

# Corporate Infrastructure and Regulatory Services Scrutiny Committee

## Air Quality and Congestion Task Group

2018

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# 1.0 Recommendations

1.1 The recommendations of the Task Group are summarised below:

**1) That Devon County Council (DCC) engages in a targeted communications campaign to promote behaviour change in children's and adult's travel habits to reduce congestion and air pollution.**

The travel habits that will be targeted are;

- Short distance car journeys undertaken by parents to transport children to school. Where possible, children should be encouraged to walk or cycle to school to replace these journeys. The school rush contributes directly to air quality and congestion issues.
- Engine idling, particularly outside schools. Idling, or running a vehicle's engine when the vehicle is not in motion, has been identified as a major source of air pollution.<sup>1</sup>

This campaign must;

- Have a measurable impact
- Be sustainable in the longer-term
- Be timed appropriately (e.g. it should not coincide with school holidays)
- Avoid a blanket or unrealistic message
- Be realistic; for many working parents, transporting children to school by car is the most practical option

**2) That DCC reviews further opportunities for collaborative working between Public Health, Children's Services and Transport within DCC in responding to air quality and congestion issues.**

In a recent survey of adults who cycle regularly, 96% learned to ride as a child.<sup>2</sup> Promoting behaviour change surrounding travel habits to tackle congestion and air pollution would not only support the aims of Transport, but would also encourage healthier behaviours in later life and support the objectives of Public Health and Children's Services. The new mechanisms in place for collaborative working must have clearly defined objectives and timescales and measurable success criteria.

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<sup>1</sup> Dudley Metropolitan Borough Council, 'Idling Vehicles Contribute to Air Pollution', <http://www.dudley.gov.uk/business/environmental-health/pollution-control/air-quality/vehicle-air-pollution/> (last accessed 20 April 2018).

<sup>2</sup> Sustrans, 'Transforming young people's travel; Smarter choices for everyday journeys', p. 9.

### **3) That with partners, DCC to review what options can incentivise active travel to promote behaviour change surrounding transport habits in schools.**

If efforts to encourage children to engage in active travel are to be sustainable longer term, children must be incentivised to undertake active travel through their schools.

An officer should be given responsibility by DCC to work with schools, particularly schools in heavily congested areas, to increase the number of sustainable journeys to these schools. The Task Group has learnt that DCC used to employ dedicated officers to work with schools, but these posts no longer exist since funding was stopped.

Funds should also be made available to incentivise schools to engage with DCC in the promotion of sustainable travel. These funds could be used for small capital projects inside or outside the school gate that these schools identify as supporting active travel.

### **4) That DCC to consider funding a bus pass for young people aged 16 to 20.**

Buses provide journey options for medium to long length trips and facilitate components of longer journeys by linking into rail journeys.<sup>3</sup> Stagecoach South West offers special season tickets for students and for people aged 18 and under in full time education, but young people who have not purchased these tickets must pay the full adult price for bus travel.<sup>4</sup> Introducing a bus pass for 16 to 20 year olds, which could work on a similar basis to the bus pass used by older people, would make transport by bus more attractive to many students and young people starting out in apprenticeships and work. DCC has already outlined other measures to increase bus travel, such as designing new developments to accommodate buses. A Devon-wide Real Time Information system has also been implemented to improve bus journey time and reliability.<sup>5</sup>

Some rural areas of Devon are not easily accessible by bus and travel by car may be the only option for young people living in these areas. The cost of introducing a bus pass for young people must also be carefully considered. In 2016/17, Travel Concession Authorities in England (including County Councils) spent around £1.13 billion on older and disabled concessionary passes.<sup>6</sup> Bus providers must be reimbursed for providing concessionary travel.<sup>7</sup> Nonetheless, increasing the number of young people who travel by bus could delay the purchase of first cars by this age group, thereby reducing congestion and air pollution problems associated with increasing car ownership. There is the need to look long term at reducing air

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<sup>3</sup> Devon County Council, Heart of Teignbridge Sustainable Transport Report: Final Report, March 2013, p. 1.

<sup>4</sup> Stagecoach, Guide to Tickets, <https://www.stagecoachbus.com/promos-and-offers/south-west/guide-to-tickets#tab1> (last accessed 11 May 2018).

<sup>5</sup> Heart of Teignbridge Sustainable Transport Report, p. 16.

<sup>6</sup> The Department for Transport, 'Concessionary Travel Statistics England, 2016/17', <https://www.gov.uk/government/statistics/concessionary-travel-statistics-year-ending-march-2017>, 14 December 2017 (last accessed 16 May 2018).

<sup>7</sup> The Department for Transport, 'Concessionary travel for older and disabled people: guidance on reimbursing bus operators (England)', November 2016, p. 5.

pollution and congestion by concentrating on the next generation. Good travel habits must be established at an early age, whether at school, or amongst those planning to buy a first car.

