



# University of HUDDERSFIELD

## University of Huddersfield Repository

Nikitas, Alexandros, Avineri, Erel and Parkhurst, Graham

Road Pricing and Older People: An In-depth Study of Attitudes, Pro-Social Values and Social Norms.

### Original Citation

Nikitas, Alexandros, Avineri, Erel and Parkhurst, Graham (2016) Road Pricing and Older People: An In-depth Study of Attitudes, Pro-Social Values and Social Norms. In: 48th Annual Universities' Transport Study Group Conference, 6-8, January 2016, Bristol. (Unpublished)

This version is available at <http://eprints.hud.ac.uk/id/eprint/26955/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: [E.mailbox@hud.ac.uk](mailto:E.mailbox@hud.ac.uk).

<http://eprints.hud.ac.uk/>

---

## Road Pricing and Older People: An In-depth Study of Attitudes, Pro-Social Values and Social Norms

Dr Alexandros Nikitas  
Lecturer in Transport  
Department of Logistics, Operations and Hospitality Management,  
The Business School, University of Huddersfield

Prof. Erel Avineri  
Head of Department, Engineering and Management of Infrastructure Systems  
Afeka Center for Infrastructure, Transportation and Logistics (ACITRAL),  
AFEKA, Tel-Aviv Academic College of Engineering

Prof. Graham Parkhurst  
Professor of Sustainable Mobility, Director of the Centre for Transport and Society  
Centre for Transport & Society, University of the West of England

### Abstract

Understanding the socio-psychological mechanisms that determine the public acceptability of road pricing could be a key for its implementation in urban environments where this is a viable scenario. Studying the attitudes of older people is of particular importance due to the ageing of the populations in the industrialised democracies, the high political engagement of older people, and their vulnerability to transport-related social exclusion. Research by the present authors had previously identified that older people's beliefs about what is the normal, acceptable, or even expected choice in a particular social context ("social norms") and their tendency to favour, more than any other age group, what is positively valued by society ("pro-social value orientation") affect their attitudes to road pricing. The present paper aims to develop an in-depth understanding of these attitude-shaping determinants drawing on the findings of focus groups conducted in Bristol, UK. The findings suggest that there are three distinctive expressions of pro-sociality: pro-environmental values and generativity on the one hand, these two being drivers of support for road pricing, and pro-equity values on the other, which tend to drive opposition. Social norms have two particular expressions: subjective norms (i.e. norms reflecting people's immediate social environment) and norms referring to others and society in general. Furthermore, a theory-driven thematic analysis indicates that trust in the integrity of the concept and older age as a life stage associated with ageing, retirement, lower income, mobility barriers and deteriorating health are important in how attitudes reflecting and affecting public acceptability to road pricing form.

### 1. Introduction

Road pricing is a concept that covers a range of policy measures, which involve payment for road access in direct relation to usage criteria, rather than paying a fixed network access fee unrelated to use, or paying proxy charges such as road fuel duty (Nikitas et al., 2011). Despite being a policy based on a sound economic rationale, which has been successful when applied road pricing has proven notoriously difficult to decide and implement (May et al., 2010). With rare exception, efforts to introduce road pricing, aimed at reducing traffic congestion and raising sufficient revenue to ensure that road investment and on-going maintenance is secured, without an additional impost to users above current outlays, has fallen largely on politically non-supportive ears (Hensher & Bliemer, 2014). This is because politicians tend to see road pricing as a controversial charge that would not receive public support due to perceived "infringement" on freedom of access (Jakobsson et al., 2000).

The low public acceptability therefore is one of the strongest barriers hindering its applicability (Schade & Baum, 2007) with the most important reasons for opposition being social or moral norms of fairness and freedom of choice (Jakobsson et al., 2000). Imposing a cost on something that used to be free such as access to roadways, even (on many occasions) during off-peak driving times, raises equity issues especially when considering the likely impacts on exclusion from mobility opportunities and those groups of people more susceptible to them (Raje, 2003). However, earlier research by the present authors (Nikitas

---

et al., 2011) has provided evidence that if a scheme is seen as overall “pro-social”, there is stronger support for its implementation.

Although at present a general acceptance theory does not exist, it is undisputed that attitudes are of great relevance for agreeing or disagreeing with something. In this sense, the acceptability of road pricing has been seen as determined by attitudes and influenced by scheme-specific characteristics (Jakobsson et al., 2000). This is why developing an in-depth understanding of the public attitudes to road pricing is crucial. In this context studying the attitudes of older people is of particular importance because of their vulnerability to transport-related social exclusion, their emerging dependence on cars, their demographic growth and their high political engagement (Nikitas et al., 2011; Rosenbloom, 2001).

Henceforth, the paper provides a detailed background justifying the need for this study and presenting relevant literature. This is followed by a description of the methodology employed. The core section of the paper discusses the key findings of the qualitative analysis. It informs the reader about how pro-sociality and social norms and each of their distinctive expressions affect attitudes. This section also examines the ways with which “old age” per se and other ageing-induced characteristics like retirement, bad health, decreased mobility, time flexibility and low income can influence this socio-psychological process. Finally, the paper concludes with a section presenting a context-specific theoretical and empirical framework that synthesises the findings of this work and providing relevant policy recommendations.

