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1 **Prioritising transport barriers and enablers to mobility in later life: A case study from Greater** 2 **Manchester in the United Kingdom**

3

4 **Abstract**

5 Introduction:

6 There are many barriers to mobility for older people which are detrimental to older people's health
7 and wellbeing. This research got older people to prioritise their transport barriers in terms of their
8 importance as a barrier to getting out and about, and the likelihood that that barrier occurs locally to
9 them. Following this, older people then co-developed and prioritised solutions to the barriers,
10 prioritising them in terms of potential effectiveness and perceived ease of implementation.

11 Methodology:

12 Using a case study of Greater Manchester in the United Kingdom, a series of focus groups in
13 different locations got older people and stakeholders to prioritise issues and solutions for older
14 people's mobility around neighbourhood, public and community transport and policy and practice
15 themes.

16 Results:

17 Participants tended to prioritise issues that affected their safety. Poor quality pavements, sharing
18 pavements with cyclists and mobility scooters, poor crossing facilities and bus drivers driving off
19 before they had a chance to sit down were all major issues and all related to the potential for falls.
20 Poor information and signage was another issue with public and community transport. To help put
21 things right, it was strongly suggested transport staff need age friendly awareness training.
22 Participants also wanted more involvement with decision making over transport and the built
23 environment with a need to move beyond the current forms of consultation.

24 Conclusion:

25 Overall, there was a constant tension between older people portraying themselves and being seen
26 as frail and needy and as resourceful, proactive and engaged. This makes the transport offering
27 difficult to achieve, schemes aimed at plugging deficits are seen as inappropriately patronising, yet
28 schemes not aimed at older people can make them feel misunderstood or ignored.

29 **Key words**

30 Ageing; public transport; mobility; community transport; walking; transport policy

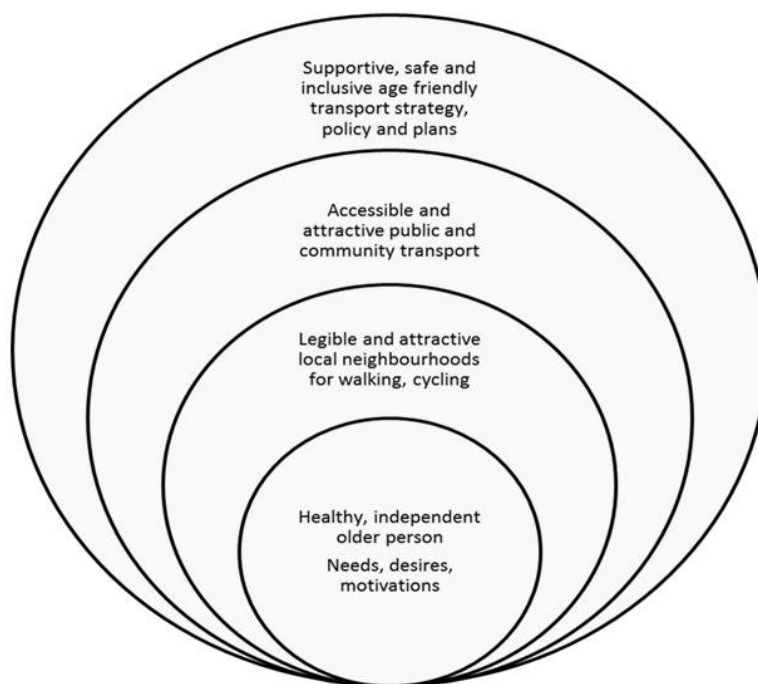
31

32 Introduction

33 Being mobile and being able to use transport to be mobile is extremely important for older people's
34 health and wellbeing (Holley-Moore and Creighton, 2015; Musselwhite et al., 2015; Musselwhite,
35 2015; Ormerod et al., 2015). In most wealthy and many low and middle income countries, high levels
36 of mobility are undertaken in order to stay connected to communities, friends and family and to
37 access shops and services (Mackett, 2018). The car has been central to this hyper-connectivity,
38 affording more choice over the location of work and home (Musselwhite and Curl, 2018). Society has
39 become so organised around the car, that those without a vehicle can become socially excluded.
40 Such institutional car-ism occurs without acknowledging the wider negative consequences of priority
41 planning around the car, such as excluding non-car users, pollution, severance of communities and
42 accidents and associated casualties (Musselwhite, 2018a).

43 In many western cultures the growth of car use has been across the life-course but there has been a
44 significant and unprecedented increase in the number of older drivers on the road (Mackett, 2018).
45 At the same time walking, cycling and non-urban bus use has been in decline across all ages
46 (Mackett, 2018). The decline in use of such services, especially bus services, means they may be
47 infrequent in nature and hence difficult to use. This has significant consequences for older people
48 when they have to give-up driving and use other modes of transport, which they may not have used
49 for many years (Musselwhite and Shergold, 2013). Older people are more likely than any other age
50 group to suffer mobility deprivation, in that they cannot access the places they want because they
51 cannot physically get to them (Holley-Moore and Creighton, 2015; Mackett, 2018). Older people are
52 more likely than any other age group to give-up driving (Musselwhite and Shergold, 2013,
53 Musselwhite, 2015). Hence, it is vitally important for older people to have mobility options across
54 many different modes of transport and mobility.

55 It was decided to use a theoretical model to help position how different parts of the transport
56 environment may affect the older person. Musselwhite (2016, 2018) has devised an age friendly
57 transport system approach utilising Bronfenbrenner's (1979, 1989, 2005) ecological model, to show
58 how different elements of the environment interact with each other and impact upon the individual
59 and are impacted upon by the individual. Musselwhite's (2016, 2018) model starts with the person
60 in the centre, with concentric circles spreading outwards to laws, policy and plans at the outside,
61 connected at the neighbourhood and public and community transport provision between them (see
62 Figure 1). This was chosen to allow data to be collected around different types of mobility from
63 neighbourhood to public and community, with laws, policy and plans overarching them, while
64 respecting that these influence one another. This model was chosen over others, for example, needs
65 based models (Hjorthol, et al., 2010; Musselwhite and Haddad, 2010, 2018), mobility capital-based
66 models (Musselwhite and Scott, 2019) or non-literal mobilities continuums (Parkhurst et al., 2014) as
67 these do not easily distinguish between the different physical modes of transport as readily as
68 Musselwhite's (2016,2018) model does.



