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Practitioner views on transport planning's evolution – A Sisyphean task still ahead?

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ABSTRACT

Transport planning as a formalised profession is relatively young and there is no doubt it has evolved over time. In Europe, Sustainable Urban Mobility Plans reflect a change in emphasis from keeping traffic moving to place-based, people-centric planning. Three new developments of significance present themselves to contemporary transport planning: the collision and merging of the digital age with the motor age; a widespread sense of deep (and possibly deepening) uncertainty about the future; and the imperative to address the climate emergency and decarbonise transport. Taken together, such developments are reflected in the recent notion of Triple Access Planning which sits within a so-called 'decide and provide' paradigm – contrasted with traditional transport planning within the 'predict and provide' paradigm.

The world is changing significantly with a strong sense that transport planning needs to change accordingly. This paper draws upon the '7 Questions Interview' technique to explore with 23 practitioners in the UK their experience of transport planning practice over time, their hopes and fears for its future and what could be achieved, and their views on enablers of, and barriers to, positive change.

The interviews reveal a strong sense that transport planning can face a Sisyphean (seemingly impossible) task of advocating measures that could push towards realisation of economic, social and environmental aspirations, only to find progress with measure approval and implementation thwarted by perennial challenges including lack of political will and public buy-in. While the three new developments mentioned represent potential catalysts for significant change, such change relies on multiple other factors. These include collaborative cross-sector working, a long-term perspective, appropriate funding and political agency, and enhanced communication skills to win hearts and minds. The paper concludes that Sisyphus may continue to struggle to push the transport planning boulder to the top of the hill; unless perhaps Hercules can lend a hand.

1. Introduction

Transport planning involves "preparing, assessing and implementing policies, plans and projects to improve and manage our transport systems".[1] To do this, it needs to address change to the transport system, its use, and its function in society over time. This includes change which *could* in future arise as well as change that is judged *preferable*. Over time the nature of transport planning has evolved, reflective of a transport system – in terms of land-based surface transport – that has been substantially shaped by the private car (Banister, 2001; Adams, 2021). In recent decades it has been widely apparent in transport planning circles that the benefits that once might have attracted planners and decision makers to support movement of private cars, are in tension with the adverse consequences that have also arisen. For some time, transport planners have recognised the need in our built environments for active travel modes and public transport to play an appropriate part in movement of people. This carries a need to lessen rather than further reinforce car dependence, in the interests of appropriate environmental and social, as well as economic, outcomes (Maltese et al., 2021; McLeod et al., 2017).

The opportunities of digital accessibility, created by digital connectivity and the widespread availability of online activities and services, have also become of relevance to a changing society and how people fulfil their need or desire to reach goods, employment, services, and other people in their daily lives (Mokhtarian 2009; Lyons et al., 2018). The Covid-19 pandemic amplified our collective ability to rely upon

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[1] As explained by the UK Transport Planning Society - https://tps.org.uk/profession/careers.

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digital accessibility and make use of it in flexible ways to help provide resilience to economic and social activity (Mouratidis and Peters, 2022). With transport as a major sector globally contributing substantially to global emissions of carbon dioxide (Chapman, 2007), transport planning now also finds itself needing to bring about what may be considered unprecedented change in the face of a climate emergency.

While transport planners are responsible for developing, implementing and monitoring transport solutions, they are not directly responsible for shaping the future of transport. That responsibility rests with politicians alongside wider change being brought about by private sector actors, notwithstanding the indirect influence possible from transport planners through supporting and engaging with politicians and interactions with other actors. This can and does make for a challenging environment in which transport planning must operate (Marsden and Rye, 2010). Planners and decision-makers alike are also faced with a need to address and accommodate uncertainty. The role of transport planners is therefore key in shaping a more robust plan in the face of uncertainty, by designing and selecting adaptable and resilient measures for political consideration. These might not be the 'typical' measures of traditional transport planning, and may therefore face resistance in terms of political support (Lyons et al., 2024).

This paper uses a futures interview technique called '7 Questions' (Chermack, 2011) to explore UK practitioners' views regarding the changing nature of transport planning and the opportunities and challenges they see ahead. The particular focus of the paper is on urban mobility planning and all further reference to transport planning in the paper should be understood accordingly.

The next section of the paper provides further background to developments in transport planning in the UK. The following section then introduces the methodology, explains the selection of interviewees involved, and provides a description of the sample. Sections 4 presents the results from the interviews, including key themes which emerged. Section 5 discusses the results and reflects upon the insights this exercise offers for the transport sector looking ahead.

2. Background

While transport planning has long concerned itself with more than only servicing the movement of people by private car, it seems circumstances now faced by society in the wake of a pandemic and with an unfolding climate emergency are demanding a shifting of gears in terms of transport planning's role in reshaping the transport system and its use.

2.1. Travel demand is derived from a need or desire for access

Travel is a derived demand, notwithstanding the potential appeal of travel for its own sake (Mokhtarian and Salomon, 2001). It is (typically) derived from the need or desire to participate in activities at different locations. This is at the heart of transport planning, which has evolved as a profession responsible for examining and addressing transport supply and demand over time. Transport planning is today, according to the UK's Transport Planning Society, about "understanding the link between transport and land use, in particular the future shape of our towns and cities, and the activities which people want to undertake to meet quality of life objectives".[2] Implicit in, and at the heart of, such understanding is accessibility. This can be defined as "the ability of people to reach and take part in activities normal for that society" (Farrington, 2007: 320). It entails being able to reach people, goods, jobs, services, and opportunities. It therefore does not refer only to overcoming spatial separation though physical movement. Accessibility can be achieved also through digital connectivity and online services.

Yet transport planning in its history and through to the present day (Goulden et al., 2014) has been strongly associated with the so-called predict and provide paradigm – project future demand for travel (especially car travel) and then set about addressing transport system capacity to meet that demand. It can appear to be a matter of offering transport solutions to transport problems. As Banister notes, there has been a "predominance of transport solutions to urban problems" constituting pursuit of a demand-based "transport-led future" (Banister, 2008: 73). Yet if travel is a derived demand, it should be apparent that the root cause of that demand lies beyond only transport and concerns fulfilment of society's access needs and desires. Transport solutions may not be the only recourse to addressing transport problems (or urban problems arising from past transport-led solutions).

This has given rise to considerable interest in paying more attention to accessibility as opposed to (only) mobility in transport planning. For example, the accessibility planning policy was introduced into transport planning in the UK in 2004 to help promote social inclusion (Kilby and Smith, 2012), though without subsequently becoming mainstream practice, and facing obstacles – notably concerning cross-sector working (Halden, 2014; see also Curl et al., 2011). Analysis of literature on accessibility over the last two decades shows the number of annual publications on the topic has grown enormously and has been especially high in the last few years (Shia et al., 2020). Yet interest has not translated as readily into transport planning practice. "A seemingly simple idea, that goods and services and other activities should be easy to reach, is somehow difficult to implement in practice" (Handy, 2020: 2). When it comes to accessibility measures and instruments, there is a recognised 'implementation gap' (Silva and Larsson, 2018) – something Handy (2020) attributes to the relative difficulty in being able to measure accessibility compared to measuring mobility.

