Cardiff's Transport & Clean Air Green Paper

Changing how we move around a growing city

Consultation Report

August 2019

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

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1. **Introduction**

"We all know Cardiff's transport network needs to change. Too many of us have been stuck in traffic trying to drop off our children, or late for work because the bus didn't turn up, and whilst a growing number want to walk or cycle, the facilities to do so are often inadequate.

There is also now a more alarming and pressing matter. Pollution levels in Cardiff are now damaging our health. Improving the air we breathe has become a matter of life or death. The latest figures from Public Health Wales suggest that the number of deaths per year that can be attributed to poor air quality has increased to over 225 across Cardiff and the Vale of Glamorgan. With Cardiff growing faster than any other UK city outside of London and projected to grow by more than every other local authority in Wales combined it is essential that action be taken before it is too late.

This summer we published a Green Paper that set out our big ideas for improving transport and air quality in our city, and to begin a conversation with the people of Cardiff on this important issue.

Thank you to the thousands of people who responded and took time out to give us your views.

We want to create a transport system that works for the people of Cardiff, and so what you think will work – and what won't work – is incredibly important to us. This report summarises the response we received, and is being used to help us develop our Transport and Clean Air White Paper, which will be published this autumn.

I look forward to continuing the conversation over the months to come.

Cllr Caro Wild, Cabinet Member for Transport and Strategic Planning

2. **Methodology**

Consultation on the Cardiff's Transport and Clean Air Green Paper was open from the 26th March to the 1st July 2018.

The consultation centred on an electronic survey, with a communication campaign conducted via social media.

Three thousand hard copy surveys[1] were also distributed across public buildings in the city including libraries, hubs, leisure centres, community centres and core council buildings.

To ensure that communities in the city less typical to respond to online consultations had the opportunity to have their voice heard a series of face to face engagement sessions were put in place, including:

- **Cardiff East** – Two additional sessions were facilitated in Cardiff East (Rumney, Llanrumney and Trowbridge), one of Cardiff's most deprived and disconnected communities. A drop-in information session was delivered through Llanrumney Hub whilst a bespoke meeting was facilitated with an older person's speakers club at the John Reynolds centre in Llanrumney. This event was attended by approximately fifty local people as well as the three local councillors.

- **Young People** – Secondary schools in both the East and the West of the city were targeted to increase participation from younger people. Cardiff West High School and Eastern High both distributed the survey to pupils in years 7/8/9. The issues covered within the green paper were discussed in geography classes. Younger people were given a further voice via the Cardiff Youth Council who undertook a city wide transport survey, collecting the views of over 2,400 young people across Cardiff. The responses to this survey will be also used to inform the development of the Transport and Clean Air White Paper.

- **Older People** – The Cardiff 50+ forum whom actively shared their views and opinions via a number of local focus groups.

- **Disability** – Cardiff Research Centre facilitated a focus group session with a dozen members of the Cardiff Access Forum. The Access Forum is a Cardiff Council facilitated group representing varied disabilities including mobility, sensory loss and learning disability. Cardiff Research Centre also provided a presence at a City Centre Dementia Friends Cardiff event, seeking the views of those with dementia and their carers.

- **BAME** – The views of ethnic minorities in the city were boosted by attendance at a series of FAN (Friends and Neighbours) groups across the city. These are regular groups where those for whom English is not a first language come together to practice language skills in a safe environment. Recent work on the Cardiff Well-being Strategy also consulted significantly with this demographic regarding the city's

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[1] 700 Welsh version of the survey were distributed in addition to the 3,000 English copies.

transport system – views expressed here have also been incorporated into this report.

- **Business Community** - Given the impact of transport on the city economy, and on city centre business in particular, a consultation event was also put in place for city centre businesses, in partnership with 'FOR Cardiff'.

A 'facilitators guide' was provided to assist groups or organisations who wished to engage with their members on the issues raised independently.

3. Response

3.1 Overall Online Response

The survey received **3,580** total <u>valid </u>survey responses (including 266 partial responses[2])

The total number of surveys collected from schools was 285.

A further 1,059 responses were received which were considered 'invalid'. Responses were considered invalid either because they contained only missing or blank data (562) or the data they did contain was determined to be false and aimed purely at influencing the legitimate result.

RESULTS TAMPERING

Over the course of the consultation it became evident that the electronic survey was being targeted by an individual/s with an aim to undermine or influence the results.

A strict criterion was applied to the responses to successfully identify and remove those believed <u>without doubt</u> to have originated from a dubious source.

Responses were removed only where two or more of the following conditions were met:

- Duplicate open text comments within the response
- Survey is completed in less than 3 minutes

A complete but invalid CF postcode (incomplete postcodes e.g. CF10… were maintained. In applying these criteria, 497 responses were identified and removed from the main dataset.

<u>In all of these cases a response of '1' was given uniformly to all of the big ideas put forward in the Green Paper.</u>

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[2] Refers to surveys not been formally submitted, but which contain completed information.

3.2 Results by Geography

The map below shows the representative response by ward area, with the communities in red showing an under-representation by 1% or more in the sample, and those in green with an over-representation in the sample by 1% or more.

Over / Under Represented Ward Respondent Map - Transport Green Paper (4th July 2018)
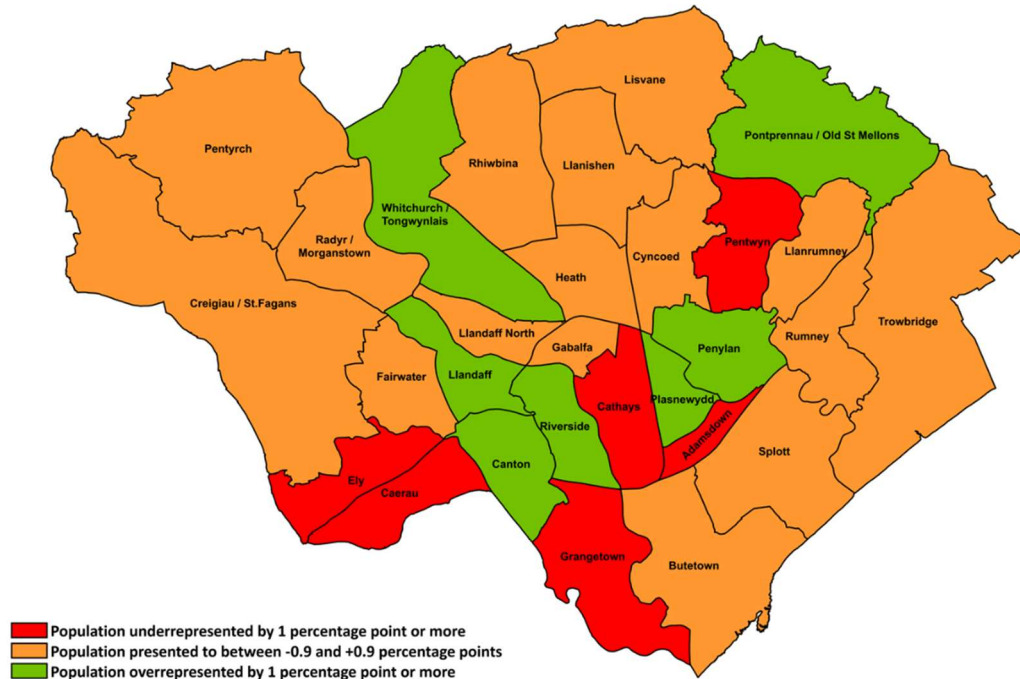
3.3 Results by Demographic

i)   Gender

The response to the Transport and Clean Air Green Paper elicited a slightly over represented response from males.

|	Survey		Mid-2017 Population Estimate (% of those Aged 16+)
	No.	%	
Male	1,658	59.5	49.0
Female	1,120	40.2	51.0
Other	7	0.3	-
Prefer not say	119	-	-
Total	2,904	100.0	100.0

ii)   Ethnicity

'White' respondents accounted for 94.4% of the survey responses. The 2011 Census places the white population of Cardiff at 86.7%.

White:	**2,475**	**94.4**	**86.7**
Welsh/English/Scottish/Northern Irish/British	2,345	89.5	82.1
Irish	34	1.3	0.9
Gypsy or Irish Traveller	1	0.0	0.1
Other	95	3.6	3.7
Mixed/Multiple Ethnic Groups:	**51**	**1.9**	**2.2**
White and Black Caribbean	10	0.4	0.8
White and Black African	7	0.3	0.4
White and Asian	22	0.8	0.5
Other	12	0.5	0.5
Asian/Asian British:	**55**	**2.1**	**7.3**
Indian	18	0.7	2.3
Pakistani	9	0.3	1.5
Bangladeshi	8	0.3	1.1
Chinese	15	0.6	1.2
Other	5	0.2	1.2
Black/African/Caribbean/Black British:	**14**	**0.5**	**2.0**
African	10	0.4	1.2
Caribbean	1	0.0	0.4
Other	3	0.1	0.4
Other Ethnic Group:	**26**	**1.0**	**1.7**
Arab	6	0.2	1.1
Any other ethnic group	20	0.8	0.6
Prefer not to say	256	-	
Total	2,877	100.0	100.0

iii) Age

A total of 3,187 respondents were identifiable by age category. Direct engagement with secondary pupils resulted in a slight overrepresentation of under sixteen year olds. Comparison to the ONS mid-year estimate for 2017 shows the response to have an under-representation of the 16-24 age group and those aged 75+. It should be noted that demographic information was absent from those responses received in paper format. This format is also the known preference of many older participants.
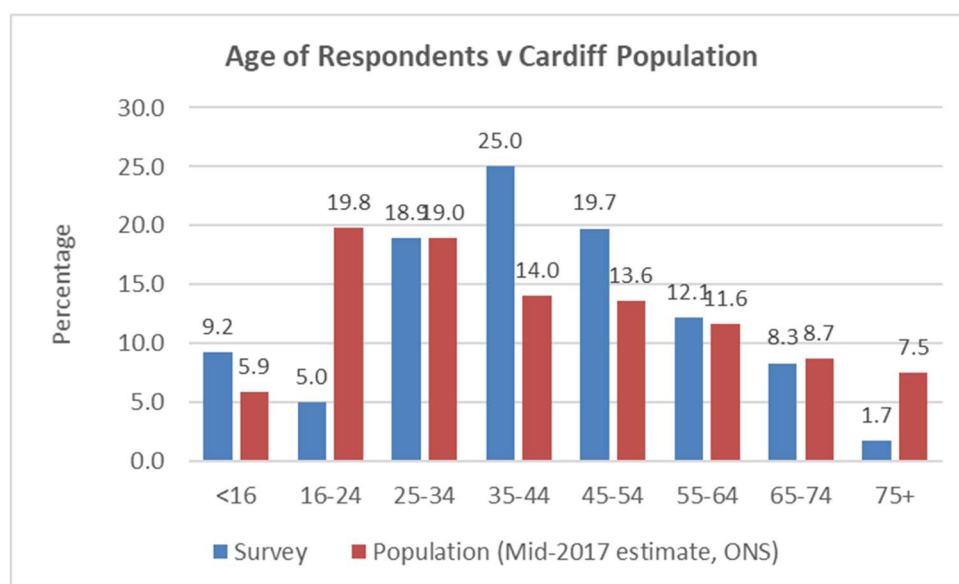
3.4 Weighting

In order to make the results of the online survey as representative of the city as possible 'weighted analysis'[3] of the responses was attempted based on the age, gender and location of the respondents compared with the latest (mid-2016) small area population estimates for Cardiff. In order for a respondent's data to be weighted cases needed to include all of the following information:

- Age Group
- Male/Female Gender
- Valid Cardiff postcode

Any responses without all three of these could not be weighted and thus continued to count as one person towards the results. This included those individuals that left any of these questions unanswered, as well as people located outside of Cardiff, those that did not give a full/valid postcode, and respondents who gave their gender as 'other' or preferred not to say. In addition, those aged under 16 were excluded due to the disproportionately low

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[3] The process of 'weighting' involves emphasising some aspects of a data set to influence the result. For example, if a low number of responses were received from, young people aged 16-25; extra emphasis could be placed on the responses that were received from this group in order to bring the overall response more in line with what is known about the makeup of the wider population.

numbers within this category compared with the population as a whole[4]. The hard copy of the survey also did not include any questions on the respondent's profile (e.g. age, gender, postcode) and so any surveys completed in this way could not be weighted.

Subsequently, once all this had been taken into account, only 2,012 (56%) of the 3,580 responses could be subjected to weighting, with the remaining 1,568 (44%) continuing to account for one person in the calculations.

Two different weightings were produced based on alternative breakdowns of the place of residence; one for Neighbourhood Partnership Areas (NPAs) and one for the Southern Arc/Rest of Cardiff. However, **the results under both weighted analyses showed very little difference from the unweighted figures**, possibly due to the large proportion of responses unable to have a (non-1) weighting applied.

The Table below shows that the average scores were very similar for all three analyses. In addition, when ranking the average scores, the order of preference was almost identical with only two minor differences for the weighted figures – 10th/11th and 17th/18th highest scores swapping positions (highlighted).

For this reason the results reported in this document refer to the 'unweighted' evidence.

Average Score of Proposals: Unweighted v Weighted Data

Proposal	Unweighted		Weighted NPA		Weighted Southern Arc	
	Ave Score	Rank	Ave Score	Rank	Ave Score	Rank
Integrated Ticketing	4.11	1	4.14	1	4.15	1
Zero Carbon Bus Fleet	4.04	2	4.08	2	4.08	2
Digital Network / User Information	3.91	3	3.96	3	3.96	3
Developing the South East Corridor	3.82	4	3.85	4	3.85	4
Cycle Route Network	3.78	5	3.79	5	3.80	5
High-quality capital city centre environment	3.72	6	3.77	6	3.79	6
Realign Bus Services	3.72	7	3.74	7	3.75	7
Regional Park & Rides	3.67	8	3.71	8	3.72	8
Network of Charging Points	3.64	9	3.70	9	3.71	9
Active Travel Zones	3.61	10	3.65	11	3.66	11
Intelligent Street Management	3.59	11	3.67	10	3.67	10
Zero carbon vehicles	3.52	12	3.58	12	3.60	12
Clean Air Zones	3.37	13	3.41	13	3.42	13
Active Travel Targets	3.26	14	3.31	14	3.32	14
Car Clubs and Mobility as a Service	3.01	15	3.06	15	3.08	15
Total City 20 mph zone	2.91	16	2.90	16	2.91	16
Parking Levies	2.73	17	2.71	18	2.72	18
Assess Autonomous Vehicles	2.66	18	2.72	17	2.73	17

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[4] Two hundred and eight five responses came from school age pupils however; these did not include gender or postcode information to allow weighting to be undertaken.

3.5 Face to face engagement

As noted above, a series of face-to-face engagement sessions were facilitated with identified groups and communities.

Individual written responses were provided from a range of city stakeholders, including:

- British Heart Foundation Cymru

- Caerphilly Council

- Cardiff and County Club

- Cardiff Bus

- Cardiff By Bike

- Cardiff Civic Society

- Cardiff Cycling Campaign

- Cardiff North Labour Party Women's Forum

- Cardiff Third Sector Council

- Community Transport Association

- Conservative Group

- Diverse Cymru

- Federation Small Business Wales

- Friends of the Earth

- Llandaff Society's

- Motor Cycle Industry Association

- North West Cardiff Group

- Pentyrch Community Council

- St David's Partnership

- St Fagans Community Council

The views and comments from businesses, groups and organisations have been summarised and tabled in Appendix 1.
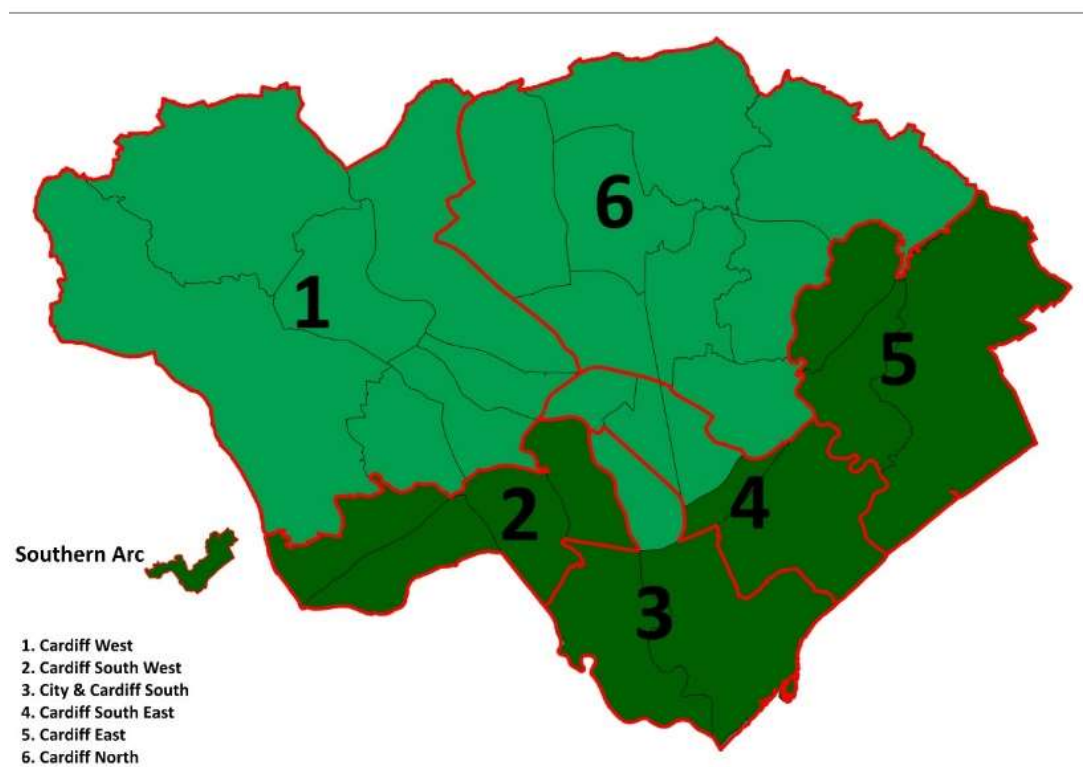
RESULTS:

The Transport and Clean Air Green Paper put forward 18 proposals, or 'Big Ideas', for improving how we get around Cardiff, and asked respondents to rate each of these ideas on a scale of 1 o 5 (with 5 being most positive).

This section of the report contains the results received to each of the 18 'big ideas' with a breakdown provided by a range of demographics[5] including age, gender and disability.

Analysis was also undertaken at a geographic level enabling comparisons to be made between residents in the 'Southern Arc,' an area of Cardiff containing many of Wales' most deprived communities, and the remainder of the city.

The results by demographic group of area of the city are only discussed in the following chapters where significant differences are evident in the responses received from different groups.