69

70 Figure 1: A model of age friendly transport (after Musselwhite, 2016, 2018)

71

72 *Neighbourhood level*

73 Walking is good for health. There are direct benefits of continuing active travel in later life. Regular
74 walking or cycling has been found to reduce cardiovascular disease by around 30% and reduce all-
75 cause mortality by 20% (Hamer and Chider, 2008), through reducing the risk of coronary heart
76 disease, stroke, cancer, obesity and type 2 diabetes (NICE, 2013). It also keeps the musculoskeletal
77 system healthy and is good for mental health (NICE, 2013). Improving the public realm to be more
78 accessible (providing public toilets, benches, wide and well maintained pavements), legible (maps,
79 spaces that make you feel you should be there) and desirable (use of quality materials, landscaping,
80 arts and vegetation to make you want to be there) can help older people walk more often
81 (Musselwhite, 2018b). However, there are a number of known barriers to walking that are
82 especially an issue for older people, including poorly maintained pavements, for example that are
83 frequently cracked hamper walking (Newton and Ormerod, 2012), poor surfaces, caused by fallen
84 leaves, rain, ice or snow (Wennberg, 2009) and cluttered or shared pavements, with pavement
85 parking, street furniture or narrow or non-existent pavements creating barriers (Musselwhite,
86 2018b). Dark or poorly lit streets especially in inclement weather or at night have a negative effect
87 on older people using the street, both in terms of concerns about falling and because of safety fears

88 (Shumway-Cook, et al., 2003). Inability to cross the road has been cited as a crucial factor that
89 reduces older people's confidence with getting out and about, and can mean older people make
90 large detours to avoid crossing dangerous roads, make fewer trips or even stay at home (Lord et al.,
91 2010; Zijlstra et al., 2007). Crossing times are set for a walking speed of 1.22 meters per second (m/s)
92 in most countries, and this is too fast for older people. Musselwhite (2015) found 88% of older
93 people cannot complete the crossing in this time. Similarly, previous research suggests older people
94 cross the road at between 0.7 and 0.9 metres per second (e.g. Asher et al., 2012, Newton and
95 Ormerod, 2008).

96 *Public and community transport*

97 Public buses play an important part in connectivity for older people, especially those who have given
98 up driving. Bus use is especially high among older people where there are concessionary or free
99 fares, as in the United Kingdom. Not only does the bus keep people connected, bus use is also
100 correlated with health and wellbeing, being a protective factor in obesity for older people (Webb et
101 al., 2011).

102 There are still many barriers to using a bus, even if it is free, that prevent or make it difficult for older
103 people to use it. Gilhooly et al. (2002) found the highest barrier to public transport use amongst
104 older people was personal security in the evening and at night (79.8% of over 70s agreed), followed
105 by transport running late. A report using accompanied journeys in London highlighted similar
106 problems for older people including crowds at the bus stop or on the bus, prams taking up the seats
107 or area at the front of the bus, steps up to the bus being too high (or driver stopping too far from the
108 kerb) and fear of falling over when the bus moves off (TfL, 2009). These continue to be a barrier
109 despite low-floor and easy to access buses and raised bus stops (Mifsud et al., 2019). Broome et al.
110 (2010) in an Australian study found that for older people, driver friendliness, ease of entry/exit and
111 information usability were prioritised barriers and facilitators for older people. Age UK London
112 (2011) quantified this by surveying bus driving behaviour in 550 journeys in inner London and 541
113 journeys in outer London. In 42% of cases, passengers were not given enough time to sit down
114 before the bus was driven away from the stop. In 25% of the cases the bus did not pull up tight to
115 the kerb at the bus stop.

116 As an alternative to conventional public bus services, there can be provision of specialist transport
117 services, often operating door to door for people who cannot access public or private transport,
118 known as specialist transport service or community transport or transit. Such services usually run on
119 demand rather than a scheduled timetable. There are some barriers to community transport use
120 (Musselwhite, 2018c) and services can be fragmented across the country as they rely on third sector
121 or charity provision (Mohammed et al, 2019; Mulley et al., 2012). People who may well benefit from
122 such a service can sometimes feel the service is not for people like them; there is sometimes the
123 perception that it is for people with disabilities, rather than for everyone with accessibility issues
124 (Musselwhite, 2018c; Ward et al., 2013). Journeys typically are based around providing transport to
125 shops, services and doctors and hospitals, but there needs to be more "discretionary" journeys
126 provided to places of leisure and fun (Musselwhite, 2017).

127 *Governance, policy and societal norms*

128 Transport policy tends to focus around the needs of business and work and focusses on inter- and
129 intra-urban mobility with a focus on provision in supporting core work hours 9-5 (Musselwhite,
130 2018a). Older people's needs may therefore not be met, as their needs differ, for example they
131 often work part-time and avoid rush hour travel if they can and have greater caring responsibilities.
132 Even though there is scope for greater impact from policy if directed around lifestages (e.g.
133 retirement from work, becoming a grandparent, becoming a carer), age is very rarely mentioned in
134 policy contexts (Avineri and Goodwin, 2010).

135 *Aim of the paper and gap in knowledge*

136 As can be seen there are many barrier's to transport mobility for older people. This paper reports
137 research which aimed to offer a wider context to the barriers, allowing older people to discuss and
138 broaden the barriers and relate them to their local context. Within these discussions older people
139 ranked the barriers in terms of their importance as a barrier to getting out and about, and the
140 likelihood that that barrier occurs locally to them. Once this prioritisation had occurred, older people
141 then co-developed and prioritised solutions to the barriers, prioritising them in terms of potential
142 effectiveness and perceived ease of implementation.

143 **Method**

144 *Design*

145 A case study approach was adopted using one overarching region, within which data collection in
146 different distinct areas were carried out, using an interactive workshop style focus group. In-depth
147 focussed data was collected around the three layers based on Musselwhite's (2016,2018a) age
148 friendly model (figure 1): neighbourhood, public and community transport, and governance, policy
149 and norms. As such it was deemed appropriate that the priority sorting of key barriers and enablers
150 to mobility and transport should be performed by older people themselves. This co-production
151 approach was commensurate with a social approach to transport, where older people are the
152 experts in their own use of their transport within their local environment. In order to maximise the
153 social aspects of mobility, focus groups were selected with older people who lived locally. This
154 method would generate in-depth qualitative data from a bottom-up perspective and enable a
155 geographical context to the findings would take place. Previous research suggests that the provision
156 of age friendly transport varies between places for a variety of reasons including economic, political
157 and topographical issues (Musselwhite and Curl, 2018), hence focus groups in different geographical
158 locations within the case study area were deemed important.

