets) |
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| 61 | The Mayor, through TfL, and working with the London boroughs, developers and other stakeholders, will improve the quality and provision of information and resources for walking, especially at stations, interchanges and in town centres by measures, including:  
  a) Extending Legible London to other areas  
  b) Creating an online one-stop walking resource to facilitate walking, linked to an enhanced Journey Planner with advanced walking options  
  c) Developing consistent wayfinding formats and making use of new wayfinding technologies |
| 62 | The Mayor, through TfL, working with the London boroughs, developers and other stakeholders, will promote walking and its benefits through information campaigns, events to raise the profile of walking, and smarter travel initiatives such as school and workplace travel plans. |
| 63 | The Mayor, through TfL and working with the London boroughs, Network Rail, train operating companies, the police and other stakeholders, will seek to reduce fatality and injury rates on London’s transport system further, and will aim to reduce London bus road user fatality, major and minor injury rates. |
| 64 | The Mayor, through TfL, and working with the London boroughs, police, Highways Agency, road safety partnerships, and other stakeholders, will seek to achieve any new national road safety targets and such further road safety targets as the Mayor may set from time to time. |
| 65 | The Mayor, through TfL, working with the police, Highways Agency, London boroughs, road safety partnerships and other stakeholders, will develop a new Road Safety Plan to reflect any new road safety targets to be set by the Government or the Mayor and review progress every five years. |
| 66 | The Mayor, through TfL, will continue to monitor road safety schemes and publish road safety casualty reports and research. |
| 67 | The Mayor, through TfL, and working with the London boroughs, police, DfT, and other stakeholders, will undertake public information and engagement to improve road user behaviours and reduce the risk of collisions. |
| 68 | The Mayor, through TfL, the police and working with the DfT, London boroughs, road freight operators and other stakeholders, will improve safety for cyclists in the vicinity of HGVs and other vehicles, by:  
  a) Encouraging the Government to amend legislation and remove the current exemption for HGVs being fitted with sideguard protection  
  b) Working to increase the number of HGVs with sideguard or fitted with electronic warning devices that detect cyclists  
  c) Raising awareness among drivers of the safety benefits of advance stop line areas |
<p>| 69 | The Mayor, through TfL and working with the DfT, London boroughs, road freight operators and other stakeholders, will seek enhanced vehicle and driver safety from organisations operating corporate fleets by working with the freight sector and other stakeholders, promoting increased membership of the Freight Operator Recognition Scheme, and encouraging operators to uptake and demonstrate freight best practice. |
| 70 | The Mayor, through TfL, and by working with the DfT, London boroughs and Health and Safety Executive, will seek to improve road safety by developing initiatives and working with employers to increase work-related road safety and to reduce casualties involving work-related vehicles and activities. |
| 71 | The Mayor, through TfL, and working with the London boroughs, Highways Agency and other stakeholders, will implement targeted physical engineering and other design considerations to improve road safety across London’s road network. |</p>
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<td>72</td>
<td>The Mayor, through TfL, and working with the DfT, London boroughs, vehicle manufacturers and other stakeholders, will encourage the introduction of voluntary ‘intelligent speed adaptation’, subject to the outcome of trials in corporate fleets, including freight, passenger transport and company cars and vans.</td>
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<td>73</td>
<td>The Mayor, through TfL, and working with the police, London boroughs and other partners will continue implementing effective enforcement measures, targeted at locations with poor collision records across London’s road network, including new average speed cameras which will be trialled subject to local consultation, for example, on main roads and for enforcing speed in 20mph zones.</td>
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<td>74</td>
<td>The Mayor, through TfL, and working with the London boroughs, transport operators, police and local communities, will establish a statutory community safety partnership for transport and travelling in London. These partners will seek to ensure a strategic, effective, integrated and financially sustainable approach to improving safety and security across the transport system. The partnership will develop and implement a rolling three-year community safety strategy to tackle crime, fear of crime and antisocial behaviour. The strategy will set out shared priorities, objectives and targets based on a joint annual strategic assessment.</td>
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<td>75</td>
<td>The Mayor, through TfL, and working with the London boroughs, police and other stakeholders, will make best use of available resources, basing decisions on evidence and shared intelligence, to: a) Increase the visibility and accessibility of uniformed staff and officers, including special constables, at the right times and locations and provide them with the right powers to maximise their impact on crime, antisocial behaviour and public confidence in travelling in London b) Target enforcement activity on priority crimes, antisocial behaviour and behaviour that feeds the fear of crime using a problem-solving approach c) Create a small joint intelligence unit between TfL and policing agencies to improve intelligence sharing and the efficiency and effectiveness of resource deployment</td>
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<td>76</td>
<td>The Mayor, through TfL, and working with the London boroughs, police and other stakeholders will integrate local policing structures on the transport system; improve coordination and deploy resources collectively. Joint tasking of uniformed staff will help maximise their effectiveness.</td>
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<td>77</td>
<td>The Mayor, through TfL, and working with the London boroughs, police and other stakeholders, will integrate reporting systems for antisocial behaviour, crime and disorder on the transport system.</td>
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<td>78</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will introduce a package of measures including marketing, education and engagement activities to help passengers make informed, safer travel choices, and raise awareness of the effect of inconsiderate and antisocial behaviour on others.</td>
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<td>79</td>
<td>The Mayor, through TfL, and working with the London boroughs, police, and other stakeholders, will seek to ensure that: a) Safety and security considerations are incorporated into the planning and design of transport facilities b) Existing transport infrastructure, including pedestrian routes and cycle parking facilities, are kept in a good state of repair and have adequate lighting, signage, clear lines of vision and CCTV coverage where appropriate</td>
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<td>80</td>
<td>The Mayor, through TfL, and working with the London boroughs, police, and other stakeholders, will exploit the opportunities provided by new technology to prevent crime and disorder.</td>