2.2. The evolving role of transport planners

Transport planning has significantly changed in the last sixty years. It has progressed from an emphasis on highway building to increase road capacity in response to expected levels of demand, to promoting sustainable development and giving greater attention to reducing transport's negative externalities (Banister, 2001). The role of transport planners has evolved accordingly to accommodate new objectives and priorities. These include addressing how to make more efficient use of existing capacity for priority users (Dunn, 2010), and accounting for increasing levels of private sector provision of transport services (Banister, 2001). Transport planners need to have a strong understanding of the social and political dimensions of transport problems and solutions (Kane and Del Mistro, 2003).

Past chairs of the UK's Transport Planning Society have reflected on 25 years since the inception of the Society and a common theme emerged that "Good transport planning can drastically improve people's socio-economic conditions in several ways while also helping us realise vital wider policy goals such as Net-Zero, clean air and enabling more physical activity" (Transport Planning Society, 2022a). At the same time, the Transport Planning Society published a state of the nation report on transport and transport planning in the UK where it advocated for a re-definition of the overarching goal of national transport policy to "increase equitable and sustainable access to goods, services, opportunities and other people" (Transport Planning Society, 2022b).

Final public sector decisions on investment in shaping the future rest with politicians. Transport planners' role is to inform such decisions. They also have the important power to shape decisions through effective preparation and communication of evidence that takes account of the current system and its use and in turn of what change could or should occur in future. Decision makers need to be made aware of options for intervention that have the prospect of being suitable, acceptable and feasible. Effective design and implementation of measures depends upon relevant transport planning knowledge and expertise. This applies especially in circumstances where such measures risk being unpopular in spite of the benefits they could deliver. As such, transport planners

[2] https://tps.org.uk/profession/careers.

have considerable opportunity to exercise soft power in helping shape the agenda for local transport. Transport planners can therefore play a key role in fostering the successful implementation of effective measures, and can shape more sustainable futures, especially considering the increasing significant impact of transport on air quality and carbon emissions (see next section).

2.3. The climate emergency calls for a reshaping of access

According to one source,[3] as of 2021, 75% of public authorities in the UK had declared a climate emergency. The UK Government has a legally binding commitment to decarbonise its economy by 2050 as well as remaining within five-year carbon budgets in terms of its trajectory to net zero emissions. The devolved administrations in the UK – the Scottish and Welsh Governments – have each set targets to reduce car kms significantly by 2030 (TS, 2020; Welsh Government, 2021). Meanwhile, the UK Department for Transport's latest road traffic projections (in the absence of policy interventions) indicate an increase in total distance driven annually of between 8 and 54% between 2025 and 2060 (DfT, 2022). Local authorities seeking to reduce their carbon emissions have indicated a need for unprecedented reduction in car travel. For instance, the West of England Combined Authority envisages a need for a 40% reduction in private car mileage to bridge the gap between its forecast carbon emissions and its 2030 ambitions (WECA, 2023); and the city of Leeds has a transport strategy pursuing a 43% reduction in carbon emissions by 2030 allied to an aim for a 30% reduction in car mileage (Leeds City Council, 2021). Can such eyewatering ambitions be realised?

Importantly, reductions in car use do not necessarily mean reductions in accessibility if opportunities can be brought close to people through land use changes, to foster spatial proximity (De Vos et al., 2012), and digital accessibility, to replace the need for physical mobility (Lyons and Davidson, 2016). According to Lyons and Davidson (2016), physical mobility, spatial proximity and digital connectivity should frame policy. They introduce a new way of thinking for future planning and accessibility called *Triple Access Planning*. This considers the integration of the systems of land use (spatial proximity), transport (physical – motorised - mobility), and telecommunications (digital connectivity) as a framework for policy and investment decisions that can harness flexibility and resilience. The focus is therefore changed from the need to move, to the need to access.

2.4. Uncertainty about the future is deep

While imperatives for change are strongly evident, so too is the sense of uncertainty about future change. Such uncertainty has come about in part as a result of the collision and merging of the digital age with the motor age (Lyons, 2015), creating a state of flux and the possibility that we are transitioning away from the established regime of automobility (Geels et al., 2012). A socio-technical regime (the way of the world as we know it) can be characterised as an "alignment of existing technologies, regulations, user patterns, infrastructures, and cultural discourses" (Geels 2012: 473). Regimes are often established and long lasting. They tend to be preserved because of such factors as path-dependency, lock-ins and vested interests. Mattioli et al. consider the complex nature of car dependence (as part of an 'automobility regime' (Geels et al., 2012)) pointing to "a deeply self-reinforcing system, apparently immune from economic and political pendulum swings, able to bend the forces that sway the rest of the society to its purpose" (Mattioli et al., 2020: 14). However, niche developments can sometimes accumulate and scale in ways that destabilise a regime and bring about transition. Geels has suggested that the motor age may be subject to destabilisation by the digital age and that "we are only in the early phases of a low-carbon transition in the transport domain" (Geels, 2012: 479). Docherty et al. consider the importance, in relation to so-called 'smart mobility', of governing and steering transition to avoid "locking the mobility system into transition paths which exacerbate rather than ameliorate the wider social and environmental problems that have challenged planners throughout the automobility transition" (Docherty et al., 2018: 114).

Changes relate to technological possibilities within and beyond transport. These include increasing levels of driver assistance in vehicles, new modes of transport (such as micro-mobility), and new ways of working both in terms of flexible working practices but also the possibilities being brought about by artificial intelligence. Changes are not limited to technological innovation but relate also to behavioural and attitudinal change and the shifting sands of geopolitics. The UK Department for Transport's (former) Chief Analyst points out that: "[t]here is considerable uncertainty around future travel demand, including the extent to which social and behavioural change, emerging technologies, decarbonisation, demographic change and growth in the economy will influence how, when and where we travel" (DfT, 2022).

2.5. An emerging new paradigm of transport planning

Resonant with the issues above has been the emergence of an alternative paradigm to predict and provide called *decide and provide*. While transport planning has sat within the predict and provide paradigm, it is proposed that an evolved form of transport planning – i.e. triple access planning - sits within decide and provide (Lyons and Davidson, 2015). The distinctions are set out as follows.

- Transport planning in the predict and provide paradigm has been forecast-led ('predict') and focused on transport (and indeed traffic). It has taken a demand-led supply approach and been reactive to change while tending to conceal uncertainty.
- Triple access planning in the decide and provide paradigm is vision-led ('decide') and focused on access (not only transport). It takes a supply-led demand approach that proactively seeks to influence change and accommodate uncertainty.

While it remains too early to judge how prevalent and impactful this alternative approach could become, there are a growing number of signs of support for its use. For example: coverage and endorsement by the International Transport Forum (ITF, 2021); practical guidance on decide and provide available for development planning and transport assessments (TRICS, 2021); adoption of decide and provide by the sub-national transport body, Transport for the North (TfN, 2020); adoption of decide and provide by Oxfordshire County Council (2022); inclusion of Triple Access Planning in Scottish local development planning guidance (Scottish Government, 2023); consideration of triple access in local transport plan development in the West Midlands (TfWM, 2021); and adoption by the Swedish Transport Administration of the concept of TAP in its new national handbook for strategic transport planning (Sandberg, and Wärnhjelm, 2022).

