

Reducing car kilometres 20% by 2030: public perceptions

 **Dr Llinos Brown and Professor Jillian Anable, University of Leeds**

December 2021

<http://dx.doi.org/10.7488/era/1745>

1 Executive summary

Scotland has a legal requirement to achieve net-zero greenhouse gas (GHG) emissions by the year 2045. Achieving this commitment requires reductions in GHG emissions across all sectors. Domestic transport is the largest source of net emissions, accounting for 25% of Scotland's GHG emissions¹. To help reduce emissions in the transport sector, and meet the net-zero target, in 2020² the Scottish Government committed to a 20% reduction in car kilometres (km) by 2030³.

This report examines public perceptions towards the 20% reduction commitment. It details findings from six two-hour focus groups conducted virtually between 26th July and 4th August 2021, with members of the public from across Scotland. In total, 34 people living in a range of different geographical settings participated in the focus groups. Participants were a mix of car drivers, aspiring car drivers⁴, public transport and active travel users.

1.1 Findings

Public opinions concerning the 20% reduction commitment

- Most participants were not aware of the Scottish Government's commitment to reduce car km by 20%. When provided with the details, the majority supported it. Those who were not in support, wanted more details.
- Some participants thought the commitment was a good idea but did not think they would be able to change their car use. Some changed their views towards the commitment during the focus group; most who changed views thought it would be easier to achieve.

Adapting journeys

- Most participants talked about stopping journeys or changing the mode used to conduct the journey, rather than adapting any frequency of travel, or location where tasks are completed, or opting for multi-modal options.

¹ <https://www.gov.scot/publications/scottish-greenhouse-gas-statistics-1990-2019/pages/3/>

² <https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/>

³ Based on 2019 levels.

⁴ Looking to get a car in the next two years

- For some journeys, participants suggested they could switch from using a car. These journeys included: replacing a short local car journey with active travel; changing the commute by a continuation of working from home or increasing the frequency of working from home; and car sharing for some journeys, particularly for the commute.
- Car journeys, which participants felt they were unable to change, included: grocery shopping; visiting friends and family who live longer distances away; camping and leisure journeys particularly those involving equipment, and destinations in rural Scotland; trips with young children; and journeys conducted in winter when weather conditions worsen.
- Grocery shopping was a journey that attracted polarising views. Some participants were adamant they could not adapt; others expressed an interest in online shopping, or buying less but shopping more frequently to enable them to shift from car use to active travel or public transport

Enabling measures

There were lots of comments relating to public transport and suggestions of improvements which participants thought needed to be in place to enable them to use their car less and public transport more (see Section 7.1). These focused around the need for services to be: accessible for all; affordable and competitive with other transport options; better connected with other services; and safe.

Additionally, participants suggested they needed:

- A central place for information relating to public transport and alternatives to using the car, and knowledge on cheapest and most economical route options.
- Improvements in active travel infrastructure, particularly in rural areas, and route suggestions for active travel options across Scotland.
- Information on the impact of deliveries and taxis to enable them to make informed choices regarding the impact of a given journey on GHG emissions.
- Encouragement to allow a continuation of working from home and prompts for lift sharing and carpooling with colleagues and friends.
- Increase in services coming to their homes, and a reduction in cost for deliveries

There were some specific rural area needs which related to a reduction in the cost of public transport, taxis and wider services, and improvements in internet infrastructure.

The role of car-sharing schemes

- Most participants were not aware of any car clubs or car sharing schemes operating in the area where they live.
- Participants were easily confused with lift-sharing and car-sharing schemes, with lift sharing being viewed more negatively than car sharing. Additionally, there was a lack of understanding as to what car clubs and car sharing schemes are; participants need more information to enable them to decide whether they may be an alternative to private car use.
- When deciding whether to use car clubs or car-sharing schemes participants stated it depended on cost of memberships, availability, location, and availability of different size vehicles (including vans).
- Participants provided several examples where car clubs and car sharing schemes could be used including leisure trips and longer distance trips where public transport does not serve the whole journey (further examples in Section 6.3).

Communication and messaging

Participants felt they experienced lots of mixed message regarding car use and GHG emissions. These include:

- Messaging to encourage public transport use, but public transport ticket prices continuing to increase.
- Lots of adverts on television for holidays, low-cost flights, and new cars.
- Uncertainty whether this is truly a climate crisis. COVID-19 has demonstrated the money and resources for a crisis are available. However, the climate crisis has not received the same attention.

In terms of future messaging, participants said they wanted to see clear, honest and concise information from government, for example, on:

- What has already been done to accommodate the 20% reduction commitment and what will be done in the future to help the public achieve this?
- What is the Scottish Government doing to reduce its business car km? And how does this fit into other government agendas, targets and commitments?
- What are 'others' doing? (further information in Section 8.4)
- What difference will this make? And how will the public know if/when the reduction commitment is achieved?

Participants also said they wanted to see messaging coming from scientists and credible experts in the field, an independent climate body, and celebrities and/or social media influencers.

It was noted during the focus groups that participants easily confuse the 20% reduction commitment with the phase out of petrol and diesel cars by the year 2030, not realising these are two different commitments.

Additional comments

As well as the above direct points on participants' suggestions of what needs to be in place to help them reduce their car use, what messaging they would like to receive and from who, the researchers make the following additional observations:

- Participants wanted to see a 'joined up' approach, with information from Scottish Government on how the 20% reduction commitment fits in with other targets to address the need to meet the net-zero GHG emissions targets.
- Participants wanted to know what else they can do to reduce their GHG emissions in their homes, in the goods and services they purchase, and in day-to-day activities.
- Participants agreed that something needs to be done to reduce GHG emissions from transport and wider sources.
- Participants rarely talked about walking as a mode of travel. At the start of the focus groups participants were asked to describe the transport options available to them in their local areas, and not many participants mentioned walking. However, during the focus groups several participants did highlight how they walked to various destinations to conduct activities.

1.2 Recommendations

The following points summarise the key recommendations for Scottish Government (further details in Section 9.1) from the findings of the focus groups. For a number of recommendations other players are also likely to have an influential role too (e.g. local authorities, employers).

1. Develop public education and promotional campaigns that demonstrate the ways people can adapt their current car use.

2. Provide a central place for information on transport options available in each area including bus, train, coach, bike sharing schemes, car clubs, walking and cycling routes.
3. Provide regular 'reducing GHG emissions' briefings to highlight what is being done to: facilitate the public in reducing GHG emissions; demonstrate what is being done within Government to reduce GHG emissions; and promote what businesses (including transport operators) are doing to reduce GHG emissions.
4. Reduce the cost of public transport to be more competitive against the cost of cars, introduce integrated ticket options with other public transport and car clubs, and/or incentives to use public transport.
5. Encourage the public and workplaces to continue with some adaptations made during COVID-19, such as working from home, flexible working hours, less business travel, staying more locally and adaptations to frequency of grocery shopping.
6. More research is needed on the impact of deliveries, and their GHG emissions, with the aim of developing clearer messaging to inform public decision-making on deliveries.
7. Continue to improve internet and active travel infrastructure in rural areas.
8. Ensure car clubs are accessible to young and less-experienced drivers who may be looking to become car owners in the future.
9. Examine the cost of public transport and taxis in rural areas and align this more closely with urban areas.
10. Ensure education and promotional work communicates clearly that the 20% reduction in car km is distinct from, and additional to, the commitment to phase out the sale of new petrol and diesel cars and vans.
11. Encourage schools to promote active travel for the school run.
12. Encourage workplaces to promote car sharing and low carbon means of travel for commuting.

The focus group findings demonstrate how members of the public want information to be evidence based and 'backed by science'. Where Scottish Government does not currently have sufficient evidence-based information to provide enabling measures, public information or messaging campaigns, we recommend further research and the commissioning of desk-based evidence reviews and tailored research in a Scottish context. This includes, for example, the topics of the impact of deliveries and taxis on reducing GHG emissions, and the role of car clubs in reducing car kilometres, with a focus on 'aspiring car users'.

Contents

1	Executive summary.....	1
1.1	Findings.....	1
1.2	Recommendations	3
2	Introduction	6
2.1	Research purpose and objectives.....	6
3	Methodology	6
3.1	Focus groups.....	6
3.2	Recruitment, participants and geographical considerations	7
3.3	Participants and their travel characteristics.....	8
3.4	Geographical considerations	9
3.5	Pre-focus group survey	9
4	Current transport links.....	9
4.1	Views on existing transport options	9
4.2	COVID-19.....	11
5	Public perceptions towards 20% reduction in car km commitment...12	
5.1	Views on the 20% reduction commitment	12
5.2	What journeys could participants change or not change?	14
5.3	Difference noted between groups.....	16
6	Car clubs and car-sharing schemes.....	17
6.1	Awareness of car clubs and car-sharing schemes.....	18
6.2	Willingness to use car clubs and car-sharing schemes.....	19
6.3	Where car clubs and car-sharing schemes could be used.....	21
6.4	Alternative to car ownership	22
7	What needs to be in place.....	22
7.1	Public transport	22
7.2	Information and education	24
7.3	Active travel infrastructure	25
7.4	School runs	26
7.5	Encourage more working from home.....	26
7.6	Increase in services coming to participants' homes	26
7.7	Lift sharing and carpooling.....	27
7.8	Rural area needs.....	28
8	Messaging the 20% reduction in car km.....	29
8.1	Current messaging	29
8.2	Future messaging.....	30
8.3	Who messaging comes from?	31
8.4	Transport and net zero	32
9	Conclusion and recommendations	32
9.1	Recommendations	33

2 Introduction

The Scottish Government has committed to achieving a net-zero GHG emissions target by 2045⁵. To achieve this, a pathway to achieving net zero across all sectors was published in the updated climate change plan of December 2020⁶. The transport sector (including international aviation and shipping) currently accounts for 29% of Scottish emissions⁷, the sector with the largest single contribution. To address the need to reduce GHG emissions from transport, the Scottish Government committed to reducing car km by 20% by the year 2030⁸; this pledge is in addition to the phasing out of petrol and diesel cars and vans by 2030 and the increase in electric vehicle uptake. This approach demonstrates a coupling of both technological and behavioural solutions to achieve net-zero GHG emissions by 2045.

