



Welcome to the Birmingham Clean Air Roadshow

Headline Partner: 

Our partners:



UNIVERSITY OF
BIRMINGHAM



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Session One

Birmingham's air quality challenge

FRAIKIN
YOU DRIVE, WE CARE

 **Birmingham**
City Council

teep
TYSELEY ENERGY PARK

UNIVERSITY OF
BIRMINGHAM

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Birmingham City Council



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#brumbreathes

A Clean Air Zone for Birmingham

Consultation open from 4 July
to 17 August 2018.



Making a positive difference everyday to people's lives

Background

- Poor air quality is a major public health burden
 - Up to 900 deaths per year in Birmingham are linked to man made air pollution
- Transport is the biggest source of pollution
 - Contributing on average to approximately 80% of nitrogen oxides (NOx)
- UK Government has obligations under EU and domestic legislation to set out a national strategy and plans to improve air quality to meet legal limits

Background

- In 2015 Client Earth took the Government to the Supreme Court over its inaction to address air quality.
 - As a result the Government were instructed to develop an air quality plan to achieve reductions of NO₂ in the shortest possible time in line with legislative requirements.

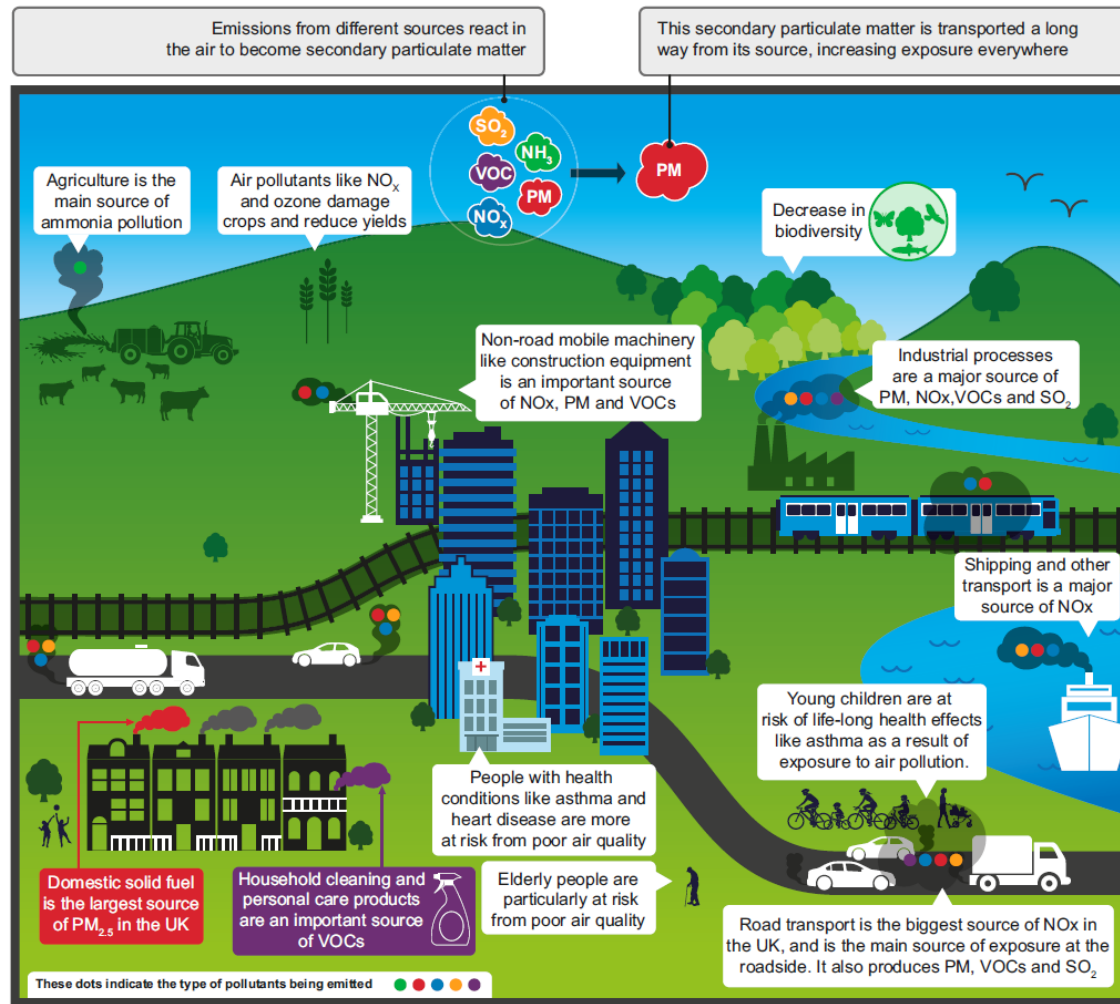
 - National Air Quality Plan issued in December 2015
 - Identified five cities including Birmingham as being non-compliant beyond 2020.

 - Second Client Earth challenge 2016 – successfully challenged 2015 Air Quality Plan

 - Updated National Air Quality Plan (the NO₂ Plan) – July 2017

 - Ministerial Direction issued in December 2017
 - Required the council to submit a business case for a scheme in September 2018
-

The causes and types of air pollution



Source: Clean Air Strategy 2018 (DEFRA)

The types of air pollution

Nitrogen oxides (NO₂)

80% Polluting vehicles are the biggest source of NO₂

46% With diesel vehicles creators of NO₂ in Birmingham biggest

Ammonia (NH₃)

Sulphur dioxide (SO₂)

Primary Particulate Matter (PM_{2.5})

Volatile organic compounds (NMVOCs)