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| 81 | The Mayor, through TfL, and working with the London boroughs, police, and other stakeholders, will seek to:  
  a) Improve the safety of night-time public transport services  
  b) Improve the safety of cabs  
  c) Provide better information about, and access to, safer travel options |
| 82 | The Mayor, through TfL, and working with the London boroughs, police and other emergency services and stakeholders, will seek to reduce the likelihood and impact of potential terrorist attacks on the transport system. |
| 83 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will use the principles of ‘better streets’ to seek to improve town centres, in particular: removing clutter and improving the layout and design of streets; enhancing and protecting the built and historic environment; increasing the permeability of streets; and creating clear and easily understandable routes and spaces to make it easier for cyclists, pedestrians and disabled people to get about. |
| 84 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will introduce accessible for all, ‘better streets’ initiatives. Consideration will be given to trialling the removal of traffic signals where safe and appropriate. |
| 85 | The Mayor, through TfL and the LDA, and working with the London boroughs, Network Rail and other stakeholders, will seek to implement integrated and complementary improvements to town centres, streets and pedestrian and cycling routes directly adjacent to where major public transport investment projects are being delivered, using sustainable materials. |
| 86 | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will target the provision of noise reduction measures and noise mitigation measures in areas significantly affected by transport noise, to improve perceptions of noise and reduce the impacts of noise on dwellings and people, by:  
  a) Timely and effective rail maintenance and replacement works  
  b) Working to the TfL Health Safety and Environment policy  
  c) Ensuring all new transport projects consider noise mitigation  
  d) Introducing road maintenance programmes to replace road surfaces with low noise surfacing where possible  
  e) Improving traffic management and signal control techniques  
  f) Introducing speed enforcement measures which do not encourage noisy, rapid acceleration and deceleration  
  g) Introducing quieter buses  
  h) Procuring new, quieter public sector service vehicles, potentially through joint procurement to achieve efficiency |
<p>| 87 | The Mayor, through TfL, and working with London Councils, London boroughs, freight operators, and other stakeholders, will explore opportunities to use the London Lorry Control Scheme to encourage companies to operate quieter vehicles as well as to promote improvements in air quality, and reduce CO2 emissions. |
| 88 | The Mayor, through TfL, and working with the London boroughs, motorist organisations, freight operators and other stakeholders will encourage quieter driving through publicity campaigns aimed at private drivers and motorcyclists, and training programmes for professional drivers. |</p>
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| 89          | The Mayor, through TfL, and working with the DfT, the national air traffic control service and the European Commission, will:  
  a) Encourage the development and use of quieter aircraft  
  b) Seek to coordinate flight paths so they minimise their impact on London |
| 90          | The Mayor, through TfL, and working with the DfT, Highways Agency, London boroughs, Network Rail, and other stakeholders, will make the most of open spaces across the transport system (for example, green spaces alongside railway lines, roads, rivers, canals, cycling and walking routes, green grids and on roof tops) to improve the quality and diversity of London’s natural environment. |
| 91          | The Mayor, through TfL and working with London boroughs, transport operators and other stakeholders, will encourage behavioural changes to reduce vehicle emissions, by:  
  a) Promoting walking and cycling, the use of car clubs, car sharing, the use of fuel efficient vehicles and smarter driving techniques and raising awareness about air quality  
  b) Implementing eco-driving training for all GLA/functional body, taxi and bus drivers  
  c) The Mayor will also reduce emissions from the wider fleet by supporting eco-driving training for members of the public and freight drivers (through the existing FORS scheme) and tackling emissions caused by unnecessary idling  
  d) Providing better information about emissions from private vehicles and the public transport fleet |
| 92          | The Mayor, through TfL, and working with the London boroughs, DfT, Network Rail, train operating companies and other stakeholders, will introduce measures to reduce emissions, including:  
  a) Cleaner buses  
  b) Cleaner taxis and PHVs  
  c) Further rail electrification, including the recently announced Great Western Main Line electrification scheme and the Barking to Gospel Oak line  
  d) Cleaner passenger boats and other river vessels, which use more environmentally friendly fuels  
  e) Encouraging the introduction and use of cleaner public service and local authority vehicles |
| 93          | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will take further action to reduce private vehicle emissions, by:  
  a) Supporting the uptake of low emission vehicles, such as electric cars and vans  
  b) Incentivising of low emission vehicles through pressing for changes to vehicle excise duty and parking regulations  
  c) Working with the European Commission, the Government and vehicle manufacturers, the Mayor will encourage the development of new technologies which reduce vehicles emissions, such as better tyres which wear less, more sophisticated abatement technology and automatic hybrid-switching |
<p>| 94          | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will introduce targeted local measures at poor air quality priority locations to reduce emissions and improve local air quality. |</p>
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| 95          | The Mayor, through TfL, will continue to operate the existing London Low Emission Zone. The Mayor will consider further tightening of the standards of the current LEZ, as well as the introduction of further emissions control schemes to encourage the use of cleaner vehicles in London:  
  a) The current LEZ scheme will continue to operate to reduce emissions from the heaviest vehicles, and tighter standards will be introduced in 2012 as planned  
  b) The Mayor will defer extending the LEZ to LGVs and minibuses (which was due to commence in 2010) to 2012  
  c) In 2015, the Mayor will, subject to technical feasibility, introduce an emissions standard for NOx (Euro IV) into the LEZ for HGVs, buses and coaches  
  d) If necessary, the Mayor will consider introducing minimum requirements for other vehicles or tighter standards in particular locations within London  
  e) The Mayor will work with boroughs that propose to take local action to address air quality through local low emission zones or similar measures |
| 96          | The Mayor, through TfL, and working with the London boroughs, transport operators and other stakeholders, will promote behavioural change and smarter travel measures aimed at encouraging more use of lower carbon modes, eco-driving practices, better vehicle maintenance and flexible working patterns to reduce CO₂ emissions |
| 97          | The Mayor, through TfL, and working with the London boroughs, transport operators, and other stakeholders, will support, promote and improve sustainable, low CO₂-emitting transport (including public transport, cycling, walking, and rail and water for freight), and reduce the need to travel through integration of transport and land use planning |
