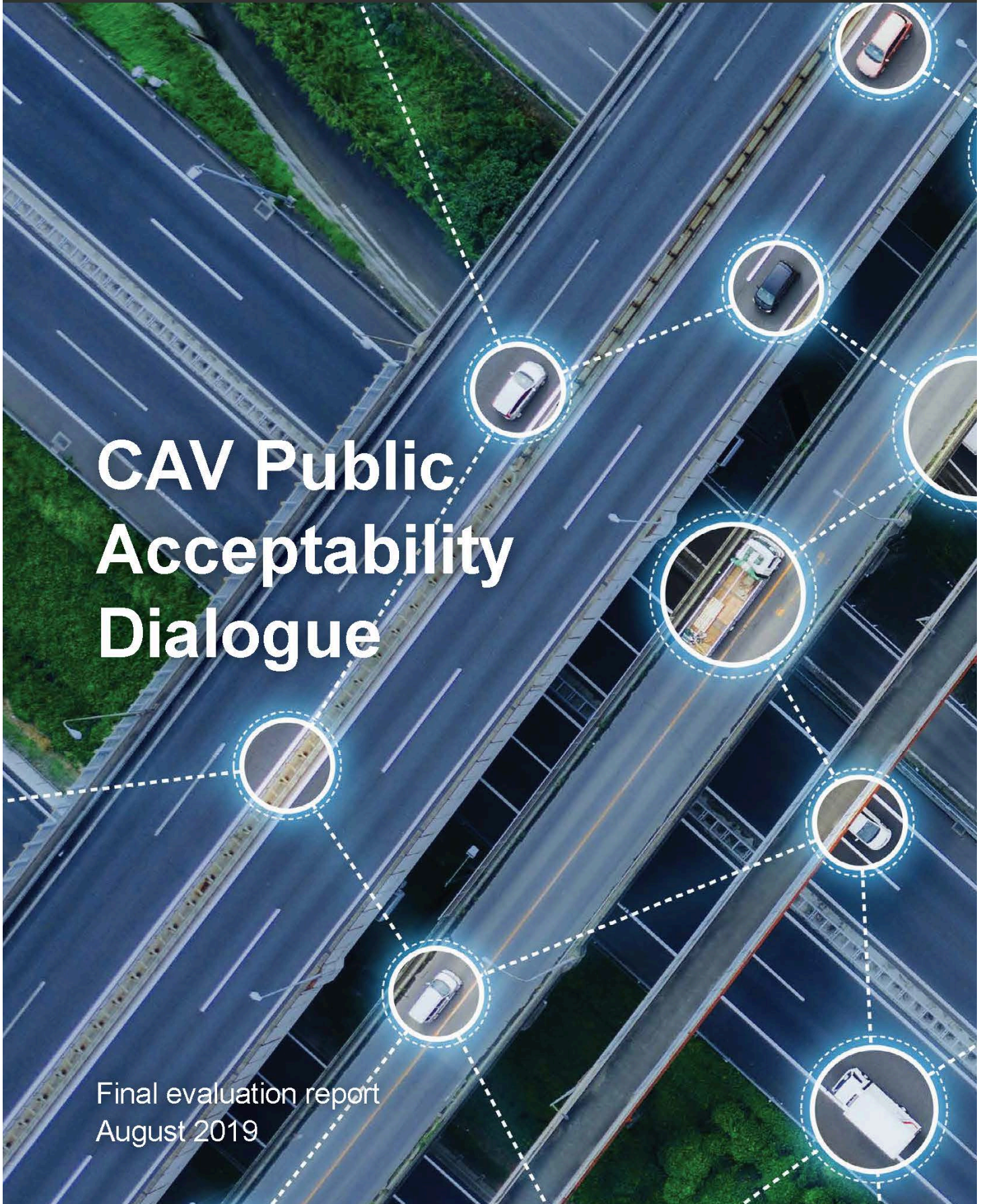




CAV Public Acceptability Dialogue

Final evaluation report
August 2019



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Executive summary

Background

This is the final evaluation report for the Connected and Automated Vehicle (CAV) public dialogue project. It presents overall reflections on the project and its impacts. The project was commissioned by the Department for Transport (DfT) in partnership with Sciencewise. [Sciencewise](#) helps to ensure policy is informed by the views and aspirations of the public. The programme is led by UK Research and Innovation (UKRI) with support from BEIS.¹

The CAV dialogue presented an opportunity for policy makers and specialists to interact with and hear direct from members of the public on a multifaceted, fast moving emerging technology, with a view to shaping future work, regulation and engagement on the topic.

Between October and December 2018, more than 150 people participated in a series of three workshops in one of five locations: Abergavenny, Glasgow, Leeds, Millbrook, and Milton Keynes. Participants took part in a series of structured discussions and activities, designed to enable them to develop and share their views. Additionally, some public participants the opportunity to interact directly with CAV technology – a first for a Sciencewise-funded dialogue process.

Impacts

There was a good potential for impact from the start of the process, given there had been limited interaction with members of the public of with the social (rather than technological) aspects of CAVs to date. Relevant policy makers and other stakeholders expressed a strong interest and appetite to engage with the dialogue findings throughout the process.

Some policy and wider impacts have already been identified, along with avenues for ongoing impact and further related engagement work, including:

- Impact on the development of the Centre for Connected and Autonomous Vehicles (CCAV) strategy, particularly in relation to the way in which CCAV communicates about CAV technology – with further practical implications currently being explored by CCAV.
- Use in CCAV's evidence base in developing a business case for funding through the Government's forthcoming Comprehensive Spending Review (CSR).
- Development of further engagement projects on specific aspects of CAV technology.

This potential for impact could have been enhanced by making closer links directly with evolving policy-making needs and closer engagement with a fuller range of policy makers from the early stages. Plans for ongoing dissemination of the findings should help to embed findings within the relevant UK government – and potentially wider – transport community circles.

Factors contributing to impact

Various aspects of the project context and delivery contributed to an overall very successfully delivered process – including governance and communications structures, the nature and level of stakeholder involvement, project management, design, and on-the-day workshop delivery. These and other factors are discussed in relevant sections of the report.

¹ On 1st April 2019, during the course of the project, the Sciencewise programme transferred to UK Research and Innovation. UK Research and Innovation brings together the seven Research Councils with Innovate UK and Research England. Operating across the UK with a combined budget of more than £7 billion, it works in partnership with universities, research organisations, businesses, charities, and government to create the best possible environment for research and innovation to flourish. <https://www.ukri.org/>.

There are also a number of learning points contained within this report, reflecting upon areas of the design, delivery and context of the process that went particularly well, presented a particular challenge, or could have been approached differently. Several of these learning points have been translated into a series of 21 recommendations for future dialogue projects and their context – compiled below.

Recommendations

1. **Sciencewise** should consider adding or adapting some specific elements of its current dialogue model in order to maximise the potential for the tracking and realisation of impacts. For example:
 - an early ‘policy gaps’ meeting with relevant policy makers and the whole project team, to enable a clear shared understanding of the dialogue process and ensure the dialogue scope and questions are tightly aligned with current / emerging policy priorities and knowledge gaps;
 - formalised tracking of related national / international activities such as relevant conferences and other engagement processes, to aid impact and dissemination;
 - budgeting for collaborative dissemination activities between funders, Sciencewise and delivery contractors;
 - extension of the evaluation period beyond project delivery, by design rather than request².
2. **Sciencewise** and other dialogue funders should consider building in an opportunity for participants to experience first-hand the technology being discussed, where feasible.
3. **UKRI** should reconsider the suitability of the current procurement body and online gateway used to invite tenders for Sciencewise projects – particularly given the complex nature of a dialogue project, which does not lend itself to a more traditional product or service-based procurement system.
4. **Sciencewise** should consider producing explicit guidance on the decision-making process for areas of potential difference between its own and partner funders’ preferred methodology or approach – particularly in the context of the reduced scope of the Dialogue and Engagement Specialist (DES) role within active dialogue projects.³
5. **Future project teams** should – based on clear guidance from Sciencewise – clarify at the outset the roles and membership of any distinct stakeholder groups such as oversight or specialist groups within the overall governance structures, and consider different options for such groups (e.g. one large group with sub-functions, core group and reference group, multiple groups).
6. **Sciencewise** should consider building on any existing templates to build a bank of sample or template documents that can be provided to project teams upfront (including OG and SG terms of reference, as well as other documents such as specialist and observer briefings for workshops) based on previous dialogue processes, to enable earlier clarity and speedier development of materials other than those designed to engage participants.
7. Flexibility of process aided by clear, open communication and regular check-ins are a valuable and essential part of a complex dialogue process – **future project teams** should enter into

² Currently, the evaluation of Sciencewise projects runs alongside and finishes around the same time as the delivery process. In the CAV dialogue, it was agreed that the evaluation could continue for a few weeks past the project delivery time in order to maximise capture of potential impacts based on the findings presented in the dialogue report.

³ This dialogue project has been one of the first to experience the new, reduced role of the Sciencewise Dialogue and Engagement Specialist (DES) compared to previous waves of Sciencewise dialogue projects.

dialogue processes with this explicitly in mind.

8. **Sciencewise** should consider how to manage and distribute the risk and impact of project extension or slippage for future project, for example allowing contingency within the overall project budget for slippage in timing, or agreeing processes for spreading the resource implication between the range of parties involved.
9. **Sciencewise** should reflect upon the reduced role of the DES within project delivery and consider whether any specific actions should be taken to reduce resulting risks to the projects (e.g. changing the role of the evaluator, or ways to free up some of the DES's time for more active involvement throughout the process).
10. **Future funders and project teams** should work to ensure consistent internal awareness and understanding of the dialogue outputs within relevant policy making circles, to ensure dialogue outputs are taken account of within all (or as many as possible) relevant policy decisions or documents.
11. **Future project teams** should continue to carefully plan and manage the involvement of specialists and observers in future dialogue processes, including selection of individuals, range of interests, clear briefing, ability to talk about viewpoints other than their own and maximising dialogue (particularly in the latter stages of the process).
12. **Future project teams** should consider increasing interaction between relevant policy makers and participants, accompanied by clear briefing / training for participating policy makers.
13. In future processes, **project teams** should explicitly address the issue of balancing breadth and depth in a dialogue's scope, to ensure there is a clear rationale for why and where to focus depth, being aware of the related need to keep materials and process simple where possible.
14. **Sciencewise** should reconsider how best to frame the dialogue process alongside other types of qualitative engagement (for example social and behavioural research, deliberative research, focus groups, etc) – including the use of language that will best communicate the value of the dialogue process with policy makers and other stakeholders. This language should be reflected in dialogue documentation such as case studies. A key question for Sciencewise to reflect on is “what is the difference between dialogue and these other processes, and why does it matter?”
15. In future, where dialogue processes are built around specific locations due to association with the topic or presence of a particular technology in action, **funders** should consider closer upfront engagement with relevant locations / venues to ensure they are both suitable (i.e. can accommodate the expected number of participants) and available within budget (e.g. for all day Saturday workshops) – prior to the procurement process going live. This early priming (undertaken with Sciencewise guidance by the commissioning body) would give a head start to the project team in terms of agreeing and confirming locations once the process goes live.
16. **Sciencewise** should consider producing standardised wording to insert in future dialogue reports, communicating the rationale, value, and limitations of the overall approach and data, including the risk of inference and over-extrapolation. This can be built upon by dialogue contractors, for example by adding any further detail on the value and limitations of specific design choices.
17. In the framing of the final report (and interim reports to the OG and SG), **future project teams** should continue to explicitly consider how to minimise the risk of out-of-context interpretation presented by highlighting trends within or across specific demographics.
18. **Future project teams** should discuss and agree expectations of the report structure and purpose early (which was done for this project), revisit these discussions during the analysis process, and ensure a draft chapter is worked up for comment prior to a full draft report being produced.

19. **Future delivery contractors** should consider emulating this process in relation to the facilitation structure (lead facilitator alongside consistent table facilitators and small groups within locations) to maximise the participant-focused nature of the process and rapport-building, bearing in mind the resourcing implications (time and budget) this presents.
20. **Future delivery contractors** should maximise the use of wash-up or feedback sessions to enable transference of challenges and good practice between facilitators. This could, for example, include use of a one-page facilitator crib-sheet highlighting things to look out for, amplify and avoid, to aid consistency of approach across a large team.
21. **Future delivery contractors** should work to ensure participants' accessibility needs are understood and worked into the design process upfront (e.g. room accessibility, specific cognitive needs such as preferring written instructions or large print).

Contact

Please contact helen@3kq.co.uk if you have any questions about this report and its contents.

1. Introduction

1.1. This report

This is the final evaluation report for the Connected and Automated Vehicle (CAV) public dialogue project. It presents overall reflections on the project and its impacts, taking account of the Sciencewise [Guiding Principles](#) and Quality Framework. See section 8 for a summary of the dialogue project and evaluation process.

Two earlier (internal) evaluation reports were produced to capture learning and provide formative input project delivery. An initial baseline evaluation report considered the context and initial delivery of the dialogue. The interim evaluation report added reflections on the delivery of the dialogue and the potential for impact.

This final evaluation report includes key learning and recommendations from those two earlier reports, with the addition of further reflection on impacts. It is written thematically, starting with impacts. The Sciencewise indicators covered by this report are listed in Appendix 1 – relevant sections of the report are cross-referenced from the appendix, rather than each indicator being covered one by one in the text of the report.

1.2. Evaluation principles

The evaluation has combined a formative with a summative approach: formative input was provided to the project team at regular points (for example during or after dialogue events, or at the regular project team catch up calls), with summative input provided at set points via the baseline, interim and final reports.

This dual approach requires the evaluators to hold to a firm set of principles, in order to be a trusted critical friend to all parties throughout the delivery process, and to provide ongoing input that is useful and impactful. The principles 3KQ adheres to include:

- **Constructive:** focused on gaining understanding and learning rather than apportioning blame.
- **Proportionate:** allocating sufficient resources in sufficient depth to be flexible and proportionate to the evolving dialogue process.
- **Transparent:** ensuring clear communication of the evaluation process, objectives and findings with participants and stakeholders.
- **Useful:** communicating evaluation findings in jargon-free language, and in a form that is relevant and practical.
- **Independent:** producing findings that reflect the evidence and data rather than being directed or overly influenced by the views of any one party.

2. Impacts

Headlines

- Good potential for impact given the nature of the topic and appetite from relevant stakeholders.
- Some policy and wider impacts already identified, with the potential for ongoing impact and further related engagement work.
- Breadth of topic was an opportunity for multiple avenues of impact and provided a potential foundation for further targeted engagement process, but was also a challenge in terms of focusing the dialogue.
- Opportunity to make closer links directly with policy-making needs in future projects to ensure maximum value and impact.

2.1. Potential for impact

The main policy home for the dialogue outputs is the Centre for Connected and Autonomous Vehicles (CCAV), but outputs are also relevant to specific policy teams within DfT and more widely to industry, academic and civil society organisations such as those sitting on the project Oversight Group.

Early observation and engagement indicated a clear potential for the dialogue outputs to have a tangible impact. The lack of targeted engagement to date on the social and societal aspects of CAVs presented a gap to be filled. The relatively early stage of CAV technology and the speed at which it is evolving present the need for regulation, engagement and communication to keep pace and be fit for purpose.

The breadth of the topic – involving multiple stakeholder interests and potential implications for society – presented the potential for multiple avenues of impact, but also a challenge in terms of defining the scope and focusing the framing of the dialogue (see section 3 below).

Early engagement with policy makers, OG and SG members indicated a strong recognition of the need to better understand as yet underexplored public views on this topic and an appetite to engage with the dialogue findings. Several noted that this was one (important) part of the overall set of evidence they would continue to draw upon as the technology and surrounding policy decisions continue to evolve.

Potential avenues for impact identified early on included specific areas of policy making, as well as particular points of interest of relevance to OG members' work – see Appendix 2 for a full list.

2.2. Impacts and pathways to impact identified to date

2.2.1. What's new?

When asked explicitly what this project presented that was new or different to other similar work, stakeholders commented that the dialogue findings:

- challenged previous assumptions that older users would struggle with trusting the technology and related applications more than younger people;
- challenged previous assumptions that younger people are less concerned about data and privacy than older people;
- highlighted the major concerns in line with expectation / confirmed existing understanding that there is no current evidence for any kind of shift in user behaviour;
- raised new concerns about affordability;

- presented new detail about views and concerns relating to sharing vehicles;⁴
- provided detail on participants' views of safety as both a positive and negative aspect of CAVs;
- elicited more cynicism among stakeholders than is currently presented, e.g. by the industry or the media;
- confirmed the view that autonomous vehicles have many hurdles to overcome before they become part of the everyday travel mix;
- gave a sense of the journey members of the public take through the topic of CAVs over time;
- provided analysis of different demographic sub-groups, which didn't reflect any significant results for any particular demographic.

The point was also raised that the deliberative approach taken in a public dialogue project presents more nuanced qualitative supporting information than previous survey work, and that this project delved deeper specifically into the topic of CAVs compared to the previous [Future Roads dialogue](#) work – both in terms of content and the length of time over which participants were engaged. In addition, this was the first process of engagement on the topic of CAVs that gave public participants a hands-on experience with the technology – an aspect that some stakeholders felt should be repeated in future projects where possible.

Traverse (the delivery contractor) began the process of triangulating the dialogue findings with the findings of previous CAV-related engagement and other emerging technology research, to highlight consistencies and differences. Some stakeholders mentioned that this was a useful process, but there is also the sense that this process did not achieve maximum value due to limited input from the relevant stakeholders to help complete the triangulation document.

Building this type of triangulation process into future projects at an early stage could enable a systematic identification of other relevant (previous, ongoing or forthcoming) work or events, helping both to frame the topics for engagement to avoid (unplanned) repetition and to plan dissemination and communication of final outputs.

2.2.2. Immediate / experiential impact

For some policy makers and other stakeholders, the dialogue immediately presented useful input, in that it offered a first structured opportunity to talk to members of the public fresh to the topic of CAVs in a focused and deliberative manner. For these stakeholders – such as CCAV – the dialogue has therefore been of immediate use in terms of gaining first-hand experience of interacting with people on the topic and seeing the participants' journey through the issues.

Observers and specialists attending the workshops described a number of initial impacts on thinking and take-home messages, including:

- Differences in existing perceptions and understanding among members of the public.
- Reflection of the range of issues raised by the OG and SG within workshop discussions.
- Confirmation of existing thoughts (e.g. safety as a key concern, reliability, accountability, cost).
- New perspectives or those that might need further thought (e.g. around security concerns, transition period, jobs, regulation, control over access, use by vulnerable people, antisocial behaviour and personal space, land use planning, sharing, optimism over timescales for delivery of CAV technology).
- Work required to communicate information about CAVs with the general public.

⁴ The willingness and ability of vehicle users to share a ride with others is central to some future use models for CAV technology.

- Thoughts about how / what to communicate about CAVs.
- The value of public dialogue.
- The effect of increased information and deliberation on attitudes (to become more positive or negative).

The longer term impacts of direct participation in public dialogue and engagement processes is notoriously difficult to pin down. Conversations with stakeholders attending the workshops indicate the opportunity to hear from and interact with members of the public on a topic usually dominated by technical discussions provided new insight and clear value. The incremental impact of this experience on the way in which those individuals and their organisations interact with or take account of public views in future is impossible to isolate and track, but anecdotal evidence suggests there will be an ongoing impact for several of these stakeholders.

2.2.3. Impacts on policy making and other work

Beyond the experiential aspect, stakeholders have identified a number of more tangible impacts or avenues for impact resulting from the dialogue findings.

In several cases, the dialogue findings confirm existing understanding but present nuances, for example around the difference (or apparent lack of difference) between views from different demographic groups. In others, the findings look set to inform specific documents, strategies, future communications or other work.

For some stakeholders, however, the dialogue presents little in the way of new understanding or insight in the context of their own work and therefore is unlikely to lead to any changes in relevant documents or strategies – in these cases the value has been to confirm existing views and assumptions.

The dialogue outputs have fed directly into the CCAV strategy, which is in the process of being drafted. Although there are unlikely to be substantive changes to the goals within the strategy, the outputs are influencing the mechanics of how those goals will be achieved, for example:

- Shaping specific wording or phrasing in the strategy and beyond, taking account of the particular concerns, aspirations, and use of language by dialogue participants.
- Informing the strategy for communication about the work of CCAV, to ensure its role is clear (e.g. in response to concerns raised in the dialogue that industry may not be sufficiently regulated).
- The provision of guidance or framing for other stakeholders (e.g. CAV technology companies) to help frame their own work.

The dialogue report will be referenced as part of the evidence base for the final strategy document, and work is currently being done within CCAV to further examine the practical implications of the dialogue outputs for its future work – beyond the initial communications-focused responses outlined above.

Additionally, CCAV is using the dialogue findings as supporting evidence to include safety and security as a central part of future budgeting plans.

Other stakeholders reflecting on the influence of the dialogue findings on their own work cite the following insights, impacts or areas for further exploration:

- Contribution to the evidence base feeding into the DfT response to the Future of Mobility Grand Challenge.
- Awareness of the nuances of the debate and reactions to new technology – e.g. to feed into work on Future Mobility Zones.

- Development of a project to examine the reasons people share transport and the decision-making processes that lead to sharing.
- Potential further work to be done on addressing concerns about transition.
- Ensuring future policy making keeps options as open as possible with respect to, for example, choices about owning or renting and the design of automated public transport models.
- Further exploration of what is meant by “control” (regarding the desire to retain control / the ability to take control over CAVs).
- Further exploration of data sharing in the context of CAVs (but also more broadly) – for example examining what people are comfortable with, why, and what are the trade-offs.
- General and ongoing measurement of policy views and emerging policy against the dialogue findings.
- Further consideration of how to host members of the public for demonstration rides based on the experiences in this project – including clear communication of what to expect, why and when safety drivers might intervene, and how the ride differs from simple path following.
- Taking account of findings in designing the in-vehicle passenger interface – what information to show passengers and why.
- Clarity about how to communicate about and position CAVs and what kind of questions members of the public will expect answers to (e.g. regarding safety and trust)
- Informing service and vehicle design – for example, in car safety of a shared service, convenience of service, etc.
- Informing future economic modelling, including testing assumptions around the drivers behind people’s opinions and decisions.
- Provision of a foundation for future constructive engagement of stakeholders in the dialogue around CAVs, including the “alternative” or non-industry voices – for example, activities such as the forthcoming Driverless Cars Emulsion Workshops could build on learning from this project.

2.2.4. Impacts on future engagement processes

At the inception of the dialogue process, the business case from DfT and CCAV suggested that this process be viewed as the beginning of a conversation on the topic of CAV technology, presenting the potential for further, more focused, engagement to drill down into specific aspects or issues.

Aside from the potential impacts on future engagement work identified by stakeholders above, there are currently conversations between CCAV and Sciencewise regarding the possibility of a smaller public dialogue focusing on Mobility as a Service (MaaS).

One stakeholder suggested a re-run of this dialogue process or a similar process in a few years would be an interesting exercise, given how quickly the sector is moving. Any such process would, however, need to be clearly framed and focused on how attitudes and views are changing (if at all) to ensure maximum value. A repeated process could, for example, include the views of communities who have been involved in trialling CAV technology (e.g. automated taxis in London or the Edinburgh bus route).

Some stakeholders reflected on the value of the deliberative dialogue process itself in engaging members of the public on this complex topic – for example noting the way in which participants were enabled to develop informed lines of questioning and go on a journey that is more similar to how they might encounter CAVs in the real world than with other types of engagement. This highlights the importance of ensuring specialists are in the room, enabling participants to ask questions on the issues important to them and follow their own lines of enquiry.

2.2.5. Impacts on the language around CAV technology

As a rapidly emerging field, the language surrounding connected and automated vehicles is still in flux. The dialogue outputs and process are relevant to this in two ways:

1. **What to call the technology.** With various organisations currently using different names for the technology (CAV, CAM (connected and automated mobility) automated, autonomous, etc.), the dialogue presents insights into how participants spoke about the technology at the beginning and the end of the dialogue process, and therefore the type of language that might resonate with members of the public in general.
2. **How to talk about the public relationship with CAV technology.** The dialogue process was named the CAV public *acceptability* dialogue since it explored the extent to which people perceive the technology might be desirable, and the various factors that might contribute to or detract from this, as well as implying ongoing iterative work to earn acceptability. This was deliberately different to *acceptance* which implies the act of accepting something once it has been experienced. Even so, the dialogue findings suggest that the public participants tended to view CAVs as inevitable, and thus as something perhaps being done “to” rather than “with” them.

