

Pollution caused by traffic calming

The Government's evidence on speed bumps and pollution has been questioned and their suggestions that councils remove speed bumps to improve air quality is starting to unravel, after it appeared unable to provide evidence that such a move, would have overall benefits. The UK's leading transport research body questioned its rationale.

Ministers' latest national air quality strategy suggests 'Improving road layouts and junctions to optimise traffic flow, for example by considering removal of speed humps',

Scrapping speed bumps could help protect city dwellers against 'London throat' because braking releases toxic dust may trigger coughs and colds, scientists have said. The condition is most likely to affect people living in built up urban areas.

Dust from worn-out brake pads could have the same harmful impact as diesel emissions, according to scientists. Tests carried out by King's College London, show metallic abrasion dust can cause inflammation of the lungs and reduce immunity, increasing the risk of respiratory infections. Scientists said the metal particles could be contributing to serious illnesses like pneumonia or bronchitis.

Scientists suggest there is no such thing as a zero-emission vehicle and as regulations to reduce exhaust emissions kick in, the contribution from these sources are likely to become more significant. Therefore, further studies were needed to understand more about the effects of brake dust on human health.

There is ample evidence on the impact of air quality on health. Over time, poor air quality is associated with a range of mortality and morbidity outcomes. Exposure to poor air quality is associated with a range of cardiovascular, respiratory and cerebrovascular health effects and recent evidence suggests a link between exposure to air pollution and cognitive performance.

In terms of speed hump removal and air quality impacts the principle that it may be possible to improve air quality should not be dismissed. The smoothing of traffic flow to reduce congestion also reduces incidents of acceleration, braking, and idling, and will contribute to better air quality by means of reducing exhaust emissions and non-exhaust emissions. However as all things air quality there is more than one factor associated with actual emissions. For example does removal of speed humps cause higher speed and what is the air quality impact of higher speed, or does the introduction of speed humps lead to increased braking and harder acceleration? Local authorities should be able to demonstrate that any proposed alternative to speed humps is at least as effective in controlling speeds, preventing injuries and fatalities and improving public health for people of all ages and abilities, including children and other non-drivers.

Ultimately there is probably no one size fits all answer, what may reduce pollution at one location by smoothing flow, may increase elsewhere by increasing traffic number, speed, or congestion. KCC have no agenda to study traffic flow, speeds, acceleration and braking incidents, congestion on a case by case basis.

Summary

With regard to the removal of speed bumps, unless there are clear demonstrable benefits that outweigh any other impacts and can be reliably applied to specific sites then no further action is proposed. If that guidance and evidence base comes forth then the position can be reviewed.