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Original Citation

Nikitas, Alexandros, Avineri, Erel and Parkhurst, Graham (2016) Public Attitudes to Road Pricing: Exploring the Role of Older Age, Pro-Sociality, Social Norms and Trust. In: Transportation Research Board 95th Annual Meeting, 10th-14th January 2016, Washington DC, United States.

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1 **PUBLIC ATTITUDES TO ROAD PRICING: EXPLORING THE ROLE OF OLDER AGE,**
2 **PRO-SOCIALITY, SOCIAL NORMS AND TRUST**

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24 **Word count:** 6249 words text + 3 tables/figures x 250 words = 6999 words

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27 **Submission Date of Revised Manuscript:** November 15, 2015

1 ABSTRACT

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

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22 *Keywords:* Road Pricing; Congestion Charging; Older People and Aging; Attitudes; Pro-sociality and
23 Social Norms; Public Acceptability

24

1. INTRODUCTION

Road pricing is a travel demand mechanism detailed as long ago as 1844 aiming to make the allocation and use of existing road space in congested urban regions more efficient. Nikitas et al. (1) define road pricing as 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.

Despite being a policy based on a sound economic rationale, which has been successful when applied (2), road pricing has proven notoriously difficult to decide and implement (3). With rare exception, efforts to introduce road pricing, aimed at reducing traffic congestion and raising sufficient revenue to ensure that road investment and ongoing maintenance is secured, without an additional impost to users above current outlays, has fallen largely on politically non-supportive ears (4). This is because politicians tend to see road pricing as a complicated and controversial charge that would not receive public support due to perceived “infringement” on freedom of access (5).

The low public acceptability therefore is one of the strongest barriers hindering its applicability (6, 7) with the most important reasons for opposition being social or moral norms of fairness and freedom of choice (5). 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 (8, 9). However, earlier research by the present authors (1) 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 (5). 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 automobility, their demographic growth and their high political engagement (1, 10).

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 aging-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 synthesizes the findings and providing relevant policy recommendations.

2. BACKGROUND

2.1 Focus on Older People

Over recent decades aging 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 the global population of seniors 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 (11) and more likely to vote than younger people (12). Thus it can be hypothesized that their views may be particularly influential on social policy in general, and on 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 by various studies (e.g. 13) as the age group most likely to be subjected to transport-related social exclusion. 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” (14). Increased longevity and better health and social care enable older people to remain mobile for much longer than ever before (15). Excessive restriction of older people’s mobility will be detrimental both to society generally, which will become increasingly dependent

1 upon expenditure by older citizens and to the individual, who will have reduced access to services and
2 social facilities (14). However, recent research (16) found low levels of self-reported social exclusion in a
3 study of rural elders, indicating that exclusion affects a small if important minority. Notably, the incidence
4 grew with the degree of rurality of location, but there was no statistically significant relationship with
5 household car availability.

6 Due to the broad-range definition of older age, older people are a particularly heterogeneous group.
7 Nevertheless, the literature identifies a number of factors by which older people as a group differ from
8 younger adults and which could be indicators of their potential to form distinct attitudes, including to road
9 pricing. For example, older people are the individuals most likely to have complex mobility needs (17),
10 physical vulnerability and health issues (15), cognitive limitations in their processing capacity (18) and
11 lower annual incomes (19); although this latter point needs to be considered in the context that people over
12 60, on average, have accumulated more wealth than people under 40.

13 Older people are also more reluctant to be exposed to or start using new technologies than younger
14 adults (20) although given the penetration of new information-communication technologies particularly in
15 recent years, this may represent in part a cohort effect. In terms of car usage, today's older people are
16 more likely than previous generations to need the use of a car to fulfill mobility needs (15). Nonetheless,
17 at the same time seniors can be more cost-aware and more likely to reduce car ownership or use than
18 younger people (21). They are also more likely to rely on others for lifts (9, 19). On the other hand, older
19 people enjoy greater time flexibility after being retired from work (17) so they can avoid, in most cases,
20 peak traffic hours and, in many countries, benefit from concessionary travel passes or reduced fares in
21 public transport.