The effects of air pollution on Birmingham's citizens

Up to
900 DEATHS



per year linked to man-made air pollution

LINKED TO

Heart disease
Diabetes
Asthma
Obesity
Cancer
Dementia



Deaths due to air pollution worldwide per year

LINKED TO

Still births
Infant deaths
Low birth weight
Organ damage
Premature deaths



CHILDREN IN
HIGH
POLLUTION
AREAS

x4



more likely to have reduced lung function when they become adults



61% OF JOURNEYS TO WORK ARE BY CAR OR VAN

Exposed to **21%** higher levels of pollution



Affects the

VULNERABLE & DEPRIVED

areas most



BUS & TAXI DRIVERS

are exposed to

3x



more pollution than anyone else

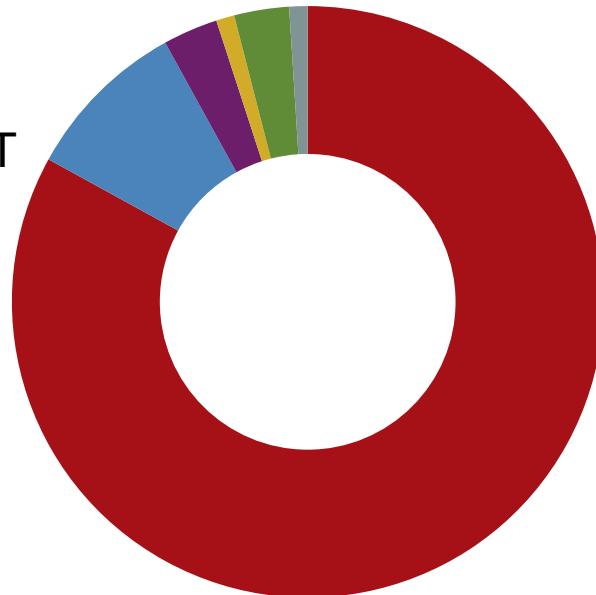
The challenge for Birmingham

The composition of our vehicle fleet and the emissions created provide Birmingham with a significant challenge

83%

The majority of Birmingham's vehicle fleet are cars

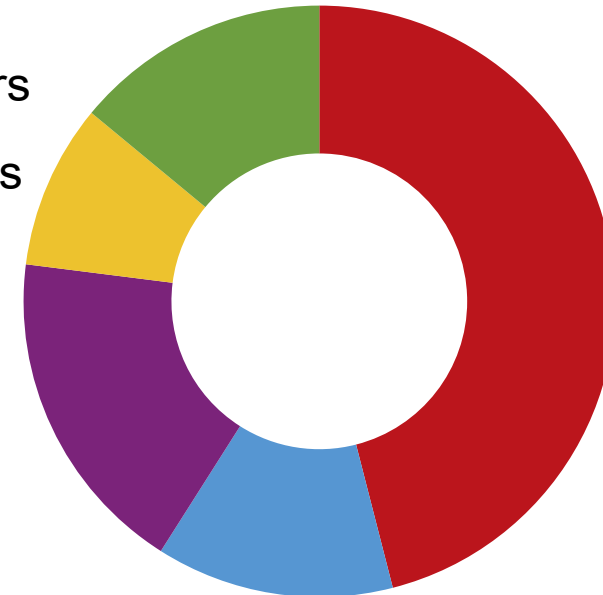
- Car
- LGV <3.5T
- OGV
- Taxi
- Bus
- Other



46%

Diesel cars account for almost half of the NOx emissions in the city

- Diesel cars
- Petrol cars
- Vans
- Buses
- HGVs



The 'hotspots' where the problems are worst

Location

Level of NO₂ expected in 2020 if we take no action

A4540 Lawley Middleway
to Garrison Circus

46.9µg/m³

A4100 Digbeth

46.4µg/m³

A38 Lancaster Circus to
Dartmouth Circus

46.6µg/m³

Suffolk Street Queensway
near Beak Street

48.8µg/m³

#brumbreathes

A CLEAN AIR ZONE FOR BIRMINGHAM



The purpose of a Clean Air Zone

- An area where targeted action is taken to improve air quality, by discouraging the most polluting vehicles from entering the zone
- A Clean Air Zone (CAZ) should achieve compliance with defined air quality standards by focusing on three specific outcomes

1

Reduce

The amount of journeys that need to be made – or at least that travel through locations with the poorest air quality

2

Shift

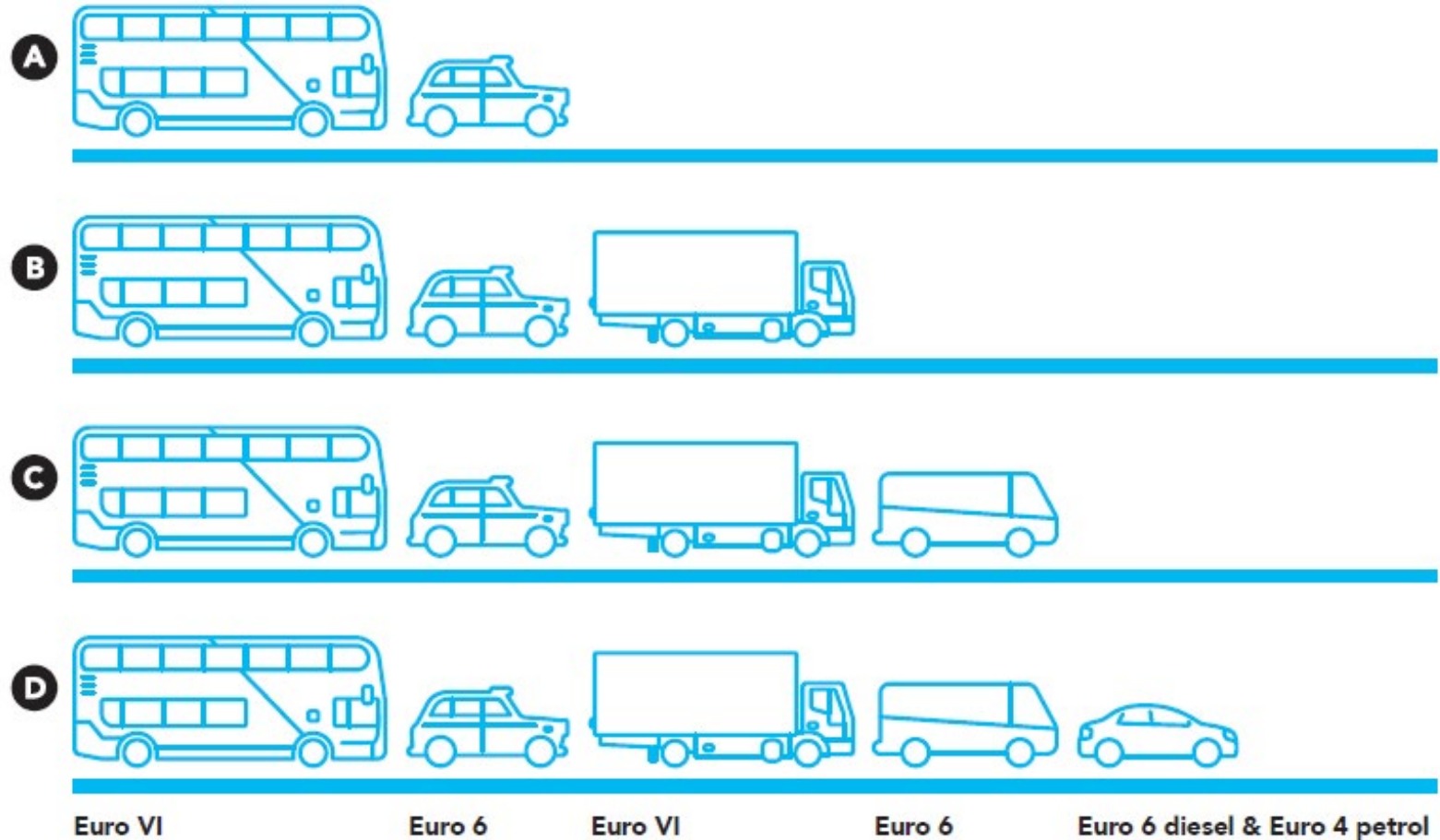
Journeys to public transport, walking and cycling.