159 *Case study location*

160 Greater Manchester was the location for the case study. Greater Manchester became the UK's first
161 age-friendly city region as recognised by the World Health Organization and has an unrivalled
162 approach to bringing together stakeholders involved in improving the lives of older people in the
163 region. The Greater Manchester Ageing hub, run from the Greater Manchester Combined Authority,
164 brings together all ten local authority councils in the region, the health and social care partnership,
165 public health, Health Innovation Manchester, fire and rescue, housing providers, the Centre for

166 Ageing Better, the universities and health science network and Greater Manchester Centre for
167 Voluntary Organisation. As such this was an ideal opportunity to run the prioritisation exercises with
168 potential to have real impact in the local transport system across Manchester.

169 In the Greater Manchester area, there are 431,000 over 65s, making up around 15.6% of the
170 population. Greater Manchester has a higher than average amount of deprivation - 36% of Greater
171 Manchester population live in 20% of UKs most deprived neighbourhoods (Phillipson 2017). Self-
172 reported quality of life with respect to health (including mobility, self care, usual activities,
173 pain/discomfort and anxiety/depression) among the over 65s is lower in Greater Manchester
174 compared to the average for England (Phillipson, 2017).

175 Focus groups were set up in conjunction with age leads from each area and took place during the
176 summer of 2018. The selected areas for the focus groups within Greater Manchester were Salford,
177 Tameside, Bolton, Bury, Oldham and Wigan. The six selected areas are chosen to add heterogeneity
178 to the findings. Wigan (18.4%), Bury (17.8%), Tameside (17.3%) and Bolton (16.8%) have higher than
179 the Greater Manchester percentage of people aged over 65 (15.6%) in their areas. Oldham (15.8%)
180 has average numbers of older people in their area and Salford (14.6%) by contrast has a lower
181 percentage of older people. In addition, Tameside and Wigan have higher than average number of
182 people living with disabilities in their area that may affect mobility and Oldham and Salford regularly
183 appear in the most deprived areas in Britain on a number of factors including index of multiple
184 deprivation but also single structures on housing, health and jobs (ONS, 2016). These two areas,
185 along with Bolton are also noted for having high levels of deprivation especially for an ageing
186 population (Income Deprivation Affecting Older People (IDAOPI)) (Bullen, 2015). Bury, by contrast is
187 far less affected by a range of deprivation indices across all ages (Bullen 2015; ONS, 2016).

188 Mobility across Greater Manchester is commensurate with the picture of other large urban British
189 cities. As people age, there is less reliance on the car as a mode of transport and an increase in
190 public transport use, coupled with less walking (TfGM, 2019). Increases in trips are found for leisure
191 purposes in 60-69 year olds, including shopping, sport and entertainment, holidays and personal
192 business (TfGM, 2019). Shopping and personal business trips fall for 70 years and over, but make up
193 a higher % of overall trips made (TfGM, 2019). Visiting friends decreases for those aged over 70, as
194 does escorting others. Both are highly valued activities (Musselwhite and Haddad, 2010). Visiting
195 family and friends is cited in previous research as something older people want to do more of but
196 are stopped by transport barriers (Mackett, 2018). This again is largely commensurate with the
197 national picture (Mackett, 2018)

198 *Participants*

199 Focus groups consisted of older people from the local area, recruited by local leads working with the
200 community in that area. Each group had at least one additional stakeholder who worked locally with
201 older people. These stakeholders were people who ran local community groups that supported older
202 people's issues in the area and were either a paid community leader or in some cases a volunteer.
203 This was done as these local experts would have a collation of issues and solutions about transport
204 from older people with whom they had worked. This was intended to help generalise the findings to
205 wider audience than the older people at the focus group, with the stakeholders drawing on wider

206 expertise. Across all groups 45 older people took part, along with 8 people working with older
207 people in the local community . The groups were held in convenient locations for older people to
208 attend and how the participant arrived at the focus group was recorded. . The majority of
209 participants arrived by car as driver or passenger unless otherwise noted:

- 210 • The Bolton group had 9 older people (with 2 arriving by bus, 2 had walked) and 1 local
211 worker. Four were male, 5 female. One was aged 80-89, 4 were aged 70-79 and 5 were aged
212 60-69. Five had long standing health conditions.
- 213 • Bury had 5 older people (all arrived by car), with 1 local worker. Three were male, 2 female.
214 All were aged 70-79.
- 215 • Oldham had 8 older people (all arrived by car) and had 2 local workers taking part. All were
216 female. Five were aged 80-89, 1 aged 70-79, and 2 aged 60-69. All had long standing health
217 conditions.
- 218 • Salford had 6 older people (2 arrived by bus and 4 lived at the venue) and 1 local worker.
219 Three were male, 3 female, 3 aged 80-89 and 3 aged 70-79. Three had long standing health
220 conditions.
- 221 • Tameside had 10 older people (3 arrived by taxi, 1 walked, 3 used the bus and 1 cycled then
222 got the bus there) and 1 local worker. Five were male, 5 female. Three were aged 80-89, 5
223 aged 70-79 and 2 aged 60-69. Three had long standing health issues.
- 224 • Wigan had 7 older people (2 arrived in taxi). and 2 local workers. Four were male and 3
225 female. Four were aged 80-89 and 3 aged 70-79. Three had long standing health issues.

226 Hence some areas had more car users than others. People were encouraged to think of
227 themselves as using the mode of transport discussed rather than their usual mode and to think
228 outside of using the car. Hence for participants who still drove, discussions were caveated with
229 “if you didn’t have access to a car...”.

230 *Tools*

231 The focus groups were semi-structured in terms of firstly using prompts on cards to present some
232 key issues and solutions to the participants, and then allowed scope for people to bring in their own
233 ideas. Literature identified previous knowledge on the topics which formed as a basis for the focus
234 groups. Cards were developed around the key issues and solutions identified in previous research for
235 each of the three levels of the age friendly transport model (Musselwhite, 2016, 2018). The
236 advantage of using a semi-structured focus group approach allowed the participants to add their
237 own issues after the cards were presented and participants were encouraged to do so t. A board was
238 presented for each topic covered that the cards could be stuck to. The board had dimensions on an x
239 axis of importance from highly important (on right hand side) to less important (on left hand side)
240 and transecting this a y axis of likelihood of that issue being present from highly likely (at the top) to
241 very unlikely (at the bottom). A grid resulted with issues in one of four zones (see figure 2). The
242 board was identical for prioritising issues on all three layers (neighbourhood, public and community
243 transport and policy and practice). A slightly modified board was used for the solutions, which had a
244 similar x and y transecting axes, with the x axis being ease of implementation (from easy on the

245 right, to hard on the left) and the y axis being effectiveness (from high at the top, to low at the
246 bottom), again this resulted in a 2x2 grid as in figure 3.