**5) That DCC continues to implement the measures outlined in the Devon and Torbay Local Transport Plan (2011-2026) and continues to review the progress of the measures implemented.**

The 2011 to 2026 Local Transport Plan sets out measures aimed at developing the public transport network and outlines how Devon will boost the health and wellbeing of residents by providing more opportunities for physical activity. By improving the accessibility and reliability of the bus service and investing in the urban and rural cycle network, travel by bus and by bike will be encouraged. This will contribute to a reduction in air pollution and congestion.<sup>8</sup>

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<sup>8</sup> Devon County Council and Torbay Council, 'Local Transport Plan; Devon and Cornwall Strategy 2011-2026', April 2011, pp. 17-21.

## 2.0 Introduction

2.1 The Task Group — Councillors Jerry Brook (Chair), Marina Asvachin, Yvonne Atkinson, Jackie Hook, Caroline Chugg, Brian Greenslade and Martin Shaw — would like to place on record its gratitude to the witnesses who contributed to the review. In submitting its recommendations, the Group has sought to ensure that its findings are supported with evidence and information to substantiate its proposals. The Group is also grateful to Councillor Emma Brennan, who proposed the focus on air quality and congestion.

2.2 On 26 September 2017, the Corporate Infrastructure and Regulatory Services Scrutiny Committee resolved to set up the Air Quality and Congestion Task Group.

2.3 Air quality has been defined as ‘the air we breathe, and the level of pollutant concentrations that are reasonably ‘safe’ from a health perspective’.<sup>9</sup> Evidence suggests that the effect of air pollution may be greater than the impact of industrial disputes in terms of the number of absences from work, and greater than passive smoking or road traffic accidents in terms of the impact on life expectancy.<sup>10</sup> Congestion and air pollution are directly linked, because cars travelling in stop-start conditions produce more emissions than those travelling at a consistent speed.<sup>11</sup>

2.4 Air pollution concentrations are generally low in Devon when compared with urban areas in the rest of the UK.<sup>12</sup> However, Devon does have some hotspots where there are severe air pollution and congestion problems. These include Braunton, Ivybridge, Crediton and Exeter.

2.5 Case studies of other areas, and the work of the sustainable transport charity Sustrans, stress how travel behaviours, including those of school children and their parents, can be influenced when people are ‘nudged’ in the right direction by small-scale infrastructure changes (such as introducing new bike lanes), community actions, and through the dissemination of practical information on air quality and congestion.<sup>13</sup> This change in travel behaviours could reduce air pollution and improve congestion in the long-term, thereby improving the mental and physical wellbeing of Devon residents.

2.6 Time and resources necessitate that this report provides a snapshot approach to highlight the issues of air quality and congestion. The list of witnesses to the review does not pretend to be exhaustive but hopes to provide insight into some of the central themes surrounding these issues.

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<sup>9</sup> Devon County Council, ‘Air Quality and Car Emissions; Report of the Head of Planning, Transportation and Environment’, 14 June 2016, p. 1.

<sup>10</sup> Natural Capital Committee (2015). The State of Natural Capital, Protecting and Improving Natural Capital for Prosperity and Wellbeing, cited in Exeter City Council, ‘Exeter Air Quality Strategy 2015-2020’.

<sup>11</sup> Devon County Council, ‘Overview of Highways Data at AQMA’s in Devon County’, p. 1.

<sup>12</sup> Public Health Air Quality Board, ‘Devon Wide Personal Exposure Reduction Project Report’, April 2016, p. 3.

<sup>13</sup> Camden Council, ‘Research Report; understanding target groups knowledge and perceptions of Camden Air Quality’, March 2012.

2.7 The terms of reference for the review were:

1. To review a range of sites in Devon where there is data on congestion and air quality to better understand the problem, potential solutions, and the wider public impact of these potential solutions.
2. To explore innovative solutions and best practice, both locally and nationally, to address traffic congestion and air quality in the County.
3. To report back to the Corporate Infrastructure and Regulatory Services Scrutiny Committee on the findings of the Task Group with recommendations.

## 3.0 Background

### The role of the UK government in reducing air pollution and congestion

3.1 The UK Air Plan for tackling nitrogen dioxide (July 2017) announced that the sale of petrol and diesel cars will be banned by 2040. Though uptake of electric vehicles is still low, the government has offered financial incentives for motorists to switch to electric vehicles since 2011. There is also funding available to councils to tackle air pollution and congestion through the Clean Air Fund.<sup>14</sup> However, the Air Plan has been criticised as ineffective.<sup>15</sup> Much of the onus for tackling congestion and air pollution has been placed on Local Authorities themselves, with the government urging local authorities to employ a 'wide range of innovative options' to tackle air pollution and congestion.<sup>16</sup>