2.1 Research purpose and objectives

The purpose of this research was to gain an understanding of public attitudes to the Scottish Government's 20% reduction in car km target. The specific objectives were to understand:

- Current opinions of the 20% reduction in car km target.
- What journeys people are willing, or not willing to adapt.
- What the public believe needs to be in place to assist them with meeting the target.
- If, and how car-sharing schemes can assist the public in meeting the target.
- What messages the public want to see to encourage them to adapt their travel behaviours.
- Who and where messages and communications on the 20% reduction commitment come from.

Early findings from this work⁹ detailing public attitudes and opinions towards the 20% reduction commitment have been included in Annex A of the recently published route map to achieving the 20% reduction commitment¹⁰. The findings in this report will be useful for Transport Scotland in the implementation of the interventions in the roadmap. They can also assist other Scottish Government departments, along with local governments, to develop strategies to achieve net-zero emissions by 2050 and inform how to influence public behaviour change.

3 Methodology

This section outlines the methodology used to address the research aim and objectives.

3.1 Focus groups

This report draws on findings from six focus groups which took place virtually on Zoom between 26th July and 4th August 2021. Each focus group was approximately two hours

⁵ Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

⁶ Scottish Government (2020) Update to the Climate Change Plan 2018-2032: Securing a Green Recover on a Path to Net Zero

⁷ <https://www.gov.scot/publications/scottish-greenhouse-gas-statistics-1990-2019/pages/3/>

⁸ Base level 2019 car km

⁹ <https://www.climateexchange.org.uk/media/5094/cxc-summary-report-scotlands-20-car-kilometre-reduction-target-what-needs-to-be-in-place-october-21.pdf>

<https://www.climateexchange.org.uk/media/5092/cxc-summary-report-public-perceptions-of-car-clubs-car-sharing-oct-21.pdf>

¹⁰ Transport Scotland (2022) Reducing car use for healthier, fairer and greener Scotland: A route map to achieve a 20 per cent reduction in car kilometres by 2030

in length and attended by three to seven members of the public (more details in Table 1). To gain views from both car drivers and future car drivers, attempts were made to recruit members of the public from both groups. Focus groups were conducted in the evenings between 6pm and 8pm.

Table 1: Summary of focus group participants and associated urban rural classification

Focus Group	Date	Attendees	No. Aspiring Car Owners*	6-Fold Urban Rural Classification
Glasgow Semi-Urban	26 July	6	2	2 and 3
Glasgow Urban	27 July	7	2	1
Aberdeen Semi-Urban	2 August	7	2	2 and 3
Aberdeen	4 August	7	2	1
Rural 1	28 July	3	0	5 and 6
Rural 2	3 Aug	4	0	5 and 6

*Aspiring car owners – participants who are looking to become car owners in the next two years

The authors of this report facilitated the focus group, with Dr Llinos Brown acting as the primary facilitator. Sessions were recorded and transcribed, with analysis being conducted in NVivo.

3.1.1 Limitations

This research utilises the qualitative research method of focus groups. Focus groups allow participants to describe and explain their opinions, beliefs, and perceptions. They allow researchers to develop semi-structured open-ended questions and allow participants to answer these questions in their own way, with flexibility to explore topics outside the direct questions. Limitations of this approach include:

- Sample size representation. As explained in Section 3.2 recruitment was conducted based on a sample quota set by the researchers. This aimed to gain a range of viewpoints but did not seek to be a representative sample of the Scottish public.
- Small sample size. Focus group data provides rich data from the participants involved but as is common with most focus group research the sample size is small (n=34).
- Recruitment to rural focus groups was limited. Various agencies were contacted to assist with recruitment but rural Scotland were out of their catchment areas. Thus, as detailed in Section 3.2, recruitment for the rural focus groups was combined with an existing COVID-19 Transport Scotland telephone survey. This recruitment method restricted the opportunity to gain views from ‘aspiring car owners’ from rural areas.
- Focus groups were conducted in the evenings which may have restricted some members of the public from joining.

3.2 Recruitment, participants and geographical considerations

To limit any participation biases, during recruitment participants were informed the focus groups were themed around how travel has been impacted due to the pandemic, and feelings towards car use.

QA Research, and AECOM acted on behalf of The University of Leeds to recruit participants for the focus groups:

- QA Research recruited participants for the four focus groups centred around Glasgow and Aberdeen. A sampling quota was specified by the University of Leeds which stated:
 - Recruit a total of 7 participants for each focus group, a mix of genders and age bands. At least 2 participants to have children under 18 in the household. 5 participants to be car drivers, 2 participants to be aspiring car owners¹¹. Minimum 3 x working participants, minimum 3 x not working participants (1 of which must not be retired).
- AECOM recruited participants for the two rural focus groups. This recruitment process was linked to Transport Scotland’s COVID-19 attitudes telephone survey which is conducted by AECOM on behalf of Transport Scotland¹². Participants were asked at the end of the COVID-19 attitudes telephone survey if they would like to participate in this research. AECOM identified which of these participants were located from rural classifications 5 and 6 (n=14). Participants were then re-contacted by AECOM, inviting them to join a focus group via Zoom.

As seen from Table 1 not everyone who was invited to participate in the focus groups joined in the sessions. There were several no shows on the evening of the sessions.

3.3 Participants and their travel characteristics

In total 34 participants participated in the focus groups. A summary of participant demographics is presented in Table 2. Participants were not directly asked their income profile or disability status, but during the focus group 1 participant shared that they had health mobility issues and were registered disabled, and another participant shared they were currently unable to drive due to health reasons.

Table 2: Summary of gender, age and work status of focus group attendees

Gender		Age		Work Status	
Female	= 17	Under 25	= 6	Part-time work	= 3
Male	= 17	25 – 34	= 5	Full-time work	= 19
		35 – 44	= 8	Retired	= 4
		45 – 54	= 3	Student	= 5
		55 – 64	= 7	Other	= 3
		Over 65	= 5		

Travel characteristics

The 34 participants consisted of:

- **Eight aspiring car drivers:** five of which were regular public transport users, two were occasional public transport users, and one who rarely used public transport and travelled by either borrowing a friend’s car or cycling. One regular

¹¹ Aspiring car owners – participants who are looking to become car owners in the next two years

¹² Transport Scotland have been monitoring transport and travel attitudes during the COVID-19 pandemic via a public attitudes telephone survey conducted every 1-3 months. More information available here: <https://www.transport.gov.scot/publications/?q=attitudes&topic=63625>

public transport user and one occasional public transport user also reported cycling regularly.

- **Three regular multi-modal users** who had a car, and could drive, but also used public transport at least twice a week.
- **Twelve consistent car users** who mostly used the car but occasionally use the train or bus either to access city centres, or when they cannot use the car either due to other members of the household using it, or when not able to drive for example, for nights out. 1 of these users did report occasionally using NextBike cycle hire scheme in Glasgow.
- **Eleven avid car users** who do not use public transport (or reported using it less than once a year) and do not cycle.

3.4 Geographical considerations

To ensure this research gained views from both rural and urban areas, a recruitment strategy was developed which recruited members of public from different areas of the Scottish Government 6-fold Urban Rural Classification¹³.

QA Research were provided with maps of Aberdeen and Glasgow, and surrounding areas, which identified which areas were in the urban-rural classifications 1, and 2 and 3. Using this map QA research recruited participants from these locations for the relevant focus group.

AECOM were provided with postcodes from urban-rural classifications 5 and 6. With this information they compiled a list of participants who consented to be involved in further research and lived in the locations specified.

3.5 Pre-focus group survey

Ahead of the focus group, participants were asked to complete a travel diary survey which focused on the week before the focus group. The survey asked participants frequency of using different transport modes, and reasons for car journeys. Additionally, the survey asked car drivers what their pre-pandemic annual mileage was, and their annual mileage over the past year. The purpose of these surveys was to provide the facilitators with background information on the participants travel behaviours, and provide an indication of each participants annual mileage (if they had a car),

4 Current transport links

Prior to asking views on the 20% reduction commitment, focus group attendees were asked for their views on the transport options currently available to them and what could be improved to make it better for them.

4.1 Views on existing transport options

Most comments were fairly neutral, with participants explaining what options they had available to them with no remarks on whether they were satisfied or dissatisfied with the options available to them.

There were some participants who commented with **positive** comments, using phrases such as 'good' or 'happy'. All these comments came from participants living in urban and semi-urban locations. The comments focused on:

- Having **lots of different transport options** available locally.
- **Cycling** being faster than other means of transport.

¹³ Scottish Government. (2018) Scottish Government Urban Rural Classification

- Availability of **hire bike services** in Glasgow (NextBike).
- **Bus services being direct** and taking them where they want to go.
- Good **frequent bus and train services**.
- Train and bus services being **affordable** for the regular journeys being conducted (£3 return).
- Having **access to a railcard and bus pass** that allows affordable and frequent travel.
- **Integrated ticket payment options in Aberdeen** - a participant in Aberdeen praised the option to use their debit card as a method of payment. They explained how it was easy to use and they liked the fact it only charges for one ticket even if using multiple buses in one day, which saves them money compared to buying individual tickets.
- **Free travel for people under 22** – this Scottish Government initiative was announced during the week of the focus groups and was brought up by some of the participants. Where it was mentioned, participants generally supported this scheme, liking how it would make public transport more accessible for younger people and families.
- **Golden Bus by Scottish CityLink** – this is a service which takes passengers from Glasgow to Aberdeen, and Glasgow-Aviemore-Inverness. Participants who had used this service spoke very fondly of it; they liked the luxury provided and the affordability of the service.

Participants who had access to railcards and bus passes that allowed either free, or cheaper travel had a greater level of satisfaction with public transport services and viewed public transport services more positively than participants who did not have access to these cards, or did not use public transport regularly.

