

RoSPA Response to "A Clean Air Zone for Birmingham"

A Birmingham City Council Consultation Paper

16 August 2018



Introduction

This is RoSPA's response to Birmingham City Council's consultation paper, "A Clean Air Zone for Birmingham".

A Clean Air Zone (CAZ) is an area where targeted action is taken to improve air quality. It aims to reduce all types of air pollution, including nitrogen dioxide and particulate matter, to reduce air pollution and improve air quality for everyone. The Government expects Birmingham and other cities to introduce Clean Air Zones from January 2020.

Birmingham City Council propose to implement a Clean Air Zone that would cover all the roads within the A4540 Middleway ring road, including the city centre, but not the Middleway itself, and is seeking views on its proposals.

Charges to enter or drive within the Clean Air Zone would apply to most vehicles whose engine does not meet Euro 4 or better (for petrol engines) and Euro 6 or better (for diesel engines) emission standards. This includes buses and coaches, lorries, vans, cars and taxis and specialist vehicles like bin lorries. Charges would apply all day, every day. The Council has not yet considered whether motorcycles and mopeds should be charged.

The charges will be based on the vehicle and not the person driving it or any passengers or goods being carried. Drivers of vehicles with Euro 4 or better (for petrol engines) and Euro 6 or better (for diesel engines) would not be charged.

The Council propose to set charges to enter or drive within the range of £50 to £100 per day for buses, coaches and lorries and within the range £6 to £12.50 per day for cars. They believe these charges will be high enough to persuade people to change their travel habits (for example, change their vehicle to a cleaner one, travel by public transport, cycle or walk, choose a different route or reduce the number of trips they make).

Some specialist vehicles may be exempted and some people and organisations may need additional support, possibly from the Government and/or the Council.

The Clean Air Zone will be clearly signposted with road signs. There will be no barriers or toll booths, but cameras will read vehicle number plates as they are driven into and within the zone. Drivers will be able to pay online and possibly by other ways, but if the daily charge is not paid, a Penalty Charge Notice (PCN) of up to £120 will be issued to the registered keeper of the vehicle to be paid in addition to the CAZ charge.

If a vehicle is parked within the CAZ zone but does not move all day (e.g. because the driver lives in the CAZ), it would not be charged on that day.

Income from the charges and Penalty Notices will first be used to cover the costs of running the Clean Air Zone, and may also cover some or all of the costs of introducing the Zone.

Following this consultation, the Council will publish a final report, the Clean Air Zone will be 'built' in 2019, and come into force in January 2020.





RoSPA Responses to Questions in this Consultation

About You

Question 1

What is the name of your organisation? RoSPA, the Royal society for the Prevention of Accidents

Question 2

What is your name? Kevin Clinton

Question 3

What is your job title/Role in the organisation? Head of Road Safety, RoSPA

Question 4

What is your email? kclinton@rospa.com

Question 5

Please confirm you are authorised to respond on

behalf of this organisation.

I am authorised to respond for RoSPA.

Question 6

My we contact you further about this consultation

and the Clean Air Zone?

Yes.

About your organisation

Question 7

What Sector does your organisation fall into? RoSPA is an Accident Prevention charity

Question 8

What is the postcode of your organisation's main site? B15 1RP

Question 9

How many employees does your organisation have in Birmingham?

RoSPA's Response

RoSPA has 119 staff in total, 97 of whom are based in Birmingham and either live in Birmingham or live outside Birmingham and travel into the city for work. A further 8 are either trainers or home based staff who travel to our headquarters. The remainder are Edinburgh or Cardiff staff.

We also have part-time driver trainers, driving examiners, and health and safety trainers and consultants who may on occasion visit one of our Birmingham sites, and a network of voluntary groups across the UK, with around 8,000 members who rarely come to Birmingham.





Your Organisation's Vehicles

Question 10

Does your organisation own or lease any vehicles in Birmingham?

RoSPA's Response

Yes, our organisation has vehicles on long term lease

Question 11

Roughly how many of each of the following do you have?