| 98          | The Mayor, through TfL, and working with the London boroughs, car club operators, and other stakeholders, will support expansion of car clubs and encourage their use of ultra low carbon vehicles |
| 99          | The Mayor, through TfL, and working with the London boroughs, road freight operators and other stakeholders, will:  
  a) Adopt planning conditions that specify Delivery Service Plans for major developments (by spring 2011)  
  b) Aim for 50 per cent of HGVs and vans serving London to be members of FORS by 2016  
  c) Encourage, and where appropriate specify, improved freight movement efficiency through, for example, greater consolidation, more off-peak freight movement and greater use of water and rail-based transport  
  d) Support freight industry land requirements for locally focused consolidation and/or break-bulk facilities and access to waterways and railways |
<p>| 100         | The Mayor, through TfL, will introduce automatic train control (a tool that can optimise energy efficiency through driving style) across the Tube network. Drivers of non-automatic railways, such as London Overground, will be given training on energy efficient driving style, as will London’s bus drivers |
| 101         | The Mayor, through TfL, or otherwise, will work with the DfT and other stakeholders to promote research, investment and regulation to achieve improved aviation carbon efficiency |
| 102         | The Mayor, through TfL, and working with the London boroughs, Highways Agency, and other stakeholders, will implement a package of measures (including signal timing reviews and the coordination of traffic signals) to reduce road traffic emissions by smoothing the flow of traffic and optimising the efficiency of London’s road network |</p>
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<td>103</td>
<td>The Mayor, through TfL, and by working with the London boroughs, will encourage a switch from conventional to low CO2-emitting road vehicles and low carbon fuel sources where feasible. The Mayor will lobby Government and other stakeholders to follow suit in order to establish a package of integrated incentives across national, regional and local government to ensure low carbon road vehicles are price competitive with conventional technology.</td>
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<tr>
<td>104</td>
<td>The Mayor, through TfL, or otherwise, will continue to examine the feasibility of increasing the use of sustainable biofuels in vehicle fleets controlled or regulated by Mayoral bodies, and will encourage the boroughs and other vehicle fleet operators to do likewise.</td>
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<td>105</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will enable and support the development and mass market uptake of low carbon road vehicles (including EVs) through, for example, the delivery of infrastructure required for the distribution of alternative transport fuel sources, including EV recharging points.</td>
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| 106         | The Mayor, through TfL, and working with Network Rail, and the DfT, will endeavour to:  
  a) Provide low loss electricity supply infrastructure on London’s rail networks  
  b) Implement regenerative braking where feasible on London’s rail networks  
  c) Develop, trial and seek to implement measures that minimise the loss through electricity distribution on the Underground |
| 107         | The Mayor, through TfL, and working with the DfT, energy companies, and other stakeholders, will deliver additional low/zero carbon electricity-generating capacity and investigate the potential for micro-generation at sites on the transport system. |
| 108         | The Mayor, through TfL, and working with the London boroughs and other stakeholders, will promote CO2 standards for vehicles and infrastructure controlled, procured or regulated by the Mayor, GLA Group and/or other public sector bodies (for example, public transport vehicles, taxis, street and station lighting and infrastructure embodied carbon) to reduce emissions from existing and new vehicles and infrastructure, including the following specific measures:  
  a) The Mayor, through his functional bodies, will increase the proportion of his vehicle fleet powered by electricity  
  b) All new buses entering fleets operated on behalf of the Mayor from 2011/12 will be lower carbon  
  c) Work with vehicle manufacturers and the taxi trade to develop a new low carbon and low air pollutant version of the London taxi  
  d) A trial of at least five hydrogen powered buses from 2010  
  e) Trialling of low energy station lighting and automatic meter reading  
  f) LED traffic signals preferred to conventional technology when replacing life-expired signal sets and further development of LED lighting leading to a preference for LED technology when replacing life-expired lighting, if proved to be feasible  
  g) Major infrastructure schemes will conduct a carbon footprint assessment  
  h) Where relevant, encourage the GLA group, boroughs, other public sector bodies and their suppliers to procure freight services from FORS members or freight operators able to demonstrate equivalent competencies |
<p>| 109         | The Mayor, through TfL, and working with the London boroughs, DfT, Highways Agency, and other stakeholders, will keep under review the option of road user charging and/or regulatory demand management measures to influence a shift to more CO2-efficient private and commercial road vehicles, and to lower carbon travel options such as walking, cycling and public transport. |</p>
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<td>110</td>
<td>The Mayor, through TfL, and by working with the London boroughs, Network Rail, Highways Agency, airport operators and other stakeholders, will determine the vulnerability of transport assets to the impacts of climate change and maintain existing infrastructure (including remedial works where effective and affordable) to improve resilience to climate change.</td>
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<td>111</td>
<td>The Mayor, through TfL, and working with the London boroughs, Network Rail, and other stakeholders, will prepare adaptation strategies to improve safety and network resilience to threats posed by climate change, and ensure that new transport infrastructure is appropriately resilient. The adaptation strategy should include: a) Climate change impacts risk assessment of infrastructure and operations to identify key risks and mitigation opportunities b) The prioritisation of identified risks and proposals for appropriate management and/or mitigation action plans, including emergency planning and investment plans c) Guidelines for major procurement contracts (including design, construction and maintenance) to demonstrate a climate risk assessment for the lifetime of the investment</td>
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<td>112</td>
<td>The Mayor, through TfL, and working with the London boroughs, Network Rail and other transport infrastructure owners, will ensure the transport system is developed with climate change in mind, by: a) Designing, locating and constructing new infrastructure to withstand climatic conditions anticipated over its design life b) Introducing energy efficient air-conditioned rolling stock where feasible, for example, on London Overground services and sub-surface Tube lines c) Continuing to investigate the feasibility of innovative methods of cooling the deep tunnelled sections of the Tube network d) Ensuring that all new buses entering the London fleet will feature specific climate change adaptation measures</td>
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<td>113</td>
<td>The Mayor, through TfL, and working with London boroughs, Network Rail and other transport infrastructure owners, will plant an additional 10,000 street trees by 2012, with the ambition of an additional two million trees in London’s parks, gardens and green spaces by 2025.</td>
