Older People and Public Transport

Challenges and Chances of an Ageing Society

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1 Executive summary

Europe will be challenged with comprehensive demographic shifts within the coming decades: The EU25 population aged 65 and over is expected to double between 1995 and 2050\(^1\). This will have a massive impact on public transport. Demand in the peak hours will decrease and authorities will have to respond to the needs and aspirations of older passengers. Public transport will be confronted with a double challenge: On the one hand, motorisation is on the rise, particularly among older women, so modal shifts towards the private car can be expected. On the other hand, many older citizens will not find it comfortable or will not be able to drive themselves and not only for health reasons: With increasing fuel costs and growing social inequalities, particularly single senior citizens will have to re-think car ownership. Therefore, public transport will have an increasingly important role to ensure independent living and social inclusion of large parts of society.

The objective of this study is to identify the challenges and chances of ageing societies for public transport, to analyse how European public transport authorities and operators cope with it and to develop meaningful recommendations which facilitate it for the public transport authorities to develop further actions. These are illustrated by best practice examples from different European cities.

To achieve this, a three-step approach was chosen: Information from related research projects was collected and analysed, forming the base for a questionnaire campaign. After the feedback was received, 6 cities and agglomerations have been selected for site visits in order to deepen findings and to identify good practice which can serve as example for other cities.

The main results of the research work are in the following:

It was rather difficult to define who is an old person and thus to identify common requirements and needs. Older people can be very active and fit, but can also suffer from bad health and decreased mobility. The study therefore addresses people beyond working age (starting at 55 years) and tries to concentrate more on abilities and grade of activity than on the actual age.

The coming decades will see the ageing of generations accustomed to car use and with travel-intensive lifestyles. It is expected that people will try to maintain their high mobility levels. They will make more and longer trips than comparable age groups today. This is partly due to an increasing motorisation of older people, particularly among women.

\(^1\) Cf. EUROSTAT news release 129/2006 (2006)
As a consequence, the number of captive users will decrease. However, public transport will be important to maintain the mobility of older people: It is a comfortable alternative to overcrowded streets and will contribute to maintain independency when age-related constraints make driving difficult in later life. With increasing mobility costs and cutbacks in public welfare, public transport will become crucial to maintain quality of life and active participation in society. This implicates a mutual dependency: Public transport relies on older people to gain revenues, while older people will need it to maintain personal mobility.

Thus, the need for action covers two main areas: First, the public transport system has to be adapted to the needs and expectations of the increasing share of older people. Secondly, public transport will have to attract older passengers and also familiarise them with the usage of the services.

Transport authorities need to know the needs and expectations of older people on a local level. Therefore, more efforts in research and consultation are necessary. It is important to involve older people and their representatives in the decision processes, as well as following a clear communication strategy (e.g. ombudsman).

The image of public transport among older people needs to be improved. Many older people seem not even to be aware of the mobility opportunities that buses and trains are offering them. This should go hand in hand with focused marketing in order to attract more senior passengers. It should be considered how to make non-users familiar with public transport – using for example trainings, events or personal marketing.

It is crucial that staff is approachable and public transport is easy to use: Even though older people get more and more familiar with technical devices, many older (and also younger) people strand at complicated ticketing machines or complex tariff schemes, particularly when they are no frequent users. Staff is important for older people, as it informs, assists and improves safety and security.

Vehicles & Infrastructure: Many older people suffer from age-related deficiencies and are in general more sensitive to physical strains. From this emerges the need to apply existing accessibility guidelines more consequently now and in the future. Particularly interchanges are an important topic (orientation, long distances).

Apart from being easy to understand and to purchase, tariff and ticketing schemes should find the right balance between economical and social issues. This is clearly a sensitive issue and authorities are also dependent on national frameworks, so no clear recommendation can be provided.

Fear of accidents and harassment, but also misbehaviour of staff are important issues among senior people and often
prevent them from using public transport. This challenge should be answered by implementing training programmes for passengers and drivers, improving vehicles and stops and hiring additional staff.

The ageing of society will have a large impact on the planning of services. In the short run, it is necessary to enlarge and improve existing demand-responsive services. In the longer run, new approaches will be necessary in order to balance proximity of stops, speed, cost-effectiveness and service levels.

Pre-trip and on-trip information has to be adapted to the requirements of older people. This does not only apply to technical issues such as providing visual and audible information and readable font sizes. It is also crucial that information is easy to understand from a cognitive point of view.

Older people, particularly when they are non-frequent users, pay much attention to service quality. Punctuality and cleanliness should be ensured in order to attract them as passengers.

The requirements and aspirations of older people go far beyond the classical accessibility context and are not primarily of a technical nature. In consequence, it will be difficult to meet the future challenges with (rather technical) accessibility guidelines. Thus, integrated concepts are necessary that combine “hard” aspects such as infrastructure and vehicles with “soft” aspects such as service, safety and communication.

When addressing the mobility of older people, economical and accessibility-related aspects are an issue, and both challenges and chances are emerging. The ageing society offers new market opportunities for public transport. For older people on the other hand, it can be a comfortable and non-exhausting way of travelling which helps them to maintain autonomy until high age.
2 Introduction

Who is an old person? Is it a person beyond a certain numeric age or beyond working age? Are abilities and activities crucial or is it the individually perceived age? Various approaches can be found and are valid. In terms of mobility behaviour, there is a clear difference between the working population and retired people. Therefore, we will focus on people beyond working age in this study. As this definition is not often to be found in statistics, we use in parallel the age limit of 55 years. At this age, the share of retired people equals the share of working people in European countries. In addition, the number of people with locomotor disabilities starts to rise notably at this age (cf. Figure 3).

Older people want to lead an active, mobile and independent life. It is crucial to them to be able to care for themselves as long as possible and to participate actively in society. Public transport is a safe, comfortable way for older people being on the move. It helps them to maintain independent mobility in later life.

The objectives of this study can be characterised as follows:

- To define the challenges of an ageing society for the public transport sector,
- To find out the main characteristics of the mobility of elderly people and to identify the main issues which will influence mobility behaviour in the coming two or three decades,
- To outline age-related personal constraints, needs and expectations of older people in order to enable the public transport sector to consider them,
- To analyse how transport authorities and operators all across Europe assess the challenges of ageing societies and which measures and policies they have developed in order to cope with it,
- To identify measures and policies all across Europe that can serve as best practice to improve the mobility of older people and to make public transport more attractive for them.

A three-step approach was followed in order to achieve these objectives. First, desktop research has been carried out and relevant literature and documents from research and demonstrating projects was analysed. A questionnaire has been developed and was sent out to more than 150 European cities and agglomerations with a feedback of 33 questionnaires, whereof 30 could be analysed. Based on this information, 6 cities and agglomerations have been selected for a site visit in order to gather further information, particularly on best practice
examples. Birmingham (UK), Göteborg (SE) Lille (FR), Manchester (UK), the Rhine-Ruhr Area (DE) and Salzburg (AT) have been included in this stage of the study. Transport professionals, older passengers, representatives of user groups and researchers have been interviewed.

This report starts with an overview of recent trends in demography, urbanism and society and demonstrates their relevance for older persons’ mobility. Age-related mobility constraints are also described in this section.

In the following chapter, the mobility of older people and recent trends are analysed. Case studies from different countries show the various trends and draft a scenario how mobility behaviour could develop within the coming 20 or 30 years.

The perspective of older people on urban mobility and public transport is described in the next section, showing how the users perceive services and which improvements they wish.