Southern Arc

1. Cardiff West
2. Cardiff South West
3. City & Cardiff South
4. Cardiff South East
5. Cardiff East
6. Cardiff North

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[5] Paper copies of the Green Paper did not provide space for the recording of demographic data. Where some information was known relating to paper copies e.g. completed by pupils aged under 16 from Cardiff West High, this was added manually to the dataset.

4. <u>RESULTS: OVERALL</u>

The overall response to each of the Green Paper's 18 big ideas can be seen below.
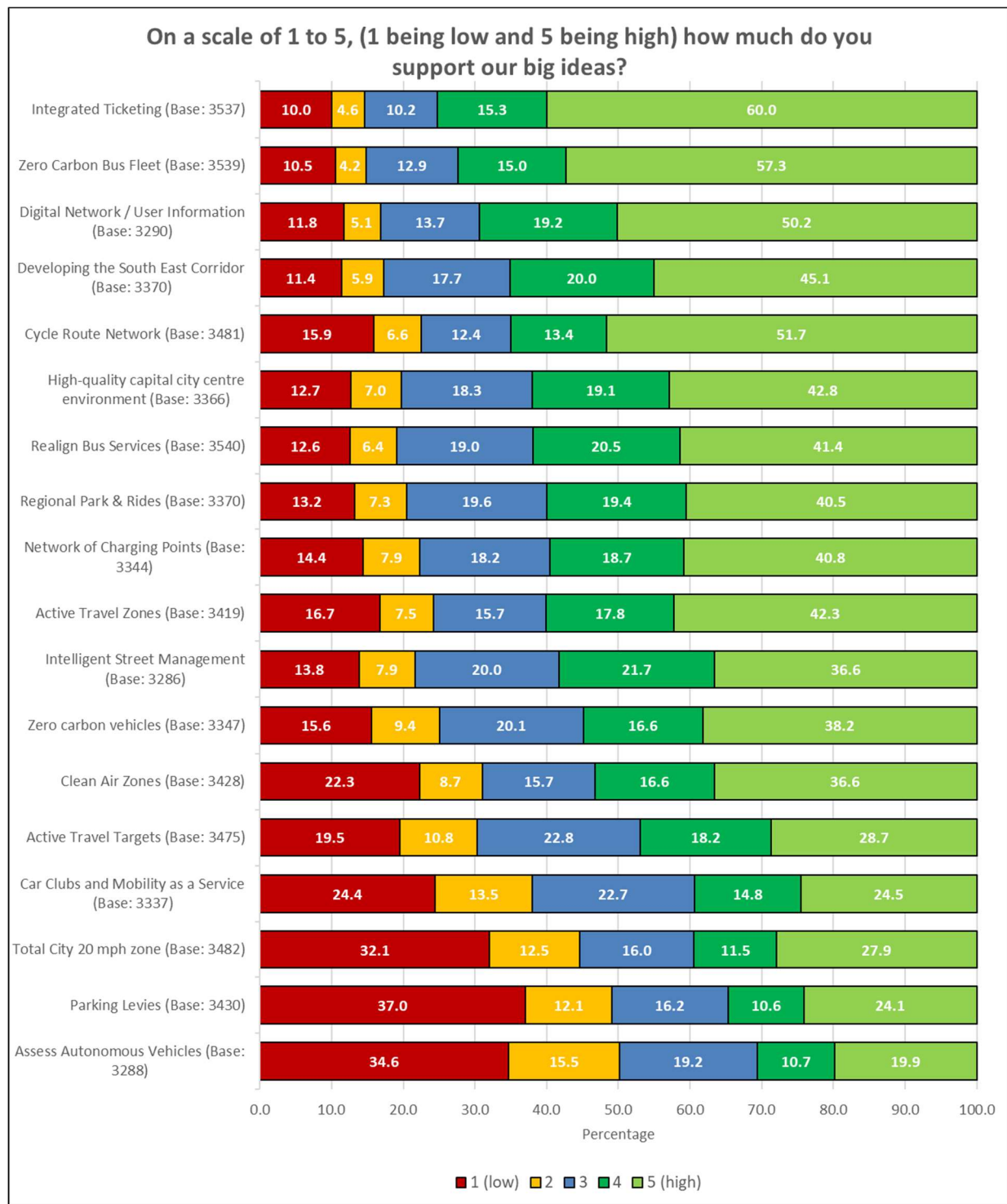
The three most popular Big Ideas were:

- Integrated Ticketing
- Zero Carbon Bus Fleet
- Improving the digital network and user information

The three least popular Big Ideas were:

- A Total City 20mph Zone
- Parking Levies
- Autonomous Vehicles

The following chapters examine the results received for each of the 18 big ideas in more detail, breaking responses down by a range of demographics and geographies.

BIG IDEAS: DETAILED RESULTS

The Future of the Metro and Buses

The Metro forms the heart of a fully integrated public transport network that is modern, clean, efficient and affordable.
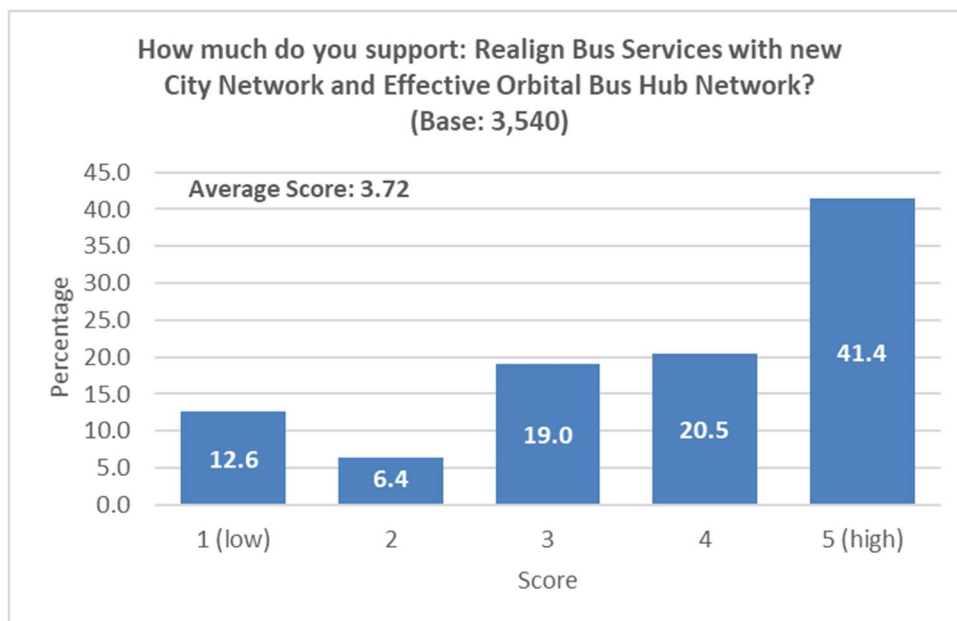
The big ideas:

1. Realign the Bus Services Network

The introduction of the Metro offers the opportunity to comprehensively review the overall bus network. We could look to realign how the network works, creating better connectivity between locations and modes of transport. For example other cities have switched to routes that run in circles around the centre with co-ordinated connections inwards like the spokes of a wheel.

The outer routes could, for the time being, run on diesel while smaller electric buses, existing trains and new trams, provide the spoke connections. New rapid bus routes could be clearly mapped out alongside the new Metro lines and other transport modes to create a transport 'masterplan' for the city.

Three in five respondents (61.9%) expressed strong support (rated as 4 or 5) for the realignment of the bus services network.

This proposal was awarded an average score of 3.72 ranking at as joint 6/18.

How much do you support: Realign Bus Services with new City Network and Effective Orbital Bus Hub Network? (Base: 3,540)

Analysis of the results by demographics revealed only minimal differences in opinion between groups.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Realign Bus Services with new City Network and Effective Orbital Bus Hub Network?

Demographic	1 (low)	2	3	4	5 (high)
Gender: Female (Base: 1111)	11.7	5.2	17.7	18.2	47.2
Age: 55+ (Base: 693)	12.1	3.8	18.5	19.8	45.9
Geog: Southern Arc (Base: 1081)	10.3	6.5	20.3	22.4	40.6
Geog: Rest of Cardiff (Base: 1298)	12.6	5.9	17.7	21.8	42.0
All Respondents (Base: 3540)	12.6	6.4	19.0	20.5	41.4
Age: 35-54 (Base: 1420)	13.3	7.7	16.3	20.1	42.6
Gender: Male (Base: 1646)	13.9	7.1	17.1	21.3	40.6
Age: <35 (Base: 1044)	11.2	7.3	22.9	23.4	35.2
Disability/Health Condition (Base: 545)	16.7	6.1	18.3	16.9	42.0

There was little difference in responses among demographic groups across all 18 big ideas – for the following chapters we will therefore **only report where significant differences are evident** in the response from different demographic groups.

- Respondents were keen for the development of the Metro to advance with a feeling that it had been 'dangled' in front of the public for too long without progress. Existing train services were described as 'diabolically overcrowded'
- There were multiple calls for buses and the metro to be sufficiently able to carry bikes whilst travel by bike needs to be safer to be a viable alternative to the car.
- Members of the 50 Plus Forum and the Cardiff Access Forum all stressed the importance to them of ensuring the completion of a new 'Transport Hub' in the city centre. Finding your way without any central reference point was described as a 'significant disadvantage' for those with mobility or sensory impairments.
- It was felt that bus services across the city in general need to be more frequent and more affordable, particularly for families. Multiple suggestions were made for free bus travel, as has been trial in other European cities. Without significant reductions to cost it was felt that a widespread use of bus services would remain economically unviable.
- Services running later into the evening were suggested to reduce the need to use cars and taxis.

- Respondents expressed support for bus lanes but felt that these need to be more direct from A to B otherwise *'they are pointless.'*
- Travel between local communities was flagged as a particular issue with relatively short journeys currently requiring multiple changes.
- It was expressed that future housing developments should have public transport at the heart of the planning process and the services should also be aligned to schools with the aim of reducing congestion at schools.

"I've got family in Pentwyn and St Mellons; for them to get to one another takes 8 minutes by car, but on public transport they have to catch one bus into the city centre and another back out. That takes an hour and 45 minutes. You are simply not going to do that." (Member of the Cardiff Access Forum)

- More than fifty percent of young people reported to use bus services at least once a week. Cardiff Youth Council gave strong support for the realignment of bus services, explaining that great connectivity across the city would reduce their reliance on family cars when participation in educational and recreational activities. The condition of buses and shelters, overcrowding and expense were all areas of dissatisfaction amongst young people.

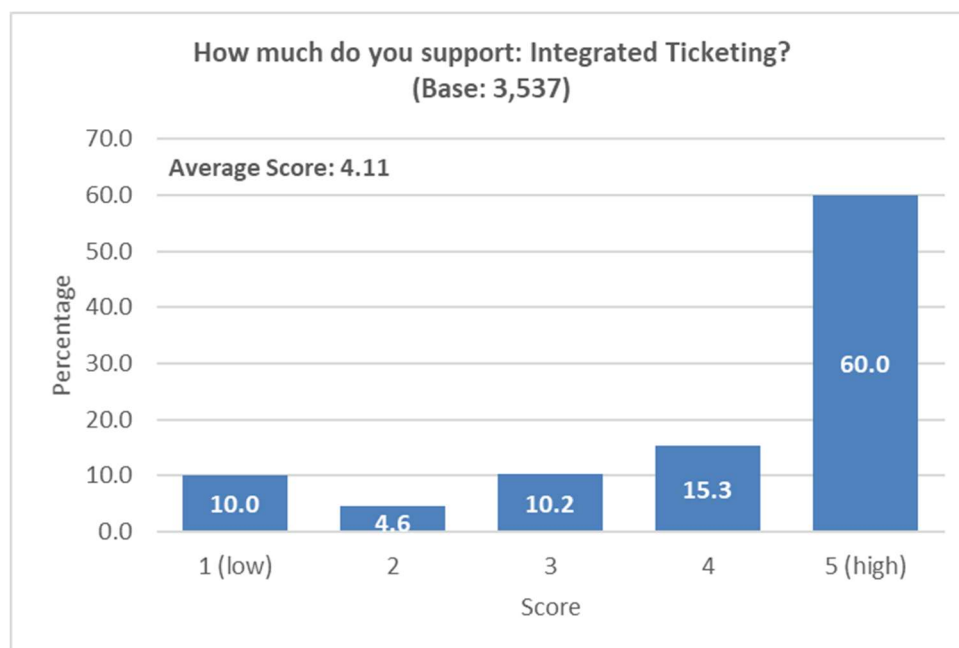*Prepared by Cardiff Research Centre*

2. Integrated Ticketing

A number of cities across the world have developed integrated ticketing systems. If you have visited London in recent years, you may have encountered the Oyster Card – a plastic card like a bank card which allows you to hop on and off buses, trains and tubes as long as you have credit on the card. Transport authorities are increasingly moving towards a payment system where ticket fares are deducted straight from your bank card by reading devices on the bus/train/ticket barrier. Proposals for the south Wales Metro include integrated ticketing but we could extend this to include Cardiff buses, and car and bike hire within the city.

Three quarters of respondents, (75.3%) expressed strong support (rated as 4 or 5) for the introduction of integrated ticketing.

This proposal achieved an average score of 4.11 ranking as **the most popular** of all 18 big ideas.

How much do you support: Integrated Ticketing? (Base: 3,537). Average Score: 4.11. 1 (low): 10.0, 2: 4.6, 3: 10.2, 4: 15.3, 5 (high): 60.0

- Support for integrated ticketing was high with respondents referring to it as both 'necessary' and 'essential'.

"An integrated ticketing system is vital to make this work; people shouldn't be penalised for having to use a combination of bus and rail to get to destination."
(Female 65+, Cathays)

- Some felt that the introduction of a new 'travel card' was unnecessary and instead favoured the use of an app or using existing contactless bank cards.
- Integrated ticketing was also required to extend beyond Cardiff and into the commuter belt to ensure affordability for those travelling into the city for work.

- Concerns were voiced regarding how integrated ticketing would work in relation to those aged 60+ or who are disabled and hold concessionary bus passes. Would passes be updated to include additional forms of transport?
- Older people in particular also questioned whether cash payment would continue to remain an option on the city's transport network? Some felt reluctant to use a system where payments were automatically deducted whilst some people may not have access to a bank account.
- Young people were keen to see the implantation of integrated ticketing but emphasised that this needed to incorporate all bus service providers as well as multiple modes including bike hire and cycle storage.
- Young people also described multiple difficulties with the existing 'iff' card providing discounted travel on Cardiff bus for those aged 16-18. The problems encountered included website crashes, delays in the cards arriving and cards failing to be delivered.

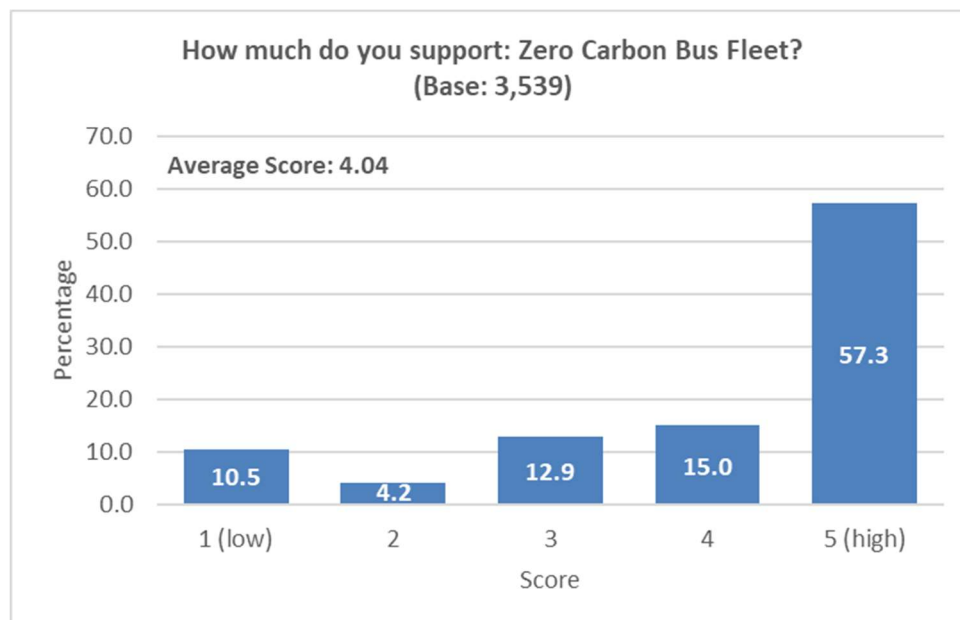*Prepared by Cardiff Research Centre*
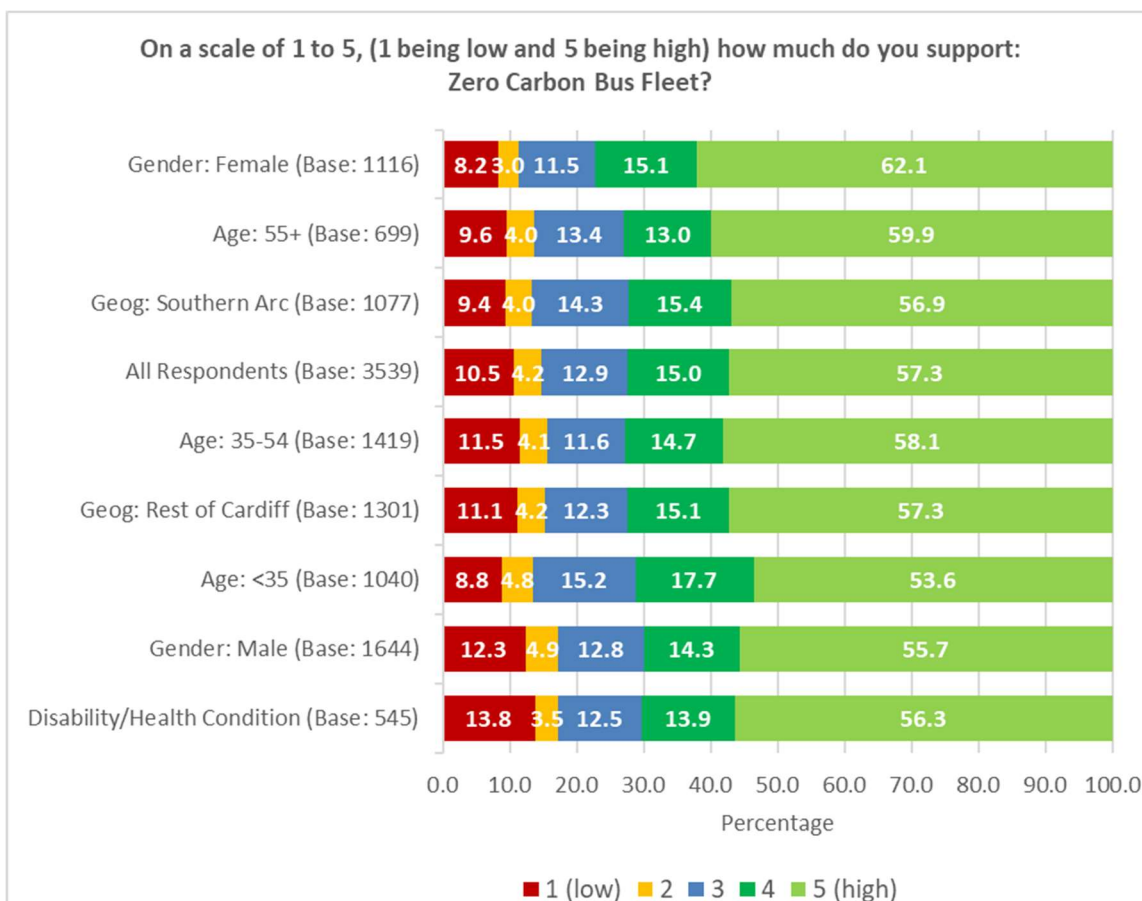
3. Zero Carbon Bus Fleet

With key bus operation partners, we will investigate options for developing a bus fleet that is powered by electricity or hydrogen and so does not contribute to poor air quality. There are many cities around the world and some, like Milton Keynes, in the UK where electric and hydrogen buses are already operating. The buses currently come with a far higher price tag but we could learn from this considerable body of knowledge and make the right choices for Cardiff.