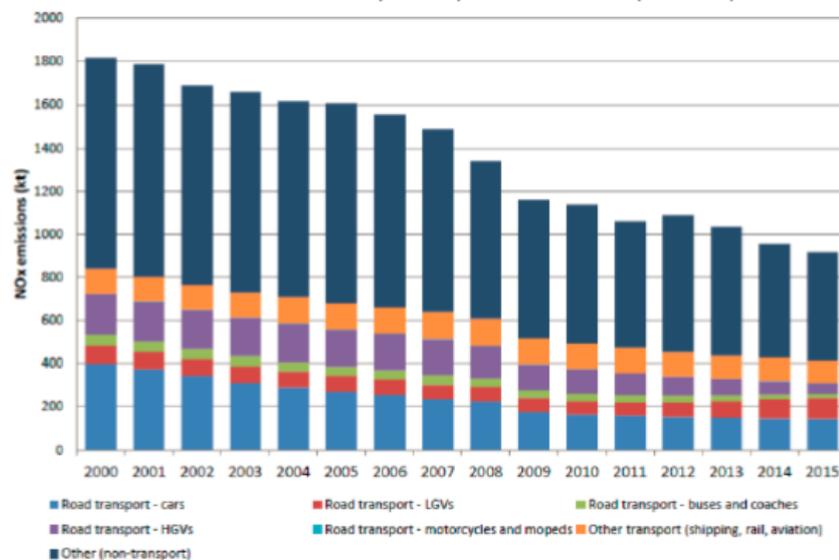
#### 'Local authorities should employ a wide range of innovative options to tackle air pollution and congestion'

DEFRA and the Department for Transport, 'UK plan for tackling roadside nitrogen dioxide concentrations: An overview', July 2017, p. 8.

3.2 In March 2018, the joint report on improving air quality called for a new Clean Air Act, new legislation to require manufacturers to end the sale of conventional petrol and diesel cars earlier than 2040, and for a national air quality support programme for councils.<sup>17</sup>

3.3 Nonetheless, air quality has been improving nationally over

Figure 1. National NO<sub>2</sub> Emissions (UK Plan for Tackling Roadside Emissions Technical Report, Department for Transport 2017).



<sup>14</sup> 'Plan for roadside NO<sub>2</sub> concentrations published', <https://www.gov.uk/government/news/plan-for-roadside-no2-concentrations-published>, 26 July 2017 (last accessed 11 January 2018).

<sup>15</sup> University of the West of England, Air Quality Management Resource Centre, 'Keynote Session: Air Quality Action Plan to Improve the Health of the Public', presentation by Dr Jim Longhurst, 12 July 2017.

<sup>16</sup> DEFRA and the Department for Transport, 'UK plan for tackling roadside nitrogen dioxide concentrations: An overview', July 2017, p. 8.; Sustrans, 'Cycling and walking the obvious quick-win solution to improving air quality' by Dr Andy Cope, <https://www.sustrans.org.uk/blog/cycling-and-walking-obvious-quick-win-solution-improving-air-quality>, 23 June 2017 (last accessed 12/3/18).

<sup>17</sup> House of Commons Environment, Food and Rural Affairs, Environmental Audit, Health and Social Care, and Transport Committees, 'Improving air quality; Fourth Report of the Environment, Food and Rural Affairs Committee, Fourth Report of the Environmental Audit Committee, Third Report of the Health and Social Care Committee, and Second Report of the Transport Committee of Session 2017–19', 15 March 2018.

the last 15 years (see *Figure 1*), suggesting that existing measures have been successful in improving air quality. In Devon, emission concentrations are expected to return to legal levels before 2021.<sup>18</sup>

### **The role of district councils**

3.4 District councils, not DCC, are responsible for collecting air quality data. Air Quality Annual Status Reports (ASRs) outline progress towards improving nitrogen dioxide, sulfur dioxide and particulate concentrations and must be submitted by district councils every year. When Local Authority areas do not meet government National Air Quality Objectives, an Air Quality Management Area (AQMA) must be declared and the local authority must produce Air Quality Action Plans for these areas. There are 11 AQMAs in Devon, including Ivybridge, Crediton, Braunton and Exeter city centre.

### **The role of Devon County Council**

3.5 Where a district council is preparing an Action Plan, county councils must submit measures to help meet air quality objectives in the local area. These measures could be related to local transport, highways, public health or schools and education and will be included in the Action Plan. Devon County Council is also a consultee to ASRs and Action Plans. It may make recommendations to the district council in relation to the review and development of Action Plans in the local authority area.

### **Factors contributing to air pollution and congestion**

3.6 This is by no means an exhaustive list of the issues contributing to air pollution and congestion, but it offers a summary of some of the main causes.

- Population growth and increasing car ownership can cause an increase in road traffic. Each road can only take a maximum number of vehicles (known as capacity). As road capacity is approached, vehicle speed reduces and congestion increases. This can lead to an increase in emissions per mile.<sup>19</sup> Cars make less efficient use of road space than busses.
- Where roads are bordered by tall buildings, corridors are formed from which air pollution is unable to disperse quickly. This is exacerbated where there are no 'buffers' between the road and pavement.<sup>20</sup>

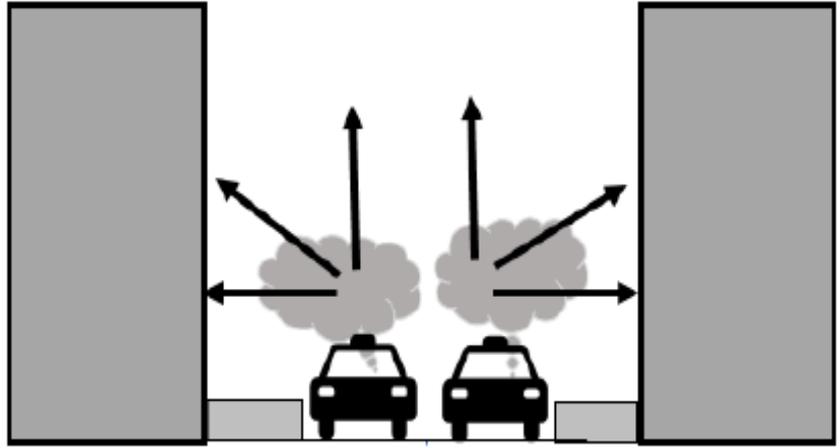
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<sup>18</sup> Overview of Highways Data', p. 15.