2.6. What ambition and possibility for change lies ahead?

Such developments as set out above can be likened to a diffusion of innovation. Innovators and early adopters trailblaze change and, if the diffusion continues, are joined by an early and then late majority of others, followed eventually by so-called laggards (Rogers, 1962). However, change takes place in the context of a system of governance within the UK. Local authorities are reliant upon central government for the powers bestowed upon them as well as the resources and control over such resources made available to them. At the time of writing, the Department for Transport is due to be publishing revised guidance on local transport planning in England. Prior to this the last guidance was issued in 2009, allied to the earlier Transport Act 2000 which required

[3] https://www.climateemergency.uk/blog/list-of-councils/- see also https://en.wikipedia.org/wiki/Climate_emergency_declarations_in_the_United_Kingdom.

all local authorities in England to produce a Local Transport Plan (Hull, 2005). Whether, to what extent, and with what consequences new guidance reflects the paradigm shift referred to above remains to be seen. Meanwhile a new handbook for practitioners on Triple Access Planning has been published (Lyons et al., 2024).

Given the circumstances and imperatives set out above, we thought it important to find out the views of practitioners themselves when faced with this agenda. We found only one example of research that had considered transport planner professional opinions. A Delphi study of transport experts in New Zealand obtained views on interventions that could enable a transition from automobility towards sustainable mobility (Stephenson et al., 2018). It identified a wide range of interventions across "transport law and policy, transport funding, urban form, mode share, low-emissions vehicles, rail provision, climate change responsiveness, consultation, and education", as well as changes in the governance, legislation and funding of transport. We wished to look more broadly than interventions and to look at professional views in the UK context. The next section explains how we set about securing the views of UK transport planning practitioners.

3. Methodology

We set out to understand how those individuals involved in transport planning (and also those involved in land use and digital planning) perceived the realities of matters set out in Section 2. Our particular interest, as noted earlier was transport planning in an urban context – so-called urban mobility planning. Our focus was on understanding what transport professionals see as success in urban mobility planning and what needs to change to achieve this.

This study formed part of the pan-European project 'Triple Access Planning for Uncertain Futures'[4] in which the authors have been members of the research team. The project has been research focused but practice-oriented. It involved multiple non-academic partners from local authorities, national governments, and consultancies. Project coverage in the UK has involved the city authorities of Bristol (England) and Aberdeen (Scotland) as well as Transport Scotland (Scottish Government) and Mott MacDonald (transport consultancy). The intention was to pursue the research questions with representatives from across these organisations.

3.1. Interview design

In determining how best to engage transport professionals, we turned to futures techniques (Georghiou, 2008). Exploring drivers and enablers of change is integral to a repertoire of techniques in the field of futures and foresight. This field explores and anticipates future trends and developments, and considers possible future outcomes and scenarios to inform decision-making and planning (Niiniluoto, 2001). Techniques include visioning, scenario planning, SWOT analysis and roadmapping (Popper, 2008; GOS, 2017). Another futures and foresight technique is called the *7 Questions interview*. It was originally taken forward by Shell in its futures work, as a means to identify strategic issues through stimulating individuals' thinking and views on change (GOS, 2017). This interview technique is described by Chermack as following a "combination-type approach" in which "specific questions should be asked of each participant, but room for other issues and conversation should be allowed" (Chermack, 2011). The questions – conceived of originally by Pierre Wack in the 1970s (Chermack, 2017) – can be adapted to align with the scope of the study they are used for (Amara and Lipinski, 1983; Ringland, 1998; Van der Hiejden, 2005: 175; Rowland and Spaniol, 2021), to facilitate strategic conversations (Ratcliffe, 2002).

With an interest at a strategic level in changing transport planning (how it is changing and potentially how it could be changed) we chose to employ this technique for this study. Table 1 shows the version of the seven questions (based on Shell (GOS, 2017)) and the corresponding questions as worded and sequenced for this study. Before undertaking data collection, we obtained ethics approval from the University of the West of England. Appropriate interviewees were then identified through the contact points in each organisation broadly familiar with the triple access planning concept at the heart of the main project. Diversity of interviewees was sought in terms of demographics, level of experience and professional interest (specifically land use planners and digital accessibility experts were recruited in addition to transport professionals).

Each interviewee was provided in advance with a briefing sheet and a consent form to sign. In total, 23 1-h interviews were conducted online (using Microsoft Teams) between September 2022 and March 2023. The authors between them have a lot of experience of using the 7 Questions technique in other transport foresight work, and it is recommended by the UK Government Office for Science (GOS, 2017). The interviews naturally serve well an hour-long discussion providing appropriate direction and staging posts for the interviewee to navigate and share their thinking. The interviewing period began roughly a year and a half after the end of UK Covid-19 pandemic lockdowns. This was also two years after the Scottish Government expressed a commitment to reduce car kilometres by 20% by 2030. At the time of the interviews the Scottish National Planning Framework 4 (NPF4)[5] was in the process of being released, and forthcoming English guidance on Local Transport Plans[6] was being awaited. The timing of the interviews preceded announcements by the UK Government later in 2023 that seemed to suggest some

Table 1
The seven questions that framed the interviews into past, present and future transport planning.

Shell 7 Questions	Study 7 Questions
(1) If you could speak someone from the future who could tell you anything about [this venture], what would you like to ask?	(1) If you could speak someone from 2035 who could tell you anything about urban mobility planning at that future point in time, what would you like to ask?
(2) What is your vision for success?	(2) What is your vision of success for future urban mobility planning?
(3) What are the dangers of not achieving your vision?	(3) What are the dangers of not achieving your vision?
(4) What needs to change (systems, relationships, decision making processes, culture for example) if your vision is to be realised?	(4) What needs to change in planning terms (systems, relationships, decision making processes, culture for example) if a vision of success for urban mobility is to be realised?
(5) Looking back, what are the successes we can build on? The failures we can learn from?	(5) Looking back, what are the successes in/from urban mobility planning we can build on? The failures we can learn from?
(6) What needs to be done now to ensure that your vision becomes a reality?	(6) What needs to be done now to ensure that your vision for successful urban mobility planning becomes a reality?
(7) If you had absolute authority and could do anything, is there anything else you would do?	(7) If you had absolute authority and could do anything, is there anything else you would do?

[4] https://www.tapforuncertainty.eu/.

[5] The National Planning Framework (NPF) is a long-term plan for Scotland that sets out where development and infrastructure is needed. Scotland's fourth National Planning Framework (NPF4) is a long-term plan looking to 2045 that guides spatial development, sets out national planning policies, designates national developments and highlights regional spatial priorities. It is part of the development plan, and so influences planning decisions across Scotland.

[6] This is the equivalent for England to the European Sustainable Urban Mobility Planning guidelines.

weakening of resolve to tackle road transport decarbonisation. In addition, the concepts of Low Traffic Neighbourhoods and 15-min cities were drawn into so-called culture wars. In October the Government also published a document called 'The Plan for Drivers' (DfT, 2023) with an overtly pro-motorist stance. This was seen by many to be politically motivated with a national election coming closer. That election took place on July 4, 2024 with a new Labour Government coming into power.