Almost three quarters of respondents (72.3%) expressed support (rated as 4 or 5) for the introduction of a zero carbon bus fleet.

This proposal was awarded an average score of 4.04 ranking it as **the second most popular** of the big ideas presented in the paper.

Analysis of the results by demographics revealed only minimal differences in opinion between groups.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support:
Zero Carbon Bus Fleet?

	1 (low)	2	3	4	5 (high)
Gender: Female (Base: 1116)	8.2	3.0	11.5	15.1	62.1
Age: 55+ (Base: 699)	9.6	4.0	13.4	13.0	59.9
Geog: Southern Arc (Base: 1077)	9.4	4.0	14.3	15.4	56.9
All Respondents (Base: 3539)	10.5	4.2	12.9	15.0	57.3
Age: 35-54 (Base: 1419)	11.5	4.1	11.6	14.7	58.1
Geog: Rest of Cardiff (Base: 1301)	11.1	4.2	12.3	15.1	57.3
Age: <35 (Base: 1040)	8.8	4.8	15.2	17.7	53.6
Gender: Male (Base: 1644)	12.3	4.9	12.8	14.3	55.7
Disability/Health Condition (Base: 545)	13.8	3.5	12.5	13.9	56.3

Percentage

■ 1 (low) ■ 2 ■ 3 ■ 4 ■ 5 (high)

- Responses were generally supportive of a move to this kind of fleet however several named zero-carbon as a myth, pointing out the pollution is instead moved to the source of where the energy is created.
- Respondents highlighted Westgate Street as an area of the city where people felt the air quality to be particularly poor with empty and idling buses identified as the issue.
- Ensuring the continuous flow of traffic through the city centre was suggested as the best way to combat poor air quality.

"If the traffic is moving we have less pollution, we need routes without obstruction"
(Member of the Cardiff Access Forum)

- Members of the access forum raised concerns regarding the sound levels omitted from low carbon/electric vehicles. As an association, Guide Dogs for the Blind have a campaign regarding silent vehicles, believing them to be a danger to those with sight impairment. The group is currently petitioning the UK Parliament.

Do you have any other ideas, big or small regarding the future of the South Wales Metro and buses?

1427 text responses were received to the questions relating to the Metro and buses.

An analysis of a sample of the text responses indicates that:

- 87% of respondents were in support of realigning the bus network, with 7% opposed to this measure and 7% unsure.
- 91% of respondents were in support of integrated ticketing, with 9% opposed.
- 62% of respondents supported Zero Carbon Bus Fleets, with 15% opposed and 23% unsure.

The comments provided by respondents to this question show a number of common themes, including:

- The cost of public transport – that transport fares are too expensive and that public transport should be free
- How easy it is to access and how attractive it is to use – for buses, that a city centre bus station is needed, that the buses are unreliable and that the big events held in the city affect bus services, and for rail that more rail stations needed, particularly on the east side of the city. A payment system like that in London and the need for a tram system were also common suggestions
- Concerns about the coordination between the timescales of new developments in the city and transport provision.

Active Healthy City

Cardiff becomes one of the best places in Europe for active travel

The big ideas:

4. Develop Active Travel Zones in the City Centre and in Neighbourhoods.

An active travel zone is an area designated as a place where walking, cycling and non-motorised transport take priority. The benefits of such zones are cleaner air, a healthier lifestyle, safer, quieter streets and more lively, sociable spaces. Children are more likely to play outdoors, cafes can place seating outside, and there is space for plants, trees, lawns and benches. Streets could be closed to vehicles at certain times of the day – for example, at the start and close of school or between the end of school and 5.30pm to allow children to play. Areas in the city centre could be developed as exciting new public spaces, like squares and green pockets, for all to enjoy.

Many cities around the world are creating areas where people come first. Sometimes this means excluding all types of vehicles, or it can mean combining cycle, bus and tram lanes with much wider pavements and plazas.

The benefits of doing this are many:
• cleaner air
• encouraging walking/cycling, which helps improve physical health
• more social interaction, which helps reduce loneliness
• a less stressful environment
• opportunities for retailers with greater numbers of shoppers stopping and browsing
• opportunities for open-air seating and street food stalls
• opportunities for cultural and artistic activities, and safer major event management.

We would encourage people living in active travel zones to take up active travel. For example, those who have never cycled before could use an affordable cycle hire scheme. We would provide special support to people of limited mobility, helping them use the streets without having to rely on a motor vehicle.

Three in five respondents (60.1%) expressed strong support (rated as 4 or 5) for the development of active travel zones in the city centre and in neighbourhoods.

This proposal achieved an average score of 3.61 ranking it at 10/18.
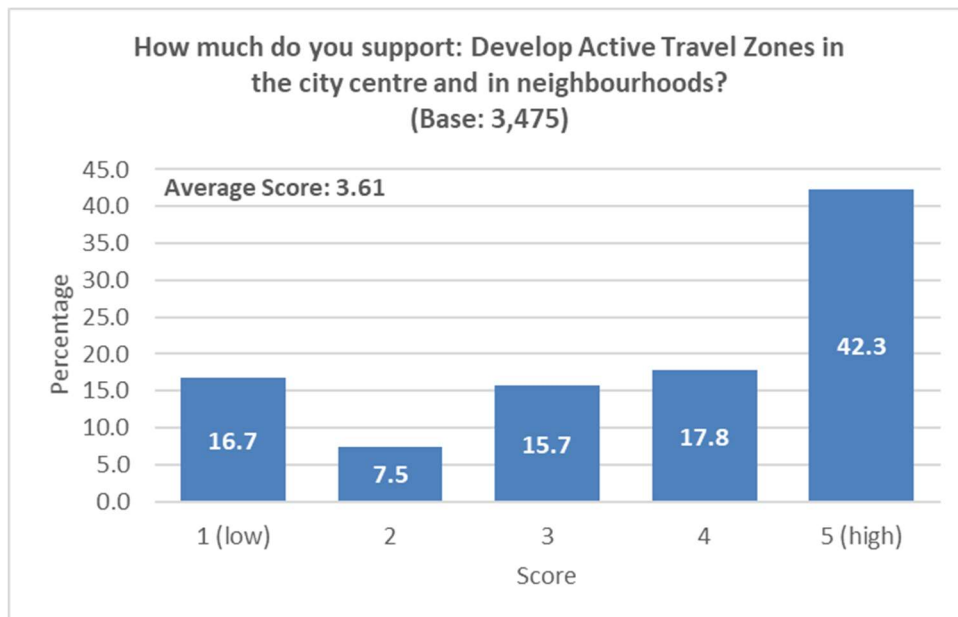
Analysis of the results by demographics revealed only minimal differences in opinion between groups, with support highest amongst women (64.2% positive) and people from the Southern Arc of Cardiff (63.3%), and lowest from those who report a disability or health condition (55.7%).

- Many believed that adequate improvements to public transport would naturally lead to a lower usage of cars.
- Attitudes toward active travel were thought to be significantly influenced by the seasons. Whilst many respondents enjoyed cycling in the summer months, darker

mornings and evenings and the poorer weather is likely to lead to a return to travel by car.

- Respondents asked that consideration be given to those for whom a car remains the only option for their work. Similarly, care must be taken to ensure that the elderly or those with mobility issues are not discouraged from accessing the city centre.

"Will active travel punish people who really need cars? E.g. pregnant women, people with pain problems (arthritis, bad feet and a hundred other conditions)? Those people who don't qualify for blue badge exemptions but find walking unbearable. Will plans punish people like teachers who need to transport equipment to work (try walking/bus with 60 exercise books and a load of charts)?" (Female 65+, North Cardiff)

- Concerns were raised on behalf of those with mobility issues or visual impairment in terms of managing a layout of café tables and street furniture.
- Older respondents highlighted the need for the provision of public conveniences to be built into plans for active travel zones.
- Some responses suggested regular car free days whilst others were supporting of a complete ban on cars in the city centre.
- Around a third of young people currently rely on transport by car for many of their day-to-day activities. Just a quarter reported to travel on foot and nine percent by bicycle when meeting up with friends and family. Cardiff Youth Council called for more and safer cycling and walking routes, secure cycle store and accessible information (possibly via an app) to promote active travel.

5. Comprehensive Cycle Superhighway and Primary Cycle Route Network.

Our vision is to develop Cardiff into a cycling city where cycling is a normal, practical and safe choice for short trips for people of all ages and abilities. We are already committed to introducing fully segregated Cycle Superhighways in Cardiff. However, we need further public support and funding to introduce a comprehensive network, including the delivery of more localised cycling infrastructure, in order to be faster and bolder in implementing our cycling strategy

Two thirds of respondents (65.1%) expressed support (rated as 4 or 5) for a comprehensive super highway and primary cycle route network.

This proposal achieved an average score of 3.78 ranking it at 5/18.

Prepared by Cardiff Research Centre
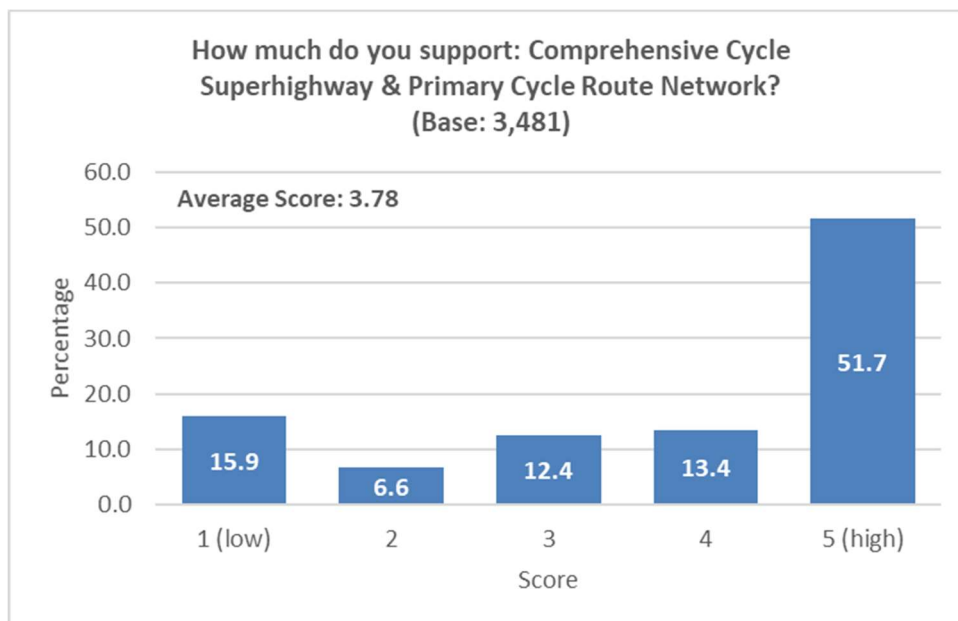
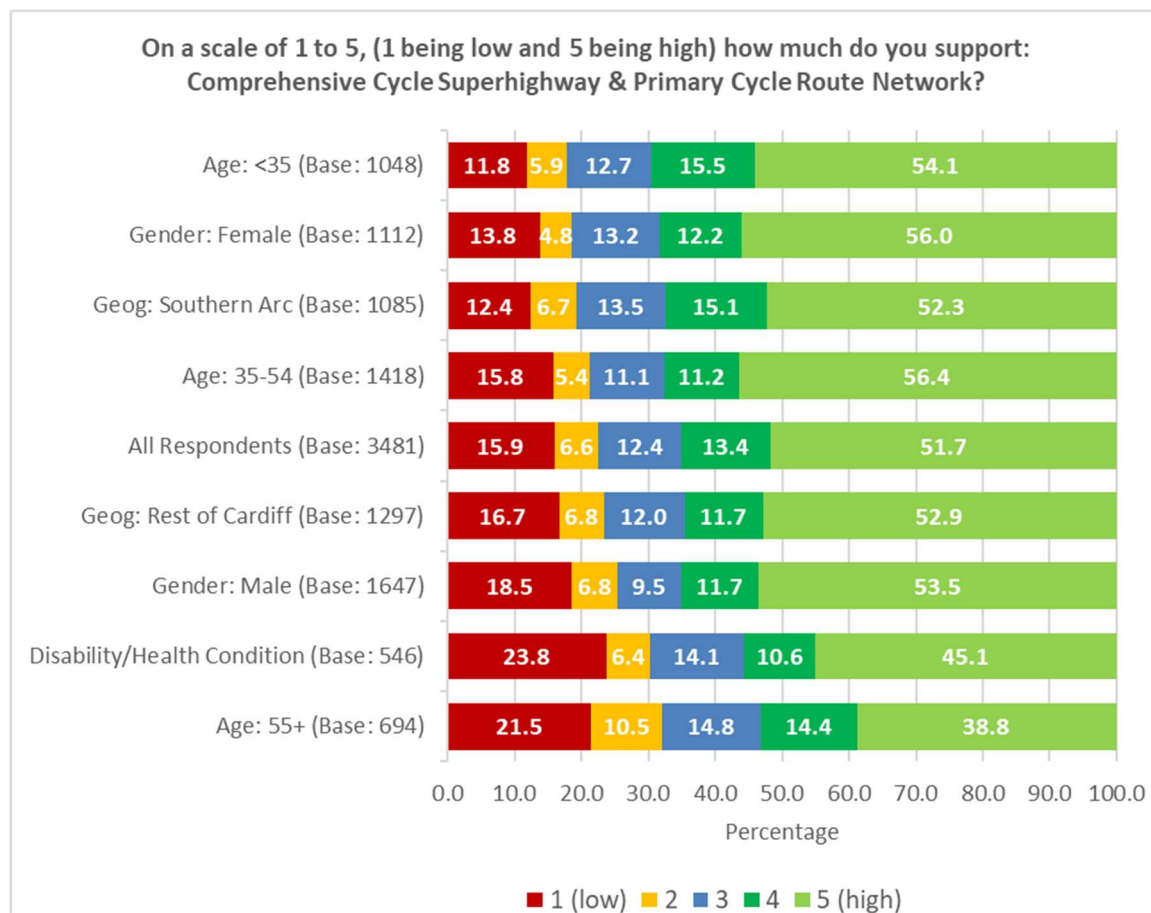Analysis of the results by demographics revealed slight differences in opinion between groups. Those aged under thirty-five gave the highest levels of support for the proposal. Support was slightly lower amongst those aged 55+ and those with a disability or health condition.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Comprehensive Cycle Superhighway & Primary Cycle Route Network?

Group	1 (low)	2	3	4	5 (high)
Age: <35 (Base: 1048)	11.8	5.9	12.7	15.5	54.1
Gender: Female (Base: 1112)	13.8	4.8	13.2	12.2	56.0
Geog: Southern Arc (Base: 1085)	12.4	6.7	13.5	15.1	52.3
Age: 35-54 (Base: 1418)	15.8	5.4	11.1	11.2	56.4
All Respondents (Base: 3481)	15.9	6.6	12.4	13.4	51.7
Geog: Rest of Cardiff (Base: 1297)	16.7	6.8	12.0	11.7	52.9
Gender: Male (Base: 1647)	18.5	6.8	9.5	11.7	53.5
Disability/Health Condition (Base: 546)	23.8	6.4	14.1	10.6	45.1
Age: 55+ (Base: 694)	21.5	10.5	14.8	14.4	38.8

- The current cycle network was described as 'patchy' and often coming to an abrupt stop. Many continue to feel unsafe at the prospect of using bicycles for cross-city journeys.