RoSPA's Response

Motorbikes	0
Petrol cars	8
Diesel cars	6
Other fuel cars (including electric, LPG, hybrid)	1
Petrol vans/minibuses	0
Diesel vans/minibuses	0
Heavy Good Vehicles (lorries or specialist vehicles)	0
Coaches/buses	0

Question 12

Roughly what proportion of your current fleet would NOT be charged to drive in the proposed Clean Air Zone?

RoSPA's Response

All of our fleet cars were registered from 2017 onwards and so would be exempt from the Clean Air Zone charges. However, based on where they live and the vehicles they drive, we estimate that some RoSPA staff, trainers and consultants who personally own or lease their vehicles would be charged to drive in the Clean Air Zone. We also have a network of voluntary groups around the country, members of which visit RoSPA offices in Birmingham on occasion, some of whom are likely to be charged to drive in the zone.





About the Clean Air Zone

Question 13

How many sites does your organisation have in the Clean Air Zone?

RoSPA's Response

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RoSPA has two sites in Birmingham, our headquarters which is marginally outside the Clean Air Zone, on Calthorpe road in Edgbaston and our training centre on Castle road in Kings Norton. Both are outside the Clean Air Zone. However, we believe that it is likely that people travelling to these sites will either have to drive through the Clean Air Zone or seek longer (and perhaps more congested) routes to skirt around the Zone.

Question 14

Roughly how many vehicle trips per week are made in the proposed CAZ area as part of your organisation's operation?

RoSPA's Response

	250 more trips week	or a	50 – 249 trips per week	10-49 trips per week	1 - 9 trips per week	Fewer than 1 per week	Don't know
Receive deliveries/collections to my				Yes			
organisation within the proposed CAZ							
Supply goods and services to customers or service users in the proposed CAZ			Yes				
Transport people or goods in or through the proposed CAZ (e.g. courier, haulier, taxi, bus, firm, ambulance)				Yes			





Question 15

Do you have any comments on the proposed area of the Clean Air Zone?

RoSPA's Response

RoSPA strongly agrees that air pollution caused by motor vehicles, especially older diesel vehicles, is a serious risk to public health and must be reduced. We believe that the proposed Clean Air Zone in Birmingham will play an important and effective role in achieving this.

Studies¹ have also identified the risk to children being more exposed to car fumes than adults because they are smaller and so nearer to vehicle exhaust pipes and ingest more pollutants, such as particulates. They suggest that one in three youngsters might develop long-term health problems because of high pollution levels where they live. They also found that children inside cars in traffic are exposed to twice the level of pollutants as those walking, even along busy roads. These findings emphasise the need to reduce air pollution, especially from traffic.

However, it is also crucial that measures to reduce air pollution do not inadvertently increase the risk of road deaths and injuries. Inappropriate speed is one of the most serious road safety problems on Britain's roads, and causes death and injury to thousands of people each year. Removing speed humps, which are proven to be an effective way of reducing road casualties, would increase risk to all road users, but especially to pedestrians, pedal cyclists and children.

A considerable body of evidence over many years has proven that speed significantly increases the likelihood of collisions, the chances of those collisions causing injury and the severity of those injuries.^{2, 3, 4, 5}

Road engineering measures are an established and effective way of reducing road casualties, and are one of the key reasons why death and injury on our roads has fallen so substantially over the last few decades. The measures that are most effective are traffic calming schemes and 20 mph zones. They have been shown to reduce:

- Injury accidents by 60% and child injury accidents by 67%
- Road accidents by 56% and fatal and serious injuries by 90%⁷
- Pedestrian casualties by 54%, child casualties by 54% and child pedestrian casualties by 74%⁸ⁱ
- Injury accidents by about 42% and fatal or serious accidents by 53%⁹
- Road casualties by over 40% and fatal or serious injuries to children by 50¹⁰
- Injury accidents by about 15% on average¹¹

Evidence also suggests that 20 mph limits, without traffic calming measures, reduce speeds and casualties, but not as much as 20 mph zones with traffic calming. ^{12, 13, 14} They are most appropriate for roads where average speeds are already low, below 24mph, and the layout and use of the road also gives the clear impression that a 20mph speed or below is the most appropriate.