3

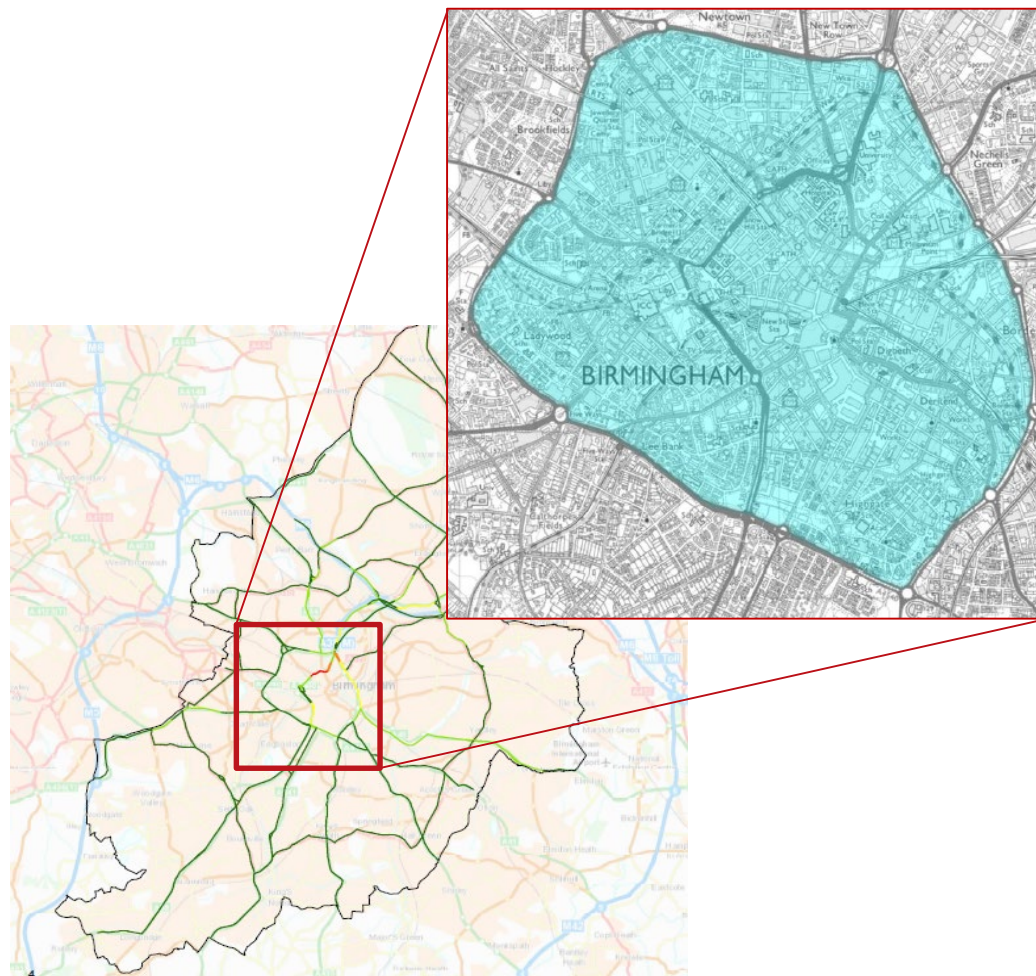
Improve

Clean up the emissions of the trips which are essential – stimulating take up of cleaner vehicles

There are different classes of CAZ



Developing the CAZ



Developing the CAZ

- Local modelling shows the air quality issues broadly align with Government's national Pollution Climate Mapping (PCM) with regard to the locations of exceedance of the **NO₂ annual mean limit value of 40 µg/m³**
- Different potential solutions have been modelled including different CAZ classes
 - The goal was to see what type of CAZ would provide the optimum solution
- CAZ D is required for Birmingham (which includes private cars)
- Consultation in July and August 2018



Have your say.
Consultation open
from 4 July to
17 August 2018.