"If cycles lanes were safer, transport cheaper and more reliable, and parking more expensive than either option, I'd cycle or walk more. Right now, driving is by far the cheapest, safest and most convenient option especially when with kids, so I tend to drive. I'd prefer not to!" (Female 45-55, North Cardiff)

- Dedicated areas were requested for different forms of transport i.e. buses, cars, cyclists and pedestrians rather than trying to 'tag on' extra lanes.
- Respondents questioned how routes could be incorporated into already busy or narrow areas e.g. Cowbridge Road East.
- Just five percent of respondents to the Cardiff Youth Council survey currently cycle to school or college, referring to the current provision as 'patchy'. A lack of safe cycling

routes was a reason for many young people choosing not travel this way. Other reasons included a lack of secure storage at school and a negative image of cycling with several terming it as 'geeky'.
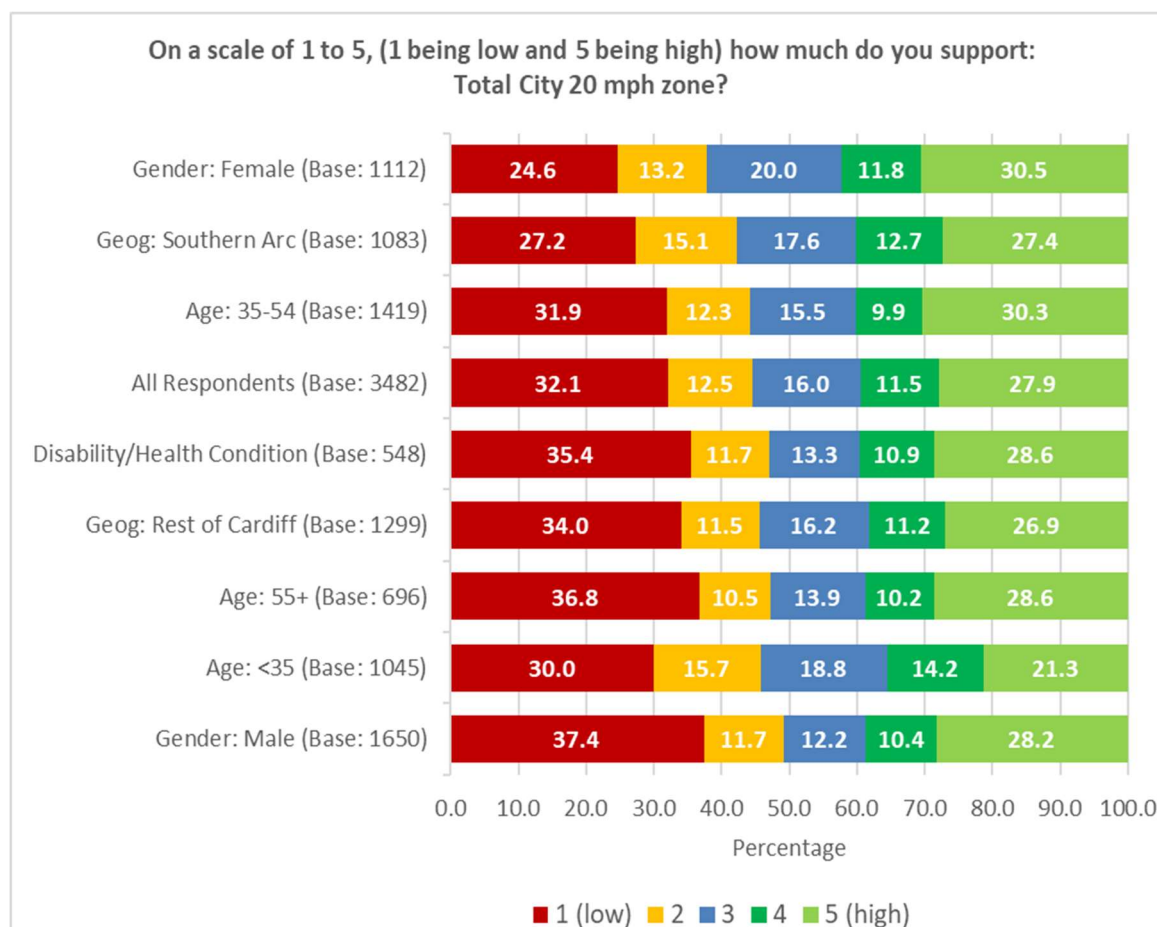
6. Total City 20 mph zone

The vision of Cardiff as a 20mph city is consistent with encouraging more use of public transport, walking and cycling. Work to increase the number of 20mph zones is ongoing and we have learnt a great deal from our pilot areas. We will continue to implement 20mph zones, ensuring that all people understand the process, and taking account of the fact that designing, consulting and procuring contractors places a significant demand on resources. However, we could speed up this process if the resources were available to make larger areas, or the whole city (excluding key arterial roads) a single 20mph zone.

Two fifths (39.4%) expressed support (rated as 4 or 5) for the introduction of a total city 20mph zone, while 44.6% were unsupportive (rated 1 or 2)

This proposal was awarded an average score of 2.91 ranking it 16th of the 18 proposals, **making it one of the three least popular big ideas.**

Prepared by Cardiff Research Centre
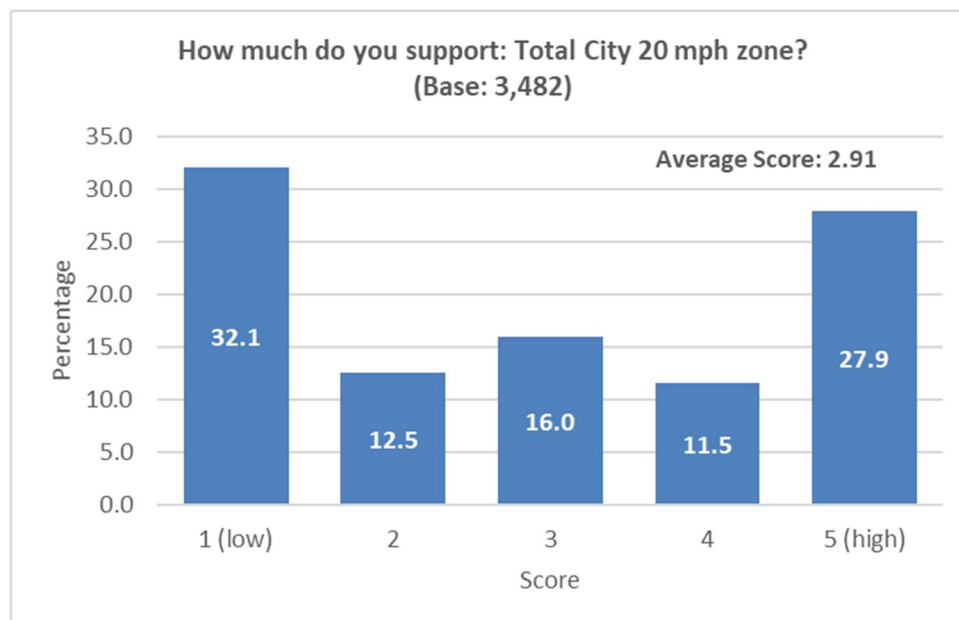
Analysis of the results by demographics revealed some small differences between groups. Support for the proposal was lowest amongst male respondents and highest from females.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Total City 20 mph zone?

	1 (low)	2	3	4	5 (high)
Gender: Female (Base: 1112)	24.6	13.2	20.0	11.8	30.5
Geog: Southern Arc (Base: 1083)	27.2	15.1	17.6	12.7	27.4
Age: 35-54 (Base: 1419)	31.9	12.3	15.5	9.9	30.3
All Respondents (Base: 3482)	32.1	12.5	16.0	11.5	27.9
Disability/Health Condition (Base: 548)	35.4	11.7	13.3	10.9	28.6
Geog: Rest of Cardiff (Base: 1299)	34.0	11.5	16.2	11.2	26.9
Age: 55+ (Base: 696)	36.8	10.5	13.9	10.2	28.6
Age: <35 (Base: 1045)	30.0	15.7	18.8	14.2	21.3
Gender: Male (Base: 1650)	37.4	11.7	12.2	10.4	28.2

Percentage

- 1 (low) - 2 - 3 - 4 - 5 (high)

- Opinion was split with regard to the introduction of 20mph zones. Those opposed to the limit claimed increased emissions and congestion would come as a result of their implementation. Some suggested that the 20mph limit should be considered at specific times or locations opposed to a citywide initiative. Those in favour stressed the importance of enforcement in order for them to be meaningful.

"City 20mph zones are practical in areas such as around schools, community retail area, hospitals etc. With little enforcement evident in existing 20mph zones, road users are not going to respect the purpose and intentions behind creating these low speed zones." (Male 65+, North Cardiff)

Do you have any other ideas, big or small for helping Cardiff to become a more active healthy city?

1370 text responses were received to the questions relating to the Active Healthy City theme.

An analysis of a sample of the text responses indicates that:

- 93% of respondents supported Active Travel Zones in the city centre and in neighbourhoods, with 7% opposed.
- 79% of respondents were in support of developing Comprehensive Cycle Superhighway and Primary Cycle Route Network, with 21% opposed.
- 20% were in support of a Total City 20mph Zone, with 76% opposed and 4% unsure.

The comments provided by respondents to this question show a number of common themes, including:

- Ensuring that appropriate provision of facilities is in place to support active travel – concern was expressed about conflict between pedestrians and cyclists, with improved/segregated cycle routes seen to be necessary to encourage more walking and that secure cycle parking and park and cycle are facilities needed
- The climate not being suitable for cycling
- Better enforcement needed, for example, for 20mph limits and preventing car parking in cycle lanes.
- Keeping 30mph limits on main roads.

Clean Air City

All parts of Cardiff will have clean air. No citizen will die or have to suffer ill health as a consequence of high levels of pollution.
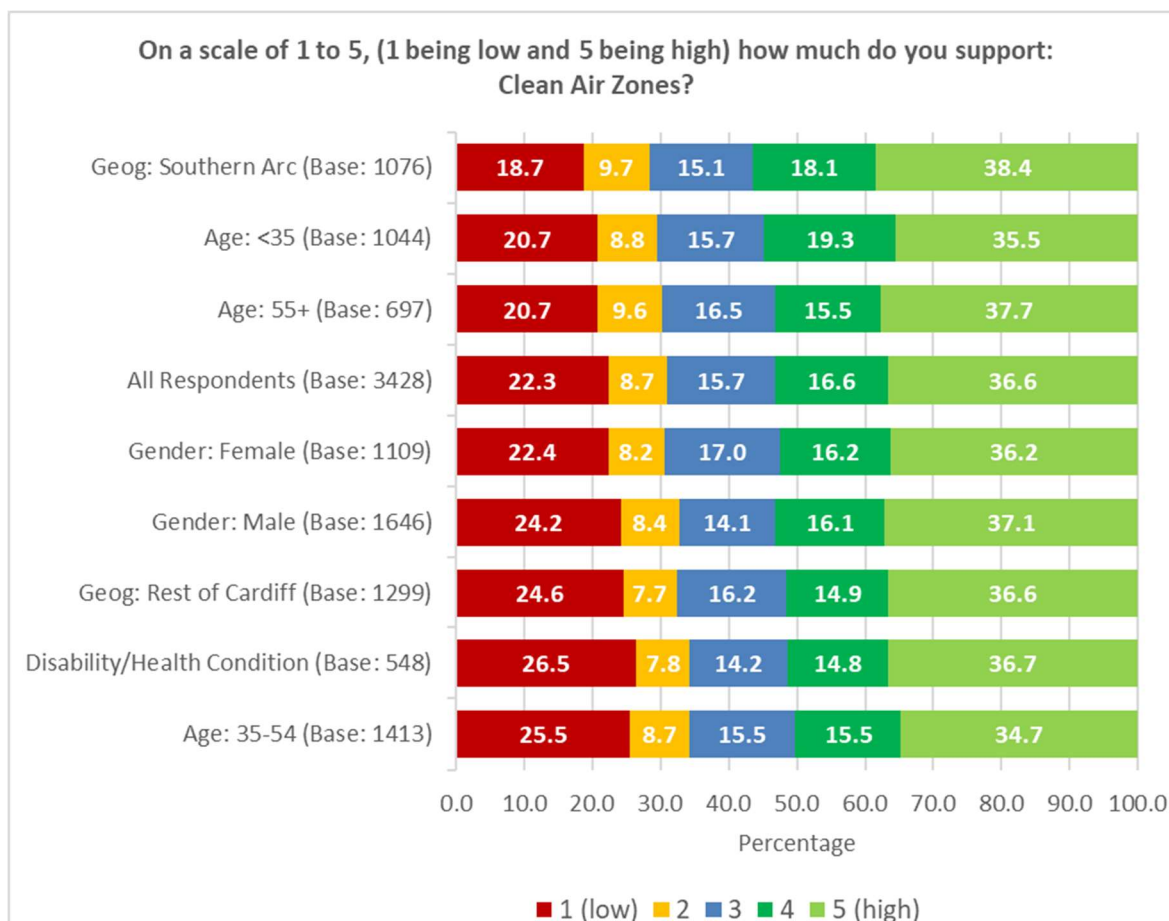
The big ideas:

7. Clean Air Zones

A Clean Air Zone is normally an area where targeted action is taken to improve air quality, in a way that improves health outcomes and supports economic growth. There are a number of different types of clean air zone models in operation or in development in the UK and Europe that aim to reduce congestion, lower pollution and raise funds to give people a realistic transport alternative to using their cars. In many Zones access is restricted, or charges are in place, for vehicles that don't meet certain emission standards.

More than half of respondents (53.2%) expressed support (rated as 4 or 5) for the introduction of clean air zones, with 30.1% unsupportive.

This proposal achieved an average score of 3.37 ranking it at 13/18.
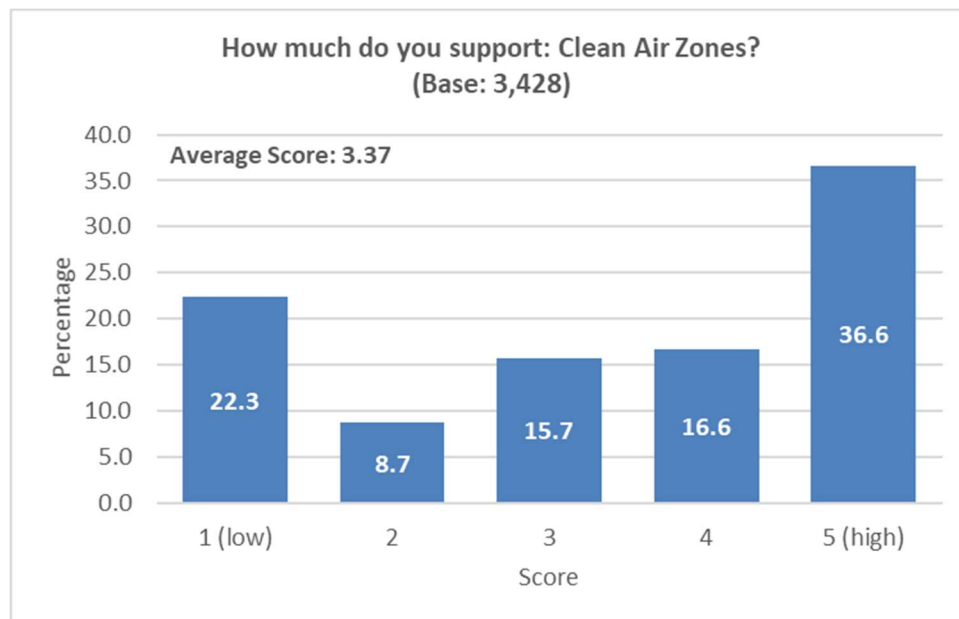
Analysis of the results by demographics revealed only minimal differences in opinion between groups although support was seen to be strongest amongst those resident in the Southern Arc of the city.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support:
Clean Air Zones?

	1 (low)	2	3	4	5 (high)
Geog: Southern Arc (Base: 1076)	18.7	9.7	15.1	18.1	38.4
Age: <35 (Base: 1044)	20.7	8.8	15.7	19.3	35.5
Age: 55+ (Base: 697)	20.7	9.6	16.5	15.5	37.7
All Respondents (Base: 3428)	22.3	8.7	15.7	16.6	36.6
Gender: Female (Base: 1109)	22.4	8.2	17.0	16.2	36.2
Gender: Male (Base: 1646)	24.2	8.4	14.1	16.1	37.1
Geog: Rest of Cardiff (Base: 1299)	24.6	7.7	16.2	14.9	36.6
Disability/Health Condition (Base: 548)	26.5	7.8	14.2	14.8	36.7
Age: 35-54 (Base: 1413)	25.5	8.7	15.5	15.5	34.7

Percentage

■ 1 (low)   ■ 2   ■ 3   ■ 4   ■ 5 (high)

- Respondents wanted to see improvements to public transport first in order to provide commuters with a viable alternative prior to restrictions or charges being introduced.
- Concerns were raised that the changes would punish those without any choice i.e. those that need to drop children at school/childcare, people with mobility issues and those for whom a vehicle is essential for their work.
- Fears were expressed that the proposals would have a detrimental impact on businesses in the city centre or that costs would be passed onto the consumer.
- Clarification was sought as to whether accessible taxis and blue badge holders would be exempt from the scheme. If was felt that the inclusion of these within the scheme could significantly reduce city centre access to those with a disability.

"Public transport is all well and good but it can't take you direct to your door, and you need that, particularly if you have mobility problems"
*(Member of the Cardiff Access Forum)*

- Support was voiced for the monitoring of air quality around schools and action to reduce the use of vehicles in these locations.
- Young people expressed concern that poor air quality caused by city centre congestion may negatively impact on BAME communities concentrated in the south of the city.

8. Active Travel Targets for the Public Sector and Business

Cardiff's Public Services Board, which represents the main public sector organisations responsible for Cardiff, has committed to increase active travel amongst its staff. Plans will be developed in 2018 to support staff in these organisations, and key partners, to take up healthy travel, setting clear, challenging but achievable monitored targets. Active Travel Plans will also be developed with schools to reduce the numbers of cars on the "school run."

By working with regional partners and the business community, we could help people choose more sustainable forms of travel; working in partnership to build the infrastructure that ensures people have safe and attractive alternatives to car travel. This partnership approach would show leadership across the public and business sectors to meet clean air targets and improve our city.

Less than half of respondents (46.9%) expressed strong support (rated as 4 or 5) for active travel targets. This proposal achieved an average score of 3.26 ranking it at 14/18.
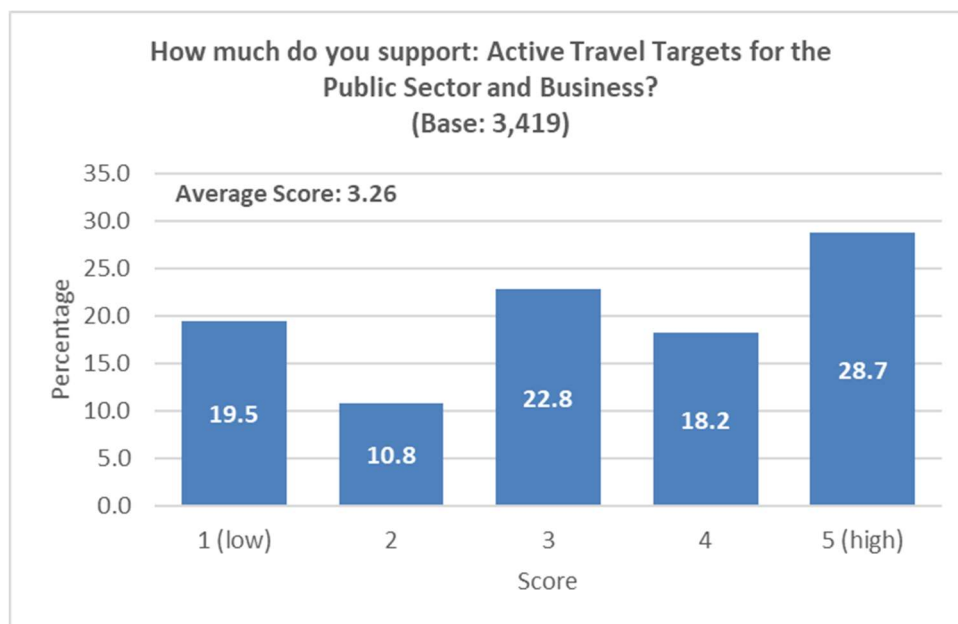
Analysis of the results by demographics revealed only minimal differences in opinion between groups.

- Targets were deemed as unfair to those who have to use a car for work for mobility e.g. sales people, care staff and anyone with no fixed office.

"It might sound good to those who do work in one office only but these tend to be government workers who don't visit suppliers, customers etc."
(Full-time working male)

- It was also felt that families could be penalised by such targets, commenting that for those that have to drop children to school or childcare on their way to work, public transport is simply not an option.
- Some felt that this measure would not deter business from the city centre.

