

Mitigation / Recommendation Cross Reference

Mitigation Measures			
Ref	Mitigation Measure	Key Theme from question 'What kind of support do you think you would need and why?'	% Individuals who answered this question mentioning this theme
M1	Scrappage scheme or mobility credit	• Make Improvements to public transport	N/A
		• Those living within the CAZ should be exempt or receive discount	12.5%
		• Support for those on low income	8.2%
		• General financial support	25.6%
		• Introduction of a vehicle trade-in scheme	17.6%
M2	Mobility Credit	• Make Improvements to public transport.	N/A
		• Those living within the CAZ should be exempt or receive discounts	12.5%
		• Support for those on low income.	8.2%
		• Commuters and workers	3.9%
		• General financial support	25.6%
		• Subsidised bus travel and/or bus passes	3.6%
M3	Taxi operational support package or LPG retrofit scheme	• Taxi Drivers	2.1%
		• General Financial Support	25.6%
		• Introduction of a vehicle trade-in scheme	17.6%
M4	Council Taxi leasing scheme	• Taxi Drivers	2.1%
		• General Financial Support	25.6%
		• Introduction of a vehicle trade-in scheme	17.6%
M5	Free Van Miles	• Small and local businesses	4.3%

	on BCC network	<ul style="list-style-type: none"> Commuters and workers 	3.9%
		<ul style="list-style-type: none"> General Financial Support 	25.6%
M6	Companies with HGV's	<ul style="list-style-type: none"> Small and local businesses 	4.3%
		<ul style="list-style-type: none"> Commuters and workers 	3.9%
		<ul style="list-style-type: none"> General Financial Support 	25.6%
M7	Marketing Campaign	<ul style="list-style-type: none"> All 	N/A
Exemptions			
E1	CAZ HGC's and coaches	<ul style="list-style-type: none"> Small and local businesses 	4.3%
		<ul style="list-style-type: none"> Discount or exemption from paying the charge 	N/A
E2	HGVs with existing finance agreements	<ul style="list-style-type: none"> Small and local businesses 	4.3%
		<ul style="list-style-type: none"> Commuters and workers 	3.9%
		<ul style="list-style-type: none"> Discount or exemption from paying the charge 	Combination of wider themes
E3	SME Vans	<ul style="list-style-type: none"> Small and local businesses 	4.3%
		<ul style="list-style-type: none"> Discount or exemption from paying the charge 	Combination of wider themes
E4	Vans with existing finance agreements	<ul style="list-style-type: none"> Small and local businesses 	4.3%
		<ul style="list-style-type: none"> Discount or exemption from paying the charge 	Combination of wider themes
E5	CAZ Residents	<ul style="list-style-type: none"> Those living within the CAZ should be exempt or receive discounts 	12.5%
		<ul style="list-style-type: none"> Discount or exemption from paying the charge 	Combination of wider themes
E6	Income Deprived working within the CAZ	<ul style="list-style-type: none"> Commuters and workers 	3.9%
		<ul style="list-style-type: none"> Discount or exemption from paying the charge 	N/A
E7	Key Workers	<ul style="list-style-type: none"> Necessary visitors to and staff at the 	16.8%

	working within the CAZ	Birmingham Children's Hospital	
		<ul style="list-style-type: none"> • Commuters and workers 	3.9%
		<ul style="list-style-type: none"> • Discount or exemption from paying the charge 	Combination of wider themes
E8	Hospital and GP Visits	<ul style="list-style-type: none"> • Necessary visitors to and staff at the Birmingham Children's Hospital 	16.8%
		<ul style="list-style-type: none"> • Discount or exemption from paying the charge 	Combination of wider themes
E9	Faith Groups	<ul style="list-style-type: none"> • Discount or exemption from paying the charge 	Combination of wider themes
E10	Community and School Transport	<ul style="list-style-type: none"> • Exemptions for the disabled and their carers 	Combination of wider themes
		<ul style="list-style-type: none"> • Discount or exemption from paying the charge 	Combination of wider themes

Birmingham Clean Air Zone

Mitigation measures

All mitigation measures are anticipated to last 1 year, unless noted otherwise.

ref	Mitigation measure	Target group	Target fleet	Description	Impacted group size
M1 (a)	Scrappage scheme or mobility credit	CAZ residents and low-income group	Private car/van	<p>Measure targeted at CAZ residents and low-income households that regularly travel to the CAZ.</p> <p>With evidence of scrapping a non-compliant car the target group will receive either:</p> <ul style="list-style-type: none"> - £2,000 cash payment toward the purchase of a compliant petrol car. - £2,000 mobility credit. Credit to be supplied on a SWIFT card with no expiration for use. 	<p>7,700</p> <p>Non-compliant vehicles estimated with DfT registration information for CAZ residents and as a proportion of AADT into the CAZ for low income. 50% uptake assumed.</p>
M1 (b)	Mobility credit	Low-income living or working within the CAZ	Private car/van	Mobility credit offered to low income non-compliant car owners living or working within the CAZ	<p>5,650</p> <p>Non-compliant vehicles estimated with DfT registration information for CAZ residents and as a proportion of commuting AADT into the CAZ for low income. 50% uptake assumed.</p>
M2	Taxi operational support package or LPG retrofit scheme	Taxi drivers on non-compliant Hackney carriages	Hackney carriages	<p>Taxi drivers with non-compliant Hackney Carriages will be offered support payments to be paid toward the purchase or lease of a ULEV vehicle. This is forecast as £5,000 over 4 years.</p> <p>Alternatively, the target group can choose to receive support (£5,000) for an LPG retrofit of their current vehicle, this includes those who must first</p>	<p>1,100</p> <p>Of current Hackney carriage fleet operating in Birmingham 1,150 are non-compliant with CAZ requirements.</p>