22 While there are commonly used definitions of older age, usually relating to retirement age, there is no
23 universal consensus about a specific chronological threshold at which a person becomes old. The British
24 Department for Transport has linked the eligibility for free, off-peak, local bus travel to the state pension
25 age (currently in transition). Given that the data collection was conducted in Bristol, UK the age of 60
26 was selected as the most applicable reference point for marking "older age". Nikitas (22) reviewed a
27 significant number of studies and proposed that older people could be classified in two categories; those
28 aged 60 to 74 ("*young older people*") and those aged 75 and over ("*old older people*"). These are the
29 definitions adopted from the present paper.

30 It should be also noted that this paper is not examining solely the attitudes of older drivers but the
31 attitudes of older people as a whole (drivers and non-drivers) since individuals that might not drive or
32 own a car could still be among the decision-makers sealing the fate of a proposed scheme by voting in
33 favor or against it in a referendum for example. Not all the voters involved in the rejections of the
34 proposed Edinburgh and Greater Manchester schemes in 2005 and 2008 respectively were drivers.

36 2.2 The Social Context Parameters

37 The social dimension is important in the formation of attitudes to road pricing. According to Schade and
38 Baum (7) negative social norms and perceived unfairness can potentially be factors determining the
39 degree of acceptability. The present paper explores the connection between attitude development and two
40 important elements of social context: social norms and pro-social value orientations.

41 The proportion of people that tend to favor what is positively valued for society, and assign more
42 importance to collective consequences - a process described as "pro-social value orientation"- has been
43 reported to increase with age (23). Older people are more likely to be helpful (24) and devote more time
44 to volunteering, not simply because they have more time but because they see volunteering as active and
45 meaningful leisure (25). Other research suggests that older people tend to have stronger solidaristic
46 feelings towards needy people than younger people do (26). There is also some context-dependent
47 evidence that older people may show significantly higher connectedness to nature values, societal-level
48 willingness to act, and recycling attitudes and behaviours (27). Generativity goals, such as becoming a
49 "keeper of the meaning" or "taking responsibility for future generations" have been found to be most
50 prominent in older age (28). Hence in a transport context, older people may be more likely to approve or
51 disapprove of road pricing, depending on whether they believe it would be good or bad for others or for
52 society in general.

1 This tendency to cater for others, or at least care for what others need, leads to a second hypothesis
2 suggesting that their beliefs about what family and friends, but also society as a whole, consider to be the
3 normal or acceptable attitude could influence how older people view road pricing. Thus, social norms
4 defined as “standards of behavior that are based on widely shared beliefs about how individual group
5 members ought to behave in a given situation” (29) need to be studied too, especially since there is
6 evidence suggesting attitudinal dependence on social influence (30, 31).

8 **2.3 Previous Work**

9 Although aging and mobility is now a clear theme in transport policy, only limited research has been
10 published on how older people view road pricing and why they do so. Findings relating to the London
11 Congestion Charge suggested that older people are more positively oriented to road pricing than younger
12 individuals, whilst evidence from Scotland indicated exactly the opposite (1, 22). Secondary analysis of
13 three datasets: two about the unrealized scheme for Edinburgh (rejected at a referendum in 2005) and a
14 national one examining the “concept” in general provided only inconclusive evidence that attitudes to
15 road pricing vary with age and no explanations about this deviation. Therefore, primary research,
16 considering pro-sociality and social norms directly, was necessary.