Based on the results of our field work, the perspective of public transport authorities and operators is analysed. This includes statements on expected changes with the ageing of society, information on implemented and planned measures and their effectiveness.

Subsequently recommendations to local public transport authorities and operators are provided on six sheets. They include selected good practice examples from the visited cities and beyond. In subsequence, recommendations on the National and European Level can be found.
3 Recent Trends with impact on Older People’s Mobility

This chapter aims at giving an introduction on expected demographic changes and other relevant trends in society and urbanism. Many factors and trends are influencing mobility of older people, both “hard” factors (such as resources, health condition, infrastructure, the weather, etc.) and “soft” factors (preferences, lifestyles, cultural issues, personal perception of the hard factors, etc.). This section will deal with the most influencing trends.

3.1 Demographic Shifts

Europe is facing tremendous demographic changes in the coming years: With the ‘Baby Boomer’ generation entering retirement age, increased life expectancy and decreasing birth rates, the proportion of older people will increase in all European societies.

The current fertility rate in the EU-25 is at 1.5 children per woman, well below the replacement rate of 2.1 to stabilise the population size\(^2\). On the other hand improved medical provision and quality of life lead to an increased life expectancy. These general trends are intensified by the large number of “baby boomers” born in the 1950ies and 1960ies and entering retirement age over the next years.

At the age of 65, men can expect to live 10.1 more years of a healthy life without disabilities, and women 10.7 years respectively (EU-15 in 2003). From those 65-69 years old in the EU-25, 8.2% are still working\(^3\).

The share of the 55+ population in Europe\(^4\) is forecasted to rise from 28% in 2005 to 40% in 2035 (cf. Figure 1). The dependence ratio\(^5\) in the EU-25 (the number of people aged 65+ compared to the number of people 15-64 years old) is expected to double and reach 51% in 2050. While the group of the “young old” (55-64) will only grow for the next approx. 20 years, the share of “very old” (75+) citizens will grow steadily.

\(^2\) Cf. COM (2006) 571, 12.10.2006
\(^3\) EUROSTAT (2006)
\(^4\) U.S. Bureau of Census (2006), international database. Figures exclude the CIS and Turkey
\(^5\) EUROSTAT (2006)
However, the ageing of the population will not have the same character and dynamic all over Europe. In the year of 2035, the population aged 65 or more will make for up to 28 – 33% in many European countries such as Austria, Bulgaria, Germany, Italy, Slovenia and Spain. The “youngest” six countries of the EU-27 (with 20-23% older than 65 years) are expected to be Cyprus, Hungary, Ireland, Luxembourg, Romania and Slovakia. All other EU-27 countries as well Norway and Switzerland will have rates around 25%.
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<tr>
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<th>Share of Population aged 65 and over in %</th>
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<td>Austria</td>
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<td>Belgium</td>
<td>22.9</td>
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<td>Bulgaria</td>
<td>15.5</td>
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<td>Czech Republic</td>
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<td>Cyprus</td>
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<td>Estonia</td>
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<td>Finland</td>
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<td>France</td>
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<td>Greece</td>
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<td>Hungary</td>
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<td>Ireland</td>
<td>16.7</td>
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<td>Italy</td>
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<td>Latvia</td>
<td>20.7</td>
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<td>Lithuania</td>
<td>21.0</td>
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<td>Luxembourg</td>
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<tr>
<td>Malta</td>
<td>23.5</td>
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<tr>
<td>Netherlands</td>
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<tr>
<td>Norway</td>
<td>14.8</td>
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<td>Poland</td>
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<td>Portugal</td>
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<td>Romania</td>
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<td>Slovakia</td>
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<td>Sweden</td>
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<td>Switzerland</td>
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<td>UK</td>
<td>20.4</td>
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3.2 Societal & cultural issues

**Single households:** An increasing share of older people is living alone. This is due to societal and cultural changes (divorces and the decrease of the multi-generation households). As a consequence, elderly people lack the support from their relatives or partners (e.g. getting a lift to the next store) and have to travel to see their families. For single households, it is also more difficult to maintain a car.

**Cultural diversification of society:** More and more people with immigration background are becoming old in our societies. Particularly in the Northern and Western European countries, people who immigrated in the 1960ies or 70ies are reaching retirement age and most of them are likely to stay in their new home countries. Mobility behaviour and needs of the immigrant pensioners require particular attention from transport authorities and operators. Language and cultural barriers often prevent old migrants from using public transport in a suitable way. Often they are not informed about special offers for senior passengers or may feel it is difficult to make their voice heard. They might also share the attitude “not to ask too much” from public authorities. It is known that old people with migration background are less likely to own a car, but are more reliant on public transport than the average population. However, there has not been much investigation concerning this user group on a scientific level.

**Activity patterns & lifestyles:** As a result of better health, higher education and the societal processes described above, seniors spend their time differently from previous generations. This does not only include more activities related to sports, culture and recreation: Seniors also devote their time to volunteer activities or help their relatives and friends. In addition, growing heterogeneity and diversity can be observed. Not all older people tend to become materialistic “silver agers”, lifestyles of senior people today are moving away from old stereotypes. In general, an increasing number of wealthy, active and demanding older people can be expected, while there will be a large group of modest seniors at the same time. It is getting more and more difficult to define a homogeneous group of “old people”. Personal preferences are increasingly influencing activity patterns, rather than classical determinants such as actual age and health status.
3.3 Financial resources

For long years, old people have been regarded as poorer than the population average and Public Transport was necessary to provide them with affordable mobility. Nowadays, we have to take a more differentiated look at the financial situation of old people in Europe:

**There are big differences between the particular countries and regions:** For example, more than 20% of the people aged 65 and over are considered as poor in the United Kingdom, but only some 3% in Sweden (cf. Figure 2). This means that poverty of older people is not always in line with the overall social situation in the particular countries. Even though they are not included in this graphic, we need to put emphasis on the older people in former socialist countries: As their pensions are very low while the cost of living is increasing strongly at the same time, many older people suffer from poverty in these regions.

**Figure 2: Poverty rates among people aged 65 and over (2000)**

SHARE final report (2005), Data: Luxembourg Income Study

**Rising fuel costs will make the private car more expensive:** Many people, not only the old ones, will compensate this by avoiding trips or shifting them to more economic modes – such as Public Transport. Particularly for single seniors, it could become difficult to maintain a car of their own.

**Decrease of public provision:** The society systems are becoming more and more unable to maintain the high levels of provision, concerning both pensions and health care. This means that there is more responsibility given to the individuals to care for their own retirement provisions. Due to restructuring processes of the economy, a considerable number of employees do not work anymore even before they reach retirement
All these trends will definitely have negative impacts on the financial situation of old people in Europe. In general, it can be expected that the social gaps in most European societies will tend to grow over the next decades.

3.4 Urbanism

Land use patterns have an important influence on our mobility. In context with the mobility of senior persons, the following aspects are worth consideration:

**Concentration and urban disintegration processes in the retail & service sector:** During the last years, it has been observed all over Europe that small stores in city centres and residential areas had to close. At the same time, huge supermarkets started to develop at the city edges and along arterial roads. Public and semi-public services also are passing trough restructuring processes, meaning that for example post offices or smaller hospitals have been closed and consolidated in larger units. Without being able to analyse all these processes in detail, two points can be stated: The average distance from "home to store/ service" is growing and it is becoming more difficult to reach them by foot, which is the mode preferred by seniors. Additionally, new facilities are often situated in commercial zones, far away from the city centre and suburban high streets. These areas are outside the reach of walking/ cycling and difficult to integrate into the public transport network. As a result, these developments strengthen the role of the private car for daily life.

