

# **Branching Out**

## The future for London's street trees

April 2011





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minicom 020 7983 4458

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# Environment Committee Members

Darren Johnson	Green (Chair)
Murad Qureshi	Labour (Deputy Chair)
Gareth Bacon	Conservative
James Cleverly	Conservative
Roger Evans	Conservative
Nicky Gavron	Labour
Mike Tuffrey	Liberal Democrat

The Environment Committee agreed the following terms of reference for its investigation on 1 December 2010

- To examine what progress has been made for street trees in London since the committee's 2007 report; and
- What the future holds for street trees, and where responsibility for planting and maintenance will lie.

The Committee would welcome feedback on this report. For further information contact:

Jo Sloman, Assistant Scrutiny Manager, on 020 7983 4942 or [Jo.Sloman@london.gov.uk](mailto:Jo.Sloman@london.gov.uk).

For media enquiries please contact:

Lisa Moore on 020 7983 4228 or [Lisa.Moore@london.gov.uk](mailto:Lisa.Moore@london.gov.uk); or  
Julie Wheldon on 020 7983 4228 or [Julie.Wheldon@london.gov.uk](mailto:Julie.Wheldon@london.gov.uk)



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# Chair's foreword

Our first investigation into street trees in London in 2007 showed just how much Londoners value the shade and cooling that urban street trees offer in the summer, how they improve street environments and reduce noise and dust from road traffic. Crucially, they also mop up carbon emissions. The Assembly's report *Chainsaw Massacre* highlighted the unfortunate practice of removing broadleaf trees to avoid subsidence damage claims. The public wanted more trees and for them to be protected. The Mayor responded by establishing a street tree programme for new planting in areas with few street trees.

Returning to this issue in 2011, it is clear that Londoners and tree organisations continue to campaign just as strongly for trees to play a part in creating greener environments, in reducing the impact of the urban heat island effect in the capital and mitigating climate change.

In *Branching Out*, we review the Mayor's scheme to see what difference it has made, and what future impact it (and its successor campaign 'RE:LEAF London') will have on the city. We find that while Londoners continue to value their street trees, they face an uncertain future.

If we want to see more street trees in London and their resulting long-term health and well-being benefits, the Mayor needs to support a few vitally important measures. These include tree valuation, supporting continued investment, a recognised claims handling process, publicly available data, and limiting severe pollarding and pruning techniques to only exceptional circumstances.

Tree experts have told us that if these recommendations are taken up, London's street trees will have a more confident future and will be able to make a stronger contribution to increasing canopy cover across the capital.

# Executive summary

Street trees play an important role in London's environment, providing multiple physical and aesthetic benefits to the population and reducing the impact of climate change on the capital. The Mayor has a strategic objective to increase canopy cover from 20 per cent to 25 per cent by 2025, and street trees are an important part of this aim.

We carried out an investigation into street trees in 2007 and we found that overall, the numbers of street trees were holding up, a third of boroughs had experienced a net loss. Our report highlighted that street trees were at particular risk from felling due to subsidence-related insurance claims.



In this update we set out to review how the landscape for street trees had changed since our last report, by speaking to those who gave evidence to the Committee in 2007. This report examines what is being done to safeguard London's street trees by looking at planting, maintenance, and protecting street trees from felling.

## Street tree planting

The Mayor made a pledge to plant 10,000 additional street trees by 2012, targeting areas which lack street trees and where they could have a significant environmental impact. Across London, the Mayor's Street Tree Programme identified 40 priority areas (with at least one per borough) in which local authorities, communities and other interested parties could apply for trees.

To date, the scheme is on target and 9,500 street trees are expected to have been planted as we publish our report. We cannot tell whether this has affected the street trees boroughs plant ordinarily (as new trees, or as replacements), however, our data show that the Mayor's programme has had a positive impact by increasing the number of street trees in the majority of participating boroughs. With the end of the Mayor's programme in 2012, the Mayor has launched a partnership campaign to plant more trees across the capital, RE:LEAF, and we are pleased that the campaign will continue to use the targeted planting approach.

Our report also acknowledges the contribution that the business community is making to planting additional trees in the capital, and we think the Mayor should highlight and support their work through RE:LEAF.



### **Street tree maintenance**

Boroughs have largely varying budgets for street tree maintenance, ranging from £55 to £1 spent per tree per year. Street tree budgets are under pressure for several reasons – including local level cuts and the rising costs of maintenance – which could present challenges to those responsible for looking after London’s street trees.

Cyclical pruning is an example of a cost effective basic maintenance technique which could be at risk if budgets are reduced. Failure to adequately maintain trees could lead to both higher costs for boroughs and depreciated tree stock; therefore it is important that tree departments have sufficient resources enabling them to maintain this vital public resource.

To mitigate loss of revenue, we support the use of the tree valuation approach such as Capital Asset Valuation for Amenity Trees (CAVAT), which allows tree departments to treat trees as assets and justify adequate funding support.

We also investigated how the voluntary and community sector could support street trees. We found that while it is difficult to involve members of the public in technical tree planting because of the need for specialist skills and high insurance costs, the support of these groups can be harnessed in other ways, such as taking part in tree warden schemes.

In view of funding pressures, we conclude that the Mayor should use RE:LEAF to highlight to boroughs the importance of adhering to recognised tree maintenance standards. We would also like him to endorse the CAVAT system to justify sustained maintenance of our street trees.

### **Preventing unnecessary street tree felling**

Following the concerns we raised in our last report about unnecessary tree felling, we were interested to see whether there had been improvements to help boroughs retain their trees. Our report finds that the Joint Mitigation Protocol (between boroughs and the insurance companies) and public data are the two most important mechanisms to protect street trees from felling.

Firstly, we are pleased that the Joint Mitigation Protocol (which was in development when we produced our 2007 report), has now been introduced as a pilot.

So far, around a quarter of boroughs and 50 per cent of the buildings insurer market have signed the protocol. It is generally considered a valuable resource because it follows an established and shared process and reduces costs for both parties; however, it is not possible to judge its real impact because there is no evidence about the effect it has had. We believe it requires proper evaluation, which will then provide boroughs and insurers who are not yet signatories, with evidence of its effectiveness.

Secondly, we reiterate our call for boroughs to make public their data about street trees, because we are disappointed that there has been no improvement on this issue since our 2007 investigation.

We see two main reasons why street tree data should be in the public domain. Firstly, it would allow the Mayor and boroughs to monitor changes to street trees and their contribution to canopy cover. Members of the public could also hold their councils to account for ensuring that London's street trees are preserved and that more are planted. A database containing all the street trees in London (including their location, type and dimensions) was created for the Mayor's scheme, and the Mayor should now encourage the boroughs to share this data and update it annually so that we know how many street trees there are in London.

# 1 Introduction

- 1.1 London's street trees are highly valued public assets that have a significant impact on our environment and quality of life. Street trees feature in the Mayor's Climate Change Adaptation Strategy, which recognises the positive impact they have on the urban heat island effect, energy demand, and air and noise pollution. The current Mayor has made street trees a priority issue during his mayoral term by funding a programme to plant 10,000 street trees. Over the long term, the Mayor has a strategic objective to increase canopy cover across London from 20 to 25%. This represents around an additional two million trees, and street trees will play a part in reaching this goal.
- 1.2 In this update report we seek to build on the success of the Committee's previous report which highlighted the issues facing street trees in London. Our investigation in 2007 found that there were almost 500,000 street trees in London and that although there had been an increase of approximately 1.7 per cent over the previous five years, a third of boroughs had experienced a net loss of trees. However, boroughs were often removing street trees following insurance claims for subsidence damage, sometimes unnecessarily accounting for a significant proportion of removals in some boroughs.<sup>1</sup>
- 1.3 Four years on, we wanted to investigate what had changed for London's street trees and to assess how they would fare in the future, with a particular focus on what the Mayor can do to support street trees. To answer these questions we wrote to many of those who contributed to our initial review, including boroughs, tree organisations, and other business and voluntary sector stakeholders in London. We also held a public meeting on 13th January with guests from the London Tree Officers Association (LTOA), the Forestry Commission and the Greater London Authority (GLA), and met with the Association of British Insurers on a separate occasion. In December, the Chair and Deputy Chair visited Bankside Urban Forest, part of the Better Bankside BID, to learn about the greening work in the Borough area and the Chair returned to the area in February to see some of the newly planted trees.
- 1.4 Our report finds that street tree numbers remain at approximately half a million trees, with welcome recent support from the Mayor's scheme.



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<sup>1</sup> The Environment Committee's 2007 report *Chainsaw Massacre* and its recommendations are available here:  
<http://legacy.london.gov.uk/assembly/reports/environment/chainsaw-massacre.pdf>

Looking forward, we examine what is being done to safeguard London's street trees by looking at planting, maintenance, and protecting trees from felling. Based on these findings we make recommendations to the Mayor and borough tree departments to help protect and promote street trees. To facilitate our work we have had to collect data from each borough on the number of street trees and the budgets available to support them. These data exist in other fora, but, unfortunately, they are not publicly available. We address this issue in more detail in Chapter 4.