17 By analyzing the answers of 491 survey respondents (including 184 older people) Nikitas et al. (1),
18 provide evidence that there are age-specific differences in the way older and younger people view road
19 pricing and that their social norms and pro-social value orientations play a role in this variation. Nikitas
20 (22) identified that young older people were the individuals most likely to express disagreement with the
21 notion that “road pricing is a good idea”. Old older people, on the other hand, were more likely to be
22 sympathetic or neutral to this notion. Young older people were the respondents least likely to self-declare
23 that they would accept road pricing even if this would be “helping future generations”, “easing people’s
24 journeys”, “improving local transport alternatives” or “reducing the environmental damage”, which were
25 the four specific attitude objects used to frame pro-sociality. In comparison, old older people were more
26 likely than any other group to respond positively to these four pro-social indicators. Young older people
27 were also less likely to think that their significant others perceived “road pricing as a good idea” while old
28 older people, were far more likely to be neutrally oriented (primarily) or positive to this statement. Older
29 people as a whole and especially people aged 75 and over, were more influenced by social norms than
30 younger people were. When asked to rate a statement that “they would accept road pricing if their
31 significant others agreed that this was a good idea”, more than half of them agreed or strongly agreed.

32 The present paper uses these quantitative findings as a starting point for developing an in-depth
33 understanding of how older people’s attitudes to road pricing are formed.

35 **3. RESEARCH METHODOLOGY**

37 **3.1 Study Location**

38 The study area chosen was the administrative district of Bristol City, UK, which has a population of
39 437,500 residents with 17% of them being aged 60 and over. Bristol has been at the forefront of British
40 cities planning charging schemes in the last two decades, as the local authorities in the Bristol (and wider
41 West of England region) area have undertaken technical investigative and planning work into two
42 different charging schemes, but for strategic political reasons neither of these schemes has progressed
43 beyond initial, informal public consultation. The concept of charging has remained part of the local
44 transport debate, but there has not been an election mandate sought specifically in connection with
45 charging, as in London, or a referendum held, as in Edinburgh and Manchester (1). Nonetheless, the level
46 of awareness generated about road pricing by these efforts was regarded as adequate to ensure that social
47 norms and attitudes per se towards road pricing were meaningful (i.e. social norms cannot exist if the
48 attitude object is an unknown quantity).

50 **3.2 The Choice of Focus Groups**

51 Focus groups were selected over other qualitative methods as allowing a large amount of interaction
52 between participants so that they could build on one another’s responses, communicating ideas that

1 otherwise may have been unheard. The focus groups were conducted by a moderator and an assistant
2 moderator. A focus group topic guide defined procedures and provided consistency between the different
3 sessions. It consisted of eight parts: introduction; ice-breaker; background discussion items; introduction
4 of scenario type approach; attitudes to road pricing including discussion about age impacts, pro-social
5 values and social norms; spatial, income, trust and media influence discussions; and summing up. It
6 should be acknowledged that the choice of a qualitative approach as such (which provides less potential
7 for generalizations) was a choice designed to complement the earlier quantitative study of the authors by
8 exploring in detail the reasons that govern older people's attitudes to road pricing.
9

10 3.3 Recruitment

11 All the participants were survey respondents of the predecessor study who volunteered via a recruitment
12 question. They were invited to the focus groups via telephone and in writing. The participants were
13 informed prior their involvement about the detailed focus groups arrangements, a £15 incentive given to
14 them as a token of appreciation and the fact that the sessions would be transcribed and anonymized.
15

16 3.4 Employing a Scenario-type Approach

17 A scenario-type approach was employed, in which people were presented with a specific hypothetical
18 road pricing scheme situated in Bristol's city center. This hypothetical scenario reflected some of the
19 specifics of an unimplemented scheme that was proposed in 2000. The simulation of a consistent road
20 pricing vision enabled the participants to provide answers in a more systematic way that would allow
21 meaningful comparisons between the different focus group sessions.
22

