



Sheffield Trees Action Groups (STAG), May 2017

Street Tree Manifesto for Parliamentary Candidates

This has been drawn up to bring attention to issues for our national Parliament, arising from the controversy over premature replacement of healthy street trees in Sheffield.

Protect and Create Street Tree Canopy for Health

Large street trees make a unique and significant contribution to residents' health (1). It must be a priority for National and Local government to protect established healthy Street Tree Canopy and have a comprehensive policy to plant new large crowned street trees across all our towns and cities, especially in areas of health inequality.

Include Trees in Air Quality Policy

There is a national crisis over dangerous air pollution. Street trees have been shown to mitigate such pollution, especially at 'hot spots' such as busy roads (2). Government must develop clear, evidence-backed strategies to conserve and create tree canopy where it will help deal with air pollution.

Stop Creating Private Monopolies over our Public Services.

The democratic crisis over Sheffield's Street Trees is the direct result of awarding long-term control of our streets to a multinational company. Government must stop using risky, expensive and inflexible PFI contracts (3) and awarding local monopolies that allow powerful big companies to control public services for decades (4). Government must act to ensure that existing long term contracts do not prevent Local Authorities from responding to changing priorities (3,4).

Ensure Comprehensive Street Tree Management Strategies

Given the importance of Street Tree Canopy to health and wellbeing, both on the highway and on adjacent private land, Government must require local highway and planning authorities to have comprehensive strategies for management and further creation of street tree canopy, informed by the best arboricultural practice, taking account of environmental impact and financial value of trees and not compromised by highway maintenance, property development or other secondary concerns. Appropriate financial penalties should be in place for Local Authorities that do not conserve valuable street trees.

Notes.

1. Street tree canopy has a measurable and substantial positive effect on residents' health.

Clinical and epidemiological studies over several decades, particularly in the field of Architecture for Healthcare, have demonstrated the positive relationship between health and contact with nature. More recently evidence has emerged of direct connections between street trees and residents' health, for example when a large number of street trees died from an epidemic in parts of the USA.

To investigate this more fully, University of Chicago carried out an epidemiological study of street trees and health in Toronto, using satellite images to measure tree canopy and the Ontario Health Survey to map health indicators and factors that might affect health.

The conclusion was dramatic: where there was a significant tree canopy (typically 10 big trees per city block) the effect on residents' physical and mental health was similar to being 7 years younger. This peer-reviewed research is published in Nature, the world's most highly regarded scientific journal (Kardan 2015)

2. Street trees reduce air pollution in the immediate locality

This issue has been debated for many years and until recently there has been little reliable evidence.

The Centre for Environmental Magnetism & Palaeomagnetism at Lancaster University created an experiment in which a temporary row of trees was placed outside a row of houses and levels of air pollution measured before and after with swab samples from TV screens.

The study showed more than 50% reduction in pollution when trees were in place, indicating that previous estimates may have greatly understated the effect of street trees on the air that residents breathe (Maher 2013)

3. PFI is risky, expensive and inflexible

PFI contracts have been shown to be very poor value for money and have damaged the finances of our hospitals and schools, some of which are in deep financial trouble as a result. The Treasury Select Committee (2011) estimates that the cost of borrowing for PFI projects is 71% higher than using traditional methods of financing big projects.

The only justification for this expensive scheme seems to be to conceal public debt (Mann 2012).

The PFI system is inherently inflexible and leaves public authorities unable to respond to changing priorities or new technologies (Treasury Select Committee, 2011)

4. Large scale outsourcing creates dangerous monopolies

Cumbria Council (Conservative-led) have withdrawn from outsourcing for its highways maintenance because these long contracts granted monopoly powers to the contractor. The Leader of the Council has described how their contractor (Amey) were able to charge very high prices for any variation to contract, reinforcing the point made above by the Treasury Select Committee (2011). If the Council had not moved

back to in-house maintenance the recent floods would have been disastrous for their finances, with all additional flood work resulting in extra charges. With the in-house system the Council were able to re-allocate their workers and equipment in response to the new priorities of the flood with no new costs (Presser 2016)

Kardan, Gozdyra et al (2015) *Neighborhood Greenspace and Health in a Large Urban Center*, Nature Scientific Reports 5, Article number: 11610 (July 2015). [Available online at <http://www.nature.com/articles/srep11610>]

Maher et al (2013) *Impact of Roadside Tree Lines on Indoor Concentrations of Traffic-Derived Particulate Matter*, Environmental Science and Technology, 2013, 47 (23), pp 13737–13744 [Available online at <http://pubs.acs.org/doi/pdf/10.1021/es404363m> (paywall)]

Mann, N (2012) *PFI 'still being used to keep costs off balance sheet'*, Public Finance, 11 January 2012 [Available online at <https://tinyurl.com/kohtm3c>]

Presser, L. (2016) *Why have councils fallen out of love with outsourcing vital services?* The Guardian 2 March 2016 [available from The Guardian online via <http://tinyurl.com/z55kbtj>]

Treasury Select Committee (2011) *Private Finance Initiative - Value for Money*, House of Commons [Available online at <https://tinyurl.com/lkrcqc7>]

Produced by the STAG Steering Group, representing 10 local Tree Action Groups across the City