<sup>19</sup> 'Report of the Head of Planning, Transportation and Environment', pp. 2-3.

<sup>20</sup> 'Overview of Highways Data', p. 1.

Figure 2. Street canyons can be formed when high structures have been built close to the carriageway, preventing emissions from dispersing quickly ('Overview of Highways Data, p. 1.)



- Speed humps, chicanes and road narrowings can have similar impacts to pedestrian and cycle crossings by decreasing vehicle speeds. Cars travelling in stop-start conditions produce more emissions than those travelling at consistent speeds, even if the trip distance and time is the same. Smoothing traffic flow reduces emissions, though improved traffic flow might also lead to increased car use and make the space unattractive for other users.<sup>21</sup>

<sup>21</sup> 'Overview of Highways Data', p. 1.

## 4.0 The health implications of air pollution and congestion

### Air pollution

4.1 Both poor air quality and congestion have detrimental impacts on the mental and physical wellbeing of Devon residents. Public Health England have calculated that particulate concentrations in Exeter alone have resulted in 42 additional deaths per year.<sup>22</sup> The World Health Organisation has claimed that air pollution causes 3.7 million premature deaths each year, with children among the most vulnerable groups.<sup>23</sup> In addition, epidemiological studies have shown that symptoms of bronchitis in asthmatic children increase in association with long-term exposure to NO<sub>2</sub>.<sup>24</sup>

4.2 Idling, or running a vehicle's engine when the vehicle is not in motion, has been identified as a major source of air pollution and is particularly prevalent outside schools.<sup>25</sup> Children are more vulnerable to the effects of air pollution.

### Congestion

4.3 Longer commute times, associated with high congestion levels, have been linked to increased stress levels amongst commuters and can impact negatively upon family life and work-life balance.<sup>26</sup> Pollutant levels are also generally higher inside vehicles than outside.<sup>27</sup>

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<sup>22</sup> Public Health England, 'Estimating Local Mortality Burdens associated with Particulate Air Pollution 2014', April 2014, p. 17. <http://www.hpa.org.uk/Publications/Environment/PHECRCEReportSeries/PHECRCE010/>

<sup>23</sup> *The Times*, 'Study links air pollution to cot death', 19 April 2018, <https://www.thetimes.co.uk/article/study-links-air-pollution-to-cot-death-gqqn572vq> (last accessed 19 April 2018).

<sup>24</sup> The World Health Organisation, 'Ambient (outdoor) air quality and health', September 2016, <http://www.who.int/mediacentre/factsheets/fs313/en/> (last accessed 19 April 2018).

<sup>25</sup> <http://www.dudley.gov.uk/business/environmental-health/pollution-control/air-quality/vehicle-air-pollution/>; Massachusetts Department of Environmental Protection, 'Engine Idling: Impacts on Your Health and the Environment', <http://www.mass.gov/eea/docs/dep/air/idling-and-health.pdf> (last accessed 23 April 2018), pp. 1-2.

<sup>26</sup> Hansson, E, Mattisson, K, Bjork, Ostergren, P-O & Jakobsson, K 2011, 'Relationship between commuting and health outcomes in a cross-sectional population survey in southern Sweden', *BMC Public Health*, vol.11 (834), cited in Whittlesea Council, 'Social impacts of congestion', <https://www.whittlesea.vic.gov.au/about-us/advocating-for-community-needs/social-impacts-of-congestion/> (last accessed 17 April 2018); Pocock, B & Masterman-Smith, H 2006, *Work, families and affordable housing*, Centre for Work + Life, University of South Australia, Adelaide, cited in Whittlesea Council, 'Social impacts of congestion'.

<sup>27</sup> Transport for London, 'Roads Task Force Thematic Analysis; Technical Note 20. What are the main health impacts of roads in London?', p. 5.

## **Public Health benefits associated with improvements in air quality and congestion**

4.4 There are recognised Public Health benefits associated with improvements in air quality and congestion, particularly surrounding the promotion of active travel in schools;

- In a recent survey of adults who cycle regularly, 96% learned to ride as a child. Schools can stimulate sustainable travel behaviour within groups of children and their families. This could influence their choice of transport for future trips.<sup>28</sup>

*‘Schools have the opportunity to encourage sustainable travel behaviour in children and families which could make a significant difference to their mode choice for other, non-education, trips in the future’*

‘Supplementary Highways Note’ provided to the Air Quality and Congestion Task Group, February 2018, p. 11.

