



A Clean Air Zone for Birmingham

Frequently asked questions

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What is a Clean Air Zone?

A Clean Air Zone is an area where targeted action is taken to improve air quality, specifically as a consequence of pollution from road vehicles. Clean Air Zones aim to reduce all types of air pollution, most notably nitrogen dioxide and tiny airborne particles known as particulate matter, so that people breathe in less of all these pollutants.

Within a Clean Air Zone, there is also a focus on reducing carbon emissions and making sure that improvements in air quality are long lasting. Pollution should not be increased by growth in population, new buildings or changes in land use.

Why Birmingham?

In big cities such as Birmingham, road transport is the biggest source of air pollution. Constant monitoring shows us that the impact of pollution on air quality is biggest next to busy main roads. Levels of air pollution can vary over short distances, including from one side of a pavement to the other.

Figures show that up to 900 deaths a year in Birmingham alone can be attributed to man-made pollution, mostly through transport and the increased use of diesel vehicles. By contrast, there are fewer than 30 deaths resulting from collisions on Birmingham's roads each year.

Pollution results not only from the exhaust of cars and vehicles but also from mechanical wear and tear of engine components, friction from tyres on the road and wear of brake discs and pads – all of which lead to tiny particles known as particulate matter getting into the air we breathe.

If you are travelling by car in heavy city traffic then the polluted air inside your vehicle is more concentrated than outside your vehicle, placing both driver and passengers at greater risk. While you will still be exposed to some air pollution when walking or cycling, you will also have the additional health benefits that come with physical activity.

The Government's Air Quality Plan has suggested Birmingham will need a Clean Air Zone in order to achieve legislative compliance and deliver the health benefits that arise from this in the shortest possible time.

When will this happen?

Birmingham City Council is required to take action to meet legal air quality limits in the shortest possible time. The aim is to implement the Clean Air Zone by 2020 in order to deliver the health benefits as quickly as possible.

What happens if Birmingham does not comply?

The city could be fined tens of millions of pounds, with figures in the range of £60 million being suggested, if it does not comply with the clean air requirements – and there is also the unacceptable risk to people's health if we do not take action.

Where will the Clean Air Zone be?

We believe the Clean Air Zone should include all roads within the A4540 Middleway ring road, as this is where the worst hotspots are.

As well as dealing with high levels of pollution in those areas, the Clean Air Zone must be big enough so that we don't simply move the pollution further down the road.

What vehicles will be affected?

The type of Clean Air Zone we are consulting on (Class D) will cover buses, coaches, taxis, heavy goods vehicles (HGVs), light goods vehicles (LGVs) and private cars, with an option to include motorbikes and mopeds.

Clean Air Zone charges are based on the type of vehicle and what sort of engine it has. Engines can be sorted by fuel type (for example, petrol, diesel or electric) and by Euro standard, which defines how much pollution the engine may emit. The higher the Euro number, the cleaner the engine.

The engine standards for a Clean Air Zone are set nationally – this is not something which we can decide for Birmingham. To avoid paying a charge to drive in the Clean Air Zone, diesel engines must be Euro 6 (Euro VI for buses and lorries) or better, while petrol engines must be Euro 4 or better. All hybrid, electric and Liquefied Petroleum Gas (LPG) vehicles already meet Clean Air Zone standards.

There are some specialist vehicles whose engines cannot be upgraded, so will not be charged to enter the Clean Air Zone, regardless of their engine type:

- Specialist emergency vehicles (ambulance, fire and police)
- Historic vehicles
- Military vehicles
- Show vehicles

How much will the charge be?

The charge for vehicles to enter or travel within the Clean Air Zone needs to be high enough to persuade people to change their travel habits; replacing their vehicle with a cleaner one, making their journey in another way (public transport, cycling or walking), choosing a different route or simply stopping making certain trips.

We are proposing the following daily charges:

- Buses and coaches: £50-£100
- Lorries (HGVs): £50-£100
- Taxis and private hire vehicles : £12.50
- Vans (LGVs): £12.50
- Private cars: £6-£12.50

We tested some different pricing options, and we think that prices in these ranges would encourage enough people to change their travel habits or vehicle.