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<td>114</td>
<td>The Mayor, through TfL, and working with the London boroughs, Network Rail, and other stakeholders, will develop and test plans and procedures to minimise risk to person and property, manage disruption and ensure rapid transport system recovery from the impact of climate change related events.</td>
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<td>115</td>
<td>The Mayor, through TfL, and working with the London boroughs, DfT, Network Rail, train operating companies, and other stakeholders, will enhance the provision of information to improve customers’ knowledge and understanding of service availability, delays and other information to improve customer satisfaction, and the way Londoners use public transport and make travel decisions, by: a) Improving the provision of real time and other journey planning information, including upgrading the TfL web-based journey planner, allowing further improvements to its real time performance, accuracy and personalisation b) Providing customers with a range of paper-based information (Tube, cycle and bus ‘spider’ maps, timetables, fares and service changes) c) Raising public awareness and knowledge of existing public transport provision, particularly, orbital public transport services d) Further development of journey planning, including web-based information, for local trips to town centres e) Developing town centre journey planning tools consistent with other information resources proposed in the strategy</td>
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<td>116</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, will use smarter travel initiatives across London to facilitate more efficient use of the transport system, achieve mode shift to cycling, walking and public transport and encourage the take-up of healthier travel options.</td>
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<td>117</td>
<td>The Mayor, through TfL, and working with the London boroughs, and other stakeholders in the public and private sectors, will improve the efficiency and effectiveness of freight operations through the promotion of ‘delivery and servicing plans’, ‘construction logistics plans’, the Freight Operator Recognition Scheme, Freight Quality Partnerships and other efficiency measures across London.</td>
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<td>118</td>
<td>The Mayor, through TfL, and working with the London boroughs, freight industry, and other stakeholders, will develop the London freight information portal to exchange information and share knowledge to ultimately improve the performance of freight operators, boroughs and TfL.</td>
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<tr>
<td>119</td>
<td>The Mayor, through TfL, working with the London boroughs, freight operators and other stakeholders, will develop the London freight information portal to exchange information and share knowledge to ultimately improve the performance of freight operators, boroughs and TfL.</td>
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<td>120</td>
<td>The Mayor will ensure that fares provide an appropriate and necessary level of financial contribution towards the cost of providing public transport services to ensure that public transport continues to play a central role in London’s transport system and overall economic development.</td>
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<td>121</td>
<td>The Mayor will keep the range of concessions for which he is responsible under review to ensure that they are focused on where they will be most effective at helping those in most need of them. Concessions for schoolchildren are also conditional on good behaviour. If removed for poor behaviour, concessions can be earned back through programmes of community activity and good behaviour.</td>
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<td>122</td>
<td>The Mayor, through TfL, will seek to conclude the creation of a fully integrated fare collection system for London that covers both TfL and National Rail services with a common set of travel products simplified to the maximum extent possible, in cooperation with the Association of Train Operating Companies and the DfT.</td>
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<td>123</td>
<td>The Mayor, through TfL, and working with the London boroughs, train operating companies, other transport operators and stakeholders, will explore ways to reduce the cost of revenue collection and to make fare payment quicker and more convenient for passengers through the use of new technology and other initiatives.</td>
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<tr>
<td>124</td>
<td>The Mayor, through TfL, and working with the London boroughs, London Councils, and other stakeholders, will seek to ensure fair and consistent enforcement of parking and loading regulations across London, together with more consistent regulations, clearer signage, and more advance information regarding parking availability. Pan-London parking provision and regulations information will be published on the internet in an easy-to-access format.</td>
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<tr>
<td>125</td>
<td>The Mayor, through TfL, and working with the London boroughs, car park operators, and other stakeholders, will encourage implementation of pricing differentials based on vehicle emissions, including banded resident parking permits and other on and off-street parking charges, including incentives for EVs.</td>
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<td>126</td>
<td>The Mayor, through TfL, the LDA, and working with the London boroughs and other stakeholders, will seek to ensure that new developments generating significant volumes of freight activity provide adequate off-street lorry parking and waiting facilities.</td>
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<td>Proposal No.</td>
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<tr>
<td>127</td>
<td>The Mayor, through TfL, the LDA, and working with the London boroughs and other stakeholders, will support those park and ride schemes in Outer London that lead to an overall reduction in congestion, journey times and road vehicle kilometres.</td>
</tr>
<tr>
<td>128</td>
<td>The Mayor, through TfL, subject to consultation, will remove the Western Extension of the central London Congestion Charging zone after putting in place such measures in mitigation of negative impacts as are both desirable and practicable.</td>
</tr>
<tr>
<td>129</td>
<td>The Mayor, through TfL, will operate and monitor Congestion Charging in the original Central London Congestion Charging zone. The Mayor will keep the scheme under review, making variations to ensure the continued effectiveness of the policy reflects best practice, improves the operation of the scheme, or helps it to deliver the desired outcomes of the MTS.</td>
</tr>
<tr>
<td>130</td>
<td>The Mayor, through TfL, and working with the London boroughs and other stakeholders, if other measures are deemed insufficient to meet the strategy’s goals, may consider managing the demand for travel through pricing incentives (such as parking charges or road user charging schemes). This would depend upon there being a reasonable balance between the objectives of any scheme and its costs and other impacts. Any scheme would need to take account of local conditions, as well as the impact on surrounding regions, and to be fair and flexible relating charges to the external costs of travel with sensitivity to time of day, and with scope for discounts or exemptions for specific user groups. The Mayor will also consider imposing charges or tolls to support specific infrastructure improvements, such as river crossings.</td>
</tr>
</tbody>
</table>
Annex C – Freight and servicing contents