- In January 2017, nearly a third of children aged 2 to 15 were overweight or obese. Younger generations are also becoming obese at earlier ages and staying obese for longer. The UK spends more each year on the treatment of obesity and diabetes than it does on the police, fire service and judicial system combined. It was estimated that the NHS in England spent £5.1 billion on overweight and obesity-related ill-health in 2014/15.<sup>29</sup>
- The King’s Fund has found that there is substantial cost-benefit evidence for investing in air quality.<sup>30</sup> An increase in physical activity of 15 minutes is associated with lower odds of obesity of over 50% in boys and nearly 40% in girls.<sup>31</sup> Reducing childhood obesity through preventative measures such as encouraging active travel to schools could yield significant future savings for an already overstretched NHS. Childhood asthma has also been linked to air pollution. It has been calculated that for every case of childhood asthma that can be prevented, there will be a cost saving to the NHS of £3000.<sup>32</sup>
- Cycling can boost mental health and improve children’s concentration and alertness.<sup>33</sup>

<sup>28</sup> Sustrans, ‘Transforming young people’s travel; Smarter choices for everyday journeys’, p. 9. ; ‘Supplementary Highways Note 02: Air Quality and Congestion Task Group Meeting 26/02/2018’, p. 11.

<sup>29</sup> The UK Government, ‘Childhood obesity: a plan for action’, last updated 20 January 2017, <https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action> (last accessed 19 April 2018).

<sup>30</sup> The King’s Fund, ‘Improving the public’s health; A resource for local authorities’, 2013, p. 48.

<sup>31</sup> PLOS Medicine, Volume 4, Issue 3, ‘Objectively Measured Physical Activity and Fat Mass in a Large Cohort of Children’, March 2007, p. 7.

<sup>32</sup> *The British Medical Journal*, Volume 6, Issue 6, ‘A pharmaco-economic approach to assessing the costs and benefits of air quality interventions that improve health: a case study’, June 2016, pp. 1,3, 5.

<sup>33</sup> NHS choices, ‘Cycling for beginners’, <https://www.nhs.uk/Livewell/getting-started-guides/Pages/getting-started-cycling.aspx> , 30 June 2016 (last accessed 27 April 2018).

- Actions to address the health impacts of air pollution can support local priorities such as mobilising community engagement and combating health inequalities.<sup>34</sup> For example, the Heavitree Community Partnership Project, a year-long collaboration between the University of Exeter, Exeter City Council, and Exeter City Futures, has mobilised community-led groups to find solutions to Heavitree's congestion problem. The Project is ongoing in Heavitree and is collecting air quality data from outside schools and quantitative and qualitative data around travel behaviours. This will be shared publicly when the project is completed.<sup>35</sup>

4.5 Similar Tasks Groups in other areas have highlighted how councils alone could not tackle poor air quality, and that they required other key agencies to work with them. Effective partnership between organisations in tackling air pollution is crucial.<sup>36</sup> This Task Group has collaborated extensively with Sustrans and Public Health at DCC in drawing up these recommendations. Both this Task Group and Public Health endeavour to improve the health and wellbeing of people in Devon.

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<sup>34</sup> The Department for Food, Environment and Rural Affairs, 'Air Pollution; an emerging public health issue. Briefing for elected members', p. 108.

<sup>35</sup> Lindsey Anderson, 'The Community Partnership Project: Final Report', January 2018, pp. 1-3.

<sup>36</sup> Wiltshire Council, 'Overview and Scrutiny. Report of the joint Air Quality Task Group', pp. 3-5; Bromsgrove District Council, 'Task Group Report - Scrutiny Steering Board', December 2007', p. 22.

## 5.0 Work in Schools to promote active travel

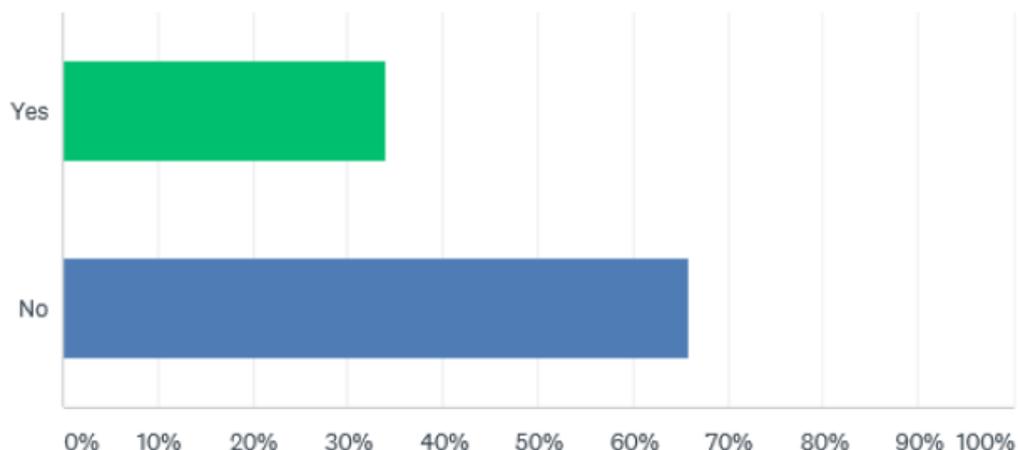
### Work already undertaken in Devon schools