**Suburbia is growing old:** In our agglomerations, an increasing share of the population lives in suburban and peri-urban areas, where it is more difficult to provide frequent public transport services while distances are often too far to walk or cycle. People living in these areas use the private car more frequently than in central urban areas with higher population density. Being built in the 1960ies and 70ies, these suburban settlements not only show a rather car-dependent lifestyle, but are also growing old rapidly in the coming years. Suburbia is the home of the baby boomer generation. As only few owners are likely to sell their houses and to move to areas with better infrastructure, it will be an important question of the future how to enable the suburban old to live independently when driving becomes difficult or even impossible.
Conclusion of Chapter 3

- **European societies will see dramatic demographic shifts within the coming decades.** Due to decreasing birth rates and raised life expectancy, the share of older people in our societies will increase.

- **Societies will diversify.** Many people with migrant background will reach retirement age. In addition, diversification of lifestyles will make the older generation more heterogeneous than ever.

- **Due to major changes in the society systems,** the responsibility for financial security will pass over to the citizens. This could provoke growing gaps in society. This does however not exclude that maybe a growing number of wealthy seniors could be expected. Also the costs for (car) mobility will increase with fuel costs. However, the situation can be different across Europe.

- **Many older people will live in suburban structures,** where it is more difficult to provide good public transport. Furthermore, decentralisation and concentration of retail and services will have an impact: It will become more difficult to organise life without motorised transport.
4 Facts on Mobility of Older People

In this section, the mobility of older citizens in European countries will be analysed. First an introduction on age related mobility constraints will be given. Than, mobility behaviour and personal mobility conditions will be described using data on car availability, driving license ownership, number and purpose of trips and of course the modes that have been used.

For car availability and driving license ownership, data for 5 European countries were available from the MOBILATE survey. For mobility behaviour, meaningful data were available for France, Germany, the Netherlands and the United Kingdom. It is of course difficult to compare two countries directly. Methodology, sample size and year of the survey differ too much. Therefore, we concentrated on finding out if the characteristics and trends in seniors' mobility are similar in the 4 countries.

Based on the data available from Germany, France and the Netherlands, a simplified Do-nothing scenario was developed to show how mobility behaviour of older people could vary within the coming 20 or 30 years.

4.1 Age-related personal constraints

The likeliness of impairments which affect mobility is increasing with age. While only 10% of the 45 to 54 year olds in the EU suffer from locomotor disabilities, the figure is more than 20% of the 65 to 74 year old and more than 50% for persons aged 85 and beyond (cf. Figure 3). This means that there is a clear link between age and disability. It is also worth mentioning, that above the age of approx. 75, women are more likely to suffer from such a disability than men.
Figure 3: The link between age and locomotor disability (EU)

The age-related personal constraints can be classified as follows:

**Senses**: Vision and hearing losses affect many seniors. This causes difficulties using all transport modes and can lead to changes in mobility behaviour, such as not driving at night or during bad weather conditions. When using Public Transport, it can become difficult to read timetables or to understand announcements. Orientation in vehicles and at stations/stops is also affected.

**Functional constraints**: This term relates to all constraints directly related to body movement. Being caused by different diseases and having different characteristics, this point includes difficulties getting on/off the vehicle, standing safely inside the vehicle, using ticket machines/validating tickets, carrying things etc.

**Physical stress**: A point that is often forgotten when addressing the mobility of old people. Even when they suffer from no particular disease, travelling always means an effort to them. Changing the bus, coping with deviations or simply being at the station at the right time is much more exhausting for seniors. In reality, a senior could refuse to make a trip by Public Transport, because (s)he has to change vehicles various times - even if these are accessible.

**Intellectual/ cognitive constraints, language and speech**: Even when they are not mentally disabled in classic terms, trip planning decisions, ticketing, orientation in the stations and on-trip are more difficult for senior passengers than younger ones. Information may appear confusing or insufficient to them; particularly when challenged with service deviations (e.g. a train departs from a different platform than scheduled) old people
may feel unsettled. These effects are boosted by the fact that in many cases there is no service personnel available for direct communication. These non-physical constraints have been underestimated for a long time.

**Psychological constraints:** This is a rather complex headline. First, it addresses the different fears of senior passengers: The fear of falling and accidents, but also the fear of rude behaviour by staff and other passengers or when waiting at a deserted bus stop at night. This point also relates to the fact that seniors are less flexible and able to adopt new behaviours and techniques. More than other passengers, they may feel unsettled (“Am I on the right bus, do I have the right ticket?”) and more likely to be discouraged by bad experiences. For example, once having had an accident on a bus trip, it will be hard work to convince this person to use Public Transport again.

**Deceleration of all activities:** It is a common attribute that older people are slower in their movements, cognition and reaction. As a consequence, public transport is often too fast for seniors. This applies to the physical level, when there is no time to sit down before the vehicle starts moving or the platform has to be changed in short time. But we have also to take into account the mental or decision-making level. For someone usually well prepared for a trip, unexpected events asking for a quick decision (even it is only a small one) can be highly challenging.
Table 2: Age-related personal constraints

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<th>Physical constraints</th>
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<tbody>
<tr>
<td>• Loss of mobility of limbs</td>
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<td>• Loss of physical power</td>
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<td>• Lower endurance and increasing fatigue</td>
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<tr>
<td>• Higher stress sensibility</td>
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<td>• Reduced functionality of inner organs/chronic illnesses</td>
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<th>Sensory constraints</th>
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<td>• Visual impairments</td>
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<td>• Hearing problems</td>
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<th>Cognitive and psychological constraints</th>
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<tr>
<td>• Loss of ability to coordinate movements</td>
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<td>• Reduced and selective cognitive processes</td>
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<td>• Reduced multitasking abilities, loss of flexibility</td>
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<td>• Lower concentrativeness</td>
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<td>• Higher stress sensibility</td>
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<td>• Cognition</td>
</tr>
<tr>
<td>• Reaction</td>
</tr>
<tr>
<td>• Decisions</td>
</tr>
</tbody>
</table>

*Rupprecht Consult (2006)*

Often, there is only a partial loss of abilities, meaning that senior persons have hearing problems, but are not deaf or have functional impairments but are no wheelchair users and so on. It is important to keep in mind that the decline of mobility of limbs, sensory and cognitive abilities start long before retirement age and can be seen as a slow process. Sooner or later, these ability losses can reach a level where they have a direct impact on mobility.

Unlike in the case of many truly impaired passengers, there are less particular barriers for many older passengers. It is much
more the **sum of constraints and efforts on the whole trip chain** that is crucial. A gap of 10cm for example can be a real barrier for a wheelchair user, but many older persons would not notice it at all. On the other hand, to have to change two times on a trip in a perfectly accessible network would be possible for a (younger) wheelchair user, while an older person would find this too exhausting and too difficult to manage.

When assessing the impact of age-related personal constraints on the usage of public transport, the **perception** of the older persons themselves is crucial. Often, it is also the bad image of public transport (“Only the mob is using the bus”) or an under-estimation of one’s own abilities (“Will I manage to purchase the right ticket?”) which makes people use the private car or not to do a trip at all.