247 *Procedure*

248 Each focus group lasted around one and a half hours. Each workshop got participants to prioritise a
249 list of key issues they have with transport in different domain outlined in the model of age friendly
250 transport. The cards were introduced and participants discussed them and then placed them on the
251 grid. The prioritization exercise forced participants to sort the issues and solutions across all groups
252 and give four levels of priority (from immediate priority to least priority) based on most common
253 responses (caveats are given where appropriate) based on importance as a barrier to getting out and
254 about and frequency of occurrence. After each new card was added participants were able to shuffle
255 the cards on the board around. At the end when all cards were produced, participants were asked if
256 anything else needed covering. They had one final look at prioritisation and came to an agreed set of
257 priorities. For solutions, a similar grid followed with slightly different categories – participants were
258 asked to place in order of potential impact and then in terms of ease of introduction.

259 *Analysis*

260 All focus groups had their audio recorded and the final agreed charts captured using photographs. A
261 basic thematic analysis took place on the discussion taking place during the sorting exercises to bring
262 together key themes and messages. The coding was a mixture of emic and etic, based both around
263 what would be expected to be found based on previous research, while also capturing new findings
264 and making new themes. Alongside this was the value given by the participants on the final charts of
265 each 2*2 grid. There was often strong agreement both within and between groups, which helped
266 keep the overarching collated priority order quite clear. Where there was contention however, this
267 is brought out in the text of the findings along with justification for their final position in the
268 protestation.

269

270 **Findings**

271 Findings are discussed under each of the three levels of age friendly transport (as seen in figure 1)
272 (Musselwhite, 2016). Then within each level, the findings are discussed as prioritised by older people
273 themselves in the focus groups. Lack of audible traffic lights was a topic developed by participants
274 themselves in Tameside as an important but slightly less common issue, all other topics were
275 presented by the researcher but embellished by the participants themselves as discussed below.

276 *Neighborhood level and walking*

277 Older people within and between focus groups almost unanimously placed the order of priority the
278 same for the neighbourhood walking level (see figure 2). These were placed in order starting with
279 top priority being around poor quality of pavements, followed closely by obstructions on the
280 pavement and sharing the pedestrian space with others, including cars, bicycles and mobility
281 scooters.

282 “as a pedestrian you struggle past these illegally parked cars” (Bury, male, focus group).

283 “near misses you know, terrible, police don’t do anything about it, turning pavements into
284 roads” (Salford, male, focus group)

285 Buses were added to this list for Oldham, but not other groups.

286 “buses come so fast legitimately into that area”, (Oldham, female, focus group)

287 The third prioritised issue was pedestrian crossing times, followed by speeding traffic (except for
288 those in Tameside, who although felt it was prevalent believed it to be less of an important issue
289 than other groups). The quality of pedestrian crossings was next priority. People tended to agree
290 that there was a general lack of enough pedestrian crossings and there was concern also about a
291 lack of dropped kerbs and also tactile surfaces on pavements, especially when it is poorly
292 maintained,

293 “You know the slabs for blind people. Those are very bad to walk on when you have mobility
294 issues.” (Tameside, female, focus group)

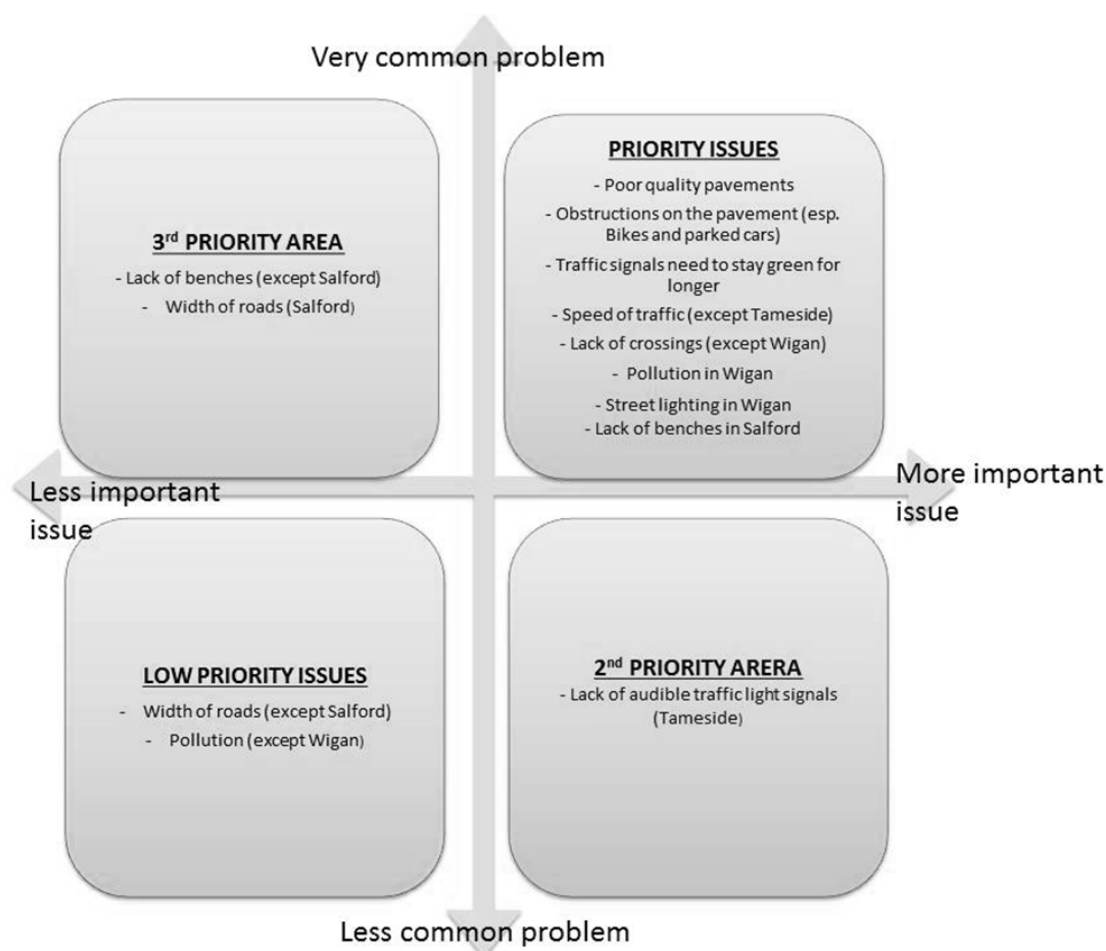
295 Lack of benches and toilets were viewed as important but not that common a problem, except in
296 Salford where it was more of a problem. Older people in the Wigan focus groups noted two common
297 and important issues that other groups did not rate at all, street lighting and pollution.