#brumbreathes

A Clean Air Zone for Birmingham

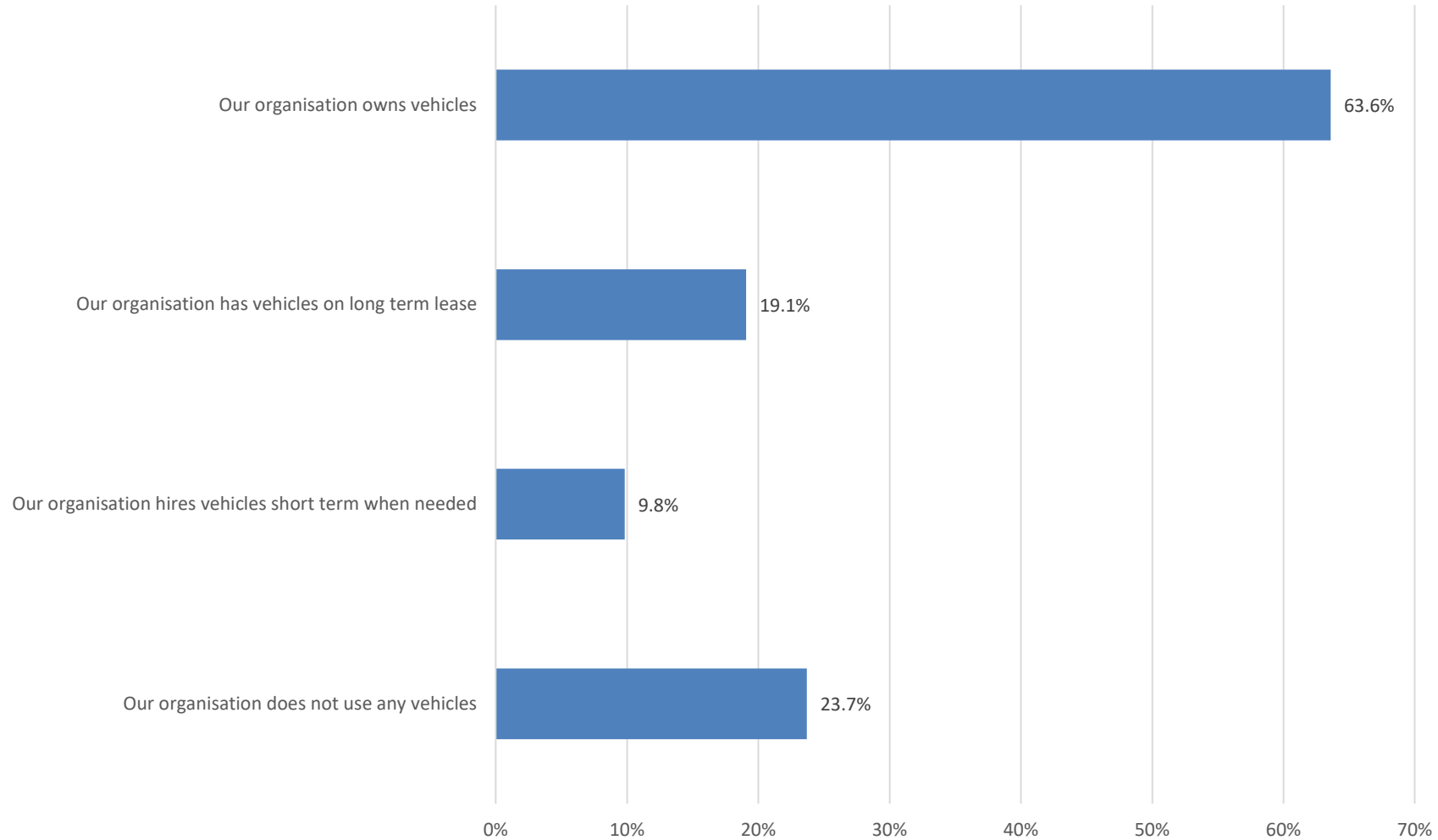
birmingham.gov.uk/caz



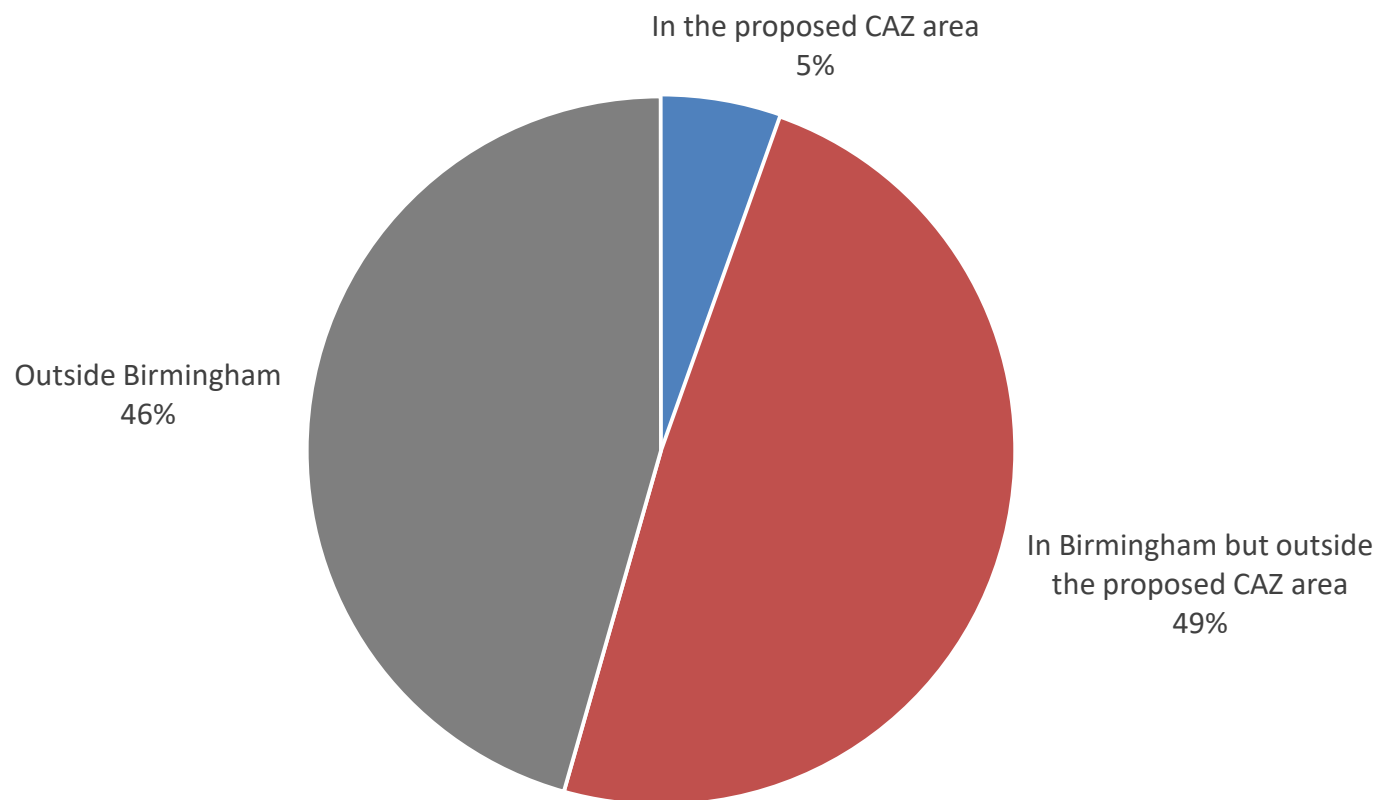
Consultation Response

- 10,368 individuals
- 384 organisations and businesses
- A petition organised by the Motorcycle Action Group with 394 signatures
- Largest response to any Birmingham City Council lead engagement exercise

