



How green infrastructure contributes to the Healthy Streets Approach

Healthy Streets indicators



Key points

- In an urban setting like London, green infrastructure can include parks, woodlands, private gardens, trees on streets, allotments, playing fields, green roofs and sustainable drainage systems
- Green infrastructure that is well planned, designed and maintained can provide many different benefits. It can contribute to every indicator of the Healthy Streets Approach, as well as support biodiversity and boost ecological resilience
- As green infrastructure provides a wide range of benefits, it is one of the most cost-effective ways for TfL and others to meet the environmental and social requirements of the London Plan, Mayor’s Transport Strategy and London Environment Strategy



01 Pedestrians from all walks of life
 Good-quality local greenery that is attractive, feels safe and welcoming, and is easy to access encourages people from different ages and backgrounds to be more physically active on and around the street.



02 People choose to walk, cycle and use public transport
 Green infrastructure improves the look and feel of a street, making it somewhere people will choose to walk and cycle in order to enjoy the greenery. The street itself becomes the destination or a place for walking and cycling for leisure, rather than just a travel route. Making streets greener can increase the number of people walking and cycling.³



03 Clean air
 Green infrastructure, such as hedges, can act as a barrier to air pollution and reduce the exposure of those on the street.⁹



04 People feel safe
 Green infrastructure can improve the ambience of a street – we know that people feel safer when an area is attractive and well maintained. Green infrastructure in streets is linked to improved social behaviour and reduced traffic accidents.^{4,5}



05 Not too noisy
 Green infrastructure can act as a sound barrier and, by improving the ambience of the street, can reduce the subjective experience of noise.^{1,2} By making the street feel narrower, green infrastructure can also act as a form of ‘psychological traffic calming’, causing people to reduce speed and make the street a quieter place.



06 Easy to cross
 Green infrastructure can be combined with other measures that make streets easier to cross. For example, rain gardens can be incorporated into build outs that slow traffic. Rain gardens also help reduce or prevent flooding, which in itself can be a barrier to crossing streets. Trees can also be used as bollards to protect crossing or refuge points.



07 Places to stop and rest
 Green infrastructure can also provide a place to stop and rest. For example, places to sit can be installed on the edges of planter boxes. Placing benches around or under trees makes a resting place more inviting and sheltered.



08 Shade and shelter
 Trees and hedges can provide shade from the sun: on a sunny day, a tree-lined street can be several degrees cooler than one without any trees. Hedges and trees can also offer protection from rain, wind and other bad weather.



09 People feel relaxed
 Green infrastructure can help make streets more calming and has a positive effect on stress and mental health.^{6,7,8}



10 Things to see and do
 Green infrastructure is an important part of London’s visual landscape and cultural heritage, for example through flowers and changing leaf colour. It also supports biodiversity that captures public interest, such as butterflies and birds. When combined with schemes like community gardening to maintain flower beds, caring for green infrastructure can also act as a street-based activity and help bring people together.

Early discussions can ensure the best opportunities are identified and reduce costs.

For more information, contact:
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Useful guidance documents include:

- [Urban Design London – Designing Rain Gardens: a practical guide](#)
- [TfL Streetscape guidance](#)
- [TfL Sustainable Drainage Systems \(SuDs\) guidance](#)

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2. AM Dzhambov et al, 'Lower noise annoyance associated with GIS-derived greenspace: Pathways through perceived greenspace and residential noise', *International Journal of Environmental Research and Public Health*, 2018, 15(7): 1533. For further information, visit: www.doi.org/10.3390/ijerph15071533
3. GW Heath et al, 'The effectiveness of urban design and land use and transport policies and practices to increase physical activity: A systematic review', *Journal of Physical Activity and Health*, 2006, 3 (Suppl. 1), S55-S76. For further information, visit: www.doi.org/10.1123/jpah.3.s1.s55

4. FE Kuo & WC Sullivan, 'Aggression and violence in the inner city: Effects of environment via mental fatigue', *Environment and Behavior*, 2001, 33(4): 543-571. For further information, visit: www.doi.org/10.1177/0139160121973124
5. KL Wolf, 'Safe streets - A literature review'. In: 'Green cities: Good health', College of the Environment, University of Washington, 2010. For further information, visit: www.depts.washington.edu/hhwb/Thm_SafeStreets.html
6. C Ward Thompson et al, 'More green space is linked to less stress in deprived communities: Evidence from salivary cortisol patterns', *Landscape and Urban Planning*, 2012, 105(3): 221-9. For further information, visit: www.doi.org/10.1016/j.landurbplan.2011.12.015

7. CP Wheeler et al, 'Returning urban parks to their public health roots', Manchester: Department of Environmental and Geographical Sciences, Manchester Metropolitan University, 2007.
8. J Allen & R Balfour, 'Local action on health inequalities: Improving access to green spaces', Public Health England, 2014. For further information, visit: <https://www.gov.uk/government/publications/healthy-high-streets-good-place-making-in-an-urban-setting>
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