298 “Pollution is a serious problem - only when I am able to get out of Manchester does my
299 chronic catarrh and sore throat stop for a few days.” (Wigan, female, focus group)

300 A lower priority was given, though it was still an issue, to width of the road across all groups,
301 especially when crossing the road is necessary,

302 “Our newest crossing that’s a problem...you do go in places where there’s a new crossing
303 you do go my God how wide is it, because it’s ever so wide” (Tameside, female, focus group)

304



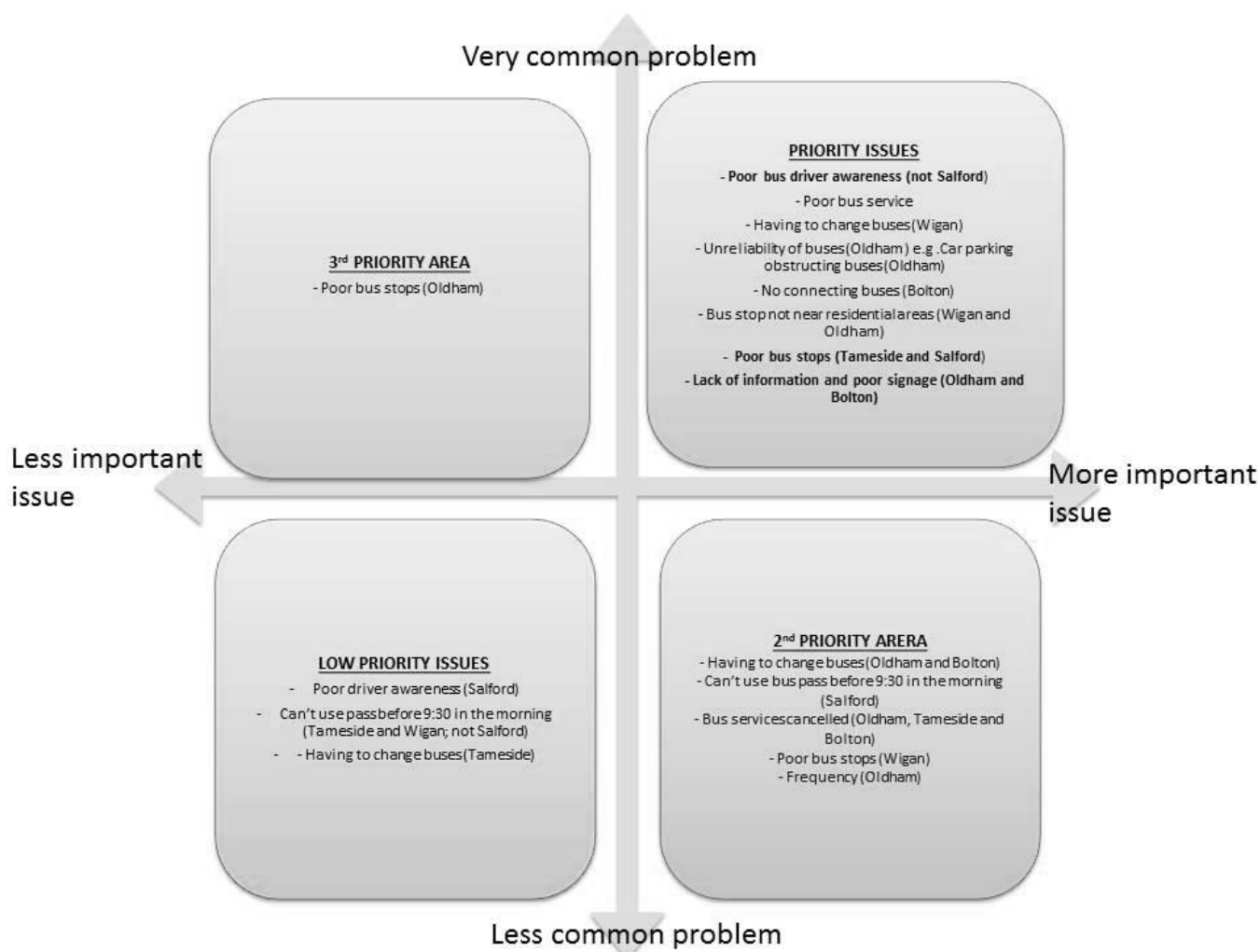
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306 Figure 2: Priority issues for neighbourhood pedestrian level for older people in Greater Manchester.

307

308 *Public transport use*

309 As figure 3 notes the priority of issues surrounding buses are highly localised and differ among the
 310 locations the focus groups took place. Oldham participants brought in their own topics of
 311 unreliability and obstruction of buses, bus stops not being near residential areas, all of which they
 312 placed as key priority issues. They also brought in their own topics of having to change buses, bus
 313 services being cancelled and poor frequency as less common but still important issues. Bolton also
 314 brought in not having connecting buses, they also place as a key priority issue, and bus services
 315 cancelled as a secondary priority area issue (an important issue but less common). Participants in
 316 Wigan also brought in the issue of buses not stopping near residential areas as a key issue. All other
 317 topics were suggested by the researcher.



318

319 Figure 3: Priority issues on public buses for older people in Greater Manchester

320

321 There was common agreement across different groups that there was a lack of awareness among
 322 bus drivers of older people's issues, typified by bus drivers driving off before the older person had
 323 sat down on the bus,

324 "Some drivers can't wait for you to get in the bus and they're going...for me it's intimidating.
 325 You're frightened of falling" (Wigan, female, focus group)

326 Or not realising an older person might struggle getting on and off, for example taking longer, or
 327 struggling with bags and taking time to find and swipe the pass. They did acknowledge this was due
 328 to the pressure the bus driver was under,

329 "They're on a timetable. The traffic is that bad and they're behind" (Oldham, female, focus
 330 group)

331 It was discussed that buses didn't stop close enough to the kerb, making it harder to board the bus.
332 There was also anxiety about getting off the bus, where older people didn't trust the driver always to
333 stop when the bell had pushed or wait for them to get up when the bus had stopped.

334 This was followed by a variety of issues with the bus service itself including the bus stop not being
335 near the main residential areas (especially in Wigan and Oldham),

336 "they changed it and they go on the main road and you have to walk it" (female, Wigan,
337 focus group)

338 Buses being cancelled altogether or reduced in number (esp. Wigan) and the unreliability of the
339 service was mentioned as an issue in Oldham. It was noted that there were issues between different
340 operators when having to change buses. This was followed by poor bus stops and signage, especially
341 in Oldham and Bolton. People talked about poor quality bus stops, lack of seating and in poor repair,
342 but despite being a common issue, this was a lower priority issue than signage and information. The
343 bus itself, the bus infrastructure, was an issue in Oldham, where it was noted how buses have drop
344 down mechanisms that frequently fail and also noted a lack of grab rails on the bus both of which
345 were deemed important barriers to use.