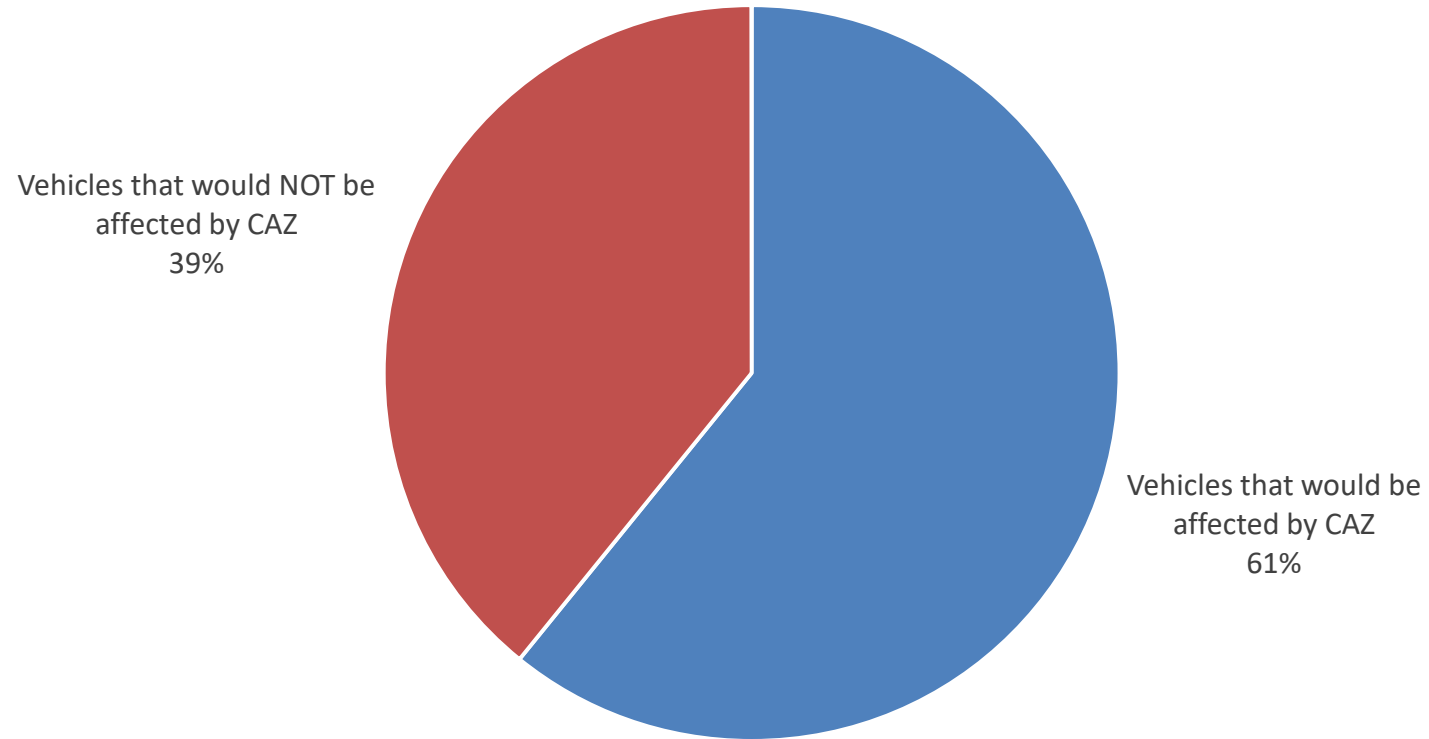
oQ10. Does your organisation own or lease any vehicles in Birmingham?



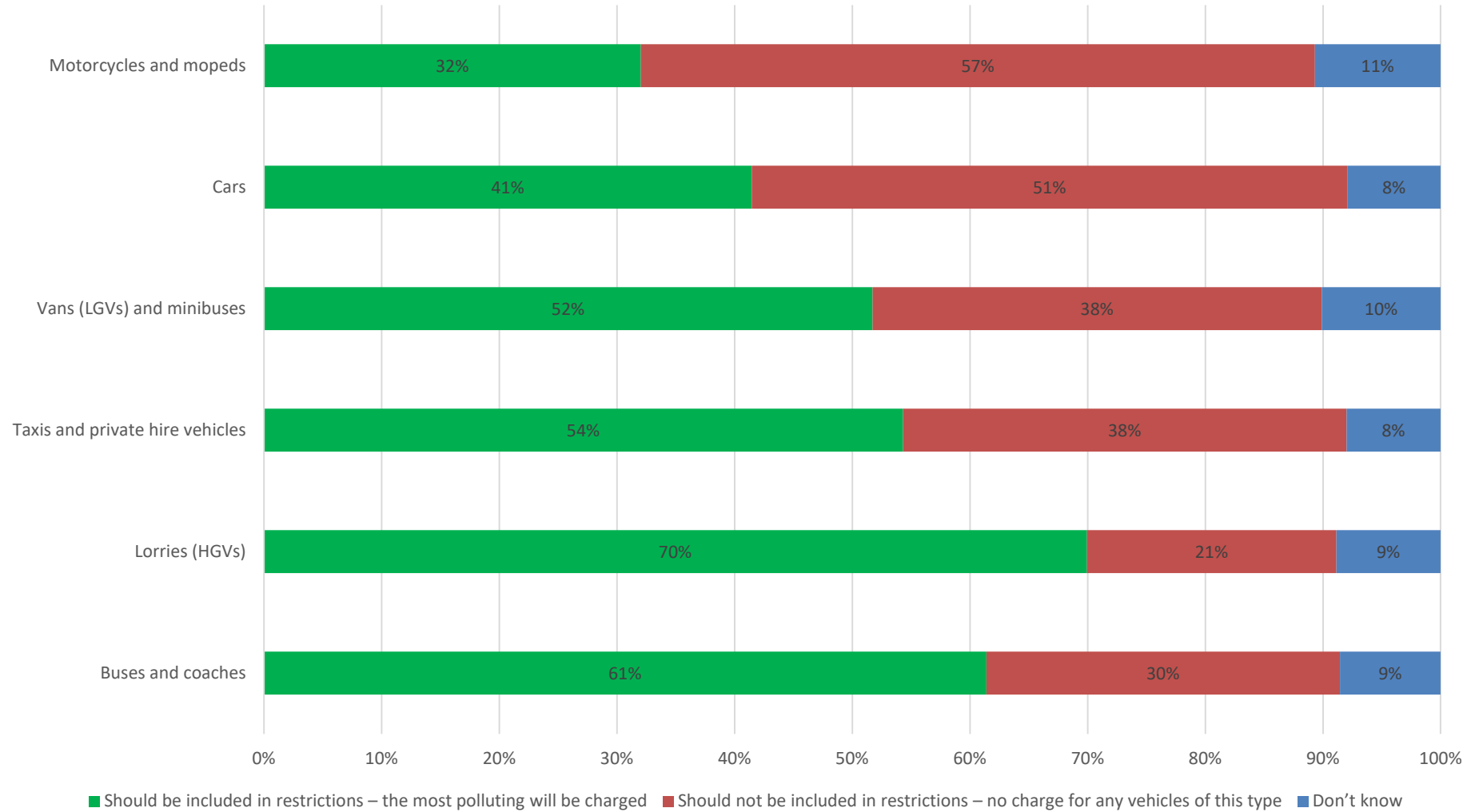
**oQ13. How many sites does your organisation have?
(% of total sites by location)**