Two of the authors were present for each interview – one leading the interview and the other taking notes. Interviews were also recorded and automatically transcribed.

The 7 Questions interview technique is a proven method. The question set is designed to be thought provoking and to allow interviewees flexibility in responding while taking them on a 'thought journey' between the past, present and future. During each interview we undertook, supplementary probing questions were also included and the period of 1 h proved to be ample to allow an in-depth examination of issues (Van der Heijden, 2005).

3.2. Sample

We designed our sample based on a combination of convenience sampling and 'purposive sampling' (Etikan et al., 2016). We restricted our sample frame to organisations involved in the 'Triple Access Planning for Uncertain Futures' project. From within those organisations, we sought a diversity of participants in terms of professional role and experience. While this approach to sampling may not ensure a representative sample of transport planners, it ensured we were able to interview professionals with some awareness of Triple Access Planning. We believe the sample achieved reflects a broad range of professional perspectives relevant to the research purpose. Our practitioner sample comprised predominantly transport planners, with some spatial planners and planners who were looking at the role of digital services. Despite their role at the time of the interview, the sample included a variety of background education and experience. Participants were drawn from five main bodies and institutions.

- Aberdeen City Council;
- Bristol City Council;
- West of England combined Authority (WECA), which among other things is a regional transport authority with substantial responsibility for transport in Bristol;
- Scottish Government (most, but not all, of these interviewees were from Transport Scotland, the national transport agency for Scotland); and
- Mott MacDonald, a global engineering, management, and development consultancy.

These organisations, apart from WECA, were project partners. We asked key contacts at the organisations to help us identify and recruit a diverse range of participants. This included different demographics (age, gender), backgrounds, level of experience, and professional interests. 35% of participants were women and 65% were men. Most interviewees (78%) work in public organisations (57% local governments, 22% national government), and 22% in consultancy. Several of the interviewees identified extensive experience in the transport sector over many years, including changes in role and professional focus in that time. Roles held by individuals at the time of interview included operations manager, engineer, economist, spatial planner, town planner, and transport planner. A summarised self-description for each participant is provided in the annexed Table 3. The anonymised interviewee ID included in this table is then used for interviewee quotes included in Section 4 providing the reader with the opportunity to cross-refer.

3.3. Data analysis

The data recorded from the interviews were in the form of notes taken. These were supported by a video recording of the interview and a transcript of the conversation from the video recording. For each interview, each question was analysed in turn, maintaining the integrity of the 7 Questions technique. Answers from all participants were drawn together. Then we conducted a thematic analysis, identifying common recurring themes across different questions and across the range of responses. Thematic analysis is a qualitative research method used to analyse qualitative data (e.g., textual or visual) and identify themes and patterns. It is widely used in qualitative research as it helps gaining insights into the perspectives and experiences of participants in the study (Vaismoradi et al., 2013).

We have analysed the data following the approach suggested by Braun and Clarke (2006: 87). First, we became familiar with the data, looking at the transcribed interviews to get a sense of the whole and noting down initial ideas. We considered the individual questions and answers ('7 Questions') and identified common themes characterising interviewee commentaries across the questions. We found there were a set of recurring themes across the main interview questions explored and deemed it more useful to organise the analysis and write-up of the interviews based on these themes. Data and insights were organised according to the themes and the thematic structure was reviewed and finalised. Fig. 1 identifies the final themes. The links between themes are based on connections made between themes in the interviews. For example, a change to travel behaviour and patterns was deemed necessary to achieve transport decarbonisation. In the following results section, we present narrative commentaries on each theme.

4. Results

The '7 questions' are open-ended questions that are very broad in nature and therefore supplementary questions are also asked as the interview proceeds. The questions enable interviewees to reflect upon and share their perceptions and views about the future. Their views are informed by their understanding and experience of developments in the past and present on a specific topic – in our case *transport planning*.

This section presents the results from the interviews using a thematic structure. In contrast to a question-based structure, this better reflects the important insights (which in many cases spanned more than one question) concerning our interviewees' views on the past, the present and the future of transport planning. The themes identified from the interviews are shown in Fig. 1. *Accessibility to opportunities* was articulated by many participants as the fundamental purpose of the transport system. It was acknowledged that this purpose can be achieved through digital as well as physical means. The overriding need for *transport decarbonisation* was seen as an existential imperative by most participants. Changes to *travel behaviours and patterns* were seen as necessary to achieve decarbonisation and part of reshaping future accessibility to

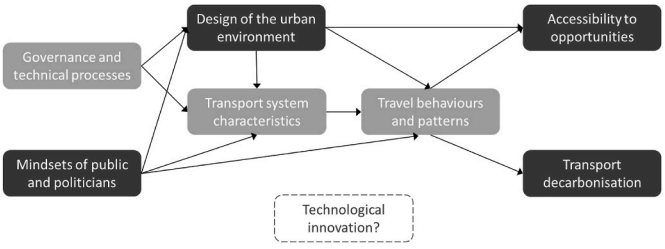

Fig. 1. Themes and their inter-connections - Lighter boxes reflect well-known themes in traditional transport planning; darker boxes reflect what might be more innovative themes driving change, especially decarbonisation; and Technological innovation as a cross-cutting consideration in sustainable urban mobility planning.

opportunities.

Changes to travel behaviours and patterns were not seen as possible without changes in the *mindsets of the public and politicians* and to *transport system characteristics*. Appropriate *design of the urban environment* was often considered a pre-requisite for meeting accessibility and decarbonisation needs. *Governance and technical processes* need to be aligned with changes needed to urban environments and transport systems. *Technological innovation* was discussed by some interviewees but with uncertainty about its role in the future of urban transport planning (hence the way it is depicted in Fig. 1).

This section now summarises discussions that took place for each theme. In particular, it refers to the hopes and fears raised by interviewees on each theme and the barriers and enablers to achieving the visions of interviewees. For direct interviewee quotes we identify the participant number (see Table 3 for corresponding participant description) and the question number they were responding to (see Table 1).

4.1. Transport decarbonisation

The imperative for urban mobility planning to contribute to addressing the global climate change crisis served as a backdrop to interviewees' responses to the seven questions.

Only a small number of interviewees explicitly stated that their vision of success was transport decarbonisation. However, it was implicit in the responses of almost all interviewees. One interviewee simply stated that *"success would be that we hit our net zero decarbonisation targets"* (P17, Q2). Other interviewees referred to decarbonisation but linked to other specific changes they saw as necessary, such as the need for "intelligent decarbonisation" (P12, Q2). This was meant as more equitable and effective ways of promoting active travel and placemaking aiming at making services more accessible locally.