Remember that a vehicle whose engine is clean enough will not have to pay anything.

We think that Clean Air Zone charges should be in place all day every day. Although there are fewer people around in the middle of the night, pollutants take time to disperse so some will still be in the air the following morning.

Isn't this just a congestion charge?

No. A Clean Air Zone is about reducing emissions in a specific area of the city, so this means restricting the most-polluting vehicles rather than simply targeting all vehicles. A key part of the work we will be doing between now and after implementing the CAZ is encouraging the use of greener, cleaner vehicles and greater use of public transport.

Won't this impact on people who rely on vehicles for their livelihood, such as taxi drivers and business owners?

We want to work closely with as many different groups across the city as possible, including businesses, haulage companies, members of the taxi trade and bus operators, to understand how a Clean Air Zone would affect them and to ensure that we deliver the best possible strategy for cleaning up our city's air, including a consultation building on previous discussions. We will also be looking at support for small and medium-sized businesses, and specifically taxi and private hire owners, drivers and operators.

What is nitrogen dioxide and what does it do?

Nitrogen dioxide (NO₂) is a gas produced by burning fossil fuels, with one of the biggest sources of NO₂ being diesel used as a fuel in vehicle engines. It can cause breathing problems and also lung damage if you are exposed to it for long periods. In particular, it affects children and people with existing breathing problems, including asthma and chronic obstructive pulmonary disease.

What is particulate matter, where does it come from and what does it do?

Particulate matter (PM) is a mixture of airborne liquids and solids that are too small for us to see.

The type of particulate matter that concerns us most in Birmingham comes from road transport. It's made up of a combination of partially burned fuel – petrol or diesel – together with engine lubricants, tiny specks from worn tyres and brakes and from road dust.

The very smallest particles are able to pass directly into the bloodstream.

There is medical evidence that both short and long-term exposure can cause respiratory and cardiovascular illness and even death. People who have existing lung or heart disease are most at risk together with children and older people, although ultimately air pollution affects us all.

What can I do now to protect myself and people I care about?

There are some simple, cost-effective things we can all do now to improve the quality of air that we breathe. These are:

1 – Changing the way we travel

Road transport is the biggest cause of air pollution in Birmingham. We can improve air quality by leaving the car at home and choosing to travel by public transport, cycling or walking. Even if we choose to travel differently just once a week we could reduce the amount of air pollution our cars cause by up to 20%.

Walking and cycling will help us to get fitter and also improve the environment of our city.

Car sharing is another good way of reducing the number of vehicles on our roads.

2 – Changing the time we travel

If people still have to travel by car, avoiding morning and evening rush hours can reduce congestion and produce less pollution from vehicles idling in traffic jams.

If it is possible for you, ask your employer if you can do flexible working to time your journey to and from work outside of peak traffic times.

3 – Changing the routes we travel

If you are cycling or walking, avoid main roads and choose routes using quieter back streets, parks or canals. More details about cycling in Birmingham can be found at www.birmingham.gov.uk/bcr

The simple rule is this – the closer we are to busy traffic, the more we are at risk of air pollution. Even choosing to walk on the side of the pavement furthest from the heaviest traffic can help.

4 – Changing the way we drive

Driving economically – for example, by only accelerating gently, sticking to speed limits and switching your engine off when stationary – uses less fuel, saves money, reduces the risk of having an accident and reduces air pollution.

We can also reduce pollution from our cars by making sure they are properly maintained – for example by keeping the tyres pumped up to the right level and having cars regularly serviced. These basic measures can not only reduce the amount of fuel we use but also reduce the amount of tiny particles of worn tyre, brake pads and discs and engine wear that gets into the atmosphere and then gets into us through breathing.

More tips about driving to protect the environment are available from the Automobile Association at <http://www.theaa.com/driving-advice/fuels-environment/drive-smart>

5 – The school run

Children need to understand that there are other ways of getting around and that there are negative things about being driven to school – including the impact transport has on air quality and our health.

The actions open to us include cycling or walking with our children to school and supporting schools to develop active travel programmes.

If you do have to do the school run by car, consider park and stride for the last part of your journey and avoid idling by turning the engine off when you are waiting near the school gates.