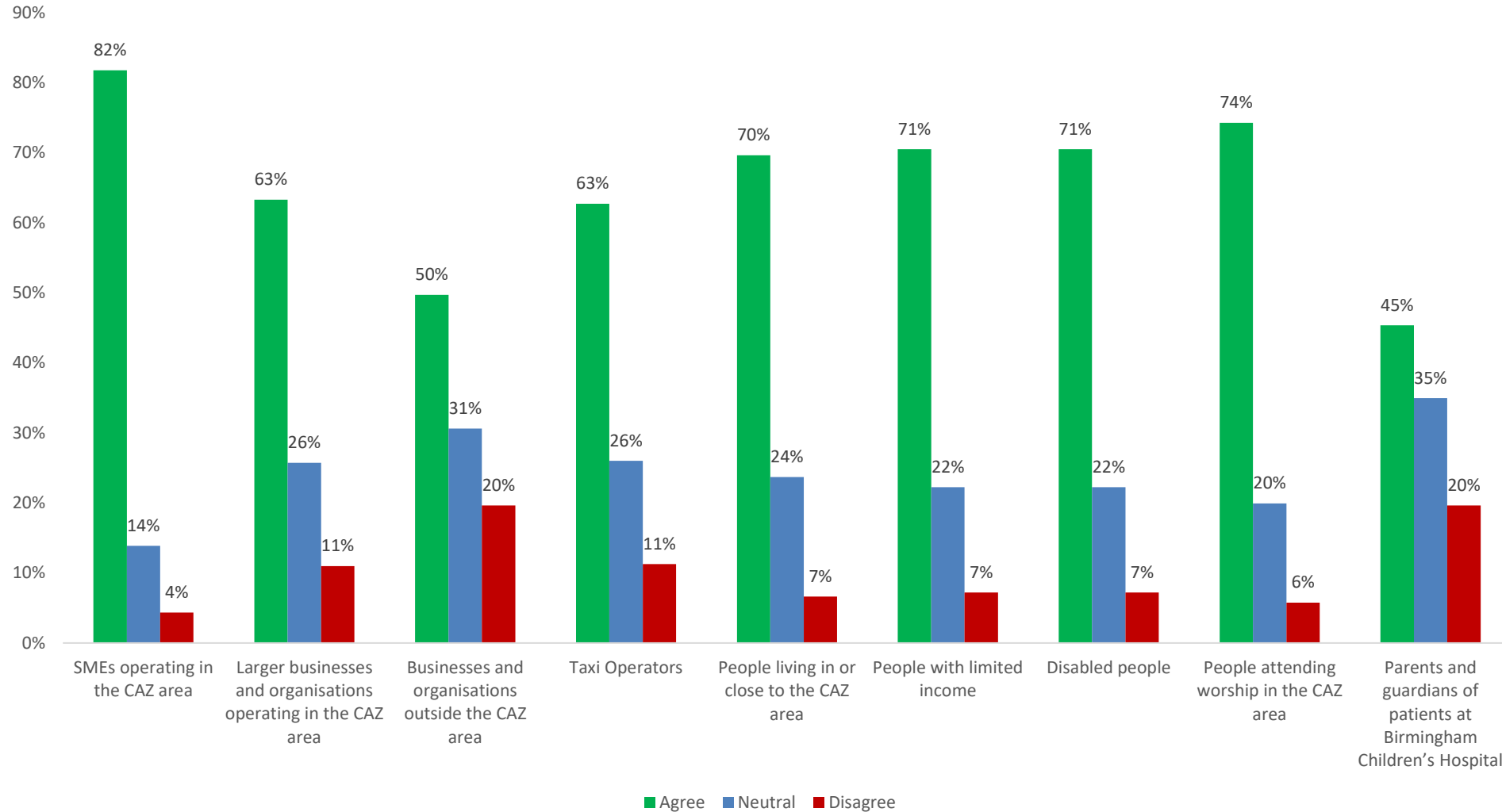
oQ12. Roughly what proportion of your current fleet would NOT be charged to drive in the proposed Clean Air Zone?