20 mph zones are often located in the most deprived areas and there is a well established link between socio-economic status and risk of being injured in road traffic accidents, ^{15,16,17} so any increase in risk due to the removal of speed humps would disproportionately affect people in those areas.





We suggest that the strategy for introducing the Clean Air Zone in Birmingham includes measures that do not increase risk in other areas, such as:

- Reducing the number of diesel vehicles and encouraging ultra-low emission vehicles (ULEVs)
- Improving the performance of diesel engines
- Improving road layouts, junctions and congestion bottlenecks
- Increasing walking and cycling
- Other measures to reduce motor vehicle use

We anticipate that the Clean Air Zone will increase congestion on the outskirts of the zone as motorists try to skirt around the zone rather than drive through it. It seems likely that the impact of more vehicles using unfamiliar routes to avoid charges could create a number of other problems. For example, we suspect parking along roads at the edge of the ring road will become more problematic.

There are already parking problems near RoSPA's HQ, by the Botanical Gardens and Harborne Road, where people park and then leave their cars when the timed parking restrictions come into force. There may also be an increase in the level of pavement parking, especially near schools. The Council may need to monitor and take action on these types of problems.

As drivers seek alternative routes using the ring road (e.g. exit the Aston Expressway before the tunnels and take the ring road all the way round to Five Ways instead) the ring road is likely to become even more congested than it already is. Journey planning, including allowing enough time for journeys, will be key. RoSPA will certainly consider the advice we give to our staff and visitors about journey planning, routes and travelling on foot and bicycle.

The Clean Air Zone may increase walking and cycling journeys from the suburbs to the city centre, and any safety implications will need to be considered and addressed.

The Clean Air Zone provides opportunities and incentives to promote safer routes for walking and cycling, particularly in areas where there will be a likely increase in congestion as drivers try to avoid the city centre. For those visiting our headquarters. RoSPA will promote the use of public transport, and, from 2019, the new tram service that should be running between New Street Station and Fiveways.





Question 16

Which types of vehicle do you think should be included in the Clean Air Zone restrictions?

RoSPA's Response

	Should be included in the CAZ restrictions	Should not be included in the CAZ restrictions	No Charge	Don't Know
Buses and coaches	Yes			
Lorries	Yes			
Taxis and Private Hire	Yes			
Vehicles				
Vans and Minibuses	Yes			
Cars	Yes			
Motorcycles and Mopeds	Yes			

Question 17

The Council think that a price in the range of £50-100 per day for buses, coaches and lorries and £6-12.50 per day for other vehicles would be right. What do you think the daily charge for driving in the Clean Air Zone should be?

RoSPA's Response

	£50 to £100 per day	£6 to £12.50 per day			
Buses and coaches	Yes				
Lorries	Yes				
Taxis and Private Hire Vehicles		Yes			
Vans and Minibuses		Yes			
Cars		Yes			
Motorcycles and Mopeds		Yes			

Question 18

Do you have any comments on which vehicles should be charged to drive in the Clean Air Zone and how much those charges should be?

RoSPA's Response

RoSPA supports the Council's approach of charging vehicles whose engines do not meet the specified emissions standards (ie, Euro 4 or better for petrol engines and Euro 6 or better for diesel engines). However, owners of some vehicles, such as camper vans, may struggle to replace their vehicle with a newer version with a Euro 4 or Euro 6 engine due to the lack of availability and cost of such replacement vehicles. These owners should be considered as special case as discussed in question 20 below.





Question 19

If a Clean Air Zone was introduced what do you think would be the overall impact for:

- Your organisation?
- The health of people in Birmingham?
- Businesses in Birmingham?
- Birmingham as a city?