Freight and servicing is considered throughout the MTS and most policies and proposals apply to both people and goods. For ease of reference, these chapters are most relevant for freight and servicing:

**Chapter three – Context**
3.1 London’s transport geography .................................................. 39
3.1.1 International travel ........................................................................ 41
3.2 Integrating transport and land use planning ...................................... 53

**Chapter four – Challenges and strategic policies**
4.2.1 Supporting sustainable population and employment growth ................................................. 65
4.2.2.3 Delivering radial capacity and connectivity improvements into central London .............. 70
4.2.3.1 Integrating land use development with transport planning .............................................. 82
4.2.3.4 Improving efficiency of freight distribution ..................................................................... 87
4.3 Enhancing the quality of life for all Londoners .................................. 88
4.3.4 Improving air quality ...................................................................... 91
4.3.5 Improving noise impacts ................................................................. 91
4.6.2 Reducing CO₂ emissions ................................................................. 102

**Chapter five – Transport proposals**
5.2.2 International and National Rail links and services .......................... 111
5.6 Managing the road network ............................................................... 151
5.6.3 Smoothing traffic flow .................................................................. 154
5.6.8 Developing the road network ......................................................... 158
5.7.5 Making better use of rivers and canals for waterborne freight ........ 165
5.8 River crossings ................................................................................. 168
5.12.2 Surface access to airports ............................................................ 184
5.13.7 Using bicycles for commercial purposes ..................................... 193
5.16.6 Work-related road safety .............................................................. 207
5.19.2 Reducing the noise impacts of roads and public transport .......... 224
5.21 Improving air quality ...................................................................... 228
5.21.3 Behavioural changes ................................................................... 230
5.21.7 London Low Emission Zone ......................................................... 232
5.22 Reducing carbon dioxide emissions ................................................. 237
5.22.2 Carbon efficient travel behaviour ................................................ 239
5.22.3 Reducing CO₂ emissions from freight delivery .............................. 241
5.22.9 Mayoral innovation and leadership ................................................ 249
5.24 Better journey planning and smarter travel for people and goods ...... 255
5.24.3 Smarter transport of freight and services ...................................... 258
5.26 Parking and loading ....................................................................... 264
5.27 Road user charging for economic and environmental aims ............ 267
**Accessibility**: The general term for how easy it is for people to get to places, jobs, homes and services.

**Accessibility Plan**: The GLA Act 1999 requires the production of a specific accessibility plan covering the full remit of the policies and proposals in this area, together with a timetable for implementation. It is currently intended that a draft will be prepared alongside the public consultation draft of the MTS.

**Air quality**: The main air pollutant emissions from ground-based transport are:
- Oxides of nitrogen
- Particulate matter of varying size fractions, notably PM10 and PM2.5

The Mayor’s Air Quality Strategy considers emissions of these pollutants from all sources in London, including transport.

**All London Green Grid**: A strategic framework for creating, improving and managing London’s green infrastructure (for example, parks, Greenways) and promoting active travel.

**Antisocial behaviour**: The Crime and Disorder Act 1998 describes antisocial behaviour as that which is ‘likely to cause alarm, harassment or distress to members of the public’.

**BAA Ltd**: The body that owns and operates six UK airports, including Heathrow.

**Better streets**: A street with a minimal amount of visual clutter and obstacles that encourages a degree of negotiation between road users.

**Biking Boroughs**: London Boroughs that prioritise cycling in their local transport strategies and LIPs. Strong political commitment will help to unlock the potential for cycling trips within the borough, especially in areas of more significant opportunity, such as local town centres. Biking Boroughs will demonstrate partnership working, for example, with schools, NHS Primary Care Trusts and businesses, to deliver an integrated package of measures including smarter travel interventions, traffic management and infrastructure. TfL will offer support with programme development and technical expertise.

**Break-bulk facilities**: These are locations where larger vehicles unload materials and goods (often for retail), which are then transported to their final destination by smaller vehicles. Consolidation centres are currently only used by the construction industry, but are essentially the same concept.

**Carbon dioxide (CO₂)**: The primary greenhouse gas emission associated with transport. Produced through the burning of fossil fuels, either in engines or electricity generators, to produce power for transport purposes.

**Car clubs**: A car club provides its members with quick and easy access to a car for hire. Members can make use of car club vehicles as and when they need them.

**Central Activities Zone (CAZ)**: The area where planning policy promotes finance, specialist retail, tourist, cultural uses and activities.

**Central London**: The area, broadly speaking, within the Inner Ring Road, similar to the area covered by the central London Congestion Charge.
**Central London Congestion Charging scheme:** The charge applied to vehicles entering a defined area of central London to reduce congestion.

**Climate change:** Long-term significant change in the expected patterns of average weather conditions of a specific region over an appropriately significant period of time.

**Civils:** Infrastructure assets such as bridges, viaducts, embankments and drainage systems.

**Construction Logistics Plans (CLPs):** Travel plans which aim to improve the sustainability of construction freight movements by establishing site management and procurement processes to reduce the impact of construction traffic on the road network.

**Consolidation centre:** See break-bulk facilities.

**Convergence (as in London 2012 Olympic and Paralympic Games legacy):** The principle and aim that within 20 years the communities of the five London boroughs hosting the 2012 Games would have the similar social and economic chances as their neighbours across London.