9. Parking Levies

In 2012, Nottingham introduced a workplace parking levy requiring workplaces to pay for each parking space provided (charging £387 for each parking space for businesses with more than 10 employees)The levy has raised between £8million and £10million a year, which has been used to improve public transport options, including a new tramline.

Cardiff currently has average parking prices compared to other cities in the UK. Cardiff could introduce a workplace levy similar to the one in Nottingham, or seek to increase its general parking charges. This would dissuade people from driving into town, while also raising funds for public transport alternatives.

Nearly a half of all respondents (49.1%) were unsupportive of the proposal to introduce workforce parking levies, with just a third of respondents (34.7%) expressing support (rated as 4 or 5).

This proposal was awarded an average score of 2.73 ranking it at 17/18.
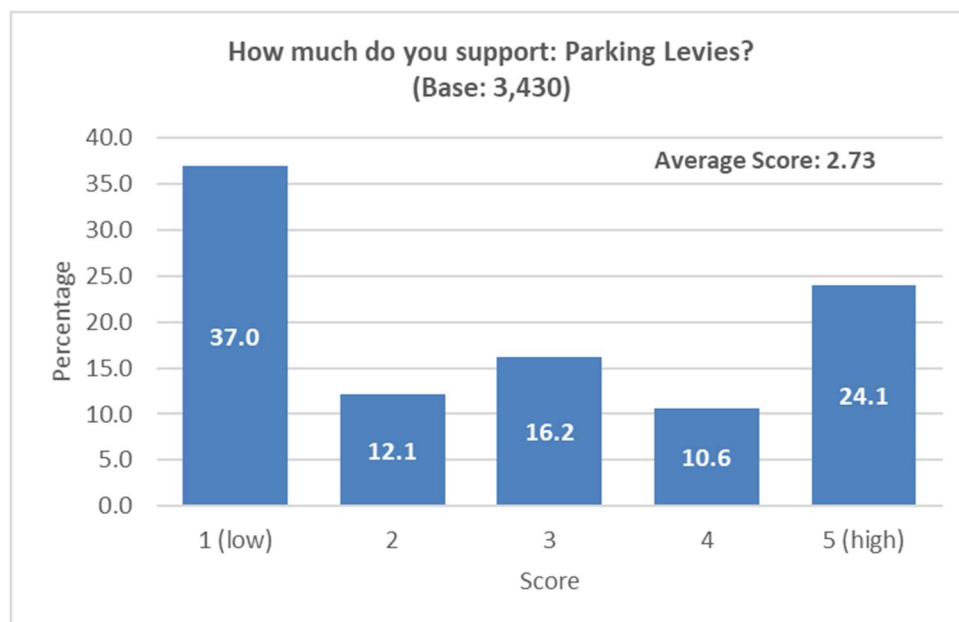
Analysis of the results by demographics revealed only minimal differences in opinion between groups.

- Many felt that workplace levies would add to financial pressures on employees and employers, in some instances driving businesses out of the city centre and penalising further those without a feasible alternative to car use.

"Parking levies will have an impact of driving businesses away from the city. Many workplaces employ people who need to have their car available for business use during the day."
(Male, 75+)

- Most commenters felt that parking levies should only be in place when other options for travel are both feasible and safe.
- In the majority of instances where support for parking levies and congestion changes was given, respondents described it as 'crucial' that resulting monies be ring-fenced for further public transport improvements.
- Young people gave support for the introduction of a congestion charge via the Cardiff Youth Council Survey. They were also keen that monies generated by congestion charges or parking levies should be invested to address young people's travel needs. Priory needs were identified for vulnerable young people, learners, trainees, young carers and looked after children.

Do you have any other ideas, big or small for helping Cardiff to improve the quality of its air?

1057 text responses were received to the questions relating to the Clean Air City theme.

An analysis of a sample of the text responses indicates that:

- Clean Air Zones were supported by 31% of respondents and opposed by 43%, with 26% unsure.
- Active Travel Targets for the public sector and business were supported by 35% of respondents and also opposed by 35% of respondents, with 30% unsure.
- Parking Levies and Charges received support from 12% of respondents and were opposed by 60%, with 28% unsure.

The comments provided by respondents to this question show a number of common themes, including:

- The need for substantial improvement to the existing alternatives, especially public transport, before implementing any of the big ideas
- The impacts of additional costs, for example, being detrimental to business, economic development, employment, tourism and entertainment in the city; disproportionately affecting those that don't have the alternatives readily available to them (i.e. the elderly/disabled and shift workers etc.); those on lower incomes who will be

disadvantaged; representing an additional burden on already struggling businesses, and that charges will be passed on to employees by their employers

- The purpose of the interventions being to raise more revenue for the Council and that motorists are taxed enough
- A preference for positive encouragement to switch to using sustainable modes, with the proposals seen to be ineffective as they are punitive
- The need for more green landscaping and green spaces to absorb pollution, with less development building on green areas.

International Capital City of Business Work & Culture

A vibrant 'destination city centre' with a thriving business economy, supporting major events and a rich diverse culture.

The big ideas:

10. Creating a high-quality capital city centre environment

Cardiff City Centre is one of the major assets the region and nation possesses to attract business and visitors, as well as a great place for local residents to live. Creating an international high quality, people-focussed, active travel city centre will underpin major economic benefits and growth.

We want to use the city centre to celebrate the diverse culture and heritage of modern Cardiff and be a showcase for Wales on the international stage. In doing so, we will facilitate people to meet for leisure or business and enable traders and retailers to create innovative spaces for shopping, eating and entertainment.

Three in five respondents (61.9%) expressed strong support (rated as 4 or 5) for creating a high-quality capital city centre environment.

This proposal was awarded an average score of 3.72 ranking it at joint 6/18.
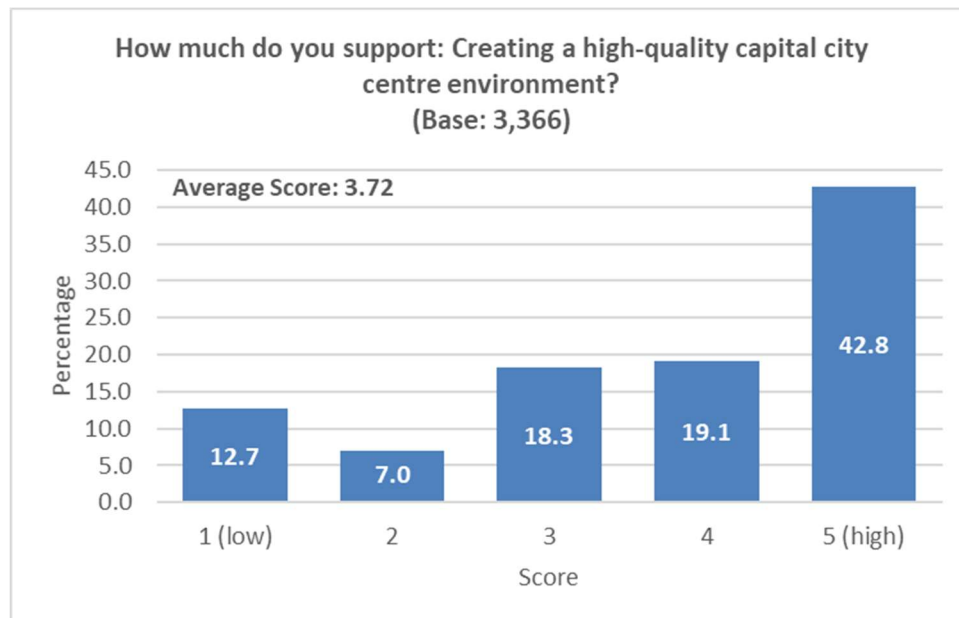
Analysis of the results by demographics revealed only minimal differences in opinion between groups.

- Respondents were keen that good quality architecture, planning and design are used to retain Cardiff's 'character'. Multiple requests came for an increase in 'street trees' to ensure the visibility of greenness in the city centre.
- Improvements to the Cardiff International Airport were described as 'essential' to effectively attract both visitors and business to the city.
- Respondents felt that litter in the city centre is something that needs tackling in order to improve the image of the city to visitors.
- Respondents highlighted difficulties experienced with transport in the city during major events. Particularly older people and those with a disability reported the city centre as 'cut off' to them during these times. The frequent changes to routes/drop off points etc. were particularly difficult for some.

"I'm visually impaired, I know my city, I know the pitfalls, I only go on a route that I know well and where I know that I am safe."
(Member of the Cardiff Access Forum)

- The delivery of a central transport hub was viewed as essential in attracting both visitors and businesses to the city. The current lack of a central bus station was described as 'confusing' whilst criticism was also aired regarding the current location of the National Express coach stop at Sophia Gardens. The current positioning was termed as 'unsafe' and 'inaccessible' particularly for those with mobility or visual impairments.
- Whilst accepting the advantages of major events the city some young people highlighted the difficulties that this can incur.

"There seems to be a lot more events happening in the city centre, it can make getting in for work and college more difficult with the road closures and traffic".
(Young person from Gabalfa)

Prepared by Cardiff Research Centre

11. Developing the South East Corridor

A major opportunity exists to increase accessibility for residents and businesses to the east of Cardiff; one of the city's most deprived and disconnected communities. Aligned with the new Industrial Strategy for the east of the city, this would include a new park and ride rail station for St. Mellons, the completion of the Eastern Bay Link road, further improvement to Queen Street Station, linked to improved cycling and walking routes.

Three in five respondents (61.9%) expressed strong support (rated as 4 or 5) for the development of the south east corridor.

This proposal was awarded an average score of 3.82 ranking it at 4/18.
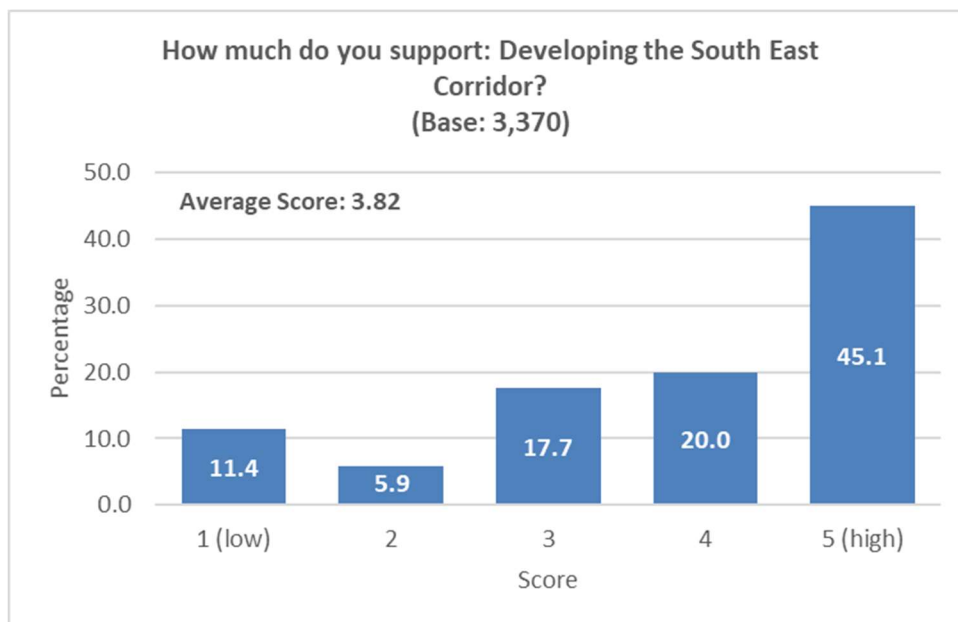
An additional subgroup termed as 'South Eastern Corridor' i.e. residents in the wards of Trowbridge, Rumney and Llanrumney was added to the analysis of this proposal.

Predictably, this group expressed the highest levels of support for the proposal. The average score awarded to the proposal from the group was 4.02 compared to 3.82 from respondents overall.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Developing the South East Corridor?

	1 (low)	2	3	4	5 (high)
Geog: SE Corridor (Base: 285)	10.2	4.6	15.1	13.3	56.8
Geog: Southern Arc (Base: 1069)	8.5	5.9	18.4	20.6	46.6
Age: <35 (Base: 1033)	8.1	5.3	19.4	22.4	44.8
Gender: Female (Base: 1106)	10.3	5.3	17.6	18.0	48.7
All Respondents (Base: 3370)	11.4	5.9	17.7	20.0	45.1
Age: 55+ (Base: 694)	11.5	7.1	16.1	19.7	45.5
Gender: Male (Base: 1634)	13.1	5.9	15.7	19.8	45.4
Geog: Rest of Cardiff (Base: 1292)	12.3	5.5	17.9	20.5	43.8
Age: 35-54 (Base: 1407)	13.3	5.5	17.0	19.0	45.3
Disability/Health Condition (Base: 543)	16.2	6.3	12.5	21.5	43.5

Percentage

- Demand was high for increased rail links opposed to bus services in the east of the city. Whilst some support was provided for park and ride it was pointed out that this still involves commuters using their cars and should be a last resort rather than a primary solution.

"South East Cardiff is horrendous to travel in at peak times. If there were a train station or mono rail available, this would take traffic off the road."
*(Male, 35-45, St. Mellons)*

- It was felt that improvements to cycle routes from the east could also play a role in reducing congestion and car use.

12. Regional Park & Rides – Improved Regional Connections

Working with regional colleagues and the business community, we could accelerate plans to grow the region's park and ride network. New park and rides would be established to provide a more efficient route into the city centre for commuters. They would be based at junctions 33, 34 and north of junction 32 of the M4, and to the east and west of the city.

Three in five respondents (59.9%) expressed strong support (rated as 4 or 5) for improved regional park and ride connections.

This proposal achieved an average score of 3.67 ranking it at 8/18.
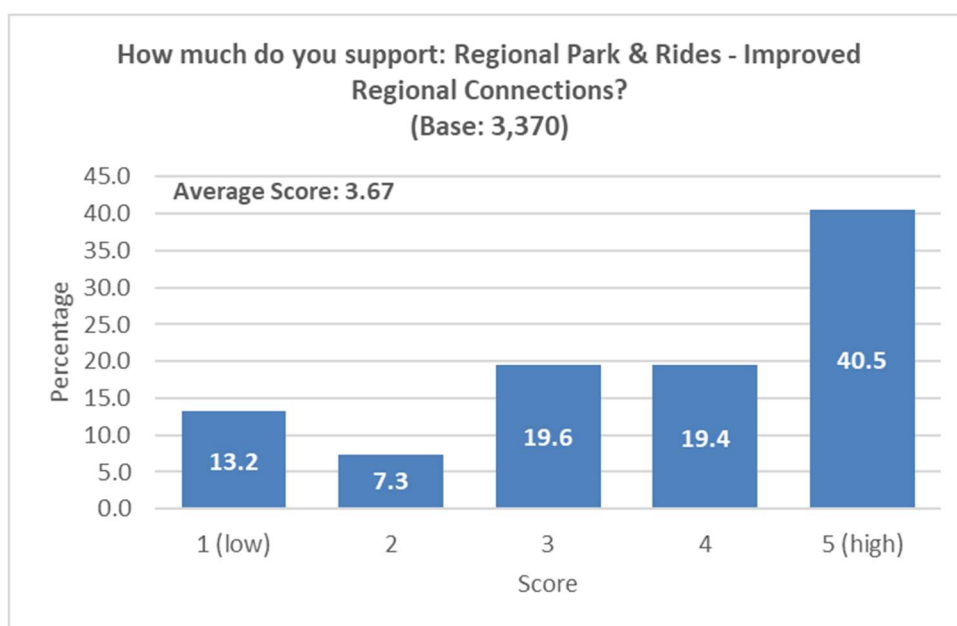
Analysis of the results by demographics revealed only minimal differences in opinion between groups.

- Bus services from Park and Ride facilities need to be faster than driving as well as more affordable to make their use viable. Many felt that currently this was not the case.

"I know of people who do not use park and ride because they don't want to have to lug their armfuls of shopping to a bus stop, wait for the bus, stand on a crowded bus just to travel a few miles to their car before driving 20miles home. They do not see it as practical. It often takes people longer to get home this way."
(Female, 25-35, Newport)

- Where park and rides are in place respondents wanted to see longer hours and Sunday availability in order to better accommodate city events and those working less sociable hours.

Do you have any other ideas, big or small to help make Cardiff an international capital of business, work or culture?

842 text responses were received to the questions relating to the Work and Culture theme.

An analysis of a sample of the text responses indicates that:

- 27% of respondents supported creating a high quality capital city centre environment, 32% opposed this intervention and 41% were unsure.
- 67% of respondents supported developing the South East Corridor, 13% were opposed and 20% were unsure.
- 43% of respondents supported Regional Park & Rides, with 32% opposed and 25% unsure.

The comments provided by respondents to this question show a number of common themes, including:

- Concerns about the ability to deliver the big ideas when 'the basics' still need to be addressed
- The need for better public transports links to the City Centre and for the new central interchange
- The negative impact of City Centre proposals on businesses
- The impact of event days and the need for the City Centre to remain accessible by walking, cycling and public transport
- The suitability and viability of bus based park and ride (e.g. cost, convenience, passenger numbers) compared with rail based park & ride, which requires significant investment and to be progressed as part of the Metro
- The need for working at regional level
- Investment for the South East Corridor, in particular completion of EBL with provision of high quality cycle links
- A lack of clarity about what 'active travel' means
- The scale of development in the City Centre, particularly the quantity of student accommodation, and the need for Cardiff to protect its cultural heritage and retain green and public spaces
- Addressing wider issues – for example, cleanliness, and the extent of homelessness, begging, drug and alcohol misuse and drunken behaviour - to improve the quality of the city centre environment.

Prepared by Cardiff Research Centre

The Future for Cars

More Cardiff citizens feel able to either share or not own a car. Many will choose zero carbon cars.

The big ideas:

13. Zero Carbon vehicles

Japan now has more electric car charging points than petrol stations. A new electric car is currently registered in the UK every 13 minutes. Only 114 electric vehicles are currently registered in Cardiff (Nov 2017) but this will increase. Hydrogen is also emerging as an alternative fuel. While electric and hydrogen cars produce less pollution, they still contribute to congestion. Cardiff could encourage growth in electric and hydrogen vehicles as replacements for older, polluting models.

More than half of respondents (54.8%) expressed strong support (rated as 4 or 5) for the introduction of zero carbon vehicles.

This proposal was awarded an average score of 3.52 ranking it at 12/18.

How much do you support: Zero Carbon Vehicles? (Base: 3,347)

Analysis of the results by demographics revealed only minimal differences in opinion between groups.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Zero Carbon Vehicles?