Those that responded expressing dissatisfaction commented on:

- Lack of bus services.
- Buses being infrequent or often unreliable.
- Trains being infrequent.
- Existing bus services connecting to other services and wider existing public transport routes.
- Roads in Aberdeen not being cycle friendly due to road surfaces and road width.
- Safety on buses (relating to COVID-19 transmission).

Note: The question wording asked about ‘transport options’, however the authors noted that when participants answered the question they immediately commented about bus or train services in the area. Some car drivers then went on to talk about using the car.

Participants rarely commented about walking, but it was noted later in the focus groups that some did speak about ‘walking more in the future’ and made comments on how much they currently walk. The participant travel diaries completed before the focus group also indicated that 56% of focus group participants walk at least 3 times a week as a mode of travel, but this was not mentioned by participants during the focus groups. This differs to participants who cycle regularly mentioning cycling.

4.1.1 Cost of using the car

During the focus groups it was noted that participants often spoken about the cost of public transport but did not comment on the cost of driving, with the exceptions of the cost of parking in some city centres, and one participant commenting on how cycling is cheaper than driving a car. As noted in section 7.6 some participants perceived the cost of receiving some shopping deliveries as being expensive (£5) but there was no mention of the current cost of using a car for grocery shopping. There were no comments in the

focus groups about the cost of car ownership in terms of wear and tear of the car, fuel costs, servicing, insurance and tax. However, it should be noted the focus group questions did not ask about the cost of car, and as noted earlier most people when asked about the travel options initially spoke about public transport and commented on services, with little mention of satisfaction with car driving.

When participants commented on electric vehicles, there was a general lack of awareness of the cost of owning a private car. The focus group questions did not directly ask about electric cars, but when they were raised several participants commented how they perceived electric cars to be expensive, with some participants claimed fixing electric cars was a lot more expensive than petrol or diesel cars. However, what many participants failed to mention was how the day-to-day running costs of electric cars is often cheaper than petrol and diesel cars with car tax exemptions and minimal servicing requirements.

4.2 COVID-19

COVID-19 is still impacting how some people travel, and the public attitudes towards travelling by different transport modes. Some participants commented how they had noted some public transport services had not returned to what they were pre-pandemic. Others commented how they still feel very anxious in shared spaces with other people, and due to this they have anxiety of using public transport currently and in the future. Additionally, some participants have found alternatives to public transport during the COVID-19 pandemic and have stated they are sticking with these alternatives, for example, using the car for family trips, rather than using the bus or train. Participants also spoke about changes to their shopping behaviours which will be discussed more in Section 5.2.3. Although the challenge of getting non-regular public transport users to use public transport in the future may be far greater than it was pre-pandemic there are lots of opportunities to encourage people to continue with COVID-19 adaptations (further details in Section 7).

4.2.1 Annual mileage

It is important to note, in the pre-focus group survey, car driving participants were asked to report their mileage pre-pandemic, and during 2020 (during the pandemic)¹⁴. Results show approximately 25% of participants reported a reduction in their annual mileage by at least 50% during the pandemic, and nearly 50% reported some reduction in their annual mileage¹⁵ during the pandemic (Figure 1).

¹⁴ Participants were provided with the link <https://www.gov.uk/check-mot-history> to encourage them to report accurate mileage

¹⁵ The question asked participants to select different mileage brackets, so we are unable to calculate exact percentage reductions. Where we are confident at least 20% reduction has occurred this has been reported.

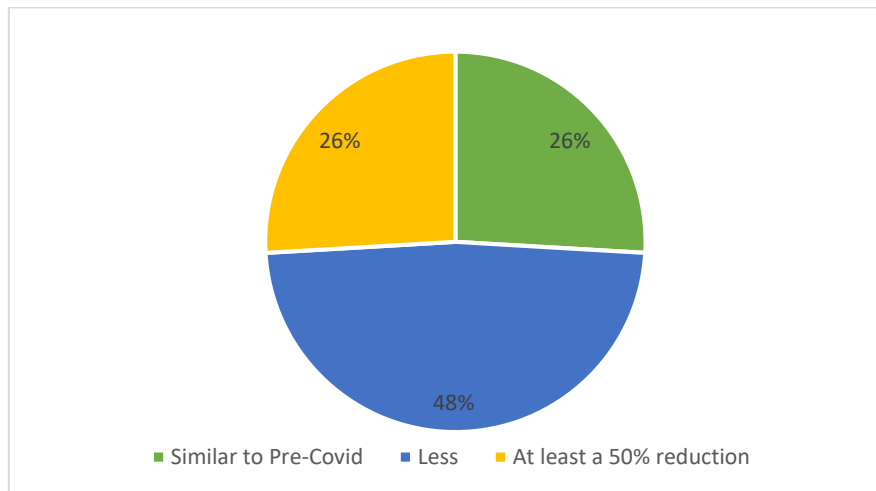


Figure 1: Change in participant's annual mileage comparing during the pandemic (2020) to before the pandemic (n=27)

5 Public perceptions towards 20% reduction in car km commitment

During the focus groups, participants were asked to complete a poll asking whether they were aware of the 20% reduction target. Most responded with 'no'. Where participants answered 'yes' they were asked what they understood about the commitment and where they had acquired the information. Of the 11 participants who answered yes, when prompted, most commented on the phase out of petrol and diesel cars by the year 2030, or how the reallocation of road space to pedestrians and cyclists in response to the pandemic was due to the commitment. Only three participants had an accurate understanding of the 20% reduction commitment; these participants either worked for local government, followed Scottish politics closely or were university students who had recently completed a project on sustainability.

5.1 Views on the 20% reduction commitment

During each focus group, after a poll to determine the group understanding of the commitment, the facilitator provided a brief explanation of the commitment, and participants were asked what they thought of it.

Participants are generally in support of the 20% reduction in car km commitment, with several participants following supportive comments with comments about the need to reduce emissions because of climate change (Figure 2). Several participants also thought it was highly achievable given the timescales provided, and the changes that people have made during the pandemic. However, as the last extract in Figure 2 states, some participants followed comment of support with the need for adequate alternatives (more details provided in Section 7).

*'I think it's **commendable** and I would love to see them achieve their targets.'* [GSU3]

*'..the idea of cutting away a fifth of our transport is a very good idea, like it can only be good for the environment...and to be honest with you I think it probably is **very achievable**'* [GU2]

*'I think that's a **great idea**, I think like with the way climate change is going at the moment we need to do as much as we can right now, otherwise it will be worse later on in the future.'* [ASU2]

*'I think it's a **great idea**. I always think committing for lowering things that are harming is always a good idea.* [AU5]

*'I think it's a **good idea**, especially from the environmental point of view, and also just getting like cars out of cities, like it opens up the space up more as I think it [GU2] was saying earlier about like George Square, be nice to have just like more pedestrianised areas, I think as long as they can make it like cheap, convenient, and quick then there's no reason why people wouldn't be onboard with it'* [GU6]

Figure 2: Extracts from focus group in support of the 20% reduction commitment

As would be expected, not all participants expressed support. Some wanted more information about details of how such a scheme will be facilitated, why it was being introduced and if there were any incentives or disincentives associated with the target. Where participants responded with negative comments, they all followed with explanations or justifications for their answers, often providing suggestions of what needs to be in place (further details provided in Section 7).

There were also others who thought it was a good idea, but immediately followed up with comments about not being able to change, examples provided in Figure 3.

'I know I couldn't reduce my miles, I use my car for work and everywhere I go, there's not really so easy to do public transport so I'm not sure but I do think it is a good thing all in all.' [ASU1]

'I don't think there's a lot I can change because I don't tend to use my car unless I have to' [R3A]

'I don't think any of my current car use will change' [RB2]

Figure 3: Extracts from the focus group where participants supported the 20% reduction commitment but followed with comments of not being able to change

5.1.1 Change of views during the focus group

During the focus group some participants changed their views about the 20% reduction commitment. Before the last set of focus group questions, participants were asked a final poll (Figure 4).

Does the 20% reduction target sound easier, more difficult, or about the same as what you thought at the start of this session?

Figure 4: Focus group poll question

Results from this poll indicate that some participants changed their views during the session after hearing comments from other participants on the themes of the 20% reduction commitment and car clubs. Ten participants reported a change in their views, with eight reporting it would be easier to achieve, and two reporting it being more difficult. (Figure 5).

'I initially thought quite naïve and unrealistic, but having listened to [GU2], I can see why he's saying that you know, it could be, should be achievable' [GU5]

Figure 5: Quote from focus group when participants were asked about their response to question in Figure 4

5.2 What journeys could participants change or not change?

When participants were directly asked about what the 20% reduction commitment would mean for them, the majority commented on ceasing car journeys. There were very few comments on changing destinations or adapting journeys to be multi-modal.

The facilitator of the session used prompt questions (Figure 6) to encourage comments on changing frequency, destination, or transport mode but again most participants responded with extremes, thinking about journeys which they could stop all together.

Q -What do you think of the Scottish Governments commitment to reduce car km by 20% by the year 2030?
 Q- What does this mean for you? How will this affect you?
 Prompts – Which trips do you make that you think you could change or adapt? Either by changing frequency, destination, or transport mode? Are there any trips that you couldn't change?

Figure 6: Questions asked during the focus group

5.2.1 Journeys participants could change

Where participants did mention specific journeys they could change, they focused around:

- Replacing short car journey in their local area by active travel, or short bus trips.
- Working from home more frequently, or a continuation of working from home.
- Car sharing, especially for the commute.

5.2.2 Journeys participants could not change

There were several journeys that participants stated they would be unable to change. These included:

- Grocery shopping (further details in Section 5.2.3).
- Visiting friends and family who live longer distance away.
- Camping holidays.
- Trips to rural Scotland for example for hiking or holidays with friends.
- Journeys with small children, especially when carrying equipment on days out e.g. children scooters.
- Journeys that required taking equipment e.g. paddleboards and bikes.
- Journeys in winter – some participants expressed concerns that they would not be able to conduct active travel during winter months when the weather

worsened. With some participants raising concern about pavements being unsafe in icy conditions.

Most of the above examples relate to either carrying equipment or visiting places with poor connections to existing public transport services.