Many older people respond to restrictions by developing **compensation strategies**. This enables them to participate in traffic without running the risk of accidents or becoming exhausted. These strategies follow the principles of **selection** (e.g. by avoiding bus trips at peak hour), **optimisation** (e.g. combining the trip to the doctor with shopping) and **compensation** (e.g. being early at the bus stop in order to avoid hurry)

### 4.2 Car availability and driving licence ownership on the European level

From 1990 to 2004, the number of private cars grew by 38% in the EU-25. In some countries, particularly in Central, Southern and Eastern Europe, the numbers are increasing even faster: the Baltic States, Greece, Malta, Poland and Portugal all saw growth rates around 100% or more. But also in highly motorised countries such as France, Germany, Italy and the UK the number of private cars grew around 25% or more.

But what about the older generation? Do these macro-trends apply to them, which factors influence car availability among them? A survey carried out during the EU co-funded MOBILATE project (1999-2003), found that there are some differences in car availability across Europe: Referring to urban areas, a car was available in 58% of the senior households in Germany, 53% in the Netherlands and 60% in Finland. In Italy, more than 80% could use a car as driver or passenger. Contrary to this, only 36% of the Hungarian seniors had access to a car (Figure 4).

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6 VCS / ATE (2006)
7 DG TREN/Eurostat (2006)
The study also showed a strong dependency of car ownership on the following factors:

- Household status (single/non-single)
- Age
- Gender

Only 7 out of 100 single women above the age of 75 had access to a car, while 86% of the 55-74 years old men living in multi-member households did so (cf. Figure 5). Many older women never applied for a driving license and used to ride as a passenger in their husbands’ cars. When their partner dies, many old women are dependent on Public Transport or support of relatives and neighbours.
Now that we are aware of the factors that are determining car availability among senior citizens in some European countries, we still do not know about the trends. Is car availability growing among seniors as rapidly as on the European average, or it is growing even faster? However, there are no data available on the European level. Therefore, we will analyse the situation in selected countries in order to better understand better the dynamics of the senior population’s motorisation.

Even though no data were available comparing car ownership, license ownership and age at the European level, one might assume that at least the main trends are similar in the remaining EU-15 countries. It is expected, that the motorisation of old people in the Central and Eastern European countries will stay rather low in the next 15-20 years. However, according to the level of the economical development particularly in the cities, assimilation to the Western European car availability/ license ownership rates can be expected even earlier.

*Note. Percentages; N=3934 respondents.*

*Mollenkopf (2005)*
4.3 Selected Mobility Data: France

Car availability and driving license ownership

As a survey carried out by CERTU between 1995 and 1998 indicates, some 90% of the men aged 65-69 and still approx. 85% of those 80-99 years old held a driving license, while only approx. 55% of the women aged 65-69 and only about 25% of the over 80 years old women did so (cf. Figure 6).

Figure 6: Driving license ownership (France)

CERTU (2001)

Parallel to this, also the motorisation rate is also lower among very old people: About 80% of the persons 65 to 69 years old own a car, but only some 45% of the seniors older than 80 years. Women in general show lower ownership rates than men, the differences are however smaller in the “younger” age groups. It is remarkable, that approx. 75% of the 64 to 69 years old women owned a private car about 10 years ago (cf. Figure 7). It is very likely that these numbers have increased in the meantime.
The results also show that older persons living alone are less likely to own a car than people living in bigger households.

Mobility behaviour

The daily mobility in terms of trips made on an average day declines with age: 65 to 69 year old French still make 3 trips per day, while those over 80 years old make only 2 trips. Particu-
larly after the age of 75, mobility is declining. Older women generally show lower mobility levels than men (cf. Figure 8).

French seniors make most trips related to shopping purposes (45%), but also leisure/socialising (33%) and different tasks (like visiting the doctor, accompanying other people etc., 21%) are frequent reasons for journeys. Among the very old people shopping related trips are becoming more important. This is often the only remaining activity for them.

When comparing the mobility behaviour, it becomes obvious that seniors are walking or using public transport for a higher share of trips than the average French (cf. Figure 9).

**Figure 9: Modal split of older people compared to the average (France)**

![Modal split of older people compared to the average (France)](image)

**CERTU (2001)**

Like in other European countries, walking is “the way to move” for older people in France, becoming even more important in very old age: While some 40% of trips are made on one’s own feet by those 64 to 69 year old, this goes up to about 60% for the very old (80+). Walking is the most important mode for the French over 70 years old. Parallel to this very old people are using private cars less frequently than the “young old” (cf. Figure 10).
Public transport has an increasing share from the “younger” to the “oldest” seniors, which means a share of 8% on the modal split of all older people.

These data must be interpreted as a snapshot and can not be scaled directly to the future: Not only the individual age (and health) of a person is determining his/her mobility, other factors like motorisation, sex, socio-economic and psychological factors also play an important role. From all these factors, motorisation is influencing public transport usage most: While French seniors without car use public transport for about one fifth of all trips, it is only a fraction in households with a private car (cf. Figure 11)

Due to their lower car ownership, older women in France walk or use public transport much more often than men. They often travel in cars as a passenger, not as a driver.
4.4 Selected Mobility Data: Germany

The example of Germany shows very well, that driving license and car ownership are less a question of actual age than of generation (birth year) and gender: While only some 30% of the women born between 1917-22 had a driving license in 1976 (being approx. 65 years old at that time), the figure was approx. 28% in 2002. In the cohort born 1929-34, the rates amount to around 50% for all years of the survey (1976, 1982, 1989 and 2002).

This means, that numbers of license ownership stay rather stable within a cohort and do almost not decrease with age. As generations with high driving license ownership are getting old, rates of over 80% for both older women and men within the next 20 years can be expected (Figure 12).

Figure 12: Driving licence ownership and cohort effects

A parallel phenomenon can be observed concerning car ownership (cf. Figure 13). It becomes clear that motorisation not a question of age, but of socialisation. As car/license ownership

Beckmann et al. (2005)
has an evident impact on mobility behaviour, we will have to divide between

- Age-related changes of mobility behaviour (retirement from job, health)
- And cohort or generation effects, reflecting the "mobility socialisation" of individuals

Figure 13: Car ownership and cohort effects

Beckmann et al. (2005)

The figures also suggest that there are catch-up effects among women, meaning that some of them start to drive rather late in life. On the other hand, some persons aged 75 years and beyond seem to give up driving.

As already stressed before, there is a clear link between car ownership, gender, age (or birth year) and household size. While 90% of the men (65-69) living in multi-person households can use a car on a daily basis, only 7% of single women aged 80 years and beyond do so (cf. Figure 14).
Older People & Public Transport

Figure 14: Car Availability in Germany (2003)

<table>
<thead>
<tr>
<th>age</th>
<th>men one-person household</th>
<th>multi-person household</th>
<th>all men</th>
<th>women one-person household</th>
<th>multi-person household</th>
<th>all women</th>
</tr>
</thead>
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<td>18 to 29</td>
<td>57</td>
<td>90</td>
<td>84</td>
<td>48</td>
<td>85</td>
<td>79</td>
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<tr>
<td>30 to 39</td>
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<td>95</td>
<td>90</td>
<td>72</td>
<td>93</td>
<td>90</td>
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<td>40 to 49</td>
<td>74</td>
<td>94</td>
<td>91</td>
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<td>65 to 69</td>
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<td>21</td>
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<tr>
<td>All</td>
<td>66</td>
<td>91</td>
<td>86</td>
<td>42</td>
<td>90</td>
<td>78</td>
</tr>
</tbody>
</table>

Table 1. Car availability by age group, household size and gender in Germany

Share of persons living in motorised households.
Source: socio-economic panel (SOEP) 2003 (own analysis).