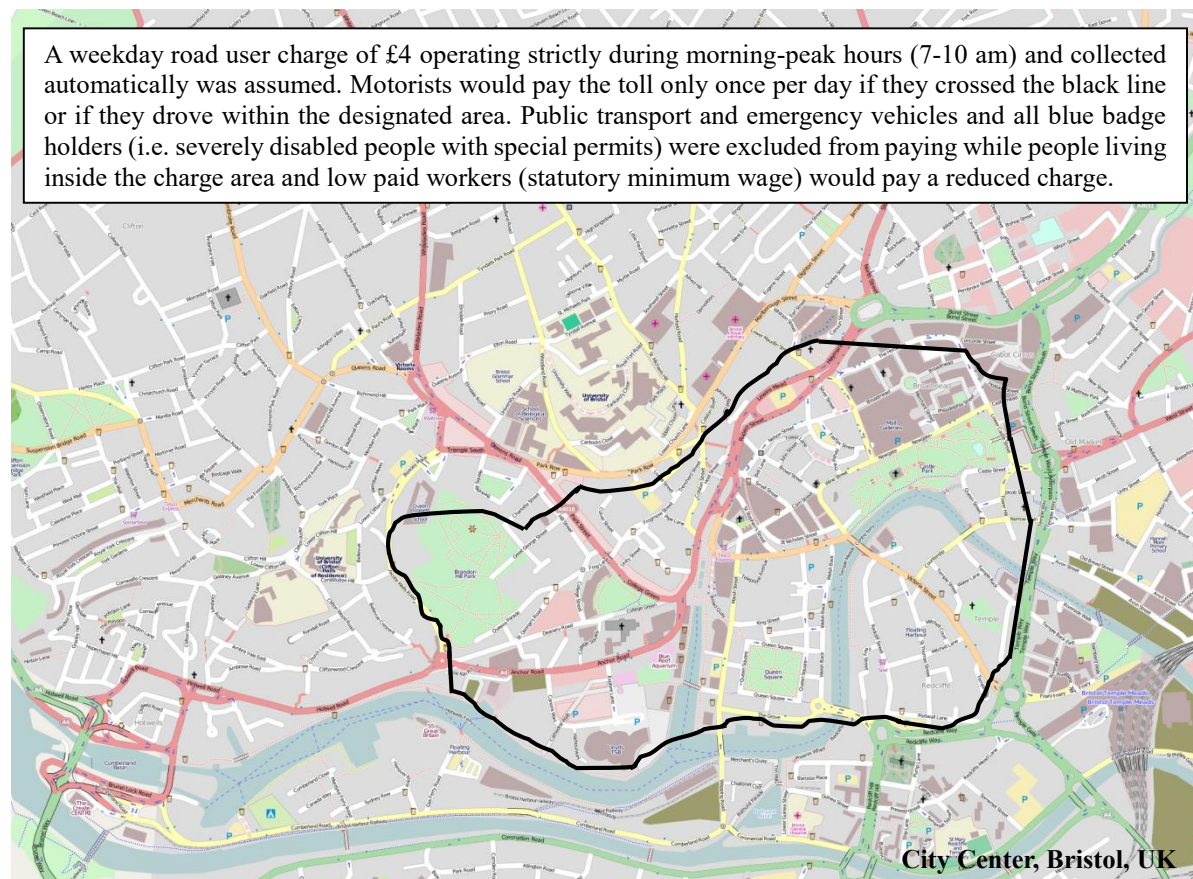


FIGURE 1 The hypothetical scheme.

3.5 Method of Analysis

Theory-driven thematic analysis was chosen adopting Braun and Clarke's (32) six-step procedure:

1. *Familiarizing 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

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 favor or in opposition to road pricing. Hence social desirability bias was minimized.

1 **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	Neutral
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

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4.2 Themes

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*.

4.2.1.1 Pro-equity Values Participants primarily expressing pro-equity concerns were likely to assess road pricing strictly in financial terms, labeling 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 their fellow citizens they would not favor 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 center, 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 exceptions of pro-equity value oriented people who evaluated “costs” based on time and liveability considerations. These individuals suggested that a “fairer” reallocation of road space, prioritizing people over automobiles, 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 center 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

4.2.1.2 Pro-environmental Values Pro-environmental value orientations represent the second expression of pro-sociality. 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 that usually initiated discussions around environmental concerns; especially young parents.

“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 penalizing 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

1 discussing the policy's acceptability.