**Cycle Safety Action Plan:** The Mayor’s action plan includes input from expert groups as well as ordinary Londoners to identify the types of collision most likely to result in serious cycling accidents and sets out measures to reduce them.

**dBA:** Refers to decibel, a logarithmic measurement used to express sound intensity and power.

**Delivering a Sustainable Transport System (DaSTS):** A framework for the assessment of funding for schemes intended for implementation in the period 2014 to 2019.

**Delivery and Servicing Plans (DSPs):** Travel plans which aim to improve the sustainability of freight and servicing by working with suppliers, clients and the freight industry to reduce the number of deliveries required, while ensuring remaining deliveries are made as safe and as environmentally friendly as possible.

**Department for Transport (DfT):** The Government department responsible for the UK transport network.

**Defra:** The Department for Environment, Food and Rural Affairs.

**Disability Equality Scheme (DES):** A statutory document which sets out in detail what TfL is going to do to ensure that the services it offers are accessible to disabled people. TfL is required to produce a DES every three years containing an outcome-based action plan that sets out what will be achieved during that timescale.

**Economic Development Strategy (EDS):** A strategy produced on behalf of the Mayor by the LDA to support the development of the Capital’s economy.

**Equal Life Chances for All:** The Mayor’s framework to address the remaining and significant pockets of deprivation and inequality, providing a fresh analysis and different solutions to inclusion, community cohesion and tackling disadvantage. It aims to achieve equal life chances for all and proposes an approach that brings Londoners together, rather than dividing them. It sets out the Mayor’s equality vision and the framework necessary to deliver it.
Fail to stop collision: Collisions resulting in injury where one or more vehicle leaves the scene, so that information about the vehicle and its driver may be unknown. These collisions are often referred to as ‘hit and run’ collisions.

Freight: The delivery, collection and physical carriage of goods by any mode. This includes the provision of servicing, utilities and the movement of waste. Servicing incorporates maintenance and other skilled trades supplied to individual and corporate clients.

Freight Operator Recognition Scheme (FORS): An industry-led membership scheme aiming to improve freight efficiency and operation in London.

Greater London Authority (GLA): The region-wide governing body for London. It consists of a directly elected executive Mayor of London and an elected 25-member London Assembly with scrutiny powers.


Greenways: These are reliable, safe and pleasant walking and cycling routes running through parks, forests, waterways and quiet residential streets.

HGV (heavy goods vehicle): Motor vehicles (for example, trucks/lorries) with a maximum gross vehicle weight of more than 3.5 tonnes.

High Level Output Specification (HLOS): The railway investment and service improvements the Government has committed to funding for the period 2009 to 2014.

Highways Agency: An executive agency of the Department for Transport which is responsible for operating, maintaining and improving the strategic road network in England.

iBus: An automatic vehicle location (AVL) system to improve the reliability and operation of London’s buses.


Integrated Impact Assessment (IIA): The MTS is subject to a number of legal requirements to prepare complementary assessments of how the strategy might affect people, places and conditions in London. TfL has undertaken an IIA to meet all these requirements simultaneously and to maximise the contribution which the strategy can make to progressing sustainability. The IIA integrates the following assessments to take into account all aspects of sustainability:

- Strategic Environment Assessment (SEA)
- Health Impact Assessment (HIA)
- Equality Impact Assessment (EqIA)
- Assessment of Economic Impacts
- Habitats screening exercise

Community safety, including crime and disorder, was also considered as part of the IIA.

Intensification Areas: These areas have significant potential for an increase in residential, employment and other uses through development of sites at higher densities with more mixed and intensive use.
Intensification Area Planning Frameworks (IAPFs): See Opportunity and Intensification Area Planning Frameworks.

Journey stage: A journey stage is part (or sometimes all) of a trip made by a single mode of transport. A home to work trip, for example, may contain three journey stages: a walk to a bus stop, a bus journey stage, and a further walk from the bus stop to the workplace. Note that if the same home to work trip were made directly by car, walking or bicycle, there would be only one journey stage.

Key walking route: A program of projects to improve the walking environment across London. These projects include improving routes to shops, schools, leisure centres and work, new or improved pedestrian crossings, and clearer signing.

Legible London: A map-based pedestrian wayfinding and information system that gives people clear and consistent information to facilitate and encourage walking journeys. It is managed by TfL but available for third party use.

Leq: A well-established index of long-term constant average exposure to noise and is an abbreviation for ‘equivalent continuous noise level’. It replaces the Noise and Number Index used previously. Calculated values give the level of a steady sound which, if heard continuously, would contain the equivalent total amount of sound energy (decibels) as all the noise events over the same period of time. For example, at Heathrow, a 16-hour core operating period is analysed, from 07:00 to 23:00.

LGV (light goods vehicle): Motor vehicles (for example, vans/pick-ups) with a maximum gross vehicle weight of up to 3.5 tonnes.

Lifetime neighbourhoods: These are designed to be welcoming, accessible and inviting for everyone, regardless of age, health or disability. They are sustainable in terms of climate change, transport services, housing, public services, civic space and amenities, making it possible for people to enjoy a fulfilling life and take part in the economic, civic and social life of the community.

Local Implementation Plans (LIPs): Statutory transport plans produced by London boroughs bringing together transport proposals to implement the MTS at a local level.

London Councils: This organisation represents London’s 33 local authorities and lobbies on their behalf. London Councils also runs a number pan-London services.

London Electric Vehicle Centre of Excellence: Established within the Greater London Authority group to implement the London Electric Vehicle Delivery Plan. The unit will seek to exchange knowledge and experience with other cities intending to take forward similar plans.

London Freight Plan: Produced by TfL in conjunction with stakeholders in the private and public sector, outlines a vision for sustainable freight distribution in the Capital. The plan highlights challenges faced by London’s diverse freight sectors and details four key projects (FORS, DSPs, CLPs and the freight information portal). The London Rail Freight Strategy sets out how TfL would like to see rail freight develop in the medium term.
**London Plan:** The Mayor of London’s spatial development strategy for London.