Mobility behaviour

In relation to all the trips made, car usage is decreasing with age in Germany, while walking and public transport, but also cycling are increasing (cf. Figure 15) However, these figures must be interpreted with care: It is very likely that public transport usage will decrease in relation to rising car ownership. The figures also show that there is a clear link between household size and mobility behaviour: While single retired persons use public transport for 13% of their trips, only 5% of retired persons living with others do the same. This is a factor of 2.5, even though we can suggest that the majority of the single persons are women of high age without car.
Figure 15: Modal Split in Germany (2002)

It is very instructive to analyse the duration of all daily trips: While 45 years old persons pass an average of approx. 100 minutes each day in traffic, there is a leap at the age of 65-68 (retirement from work) and a rather stable phase until the age of 75. In later years, the duration sinks continuously, with less than 40 minutes remaining at the age of 85 years (cf. Figure 16).
4.5 Selected Mobility Data: The Netherlands

Car availability and driving license ownership

There is a clear link between car ownership and public transport use: Older people in the Netherlands who own a car are less likely to use buses and trams (cf. Figure 17). Even information was not available for all countries, it is very likely that this correlation exists across Europe and beyond. Therefore, it is an important aspect to analyse car and driving license ownership rates.
Driving license ownership among women 65-74 years old grew from 20% to 47% (men: 65% to 86%) from 1986 to 2001 and from 43% to 75% (men: 85% to 94%) for those aged 50-64. Personal car ownership developed slower, but while only 47% of the women 65-74 years old owned a car in 2001, it was 75% of the women 50-64 old (cf. Figure 18). Looking at the Dutch men (cf. Figure 20), we see that their licence ownership is much higher, but older men are less likely to drive than young men. Parallel to the women, the licence ownership rates of senior men have increased and it seems that some of them (both sexes) have acquired the license above the age of 50: A higher share of the persons born between 1922 and 1936 had a driving licence in 2001 than in 1986.

10 The percentages refer to whether a person is using public transport; they are NOT equal to the “modal split”. The decreasing percentage with age has to be seen in relation to the decreasing number of all trips. In fact, the share of trips made with public transport increases with age (see figures below).
While in 1986, only 18% of the women between 50 and 64 years owned a car, while the figure was more than 40% in 2001. The women born between 1922 and 1936 increased their car ownership rate slightly from 18% to 24% between 1986 and 2001.

Men are in general more often car owners in the Netherlands, those 50 to 64 years old have rates around 80% with slight changes between 1986 and 2001. Similar to the women, they keep having a car in later years, but slight decreases can be noted: From the men born between 1922 and 1936, 77% had a car in 1986 and 75% in 2001.
As we are able to compare not only age groups but also cohorts in the Netherlands, some trends can be remarked: Ownership of a private car and a driving license respectively is not so much a question how someone is, but when she/he has been born. The rates stay rather stable over the long term, with slight decreases in age for men and slight increases for women.

We can assume that some men stop driving in older age. Women probably do so as well, but these effects interfere with catch-up effects.

Car ownership of the older generation and particularly of women will “change” as the people will mainly continue to have a car when getting old. As car ownership has a direct, negative
impact on public transport usage we must assume that older people of tomorrow will use buses and trains relatively less than the generations before. It is also very probable that older people reduce or even give up driving in very old age, however this can not be analysed using the data available.

Mobility behaviour

Both the trips per day and the distances travelled are decreasing with age in the Netherlands (cf. Figure 22 and Figure 23). Distances decrease faster then trip numbers, this means that the average distance by trip is also lower in age: the older people get, the more their trips concentrate around their living area. This is only partly due to the fact that the do not need to commute to work or less of them do not have a car available. It also expresses the senior people’s preference for being in an area where they know the streets and the people and of course has also to be seen in relation to increasing health problems in older age.

Figure 22: Trips per day (NL 2001)

As these figures were not available for the previous years, we cannot say if distances and trip numbers of similar age groups have changed over the years, particularly considering today's higher car ownership rates. This would certainly be an interesting topic for further investigation.
Older Dutch men reduce driving compared to walking and cycling. Only in very old age (75 years and beyond), cycling decreases (cf. Figure 24). Public transport also gains importance: It increases from 2.9% (55-64 years old) to 4.0% (75+)\textsuperscript{11}.

Older women show similar tendencies, however due to the low driving licence ownership, they use cars much more as passenger than being a driver. The public transport share is also much higher among women: It increases from 3.6% of all

\textsuperscript{11} The share of public transport in the Netherlands appears relatively low according to this data. However, it is including all national (incl. inter-urban) trips. As stressed before, these figures are difficult to compare between the particular countries as not enough is known about the methodology.
trips for the 55-64 age group to 7.3% for the oldest age group (cf. Figure 25).

**Figure 25: Modal split by age groups - women (NL 2001)**

![Modal split by age groups - women (NL 2001)](image)

*Ministry of Transport, Public Works and Water Management (2002)*

Interpreting these data, we must be aware of the lower car occupancy of older people, particularly women. As explained above, this is very likely to change in the future.

It is very interesting to analyse, when seniors start their trips during the day (cf. Figure 26, Figure 27 and Figure 28): Both older men and women are travelling less during the peak hours. Also during the evenings and night time, few seniors start their trips.
The vast majority of trips start during daytime between 9 am and 4 pm, increasing with age. While less than 50% of the trips of the Dutch 18 to 54 years old start at these times, this figure is more than 70% for the oldest age group (75+).

It is very likely that public transport capacity needs will change due to the ageing of the population: There will be less demand during the morning and afternoon peak hours and a very low demand in the evening and at night. On the other hand, demand in the daytime off peak hours could increase.
Figure 28: Trips started between 9 am and 6 pm (NL 2001)


Even though these numbers are for the Netherlands, it is very likely that they are more or less similar in other European countries. There might be some cultural differences between the regions and it is also possible that the seniors of tomorrow will enjoy evening events more frequently than today.

However, there will be a levelling of demand during daytime. This can be positive for public transport operators, as they will not have to provide the large peak time capacities anymore. On the other hand, this could lead to lower frequencies which would make public transport less attractive for commuters. Finally, here is also a danger that late services will be reduced or discontinued due to lack of demand.

Figure 29: Trip purposes by age groups - men (NL 2001)

It is hardly surprising that older people make (relatively) more leisure-related trips than younger ones (cf. Figure 29 and Figure 30) and almost have no travel demand related to work and education. However, it is an important detail that shopping is becoming a very important outdoor activity in higher age, with 37% (men) and 40% (women) respectively of trips of those over 75 years old. The ability to go shopping independently becomes an important factor of quality of life in older age. Often it is also an opportunity for socialising and meeting people.

**Figure 30: Trip purposes by age groups - women (NL 2001)**

4.6 Selected Mobility Data: United Kingdom

Car availability and driving license ownership

In the UK, similar tendencies can be observed: Only 35% of all women over 70 hold a car driving licence, but almost 80% of the women aged 40-49 years. Some 20 years before, only 11% of the old women were licensed to drive a car!