RoSPA's Response

Our Organisation

As both RoSPA's HQ and our training centre are outside the Clean Air Zone, it is likely to have a limited direct impact on us. However, staff and visitors to our sites will be affected (for example, by longer or more expensive journeys) if they need to enter the Clean Air Zone (during their commute or to catch a train to London, for example) or if their journeys are affected by increased congestion on roads around the zone.

We believe that the Clean Air Zone will result in increased operating costs for RoSPA. In particular, our staff, trainers and consultants who use their own personal vehicles to commute to and from our office or training centre, or travel to one of the mainline train stations in Birmingham to catch a train (to London, for example) for work purposes, are likely to face increased costs and Clean Air Zone charges.

We are also concerned that this will have a detrimental effect on staff recruitment and retention as the additional travel costs and more difficult journeys may not be affordable or may interfere with family life. These issues may deter potential job applicants or encourage some staff to look for alternative employment outside Birmingham.

Commuting costs are likely to increase for staff whose vehicles would be charged for driving in the Clean Air Zone.

As an employer RoSPA will need to consider whether we can take measures to mitigate some of these issues for our staff who are adversely affected.

The health of people in Birmingham

RoSPA thinks that the Clean Air Zone will ultimately improve the health of people in Birmingham. However, increased congestion during construction and the effects on journey times as people seek to avoid entering the Zone may increase stress and frustration.

Businesses in Birmingham

RoSPA thinks that the Clear Air Zone would have similar impacts on businesses in Birmingham as we think they are likely to have on RoSPA as an organisation based in Birmingham.

Birmingham as a City

RoSPA thinks that the Clear Air Zone will ultimately help to create a healthier and more pleasant city. However, increased congestion during construction and the effects on journey times as people seek to avoid entering the Zone may increase stress and frustration.





Question 20

To what extent do you agree or disagree that there should be extra support for the following groups?

RoSPA's Response

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't know/ No opinion
Small and medium Sized Enterprises operating in the CAZ area	Yes					
Larger businesses and organisations operating in the CAZ area.	Yes					
Businesses and organisations outside the CAZ area						
Taxis Operators	Yes					
People living in or close to the CAZ area	Yes					
People with limited income	Yes					
Disabled people	Yes					
People attending worship in the CAZ area	Yes					
Parents and guardians of patients at Birmingham Children's Hospital	Yes					

As we mentioned in our response to question 18, owners of some vehicles, such as camper vans, may struggle to replace their vehicle with a newer version with a Euro 4 or Euro 6 engine due to lack of availability and cost of replacement vehicles. These owners should be considered as special case as discussed in question 20 below.

Question 21

Do you have any comments on the type of support which could be provided, and who it should be for?

RoSPA's Response

RoSPA believes that people and organisations should not be disadvantaged because they happen to live or operate in the CAZ area, or because of their financial circumstances. Options such as additional time before charges come into force or financial assistance should be considered.

We are not clear about the cost or availability of disabled vehicles with Euro 4 or better petrol engines and Euro 6 or better diesel engines. This should be considered.

Parents and guardians of patients at Birmingham Children's Hospital should certainly not be disadvantaged by the location of the Birmingham Children's Hospital. Nor should they be subject to time limited or means tested discounts on charges for long stay patients (as currently in operation for parking) Discounts should be permanent and not means-tested.

We are not convinced that "Travel planning support for places of worship to help worshippers change their travel habits" would be effective. They would require adequate provision of alternatives to driving, especially at weekends and evenings when people may be attending places of worship.





Question 22

If a Clean Air Zone was introduced do you think your organisation would need extra support?

RoSPA's Response

Yes, we would need extra support to mitigate increased costs and journey times.

Question 29

If you answered 'yes', what kind of support do you think you would need and why?

RoSPA's Response

If the Clean Air Zone goes ahead as described in Birmingham City Council's consultation paper, we would need to consider what measures we could take as an employer to help our staff, trainers and consultants who might be adversely affected. As well as help to enable us to provide financial assistance to staff, or to mitigate increased operating costs, we would welcome help to provide advice to staff on how they can plan commute and other journeys, and what other measures they could take to avoid being charged to drive in the Clean Air Zone.

