



Clean Air Consultation

Report
May 2019



Gweithio dros Gaerdydd, gweithio gyda'n gilydd
Working for Cardiff, working together



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Clean Air Consultation

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Background

There is no doubt that air pollution is damaging to the human health and the environment.

Public Health Wales have stated that poor air quality is probably the second greatest health concern after smoking and is the most significant environmental determinant of health.

Recent work by Public Health Wales estimates that the equivalent of over 220 deaths each year among people aged 30 and over, in the Cardiff and Vale Health Board area, can be attributed to Nitrogen dioxide (NO₂) pollution with many more citizens suffering ill health as a consequence of poor air quality.

The Council has been undertaking a detailed study into air quality as a result of a legal requirement which has been placed on the Welsh Government, which requires the Council to take action to reduce pollution levels (NO₂) to the legal limit which is set out in European legislation in the shortest possible time.

What are the Results to Date?

Detailed air quality and transport modelling has taken place across the city to forecast NO₂ levels and the results have identified one street where EU legal limits are likely to be breached in future years. The results have showed that only Castle Street, which runs in front of the Castle by Westgate Street to Duke Street, is likely to fail legal compliance beyond 2021 if nothing is done to reduce traffic pollution.

Although the modelled data, which is required under the EU Directive, has only indicated that Castle Street will be in breach of the required level, the Council also has a number of Air Quality Management Areas (AQMA) across the City, where pollution levels also remain a concern.

What are the Solutions?

The most recent Outline Business Case has concluded that a package of non-charging measures is the preferred option when compared with a charging Clean Air Zone.

The main reason for this is that the non-charging measures deliver wider air quality benefits across all of Cardiff when compared directly to the results of the charging Clean Air Zones.

Further government guidance is clear that where pollution limits can be met by non-charging solutions that these should be the preferred option over any charging scheme.

The proposed measures are currently concept designs at this stage and look to tackle the problem of air pollution in the city centre. An outline bid for funding has been made to the Welsh Government for the following schemes and these will be refined, following public consultation and cabinet approval as we develop the full business case:

- Implementation of electric buses to replace the oldest and most polluting buses – costing £1.8m
- Introduction of a Bus Retrofitting Scheme for bus operators in Cardiff to upgrade older buses so they meet Euro VI engine emission standards – costing £1.4m
- Major changes to both Castle Street and Westgate Street and the city centre loop to allow for better and more efficient movement of public transport (buses) and increasing active travel capacity in the City Centre – costing £18.9m
- Review and implement a revised taxi policy to ensure that all applications to grant a ‘new vehicle license’ or for a ‘change of a vehicle on a current license’ are only approved for vehicles that meet the latest Euro 6 emission standards – costing £5.5m.
- Improvements to Active Travel and increased 20 mph areas – costing £4.5m View questions and answers on the clean air project.

Research Methodology

An online survey was developed, which could be accessed from a page on the Council website, which provided the background information on the proposals. This was distributed to members of the Council’s Citizens’ Panel, consisting of over 5,000 residents across the city, and a list of key stakeholders, listed in Appendix 1.

Public engagement events were also held, giving members of the public an opportunity to ask further details about the scheme from members of the Project team; 76 members of the public attended these events.

April 13th: Angel Hotel (Prince of Wales Suite – Ground floor)

April 20th: Central Library (level 3)

May 4th: Angel Hotel (Rhymney Suite – Floor 1)

May 11th: Central Library (level 3)

Both the survey and the engagement events were promoted through local news media, and via the Council’s social media channels – 52 posts were released throughout the consultation period, reaching 1.9 million users, and generating 2.1 thousand clicks.

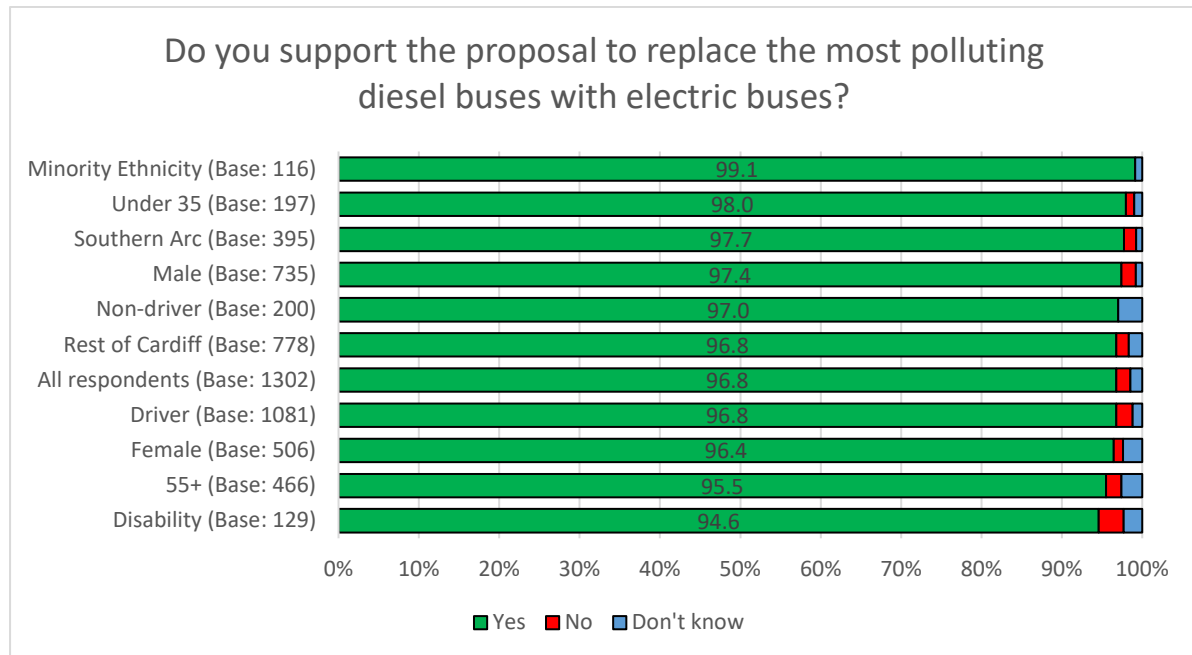
After data cleansing to remove any blank or duplicate responses, a total of 1,303 responses were received for the consultation.

Research Findings

Buses

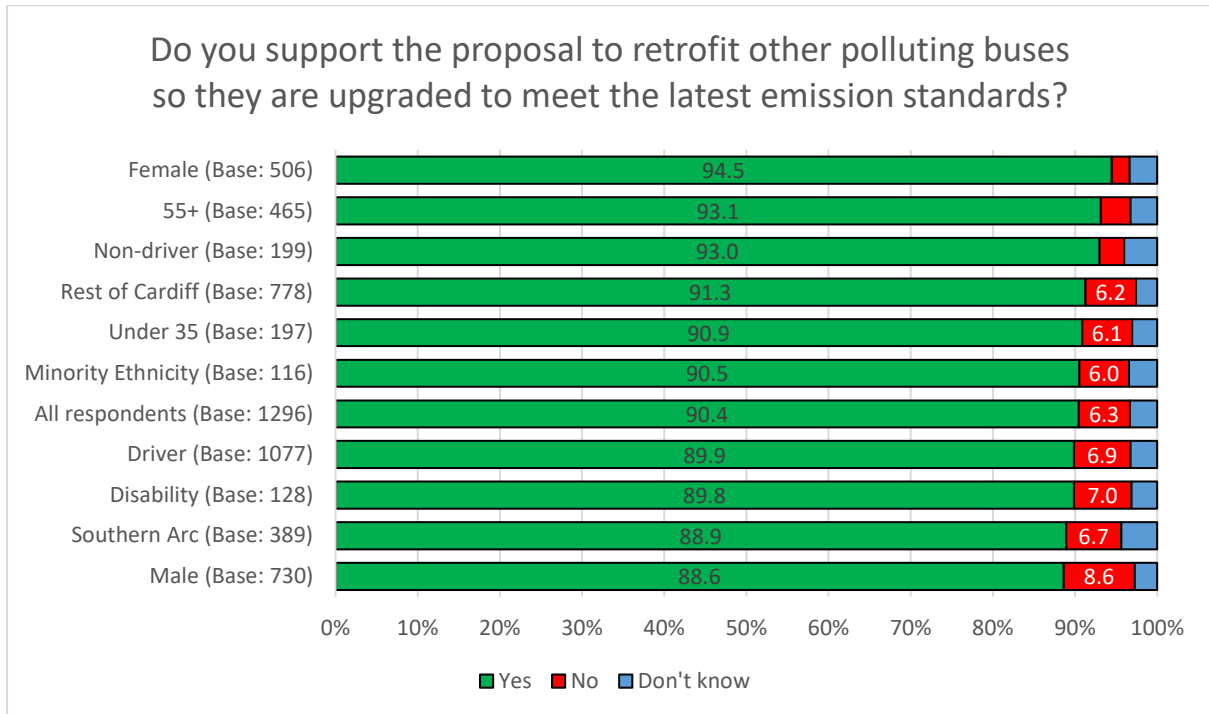
1 Do you support the proposal to replace the most polluting diesel buses with electric buses?

Support for the proposal to replace the most polluting buses was overwhelming, with 96.8% of all respondents in agreement; the lowest level of support stood at 94.6%, amongst respondents identifying as disabled.



2 Do you support the proposal to retrofit other polluting buses so they are upgraded to meet the latest emission standards?

There was also strong support to retrofit other polluting buses, at 90.4% overall.



3 Do you have any other comments regarding the introduction of cleaner buses in Cardiff?

A total of 496 comments were received for this question, which have been grouped into themes. The top three are shown below; a full list of themes can be found in Appendix 2.

Theme	No.	%	Example Comments
Support the	99	20.0	<p><i>An excellent idea. I use the bus regularly and wholeheartedly support this plan.</i></p> <p><i>I think this would be a quick easy win and fully support it</i></p> <p><i>Wholly in support, regardless of cost</i></p> <p><i>Do it all over the city, not just the city centre. How wonderful would it be if we had a bus station that could charge buses as they waited for passengers?</i></p> <p><i>Way to go.</i></p> <p><i>I'm very supportive of measures to update public transport provision and reduce pollution and am glad to see it prioritised.</i></p>

All buses to be electric/ULE/green	94	19.0	<p><i>36 electric buses is not enough. We need at least 90% of buses to be electric and the other 10% to meet the lowest emission standards.</i></p> <p><i>What is the point of upgrading buses to cleaner diesel when the aim should be electric? Cardiff Bus bought diesel as a cheaper option to electric, Cardiff Council is not providing enough charging points so this smacks as a short term saving to gloss over a short sighted investment plan.</i></p> <p><i>All buses and Council vehicles should be replaced by less polluting electric vehicles.</i></p> <p><i>All of the buses should be electric. I cough in the mornings at different times of the year from the bus exhaust and pollution I breathe in while riding in the city centre.</i></p> <p><i>100% of buses in Cardiff should be electric, including coaches and stagecoach services not just Cardiff Bus</i></p>
Other issues with buses - Reliability, cleanliness, Demand, Dedicated Bus station, Accessibility	83	16.7	<p><i>The bus routes need to be looked at. As they are incredibly long for no reason - a journey on the bus in Cardiff will take around the same time if you are walking to your destination. The busses in Cardiff are a time wasters and unreliable in term of time and even showing up at all sometimes as I lived in other cities and that was not the case. So no matter what kind of bus it is me as a professional and have no time to waste I will not trust Cardiff buses to commute. I did not feel the need to get a car till I moved to Cardiff unfortunately. Due to the disappointing service.</i></p> <p><i>get rid of bendy buses as they snarl up the traffic by blocking the road</i></p> <p><i>Buses are the worst pollutants in Cardiff currently, really discouraging me to cycle, I end up stopping and coughing so many times I get stuck behind one. Also, they are terribly managed, extremely unreliable and polluting while carrying 2 or 3 passengers</i></p> <p><i>This is only good if you stop cutting bus routes, buses run on time, and they stop being cancelled.</i></p> <p><i>I am disappointed the bus station at Central Square is still incomplete. It sends out the wrong message about a commitment to public transport.</i></p>

A number of comments responses were received from Stakeholders and organisations in response to this question:

Healthy Air Cymru

Air pollution is killing tens of thousands of people prematurely across the UK every year. Both particulate matter (PM10 and PM 2.5) and Nitrogen Dioxide (NO2 a part of Nitrogen Oxide [NOx]) have detrimental effects on our health. Road transport is responsible for 80% of NOx pollution where legal limits are being broken. But it's not just burning fuel that causes the problem.

In London, where there is good data, 45% of the particulate matter comes from tyre and brake wear – so even if we switched all the vehicles to electric, we'd still have a damaging amount of very fine dust as a result of all the traffic. In Wales, PM2.5 pollution contributes to more than 13,500 associated life-years lost.

It is great to see that Cardiff Council are planning to reduce the emissions coming out of their bus fleet, electrification will have an impact on reducing NOx in our city centre, but may contribute higher levels of particulate matter. Sustrans Cymru understand that the air quality targets set for Cardiff do not mention particulate matter, but that should not remove Cardiff's duty to consider air quality more broadly.

The biggest contributor to NOx levels in Cardiff are cars, yet Cardiff are not proposing any measures directly on cars. Modal shift from motorised transport to cycling and walking can have a positive effect on air quality as well as reducing congestion and improving public health through increased physical activity. Sustrans Cymru are pleased with the proposals that Cardiff council are recommending to reduce illegal limits of air pollution in the city centre. The investment in progressive walking and cycling infrastructure is something we have been calling for, and we believe that when these plans are linked up to the walking and cycling developments that are taking place city wide, Cardiff will see a change in the way in which people move around. However, we would like to see Cardiff taking bolder action to encourage people to leave their cars behind. See our response to question 9.

Unison Cardiff Central Young People's Officer

Yes, the city centre should be made a car free zone. Only public transport should be allowed and loads of cycling lanes. Reintroduce the trams and make all public transport free and publicly owned. If Cardiff bus was nationalized this would insentience people not to drive and to take public transport, making the city healthier, cleaner, improving quality of life and would make the city far more attractive to tourists.

Academia (Unspecified)

The elephant in the room here is the lack of bus station, & moreover one big enough to accommodate all bus services. Until that is in place, people are seriously put off using buses. A functional bus station is needed - like, or even better than, the one that was demolished yonks back - in order that people can wait in the dry w/o draughts, can easily see which buses go from where & when, and can access was, etc. while waiting

Professional Driver

Diesel engines can be fitted with a type of catless that would bring down CO2. Instead of spending fast amount of money why not try the cheapest version first.

Professional Driver

Remove all speed humps which are according to the World Health Authority a major cause of localised pollution.

Professional Driver

What batteries will be used in electric buses? Are the batteries produced efficiently and without causing harm to the environment?

Professional Driver

Should have been done a long time ago!

Professional Driver

Reduce the number of theses to reduce pollution due to not being used, running empty.

Professional Driver

Council tax payers should not have to contribute, higher fares should pay these changes along with Welsh assembly funding

Professional Driver

The latest diesel engines using ADD BLUE are very clean and I feel this could be a more cost effective solution.

Professional Driver

What is wrong with trams and trolley buses?

Professional Driver

Although a higher cost, replacing buses with Electric Vehicles should surely be more beneficial in the long run? Further reduced Emissions, potential running costs compared to newer vs older vehicles; including the complexity of a combustion engine compared to EV?