CCAV is in the process of discussing whether the language should be moved further towards *desirability* and is clear about the need for participatory design. One stakeholder observed that use of the word *familiarity* might help to ensure members of the public don’t feel left behind, or to avoid falling into the deficit model of public engagement.

2.3. Maximising future impact

2.3.1. Communicating and disseminating findings

A number of communication and dissemination activities are already in place to share the dialogue findings. These include:

- An internal DfT seminar in July, for policymakers and analysts across the department to engage with the findings. This was well attended and demonstrated a high level of interest in the dialogue and its findings across the department.
- Delivering a paper to DfT Executive Committee combining the dialogue findings with a CCAV response – to gain senior buy-in for how findings will be taken forward and the questions and challenges raised by the dialogue for future work.
- Presenting findings to the Future of Mobility Steering Group.
- Sharing the final dialogue report with OG and SG members alongside a request for them to share the findings with their own networks.

Traverse was asked to present the findings at a recent CCAV cohort event, but were unable to due to the timing of the request and lack of explicit resourcing for such events. Additionally, DfT and Traverse made a joint submission to present at the [European Transport Conference](#), which at the time of writing had not been accepted.

DfT and CCAV will continue to look for opportunities to share the findings both internally and with the broader transport and research community.

2.3.2. Longer-term impacts: rethinking the model

The CAV dialogue project presented a high potential for impact. Current findings indicate that this impact is beginning to be borne out – particularly through the strategic planning and future work of CCAV, but also with respect to catalysing further engagement and influencing the work of relevant stakeholders.

There is a sense, however, that even more impact and value could have been extracted from the dialogue based on the following reflections from stakeholders:

- The most significant policy home for the findings (CCAV) was not the team directly involved in project planning and delivery (DfT social and behavioural research team). Although CCAV had strong involvement through the OG, SG and via attendance at the dialogue workshops, they were less directly involved in the ongoing discussions about aspects such as questions to be covered by the dialogue, source materials (see section 4.3), analysis and reporting. The DfT social and behavioural research team ensured it stayed engaged with CCAV and provided co-ordinated responses at key points, but there was still a slight sense of distance from policy makers felt by other members of the delivery team. This meant that:
 - the delivery contractor did not have direct ongoing dialogue with CCAV and other relevant policy making teams, e.g. to identify policy gaps and during the refining and agreement of the key questions to be answered by the dialogue;
 - where a change was made to the dialogue focus (the introduction of sharing as a key topic), this happened late in the design process and it took some time for the rationale behind this to be fully communicated and understood;
 - there was a sense that not enough policy makers were sufficiently or actively involved directly in the process to confirm and prioritise dialogue questions, and in ongoing conversations about other aspects such as source materials, analysis and reporting;
 - consistency of knowledge and understanding of the dialogue process beyond those policy makers directly involved was variable (see section 4.3).
- The scope of the dialogue was necessarily wide given the stage at which this technology and related public engagement are at. This enabled a good breadth of topics to be covered, but risked a lack of depth and focus – the dialogue helped to map the territory, enabling areas for future focused engagement to be identified, but therefore could not deliver in depth findings on every topic discussed.
- Although opportunities for wider communication and dissemination of the dialogue findings will continue to be sought, explicit upfront consideration of the potential and resources for Sciencewise and the delivery contractors to contribute to that process could have helped to maximise dissemination and wider learning.

A time-bounded evaluation process will only ever provide a snapshot of potential longer-term impacts from this type of project. This factor, combined with the points above, suggests the potential for specific elements to be introduced to the Sciencewise model as standard, to more keenly focus on impacts. This could include:

- Ensuring an initial meeting (or meetings) between funders, dialogue contractors, evaluators and policy makers, to enable a clear shared understanding of the dialogue process, relevant policy gaps and targeted questions to be addressed by the dialogue. This is particularly relevant to emerging fields such as CAV technology, where legislation and policy is at a nascent stage.
- Earlier collaboration between project team and policy makers to formally track other existing and emerging national and international work of relevance to the dialogue, in order to inform dialogue focus and dissemination.
- Budgeting for delivery contractors and the Sciencewise Dialogue and Engagement Specialist (DES) to actively participate in communicating and disseminating findings and learning.
- Proactively planning the evaluation process for dialogues to extend six months beyond the project end without necessarily extending the budget. This could be achieved by a shift in focus to a lighter touch delivery evaluation (particularly when the delivery contractor has a strong track record of delivering Sciencewise funded projects) and an extended focus on impacts.

Recommendations

1. Sciencewise should consider adding or adapting some specific elements of its current dialogue model in order to maximise the potential for the tracking and realisation of impacts. For example:

- an early 'policy gaps' meeting with relevant policy makers and the whole project team, to enable a clear shared understanding of the dialogue process and ensure the dialogue scope and questions are tightly aligned with current / emerging policy priorities and knowledge gaps;
- formalised tracking of related national / international activities, such as relevant conferences and other engagement processes, to aid impact and dissemination;
- budgeting for collaborative dissemination activities between funders, Sciencewise and delivery contractors;
- extension of the evaluation period beyond project delivery, by design rather than request.

2. Sciencewise and other dialogue funders should consider building in an opportunity for participants to experience first-hand the technology being discussed, where feasible.

3. Project context

Headlines

- Clear rationale for a public dialogue approach, with timing about right given the stage of the technology and related regulatory framework.
- Management of the procurement process risked derailing the dialogue process.

3.1. Rationale and timing

One of the original drivers for the dialogue was a direct recommendation in an [academic report](#) commissioned by DfT. The nature of the topic made it a natural fit for a Sciencewise-type dialogue approach: this is a rapidly developing area of technology, with an emerging (but as yet unformed) regulatory framework, and where decision-makers currently have a limited understanding of relevant public views.

The dialogue project built on a recommendation from earlier work and, through the triangulation process, took account of existing knowledge and research as far as possible (see section 2).

Stakeholders had a mix of views on the degree to which the dialogue was happening too early (given the degree of uncertainty), too late (given the speed at which the technology is developing), or at a suitable time (given the balance of those two factors). This suggests that the timing was about right.

3.2. Procurement process

The project underwent an extended procurement process, including reissuing of the delivery contractor invitation to tender. Several individuals and organisations gave strong feedback on the challenges with the procurement process managed by UK Shared Business Services (UK SBS).

This feedback was consistent with that provided to the evaluators and the evaluators' own direct experience relating to other Sciencewise projects using the same procurement contractor, indicative of a systemic issue or issues.

The extension of the overall procurement process risked undoing much of the early work to build trust between Sciencewise and DfT, and between the DfT project team and policy colleagues. Clear and regular communication between these parties avoided any obvious damage in this regard.

Recommendations

3. UKRI should reconsider the suitability of the current procurement body and online gateway used to invite tenders for Sciencewise projects – particularly given the complex nature of a dialogue project, which does not lend itself to a more traditional product or service-based procurement system.

4. Governance, management, communications, stakeholder involvement

Headlines

- Solid project governance structures, strong project management and good open communications within the project team contributed to successful project delivery.
- The complexity of multiple parties involved presented a range of communication challenges, which tended to be well met – although the Oversight Group could have been more closely engaged towards the end of the project.
- The process has remained flexible to changes, particularly during the reporting stage, although the resulting extension presented resourcing challenges.
- Policy maker engagement with the project has been strong but not completely consistent between or within relevant policy making teams.

4.1. Project governance and structures

4.1.1. Overall governance and project team

Sciencewise projects effectively have two clients: Sciencewise and the partner funder (in this case, DfT). The addition of the relatively large number of stakeholders and specialists involved in the OG and SG in this project presented a wide range of viewpoints and expectations to be considered throughout the process. This appears to be a necessary reflection of the broad nature of the topic and therefore the breadth of related interests, but required careful managing.

Regular telephone meetings of the core project team – consisting of DfT, Sciencewise, Traverse (delivery contractor) and 3KQ (evaluator) – enabled ongoing discussion of expectations, challenges and solutions. These check-ins were essential to the smooth running of the project.

The “two client” model does present some challenges, specifically where a decision is required on a specific process point with two different preferred approaches (for example the style and components of the report). These decisions were worked through during the course of the project team calls, but some upfront guidance on “who decides” or, for example, which Sciencewise principles are non-negotiable, could have helped to speed up some such decisions.

In this particular case, there was essentially a third client for the dialogue project: CCAV. The high level of engagement of CCAV in the process was very positive from the point of view of maximising potential for impact but, as discussed in section 2 above, this slight level of distance from the central project team also presented challenges. In addition, there were a number of Sciencewise representatives involved in the early stages of project development, which had the potential to cause some confusion around roles and responsibilities.

Feedback from project team members on their interactions with the other individuals and organisations in the core team has been largely very positive, in particular the responsiveness of Traverse, the responsiveness and availability of the DfT team and the Sciencewise DES, the continuity of handover to a new DfT project lead, and the ability of the team to have open discussions about assumptions and challenges.

The cultivation of frank, open relationships within project teams is to be encouraged for future dialogue (and wider) projects, as it enabled some early challenges and potential differences to be tackled head-on rather than risking later destabilisation of the project. See section 5 below for further discussion of the final reporting process.

4.1.2. Oversight Group and Specialist Group

Given the large number of interests surrounding the topic and the broad split between the higher-level societal interests and the more detailed technical interests, the project team agreed that it

made sense to accommodate the range of stakeholders in two groups. Roles and responsibilities were clearly laid out for each group and a degree of crossover between the membership (in terms of organisations or individuals) helps to connect the two groups, though as noted below, this crossover is not without its challenges.

It took a while to finalise the roles and responsibilities of each group, and a head start through the earlier provision of a pro forma or example terms of reference for each may have helped to clarify the potential differences in roles and speed up the process of confirming them. The split between the groups risked feeling like a slightly artificial one simply due to the volume of interests involved in the topic, but overall has been well managed.

Further into the process, some stakeholders could identify a clear distinction between the two groups (e.g. OG representing groups likely to be impacted by CAV technology and SG representing more technical expertise), but for others this was less clear. Other structural options might have included keeping two groups, but making an even clearer distinction between the role and membership of each, or having one larger group from within which process steering and working / content groups were formed.

Engagement of and communication with the OG and SG have been timely and clear on the whole, although the division of responsibility for communicating with the OG and policy makers (DfT) and the SG (Traverse) presented the potential for mixed messages. The lines of communication within the project team have overall ensured clear coordination, but this separation of responsibility potentially added complication to the process of confirming observer and specialist attendance at workshops.

Feedback from the OG, SG and policy makers captured during meetings and via baseline evaluation interviews was considered and, where appropriate, responded to by the project team either through tweaks to the process or materials, follow-up discussions, or consideration of future process (e.g. ongoing communication mechanisms). Similarly, feedback from the OG and SG on the storyboard report has been taken account of by Traverse prior to presentation of the headline findings at the final OG meeting.

Overall, expectations across the two groups appear to have been managed well, particularly the degree to which feedback on the process and materials was taken account of and responded to where necessary. Several members of each group attended dialogue workshops as specialists or observers, and the OG had the opportunity to hear and reflect on emerging dialogue findings during their final meeting.

Final input from the project team and wider stakeholders suggested that there was a feeling the Oversight Group could have been more closely engaged generally, and particularly towards the closing stages of the project – including clearer communication of final reporting timelines.

Overall, however, the SG and OG involved a broad range of stakeholders with strong relevant experience and expertise, and a good level of engagement in the dialogue process. The chairing of the OG by the head of CCAV was a particularly good indicator of the level of investment and interest in the process from CCAV.

4.2. Project management and resourcing

The tight budget and delivery timescale of the project, combined with a broad topic and a detailed list of questions to be answered, presented a delivery challenge. The challenge was well met by the project team, and Traverse has displayed strong project management, responsiveness and flexibility to shifts in context and stakeholder feedback – challenging and clarifying where needed.

The reporting process extended beyond original timescales, largely due to the volume of changes required to the first draft of the report. See section 5 for more detailed discussion of why this happened. The extension of timescales, beyond any extra work incurred to produce the report itself,

leads to an extension of project management and communications time.

This has the potential to impact on resourcing for all parties involved in the project team. Further thought should be given for how to manage and distribute this type of risk and impact for future projects, for example allowing contingency within the overall project budget for slippage in timing, or agreeing processes for spreading the resource implication between the range of parties involved. This would, in particular, provide a level of comfort to delivery contractors in the context of already tight budgeting for dialogue projects.

This dialogue project has been one of the first to experience the new, reduced role of the Sciencewise Dialogue and Engagement Specialist (DES). In theory this meant that the DES was not budgeted to attend any of the dialogue workshops and was due to have limited input during the middle (delivery) phase of the process. In reality, the DES did attend one workshop and the majority of weekly project team catch up calls, in order to keep in touch with the process and provide input and advice from the Sciencewise perspective.

The reduced resourcing for DES involvement in the delivery of projects raises some questions for Sciencewise, including:

- How important is it for Sciencewise that its principles and approach are fully and consistently represented throughout the whole of the delivery process?
- Should the evaluator therefore be expected or formally asked to take on some of the work of representing the Sciencewise perspective and principles where the DES is not present, bearing in mind the potential for this to impact on the independent nature of the evaluator's role?
- Are there other measures that could be put in place to free up some of the DES's time for more active involvement throughout the process (e.g. formalisation of decision-making processes, development of a bank of templates, and other recommendations made elsewhere in this report)?

4.3. Policy maker involvement

The involvement of CCAV, as the main policy customer for DfT for this project, has been strong throughout – including presence at the inception meeting, chairing of the OG, and the presence of at least one representative at the majority of workshops. This reinforces the potential for ongoing tangible impact outlined in section 2.

Interim and final evaluation interviews, however, did raise a question over the consistency of awareness of the dialogue within policy-making circles, with anecdotal evidence of relevant meetings where the dialogue was either clearly mentioned or notable in its absence, and of materials that the dialogue could have linked to as they were being developed.⁵ This suggests that linkages between the dialogue and relevant policy makers could have been more clearly and consistently defined and communicated.

See section 2 above for more on this point.

4.4. Stakeholder involvement in dialogue workshops

Non-public participants attended the workshops in the following capacities: observers in the room to experience the process as it happened (OG members), specialists directly interacting with public participants (SG members and other specialists) and policy makers (generally taking an observing role). Briefing notes were produced for each group, with Sciencewise input.

Having these participants in the room is a key part of the public dialogue process. It enables

⁵ E.g. recent CCAV [documents](#).

stakeholders to experience the process first-hand and hear directly from members of the public. Beyond this, a key value of specialist and policy maker presence in the room is the interactions they have with members of the public, and the two-way impact on points of view, attitudes and assumptions. Indeed, this expectation is written into the Sciencewise guiding principles.

A range of specialists and observers was invited to attend the workshops, via the OG, SG and wider stakeholder contacts. This presented a good range of specialisms and interests across the set of workshops. The workshop 2 session that enabled participants to discuss CAVs with a selection of three different experts was observed by all involved to be one of the most successful sessions in terms of richness of discussion, enjoyment and learning from participants.

In some cases, the presence of specialists particularly in workshop 2 shaped the nature of discussions had by participants – for example because a specialist worked on a particular type of CAV technology or was interested in a particular topic. This is a natural consequence of involving a range of stakeholders in the dialogue process. In some cases the facilitators or specialists mitigated against conversational bias by ensuring alternative perspectives were flagged or brought into the conversation, but it is worth being aware that in some cases the direction of conversation (and thus outputs) may have been different had different specialists been in the room.

This will always be the case with interactive processes and – given the structured nature of the sessions, range of specialist involvement and presence of facilitators – is unlikely to have impacted the robustness of dialogue findings. It is, however, worth bearing in mind for future processes that the more complex the topic and therefore the greater the variety of specialist interests involved, the harder it is likely to be to enable the full range of interests to be present in the room with public participants.

The involvement of specialists in the third set of workshops – for example in the development of guiding principles – was good, but was hindered by the presence of only two specialists at each workshop, meaning one table was without access to a specialist at any one time. This was largely due to a budgetary constraint.

Getting “the right” stakeholders in the room for a dialogue process (i.e. a mix of appropriate knowledge and ability to engage in an unbiased conversation) is an ongoing challenge, and one that Traverse met in the following ways:

- Clarifying the role of observers, specialists and policy makers in the room, via written briefings and an on-the-day briefing about their role.
- Stepping in if the roles became blurred, either in the moment or by clarifying or restricting roles for future workshops – e.g. if observers or policy makers began correcting participants or trying to influence their views.
- Balancing a mix of in depth specialist knowledge in the room with the need to limit numbers of non-public participants.

Policy makers tended to take an observing rather than a specialist role at workshops. This enabled input from a range of specialists covering the breadth of topics relevant to the dialogue, while avoiding an imbalance of input from non-public participants that could have risked shifting conversations away from public participant airtime and views. However, it also limited interaction directly between participants and policy makers. With future processes – for example specific engagement with particular aspects of CAV technology where a narrower range of specialist input is required, or to feed into the development of a particular policy area – consideration should be given to increased interaction between relevant policy makers and participants. In line with the typical Sciencewise dialogue approach, this should continue to be accompanied by clear written and in-person briefings, as well as potentially a more in-depth training session to enable relevant policy makers to gain a deep understanding of the value of the deliberative dialogue and their role within it.

Recommendations

4. Sciencewise should consider producing explicit guidance on the decision-making process for areas of potential difference between its own and partner funders' preferred methodology or approach – particularly in the context of the reduced scope of the Dialogue and Engagement Specialist (DES) role within active dialogue projects.
5. Future project teams should – based on clear guidance from Sciencewise – clarify at the outset the roles and membership of any distinct stakeholder groups such as oversight or specialist groups within the overall governance structures, and consider different options for such groups (e.g. one large group with sub-functions, core group and reference group, multiple groups).
6. Sciencewise should consider building on any existing templates to build a bank of sample or template documents that can be provided to project teams upfront (including OG and SG terms of reference, as well as other documents such as specialist and observer briefings for workshops) based on previous dialogue processes, to enable earlier clarity and speedier development of materials other than those designed to engage participants.
7. Flexibility of process aided by clear, open communication and regular check-ins are a valuable and essential part of a complex dialogue process – future project teams should enter into dialogue processes with this explicitly in mind.
8. Sciencewise should consider how to manage and distribute the risk and impact of project extension or slippage for future project, for example allowing contingency within the overall project budget for slippage in timing, or agreeing processes for spreading the resource implication between the range of parties involved.
9. Sciencewise should reflect upon the reduced role of the DES within project delivery and consider whether any specific actions should be taken to reduce resulting risks to the projects (e.g. changing the role of the evaluator, or ways to free up some of the DES's time for more active involvement throughout the process).
10. Future funders and project teams should work to ensure consistent internal awareness and understanding of the dialogue outputs within relevant policy making circles, to ensure dialogue outputs are taken account of within all (or as many as possible) relevant policy decisions or documents.
11. Future project teams should continue to carefully plan and manage the involvement of specialists and observers in future dialogue processes, including selection of individuals, range of interests, clear briefing, ability to talk about viewpoints other than their own and maximising dialogue (particularly in the latter stages of the process).
12. Future project teams should consider increasing interaction between relevant policy makers and participants, accompanied by clear briefing / training for participating policy makers.

5. Delivery

Headlines

- The complexity of the project presented a challenge in terms of identifying and prioritising specific questions to cover through the dialogue process – the challenge was well met, but meant a compromise between breadth and depth of discussion.
- Design and delivery was of a high quality overall.
- The inclusion of identifiable data by individual or demographic provided the potential for rich analysis but risks dialogue findings being over-extrapolated.
- Extension of the reporting process has led to some learning for future processes, but the final result is perceived to be of high quality by relevant stakeholders.

5.1. Scoping and framing

The dialogue objectives were refined early on in the process and the more detailed set of dialogue questions⁶ went through a prioritisation process following the inception meeting; further changes were made, for example, in response to emerging policy priorities. In particular, one late change to the dialogue priorities (around the topic of sharing) was accommodated within the overall process design – this ensured the process could meet current policy priorities, but relied on the delivery contractor being responsive and flexible in making the required changes in a timely manner.

The wide scope of the topic presented the challenge of balance – cover more areas in less depth, or fewer in more detail. The project team has been keenly aware of this throughout, and the scope has remained matched to the prioritised set of dialogue questions, but with tweaks to take account of shifts in policy priorities (e.g. increased focus on sharing partway through the design process) as well as input from the OG. The resulting process covered areas of high interest, such as sharing, in depth, with other areas covered in a lighter touch way. See section 2 for further discussion of scoping in the context of emerging impacts and links to policy making priorities.

Sciencewise dialogue projects occupy a unique position alongside social research or other types of qualitative engagement (for example behavioural research, deliberative research, focus groups, etc). This presents the ongoing challenge of clarifying what the dialogic approach can and cannot do well, and how it sits alongside other equally valid but different types of work to explore public views and attitudes. More specifically, it can raise differences in language or methodology – for example around the perceived or actual difference between dialogue and social research – which did arise at points particularly during the design process for the dialogue workshops.

As with other issues (see section 4), there has been open conversation within the project team to clarify and agree a way forward whenever such differences have arisen. But this point does reinforce an ongoing challenge for Sciencewise in describing and framing the public dialogue process.

5.2. Recruitment

The delivery team paid significant attention to the recruitment of participants in terms of the specific breakdown of demographics across and between the five locations. A process of prioritisation and some further tweaking refined specific recruitment criteria to ensure the demographic sub-groups of most interest to the DfT team and policy makers were taken into account. One or two tweaks came fairly late on, just as recruitment was beginning. The relevant change was made but, as with

⁶ These “dialogue” or “research” questions were the set of questions the process was designed to answer – see the final dialogue report for the full set.

changes to process design, agreeing a clear cut-off point for changes to recruitment criteria could be helpful in future.

The dialogue engaged around 150 participants (a relatively high number for a Sciencewise process), which provided the opportunity to recruit for a broad range of different demographic and sociological factors. This did mean, however, that some of these factors were present in the mix in low numbers. Policy makers and others using the outputs to inform decision making will need to be clear that the small numbers of some demographic sub-samples are not large enough to provide robust disaggregated conclusions, and indeed that this is not the function of a public dialogue process – see 6.4 and 6.5 below for more on this.

Observation and specialist / observer reflections at the workshops picked up on the mix of participants across the five locations in terms of key aspects such as age, ethnicity, socioeconomic groups and driving experience. Sciencewise dialogues do not aim to provide statistically significant conclusions on the attitudes of specific demographic groups. However, a broadly representative mix of participants involved in a dialogue aids credibility of the findings overall. And in this case (non-statistically significant) analysis of any differences / non-differences between different sub-groups of participants provided some useful evidence, potentially challenging existing assumptions (see section 2).

The spread of workshops covers one location in Scotland, one in Wales and three in England, with two of the English locations being very close together geographically (Millbrook and Milton Keynes). This is due to the building in of experiences with CAV technology to three of the workshop locations – requiring meetings to be tied to the particular places where trial technology exists and is able to be used. While not ideal in terms of spread, there was little scope for alternatives within the budget and time available leading up to the workshops.

5.3. Design and delivery

The overall design of the dialogue process was well-structured to respond to the overarching set of dialogue questions. Each element and method has a clear rationale, with a variety of pace, structure and activity built into each workshop.

Overall, the delivery of the workshops went very well, as reflected by observation, stakeholder, project team and participant feedback. The structured activities were generally successful at engaging participants in an imaginative and creative way in relevant questions and discussion.

Some activities were more complex than others, requiring a series of supplementary questions and a range of materials to enable a deeper dive into specific topics. This added a challenge for table facilitators to deliver the tasks consistently across all groups and sometimes made it more difficult for participants to fully understand or engage in the task. The balance between consistency and depth is a difficult one to strike and this was a challenge that was overall well met by the process design and facilitation teams.

Materials development was an involved process with several iterations, due to the need to feed in views from DfT, Sciencewise, the OG (from a strategic perspective), the SG (with respect to technical details) and policy makers (primarily CCAV). The range of perspectives involved and their high level of engagement with the process made timescales for turning around materials challenging, but Traverse has managed the process efficiently and with a high degree of flexibility.

Participants responded well to the majority of materials, especially those that engaged them in possible future scenarios in a creative way. They were also encouraged to seek further information as part of their homework tasks – e.g. noticing where they saw CAV technology mentioned in the media. Facilitators presenting materials during the workshops often noted that the future of CAV technologies was not set: factors such as the speed and direction of development and deployment, and the range of potential uses, mean there are a number of different possible futures. This could

have been done to an even greater extent, particularly as specialists with particular areas of interest became more involved in discussions.