If you are driving with your children in heavy traffic, shut the car windows and adjust the air conditioning so that it circulates the air already inside the vehicle and does not suck in air from outside.

What will happen to the money drivers pay?

Income from the CAZ charges and any Penalty Charge Notices issued will first be used to cover the costs of running the CAZ. Depending on what money we receive from the Government, the income may also have to cover some or all of the costs of introducing the CAZ.

After that, any surplus money will be spent on things which will further improve Birmingham's air quality, such as improvements to public transport, cycling and walking and support for businesses and individuals.

Are motorcycles exempted?

CAZ standards (set nationally) say that motorcycles need to be Euro 3 or better to avoid paying a charge. Whether non-complaint motorcycles should be charged this has not yet been decided. Please respond to the consultation and give us your views on this.

What about making public transport better before a CAZ is introduced?

Investment in public transport is ongoing, and we have an ambitious programme of improvements planned, working in partnership with the West Midlands Combined Authority. This includes new rail stations, further expansion of West Midland Metro, the creation of brand new SPRINT Bus Rapid Transit routes and new cycle routes. Operators are also investing in public transport; bus operators are upgrading their fleet, the local rail franchise includes new trains, more weekend and evening services and increased capacity.

In an ideal world, all these projects would be completed before a CAZ is implemented, but the reality is that we need to tackle our air quality as soon as possible, and it takes time to build significant new public transport infrastructure. Anything we can bring forward and do before the CAZ is implemented, we will: new bus lanes will be introduced, and the A34 and A38 cycle routes and the Metro extension to Centenary Square are all due to open before CAZ charging begins.

When will more carriages be provided on the trains?

The council does not control trains services, these are determined by private rail operators, but the new West Midlands Rail franchise does include plans to increase train capacity, especially during rush hour. This includes an investment in 100 new carriages on the Cross City line in Birmingham, and a further 80 for the Snow Hill line. The new Cross City line carriages will offer metro-style passenger facilities, just like on the London Overground, with increased space to carry more passengers.

What support will be available for disabled and older people?

We know that some people will need support when the CAZ is introduced. This may be financial incentives to help with the cost of changes to vehicles, extra time to change their vehicle before being charged, discounts on the CAZ charges, or extra incentives to use public transport.

Some of this support could come from the Government and some from the Council and Transport for West Midlands, but we don't yet know exactly how this will work.

How did you work out air pollution contributes to 900 deaths per a year?

The figure of 900 deaths has been calculated based on the best estimates from two separate reports by Public Health England¹ and Ricardo-AEA². This research was published between 2014 and 2015 and is the most up to date estimate available that gives the actual number of deaths. The figure includes deaths attributed to both nitrogen dioxide and particulate matter and is also in line with national figures, when looking at the percentage of deaths that would be expected in Birmingham.

¹ PHE "Estimating Local Mortality Burdens Associated with Particulate Air Pollution", Public Health England, 2014

² Ricardo-AEA "West Midlands Low Emission Zones: Technical Feasibility Study. Economic and health impacts of air pollution reductions", 2015.

Will the A38 through the centre of town be included?

Yes. Through trips, which neither begin nor end in the city centre are a significant contributor to our air pollution.

What about patients and visitors at Birmingham Children's Hospital?

One of the things we want people to tell us during the consultation is whether there are groups of people who should get extra support when the CAZ is introduced. This could include the parents and guardians of patients at the Children's Hospital. Please respond to the consultation and give us your views on this.

Will you have to pay each time you enter the zone if you enter more than once in a day?

No, the charge will be a one-off daily charge regardless of how many times you enter the zone in a day.

What about people who currently live within the CAZ area?

One of the things we want people to tell us during the consultation is whether there are groups of people who should get extra support when the CAZ is introduced. This could include people living in the city centre, particularly those on a low income. Please respond to the consultation and give us your views on this.

The Government told us to buy diesel cars to reduce CO₂, now we are being told that diesel cars are worse for air quality.

The encouragement by Government in the past to purchase diesel vehicles was based on the best available information at the time. Since then there have been significant advances in technology and research.