346

347 Lower priority issues included, older people wanting to be able to use their free bus pass before 9.30
348 in the morning, which they currently can not do. This was especially an issue because of hospital
349 and doctor appointments at that time of the day. Though, there was acknowledgement that it helps
350 manage passenger demand,

351 "People getting to work you don't want them fighting with pensioners...We have all day... If
352 you make an appointment doctors and hospital and things like that they usually are quite
353 accommodating" (Wigan, female, focus group)

354

355 *Community transport use*

356 The key priority issue in community transport use is ambiguity over who can use the service. People
357 discussed not knowing community transport existed at all. More commonly people had an idea of
358 some of the services but had no clear understanding of the detail of the different types that existed.
359 There is also evidently some confusion over who can use the services. Inconvenient and unreliability
360 with the service making it impossible to do what they were using the transport for, were also noted
361 but were of slightly lower priority,

362 "One of the block bookings for the lunch club arrived so late last week that the people on
363 Ring and Ride missed their soup. They have to pay for their dinner but they don't get it all."
364 (Oldham, focus group)

365

366 *Policy and governance*

367 The final area addressed in the groups was the influence of policy on transport issues. People across
368 the focus groups wanted to be consulted in more detail about changes to transport system. Coupled
369 with this was feeding back, including lack of confidence in reporting and time taken to make any
370 changes was noted as very common and fairly important.

371 “Very important to consult people whether they take any notice is another
372 thing....sometimes you get invited to a lot of these consultations and you go and you sit and
373 then you think what were the point because nothing’s changed” (Bury, female, focus group)

374 “A lot of people think they have these consultations as purely tick box exercises” (Bury,
375 male, focus group)

376 Underinvestment in areas outside of London was a very common and very important issue across
377 both groups. A non-joined up transport system was then seen as next most common but equally
378 important issue. Underinvestment in the transport system was also noted from the Oldham focus
379 group.

380

381 *Findings – Solutions*

382 The solutions could be placed around four different groups based on their rankings made by the
383 participants. Priority areas are those that older people felt need to be done first and would have
384 highest effect. There were then two groups where a strategy would be needed in order to reach the
385 goal and where a slightly longer term plan would be required. Finally, an area that would be “nice to
386 have” that would show only average levels of impact and would be hard to implement. There are
387 also a few solutions where groups couldn’t reach an agreement, creating a mixed views category.
388 This is shown in figure 4. The solutions that were thought of by the participants were better parking
389 enforcement and introducing more traffic calming. These two solutions ended up in a category of
390 mixed views and longer term plans respectively. All others were presented by the researcher to the
391 participants in each focus group.

392

393

394 Figure 4: Prioritisation of transport solutions for older people

395

396 *Priority areas*

397 Almost unanimously across all groups, older people agreed that public (and community) transport
398 staff should be trained and have a greater empathy and awareness of older people’s issues. This
399 was to overcome drivers driving off before the older person had sat down or not stopping to pick
400 them up. Older people felt this would be very effective and relatively simple to set up. One way of

401 delivering the training is to make it a mandatory requirement or to offer a kitemark style badge, “age
402 friendly service” or similar. Training is provided and is undertaken by a variety of public transport
403 companies. Best practice would ensure older people, third sector and charities were involved in the
404 setting and delivery of such training. There should be some standardisation of training and also some
405 evaluation of the training.

406 Secondly, extending free travel for older people was wanted before 9.30am. It was felt not everyone
407 could change the times they had to travel and making older people pay for something that had no
408 choice on was unfair, so despite being a low down issue, a solution was highly prioritised for the
409 small number of people who may need it. The main reason for increasing the times the pass can be
410 used was to help meet hospital or GP appointments, and to a smaller degree to help older people
411 get out and about to go shopping and get necessities done and be back in time well before it gets
412 dark in the winter.

413 The first of three solutions that emphasise older people as proactive, resourceful, and engaged is
414 next; A local transport action group for older people to have a say over transport issues locally was
415 the third priority solution. All three solutions where older people are proactive, resourceful, and
416 engaged are viewed by older people as highly effective solutions, but this is the only one that was
417 felt to be easy to implement and could happen immediately. The other two completing audit tools
418 and having control over bus services are effective but need a strategy and are discussed below. All
419 other solutions require older people to have the solution provided for them, rather than being
420 engaged in it themselves and these are found across the categories of solution.

421 The exact make-up of the Transport Action Group wasn't discussed in detail; moreover it was about
422 collective action to lobby for changes in transport and mobility. There was a feeling that these
423 groups should move beyond traditional tokenistic “nodding shops” and should be more about
424 “building relationships” with older people as opposed to “hit and run” consultations or “complaint
425 fielding”. There is also a need to draw on a wider sample of older people in such groups and not just
426 involving the regular, confident groups of older people who are often involved in public groups.

427 Older people felt an easy solution and quick win would be to run a community toilet scheme where
428 local businesses allow the public to use their toilets in exchange for a fee from the local authority.

429 Older people wanted extra information at bus stops and onboard buses to help with their journey. In
430 particular they wanted audio information to accompany any visual information which could be quite
431 hard to see for many people. Two concepts were discussed, audio bus stops and talkative bus stops.
432 Audio bus stops, announce times of next buses and are set up as beacon and hub so only connect
433 with people who need it (on mobile phones for those blind or partially sighted for example).
434 Talkative bus stops are fitted with location-based services, sensors/beacons, mobile apps and
435 intelligent digital signage. People will check-in to their bus stop and let bus operators know they are
436 waiting for their service.

437 Older people wanted crossings that allowed extra time for them to complete before going back to
438 green to allow traffic to proceed. Solutions discussed included technology assists such as having a

439 swipe card to use at the crossing, as is found in Singapore, and an app which alerts the crossing to
440 give extra time and to simply using infra-red technology or zebra crossings to lengthen the time.