## 2 Street tree planting

- 2.1 The Mayor made a key manifesto pledge to plant 10,000 street trees during the current Mayoral term (hereafter referred to as the Mayor's Street Tree Programme, or MSTP). This pledge is part of his objective to make London a greener city, with a particular focus on greening areas with few street trees. In order to achieve this objective, the GLA attached specific criteria to MSTP grants: trees need to be additional to those boroughs would plant in a normal yearly cycle, and they have to be planted within selected priority area(s).
- 2.2 In this section we discuss the development of the Mayor's Street Tree Programme, the contribution it is making to street tree planting across London. We then examine the short term impact of the programme, how it relates to borough planting, and its relative value for money. Finally, we consider its potential longer term impact, what alternative support will exist for street tree planting in future, and the role of the Mayor's new RE:LEAF campaign.

### **The Mayor's Street Tree Programme**

#### *Selection process*

- 2.3 The MSTP has taken a strategic approach to plant new trees in areas deficient in street trees and where they would have greatest impact on the environment and local community. An expert group selected priority areas by examining six factors at Lower Super Output Area (LSOA) level: street tree density, multiple deprivation (with a particular focus on the 20% most deprived), the urban heat island effect, air quality, noise, and deficiency in access to nature. The scoring system gave additional weighting to the heat island effect and multiple deprivation scores.
- 2.4 Using this process, working with Greenspace Information for Greater London (GiGL), the GLA identified the 'most deserving 25%' of areas, following which they consulted boroughs before selecting the final priority sites.<sup>2</sup> The Committee welcomes the fact that this selection process ensured that data collection was centralised and standardised, resulting in a robust and comprehensive dataset about London's street trees.

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<sup>2</sup> Greenspace Information for Greater London (GiGL) (2008) *Capital Woodlands Street Tree Project Methodology*. GiGL was commissioned 'to identify areas of street tree deficiency to enable the targeting of planting in appropriate areas'.

### *Additional or substitutes?*

- 2.5 Now in its fourth year, the MSTP is helping to increase the number of street trees in London. While it may be too early to judge the long-term benefits of the scheme, the MSTP is on target to reach its objective of planting 10,000 new street trees by 2012. To date, all boroughs bar four have taken up the grant<sup>3</sup> and by the end of 2010 half the trees had been planted. A further 4,576 were planted by the end of the 2010-11 winter season.<sup>4</sup> Consequently, 9,576 Mayor's street trees have been planted and therefore London will almost certainly gain an additional 10,000 street trees by March 2012.
- 2.6 Yet, although trees have been planted in new locations, we are unable to tell whether the MSTP has meant that boroughs themselves have planted more or fewer street trees than they would have done without it. During our investigation we carried out a survey of boroughs, requesting data on street trees planted and felled, and planting and maintenance budgets. This data enables us to make some comparison with the Mayor's scheme, however, it has some limitations, which are provided in Appendix 1.
- 2.7 Based on our survey, the MSTP increased the number of street trees planted in the last year by between 35 and 53 per cent. The data suggest that boroughs planted almost 15,000 street trees outside of the Mayor's scheme in the last year.<sup>5</sup> However, many of these are replacement trees. Taking account of felled street trees, the data indicate there has been a net gain of 6,792 trees across the boroughs in 2009-10. In the same period, 3,588 street trees were planted through the MSTP, which – if these figures are included within the total planted – would account for 53 per cent of the net gain in 2009-10. However, if the MSTP trees are added to the borough net gain, they would account for around 35 per cent of the total gain. (These data are presented in full in Appendix 2, Table 2.)



<sup>3</sup> All 32 London Boroughs have a priority area except City of London which declined to participate due to limited opportunities to plant new trees in a heavily built-up area.

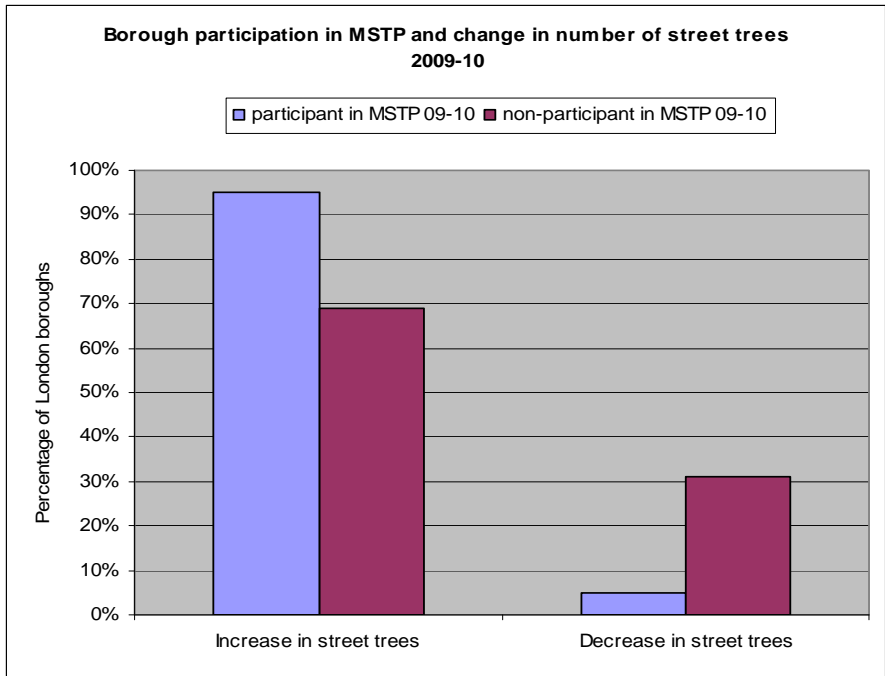
<sup>4</sup> Supplied by GLA to Committee officer 11.04.11

<sup>5</sup> This figure is true if the number of street trees planted by boroughs excludes any trees planted using the MSTP funding. Where boroughs presented trees planted using their ordinary budgets and the MSTP separately, we have used the borough figure. Not all boroughs distinguished between them, however, therefore this figure should be treated with caution.



- 2.8 Table 2 (Appendix 2) shows that some boroughs may have relied more heavily than others on the MSTP for new planting, but the data also show that scheme participants have generally increased their overall tree stock. For example, the proportion of trees planted by the Mayor (respective to all trees planted) ranges from 13 per cent in Redbridge, to 84 per cent in Lewisham.<sup>6</sup> If we compare changes across the boroughs in the 2009-10 season, 79 per cent of boroughs have increased their number of street trees. Of these, 68 per cent received grant funding through the MSTP.
- 2.9 If we look at those which have participated in the Mayor’s programme, 95 per cent of the boroughs that took up MSTP funding reported an increase in street trees, as shown in figure 1 below. Conversely, four of the five non-participating boroughs reported an overall loss in street trees, making it clear that the MSTP has bolstered borough’s planting efforts.

**Figure 1: Borough street tree change and participation in MSTP**

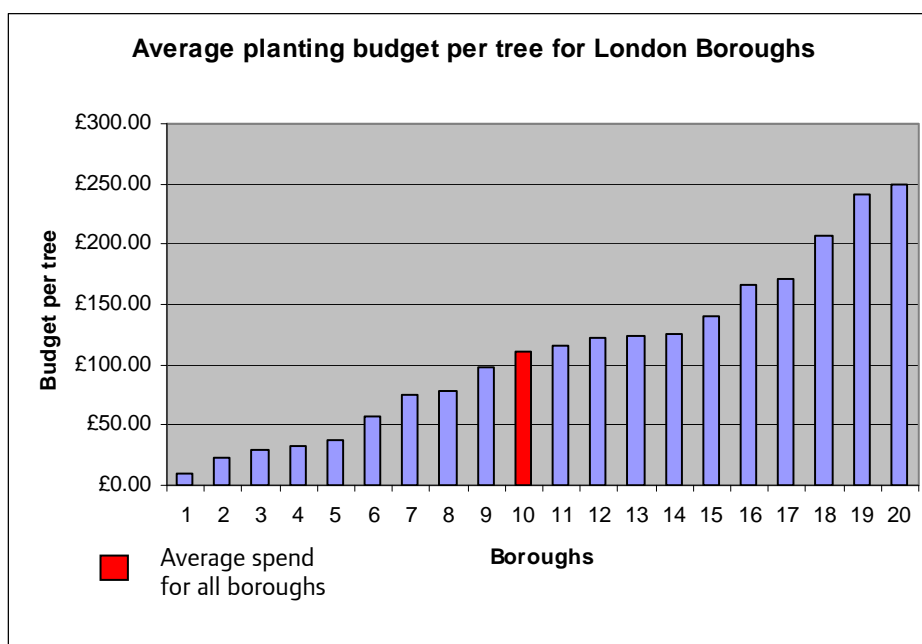


<sup>6</sup> Excludes the five non-participating boroughs in the MSTP

### Value for money

- 2.10 In comparison to borough street tree planting, it is difficult to assess whether the MSTP represents value for money. The MSTP has used a standardised grant formula based on the pre-existing London Tree and Woodland Grant Scheme, which pays up to £396 to plant a tree on a paved street, and £322 on a verge. Across all the participating boroughs, street trees planted through the Mayor's scheme have cost approximately £354 per tree on average.<sup>7</sup>
- 2.11 We have collected data from boroughs to compare how MSTP funding relates to borough planting budgets. These data show that there is a significant range in the amounts they spend on tree planting. Based on borough data, planting budgets range from £10 to £250 per tree, resulting in an average of £110 per tree, as shown in figure 2.<sup>8</sup>

**Figure 2: Average planting budgets across London boroughs**



<sup>7</sup> Figures relate to 09/10 planting season; data supplied by the GLA. The Mayor's funding includes one year's maintenance costs.