## **2. Background**

### **2.1 Focus on Older People**

Over recent decades ageing has emerged as a socio-demographic phenomenon unprecedented in human history. The number of people aged 60 years and over has doubled since 1980 and is projected to be close to 2 billion by 2050. In addition, older people are more interested in local democracy usually being over-represented as actors in community activity and engagement (Shergold et al., 2012) and more likely to vote than younger people (Goerres, 2007). Thus their views may be of particular importance for social policy in general, and for the acceptability of road pricing in particular.

There is another important dimension to older people’s emergence as a significant factor in urban policy-making: older people have been identified as the age group most likely to be subjected to transport-related social exclusion (Hine & Mitchell, 2003). Although older people tend to make fewer trips overall and the proportion of trips made by car also declines significantly from age 60 “the need for mobility does not cease with old age” (Langford, 2001). Increased longevity and better health and social care enable older people to remain mobile for much longer than ever before (Musselwhite & Haddad, 2010). Excessive restriction of older people’s mobility will be detrimental both to society generally, which will become increasingly dependent upon expenditure by older citizens, and to the individual, who will have reduced access to services and social facilities (Langford, 2001).

Due to the broad-range definition of older age, older people are a particularly heterogeneous group. Nevertheless, the literature identifies a number of factors by which older people as a group differ from younger adults and which could be indicators of their potential to form distinct attitudes, including to road pricing. For example, older people are the individuals most likely to have complex mobility needs (Siren & Hakamies-Blomqvist, 2004), physical vulnerability and health issues (Musselwhite & Haddad, 2010), cognitive limitations in their processing capacity (Kovalchick et al., 2004) and lower annual incomes (DfT, 2001); although this latter point needs to be considered in the context that people over 60, on average, have accumulated more wealth than people under 40.

Older people are also more reluctant to use new technologies than younger adults (Selwyn, 2004) although given the penetration of new information-communication technologies particularly in recent years, this may represent in part a cohort effect. In terms of car usage, today’s older people are more likely than previous generations to need the use of a car to fulfil mobility needs (Musselwhite & Haddad, 2010). Nonetheless, at the same time seniors can be more cost-aware and more likely to reduce car ownership or use than younger people (Dominy & Kempson, 2006). They are also more likely to rely on others for lifts (Raje, 2003). On the other hand, older people enjoy greater time flexibility after being retired from work (Siren & Hakamies-Blomqvist, 2004) so they can avoid, in most cases, peak traffic hours and, in many countries, benefit from concessionary travel passes or reduced fares in public transport.

While there are commonly used definitions for older age, usually relating to retirement age, there is no universal consensus about a specific chronological threshold at which a person becomes old. The British Department for Transport has linked the eligibility for free, off-peak, local bus travel to the state pension age (currently in transition). Nikitas (2010) reviewed a significant number of ageing studies and proposed that the age of 60 is an appropriate reference point for marking "older age". This study also suggested that older people could be classified in two categories; those aged 60 to 74 ("young older people") and those aged 75 and over ("old older people"). These are the definitions adopted from the present paper.

## 2.2 The Social Context Parameters

The social dimension is important in the formation of attitudes to road pricing. According to Schade and Baum (2007) negative social norms and perceived unfairness can potentially be factors determining the degree of acceptability. The present paper explores the connection between attitude development and two important elements of social context: social norms and pro-social value orientations.

The proportion of people that tend to favour what is positively valued for society, and assign more importance to collective consequences - a process described as "pro-social value orientation"- has been reported to increase with age (Van Lange et al., 1997). Older people are more likely to be helpful and devote more time to volunteering, because they see it as active and meaningful leisure (Chambré & Einolf, 2008). Other research suggests that older people tend to have stronger solidaristic feelings towards needy people than younger people do (Van Oorschot et al., 2005). Generativity goals, such as becoming a "keeper of the meaning" or "taking responsibility for future generations" have been found to be most prominent in older age (Davila & Diaz-Morales, 2009). Hence in a transport context, older people may be more likely to approve or disapprove of road pricing, depending on whether they believe it would be good or bad for others or for society in general.

This tendency to cater (or simply care) for others leads to a second hypothesis suggesting that their beliefs about what family and friends, but also society as a whole, consider to be the normal or acceptable attitude could influence how older people view road pricing. Thus, social norms defined as "standards of behaviour that are based on widely shared beliefs about how individual group members ought to behave in a given situation" (Horne, 2001) need to be studied too, especially since there is evidence suggesting attitudinal dependence on social influence (Ajzen, 1991).

## 2.3 Previous Work

Although ageing and mobility is now a clear theme in transport policy, only limited research has been published on how older people view road pricing and why they do so. Findings relating to the London Congestion Charge suggested that older people are more positively oriented to road pricing than younger individuals, whilst evidence from Scotland indicated exactly the opposite (Nikitas, 2010). Secondary analysis of three datasets: two about the unrealised scheme for Edinburgh (rejected at a referendum in 2005) and a national one examining the "concept" in general provided only inconclusive evidence that attitudes to road pricing vary with age and no explanations about this deviation. Therefore, primary research, considering pro-sociality and social norms directly, was necessary.