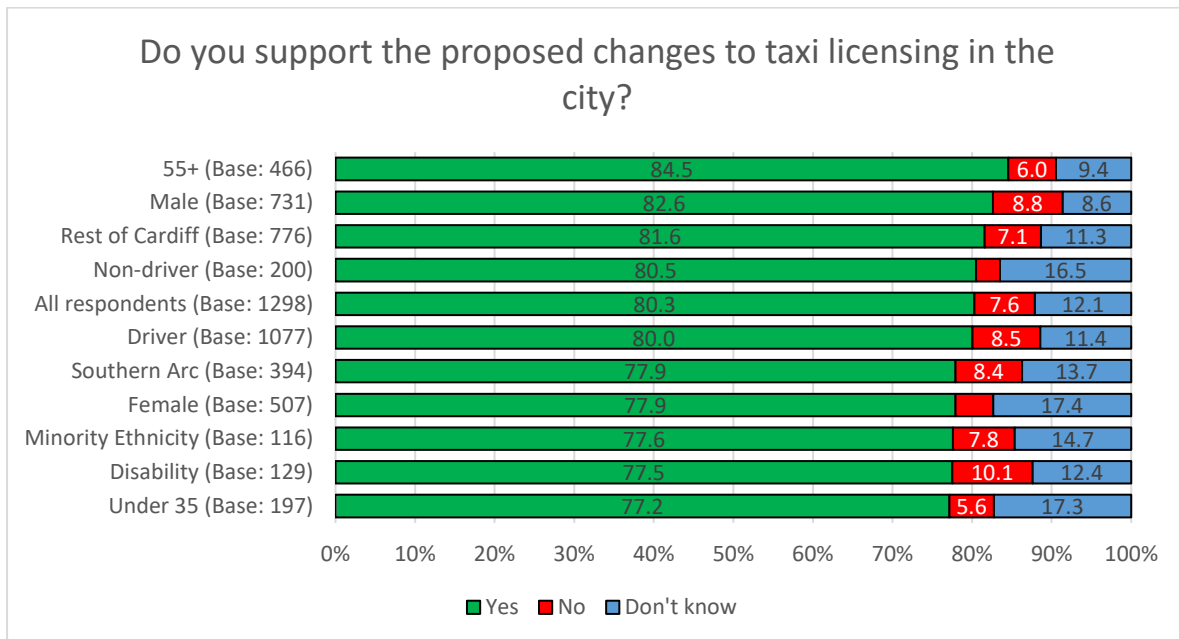
Taxis

4 Do you support the proposed changes to taxi licensing in the city?

The following changes to taxi licensing were put forward:

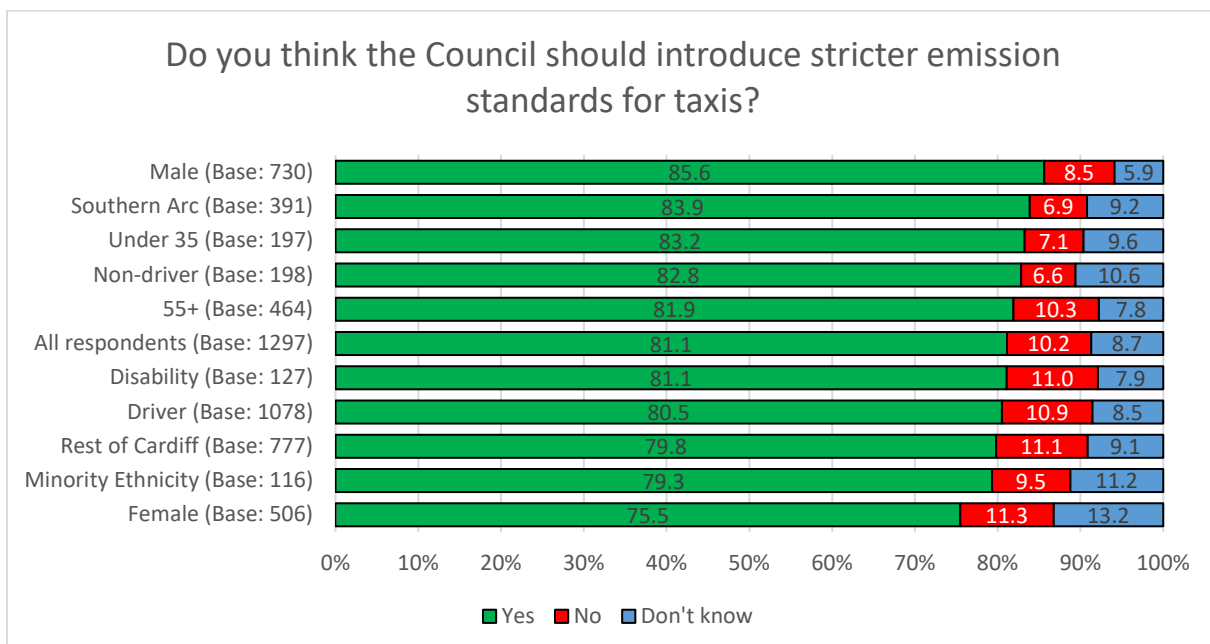
Specification	Current Policy			Proposed Policy
	Saloon/ Multi-Purpose Vehicles	Prestige vehicle	Purpose Built Hackney Carriage	All licensed vehicles
Maximum age at first application	25 months	Under 10 years	Under 10 years	Under 5 years old and meet or exceed Euro 6 standard
Maximum licensable age (unless vehicle complies with exceptional condition policy)	6 years	10 years	10 years	10 years old
Age at which vehicle may be annually tested/ 12 month license issued	Under 4 years	Under 4 years	Under 10 years	Under 5 years old
Age at which vehicle is tested 6 monthly/6 month license issued	4 years	4 years	10 years	5 years or over

Four in five respondents (80.3%) supported the proposed changes to taxi licensing:



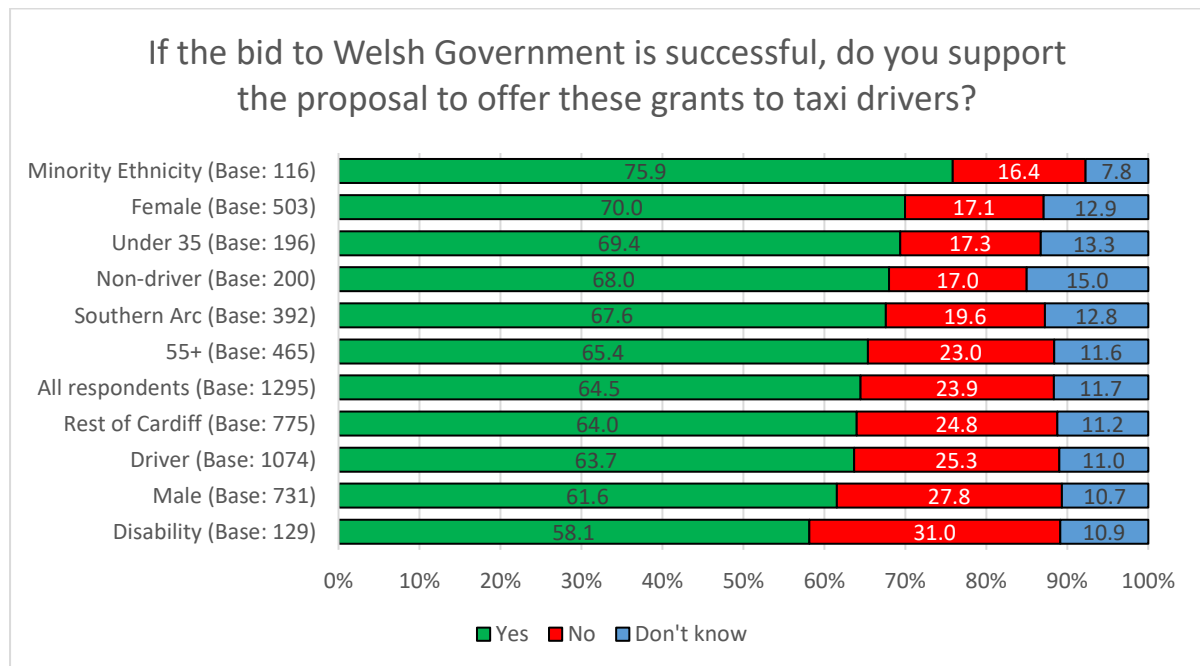
5 Do you think the Council should introduce stricter emission standards for taxis, for example only allowing new licences or renewals to be granted for ultra-low emission vehicles only (i.e., fully electric or hybrid etc.)?

At least three quarters of each of the demographic groups analysed supported the introduction of stricter emission standards, with 75.5% of females, 85.6% of males, and 81.1% of all respondents supporting this proposal.



6 The Council is seeking financial assistance from the Welsh Government to offer grants to taxi drivers for upgrading their vehicles to meet the new standards. If this bid is successful, do you support the proposal to offer these grants to taxi drivers?

The consensus of opinion shown for other proposals was less apparent regarding the offer of grants to taxi drivers to upgrade their vehicles to meet the new, stricter, emission standards. Support ranged from 58.1% of respondents identifying as disabled, through 64.5% of all respondents, to 75.9% of respondents from a minority ethnicity.



7 Do you have any further comments or suggestions on how to change taxi licensing rules to improve air quality in the city?

A total of 442 comments were received for this question, which have been grouped into themes. The top three are shown below; a full list of themes can be found in Appendix 4.

Theme	No.	%	Example Comments
All taxis should be Low Emission	86	19.5	<p><i>Has to be all electric</i></p> <p><i>We need to go full electric / hydrogen on all taxis in Cardiff by 2025, and support rapid development of renewable energy sources of electricity / hydrogen.</i></p> <p><i>Complement stricter emission standards with incentives to upgrade vehicles to electric ones.</i></p> <p><i>Not to issue new licences unless hybrid or fully electric after 2021</i></p> <p><i>All taxis should be electric or hybrid.</i></p>
Taxi firms/ drivers should pay	68	15.4	<p><i>Taxis are the responsibility of the operator - public money should not be spent to pay for their cleaner vehicles.</i></p> <p><i>I would have concerns that public money is paying for someone who privately owns a vehicle, to get a newer vehicle, which they could sell at some point and keep the full amount of money. Should they have a caveat that if they cease operating within 5yrs of the grant, they repay the grant, otherwise they could receive the grant, retire within a month, and keep the car/grant. I would love money to be given to me to replace my diesel car! What about self-employed people i.e. builders, who travel the whole city. They are providing a service to the public too, the same as taxi drivers - it's all private work, to earn a living. It's discriminatory if only taxi drivers are helped.</i></p> <p><i>Taxi drivers will not need grants - if cars are disincentivised from the city centre (with taxis exempt) then their revenue will be higher</i></p> <p><i>Subsidy is inappropriate otherwise everyone should get it</i></p>
Discourage idling	61	13.8	<p><i>Taxis (and buses) often sit empty with their engines running. This should not be allowed and measures should be put in place to discourage this practice</i></p> <p><i>Prohibit and enforce measures to prevent idling engines whilst taxis are waiting.</i></p> <p><i>A rule that states that taxis engines must be switched off when they are not driving. You see entire ranks of them all with their engines on whilst waiting for customers just because they want the radio on.</i></p> <p><i>Ban buses and taxis from being allowed to idle their engines at stops of any kind</i></p>

A number of comments responses were received from Stakeholders and organisations in response to this question:

Unspecified Organisation

Cardiff has too many taxis as it is. Most are dangerously old. No public money should go to upgrading cars. They should all have to be green or license revoked. Maybe green taxis pay lower fees? Also, can we have city colour scheme? Tourists find it hard to spot taxis. The ones that are black with white bonnets look stupid - one tourist told me they look "stolen"

Unison Cardiff Central Young People's Officer

Yes, lower the amount of taxis also create penalties for taxis which are parked and have their engines running.

Academia - RTPI member

Taxis are still cars on the road the money would be better spent on newer buses or extra train carriages or safer cycling and walking routes - walking buses for schools, 20mph through residential areas, better play areas within walking distance of homes.

Cardiff University

If there is inadequate financial support for taxi owners to change, we are likely to see a reduction in taxis and the a rise in price, which in turn will encourage people to bring their private cars more into the city centre, especially for pickups from bus or train stations

Cardiff University

Taxis as a whole should be discouraged. Even hybrids contribute to public health issues through brake dust etc, and contribute to congestion which makes pollution from other vehicles much worse. Taxis should be discouraged in favour of public transport (although, for this to be viable public transport would have to be improved).

Environmental health lecturer

Better use of taxi ranks so ensure they are located in appropriate places/spaces

Cardiff University

The government should be working for buses. If taxi drivers want to get a hybrid system, they should finance this change by themselves.

Castle Court Residents Association

There should be much, much tighter control over the licensing rules to eliminate rogue taxi drivers

Professional Driver

Why should Taxi have help from the Welsh Office when the car owner have to take the full plenty of the cost with no government help? I do not pay council tax to subsidize taxi services

Professional Driver

Remove all speed humps.

Professional Driver

Taxi drivers are a business. What other businesses, i.e. delivery vans, driving schools would be offered a grant? The very latest diesel cars are very clean. How clean really are fully electric, taking into account the mining of lithium. Please don't make a knee jerk decision which will harm the environment.

Professional Driver

This should have been done a long time ago. Scottish government offer a £50k interest free loan to everyone to upgrade to hybrid/EV. Why are we so far behind? It doesn't have to be £50k, you can buy a good hybrid for less than £30k

Professional Driver

Why should the public pay for this? And why are the council spending more money on Cardiff Bus? Electric buses are NOT greener.

Professional Driver

There are too many taxis in Cardiff getting rid of the oldest would be a good start.

Professional Driver

If you are going for a grant for Taxi's why not HGV's LGV's and personal cars.

Professional Driver

If funds would allow, at least all Hackney Carriage Taxis operating in the City should be Hybrid vehicles at least, with Private Hire having to adhere to Strict Emissions tests.

City Centre Schemes

To achieve the goals set out this plan, additional road space has to be given to both public transport and active travel in the city centre. By improving the infrastructure, sustainable travel will become a quicker and more attractive option.

At this stage of the process, the designs being put forward only show the concept of what we are trying to deliver. All of these projects will be subject to a competitive tender exercise, so there are no detailed designs at this stage. The images below show the council's intentions in terms of the road design layout. Detailed consultation will take place on each project, when the detailed designs are available.

City Centre West

The main aim of this scheme is to accommodate the new Transport Interchange and Central Square Development, whilst also Improving Air Quality within the City Centre Air Quality Management Area. This could be achieved by removing through-traffic from Westgate Street and installing a new highway layout that will improve and connect the current bus network with the new Interchange, Central Square, Central Station and the City Centre Enterprise Zone. In addition, the scheme could offer improved safety for pedestrians via improved pedestrian crossing facilities, 20mph speed limits and an improvement to the pedestrian environment outside of the national stadium. The scheme could also install a network of stepped cycle tracks to connect the area with the proposed cycleway on Castle Street and the Taff Trail routes.

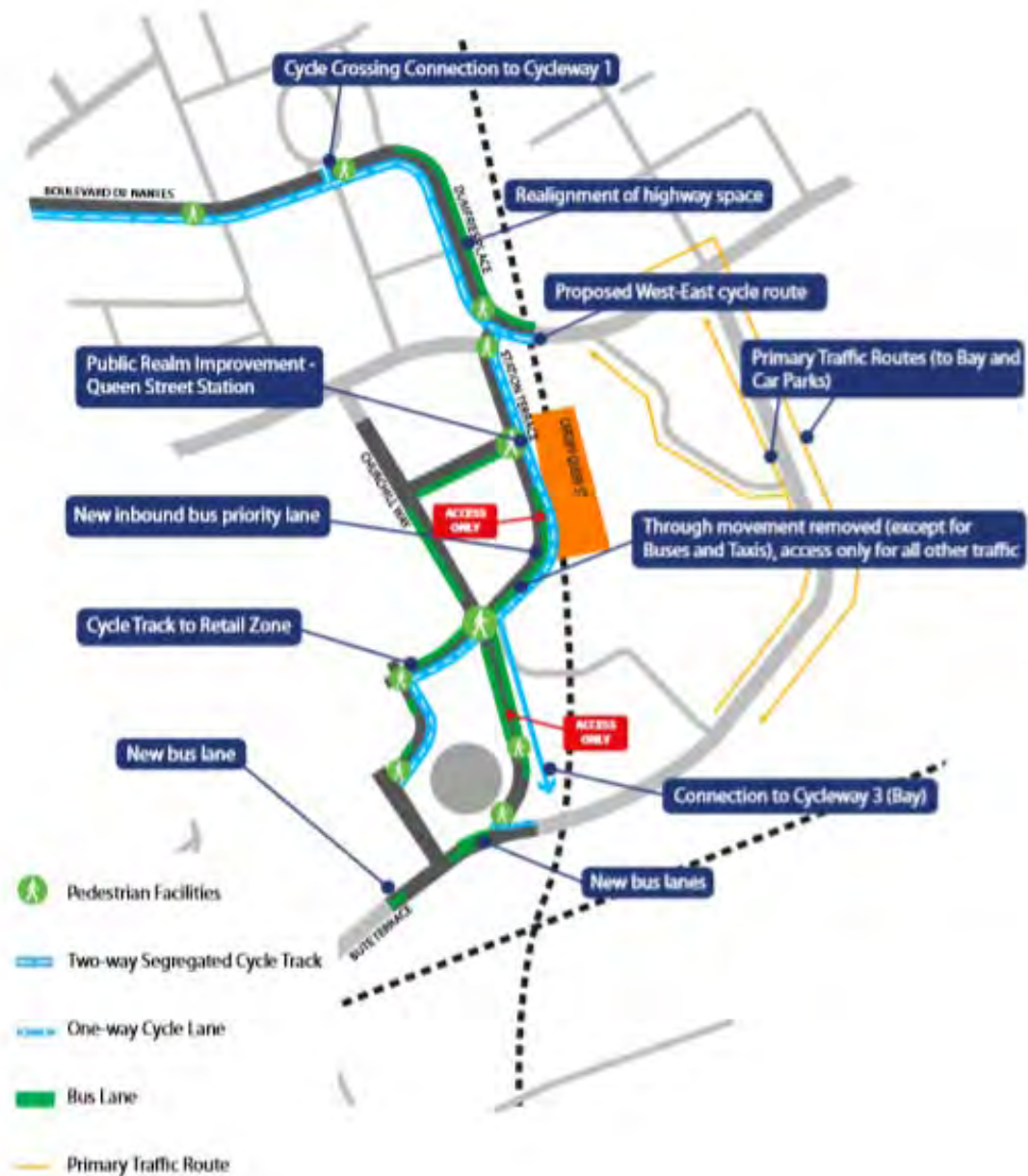
City Centre North

The main aim of this scheme is to bring Castle Street into Air Quality compliance by 2021 and install a primary Cycle Way along its length. The installation of the cycle lane and the reduction in highway space will allow for traffic to be reduced enough to target the air quality issue. Improved pedestrian crossings with countdown timers could also provide safety improvements for pedestrians.



City Centre East

The main aim of this scheme is to provide a new dynamic for the bus network, whilst connecting primary Cycle Ways and improving the pedestrian environment outside of Queen Street Station. This could be achieved through providing bus priority measure throughout the Station Terrace and Churchill Way areas that would provide new routes for buses, taking them away from the City Centre Air Quality Management Area and closer to key areas such as Queen Street Station and the shopping district. The new bus routing system is also key to allowing the Interchange to be accessed from its south entrance, and also work effectively on major event days. A primary Cycle Way could be installed to connect the east of the city centre with the City Centre Enterprise Zone, and join up all the other proposed primary Cycle Ways. Pedestrian improvements on Dumfries Place and Station Terrace could also improve safety for pedestrians and improve connections to Queen Street Station and the City Centre Enterprise Zone.