2
3 *"We are aware of what damage we are doing to the environment in our household. And I don't know why*
4 *other people aren't aware of it but we feel very strong and that's why we are cyclists, we are walkers and*
5 *I use my bus pass every day, sometimes more than once a day!"* N.C., aged 61

6
7 Issues, like green development, ecologically friendly transport, fewer CO₂ emissions and climate
8 change came up during the sessions both spontaneously and after trigger questions. Older participants
9 seemed to care very much for the environment although they were not as passionate as some younger
10 participants. Nonetheless, on many occasions this was the case just because they did not recognize the
11 potential pro-environmental benefit that road pricing could offer. They considered that this environmental
12 benefit would be minimal compared to the potential adverse equity issues discussed.

13
14 **4.2.1.3 Generativity** Some participants referred extensively to the effect that a bad transport system
15 could have on children and on the future generations and related these thoughts to their personal
16 assessment of the policy in focus. Participants expressing generativity-related insights were usually
17 positive to road pricing.

18
19 *"If we don't do something with road traffic now, or soon, we are going to be in trouble! It won't affect*
20 *me! I am too old (laughter)!"* M.L., aged 75

21
22 *"Yes some of my respondents suggested that this measure would help future generations to enjoy a better*
23 *environment."* Moderator

24
25 *"I would say this is our duty!"* M.L., aged 75

26
27 Nevertheless, there were participants negatively oriented to road pricing who expressed these concerns
28 but still could not see how the proposed measure could help future generations.

29
30 *"It's true that the center of Bristol is very polluted and we know that the stuff in petrol affects the brain of*
31 *children and may harm future generations... but I am not sure that this scheme is going to actually do a*
32 *lot towards that...because as somebody has already said people will continue to use their cars."* J.B.,
33 aged 68

34
35 Older participants were far more likely to express thoughts relating to generativity than younger ones.
36 Older people having a longer time perspective witnessed the deterioration of traffic conditions over the
37 years, whereas younger people have not experienced lower-traffic times. Among the young participants,
38 only two mothers with young children specifically expressed concerns about the impact that the current
39 traffic situation might have on their children.

40 41 *4.2.2 Social norms*

42 Social norms emerged as another determinant of attitudes to road pricing. These could be separated into
43 subjective norms and the norms of others. Subjective norms are the norms referring to the people that are
44 most important in one's life; usually family and friends (31). The norms of others could be a more
45 legitimate pro-social indicator since they reflect the views of the general public, referring to people not
46 directly related to the participants.

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

49
50 *"No! I have my own opinion and I am rather strong about it! So what other people choose to do, well*
51 *that's their right to say what they want."* M.W., aged 83

52

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

3
4 *“I am just trying when thinking about it to refer to people about my own age. I still have a lot of friends
5 who drive but they wouldn’t need to go; I mean they are not working, they wouldn’t need to go at that
6 little bit of time (meaning the 7-10 am charge period). So they wouldn’t be bothered! I wouldn’t!”* M.G.,
7 aged 84

8
9 There were numerous examples of older participants talking specifically about their relatives and
10 friends while expressing their attitudes to road pricing; thus the need to identify subjective norms as a
11 distinct type of social norms. Many of them thought that their personal views were identical to those of
12 the people they used as a reference point.

13
14 *“Well I think I am not influenced by anyone either, but I have known opinions about it, and I am in favor
15 of road pricing and my husband is in favor and I think my children would be as well!”* N.C., aged 61

16
17 In this case, an older participant supporting road pricing considers herself to have decided completely
18 independently from anyone else that she is in favor. However, at the same time she did not fail to
19 recognize that the people most important to her (i.e. family) would have also been in favor of road
20 pricing. This hypothetical “family support” of her position could have played an implicit role in the
21 development of her attitude towards the proposed scheme. Her subjective norms thus could be one of her
22 decision-making factors even if she does not recognize this influence.

23 The older participants generally seemed to be influenced by social norms, although at the same time
24 they were the ones most likely to point out that they were independent thinkers during the focus groups.
25 This tentatively confirms the statistical findings of Nikitas et al. (1), suggesting that older people are more
26 likely to be influenced by social norms than younger people.