By analysing the answers of 491 survey respondents (including 184 older people) Nikitas et al. (2011), provided evidence that there are age-specific differences in the way older and younger people view road pricing and that their social norms and pro-social value orientations play a role in this variation. Nikitas (2010) identified that young older people were the individuals most likely to express disagreement with the notion that "road pricing is a good idea". Old older people, on the other hand, were more likely to be sympathetic or neutral to this notion. Young older people were the respondents least likely to self-declare that they would accept road pricing even if this would be "helping future generations", "easing people's journeys", "improving local transport alternatives" or "reducing the environmental damage", which were the four specific attitude objects used to frame pro-sociality. In comparison, old older people were more likely than any other group to respond positively to these four pro-social indicators. Young older people were also less likely to think that their significant others perceived "road pricing as a good idea" while old older people, were far more likely to be neutrally oriented (primarily) or positive to this statement. Older people as a whole and especially people aged 75 and over, were more influenced by social norms than younger people were. When asked to rate a statement that "they would accept

road pricing if their significant others agreed that this was a good idea”, more than half of them agreed or strongly agreed. The present paper uses the reported quantitative findings as a starting point for developing an in-depth understanding of these attitudes.

### 3. Research Methodology

#### 3.1 Study Location

The study area chosen was the administrative district of Bristol City, UK, which has a population of 437,500 residents with 17% of them being aged 60 and over. Bristol has been at the forefront of British cities planning charging schemes in the last two decades, as the local authorities in the Bristol (and wider West of England region) area have undertaken technical investigative and planning work into two different charging schemes, but for strategic political reasons neither of these schemes has progressed beyond initial, informal public consultation. The concept of charging has remained part of the local transport debate, but there has not been an election mandate sought specifically in connection with charging, as in London, or a referendum held, as in Edinburgh and Manchester. Nonetheless, the level of awareness generated about road pricing by these efforts was regarded as adequate to ensure that social norms and attitudes per se towards road pricing were meaningful (i.e. social norms cannot exist if the attitude object is an unknown quantity).

#### 3.2 The Choice of Focus Groups

Focus groups were selected over other qualitative methods as allowing a large amount of interaction between participants so that they could build on one another's responses, communicating ideas that otherwise may have been unheard. The focus groups were conducted by a moderator and an assistant moderator. A focus group topic guide defined procedures and provided consistency between the different sessions. It consisted of eight parts: introduction; ice-breaker; background discussion items; introduction of scenario type approach; attitudes to road pricing including discussion about age impacts, pro-social values and social norms; spatial, income, trust and media influence discussions; and summing up.

#### 3.3 Employing a Scenario-type Approach

A scenario-type approach was employed, in which people were presented with a specific hypothetical road pricing scheme situated in Bristol's city centre. This hypothetical scenario reflected some of the specifics of an unimplemented scheme that was proposed in 2000. The simulation of a consistent road pricing vision enabled the participants to provide answers in a more systematic way that would allow meaningful comparisons between the different focus group sessions.

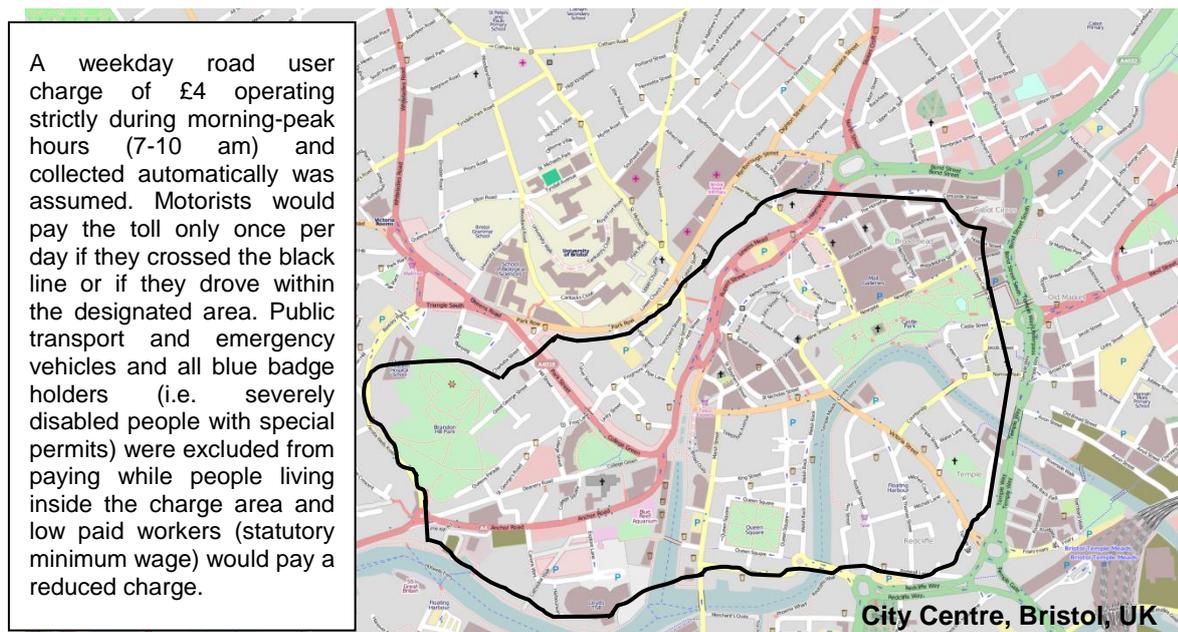


Figure 1: The hypothetical scheme

### 3.4 Method of Analysis

Theory-driven thematic analysis was chosen adopting Braun and Clarke's (2006) six-step procedure:

1. Familiarising with the data through transcription;
2. Generating initial codes;
3. Searching for themes;
4. Reviewing themes;
5. Defining and naming themes;
6. Producing the final written output.

After the full transcription of the focus groups and the generation of over 50 different thematic codes, a systematic process of selecting the core themes took place. Care was taken to ensure that the extraction and interpretation of findings was based on the raw data rather than on the researchers' subjective impressions. It should be acknowledged that the process was analyst-driven; its focus was on older age, generational differences, pro-social value orientations and social norms.