5.1 The Task Group learnt that Sustrans has already carried out positive work in Devon schools to encourage a change in transport habits. Sustrans' objective is to make 'it easier for people to walk and cycle'.<sup>37</sup> Examples of their work include school workshops, 'bikeability' (bike training) courses, and the Sustrans 'Big Pedal' inter-school cycling competition. Sustrans is currently working with 20 Devon schools but there are still many schools in Devon that could benefit from similar interventions. DCC has already outlined measures to improve cycling infrastructure and bus networks in Devon, and has promoted school crossing patrols and provided free 'bikeability' courses.<sup>38</sup> However, the results of an online survey sent to 44 Devon schools in March 2018 suggest that these schools feel DCC could do more to develop active travel to schools.<sup>39</sup> DCC used to employ dedicated officers to work with schools, but these posts no longer exist.

Figure 3. Results of an online survey sent to Devon schools in March 2018.

### Does your school feel supported by Devon County Council in encouraging active travel to school?

Answered: 41 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	34.15%	14
No	65.85%	27
<b>Total Respondents: 41</b>		

<sup>37</sup> Sustrans, 'Our Strategy 2017-22', <https://www.sustrans.org.uk/strategy> (last accessed 27 April 2018).

<sup>38</sup> Heart of Teignbridge Sustainable Transport Report, pp. 16-17.

<sup>39</sup> Results of a survey sent by the Head of Education and Learning at Devon County Council to 44 Devon schools in March 2018.

## **Challenges to the promotion of active travel in Devon schools**

5.2 This Task Group accepts that there are challenges to promoting active travel. DCC must be realistic when responding to air quality and congestion. Responses can have repercussions for commuters, particularly those on lower incomes, and on residents and businesses. Indeed, the Exeter City Council Draft Air Quality Action Plan has ruled out the introduction of a potentially contentious congestion charge.<sup>40</sup> The blame for congestion and air pollution should not be placed on individuals or groups.<sup>41</sup> Busy lifestyles influence travel behaviour, making driving convenient.<sup>42</sup> Many parents must get to work, and there are potential economic implications of any attempts to influence travel habits. Exeter attracts one of the highest ratios of commuters in the country. 48% of people who work in the city travel in from elsewhere. It is challenging to provide alternatives to travel by car for those commuting from semi-rural and rural areas.<sup>43</sup>

5.3 The Task Group has acknowledged that children are a good route into encouraging significant changes in school travel habits, but that it will require considerable long-term work to affect this behavioural change. Given Devon's nature as a large rural county, some children must also travel long distances to attend even their nearest school. For Shute Community Primary School in rural East Devon, 95% of pupils were driven to school. 12.5 miles was the average driving distance.<sup>44</sup> Parental preference for schools must also be considered, meaning that some children do not attend local schools. For these children, travelling long distances to school along busy roads by bike or on foot may be unsafe. Indeed, the charity Brake is launching supervised walks on 13 June 2018 at Devon primary schools to promote the importance of children being able to walk without fear of traffic. DCC's Education transport budget is £23 million per annum. Where possible children are allocated to public transport, but this is difficult for more rural areas.<sup>45</sup> Measures taken to support active travel to schools can sometimes have unintended consequences which affect children.

5.4 The Task Group agreed that it would be more realistic to aim attempts to encourage active travel at schools in urban areas with the most severe congestion and air quality issues. These areas include the 11 Devon AQMAs. Efforts to develop active travel should be aimed at reducing short distance car journeys to these schools by encouraging behaviour change. The Devon School Travel Kit provides a breakdown of the average daily driving distances to schools and the percentages of children travelling by each method for 2017.<sup>46</sup> The League Table ranks schools based on the percentages of pupils travelling to school by car within walking, cycling, car share and public transport threshold areas.<sup>47</sup> It was also underlined to the Task Group how such a campaign needs to be timed appropriately to be effective (it should not coincide with the school holidays) and should avoid an unrealistic message that cannot be delivered upon.

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<sup>40</sup> Exeter City Council, 'Draft Air Quality Action Plan 2018-2023', pp. 24-27.

<sup>41</sup> 'Air Quality Action Plan to Improve the Health of the Public', presentation by Dr Jim Longhurst, 12 July 2017.

<sup>42</sup> 'Tackling the School Run Research Study', p. 22.

<sup>43</sup> *The Exeter Daily*, 'Project explores travel habits in Exeter', <https://www.theexeterdaily.co.uk/news/business-daily-local-news/project-explores-travel-habits-exeter> (last accessed 23 April 2018).

<sup>44</sup> 'The Devon School Travel Toolkit', <https://devon.schooltraveltoolkit.com/> (last accessed 23 April 2018).

<sup>45</sup> Report provided by the Head of Education and Learning, February 2018, p. 2.