27 28 4.2.3 Trust

29 Lack of trust about the motives behind road pricing’s introduction, its eventual efficiency, ease of use and
30 administration, and about the way that the collected revenue would be spent for the benefit of local
31 societies was a third theme that emerged. Lack of trust had a clearly negative effect on the attitudes, pro-
32 social value orientations and social norms of the focus groups participants; the participants expressing
33 these feelings suggested that mistrust was the main reason they were against the scheme. Trust has also
34 been reported as being a key motivation for underlying opposition to the scheme rejected for Edinburgh,
35 and particularly for older citizens (22).

36 In the Bristol research, almost all the participants agreed that if they were sure that the scheme would
37 provide funding for a transport improvement package they would accept it. Most of the participants, and
38 especially those aged 60 to 74, were very suspicious, however, about the motives behind the scheme’s
39 implementation and about the eventual misuse of the money generated.

40
41 *“Councils and Government chop all the money. They always get in these hair-raising schemes and it’s all
42 to get money!”* O.M., aged 75

43
44 Moreover, they did not trust the effectiveness of the chosen methods and planning procedures that the
45 local and national authorities followed in general. For example:

46
47 *“I doubt very much that road pricing would ever be implemented! Because we come back to the old story
48 of people having bright ideas, agreeing on a plan of action and then nobody wants to take the final
49 decision! And when they take the final decision, just before the decision is implemented, some group
50 comes up and says ‘we weren’t consulted’ and so everything is tried out all over and something comes up
51 again. So five years later you are still not a lot further from where you started.”* P.R., aged 68

52

1 Upfront transport investments with an emphasis on the enhancement of public transport services,
2 transparent fund-raising and expenditure, and more effective administrative procedures could re-
3 establish “trust”. More specifically, the most discussed way to offset “lack of trust” was revenue
4 hypothecation. Most of the participants believed that focused, pre-implementation investments on
5 transport alternatives and road infrastructure could make them - and others too - more positive about road
6 pricing. Some participants suggested that “they need proof in advance” that road pricing could be
7 beneficial for society and not yet another tax-generator. If these people could see substantial upfront
8 investments or committed revenue hypothecation then they would have been willing to accept a policy
9 that gives value back to society.

10
11 *“Oh dear! I think if you saw the benefit for what you are having to pay that would be a different matter.”*
12 M.W., aged 83

13
14 The “inefficient” -as branded by some of the participants- way in which the current transport
15 administration operates was a discussion topic and in the following extract it was clearly linked with the
16 need to package the revenue generated by different road taxes and re-invest it solely on transport.

17
18 *“You know if there was an independent transport department and all funds automatically went there - no
19 matter what - from road pricing, parking charging and the rest of it... and it was responsible solely for
20 this budget and was purely for road improvements, trams, buses the whole infrastructure then of course
21 you could say ‘yes let them get on with it’. It should have no relation with any government center or
22 whatsoever... and use the funds independently.”* K.M., aged 65

23
24 Older participants’ lack of trust meant that they could not see road pricing as a measure with a
25 genuine pro-social potential; on the contrary because they feared such a scheme would be handled by
26 authorities as a road tax with a purely anti-social character they expressed their pro-sociality by
27 disapproving of it. Social norms are also built in this way. So, lack of trust negatively affects social
28 norms.

29 Worth noting is that the informative nature of the focus group discussions converted the initial
30 disbelief or neutrality of three (out of seven overall) old older participants to support for the scheme; they
31 justified this attitudinal change by suggesting that “they gained trust that the measure had a realistic
32 potential to be pro-social”.

33 34 4.2.4 Age

35 The fourth core theme was age; a parameter that had an impact on the attitudes, pro-social value
36 orientations and social norms of individuals but still was not acknowledged – especially by the older
37 participants - as a factor that could, per se, shape their and other people’s attitudes to road pricing.
38 Nonetheless, age is immediately linked with a number of factors that the participants directly recognized
39 as factors affecting their attitudes. These particular factors were: disabilities and mobility problems; state
40 of health; financial status; resources flexibility (i.e. time and free public transport travel); and employment
41 status (retirement vs employment). Therefore, age plays an indirect but nonetheless critical role in the
42 development of norms around road pricing.