441 *Mixed feelings*

442 There were mixed feelings around two concepts, making pavements clutter free and providing
443 courses for older people to help them give-up driving and move to other transport. Older people felt
444 increased enforcement and even a change of law to help make pavements free from obstacles
445 including street furniture and bins but especially cars and cyclists, though many acknowledged this
446 was not easy to do. Older people felt a course to help older people give up driving and use public
447 transport would be of some use but different groups gave different responses to the effectiveness
448 and ease with which it could be implemented. A mixed response included feeling people wouldn't
449 want to do the course,

450 "If my dad were alive when he had to give up his car I wouldn't like to tell you what he'd
451 say" (Bury, female, focus group)

452 *Strategy plans*

453 Solutions that were felt to be highly effective but were not at a stage they could immediately be
454 implemented were placed in a category that would require a strategy before they could be
455 implemented. These included two solutions which involved older people in the solution itself. For
456 example, older people would very much welcome the opportunity to audit their own local area in
457 terms of barriers to transport, but having a system where that went beyond tokenism and got
458 listened to by people who could make a difference would require changes in strategy, policy and
459 possibly law. Similarly, reforming local bus services and allowing more local user involvement in
460 running the services was appealing but would require more strategic planning to work. General
461 improvements to pavements, keeping them well maintained, wide enough and having enough
462 crossing points, was a third area, albeit one of less direct involvement of older people, where more a
463 more detailed strategy or plan was needed to reach the goal.

464 *Longer term plans*

465 These were the solutions that older people felt would have moderate success but would require
466 longer term planning. At the top of such a list was a buddying support system.. A support system
467 for new users of public transport or walking, in terms of a buddying system. Older people thought
468 having a scheme where confident users could help less confident users. This was followed by an
469 Independent Transport Network (ITN). One way of overcoming the burden and retaining a form of
470 independence is available through options such as volunteer car-pooling and journey-sharing
471 (Whelan et al., 2006). Freund (2003) proposes an innovative alternative where older people who can
472 no longer drive their own cars "sell" their car to a not-for-profit community-based organisation, the
473 Independent Transportation Network® (ITN). The car provides credit and funds volunteers who
474 provide door-to-door transport, in a donated car, in a close approximation to the flexibility and
475 comfort the individual used to enjoy as a driver (Brown, 2010). ITN schemes are now available in
476 many states of North America. Older people tended to think this was of generally limited benefit,

477 with plenty of alternative opportunities to mobility and would rather have seen public transport
478 improved. Older people did not really see the value in local emissions plans in relation to ageing,
479 with direct and tangible changes in provision being preferred over a wider action plan. Many older
480 people in the focus groups did not link pollution to an issue older people would have anyway. Traffic
481 calming was suggested by participants themselves in two of the groups, Salford and Wigan, but in
482 both cases although it was felt they were successful at reducing speeds there were concerns about
483 reducing emergency vehicle time, causing pain to older people who may have long-term pain, such
484 as back pain and making bus journeys more uncomfortable or even meaning bus routes would be
485 altered away from roads with them on, with examples given. Both groups concluded they were a
486 solution to be used if other solutions had been unsuccessful.

487 *Nice to have*

488 Older people discussed a one-stop shop of information on transport services and provision for older
489 people themselves and for people working in the field that might include statistics, latest reports,
490 share best practice, include blogs and advertise events. Older people felt this would be easy to
491 implement but be of limited value. To have any effect at all it needs to be written by older people.
492 There was a feeling among the older people themselves that it was of less value to older people who
493 were less likely to have the Internet or be using smartphones in the first instance.

494

495 **Discussion**

496 In prioritising key mobility barriers, there was more agreement between groups on the
497 neighbourhood level and the order of priority was similar across groups. This is interesting given the
498 opportunities that exist for local variation, natural elements such as topography and historical
499 elements such as pavement and road layouts, which even if present is obviously not influencing
500 older people's ability to use space differently. Moreover, people felt that poor quality pavements,
501 sharing the pavements with others and poor quality crossings (slight higher priority over timing than
502 location). Speeding traffic was an issue everywhere except Tameside and lack of benches and toilets
503 the next most important and prominent issue everywhere but Salford. As might be expected these
504 key and most prominent issues are all very practical barriers and are to do with concerns over safety,
505 sharing and continuity of activity. People are very worried about having accidents in terms of having
506 a fall, associated with poor quality surfaces, about being knocked over by passing cyclists and
507 mobility scooters and crossing the road and coming into conflict with vehicles. The high concern for
508 falling on pavements suggests pedestrian accidents involving falls should be collected and counted in
509 the road accident statistics, even when no other vehicle is present, echoing calls by Methorst et al
510 (2017). This would help the issue gain prominence and aid local authorities in prioritizing and
511 resource interventions and solutions to it. Participants did not readily see an easy solution to the
512 issue of poor pavements with auditing the area and improving pavements being seen as being a
513 lower priority solution requiring strategic investment.

514 Sharing the pavement with others is a known barrier (Musselwhite, 2018) but this research
515 emphasized just how important this was and discussed different situations and contexts of those

516

517 barriers. The concern again was largely over safety, being knocked over by cyclists or mobility
518 scooters using the pavement, especially when they felt they would not always be aware of their
519 presence. Cars parked or too much street furniture would push them into the road to complete
520 journeys adding to the dangers. The concern for getting knocked over by cyclists seems unfounded.
521 Of the 448 pedestrians killed in 2016 in England (DfT, 2016), only 3 were caused by cyclists and only
522 108 pedestrians were seriously injured by a bicycle, compared to 4,156 by a car. Older people are
523 most worried about the impact of cars when crossing the road, even at formalised pedestrian
524 crossings. The findings here echo previous research on how a poorly sited crossing (Lord et al., 2010;
525 Zijlstra et al., 2007) or crossing with a lack of time to cross the road (Asher et al., 2012; Musselwhite,
526 2015b; Newton and Ormerod, 2008) can be a barrier to older people walking. This research shows it
527 is a high priority issue. Older people discussed improving crossing times by having better infra-red
528 technology to aid crossing, not allowing the lights to turn back green for vehicles to proceed until the
529 pedestrian was out of the carriageway and clear of the crossing. Holding a card or possessing a
530 mobile phone app which alerts the crossing to give extra time was also discussed as potential
531 solutions to this that would be relatively cheap to install.