**London sub-regions:** While having fuzzy boundaries to encourage cross-boundary working, London regions are proposed to contain the following boroughs:

- Central London region: Cities of London and Westminster, plus the boroughs of Camden, Islington, Kensington & Chelsea, Lambeth and Southwark
- North London region: Boroughs of Barnet, Enfield, Haringey and Waltham Forest
- East London region: Boroughs of Barking & Dagenham, Bexley, Greenwich, Hackney, Havering, Lewisham, Newham, Redbridge and Tower Hamlets
- South London region: Boroughs of Bromley, Croydon, Kingston upon Thames, Merton, Richmond upon Thames, Sutton and Wandsworth
- West London region: Boroughs of Brent, Ealing, Hammersmith & Fulham, Harrow, Hillingdon and Hounslow

**Londoners:** Anyone in London, including permanent and temporary residents, visitors, students, workers and tourists.

**LondonWorks:** Planning software used by TfL and London boroughs to coordinate utility street works in the Capital with the aim of reducing negative impacts on traffic flows.

**Low Emission Zone (LEZ):** The application of charges across Greater London based on emissions of air pollutants to reduce the amount of harmful vehicular emissions in the city.

**Mayoral functional bodies:** The bodies which provide services for which the GLA is ultimately responsible. They include TfL (transport), the Metropolitan Police Authority (policing), the London Fire and Emergency Planning Authority (fire and rescue) and the LDA (development and strategic planning).

**Mayor’s Air Quality Strategy (MAQS):** See air quality.

**Metropolitan town centres:** The 12 metropolitan centres currently identified are Bromley, Croydon, Ealing, Wood Green, Harrow, Romford, Uxbridge, Hounslow, Kingston, Ilford Shepherd’s Bush and Sutton. The London Plan also identifies three potential metropolitan town centres: Stratford, Woolwich and Brent Cross.

**Mobility impairment:** People who may find it harder to get around streets and use public transport for a variety of reasons. This can include people with a disability (sensory, physical or people with learning difficulties), older people, the very young, expectant mothers and people with luggage.

**Mode share:** This is a measure of the relative use of each mode of transport. It can be measured in several ways including trips by each mode and journey stages by each mode. A trip is defined as a one-way movement from one place to another to achieve a single main purpose. Trips may be further sub-divided into journey stages, the single components of parts of a trip using a single mode of transport between the interchanges. Each of these definitions is valid, though gives a differing result.

**Natura 2000:** A European network of protected sites which represent areas of the highest value for...
natural habitats and species of plants and animals which are rare, endangered or vulnerable in the European Community.

**Network Rail**: The company that owns and operates Britain’s rail infrastructure.

**Noise contour**: The Civil Aviation Authority estimates the noise exposures around major airports (such as Heathrow, Gatwick and Stansted) for the DfT. The magnitude and extent of the aircraft noise around these airports are depicted on maps by contours of constant aircraft noise index (Leq) values. The contours are generated by a computer model validated with noise measurements, which calculates the emissions and propagation of noise from arriving and departing air traffic.

**Opportunity Areas**: London’s principal opportunities for accommodating large scale development to provide substantial numbers of new employment and housing. Each typically has more than 5,000 jobs and/or 2,500 homes, with a mixed and intensive use of land and assisted by good public transport accessibility.

**Opportunity and Intensification Area Planning Frameworks**: Planning frameworks take different forms depending on local circumstances. They focus on implementation, identifying both opportunities and challenges that need resolving including land use, transport infrastructure requirements and other intervention. With support from strategic partners they should set realistic programmes and timescales for delivery.

**Orbital travel**: Non-radial journeys made between one part of London and another, where the end destination is not in central London.

**Outer London**: Includes the boroughs of Barking and Dagenham, Barnet, Bexley, Brent, Bromley, Croydon, Ealing, Enfield, Haringey, Harrow, Havering, Hillingdon, Hounslow, Kingston upon Thames, Merton, Newham, Redbridge, Richmond upon Thames, Sutton and Waltham Forest.

**Outer London Commission**: The Outer London Commission was established by the Mayor to explore how Outer London can better realise its economic potential, especially in town centres, as well as identify Opportunity and Intensification Areas and Strategic Industrial Locations. Its membership includes representatives of business, the boroughs, the (property) development industry and the voluntary sector. The Commission is tasked with identifying opportunities to enhance the ‘quality of life’ and encourage economic development. It will also examine the relationship between demographic, housing and economic growth and the transport improvements needed to facilitate this.

**PHV**: Private hire vehicles, for example, minicabs.

**Physical accessibility**: How easy it is for all people to get around streets and to use public transport.

**Planning Policy Guidance 13 (PPG13)**: National guidance regarding the integration of planning and transport at the national, regional, strategic and local level, and to promote more sustainable transport choices for carrying people and for moving freight.

**Polyclinic**: Polyclinics provide a wide range of health care services (including diagnostics) without the need for an overnight stay. Polyclinics
are sometimes co-located with a hospital or may be located in another locality entirely. A typical polyclinic will house a number of general medical practitioners such as doctors and nurses.

Potential metropolitan town centres: See metropolitan town centres.

Public transport accessibility level (PTAL): This is a measure of accessibility to the public transport network. For any given point in London PTALs combine walk time to the network (stations, bus stops) with service wait time at these stops to give an overall accessibility index. This can be allocated to six accessibility levels with one being poor and six being excellent.

Police: All police forces in London tasked with law enforcement on transport infrastructure. Principally, this incorporates all relevant divisions of the Metropolitan Police Service, City of London Police and British Transport Police.

Public private partnership (PPP): A mechanism for using the private sector to deliver outcomes for the public sector, usually on the basis of a long-term funding agreement.