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

46
47 *“If you were a bit younger or a bit older what would you think about road pricing?”* Moderator

48
49 *“You can’t tell... can you? Because some people that are in their fifties can’t walk as well as others who
50 are in their seventies! It is not age related as such... is it? It’s so random!”* T.J., aged 64

51
52 *“So I guess it’s about mobility. This influences your opinion about road pricing?”* Moderator

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

2

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

4

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

8 Older age, can also impact individuals' financial status, which might have an effect on their ability to
9 pay a road charge or on their perceptions about being able to afford this. If car-based travel becomes more
10 expensive for low-income motorists with relatively low values of time - because of the introduction of
11 road pricing - the disbenefit of the new charges will outweigh any time savings, resulting in reduced
12 travel (9). The perceived value of pensions therefore was a strong driver of opposition.

13

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

15

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

17

18 Some older people (or retirees as M.C. in the extract provided below) had enjoyed higher incomes
19 when younger, when working. These people might have then been more accepting of a road charge than
20 they were at the time of the research.

21

22 *"I don't think things bothered you that much when you were younger. Money wasn't a problem you had.
23 When you had to be somewhere, and that even if it meant you paid to go on a toll road you did it; even if
24 you didn't like it. Now being retired and having different needs... yes you do worry about road pricing
25 more."* M.C., aged 56

26

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

32

33 *"I am being very passionate about this, about pensioners who get all this at the moment. Our savings
34 gone right down because of the nil interest rate... our money has actually depreciated and cannot cover
35 the cost of living...so using money that way...especially if you are a disabled pensioner is not good... if
36 you are a disabled pensioner then you need your car all the time anyway. If you are a rural pensioner
37 then you are really in the crap because petrol has gone up and everybody who lives in a rural area
38 depends on their car. There is no public transport to these places. I think that the older you get it's harder.
39 It's a fact that you will feel very differently in 70 than what you did at 50... about how far you can walk,
40 how far you can go and how far you can manage without help."* J.B., aged 70

41

42 Most of the participants, notwithstanding their age, agreed that people such as disabled pensioners
43 should be exempt from the measure. This could make road pricing a visibly fairer policy that "respects"
44 social inclusion and could be therefore considered by people exhibiting high pro-equity value orientations
45 as more acceptable.

46 The time flexibility that retirement provides also came up when discussing aging and age-related
47 differences in the thinking processes of the participants. People realized that a scheme with a charge
48 between 7-10 am could not penalize financially people that could avoid travelling into the city center
49 during the morning peak hour traffic; people like pensioners.

50

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

5. CONCLUSIONS AND RECOMMENDATIONS

The analysis has strengthened the argument of Nikitas et al. (1) 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 recognize the influence of others on their decision-making process when evaluating road pricing.

Lack of trust about the motives behind road pricing’s introduction, 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. Age, and in particular older age, was not recognized 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 Behavior, inspired by existing literature and more importantly deductively informed (for its initial conception) and supported (to a significant degree) by its predecessor questionnaire study described in Nikitas et al. (1). All in all, this framework provides a normative model of older people’s potential for accepting road pricing.

