

# London 2012 Olympics: New technology will be used to measure impact of extra traffic

April 30 2012

---



This shows a CityScan instrument in use. Credit: University of Leicester

University of Leicester researchers are set to use new technology they have developed to monitor the impact of increased traffic on pollution levels in London during the Olympics.

The announcement has been made during the third annual Universities Week campaign –starting today (Monday April 30)- which aims to increase public awareness of the wide and varied role of the UK's universities. This year's campaign will look at the contribution that our universities make – and have always made – to the Olympic movement, the sports industry and society as whole.

The 2012 Olympic and Paralympic Games are expected to draw 11m visitors from around the world to the UK's capital for seven weeks, and

3m extra car journeys are anticipated on the busiest day.

The team of researchers will use their CityScan technology, which gathers scattered sunlight to scan whole cities and take readings of air quality, to investigate the impact of this extra [traffic](#) on pollution.

Rather than existing technology, which can only give an accurate reading for certain "hotspots," CityScan can show the air quality over every point of the city - including individual roads, playgrounds and other buildings.

It will also reveal the days and times when [pollution levels](#) are at their highest.

Sensors will be set up on a 30-storey building in North Kensington and a 14-storey building in Chelsea, in the west of the city, as well as a third location which is yet to be determined.

The sensors will give readings of nitrogen dioxide, which is produced from traffic emissions and can decrease lung function and increase the risk from respiratory illnesses, including bronchitis and asthma.

Team leader Dr Roland Leigh, of the university's Earth Observation Science Group, said: "We will be able to map the pollution in 3D to show emissions of nitrogen dioxide and how far they spread."

"Traditional sensors take in a single point measurement, giving a very accurate measurement that might be by a roadside.

"Between two or three CityScan instruments, we can map out a complete urban area and tell you where the [nitrogen dioxide](#) is in that space."

"CityScan makes the link between emissions and poor air quality downwind, enabling better management of the respiratory health of

sensitive individuals."

"We want to make a practical difference, and contribute to systems which inform people when and where poor [air-quality](#) may occur.

The technology is already being tested in Leicester, and the scientists hope their findings will help councils all around the country improve environmental planning and traffic management issues.

Provided by University of Leicester

Citation: London 2012 Olympics: New technology will be used to measure impact of extra traffic (2012, April 30) retrieved 25 April 2024 from <https://phys.org/news/2012-04-london-olympics-technology-impact-extra.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------