8 Do you support the overall design principles of these schemes, which aim to contribute to meeting the legal limits of NO2 in the shortest possible time?

Around two-thirds of respondents supported the proposals for the city centre schemes, with just under a fifth against:

	City Centre West		City Centre North		City Centre East	
	No	%	No	%	No	%
Yes	856	66.4	848	65.9	854	66.6
No	236	18.3	237	18.4	230	17.9
Don't know	197	15.3	202	15.7	199	15.5
	1289	100.0	1287	100.0	1283	100.0

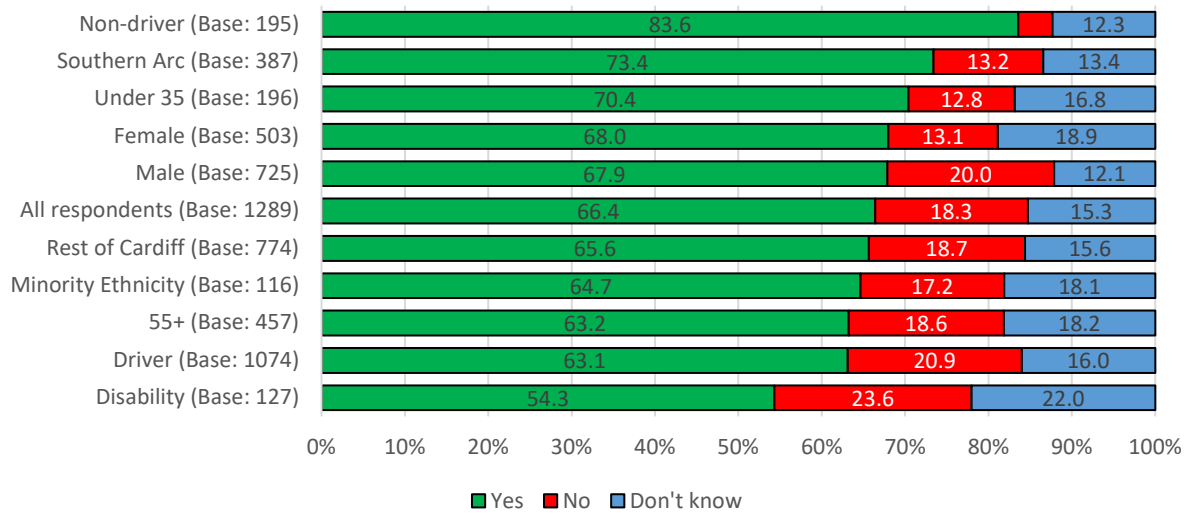
Support was highest amongst non-drivers, with over four-fifths in favour...

	City Centre West		City Centre North		City Centre East	
	No	%	No	%	No	%
Yes	163	83.6	163	83.6	162	83.9
No	8	4.1	8	4.1	6	3.1
Don't know	24	12.3	24	12.3	25	13.0
	195	100.0	195	100.0	193	100.0

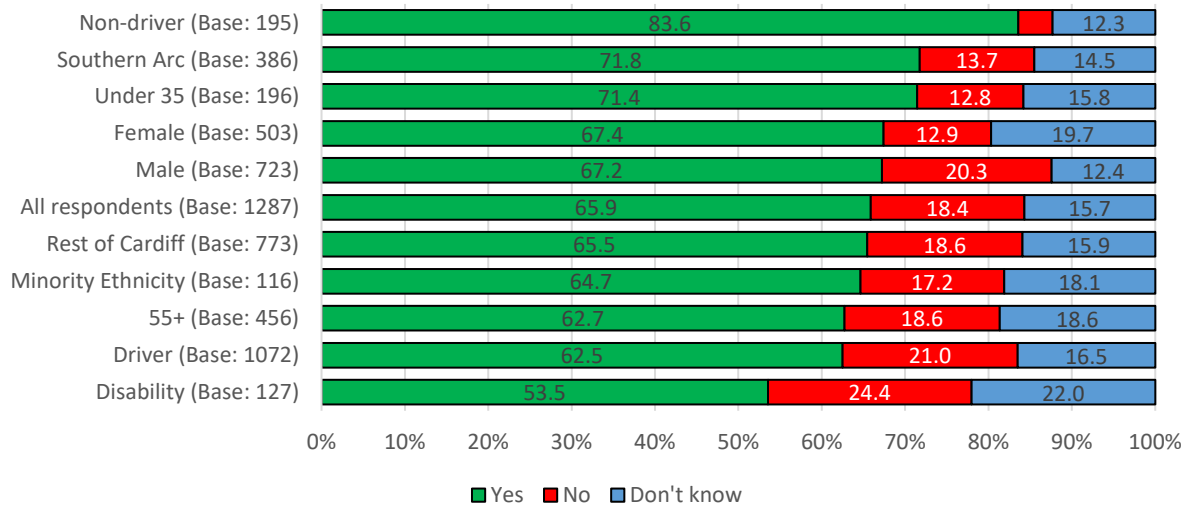
...and lowest amongst respondents identifying as disabled, with just over half supporting the design schemes, and around a quarter against them:

	City Centre West		City Centre North		City Centre East	
	No	%	No	%	No	%
Yes	69	54.3	68	53.5	69	54.3
No	30	23.6	31	24.4	30	23.6
Don't know	28	22.0	28	22.0	28	22.0
	127	100.0	127	100.0	127	100.0

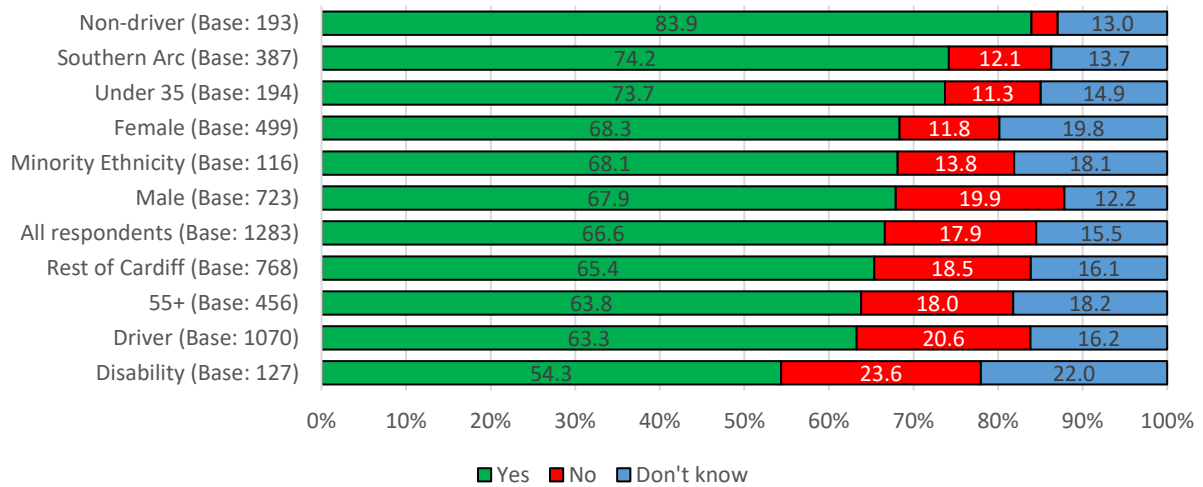
Do you support the overall design principles of these schemes? City Centre West



Do you support the overall design principles of these schemes? City Centre North

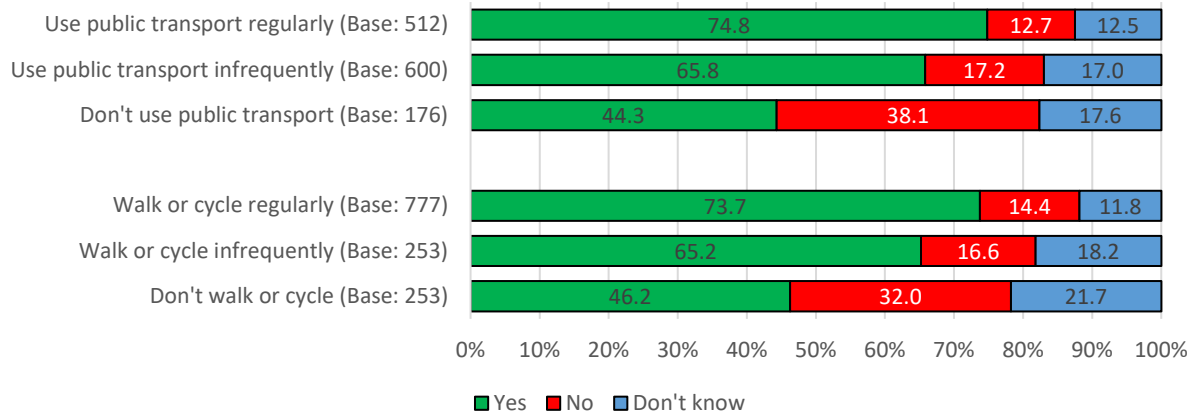


Do you support the overall design principles of these schemes? City Centre East

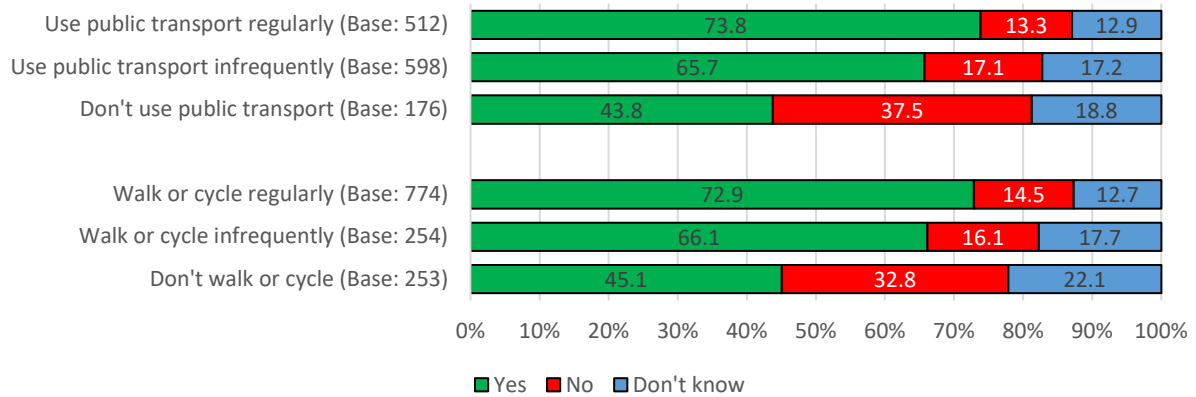


Support for these design principles was notably lower amongst respondents who do not use public transport or active means of travel:

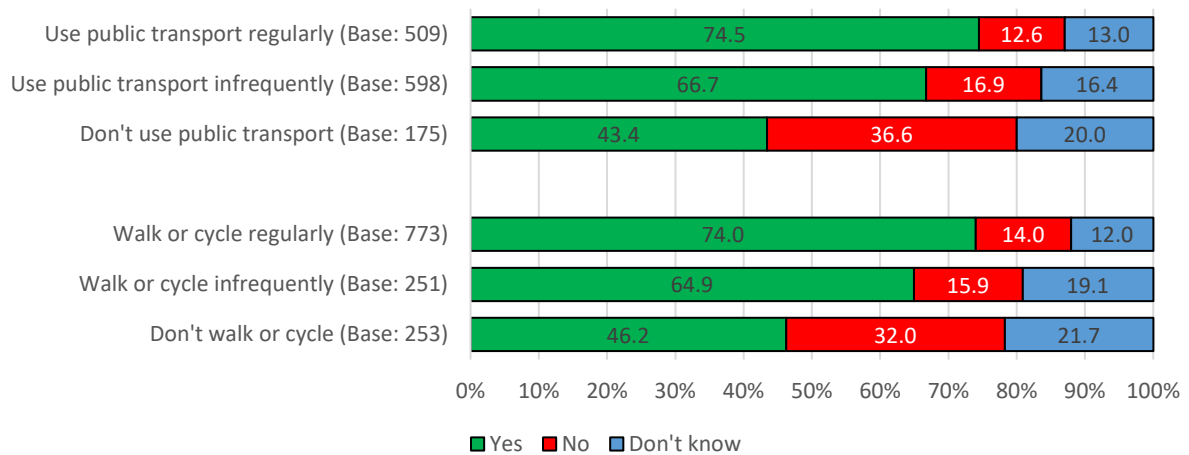
Do you support the overall design principles of these schemes? City Centre West



Do you support the overall design principles of these schemes? City Centre North



Do you support the overall design principles of these schemes? City Centre East



9 Do you have any alternative suggestions on how traffic movements in the City Centre could be changed in order that the Council can meet its duty to improve air quality in the shortest possible time? Please provide evidence for this if possible.

A total of 578 comments were received for this question, which have been grouped into themes. The top three are shown below; a full list of themes can be found in Appendix 4.

Theme	No.	%	Example Comments
Traffic flow / light sequence / Road layout	179	31.0	<p><i>Re-phase traffic lights to reduce the amount of time spent waiting at red lights.</i></p> <p><i>Improve the road network for cars</i></p> <p><i>Remove speed humps, they cause drivers to accelerate and brake between them.</i></p> <p><i>Private vehicles should be allowed to turn left into Wood Street thereafter into St Mary Street: The current system forces East bound traffic westwards along Wood Street and through residential areas to get to Callaghan Square. A 1.8 mile journey for a distance of only 0.3 miles.</i></p> <p><i>(</i></p> <p><i>)</i></p> <p><i> </i></p> <p><i> </i></p> <p><i> </i></p>
Improve cycleways / storage	137	23.7	<p><i>If you are going to make provision for more cyclists, please ensure there are appropriate cycle lanes. Cardiff at the moment does not feel safe for me as a pedestrian because of all the cyclists illegally cycling on pavements and jumping red lights at junctions. When you challenge cyclists about this you just get abuse.</i></p> <p><i>More secure, and monitored by City CCTV, bike racks for cyclists.</i></p> <p><i>I hope these routes don't just end, abandoning the cyclist. There would be a need to improve cycle storage too - maybe re purpose car storage sites</i></p> <p><i>Provide more cycling facilities inc routes and parking - ideally overlooked for maximum security and covered from the weather.</i></p> <p><i>Improved cycle safety and dedicated cycle lanes would hugely encourage more to use cycles, esp. when secure places for "parking" cycles be provided...</i></p>
Improve public transport	133	23.0	<p><i>I don't agree giving more priority to buses until they become at least useably reliable and cheaper.</i></p> <p><i>Sort out the buses so that they go to places that people need - rather than just the centre of town.</i></p> <p><i>Introduce affordable cleaner public transport before you start charging people</i></p> <p><i>Reduce car transport in the East with train stations on the existing line at Roath, Rumney, St Mellons and Marshfield</i></p>

A number of comments responses were received from Stakeholders and organisations in response to this question:

Healthy Air Cymru

Sustrans Cymru are pleased with the proposals that Cardiff council are recommending to reduce illegal limits of air pollution in the city centre. The investment in progressive walking and cycling infrastructure is something we have been calling for, and we believe that when these plans are linked up to the walking and cycling developments that are taking place city wide, Cardiff will see a change in the way in which people move around. However, we would like to see Cardiff taking bolder action to encourage people to leave their cars behind.

Sustrans Cymru would like to see traffic removed from Cathedral Road to Boulevard de Nantes and Westgate Street, allowing access for busses, traders and people with a disability, but restricting access for the majority of private vehicles in the city centre. Air pollution is at crisis levels in urban centres around the world and removing traffic is one of the most effective tools local governments have to tackle it. Pontevedra, Northern Spain, serves as a model of the local transformation that removing traffic can bring. The city removed traffic from its 300,000 square metre city centre in 1999, bringing myriad economic, social and health benefits to its residents. As a result of the reduction in car use, the city has achieved a 70% drop in CO2 emissions.

Castle Street is one of the city's oldest and most iconic locations and the impact of traffic and severance is notable, many people who come to visit Cardiff come to see the Castle and enjoy its grounds. Removing vehicles from this location would connect the castle to the city centre, improve commercial viability, and create (a place) an attractor for people to stop in and enjoy. We have seen this happen in Bristol where traffic has been removed from a number of key locations within the city. This has resulted in the creation of some of the most popular, iconic places within the city most notably College Green and Queen's Square which have been transformed from busy roads to green spaces where people can stop, relax, and enjoy the area. The severance caused by traffic on Westgate Street is also notable. Despite the stadium being a landmark, activity in the town centre stops at High Street, and the role Westgate Street is predominantly that of an arterial route for vehicles. Removing traffic from this area would have a similar effect as the closure of Castle Street. Linking the iconic Principality Stadium with the rest of the city centre and creating an attractive area for people who live in, and people who visit the city.

Removing traffic from both Castle Street and Westgate Street is achievable for Cardiff. Just this weekend Cardiff saw people of the city take over Castle Street on Cardiff Car Free Day, the space is also often closed when large events take place in the city, Westgate Street is also regularly closed to traffic on match days. This shows that the Cardiff council are already able to facilitate travel in and out of the city without this route open to private vehicles and the closure has the potential to seriously improve air quality in the city centre. Research from city closures across Europe show a huge drop in emissions when cars were removed from their roads. In September 2015 Paris went car free for the day, exhaust emissions were reduced by 40%. Similarly, during the London marathon route in 2018, estimates put the reduction in local air pollution at 89% in some parts of the city.