## 4. Analysis and Discussion

### 4.1 Characteristics of the Focus Groups

All the participants were survey respondents of the predecessor study who volunteered via a recruitment question. The sample consisted of 30 participants (19 older people and 11 younger people) split into three focus groups each hosting 10 participants. Two of the groups (A, C) comprised both older and younger participants. This was an intentional feature of the design in order to encourage intergenerational dialogue and have older people answering questions in an environment resembling the society's real structure and its influences more accurately. A third focus group (B) consisted solely of older and pre-older people (aged 55 to 60) providing a different interpersonal context allowing the examination of older people's attitudinal dependence on age-related issues such as retirement, pensions, age-induced mobility/cognitive difficulties and free bus passes.

Table 1 lists the demographic and attitudinal characteristics of the participants; the latter as recorded from the survey. The table also provides an evaluation of their respective attitudes after the completion of the focus group sessions, to report change (if any). The words in the brackets denote the participants' post-focus group attitudes towards the goodness of the scheme as evaluated by the moderator. Due to the much more complex nature of the pro-sociality and social norm concepts only the ones recorded prior to the participants' focus group involvement are reported.

The balanced mix between people having positive, neutral and negative attitudes to road pricing allowed the participants to express themselves without having the pressure of communicating views to an audience that was particularly in favour or in opposition to road pricing. Hence social desirability bias was minimised.

TABLE 1: Participants' Characteristics

Focus Group A (Mixed Sample)							
N	Name	Gender	Age	Frequency of Driving	Road Pricing Goodness	Pro-Social Value Orientations	Social Norms
1	M.L.	M	75	Daily	Agree ( <i>Agree</i> )	Agree	Neutral
2	M.W.	F	83	Daily	Strongly Disagree ( <i>Agree</i> )	Disagree	Strongly Disagree
3	M.C.	M	56	Daily	Neutral ( <i>Agree</i> )	Agree	Agree
4	G.N.	F	69	Weekly	Agree ( <i>Agree</i> )	Agree	Agree
5	P.C.	M	66	Few Times a Week	Strongly Agree ( <i>Strongly Agree</i> )	Agree	Agree
6	J.B.	F	70	Few Times a Week	Neutral ( <i>Disagree</i> )	Neutral	Neutral
7	M.B.	M	37	Few Times a Week	Agree ( <i>Agree</i> )	Agree	Agree
8	A.P.	F	26	Never	Disagree ( <i>Disagree</i> )	Agree	Strongly Disagree
9	C.V.	M	33	Never	Disagree ( <i>Disagree</i> )	Disagree	Neutral
10	M.K.	M	47	Daily	Strongly Disagree ( <i>Strongly Disagree</i> )	Disagree	Disagree
Focus Group B (Older and Pre-older Participants Only)							
N	Name	Gender	Age	Frequency of Driving	Road Pricing Goodness	Pro-Social Value Orientations	Social Norms
11	K.M.	M	65	Daily	Strongly Disagree ( <i>Strongly Disagree</i> )	Disagree	Disagree
12	C.T.	F	55	Few Times a Week	Neutral ( <i>Agree</i> )	Agree	Neutral
13	L.S.	F	62	Daily	Neutral ( <i>Disagree</i> )	Strongly Disagree	Agree
14	A.L.	M	61	Daily	Neutral ( <i>Agree</i> )	Agree	Agree
15	J.H.	M	57	Never	Disagree ( <i>Disagree</i> )	Disagree	Neutral
16	B.S	F	78	Never	Agree ( <i>Agree</i> )	Strongly Agree	Agree
17	P.R.	F	68	Few Times a Week	Strongly Disagree ( <i>Disagree</i> )	Agree	Disagree
18	N.C.	F	61	Never	Strongly Agree ( <i>Strongly Agree</i> )	Strongly Agree	Strongly Agree
19	O.M.	F	75	Never	Strongly Disagree ( <i>Disagree</i> )	Strongly Disagree	Strongly Disagree
20	J.R.	M	72	Few Times a Week	Neutral ( <i>Neutral</i> )	Agree	Neutral
Focus Group C (Mixed Sample)							
N	Name	Gender	Age	Frequency of Driving	Road Pricing Goodness	Pro-Social Value Orientations	Social Norms
21	V.W.	F	64	Few Times a Week	Disagree ( <i>Disagree</i> )	Agree	Disagree
22	D.H.	M	75	Few Times a Week	Neutral ( <i>Agree</i> )	Neutral	Neutral
23	T.J.	M	64	Few Times a Week	Strongly Disagree ( <i>Disagree</i> )	Disagree	Strongly Disagree
24	M.G.	F	84	Never	Neutral ( <i>Agree</i> )	Strongly Agree	Neutral
25	E.H.	F	79	Daily	Strongly Disagree ( <i>Disagree</i> )	Strongly Disagree	Strongly Disagree
26	A.W.	F	62	Few Times a Week	Strongly Agree ( <i>Strongly Agree</i> )	Strongly Agree	Strongly Agree
27	T.V.	M	29	Never	Disagree ( <i>Disagree</i> )	Disagree	Agree
28	K.M.	F	30	Weekly	Agree ( <i>Agree</i> )	Neutral	Strongly Agree
29	J.R.	M	31	Weekly	Agree ( <i>Agree</i> )	Strongly Agree	Neutral
30	R.A.	F	32	Weekly	Agree ( <i>Agree</i> )	Agree	Agree

#### 4.2 Themes: The Determinants of Attitudes

Four core themes emerged, in no particular order, from the thematic analysis; *pro-social value orientations*, *social norms*, *trust* and *age*. Each of them is important for the attitude-shaping mechanism that this paper describes.