<sup>8</sup> Note that planting budgets were only supplied for 18 boroughs and therefore these figures should be treated with considerable caution. The figures supplied may not reflect all funding sources available to plant trees. This range excludes one borough for which the average planting budget per tree was £696 in 2009-10.

- 2.12 Comparisons between the cost of the Mayor's street trees and those planted by the boroughs are difficult, because our data from the boroughs are incomplete. Furthermore, the MSTP grant includes one year's maintenance funding, the equivalent of which may be included within boroughs' revenue rather than planting budgets).
- 2.13 It is, however, possible to compare the costs of the Mayor's scheme in a borough such as Wandsworth. In 2010 the borough allocated £220 per new tree planted, which also includes one year's maintenance.<sup>9</sup> In the same year, Wandsworth received a MSTP grant of £24,750 to plant 150 trees, resulting in an average allocation of £165 per tree. This would suggest that trees planted through the MSTP were delivered at lower cost than those planted by the boroughs. However, it is important to note that both the value of MSTP grants and budgets allocated by boroughs vary largely due to planting conditions.
- 2.14 On the whole, planting locations for the Mayor's trees may cost more than ordinary borough planting because the scheme is targeted at areas in locations without existing trees. Other reasons for higher costs include economies of scale and variable contracting arrangements; separate budgeting for planting and maintenance; and the type of planting pit (e.g. holes dug in a soft verge or a hard-surface).
- 2.15 We were unable to find out what planting budgets would be available to the majority of boroughs in the next few years. Most receive an annual planting budget which does not vary greatly year-on-year, but some others do not have fixed budgets for replacement or new street trees. Tree planting budgets can therefore be relatively inconsistent, which could mean that some local communities may see tree departments struggle to maintain the stock of street trees. Those which do not have a consistent budget for new street tree planting rely instead on capital grants such as Section 106 funding. If capital budgets fall, however, there are concerns that this could lead to a situation where recent gains in street trees are reversed, as explained by a tree officer from Enfield:

*'...our annual tree planting has relied this year on additional or capital funding. Should this capital funding no longer be available in 2011/2012, Enfield would not be in a position to plant any trees for this financial year; we would then be in a*

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<sup>9</sup> Written evidence from LB Wandsworth

*position that we were in 4 years ago when we were losing more trees than we were planting annually.<sup>10</sup>*

Boroughs will need to look creatively at how they can develop more diversified sources of funding. We discuss this issue in more depth in Chapter 2.

### Short-term impact of the MSTP

- 2.16 Boroughs' response to the MSTP has been favourable, but some concerns have been raised. Some boroughs have found that the scheme has boosted their own efforts while others have not been able to take full advantage of the extra trees it offers.
- 2.17 Our review has found that the majority of boroughs have largely welcomed the MSTP. Although some have queried the selection of priority areas; LB Lewisham told the Committee that the MSTP has complemented its existing targeted approach, showing that the programme has effectively reinforced the borough's own efforts:

*'Lewisham tree officers had established a policy of targeting areas considered to have a lesser percentage of trees compared to the rest of the borough in an effort to both gain a better equilibrium of tree distribution, and improve amenity value for residents. Funding from the Mayor's programme has enabled further support of this principle and as a result of funding obtained, 400 new trees were planted in the north of our borough which has, historically, been less well populated with trees. The new planting has gone a long way to reducing this deficit and has been welcomed by local residents.'<sup>11</sup>*

- 2.18 By planting trees in areas determined to be most in need, tree officers told the Committee that the new trees have made a difference to local areas. For example, London Borough of Newham noted that it has gained from the opportunity to engage communities about their local area, which has resulted in a low incidence of tree vandalism. Furthermore, there are indications that the MSTP is having an immediate impact on how local residents experience their surrounding environment, reinforcing the strong value that communities place on street trees:

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<sup>10</sup> Written evidence from LB Enfield

<sup>11</sup> Written evidence from LB Lewisham



*‘Our experience of the Mayor’s Street Tree Programme has [...] been effective in helping make the area of Yiewsley greener again and improved the aesthetic appearance of streets significantly. Overall the response from residents in this area has been positive, we are on course to beat the target of 250 trees in 4 years in this 3rd year of the programme.’<sup>12</sup>*

- 2.19 On the other hand, the targeted approach has received mixed reactions from some borough tree departments, who have found the programme restrictive. Boroughs gave a variety of reasons for the latter, including priority areas being inhospitable for street trees or too small for the number of trees allocated, insufficient demand for trees in these areas from residents, or tree officers or residents wanting to plant trees elsewhere. The London Borough of Hounslow told us:

*‘The programme has been very effective, however... it is very restricted to the two priority areas. We have received complaints from residents in the priority areas where the footpath has been narrow and the residents in these roads in particular have not welcomed the new street tree planting.’<sup>13</sup>*

This comment may point to a discrepancy between the data-informed approach and one based on local knowledge of areas where there is political and resident support for trees.

### **Long-term impact of the MSTP**

- 2.20 Our assessment of the Mayor’s scheme is limited to information on the number and cost of trees planted to date through the programme, and opinions on its impact from the main stakeholders. There is a clear argument by the Mayor – which the majority of boroughs support – that street trees should be planted in areas where there are currently few and where they can have greatest impact, and the Mayor’s new RE:LEAF London campaign aims to continue this approach.

### **Conclusion**

- 2.21 The benefits of trees on local environmental indicators such as air pollution, the urban heat island effect and noise pollution are well-

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<sup>12</sup> Written evidence from LB Hillingdon

<sup>13</sup> Written evidence from LB Hounslow

known.<sup>14</sup> We welcome the strategic approach that the MSTP has used to plant street trees where they will make most difference, and we would like to see this approach extended through all strands of RE:LEAF. Measuring the effect of new trees on environmental indicators will require evaluation over a long-term period, and the Mayor should support ongoing monitoring over the course of the RE:LEAF campaign.

#### **Recommendation 1**

**The Mayor should use his leadership of RE:LEAF to require partners to retain the MSTP's strategic approach for planting new street trees. Partners should target planting in areas of most need, using indicators on air pollution, the urban heat island effect, and noise pollution.**

#### **Beyond the Mayor's Street Tree Programme**

##### **RE:LEAF London**

- 2.22 The Mayor is unlikely to have a continuing role in directly funding street trees once the MSTP finishes in 2012. He has, however, said that he will continue to champion the role that street trees play in improving London's environment. In this vein, he launched a new campaign in winter 2010-11 called RE:LEAF London. This Mayor-led partnership (with the Forestry Commission, the Woodland Trust, Trees for Cities, the Tree Council, London Wildlife Trust, amongst others) aims to increase opportunities to plant more trees in the capital,<sup>15</sup> but it does not set aside specific financial support for street trees.
- 2.23 Isabel Dedring, the Mayor's Advisor for Environment, told the Committee at its meeting in April that RE:LEAF *'is going to be funded largely through sponsorship but also with some public sector contributions and some contributions from partners'*<sup>16</sup>. We would like to see more detail on how the Mayor will leverage funding by working with RE:LEAF partners, in order to see how his vision to plant two million more trees by 2025 will become a reality.

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<sup>14</sup> For example, see Trees & Design Action Group's recently published guide *The Canopy – London's Urban Forest: A Guide for Designers, Planners and Developers* which explains the cost-effective benefits trees have on the urban environment

<sup>15</sup> This includes trees in woodlands, parks, and street trees

<sup>16</sup> Transcript of Environment Committee meeting 6 April 2011, page 28



2.24 Through the RE:LEAF partnership, the Mayor intends to, amongst other things, encourage businesses to refill vacant tree pits, gain new funding to develop the MSTP, and promote the benefits of trees to encourage private investment in planting.<sup>17</sup> One of the campaign's main objectives is to 'extend and refocus' the MSTP to areas within or nearby the priority areas, using the principles of the scheme to plant trees in the public realm where there are currently few.<sup>18</sup> Although the Committee welcomes this aim, it is currently unclear how these will be funded or what incentives would be available to local authorities and other partners to plant in particular locations and deliver this ambition. Furthermore, boroughs need to know which locations have the greatest need for street trees. They would need to commit to providing updated data for the London-wide database used to inform the priority area selection for the Mayor's scheme.

#### **Recommendation 2**

**The Mayor should publish a detailed plan on the funding mechanisms for RE:LEAF within six months. He should also produce a plan outlining how the campaign will achieve its goals, and its partners' responsibilities.**

#### *The business community*

- 2.25 Aside from the Mayor and the boroughs, London's business community is also planting street trees in efforts to make the local business environment more attractive. Business Improvement Districts (BIDs), such as Better Bankside and the Victoria BID, have explored opportunities to make these areas greener as part of wider improvements to the public realm.
- 2.26 The Committee visited Better Bankside, where the BID has planted trees using funding from the business precept (planting around 120 trees by the end of 2010). Better Bankside plans to plant 1,000 trees in streets, private spaces and parks by 2015, using the concept of 'Bankside Urban Forest' which has a specific aim to use greenery to link the benefits of development from the riverside to south of the regeneration area in the borough.