	1 (low)	2	3	4	5 (high)
Age: <35 (Base: 1025)	12.0	8.6	19.3	19.1	41.0
Gender: Female (Base: 1108)	13.6	9.7	19.5	16.2	40.9
Geog: Southern Arc (Base: 1058)	12.9	8.8	20.9	19.8	37.6
Geog: Rest of Cardiff (Base: 1301)	16.0	9.6	18.0	16.1	40.3
All Respondents (Base: 3347)	15.6	9.4	20.1	16.6	38.2
Age: 55+ (Base: 698)	17.3	8.7	21.3	16.5	36.1
Disability/Health Condition (Base: 546)	20.9	7.5	17.0	16.8	37.7
Age: 35-54 (Base: 1412)	17.5	10.4	20.2	15.7	36.3
Gender: Male (Base: 1644)	18.2	9.9	19.7	16.4	35.8

- The views collected reflected the view that cleaner vehicles should be encouraged but the focus has to be on encouraging fewer cars and fewer car journeys to tackle congestion.
- A lack of knowledge was evident regarding electric vehicles. Respondents queried how far vehicles could travel on batteries, what kind of facilities are needed for charging and how long does charging take?
- Electric and low carbon vehicles were felt to be financially out of reach for poorer residents who could then be unfairly discriminated against in terms of access to the city centre.

"Zero carbon cars in a great idea in principle but it decimates against poorer and disabled people who need cars to access services and work but who cannot afford to replace older vehicles with newer more efficient ones."
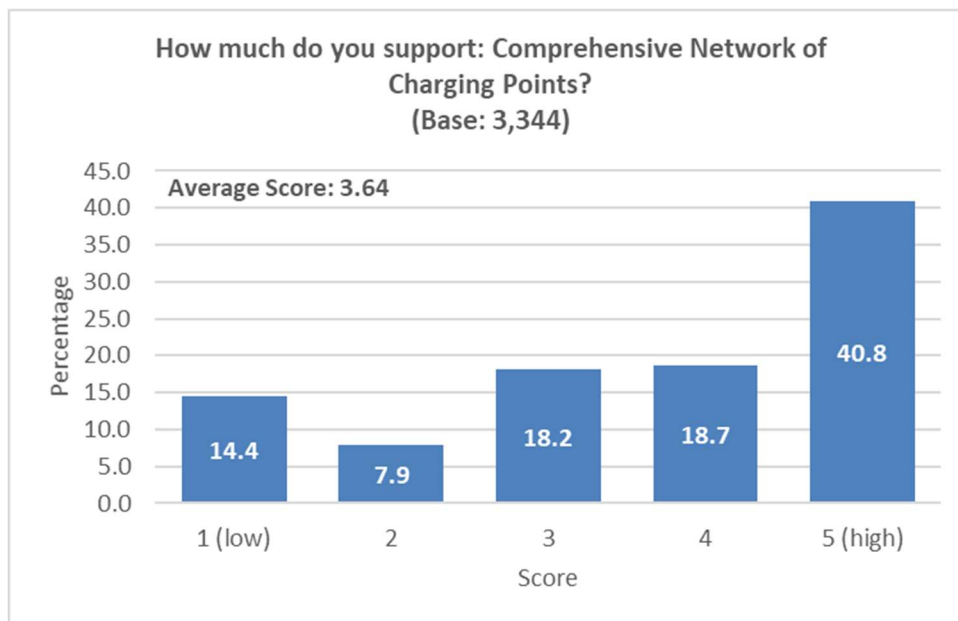*(Female, 25-35, Fairwater)*

- Several respondents expressed uncertainly that electric cars represented the right long-term solution, stressing a focus on improved public transport to be the priority.

14.   Comprehensive Network of Charging Points

The Council is committed to increasing the number of charging points around the city but it is unrealistic at this stage to expect every house in the city to have its own charging point. We could build on existing work with industry, retail and the community to bring forward a comprehensive network of charging points and hydrogen supply to encourage ownership of low carbon vehicles.

Three in five respondents (59.5%) expressed strong support (rated as 4 or 5) for a comprehensive network of charging points.

This proposal was awarded an average score of 3.64 ranking it at 9/18.

How much do you support: Comprehensive Network of Charging Points? (Base: 3,344)

Average Score: 3.64

Score	Percentage
1 (low)	14.4
2	7.9
3	18.2
4	18.7
5 (high)	40.8

Analysis of the results by demographics revealed only minimal differences in opinion between groups.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Comprehensive Network of Charging Points?

	1 (low)	2	3	4	5 (high)
Age: <35 (Base: 1024)	11.5	7.0	18.1	22.5	40.9
Gender: Female (Base: 1109)	12.2	7.5	19.2	17.1	44.0
Geog: Rest of Cardiff (Base: 1297)	14.9	7.2	15.6	18.3	44.0
Geog: Southern Arc (Base: 1059)	12.1	8.0	19.9	20.9	39.1
All Respondents (Base: 3344)	14.4	7.9	18.2	18.7	40.8
Age: 55+ (Base: 696)	16.2	8.5	16.2	17.2	41.8
Age: 35-54 (Base: 1412)	15.7	8.1	19.7	17.1	39.4
Gender: Male (Base: 1643)	16.9	8.5	17.0	18.3	39.4
Disability/Health Condition (Base: 545)	19.4	6.1	17.8	14.3	42.4

Percentage

- Concerns were also raised with regard the number of charging points required and the difficultly of supporting electric cars given Cardiff's large proportion of terraced housing. It was suggested that all new housing developments have charging facilities built into their design.

"Much of the local Cardiff area are terraced streets so appropriate on-street charging is required. We recently bought a new car but because we don't have a drive way and there are no charging points we couldn't consider an electric car."
(Female, 35-45, Heath)
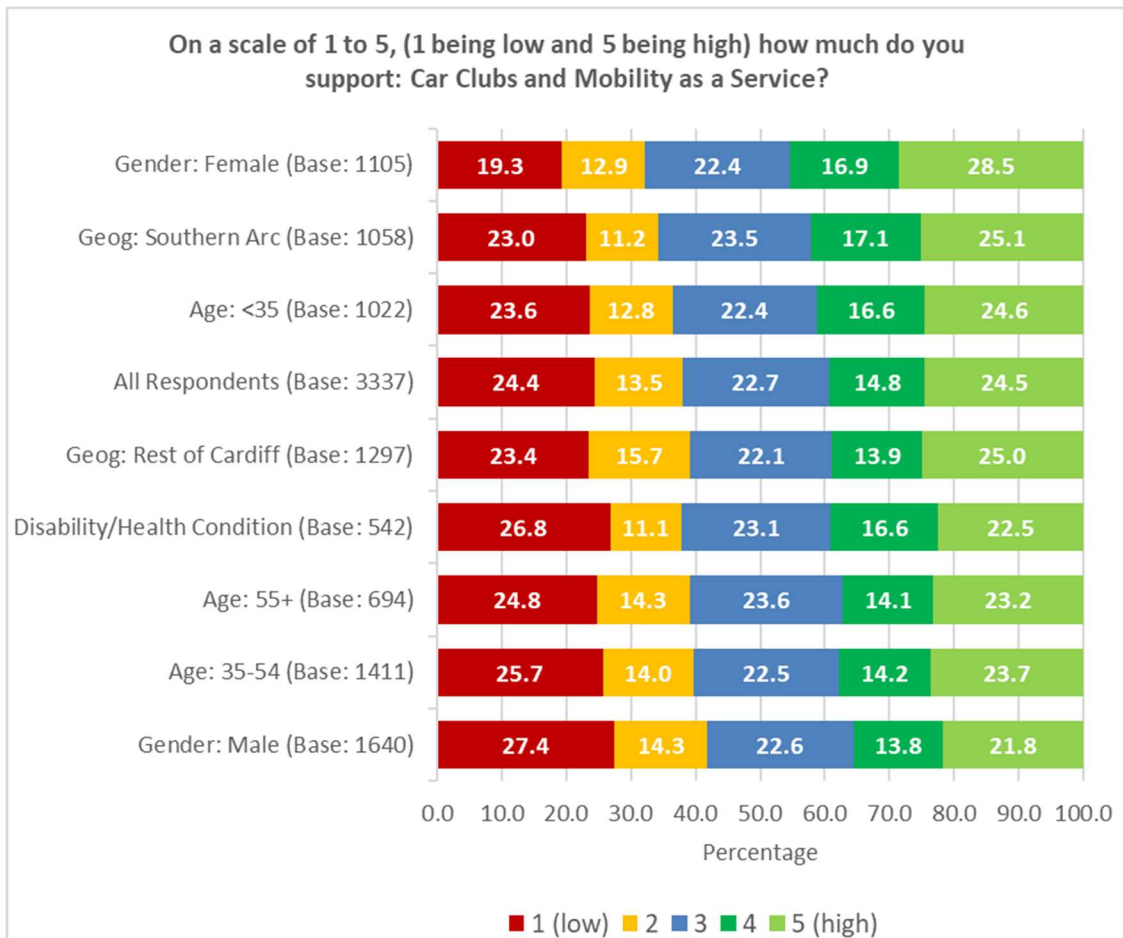
15. Car Clubs and Mobility as a Service

Instead of owning cars, there are indications that city dwellers around the world are choosing "mobility as a service" in which a person either joins a car club, or signs a contract with a service provider. A Cardiff Car Club is already operating but we could attract and develop a wider range of car sharing options, both market driven, including commercial car club operators and community based clubs, facilitated by communities and employers. This would give a variety of options to meet people's needs.

Two fifths of respondents (39.3%) expressed strong support (rated as 4 or 5) for the development of car clubs and mobility as a service. A quarter (24.4%) of respondents awarded a score of just 1.

This proposal was awarded an average score of 3.01 ranking it at 15/18.
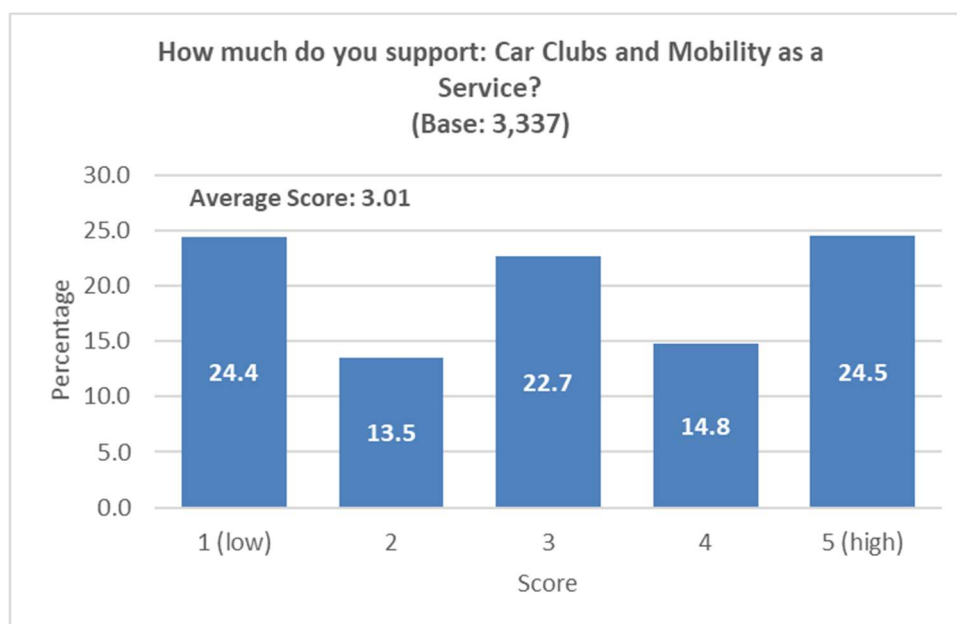
Differences between groups were small, however support was highest amongst females, residents in the Southern Arc and younger respondents.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Car Clubs and Mobility as a Service?

	1 (low)	2	3	4	5 (high)
Gender: Female (Base: 1105)	19.3	12.9	22.4	16.9	28.5
Geog: Southern Arc (Base: 1058)	23.0	11.2	23.5	17.1	25.1
Age: <35 (Base: 1022)	23.6	12.8	22.4	16.6	24.6
All Respondents (Base: 3337)	24.4	13.5	22.7	14.8	24.5
Geog: Rest of Cardiff (Base: 1297)	23.4	15.7	22.1	13.9	25.0
Disability/Health Condition (Base: 542)	26.8	11.1	23.1	16.6	22.5
Age: 55+ (Base: 694)	24.8	14.3	23.6	14.1	23.2
Age: 35-54 (Base: 1411)	25.7	14.0	22.5	14.2	23.7
Gender: Male (Base: 1640)	27.4	14.3	22.6	13.8	21.8

- Whilst car clubs were supported in theory, concerns were expressed over the practicality of this i.e. availability, fitting in with the schedules of others and insurance.

"I think the model of car ownership is already changing and I would seriously consider giving up my car if there were a sufficient number of car club vehicles available."
(Male, 35-45, Penylan)

Do you have any other ideas, big or small, for the future of cars?

809 text responses were received to the questions relating to the future of cars theme.

An analysis of a sample of the text responses indicates that:

- 32% of respondents supported measures promoting Zero Carbon Vehicles, with 42% opposed and 26% unsure
- 32% of respondents supported developing a Comprehensive Network of Charging Points, with 40% opposed and 28% unsure
- 26% of respondents supported Car Clubs and Mobility as a service, with 28% opposed and 34% unsure.

The comments provided by respondents to this question show a number of common themes, including:

- The need to concentrate first on getting the 'basics right'
- The cost of new technologies creating a disparity in access for the most affluent/poorest in society and the particular dis-benefits of discouraging conventional fuel cars for lower income groups
- Concerns about the environmental impacts of low carbon technologies and the associated equipment (e.g. EV charging points contributing to street clutter)
- Improving provision for walking, cycling, public transport and restricting access by car in some areas (e.g. the city centre) would be more effective in terms of addressing congestion, safety and other issues arising from the use of private cars
- Promoting zero carbon vehicles should not be within the Council's remit, and is contrary to other aims
- National level initiatives would be more effective and private investments should be used to progress EV charging, not public funds
- The Council should concentrate on its own fleet, taxis and buses first
- Car clubs are not a flexible or practical solution for many users.

Smart City

As the digital world evolves, Cardiff will use the latest technology to support an integrated transport system in which travellers are well informed and able to make smart travel choices.
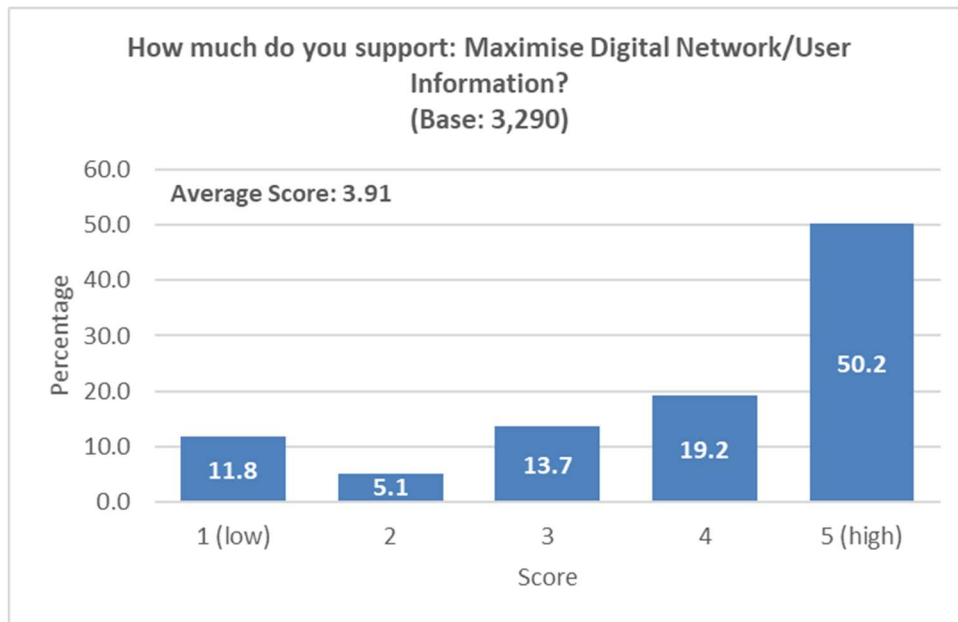

The big ideas:

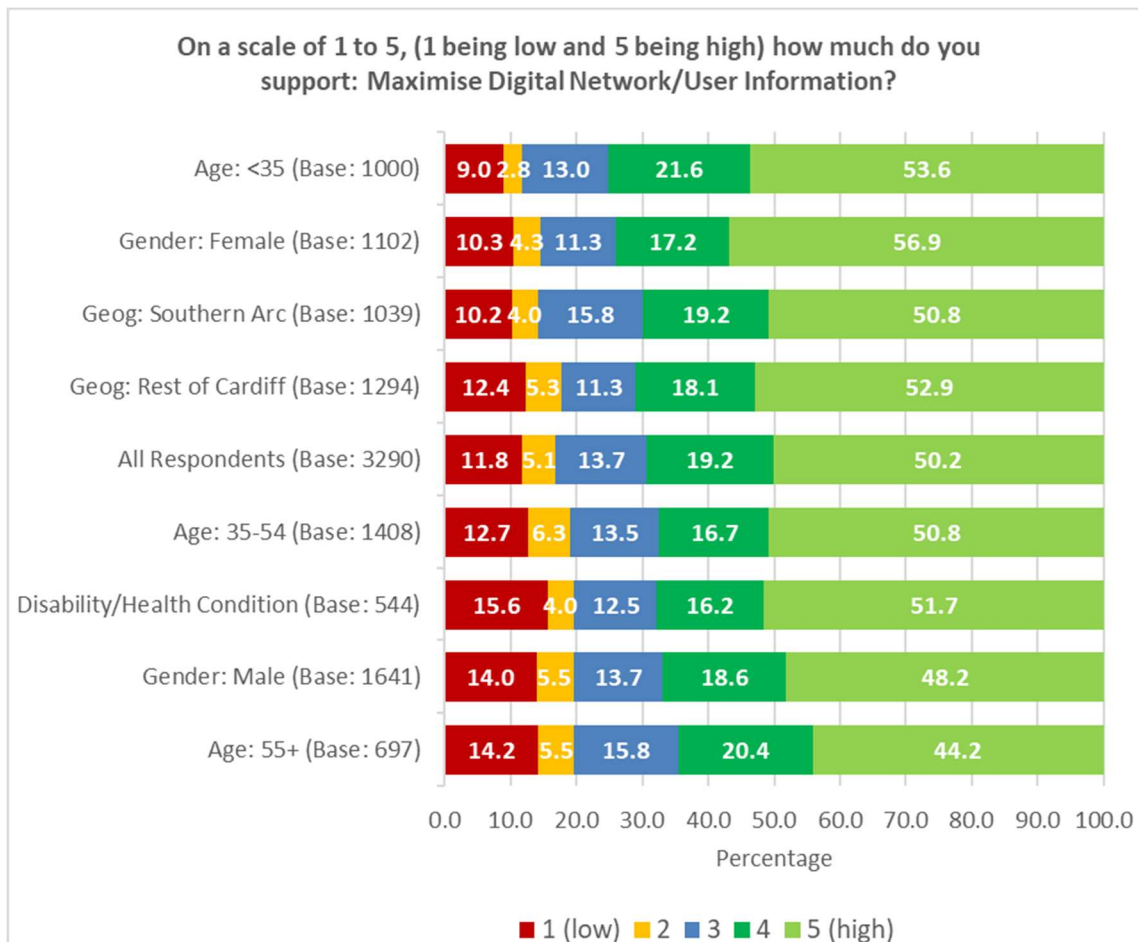### 16. Maximise Digital Network/User Information

In partnership with the operator of the South Wales Metro, we will be able to use technology to support an integrated ticketing system that will enable people to pay for journeys across various modes of travel using phones, cards and on-line accounts. People will be better able to plan their journeys using real-time information and previous journey information. This will give people more flexibility and the potential to create their own travel plans to suit their needs.