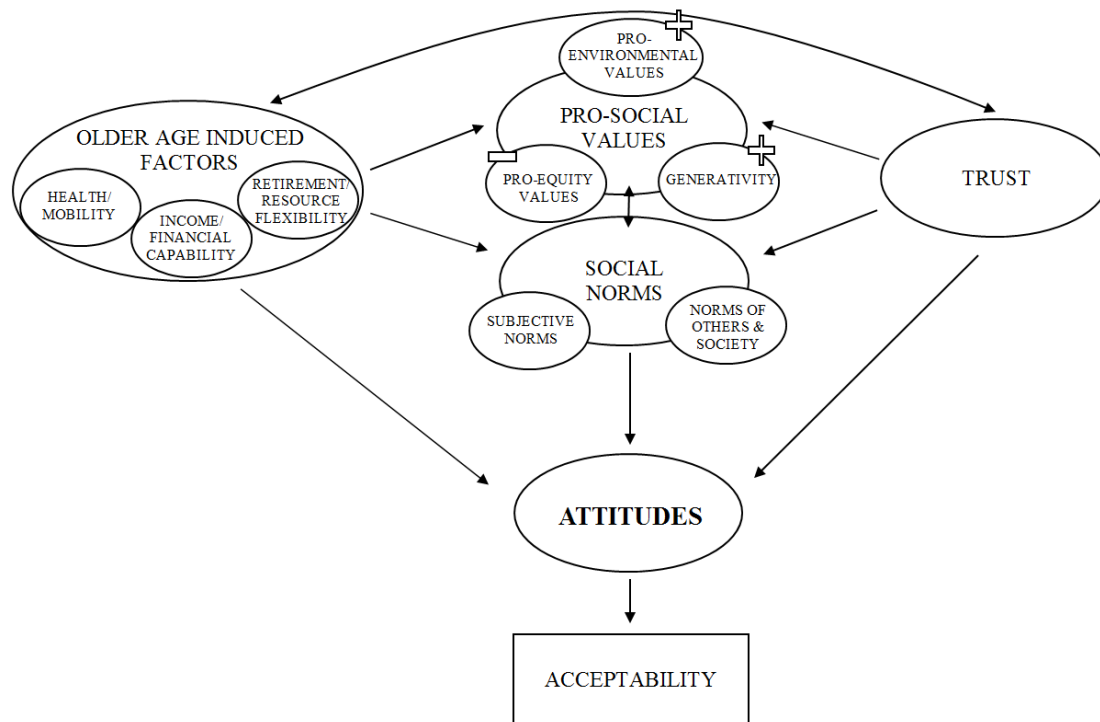


FIGURE 2 Older people’s attitude-shaping mechanism.

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

8 Therefore, it is necessary for policy-makers to communicate plans in a sound way that does not focus
9 too heavily on the rather arbitrary and subjective goal of “average welfare gains” (*see 33*) but instead
10 emphasizes the potential pro-social character of the measure for “helping future generations”, “easing
11 people’s journeys”, “improving local transport alternatives” and “reducing environmental damage”. This
12 is in line with Pronello and Rappazzos’ (34) recommendation that a clear communication strategy should
13 be defined and should be tailored according to the different groups in terms of their acceptance towards
14 the measure. Integration involving packaging road pricing, which is less palatable on its own, with other
15 measures that demonstrate benefits to those affected, revenue hypothecation, visible upfront transport
16 investment, compensation for potential losers in the form of exemptions, discounts, special permits or
17 concessionary fares for public transportation and focused public consultation exercises that highlight the
18 measure’s pro-social potential and re-establish “trust” can all be part of such a strategy. Authorities should
19 also be patient and acknowledge that acceptance is a process that takes time. Experiences from other
20 cities show that once people become familiar with road pricing, public acceptance increases (35).

21 A further research direction might study the effect of framing road pricing among different age groups.
22 Studies of “framing effects” in a range of contexts have explored how individuals respond differentially to
23 equivalent descriptions of the same critical information, presented in different formats. Information can be
24 putted in a positive or negative light, emphasizing choice outcomes that can be perceived as either ‘gains’
25 or ‘losses’, in order to focus attention either on the positive or the negative aspects of it (36, 37). Recent
26 work (38) demonstrating age-related decreases in reactivity to anticipated monetary losses, but not gains,
27 suggests that older and younger adults might show equivalent risk aversion for gains but discrepant risk
28 seeking for losses. In the road pricing context (which is naturally framed as a loss), it would be of relevance
29 to explore how perceptions, attitudes and preferences of different age groups might be influenced by
30 framing.

31 **ACKNOWLEDGMENTS**

32 The authors are grateful for the funding support of the UK Government Department for Transport and
33 Bristol City Council. Special thanks to Dr Ben Clark for assisting the focus group moderation.

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