The biggest risk associated with the practical delivery process was the integration of the live experience with CAV technology to three of the workshops. Each experience was different,⁷ requiring three slightly different workshop plans to accommodate them, and as with any technology, there was the risk that things might not go to plan on the day. The project team has been aware of this from the start, and Traverse put thought into the detailed process surrounding the experiences, as well as potential contingencies. All three of the relevant workshops went smoothly and to time, with the experiences causing minimum disruption to the overall flow, thanks to a combination of forward planning, efficient host organisations, and strong on-the-day management.

Interim interviews suggested the introduction of the experiences to participants (by facilitators and host organisation) could have focused even more strongly on contextual information, for example, explaining why and how the demo was different to a “live” scenario, and describing other applications of CAV technology and different levels of automation.

A lot of ground was covered across the three sets of workshops, requiring disciplined time management, which on the whole was done very well, especially in those workshops where participants were experiencing CAV technology. The mix of shorter and more extended activities added variety and changes of pace to the workshops.

Participants were reassured throughout that any attributable data collected would not be linked to their personal details and, where needed, consent was sought to recontact participants with a clear description of purpose and data handling procedures.

Traverse working with academic partners from University College London (UCL) to deliver the project. This provided Traverse with additional perspectives on content, design, methodology and analysis – including input from a researched-focus perspective. UCL members of the project team also attended Oversight Group meetings and in one case acted as a table facilitator. This added a risk of different faces or organisational approaches being presented by the delivery team – a risk that was managed by Traverse when needed. Bringing extra partners on board in an already complex process potentially adds to the overall resource burden of the project, but in this case the delivery team clearly valued the perspectives, knowledge and experience brought to the process by their academic partners.

5.4. Capturing data

The ability to attribute views to specific participants was built into the process through the range of methods being used to capture views, including keypad tracking votes at regular points, unique post it notes for each participant, and journals. This was done to enable a richness of analysis in the final report with respect to examining trends, tendencies and areas for further exploration across the different types of participant involved in the process (e.g. age, urban / rural, driver / non-driver, etc). However, it also presents the risk that any observations of differences or similarities across demographics could be interpreted out of context.

The report includes caveats designed to help to avoid later generalisation of views based on the findings in the report and conversations with stakeholders close to the dialogue process suggest that they are clear about the limitations of the data. There remains a risk of over-extrapolation, however, from stakeholders not involved in the process – for example “there were no clear differences in views on topic x between different sub-groups participating in the dialogue” could risk being interpreted or communicated in shorthand as “all types of members of the public hold similar views on topic x”.

⁷ Including a pod in Milton Keynes, a highly automated car in Millbrook and a simulator in Leeds.

5.5. Analysis and reporting

Early discussion of expectations around analysis and reporting via a dedicated reporting meeting took account of the various expectations gathered from baseline evaluation interviews, and included discussion of the range of outputs as well as the content. Traverse also dedicated time to discussing the analysis and reporting approach internally, to ensure the large amount of data captured was analysed in a cost-effective and relevant manner.

A storyboard report highlighting key findings was produced to share with the OG for their reflection and input, and received a high level of interest and positive response from attendees at the final OG meeting. Following this, Traverse produced a draft report – based upon a structured programme of analysis. The report received a high volume of comments from the rest of the project team, leading to the need for substantive changes. Observations and discussions suggest this was due to a mix of mismatched expectations regarding what the report should deliver and how, as well as some lack of clarity over the outcomes of early discussions on reporting.

To help avoid such a scenario in future projects, it is suggested that expectations of the report structure and purpose be discussed and agreed early (clearly capturing any key agreements), that these discussions be revisited during the analysis process, and that a draft chapter be produced (rather than a storyboard report followed by a full draft) to minimise the need for extensive reworking.

Following the reworking of the report, relevant stakeholders are very happy with the final version. The decision by DfT to allow extra budget for the production of a slide deck to accompany the final report and executive summary provides easily digestible high-level outputs that can be shared within and outside of policy making circles. Again, where relevant these will need to be accompanied by clear caveats with respect to inference and interpretation.

Recommendations

13. In future processes, project teams should explicitly address the issue of balancing breadth and depth in a dialogue's scope, to ensure there is a clear rationale for why and where to focus depth, being aware of the related need to keep materials and process simple where possible.
14. Sciencewise should reconsider how best to frame the dialogue process alongside other types of qualitative engagement (for example social and behavioural research, deliberative research, focus groups, etc) – including the use of language that will best communicate the value of the dialogue process with policy makers and other stakeholders. This language should be reflected in dialogue documentation such as case studies. A key question for Sciencewise to reflect on is “what is the difference between dialogue and these other processes, and why does it matter?”
15. In future, where dialogue processes are built around specific locations due to association with the topic or presence of a particular technology in action, funders should consider closer upfront engagement with relevant locations / venues to ensure they are both suitable (i.e. can accommodate the expected number of participants) and available within budget (e.g. for all day Saturday workshops) – prior to the procurement process going live. This early priming (undertaken with Sciencewise guidance by the commissioning body) would give a head start to the project team in terms of agreeing and confirming locations once the process goes live.
16. Sciencewise should consider producing standardised wording to insert in future dialogue reports, communicating the rationale, value, and limitations of the overall approach and data, including the risk of inference and over-extrapolation. This can be built upon by dialogue contractors, for example by adding any further detail on the value and limitations of specific design choices.
17. In the framing of the final report (and interim reports to the OG and SG), future project teams

should continue to explicitly consider how to minimise the risk of out-of-context interpretation presented by highlighting trends within or across specific demographics.

18. Future project teams should discuss and agree expectations of the report structure and purpose early (which was done for this project), revisit these discussions during the analysis process, and ensure a draft chapter is worked up for comment prior to a full draft report being produced.

6. Participant experience

Headlines

- High levels of satisfaction and positivity towards the process, which continue to be reflected six months after the delivery of the dialogue workshops and have made participants more willing to want to participate in similar processes in the future.
- Good, proportionate responsiveness of process to participant needs.
- High levels of self-reported learning, again reflected in the six month post-dialogue review.

6.1. Participant understanding and expectations of the process

The dialogue aims were shared with public participants close to the beginning of each workshop as part of the opening presentation, alongside a reminder of the overall process and an overview of the activities for the workshop itself.

Participant feedback (see Appendix 3) show that participants overall felt clear about both the dialogue and the individual workshop purpose. This was particularly true of the third workshop, which ended with the development of suggested guiding principles for CAV development.

Again, across all three workshops, participants indicated they were clear about how their views could make a difference (see Appendix 3). This indicates an expectation of impact, which highlights the importance of decision makers taking account of the dialogue outputs and – where appropriate – referencing the dialogue as a source of evidence.

6.2. Participant satisfaction

Participants were asked about a number of other aspects of the workshop. The table below shows the total percentage (across all locations) who agreed or strongly agreed with each statement.

Statement	Workshop 1	W2	W3
I felt able to contribute my views today	95%	95%	97%
There was enough time for me to discuss the things that mattered to me	91%	93%	95%
The information I received today was balanced / unbiased	N/A	94%	95%
I felt supported and respected	97%	98%	97%
I felt physically comfortable in the room	93%	88%	97%
I enjoyed the food	88%	93%	91%
I am happy to stay involved in the public dialogue process	98%	N/A	N/A
Total respondents	152	148	152

These results indicate a very high level of overall satisfaction with the process, including aspects of participation (ability to contribute, time to discuss things that mattered, support and respect) and information received. Feedback on logistics (food and room) were positive, but reflected issues around aspects such as room temperature, lighting, acoustics and food options. These were fed back to the project team and were responded to for the remainder of the workshops where possible.

Aspects participants particularly enjoyed about the workshops included:

- The small group discussions and ability to contribute.
- The topic itself (e.g. interesting, thought provoking).

- Interactions with other participants, facilitators and specialists.
- Specific exercises or activities (including the live voting at the end of each workshop).
- The opportunity to experience CAV technology directly (where relevant).
- The overall organisation and coordination of the workshops.

Things participants said they would change about the workshops again tended to focus on logistical aspects such as room temperature, acoustics or food, although a small number focused on specific exercises or other aspects of the event such as timing (e.g. wanting more time or less time for specific activities, breaks, or the overall event).

The positive experience of public participants was further evidenced by the high level of retention throughout the process, although the tiered incentive structure⁸ used by the project team was probably a strong contributory factor to this.

Use of a lead facilitator alongside three table facilitators was essential given the range of activities and the need for good time management balanced with the need for flexibility of process across the three workshops. The lead facilitator was able to convey messages about changes in process, communicate timings, and dip in to help with facilitation where required.

Use of a consistent set of table facilitators within each location was key to the development of a strong rapport with participants, which was one of the most noticeable strengths of the facilitation across all locations. Participants enjoyed interacting with their facilitators and appeared to trust them to lead the process.

During the workshop design process, there were discussions within the project team about whether or not to mix up the make-up of small groups between sessions. It was agreed not to mix up the groups, in order to aid rapport-building and maximise contribution. There were, as always, some participants who were less vocal or engaged than others. On the whole facilitators did a good job encouraging these participants to contribute and ensuring a balance of voices, and could have been even more mindful of this particularly towards the end of the process – where there was the potential for fatigue to set in and where participants were contributing to a set of guiding principles.

Similarly, facilitators overall paid attention to differences in views, exploration of meaning and values underlying specific viewpoints, linkages between specific ideas, and observing trends or patterns. The level at which this happened varied across the different facilitators, and the lead facilitators played an important role in feeding back to facilitators where they could be doing more to pay attention to or capture aspects of the conversation.

Wash-up sessions after each workshop enabled the facilitation team to capture emerging messages and to share thoughts on what went well or could be adapted. Evaluation feedback after and during each workshop also fed into the ongoing monitoring and adaptation of process and facilitation.

6.3. Participant influence, responsiveness and flexibility of process

Ways in which the process responded to participant needs and involved participants in the development of findings included the following:

- Participants were not restricted in what they could say or where they could go with a conversation in any given exercise, although facilitators necessarily balanced this with focusing discussions on the relevant dialogue questions.
- At the beginning of workshop 2, the pros, cons and questions developed in workshop 1 were clustered thematically and fed back to participants, so that participants could sense check the

⁸ The incentives for participants were: £25 at the end of workshop 1; £75 at the end of workshop 2; £200 at the end of workshop 3.

clustering directly and confirm their thoughts had not changed between workshops.

- The specialist sessions in workshop 2 enabled participants to interact directly with specialists in whatever format they liked, and to ask questions directly.
- Emerging findings were shared with participants at the beginning of workshop 3, and they could then add to or amend these based on their own memory and experience of the process.

Participants were asked about accessibility needs during the recruitment process, but this did not always pick up on particular needs that later became apparent during the delivery process – either because the upfront question wasn't specific enough or because participants didn't feel comfortable sharing relevant information so early in the process. Where particular participant needs were picked up by facilitators or shared with them, an effort was made to adapt logistics or process accordingly. In future, a more systematic process for building access and literacy needs into the process from the start alongside asking more specific questions post-recruitment would potentially help to preempt some of these adaptations.

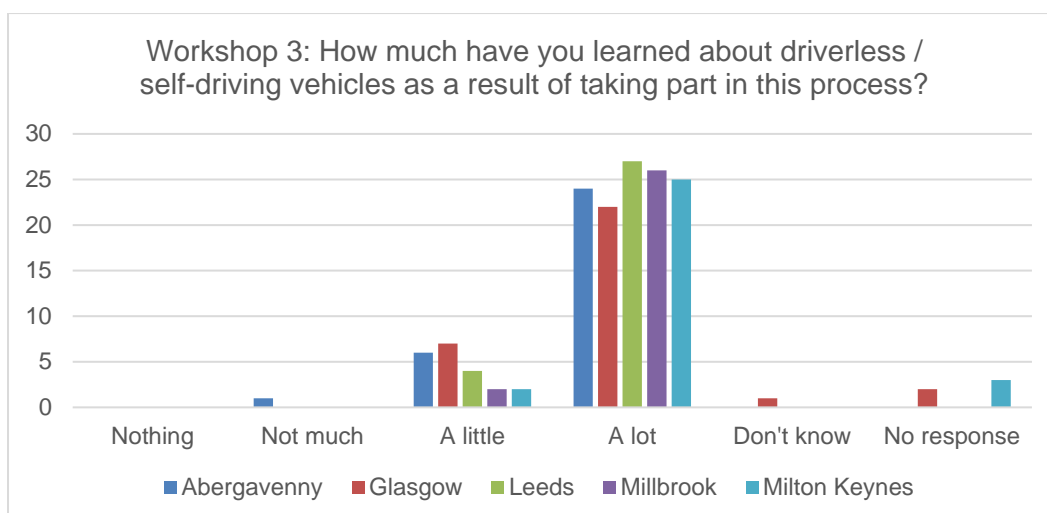
Limiting further direct participant influence over the workshop design made sense given the need to cover a relatively large set of questions and topics in a structured manner.

6.4. Impacts on public participants

The overall impression of the entire workshop delivery phase, based on observation, discussion with participants during the workshop and feedback forms, is of a process that was responsive to participant needs and that provided a high level of enjoyment and learning for those taking part. While enjoyment in itself is not necessary to achieve an output from this kind of process, participants feeling positive about the process are likely to be more engaged and thus contribute to a richer discussion than participants who are feeling negatively towards the process.

At the first and second workshops, participants were asked what had changed for them as a result of taking part. Many cited increased knowledge or understanding, with some saying they had a new point of view or understood others' point of view better. Some mentioned specific learning, for example around the possible use cases of CAV technology or the timescales.

At the third workshop, participants were asked specifically about learning – see graph below. The majority of participants said they had learned a lot about driverless or self-driving vehicles as a result of taking part in the process, with most of the remainder saying they had learned a little.



Specific learning mentioned by participants included particular aspects of CAVs (e.g. use cases, automation levels, timescale, infrastructure requirements, insurance, regulations, future context), impacts or benefits (e.g. safety, environment). Some talked about the perceived inevitability of the

technology happening, while others mentioned they felt they knew more about the topic generally.

Participants were asked two further questions in workshop three:

- How do you feel about driverless / self-driving vehicles, compared to before you took part in the dialogue process?
- Based on your experience with this process, how likely are you to be willing to take part in a similar public dialogue process in the future?

Full results are shown in Appendix 3, but broadly speaking, the majority of participants across all locations said they felt more positive (or at least about the same) about driverless or self-driving vehicles – the table in section 6.2 above shows that the majority of participants came to this view in the context of receiving information they felt was balanced and unbiased.

Similarly, the majority of participants across all locations said they would be more likely to take part in similar public dialogue process, based on their experience with this process. When asked to explain further, participants mentioned general interest in this type of topic, the enjoyment of taking part, learning, feeling listened to, and feeling a responsibility to contribute views.

6.5. Six month follow-up survey

In June 2019, six months after the final dialogue events, the evaluators sent a short follow-up evaluation survey to all public participants who had provided an email address and permission to be recontacted (via in-workshop evaluation forms). 20 participants responded – see Appendix 7 for the full results.

Given the smaller sample size, direct comparisons with the end of workshop 3 data should not be drawn. But broadly speaking, those participants who did respond to the survey remained very positive about their future willingness to participate in dialogue projects and generally positive about driverless / self-driving vehicles, compared to before they participated in the dialogue. They expressed more nuanced views about the potential for CAV technology to have a positive impact on society and on them / their family, in line with the findings in the dialogue report.

Respondents were asked to comment on what worked and didn't work about the process, as well as providing any final reflections on the process:

- Positive memories of the dialogue process focused on learning about CAVs, as well as the openness of the process, interaction with specialists, and direct experience with the technology.
- There were fewer thoughts about what didn't work so well. These comments included the overall length of the workshops and the resulting potential for repetition, the sense that the direct experience with CAV technology was not true to life / realistic, and the size of the groups (too large to discuss some things properly).
- Final reflections were consistently positive, with a couple of respondents saying they would like to know more, or that they have become aware of the amount CAVs are now in the news.

Recommendations

19. Future delivery contractors should consider emulating this process in relation to the facilitation structure (lead facilitator alongside consistent table facilitators and small groups within locations) to maximise the participant-focused nature of the process and rapport-building, bearing in mind the resourcing implications (time and budget) this presents.

20. Future delivery contractors should maximise the use of wash-up or feedback sessions to enable transference of challenges and good practice between facilitators. This could, for example, include use of a one-page facilitator crib-sheet highlighting things to look out for, amplify and avoid, to aid

consistency of approach across a large team.

21. Future delivery contractors should work to ensure participants' accessibility needs are understood and worked into the design process upfront (e.g. room accessibility, specific cognitive needs such as preferring written instructions or large print, etc.).

7. Final reflections and summary of recommendations

The CAV public dialogue was a timely process with the potential to fulfil a clear need from relevant sectors and policy makers to increase knowledge of public understanding, views and attitudes towards CAV technology, and the factors that shape and influence these views.

The procurement process was challenging and extended, and risked destabilising the entire project, but the tenacity of the DfT team in particular in keeping the process going enabled it to come to fruition.

The dialogue combined strong design and delivery with open communication, a responsive project team, and an engaged group of members of the public and stakeholders. Several specific learning points are provided in relevant places throughout this evaluation report, with the full set of recommendations as follows:

1. **Sciencewise** should consider adding or adapting some specific elements of its current dialogue model in order to maximise the potential for the tracking and realisation of impacts. For example:
 - an early 'policy gaps' meeting with relevant policy makers and the whole project team, to enable a clear shared understanding of the dialogue process and ensure the dialogue scope and questions are tightly aligned with current / emerging policy priorities and knowledge gaps;
 - formalised tracking of related national / international activities, such as relevant conferences and other engagement processes, to aid impact and dissemination;
 - budgeting for collaborative dissemination activities between funders, Sciencewise and delivery contractors;
 - extension of the evaluation period beyond project delivery, by design rather than request.
2. **Sciencewise** and other dialogue funders should consider building in an opportunity for participants to experience first-hand the technology being discussed, where feasible.
3. **UKRI** should reconsider the suitability of the current procurement body and online gateway used to invite tenders for Sciencewise projects – particularly given the complex nature of a dialogue project, which does not lend itself to a more traditional product or service-based procurement system.
4. **Sciencewise** should consider producing explicit guidance on the decision-making process for areas of potential difference between its own and partner funders' preferred methodology or approach – particularly in the context of the reduced scope of the Dialogue and Engagement Specialist (DES) role within active dialogue projects.
5. **Future project teams** should – based on clear guidance from Sciencewise – clarify at the outset the roles and membership of any distinct stakeholder groups such as oversight or specialist groups within the overall governance structures, and consider different options for such groups (e.g. one large group with sub-functions, core group and reference group, multiple groups).

6. **Sciencewise** should consider building on any existing templates to build a bank of sample or template documents that can be provided to project teams upfront (including OG and SG terms of reference, as well as other documents such as specialist and observer briefings for workshops) based on previous dialogue processes, to enable earlier clarity and speedier development of materials other than those designed to engage participants.
7. Flexibility of process aided by clear, open communication and regular check-ins are a valuable and essential part of a complex dialogue process – **future project teams** should enter into dialogue processes with this explicitly in mind.
8. **Sciencewise** should consider how to manage and distribute the risk and impact of project extension or slippage for future project, for example allowing contingency within the overall project budget for slippage in timing, or agreeing processes for spreading the resource implication between the range of parties involved.
9. **Sciencewise** should reflect upon the reduced role of the DES within project delivery and consider whether any specific actions should be taken to reduce resulting risks to the projects (e.g. changing the role of the evaluator, or ways to free up some of the DES's time for more active involvement throughout the process).
10. **Future funders and project teams** should work to ensure consistent internal awareness and understanding of the dialogue outputs within relevant policy making circles, to ensure dialogue outputs are taken account of within all (or as many as possible) relevant policy decisions or documents.
11. **Future project teams** should continue to carefully plan and manage the involvement of specialists and observers in future dialogue processes, including selection of individuals, range of interests, clear briefing, ability to talk about viewpoints other than their own and maximising dialogue (particularly in the latter stages of the process).
12. **Future project teams** should consider increasing interaction between relevant policy makers and participants, accompanied by clear briefing / training for participating policy makers.
13. In future processes, **project teams** should explicitly address the issue of balancing breadth and depth in a dialogue's scope, to ensure there is a clear rationale for why and where to focus depth, being aware of the related need to keep materials and process simple where possible.
14. **Sciencewise** should reconsider how best to frame the dialogue process alongside other types of qualitative engagement (for example social and behavioural research, deliberative research, focus groups, etc) – including the use of language that will best communicate the value of the dialogue process with policy makers and other stakeholders. This language should be reflected in dialogue documentation such as case studies. A key question for Sciencewise to reflect on is “what is the difference between dialogue and these other processes, and why does it matter?”
15. In future, where dialogue processes are built around specific locations due to association with the topic or presence of a particular technology in action, **funders** should consider closer upfront engagement with relevant locations / venues to ensure they are both suitable (i.e. can accommodate the expected number of participants) and available within budget (e.g. for all day Saturday workshops) – prior to the procurement process going live. This early priming (undertaken with Sciencewise guidance by the commissioning body) would give a head start to the project team in terms of agreeing and confirming locations once the process goes live.
16. **Sciencewise** should consider producing standardised wording to insert in future dialogue reports, communicating the rationale, value, and limitations of the overall approach and data, including the risk of inference and over-extrapolation. This can be built upon by dialogue contractors, for example by adding any further detail on the value and limitations of specific design choices.
17. In the framing of the final report (and interim reports to the OG and SG), **future project teams**

should continue to explicitly consider how to minimise the risk of out-of-context interpretation presented by highlighting trends within or across specific demographics.

18. **Future project teams** should discuss and agree expectations of the report structure and purpose early (which was done for this project), revisit these discussions during the analysis process, and ensure a draft chapter is worked up for comment prior to a full draft report being produced.
19. **Future delivery contractors** should consider emulating this process in relation to the facilitation structure (lead facilitator alongside consistent table facilitators and small groups within locations) to maximise the participant-focused nature of the process and rapport-building, bearing in mind the resourcing implications (time and budget) this presents.
20. **Future delivery contractors** should maximise the use of wash-up or feedback sessions to enable transference of challenges and good practice between facilitators. This could, for example, include use of a one-page facilitator crib-sheet highlighting things to look out for, amplify and avoid, to aid consistency of approach across a large team.
21. **Future delivery contractors** should work to ensure participants' accessibility needs are understood and worked into the design process upfront (e.g. room accessibility, specific cognitive needs such as preferring written instructions or large print).

Overall the process delivered was of a high quality, and remained flexible to changing needs and circumstances. The participant experience was consistently strong across all locations.

The potential for the dialogue to influence and impact decision making and future work programmes appears to be good – including policy making, further dialogue and research projects, and other CAV-related activities such as public communications and technology trials. A more targeted approach to identifying policy gaps and other relevant work, and to keeping the full range of relevant policy makers directly engaged in the process, would have helped to increase the overall impact and value of the process.

8. The dialogue project and evaluation process

8.1. The dialogue project

The Department for Transport (DfT) in partnership with [Sciencewise](#), funded by UK Research and Innovation (UKRI), commissioned a public dialogue project on attitudes towards Connected and Automated Vehicle (CAV) technology. The final combined DfT and Sciencewise spend on the project was £301,162.45 – including the cost of DfT staff time.

The overall project phases were as follows:

- March-September 2018: confirming scope and objectives, planning workshops and developing stimulus materials.
- October-December 2018: workshop delivery.
- January-June 2019: analysis and reporting.

Between October and December 2018, more than 150 people participated in a series of three workshops in one of five locations: Abergavenny, Glasgow, Leeds, Millbrook, and Milton Keynes.

Participants took part in a series of structured discussions and activities, designed to enable them to develop and share their views. They also had the opportunity to interact with policy makers and specialists from industry, academia and government. In three of the locations, some participants were able to gain first-hand experience of CAV technology by riding in a simulator (Leeds), a self-driving pod (Milton Keynes), or a highly-automated car (Millbrook).

The project was delivered by Traverse in partnership with researchers at UCL, and evaluated by 3KQ. Project delivery was overseen by members of the DfT social and behavioural research team and Sciencewise. Two further bodies were convened to provide input to the dialogue:

- Oversight Group (OG). An advisory group comprised of stakeholders from academia, industry, policy, and public interest groups – providing oversight for the dialogue process, including commenting on the stimulus materials, outputs and communications strategy for the outputs.
- Specialist Group (SG). A group of stakeholders from academia, industry, and other relevant bodies – providing specialist expertise to inform the dialogue materials, as well as in some cases attending workshops to participate as specialists.