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<sup>17</sup> GLA Request for Director's Decision – DD369, RE:LEAF London Campaign – mass tree planting, Appendix B

<sup>18</sup> Ibid

2.27 In addition to its own planting, Better Bankside BID's support for street trees has also encouraged uptake of the Mayor's programme where it may not have happened otherwise, by providing match funding to the London Borough of Southwark. Another example of business involvement through private sponsorship schemes is the Westminster Tree Trust – which this year is expected to fund 150 trees.<sup>19</sup> Examples of private sponsorship on Westminster's scale are rare, however, as the London Tree and Woodland Framework Manager explained to the Committee at our public meeting:

*'Generally speaking, across London, you get individual cases of companies providing funding for tree planting but it is on an ad hoc basis.'*<sup>20</sup>

2.28 The Committee heard from Isabel Dedring that the Mayor aims for RE:LEAF *'to work on the basis of sponsorship'*<sup>21</sup>, therefore, there are clear opportunities for the Mayor to learn from existing business-led urban planting schemes such as the Business Improvement District initiatives.

### **Recommendation 3**

**Through RE:LEAF, the Mayor should highlight good examples of tree planting undertaken by BIDs, to raise the profile of the contribution that the business community can make.**

### **Conclusion**

2.29 There is considerable cross-sector interest in planting more street trees in London. The Mayor is committed to increasing canopy cover and to enhancing street life. Other stakeholders, such as the Royal Parks, support a strategic approach:

*'There are many areas of London where street trees are absent and where a strategic planting scheme could bring enormous*

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<sup>19</sup> Written evidence from City of Westminster

<sup>20</sup> Oral evidence from Jim Smith, LTWF Manager

<sup>21</sup> Transcript of Environment Committee meeting 6 April 2011, page 27

*benefit. There is considerable scope in London for “high profile” street tree planting schemes of preferably large trees.’<sup>22</sup>*

- 2.30 Where businesses are planting trees – for instance, in Business Improvement Districts – these trees can be used to help to improve the look of the local environment, by enhancing areas where people work, do business, and visit as tourists.
- 2.31 Through the MSTP, the Mayor has made a positive contribution to the number of London’s street trees. Increasing tree canopy cover will also eventually have a role in reducing air pollution;<sup>23</sup> however, it appears that this link could be better supported. The London Development Agency (LDA)<sup>24</sup> recognises that the Mayor could make a more explicit link between his promotion of street trees and its environmental impact:

*‘The Mayor has a programme to plant street trees which is funded by the LDA. Although, at present there are no overarching programmes linking this to air pollution. The GLA’s emerging RE:LEAF campaign being launched in January 2011 should create closer synergies between these components.’<sup>25</sup>*

- 2.32 Furthermore, the process for identifying priority tree planting locations has produced a comprehensive dataset of all street trees in the capital, which is essential to support the strategic management of London’s street trees. It would be disappointing if this dataset were not maintained, updated, and made public, because the same dataset could be used to monitor change over a long period. In Chapter 4 we discuss how the Mayor is well-placed to lead this as there is currently no mechanism to assess changes to London’s treescape. The Committee believes that the Mayor now has the opportunity – through RE:LEAF – to carry forward the principles of the MSTP by using an updated evidence base to pinpoint the most needy locations, and subsequently encourage tree planting in those areas.

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<sup>22</sup> Written evidence from the Royal Parks

<sup>23</sup> See *The Mayor’s Air Quality Strategy* (Mayor of London, December 2010), Chapter 4.12.3, pages 129-130.

<sup>24</sup> The MSTP is funded by Transport for London, the London Development Agency (LDA) and the GLA.

<sup>25</sup> Written evidence from the LDA

## 3 Street tree maintenance

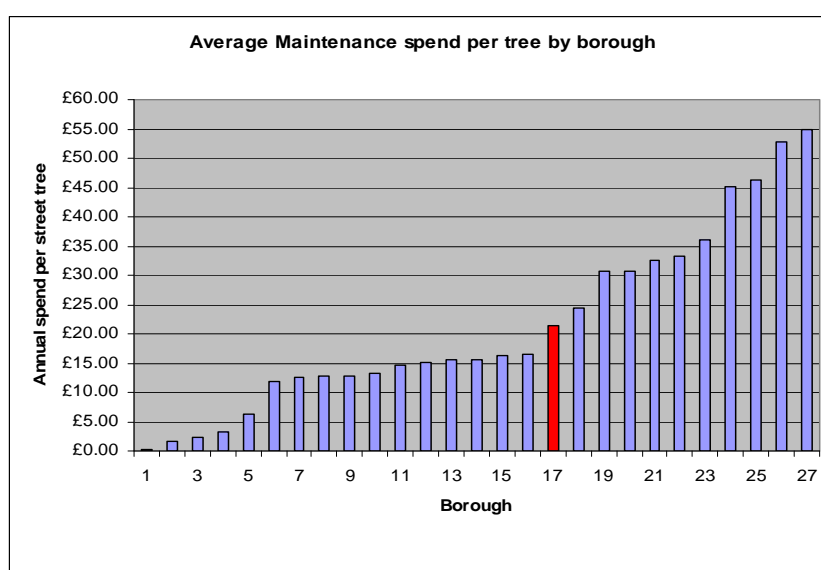
3.1 Boroughs are responsible for maintaining street trees on Local Highway Authority roads. In this chapter we look at the resources they have to do this, and what they may have in future. We are also interested in the challenges facing boroughs and how they can support their maintenance activity by using valuation systems and involving the local community.

### Current maintenance spending

3.2 The Committee has examined what effect changes to borough revenue budgets may have on their ability to adequately maintain their existing tree stock. Across London, we have found that there is a very large range between boroughs' street tree maintenance budgets. Of total street tree budgets, data indicate that tree departments spend on average just over a third on tree planting (replacements and new trees), with the remainder on tree maintenance.<sup>26</sup>

3.3 The average annual maintenance spend ranges from £55 in one borough, to under a pound per street tree in another, with an average of £21.43 per tree across all boroughs as shown in figure 3.<sup>27</sup> In the next few years, however, as boroughs expect to have smaller budgets, many anticipate reducing spending on planting, in some cases restricting their spending to just street tree maintenance.<sup>28</sup>

**Figure 3: Average maintenance spend per tree by borough**



<sup>26</sup> However, there is a range from 7% in Croydon and 67% in Haringey

<sup>27</sup> These figures are based on the 26 boroughs that supplied data on tree maintenance budgets

<sup>28</sup> For example, Enfield and Brent (supplied in written evidence)

### Future maintenance spending

3.4 Trees for Cities told us that from their perspective '*Revenue budgets for maintenance are steadily dwindling*', and it is not just from councils looking to reduce costs<sup>29</sup>. Pressure on these budgets comes from a number of factors:<sup>30</sup>

- Firstly, the costs of looking after street trees are likely to rise; 'Maintenance costs are expected to increase significantly in the coming years and this will adversely affect the budget for replacement planting.'<sup>31</sup>
- Secondly, although it is more likely to affect park trees rather than street trees, dog damage to trees poses a rising threat. Some boroughs have to use protective measures (which may be physical or non-physical barriers) to reduce dog damage which subsequently raise their costs.<sup>32</sup>
- Thirdly, councils have recently noted that more frequent snowfall in recent winters could lead to an increase in tree death and damage caused by winter gritting, which is especially likely to affect street trees.<sup>33</sup>

3.5 As a result of reduced funding, boroughs may have to carry out less regular maintenance for street trees or use cost-saving maintenance techniques to manage their street tree stock. If tree departments do not carry out regular pruning, however, they could find themselves at increased risk of requests from insurance companies to remove trees.

3.6 Cyclical pruning is a more cost effective way to manage street trees as it acts as a preventive alternative to removing trees which may have the potential to cause subsidence damage due to high water uptake.<sup>34</sup> For trees which do have the potential to cause damage in areas with vulnerable soil types, pollarding is understood to be an acceptable practice to manage the threat of subsidence damage. However, there



<sup>29</sup> Written evidence from Trees for Cities

<sup>30</sup> Committee meeting 13<sup>th</sup> January 2011

<sup>31</sup> Written evidence from LB Greenwich

<sup>32</sup> London Borough of Islington estimates that dog damage cost the borough £1m in 2009-10. LTOA (2010) *Bark better than bite: Damage to trees by dogs, best practice note*

<sup>33</sup> <http://www.telegraph.co.uk/earth/earthnews/8333386/Gritting-over-the-winter-could-have-killed-thousands-of-trees.html#>

<sup>34</sup> LTOA (2008) *Risk Limitation Strategy*, p. 17-18

are some concerns that tree departments are pollarding trees unnecessarily. The cyclical pruning of trees is largely a result of pressure from the insurance industry, as explained by Jim Smith:

*'Local authorities that do that very heavy level of pruning do so because they need to satisfy their insurance and their risk managers that those trees will not cause problems.'*<sup>35</sup>

Tree officers have clear guidance which establishes acceptable standards for tree maintenance, with the newly revised British Standard 3998 recommending that severe crown reduction should only be carried out in exceptional circumstances.