Unspecified organisation

Close Castle Street for traffic. Would become nice public space for people. Would create nice square in front of castle too and could introduce a cafe culture to the city (at the moment you can't as most outside areas are in the shade). Could have fountains etc. This will remove CO₂ from the biggest polluting area in the city overnight. As a minimum there needs to be a cordoned cycle lane from the bridge on this street to Bute Park. Currently it's dangerous. On Westgate St I've noticed it's a quiet street - could this be closed off to all traffic too?

Local Business

Ban taxis and buses from leaving their engines running whilst parked up

Unison Cardiff Central Young People's Officer

Yes, make the city centre a car free zone and introduce loads of cycling lanes. The measures the council aim to take, which currently cost millions won't successfully mitigate the damage of climate change, these changes are out of date and are not fit for purpose.

Cardiff University

The material presented was too diagrammatic to enable me to tell how cycle-friendly this would all be - the devil is in the detail! See for instance the disastrous arrangement for cyclists crossing North Rd to Tel-y-Bont

Environmental Health Lecturer

Remove multi storey car parks and ring fence funds to park & ride schemes which Cardiff appears poor at. See Oxford CC approach which is excellent - overnight P&R facilities; CCTV at P&R sites etc.

Castle Court Residents Association

Access and Parking facilities for Westgate Street residents is essential

Support Group for "Save the Trees at Suffolk House"

What a joke!!! Cardiff Buses have been cutting services after pleading with commuters to leave their cars and take the bus! Such a JOKE!!!

Elected Representative

Introduce a charging clean air zone

Professional Driver

Cleaner air is always a good thing but I don't care about the way you go about it. Paying out vast amount of money to bring down NO₂ gas and making the city centre a no go for cars will bring that centre to a full stop.

Professional Driver

The bus policy is obviously not working. Why is Cardiff Bus company stopping so many routes? Adjusting traffic light timings would be a good start to reducing congestion, therefore pollution.

Professional Driver

All this does is push the pollution to other areas. It just moves it. It doesn't solve the core problem

Professional Driver

Bus lanes for example are rarely used in most areas, bus drivers hate them, they are proven to be unsafe and taxi drivers use them like rat runs, in and out to get one car ahead.

Professional Driver

Footbridge connecting Queen St with castle area so pedestrians can cross freely, traffic will flow, less congestion and less emissions

Professional Driver

Cardiff needs more affordable car parks so people can access the city centre using their cars. A ring of multi-storey carparks around the centre would be beneficial... This would produce more shoppers using Cardiff stores.

Professional Driver

Shut the city centre off and close all the shops down and build more student flats and stop everyone using the city centre. Also don't forget to put up the council tax again.

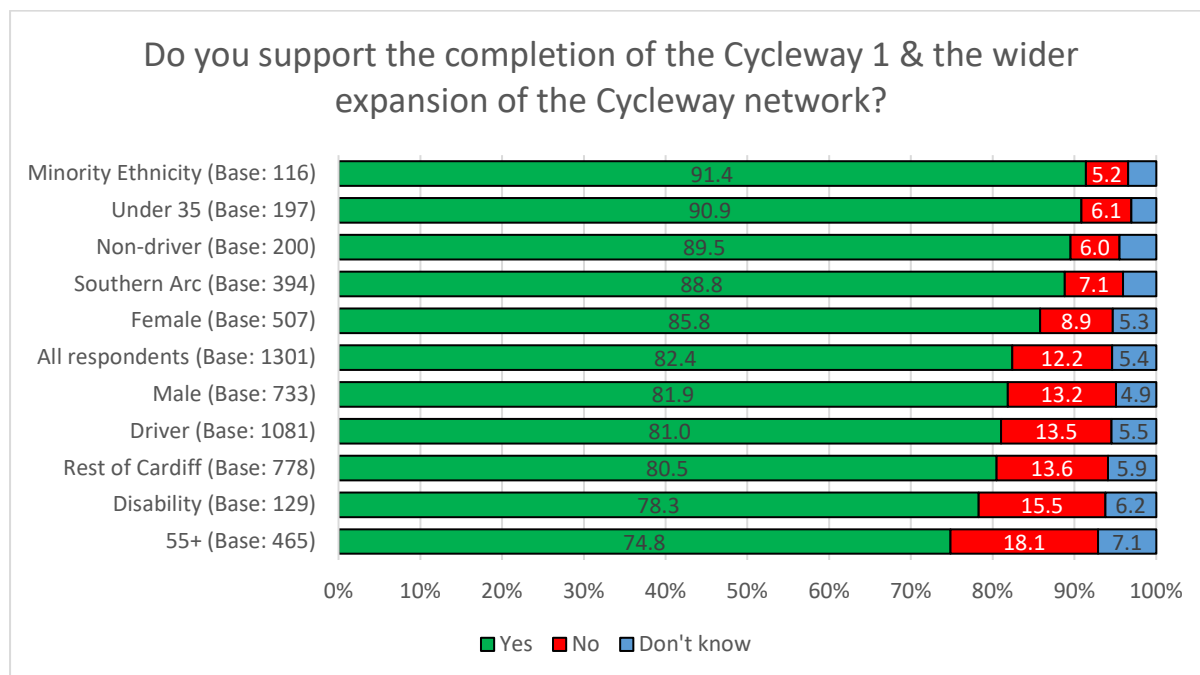
Professional Driver

Stopping traffic access on Station Terrace, which uses this road to park in St. David's car park would shunt all this traffic to either the central link road/A4160 in both directions heading into the centre or from the direction of Callahan Square. Traffic can be heavy on these roads already during busy periods.

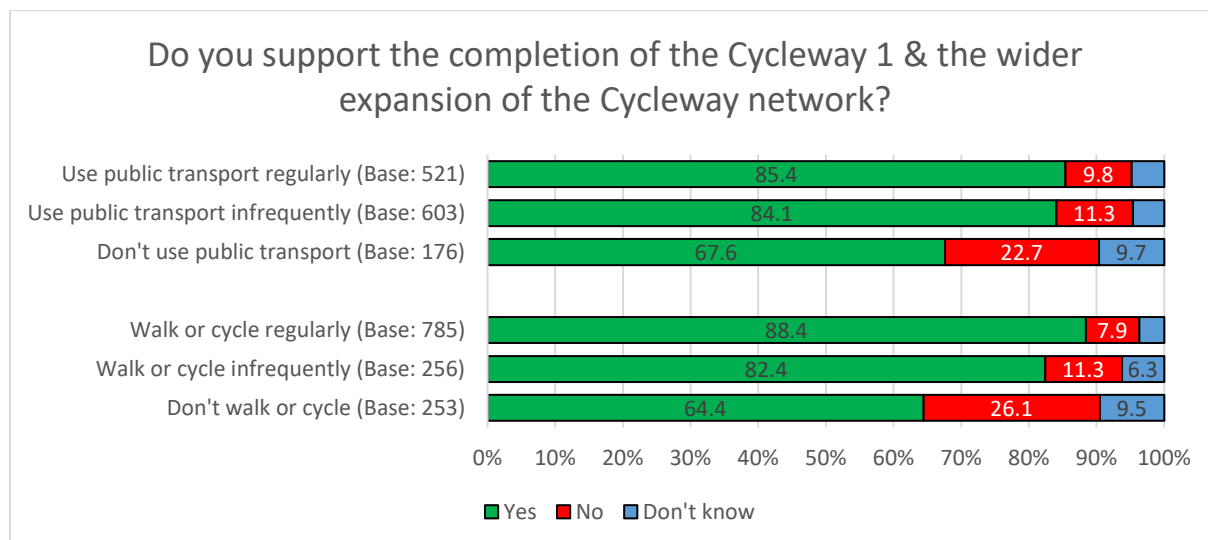
Active Travel and Cycleway C1 Completion

10 Do you support the completion of the Cycleway 1 (connecting the city centre to Cathays, University Hospital Wales, Heath and North East Cardiff) and the wider expansion of the Cycleway network?

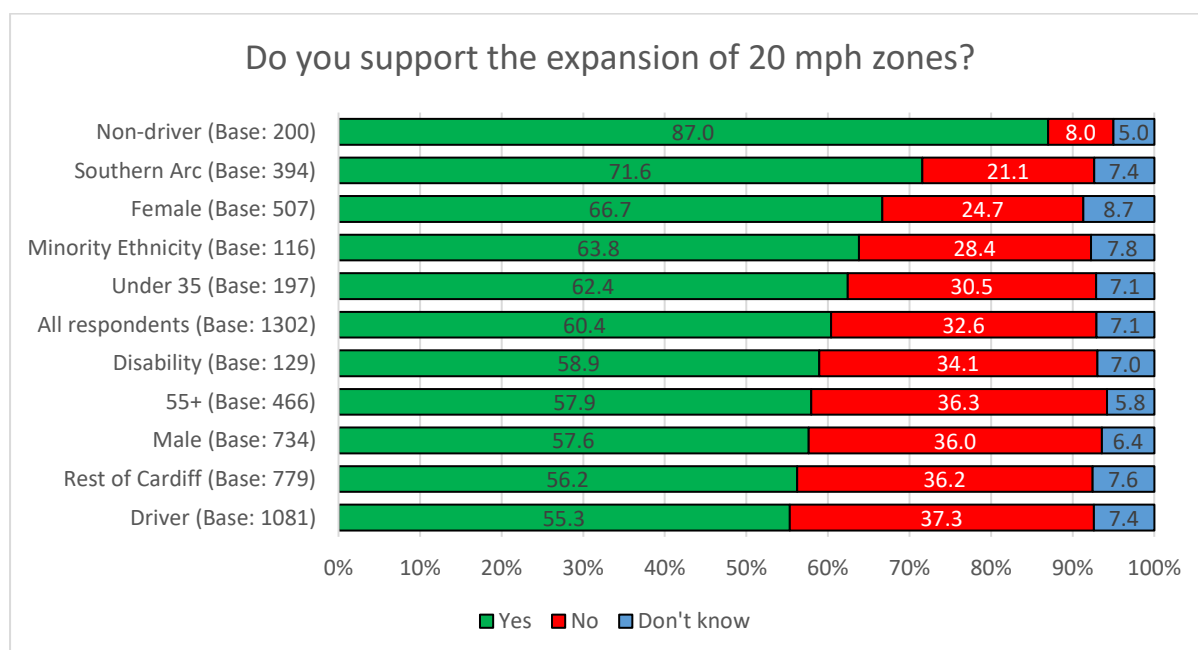
Support for the expansion of Cycleway 1, linking the city centre and North East Cardiff, and the Cycleway network as a whole was strong, with at least 74% of each of the demographic groups analysed agreeing with the proposals.



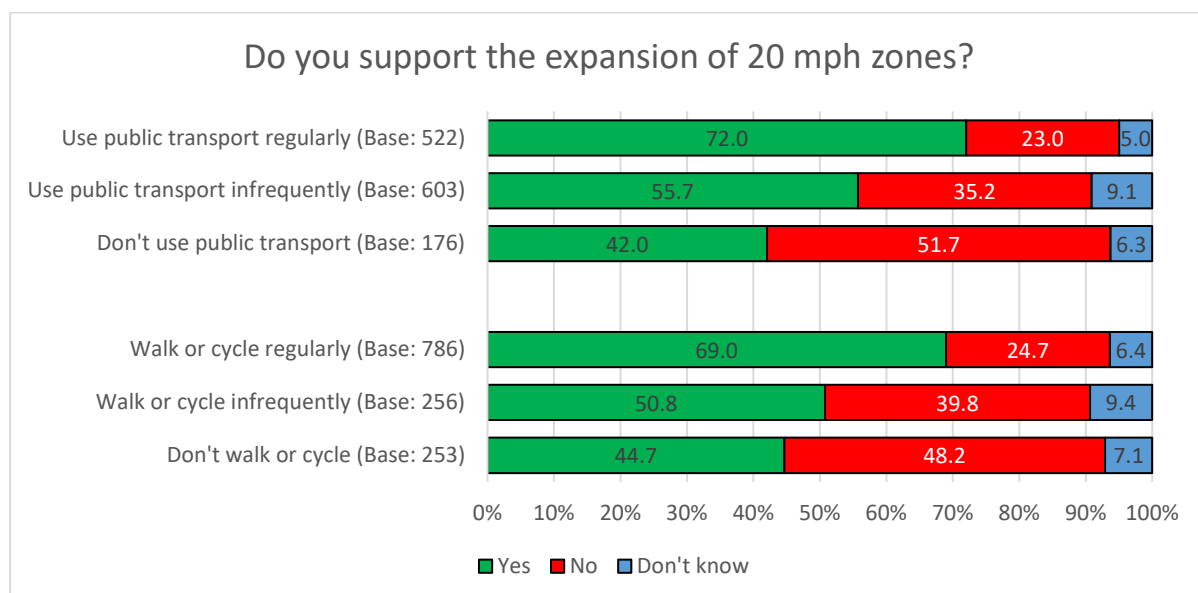
Unsurprisingly, support was highest amongst respondents who regularly use active means of travel, along with those who use public transport:



11 Do you support the expansion of 20 mph zones?



Again, support was lower amongst respondents who do not regularly use public transport, or active means of travel:



12 Are there any other measures you think the Council should be implementing in order to deliver compliance with the NO2 limit value in the shortest possible time? Please provide evidence for this if possible.

A total of 652 comments were received for this question, which have been grouped into themes. The top three are shown below; a full list of themes can be found in Appendix 5.

Theme	No.	%	Example Comments
Promote cycling / make it easier / more facilities	121	18.6	<p><i>Stop making poor quality painted cycle lanes, they will not attract anyone to cycling. Segregation, even where it hurts.</i></p> <p><i>Increased cycling infrastructure.</i></p> <p><i>Give cyclists and pedestrian right of way over traffic. Cycleways should be designed so that they don't have to stop for cars everywhere. Cars should be stopping for cyclists and pedestrians. The cycle route to the Bay is an embarrassment with gates blocking the cycle way at every intersection. It's good that the problem is being fixed now, but the fact that such a route was originally implemented highlights the fact that Cardiff council needs a lot of input from true cyclists and good cycle cities around the world in order to do things correctly and not as half measures again.</i></p> <p><i>Ensure budget is available for maintaining and expanding the cycleways each year with appropriate and secure bike parking facilities at appropriate locations</i></p> <p><i>Changing cycle ways and expanding them is good but I would like to see much more training and management of cyclists on the city's roads. Rush hours are already dangerous in N Cardiff because they're all over the road.</i></p>
Improve public transport	114	17.5	<p><i>An increase of public transport covering the whole of Cardiff, if you can make the trains better and more frequent and make the buses run on time and fund more routes around the city, people will rely on them more and thus drive less.</i></p> <p><i>Reduce cost of public transport and improve reliability and frequency. Until we can rely on transport we will continue to drive places</i></p>

Improving the bus network so that the differences in journey times between using a private vehicle and using public transport are lessened.

Accessible bus routes throughout the city the connect with other public transport services i.e. rail

Tram system, improved public transport, subsidised public transport - currently more economical to drive and pay car park. Bus routes need improvement so you don't need to enter city centre, bus company needs subsidising

Traffic calming / Flow	111	17.0	<p><i>Remove traffic humps and traffic calming measures, these result in speed up, slow down traffic, which INCREASE emissions. Smooth driving, which can be achieved only when traffic jumps are removed will actually decrease emissions.</i></p> <p><i>I am concerned that raised tables used to reduce traffic speeds in 20mph zones actually increase NO2 emissions. Vehicles tend to slow down when approaching and then accelerate after passing these road 'humps' and emit more NO2 by accelerating rather than maintaining the same speed.</i></p> <p><i>Make major routes for traffic able to go through all traffic lights at green if you stick at 30mph not have to stop at every traffic light</i></p> <p><i>Remove bus lanes that slow down traffic by condensing traffic into fewer lanes, creating more emissions.</i></p> <p><i>Too many pedestrian crossings add to the stop/start of vehicles, thus adding to pollution.</i></p>
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A number of comments responses were received from Stakeholders and organisations in response to this question:

Healthy Air Cymru

Sustrans Cymru would like to see Cardiff council being holistic in its approach to sustainable transport, and investing in linking up all forms of transport so that walking and cycling is an easy and accessible option. Rail stations should be active travel hubs making it easier for commuters, locals and visitors to get active. This includes safe cycle storage at all main transport interchanges, notably Cardiff Central station, Cardiff Queen Street station, and when it is built the bus interchange in Central Square.

Elected Representative

Open St Mary St/High St and make one way in & one way out with Westgate St

Unspecified Organisation

Close off as many city centre roads from traffic. Close Castle St. This would cut emissions over night

Cardiff University

A wider congestion charge covering the city, better funded and more coherent bike lanes and subsidised/expanded bus provision.

Academia – RTPI Member

The cycle route with bollards by Lidl off Caerphilly road is shocking, it's always full of glass and can't be ridden on, complete waste of space and money. Road cleaners can't keep it clear of glass which means even less road space for cyclist and cars. Can't be used. Also no advertising of the new law to give cyclist 2 metres of space. Cycling in Cardiff is awful, and the worst culprits are Cardiff bus.