5.2.3 Grocery shopping

Grocery shopping was a journey that gave rise to polarised views from participants on their willingness to adapt or change this journey.

Some participants were adamant they had to use their car to conduct their grocery shopping and would not be able to conduct their journey, adapt their journey or the things they buy, in any other way to accommodate the 20% reduction in car km (Figure 7).

'I prefer to use my car just because there's not a supermarket in the town... there's no supermarket beside us...I wouldn't even think about taking a bus to go and get my shopping.' [ASU1]

'the only ones that I wouldn't be changing would be the big kind of shopping from Tesco because I have 6 cats... there's a lot of shopping' [AU2]

'am I going to suddenly jump on a bus and drive down to the local Asda or Tesco or whatever to get my shopping that is £100 plus because I've got four mouths to feed and what not, I doubt it, I don't see people changing that. I think your typical shop will always be people driving their cars down regardless' [GU2]

Figure 7: Focus group quotes highlighted how participants view grocery shopping as a journey they cannot change

Other participants highlighted how they conduct grocery shopping online and found this to be a very suitable alternative to physically travelling to a grocery store (Figure 8). Some participants highlighted how a way to reduce car km might be to encourage more people to shop online for grocery deliveries.

'I do most of my shopping online, apart from little bits and pieces that I would need through the week. But I do, I have a Tesco order delivery, I started when Covid started and I've carried on since and I shop for clothing online too' [ASU3]

'This is a new thing since lockdown and we've found it a fabulous service and we have continued it since.' [GSU3]

Figure 8: Focus group quotes highlighted how participants conducted grocery shopping online

When online grocery shopping was brought up by participants, it prompted others to share their experiences and views on home grocery deliveries. One of the main reasons participants stated they did not conduct online grocery shopping was the uncertainty around the quality of fresh produce, and the uncertainty regarding substitutes of items when not in stock.

In addition to online grocery shopping being a way to reduce car km, some participants highlighted how an alternative way to shop might be to buy less and shop more frequently (Figure 9). This would reduce the need for using a car because participants could then use alternative modes of transport such as active travel or public transport. However, where this was mentioned in two of the focus groups it was met with dismissing, negative responses from others in the group, with responses such as ‘I’m quite happy doing what I do [GSU3]’.

‘We don’t have a car at all in my household and we never have, so we have always had to go to the shops like every day.....buy what we need for that day and maybe like the next day, but we never ever do like a big food shop because we can’t carry it.’ [GSU5]

Figure 9: Quote highlighting how grocery shopping could be conducted more frequently but buy less to avoid using the car

COVID-19 has changed shopping behaviours for some participants, with some stating they are set to continue with these behaviours in the future. Changes noted in the focus group discussions, which have not already been reported, include being mindful of the frequency of shop visits and instead of travelling to the shops every day, only trying to go once or twice a week, thus reducing car km.

5.2.4 Attachment to the private car

In the focus groups several participants made comments about how they enjoyed driving their car and how younger generations aspire to become car drivers. Some aspiring car drivers view the car as providing them with ‘freedom’ to travel (focus group extracts in Figure 10). These comments highlight the attachment that some participants have to the car, and how the challenge of moving away from car use might be harder for some groups of people.

‘I definitely could cut down my car use, I do know that, like we’ve proved that in lockdown, like there’s loads of stuff that I could do. I just like the car’ [GSU2]

‘I’m hoping to be driving before the end of the year anyway, so then it will give us a lot more freedoms to get out with the city and stuff with the kids’ [AU3]

‘My grandson is 16, heading towards 17 and he is desperate for a car and it’s more of a status for him to have a car and to be seen have a car’ [GSU3]

‘...people enjoy driving, people if they’re getting stressed out they go for a drive or just fancy going for a drive to somewhere, somewhere different for the day or for a couple of days, you know, you’re not going to stop people from driving’ [ASU5]

Figure 10: Focus group extracts highlighting some participants’ attachment to the car

5.3 Difference noted between groups

There were some noticeable differences in responses in the initial reactions to the 20% reduction in car km questions amongst different groups of participants, and at different locations.

5.3.1 Geography

By examining the differences in focus group locations, the researchers noted that:

- Participants in Glasgow were a lot more positive about the 20% reduction commitment, than participants in Aberdeen, and in rural areas.
- Participants in Aberdeen still generally supported the 20% reduction commitment but were more vocal on identifying journeys they would not be able to change, and problems that would occur if they were required to stop the journey.
- Rural areas spoke more about place-based issues and solutions than the more urban locations (more details in Section 7).

5.3.2 Demographics

Retirees

Most retirees highlighted how they had noticed a reduction in their annual km driven when that they retired, with some reporting reducing the number of cars in their household and becoming one car households. However, there were polarising views as to what this meant in relation to the 20% reduction commitment. Some had the view that they had already done enough and could not change any more (for example extract in Figure 11). While others were more open to adapting their lifestyles further and reducing their car km even more by potentially given up a car (if they had access to a car club) or using public transport and walking more (for example extract Figure 12). The extract in Figure 12 highlights how for many retirees time is no longer a factor when travelling, this participant went on to explain how they have greater flexibility with catching multiple trains and buses for a journey as they have more time to complete a journey.

*'I can't see me changing my lifestyle very much to achieve this **because I think we've already cut back on mileage** because my husband and I are both retired now, so obviously we're not commuting to work and as I say we live in a rural area, so we're not really provided with transport to go anywhere so it's just not going to work.'* [GSU1]

Figure 11: Quote from retiree highlighting how they have already reduced their car km and cannot change anything else

'I've got a car but I very seldom use it, in my time of life time is not a factor, I do enjoy travelling by train, and bus, because of Covid the last year I haven't used my car at all' [GU3]

Figure 12: Quote from retiree highlighting how time is not as much of a factor when travelling now they are retired

5.4 Fairness of 20% reduction commitment

Focus group questions did not directly explore considerations linked to the fairness of the 20% reduction commitment. However, during the focus groups some participants did comment on how the impact of the commitment may be felt differently. These groups included:

- Self-employed, contract delivery drivers who use their own vehicles to conduct deliveries. One participant highlighted how they use an estate family car to conduct deliveries rather than a van, because this enables them to use one vehicle for multiple purposes – for delivery of parcels for work and also as a family car.

- People who work in the building trade. One participant highlighted how it is *'impossible to use public transport because of the logistics of where you are actually working...and the carrying of tools and equipment'* [GU3]. However, as discussed in Section 7.8, a participant in a different focus group highlighted how after Day 1 on a new site, they would often lift share with other tradespeople to reduce costs.

Discussions on fairness did not dominate the focus groups. There were no direct comments on the reduction being harder for some people than others, for example people who are reliant on the car such as people with disabilities. The exception to this was the mention of it being more difficult for people in rural areas who do not have a wealth of alternative travel options (more information on rural area requirements in Section 7.9).

However, making car driving more expensive, as a 'disincentive', was deemed unfair by some participants. Especially without providing easy to use, accessible and cheaper (than currently exists) alternatives to the car (Figure 12).

'people have to get to and from work and until there are more of this car sharing or easy access to public transport and cheaper public transport then I think that would be jolly unfair to make pricing the main way of cutting travelling.' [GSU3]

Figure 13: Quote from participant highlighting how it would be unfair to increase cost of travelling my car without suitable alternatives

6 Car clubs and car-sharing schemes

The following section reports on findings during the focus groups discussions centred around car clubs. Participants were asked several questions relating to car clubs and car-share schemes. To gain an understanding of knowledge of the group, participants were firstly asked to answer a poll which assessed their awareness of clubs and schemes in their area. Following this, to gain an understanding of car clubs and car-sharing schemes potential, the facilitator asked the questions in Figure 14.

- Are you aware of any car sharing schemes or car clubs in your area? [Zoom Poll]
- For those who answered yes – what do you know about them? Could you provide some more information?
- Would you use a car sharing scheme? What features would you like to see?
- For those of you with two cars, would you find a car sharing scheme useful?
- For those who don't have a car, does having a car sharing scheme change your views on owning a car?

Figure 14: Questions about car clubs explored during the focus groups

6.1 Awareness of car clubs and car-sharing schemes

Most focus group participants were not aware of car clubs or car-sharing schemes in their area. However, in five of the six groups, at least one person knew of a scheme or had used a scheme previously. The following schemes were mentioned:

- Leap Car Club – car club (Lochwinnoch, Kilbarchan and Bridge of Weir)

- CoWheels – car club (Aberdeen)
- Enterprise Car Club – car club (nationwide)
- Moray Carshare – car club (Forres)
- BlaBlaCar – Lift sharing app
- UberPool – Lift sharing app

6.1.1 Confusion between car clubs and lift and ride sharing

As shown in the list above, in addition to car clubs, some participants spoke about lift sharing and ride sharing apps/platforms. These are different to car clubs. Lift sharing and ride sharing apps/platforms seek to connect drivers and passengers, who do not know each other but are willing to share the cost of a journey. The journey can be conducted in a personal car, or a paid service such as Uber.

When lift sharing and ride sharing platforms were mentioned by a participant, these were often met with negative comments from other participants. Participants had concerns about personal safety, particularly for females, lone travelling, uncertainty about insurance, the condition of the vehicle, and the driver's ability. There was a general uneasiness towards the prospect of sharing a trip with a stranger. Where these conversations occurred, they often dominated the focus group discussion, and required the facilitator to step in and bring the conversation back to car sharing, moving away from lift and ride sharing. Sometimes this required multiple interruptions by the facilitator as participants often got confused by the different schemes and did not understand the differences.