- 3.7 At our meeting in January, Jessica Lawrence, a member of Harrow Trees Protection Campaign, expressed her concern that boroughs are excessively cutting the tracery of trees. This led the LTOA to predict that this practice would become commonplace:

*'...it is the revenue budgets, the pruning budgets, when they are reduced, the sort of pruning that has to take place will take place less frequently and so, therefore, it will be more the sort of pruning that you are talking about ["savage amputation"].'*<sup>36</sup>

- 3.8 Excessive pollarding often provokes public criticism because it damages the aesthetic value of trees. It also reduces canopy cover, which is in direct opposition to the Mayor's aim to increase canopy cover across London by 5 per cent by 2025. We are very concerned that excessive pollarding will increase, and we are disappointed that this is still an ongoing issue. As we highlight here and in our previous report, there are guidelines for safe pollarding and we expect them to be followed.

#### **Recommendation 4**

**As part of RE:LEAF, the Mayor and the LTOA should support boroughs in taking a proactive role to protect their street trees. The RE:LEAF scheme should require all partners to adhere to the guidance set out in British Standard 3998 on the correct method for pollarding of street trees.**

<sup>35</sup> Oral evidence from Jim Smith, LTWF Manager

<sup>36</sup> Oral evidence from the LTOA



### Financial support for street tree maintenance

- 3.9 It is clear that boroughs require financial strategies to continue to adequately maintain London's street trees and tackle these financial challenges. Since our last report, stakeholders have told us that one of the most significant improvements in tree management has been the use of a tree valuation system.
- 3.10 Such systems allow boroughs to place a financial value on street trees, leading them to treat them as assets rather than liabilities. Tree valuation allows tree departments to recover the true cost of a tree if it has to be felled for any reason, and it can also justify maintenance spending levels on street trees. Some tree departments and Transport for London (TfL) have told us that they now use the CAVAT approach (Capital Asset Value for Amenity Trees) to value their tree stock, and witnesses at our meeting said that tree valuation can be an effective way of securing financial support within councils.
- 3.11 We support the view that wider use of a tree valuation approach would strengthen the case of tree departments for sustained investment in street trees. Furthermore, the Committee heard that the approach would help make a strong case for street tree maintenance, by treating street trees like other publicly-owned assets. The Forestry Commission told the Committee that the Institute of Asset Management recommends spending between 0.4 and 1.5 per cent of an asset's value on maintenance. The London Borough of Islington has used this system, enabling the tree department to justify and consequently protect its budget, as explained by the Forestry Commission:

*'Islington was able to demonstrate, by valuing its trees, that it was spending 0.4 per cent of its value on the maintenance. Doing that overnight, that officer was able to justify his budget straightaway, and probably protect himself from future cuts as a result of that.'*<sup>37</sup>

This suggests that boroughs could benefit from using the valuation approach to make a case for supporting their maintenance budgets.

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<sup>37</sup> Oral evidence from Jim Smith, LTWF Manager

### Community and voluntary sector involvement

3.12 In our update, we also reviewed what opportunities exist for community involvement in street tree planting and maintenance. Tree organisations and schemes to plant more street trees often mention community engagement and involvement, yet a closer look at the practical implications of community involvement shows that it is not very easy to facilitate. This is because planting on the public highway presents a public safety risk which results in prohibitive insurance costs.



3.13 Other limitations include the fact that tree maintenance such as pruning and treatment requires technical skills and specialised machinery, thereby restricting volunteers to non-technical roles such as watering. Taken together, these barriers limit the opportunities for community involvement, and therefore – whilst schemes such as the MSTP and RE:LEAF often speak about community involvement – in practice this is confined to financial sponsorship, or tree planting in parks and woodland.

3.14 Nonetheless, while local authorities and their private and third sector partners will remain responsible for planting trees, they can engage voluntary groups in other ways. These may include campaigning to support trees and maintenance initiatives which are not on the public highway, such as alerting organisations to the need to water trees in hot weather (Trees for Cities' Love Trees Hotline, for example).

3.15 Our evidence suggests that organisations are keen to involve and engage communities in tree schemes which may not be technically street trees, but those which improve the public realm (i.e. on the edges of blocks of housing). An example is Trees for Cities' engagement with the MSTP, which enabled communities to be involved in planting street trees on land adjacent to the highway but at a safe distance from traffic and pedestrians. They told us that public engagement comes at a cost and it could be even harder to resource at a time when funding for street trees is being reduced. To illustrate, funds are needed to support public consultation and communications activity. In addition, we heard that if tree planting organisations could obtain more affordable public liability and personal insurance, it may

enable more volunteers to be involved, as high insurance costs currently reduce the opportunities for involvement.<sup>38</sup>

### Conclusion

- 3.16 The ways that boroughs and their partners fund street tree maintenance may change in the next few years as they seek creative sources of support to mitigate cost pressures and the possibility of smaller budgets. If the existing tree resource is not adequately maintained, we are concerned that under-resourcing could result in a decline in the number of street trees. There are also risks that authorities will prune existing trees more severely (thereby reducing their aesthetic and environmental value) and that communities will have fewer opportunities to be involved if insurance costs remain prohibitive and boroughs have less money to spend on engagement.
- 3.17 At a time when borough budgets are under increased pressure there is scope for greater uptake of the CAVAT system. If all boroughs were to use a tree valuation process, it would mean that councils would consider trees as assets. This could be used as a mechanism to strengthen the case for sustained funding, which in turn could lead to local authorities recognising the need to invest adequately in looking after London's tree stock.

### Recommendation 5

**Through RE:LEAF, the Mayor should encourage all boroughs to adopt the tree valuation approach (i.e. CAVAT) within the next year, in order to help set benchmark levels of maintenance spending on street trees.**

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<sup>38</sup> Written evidence from the Forestry Commission

## 4 Preventing unnecessary street tree felling

- 4.1 A key part of this update investigation has been to review the Committee's recommendations made in our report *Chainsaw Massacre*, published in 2007. We are pleased that several positive developments have taken place since our last investigation to support street trees. The evidence shows, however, that boroughs could take further steps to protect trees from unnecessary felling. In this section we examine the uptake of the Joint Mitigation Protocol and what is known about the scheme's impact. We also look at how making street tree data publicly available can protect street trees from unnecessary felling.

### Joint Mitigation Protocol

- 4.2 One of the Committee's key concerns in 2007 was that borough tree departments were too quick to fell trees when residents and their insurers blamed street trees for subsidence damage. The Joint Mitigation Protocol (JMP) is a process which can help avoid unnecessary felling while providing assurance to insurers that tree departments have taken action to minimise any risk presented by street trees. Welcomed by the Committee in 2007, it is part of the LTOA's risk limitation strategy and it requires insurers to provide detailed evidence about suspected trees so that claims can be resolved more quickly.<sup>39</sup>

### JMP uptake

- 4.3 So far, the LTOA has introduced the protocol as a pilot scheme and a number of boroughs and insurers have signed up. Although only eight boroughs and three insurers have signed the JMP, the insurer signatories (Aviva, HBOS and Zurich) represent 50% of the market.<sup>40</sup>
- 4.4 However, as a result of limited uptake, there is a lack of data and evaluation on its use so far. This is, in turn, one of the main factors deterring other signatories from the JMP, and although the scheme has been extended to local authorities outside London, there is still no review of its impact.
- 4.5 Added to the small number of signatories, there have been fewer subsidence claims in the years since the protocol was introduced; for example, there were under 30,000 claims in summer 2010, compared to over 55,400 in 2003 (when subsidence claims rose following a very hot summer). Moreover, few cases have used the JMP: at the time of

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<sup>39</sup> London Assembly (2007) *Chainsaw Massacre*

<sup>40</sup> Oral evidence from private meeting with Association of British Insurers, 26 January 2011

writing, only 32 cases had been processed using the JMP and a further 28 cases were pending.<sup>41</sup> This means that there are fewer cases to test how effective the protocol is and to evaluate the extent to which it improves claims handling.

### *Impact of the JMP*

- 4.6 Despite the relatively low uptake, it is clear that tree departments generally support the objectives of the JMP: 'The JMP enables us to work closely with loss adjusters and arboricultural consultants to ensure that an alleged subsidence claim is properly investigated. This also helps in reducing the amount of spurious claims.'<sup>42</sup> Several of the boroughs which have not signed the JMP have started to use some of its principles, adopting particular procedures to retain control over how they use it. Some have done this to avoid being 'tied in' to what they consider a rigid process, while others have not been able to gain sufficient support from within the local authority.
- 4.7 Insurers are also positive about the potential benefits of the JMP. By establishing a shared process with clear stages, the protocol ensures that all parties know the protocol sequence, timescales for introducing measures, and cost expectations, as explained by the ABI:

*'... the JMP adds significant value by virtue of the fact that timescales for action by both councils and insurers are set, plus evidential levels are agreed in advance being linked to the CAVAT tree value. In addition, it is hoped that closer working relationships between council tree officers and insurers' representatives will be developed as the Protocol is increasingly used.'*<sup>43</sup>



### **Conclusion**

- 4.8 In conclusion, some boroughs have taken steps to safeguard their tree stock using the JMP. But boroughs and the Association of British Insurers believe that whilst the JMP has the potential to be mutually effective, both groups want to see evidence of its impact. There is also a lot of support for the Protocol from those involved in its design such as the Forestry Commission and the LTOA. Given that the pilot has been running for over two years, boroughs would now benefit from data on the effectiveness of the scheme. The current small number of

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<sup>41</sup> Written evidence from the ABI

<sup>42</sup> Written evidence from LB Southwark

<sup>43</sup> Written evidence from the ABI

borough signatories makes it difficult to evaluate its success and there appears to be a lack of momentum to take it forward.