<sup>46</sup> 'The Devon School Travel Toolkit'

<sup>47</sup> <https://devon.schooltraveltoolkit.com/compare/87826150/north-tawton-community-primary-school-and-nursery/>

## **Promoting behaviour change through a communications campaign**

5.5 A study commissioned by Camden Council in 2012 to explore the level of public understanding about air quality suggested that there was the potential for behaviour change in travel habits amongst residents. 41% of respondents indicated that they could change travel behaviours. Many of the respondents lived with young children, who might be able to influence their parent's behaviours.<sup>48</sup> The study also recommended the dissemination of practical information to the public on local air quality to influence travel behaviours. Use of digital and online social networks are key. Campaigns should be relevant to the individual, and the impacts of air pollution on health and wellbeing should be drawn attention to in communications. Initial 'health shocks' could give way to positive messages about the impacts of measures to control air pollution and congestion which offer practical advice on the steps individuals can take. 47% of respondents to the survey felt that information from the Council on the risks of air pollution and strategies that residents can use to protect themselves would be useful.<sup>49</sup>

5.6 Examples of media underlining the negative impacts of engine idling;



Figure 5. Health warning included on the Camden Council Twitter page ([https://twitter.com/camden\\_talking/status/862991999653236736](https://twitter.com/camden_talking/status/862991999653236736), 12 May 2017, last accessed 23 April 2018).

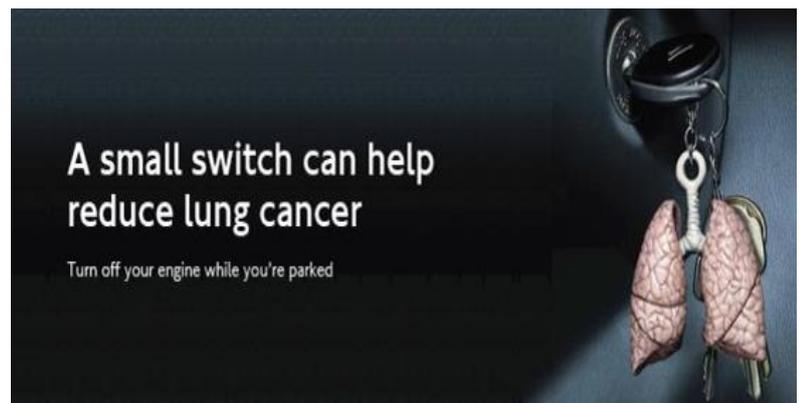


Figure 4. (The London Low Emission Construction Partnership, <http://www.llecp.org.uk/advice/mitigation/anti-idling-campaigns>, last accessed 23 April 2018).

Making use of national material aimed at reducing air pollution and improving congestion would be cost-effective. Examples of this material can be found on the Sustrans website. Sustrans has created a free guide designed for teachers, parents and governors aimed at getting more people active on the journey to and from school. It can be downloaded from the Sustrans website.<sup>50</sup>

<sup>48</sup> Camden Council, 'Research Report; understanding target groups knowledge and perceptions of Camden Air Quality', March 2012, pp. 3, 5, 9, 18.

<sup>49</sup> Camden Council, 'Research Report', pp. 5, 9, 18.

<sup>50</sup> Sustrans, 'How to Increase Active Travel to Schools', <https://www.sustrans.org.uk/our-services/who-we-work/teachers/how-transform-school-travel> (last accessed 24 April 2018).

## **Incentivising active travel in schools**

5.7 Active travel to schools should be made enjoyable for children. Children can be incentivised to undertake active travel through competitions, such as inter-school cycling competitions.<sup>51</sup> 'Scooting' is another way to make active travel enjoyable for children. Air quality and active travel could become topics for classroom projects. Funds should also be made available to incentivise schools to engage with DCC in the promotion of active travel. These funds could be used for small capital projects inside or outside the school gate that schools identify as supporting active travel. Both schools and their pupils must be incentivised to participate in active travel if air pollution and congestion in Devon are to be reduced.

5.8 An officer should be given responsibility by DCC to work with schools, particularly schools in heavily congested areas, to increase the number of short distance sustainable journeys to these schools. School governors and 'governor champions' could also foster initiatives within schools such as 'bikeability courses' or active travel competitions. Members who are also school governors should be at the forefront of endeavours to improve air quality and reduce congestion in Devon. They could disseminate information to schools to raise awareness about air quality and congestion issues and provide practical advice on how schools could respond. This information could take the form of the material described under recommendations 3 and 4. For schools in air pollution and congestion hotspots such as Ivybridge, Exeter and Braunton, the dissemination of this information would be particularly relevant.

## **Measuring behaviour change**

5.9 Guidance from the National Institute for Health and Care Excellence states that behaviour change interventions should help people maintain their behaviour change for more than 1 year by ensuring that monitoring takes place at regular intervals for a minimum of 1 year after the intervention has taken place.<sup>52</sup> To ensure that efforts to influence travel behaviours are measurable, school travel surveys could be used to provide data on the transport modes used by pupils to get to schools. This would provide information like that used by the Devon School Travel Toolkit League Table. Sustrans has used results from 'Hands Up Surveys', activity logs, bike counts, and teacher surveys to gauge the impact of its Hereford City Schools Active Travel Programme. The Programme's aim was to increase the level of pupils cycling, scooting and walking to school – aiming to double regular levels where the baseline level is lower than 10% of pupils.<sup>53</sup>

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<sup>51</sup> Sustrans, 'Air quality; The role of walking and cycling in solving the UK's air quality crisis', December 2017, p. 7.