Cardiff University

Encouragement through schools & other educational institutions for greater use of cycles. But this needs to be linked with better provision of secure cycle storage at such institutions and also across the city (e.g. at railway stations - & not just Cardiff Central). There also need to be far more installations for securing bikes in the city centre. I gave up cycling in to do shopping because the bike stands in Queen St., etc., are far too far apart (when you have heavy shopping you cannot carry it so far between bike stands before loading it onto the bike (to take the weight), and anyway are totally inadequate in number.

Cardiff University

Clear air charge for commercial vehicles. Electrification of public transport. (Reintroduce trams!) Incentivise commuter schemes (cycle-to-work, compulsory parking charges for employees, etc). Perhaps park and ride?

Environmental Health Lecturer

Remove traffic; better P&R facilities; better cycle parking areas with appropriate security and safe routes. Cambridge have cycle car parks with excellent security

Castle Court Residents Association

Discussions are pending with the Council

Community Watch

Yes - protect green spaces - reduce overdevelopment

Support Group for "Save the Trees at Suffolk House"

Yes, STOP giving developers of new build permission to fell trees. Trees are our lungs, they above all absorb carbon dioxide. For instance, we have lost our campaign to save the trees at Suffolk House, especially the older massive Copper Beech facing the Infants Nursery and

Old People's Home. Where is the sense of the Planning Committee in giving the Builders/developers permission to chop down these beneficial life giving trees?

Elected Representative

Charging Clean Air Zone

Professional Driver

I believe that implementing catalyst to reduce the NO2 gasses effect can be done by "Selective Catalytic Reduction systems are seen as an efficient technology necessary to achieving emission standards. They work by adding ammonia either in the form of Ad Blue a liquid NOx reducing agent, or directly as a gas, using cartridges to the exhaust gases. This then reacts in a catalytic converter with the nitrogen oxides coming from the diesel engine to release harmless nitrogen and water vapour at the tailpipe."

Professional Driver

Remove speed humps

Professional Driver

Built out bus stops, 20mph zones and more bus lanes have been introduced to cause congestion and to try to force people out of their cars. This has not happened. The poor air quality is self-inflicted and I predicted this 10 years ago. A good excuse to introduce a congestion charge to again, screw the motorist. You should be ashamed of your selves.

Professional Driver

Traffic light systems often introduces traffic jams and idle running vehicles, smart systems that allow traffic to flow when red lights are not need should be implemented, even part time on off systems could be used.

Professional Driver

Remove bottle necks so that traffic can flow faster and not remain stationary by castle

Professional Driver

Stop running half-empty buses. New legislation needed in parliament.

Professional Driver

I think you are on the right track but don't rule out modern diesel engined buses.

Professional Driver

Make every council employee use public transport. Lead by example.

13 Are there any other comments you would like to make about the Council's Air Quality Strategy and Action Plan?

A total of 572 comments were received for this question, which have been grouped into themes. The top three are shown below; a full list of themes can be found in Appendix 6.

Theme	No.	%	Example Comments
Support the proposal	118	20.6	<p><i>You can't escape the current screams for progress in reducing emissions in today's world - I'd love for Cardiff to be at the forefront of this charge. Let's not focus on the short term, let's focus on being the benchmark city that others want to copy. Electric buses, electric taxis, more restrictions on the wider area for general motor vehicles, real investment in cycle schemes for all residents of Cardiff - I support the schemes proposed but urge you to take this opportunity to really shake things up and pioneer Cardiff as being THE GREEN CITY of the UK. Let's attract people and businesses who have a strong social responsibility - by being THE green city we'll reap the rewards. Let's make Cardiff stand-out very prominently for all of the right reasons - this is our chance!</i></p> <p><i>I'm glad steps are being taken not only for reasons of public health and wellbeing, but also as a response to climate change.</i></p> <p><i>Looks great, now get on with it. It can't come quick enough!</i></p> <p><i>I support many of the suggestions made so far, but at the same time should wish the Council to proceed with caution in order to limit any expensive mistakes, and also to gain the backing of the public and businesses.</i></p> <p><i>Pleased to know that the Council is taking action to improve air quality. The more we can do so much the better.</i></p>
Be more ambitious	91	15.9	<p><i>It isn't nearly enough. Why not be a leader in Europe rather than catching up?</i></p> <p><i>It's neither ambitious nor strong enough to make the kind of impact to improving air quality and reducing carbon emissions that we require.</i></p>

Very 1 dimensional. Need a holistic approach that includes minimising car use, cleaner cars and carbon absorption.

Promote / Encourage / Enable Active Travel

68 11.9

Introduce more rent a bikes, they have and are so successful.

Many of the measures are welcome but there is a long way to go before it is safe and pleasant to cycle in Cardiff. Perhaps developing some of the lanes behind the terraced houses in Heath and other parts of the city as cycle paths would be an inexpensive and safe way forward

I'd like to see how the council plans to address cycle security. Improved access has to come with a level of confidence that my bike will be there when I return from my visit to the city centre. Cycle theft it seems is an easy crime with low levels of detection.

Make as many safe cycle routes to town and through town as possible. Many cycling commuters cannot get through the city safely

A number of comments responses were received from Stakeholders and organisations in response to this question:

Elected Representative

Slowing traffic & closing streets would make it worse, not better

Unspecified Organisation

These are small steps that won't tackle the issue. You'll still be non-compliant and I might make court action. To resolve this you have to be bold and close roads. It's quick, easy and efficient solution

Local Business

Please don't introduce congestion charges or similar as it will harm trade

Cardiff University

Needs more buses, need to encourage a modal shift for those who want to come into or through the City Centre.

Academia – RTPI Member

Yes - don't just focus on the city centre, focus on residential areas where most of your population live and play. And not just the existing areas - your proposals in north Cardiff are an air quality nightmare waiting to happen for existing residents and now would be the most optimal time to act.

Cardiff University

20mph limits are pointless in that they have a compliance rate close to zero. Traffic calming measures typically result in increased braking and acceleration (so more brake dust and NO2).

Environmental Health Lecturer

No - appropriate the Council meets it

Community Watch

Stick to existing policies regarding protection of green spaces and conservation areas- stop allowing developers to destroy trees etc., prior to planning applications.

Professional Driver

It's ok for you to reduce the speed limit to 20mph while engine idle speed can run up to 20 mph it is damn hard to stick to a twenty mph limit. The police, your own buses and taxi can't keep to it. Why is it that whenever you alter any road you bring the speed limit down not by five but ten. You are driving the private car off the road, and that will cost jobs that will reflect on you through taxation. For goodness sake stop the lowering of the speed limit or face a title wave of protesters.

Professional Driver

Ignoring the elephant in the room, of the council's huge expansion of the city housing. Resulting in more traffic and more pollution.

Professional Driver

I had a conversation with a Councillor some time ago about pollution with a particular emphasis on traffic light timings, which is a cheap and easy way to alleviate congestion and pollution in certain areas. He showed no interest at all and treated me as an imbecile. It's a big turnaround now though.

Professional Driver

Too little too late. This should have been implemented by now not being proposed

Professional Driver

Consider not just the city centre as being the main area, residential areas should be given the highest priority when planning and not just the so called deprived areas, as it is often just wasted money.

Professional Driver

Remove bus lanes where buses don't use them, Cryws Rd junction with Albany Rd. Allow cars to use bus lanes during off peak hours

Professional Driver

Bring in trams to the city centre. Those trams can take punters to bus stops outside the city centre when buses can go to the required destinations.

Professional Driver

If you persist in decreasing the use of cars the City centre will suffer. Empty shops don't pay rates. The John Lewis car park shows parking around the centre can be convenient and affordable. A ring of such car parks would make Cardiff a good destination city.

Professional Driver

As a driver, any expansion of Cycle Lanes and Pathways would be a welcome addition to the city of Cardiff. But these need to be implemented in such a way that finds the best possible balance between cycle safety and efficiency with the needs of road vehicles.

Engagement Events

Four Engagement Events were held in the city centre, giving members of the public the opportunity to discuss the proposals with the Project Team in greater depth. In total, 76 people attended:

April 13th: Angel Hotel (Prince of Wales Suite – Ground floor) – 22 attendees

April 20th: Central Library (level 3) – 13 attendees

May 4th: Angel Hotel (Rhymney Suite – Floor 1) - 25 attendees

May 11th: Central Library (level 3) – 16 attendees

Respondents attending these events were also invited to complete feedback forms and leave further comments or questions in addition to completing the survey; 23 forms were received. Satisfaction with the event, level of information, knowledge of the facilitator, and suitability of the room and facilities were high:

Question	Score out of 5
Overall, how satisfied are you with the event today?	4.2
I felt I had sufficient information	4.5
I felt the facilitator was knowledgeable on the subject	4.8
The room and facilities were suitable	4.1

Twenty respondents provided their contact details in order to be kept up-to-date on the project.

More than half of the comments made supported the proposals, or pushed for them to be more ambitious:

Let's get this up and running ASAP. Keep up the good work.

This is excellent value for money at ~£20-30m and a massive improvement on present arrangements

Well done, but – continue to be ambitious e.g. remove NCP car park in front of Principality Stadium and make the whole area welcoming as well as reducing pollution in Westgate St

It could be more ambitious! The recent declaration of a climate emergency provides a political context that would allow for more radical approaches that reduce air pollution even more – especially in regards to getting more electric buses.

Very informative and helpful

Concerns were raised that the consultation had not been promoted more widely, or that the venue was not suitable:

This consultation should not be “hidden” away in an obscure venue for a mere 4 hours. The one in the Angel Hotel could’ve been more accessible in a vacant shop in Working Street.

Signpost the event more prominently

Lack of bike parking at venue

Other concerns were raised, including the impact on people living in the city centre, and suburbs adjacent to it that could be negatively impacted by the proposals:

Access to my home – Landmark Place, Churchill Way – is often obstructed by traffic. The ‘No Right Turn’ into N Edward Street contributes to this congestion and I still have to use the right lane to access my home

Concerned about the highway through Llandaf. The pollution needs to be monitored constantly.

Concerns about shifting of traffic to Lower Cathedral Rd

Demographics

Which of the following best describes you? Please tick one box only

	No	%
A member of the public	1263	97.2
An elected representative	5	0.4
Representing an organisation or group	12	0.9
A professional driver	10	0.8
Academia	10	0.8
	1300	100.0

Do you drive any of the following? Please tick all that apply

	No	%
Car	1062	82.8
Motorbike	43	3.4
Van / LGV	42	3.3
Lorry / HGV	7	0.5
I don't drive	200	15.6
	1282	-

Respondents could select more than one option, so totals may not add to 100.0%

Is this...?

	No	%
Petrol	649	60.4
Diesel	442	41.2
Bio-diesel	1	0.1
Electric	20	1.9
Other	28	2.6
	1074	-

Respondents could select more than one option, so totals may not add to 100.0%

'Other' types of vehicles specified were Hybrid (22 mentions) and LPG (3 mentions).

Do you walk or cycle other than for recreational purposes? (e.g. to get to work/ school/ shops)

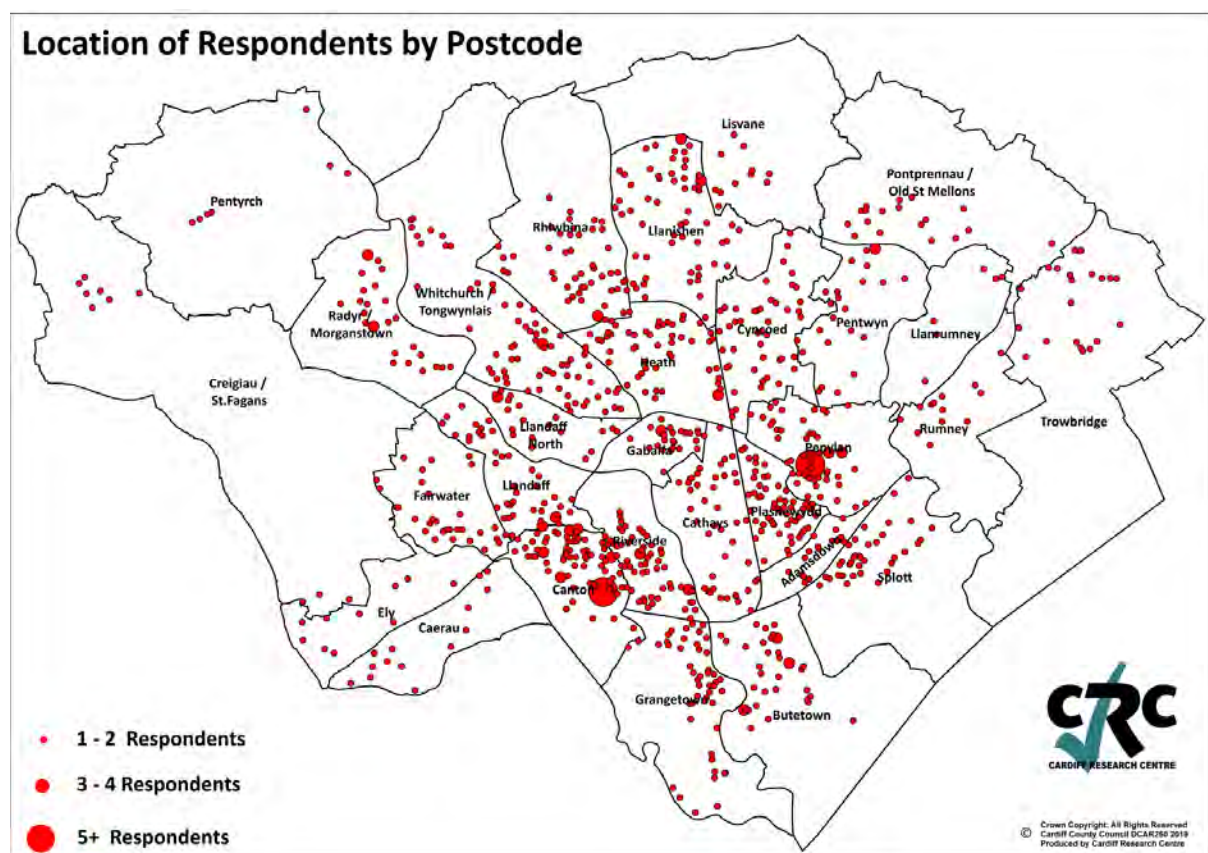
	No	%
Yes, regularly	787	60.7
Yes, but infrequently	256	19.8
No	253	19.5
	1296	100.0

Do you use public transport?

	No	%
Yes, regularly	522	40.1
Yes, but infrequently	603	46.3
No	177	13.6
	1302	100.0

So that we can target our services across the city, please provide your postcode:

1,238 respondents provided their postcode; the map below identifies the home location of respondents living in Cardiff (postcodes provided showed that a number of respondents taking part in the survey were resident outside of the city).



Are you...?

	No	%
Male	735	57.3
Prefer not to say	36	2.8
	1283	100.0

What is your age?

	No	%
16-24	27	2.1
35-44	294	22.8
55-64	247	19.2
75+	35	2.7
	1287	100.0

Do you identify as a disabled person?

	No	%
Yes	129	10.1
No	1090	85.0
Prefer not to say	63	4.9
	1282	100.0

Please tick any of the following that apply to you: (Tick all that apply)

	No	%
Deaf/Deafened/Hard of Hearing	73	21.0
Learning Impairment/difficulties	8	2.3
Long-standing illness or health condition	125	36.0
Mental Health Difficulties	50	14.4
Mobility Impairment	88	25.4
Visual impairment	17	4.9
Wheelchair user	10	2.9
Other	19	5.5
Prefer not to say	78	22.5
	347	-

Respondents could select more than one option, so totals may not add to 100.0%

What is your sexual orientation?

	No	%
Gay Man	55	4.4
Heterosexual/Straight	906	72.7
Prefer not to say	232	18.6
	1246	100.0

Do you regard yourself as belonging to any particular religion?

	No	%
No, no religion	823	66.7
	1234	100.0

	No	%
Christian	332	82.4
Jewish	3	0.7
Sikh	0	0.0
Prefer not to say	34	8.4
	403	100

What is your current Marital or Civil Partnership status?

	No	%
Married / Registered Civil Partnership	688	55.2
Single	218	17.5
In a long-term relationship	226	18.1
Separated/Divorced	57	4.6
Widowed	28	2.2
Other	29	2.3
	1246	100

Do you consider yourself to be Welsh?

	No	%
Yes	811	65.2
No	432	34.8
Prefer not to say	0	0.0
	1313	100.0

What is your ethnicity?

	No	%
White: Irish	22	1.8
Mixed/Multiple Ethnic Groups: White & Asian	5	0.4
Mixed/Multiple Ethnic Groups: White & Black Caribbean	3	0.2
Asian/British Asian: Bangladeshi	4	0.3
Asian/British Asian: Indian	3	0.2
Other Asian/British Asian ethnic background	2	0.2
Black/British Black : Caribbean	2	0.2
Other Ethnicity: Arab	0	0.0
Other Ethnicity: Gypsy/Irish Traveller	1	0.1
Other Ethnicity: Polish	1	0.1
Other Ethnicity	10	0.8
	1249	100.0

Are you pregnant, or have you given birth within the last 26 weeks?

	No	%
Yes, pregnant	8	0.7
Yes, given birth	5	0.4
Neither	1145	93.2
Prefer not to say	71	5.8
	1229	100.0

Do you have Caring responsibilities?