				purchase an eligible Euro 4 vehicle before carrying out the retrofit.	
M3	Council taxi leasing scheme			Birmingham City Council to purchase 50 ULEV taxis to lease out to most vulnerable drivers	50
M4	Free Van miles on BCC network	Drivers of electric Vans	Vans	ULEV van drivers can register to receive credit on Birmingham's public charging network	1,000 Element Energy electric vehicle forecasting model shows 1,000 EV vans operating in the Birmingham City Council area in a high uptake scenario in 2020.
M5	HGV	Companies with HGV	HGV and LGVs/Vans	HGV fleet operators within the West Midlands will be able to apply for a cash payment towards retrofit technology that will make their vehicles compliant or alternatively money towards the purchase/lease of a new/second-hand compliant vehicle. The applications will be judged against a set-criteria to target impacted groups.	500 Merit based applications will be reviewed with 500 receiving the mitigation funding.
M6	Marketing campaign	Educational outreach to all vehicle owners	All	Campaign to educate different user groups on benefits of ULEVs and inform non-compliant vehicle owners of options	

Exemptions

All exemptions are initially planned for one year. However, there may be political appetite to extend some of the measures where low impacts are not anticipated to delay the forecast compliance date.

ref	Exemption	Target Group	Target fleet	Description	Daily increase in non-compliant CAZ cordon crossings (AADT)	Proportional increase in CAZ D+ AADT
E1	CAZ HGVs and coaches	CAZ businesses	HGVs and coaches	Vehicles registered within the CAZ will receive an exemption from the CAZ charge. Max 2 vehicles per company. This is not limited to SMEs. 130 fleet size anticipated.	90	0.05% AADT increase overall 1.35% increase of HGV AADT
E2	HGVs with existing finance agreements	HGVs travelling to the CAZ	HGVs	HGVs registered in the Birmingham City area travelling to the CAZ with and existing finance agreement beyond 2020 will be exempt from the CAZ charge. 335 fleet size anticipated to be impacted.	240	0.15% AADT increase overall 3.50% increase of HGV AADT
E3	SME Vans	SME Van owners	Vans	Vans registered to SMEs within the CAZ will receive an exemption from the CAZ charge. 480 fleet size anticipated. Max 2 vehicles per company.	350	0.20% AADT increase overall 1.60% increase of LGV AADT
E4	Vans with existing finance agreements	Vans within Birmingham City area	Vans	Vans registered within the Birmingham City area travelling to the CAZ with and existing finance agreement beyond 2020. Van ownership within Birmingham City area was	850	0.45% AADT increase overall 4.10% increase of LGV AADT

				used as a proportion of those entering the CAZ. Vehicle fleet age was used to determine the number of vans that will be non-compliant and locked in a lease agreement. Average finance period is assumed to be 7 years. The vans captured in E3 have been subtracted from this to forecast a fleet impact of 1,200.		
E5	CAZ residents	Car and Van owners residing in the CAZ	Private cars/vans	All private car and van owners who are residents of the CAZ, as defined by DfT registration information, will be exempt from the CAZ charge. Anticipated 5,500 fleet impact.	1,500	0.85% AADT increase overall 1.10% increase of car AADT
E6	Income deprived working within the CAZ	Income deprived	Private cars/vans	Income deprived residents of the Birmingham metropolitan area traveling into the CAZ for work will be exempt from the CAZ charge. An impacted group of 3,500 is forecast by multiplying the CAZ commuting traffic by the proportion of the Birmingham Metropolitan area that is income deprived.	2,500	1.30% AADT increase overall 1.65% increase of car AADT
E7	Key workers working within the CAZ	Key workers	Private cars/vans	Key workers and volunteers travelling to work in the CAZ will be exempt from the CAZ charge. Commuting trips are multiplied by the proportion of key workers to total workers found in the UK economy. There may	1,900	1.05% AADT increase overall 1.35% increase of car AADT

				<p>be overlap with E6.</p> <p>Non-compliant fleet of 1,500 anticipated to be impacted.</p>		
E8	Hospital and GP visits	Hospital patients and visitors	Private cars/vans	<p>Visitors to select hospitals, GP offices and care homes will be exempt from paying the CAZ charge.</p> <p>General assumptions were applied to Hospital, GP and care home capacities to derive the proportion of visiting traffic that would be in non-compliant vehicles.</p>	100	<p>0.05% AADT increase overall</p> <p>0.07% increase of car AADT</p>
E10	Community and school transport	Section 19 transport providers	Vans/minibuses	<p>Vehicles that serve the community and are classified as Section 19 operators will be exempt from the CAZ charge.</p> <p>Eligible fleet of 100 defined through stakeholder engagement.</p>	75	<p>0.04% AADT increase overall</p> <p>0.37% increase of LGV AADT</p>