See the final *CAV public acceptability dialogue engagement report*, produced by Traverse, for further detail on the dialogue process and findings.





8.2. Evaluation approach and objectives

3KQ's evaluation approach is grounded in the Sciencewise requirements and guidance for evaluating public dialogues, including *Guidance on Evaluating Projects*, the Sciencewise Quality Framework, and the Sciencewise guiding principles.

The evaluation aims to provide an independent assessment of the impacts and quality of process – including design, delivery, reporting and governance activities – with two objectives in mind:

- Gather and present objective and robust evidence of the nature and quality of the impacts, achievements and activities of the project.
- Identify lessons from the project to support the design and delivery of future public dialogue projects.

8.3. Evaluation evidence and data sources

	Baseline stage	Interim stage	Final stage
	18 telephone interviews (policy leads, OG, SG, DfT, Traverse, Sciencewise).	11 telephone interviews (OG, DfT, Traverse, Sciencewise).	6 telephone interviews (policy leads, DfT, Traverse, Sciencewise).
	18 feedback forms from SG meeting.	452 feedback forms from approximately 150 public workshop participants. 52 feedback forms from all specialists and observers attending the workshops.	20 responses to participant follow-up survey. Written feedback from 4 OG members.
	Attendance at two OG and one SG meeting	Attendance at 11 out of the 15 dialogue workshops.	Attendance at one OG meeting.
	Ongoing observations of process, communications and documentation.		

CAV Public Acceptability Dialogue

Final evaluation report APPENDICES

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Appendix 1: Sciencewise indicators covered by this report

Relevant indicators are listed below, cross-referenced to relevant report sections, with those labelled N/A not covered by or not relevant to this report. Note, some indicators were covered in more depth by the baseline and interim reports, with relevant reflections fed back to the project team at those points in the process.

1. CONTEXT		
Theme	Quality indicator	Report section
1.1. RATIONALE AND PURPOSE	1.1.1. Evidence that the rationale for using public dialogue (rather than any other engagement / research methods) was clear, including how the dialogue results were expected to be used alongside other inputs to decision making.	3.1.
	1.1.2. Evidence that the purpose was clear and agreed among relevant stakeholders, and that different motivations and expectations among those involved were articulated and understood.	2.1.
	1.1.3. Evidence that the stated objectives identified what the dialogue was expected to achieve (not just what it would do).	2.1.
	1.1.4. Evidence that the purpose and objectives were framed in a way that ensured that the dialogue would meet the required quality standards, including informing specific decisions.	2.1.
	1.1.5. Rationale for the outputs, outcomes and impacts sought from the dialogue, including their extent and limits, and how they were expected to be achieved.	2.1.
	1.1.6. Evidence of plans for how, where, when and by whom the results of the dialogue were expected to be used in informing decisions.	2.1.
	1.1.7. Evidence that any internal objectives were made explicit and shared (e.g. organisational and individual capacity building).	N/A
	1.1.8. Evidence that the stated purpose and objectives were expressed in language that could be used without amendment with public participants and all other stakeholders involved, so that a clear and shared understanding could be developed.	3.1. 6.1.
	1.1.9. Discussion of how the objectives were appropriate in the particular context and circumstances of the dialogue.	2.1. 3.1.
1.2. TIMING AND CONTEXT	1.2.1. Rationale for the use of public dialogue at the specific time it was done.	3.1.
	1.2.2. Evidence that the issues being discussed were understood in relation to existing knowledge about public and political concerns on the main and related topics and concerns (e.g. review of existing public views on the topic, desk research, literature review, discussions with an Oversight Group and/or other key stakeholders).	2.1. 3.1.

	1.2.3. Evidence that consideration had been given to related current initiatives on the topic, especially those involving public participants (e.g. links with formal online / written consultations).	3.1.
	1.2.4. Evidence identifying any key external factors that could have influenced the tone and results of the dialogue (e.g. significant media coverage of the topic).	N/A
	1.2.5. Evidence that the dialogue was timed to feed into the relevant decisions as early as possible in the decision process, at a point at which the decision could be influenced by the dialogue results and the relevant decisions had not already been taken.	2.2. 2.3. 3.1.
1.3. POTENTIAL FOR IMPACT	1.3.1. Evidence of clarity and openness about exactly what could be informed and influenced by the dialogue, and what could not.	2.1.
	1.3.2. Evidence that there was potential for change, that decision makers were willing to be influenced.	2.1.
	1.3.3. Evidence that dialogue discussions were not unduly restricted by what could or could not inform future decisions, and that participants could raise the issues that they felt were important.	6.2
	1.3.4. Rationale for the approach to working with decision makers (e.g. to build understanding during the project, gain buy-in to the process and dialogue results; and/or build capacity for working with public dialogue).	4.1. 4.3. 4.4.
	1.3.5. Evidence that sufficiently senior decision makers were involved throughout the process to provide organisational support to the process and results in principle and practice, and that they were prepared, willing and able to use the dialogue results to inform their decisions.	2.1. 2.3. 4.1. 4.3. 4.4.
	1.3.6. Evidence that the appropriate decision makers were sufficiently involved in the framing, design and delivery of the dialogue to understand the nature of the process and be confident that the results could be used in decision making (e.g. attended at least one dialogue event in person; and were aware of the timing, form and purpose of the dialogue results so these could be used in decision making).	2.1. 2.3. 4.1. 4.3. 4.4.
1.4. RESOURCES	1.4.1. Rationale for the budget and timescale allocated to the dialogue, and the particular skills needed for design, delivery, specialist input, analysis and reporting, and clarity on the impacts any scarcity of resources had on the quality of the outputs.	3.1. 4.2.

	1.4.2. Rationale for the design of the dialogue and any associated activities to meet the agreed objectives, given the time, skills and funding available (e.g. resource implications of any associated activities such as surveys to increase numbers of participants and provide triangulation of results).	3.1. 4.2. 5.1.
1.5. GOVERNANCE AND MANAGEMENT	1.5.1. Rationale for the role and membership of an oversight group for the design and delivery of the project, with rationale for the inclusion (or not) of any external stakeholders to provide expertise on overall framing, process and content, design and delivery (e.g. the involvement of funders, decision makers, scientists and other specialists and other stakeholders).	4.1. 4.3. 4.4.
	1.5.2. Evidence of effective engagement of any oversight group (e.g. members attend meetings provide feedback in other ways).	4.1.
	1.5.3. Evidence of effective input by any oversight group (e.g. influenced materials, design, identified or acted as specialists to be involved in work with public participants).	4.1.
	1.5.4. Evidence of clear roles and responsibilities being agreed and implemented, including how changes to the project design were discussed and accommodated.	4.1.
	1.5.5. Evidence of clarity of ownership and ultimate responsibility for ensuring the project met its objectives, including sufficient allocation of time for this.	4.1. 4.2.
	1.5.6. Evidence of wider stakeholder engagement (or not) to help widen buy-in to the process and results (e.g. Early in the dialogue to input to framing of the topic and questions to be addressed; and/or at the end of the dialogue to discuss how the dialogue results can be taken forward).	2.1. 2.3. 4.1. 4.3.
	1.5.7. Evidence of clarity of decision making within the project organisation and management to ensure that the objectives were met, including clarity of roles and responsibilities for decisions and actions (e.g. Between commissioning bodies, contractors, advisers and evaluators on issues such as avoiding bias and building relationships with participants during and after the dialogue).	4.1. 4.2.
	1.5.8. Evidence of an appropriate and efficient internal management team for the day-to-day organising of the project.	4.2.
2. SCOPE		
Theme	Quality indicator	Report section
2.1. MEETING ASPIRATIONS	2.1.1. Rationale for how the dialogue project overall was designed to identify and address the aspirations and concerns of those involved (e.g. dialogue events; governance).	4.1. 5.1.

	2.1.2. Rationale for the dialogue design and methods in relation to the objectives, budget and timescale (e.g. decisions about numbers and locations of events, one-off or reconvened events, length of time for events, numbers of participants at each event).	4.2. 5.1. 5.2. 5.3.
	2.1.3. Rationale for any changes to the dialogue design during the process to meet participants' interests.	6.3.
2.2. DIALOGUE SCOPE	2.2.1. Rationale for the main topics and issues to be covered by the dialogue, and what was included and excluded.	5.1.
	2.2.2. Evidence of how the main topics and issues to be covered by the dialogue were identified and agreed (e.g. through an oversight group, desk research, wider stakeholder engagement).	4.1. 5.1.
	2.2.3. Evidence of how public participants were able to suggest additional topics (or not), and to comment on and discuss any issues that went beyond any initially agreed topics during the dialogue process.	6.3.
	2.2.4. Rationale for and framing of the main questions that the dialogue addressed.	5.1.
	2.2.5. Evidence of how the main questions to be addressed by the dialogue were identified and agreed (e.g. through an oversight group, desk research, wider stakeholder engagement).	5.1.
	2.2.6. Evidence of how public participants were able to suggest additional questions (or not), and to comment on and discuss issues that went beyond any initially agreed questions during the dialogue process.	6.3.
2.3. PARTICIPANT INFLUENCE	2.3.1. Rationale for the extent to which public participants could influence the design, process and outputs of the dialogue.	6.3.
	2.3.2. Evidence that the nature of the expected relationship (including limits) had been explained clearly and agreed with public participants.	6.1. 6.2. 6.3.
2.4. RECRUITMENT APPROACH	2.4.1. Rationale for the overall approach to involving particular members of the public to meet the objectives (e.g. recruitment to reach participants who had no previous knowledge or interest in the topic, or an invitation process to reach interested and knowledgeable participants).	5.2.
	2.4.2. Rationale for selection of participants to provide a credible diversity and mix of participants and the basis for inclusions and exclusions (e.g. 'illustrative' demographic mix; 'broadly' representative of the relevant population; credibility with decision makers).	5.2.
	2.4.3. Rationale for the number of public participants to be involved in the dialogue.	5.2.

	2.4.4. Evidence of and rationale for the approach taken to recruitment and sampling, and how the specification for recruitment was agreed and implemented.	5.2.
	2.4.5. Rationale for the use of a range of methods to increase participation beyond the numbers attending deliberative workshops (e.g. digital approaches to reach larger numbers).	N/A
	2.4.6. Rationale for and evidence of the approach to ensuring that a diverse range of views was included in the design and delivery of the dialogue (e.g. the role of external stakeholders in the process to reduce bias, ensure broad framing, include less often heard voices and values, and cover the breadth of interests around the topic).	N/A
	2.4.7. Evidence of how openness, transparency and participation (and confidentiality where appropriate) were achieved throughout the project.	N/A
3. DELIVERY		
Theme	Quality indicator	Report section
3.1. ETHICS	3.1.1. Rationale for approach to ethics in relation to the ethical challenges of the project including any frameworks used and evidence of reflexivity.	N/A
	3.1.2. Evidence of approaches to anonymity, consent procedures, management and confidentiality of data.	5.3.
	3.1.3. Discussion of measures to avoid potential harm or difficulty for participants, and to protect participants.	6.3.
3.2. PROCESS DESIGN	3.2.1. Rationale for and evidence of how the overall approach to the design of the deliberative workshops meets the agreed dialogue objectives (fit for purpose).	5.1. 5.3.
	3.2.2. Rationale for the choice of methods used in the dialogue project overall, and extent to which data from different (including non-deliberative) methods were triangulated to strengthen robustness of results (e.g. a mix of deliberative workshops, open public meetings, opinion polls, formal written and online consultations, other digital engagement).	5.3.
	3.2.3. Evidence that the methods were appropriate to enable open, creative and productive discussions at deliberative workshops including sufficient time for participants to receive relevant and useful new information, discuss and think about implications (ideally with a break between events) and come to conclusions.	5.3.
	3.2.4. Discussion of limitations of the workshop design and the implications of these limitations for the dialogue results; clear presentation of the limitations in dialogue reports.	5.3. 5.4.
3.3. WORKSHOP SPREAD	3.3.1. Rationale for number and location of workshops with public participants in order to meet the dialogue objectives.	5.2.

3.4. DELIVERY PERSONNEL	3.4.1. Rationale for use and role of external contractors in detailed design and delivery, or use of internal personnel only.	N/A
	3.4.2. Evidence of the appropriate engagement of stakeholders, including through an oversight group, in decisions about the appointment or procurement of the personnel required.	N/A
	3.4.3. Evidence of the appropriate planning and methods to recruit internal staff or procure external contractors (e.g. clear timetable built into project timings; developing a specification for the project and an invitation to tender (ITT); open and fair recruitment or procurement processes; clarity about who will assess tenders and make decisions about appointment; clarity about contractual and financial arrangements).	3.2.
3.5. FACILITATION	3.5.1. Evidence (including from participants) that all the participants were able to have their say and that all those who wanted to give their views were encouraged and supported to do so.	5.3.
	3.5.2. Evidence that no single person or view was allowed to dominate and that diversity of views, multiple perspectives and alternative positions were supported in the discussions.	5.3.
	3.5.3. Evidence of attention to disagreements, questions, outliers and exceptions during discussions.	5.3.
	3.5.4. Evidence that the discussions were well structured, open, focused on the key issues, and that all the key issues were covered.	5.3.
	3.5.5. Evidence of attention to details of logistics, timing etc	5.3.
	3.5.6. Exploration of contributors' terms, concepts and meanings, and discussion of explicit and implicit explanations of meanings.	5.3. 5.4.
	3.5.7. Unpacking and portrayal of nuance / subtlety / intricacy.	5.3. 5.4.
	3.5.8. Detection of underlying factors / influences.	5.3. 5.4.
	3.5.9. Identification and discussion of patterns of association / conceptual linkages within data.	5.3. 5.4.
	3.5.10. Identification and discussion of illuminating observations.	5.3. 5.4.
3.6. ONGOING LEARNING	3.6.1. Evidence of wash-up sessions after each event to immediately identify what worked well and less well, and what needed to be retained or changed in subsequent.	6.2.
	3.6.2. Evidence that event feedback forms were analysed promptly (usually by evaluators), lessons learned and applied for subsequent events.	6.2.

	3.6.3. Evidence of other formative evaluation input provided throughout to aid continued improvement, without evaluators straying into co-design.	6.2.
3.7. FOCUS ON OBJECTIVES	3.7.1. Clear statement of project purpose and objectives, agreed with relevant stakeholders and shared with public participants; evidence of reasons for any changes in objectives.	5.1. 6.1.
	3.7.2. Explanation of limitations of project in achieving the objectives and how these affect the interpretation of results (e.g. because of gaps in sample coverage; missed or unresolved areas of discussion; time and resource constraints).	N/A
3.8. DECISION-MAKER AND SPECIALIST INVOLVEMENT	3.8.1. Rationale for the role of decision makers attending dialogue events and evidence that they were sufficiently briefed and supported (e.g. the extent to which they were 'observers', or were 'participants' in the discussions – 'dialogue' implies greater involvement than observation; provision of explicit briefing for the role agreed).	4.4.
	3.8.2. Rationale for the role of specialists in the dialogue events (e.g. to provide information to support the discussion, or as participants in the discussion; 'dialogue' implies more than information provision).	4.4.
	3.8.3. Rationale for the number, choice, use, diversity of perspectives, knowledge and skills of specialists involved in providing scientific and technical information support to the participants in dialogue events (e.g. including sceptics / devil's advocates; those with very different views on the topics).	4.4.
	3.8.4. Evidence that specialists invited to provide information to dialogue events were adequately briefed and supported, to enable them to provide appropriate information at the right time and in the right way.	4.4.
3.9. INCLUSION	3.9.1. Rationale for whether and how special efforts were needed and made to ensure the inclusion of specific groups (e.g. those most affected by the topic; or that might be 'hard to reach' through normal recruitment approaches).	6.3.
3.10. RECRUITMENT DELIVERY	3.10.1. Detailed profile of the achieved sample (i.e. final numbers and types of participants involved), the extent to which the recruitment specification and target samples were met and the extent to which this was appropriate to the objectives of the project.	N/A
	3.10.2. Description of extent to which the participants reflected the wider population (however defined) in terms of gender, age and ethnicity balance (as a minimum).	5.2.
	3.10.3. Description of any other demographic, attitudinal or behavioural factors that were particularly important in relation to the topic.	5.2.
	3.10.4. Discussion of the implications for project findings and conclusions of any missing coverage in participants.	N/A

	3.10.5. Discussion of methods of sampling and recruitment and how these might have affected participation / coverage; evidence of efforts to reduce barriers to participation (e.g. physical access, translation etc).	N/A
	3.10.6. Discussion of the credibility of the process given the balance between time and budget and numbers of participants, locations, length of discussions etc.	5.2.
	3.10.7. Evidence of the credibility of the actual sample with those expected to use the final dialogue results.	5.2.
	3.10.8. Evidence of level of retention of participants throughout the process (e.g. numbers dropping out and when).	6.2.
3.11. MEDIA	3.11.1. Rationale for use (or non-use) of conventional and digital media to reach the wider population.	N/A
	3.11.2. Evidence of appropriate and effective use of conventional and digital media to reach the wider population, if relevant.	N/A
3.12. FAIRNESS AND RESPECT	3.12.1. Rationale for the approach to the roles of different internal and external stakeholders in designing the form and content of the dialogue, to ensure the process was fair and had no in-built bias.	4.1.
	3.12.2. Evidence of how a sufficient number and diversity of perspectives was brought into the planning and delivery of the dialogue to give robustness and credibility to the process.	4.1.
	3.12.3. Rationale for managing the split of responsibilities between facilitators - whose role is to manage and protect the integrity of the process, on behalf of participants, and specialists - whose role is to provide technical information on the content of the topic.	4.1.
	3.12.4. Evidence of how the objectives of the dialogue, and the extent and limits to the potential impacts of the dialogue, were shared with participants.	6.1.
	3.12.5. Evidence (including from participants) of how respect for participants was demonstrated in the dialogue events (e.g. treated with care, openness, encouragement, offered opportunities for meaningful contribution, input acknowledged and valued etc).	6.2. 6.3.
	3.12.6. Evidence (including from participants) of honest and full communications with the public participants throughout the process (e.g. about the extent of and limits to the expected influence of the results of the dialogue; how the results will be used; how they will continue to be kept informed).	6.1. 6.2. 6.3.
	3.12.7. Evidence from participants of satisfaction with the process, and willingness to be involved again.	6.4. 6.5.

3.13. INFORMATION	3.13.1. Rationale for the overall approach to drafting, finalising and using materials to introduce relevant and useful new information to participants to support discussion.	4.1. 4.3. 5.3.
	3.13.2. Rationale for the methods used to introduce new information (e.g. the use of written material, input in person from specialists on particular topics, videos etc).	5.3.
	3.13.3. Evidence of the approach to ensuring that participants were provided with information and views from a range of perspectives (e.g. involvement of oversight group and/or wider stakeholder engagement in the drafting of materials).	4.1. 4.3. 5.3.
	3.13.4. Evidence of encouragement for participants to use information from other sources (where appropriate) to enable participants to extend their knowledge if they wished.	5.3.
	3.13.5. Rationale for the roles taken in presenting information to ensure neutrality and independence (e.g. those presenting content information being independent from the commissioning / policy body; and independent from facilitators, who are responsible for process not content).	4.1. 4.4. 5.3.
3.14. TIME FOR DELIBERATION	3.14.1. Evidence of and rationale for approach to ensuring there was sufficient time and support for participants to engage in deliberative discussions so that they could become informed about the topics, reflect on their own and others' views, discuss and explore issues in depth with other participants and come to considered conclusions (e.g. proportionally more time for discussion compared to time taken receiving information; time away from the discussions to reflect on and discuss the issues with others between dialogue events; reconvening events after a break of some days).	5.3. 6.2.
	3.14.2. Evidence of and rationale for approach to ensuring that the discussions were long enough to allow those involved to probe the issues in sufficient depth to enable underlying key values, concerns and aspirations to be articulated, shared and understood collectively, and thus inform conclusions.	5.3. 6.2.
3.15. RECORDING AND DATA COLLECTION	3.15.1. Rationale for the approach taken to recording and collecting data from the discussions and conclusions from the dialogue from the deliberative discussions at dialogue events.	5.3. 5.4.
	3.15.2. Rationale for the approach to ensuring there were sufficient resources to fully capture the depth, detail and nuances of the public discussions to provide credible results (e.g. note takers in addition to facilitators; audio recording; additional facilitators / note takers working across several small groups to pick up wider points; participant feedback on draft results; conventions for taking notes e.g. to distinguish verbatim recordings from note takers' commentary / analysis).	5.3. 5.4.
	3.15.3. Discussion of how the methods or context may have influenced data collected (e.g. timing, location, venue).	N/A

	3.15.4. Demonstration of how error or bias may have arisen in data collection / reporting and how that was addressed (or not).	N/A
3.16. CAPTURING UNCERTAINTY	3.16.1. Rationale for seeking to define and identify agreement among participants on a particular point and/or to map out the range of views (e.g. degrees of agreement found e.g. everyone agrees; participants can 'live with' an outcome; prepared to accept; not acceptable and needs more work to make progress; not acceptable and would provoke vetoes on any attempt to progress).	5.3. 5.4.
	3.16.2. Evidence of openness about where there was a lack of agreement and there remained plurality of views and how the rationales and implications of diverging views were recorded and reported so that reasons for disagreement were covered as fully as collective statements.	5.3. 5.4.
	3.16.3. Rationale for and evidence of choice of methods for identifying where there was and was not agreement in practice (e.g. electronic polling in the room, sticky dots on propositions put forward).	5.3. 5.4.
3.17. PARTICIPANT INVOLVEMENT IN REPORTING	3.17.1. Description of and rationale for approach to gaining public participant input to the final results of the dialogue, or not (e.g. results developed collaboratively with participants or data collected and results reported by others).	6.3.
	3.17.2. Evidence of how participants were involved in validating the results, and had the ability to challenge specific conclusions and overall results, or not.	6.3.
3.18. ANALYSIS	3.18.1. Rationale for approach to analysis of data, and evidence of effective analysis.	5.4. 5.5.
3.19. REPORTING	3.19.1. Evidence of clear links between reporting, the aims and objectives of the dialogue and the key questions that were to be addressed.	5.4. 5.5.
	3.19.2. Provides a narrative / story / clearly constructed thematic account and has structure and signposting that usefully guides readers through the commentary.	5.4. 5.5.
	3.19.3. Provides clear links between dialogue objectives, methods, data collected, analysed and reported.	5.3. 5.4. 5.5.
	3.19.4. Provides accessible information for intended target audiences in lay language so that readers can make their own judgements about the status of the data and legitimacy of the findings.	5.4. 5.5.
	3.19.5. Provides a short stand-alone Executive Summary, with key messages highlighted and summarised and conclusions focused around the aims and objectives of the dialogue.	5.4. 5.5.
3.20. CLARITY OF AUDIT TRAIL	3.20.1. Discussion of how explanations / theories / conclusions were derived - and how they relate to interpretations and content	N/A

<p>Not covered in this report – discussed during weekly project meetings during the report development</p>	<p>of original data; whether alternative explanations were explored; discussion of extent to which conclusions were developed with participants in the course of dialogue events or subsequently.</p>	
	<p>3.20.2. Clear differentiation between original data, analytical commentary and recommendations.</p>	<p>N/A</p>
	<p>3.20.3. Clear links between analytic commentary and presentations of original data with appropriate use of quotes, photographs and other methods for demonstrating links between evidence and conclusions.</p>	<p>N/A</p>
	<p>3.20.4. Discussion of how / why particular interpretation / significance is assigned to specific aspects of data - with illustrative extracts of original data where appropriate.</p>	<p>N/A</p>
	<p>3.20.5. Display of conflicting views and how they lie outside the main propositions / theories / hypotheses / conclusions; or how those conclusions were revised to include them.</p>	<p>N/A</p>
	<p>3.20.6. Description of data sources, historical and social / organisational context, locations or settings (e.g. specific contextual factors that potentially affect the quality and nature of the dialogue process and results; use of data management methods that preserve context e.g. separation of reporting of findings from different categories of participants - such as public participants and stakeholders; explanation of origins of references).</p>	<p>N/A</p>
	<p>3.20.7. Participants' perspectives / observations placed in personal context (e.g. annotated with details of participant characteristics, such as location of event attended, or age etc - if relevant e.g. from specific events aimed at young people).</p>	<p>N/A</p>
<p>3.21. WIDER IMPLICATIONS</p>	<p>3.21.1. Discussion of what can and cannot be generalised to the wider population from which the sample is drawn, evidence to support any claims for wider inference and clarity on limits to drawing wider inference.</p>	<p>5.4.</p>
	<p>3.21.2. Discussion of the weight that can be given to the results as 'evidence' , compared to other sources (i.e. evidence from dialogue is different from but can be of equal value to evidence from other evidence traditions such as natural sciences.</p>	<p>2.2. 3.1.</p>
	<p>3.21.3. Detailed description of the contexts in which the project was conducted to allow applicability to other contexts to be assessed.</p>	<p>2.1. 3.1.</p>
	<p>3.21.4. Evidence of honesty about the limitations of the results, and any caveats readers / users should take into account in interpreting dialogue results.</p>	<p>5.4.</p>
<p>4. IMPACT</p>		

Theme	Quality indicator	Report section
4.1. ACHIEVING PURPOSE	4.1.1. Evidence that the dialogue achieved its original purpose and agreed objectives; evidence of reasons for any changes in objectives.	2.2. 2.3. 5.1.
	4.1.2. Explanation of limitations of project in meeting the original aims and objectives and how these limitations affect the interpretation of dialogue results (e.g. because of gaps in sample coverage; missed or unresolved areas of discussion; time constraints).	N/A
	4.1.3. Explanation of the extent to which the project met the original expectations of those responsible for the dialogue, of any failures to meet these expectations and of the implications of the differences between expectations and actual outcomes.	N/A
4.2. IMPACTS ON DECISION MAKING	4.2.1. Evidence of how, when, where and by whom the dialogue results had been used in achieving any specific changes to policy decisions or priorities (e.g. priorities for action changed; new policy ideas developed; existing policy ideas dropped).	2.2. 2.3.
	4.2.2. Evidence of how, when, where and by whom the results have been used to improve policy making (e.g. better risk management; addressing logjams from conventional stakeholder engagement; policy quicker, easier and cheaper to implement).	2.2. 2.3.
	4.2.3. Description and discussion of the extent to which the project led to organisational change, collaboration, networking, broader participation and co-operation in relation to public engagement in policy (e.g. improved relationships with stakeholders, cross-departmental collaborations).	2.2. 2.3.
	4.2.4. Evidence of plans to maximise the use of the dialogue results in the longer term, to continue to influence policy, decisions and practice.	2.2. 2.3.
	4.2.5. Evidence of plans for tracking, checking and reporting longer term and wider impacts of the dialogue.	2.2. 2.3.
	4.2.6. Results clearly linked to the purposes of the project, and the initiative or policy to which the results were directed.	2.2. 2.3.
	4.2.7. Results / conclusions were supported by data / evidence, with clarity about how the conclusions were arrived at.	2.2. 2.3. 5.4.
	4.2.8. Results / conclusions 'made sense' / had a coherent logic.	2.2. 2.3. 4.1.
	4.2.9. Results presented or conceptualised in ways that offered new insights / alternative ways of thinking (where appropriate).	2.2.