	No	%
Yes	183	14.4
No	1022	80.7
Prefer not to say	62	4.9
	1267	100.0

Appendix 1 – Key Stakeholders

Contract Management Team

Statutory bodies

WLGA

Natural Resources Wales

Public Health Wales

Policy officers at Welsh Government who oversee the funding

Cabinet

Elected Members

Public Services Board

Public Protection Committee Members

Clean Air Steering Group

Shared Regulatory Service Joint Committee

Environmental Scrutiny Committee

MP's

AM's

Environmental Campaign Groups

Friends of the Earth

Client Earth

Healthy Air Cymru

British Lung Foundation Wales

British Heart Foundation Wales

Business Improvement District (on behalf of city centre business)

Unions

GMB

Unison

Unite

Active travel campaign groups

Sustrans

Cardiff Cycling Campaign

Living Streets

Sustain Wales

Taxi forum

Cardiff Hackney Alliance (200-300 drivers)

Taxis – Private hire operators and Hackney carriage

Cardiff Bus

Royal Mail

Stagecoach

New Adventure Travel

National Express

Associated British Ports

Federation of Small Businesses Wales

Alliance of British Drivers

Road Haulage Association

Society of Motor Manufacturers and Traders

Community Transport Association

Chartered Institute of Environmental Health

Institute of Air Quality Management

Environmental Protection UK

Environmental Industries Commission

Confederation of Passenger Transport

Travel campaign groups

RAC

AA

Community groups

Westgate Street Residents Association

Businesses

Castle Street

Angel Hotel

The Castle Arms

Nisa Stores
Elevens Bar and Grill
Revolution
Chicken.com
Greazy Vegan
Fabulous Welshcakes
Nata & Co
Castle Welsh Crafts
Holiday Inn
Westgate Street
Mango House
Box UK Ltd
Bar 44
Tiny Rebel
Zerodegrees
Queens Vaults
Brew Dog
National Probation Service
O'Neill's
Central Square
Hugh James
BBC Cymru Wales
Lynq
Entrepreneurial Spark
MotoNovo Finance
Rightacres Property
Milk & Sugar
M&S Simply Food

City Centre East

Dumfries Place

Arrivo Autobus
Evans Cycles
Berry Smith LLP
Friscon Foods Ltd
Optimum Credit
AXA Insurance
Geldards

Appendix 2 – Open-ended responses to Q3

Do you have any other comments regarding the introduction of cleaner buses in Cardiff?

A total of 496 comments were received for this question, which have been grouped into the following themes:

Please note, responses will add to more than 100% as more than one theme could be covered by a single answer

Theme	No.	%	Example Comments
Support the proposal	99	20.0	<i>An excellent idea. I use the bus regularly and</i>
All buses to be electric/ULE/green	94	19.0	<i>36 electric buses is not enough. We need at least 90% of buses to be electric and the other 10% to meet the lowest emission standards.</i> <i>What is the point of upgrading buses to cleaner diesel when the aim should be electric? Cardiff Bus bought diesel as a cheaper option to electric, Cardiff Council is not providing enough charging points so this smacks as a short term saving to gloss over a short sighted investment plan.</i> <i>All buses and Council vehicles should be replaced by less polluting electric vehicles.</i> <i>All of the buses should be electric. I cough in the mornings at different times of the year from the bus exhaust and pollution I breathe in while riding in the city centre.</i> <i>100% of buses in Cardiff should be electric, including coaches and stagecoach services not just Cardiff Bus</i>

Other issues with buses - 83 16.7 *The bus routes need to be looked at. As they are*

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**Amend timetables/
routes** 76 15.3 *They should only run when needed, empty buses aren't needed and increase pollution and traffic issues*

There should be a continuous monitoring of passenger numbers, frequency of bus services

Make them more useful for users!! The buses are too infrequent & don't go where people want, the whole system is totally unsuitable for disabled people

Introduce more bus routes, and a wider timetable. Cancelling routes last month, and having no buses running Sundays and nights, will force people to take their cars to their destination.

**Alternative Transport/
Technological options** 67 13.5 *Consider biomethane and hydrogen options*

Buses are dirty- can't we have trams? I don't use buses because they're a lower form of transport

			<p><i>Whilst a Tramway would require the infrastructure of track laying resulting in roadworks, Trolley bus systems operate on overhead cabling and batteries which could have rechargeable capabilities and are ideal in urban environments</i></p> <p><i>I draw attention to the Alstom Primove system of bus charging rather than the obtrusive Balfour Beatty system trialled previously.</i></p>
As soon as possible	57	11.5	<p><i>Long overdue</i></p> <p><i>This should be done ASAP</i></p> <p><i>A great idea, should be done as quickly as possible</i></p>
Encourage public transport use	43	8.7	<p><i>Doesn't matter how clean buses are if no-one uses them - buses need to be more frequent and less expensive to encourage people not to drive in the first place</i></p> <p><i>Make the whole of the centre of Cardiff car free. Cardiff is over populated now and more should be done to keep the centre and surrounding areas free from cars. CCC should provide taxi buses who should be the only transport available around a 5 mile radius of Cardiff central. The suburbs are now too saturated with cars queuing to get into the centre of town on a daily basis, cars should be parked at provided bays and then get bus taxis into town.</i></p> <p><i>That they have more of them at nights and on weekends so that I can use them instead of having to take the car as there is at present no bus for me to use</i></p>
Cost of this change - who is to pay, no fare rises	39	7.9	<p><i>The cost to the Council will be huge but the benefits to our environment are huge.</i></p> <p><i>Instead of retrofitting other buses and wasting money just replace them when needed with the new electric buses</i></p> <p><i>If WG doesn't pay who will?</i></p>
Current cost/ integration of Public Transport	36	7.3	<p><i>A better integrated system, Oyster card for trains and buses. All buses regulated so same ticket can be used on different companies and concessions.</i></p> <p><i>do not increase fares and do not cut any more bus routes</i></p> <p><i>Make public transport free</i></p>

Idling engines a problem	33	6.7	<p><i>Clear protocol on idling needed</i></p> <p><i>Need to ensure both buses and taxis don't wait with their engines running; exhaust fumes and particulates are aimed directly at people waiting with children being closest to the emissions.</i></p>
Apply to all operators	32	6.5	<p><i>This must apply to all buses operating in Cardiff</i></p> <p><i>What about other buses and coaches that 'visit' the city?</i></p>
Discourage car use	21	4.2	<p><i>The introduction of cleaner buses is welcomed, however the reduction of car use should be a priority.</i></p> <p><i>Less cars would help more</i></p>
Dispute Bus pollution / Electric vehicle benefits	18	3.6	<p><i>I doubt whether buses are the chief culprit for pollution.</i></p> <p><i>Current production of electricity is still too dependent on pollution emitting technology for electricity to be deemed a more desirable fuel source.</i></p>
Against retrofitting	17	3.4	<p><i>I think retrofitting is a waste of money. Ultimately they will be replaced with electric, so do it now, the fuel savings will make it pay. Air quality is a pressing issue.</i></p> <p><i>Concentrate on purchasing new buses; may be some smaller buses as some routes do not need big buses all the time and we need more frequent services</i></p>
Charging points	11	2.2	<p><i>If a central bus station was finally built then this would probably significantly help as there would be a centralised hub of where the buses start and charging points could be based in the same area which means that between changeovers and transfers to buses - buses could be charged. I would envision that charging points would be above each bus stop within the bus station so that buses could be charged up before they go off to do their route.</i></p> <p><i>Will there be enough charging stations around the city?</i></p>
Encourage Active travel	9	1.8	<p><i>I'd still prioritise cycling infrastructure, despite supporting these changes</i></p> <p><i>However, changing the most polluting buses is only part of the solution. Disincentivising car travel and</i></p>

			<i>incentivising other means like cycling is even more important in the city centre.</i>
Other vehicles to be upgraded	5	1.0	<p><i>If we can do this for buses can a program for delivery lorries and transport vans follow.</i></p> <p><i>Other council vehicles (e.g. bin lorries) should also be converted to electric if possible</i></p>
Traffic flow	5	1.0	<p><i>Recent road changes are causing traffic jams which cannot help air pollution can it</i></p> <p><i>Pollution is caused by too many traffic lights in the city centre with cars sat their waiting for lights to change</i></p>
Miscellaneous	29	5.8	<p><i>Make sure the bus drivers learn how to drive safely around cyclists</i></p> <p><i>Strictly controlled management of public money is essential while pursuing a clean air policy and it should be phased in over time in a well scheduled programme</i></p> <p><i>Only use electric vehicles if you're sure electricity is generated in a green way</i></p>

Appendix 3 – Open-ended responses to Q7

Do you have any further comments or suggestions on how to change taxi licensing rules to improve air quality in the city?

A total of 442 comments were received for this question, which have been grouped into the following themes.

Please note, responses will add to more than 100% as more than one theme could be covered by a single answer

Theme	No.	%	Example Comments
All taxis should be Low	86	19.5	<i>Has to be all electric</i>
Taxi firms/ drivers should pay	68	15.4	<p><i>Taxis are the responsibility of the operator - public money should not be spent to pay for their cleaner vehicles.</i></p> <p><i>My answer to question 6 is 'no' because I would have concerns that public money is paying for someone who privately owns a vehicle, to get a newer vehicle, which they could sell at some point and keep the full amount of money. Should they have a caveat that if they cease operating within 5yrs of the grant, they repay the grant, otherwise they could receive the grant, retire within a month, and keep the car/grant. I would love money to be given to me to replace my diesel car! What about self-employed people i.e. builders, who travel the whole city. They are providing a service to the public too, the same as taxi drivers - it's all private work, to earn a living. It's discriminatory if only taxi drivers are helped.</i></p> <p><i>Taxi drivers will not need grants - if cars are disincentivised from the city centre (with taxis exempt) then their revenue will be higher</i></p> <p><i>Subsidy is inappropriate otherwise everyone should get it</i></p>

Discourage idling	61	13.8	<p><i>Taxis (and buses) often sit empty with their engines</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p> <p><i>!</i></p>
Management of scheme - financial, criteria for acceptance, history of taxis, time for implementation, incentives	53	12.0	<p><i>Issuing grants to taxi drivers should come with certain conditions such as repayment of grants if a private vehicle ceases to be used for taxi purposes within a certain time limit</i></p> <p><i>Grants offered must be ring-fenced and monitored</i></p> <p><i>Should be an interest free loan and not an outright grant. This would be in order to discourage financial misuse of the system.</i></p> <p><i>Taxis provide a vital service and should not be driven out of business as a result of these changes. If financial support is not available additional time to transition should be given</i></p>
Enforce rules	49	11.1	<p><i>I think there are too many taxis in the city centre which allows drivers to abuse the licensing arrangements and decline short fares etc. Stricter licensing and enforcement is required.</i></p> <p><i>Stricter enforcement of speed limits for taxis</i></p> <p><i>I think the rules on taxis should be stricter than the proposals in order to really minimise pollution. In the area I live in, many families own taxis which they appear to use as a family car for the school run (thus getting away with stopping on yellow lines and parking illegally) - I would be unhappy to know taxpayer's money was being used to basically upgrade taxis that are primarily used as family cars to abuse normal driving/parking rules.</i></p>
Too many taxis	44	10.0	<p><i>Might I suggest a restriction on the number of taxis operating in the city as currently many hackney cab drivers think they're entitled to rank in bus and cycle lanes, even during the day, because official ranks are already full but this only adds to congestion as buses</i></p>

and cycles swerve out into lanes for cars and commercial vehicles.

There are a lot of old taxis in Cardiff, I wonder how some of them ever get through the MOT!

restrict the amount of plates and badges

License less of them! Far too many for the trade to be sustainable!

**Improve infrastructure/
Public Transport**

36

8.1

Improved cycle lanes and public transport to reduce demand for taxis.

Expand bike hire scheme and provision for cycling rather than continuing to promote motor transport as the best way forward in a small, flat city

Improve public transport and lessen amount of taxis

Low emission vehicles only work when there is the appropriate infrastructure to support - is there plans to install charging points at the regular taxi stopping points?

Investigate other schemes

32

7.2

Is there not a retrofit option for cars? As with the buses? Could grants for these be offered where possible?

Barcelona is very well-served by hybrid vehicles, mainly Toyota.

Why not follow the same model as London? The new all-electric London taxi would work in Cardiff - I'd propose spending the money, sought from the Welsh Government, in providing the required charging infrastructure and forcing all new taxis to be fully electric. Cardiff's geography is not huge, so we'd be a great city to embrace this without any issues with 'range anxiety'. I see so many taxis in Cardiff belching out black fumes, I'm surprised to read the policy only allows vehicles up to 10 years old, I feel like some taxis look much older. Euro 6 isn't good enough in my view - no way near good enough.

**May affect No of
taxis/demand on service**

31

7.0

Taxis are already scarce enough, don't reduce them further!

Beware unintended consequences, e.g. could result in fewer and more expensive taxis, which could lead to more unregulated private cars.

If there is inadequate financial support for taxi owners to change, we are likely to see a reduction in taxis and

			<i>the a rise in price, which in turn will encourage people to bring their private cars more into the city centre, especially for pickups from bus or train stations</i>
Support proposal	29	6.6	<p><i>No, looks logical</i></p> <p><i>I think it will be a very good idea to get this done as soon as possible.</i></p> <p><i>Time to stop talking and crack on with it</i></p>
Should apply to all taxis - even those registered outside Cardiff	26	5.9	<p><i>Enforce the same emissions requirements on taxi's registered outside Cardiff that enter the city boundary</i></p> <p><i>Will the changes in licensing ensure that taxis from outside Cardiff can't get around the proposed new regulations?</i></p> <p><i>This can only work if taxis from neighbouring local authorities are banned from operating in Cardiff, which clearly can't happen. This is a prime example of where a national policy can work, but a local council 'going it alone' simply won't result in the benefits that they think it will. It also makes Cardiff taxi drivers operate at a significant disadvantage to other areas as they have to fund improvements to their own vehicles where others don't</i></p>
Loan not grant	17	3.8	<p><i>Should be an interest free loan and not an outright grant. This would be in order to discourage financial misuse of the system.</i></p> <p><i>A grant should be offered with a 50% match in funding from the driver/company. This option should be available to small businesses who drive in the city centre for deliveries, services etc.</i></p> <p><i>Drivers of cars should be responsible for upgrading their cars not the government, grants should only be provided if drivers pay these back over time.</i></p>
Don't increase fares	14	3.2	<p><i>Forcing taxis to update their vehicles will only drive up prices, and will reduce the amount of people using taxis</i></p> <p><i>If these measures are put through costs to customer will go up - which would be unfair.</i></p>
Issues with Taxis in Cardiff/ Poor service	12	2.7	<p><i>Taxi service is a shambles in Cardiff run to make money and customer needs a long way second</i></p> <p><i>Why are taxis exempt from using indicators!</i></p>
Training for drivers needed	11	2.5	<i>All taxi drivers should not be licensed unless they have a thorough knowledge of the city on a par with ' The</i>

			<p><i>Knowledge' process in London. There should be a minimum a level of cleanliness to all Taxis operators. All Taxis should carry GPS trackers to add additional level of safety and security to passengers and drivers.</i></p> <p><i>Ensure taxi drivers have training to share roads with cyclists</i></p>
Unsure of criteria/standard	10	2.3	<p><i>A taxi's life is relatively short - this could be achieved by natural "wastage". You are re-licensing and issuing new licenses now so why would you need money to implement it? What would the 5.5 million be needed for?</i></p> <p><i>I'm uncertain why the Euro 6 standard is not required at testing points, not just at first application</i></p>
Offer grants to other vehicles	5	1.1	<p><i>If you are going for a grant for Taxi's why not HGV's LGV's and personal cars.</i></p> <p><i>Will this apply to Uber? What about delivery vehicles e.g. pizza delivery cars or supermarket vans?</i></p>
Be more ambitious	4	0.9	<p><i>These proposals do not go far enough. In some situations, this is even a step backwards. These proposals are indicative of a lack of courage.</i></p> <p><i>Yes many Cardiff taxis are disgraceful and very old, and need to be taken off the road. Standards need to be stricter for sure and I don't think these proposals go far enough.</i></p>
Miscellaneous	40	9.0	<p><i>When queuing at taxi ranks, customers should be allowed to choose electric vehicles, to ride in, even if they are further down the queue</i></p> <p><i>Modern cars will help.</i></p> <p><i>stop encouraging people to go into the city centre for huge events</i></p> <p><i>I would be concerned about the increased costs of taxi journeys. This would particularly impact disabled people who are unable to use other forms of transport, for example who do not have the ability to navigate the bus system, or who are frequently subject to abuse and harassment on the bus system.</i></p>

			<p><i>Provide more cycling facilities inc. routes and parking - ideally overlooked for maximum security and covered from the weather.</i></p> <p><i>Improved cycle safety and dedicated cycle lanes would hugely encourage more to use cycles, esp. when secure places for "parking" cycles be provided...</i></p>
Improve public transport	133	23.0	<p><i>I don't agree giving more priority to buses until they become at least useably reliable and cheaper.</i></p> <p><i>Sort out the buses so that they go to places that people need - rather than just the centre of town.</i></p> <p><i>What a joke!!! Cardiff Buses have been cutting services after pleading with commuters to leave their cars and take the bus! Such a JOKE!!!</i></p> <p><i>Introduce affordable cleaner public transport before you start charging people</i></p> <p><i>Reduce car transport in the East with train stations on the existing line at Roath, Rumney, St Mellons and Marshfield</i></p>
More pedestrianisation	65	11.2	<p><i>More pedestrianisation and an electric tram/metro.</i></p> <p><i>I welcome the proposals. When the city centre is closed due to events (rugby...), it is a pleasure to walk and cycle in the city centre. I understand that without improved public transport, education, changes of lifestyle, it is not possible to have a pedestrianised Castle Street; but it would be ideal.</i></p> <p><i>Pedestrianise all of city centre... no cars to enter city from 1 mile.</i></p>
Close city centre to cars	55	9.5	<p><i>Ban Diesel cars over a certain age from city centre</i></p> <p><i>Completely close roads to cars in the city centre and only allow: taxis, buses, delivery lorries and bikes. The only roads available are for car parks</i></p> <p><i>Castle Street should be closed as a through route to private motor vehicles. This worked well during the NATO summit.</i></p>
Congestion charge/Levy polluting vehicles	54	9.3	<p><i>Introduce a charge for going through the city centre at peak times</i></p> <p><i>Impose charge for "dirty" vehicles</i></p> <p><i>We would like to see a Clean Air Zone to restrict vehicles in the city centre wards</i></p>
Move problem elsewhere	48	8.3	<p><i>The aims are laudable, however shifting traffic onto other roads may significantly increase pollution levels there.</i></p>