**4.2.1. Pro-social Values:** Pro-sociality has three distinctive expressions; *pro-equity value orientations*, *pro-environmental value orientations* and *generativity*.

**Pro-equity Values:** Participants primarily expressing pro-equity concerns were likely to assess road pricing strictly in financial terms, labelling it as “yet another form of taxation” and disagreeing with the policy. Most of them were older people reporting to have witnessed, over the years, policies “supposedly linked with societal benefits” failing again and again to

deliver any pro-social outcomes. They expected that road pricing would be unfair, especially for people susceptible to social exclusion. Some of them specified that because they care for others they would not favour a scheme that could produce adverse distributional impacts.

*"Some of us on this table have free bus passes so why bother about road pricing?"*  
Moderator

*"There are still poor people that are younger. It would hit their pockets and they probably wouldn't be able to afford a car!"* O.M., aged 75

These participants suggested that the policy-makers need to address adequately the design of any eventual scheme in order to ensure that this will be truly equitable. Only if they could operate a scheme not depriving the less-affluent members of the society from access to the city centre, would this be an acceptable policy for them.

*"Road pricing must be egalitarian; you need to form it so that the poorer people don't really lose out"* A.W., aged 62

Nonetheless, there were a few pro-equity value oriented people who evaluated "costs" based on liveability considerations. These individuals denoted that a "fairer" reallocation of road space, prioritising people over cars, is a matter of equity too.

*"If you take the example of London, the only road pricing scheme that we have got in this country, public transport has been vastly improved in the centre since its introduction. The other thing is that in places which are traffic-free the businesses prosper beyond measure. People want to go there because these places are pleasant. They don't have to get their cars; they don't have to pay for parking."* P.C., aged 66

**Pro-environmental Values:** Environment was a principal concern for about 20% of the participants, although when many of them were prompted about the environmental disbenefits of traffic they exhibited pro-environmental thinking. Participants that consistently articulated environmental considerations were generally positive to road pricing. Participants aged 34 or younger were the ones usually initiating discussions around environment.

*"I think that my husband would probably approve of anything that takes cars off the road and protects the environment and he wouldn't necessarily think whether it was socially equal or whether it was penalising people! I think he would be just: 'yes cars off the road, right, brilliant, get on with it!' I think likewise."* K.M., aged 30

Nonetheless there were some older participants that talked about environmental sustainability when discussing the policy's acceptability.

*"We are aware of what damage we are doing to the environment in our household. And I don't know why other people aren't aware of it but we feel very strong and that's why we are cyclists, we are walkers and I use my bus pass every day!"* N.C., aged 61

Issues, like green development, ecologically friendly transport, fewer CO<sub>2</sub> emissions and climate change came up during the sessions both spontaneously and after trigger questions. Older participants seemed to care very much for the environment although they were not as passionate as some younger participants. Nonetheless, on many occasions this was the case just because they did not recognise the potential pro-environmental benefit that road pricing could offer. They considered that this environmental benefit would be minimal compared to the potential adverse equity issues discussed.

**Generativity:** Some participants referred extensively to the effect that a bad transport system could have on children and on the future generations and related these thoughts to their personal assessment of the policy in focus. Participants expressing generativity-related insights were usually positive to road pricing.

*"If we don't do something with road traffic now, or soon, we are going to be in trouble! It won't affect me! I am too old (laughter)!"* M.L., aged 75

---

*“Yes some of my respondents suggested that this measure would help future generations to enjoy a better environment.” Moderator*

*“I would say this is our duty!” M.L., aged 75*

Nevertheless, there were participants negatively oriented to road pricing who expressed these concerns but still could not see how road pricing could help future generations.

*“It’s true that the centre of Bristol is very polluted and we know that the stuff in petrol affects the brain of children and may harm future generations. But I am not sure that this scheme is going to actually do a lot towards that.” J.B., aged 68*

Older participants were far more likely to express thoughts relating to generativity than younger ones. Older people having a longer time perspective witnessed the deterioration of traffic conditions over the years, whereas younger people have not experienced lower-traffic times. Among the young participants, only two mothers with young children specifically expressed concerns about the future impact that traffic might have on their children.

#### **4.2.2 Social norms**

Social norms emerged as another determinant of attitudes to road pricing. These could be separated into subjective norms and the norms of others. Subjective norms are the norms referring to the people that are most important in one’s life; usually family and friends (Ajzen, 1991). The norms of others could be a more legitimate pro-social indicator since they reflect the views of the general public, referring to people not directly related to the participants.

Many of the older participants, when asked directly, declared that their attitudes were not influenced by others, not even by people close to them, because “they can decide for themselves”.

*“No! I have my own opinion and I am rather strong about it! So what other people choose to do, well that’s their right to say what they want.” M.W., aged 83*

Nonetheless, even without acknowledging this influence they showed genuine interest about what other people thought of the measure.

*“I am just trying when thinking about it to refer to people about my own age. I still have a lot of friends who drive but they wouldn’t need to go; I mean they are not working, they wouldn’t need to go at that little bit of time (meaning the 7-10 am charge period). So they wouldn’t be bothered! I wouldn’t!” M.G., aged 84*

There were numerous examples of older participants talking specifically about their relatives and friends while expressing their attitudes to road pricing; thus the need to identify subjective norms as a distinct type of social norms. Many of them thought that their personal views were identical to those of the people they used as a reference point.