6.1.2 Lack of understanding of car clubs and car sharing

Most participants were not familiar with car clubs, and many who were aware of them still required more information. During the focus groups, participants asked the facilitators questions about how car clubs work. These questions focused on the following themes:

- **General information** - How do they differ to existing car hire? And clarification on how they work?
- **Insurance** - How does insurance work? Especially for younger and/or inexperienced drivers?
- **Accidents** - What happens if you are involved in an accident?
- **Facilitation of car clubs**
 - What do you do if you go to a car and it is damaged? Or dirty?
 - How can you trust the person before you?
 - Who cleans the vehicles? Would I be responsible?
- **Young and/or inexperienced drivers**
 - Is membership open to young people and/or inexperienced drivers?
 - Do young people and/or inexperienced drivers pay more? (like existing car insurance structures)
 - Are car clubs an option for younger people (under 25s)?
- **How do car clubs work with COVID-19 restrictions and transmission concern** – COVID-19 is still a concern for many participants and a potential barrier to overcome.

6.2 Willingness to use car clubs and car sharing schemes

Once participants had a basic understanding of what car clubs and car-sharing schemes were, the group were asked whether they would use a car club or car-sharing scheme.

6.2.1 Differing views on car clubs and car sharing schemes

Car owners

Most car owners did not view car clubs as an alternative to using their own car. There were several comments, similar to the extract in Figure 15, where car owners highlighted how they currently pay for a car, which is sat outside their home which they can use whenever they want. But after these initial responses, as discussions continued, many car owners responded with questions or comments related to cost and availability of car clubs and wanting to find out more information (examples of questions in Section 6.1.2 above).

'I'm too used to having the car just on my driveway at my fingertips and I can come and go when I want and I don't have to make arrangements' [GSU1]

Figure 15: Focus group quote – example of how some do not see car clubs as an alternative to the car

One participant did however highlight how having access to a car club in their local area is encouraging them to move towards getting rid of their car, as per extract in Figure 16. Note the participant comments on cost of private car versus car club cost, and also the convenient locations as to where the car club is accessed in his local area.

'I'm finding now that I'm walking a lot, and the only time that I really use the car is maybe [for the] food shop, or maybes visit family, where it's not as direct a transport link, but I am seriously thinking of getting rid of my car, and using the Enterprise Car Club, because when I think about what I'm paying for my car, what the running costs are, etc, it would be seriously much cheaper, and the convenience of it being on my door, I'm sure be much cheaper if I just used a taxi once a week, than using my current car.' [GU4]

Figure 16: Extract from focus group demonstrating how access to car clubs is encouraging some people to think about getting rid of private car

Aspiring car owners

Four of the focus groups contained participants (n=8) who were 'aspiring car owners' - participants who were looking to get a car in the next two years. When asked their views on car clubs, most wanted more information on how car clubs would work; what would be required to enable them to join; and whether they would be penalised for being young or inexperienced drivers, as is the case with private car insurance.

As highlighted above (Section 6.1.2) there is a lack of understanding about car clubs and car sharing schemes. It is difficult for participants to evaluate a scheme such as this, and whether they would move away from car ownership given the lack of understanding and short time frame of the focus group.

6.2.2 Features of car clubs that participants would be interested in

As many participants were not aware of car clubs, when responding to the question of 'would you use them', many responded with 'it depends on the':

- **Cost of membership and use of car**
 - Participants explained how the feasibility of using the scheme would require participants to determine how much their car costs them (Figure 17) and whether the car club is a viable alternative.
- **Location of pick up/drop off car points**
 - Considerations of the distance from home and how easy it is to travel to the car pick-up point.
 - The safety of the area where the cars are located. Some focus group participants highlighted how car hire places are often on industrial estates or in less busy locations, and participants would not feel safe walking there to pick up a car, particularly after dark.
- **Availability of cars**
 - A concern is that cars would not be available when participants needed to use them; participants highlighted how there would need to be enough cars so when you wanted them they would be available.
- **Availability of different size vehicles**
 - Participants would like to have option of different size vehicles, EVs and vans.

'..you've got to balance up the cost of everything...with tax and insurance and then would it be beneficial not to have a car then and just use'

Figure 17: Extract from focus group on topic of car clubs

A theme that runs through all sections of the focus groups is a need for any **alternatives to car driving to be convenient and easy to use**; as stated above, this also relates to car clubs. Participants want information to be easy to find; they don't want to be *'spending an hour or two online looking for information'* [GU5]. During one session, the facilitators spent approx. 5 minutes explaining where to find out more information on car sharing schemes from CoMoUK¹⁶.

6.3 Where car clubs and car-sharing schemes could be used

When participants were asked if they would use the scheme, as previously stated most did not see the benefit of using them when they had a car and the convenience this brings often outside their house. However, as conversations continued, there were some scenarios where participants provided suggestions of when car clubs might be useful.

6.3.1 Leisure trips and longer distance trips

Car clubs can be used as part of a multi-modal option for longer journeys, enabling people to get to destinations not served by public transport. During wider discussions on the 20% reduction commitment, some participants highlighted that changing the longer journeys would have the biggest impact on reducing car km. But many of the reasons why participants felt they were unable to change journeys orientated around alternative transport modes not serving their destination. However, the extract in Figure 18 demonstrates how car clubs or car hire at train stations could be used to overcome this

'My husband's got family down in North Wales. If we could get the train down there and then just jump in a car club car to go and visit people, it would be ten times easier than driving all the way down.' [RB3]

Figure 18: Extract from Rural focus group highlighting how car clubs could integrate with longer journeys

¹⁶ <http://como.org.uk>

barrier and connect different alternative transport modes together. For this to be successful some participants highlighted how there would need to be universal nationwide car club membership to provide the flexibility to hire cars from multiple locations and reduce the need to register and pay joining fees for several different car clubs.

6.4 Alternative to car ownership

As previously stated, most of car owners in the focus groups did not view the car clubs as a suitable alternative to car ownerships. However, during discussions participants highlighted several scenarios where access to car clubs may be useful, or when car clubs might be used. These can be summarised as:

- For users in **high density housing**, for example house sharing, or where there are limited parking options.
- For users in **urban areas** who have access to other transport modes for the majority of their travel and don't need a car often due to having lots of transport options available to them.
- For users who are **light car users**, and don't currently use a car much. One participant highlighted that they were thinking of getting rid of their car, and how car clubs would provide them with the access they required for occasional car use.
- Times where **private car is out of action**, for example, when at the garage
- An **alternative to owning a second car** for users who don't use their second car regularly.
- For **trips such as grocery shopping** where users struggle to transport goods home via public transport.

7 What needs to be in place

Throughout the focus group participants commented on what would need to be in place for them to achieve a 20% reduction in car km. In groups where there had been little discussions on this topic, the facilitator prompted the group by asking directly '*what needs to be in place, or what could be done to encourage you to use your car less*'.

7.1 Public transport

Comments on public transport dominated large sections of the focus groups, with participants making numerous comments on what they think needs to be in place. These findings are summarised by the following points. Public transport services need to:

- Be **accessible** for all
- Be **affordable**, lower priced, and competitive with other transport options
- Be **better connected** with other services
- Be **safe**, especially at night – this includes on the public transport service, but also in areas around public transport stops and road/path network to access public transport stops.

The quote in Figure 19, from a focus group participant, summarises the comments above.

Public transport needs to be:

'Accessible, and more affordable, with a reliable and frequent service' [R1A]

Figure 19: Extract from focus group summarising what participants think the focus of public transport services should be

The focus groups came up with specific examples of how public transport services could be improved. These include:

- **Reducing the cost** of public transport for everyone, not just people with railcards (*Figure 20* highlights how one participant found it cheaper to travel to London by air than get public transport).
- **Provide discounts for other services when using public transport** to act as an incentive for using public transport. For example, provide a percentage discount or money off in local shops, or for services and events.
- Improve **frequency and timing of services (particularly in rural areas)**.
- **Easier to access information** on timetables, ticketing and connecting different transport modes together.
- **Provide integrated ticket options** for travel in cities, for example in Edinburgh – a combined train/tram/bus ticket.
- **London Oyster style travel cards** for ease of travel, and also making it easier to understand ticket pricing.
- **Improve connectivity** between existing service. One participant provided an example of this and explained how a bus to Edinburgh drops them at one end of princess street which doesn't not connect to the trams.
- More promotion on services that are available e.g. coach services.
- **Events of all sizes should be required to promote public transport options and alternatives to driving.** With participants stating organisers should make it easy for the public to get to events via public transport without having to search for information on how to get there.
- **Make it easier to access information** about existing services (more information below).
- Modify existing fleets to **accommodate leisure equipment, luggage and bikes** especially on services operating outside of urban areas.

'The train's way more expensive than flying to London on almost any occasion you choose to do. So whilst it may or may not be a greener alternative, it's definitely a more expensive alternative.' [RB1]

Figure 20: Extract from focus group where participants explain how it is cheaper to fly to London than get public transport

7.1.1 Place-based suggestions

There were some specific place-based suggestions that emerged from the Glasgow focus groups which related to:

- Changing subway opening times and ensure a regular weekend service and late night services.

- Improving bus lanes into the city to reduce bus congestion and enable faster travel.

7.2 Information and education

A common theme that ran through all the focus groups was how the sessions acted as a knowledge sharing exercise not only between the participants gaining knowledge of the 20% reduction commitment from facilitators, but also amongst the participants.

Participants shared experiences and knowledge of the different transport options available to them in each area, and also how they could conduct their day-to-day activities in more sustainable ways. For example, how participants who do not have a car in the household conduct their grocery shopping, or how there is the ‘Golden Bus’ coach service available in Glasgow. This section discusses areas where there needs to be more public education, and where participants suggested the need for information to help with reducing car km.

7.2.1 Central place for information

Several participants highlighted the need for a central place to gain information on transport options available to them through an app, and a website. With information on:

- **Public transport and route options available to them**, similar to a route planning app. Participants highlighted how currently each individual bus operator has a timetable app, with some citing the First Bus App being ‘great’ but how it can often be difficult to connect services run by different operators. Participants also highlighted how timetables can be easily misread when looking at different bus services from different cities where services may have the same route number.
- **Knowledge of the cheapest and most economical route option** example (see quote in Figure 21). Related to this, other participants wanted knowledge on carbon emissions or suggestions on the most environmentally friendly route.
- **Coach options** – several participants had not considered the coach as a travel option before. After one participant spoke about the ‘Golden Bus’ in Glasgow this prompted participants to ask where they find more information about this.
- **Car clubs** – similar to public transport some participants highlighted how individual companies might have information on locations on car clubs, but it would be helpful to have one place to go for this information.
- **Route suggestion with integration with cycling and walking** – providing options for how different transport modes can link up with short cycle ride or walk.