			<i>All this does is push the pollution to other areas. It just moves it. It doesn't solve the core problem</i>
Reduce Car usage	44	7.6	<i>Perhaps introducing a pool commute benefit (allowed access to bus lanes if the car has 4/5 commuters?) for private vehicles that travel through these areas</i> <i>Nice start, but not ambitious enough. We really must reduce car use in Cardiff and that requires a serious shift in policy and thinking. This is tinkering at the margins.</i>
Low Emission transport	32	5.5	<i>Encourage use of electric cars by residents, as well as taxis and buses.</i> <i>Build a tram network, zero emissions!</i>
Accessibility considerations	32	5.5	<i>You have failed to meet needs of disabled by providing proper transport hub where they can change buses, coaches and easily access trains. I suspect this is illegal.</i> <i>Need to make sure disabled people can still drive where they need to</i>
Cheaper public transport	30	5.2	<i>I think if city centre buses were free for all users, it would have a big impact on air pollution and reduce the number of cars on the roads.</i> <i>Affordable public transport that is INTERGRETATED is the most important thing to ensure that clean air charging zones don't kill city centre.</i>
Parking	27	4.7	<i>Remove parking spaces in the city centre to encourage people to use public transport/active travel options</i> <i>Increase availability of car parking spaces so that less time is spent queuing.</i>
Stop vehicles idling	22	3.8	<i>Stop cars running their engines when halted for long periods, e.g. queuing for the John Lewis car park.</i> <i>Evidence: As an asthma sufferer, wheezing when passing that queue.</i> <i>Ban taxis and buses from leaving their engines running whilst parked up</i>
Be more ambitious	20	3.5	<i>Drastic, bold action is needed</i> <i>The designs seem intended to cause as little disruption to car traffic and, as such, lack sufficient ambition and risk not shifting behaviour. So e.g. the West route goes through and existing park route meaning less cost and inconvenience to cars, yet creating conflict with other park users e.g. dog walkers and ends with a very steep climb near the cathedral. It's all got the feeling of something watered down to be more palatable to motorists. A bolder approach is needed to create real change. It will end up costing much more in the long term.</i>

Enforcement	17	2.9	<p><i>I fully support 20mph zones in the city centre and more should be done to implement these - including devolving powers to the council to regulate and monitor compliance with fixed cameras and issuing Fixed Penalty Notices.</i></p> <p><i>Enforce illegal parking.</i></p>
Need more info	17	2.9	<p><i>I need more information on the above to comment.</i></p> <p><i>I am unsure about the design principles as would need more detail, and diagrams to comment</i></p>
Impact on businesses/ residents	15	2.6	<p><i>These plans will destroy the businesses in the city centre because they won't be reachable by car. The council and Welsh Govt need to accept reality. The car isn't going anywhere and if places aren't reachable by car then no one will go there and businesses will fail.</i></p> <p><i>I feel that fundamentally this plan doesn't take into account city centre residents (perhaps clear from a lack of information/invitation to the public consultations). Whilst we do not have parking at Golate Court, there will need to be provision in place for residents to receive deliveries/ be able to drop-off/pick-up nearby, either routinely or when moving in or out of the block. The current plans do not make any of these issues clear, and I would appreciate far better communication with residents for the next stage of consultations.</i></p>
Against the proposals / will make things worse	14	2.4	<p><i>Public transport priority has been shown to produce traffic congestion</i></p> <p><i>Reducing number of lanes won't reduce the number of cars on the road but will lead to more congestion which will not help reduce emissions</i></p>
Introduce new technology	10	1.7	<p><i>Introduce air quality towers that suck in the fumes and carbon trap them in the filters release air back and use the carbon to produce diamonds for resale or use in construction tooling</i></p> <p><i>Sort out your strategy to allow terraced houses to have electric charging points so we can buy electric cars</i></p>
Education / engagement	8	1.4	<p><i>Work with large companies and organisations based in the centre in order to educate management and staff on the alternative options available to them in regards to transport. Partnerships should be built to encourage people who work and/or visit the city centre to not bring a car. Cheaper public transport, car share schemes, more bicycle stands, better bus routes etc.</i></p> <p><i>Pollution around schools must be high and engaging children and teenagers into the plan would be a good opportunity</i></p>

Stop building houses	7	1.2	<p><i>Refuse planning permission for any building that does not have connections to public transport that is available regularly 24/7, 365 days p.a between that building and local services and the city centre.</i></p> <p><i>The Council seems to rely on making driving so slow and difficult that drivers will give up - this doesn't deter people when journeys are essential but simply makes pollution worse by causing jams and gridlock (increasingly common in Cardiff where housing is built with no thought as to how people will get to work).</i></p>
20mph limit	5	0.9	<p><i>I would like all residential areas to be 20. For some reason the council seem to shy away from doing this despite the safety benefits and give in too much to car owners</i></p> <p><i>Remove 20mph zones go back to 30! When driving in a 20 zone to keep at 20 I have to remain in second gear with high revs, in a 30 zone I can go into 4th gear at low revs so less pollution.</i></p>
Cost of change	4	0.7	<p><i>Postpone until finances become less restricted</i></p> <p><i>Waste of money</i></p>
Miscellaneous	37	6.4	<p><i>Any scheme should allow a high quality tariff-free route from all parts of Cardiff to the Central rail station - these schemes do not seem to provide for good uncharged routes to Central.</i></p> <p><i>Electric cars are not cleaner than fossil fuel cars- electric cars use more fossil fuels in the energy creating process used to create the electricity - in nuclear power stations etc.</i></p> <p><i>Car drop off points where passengers can safely get out of cars to access the city centre on foot while drivers do not have to drive into the city centre</i></p> <p><i>Probably a question of trial-and-error so be prepared to alter and progress measures but not retreat.</i></p>

Appendix 5 – Open-ended responses to Q12

Are there any other measures you think the Council should be implementing in order to deliver compliance with the NO2 limit value in the shortest possible time? Please provide evidence for this if possible.

A total of 652 comments were received for this question, which have been grouped into the following themes.

Please note, responses will add to more than 100% as more than one theme could be covered by a single answer

Theme	No.	%	Example Comments
Promote cycling / make	121	18.6	<p><i>Stop making poor quality painted cycle lanes, they</i></p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p><i>have to stop for cars everywhere. Cars should be</i></p> <p><i>stopping for cyclists and pedestrians. The cycle route</i></p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p><i>management of cyclists on the city's roads. Rush</i></p> <p> </p> <p> </p>
Improve public transport	114	17.5	<p><i>An increase of public transport covering the whole</i></p> <p><i>of Cardiff, if you can make the trains better and</i></p> <p><i>more frequent and make the buses run on time and</i></p>

fund more routes around the city, people will rely on them more and thus drive less.

Reduce cost of public transport and improve reliability and frequency. Until we can rely on transport we will continue to drive places

Improving the bus network so that the differences in journey times between using a private vehicle and using public transport are lessened.

Accessible bus routes throughout the city the connect with other public transport services i.e. rail

Tram system, improved public transport, subsidised public transport - currently more economical to drive and pay car park. Bus routes need improvement so you don't need to enter city centre, bus company needs subsidising

Traffic calming / Flow 111 17.0 *Remove traffic humps and traffic calming measures, these result in speed up, slow down traffic, which INCREASE emissions. Smooth driving, which can be achieved only when traffic jumps are removed will actually decrease emissions.*

I am concerned that raised tables used to reduce traffic speeds in 20mph zones actually increase NO2 emissions. Vehicles tend to slow down when approaching and then accelerate after passing these road 'humps' and emit more NO2 by accelerating rather than maintaining the same speed.

Make major routes for traffic able to go through all traffic lights at green if you stick at 30mph not have to stop at every traffic light

Remove bus lanes that slow down traffic by condensing traffic into fewer lanes, creating more emissions.

Too many pedestrian crossings add to the stop/start of vehicles, thus adding to pollution.

Discourage car use / car share / car free days 100 15.3 *People living outside of Cardiff should be restricted to driving on 4 out of 5 designated days only.*

Congestion zone or car free day, say Sunday (except for busses and emergency vehicles - as they do in Rome)

Taking a car needs to be very unattractive, high parking fees and fines. Attractive public transport with low prices, increase acceptance of cycling by

car drivers. Introduce car sharing systems to make people give up cars, introduce park and ride spaces for drivers from the valleys (parking lots + public transport/ bike schemes at the city border)

Decreasing the number of cars driving in Cardiff seem the most obvious and effective way to reduce pollution.

Can the numbers of cars driving into Cardiff be reduced? More park and ride facilities? I don't know the answer - but I am heartily fed up with seeing about 95% of cars in the rush hour with only one person in them.

Enforcement	57	8.7	<p><i>Enforce parking restrictions. Enforce laws regarding idling engines.</i></p> <p><i>Legal enforcement and monitoring of 20mph zones.</i></p> <p><i>Start enforcing illegal parking in all areas of the city. Too many roads get blocked by people parking illegally & the vehicles are left there for substantial periods of time. Aggressively act on these & people will take notice that you are being serious about pollution, speeding up traffic flow, using public transport or cycling or walking.</i></p>
Charge to drive in city centre	48	7.4	<p><i>The introduction of a congestion charge for private cars and vans. Strict rules on polluting lorries that are essential for delivering and collecting goods from stores and shops etc. Old polluting lorries should be banned</i></p> <p><i>Charging for private cars will reduce this mode of transport and encourage greener ways of travelling.</i></p>
Improve infrastructure	45	6.9	<p><i>Finish the A4232 link road to take traffic around the south of the city. The only reason there's so much traffic on Newport Rd/Blvd De Nantes is the combined failure of the Council and WG to complete this road. Should be dual carriageway from M4 Junction 33 right through to A48M/M4 Junction 29 as originally intended. Sort the traffic light programme in town to maximise throughflow. Your current attempts to simply annoy people out of their cars by making it difficult and time-consuming to navigate the city obviously aren't working.</i></p> <p><i>Need to think bigger and invest in new roads and routes</i></p>

Reduce cost/Free public transport	42	6.4	<p><i>Free bus travel for all children, the school run is a major contributor to air pollution in Cardiff.</i></p> <p><i>Improve and reduce cost of existing forms of public transport and ease of access to them</i></p>
Incentivise low emission vehicles	36	5.5	<p><i>Allow ULEVs and EVs to use Bus Lanes. Encourage electric car use via free\subsidised parking and/or charging.</i></p> <p><i>Grants for businesses to switch to ZE ways of moving goods</i></p>
Implement charges	30	4.6	<p><i>Ban on all diesels, or at least a huge tax as in the Netherlands (£1000 per car).</i></p> <p><i>Clear air charge for commercial vehicles. Incentivise commuter schemes (cycle-to-work, compulsory parking charges for employees, etc.).</i></p>
Park & Ride	30	4.6	<p><i>Is there any value in increasing the number of park and ride points to help minimise the traffic into the city? Are they used effectively and if not what could be done to improve take up?</i></p> <p><i>Introduce congestion charge if enough park and rides spaces available</i></p>
Implement technology	27	4.1	<p><i>Real time air quality monitors, that show the air quality, to the public on site</i></p> <p><i>Why not have massive fans along castle street to keep the air circulating so that NO2 can disperse?</i></p>
More charging points	27	4.1	<p><i>install electric charging points around the city and along terraced streets</i></p> <p><i>Provision of public electric vehicle charging points throughout the city</i></p>
Other Transport options	27	4.1	<p><i>Why are electrified trams not being considered like in other cities?</i></p> <p><i>Increase other transport options - ferry services, rickshaws, small electric trams, even bikes with side cars! Queen street - St Mary Street - Hayes - Churchill Way could be a brilliant circular minim tram route for shoppers, with connections with bus stops/car parks</i></p>
Improve greenery	26	4.0	<p><i>Plant more street trees and make use of moss walls which can filter high volumes of air</i></p> <p><i>Plant more trees in new developments, the new BBC building is a concrete eye sore. Where are the gardens, living walls, roof gardens, wildflowers,</i></p>

			<i>grass? Carbon sinks of all sorts need expansion. Businesses in the centre of Cardiff could make a huge differences if they planted things like vertical gardens etc.</i>
Transport to school	24	3.7	<i>Create no waiting zoned around schools at start and finish times. Give greater publicity to ANY instances where the 40 micrograms per cubic metre limit is breached, not just the 80% figure. The 80% method hides the impact on school kids in particular, taking into account periods of lower pollution when the kids are not there, i.e. holidays and weekends. Offer school buses that were previously withdrawn meaning parents end up driving children to school</i>
Pedestrianisation	21	3.2	<i>More pedestrianised areas especially near schools and nurseries I think we need to make it more pleasant for pedestrians and not just cyclists. I don't like walking through Bute Park - or even on some pavements - because of very fast and aggressive cyclists. Please can the Council crack down on pavement cyclists, and set rules for shared spaces?</i>
Low emission / cleaner vehicles	19	2.9	<i>All Local Authority buildings should have Electric Pool Cars and Electric Chargers for staff. There should also be a scheme to encourage use of Electric pool cars in other businesses through incentives and charges. There should also be reduced parking charges for electric cars, especially at Park and Ride car parks which keep traffic out of the city. Why did the council stop purchasing LPG powered vehicles? There must be 500 plus small and medium sized vehicles that the Authority uses...</i>
Parking	17	2.6	<i>Reduce the number of car permits per household - only 1 + 1 guest permit https://www.centreforcities.org/blog/workplace-parking-levy-answer-cities-transport-congestion-problems/</i>
No idling	15	2.3	<i>No vehicles left running in residential areas when parked idling Introduce laws, backed by personal fines, forbidding all drivers of vehicles with traditional engines leaving them idle whilst parked, or picking up/dropping off.</i>

20 mph	15	2.3	<p><i>Remove 20mph zones as these increase pollution - cars are less efficient at low speeds - data is flawed as its spreading the pollution over a longer time period rather than reducing it.</i></p> <p><i>20mph zones should be the only such speed for vehicles within Cardiff - it is way safer, less polluting and a lot easier to "police" if this were the "normal" speed</i></p>
Suppress new housing developments	13	2.0	<p><i>Stop building so many houses in the city which mean more cars travelling into the city. The road and rail networks need to be able to take the extra of residents.</i></p> <p><i>The council needs to implement more accessible, reliable and affordable public mass transit to cater for the substantial residential developments to the west and north east of the city. It is not realistic to expect residents not to drive unless there is a sound alternative. The increased traffic created by these developments will have a seriously detrimental effect on existing residents which is fundamentally wrong.</i></p>
Be more ambitious	10	1.5	<p><i>Some of these measures might bring emissions down in the short term, however a longer term plan is needed and whilst these might be ok to bring the limits down quickly, they are not a sustainable option.</i></p> <p><i>Be braver, stop pandering to the motorist.</i></p>
Non-traffic pollution	9	1.4	<p><i>The increased use of wood burning fires and stoves means an increase in PM2.5 particulates. Cardiff Council needs to take action to reduce these emission which are seriously detrimental to public health.</i></p> <p><i>The council should ban fireworks as these contribute to NO2 emission. The council should ban wood burners and should also stop the pollution from the steel world and incinerators in Splott!</i></p>
Penalising drivers	6	0.9	<p><i>Not unless you wish to punish all car drivers</i></p> <p><i>Stop processions and demonstrations which force cars to wait engines running whilst they pass. Priority to vehicles not pedestrians on the outer circle. Decrease the vehicle pedestrian interface which slows/stops traffic leaving engines running.</i></p>

Education	5	0.8	<p><i>I think it is very important to publicize the restrictions / changes and why they are necessary, via the media and roadside advertising, to get drivers on side.</i></p> <p><i>All active travel and public transport infrastructure developments should be supported by a wide public information campaign. A modal shift to walking, cycling and using public transport will not be achieved unless citizens are aware of changes and how they impact on them.</i></p>
Commuting v Agile working	4	0.6	<p><i>More home working for employees so staff aren't having to commute to work every day, thus reducing cars on the road. Not everyone is able to use public transport or cycle etc. due to geographical issues.</i></p> <p><i>Working with major employers in the City to promote agile working, so reducing the need for people to travel into the City to work (i.e. they can work from other sites)</i></p>
Move the problem elsewhere	4	0.6	<p><i>Pollution will increase outside the zone as people avoid driving through the zone.</i></p> <p><i>A low emission zone in the centre will push traffic to other routes, which will just shift the pollution, rather than reduce it.</i></p>
Impact on businesses	4	0.6	<p><i>This will damage businesses & trade within the city centre.</i></p> <p><i>,</i></p> <p><i>(</i></p> <p><i>)</i></p> <p><i>,</i></p> <p><i>)</i></p> <p><i>,</i></p> <p><i>(</i></p> <p><i>)</i></p> <p><i>,</i></p> <p><i>(</i></p>
Commercial vehicles	4	0.6	<p><i>Reduce the number of large vehicles such as HGV's from accessing the city centre during peak hours.</i></p> <p><i>Why not have HGVs stop at M4 jct 33, 32, 30 and then only have smaller vans come into city centre?</i></p>
		0.5	<p><i>Engine idling on the so-called 'School Run' should outlawed and radically enforced. Children are being</i></p>

			<i>subjected to horrendous levels of avoidable pollution at schools and nurseries. Action is overdue.</i>
Accessibility	3	0.5	<i>Disabled People's vehicles should be exempt. Evidence - Equalities Acts - reasonable amendments.</i>
Miscellaneous	53	8.1	<p><i>NO2 is clearly a major issue but there are others - the danger, as ever, is having a piecemeal approach -- ALL developments, including new business zones, for example, must have sustainability built in, designed in from the outset, not retro fitted!</i></p> <p><i>The cycle route with bollards by Lidl off Caerphilly road is shocking, it's always full of glass and can't be ridden on, complete waste of space and money. Road cleaners can't keep it clear of glass which means even less road space for cyclist and cars. Can't be used. Also no advertising of the new law to give cyclist 2 metres of space. Cycling in Cardiff is awful, and the worst culprits are Cardiff bus</i></p> <p><i>Stop running half-empty buses. New legislation needed in parliament.</i></p> <p><i>This should not be a priority Cardiff is not a big enough city to warrant this kind of expenditure</i></p>

Appendix 6 – Open-ended responses to Q13

Are there any other comments you would like to make about the Council’s Air Quality Strategy and Action Plan?