		2.3.
	4.2.10. Evidence that decision makers trusted the process and products of the dialogue sufficiently to be willing to use the results in decision making.	2.2. 2.3. 4.1. 4.3.
4.3. UNEXPECTED IMPACTS	4.3.1. Description and analysis of the extent to which the project achieved any unexpected impacts, and the value of those to the body running the dialogue, participants and other stakeholders.	N/A
4.4. SHARING AND DISSEMINATION	4.4.1. Description of and rationale for approach to sharing the final reports and information about the impacts of the dialogue with those involved.	2.2. 2.3.
	4.4.2. Evidence of how final reports were published and shared with all those involved in the commissioning, design and delivery of the dialogue (e.g. public participants, members of oversight groups, specialists providing input to events, other stakeholders).	2.2. 2.3.
	4.4.3. Evidence of follow-up communications with all participants to share information about how the results of the dialogue were disseminated and used in policy and decision making.	2.2. 2.3.
	4.4.4. Evidence of how, where and when the dialogue results were disseminated to those best placed to act on and learn from them.	2.2. 2.3.
	4.4.5. Evidence of wider dissemination of dialogue results to other interested parties (e.g. conference speeches, journal articles, blogs, etc).	2.2. 2.3.
	4.4.6. Evidence that decision makers trusted the process and products of the dialogue sufficiently to be willing to disseminate the results to their networks.	2.2. 2.3.
4.5. DEMONSTRATING IMPACTS	4.5.1. Clear and transparent reporting mechanisms to demonstrate how the public participants' conclusions were taken into account in future plans and if not, why not.	2.2. 2.3.
4.6. SHIFTS IN KNOWLEDGE AND UNDERSTANDING	4.6.1. Credible / clear discussion of how the dialogue results have contributed new insights and increased knowledge and understanding (e.g. influence on the knowledge, understanding attitudes and capacity of the public, policy makers and others on the topics and on the potential for public dialogue in informing policy and decision making in future).	2.2. 2.3.
	4.6.2. Evidence of changes to participants' knowledge and thinking about the topic.	2.2. 2.3.
	4.6.3. Evidence of change to participants' views on public engagement, and their willingness to engage more in future.	2.2. 2.3.

<p>4.7. COLLABORATION AND ENGAGEMENT</p>	<p>4.7.1. Evidence of increased collaboration, networking, broader participation and co-operation in relation to public engagement in science and technology.</p>	<p>N/A</p>
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Appendix 2: List of potential avenues for impact identified upfront

Relevant decision-making / areas of interest

- Forward looking user implications (for all road users, including cyclists, pedestrians, motorcyclists). How multiple users will actually interact with CAVs, including e.g. safety implications and human / psychological factors.
- Enabling deployment of CAV technology in the future – e.g. having a regulatory and policy environment that is fit for purpose (including many overlapping areas around infrastructure, commercial and private hire vehicles, etc.).
- Understanding how/if the way roads are used might change with the introduction of CAV technology, and what needs to happen to prepare for that.
- Future of mobility, future mobility choices (including for specific demographic groups such as older people), mobility as a service.
- Insurance requirements.
- What's achievable with CAVs in terms of social objectives.
- Brexit - may be lots of relevant issues?
- Understanding existing behaviours, influencing negative behaviours and understanding the social aspects of CCAV.
- As the technology progresses (or e.g. specifically If a campaign was run on the benefits of CAV technology), what's the best way to communicate and take members of the public on that journey?
- How will people actually use the technology / how will it benefit them in reality?
- How do people feel about safety / do the benefits technological people are imagining actually play out in reality (e.g. working in the back of a car doing 120mph)?
- Understand current knowledge of CAV tech.

Specific decisions / documents / work the dialogue could feed into

List of CCAV activities into which the dialogue findings could feed (provided by CCAV to the Oversight Group in September 2018)

- Code of Practice Update 2018.
- Law Commission three-year project on automated vehicles.
- Operationalising the Automated and Electric Vehicle Act.
- Automated Vehicle safety and AV crash investigation.
- International regulatory work.
- Meridian 2 and 3 infrastructure competitions.
- CAV4 collaborative R&D competition.

Other relevant policy activities

- Future of Mobility Grand Challenge – multiple workstreams, with dialogue already referenced / plugged in.
- Road investment strategy. E.g. if the dialogue shows a change in the way people might use the

roads in future, that would be very significant, but it may be more likely to confirm / give confidence in the direction of the strategy.

- Update to Highway Code relevant to CAVs / or maybe government statement. E.g. should government say anything specific now about safety / being careful (in context of manufacturers using language such as “autopilot”)?
- [And see list provided to the OG from CCAV.]

Other / overall

- Shaping trials of specific CAV technology (e.g. coming up in 2019/2020).
- Potential relevance to ongoing research, depending on what comes out in terms of new findings.
- Informing future discussions, research, education and engagement activities.
- Potential to inform international approach.

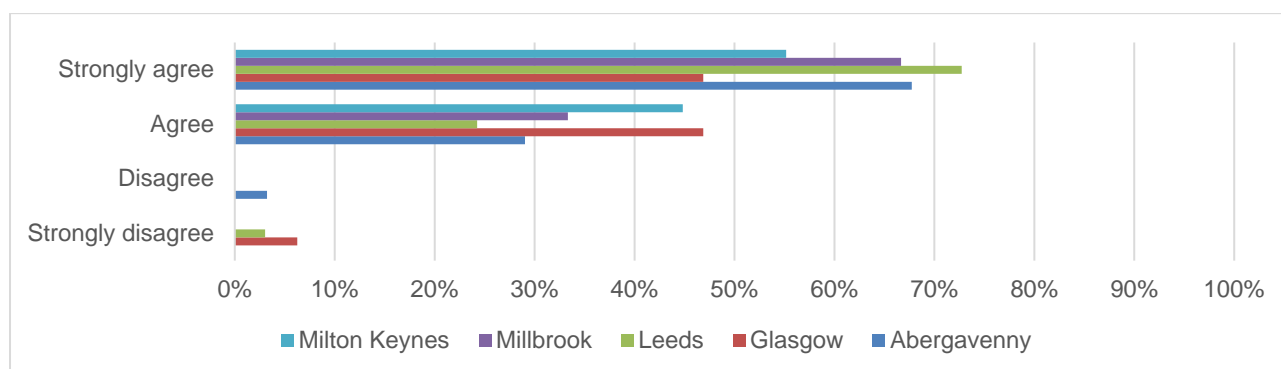
Appendix 3: Public participant workshop feedback forms

Does not include those saying “don’t know” / no response, apart from total respondents data.

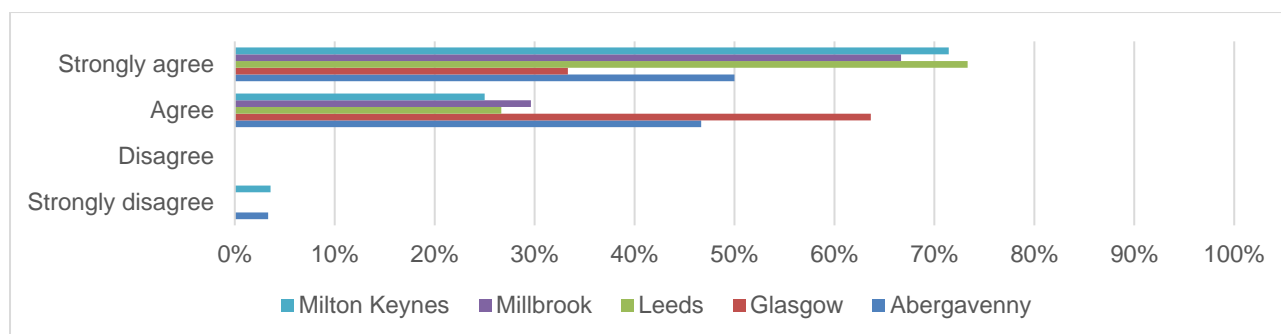
Does not include qualitative / text-based questions and responses.

“The purpose of this workshop was clear.”

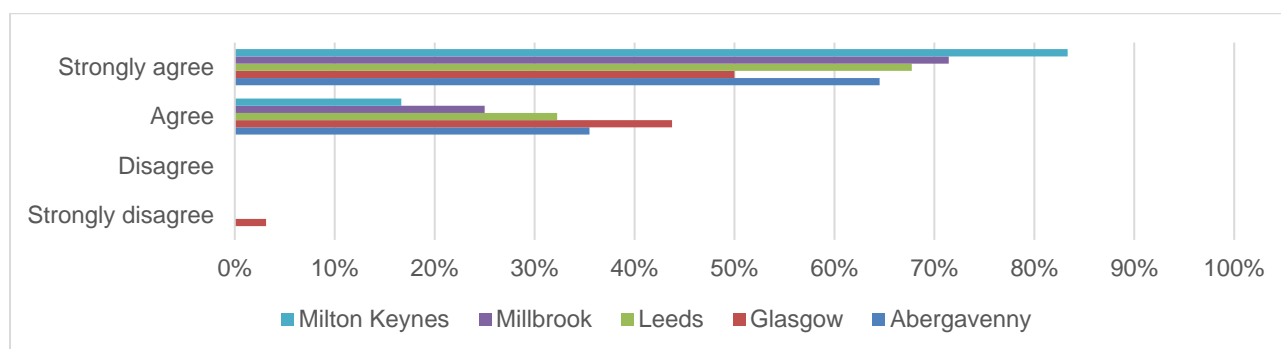
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

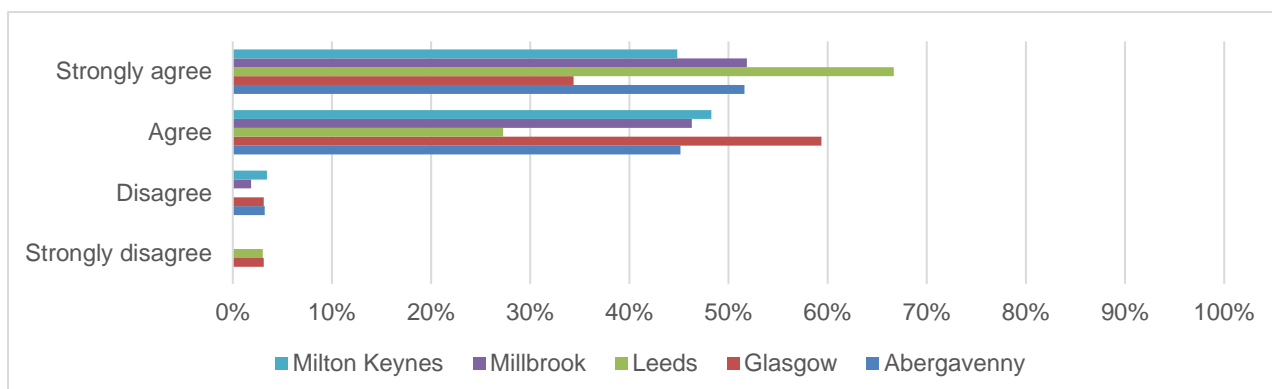


Across workshops (all locations)

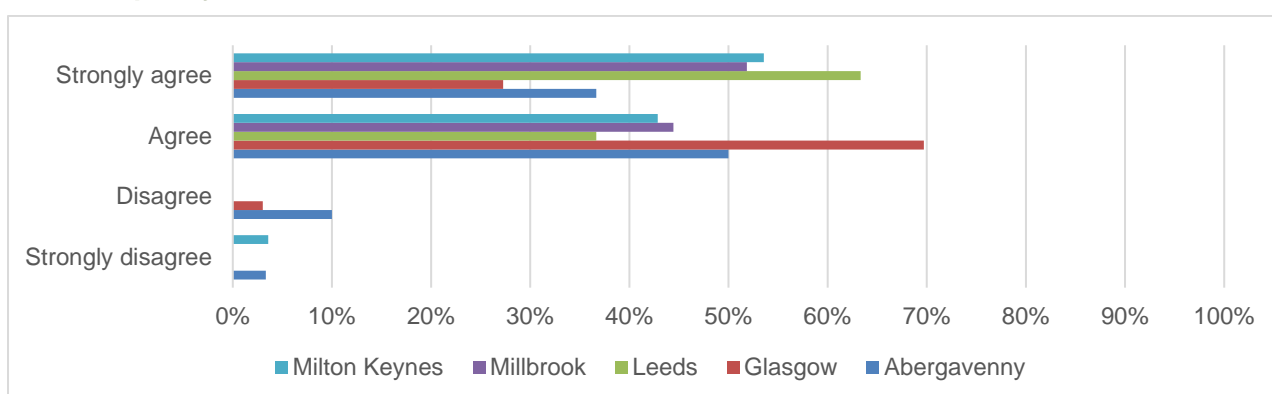
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	2%	1%	36%	62%	98%	152
Workshop 2	1%	0%	39%	58%	97%	148
Workshop 3	1%	0%	31%	67%	98%	152

“The purpose of the overall public dialogue is clear.”

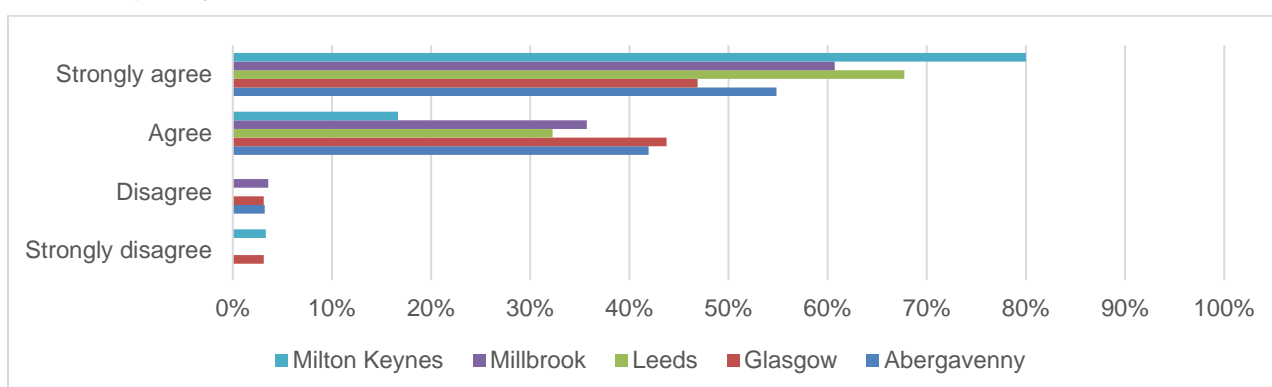
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

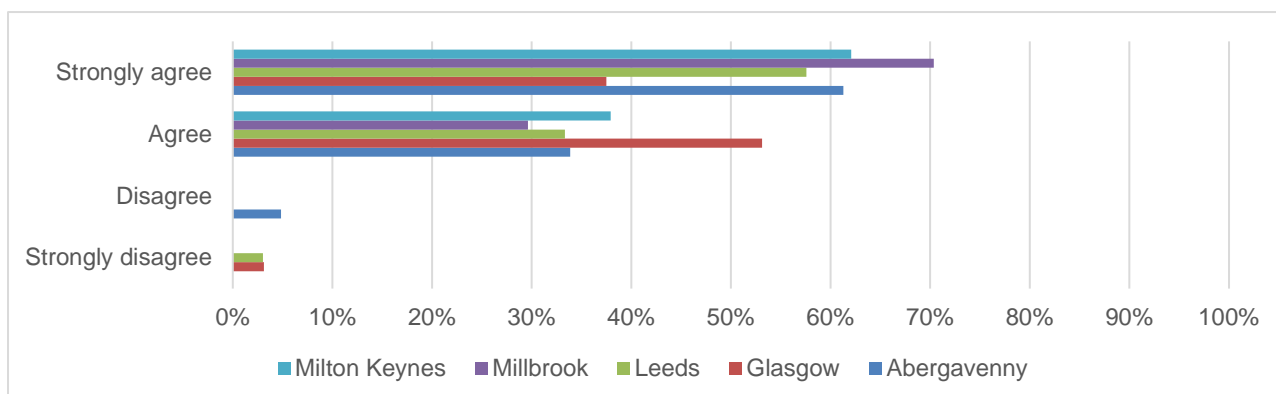


Across workshops (all locations)

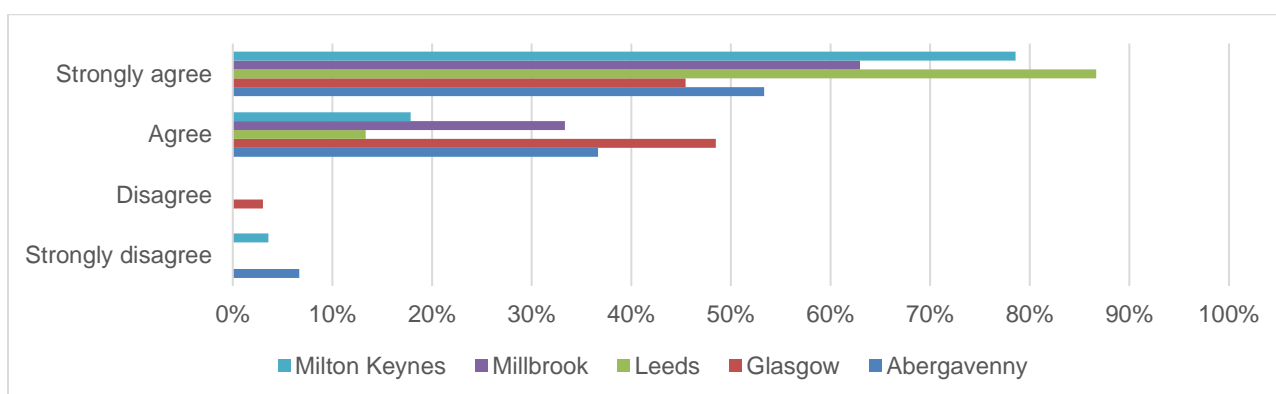
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	1%	2%	45%	50%	95%	152
Workshop 2	1%	3%	49%	46%	95%	148
Workshop 3	1%	2%	34%	62%	96%	152

“I felt able to contribute my views today.”

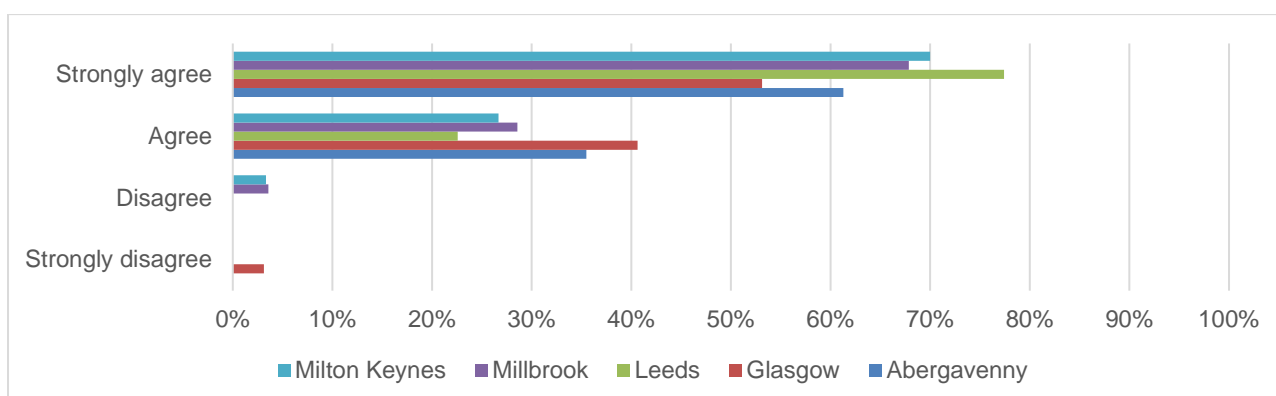
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

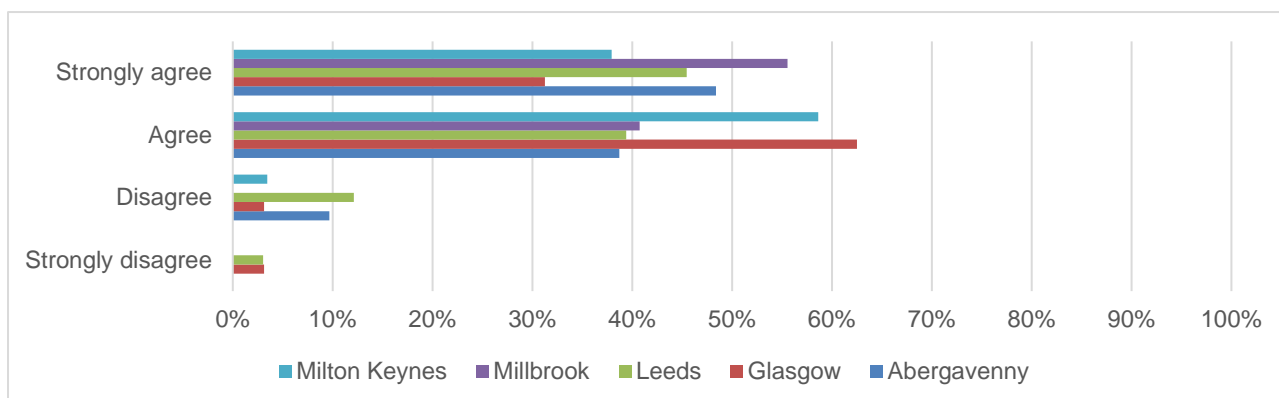


Across workshops (all locations)

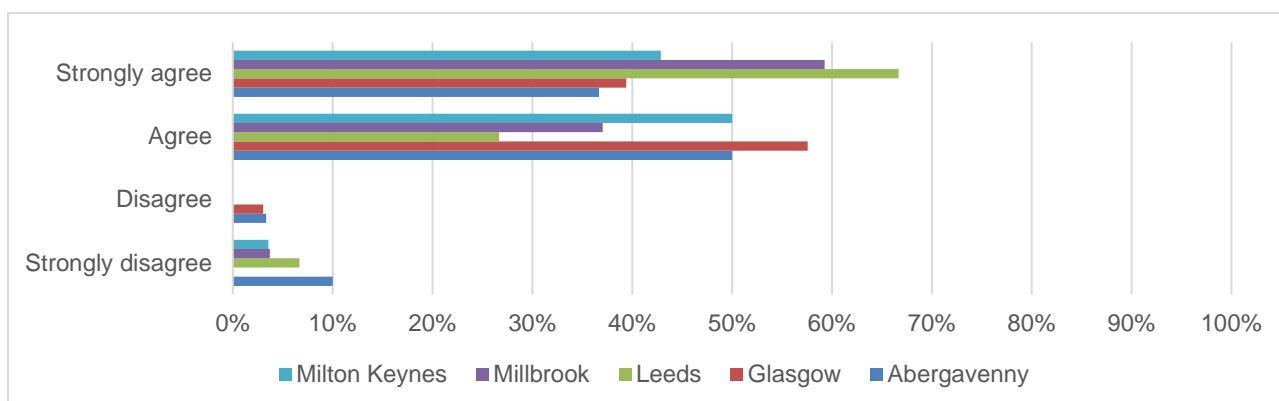
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	1%	1%	38%	57%	95%	152
Workshop 2	2%	1%	30%	65%	95%	148
Workshop 3	1%	1%	31%	66%	97%	152

“There was enough time for me to discuss the things that mattered to me.”