A common theme when this was discussed was the requirement for one place to go, with easy to access, trustworthy information.

*‘...an app where you can put in a journey and it’ll give you 1) the **cheapest option, and the most economic option as well**, something like that I think would really help people, and it would start from people that are younger also, and that’s really where you want to start embedding all this, and to me that’s the way forward, **you’ve really got to drill in advertising it better**’ [GU7]*

Figure 21: Extract from focus group discussing what the participant would like to see to help them use their car less

7.2.2 Information concerning impact of deliveries and taxis

Several participants raised concerns about the rise in delivery vehicles and the impact getting more deliveries is having. Some highlighted how one way they could reduce their individual car km is by getting more items delivered, but then they raised concerns that this would not help with GHG emissions, and instead it would transfer km and GHG emissions to other sources. In some of the groups this prompted discussions between participants, with other participants explaining that deliveries do reduce mileage because routes are optimised to ensure the least distance travelled. This exchange between participants highlights the lack of knowledge amongst the public on these issues.

Additionally, similar to deliveries, some participants did not view taxis as a viable option to help meet the 20% reduction commitment. Taxis were seen as helping reduce individual km but not wider km, and not assisting with the wider reduction in GHG emissions.

These examples of taxis and deliveries discussions demonstrate a need for further information to help individuals make well-informed travel choices to assist users reduce their car kilometres. Where evidence is not currently available to inform these messages, an evidenced-based review and potentially future research is needed to examine this further.

This discussion from the focus groups on concerns of rising delivery vehicles and the impact on GHG emissions highlights the broader understanding of the public of the wider complexity of achieving net zero, and how individual private transport is one element. More details can be found in Section 8.2.

7.3 Active travel infrastructure

Participants highlighted the need for improvements to cycle lanes and infrastructure - not just for cyclists but also for pedestrians, to enable safer spaces for both groups (for example, the quote in Figure 22 below).

'Why aren't they putting bike lanes in, because the city centre can be a very dangerous place, because of the amount of cyclists that have no regard for pedestrians [GU3]

Figure 22: Extract from focus groups in support for cycle lanes

Additionally, a car driver in the Aberdeen group, who does not cycle, commented how they viewed cycling as being unsafe because the road infrastructure is not adequate or suitable for cyclists (extract in Figure 23). Another participant in this session also commented on the width of cycle lanes in Aberdeen, stating that they are often very narrow, and do not provide an adequate safe space for cyclists sharing roads with large HGVs and other large vehicles associated with the oil and gas industry in the area.

'They try to encourage cycle but the roads are not adequate for cycling. The cycling, they're encouraging people to cycle but the roads in Aberdeen are just not suitable for cycling, you wouldn't feel safe.' [AU1]

Figure 23: Extract from Aberdeen focus group

7.3.1 Rural areas

Some participants in rural areas expressed an interest in wanting to cycle more but stated the accessibility of safe cycle routes in rural areas was limited. One participant stated some of the existing cycle infrastructure does not take a direct route, and they did

not feel safe on the wider existing road network. Additionally, another participant stated that often facilities and services in rural areas do not have facilities to lock up bikes, for example at local pub or restaurant, and how this can be a '*hassle to find somewhere to keep your bike and lock it up*' [RB1].

7.3.2 Aberdeen

Participants in the Aberdeen focus groups provided further comments about active travel. Some participants commented how the installation of 'CityFibre' is causing pedestrians to feel unsafe because pavements are often closed off, and there are frequency changes to closed off areas.

7.4 School runs

The school run was also mentioned as a journey which some thought could be adapted by many and could be targeted by the Scottish Government to encourage change.

Participants highlighted how they notice an increase in cars at the start and end of school, whether this is congestion on the roads, idling engines outside school or an increase in parking congestion around schools. Participants commented how in urban areas, school catchment areas mean children live relatively close to school and there is no need for parents to drive children to school. This prompted follow-up discussions amongst participants who had children to comment on the need to drive to get to work on time or take children to after school activities. Some participants suggested flexibility with work times could help with this.

During discussions participants highlighted how schools would be an area which could be targeted to encourage people to use their cars less and walk and cycle more, especially given how younger people are often more aware of the climate crisis and they are the next generation.

7.5 Encourage more working from home

Participants who had experienced working from home during the pandemic suggested a continuation of working from home would help them continue with their observed reduction in pre-pandemic car km. Participants commented that they had noticed a significant decrease in their annual car km since the start of the pandemic due to home working, for some this was 50% of their annual mileage.

The ability to work from home also provides parents with greater flexibility with the school/childcare drop off. One participant explained how pre-Covid-19 they had a very short window where they would be required to drop one child off at breakfast club, then drive across the city to a nursery close to work, drop the second child off and get to work in time. Now they can walk their child to school rather than use the car.

7.6 Changes in services coming to participants' homes

Grocery shopping is mentioned above (Section 5.2.3) as an activity where people can be less willing to change or adapt. Some participants commented that a way to reduce car km could be to pursue increasing the amount they get deliveries and explore what other services would come to them. However, one participant highlighted how delivery costs can be expensive, and how they would be more inclined to pursue online deliveries if the delivery fees were lower (Figure 24).

'To get your food shop delivered and all that, there is charges with all this, and maybe the government needs to look at different things with that and start to make these things free...Because I think some places are like £5 a delivery, so if you were doing that every single week then that's sort of £20 a month just maybe for one shop' [GU7]

Figure 24: Quote from Glasgow Urban focus group highlighting how the cost of grocery deliveries deters them from getting deliveries

Some participants commented how during lockdown they increased deliveries for non-grocery items and used services such as Amazon Prime more frequently. The Amazon Prime subscription includes free next-day or same-day delivery (in most geographical locations). However, one participant highlighted how they often don't require an item to be delivered that quickly, but often opt for it, as it is the default options. They suggested companies such as Amazon, who offer same-day or next-day deliveries could inform customers when they are delivering in the area and provide an option to group all items together to be delivered when deliveries are being conducted in the area, or during quieter days for the vehicle being used.

7.7 Encourage people to shop locally, and use active travel for these journeys

In addition to grocery shopping, some participants commented on other non-grocery shopping and services, such as beauty treatments and takeaways. Where these discussions occurred, they often prompted discussions on the frequency of home deliveries, and how these have reduced the car kilometres of individuals, but increased delivery miles (see section 7.2.2). However, some participants commented how a shift from car use to active travel could be encouraged for car trip which involve the collection of smaller items, such as takeaways. One participant highlighted how they always drive to collect their local takeaway, but it is in walking distance.

Relating to this, the same participant highlighted how another way to reduce car kilometres could be to support more local businesses, and shop and pay for services close to where you live (Figure 24). This comment highlights how shopping more locally and supporting local businesses not only reduces individual car kilometres but also reduces kilometres of deliveries.

'Another way to kind of adapt...[is to conduct] the smaller things that you do, in your home town rather than taking transport to other places to do it, and looking more into using local businesses and stuff closer to you.' [GU1]

Figure 25: Quote from Glasgow Urban focus group highlighting how people could shop more locally and support more local businesses

7.8 Lift sharing and carpooling

In addition to the findings on car clubs (Section 5.4), some participants suggested the opportunity to reduce car km with car sharing or carpooling with friends and colleagues in environments such as:

- Attending and participating in weekend football games/activities for example, share lifts with team-mates.
- Trade people work environments for example, set up on a site establish lift shares with other trades people.
- Travel to work in rural areas for example, where there is often one large employer and lots of people commuting from similar locations.

Participants discussed how the workplace plays a role in encouraging carpooling amongst workers and other sustainable travel behaviours.

7.9 Rural area needs

Many of the suggestions from the focus groups discussed above apply to all areas of Scotland. However, there are some that are more specific to rural areas.

7.8.1 Cost of transport and services

Both the rural focus groups commented on how alternatives to the private vehicle are expensive, specifically participants mentioned the cost of train tickets and taxis being a lot more expensive than the equivalents in urban areas (focus group extracts in Figure 26). With comments highlighting how participants do not feel these are currently adequate alternatives to the private vehicle. Additionally, some participants commented how grocery shopping was expensive in their local area, and they often travel further to access more affordable grocery items.

'Edinburgh you can pay pennies for a day trip or ticket and hop on and off as many buses as you like within the city, we pay £5 just to get to the next town, which is probably less distance away than one end of Edinburgh to the other. So, I think they need to help in regards to costs of public transport.' [R1A]

'I also think it's quite expensive up here, like even taxis for example they're very, very expensive in our area than they are down the central vale' [R1A]

'it's actually cheaper for me to shop like when I go home to my family. Up here the prices are extortionate, so the only way I would probably do a big shop up here when we get back to normal is if they brought the prices down.' R2A]

Figure 26: Quote from rural group highlighting perceptions of higher costs for rural public transport compared with urban areas

7.8.2 Internet speed and quality

In addition to the direct findings, the facilitators also noted a distinct difference in the internet quality experienced by the urban and rural focus groups. The four focus groups around Aberdeen and Glasgow had minimal connectivity and technology issues. In contrast, the rural focus groups experienced connectivity issues relating to bandwidth, and their session had to be adapted to facilitate this, for example, everyone turning cameras off. This disrupted the focus group and demonstrates how this could hinder virtual activities such as working from home.

7.9 Mobility electric vehicles and accessibility

During the focus groups, the facilitators regularly reminded participants that the 20% reduction in car km is a separate commitment to the phasing out of petrol and diesel cars and the increase in electric vehicles. However, on several occasions the conversations were brought back to electric vehicle use.

Figure 27 highlights a concern from a participant that all mobility vehicles are currently petrol and diesel. For people who do not have alternatives to using the car, not having access to electric vehicles limits their ability to travel in a more sustainable way.