Rail Vehicle Accessibility Regulations (RVAR): Legislation created in 1998 which ensures that all new trains, trams and other track-based systems, are accessible to disabled people, including wheelchair users.

Reference case: The situation that is projected to occur in a future year under existing policies. It is a baseline or ‘default’ position. The reference case is based on GLA projections for population and employment, and the investment in the published TfL Business Plan and HLOS, including:

- The investment in the TfL Business Plan up to 2017/18
- Completion of the full LU PPP line upgrade specification (including the Bakerloo line upgrade assumed to be in 2020)
- Crossrail
- HLOS improvements in 2009 to 2014
- Removal of the Congestion Charging Western Extension zone

Regenerative braking: A mechanism that reduces vehicle or train speed by converting some of its kinetic energy into a storable form instead of dissipating it as heat as with a conventional brake. The captured energy is stored for future use or fed back into a power system for use by other vehicles/trains.

Road pricing: Normally refers to the use of charges on moving vehicles for the use of roads. It normally includes tolls for specific sections of the road system and Congestion Charging where prices are intended to influence the level of traffic. It usually excludes taxes on fuel or vehicles, hire charges and charges for parking. Road user charging can be used synonymously, though it sometimes includes taxes and charges for parking.

Road pricing is a flexible policy measure. For example, schemes can be implemented to influence the degree of use that is made of limited road space (as is the primary objective of the central London Congestion Charging scheme) or the characteristics of the vehicles using the roads (the primary objective of the LEZ).

Scheme order (Congestion Charging): A legal document specifying the precise details of
the operation of the central London Congestion Charging scheme, such as its hours of operation, its geographical scope, the vehicles affected, any discounts and exemptions, and charges applicable. Its full title is the Greater London (Central Zone) Congestion Charging Order 2004.

**Scheme order (Low Emission Zone):** A legal document specifying the precise details of the operation of the London LEZ scheme, such as its hours of operation, its geographical scope, the vehicles affected, any discounts and exemptions, and charges applicable. Its full title is the Greater London Low Emission Zone Charging Order 2006.

**SCOOT:** An urban traffic control system which automatically optimises traffic signal settings based on traffic demand over a sequence of signalised junctions.

**Shared space:** A concept which suggests a degree of sharing of streetscape between different transport modes and street users, requiring everyone to consider the requirements, aspirations and needs of each other.

**Smarter travel:** Programmes of targeted measures to promote sustainable travel, helping to reduce congestion and crowding and mitigate the environmental impacts of transport.

**Smoothing traffic flow:** Overarching term for the package of measures that seeks to manage road congestion and which includes managing delay, improving journey time reliability and network resilience.

**Spider map:** A diagrammatic map to show all the bus routes from a single location.

**Strategic Industrial Locations (SILs):** These are London’s main reservoirs of industrial land comprising approximately 40 per cent of the Capital’s total supply. They are of two types to meet and support the requirements of different sorts of industrial occupier:

- Preferred industrial locations which are particularly suitable for general industrial, light industrial, storage and distribution, waste management, recycling, some transport-related functions, utilities, wholesale markets and other industrial related activities
- Industrial business parks which are particularly suitable for activities that need better quality surroundings including: research and development, light industrial and higher value general industrial, some waste management, utility and transport functions, wholesale markets and small scale distribution

**Strategic Outer London development centres:** Centres in Outer London or adjacent parts of Inner London with one of more strategic economic functions of greater than sub-regional importance, with specialist strengths that generate growth significantly above the long-term Outer London trend. The inclusion of strategic Outer London development centres in the London Plan and the MTS does not imply that development growth should be concentrated in these centres over town centres.

**Strategic Road Network:** Strategically significant roads in London for which TfL has a Network Management Duty, comprising the 580km TLRN and 500km of borough roads.
**Strategic Walk Network (SWN):** A 350-mile network of seven strategic walking routes across London. The network provides the opportunity for leisure walking and connects both rural and suburban areas, in addition to some of the Capital’s most popular central destinations. The network also provides quality pedestrian access to transport links, education and employment destinations.

**Sub-regions:** See London sub-regions.

**The Committee on Climate Change:** An independent body established under the Climate Change Act to advise the UK Government on reducing greenhouse gas emissions.

**TfL Park and Ride Assessment Framework:** The framework sets out the criteria for considering new park and ride provision in London.

**Transport for London Road Network (TLRN):** Described in the GLA Act 1999 as the Greater London Authority Road Network. The Mayor has decided to call this the Transport for London Road Network. It comprises 580km of London’s red routes and other important streets.

**Train operating companies (TOCs):** Businesses operating passenger trains on the railway system of mainland Great Britain under the collective National Rail brand.

**Transport and Works Act (TWA):** Legislation created in 1992 regulating the construction and operation of railways, tramways and other guided transport schemes, and works which interfere with navigational rights.

**Travel plans:** Plans promoting and providing guidance on sustainable transport options for a given location with the aim of promoting sustainable and environmentally friendly modes.

**Trip:** A complete movement from origin to destination, for example, from home to work.

**20mph zone:** Areas with self-enforcing speed limits that reduce vehicle speeds. Research has found that as speeds reduce casualties can be reduced by more than 40 per cent after a zone is implemented in London.

**Urban realm:** The area between building alignments including public spaces next to streets. The street makes up the greatest part of the urban realm in most cities.

**Variation Order:** A legal document specifying changes to be made to the Congestion Charging or LEZ scheme orders. Any change to the Congestion Charging or LEZ scheme must be made by TfL and then be subject to public and stakeholder consultation. In light of this, the Mayor may choose to confirm the variation order, make modifications to it, or not confirm it.

**‘Way to Go! – Planning for Better Transport’:** This non-statutory publication, published in November 2008, sets out the Mayor of London’s vision for transport in the Capital.