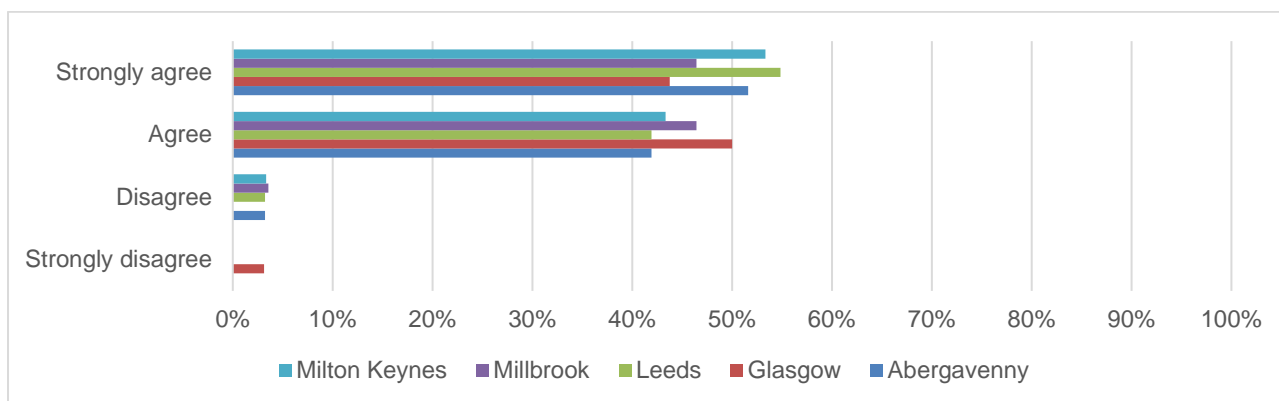
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location



Across workshops (all locations)

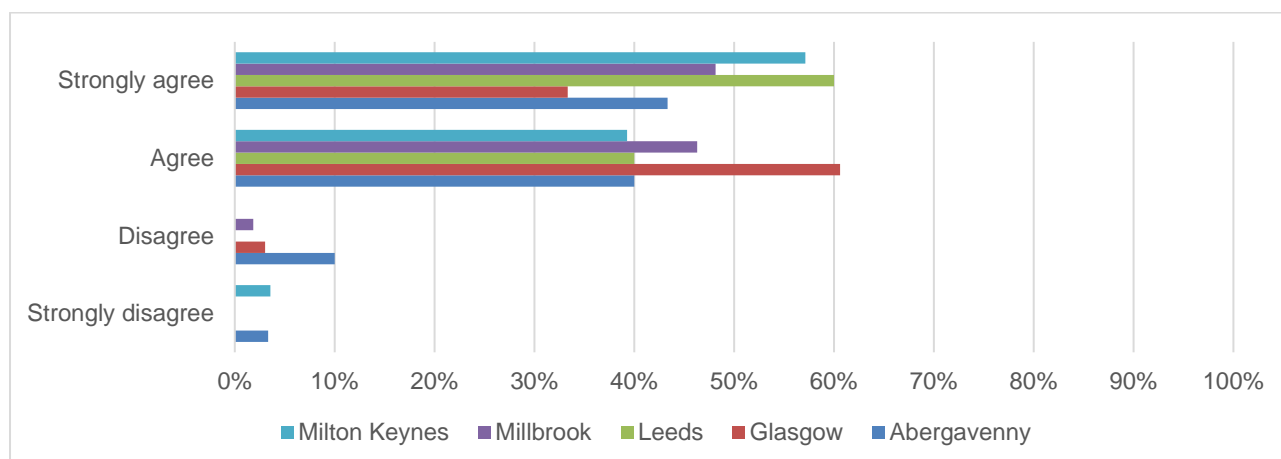
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	1%	6%	48%	43%	91%	152
Workshop 2	5%	1%	45%	49%	94%	148
Workshop 3	1%	3%	45%	50%	95%	152

“The information I received today was balanced / unbiased.”

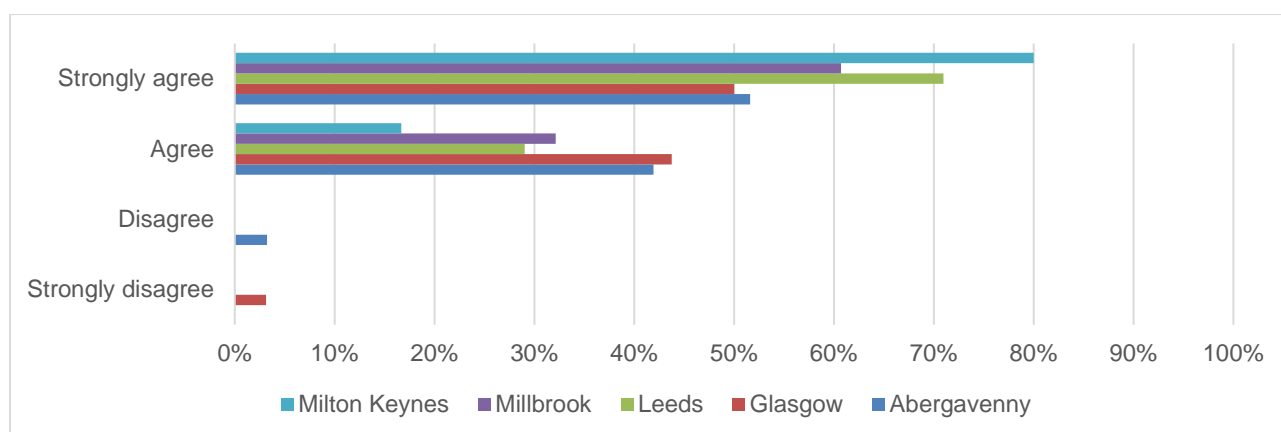
Workshop 1 by location

Not asked.

Workshop 2 by location



Workshop 3 by location

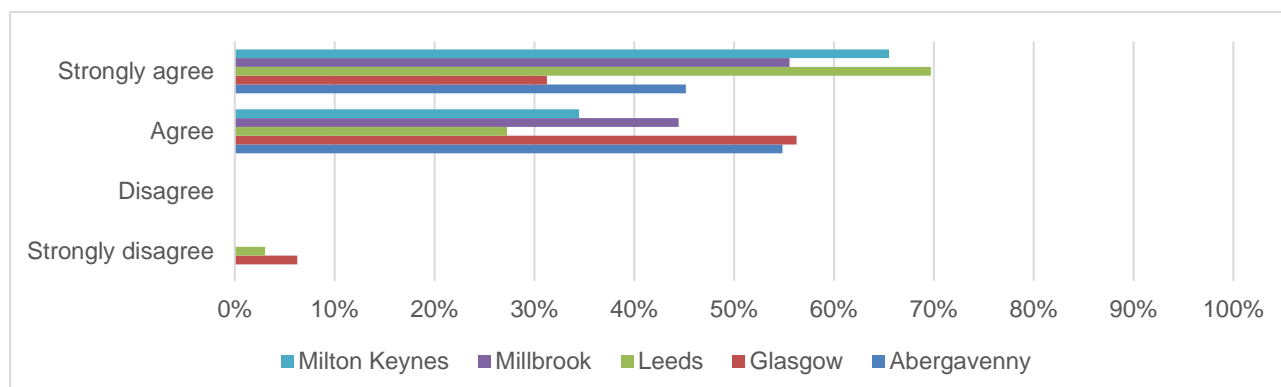


Across workshops (workshops 2 and 3)

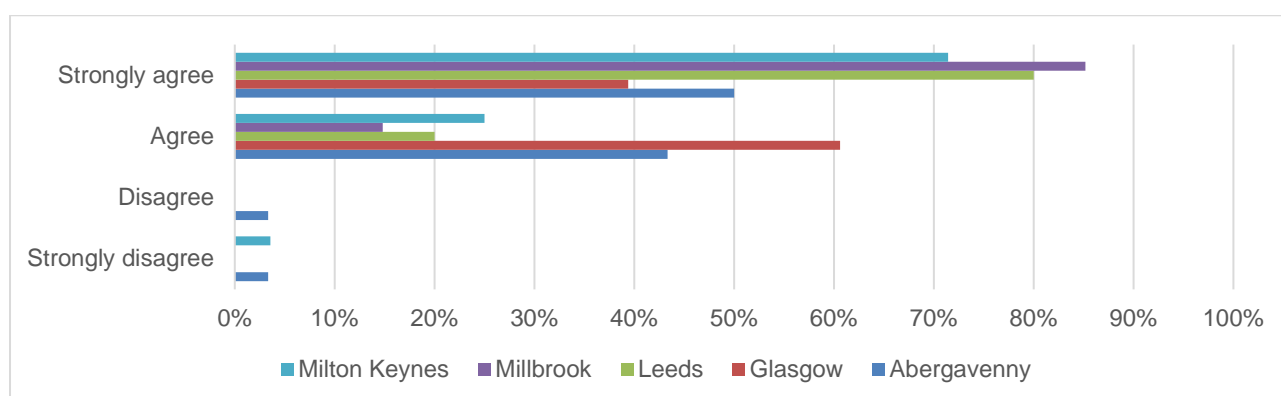
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 2	1%	3%	46%	48%	94%	148
Workshop 3	1%	1%	33%	63%	96%	152

“I felt supported and respected.”

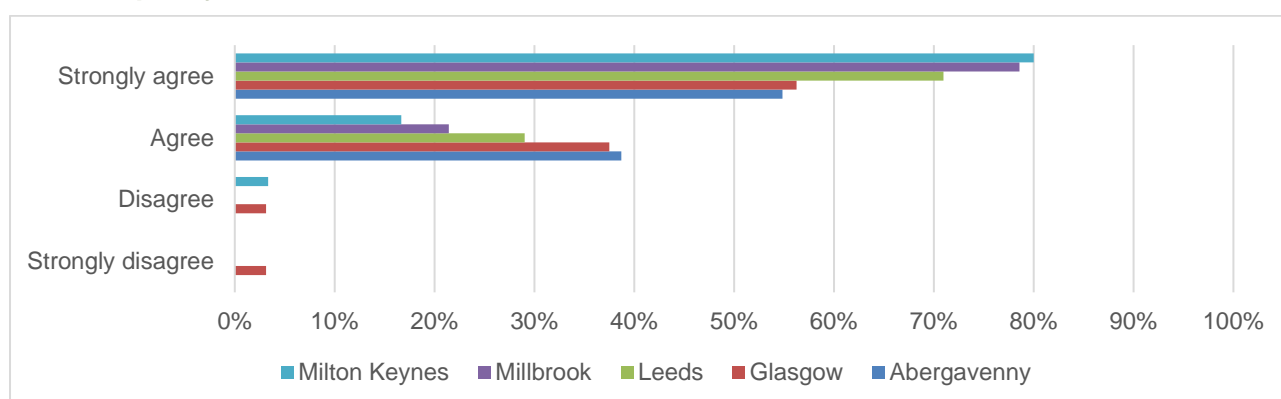
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

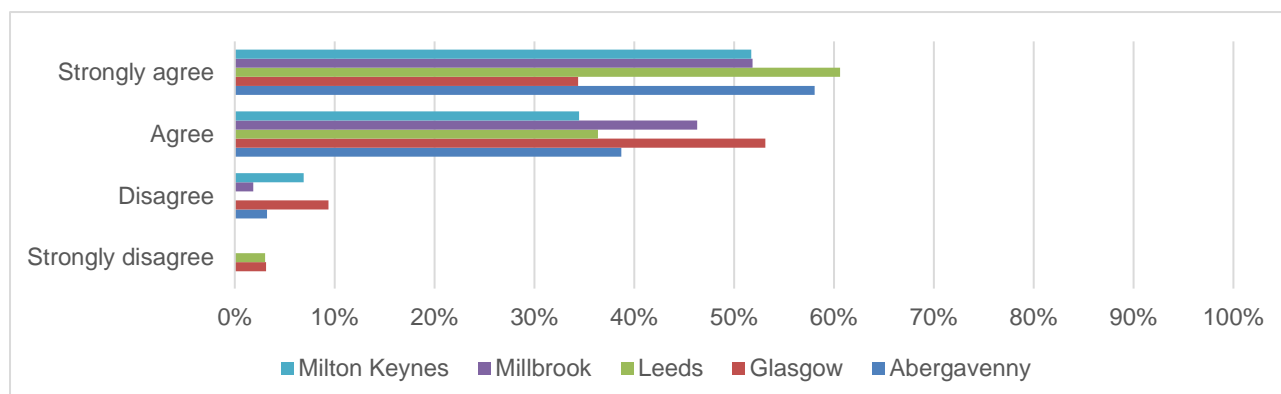


Across workshops (all locations)

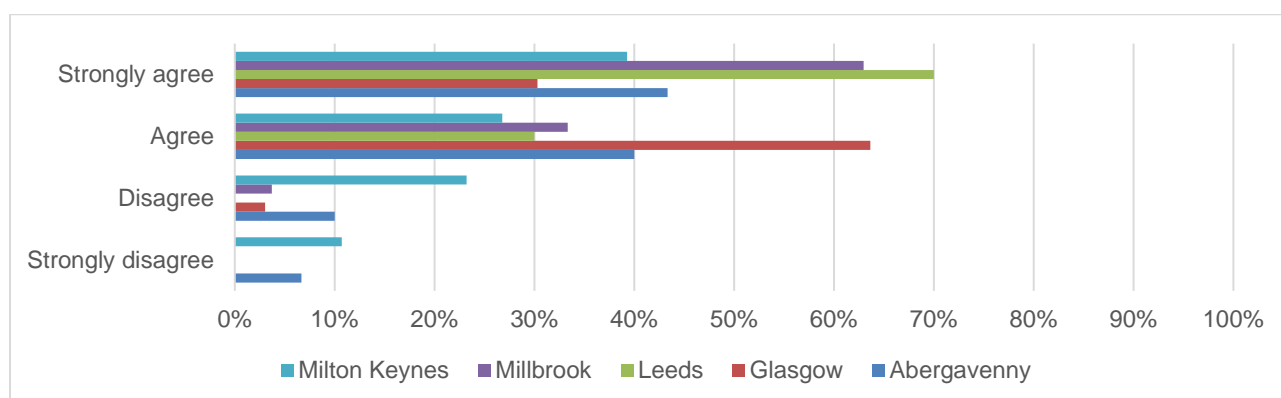
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	2%	0%	43%	53%	96%	152
Workshop 2	1%	1%	34%	64%	98%	148
Workshop 3	1%	1%	29%	68%	97%	152

“I felt physically comfortable in the room.”

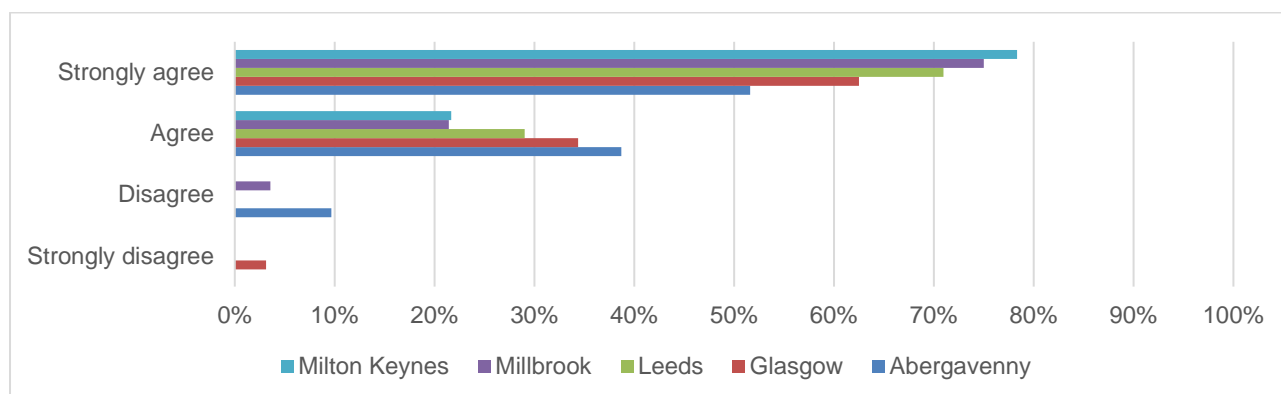
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

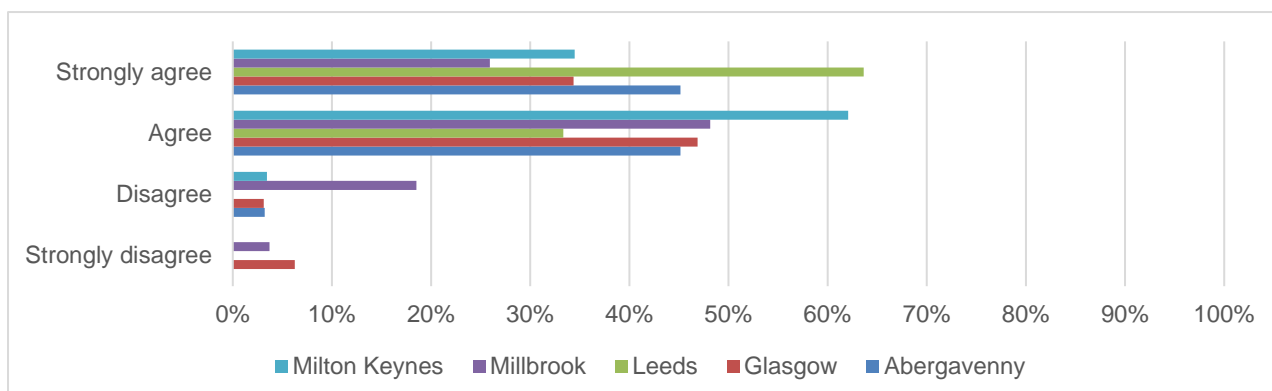


Across workshops (all locations)

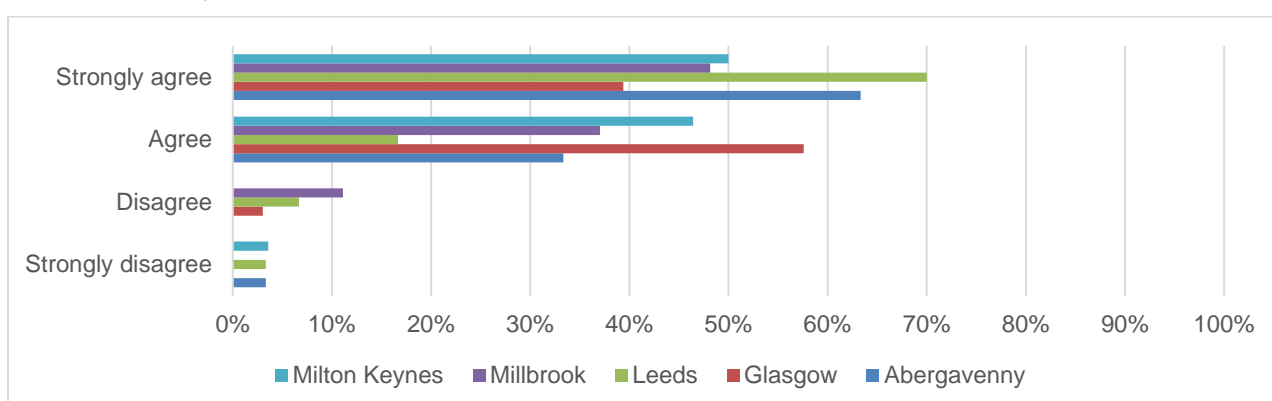
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	1%	4%	42%	51%	93%	152
Workshop 2	3%	8%	40%	49%	89%	148
Workshop 3	1%	3%	29%	67%	96%	152

“I enjoyed the food.”

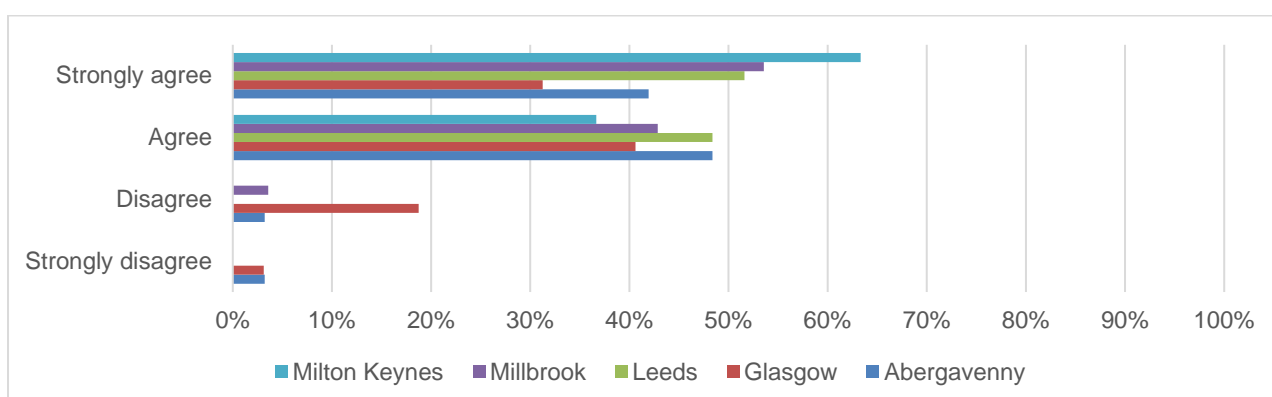
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

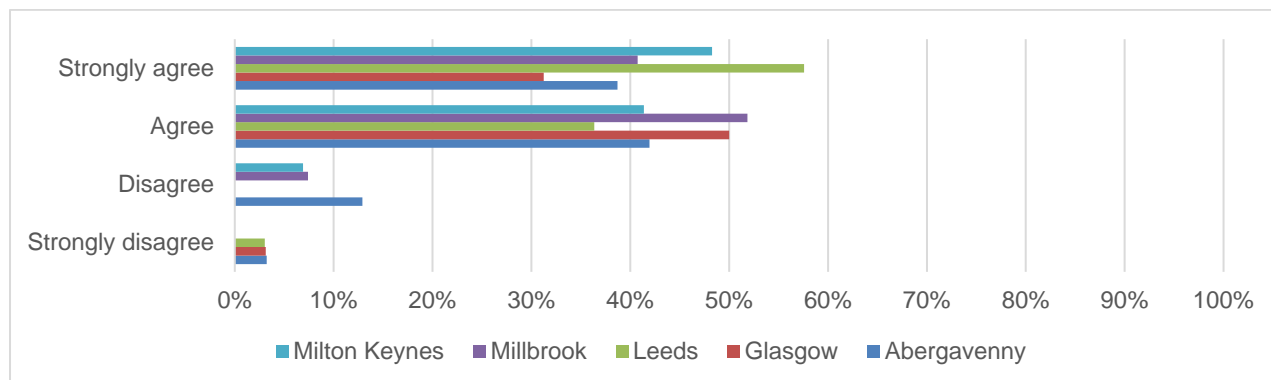


Across workshops (all locations)

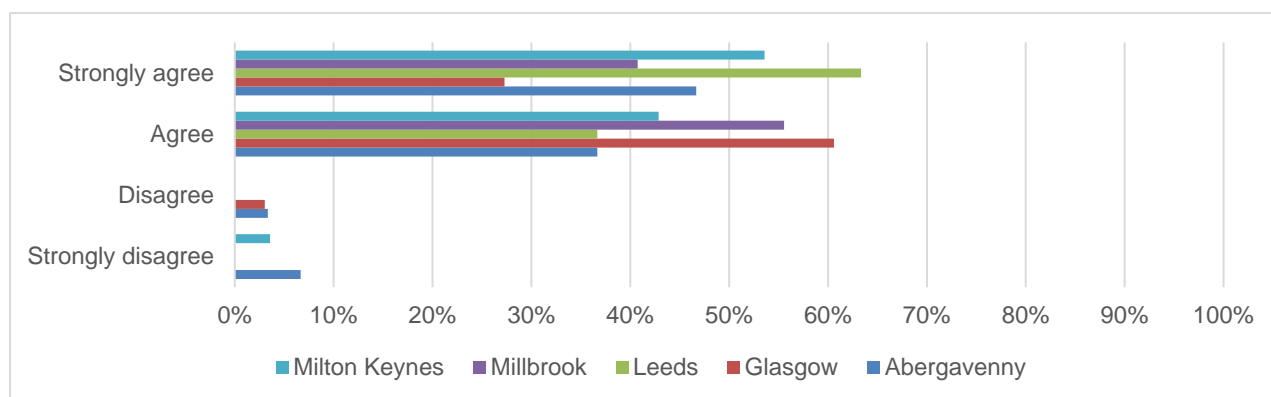
	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	2%	5%	47%	41%	88%	152
Workshop 2	2%	4%	39%	54%	93%	148
Workshop 3	1%	5%	43%	48%	91%	152

“I am clear about how my views could make a difference (e.g. to future policy or decisions).”

