

## **URBAN TREE CHALLENGE- A DRAFT PROPOSAL FROM THE TREES AND DESIGN ACTION GROUP FOR DISCUSSION**

### **Overview**

At a meeting about the Defra Urban Tree Challenge (and Defra consultation response - <https://consult.defra.gov.uk/forestry/protecting-trees-and-woodlands/> ) in Birmingham on 8<sup>th</sup> January 2019, part of the discussion was about the urban street tree challenge - £10 million over 3 years to be match-funded (in both cash and kind) to plant 1 million urban trees.

Keith Sacre, Barcham Trees and Jeremy Barrell, Barrell Tree Consultancy and both TDAG trustees, were at the meeting and at a table with Sir William Worsley, the Defra Tree Champion. They put forward the idea that, instead of spreading the funds equally across the country, it would be useful to apportion part of that fund to an exemplar project. Sir William talked in terms of c. £2 million of the fund for this.

In response the Trees and Design Action Group have proposed a 'living laboratory' where the impact of planting trees could be assessed over time and measured against agreed criteria covering physical, social/educational and economic outcomes. Of course all this would need to be recorded on a scientific basis.

This ambitious project could be ground-breaking and have international as well as national benefits creating a model which others could then follow. It would deliver more than planting a few trees in many small and scattered sites across the country. This has been the outcome of previous well intentioned central and local government initiatives to encourage tree planting. Little has been learned as a result of these schemes.

We consider that Cambridge/South Cambridgeshire would provide a very good location for a 'living laboratory' approach as it demonstrates many elements that are typical of many towns and cities i.e. areas of affluence and tree cover and areas of deprivation and lack of tree cover, areas of new development along with the need to improve existing places where lack of tree cover and social deprivation appear to be linked.

There is already some good base data for the area to work from.

### **What could this approach achieve?**

1. **Scale:** there is a lot of well publicised research about the benefits of urban trees, but this project would enable the benefits to be tested at a larger scale than most of the research carried out to date and thus providing an evidence base for future initiatives and an understanding of what works and what doesn't.
2. **Physical tree related issues:** there is much that we still need to understand about urban trees and how best to grow, select, plant and manage them to deliver the promised benefits over time This project would enable a range of practices to be scientifically tested in the field and the outcomes measured.
3. **Environmental benefits:** i-Tree Eco is a methodology for quantifying a range of eco-systems services provided by trees. This project would reverse the process and establish critical benefits required in different areas and so plant trees to deliver them and then test the results. This would cover areas such as air quality, carbon sequestration, urban cooling, sustainable urban drainage, shade provision and many more.
4. **Social benefits:** there is much talk about placemaking and the benefits of living in areas with good levels of canopy cover, with tree-lined streets which encourage walking and active travel and so improve health and well-being. Is it reasonable

in the 21st century, when we know about these benefits, for some people to live in areas of 'green deprivation'? What does it mean for communities when the quality of their places is improved? What health factors improve? Are there other measurable improvements? This project would enable some useful before and after data as an evidence base for the value of planting trees throughout our towns and cities. By carefully assessing current health indicators such as prescription use, obesity levels, diabetes levels, birth weight it will be possible to measure if these change as the urban forest grows. Research has indicated that these and many other health issues can be positively impacted by the urban forest.

5. **Economic benefits:** we know that there are increases in property value in areas with more canopy cover and, indeed, the phrase 'tree-lined street' is one of the estate agent's selling points. Research has also demonstrated that tree lined streets can strengthen the retail economy, especially the high street, by encouraging greater footfall, longer time spent in the shopping area and greater per head spend. There is also evidence that exposure to green space, including views of trees and canopies enhances concentration and productivity. As with above-mentioned evidence findings, most of the research on these topics from abroad, especially the USA. Gathering UK relevant information would facilitate much needed enhanced integration of economic growth/regeneration and environmental enhancement initiatives.
  
6. **Crime and Behaviour:** there is a great deal of research, largely from the USA which indicates that the presence of trees and green space can have an impact in reducing anti-social behaviour and the incidence of street crime. There is also evidence which suggests that the presence of trees in can impact on educational attainment.

The above is not intended to be fully comprehensive but serves to outline the potential of setting up a living laboratory where the ideas, working practices and past and current research can be tested on a large scale over a meaningful time period. It also offers the opportunity for full community and stakeholder involvement as well as engaging the academic and research communities across disciplines.

As a precedent, it is worth noting that some of the best performing metropolitan areas across the world in terms of scaling up the use of urban trees to create better places (Greater Lyon, France; Melbourne, Australia; Stockholm, Sweden; etc.) all have in common the use of "research and development" programmes – where a significant proportion of all major projects is allocated, on an annual basis, to innovation, monitoring and learning. As an example, the Greater Lyon Authority focuses on three research themes:

- Soils / growing media for urban trees
- Coping with temperature rise (using trees for more climate resilience / how to adapt the plant palette to a changing climate)
- Using trees for water management

See [page 52, Greater Lyon Tree Charter](#) for more details.

The proposal would be led by Cambridge City Council, South Cambridgeshire Council with other relevant community and academic partners.