RoSPA will consider what support it can provide to staff, such as information about public transport routes etc. in the area and considering flexible working/working from home where possible for staff who are affected by the charge if their role does not require them to be office-based five days a week.

Question 30

Is there anything else which can be done to improve Birmingham's air quality?

RoSPA's Response

RoSPA support the Council's other proposed measures, such as improving public transport, upgrading vehicle engines, building more low-emission refuelling stations (e.g. electric charging points), improving road designs, speed limits and junctions and reviewing charges for parking.

We also suggest that the council consider how it might reduce on-road parking and pavement parking, especially near schools during school run times, and seek to increase the number of safety cameras (especially average speed ones) on Birmingham roads.

Question 31

Do you feel that the information provided has enabled you to make an informed comment on the proposals?

RoSPA's Response

Yes





Question 32

What additional information would have helped you to comment on the proposals?

RoSPA's Response

We have no further comments to make.

RoSPA thanks Birmingham City Council for the opportunity to comment on the proposals. We have no objection to our response being reproduced or attributed.

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- ¹ https://news.sky.com/story/children-more-at-risk-from-car-fumes-because-they-are-small-11411650
- ² 'Some characteristics of the population who suffer trauma as pedestrians when hit by cars and some resulting implications', Ashton, S. J. and Mackay, G. M. (1979) http://www.ircobi.org/wordpress/downloads/irc1979/pdf files/1979 4.pdf
- ³ 'Literature review of pedestrian fatality risk as a function of car impact speed', Rosén, E. et al, Accident Analysis and Prevention, 43, 2011
- ⁴ 'TRL Project Report 58: Speed, Speed Limits and Accidents', Finch et al (1994), https://trl.co.uk/reports/PR58
- ⁵ 'TRL Report 421: The Effects of Drivers Speed on the Frequency of Road Accidents', Taylor et al, 2002, https://trl.co.uk/reports/TRL421
- ⁶ 'Review of traffic calming schemes in 20 mph zones, UK', Webster, D. C. and Mackie, A. M, TRL, 1996
- ⁷ 'Hull Reaps Road Safety Rewards From Slowing the City's Traffic', Brightwell, S., Local Transport Today, 2003.
- ⁸ Review of 20 mph zones in London Boroughs', Webster, D. and R. Layfield, TRL, 2007
- ⁹ 'Review of 20 mph zones in London Boroughs', Webster, D. and R. Layfield, TRL, 2007
- ¹⁰ Grundy, C. et al (2009) 'Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis', British Medical Journal, 2009; 339:b4469.
- ¹¹ 'Area-wide urban traffic calming schemes: a meta-analysis of safety effects', Elvik, R., Accident Analysis and Prevention, 33(3), 2001
- ¹² Urban speed management methods, Mackie, A, TRL, 1998
- ¹³ 'Interim Evaluation of the Implementation of 20mph Speed Limits in Portsmouth, Final Report' http://assets.dft.gov.uk/publications/speed-limits-portsmouth/speed-limits-portsmouth.pdf ¹³
- ¹⁴ '20mph Speed Limit Pilot Areas: Monitoring Report', Bristol City Council, 2012

http://www.bristol20mph.co.uk/wp-content/uploads/2016/06/20mph-Monitoring-Report-pilot-areas-2012.pdf

- ¹⁵ 'Review of 20mph Zone and Limit Implementation in England: Road Safety Research Report Findings', Department for Transport, 2009, http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme4/20mphzoneresearch.pdf
- ¹⁶ 'Using geographical information systems to assess the equitable distribution of traffic-calming measures: translational research', Rodgers, S. E. et al, Injury Prevention, 16: 2011
- ¹⁷ 'The impact of 20 mph traffic speed zones on inequalities in road casualties in London', Steinbach, R. et al, Journal of Epidemiol Community Health, 65(10), 2011



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