- 4.9 The JMP could, however, be instrumental in improving relations between the insurance industry and tree departments, resulting in shorter timeframes to resolve claims and reduced costs. According to the ABI, boroughs need to adhere to the JMP timescales, which will allow partners to fairly test the protocol. If those using the Protocol became more familiar with it, they could collect data on the outcomes, assess its effectiveness, and therefore make recommendations on how to improve the Protocol.
- 4.10 Participating organisations could share this outcome data with potential signatories, thereby promoting further uptake. The LTOA have agreed to take forward data collection on behalf of the JMP working group, and the working group will need to decide how to use the results. We think there is obvious value in communicating the results to the insurance companies and boroughs which are not yet signed up.

#### **Recommendation 6**

**The LTOA should evaluate the Joint Mitigation Protocol (JMP) and distribute the findings to its members within the next 12 months. The Mayor should also promote the JMP to boroughs through RE:LEAF to support his objective of increasing the number of trees in London.**

#### **Data on London's street trees**

- 4.11 In our 2007 report we published data on the number of street trees in London boroughs, and we recommended that the LTOA should make public an annual update of the data to allow effective monitoring of street trees in London. Our view – then and now – is that publicly available street tree data would both provide accountability to protect street trees and allow the Mayor to monitor future changes to tree canopy cover in support of his strategic objectives.
- 4.12 Disappointingly, four years on from our report there are still no data about street trees in the public domain. In this update we have sought to obtain street tree data from a number of groups who collect it. The LTOA and the GLA hold pan-London data, but we have found that they are unwilling to, or cannot release it because of concerns about



its sensitivity. As far as we are aware, no data on London's street trees have been published since the Committee last gathered this information in 2007. For this update report the Committee wrote to all the boroughs in winter 2010 to refresh its dataset.

- 4.13 These data are presented in Table 2 in Appendix 2, and they are the basis for the figures which inform the chapters on planting and maintenance.<sup>44</sup> There are limitations to the data we have collected however, such as changes to the data management systems which boroughs use to record their data, which weaken its comparability. Also, boroughs record street trees differently and some can only provide estimates, so we have concerns about its reliability. We explain the data limitations further in Appendix 1.
- 4.14 Despite the data limitations, Figures 4 and 5 in Appendix 1 provide an example of how street tree data can be used to show street tree density by borough. The maps illustrate that there are more street trees per square kilometre in some of the inner London boroughs such as Islington and Southwark than some of the larger suburban boroughs. If the data were regularly updated and in the public domain, the public would be able to monitor any changes to street tree density. This would allow an assessment to be made about which boroughs in London are increasing or decreasing their street tree resource, over time.

#### **Barriers to street tree data collection**

- 4.15 The main barrier to preventing the publication of street tree data is concern about how it may be used in the public domain. Boroughs are both concerned that insurers could use it for commercial benefit to prejudice insurance premiums, and, that they will be unfavourably compared against other boroughs.<sup>45</sup>
- 4.16 Furthermore, whilst the LTOA are currently encouraging boroughs to share their data, at borough level there are concerns about the resources required to provide updated records. The Forestry Commission thinks that boroughs will now be less likely to invest in data systems when their budgets are already stretched:

*'Many boroughs already have data storage systems with their street trees information held centrally for the purposes of*

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<sup>44</sup> Appendix 2 sets out the street tree data collected by other bodies.

<sup>45</sup> Written evidence from the GLA

*contract management. However for this data to be useful in a London-wide context it needs to be updated on a regular basis, either annually or once every two to three years. This survey work is costly and will become increasingly problematic in future years when public spending is reduced.*<sup>46</sup>

- 4.17 Despite the absence of routinely published data, we see a clear need for this information to be in the public domain. Open data are rapidly becoming available for a wide range of datasets, often with the aim of holding those who control public budgets to account. Publicly available data about street trees would show communities which areas are currently deficient in street trees. Acknowledging the scale of the resource would also help promote greater public, private and third-sector support and investment. The Mayor should lead by example by publishing data on the trees planted through the MSTP, showing how many trees each of the priority areas have received. In the case study overleaf we show an example of how open data can help communities to visualise the effect trees have on a local area.

### Conclusion

- 4.18 London street tree data should be in the public domain. Sharing this information would allow communities to hold local councils and the Mayor to account. It is unsatisfactory for the Assembly to collect this data on a periodic basis. There is a ready and robust dataset available through Greenspace Information for Greater London (GiGL), but it would require boroughs to agree to submit their data on an annual basis. We do not think this would present a disproportionate bureaucratic burden or be expensive. In contrast, it would allow a records management organisation (such as GiGL) to manage the data on boroughs' behalf, thereby alleviating tree departments of that cost. We believe that there is now a clear opportunity – through RE:LEAF, which is aimed at extending canopy cover across the capital – to highlight the importance of open data.

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<sup>46</sup> Written evidence from the Forestry Commission

**Recommendation 7**

**As part of RE:LEAF, the Mayor should encourage boroughs to supply their updated data to the existing data management system established to inform the Mayor's Street Tree Programme (MSTP) by the end of the MSTP in April 2012. This data should be shared on London Datastore and updated annually.**

**The Mayor should publish on London Datastore a list of all the new trees planted in the priority areas in each year of the MSTP. This data should include the numbers planted by broad category of tree (i.e. broadleaf/ ornamental) and the value of the grants allocated to each priority area.**

### **Case study – public tree data for the Heygate estate**

The Heygate Estate in Elephant and Castle has a large number of mature street trees in a heavily built up part of London. The estate lies in between two of the Mayor's priority areas – Borough and Camberwell.

The estate is earmarked for demolition in three phases as part of a major redevelopment. Almost all of the residents have moved and the first phase of the demolition has commenced.

When local residents in the Elephant Amenity Network saw early plans for the redevelopment of the Heygate Estate in Southwark, they were alarmed that there were very few trees in the artists' impressions. So they began to put pressure on Southwark Council and the developers to protect mature street trees from being cut down, and to make sure all lost trees were replaced.

Residents decided that it would help their case if they could count the number of trees on the estate and estimate their value using the CAVAT system. As there is no publicly available data they decided to map the trees themselves.

They produced a map of the 410 trees that still stand on the two sections of the estate not yet being demolished to publicise and support their case. Lacking any open data from the council, they did this with the support of the local OpenStreetMap community, who provided the tools and expertise for communities to map their own local trees.<sup>47</sup>

With this information the group can independently check and monitor the loss of trees on the estate. Both the mapping and CAVAT data enable them to build case for protecting the trees in their meetings and correspondence with Southwark council and the landowner.



<sup>47</sup> The map is available at <http://tomchance.dev.openstreetmap.org/trees.html>

## 5 Conclusion

- 5.1 Since the Committee's previous investigation, there has been some progress in establishing processes - such as the JMP - to better protect street trees in London from the threat of indiscriminate felling. The Mayor's Street Tree Programme has also made a welcome contribution to the number of street trees by planting additional trees in areas with few trees.
- 5.2 We recognise that tree departments are under pressure, face stretched resources and that they will not be able to access the same levels of funding from the Mayor in the next few years. The stakeholders we have spoken to have told us that tree departments can make use of some support mechanisms to ensure that they continue to plant, maintain, and protect their tree stock. These include working with businesses and other potential sponsors, making greater use of tree valuation, adopting the JMP, and publishing tree data to bolster public and political support. To support his ongoing campaign for two million additional trees in London by 2025, the Mayor should promote the good practice we highlight here to help reach this target.

# Appendix 1 Committee street tree survey 2011

## Data limitations

There are a number of caveats that should be applied to the data, relating to the information that boroughs hold and limitations affecting our data collection. Therefore, the results should be treated with caution and some key caveats applied, as explained below:

- Some boroughs do not have a central database of all street trees.<sup>48</sup> While most boroughs have electronic databases, others remain paper-based and they may therefore be updated less often.
- Some boroughs do not have accurate data for all trees,<sup>49</sup> or their databases are incomplete<sup>50</sup> because they haven't been updated with recently planted trees. Therefore their figures may be based on estimates.
- Data supplied for our previous investigation was in some cases based on inaccurate estimates, or included borough-maintained trees which were not street trees (i.e. park and woodland trees). In these cases, mis-classification of trees on a borough's database means that this year's cannot be accurately compared with the baseline.<sup>51</sup>
- Some trees which act as street trees may be private, and therefore they are not maintained by the boroughs. Data management systems cannot record these non-LHA trees, so they do not appear in the figures.<sup>52</sup>
- The data do not all relate to the same time period: we asked boroughs for data for the most recently available year; some data relate to 2009-10 and others 2010-11.