Figure 31: license ownership - women (UK)

Department for Transport (2006)
Similar to other countries, older People in the UK make less trips than younger people, the number is decreasing from approx. 1150 trips/year for those 30-39 years old to approx. 650 trips/year for people aged over 70 (Figure 33)

Distances are reduced even more; the oldest group travels only some 4,000 miles/year, while the 30-39 years old reach some 9,500 miles/year (Figure 34).
Concerning the main mode of trips, there is a shift from the private car to bus and walking. Many older people also use cars as passengers (Figure 35)

Department for Transport (2005)
4.7 And what could this mean in numbers? – A simplified scenario

Despite certain differences in driving licence ownership between the different countries, a clear tendency can be stated: Women are catching up and are getting rather close to the men’s rates. In some approx. 20-30 years, the license holding rate among old women will be at 80% or even 90% in most European countries. Only in the Central and Eastern European countries, these processes will take more time to unfold.

However, the consequence for Public Transport is clear: Old people as a captive customer group will not exist anymore in the future, at least not in the form we look at it today. On the basis of simplified estimations, we will now demonstrate the possible impacts of these shifts.

It is rather difficult to develop a clear scenario on public transport and senior passengers in the future. Partly the necessary data are not available or not useful for calculations. On the other hand, it is not possible to predict future developments, particularly in the sectors of economy and energy. There is also little knowledge concerning mobility lifestyles of older people and how they change during the process of ageing. To simplify the calculation, we assume that the number of trips and the distance travelled will stay stable, even though it has been indicated that particularly distances travelled are rising and will continue to do so.

Despite of these restrictions, we will try to develop a scenario for France, Germany and the Netherlands mentioned above in order to assume the impacts that growing motorisation of older people will have on public transport. No data on car ownership rates of older people have been available for the United Kingdom, so no calculation could be made for this country.

Interpreting these estimations, one has to take into account the differences of the used base data. The “modal split” is for example calculated in a different manner in each country. Also the age groups and the means of transport included are different. Other major changes, such as the influence of higher fuel prices cannot be considered in this model. Due to the lack of appropriate data, these figures relate both to urban and rural areas.

France

As CERTU’s 2001 report showed, approx. 65% of French seniors owned a car in 1995/98. At the same time, approx. 80% of the persons 65-69 years old were car owners, with decreasing differences between men and women. We consider that the mechanisms of maintained car ownership in age observed in Germany and in the Netherlands are also valid for France. Therefore, we can assume that there will be a car ownership
rate of approx. 80% among elderly French, including the assumption that some 3 or 5% of them might have given up driving in the meantime.

The studies from different countries also showed that the frequency of public transport use of people having no car or a car only available part time (all age groups) is around 3 or 4 times higher than of people having a car. Basing on this data, we calculate that the frequency with which an average senior will use public transport in 2030 will only be some 75% compared to the late 1990ies.

At the same time, the share will rise from 14% to 24% or from 9.3 million to 15 million persons, an increase of 62%. This means that the absolute number of public transport trips made by old people (65+) could be higher than in 1998. As the number of citizens younger than 65 years will become smaller, there will however be stagnation or even a slight decline in public transport patronage.

**Germany**

As the study of Beckmann (2005) shows most people who once had a car will continue driving when they are getting old. Therefore, it can be assumed that car ownership rates of the older generation of tomorrow will be close to the middle generation of today. Women born after 1960 (and being older than 30 years), had a car ownership rate of approx. 80% in 2002. Based on the data provided by Beckmann (2005) and BMVBW (2003), we can assume that in 2030 approx. 75 to 80% of persons older than 65 years will own a car. This already includes some 3-5% who will probably have given up driving for age or health reasons. As in 2002 only 50% of seniors (65+) had a car available, this means an increase of approx. 50 to 60% compared to the 2002 numbers.

Different country studies also showed that the frequency of public transport use of people having no car or only part time car availability (all age groups) is around 3 or 4 times higher than of people having a car. To simplify the calculation, we assume a factor of 3.5. This means, that senior people (65+) in Germany in 2030 could use public transport with an average frequency of only 70% of that of today. On the other hand, there will be approx. 40% more persons aged 65 years or over in 2030, which could equal the balance in absolute numbers. However, there will be less young persons in 2030, so this

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12 This includes also persons who do not actually own a car but have a car available all or most time.

13 Mobilität in Deutschland (Germany 2003) and Ministry of Transport, Public Works and Water Management (Netherlands 2002)
scenario would definitely mean decreasing patronage for public transport.

The Netherlands

The Dutch women have the lowest car ownership rates of the four compared countries. We assume that the catch-up effects will be higher than in other countries, meaning that also larger numbers of women above the age of 60 could become car owners the first time in their life. Depending much on these catch-up effects, the car ownership rate (persons aged 65+) could rise to 65-70%, maybe 75% until 2030. No aggregated data were available for older people’s car ownership in 2001, but based on the existing data we assume a value between 40 and 45%.

In parallel to the other countries, we assume that the people without car are using public transport more frequently by the factor 3.5, so that the average senior would use buses and trams only with a frequency of 72% as compared to 2001. Due to the fact that the public transport and cycling facilities as well as the integration of urban and transport planning are better in this country than in the rest of Europe, people will be able to switch rather easily between the modes. Therefore we can expect that the Dutch people will be able to react quickly on higher private transport costs and so the developments are even more difficult to predict in this country.

However, the number of old people (65+) will increase by 90% between 2001 and 2030\textsuperscript{14}, so the absolute number of senior passengers is very likely to increase in the Netherlands. But this will be more than balanced by the decreasing number of people younger than 65.

\textsuperscript{14} U.S. Bureau of Census – International Database
Conclusions of Chapter 4

Age-related personal constraints

- Many older people suffer from constraints that have an impact on outdoor mobility. However, this does not mean that people are ill or impaired. Many deficiencies can be balanced by compensation strategies.
- Ageing means a general decelerating of all activities. It becomes also difficult to coordinate various movements/decisions at the same time.
- Public transport should consider not only the physical, but also the cognitive and psychological constraints.
- Particular barriers are less crucial to most older people than the overall effort/stress of a trip.

Mobility behaviour and car ownership of older people

- Older people use public transport more frequently than middle-aged persons. They also walk and cycle more, while car usage is lower.
- They cover lower distances and make fewer trips than younger people. Also less time is dedicated to outdoor mobility.
- The number of trips is not as much reduced as distances. This means that trips are getting shorter. Older peoples' mobility focuses on the proximities of the own home.
- When analysing the mobility of older people, age effects and generation effects must be separated. This means that it is unlikely that an average 75 years old person in the year 2025 will have the same mobility behaviour as a 75 years old person today.

Future trends in mobility behaviour and car ownership

- When analysing the mobility of older people, age effects and generation effects must be separated. This means that it is unlikely that an average 75 years old person in the year 2025 will have the same mobility behaviour as a 75 years old person today.
- Car ownership of senior people will increase during the coming years. This is due to the fact that the middle aged people of today probably will maintain their mobility behaviour in old age (“Ageing of travel-intensive lifestyles”). It is also expected that mobility levels (i.e. number of trips and distances) will increase within the next years.
- Within the next 20 or 30 years, women will reach almost the same car and driving license ownership levels as men in most countries.
- In Central and Eastern European countries, these changes are expected to emerge much slower.
- Even older people benefit from improved health conditions, it is likely that very old people will reduce or give up driving. However, this can not be expected before the age of 75 or 80 in average.
These findings have important effects on Public Transport: It shows that people will not start to use Public Transport more intensively just because they get old. Instead they will try to maintain the mobility behaviour they habitualised in earlier years. On a longer perspective, this means that there is an urgent need to influence this process of transport socialisation – when people still are young.