Seven in ten respondents (69.4%) expressed strong support (rated as 4 or 5) for the maximisation of the digital network.

This proposal was awarded an average score of 3.91 ranking it at 3/18.

How much do you support: Maximise Digital Network/User Information?
(Base: 3,290)

Average Score: 3.91

Score	Percentage
1 (low)	11.8
2	5.1
3	13.7
4	19.2
5 (high)	50.2

Differences between groups were small however support was found to be highest amongst younger groups opposed to older people.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Maximise Digital Network/User Information?

Group	1 (low)	2	3	4	5 (high)
Age: <35 (Base: 1000)	9.0	2.8	13.0	21.6	53.6
Gender: Female (Base: 1102)	10.3	4.3	11.3	17.2	56.9
Geog: Southern Arc (Base: 1039)	10.2	4.0	15.8	19.2	50.8
Geog: Rest of Cardiff (Base: 1294)	12.4	5.3	11.3	18.1	52.9
All Respondents (Base: 3290)	11.8	5.1	13.7	19.2	50.2
Age: 35-54 (Base: 1408)	12.7	6.3	13.5	16.7	50.8
Disability/Health Condition (Base: 544)	15.6	4.0	12.5	16.2	51.7
Gender: Male (Base: 1641)	14.0	5.5	13.7	18.6	48.2
Age: 55+ (Base: 697)	14.2	5.5	15.8	20.4	44.2

- The comments were supportive of technology being maximised to help commuters with travel planning, access to real time travel information and paying fares.

- Younger people were particularly keen to see a maximisation of smart technology. Respondents to the Cardiff Youth Council Survey suggested an integrated app providing real time travel updates and traffic news, real time bus and train information, active travel maps, event news and weather reports.

- Whilst digital technology is the preferred option of an increasing majority it is still not used universally. Respondents were keen that alternative forms of communication are also maintained commenting: "sometimes you can't beat face to face support".

"Sound like good ideas in theory but sometimes batteries die or things get broken. Sometimes you can't beat face to face support. A help desk, maybe in the bus station so it's easy to find?"
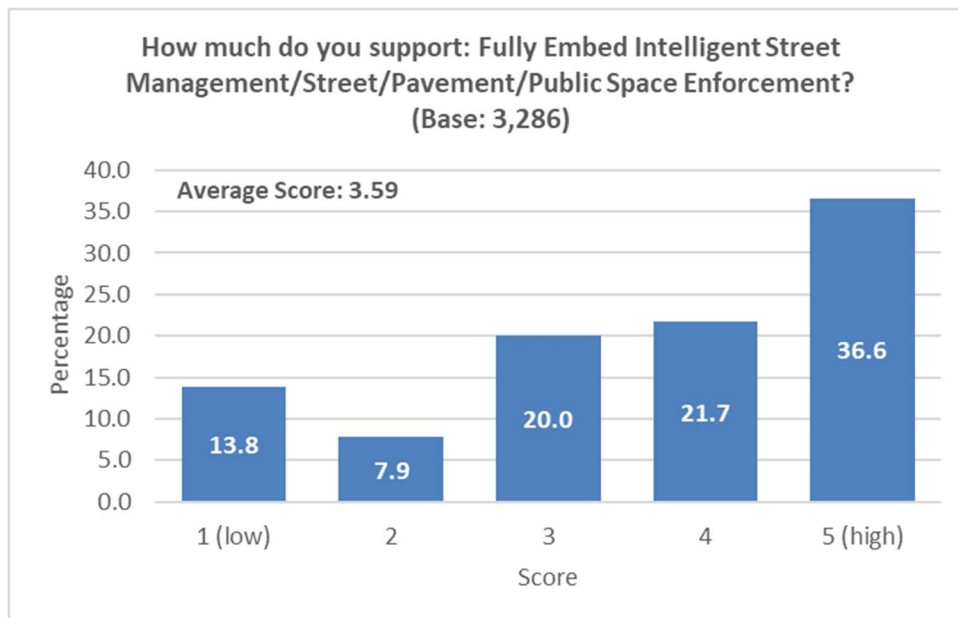*(Female, 25-35, Llanedeyrn)*

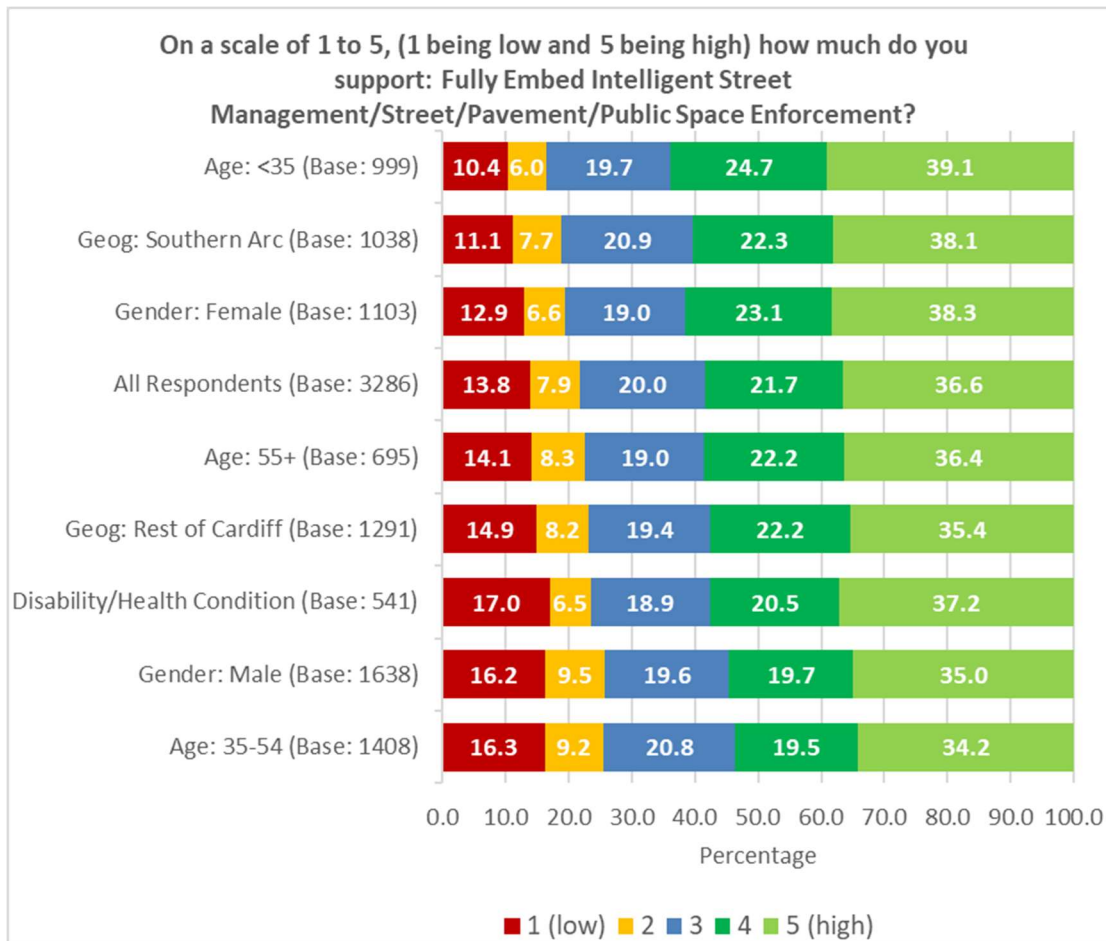## 17.   Fully Embed Intelligent Street Management

Building on the success of the parking monitors, we can ensure that streets are safer and ready to cope with the growth of electric and autonomous vehicles. We can ensure that drivers are not adding to congestion by searching for parking spaces when there are none and that drivers are not making streets dangerous through parking violations. We will be able to help drivers of electric vehicles find available charging points and manage the charging system so that there is a fair distribution of power for all. This could partly be achieved through improving our understanding of and support for our 'Internet of Things' network.

Three in five respondents (58.3%) expressed strong support (rated as 4 or 5) for the embedding of intelligent street management.

This proposal was awarded an average score of 3.52 ranking it at 12/18.

How much do you support: Fully Embed Intelligent Street Management/Street/Pavement/Public Space Enforcement? (Base: 3,286)

Average Score: 3.59

Score	Percentage
1 (low)	13.8
2	7.9
3	20.0
4	21.7
5 (high)	36.6

Analysis of the results by demographics revealed only minimal differences in opinion between groups.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Fully Embed Intelligent Street Management/Street/Pavement/Public Space Enforcement?

	1 (low)	2	3	4	5 (high)
Age: <35 (Base: 999)	10.4	6.0	19.7	24.7	39.1
Geog: Southern Arc (Base: 1038)	11.1	7.7	20.9	22.3	38.1
Gender: Female (Base: 1103)	12.9	6.6	19.0	23.1	38.3
All Respondents (Base: 3286)	13.8	7.9	20.0	21.7	36.6
Age: 55+ (Base: 695)	14.1	8.3	19.0	22.2	36.4
Geog: Rest of Cardiff (Base: 1291)	14.9	8.2	19.4	22.2	35.4
Disability/Health Condition (Base: 541)	17.0	6.5	18.9	20.5	37.2
Gender: Male (Base: 1638)	16.2	9.5	19.6	19.7	35.0
Age: 35-54 (Base: 1408)	16.3	9.2	20.8	19.5	34.2

Respondents were less supportive of technology being used to link to parking sensors feeling that this goes against the ethos of encouraging fewer journeys by car.

"Intelligent parking spaces technology just encourages people to bring their cars into the city centre - it does not encourage alternatives. Making things easier for people to drive in is not the solution."
*(Male 45-54, Grangetown)*
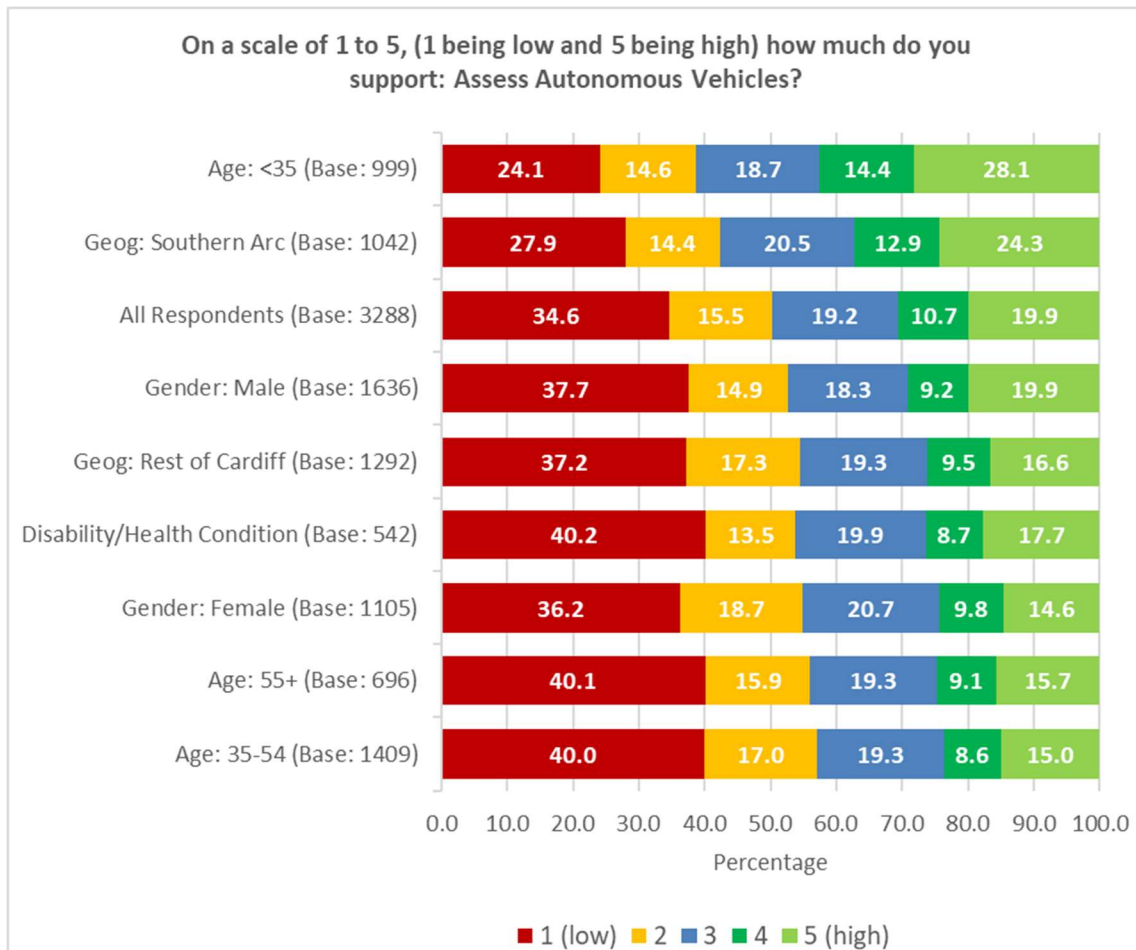
18. Autonomous Vehicles

Experts are predicting a growth of autonomous vehicles but no one is quite sure yet how they will operate in a city like Cardiff and what impact they will have. We are working with universities, industry and the UK Government to fully understand the implications and potential of this emerging technology and to ensure that it brings maximum benefit to the people and business of Cardiff. Cardiff could lead the way in automation and autonomous vehicle growth by, for example, providing the relevant digital connectivity in certain areas or asking partners to trial new technology on certain routes.

A third of respondents (34.6%) awarded a score of just one to this proposal. Just 30.6% expressed strong support (rated as 4 or 5) for autonomous vehicles.

This proposal was awarded an average score of 2.66 ranking it at 18/18, or the least popular of the 18 Big Ideas.
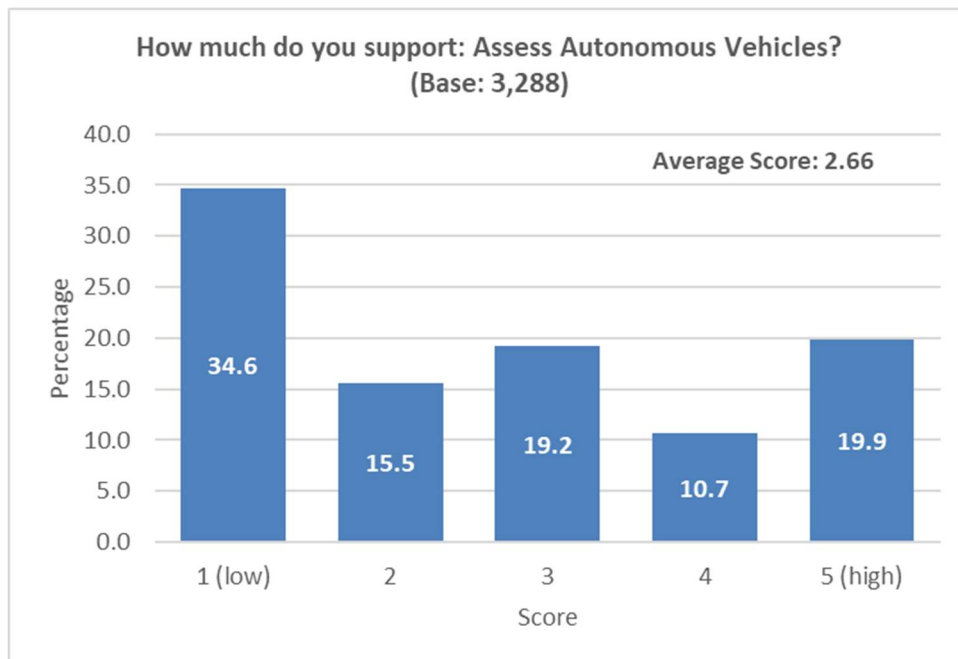
Analysis of the results by demographics revealed that young people are far more supportive of this proposal than the average respondent.

On a scale of 1 to 5, (1 being low and 5 being high) how much do you support: Assess Autonomous Vehicles?

	1 (low)	2	3	4	5 (high)
Age: <35 (Base: 999)	24.1	14.6	18.7	14.4	28.1
Geog: Southern Arc (Base: 1042)	27.9	14.4	20.5	12.9	24.3
All Respondents (Base: 3288)	34.6	15.5	19.2	10.7	19.9
Gender: Male (Base: 1636)	37.7	14.9	18.3	9.2	19.9
Geog: Rest of Cardiff (Base: 1292)	37.2	17.3	19.3	9.5	16.6
Disability/Health Condition (Base: 542)	40.2	13.5	19.9	8.7	17.7
Gender: Female (Base: 1105)	36.2	18.7	20.7	9.8	14.6
Age: 55+ (Base: 696)	40.1	15.9	19.3	9.1	15.7
Age: 35-54 (Base: 1409)	40.0	17.0	19.3	8.6	15.0

Percentage

■ 1 (low) ■ 2 ■ 3 ■ 4 ■ 5 (high)

Some uncertainty was expressed with regard to autonomous vehicles. Several respondents had concerns over the safety aspects of such vehicles. Others felt the concept to be too far in the future, preferring to prioritise improved to the traffic flow and public transport.

"Autonomous vehicles are a long way off. Fix the cycle routes and pot holes first. Get the infrastructure done and then think about what will go on it."
(Female 45-54, West Cardiff)

Do you have any other ideas, big or small, to help make Cardiff a smart city?

674 text responses were received to the questions relating to Cardiff as a smart city.

An analysis of a sample of the text responses indicates that:

- 52% of respondents supported maximising Digital Network/User Information, with 17% opposed and 31% unsure
- 27% of respondents supported Intelligent Street Management, with 41% opposed and 31% unsure
- 17% of respondents supported Autonomous Vehicles, with 45% opposed and 38% unsure.