<sup>52</sup> National Institute for Health and Care Excellence, 'Behaviour Change: individual approaches', January 2014, <https://www.nice.org.uk/guidance/ph49/chapter/1-recommendations#recommendation-1-develop-a-local-behaviour-change-policy-and-strategy> (last accessed 25 April 2018).

<sup>53</sup> Sustrans, 'Hereford City Schools Active Travel Programme; A summary of the school's programme in Hereford', November 2017, pp. 1, 3.

## 6.0 Conclusion

6.1 During this review the Task Group has considered evidence from a wide range of witnesses and sources. This Task Group has acknowledged that air pollution and congestion are contentious issues. Individuals, businesses and schools must not be blamed for air pollution and congestion.

6.2 Efforts to create a change in travel behaviours in Devon schools must be realistic. There are financial challenges, and Devon's nature as a large and overwhelmingly rural county renders active travel by children to some of Devon's schools unviable.

6.3 Nonetheless, work has been undertaken to encourage active travel in Devon schools. The further promotion of active travel through behaviour change presents an excellent route into tackling air quality and congestion which would be cost-effective. There is the need to look long term at reducing air pollution and congestion by concentrating on the next generation. Good travel habits must be established at an early age, whether at school, or amongst those planning to buy a first car.

6.4 Moreover, the Task Group has learnt that campaigns to further active travel provide more opportunities to support the aims of Public Health and to mobilise Members in the engagement of their communities.

6.5 By tackling the twin issues of air pollution and congestion, the health and quality of life of all Devon residents will be improved.

*Individual behaviour will have to change, starting in small ways... ultimately the community needs to shift its attitudes and expectations'*

*Report of the Environmental Health and Licencing Manager at Exeter City Council to the Place Scrutiny Committee, 11 January 2018, p. 4.*

## 7.0 Contact

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## APPENDIX 2

### Task Group Activities

- i. Preliminary research was conducted in early December into how air quality and congestion in Devon compare with other areas and on how other Councils have approached these issues. This research was used to inform the discussion during the first Task Group meeting.
- ii. The first Task Group meeting took place on **14 December 2017** to discuss the scoping of the review and to receive an overview of air pollution and congestion hotspots in Devon from the Head of Planning, Transportation and Environment. The Task Group also discussed government progress in tackling air pollution and congestion and acknowledged the need for DCC to be realistic in implementing actions in response.
- iii. In January, research was conducted on Exeter City Council's Draft Air Quality Action Plan, which set out potential actions that Exeter City Council (ECC) might take to improve air quality in Exeter. It was agreed by ECC Place Scrutiny on 11 January 2018 that a public consultation on ways to improve air quality and cut congestion in Exeter would be launched, the progress of which the Task Group would follow.
- iv. The University of Exeter Travel Plan (2016-20), which places emphasis on encouraging sustainable travel, and the work undertaken in Devon schools to encourage active travel, were also explored. Encouraging behaviour change surrounding transport habits was identified as a useful line of inquiry for the Task Group.
- v. The second Task Group meeting took place on **7 February 2018**. A report provided by the Head of Education and Learning on the work of Devon County Council in encouraging active travel to Devon schools was discussed.
- vi. Task Group meeting three took place on **26 February 2018**. Sustrans provided an overview of their work in Devon schools and the Task Group consulted the Traffic Management Team Manager at DCC. The Head of Communications was liaised with to consider the work that DCC has already undertaken in raising awareness about air quality and congestion issues.
- vii. **13 March 2018**; Public consultation on the Exeter Air Quality Action Plan. This was attended by an officer from DCC.
- viii. **18 April 2018**; During the fourth Task Group Meeting, Members spoke with the Head of Communications regarding the feasibility of a communications campaign to raise awareness about air quality and congestion. The Director of Insight at Sustrans was also liaised with to discuss challenges surrounding the promotion of active travel to schools.
- ix. **12 June 2018**; The Task Group Report was presented to the Corporate Infrastructure and Regulatory Services Committee.

## Contributors / Representations to the Review

Witnesses to the review (in the order that they appeared before the Task Group / members)

<b>Witness</b>	<b>Position</b>	<b>Organisation</b>
Dr Emma Kain	Specialty Registrar, Public Health	Devon County Council
Dave Black	Head of Planning, Transportation and Environment	Devon County Council
Katie Pearce	Transport Planner, Planning, Transportation and Environment	Devon County Council
Dawn Stabb	Head of Education & Learning	Devon County Council
James Cleeton	Regional Director (England Director South)	Sustrans
Charlotte Stokes	Sustrans Active Travel Education Officer	Sustrans
Chris Rook	Traffic Management Team Manager	Devon County Council
Tony Parker	Head of Communications	Devon County Council
Dr Andy Cope	Director of Insight	Sustrans
Alex Bulleid	Senior Environmental Technical Officer	Exeter City Council

## Written representations

Dr Lindsey Anderson	Impact and Partnership Development Manager – Communities	University of Exeter
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## APPENDIX 4

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