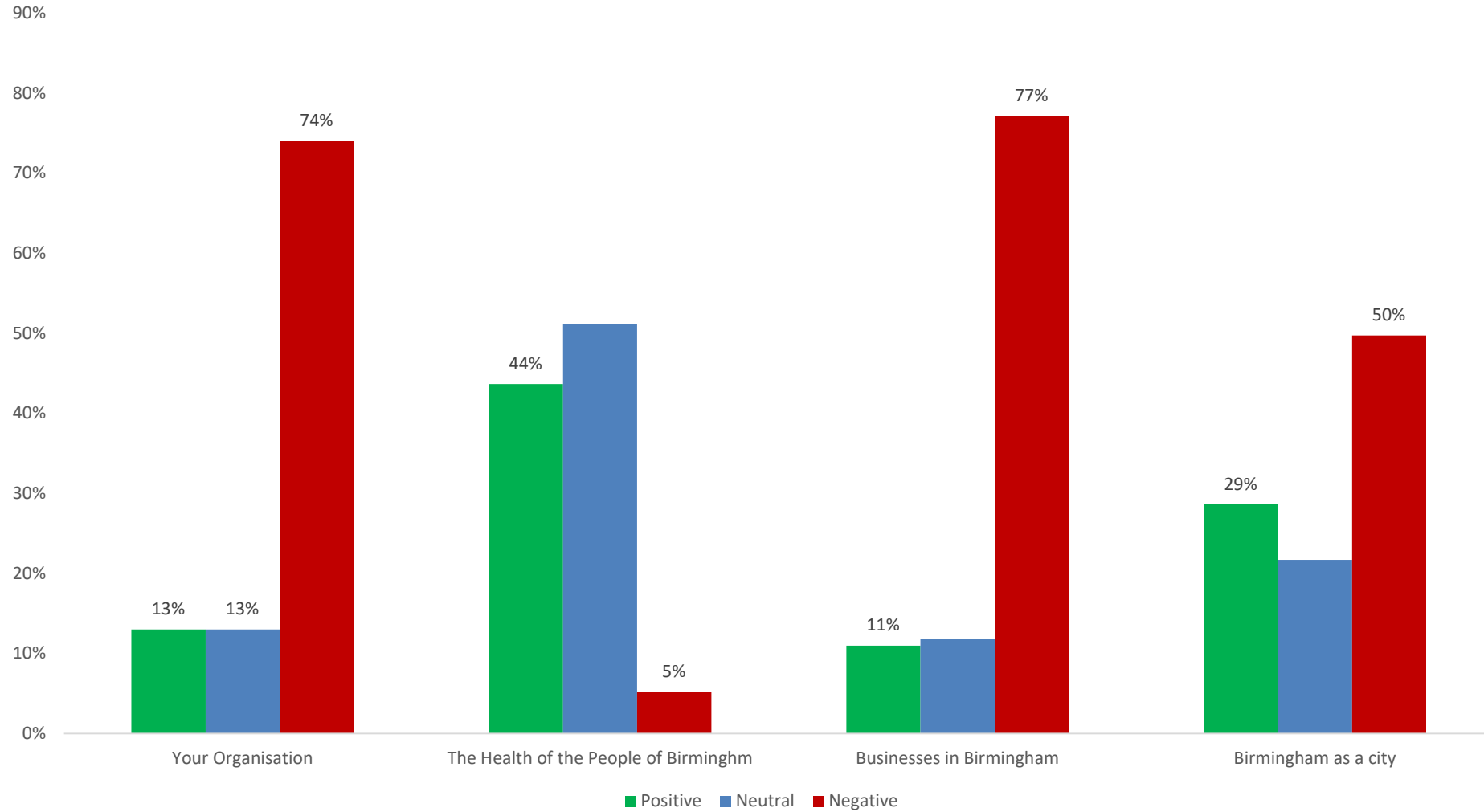
oQ16 / iQ11. Which types of vehicle do you think should be included in the Clean Air Zone restrictions?



oQ21: To what extent do you agree or disagree that there should be extra support for the following people?



oQ19: If a Clean Air Zone was introduced what do you think would be the overall impact for the following?



Key Issues raised

PROPOSED CAZ AREA

- There was some support for the location outlined in the proposed CAZ area, with others asking for it to cover a larger area.
- Some suggested the zone should be smaller, only covering the inner ring road or excluding certain areas, such as the Jewellery Quarter and industrial areas and the A38 Expressway.
- Many also used their comments on this question to voice concerns about the impact on individuals, families and businesses through resultant financial hardship, job losses and increased congestion and pollution in areas surrounding the CAZ.

Key Issues raised

OTHER IDEAS FOR ACTIONS TO IMPROVE BIRMINGHAM'S AIR QUALITY

The main suggestions made by respondents were:

- Make improvements to public transport either before or alongside the introduction of the CAZ
- Improve the cycle network
- Improve the road system to aid traffic flow, along with more effective traffic lights and fewer roadworks
- Introduce more green spaces and tree planting in the city
- Develop the rail network further to enable more journeys to be made by train
- Create a system of effective and affordable Park & Ride schemes to allow people to drive near to the CAZ and either walk or catch a bus to their final destination
- Extend the current tram system further than is currently planned
- Introduce travel passes to allow certain groups to have cheaper or free access to the CAZ for work, worship, hospital visits, visiting family members and for residents living inside the CAZ
- Promote walking and increase pedestrianisation of city centre areas
- Provide more charging points for electric vehicles

Key Issues raised

- **Support for Individuals and Businesses**

Respondents asked for extra support for a number of groups, which included:

- Visitors to and staff at the Birmingham Children's Hospital
- Exemptions for people with disabilities and their carers
- Those living within the CAZ being made exempt or receiving discounts
- Financial support for those on low incomes
- Support or exemptions for small businesses within the CAZ
- Commuters and workers within the CAZ
- Taxi and private hire vehicle drivers

The types of support that were suggested for these groups included:

- General financial support
 - Introduction of a vehicle trade-in scheme
 - Phased introduction or more time before charging begins
 - Subsidised bus travel and/or bus passes
 - Discounts or exemption from paying the charge
-
- Some felt that no support should be available for any groups.

Mitigation

- It is proposed to target mitigation at those groups least able to cope with the changes brought by the CAZ.
- The types of mitigation under consideration include exemptions, discounts, sunset periods.
- Financial incentives to support businesses and enhanced infrastructure to support the transition to compliant modes of transport to be met from the Clean Air Fund (CAF).