When interviewees were asked about the dangers of not achieving their vision, fears about climate change effects were more explicit. One interviewee even referred to civil unrest. The danger of not tackling carbon emissions appropriately was linked to other adverse outcomes (discussed more in the next section on accessibility):

> *"Key danger is climate change, real and absolutely pressing risk, and then everything else flows from there. I think, you know, we have significant dangers in terms of if we don't focus on how else people can access the goods and services. If they do by means other than travelling, we have significant issues with isolation and exclusion."* (P20, Q3)

When it came to how to achieve transport decarbonisation, a few interviewees said more evidence was needed:

> *"I think at the moment we've still largely got our head in the sand […] we're hoping something will come along […] to be able to know actually A, B and C worked to reduce carbon emissions to net zero. It would be so much easier persuading all our leaders". (P17, Q1)*

Some interviewees said that engagement with a broader cross-section of the public in the planning process could increase acceptance of carbon reduction schemes. Others emphasised increased 'climate awareness' among the public. On the other side of the coin, barriers to change were reluctance amongst the public in changing the way they live their lives and limited power in the hands of local authorities. These themes are discussed further in the following sub-sections.

4.2. Accessibility to opportunities

The role of urban mobility planning to enable the population to have sufficient accessibility to opportunities was a common theme when interviewees were asked about their vision for success for urban mobility planning.

Many interviewees referred to the need for transport to contribute to good quality and equitable access to goods, services, and opportunities. This was often mentioned alongside the need to meet net zero targets.

Some interviewees commented on the value of the Triple Access System concept. Understanding the role of the three types of access (mobility, proximity, digital) would help prioritise areas in need of better accessibility. Furthermore, the effective provision of digital access could help achieve lower carbon emissions while also addressing social inclusion. One interviewee suggested: *"It's maybe the only practical or realistic way to improve their [rural population] accessibility"*. (P4, Q4).

Some interviewees referred to the increase in working from home and online shopping during the Covid-19 pandemic as demonstrating digital access can replace physical mobility. However, interviewees wondered whether this legacy would continue and whether the impacts are as positive socially and environmentally as hoped:

> *"It would be quite interesting to see how by 2035 that is changed – whether people have wanted to go back to the old ways and commuting into an office or whether we have actually seen that people are thinking, well, actually yeah, there has been a long term benefit to me in doing this [working from home]. I feel like I've got a lot more control over my time. I don't need to be spending ages commuting."* (P7, Q1)

To successfully apply the Triple Access System concept to urban planning, it was suggested transport planners need a better understanding of digital accessibility (with an acknowledgement of current lack of skills and experience with digital accessibility and digital planning). They would also need to understand how to integrate it into urban transport planning and work in partnership with professionals in other disciplines and sectors.

However, while the valuable contribution of digital accessibility was recognised, several participants highlighted that some people might still prefer to use physical mobility where possible:

> *"Digital connectivity is key and I think everyone knows the last two years has made that more and more important than ever before. I think movement is still going to have a role. People still want to travel to a physical office. People still want to move around for entertainment, for leisure, to meet friends and family, and that sort of thing. But yeah, I completely accept that the digital is becoming more and more important as well, and for both work and leisure."* (P13, Q2)

4.3. Travel behaviours and patterns

Visions of success for future urban mobility planning often were centred around a shift in travel behaviour and patterns with a reduction in car use and an increase in active travel and public transport use. One interviewee expressed optimism that it could be possible for the next generation to move away from car ownership and use:

> *"Much more active and sustainable travel, much less car ownership. And you know, maybe in a younger generation not having their own personal car. Because I think once you have a car, you're gonna use it, the freedom and ease that it gives you."* (P9, Q2)

The need to reduce car use was not only argued in terms of achieving carbon reduction targets, but also addressing other concerns such as congestion, air quality, health, and liveability. One participant also mentioned community and wellbeing advantages of having low car local areas: *"in streets that aren't car dominated, people have much better connections with their neighbours and their neighbourhoods."* (P22, Q3).

Ways of achieving modal shift included adopting a model hierarchy: *"My personal vision of success for future urban mobility planning would be a mobility that follows that wonderful pyramid. You know, people at the top and then bicycles and then buses"* (P20, Q2).

The need for restrictions to car use was highlighted and is discussed further in the next sub-section on 'transport system characteristics'. Engaging local developers was also identified as a potentially strong enabler to create low car developments (discussed further under 'design of urban environment'). However, this would require a new mindset and letting go of the idea that most people need a car in new developments.

4.4. Transport system characteristics

There was much discussion about features of the transport system that would be desirable in helping to achieve the aims discussed above. Many interviewees referred to a transport system which offered a real choice of alternatives to the car. Some extended this thinking to include a wider system that also offered digital access options:

> *"A mobility mix. A multimodal sort of offering, being there available to people. I think with transport there's no silver bullet, there's no one mode that's going to suit everybody all of the time. So I think it's giving people that choice. They're able to use a variety of different modes and the right mode will be there for the best kind of journey, ultimately. And yeah, that stems all the way through from do you really need to travel in the first place."* (P7, Q2)

This ambition was also put forward with respect to freight transport with goods movement being carried out by the most appropriate, sustainable means. This would require interchange points (consolidation centres, high street collection points) to enable goods to be transferred between transport modes.

The need for car restraint was highlighted by one interviewee when asked what they would like to know had happened in 2035:

> *"I suppose the fundamental question would be 'Have you halved your car use?' And also, are you now paying to park? Or is there a charge to the way you're travelling by car? Do people still feel they are entitled to drive everywhere or has that perception of entitlement changed?"* (P16, Q1)

With regard to technological innovation, several interviewees said they would be interested to know about progress made in developing electric vehicle infrastructure, driverless vehicles and other transport technologies. In particular, they were interested in understanding whether driverless vehicles will be *"commonly seen"* (P8, Q1). In that case, they also wonder what implications there will be for urban and mobility planning. These were not mentioned in visions of success. Hence it has to be assumed they were not seen as offering self-evident solutions to the problems facing transport but there was curiosity as to what role they could play, for example as 'disrupting' factors.

The effective integration of transport mode alternatives via a system such as Mobility as a Service was highlighted by some interviewees as necessary to enable multi-modal transport not reliant on the car. It was highlighted how a fully integrated transport system should be inclusive and consider social needs, and therefore *"perform for the user"* and it should be designed as *"a simple to use joined up service that allows the user to achieve what they want to achieve."* (Q2, P23).

Participants noted that achieving an integrated transport system would be easier if the built environment is supportive with closer proximity of destinations to where people live (see following section on 'design of the urban environment').

Some participants highlighted the need for more power in the hands of local governments. This will allow them to implement systems that are efficiently coordinated and managed: *"I think more power and weight given to local transport plans; they are statutory documents which is a good thing, but expanding the powers that local authorities have to deliver those plans and creating a more integrated network"*. (P17, Q4). Under the Local Transport Act 2008, local authorities have an obligation and duty to prepare a local transport plan. However, implementation of the plan may not fully be within the control of the local authority with reliance also on national government concerning decision-making powers and/or funding. While local authorities in England have certain powers, e.g. the power to maintain footpaths, they lack other powers, e.g. the power to ban pavement parking.

4.5. Design of the urban environment

Interviewees considered design of the urban environment to be a critical area which will influence the success of urban mobility planning. This even went as far as interviewees' vision of future success being expressed in terms of the nature of the places where people live rather than the transport system. This was particularly the case for those whose work involved development planning and neighbourhood street design. Reference was made to 15 or 20-Minute Neighbourhoods (the latter currently being taken forward as a policy in Scotland[7]) and Liveable Neighbourhoods[8] or Low Traffic Neighbourhoods[9] (which have been implemented widely in London and other parts of England in recent years but have experienced a backlash in some places and among some groups – see also sub-section 3.1).