*“Well I think I am not influenced by anyone either, but I have known opinions about it, and I am in favour of road pricing and my husband is in favour and I think my children would be as well!” N.C., aged 61*

In this case, an older participant supporting road pricing considers herself to have decided completely independently from anyone else that she is in favour. However, at the same time she did not fail to recognise that the people most important to her (i.e. family) would have also been in favour of road pricing. This hypothetical “family support” of her position could have played an implicit role in the development of her attitude towards the proposed scheme. Her subjective norms thus could be one of her decision-making factors even if she does not recognise this influence.

Older participants seemed to be more influenced by social norms, although they were also the ones most likely to point out that they were independent thinkers during the focus groups. This confirms the statistical findings of Nikitas et al. (2011) suggesting that older people are more likely to be influenced by social norms than younger people.

#### 4.2.3 Trust

Lack of trust about the motives behind road pricing's introduction, its eventual efficiency, ease of use and administration, and about the way that the collected revenue would be spent for the benefit of local societies was a third theme that emerged. Lack of trust had a clearly negative effect on the attitudes, pro-social value orientations and social norms of the focus groups participants; the participants expressing these feelings suggested that mistrust was the main reason they were against the scheme.

Almost all the participants agreed that if they were sure that the scheme would provide funding for a transport improvement package they would accept it. Most of the participants, and especially those aged 60 to 74, were very suspicious, however, about the motives behind the scheme's implementation and about the eventual misuse of the money generated.

*"Councils and Government chop all the money. They always get in these hair-raising schemes and it's all to get money!"* O.M., aged 75

Moreover, they did not trust the effectiveness of the chosen methods and planning procedures that the local and national authorities followed in general. For example:

*"I doubt very much that road pricing would ever be implemented! Because we come back to the old story of people having bright ideas, agreeing on a plan of action and then nobody wants to take the final decision! And when they take the final decision, just before the decision is implemented, some group comes up and says 'we weren't consulted' and so everything is tried out all over and something comes up again. So five years later you are still not a lot further from where you started."* P.R., aged 68

Upfront transport investments with an emphasis on the enhancement of public transport services, transparent fund-raising and expenditure, and more effective administrative procedures could re-establish "trust". Most of the participants believed that focused, pre-implementation investments on transport alternatives and road infrastructure could make them - and others too - more positive to road pricing.

*"Oh dear! I think if you saw the benefit for what you are having to pay that would be a different matter."* M.W., aged 83

The "inefficient" way in which the current transport administration operates was a discussion topic and in the following extract it was clearly linked with the need to package the revenue generated by different road taxes and re-invest it solely on transport.

*"You know if there was an independent transport department and all funds automatically went there - no matter what - from road pricing, parking charging and the rest of it... and it was responsible solely for this budget and was purely for road improvements, trams, buses the whole infrastructure then of course you could say 'yes let them get on with it'. It should have no relation with any government centre or whatsoever... and use the funds independently."* K.M., aged 65

Older participants' lack of trust meant that they could not see road pricing as a measure with a genuine pro-social potential; on the contrary because they feared such a scheme would be handled by authorities as a road tax with a purely anti-social character they expressed their pro-sociality by disapproving of it. Social norms are also built in this way. So, lack of trust negatively affects social norms.

#### 4.2.4 Age

The fourth core theme was age; a parameter that had an impact on the attitudes, pro-social value orientations and social norms of individuals but still was not acknowledged – especially by the older participants - as a factor that could, per se, shape attitudes to road pricing. Nonetheless, age is immediately linked with a number of issues that the participants directly recognised as factors affecting their attitudes. These particular factors were: disabilities; state of health; financial status; resources flexibility (i.e. time and free public transport travel);

---

and employment status (retirement vs employment). Therefore, age could play an indirect, but nonetheless critical role, in the development of norms around road pricing.

More specifically, older participants when asked about the impact that older age might have on their attitudes suggested that it is not as dominant as mobility and their state of health to their evaluation processes.

*"If you were a bit younger or a bit older what would you think about road pricing?"* Moderator

*"You can't tell... can you? Because some people that are in their fifties can't walk as well as others who are in their seventies! It is not age related as such... is it? It's so random!"* T.J., aged 64

*"So I guess it's about mobility. This influences your opinion about road pricing?"* Moderator

*"It's about mobility! Yes! If you get about it's great!"* T.J., aged 64

*"Yes! And it's about your general state of health too!"* E.H., aged 79

Further discussions indicated that mobility challenges and ill health combined with a new road charge could eventually create new layers of transport-related social exclusion for people like disabled pensioners and this could adversely influence attitudes to road pricing, especially those of older people.

Older age, can also impact individuals' financial status, which might have an effect on their ability to pay a road charge or on their perceptions about being able to afford this. If car-based travel becomes more expensive for low-income motorists with relatively low values of time - because of the introduction of road pricing - the disbenefit of the new charges will outweigh any time savings, resulting in reduced travel (Raje, 2003).

*"It's only £4 it won't hit that much your pocket."* K.M., aged 30

*"You think pensioners will say that: 'It's only £4'? No!"* N.C., aged 61

Some discussions recognised the multiple dimensions with which the age factor could influence public attitudes to road pricing. Retirement, low income, mobility difficulties and disability in general, even living in a rural area (older people in the UK are more likely to live in a rural area than younger people) are all factors correlated with age, and which play a role in the development of older people's attitudes to road pricing.