'For disabled drivers, and each and every [car] is petrol or diesel. Why aren't they switching to electric modes of transport for people with mobility problems?' [GU3]

Figure 27: Extract from Glasgow Urban focus group

This issue has also been raised by organisations working with disabled people. For example, in a recent Green Alliance webinar titled 'How can reducing traffic help the UK meet its climate targets' (22nd September 2021)¹⁷, Dr Kate Inckle from Wheels for Wellbeing, highlighted the lack of mobility electric vehicles on the market. Dr Inckle also noted that the electric vehicle infrastructure currently being installed in the UK is often not accessible to disabled people and that there is no 'standard' for public electric vehicle infrastructure installations.

8 Messaging the 20% reduction in car km

The last part of the focus groups asked participants about the messaging they would like to see from the Scottish Government to promote the 20% reduction, and what may encourage them to change car journeys.

8.1 Current messaging

Several participants commented that current messaging, government agendas and policy information present a mixed picture for the public on sustainable transport, the future of transport and how the public should be travelling. Participants commented on (see Figure 28):

- A general message to use public transport more to meet net-zero emissions but prices of tickets for public transport continuing to increase year-on-year.
- Adverts on television for holidays, and low-cost flights, encouraging people to holiday overseas and take more flights.
- Adverts on television encouraging people to buy new cars.
- UK Government financial aid to support Nissan build cars in the UK.

¹⁷ Green Alliance (2021) How can reducing traffic help the UK meet its climate targets. Available from: <https://www.youtube.com/watch?v=LH6TnrqTeMA>

*'I mean I don't know about anybody else if they've noticed in television advertising, **40% of adverts on television just now are for new cars and the deals that are available, cheap deals, interest-free and low deposits and things, so if they really want to cut things down should that not be getting removed rather than more advertising**' [GSU3]*

*'..at the New Year the government **announces rail prices have gone up, so they're not really encouraging people to take the public transport**' [GSU6]*

Figure 28: Focus group quotes suggesting a mixed message on climate change agenda for the public

Additionally, some participants drew links between the climate crisis and the COVID-19 pandemic, highlighting how *'money was no object'* for the pandemic; governments developed apps quickly and allocated large sums of money for job support schemes (see Figure 29). Some participants argued governments have the ability to make issues a priority if they want, and if the climate crisis is so important when would we see the same approach from government.

'I'm aware that of late [government] have shown that there's always money when we need the money, and you know, they will be in a position that if they said, well let's just pay for everyone's bus travel, or public transport, what would that really mean in terms of the savings and the environment? savings on the roads?' [GU4]

Figure 29: Extract from focus group highlighting how government have invested a lot of money in the pandemic and the same could be done for the environment

8.2 Future messaging

Findings show participants would like to see a mix of messaging from the Scottish Government. They seek messaging that promotes the benefits of the 20% reduction in car km and the reasons for the reduction commitment. They would also like information about the negative aspects of cars – the environmental damage they cause.

One finding that came up in all the focus groups was the need for **clear, honest and concise information** from Scottish Government. Participants want to know:

- What has already been done to accommodate the 20% reduction commitment?
 - What is being done in the future to help the public achieve the 20% reduction commitment?
 - What is being done that will help them individually?
 - What is the Scottish Government doing to reduce their business car km?
 - How does this fit into other agendas?
 - What are 'others' doing? (see further information in 8.4)
 - How will the public know if/when the reduction commitment is achieved?
 - Where the 20% commitment fits with other targets and commitments?
- Participants identified how cars are only one area that contributes to carbon emissions, and they want to know what else is being done to address other sectors and activities that contribute to carbon emissions, such as aviation, business travel and energy generation.

Relating to the above, several participants commented how the onus should not solely be on the public, and they wanted to know what 'others' are going to do to address the target. By 'others' participants are referring to businesses, public transport providers and event organisers (more details in Section 8.4).

Some participants were very clear that they wanted to see the science and facts which back up any statements about the 20% reduction in car km. In some of the focus groups, conversations moved to talking about air pollution and road deaths and how less cars on the road would reduce this; this was met with comments asking what the evidence is behind those statements.

8.2.1 Phase out of petrol and diesel cars

During the focus groups, it was noted that participants were easily confused by the 20% reduction in car km being in addition to the phasing out of petrol and diesel cars. The researchers had to remind participants on numerous occasions that the reduction was about reducing car km and not replacing them with electric vehicle travel.

8.3 Who messaging comes from?

Participants were asked directly who they would like to see the messaging coming from; this prompted numerous discussions on who the public trust to provide them with information and who they would be inclined to listen to. It also prompted some participants to reflect on the COVID-19 pandemic, where they received information from and who they trusted for information and COVID-19 guidance. During these discussions the following stakeholders were identified as people who participants trusted:

- Scientists.
- An independent climate body: some participants highlighted how they trusted the NHS for COVID-19 health guidance, and that there needed to be an equivalent for climate change.
- Celebrities and social media influences: one participant provided an example of Andy Murray talking about COVID-19 (in a personal capacity) and how watching this on Instagram prompted the participant and his family to discuss COVID-19 and the vaccine. This prompted other discussions in the group regarding the influence of celebrities. This demonstrates the role celebrities could play in the promotion of different schemes, not only in the transmission of the message but as a discussion point amongst friends and family.
- 'Local leaders, heroes, local people who people know and respect': one participant highlighted how they would like to see a local-placed based approach to messaging, and for messaging to come from people in their local area that they trust. They provided a suggestion of honourable professors or academics from local institutes.

Some participants also highlighted where they would *not* like information from. During these discussions, Transport Scotland was brought up. Some participants explained how they do not view Transport Scotland as someone they should listen to, and they view Transport Scotland as someone who provides them with direct travel updates and not someone who they should look to for guidance on how they should travel.

Participants also noted a lack of trust and uncertainty in some government advice. With some participants highlighting how underlying political party agendas, government election cycles and changes in power in government often change the direction of government agendas and priorities, and any continuous narrative of what is important.

Following these discussions, and those on how the COVID-19 briefings were used to disseminate information some participants commented on the need for:

- **Regular climate change briefings** similar to the COVID-19 briefings which provide the messages highlighted in Section 8.4. Some participants also commented how this would demonstrate how the climate crisis is a high priority for Scottish Government.

- **Government to provide messages alongside transport providers and large businesses** – to demonstrate how transport stakeholders are working together to facilitate the 20% reduction commitment, and how businesses are taking steps to address the target, as well as wider climate change agendas.

Given the previous findings highlighting how some participants have a lack of trust in some government advice, hosting briefings alongside scientists or an independent climate body (such as Committee for Climate Change) could help with demonstrating the evidence behind the need to reduce GHG emissions and the adaptations (such as the 20% reduction commitment) which are being encouraged.

8.4 Transport and net zero

A theme that ran through all the focus groups was how participants wanted to know more about where the 20% reduction commitment fitted in the wider commitment to achieving net zero. Participants had an appreciation and understanding of the complexity of climate change and where GHG emissions come from, and also an awareness that transport was not the only source of GHG emissions. Participants want more information on:

- What difference the 20% reduction will make to the wider reduction in GHG emissions to meet net zero?
- What else is being done to address other large GHG emitting sectors, and businesses?
- What else can the public change, in addition to transport decisions? Some participants highlighted how they might be unable to change their transport options but would like to know what else they can do to reduce their individual GHG emissions

During these discussions it should be noted that in some cases there is possibly an unwillingness to change, or an uncertainty as to how to change, rather than an inability to change. As noted above, most participants automatically perceived the reduction in car km as a requirement to stop using their car for journeys, rather than adapting how they conduct tasks and associated journeys.

9 Conclusion and recommendations

This report has presented results of research that examines public perceptions towards the Scottish Governments commitment to reduce car km by 20% by the year 2030. Through the findings of six two-hour focus groups with members of the Scottish public, this report has commented on public perceptions of the commitment; what participants think needs to be in place to assist with meeting the target; and the messaging and promotion associated with the target. Car clubs and car-sharing scheme have also been discussed.

Findings show awareness of the 20% reduction commitment in July/August 2021 was low, but participants are generally in support of the commitment. Those that are not in support want more information on how it will be facilitated and what will be done to help them achieve it. In discussing the commitment, focus group participants provided several suggestions on changes that could be implemented to enable them to meet the 20% reduction commitment. These include improvements to public transport, a central place for information on travel options, and greater promotion and awareness of alternatives to car travel. It was also noted that some participants had not been aware that the 20% reduction target is additional to the commitment to phase out petrol and diesel cars and vans.

A key finding of this research is that the public need assistance to reduce their car use, to understand the travel options available to them, and more knowledge as to how they can adapt journeys. It was noted during the focus groups, even with prompts, that participants struggled to think about how they can adapt journeys, such as changing destinations or frequency of journeys; both would assist in reducing car km.

Findings also show awareness and knowledge of car clubs is low, and more information is required for participants to make informed decisions about car club usage. Participants raised lots of questions about availability, cost, type of vehicles (including vans) and how they work for younger people. However, even with this limited knowledge, our research shows there are opportunities for car clubs to be used as alternatives to the private car, and for integration with existing public transport services; this could enable people to travel further distances and access places not served by public transport.

The messaging and the promotion of the 20% reduction commitment, and where these messages come from, is key to encourage the public to adapt their car use. Participants in this research demonstrated an understanding of the complexity and multiple sources of GHG emissions and wanted to understand what else is being done by Scottish Government to reduce GHG emissions in other sectors. Coupled with this, the participants also wanted to know what else they can do in addition to reducing car use. In terms of messaging, some participants drew links with the COVID-19 pandemic and reflected on who they trusted as information sources for pandemic information. In these discussions the role of independent scientists who are 'experts in the field' was discussed, with some participants highlighting how there is a need for the equivalent for achieving net-zero GHG emissions by 2045.

Another finding of this research is that the majority of participants reported a reduction in their annual mileage in 2020 by at least 20%, based on pre-pandemic levels; some reported a 50% reduction¹⁸. This demonstrates that change is possible. The travel restrictions imposed during lockdown reduced some mileage by 50%. If these groups of people can continue with some of the adaptation made during the pandemic, this is promising for meeting the reduction target of 20% reduction in car km.