There were particular issues mentioned with respect to Aberdeen and Bristol. In Aberdeen there was interest in making the city more walkable by increasing the density of development. However, the concern in Aberdeen is that plans for housing growth will lock the city into low density development that perpetuates car dependence. In Bristol there was interest in creating Liveable Neighbourhoods to improve the quality of life for residents, but a concern 'individualism' would prevail where people place the right to drive where they want over the broader needs of their community.

Success in urban mobility planning was described by many interviewees in terms of developments which allow residents to meet most of their needs locally and enable safe walking and cycling:

> *"And so I suppose it's places that are liveable, walkable and just pleasant to be. People are able to meet the majority of their needs within their local area and whether that's the sort of 10 minute walk or cycle; and for that to be the most convenient and obvious choice for the majority of people. So yeah, alongside that the need to own a private car becomes less and less. And you know, our places are not built around the needs to own a car."* (P5, Q2)

Some interviewees felt progress toward this could be made by finding out what people really want from their communities and delivering this.

The 20-Minute Neighbourhood concept was seen as helpful to achieve local living. However, the view was expressed that it will only be successful if developers put forward development proposals that adopt the principles of 20-Minute Neighbourhoods and planners do not currently have powers to ensure this. Improved road safety for pedestrians and cyclists was identified as an enabler to support active travel and proximate mobility. For example, one participant highlighted how temporary measures during the pandemic encouraged people to cycle more, because they felt safer:

> *"It is controversial, but I would say that it's the positives that happened during Covid where we were able to see how places could be different. There was road reallocation towards pedestrianization or just streets were safer for cyclists. I think there was some good practice during that time and it was just that sort of 'So let's try it' […]. It got people thinking about how spaces are used in this city and how much of that is given over to cars"*. (P5, Q5)

4.6. Mindsets of public and politicians

A very commonly mentioned necessity for change that participants wanted to see was a shift in the mindsets of the public:

> *"I think it's about how you win the hearts and minds of the people that we need to adapt and change. And I think about that quite a lot, but without*

[7] See https://www.gov.scot/publications/local-living-20-minute-neighbourhoods-planning-guidance/.

[8] For example, see: https://www.bristol.gov.uk/files/documents/5807-liveable-neighbourhoods-handbook/file.

[9] For example, see: https://madeby.tfl.gov.uk/2020/12/15/low-traffic-neighbourhoods/.

that I don't think we'll succeed. So how do you get people to give up their cars when people say it gives me independence? If I'm out on a night out and I wanna come early, I can jump in my car and get home safely." (P11, Q2)

There was hope that some parts of the population see the need for change. In particular, some participants thought that young people understand the importance of making more sustainable choices. However, there was a recognition that they would not be in a position of power quickly enough to make a significant change, unless protests and environmental campaigns will be effective. There was high uncertainty towards the effectiveness of these.

Change in the mindset of politicians was also considered necessary alongside:

"Why have we got a system like this? It's because car drivers are wealthier. They're more likely to vote, and politicians are much more aware of their views. […] For example, you get a petition with several thousand objections to something, and the politician will perceive that as if most people are objecting. They're not gonna vote for them, right? Better ditch that one, then, and think of something else". (P16, Q2)

Communication and education were seen by several participants as key enablers to drive behaviour change among people. There was a need to change the narrative from taking something away from people to *"articulate the positives that you're actually giving people, the community"* (P3, Q1).

One interviewee had ideas on how to accentuate the benefits of change:

"It's this need to sell the wider message ultimately to people. It's saying, well, yes. If we have a city centre master plan that talks about removing 20% of the traffic from the city centre and it involves closing certain streets to traffic, it's not that we're trying to be anti-car, it's that we're trying to make the city safer, a better place. And if you want somewhere where you've got a vibrant economy, you've got lots of independent shops, you've got a cafe culture, you've got a city centre that's nice and easy to walk around". (P7, Q4)

Improved consultation was seen as a good first step towards better public engagement to drive education. However, it was recognised that the more traditional consultation approach would not work with younger people. There is therefore a need to consider new ways of engaging younger communities.

4.7. Governance and technical processes

The relationship between central government and local government with respect to decision-making processes and financial support was a key issue raised. Some participants in Aberdeen expressed satisfaction with decision making powers and financial support received. Others in England criticised the relationship between central and local governments, advocating for greater devolution of power and funding to be in the hands of local governments.

It was suggested however that central government still has an important role:

"We are going to have to make huge changes to our lives. Central government has the absolute key role to play here and I'm not convinced central government wants to do that. We have new local transport plan guidance coming out sometime this this year. The indications are it's going to be passing as much responsibility as possible down to the local authorities to lead on quantifiable carbon reduction, which is good in one sense because it's devolution. But it also comes across as though the Department for Transport is washing its hands of having to take responsibility". (P17, Q1)

There remains a perception that current funding structures in England prioritise capital spending over revenue spending which compromises local authorities in supporting public transport services. Longer-term funding packages of five to ten years from central government would provide local authorities with more power and stability. They would enable them to make ambitious and effective plans (especially towards net zero) for the future:

"On a funding side, it would help to have longer term funding settlements so that rather than going pretty much year to year as we have been doing so for the last few years, having a five or ten year programme of funding so that the local authorities can plan with some certainty that what they want to do can be funded through that programme". (P17, Q4)

There were concerns raised about the transport appraisal process required for applications for funding to the Department for Transport. In particular, a participant from Bristol said that appraisal guidance for England has become more applicable to public transport schemes than in the past. However, this still does not enable the wider benefits (i.e. social value) of urban transport schemes to be fully captured.

The need for transport planners to work collaboratively with other disciplines and use a holistic approach to tackle the challenges faced was emphasised by many of the participants.

4.8. Summary

The 7 Questions helped us identify the seven themes described above. In particular, the questions helped us identify specific hopes, fears, enablers, and barriers that are discussed in this section for each of the seven themes. These (and the specific link to 7 questions) are summarised in Table 2.

5. Discussion and conclusions

Reflecting upon the insights from our interviews with practitioners, three high level points become apparent: (i) the Sisyphean nature of transport planning; (ii) new catalysts of change; and (iii) sobering realities for transport planners wishing to be agents of change. Before considering these, we should first draw attention to the UK-centric nature of this paper in terms of its empirical insights. It principally reflects the views of UK transport practitioners on the future of transport planning and urban accessibility. The paper has not directly addressed how generalisable the findings might be in looking beyond the UK and we note this as a limitation. However, separate work undertaken as part of the same wider project of which this study was a part did consider a wide sample of Sustainable Urban Mobility Plans and transport plans from different parts of Europe (Rye et al., 2024). From a review of 37 local transport plans (covering nine European countries) and interviews with transport professionals involved in the design of those plans, similar results were found, in particular in terms of institutional barriers and resistance to change. Changing political contexts at national and local levels remain an issue for transport planning within and beyond the UK, allied to how the Overton window (concerning political viability of policies and measures) shifts (King and Krizek, 2021).