*"I am being very passionate about this, about pensioners who get all this at the moment. Our money has actually depreciated and cannot cover the cost of living... so using money that way...especially if you are a disabled pensioner is not good. If you are a disabled pensioner then you need your car all the time anyway. If you are a rural pensioner then you are really in the crap. There is no public transport to these places."* J.B., aged 70

The time flexibility that retirement provides also came up when discussing ageing aspects. People realised that a scheme with a charge between 7-10 am could not penalise financially people that could avoid travelling into the city centre during the morning peak hour traffic.

*"Pensioners have got free bus cards, so it doesn't matter! Road pricing or not they can travel anytime."* P.R., aged 68

## **5. Conclusions and Recommendations**

The analysis has strengthened the argument of Nikitas et al. (2011) that pro-social values and social norms have an important role in how older people form attitudes towards road pricing. Processes by which pro-social values influence participants were identified, and these were especially clear for those aged 60 to 74. The influence was primarily negative, since "pro-sociality" for them was an equity attribute reflecting the monetary barrier introduced by road pricing to people with lower incomes or reduced mobility. Older participants however were at the same time more likely to see "pro-sociality" as a commitment to what is necessary for providing future generations with a better chance to enjoy a liveable city. Older focus group participants were very likely to be influenced to some degree by social norms (those associated with family and friends but also those associated

with society as a whole), but very unlikely to recognise the influence of others on their decision-making process when evaluating road pricing.

Lack of trust about the motives behind road pricing, its eventual efficiency, ease of use and administration, about the way that the collected revenue would be spent and about its potential for benefiting a local community constituted an important explanation of opposition to the idea of road pricing. Older age, was not recognised by the participants as a direct determinant of acceptability per se but as a parameter influencing a set of factors (listed in Figure 2) that were deemed crucial in their attitude-building processes.

By bringing together these four themes and each of their distinctive expressions as discussed herein, the authors suggest the following conceptual framework when trying to graphically represent the attitude-shaping processes referring to older people's perceptions of road pricing (see Figure 2). Note that pro-environmental values and generativity, tending to be drivers of support, have a plus symbol attributed to them, whilst pro-equity values have a minus symbol, as they were in most cases, drivers of opposition. It should be acknowledged that this framework despite being the direct result of the presented qualitative study was analyst-driven, influenced by the Theory of Planned Behaviour, inspired by existing literature and more importantly it was deductively informed and supported (to a significant degree) by its predecessor questionnaire study described in Nikitas et al. (2011).

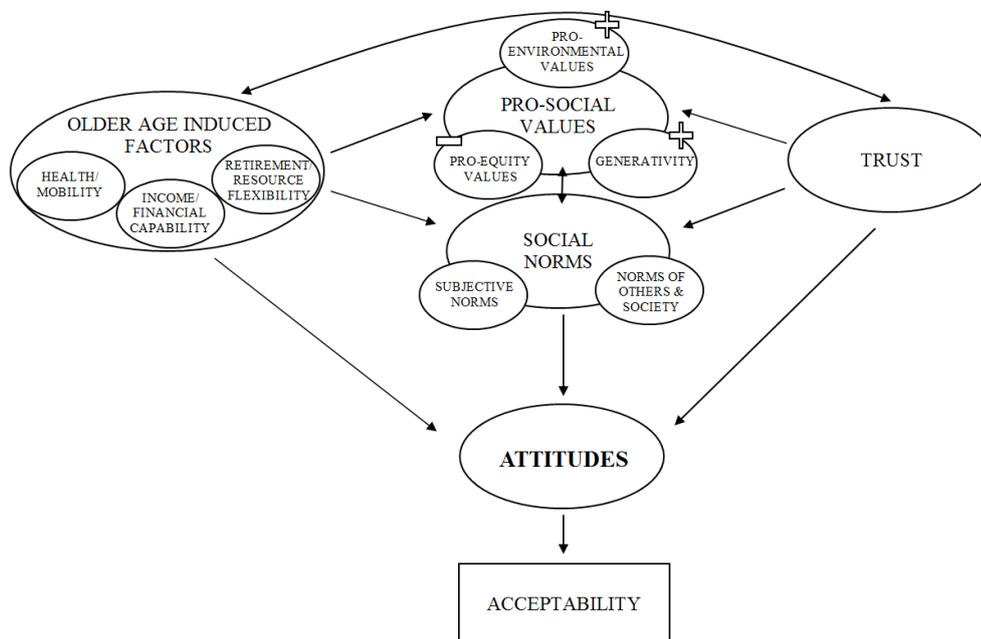


Figure 2: Older people's attitude-shaping mechanism

The policy relevance of this model includes the need for authorities planning to implement road pricing to be aware that older people may not always identify its potential to be a pro-social measure that can benefit them, their significant others or their local communities. On the contrary, they might see it as a policy that could lead to equity imbalance penalising people who depend on car mobility for access to key services and opportunities. A similar argument is legitimate for social norms too; older people and especially those that are against road pricing may consider that social norms referring to road pricing are negative.

Therefore, it is necessary for policy-makers to communicate plans in a sound way that does not focus on the rather arbitrary and subjective goal of "average welfare gains" (see Banister, 2003) but instead emphasises the potential pro-social character of the measure for "helping future generations", "easing people's journeys", "improving local transport alternatives" and "reducing environmental damage". Integration involving packaging road pricing, which is less palatable on its own, with other measures that demonstrate benefits to those affected, revenue hypothecation, visible upfront transport investment, compensation for potential losers in the form of exemptions, discounts, special permits or concessionary fares for public transportation and focused public consultation exercises that highlight the measure's pro-social potential and re-establish "trust" can all be part of such a strategy.