9.1 Recommendations

Based on the findings of the focus groups, and suggestions from participants, this report sets out the following key considerations/recommendations which could assist the Scottish Government in achieving a 20% reduction in car km by 2030. For a number of recommendations other players are also likely to have an influential role too (e.g. local authorities, employers).

It should be noted that several of the recommendations cited below, while based on this research, support those of Howick et al. (2020)¹⁹, in their report examining the communication of climate change after COVID-19.

Recommendation 1 – Develop public education and promotional campaigns that demonstrate the ways people can adapt their current car use

This should include:

¹⁸ Individual annual mileage was not directly discussed in the focus groups, but participants were asked to report their annual mileage during and pre-pandemic. Participants were encouraged to look at past MOT data to report accurate mileage.

¹⁹ Howick et al. (2022). Communication on climate change after COVID-19. Available from <https://www.climateexchange.org.uk/media/4231/understanding-and-engaging-the-public-on-climate-change.pdf>

- **Changing location and/or frequency of journeys.** This research shows when asked about the commitment people automatically think about stopping journeys, when reducing the frequency, or conducting activities in locations closer to home can help with achieving the target.
- **Role of taxis and deliveries in reducing car km.** There was some confusion amongst participants in this research as to how taxis and deliveries can help with reducing GHG emissions; some viewed this as helping individuals reduce their car km but transferring these km to other sources.
- **A focus on longer journeys people conduct.** When participants were asked how they could adapt their journeys most talk about replacing local journeys by public transport or active travel. But for some people adapting the longer journeys they conduct by using public transport can have the largest reduction in car km.
- **Car sharing** for work or leisure activities.
- **Car clubs.** Promotion of how car clubs work, where they are located and pricing structures to enable people to make informed decisions on how to use them.
- **Walking as a mode of travel.** The research notes that participants rarely spoke about walking, and often did not see it as a viable alternative to the car, or as a means to connect different modes of travel together. Recent studies have shown walking is the only transport mode which is up on pre-pandemic levels²⁰ and there is an opportunity to continue with this upward trend.

Some participants suggested developing scenarios or examples which reflect different groups of people/how different groups travel, and presenting these alongside suggestions of how people can make adaptations to reduce their car use.

Recommendation 2: Provide a central place for information on transport options available in each area including bus, train, coach, bike sharing schemes, car clubs, walking and cycling routes.

Participants highlighted how finding alternatives to the car can be difficult and using the car (if they have one) is often the simplest option. There were suggestions in the focus groups of a need for a central place for information on transport options available in each area, including bus, train and coach options; car clubs; bike-sharing schemes; cycle routes; and walking routes. Accessing information on these options currently requires the public to have existing knowledge of the transport options available to them in their local area, or at a given destination, before they can find out more detailed information and go to dedicated website or information sources for each transport mode.

Recommendation 3: Provide regular ‘reducing GHG emissions’ briefings to highlight what is being done to: facilitate the public in reducing GHG emissions; demonstrate what is being done within Government to reduce GHG emissions; and promote what businesses (including transport operators) are doing to reduce GHG emissions.

During the COVID-19 pandemic, government briefing became a regular occurrence. In this research, some participants highlighted how these briefings highlighted the severity of the pandemic and also acted as a source of information as to how they should act. The inclusion of scientists alongside ministers demonstrated how government decision making was being informed by science. Several participants suggested a need for regular briefings on reaching net-zero to communicate:

²⁰ <https://covid19transas.org/walking-levels-continue-to-increase/>

- The severity and urgency of reaching net-zero.
- What is being done across Scottish Government to achieve a reduction in GHG emissions.
- The 'joined-up' approach being taken by the Scottish Government to address GHG in all sectors. This should include promotion of action taken within government, and also external to government; for example, briefings alongside bus operators communicating how public transport services are assisting with meeting the 20% reduction commitment, and/or the promotion of what private firms and public sectors are doing to reduce GHG emissions. Promoting how achieving net-zero GHG emissions involves everyone.
- Updates on progress towards commitments such as the 20% reduction in car km.

Participants called for messaging and communications to be 'backed by science', similar to the COVID-19 briefings and would like to see independent (non-government) representatives communicating some of these messages alongside government ministers.

During the focus groups it was clear that participants have some understanding of the complexity of reducing GHG emissions, and several participants highlighted how reducing car km addresses one aspect of the wider problem of reducing GHG emissions. Briefings need to inform the public of how the 20% reduction commitment fits in other targets/agendas to reduce GHG emissions in other sector. This could help with informing the public that is not just individuals who are adapting, but also businesses, sectors and government.

Recommendation 4: Reduce the cost of public transport to be competitive against cost of the car, introduce integrated ticket options for use with other public transport and car clubs, and/or introduce incentives to use public transport

As summed up by a participant in the focus group, public transport needs to be '**accessible, and more affordable, with a reliable and frequent service**'.

Section 7.1 provides various suggestion from participants as to how they would like to see public transport improved. In addition to these suggestions, an integrated transport option which links with car clubs would provide users with options to take multi-modal transport options to destinations. For example, car club located at train stations, and train tickets being linked with car clubs.

Recommendation 5: Encourage the public, and workplaces to continue with some adaptations made during COVID, such as working from home, flexible working hours, less business travel, staying more locally and adaption to grocery shopping frequencies.

This research found most participants had reduced their annual mileage by at least 20% of their pre-pandemic usage, some by as much as 50%. Focus group findings suggest some of this reduction was due to working from home, less business travel, staying more locally and adaption to grocery shopping frequencies.

To encourage this reduction in car mileage:

- Workplaces, which can conduct activities from home, should be encouraged to allow employees to continue working from home for some of the week (where this works for the employee) and to continue conducting business meetings online.

- The public should be encouraged to continue using active travel for local journeys, and continue with other travel adaptations reported by participants during COVID restrictions, such as reducing the number of large grocery store visits.
- Flexible working hours should be encouraged. During COVID-19, several workplaces granted parents flexible working hours to facilitate home schooling and childcare. A continuation of this flexibility could assist parents with facilitating a more sustainable mode of travel (such as active travel) for the school drop off, allowing parents time to undertake the sustainable mode of travel, get home and then conduct their commute to work.

Recommendation 6: More research on the impact of deliveries, and their GHG emissions, with an aim to develop clearer messaging to inform public decision making on deliveries.

The increase in domestic deliveries prompted many discussions in the focus groups about the impact of such deliveries, and whether reducing individual car kilometres by increasing the frequency of grocery and non-grocery items is a good or bad thing. More research should be conducted to determine the impact of deliveries to assist in the development of clearer messaging and information campaigns to aid the public in making informed decisions.

Recommendation 7: Continue to improve internet and active travel infrastructure in rural areas.

It was noted during this research that the rural focus groups experience insufficient internet bandwidth and connectivity issues. These issues disrupted the focus group and highlighted how activities such as working from home, which often involve online meetings, would be more challenging for people in these locations.

Recommendation 8: Ensure car clubs are accessible to young and less-experienced drivers who may be looking to become car owners in the future.

In addition to the recommendation for more awareness and education amongst the public on car clubs and how they work (Recommendation 1), car club operators should be encouraged to ensure membership and usage pricing is available and affordable for younger and less-experienced drivers who may be looking to become car owners in the future. Young and less-experienced drivers may be 'aspiring car owners' and having access to a car clubs could make private ownership less desirable.

Recommendation 9: Examine the cost of public transport and taxis in rural areas, and align these more closely with urban areas.

Several participants in rural areas highlighted how they felt the cost of travel in rural areas was much higher than in urban areas, with participants specifically mentioning the cost of taxis and public transport. Several rural participants commented how the pricing of these transport options, alongside limited timetabling, does not encourage them to reduce their private car usage.

Recommendation 10: Ensure education and promotional work communicates clearly that the 20% reduction in car km is distinct from, and additional to, the commitment to phase out the sale of new petrol and diesel cars and vans and

increase up-take in electric vehicles. There needs to be greater public awareness that the commitment is not about replacing km with EVs, but about a reduction in car km.

Recommendation 11: Encourage schools to promote active travel for the school run

Several participants highlighted how the road network around schools at the start and end of school is extremely busy. Participants also highlighted how lots of children live in a given catchment area of a school, which is often in walking distance to the school. Some participants felt the government could encourage schools to promote active travel for the school journey. However, this needs to be done in combination with Recommendation 5 to ensure parents have flexible work hours to allow for any extra time it takes to walk or cycle to school.

Recommendation 12: Encourage workplaces to promote car sharing and low-carbon means of travel for the commute

Some participants highlighted how often (especially in rural areas) there are central places where people go to work, with several people making the same commute, and that these journeys could easily be conducted via car sharing. Subject to appropriate employee consent workplaces could draw on their knowledge of where employees' live and assist employees to understanding the alternative lower carbon intensive travel options for their commute. This approach could also be applied to tradespeople as highlighted in Section 7.8.

The focus group findings demonstrate how members of the public want information to be evidence-based and 'backed by science'. Where the Scottish Government does not currently have sufficient evidence-based information to provide enabling measures, public information or messaging campaigns, we recommend the commissioning of desk-based evidence reviews and tailored research in a Scottish context. This includes, for example, the topics of the impact of deliveries and taxis on reducing GHG emissions, and the role of car clubs in reducing car kilometres, with a focus on 'aspiring car users'.

© Published by University of Leeds 2022 on behalf of ClimateXChange. All rights reserved.

While every effort is made to ensure the information in this report is accurate, no legal responsibility is accepted for any errors, omissions or misleading statements. The views expressed represent those of the author(s), and do not necessarily represent those of the host institutions or funders.

climateXchange

Scotland's centre of expertise connecting
climate change research and policy

ClimateXChange, Edinburgh Climate Change Institute, High School Yard, Edinburgh EH1 1LZ

✉ info@climatexchange.org.uk
☎ +44(0)131 651 4783
🐦 @climatexchange_
🌐 www.climatexchange.org.uk