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<sup>48</sup> Forestry Commission

<sup>49</sup> LB Richmond

<sup>50</sup> LB Greenwich

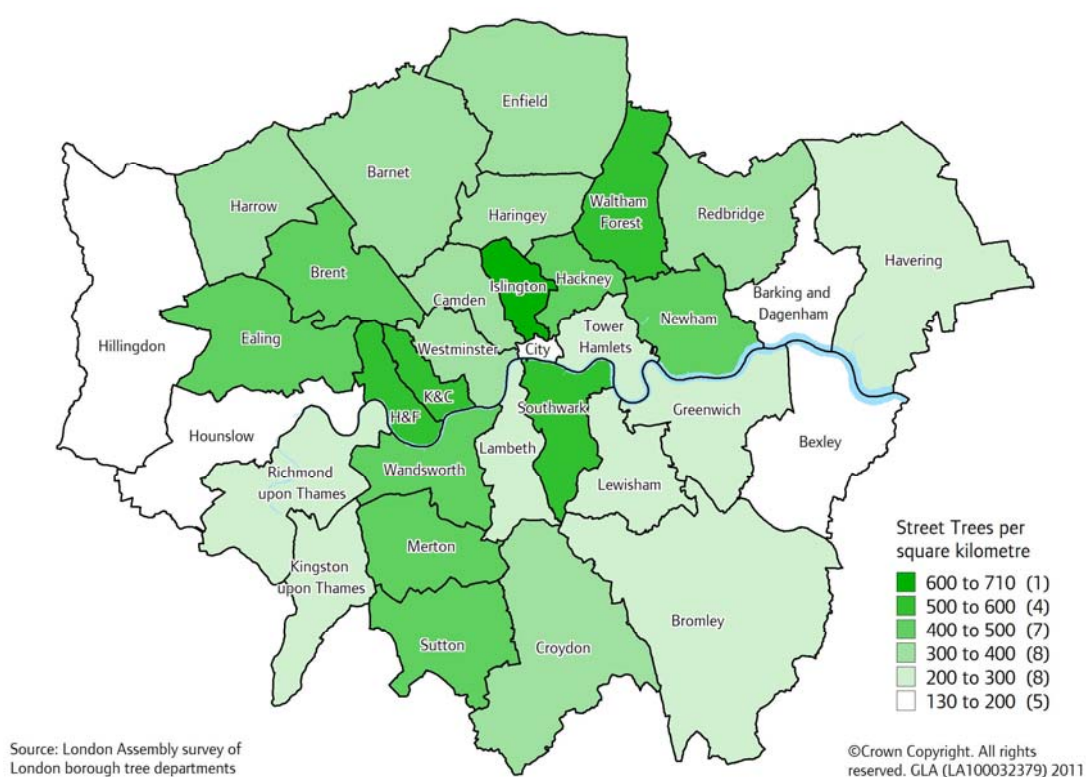
<sup>51</sup> City of London

<sup>52</sup> LB Redbridge

### Examples of uses of street tree data

In Figures 4 and 5, and Table 1 below, we provide examples of how street tree data can be viewed at borough level.

**Figure 4: Street trees per square kilometre, 2011**



### Results

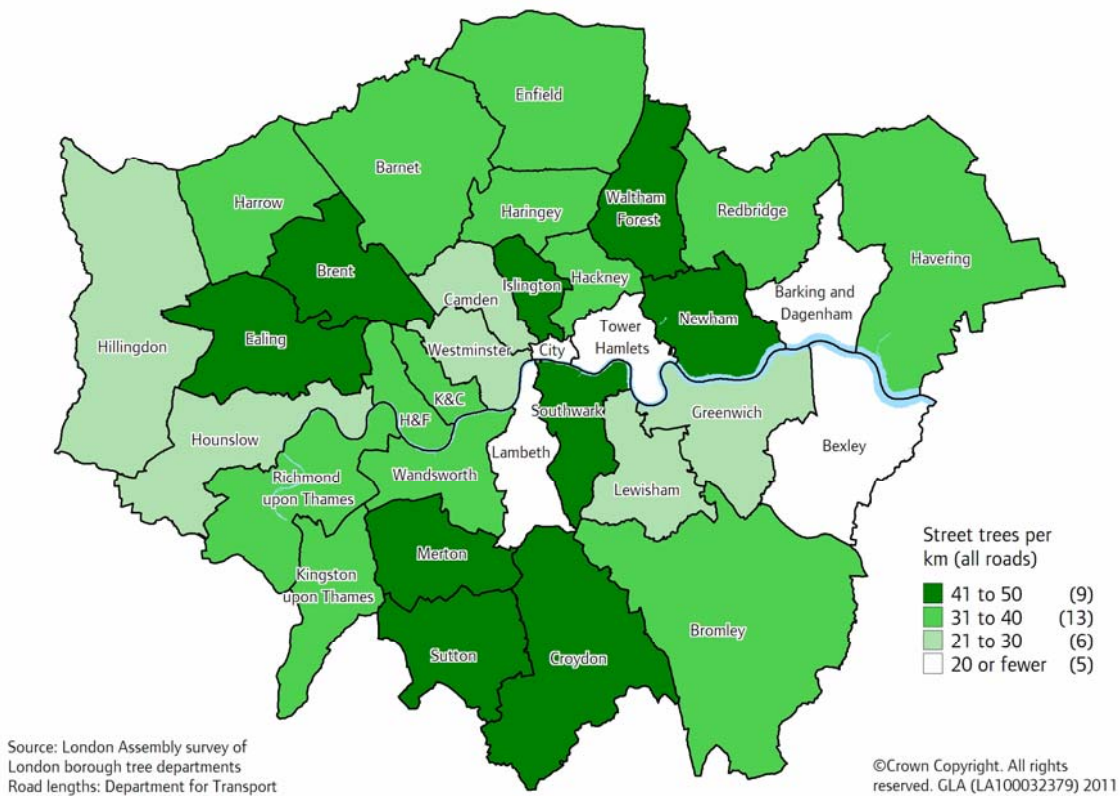
Figure 4 shows number of street trees per square kilometre. Based on the figures supplied by the boroughs, it suggests that the some of the smaller inner London boroughs have a relatively high concentration of street trees. LB Islington has the highest number of street trees per square kilometre, followed by LB Southwark, Royal Borough of Kensington and Chelsea and LB Hammersmith and Fulham. In contrast, some of the larger outer London boroughs such as the London Boroughs of Barking and Dagenham, Hillingdon, Bexley, and Hounslow have fewer street trees per square km.

**Table 1: Street trees per square kilometre, 2011**

<b>Borough</b>	<b>Area (km<sup>2</sup>) excluding tidal water</b>	<b>Estimated total street trees in 2011</b>	<b>Street trees per km<sup>2</sup></b>
Barking and Dagenham	36.0	4800	133
Barnet	86.7	29119	336
Bexley	60.6	10500	173
Brent	43.2	20000	463
Bromley	150.1	36000	240
Camden	21.8	8282	380
City of London	2.9	531	183
Croydon	86.5	33000	381
Ealing	55.5	24511	441
Enfield	82.2	25000	304
Greenwich	47.3	13000	275
Hackney	19.0	9500	499
Hammersmith and Fulham	16.4	8738	533
Haringey	29.6	11500	389
Harrow	50.5	16810	333
Havering	112.3	23000	205
Hillingdon	115.7	16000	138
Hounslow	56.0	11034	197
Islington	14.9	10455	704
Kensington and Chelsea	12.1	6505	537
Kingston upon Thames	37.3	11000	295
Lambeth	26.8	6888	257
Lewisham	35.1	9278	264
Merton	37.6	16150	429
Newham	36.2	17555	485
Redbridge	56.4	21195	376
Richmond upon Thames	57.4	15000	261
Southwark	28.9	16500	572
Sutton	43.8	19848	453
Tower Hamlets	19.8	4000	202
Waltham Forest	38.8	20000	515
Wandsworth	34.3	13915	406
Westminster	21.5	8072	376



**Figure 5: Street trees per kilometre (all roads), 2011**



### Results

Figure 5 shows the number of local authority maintained street trees<sup>53</sup> by borough street length. As in Figure 4, it shows that some of the inner London boroughs such as Islington, Southwark and Newham have a relatively high number of street trees distributed across their total road network.

<sup>53</sup> This map is illustrative only. The total number of street trees does *not* include street trees maintained by TfL on the Transport for London Road Network; however the road lengths include *all* roads (including the TLRN).

## Appendix 2 Table 2 – Survey results

Borough	Estimated total street trees in 2007	Estimated total street trees in 2011 <sup>54</sup>	Trees planted in boroughs, 2009-10	Trees felled in boroughs, 2009-10	Net in-year change in street trees, 2009-10 <sup>55</sup>	Mayor's street trees planted in 2009-10
Barking & Dagenham	4500	4800	30	25	5	379
Barnet	36000	29119	508	313	195	88
Bexley	11000	10500	402	239	163	75
Brent	18000	20000	100	50	50	70
Bromley	34710	35500	962	539	423	208
Camden	10000	8282	333	127	206	0
City of London	1653	531	15	14	1	0
Croydon	33000	33000	400	550	-150	0
Ealing	26500	24511	431	238	193	202
Enfield	20000	25000	1410	369	1041	265
Greenwich	12000	13000	415	292	123	0
Hackney	7000	9500	476	96	380	0
Hammersmith & Fulham	8695	8738			0	97
Haringey	10000	11500	745	145	600	150
Harrow	18000	16810	946	400	546	400
Havering	23500	23000	412	406	6	0
Hillingdon	16000	16000	400	300	100	88
Hounslow	11275	11034	893	280	613	310
Islington	10790	10455	642	143	499	0
Kensington & Chelsea	7880	6505	145	137	8	0
Kingston upon Thames	10000	11000	48	151	-103	0
Lambeth	9371	6888	484	99	385	186
Lewisham	12000	9278	425	167	258	355
Merton	14000	16150	446	229	217	207
Newham	16200	17555	755	337	418	0
Redbridge	20872	21195	795	631	164	94
Richmond upon Thames	16000	15000	400	400	0	41
Southwark	15436	16500	720	142	578	0
Sutton	22000	19848	530	205	325	135
Tower Hamlets	4253	4000	300	200	100	138
Waltham Forest	22000	20000	158	547	-389	100
Wandsworth	14500	13915	200	321	-121	0
Westminster	8400	8072		42	-42	0
<b>Total</b>	<b>505535</b>	<b>497186<sup>56</sup></b>	<b>14926</b>	<b>8134</b>	<b>6792</b>	<b>3588</b>

<sup>54</sup> Estimated total street trees in 2007 and 2011 are not directly comparable because the 2007 data included a large number of estimates. A more detailed explanation of data caveats is provided in Appendix 1.