The comments provided by respondents to this question show a number of common themes, including:

- Questions around the deliverability of big ideas and the need to get 'the basics' right
- Concerns about autonomous vehicles e.g. safety, congestion, readiness of technology, use of public funds, increasing car use
- Making user information widely available and payment as easy as possible (e.g. contactless)
- Not making parking/access for cars in central areas easier
- Potential impacts on groups less familiar/confident with technology e.g. older people, people without smart phones
- Cardiff should lead the way on autonomous vehicles.

5. <u>Conclusions and Next Steps</u>

The results of this survey will be used, alongside other sources of evidence, to inform the development of the city's new Transport and Clean Air Vision, which will be brought before Cardiff Council for consideration in November 2018.

This vision will set the priorities for the Council's comprehensive Transport and Clean Air Strategies, identify priorities for investment and help to change the way we move around a growing city for the better.

Appendix 1

Collective responses to the Green Paper

21 collective responses to the Green Paper were received, from a range of organisations:

BHF, Caerphilly County Borough Council, Cardiff By Bike, Cardiff Bus, Cardiff Civic Society, Cardiff Cycling Campaign, Cardiff Health, Social Care and Wellbeing Network, Cardiff Liberal Democrat Group, Cardiff North Labour Party Women's Forum, CPL, CTA, Diverse Cymru, Friends of the Earth, FSB, ICE Wales Cymru, Llandaff Society, Motorcycle Industry Association, North West Cardiff Group, Pentyrch Community Council, St Fagans Community Council, Vectos – on behalf of St David's Partnership

An analysis of the themes contained in the responses is provided below under key headings. The number of responses relating to each theme is provided in brackets e.g. Payment options must include cash and cards (1). The overall number of responses relating to each heading is also provided.

Theme 1 Metro & Buses

Cost and Ticketing

Integrated ticketing (10), including bus, train, cycle and car hire, plus tourist options (e.g. Hamburg model) (1)

Payment options must include cash and cards (1)

Cost of public transport (3), particularly for low income groups (1)

Cost implications for passengers, through higher fares as a result of providers purchasing cleaner bus vehicles (5)

Off-peak public transport discounts (1)

Bus travel should be free to the user (3)

Free travel on public transport days e.g. Traws Cymru (1)

Discounted travel for job seekers (1)

Total responses: 27

Network and Provision

Regional/cross boundary working (3)

Integrate Metro with NextBike (2)

More and better bus services (7), including night buses (1)

Integrate buses with Metro (1)

More direct routes with fewer changes (1)

Continuous loop bus lane around and into/out of the city centre (1)

Better Sunday services through Metro (1)

Linking bus services to green spaces and AONBs (1)

'Mesh' based bus network with more interchanges and cross-city services (1)

More bus priority measures (2)

Integrate Metro with new developments (1) and park and rides (1)

Infrastructure for buses services (e.g. RTI, shelters) (2)

Connectivity between different modes/parts of the network e.g. coach station, between trains/buses (2)

More capacity on trains, especially at peak times (1)

Electrification of all public transport (1)

Feeder bus services from suburbs to rail stations/city centre onwards (3)

Bigger bus station is needed (3)

Bus lanes not sufficient to encourage shift from car journeys to bus (1)

More partnership working between operators e.g. shared livery – TfL model (1)

Quality – cleanliness, reliability, safety (e.g. seatbelts) (2)

Better training for bus drivers e.g. being better informed about routes/stops etc, waiting for people to sit down before moving off, response to active travel users (2)

Improved bus/train services/frequencies, including for Sundays and event days (2)

Rapid Transit System needed in Cardiff and region (1)

Trams (1)

Total responses: 45

Information

Bus needs to be promoted (2) e.g. time credits/discounts (1)

Park and ride – limited success (1)

The journeys people are making need to be reviewed when planning services (3)

New Metro stations will change travel patterns – bus services will need to change as a result (1)

Accessible and offline information about the integrated ticketing system will be key (1)

Interactive maps/information and people to ask for information in key locations, not just mobile based information (1)

Clear information about changes to routes/stops at bus stops and in central locations (1)

Partnership working with schools/employers/universities to increase patronage (1)

Total responses: 12

Prepared by Cardiff Research Centre

Fleet

Electric /zero carbon buses (4)

Sustainability/environmental impact of alternative fuels (2)

Total responses: 6

Accessibility

Evidence indicates that car ownership reduces the likelihood of isolation; the design of the transport infrastructure will need to critically consider its place in not creating/adding unintended consequences (1)

Transport network must be fully accessible for all users (3) e.g. currently assistance for disabled travellers on trains has to be pre-booked (1), changes during rail improvement works often have negative impact on travellers with disabilities e.g. access to rail replacement buses (1)

Network might include community transport bays to enable the sector to be part of the overall network (1)

Impact of events, particularly for people with mobility issues (3), shuttle buses/other connections needed (1)

Audio and visual information is vital for people with sensory impairments (2)

The concessionary bus pass makes using different buses/providers easier (1)

Total responses: 11

Other

Impact of trams on cyclists (e.g. road space) (1)

Modal shift will reduce the number of cars on the road and the resulting carbon reduction will ease pressure to upgrade the bus fleet (1)

Total responses: 2

Theme 2 Active Healthy City

20mph/speed limits

More targeted speed limits preferable to whole city 20mph limit (1)

Speed limits should be self-enforcing (2)

Critically review evidence and statistics that indicate negative environmental impacts on 20 mph zones before implementing this approach further (1)

No evidence that 20mphs would increase use of public transport and active modes, only justifiable near schools at times chosen by individual schools (4)

Speed limits and speed reduction measures reduce road safety levels due to driver distractions (3)

Maintenance bigger priority than lower speeds (3)

Support 20mph limits but no clear evidence that they support use of public transport and walking/cycling (1)

Prioritise 20mphs around schools (1)

Public needs more information about the case for 20mph (1)

Support whole city 20mphs (2)

Impact of speed bumps on some medical conditions e.g. back/neck pain (1)

20mph limits may impact on rapid bus routes and key transport corridors (2)

20mph zones not effective (1)

Traffic calming increases emissions (1)

Total responses: 24

Network and Provision for active travel

Aligning/coordinating active travel routes with Metro/regional connections (4)

Provide alternatives first (2)

Active travel zones AND cycle superhighways needed (2)

Importance of access for buses in Active Travel Zones (1)

Traffic calming infrastructure needs to facilitate access for bus (1)

Connectivity – cycle superhighways with new developments (1), shared paths common in new developments (1)

Supporting facilities for cyclists (e.g. showers, lockers etc) in businesses (3)

Segregated cycle lanes (7)

Active travel zones shouldn't adversely impact flow of traffic (1)

Secure cycle parking (1)

Link up cycle and walking routes with better maps, aided by walking groups (1)

Proper lighting and possibly CCTV on walking routes and in underpasses to encourage everyone and particularly women to walk (1)

Driver education/awareness campaign – the reason for active travel zones, active travel etc (1)

Support for lower speeds and car free zones, but with alternatives in place first and exemption for blue badge holders/taxis (1)

Better signage/road markings (1)

Active Travel Zones need to be clearly defined (1)

Pedestrian access away from roads e.g. as in Llanedeyrn and Pentwyn (1)

Involve partners e.g. Pedal Power, Next Bike in launch of new routes (1)

Prioritise cycle route network development to where most people are cycling e.g. using Next Bike data (1)

More cycling provision for local journeys, not just into city centre (1)

City centre Active Travel Zone would make for a more attractive environment (1)

Car park management in city centre needs to be considered when reallocating road space for active travel e.g. location and use of VMS (1)

City centre not currently suitable for Active Travel Zone (4)

Appropriate maintenance for walking/cycling facilities (2)

Target Active Travel Zones (and/or pedestrian only zones) at high streets, schools and leisure destinations (1)

New schools – access by public transport/active travel should be key considerations (1)

Walking need more of an emphasis, especially for local journeys (1)

More NextBike bikes/docking stations etc (2) and adapted/child cycles (1)

Tackling pavement parking (1)

Pavement parking (1)

Segregated facilities for walking/cycling (2)

Total responses: 52

Information and incentives

Communication and engagement (1)

Regional travel planning advice/support (1)

Salary sacrifice/discounted public transport tickets/bikes (1)

Public health improvement is the key driver for behaviour change – positive opportunity not punitive measure e.g. employees in Netherlands paid to cycle to work (1)

Emphasise health benefits of active travel and contribution to addressing social problems (1)

Incentives for people not to use their cars (1)

Total responses: 6

Accessibility

Active travel not easy for all (e.g. ages, journeys) so will 'plateau' (1)

Role of buses for those not able to cycle (1)

Active travel zones must not exclude people with mobility issues/using disability cycles/children & families (3)

Ensure active travel infrastructure is accessible for all (1)

Different terminology needed for 'cycle superhighways' – doesn't imply facilities which are open to all users (1)

Total responses: 7

Charges

Consider imposing a congestion charge as Birmingham is now considering (1)

If charging, stepped charges rather than a flat rate (1)

Transparent use of charging incomes, including measures outside Cardiff to reflect income from commuters travelling into the city from neighbouring authorities e.g. park and rides (1)

Total responses: 3

Other

Social care commissioning needs a zone based approach to facilitate use of active modes of travel (1)

Moving traffic offences – the system needs to be responsive to blue badge holders and other extenuating circumstances (1)

Free short term parking in local communities/hospitals welcomed, more child/accessible spaces needed – recognising people with limited mobility but not eligible for blue badge (1)

Closing streets for play only during school holidays and outside schools hours – high levels of car parking in streets will obstruct play, damage to vehicles may ensue with a cost to the Council as a result (3)

Cleaner taxis encouraged through licensing system (1)

Addressing safety concerns e.g. through community policing, education (1)

Cycle training in schools (1)

Cyclist behaviour (e.g. cycling on footways, not using bells) (2), cyclists should be registered/insured (1)

Total responses: 10

Theme 3 Clean Air City

CAZ, Workplace Parking Levy and other charges

Support for WPL (2)

No WPL (4)

Parking levies waived for social care and other essential staff who have to travel between appointments and consideration of charities and small businesses (1)

Public transport should be excluded from penalty charges (2)

Income from charging (CAZ/WPL) should be ring fenced for transport improvements (4) – including community transport (1)

CAZ should target non-Cardiff residents (1)

CAZ should be supported by additional park and rides (1)

Support charging/prohibiting most polluting vehicles (1)

No congestion charge (2)

Need for cross-boundary continuity (1)

Phased approach to introducing changes (1)

Exemptions - hardship (3), blue badge (1)

Overall policy position that charging clean air zones are the most effective solution to poor air quality in most areas of high pollutants (1)

Charging is a regressive tax (1)

Congestion charge (1)

Real alternatives need to be in place before any charges introduced (1)

Support charging CAZ as quickest mechanism for reducing pollution (1)

WPL would be less effective than a CAZ in reducing pollution (1)

Promote alternatives to CAZ using signage and ensure charging system is robust to prevent non-payment (1)

Action on clean air needed now, through banning vehicles not introducing charging (1)

CAZ should be implemented if modelling shows is needed, but different models are available which would need to be considered (1)

Air pollution exclusion zones and idling bans e.g. around schools/hospitals (1)

Total responses: 35

Information

Clear communication (1)

Ensure that the public are well equipped with the information needed to understand the severe risks to health that air pollution poses (1)

Council unaware of the extent of the air quality problem (3)

More monitoring information, more publically available (1)

Promote economic benefits of clean environment (1)

Total responses: 7

Schools and workplaces

Impact of school run (1)

Green school transport fleet and lower costs (1)

Travel to school needs to be addressed (1)

Active travel targets – the agenda must initially focus on schools to reduce impact of school run traffic (1), targets should be revised to reflect improved provision/opportunities (1)

Public sector should use more technology to prevent unnecessary travel e.g. for meetings (1)

Walking buses for all primary schools (1)

More agile working to reduce need to travel (3)

More flexible working to facilitate active travel (1)

Active travel targets wouldn't be effective due to travel during working day (4)

Total responses: 14

Public transport

Cleaner bus fleet (2)

Funding required for cleaner bus fleet, which will have higher cost than conventional fleet (2)

Simple and cost effective network (1)

Need to address congestion through car free zone and better public transport (1)

Impact of buses and traffic congestion on central interchange (e.g. BBC car park) (1)

Free bus travel as a universal basic service for families (1)

Public transport can't compete with cheap car parking (1)

Reduced demand for car parking in city centre is an opportunity to reallocate space for active travel/public transport hubs (1)

Total responses: 10

Other

Canyon effect of high buildings (1)

Contribution of contractor vehicles to pollution e.g. idling, inconsiderate parking (1)

Funding for parking assistance app to be diverted to support active travel/public transport (1)

More free cycle training/courses (1)

Air pollution levels should be criteria in choosing new cycling routes/superhighways (e.g. Rumney, Llandaff) (1)

More green space in the inner city (1)

Maintain the full green belt (1)

Extend street planting schemes (1)

Community transport minibuses reduce the number of single occupant vehicle trips made (1)

Dispersal of traffic may spread pollution (1)

Reducing levels of Air Pollution in shopping streets and neighbourhood centres (1)

Review visitor parking permit system to prevent abuse (1)

Consider regional impact (1)

Close city centre car parks/closing at peak periods (1)

EV charging network across the city, including park and rides (1)

Total responses: 15

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Theme 4 Work and Culture

Public Transport

More park and rides (6), including evening/weekend services (3)

Park and rides don't encourage modal shift (1)

Park and rides need partnership working with employers (1)

Park and rides need to be part of a wider transport strategy (1)

Re-introduce buses to St Mary Street to promote retail environment (1)

Bus priority improvements for South East Corridor (1)

Improvements to Station Terrace/Churchill Way for buses (1)

Central bus station urgently needed (2)

Cardiff Parkway construction is a key measure of success (1)

Park and Ride facilities must be accessible for all users (1)

Park and ride proposals only refer to commuters, not all people needing to travel (1)

Total responses: 20

South East Corridor

No EBL – increase pollution and congestion (1)

EBL completion would improve air quality for South East corridor (1)

Developing the South East corridor could potentially bring in more pollutants (1)

Support SE Corridor proposals (1)

More NextBikes in east of city e.g. health/leisure centres (1)

Total responses: 5

City centre and local centres

High quality capital city centre environment which is suitable for everyone, including those with mobility issues, and which is easily accessible using public transport (2)

Improving local facilities for positive impacts in local communities and reducing city centre congestion (1)

Proposals would damage, not enhance, city centre (4)

Maintain access by car in more managed/efficient way – large number of trips are multiple occupancy (1)

Promote economic activity across the city, not just the centre e.g. local high streets (2)

Connecting inner city suburbs and surburban areas to avoid having to drive through city centre (1)

Consider preventing provision of any new car parking spaces in the city centre (1)

71

Fast walking lanes in city centre (1)

Clear signage re where cycling permitted/not in city centre (1)

Total responses: 14

Other

Regional connectivity (4)

Off-peak access to all vehicles in bus lanes/car sharing lanes (2)

Using examples/solutions from other cities e.g. Bristol, London (1)

Promotion of alternatives (1)

More provision for walking/cycling e.g. cycle parking (1), dropped kerbs (1)

Indicators to measures walkability (1)

Council system to analyse driving of council fleet vehicles (1)

Total responses: 11

Theme 5 The Future for Cars

Car clubs/sharing

Regional approach to car clubs and mobility as a service (1)

Car clubs would need thousands/large numbers of vehicles/parking spaces to be effective (4)

More car share/car club options (4)

Help for businesses re car share/car club options (3) and car free days (1)

Promote car sharing from outside Cardiff, especially rural areas (1)

Total responses: 11

Alternative fuels and vehicle charging

Cars are essential and people will continue to use them, cleaner vehicles needed (1)

Charging technology developing quickly, charging network may be out of date when installed (4)

Greener Council fleet (1)

Innovation needed from private sector on fuels/charging provision (1)

Ensure renewable sources of energy are used for vehicle charging (2)

Comprehensive charging networks (8), including as a requirement in new developments through planning process (1)

ULEVs still polluting (3)

Impact of charging infrastructure on active modes (1)

AV/EV are the future – Cardiff needs to lead (1)

Potential for hydrogen (2)

Council responsibility to educate re pressure of EV charging on national grid (1)

Total responses: 26

Public transport

Regional improvements to public transport is priority (1)

Improve public transport options and costs (1)

Total responses: 2

Other

Link with health boards – client/patient transport (1)

Free smog tests to inform drivers how polluting their cars are (1)

More intelligent residents parking system e.g. area-based permits (1)

Behaviour change needed to address congestion/pollution (1)

Total responses: 4

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Theme 6 Smart City

Digital technology and information

Expanding use of digital technology (3)

Report and monitor air pollution (1)

Integrate with Metro (1)

Fully support (1)

TfW role in integrated ticketing (1)

Improved way finding in city centre for bus services (1)

Improved and modernised real time information system (3)

Role of technology in mitigating impact of school run (1)

Fully integrated public transport timetables (2) and information (1)

Ensuring access requirements are considered when maximising use of technology e.g. considering alternatives to internet based systems (1)

App based information (3)

Driver information e.g. parking spaces at Park and Ride sites, air pollution levels (1)

More/better VMS (1)

More responsive signals (e.g. changing timings at peak times) (1)

Cardiff needs more smart technology (1)

Provide sensors to alert re dangerous parking (1)

Monitoring congestion/pollution (1)

Total responses: 24

Autonomous Vehicles

Any autonomous bus system must be fully accessible (1)

Focus on improving other infrastructure rather than facilitating AVs (1)

AVs – safety concerns, technology still needs further development (1), won't reduce congestion (5)

AVs could support more efficient use of road space but shouldn't impact on customers and visitors to the city centre (1)

Total responses: 9

Other

Minimum standard for taxi vehicles based on a positive customer experience - size, safety, cleanliness (1)

Better signage/art to promote walking/cycling (1)

Improved signalling for pedestrians/cyclists (1) e.g. lights for cyclists (1)

Total responses: 3

Other Themes

Timescales and funding

Funding (1)

Timescale – urgent action needed (1)

Where is funding coming from (1)

Timing infrastructure with new developments (1)

No masterplan, including for funding (1)

White Paper needs to provide clarity on what is being taken forward (1)

Total responses: 6

Other modes/provision

PTW should be exempt from any charges and can contribute to reducing congestion and air pollution and addressing social exclusion (1)

Growth of delivery vehicles in residential areas (2)

Water transport (3)

Links to Cardiff Airport (1)

M4 Relief Road (1)

Flyovers (e.g. Butetown tunnels/EBL (1)

Greening taxis and HGVs (2)

Total responses: 11

Other

Non-smokeless fuels and unseasoned wood are significant contributor to air pollution (1)

Needs more nuanced view of different groups (e.g. children/elderly) and the particular issues they encounter with travel (1)

Paper welcomed and vision applauded (1)

Car driver shouldn't be considered last in planning (1)

Cardiff should be an exemplar for other Welsh cities (1)

Total responses: 5