5.1. A Sisyphean task?

Sisyphus was fated by Hades, the Greek king of the underworld, to try and push a large boulder to the top of a hill only for it to roll back down as he neared the top requiring him to begin again – and to repeat this for eternity. Transport planning faces a series of perennial challenges. Notably - as indicated by our interviewees – in relation to public resistance to change and (lack of) political will or agency (Vigar, 2013; Shaw and Docherty, 2019). This comes into tension with longstanding policy goals that motivate transport planners relating to sustainable, equitable, liveable and thriving communities.

A recent example of the Sisyphean task of transport planning is the so-called Low Traffic Neighbourhood (LTN) concept - a measure intended to limit the adverse impact of car traffic to the benefit of local

Table 2
Summary of hopes, fears, enablers and barriers for the visions of the interview participants coming from the 7 questions (Qs).

Theme	Hopes (Q1, Q2, Q7)	Fears (Q3)	Enablers (Q4, Q5)	Barriers (Q5, Q6)
Transport decarbonisation	• Meeting net zero targets •Equitable outcomes	•Not meeting net zero targets •Civil unrest	•Evidence on what works •Effective engagement across population	•Resistance to change •Lack of local powers
Accessibility to opportunities	•Digital accessibility contributes •Climate sensitive solutions	•Over-reliance on digital accessibility leads to isolation	•Collaboration across land use, transport and digital	•Silo working •Lack of understanding of digital accessibility •Public preference for physical accessibility
Travel behaviours and patterns	•More active travel and public transport use •Lower car ownership in future generations •Co-benefits for health, liveability etc.	•Lack of political support	•Modal hierarchy •Restrictions to car use •Support of developers	•Long and inappropriately designed consultation processes
Transport system characteristics	•Integration between modes •Car restraint (parking, road use)	•Resistance to attempts to weaken car dependence	•Mobility as a Service (MaaS) •15-min city •Greater local powers	•Complexity of integration of modes and services
Design of the urban environment	•20-min neighbourhoods •Low Traffic Neighbourhoods	•Low density developments •Right to drive/park prevails	•Find out what people really want •Developers adopt 20-min neighbourhoods •Safe walking and cycling environments •Street experiments	•Lack of influence over developers
Mindsets of public and politicians	•Winning hearts and minds •Young people 'get it'	•Politicians seek to please vocal minority	•Accentuate positives •Engaging consultation	•People feel they will lose something
Governance and technical processes	•Greater local powers •Clear direction from central government •Longer-term funding for local transport •Collaboration between sectors	•Lack of evidence to support business cases for decarbonisation measures	•More revenue funding	•Transport appraisal process

communities (Laverty et al., 2021; Thomas and Aldred, 2023). LTNs were introduced in considerable numbers during the Covid-19 pandemic (the boulder moving up the slope). Beyond our interviewing, the (former) UK Prime Minister in July 2023 ordered a review of LTNs, calling them into question now they have become the subject of media attention in relation to inconveniencing motorists. These are motorists who are also voters at a time when the next national election was being anticipated (the boulder poised to roll back down the slope).[10]

Meanwhile in Wales, at the time of writing, legislation from the Welsh Government has come into force introducing a default 20mph speed limit "on roads where cars mix with pedestrians and cyclists"[11] This prompted a national petition[12] to rescind this legislation with nearly half a million people signing it (the population of Wales is just over 3 million). The Welsh Government has held its nerve so far, perhaps suggesting that by adding a little Herculean effort (in the form of political courage) to the task of Sisyphus, the boulder could be prevented from rolling back down. This said, in March 2024 the two senior Government ministers supporting the initiative stood down from their roles.

In Scotland, the Government in April 2024 conceded that its target for overall reduction in carbon dioxide emissions from the economy by 2030 was unattainable.

We deliberately include a question mark in the heading to this part of the paper and the paper's title. There are indeed examples within and beyond the UK of changes that have taken place in terms of implementation of plans to shape the transport system and its use. For example, the congestion charge introduced in London in 2003 remains in place today. Yet other attempts to introduce such schemes have failed, such as the proposed Cambridge congestion charge that was abandoned in September 2023. We recognise that change is possible and can occur, yet at the same time achieving change can be hard won, hard to retain and/or hard to reproduce elsewhere and scale. It would be naïve to suggest transport planning efforts are universally Sisyphean (achieving literally nothing). Yet ambitions can often fail to be realised or seem an impossible goal in terms of the nature and scale of change sought, such that it can *feel* like a Sisyphean task in some cases, reflective of the insights from our interviews.

5.2. *New catalysts of change*

Meanwhile, our interviewees have recognised the potentially influential catalysts of change set out at the beginning of our paper.

- The *climate emergency* is inescapably influencing professional, political, and public moods. Yet an information war (Mann, 2021) is being waged as different parts of society come into conflict in terms of their views on what could or should be done. Questions have been stirred up by politicians and the media as to whether or not pursuit of decarbonisation is going too far and too fast (just as transport professionals are anxious about whether action is going far enough and fast enough).
- Deep (and perhaps deepening) *uncertainty* about the future may be giving greater licence to shaping the future rather than predicting it (Marchau, 2019). This creates potential opportunity, but handling uncertainty in decision making is also challenging for politicians in the face of a diverse array of public and business perspectives and opinions on what futures could lie ahead.
- *Digital accessibility* (enabled by growing digital connectivity) is providing new avenues for behaviour change and helping unlock greater potential for 'living local and acting global' (Clarke and Gaile, 1997). Yet changes in digital accessibility are also subject to multiple public and private stakeholders' influences and involve

[10] The review output was published in March 2024 - https://www.gov.uk/government/publications/low-traffic-neighbourhood-review.
[11] https://www.gov.wales/introducing-default-20mph-speed-limits.
[12] https://petitions.senedd.wales/petitions/245548

many factors that can be challenging to understand, and which are subject to uncertainty.

5.3. Sobering realities

To harness such catalysts so that they can be used to produce change for the better is far from straightforward. It relies on collaborative cross-sector working, a long-term perspective, appropriate funding and political agency, enhanced communication skills to win hearts and minds, and greater rapidity of measure implementation. In addition, decarbonising transport will require a balance of carrot and stick measures, with the latter typically finding opposition among the public, as people tend to be reluctant to change their behaviour. This would require bringing the public more seriously into conversation about the significance of low-carbon transport and the role they can play (alongside and in support of system change) in driving a fundamental shift in consumption patterns. Transport decarbonisation goes beyond just transportation policies; it requires communication, collaboration, and coordination across various government departments.

So, there are opportunities to move the boulder up the slope but ample prospect still for it to slip back down.

5.4. Not being seduced by the siren sound of technology

It is notable that technological innovation did not emerge as one of the identified main themes in our analysis of the 7 Questions insights. This is not to say that references to technological change were not made – but it was not dominant in the minds of our interviewee practitioners. Yet this is at odds with what could be called an obsession by central government with technological innovation (DfT, 2021) which attracts research and development investment and political enthusiasm, with the prospect of jobs and wealth creation and global industrial prowess. We interpret the more muted appetite across our interviewees to consider technological innovation as a key part of the future of transport planning as: (i) a reflection of their backgrounds; and (ii) them not being persuaded that technological innovation is the key to realisation of longstanding policy goals.