---

## Acknowledgements

The authors are grateful for the funding support of DfT and Bristol City Council. Special thanks to Dr Ben Clark for assisting the focus group moderation.

## References

- Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- Banister, D. (2003). Critical Pragmatism and Congestion Charging in London. *International Social Science Journal*, 55(2), 249–264.
- Braun, V. and Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, Vol. 3(2), 77-101.
- Chambré S.M. and Einolf, C.J. (2008). Is Volunteering Work, Prosocial Behavior, or Leisure? An Empirical Study. Presented at the 103rd American Sociological Association Meeting, Boston, 2008.
- Davila, M.S. and Diaz-Morales, J.F. (2009). Age and Motives for Volunteering: Further Evidence. *Europe's Journal of Psychology*, 5(2), 82-95.
- DfT (2001). *Older People: Their Transport Needs and Requirements - Summary Report*. Department for Transport, London, UK.
- Dominy, N. and Kempson, E. (2006). *Understanding Older People's Experiences of Poverty and Material Deprivation*. Research Report No. 363. Department for Work and Pensions, Leeds, UK.
- Goerres, A.A. (2007). Why Are Older People More Likely To Vote? The Impact of Ageing on Electoral Turnout in Europe. *British Journal of Politics and International Relations*, 9(1), 90-121.
- Hensher, D.A. and Bliemer, M.C.J. (2014). What Type of Road Pricing Scheme Might Appeal to Politicians? Viewpoints on the Challenge in Gaining the Citizen and Public Servant Vote by Staging Reform. *Transportation Research Part A: Policy and Practice*, 61, 227-237.
- Hine, J. and Mitchell, F. (2003). *Transport Disadvantage and Social Exclusion: Exclusionary Mechanisms in Transport in Urban Scotland*. Ashgate Publishing, Aldershot, UK.
- Horne, C. (2001). Sociological Perspectives on the Emergence of Norms. In Hechter, M. and Opp, K. D. (eds) *Social Norms*. Russell Sage Foundation, New York, 3–34.
- Jakobsson, C., Fujii, S. and Gärling, T. (2000). Determinants of Private Car Users' Acceptance of Road Pricing. *Transport Policy*, 7(2), 153–158.
- Kovalchick, S., Camerer, C.F., Grether, D.M., Plott, C.R. and Allman, J.M. (2004). Aging and Decision Making: A Comparison between Neurologically Healthy Elderly and Young Individuals. *Journal of Economic Behavior and Organization*, 58(2), 79-94.
- Langford, J. (2001). For Many Older Drivers, Mobility May Be More Important Than Safety. Presented at the 12th Australasian Road Safety Research, Policing and Education Conference, Melbourne, Australia.
- May, A.D., Koh, A., Blackledge, D. and Fioretto, M. (2010). Overcoming the Barriers to Implementing Urban Road User Charging Schemes. *European Transport Research Review*, 2(1), 53-68.
- Musselwhite, C. B. A. and Haddad, H. (2010). Mobility, Accessibility and Quality of Later Life. *Quality in Ageing and Older Adults*, 11(1), 25 – 37.
- Nikitas, A. (2010). *Understanding the Attitudes of Older People to Road Pricing*. Doctorate Thesis. University of the West of England, Bristol, UK.
- Nikitas, A., Avineri, E. and Parkhurst, G. (2011). Older People's Attitudes to Road Charging: Are They Distinctive and What Are the Implications for Policy? *Journal of Transportation Planning and Technology*, 34(1), 87-108.
- Raje, F. (2003). The Impact of Transport on Social Exclusion Processes with Specific Emphasis on Road User Charging. *Transport Policy*, 10(4), 321–338.
- Rosenbloom, S. (2001). Sustainability and Automobility among the Elderly: An International Assessment. *Transportation*, 28(4), 375-408.
- Schade, J. and Baum, M. (2007). Reactance or Acceptance? Reactions towards the Introduction of Road Pricing. *Transportation Research Part A: Policy and Practice*, 41(1), 41-48.
- Selwyn, N. (2004). The Information Aged: A Qualitative Study of Older Adults' Use of Information and Communications Technology. *Journal of Aging Studies*, 18(4), 369-384.
- Shergold, I., Parkhurst, G. and Musselwhite, C.B.A. (2012). Rural Car Dependence: An Emerging Barrier to Community Activity for Older People. *Journal of Transportation Planning and Technology*, 35(1), 69-85.
- Siren, A. and Hakamies-Blomqvist, L. (2004). Private Car as the Grand Equaliser? Demographic Factors and Mobility in Finnish Men and Women Aged 65+. *Transportation Research Part F: Traffic Psychology and Behaviour*, 7(2), 107-118.
- Van Lange, P.A.M., Otten, W., De Bruin, E.M.N. and Joireman, J.A. (1997). Development of Prosocial, Individualistic and Competitive Orientations: Theory and Preliminary Evidence. *Journal of Personality and Social Psychology*, 73(4), 733-746.
- Van Oorschot, W., Arts, W. and Halman, L. (2005). Welfare State Effects on Social Capital and Informal Solidarity in the European Union: Evidence from the 1999/2000 European Values Study. *Policy and Politics*, 33(1), 33-54.
-