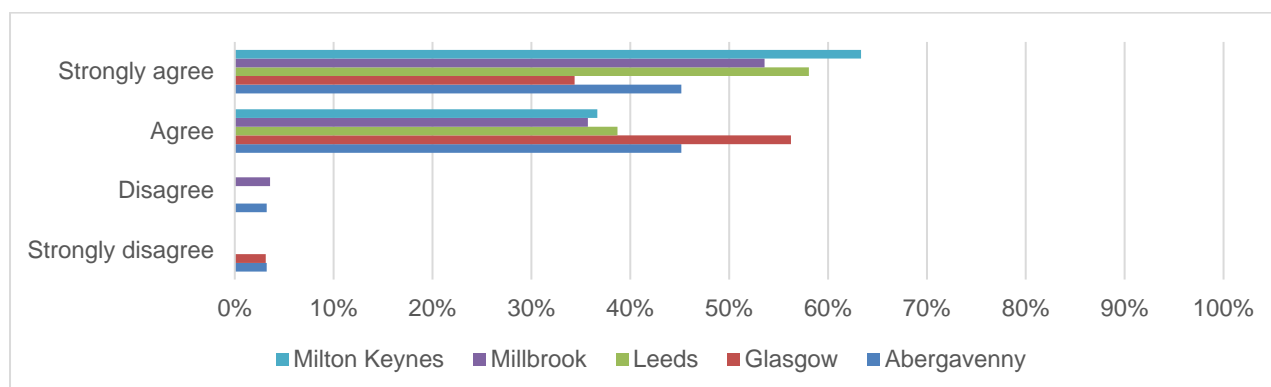
Workshop 1 by location



Workshop 2 by location



Workshop 3 by location

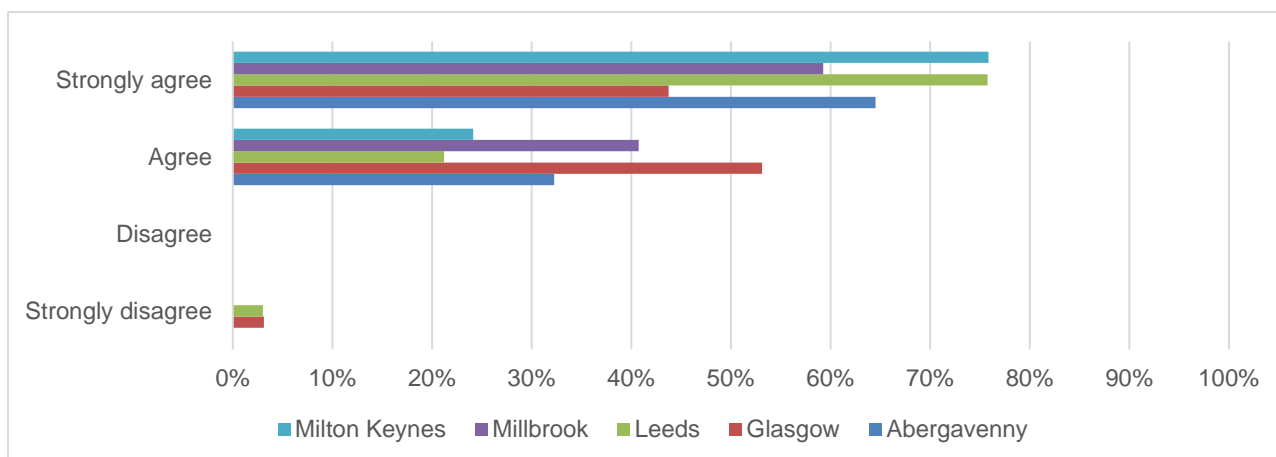


Across workshops (all locations)

	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	2%	5%	44%	43%	87%	152
Workshop 2	2%	1%	47%	46%	93%	148
Workshop 3	1%	1%	43%	51%	94%	152

“I am happy to stay in the public dialogue process.”

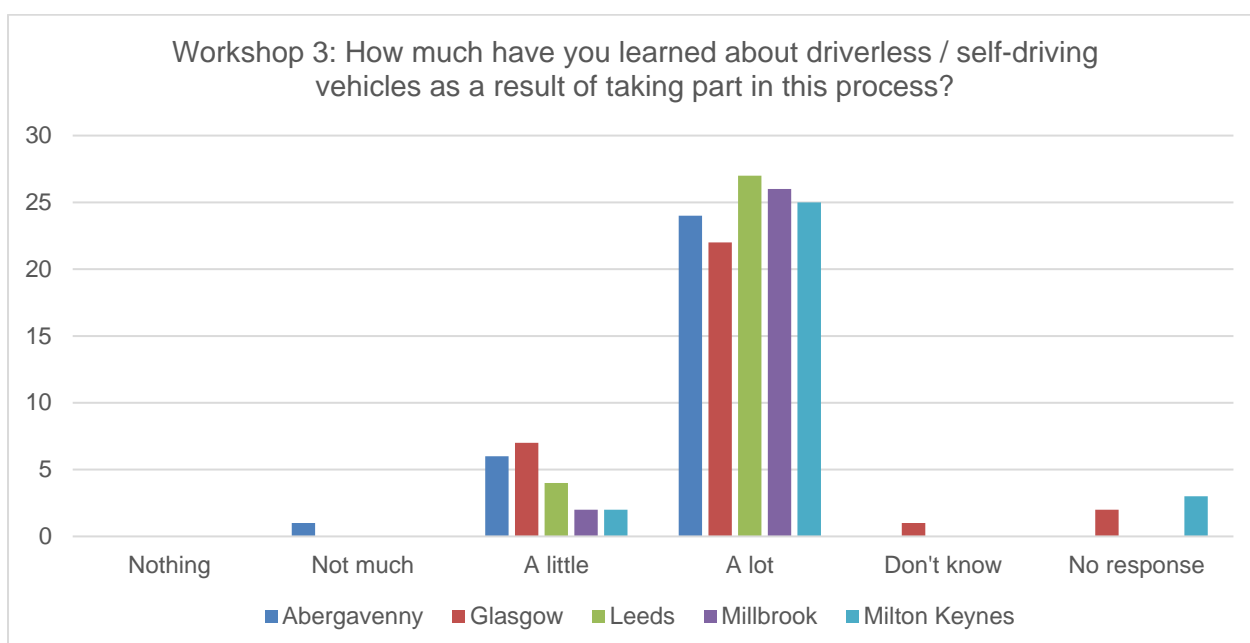
Workshop 1 by location



Across workshops (workshop 1 only)

	Strongly disagree	Disagree	Agree	Strongly agree	Agree / Strongly agree	Total respondents
Workshop 1	1%	0%	34%	64%	98%	152

Workshop 3: learning across the process



	Nothing	Not much	A little	A lot	A little / A lot	Total respondents
Workshop 3 response to: “How much have you learned about driverless / self-driving vehicles as a result of taking part in this process?”	0%	1%	14%	82%	96%	152

Workshop 3: How do you feel about driverless / self-driving vehicles, compared to before you took part in the dialogue process?

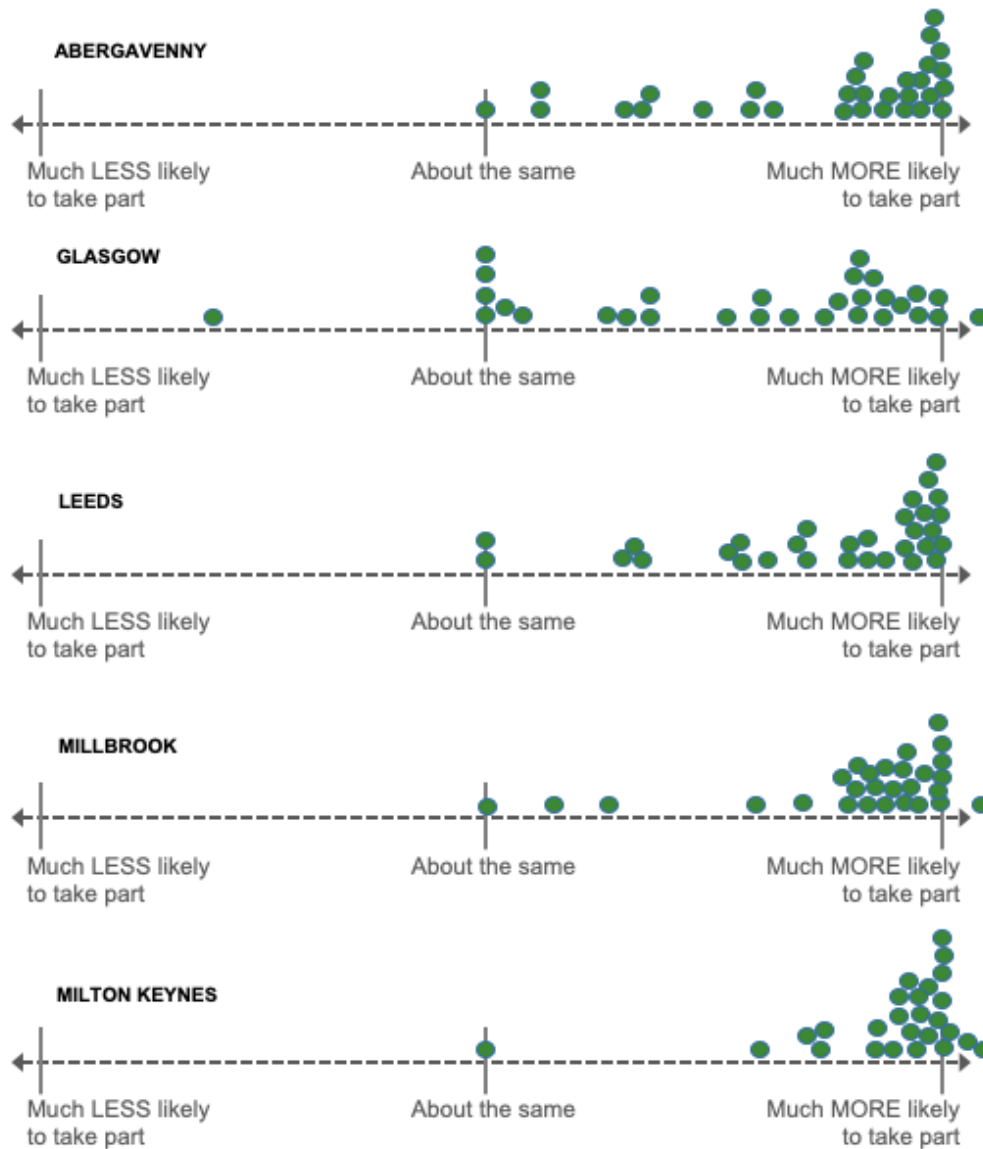
Notes:

- Locations where participants had direct experience with CAV technology were Leeds, Millbrook and Milton Keynes.
- Data came from final workshop evaluation forms, where participants placed a cross or dot at their chosen point along the scale. These are replicated and combined here as accurately as possible.



Workshop 3: Based on your experience with this process, how likely are you to be willing to take part in a similar public dialogue process in the future?

Notes – as for charts above.



Appendix 4: Feedback forms from Specialist Group meeting

Notes

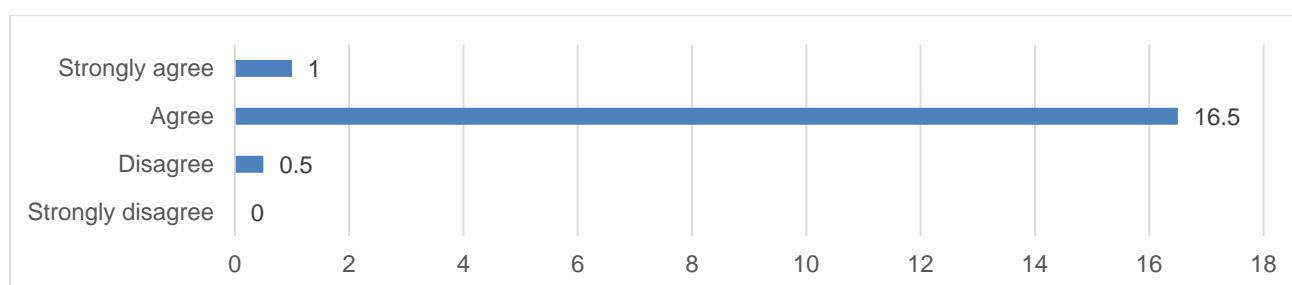
Does not include those saying “don’t know” / no response, apart from total respondents data.

Does not include qualitative / text-based questions and responses, apart from those given in support of the graph-based quantitative questions.

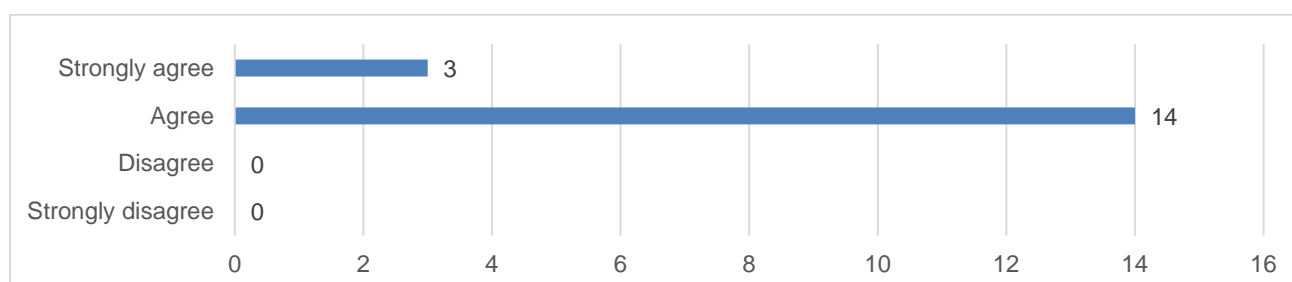
Where respondents indicated a response in between two answers (e.g. between “agree” and “disagree”, the two relevant responses were given a score of 0.5.

Number of respondents = 18

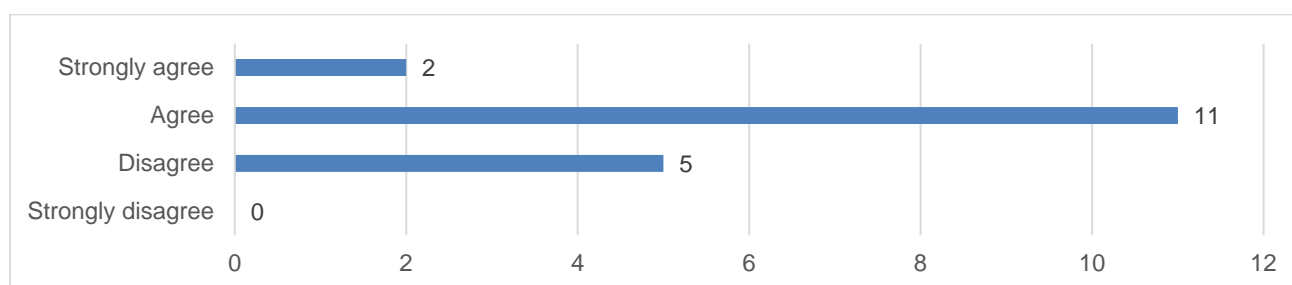
“The purpose of this meeting was clear.”



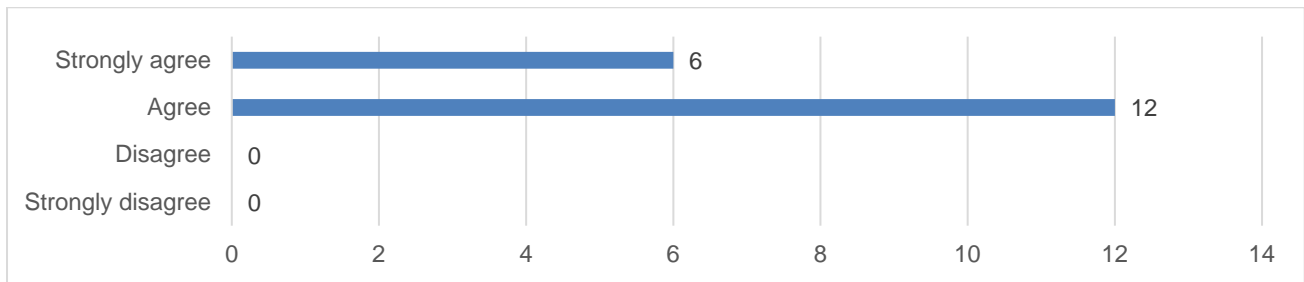
“The role of the Specialist Group is clear.”



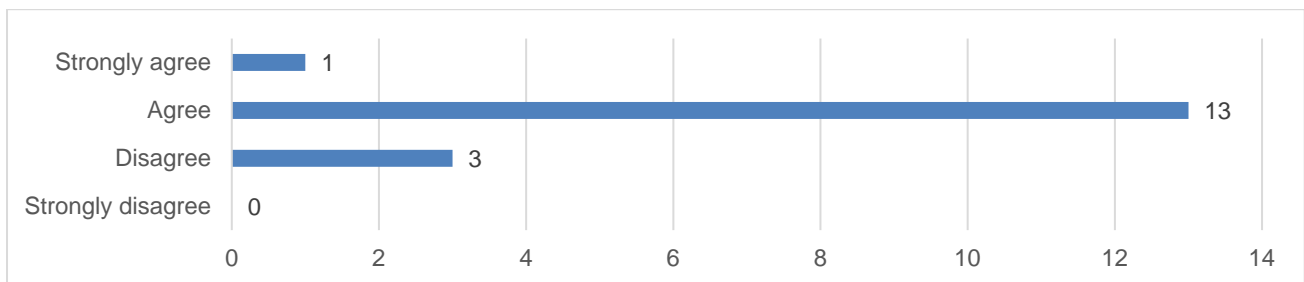
“The purpose of the CAV public dialogue is clear.”



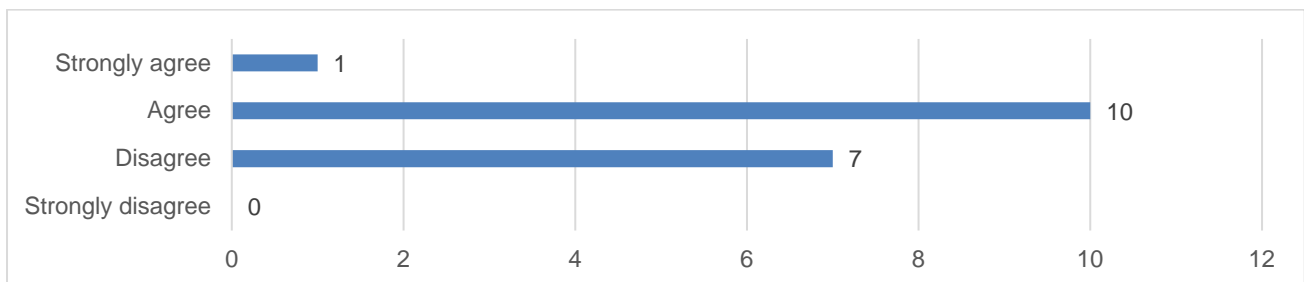
“I felt able to contribute my views today.”



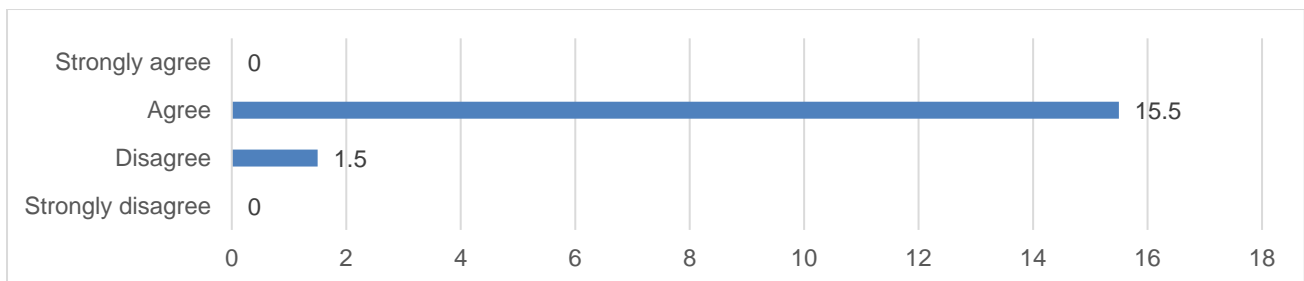
“I am confident the dialogue stimulus materials will be of high quality.”



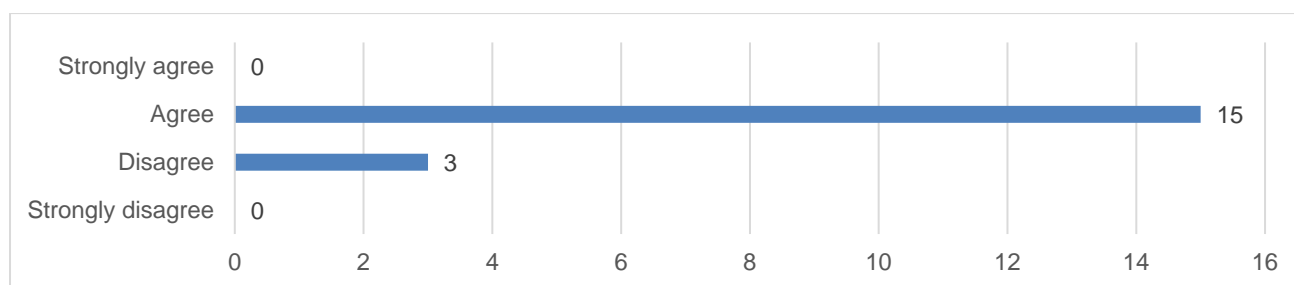
“I am confident the dialogue stimulus materials will be easy for members of the public to understand.”



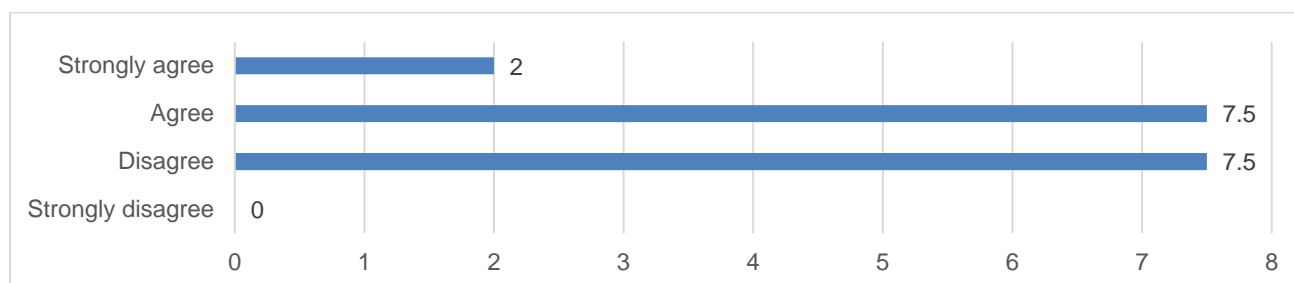
“I am confident the dialogue stimulus materials will present a good balance of perspectives.”