Public transport has to develop strategies in order to gain older people as satisfied costumers. It will be a core question to increase and promote the competitiveness of public transport with the private car.

Both active and car driving seniors as well as users who relay completely on public transport have to be considered.

Public transport needs an increased patronage among older people in order to balance the decrease of trips made by younger people.
5 The Perspective of Older People

Aiming at being attractive for passengers and meeting their special requirements, a transport system has to put people first. Therefore, it is crucial to know more about the actual and expected customers. In the present section, the requirements and expectations of older people will be described and analysed on the base of various surveys from different European countries:

- France: Certu (2005)
- EC co-funded SIZE project (2006) with surveys in Austria, Czech Republic, Germany, Ireland, Italy, Poland, Spain and Sweden
- EC co-funded MOBILATE project (2000) with surveys in Finland, Germany, Hungary, Italy and the Netherlands

Together, these surveys cover 13 European countries, well representing well the geographical and cultural heterogeneity of the continent.

The main points which are addressed in this section are:

- Are there unmet transport needs and wishes?
- What are the obstacles, barriers and fears of older people?
- What has to be changed so that older people use public transport more frequently?
- Which image does Public Transport have among older people?

5.1 Unmet travel need

Trips and activities people would like to make but are not able to make for various reasons can be determined as unmet travel needs/activity wishes, abbreviated as “unmet travel need” in the following. The discussion on this topic exemplifies how close transport and social exclusion are: When certain activities are restricted completely or partly due to transport-related reasons, a person is excluded from an active participation in social life. Unmet travel need therefore hits society at two points:

- Quality of Life is concerned, this can have impacts on mental health and will cause social costs
- Society will also miss the backing of older citizens who cannot travel independently. Many are caring for their
grandchildren or just visit the sick neighbour at the hospital.

The German FRAME study (2002), as well as the UK Department for Transport's study (2001) regarded this issue under slightly different aspects: While the German study had a focus on leisure activities and transport, the British study emphasised urban transport in general and assessed needs instead of wishes.

In a study for UK’s department of Transport, one third of the surveyed persons stated that they wished to engage in more activities than they actually do. Transport difficulties were mentioned more often by older people (80 plus), women, people from ethnic minorities and non-drivers.

**Table 3: Unmet Travel Need (DfT study)**

<table>
<thead>
<tr>
<th>Would like to do more</th>
<th>Principle barrier $^{15}$</th>
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<tr>
<td></td>
<td>Direct Transport/Journey</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Visit family</td>
<td>12</td>
</tr>
<tr>
<td>Visit friends homes</td>
<td>10</td>
</tr>
<tr>
<td>Meet friends elsewhere</td>
<td>10</td>
</tr>
<tr>
<td>Leisure/Sport</td>
<td>8</td>
</tr>
<tr>
<td>Other shopping</td>
<td>7</td>
</tr>
<tr>
<td>Food shopping</td>
<td>6</td>
</tr>
<tr>
<td>Day centre visit</td>
<td>2</td>
</tr>
<tr>
<td>Post Office</td>
<td>2</td>
</tr>
<tr>
<td>Visit others in hospital</td>
<td>1</td>
</tr>
</tbody>
</table>

*DfT (2001)*

$^{15}$ **Direct Transport**: Cost of transport; difficulty boarding/leaving vehicle; too far away; difficult journey; transport service is unreliable; transport service is not available/in frequent; journey is not comfortable; don’t feel safe making the journey; tiring journey, problems getting parking; confusing to use; attitude of staff; don’t feel safe from accident.

**Mobility/Sensory Health**: Personal mobility problems, general health problems; temporary mobility problem; find it difficult to carry things; hearing/speech impairment; weak sight.

**Non-Transport**: Cost of activity; no one to participate with; not enough time; opening/closing times do not suit; friends/family too busy; need to look after dependents, home or pet; depends on weather; other.
As Table 4 shows, most unmet activity wishes are related to socialising, leisure and shopping, so these are the most important suppressed activities. Mainly “Direct Transport/Journey” issues constrain the leisure & socialising orientated activities, while tasks like shopping or day centre visit meet problems from the “Mobility/Sensory/Health” category.

In the FRAME study, 49% stated that they had unmet activity wishes. Out of this group, 41% indicated public transport related reasons for their unfulfilled activity wishes. This means that 20% of the surveyed persons were not able to enjoy a leisure activity because of issues related to public transport.

Table 4: FRAME Unmet leisure activity wishes (PT related)

<table>
<thead>
<tr>
<th>Reasons (multiple answers)</th>
<th>% of persons with unmet act. wishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedules and Ticketing machines are difficult to use/unclear</td>
<td>26</td>
</tr>
<tr>
<td>Low level of public transport provision(^{16})</td>
<td>16</td>
</tr>
<tr>
<td>Security issues, fear of harassment</td>
<td>13</td>
</tr>
<tr>
<td>Difficulties getting on &amp; off the vehicles</td>
<td>11</td>
</tr>
<tr>
<td>Public Transport stop is unfavourably located</td>
<td>11</td>
</tr>
<tr>
<td>Equipment and furniture inside vehicles not suitable</td>
<td>7</td>
</tr>
</tbody>
</table>

Scheiner (2003)

The results are however astonishing (cf. Table 4): A relatively small proportion of the surveyed seniors (4,500 persons aged 60 plus) have physical accessibility problems (11%) or criticise the equipment of vehicles (7%). What people say most (26%) is that difficulties how to actually use public transport are crucial to them. Issues that are related to services and networks, such as non-satisfactory transport provision or stops situates too far away from home are more important than the classical, infrastructure-orientated accessibility issues. It is worth consideration that 13% complain of security and safety issues being responsible for their unmet need. This may concern both the fear of victimisation and of accidents.

Recapitulating both studies, we can state that a high number of seniors have to restrict activities for transport reasons. Particularly leisure and socialising activities are concerned: Distances are often too large for walking. Motorised transport - both public and private - does not always offer an alternative. When analysing the barriers and obstacles to the mobility of older

\(^{16}\) Also rural areas were included in this survey
people, it becomes obvious that the ease of use of (public) transport, fears, societal issues and service/connection-related issues have a bigger impact than accessibility issues (in the classical term).

It is common to both studies that there are also non-transport related reasons for suppressed activities: People have general health problems, they do not find another person to share a certain activity, they prefer in general not to be about in the dark or they do not dare to tackle something by themselves. This however shows that Public Transport cannot remove all barriers to active participation of older people in our societies.

5.2 Constraints to Older Persons’ mobility – barriers, fears and stress

As has been stressed before, it is difficult to talk about mobility barriers in the case of most old people. The term “barrier” implies that one particular problem makes it impossible to travel, such as high-floor vehicles in the case of wheelchair users. Older people often have some constraints, but these are not always so obvious and absolute. When analysing why an older person has not made a trip with public transport or at all, we rather have to consider the overall picture, the sum of stressing situations on a trip.

In the following, the barriers, obstacles and fears will be analysed from the viewpoint of older people.