<sup>55</sup> It is unclear from the borough survey if the Mayor's street trees are all included in these data. See Chapter 2, 2.5 – 2.9 for discussion on the additionality of the Mayor's scheme.

<sup>56</sup> In addition to local authority-maintained street trees, TfL maintain approximately 19,300 trees on the Transport for London Road Network (red routes), which are not included in these figures (written evidence from TfL). If TLRN trees are added to the total, London has around 517,000 street trees.

## Appendix 3 Previous street tree data collection

### *The London Assembly Environment Committee and LTOA, 2007*

In this data gathering exercise with the LTOA, we reported net change in street trees over the previous 5 years, finding that there had been a 1.7% net gain across London between 2002 and 2007. It is important to note, however, that although the survey included all 33 boroughs, 10 of the boroughs were unable to report full data over the period, 5 of which supplied estimated figures.

### *LTOA biannual survey*

Most recently carried out in late 2010, the survey asks boroughs for data on new street trees and planting budgets. These data enable the LTOA and boroughs to benchmark themselves against others; however, as such, it is only shared among the boroughs. Other groups can have restricted access to coded (anonymous) data. Unfortunately the 2010 survey data had not been analysed at the time of writing, therefore we are unable to make comparisons between this and the data we have collected.

### *Mayor's Street Tree Programme*

Greenspace information for Greater London (GiGL) collected data from all London boroughs on street tree location, height, girth, canopy and age, among other attributes. GiGL applied a data cleaning process to standardise these data (restricting it only to street trees), followed by GIS mapping which they overlaid with the other selection criteria to inform the priority areas.<sup>57</sup>

This dataset comprises the most recent and robust available data, however it is not in the public domain. The Assembly cannot have access to it even though it was gathered for the GLA. In a bid to get more use from this dataset, the Forestry Commission and LTOA have worked to produce a data licence agreement that the boroughs can sign giving permission to certain other organisations. Despite the licence agreement, only a small number of boroughs have agreed to share it with the GLA, and this was too small a sample to use for our investigation.

This dataset could be a valuable resource for the Mayor and others. It would be readily updatable because boroughs could upload their changed data on an annual basis, and the existing GiGL system could

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<sup>57</sup> We discuss the selection process in depth in Chapter 1

analyse any changes. The Mayor and other stakeholders could use this information to measure changes in street trees over time, and use it to identify strategic priority areas for new trees.

*The London Assembly Environment Committee survey, winter 2010-11*

Given that one of the main aims of this investigation was to assess the growth or decline of street trees since our last report, and that no public data existed, the Committee decided to request it directly from the boroughs. Although written evidence from the boroughs indicates that data collection methods have improved (i.e. there are fewer estimates than in 2007), the data are not fully comparable because not all boroughs were able to supply budgetary information. The data are explained in more depth in Appendix 1.

# Appendix 4 Recommendations

## Recommendation 1

The Mayor should use his leadership of RE:LEAF to require partners to retain the MSTP's strategic approach for planting new street trees. Partners should target planting in areas of most need, using indicators on air pollution, the urban heat island effect, and noise pollution.

## Recommendation 2

The Mayor should publish a detailed plan on the funding mechanisms for RE:LEAF within six months. He should also produce a plan outlining how the campaign will achieve its goals, and its partners' responsibilities.

## Recommendation 3

Through RE:LEAF, the Mayor should highlight good examples of tree planting undertaken by BIDs, to raise the profile of the contribution that the business community can make.

## Recommendation 4

As part of RE:LEAF, the Mayor and the LTOA should support boroughs in taking a proactive role to protect their street trees. The RE:LEAF scheme should require all partners to adhere to the guidance set out in British Standard 3998 on the correct method for pollarding of street trees.

## Recommendation 5

Through RE:LEAF, the Mayor should encourage all boroughs to adopt the tree valuation approach (i.e. CAVAT) within the next year, in order to help set benchmark levels of maintenance spending on street trees.

## Recommendation 6

The LTOA should evaluate the Joint Mitigation Protocol (JMP) and distribute the findings to its members within the next 12 months. The Mayor should also promote the JMP to boroughs through RE:LEAF to support his objective of increasing the number of trees in London.

## Recommendation 7

As part of RE:LEAF, the Mayor should encourage boroughs to supply their updated data to the existing data management system established to inform the Mayor's Street Tree Programme (MSTP) by the end of the MSTP in April 2012. This data should be shared on London Datastore and updated annually.

The Mayor should publish on London Datastore a list of all the new trees planted in the priority areas in each year of the MSTP. This data should include the numbers planted by broad category of tree (i.e. broadleaf/ ornamental) and the value of the grants allocated to each priority area.

# Appendix 5 Orders and translations

## How to order

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### Chinese

如您需要这份文件的简介的翻译本，  
请电话联系我们或按上面所提供的邮寄地址或  
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### Vietnamese

Nếu ông (bà) muốn nội dung văn bản này được dịch sang tiếng Việt, xin vui lòng liên hệ với chúng tôi bằng điện thoại, thư hoặc thư điện tử theo địa chỉ ở trên.

### Greek

Εάν επιθυμείτε περίληψη αυτού του κειμένου στην γλώσσα σας, παρακαλώ καλέστε τον αριθμό ή επικοινωνήστε μαζί μας στην ανωτέρω ταχυδρομική ή την ηλεκτρονική διεύθυνση.

### Turkish

Bu belgenin kendi dilinize çevrilmiş bir özetini okumak isterseniz, lütfen yukarıdaki telefon numarasını arayın, veya posta ya da e-posta adresi aracılığıyla bizimle temasa geçin.

### Punjabi

ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਦਾ ਸੰਖੇਪ ਅਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਲੈਣਾ ਚਾਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਉਪਰ ਦਿੱਤੇ ਡਾਕ ਜਾਂ ਈਮੇਲ ਪਤੇ 'ਤੇ ਸਾਨੂੰ ਸੰਪਰਕ ਕਰੋ।

### Hindi

यदि आपको इस दस्तावेज़ का सारांश अपनी भाषा में चाहिए तो उपर दिये हुए नंबर पर फोन करें या उपर दिये गये डाक पते या ई मेल पते पर हम से संपर्क करें।

### Bengali

আপনি যদি এই দলিলের একটি সারাংশ নিজের ভাষায় পেতে চান, তাহলে দয়া করে যোগাযোগ করবেন অথবা উল্লিখিত ডাক ঠিকানায় বা ই-মেইল ঠিকানায় আমাদের সাথে যোগাযোগ করবেন।

### Urdu

اگر آپ کو اس دستاویز کا خلاصہ اپنی زبان میں درکار ہو تو، براہ کرم نمبر پر فون کریں یا مذکورہ بالا ڈاک کے پتے یا ای میل پتے پر ہم سے رابطہ کریں۔

### Arabic

الحصول على ملخص لهذا المستند بلغة،  
فرجاء الاتصال برقم الهاتف أو الاتصال على  
العنوان البريدي أو العادي أو عنوان البريد  
الإلكتروني أعلاه.

### Gujarati

જો તમારે આ દસ્તાવેજનો સાર તમારી ભાષામાં જોડતો હોય તો ઉપર આપેલ નંબર પર ફોન કરો અથવા ઉપર આપેલ ટપાલ અથવા ઈ-મેઇલ સરનામા પર અમારો સંપર્ક કરો.

# Appendix 6 Principles of scrutiny page

## **An aim for action**

An Assembly scrutiny is not an end in itself. It aims for action to achieve improvement.

## **Independence**

An Assembly scrutiny is conducted with objectivity; nothing should be done that could impair the independence of the process.

## **Holding the Mayor to account**

The Assembly rigorously examines all aspects of the Mayor's strategies.

## **Inclusiveness**

An Assembly scrutiny consults widely, having regard to issues of timeliness and cost.

## **Constructiveness**

The Assembly conducts its scrutinies and investigations in a positive manner, recognising the need to work with stakeholders and the Mayor to achieve improvement.

## **Value for money**

When conducting a scrutiny the Assembly is conscious of the need to spend public money effectively.



**Greater London Authority**

City Hall  
The Queen's Walk  
More London  
London SE1 2AA

**[www.london.gov.uk](http://www.london.gov.uk)**

Enquiries 020 7983 4100  
Minicom 020 7983 4458