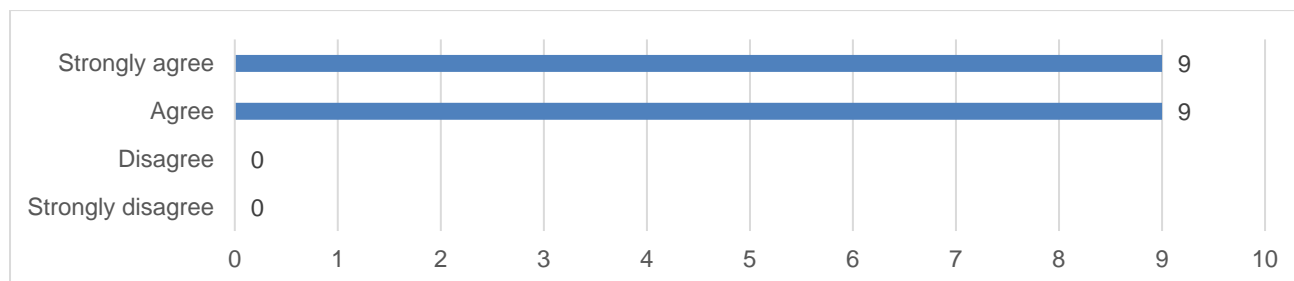
“I am confident the public dialogue process will provide useful insights to decision makers.”



“I am confident the public dialogue process will have an impact on future policy relating to CAVs.”



“I am happy to stay involved in the public dialogue process.”



Comments relating to the questions above:

- Some of the ‘disagree’ responses reflect the fact that I do not know (for instance) whether the dialogue materials will be of high quality and will present a good balance of perspectives – equally, I do not know whether they will provide useful insights to decision-makers and have a policy impact. Hence I had to say disagree with these statements.
- I suggest the first round of public engagement is pitched very simply. Entirely unrelated, but I’ve been working in transport for 10 years and the gender balance is dreadful – I was surprised this workshop didn’t seem to avoid that, given what we were discussing (or perhaps it did and It’s a further sorry indictment...)
- The thing is I ran a ‘workshop’ on all this a week or two ago and the most interesting thing to explore, for you, is why in a room of 30 people the two most junior folk could not ever see themselves travelling in a driverless road vehicle – car, cab or bus. Why’s that? We didn’t have enough time to really bottom that out – perhaps you do.

- Good level of discussion. Good range of people in the room. Need to think of an alternative metaphor for CAVs and not a person.
- This work isn't taking account of the last round of research – there is a high likelihood of duplicating results and adding nothing new. That said, today's session does a good job of making the work visible to experts.
- Who and why will be using the AVs from a shared / ownership perspective; from other road user perspective. Aim of the workshop: feeding forward/backwards; 'this is what you'll be facing in the future, what do you think?'; 'it will be good if in the future...'; current mode of transport.
- Happy to attend public dialogue sessions and generally pleased to see the level of anticipatory thinking prior to the deployment of new transport tech.
- **a**: beforehand disagree, during the event agree.
- **f** (disagree/agree): hard to say!
- **f&g** (disagree/agree): need cognitive testing before usage with 'the public'.
- **g** (disagree/agree): maybe too much balance / spread?
- **h** (disagree): seems more exploratory...won't translate to decision-making
- **i** (disagree): although I hope so! (just not confident).

Appendix 5: Specialist and observer workshop feedback questions

Workshop 1

1. What, if anything, has changed for you as a result of attending this workshop? [E.g. new viewpoint, action, contacts, confirmation of existing thoughts, anything else]
2. Tell us your thoughts about the meeting itself...
 - a. What worked particularly well?
 - b. What would you change for next time?
3. What are your take home messages from today?

Workshop 2

1. What impact has attending this workshop had on you or your thinking? [E.g. new viewpoint, action, contacts, confirmation of existing thoughts, anything else...]
2. Tell us your thoughts about the meeting itself...
 - a. What worked particularly well?
 - b. What would you change for next time?
3. What are your take home messages from today?

Workshop 3

1. What impact has being involved in the workshop/s had on you or your thinking? [E.g. a new viewpoint, confirmation of existing thoughts, something you might not have thought about otherwise, anything else...]
2. Tell us your thoughts about the meeting itself...
 - a. What worked particularly well?
 - b. What would you change for next time?
3. What are your take home messages or actions?

Appendix 6: Evaluation interview questions

All questions applied flexibly and followed up with supplementary questions, as appropriate to the individual interview.

Baseline interviews

Policy leads

1. Could you tell me a little bit about your role?
2. What kind of experience have you had with public dialogue before?
3. What's your knowledge or impression of the CAV public dialogue so far? (Follow up with anything they think is particularly good about it, and what they think are the key challenges, if not covered.)
4. I'm interested in how the timing of the dialogue works from your point of view, for example are there any particular policy developments or decisions coming up that you can see the dialogue being of relevance to? (And talk more broadly about policy context if it feels relevant.)
5. To what extent do you anticipate the dialogue informing or influencing those developments (or your thinking more generally)?
6. What would make the dialogue outputs credible (or not credible) from your point of view?

For policy leads who also sit on the OG or SG:

7. How did you find the first OG / SG meeting? (Anything that particularly worked about it for you? Anything you would change? Anyone else who should have been in the room?)
8. What's your level of expectation for involvement in the dialogue process?

For all interviewees:

9. How would you like to be kept in touch with the dialogue as it progresses?
10. What form of outputs would you find most useful in order to be able to use the dialogue findings to inform your work?
11. Is there any literature / materials it would be useful for us to look at to inform the context for the dialogue evaluation (e.g. previous work to engage the public)?
12. Is there anything else you'd like to say about the dialogue or your involvement in it at this point?

OG / SG members

1. Could you tell me a little bit about your role?
2. What kind of experience have you had with public dialogue before?
3. What's your knowledge or impression of the CAV dialogue so far? (Follow up with anything they think is particularly good about it, and what they think are the key challenges, if not covered.)
4. I'm interested in how the timing of the dialogue works from your point of view, for example are there any particular policy developments or decisions coming up that you can see the dialogue being of relevance to? (And talk more broadly about policy context if it feels relevant.)
5. How did you find the first OG / SG meeting? (Anything that particularly worked about it for you? Anything you would change?)
6. Were there any perspectives missing from that first meeting that you think would be useful to have involved going forward?

7. What's your level of expectation for involvement in the dialogue process? (Feed in to process / materials, meetings, attending dialogue events, etc)
8. How would you like to be kept in touch with the dialogue as it progresses?
9. To what extent do you anticipate the dialogue informing or influencing your own work?
10. What would make the dialogue outputs credible (or not credible) from your point of view? (Go into detail regarding things they like or have concerns about in terms of the process.)
11. What form of outputs would you find most useful in order to be able to use the dialogue findings to inform your work?
12. Is there any literature / materials it would be useful for us to look at to inform the context for the dialogue evaluation (e.g. previous work to engage the public)?
13. Is there anything else you'd like to say about the dialogue or your involvement in it at this point?

DfT / Traverse team / Sciencewise

1. Confirm role and previous experience with public dialogue.
2. How are you feeling about the CAV dialogue so far? *[Note – this question is anticipated to take up more time than the others, covering the various elements of the process so far.]*
 - a. What's working well from your point of view?
 - b. What, if anything, do you have concerns about at this stage?
(Prompt to discuss specific aspects if not covered: procurement, design process, communications and decision making, OG and SG, looking ahead to workshops, reporting, dissemination / launch, anything else...)
3. How are you feeling about the composition and dynamics of the OG and SG?
4. Are there any perspectives not involved in the first OG and SG meetings that you think would be useful to have involved going forward?
5. Are there any particular policy developments or decisions coming up that you can see the dialogue being of relevance to? (And talk more broadly about policy context if it feels relevant.)
6. Based on your impressions and conversations with decision makers so far, what (in your opinion) is the potential for the dialogue to have a tangible impact?
7. To what extent do you anticipate the dialogue informing or influencing your own work? (E.g. with respect to future use of public dialogue)
8. What would make the dialogue outputs credible (or not credible) from your point of view?
9. What do you see as the key challenges for the dialogue? And what are you most excited about?
10. Is there anything else you'd like to say about the dialogue or your involvement in it at this point?

Interim interviews

OG / SG members

1. If attended workshops: Based on the workshops you attended:
 - a. What worked well about the workshops from your point of view?
 - b. What didn't work so well / what would you change for next time?

- c. Were you clear about your role at the workshops?
 - d. What did you take away from the events?
2. If not: What are your impressions of how the dialogue process has gone?

OG only:

3. What did you think of the interim reports you received at different stages of the workshop process?

All:

- 4. Beyond the workshops, how have you found interactions and communications with the project?
- 5. Have you had a look at the storyboard report? What did you think of it? (Or, what do you hope to see in it?)
- 6. Any other reflections on the content of storyboard report / any surprises in terms of what's emerging in the report?
- 7. Looking ahead to final reporting, do you have any particular hopes or concerns? (E.g. in terms of level of analysis, presentation, etc)
- 8. Based on what you've seen in terms of emerging findings, to what extent do you anticipate the dialogue will inform or influence your own work?
- 9. And what do you think the potential is for wider relevance to and impact on future policy decisions?
- 10. To what extent do you think the dialogue findings are likely to present anything new?
- 11. Is there anything else you'd like to say about the dialogue or your involvement in it at this point?

DfT / Traverse team / Sciencewise

- 1. How are you feeling now that the delivery phase is finished? *[Note – this question is anticipated to take up more time than the others, covering the various elements of the process so far.]*
 - a. What worked well about the workshops from your point of view?
 - b. What changed during the course of the workshop delivery process / how did you adapt it?
 - c. What else would you change for next time?
- 2. How have interactions with DfT / Traverse / Sciencewise / the evaluators been going?
- 3. How do you feel the role of observers and specialists played out in the workshops? Was it as expected? Anything you would change in hindsight?

Specific to reporting (Traverse):

- 4. Can you talk me through the analysis process, just to give an overview of how it's worked?
- 5. Are there any particular challenges or surprises you've encountered during the process?
- 6. Any reflections on the storyboard report / any surprises in terms of what's emerging in the report?

For all:

- 7. Looking ahead to final reporting, do you have any particular hopes or concerns? (E.g. how the reports are received and used by stakeholders, interactions with other projects, dissemination, etc)

8. Based on what's coming out and what you know of the stakeholders involved, what (in your opinion) is the potential for the dialogue to have a tangible impact?
9. What have you taken away from being involved in the dialogue so far – e.g. learning or influence on your own work?
10. Is there anything else you'd like to say about the dialogue or your involvement in it at this point?

Final interviews

Policy leads

1. How do you feel about the process now it's coming to an end? (e.g. what worked well, what didn't work so well about the overall process or your involvement in it)
2. Do the findings present anything new? (i.e. intelligence beyond what you already knew, specific nuances, confirmation or contradiction)
3. To what extent do you expect the dialogue findings to influence emerging or future policy? (Any specifics you can point to in terms of decisions or documents the dialogue already has or is expected to impact upon?)
4. And do you anticipate your experience with the dialogue will influence how and what you engage with members of the public on in the future?
5. Is there anything else you'd like to say about the dialogue or your involvement?

OG members

1. How do you feel about the process now it's coming to an end? (e.g. what worked well, what didn't work so well about the overall process or your involvement in it)
2. Do the findings present anything new? (i.e. intelligence beyond what you already knew, specific nuances, confirmation or contradiction)
3. How (if at all) do you expect the dialogue process and/or findings to influence your own work? (e.g. informing the way you engage with members of the public, informing future work / policy / focus areas)

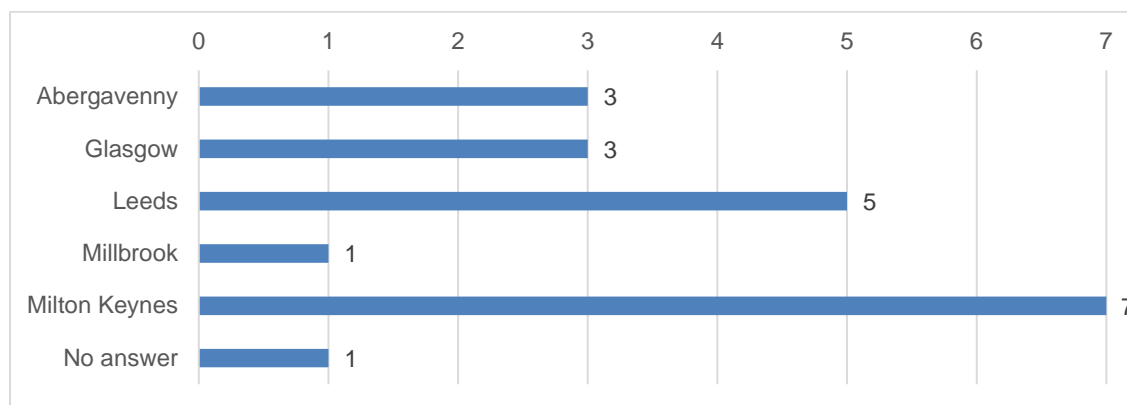
DfT / Traverse team / Sciencwise

1. How are you feeling now the process is pretty much at an end?
2. How's the final reporting process gone from your point of view? [Positive and negative]
3. What (in your opinion) is the potential for the dialogue to have a tangible impact? [Policy, tech development, future dialogue and engagement]
4. Reflecting back on the whole dialogue process, what's the key learning you're taking away?
5. What's the one thing you'd take forward for next time?
6. And the one thing you'd change?
7. Is there anything else you'd like to say about the dialogue or your involvement in it?

Appendix 7: Public participant end of project survey responses

Number of respondents = 20

Q1. At which location did you participate in the dialogue?



Q2. What was the best thing about taking part in the dialogue?

Learning

- Finding out about new technology and the reaction of various people of different ages to the concept of driverless cars.
- Better understanding of the possible future.
- An interesting insight into the future.
- Learning about the driverless pods and what might happen in the future.
- It was interesting to hear about ways we could live our lives in the future.
- It has opened my mind to the benefits of this new technology.
- Finding what is to come in the future.
- Learning more about the technology.
- Being given up to date information on the progress of this technology.
- Learning a lot of information about a topic I previously wasn't that familiar with.
- Gave me more insight into how these vehicles are to work.

Meeting people / atmosphere

- Opportunity of meeting new people and their different opinion & views about driverless cars.
- Group discussions hearing different views and the experts giving their inputs.
- The relaxed atmosphere and sharing of views.
- Fairly open.

Interaction with the technology

- Getting to drive Leeds University's simulator.
- Been able to drive in the driverless car.

- Gaining knowledge and understanding, having a go in the pods.

Interaction with decision makers / decision making

- I liked that we got to meet stakeholders from the government and ask open questions about the effect it'll have on the British public and how it'll adapt my lifestyle and modes of transport.
- The fact that I get to be part of a greater decision-making process. Also: it was highly educational, and quite fun too ;) very friendly and fun.

Q3. What didn't work so well?

Nothing / everything worked well

- Nothing as everything went and worked well.
- Nothing for me.
- Can't think of anything.
- Nothing I don't think: time whizzed by!
- Nothing.
- Can't think of anything.
- In my opinion everything was ok.
- Everything worked well, it was very well organised.

Interaction with the technology

- The test in the autonomous car. It was a let down as it wasn't driven driver-less. This test didn't give me a feel for what it would be like to be in the car
- I do not think the car in which we had our first experience of a driverless car was (q) a good example (b) a real experience.
- I wish we could have driven on an actual road, I would have had a better feel of the experience.

Timing / repetition

- There was a lot of repetition.
- The last day as felt that we had already covered most of the points.
- I recall the final dialogue day being quite long and most people were flagging a bit. It also felt a little repetitive.

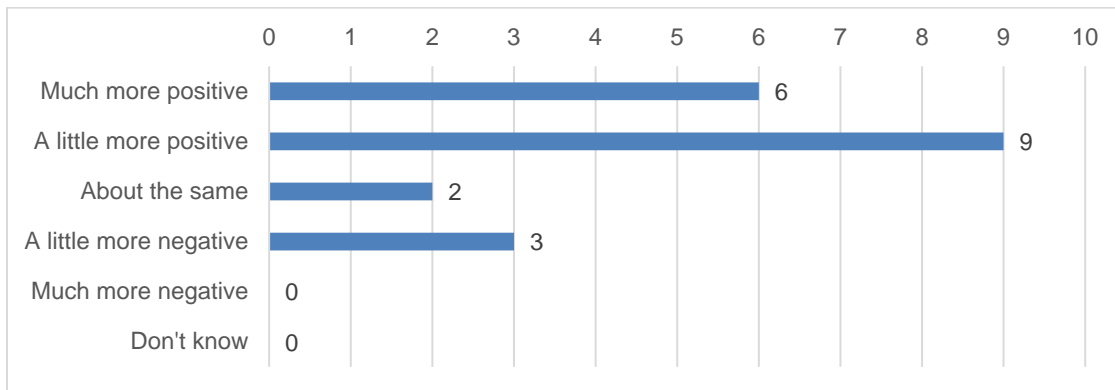
Group work / interactions

- Some participants had very strong views and were somewhat intimidating if others had different ideas.
- The groups were too big and so some aspects weren't properly discussed.
- Got a bit lost at times.
- There was some contradicting information (from some of the guest speakers). i.e.: a girl from Leeds (from an advisory sector) who gave a mini 'talk' said that London won't be fully automated until after our lifetimes. But another guy from a different sector said that it will probably be within 30 years. I suppose it's just 'early days' and no one really knows. Some things had to be rushed. actually it could have been a few hours longer so we could have had longer Q&A with key people from government and private sectors.

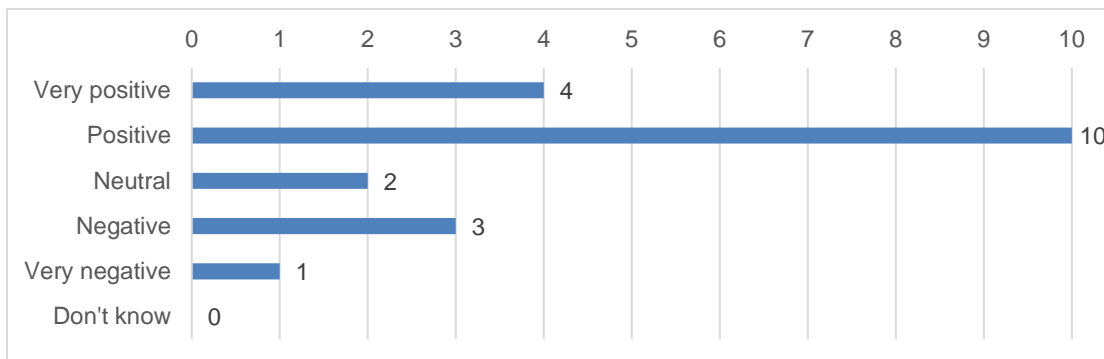
Other

- Can't see the infrastructure coping.
- Hmm too early to say what didn't work well, we will have to see once they are out and about.

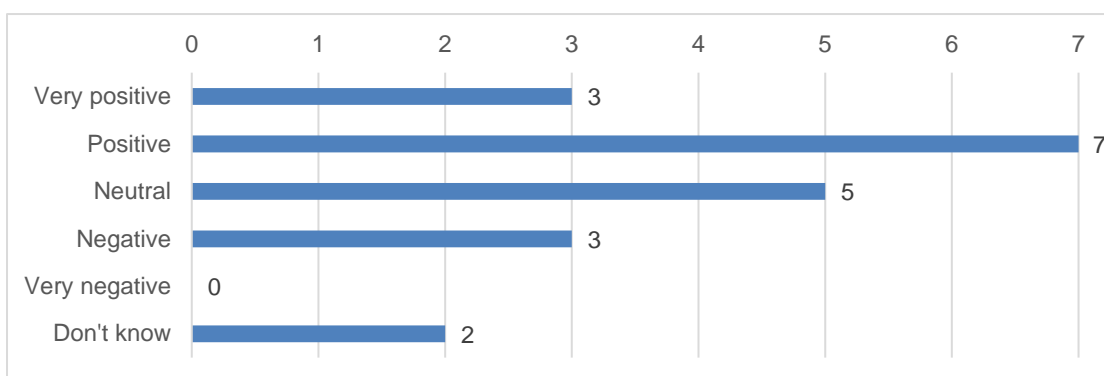
Q4. How do you feel about driverless / self-driving vehicles now, compared to before you took part in the dialogue process?



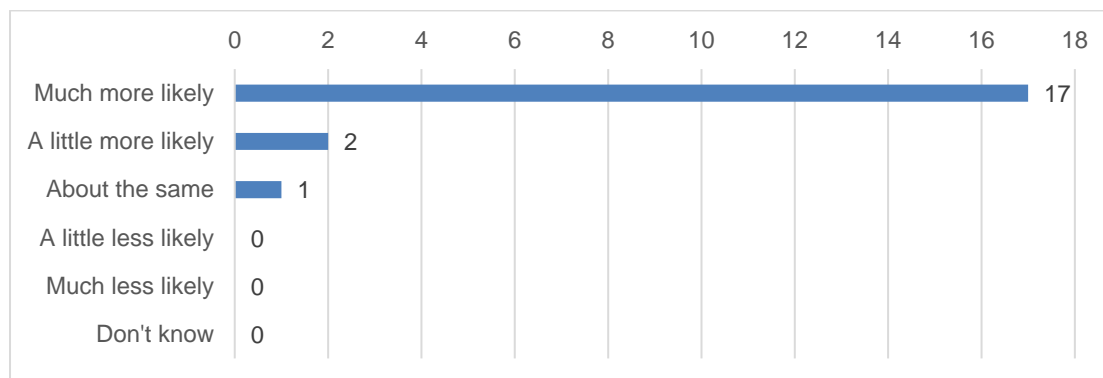
Q5. To what extent do you think that this technology will have a positive or negative impact on society?



Q6. To what extent do you think that this technology will have a positive or negative impact on you and your family?



Q7. Based on your experience with this process, how likely are you to be willing to take part in a similar public dialogue process in the future? (Compared to before you took part in this process.)



Q8. Is there anything else you'd like to say about your experience of the dialogue process?

Overall positive / enjoyment

- Really enjoyed it, well run and extremely gratifying.
- One of the best researches I have ever done, really enjoyed it.
- Thank you to everyone involved and making the experience enjoyable, educational and very understanding xx.
- Had a great time and have become aware of how much this is now in the news.
- On the whole, it was amazingly organized. I appreciate the effort that you guys put into this. I'm happy I got vegan food in the end ;) Lol My personal team leader was awesome... very understanding of the group and helped maintain a good balance throughout the 3 days. I think a big part was allowing us to all mingle and meet new friends. This made people come more out of their box.. by the 3rd day we were all much more extrovert and confident to speak our minds. I would happily do this all over again ;)
- Apart from driving the simulator car, I was really positively engaged by the interaction with others, and with the technical experts in attendance. I found the experience thoroughly entertaining and informative and I am pleased to be able to add my thoughts to the research project

Informative / learning

- Very informative and insightful.
- It was a very interesting experience and I learned more about this technology. I'm also now hearing and seeing a lot of talk about this in the news and media.
- Learned a few things about the subject and about myself.
- It was most informative and I would like to know more.
- It was a great experience and everyone was very informative and helpful.

Other

- I have answered negative to the above based on the fact I feel I wouldn't be able to own my own car and have the freedom I do now. This would also be a feeling of my family and friends as

well.

- This was extremely exciting to see how it would be possible, when you think of all the errors of driving causing so much accidents and deaths on our roads, I feel that this needs to be implemented ASAP. I really love the idea and welcome it with full view that it will help the elderly & disability people get out more and take away the fact we have so many cars on our roads just sitting there taking up space. This will cut down the taxi service and make our roads safer & cleaner for our children's children.
- Some suggested scenarios seemed positive but others quite futuristic and improbable.
- No thanks! *[Regarding any further comments.]*
- Thank you for letting me be a part of this survey.