A total of 572 comments were received for this question, which have been grouped into the following themes.

Please note, responses will add to more than 100% as more than one theme could be covered by a single answer

Theme	No.	%	Example Comments
Support the proposal	118	20.6	<p><i>You can't escape the current screams for progress in reducing emissions in today's world - I'd love for Cardiff to be at the forefront of this charge. Let's not focus on the short term, let's focus on being the benchmark city that others want to copy. Electric buses, electric taxis, more restrictions on the wider area for general motor vehicles, real investment in cycle schemes for all residents of Cardiff - I support the schemes proposed but urge you to take this opportunity to really shake things up and pioneer Cardiff as being THE GREEN CITY of the UK. Let's attract people and businesses who have a strong social responsibility - by being THE green city we'll reap the rewards. Let's make Cardiff stand-out very prominently for all of the right reasons - this is our chance!</i></p> <p><i>I'm glad steps are being taken not only for reasons of public health and wellbeing, but also as a response to climate change.</i></p> <p><i>Looks great, now get on with it. It can't come quick enough!</i></p> <p><i>I support many of the suggestions made so far, but at the same time should wish the Council to proceed with caution in order to limit any expensive mistakes, and also to gain the backing of the public and businesses.</i></p> <p><i>Pleased to know that the Council is taking action to improve air quality. The more we can do so much the better.</i></p>
Be more ambitious	91	15.9	<p><i>It isn't nearly enough. Why not be a leader in Europe rather than catching up?</i></p>

It's neither ambitious nor strong enough to make the kind of impact to improving air quality and reducing carbon emissions that we require.

These are small steps that won't tackle the issue. You'll still be non-compliant and I might make court action. To resolve this you have to be bold and close roads. It's quick, easy and efficient solution

Very 1 dimensional. Need a holistic approach that includes minimising car use, cleaner cars and carbon absorption.

Promote / Encourage / Enable Active Travel

68

11.9

Introduce more rent a bikes, they have and are so successful.

Many of the measures are welcome but there is a long way to go before it is safe and pleasant to cycle in Cardiff. Perhaps developing some of the lanes behind the terraced houses in Heath and other parts of the city as cycle paths would be an inexpensive and safe way forward

I'd like to see how the council plans to address cycle security. Improved access has to come with a level of confidence that my bike will be there when I return from my visit to the city centre. Cycle theft it seems is an easy crime with low levels of detection.

Make as many safe cycle routes to town and through town as possible. Many cycling commuters cannot get through the city safely

Improve public transport

60

10.5

I would leave my car at home and use public transport to get to work if buses were reliable, affordable and operated on better routes. While it's cheaper for me to use my car and I am assured that I can get to where I'm going after work on time (especially if that's picking up my child) because I'm using the car, unfortunately, I'll continue to use it.

massively improve public transport before further road schemes

A Bus Interchange would help.

The council has to take into account the realities of life for working families. More cycle lanes will not help families with getting kids to nursery and then getting to work (outside of Cardiff) public transport is too expensive, not frequent enough, not family

friendly and therefore needs to be improved in every respect to get people out of cars.

Against 20mph zones/speed bumps	52	9.1	<p><i>One thing I'm not sure I understand is the expansion of 20mph zones. Surely slowing down traffic would increase emissions, as vehicles are on the road longer? Isn't it in the interest of air quality for motorists to get to their destinations as quickly as possible?</i></p> <p><i>Reducing vehicles to 20mph just means they are not working efficiently and are therefore a lot more polluting</i></p> <p><i>As the council is forcing citizens into their cars by removing bus services, cars need to be allowed to move more freely by removing speed bumps and traffic narrowing points.</i></p> <p><i>It is not up to date. The third most common cause of Alzheimer's Disease is caused by previously molten iron entering the brain. This can only come from disc brakes and all engines so features like traffic slowing (road humps/narrowings etc.) need to be removed</i></p>
Discourage car use	32	5.6	<p><i>Incentivise people not to use cars - people will do what's easiest or what benefits them the most.</i></p> <p><i>Much talk of Active travel and buses as a result of these plan...but little or no talk of reducing vehicle numbers and capacity in the city which will be crucial. Every document council publish should be indicating to people that cars will become increasingly less welcome and unnecessary in the City Centre. Publish Numbers of parking spaces in each ward with targets for reduction of space reduction over next 1, 2, 5 years - and deliver those reductions.</i></p>
Accessibility issues	30	5.2	<p><i>I am concerned that the proposed schemes are not suitable for people with mobility problems.</i></p> <p><i>It's all aimed at trendy green people who can ride bikes are able bodied and are fit! Most people don't fit into this category.</i></p>
Enforcement	27	4.7	<p><i>20mph zones are ineffective without enforcement and active measures to reduce speeds. Please stop undermining respect for law and wasting money. I support 20mph zones but they must all have enforcement and active measures.</i></p>

			<i>Give clear instruction on rules of joint pedestrian and bike lanes, enforce the rules.</i>
Against the proposal	25	4.4	<p><i>Slowing traffic & closing streets would make it worse, not better</i></p> <p><i>I don't believe that the air quality is as bad as stated. I think that the testing procedure should be checked and any instruments be calibrated by an independent authority</i></p>
Businesses / Industry / Residents	22	3.8	<p><i>The one thing I do not feel happy about is for businesses in the city centre to have to pay special fines if the vehicles are highly polluting. One of these days, all the businesses will have left the city centre, because it's just no longer profitable</i></p> <p><i>Would it be possible to consider existing City Centre Residents who have already had cars, such as residents at Landmark Place?</i></p>
As soon as possible / Overdue	21	3.7	<p><i>Please hurry up and get on with it</i></p> <p><i>It is encouraging to see proposals being made but would press for urgent action to be taken without further delay to address the current climate crisis.</i></p>
Implement / Do it / Don't get put off	21	3.7	<p><i>Implementation is important. Over the years the council has had many strategies which have either been not implements, or have lapsed. Progress needs to be continuous.</i></p> <p><i>Please implement these measures. There will be complaints from people who don't see that cars kill the city, but with some vision and time (and some money) the city can be a cleaner, more pleasant place.</i></p>
Safety of pedestrians	20	3.5	<p><i>Cycleways are all very well but Cardiff, unlike many urban areas in the UK, doesn't make much effort to segregate walkers and cyclists. A substantial downside to the enjoyment of open spaces here is the need to be constantly on the alert for the many cyclists who appear not to believe that pedestrians should be on their turf at all.</i></p> <p><i>Improve facilities for walking pushchairs and wheel chairs throught the active travel routes</i></p>
Utilise Nature	19	3.3	<p><i>More greenery, plants to absorb pollutants, green up roundabouts and pockets of land.</i></p> <p><i>The Air Quality Strategy does not make any reference to the benefits that green infrastructure</i></p>

can have in terms of air quality. Green Infrastructure includes street trees, soft landscaping and hedges, as well as green roofs, green or living walls and green screens. The right vegetation in the right place can act as a barrier to separate pedestrians from traffic pollution, as well as trapping pollutants such as particulates and absorbing CO2. The Air Quality Strategy should seek these benefits, and further advice can be found in the Mayor Of London's 'Using Green Infrastructure to Protect People from Air Pollution'

Parking	19	3.3	<p><i>Parking in Cardiff is too cheap; if we want to reduce emissions, we need to increase parking costs; and massively increase enforcement of existing parking restrictions. In London a car on double yellows is towed in minutes.... in Cardiff... "Meh, whatever, not-my-job-mate" attitude gets us nowhere. Less cars = more liveable city, better wellbeing.</i></p> <p><i>Please do something about all day car-parking in suburb streets with people using train for city centre work/shopping- pushing pollution and traffic disruption just further out from city centre. This also needs to be tackled with permit parking only zones around Heath Hospital.</i></p>
Stop building houses / ensure infrastructure	18	3.1	<p><i>Ill-considered knee jerk response lacking proper thought or a proper investment strategy. CCC has permitted uncontrolled development of housing without having due regard to the impacts. Travel infrastructure should have preceded the house building. An epic fail on the part of CCC and one that so many voices warned of.</i></p> <p><i>Ignoring the elephant in the room, of the council's huge expansion of the city housing. Resulting in more traffic and more pollution.</i></p>
School Traffic Concerns	16	2.8	<p><i>air quality ids not just for the city centre outer areas are just as bad ...areas around schools should be traffic free strictly i.e. a minimum mile round each school traffic free , children have legs and should be encouraged to walk a mile to and from school each day....parents who continue to pick up their sprogs should be issued with pollution fines especially for those who park in bus turning areas</i></p> <p><i>Please look into air quality outside schools.</i></p>

Increase capacity for public transport	15	2.6	<p><i>The council should be looking at travel over Cardiff as a whole, as the capital city with many businesses moving to the city centre public transport will be unable to cope. Our current local train line cannot cope with the number of passengers already, so to reduce access to the city centre does not make sense if the people cannot get into work reliably, and this may mean businesses will look elsewhere for a location.</i></p> <p><i>Needs more buses, need to encourage a modal shift for those who want to come into or through the City Centre.</i></p>
Longer term approach needed	15	2.6	<p><i>Too much of a focus on a short term fix suggests that the longer term repercussions are not really being considered, and any solution to NO2 issues in the city will be more costly in the long run due to multiple short term interventions rather than a longer term strategy.</i></p> <p><i>I am pleased to see that there is a strategy and these measures are being taken. I would encourage the council to take a bold, long term view rather than settle for measures that only answer the here and now. This is an important investment in the future.</i></p>
Move the problem elsewhere	15	2.6	<p><i>Thought should be given to the areas just outside a clean air zone. We do not want extra traffic building up, looking for non-existent parking or creating unsuitable rat runs to avoid the area.</i></p> <p><i>Less emphasis needs to be put on the city centre a lot of which is pedestrianised and more effort around the city where people live and children walk to school.</i></p>
Metro / Trams / Alternative transport	15	2.6	<p><i>South Wales Metro needs to be implemented ASAP especially in light of all the new house building in and around the city. The rail services are not fit for purpose</i></p> <p><i>Bring in trams to the city centre. Those trams can take punters to bus stops outside the city centre when buses can go to the required destinations.</i></p>
Against Congestion Charge	14	2.4	<p><i>Definitely no charging areas - they do nothing to help clean the air, but still incur costs of implementation. The privileged rich who can afford the charges, would carry on with their driving</i></p>

habits, but all Cardiff Council tax payers would have to foot the cost of the wages of staff employed to deal with the paperwork (or online running) needed to implement this charge. Pollution will continue.

Please don't introduce congestion charges or similar as it will harm trade

Traffic flow	13	2.3	<p><i>Introduce smart control of traffic lights to minimise standstill time for vehicles which makes for less pollution and faster journeys.</i></p> <p><i>Get the traffic moving, not make it more congested so there is more pollution. There are a number of traffic calming measures that hold the traffic up, so the cars are at a standstill causing more pollution.</i></p>
Education / Increase awareness	11	1.9	<p><i>Increase public awareness of these issues.</i></p> <p><i>Is there a way to publish or put on boards the air quality levels? It may make people consider their driving habits if they can see how bad it is. Could it also be equated to air quality that people understand? E.g. today's air quality is the equivalent of 10 garden bonfires etc.</i></p>
Non-traffic pollution	10	1.7	<p><i>1) No mention of heavy industry such as the steel works. 2) No reference to emissions from hotels / businesses in the City. 3) Overall energy usage should be considered For example all shop front advertising signs turned off by midnight.</i></p> <p><i>How about people with solid fuel fires? You can't breathe in my area during winter because of the stench. Also carcinogenic. More important that the City Centre.</i></p>
Consultation Process	10	1.7	<p><i>Public consultation event only available on Saturdays, there should be weekday times so that those parties working in the city centre can WALK to the event not travel on a weekend.</i></p> <p><i>Good to see that there is some activity but it has been largely the same over the last 5 or 6 years. I appreciate that austerity does not help, but I have been asked in loads of your surveys in the past whether I support the 20mph limit across the city -- stop asking: either people are in favour then implement or they are not, then think of something else. Clear long-term strategy is needed and it needs to be clearly communicated.</i></p>

Cheaper public transport	9	1.6	<p><i>Bus travel is too expensive esp. for those having to commute from outside the city (Vale of glam) Public transport between authorities needs to be more joined up.</i></p> <p><i>Make bus travel more appealing - don't bother with Wi-Fi and charging points - this isn't what's needed - focus on affordability/simplicity/transfer options. To do school run and work commute on buses would cost me >£13 a day - not realistic and people will opt for using the car.</i></p>
More Charging points	9	1.6	<p><i>More electrical charging outlets, perhaps in city centre car parks. Investment in this would be preferred over grants to taxis.</i></p> <p><i>How do you propose that people living in terraced housing charge their cars?</i></p>
More info needed	8	1.4	<p><i>Are there any legal time limits to achieving a clean air city?</i></p> <p><i>Do changes to the roads really cost 10x more than replacing the oldest buses with electric ones??</i></p>
More vehicles to be ULE	8	1.4	<p><i>Replace the pool car fleet with electric vehicles or hybrids and lead by example</i></p> <p><i>All public transport should be emission free</i></p>
Traffic flow	8	1.4	<p><i>The council continues to increase pollution and congestion by installing speed humps and road narrowings. It should think scientifically instead of like a religious cult. Aim to facilitate smooth traffic flow, not impede it at every opportunity.</i></p> <p><i>Not properly thought through. Need free-flowing bypass for cross city traffic</i></p>
Anti-car	8	1.4	<p><i>Generally this is completely anti car, and must be stopped at all costs. You have a duty to all city residents, including car owners, and the council must lose its anti-Car bias.</i></p> <p><i>Appears, as usual prejudiced against drivers whilst not providing any improvements to infrastructure. If council wanting to improve clean air why build thousands of new houses on green belt sites!!!</i></p>
For congestion charge	6	1.0	<p><i>You can reduce the volume of vehicles by adopting a standard congestion charge across the inner city</i></p> <p><i>I'm not sure why creating a 'charging zone' for polluting vehicles is not part of the action plan</i></p>

Ban idling	6	1.0	<p>No mention is made of measures to enforce existing bans on stationary and lay-over vehicles continuing to run the engine.</p> <p>As in many other countries, traffic signals should be equipped with simple, large-format digital displays showing drivers how long until the lights turn green (called: TTG Time-Till-Go). This gives the informed driver the opportunity to switch off the engine until needed. Again, this is a self-funding investment as all fuel, emissions, human health and life savings will repay the costs in less than 6 months (evidenced abroad)!</p>
Not just city centre	5	0.9	<p>City centre focussed schemes do not address Cardiff wide air quality issues. Also - Cardiff city council needs to have more, better placed, air quality monitoring stations. Two is not adequate over such a large area- currently the Queen Street station is stuck inside a construction site so cannot collect any meaningful data.</p> <p>The quality of air in Splott is appalling.</p>
Involve youth	3	0.5	<p>In my experience once you have the youth on board with this (especially as they have been protesting) you could set up school ambassadors , I know that they will then take this information home to the families and it's a start of a good drip-drip communication, especially high schools and universities</p>
Park & Ride	3	0.5	<p>Increase provision for Park and Ride to encourage motorists to leave their cars on the city outskirts</p>
Miscellaneous	56	9.8	<p>How about a ban on old Ice cream vans which keep their non-Euro compliant diesel engines running all day especially near playgrounds.</p> <p>The litter here contributes to pollution too, fly tipping is terrible here</p> <p>Fill in the potholes correctly before using money on air quality functions.</p> <p>Train infrastructure should be considered too, old diesel engines need to be replaced asap with electric lines and trains idling at stations for upwards of 5 minutes needs to be stopped. I use trains a lot and am often coughing and choking at stations due to the fumes.</p>

Develop the River Taff as a major transport thoroughfare.