532 Lighting and pollution was less of an issue, with both being noted only as issues in Wigan. Previous
533 research discusses issues with lighting effecting older people's feelings of safety (Shumway-Cook et
534 al., 2003). Given the urban nature of the work it is likely most roads and pavements will be well-lit
535 and different level of priority might be found in more rural areas without street lamps. It is unknown
536 why this was more of an issue over lighting in Wigan; an audit of the lighting by older people would
537 help offer clarity on the issue here. Similarly data on air pollution for the Greater Manchester area
538 offers no solution as to why people in Wigan would cite pollution as more of an issue than other
539 areas had done. Again, microscopic level audit would help identify specific place based experiences
540 of pollution

541 In contrast to the homogeneity seen at the neighbourhood level, there was high local variation in
542 the most important and most prominent issues on local public bus use, showing how varied the
543 services are between different locations. It is not all that surprising to then find older people wanting
544 greater parity across services with an integrated local authority approach controlling the quality of
545 the bus services on offer. They acknowledge this would take a while to happen, but believe it would
546 make significant impact. Hence, moves to bring greater control over local public transport is
547 recommended to be pursued. This shows that an age friendly transport model developed by
548 Musselwhite (2016) needs to perhaps dissect the categories into further sub-categories to help
549 explain variations in the area better. Perhaps the use of Musselwhite and Scott (2019) mobility
550 capital could be used to show differences in infrastructure, social, cultural and individual capitals can
551 explain variances at different levels. For example, the differences in bus service provision in different
552 areas being an example of infrastructural capital available to people. Differences in responses were
553 largely due to location, but this is likely to be a facet of the methodology where the focus groups
554 tended to mask these differences as discussions took place and it is likely age, gender and access to a
555 car could result in different responses. Future research may like to look at using interviews to look at
556 such differences or focus groups set up around age, gender and access to a car within each location.

557 There was strong agreement, however, among all groups, with the exception of Salford, that the
558 most important issue was bus driver attitude and behaviour, where they have an awareness and a
559 positive attitude towards older people's issues, which has been highlighted as an issue in previous
560 research (Age UK London, 2011; Broome et al., 2010; TfL, 2009). Again fear of falling is an issue with
561 concerns about the driver driving off before the person has sat down or passengers feeling they
562 need to stand while the bus is travelling before it reaches a stop to show to the driver they need to
563 alight. Further exploration of this issue in the solutions section of the focus groups echoed this as a
564 key issue that needs and could be resolved quickly and effectively with staff training. It is suggested
565 such training is extended to other public transport sectors, for example railway employees on train
566 services and stations, and moves beyond just training frontline staff to management too which
567 would help embed the attitude in the culture. Although there are examples of such training,
568 research is needed into what such training should contain and how it should be delivered and
569 whether such training would indeed be effective. Following the research into such training, it is
570 suggested that "kitemarking" the quality of such training would help with parity and that older
571 people should be involved in its writing and delivery.

572 As Broome et al (2010) found in Australia, the information provision about bus services is important
573 to older people. Exploring this again in the solutions section echoed the importance of bus stops
574 presenting the information in different formats, for example using audible next bus information for
575 those who struggle to read the timetables. Lack of seating and poor quality bus stops were less of an
576 issue but still important. The bus itself not lowering to allow people on was noted as a barrier, as
577 had been found previously with the TfL (2009) research; although given this study is 9 years on from
578 then it is a shame to see technology had not improved much and can still fail.

579 In the UK, older people get free travel after 9:30am in the morning, in order to help disperse people
580 using the buses away from peak times. The suggestion is that older people's travel is less likely to be
581 needed at those hours, and there was some acknowledgement of that from participants. However,
582 our research suggested that there were occasions where this is needed, especially around
583 healthcare appointments at hospitals. Perhaps, it is more of a case of joined up thinking where
584 healthcare takes more responsibility for how patients access appointments, moving them to outside
585 of peak hours or co-ordinating patient transport.

586 Community transport was hugely valued but there were two main concerns, that it was not clear
587 who could use such services, echoing previous research (Musselwhite, 2018c; Parkhurst et al., 2014;
588 Ward et al., 2013) and that it is inconvenient and unreliable transport with some examples of it
589 running late, of not giving enough time for people at destinations and difficulty with booking.

590 In terms of policy and practice based people wanted to have more say in their local transport. There
591 was an overwhelming feeling that transport decisions were made with little regard for the people
592 who they effect and that methods of consultation were inadequate. In the solutions this was picked
593 up with various ways of getting more involved, including auditing, using tools such as Older People's
594 Residential Assessment Tool (OPeRAT; Burholt et al., 2016) and formation of groups, but the
595 importance of feedback on their involvement from the decision makers was crucial.

596 There is some interesting insights into how not all transport issues are perceived as an issue by older
597 people. Pollution is an example of this, known to be an issue for people with increased respiratory
598 and heart problems and more likely to effect older people, yet not seen by the people in the groups
599 as much of an issue. This highlights another theme found throughout the groups, a constant tension
600 between older people as frail and needy and older people as resourceful, proactive and engaged.
601 This makes the transport offering difficult to achieve, schemes aimed at plugging deficits seen in
602 older people can be met with derision, like the support group for those giving up driving, but doing
603 nothing can also be met with a feeling of being left out, of being misunderstood or ignored. This is
604 why more involvement of older people along with more dialogue between transport policy and
605 providers and older people is needed.

606 **Conclusion**

607 The research has been successful in developing a priority order for the key issues and solutions
608 facing older people with regards to mobility and transport, but it would be interesting to repeat this
609 research in different locations to examine whether similar patterns emerge. The findings suggest
610 neighbourhood level issues for walking and cycling are similar across different locations, but that
611 public and community transport issues vary between locations. It would be interesting to see how
612 far such findings could be generalised to areas outside of Greater Manchester. The areas are typical
613 of large towns close to a large metropolitan area, but how far these might be generalised for
614 suburban or rural areas would be interesting to examine. For example, would rural areas where
615 there are fewer pavements and fewer bus services find similar prioritisation? In addition, it would be
616 useful to look at disaggregating the findings by background for example by age, gender, access to a
617 car or long-term condition, for example, or by mobility capital (Musselwhite and Scott, 2019) to add
618 extra granularity to the findings. A wider sample of older people would also be useful. The research
619 naturally engages with participants who are socially adept and already motivated to want to make a
620 difference, therefore the emphasis on a solution around getting older people involved in helping
621 shape transport decisions might be skewed by those who like getting involved in civic affairs.
622 Nevertheless, there is a growing emphasis on citizen involvement and co-production with planning
623 and design of neighbourhoods (Buffel, 2018; Buffel et al., 2015) and transport is naturally part of this
624 process, though has largely been ignored from such debates until now.

625 The success of the project is shown in that the findings have been developed into recommendations
626 for Transport for Greater Manchester (see TfGM, 2018). These involve those stemming directly from
627 this research including: (1) Involving older people in decision making about their transport and
628 mobility; (2) Improving accessibility of transport, including pavements and public transport; (3)
629 Working in collaboration with the health sector to promote active travel; (4) Giving public transport
630 staff better training; (5) Better promotion and coordination of community transport and; (6) Making
631 sure walking and cycling is key to developing age friendly communities

632

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