5.5. A sobering outlook

Revolution is often promised in relation to technology-led innovation. There is no doubt that technological changes are influencing transport and society and will continue to do so. Yet the hype cycle conceptualisation (Linden and Fenn, 2003) reminds us that evolution can be more likely than revolution in terms of the timescales of change. We believe this is true in terms of transport planning itself. Much as there are imperatives for it to flex its muscles in new or amplified ways to bring about change, it will in practice be an evolutionary process. As noted earlier in the paper, vision-led planning is growing in prominence with an access focus and attempt to accommodate uncertainty. However, this is diffusing through the sector rather than sweeping through it (Lyons and Davidson, 2016).

Transport planning and its political masters will continue to wrestle with wicked problems. It would be disingenuous for us to end this paper by trivialising these matters with a trite call for optimism and missives on what we believe should be done. Times ahead look very difficult for society and for the role of transport planners in their quest to achieve change for the better through their actions. Measures that are perceived as new might never be adopted, both because of the lack of evidence about their impact and lack of knowledge about how to include them in processes such as modelling. In addition, they might be disregarded due to being different from standard transport-related measures or just because decision makers have never heard of them.

Transport planners have a key role in fostering acceptance of these types of measures, for example, by directly linking them to specific objectives within the planning process, or organising workshops and training sessions to provide evidence of their effectiveness (Lyons et al., 2024). All the participants in our study were concerned about the present of transport, but at the same time they all had ideas of what could be done to improve it. This showed, to some extent, a degree of hope and agency, rather than abject despondency; yet they also shared a common sense of frustration in recognising very limited power in their hands to change things. Hopes, where they exist, rest with whether the catalysts of change can be turned to an advantage. The fears are that such hopes flounder and that the boulder will roll back down the slope. Push hard Sisyphus and may Hercules come to your aid.

CRediT authorship contribution statement

Daniela Paddeu: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Glenn Lyons:** Writing – review & editing, Writing – original draft, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Kiron Chatterjee:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Thomas Calvert:** Formal analysis, Data curation.

Data availability

The data that has been used is confidential.

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Annex 1.

Table 3
Characteristics of the interview sample (the "background and experience" column presents how participants described themselves and their background and shows direct quotes from the interviews)

ID	Gender	Role	Background and experience (self-definition)
P1	M	Operations manager	"I have a background as a transport planner professional, and I have lots of experience in land use planning, more on delivery side than policy making side".

(*continued on next page*)

Table 3 (*continued*)

ID	Gender	Role	Background and experience (self-definition)
P2	F	Consultant	"I am a chartered town planner and transport planner, and I have been working on making sure that local authorities develop their development plans in line with national guidelines".
P3	F	Policy maker (sustainable transport)	"I have been working in policy for 10 years. I have worked on workplace parking levy, with a policy lead role. I have also previous experience in business and health".
P4	M	Economist (business cases)	"I have experience in developing business cases and looking at value for money over spending on digital connectivity projects, as well as sort of gathering evidence and understanding the impacts of our spending".
P5	F	Chartered town planner	"I have been working at the national government for about 8 years and have some private sector planning experience prior to that. I've been involved with specifically transport policy for the past three years".
P6	M	Senior engineer	"I have worked at the council for many years. a lot of the transportation areas, might I mainly deal with the appraisal side of transport, so appraising transport schemes. I have experience with dealing with technical aspects of traffic modelling, strategic modelling and detailed modelling. I have a civil engineering background, but I haven't done a lot of this, apart from some on site work in past. I have experience at dealing with developers".
P7	M	Transport planner	"I have been in the council for a long time. I made my way up from planning training to planner to senior planner. I have seen quite a bit of change in the city over that time. I have been involved with a lot of different projects and I have seen how the transport context has evolved within that time as well. In some ways, not a lot has changed, but in some ways a lot has".
P8	M	Transport planner	"My background is in operational teams, mainly road maintenance, junction improvement, and then traffic signals. I actually did the signals for 19 years. I have worked as transport engineer on design projects for new junctions, reviewing consultant designs".
P9	F	Regional transport planner	"I have a background in maths. I have experience with development control, mainly on appraisals. I have been involved in stag proposals, as well as in regional transport strategies, on the modelling side. I have a strong background in predict and provide, but now organisation thinking is much more in terms of climate change and thinking about active transport".
P10	M	Spatial planner (local development plan)	"I have experience in working in development management for regional plans, and local development plans"
P11	F	Service manager	"I have wide experience with managing responsibilities of big digital and economic projects, including projects related to innovation, digital and transport".
P12	M	Strategy manager	"I have spent 15 years as a consultant doing sustainable transport work, and development planning. I have worked on strategic planning, including regional transport strategies".
P13	M	Senior engineer	"I have been working at the Council since 2007. I have predominantly worked in the transport strategy team. I have been involved in active travel action plan and sustainable urban mobility plan, as well as in delivering projects such as the low emission zone in the city centre".
P14	M	Head of transport	"I have started in transport 20 years ago, designing traffic lights, and infrastructure/signal/network design, transport operations and management". "Experience with leading transport planning and major projects at council, including Local Transport Plan, and Strategy"
P15	M	Project manager for walking and cycling projects	"I've worked in transport at the Council for for about 10 years, starting with residence parking across the city (4 years), then experience with cycling/walking schemes, safer streets, housing work and working close to the spatial development team, Clean Air Zone, emergency power schemes (during the Pandemic), pedestrianization, and protected cycling infrastructure".
P16	M	Principal Transport Officer	"I've worked in partnership office, public transport and then policy in councils".
P17	M	Principal Transport Officer	"I have worked on the latest and previous Joint Local Transport plans. In the part I have worked on a wide range of projects mainly related to transport policy".
P18	F	Project lead (business cases)	"I am a civil engineer and I have a project management master. I started working in the rail sector, managing projects on building new railway and stations. Then I have been working as a bridge engineer, and then in transport planning for a major consultancy for three to four years, working mainly on business cases".
P19	F	Technical director	"I have started my career at Transport Research Laboratory in the late 90s, and I have worked on a lot of interesting projects on sustainable mobility, then looking at best practice across Europe. My career really has been all about sort like integrated land use and transport".
P20	F	Senior consultant (strategy)	"I have a background as a social geographer. I have also expertise in travel behaviour change, workplace travel plans, Travel Demand Management, transport planning and strategy".
P21	M	Regional director	"I have been a consultant since 2005. I have previous experience in local government, and I have been editor in chief for a local transport plan. I was involved in strategic transport planning, particularly in relation to the land-use aspect, and how land-use can be joined to transport planning. I have had strong involvement in the local transport planning process in several local authorities".
P22	M	Technical director	"I have twenty-year experience in transport planning, strategy and policy, transport modelling, including freight and logistics, public transport, and active travel".
P23	M	Consultant	"I have wide experience on transport projects, all from a technology perspective, including all transport modes, broadband rollouts, smart cities, future of air and space-based technology requirement for rail, and digital transformation".

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