Proposed Exemptions

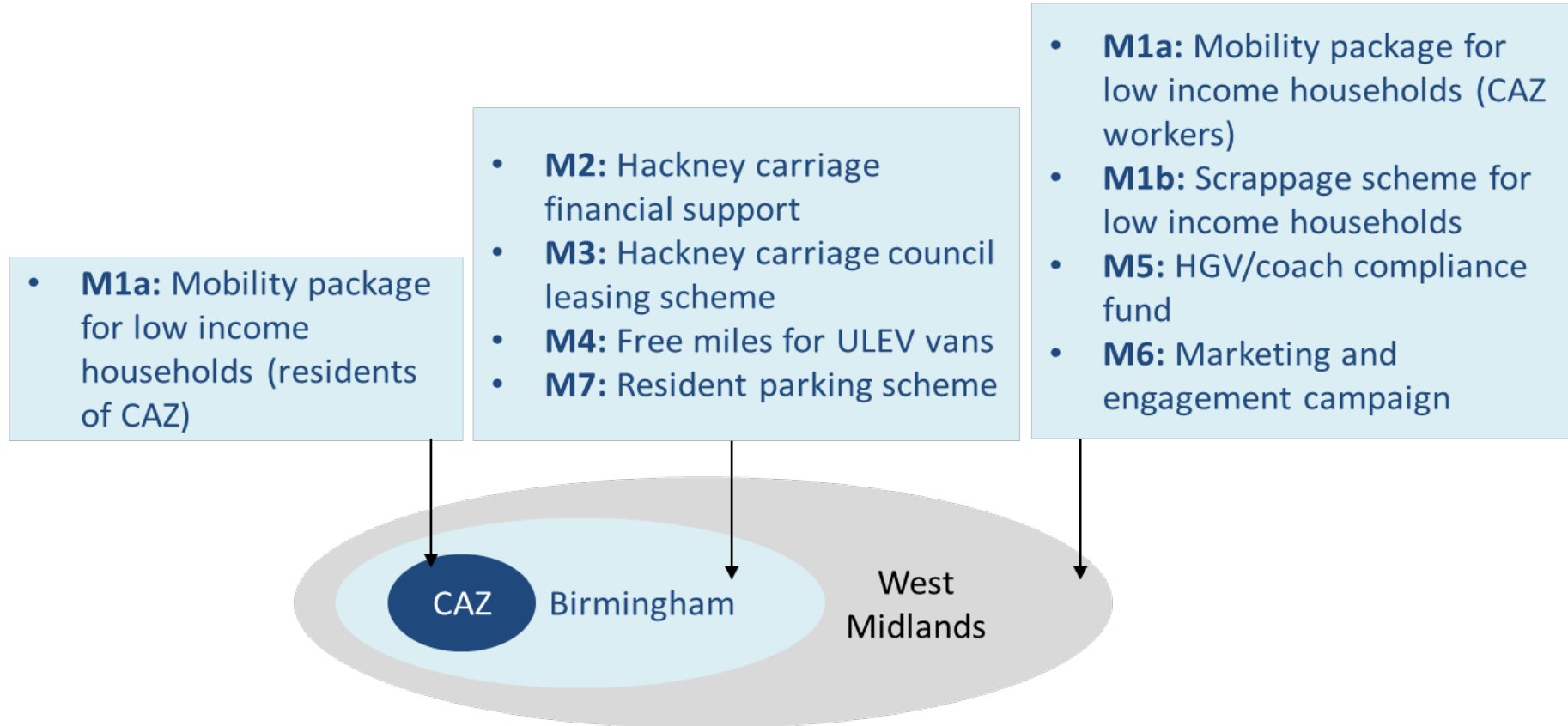


- **E1:** HGVs/coaches registered within CAZ
- **E3:** Vans registered within CAZ
- **E5:** Private vehicles registered within CAZ

- **E2:** HGVs with pre-existing finance agreement
- **E4:** Vans with pre-existing finance agreement
- **E6:** Income deprived residents traveling into the CAZ for work
- **E9:** Community & school transport

- **E7:** Key workers and volunteers traveling into CAZ for work
- **E8:** Visitors to key hospitals
- **E10:** Two wheeled vehicles

Proposed Mitigation Measures



Brum Breathes Air Quality Programme

- Birmingham Clean Air Strategy – Autumn 2018
 - provide a roadmap to deliver cleaner air in Birmingham to and ultimately beyond 2030.
 - align with the Government Clean Air Strategy 2018
 - go beyond legal duties, to incorporate ambitious actions, to be cross-party, to involve partners and be owned by the city of Birmingham with the Council as the driving partner.

Brum Breathes Air Quality Programme

- Tyseley Energy Park
 - public/private sector development of first low/zero emission re-fuelling hubs in Birmingham.
 - Due to open from April 2019, providing commercial vehicle re-fuelling - hydrogen, CNG, electric, LPG and bio-diesel- supporting cars, buses, taxis, trucks, vans, HGVs and bin wagons.

- Further sites across the city and proximity to motorway/key route network to be developed throughout 2019.

- Electric vehicle chargepoint network – £2.92 million secured from the Office for Low Emission Vehicles to support implementation of a city level electric vehicle chargepoint network.

Brum Breathes Air Quality Programme

- Roll out of retrofit programme
 - 65 taxis already retrofitted to LPG under a pilot scheme- now CVRAS compliant technology solution.
 - Clean bus vehicle technology – Transport for West Midlands (TfWM) have secured £3m, matched by £2.9m from bus operators for retrofit.
- Kick starting development of the hydrogen market - 20 hydrogen buses to be procured by the Council and deployed in 2019- encouraging further take – up by next generation buses, cars and vans.
- Delivery & Service Plans - support business to make more efficient and reliable deliveries and make cost saving efficiencies - reducing congestion, collisions and emissions.

Brum Breathes Air Quality Programme

- Development of online Business Support Tool
 - ‘Business Breathes’- Targeting commercial fleet managers & sole traders that use vehicles in the city – cars, vans, trucks and HGVs.

- Summary information about CAZ.
- Focus on fleet transition from compliant vehicles via CVRAS accredited retrofits as an interim solution to different types of ultra low & zero emission vehicles and fuels.
- FAQs.
- Easy location finders for Birmingham & national re-fuelling facilities that provide electric, CNG, hydrogen, LPG and bio-diesel.
- Latest developments and eligibility for mitigation actions from retrofit grants for HGVs and financial support for fleet transition.

Next Steps

- The Ministerial Direction required the Council to submit a Business Case to Government by 15th September.
- Cabinet considered the preferred option on 10th September.
- Important that the Council now provides a clear message around the Clean Air Zone so that individuals and businesses can start to consider and make the necessary changes.
- It is fully acknowledged that this is an extremely challenging and complex process which will have significant impacts on the City.
- Further ongoing engagement with stakeholders and the public on the proposals as the scheme proceeds towards implementation will continue particularly regarding measures to mitigate the impacts.
- Clean Air Zone operational January 2020.
- Consultation on Birmingham Air Quality Strategy later this year.

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Making a positive difference everyday to people's lives