Thematic fields

- Affordability
- Safety, Security and Attitudes
- Accessibility
- Schedules & Networks
- Comfort
- Information & ease of use

In the SIZE survey (2006), the “worst five” barriers concerning Public Transport were the following (cf. Table 5):
Table 5: Obstacles (SIZE survey)

<table>
<thead>
<tr>
<th>Obstacles (Public Transport)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcrowded vehicles</td>
<td>1.29</td>
</tr>
<tr>
<td>Ruthless drivers</td>
<td>1.05</td>
</tr>
<tr>
<td>Insufficient routes</td>
<td>1.05</td>
</tr>
<tr>
<td>Lack of punctuality</td>
<td>1.03</td>
</tr>
<tr>
<td>Bad infrastructural access</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Scale from 0 = never an obstacle to 3 = always an obstacle

SIZE (2006)

On a general level (not exclusively related to Public Transport), some other points with relevance for this study have been raised: Almost 50% of the older people stated that they miss toilets in public space, and almost 40% said that they suffer from negative attitudes towards older people.

The oldest group (85+) had the most problems with Public Transport: In their eyes it is overcrowded, technically mal-adapted and also maladapted in routes and frequencies.

On the other hand, seniors with high income, high autonomy and high satisfaction scores have little problems with infrastructural conditions.

The German ANBINDUNG survey (2001) analysed how older car drivers can be motivated to use Public Transport more frequently. During test trips in Public Transport, it found out that tasks as buying a ticket and orientation at stations and on trips were rather difficult for these senior passengers. These tasks were perceived as stressing and made them insecure. Other tasks such as walking to the station and getting on the vehicle were assessed as less demanding and easier to perform. However, these factors depend much on personal health and also on the particular city.

5.3 The image of Public Transport

As stressed in the previous sections there are various reasons which impede older people from using Public Transport more often. But removing these barriers is only the first part of the work to be done. Public Transport also needs a good image in order to attract more senior passengers.

The Transport Authorities consulted during this study affirmed that their senior passengers are very loyal customers. In marketing studies they usually assess Public Transport better than younger people. However, these studies exclusively refer
to Public Transport users and hardly compare it to other means, namely the private car.

Table 6: Advantages and Disadvantages of Public Transport

<table>
<thead>
<tr>
<th>Primary Advantages Public Transport</th>
<th>Primary Advantages Private Car</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Comfortable/stress-free</td>
<td>• Independence (always available, I can go almost everywhere, fast)</td>
</tr>
<tr>
<td>• No parking trouble</td>
<td>• Comfortable with shopping bags</td>
</tr>
<tr>
<td></td>
<td>• Privacy/ No harassment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Advantages Public Transport</th>
<th>Secondary Advantages Private Car</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Environment friendly</td>
<td>• Cheaper when two or more persons are travelling</td>
</tr>
<tr>
<td>• Possibility to drink alcohol</td>
<td>• Comfortable</td>
</tr>
<tr>
<td>• High safety level (accidents)</td>
<td>• Has become more environmental friendly</td>
</tr>
<tr>
<td>• Fast (depending on line &amp; journey)</td>
<td>• Prestigious</td>
</tr>
<tr>
<td>• Cheap (depending on ticket)</td>
<td></td>
</tr>
</tbody>
</table>

Source: VRR (2002)

<table>
<thead>
<tr>
<th>Primary Disadvantages Public Transport</th>
<th>Primary Disadvantages Private Car</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dependence (not always available, some destinations difficult to reach, need to change, way to/from the next stop)</td>
<td>• Parking troubles</td>
</tr>
<tr>
<td>• Uncomfortable with shopping bags</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Disadvantages Public Transport</th>
<th>Secondary Disadvantages Private Car</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Asocial behaviour (depending on line, city)</td>
<td>• Expensive (maintenance, parking)</td>
</tr>
<tr>
<td>• Not clean</td>
<td>• Stress (congestion, aggressive road users)</td>
</tr>
<tr>
<td>• Expensive (when used less frequently)</td>
<td>• Not environmental friendly</td>
</tr>
<tr>
<td></td>
<td>• Risk of accidents</td>
</tr>
</tbody>
</table>

Source: VRR (2002)
5.4 Necessary Improvements from the perspective of older people

In this section we will analyse which priorities for improvements have been set by older people. As the reviewed surveys showed, they can vary much from the issues bemoaned by the older people. In the ANBINDUNG survey, older car drivers have set the following priorities in order to make Public Transport more attractive to them (Table 7).

Table 7: Desiderata of older passengers

<table>
<thead>
<tr>
<th>Necessary Improvements (Public Transport)</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheaper trips</td>
<td>4.13</td>
</tr>
<tr>
<td>Safety from crime and harassment</td>
<td>4.02</td>
</tr>
<tr>
<td>Easier ticket purchase</td>
<td>3.71</td>
</tr>
<tr>
<td>Less anonymity</td>
<td>3.68</td>
</tr>
<tr>
<td>More Toilets</td>
<td>3.64</td>
</tr>
<tr>
<td>Improved image of public transport</td>
<td>3.54</td>
</tr>
<tr>
<td>Safety from accidents</td>
<td>3.44</td>
</tr>
<tr>
<td>Easier usage of vehicle doors</td>
<td>3.35</td>
</tr>
<tr>
<td>Reduced physical efforts</td>
<td>3.22</td>
</tr>
<tr>
<td>Improved comfort</td>
<td>3.12</td>
</tr>
<tr>
<td>Easier access</td>
<td>3.07</td>
</tr>
<tr>
<td>Enhanced orientation</td>
<td>3.02</td>
</tr>
<tr>
<td>Possibility to carry the own bicycle in PT</td>
<td>2.83</td>
</tr>
<tr>
<td>Shorter journey times</td>
<td>2.59</td>
</tr>
</tbody>
</table>

Scale from 0 = not important to 5 = extremely important

Source: ANBINDUNG Final Report (2001)
Conclusions of Chapter 5

- Many older people have unmet travel needs and wishes. Lack of suitable (public) transport prevents them from enjoying activities or meeting friends and relatives. This shows clearly, that provision of adequate public transport is needed in order to keep older people active, maintaining their social relations, organising their life independently and participating actively in society.

- The physical accessibility of stations and vehicles is important to older people, but not the main issue.

- Older people highlight the behaviour of staff and other passengers and safety issues (e.g. fear of falling down inside the vehicle or at leaving it).

- Ease of use is very important to older people. Many find it difficult to get the right information, to cope with ticketing machines or unclear network plans. Information should not only available in different formats but also understandable.

- Older people wish measures that reduce physical efforts and stress.

- Enhanced interchanges and waiting environment is crucial. Seniors complain on long distances to walk and lack of toilets, shelters, lighting and seating.

- Particularly older car drivers expect cleaner vehicles and stops.

- Many older people would appreciate to find more approachable staff at vehicles and stops. This would help to address many of the issues raised by older people.

- In general, older people perceive public transport as an attractive and comfortable way of travelling. However, deficiencies on local level often prevent them from using it more often. This means, that there is potential to increase the patronage among older people considerably, as they have mostly a positive attitude towards public transport.
6 The Perspective of Public Transport Authorities and Operators

In order to find out how the European public transport sector is dealing with the challenge of ageing societies, a survey was carried out by Rupprecht Consult in spring 2006. The target group was transport professionals working at public transport authorities and operators. 30 cities and agglomerations participated in this survey (cf. Figure 36), covering different European regions and including agglomerations from 200,000 to 10,000,000 inhabitants. The original questionnaire can be found in the annex.

Figure 36: Participating Cities and Agglomerations

Based on the feedback of the questionnaire campaign, 6 site visits have been carried out in order to discuss in depth the answers and to gather information on good-practice measures and policies:

- **Birmingham and the West Midlands** (United Kingdom)
- **Göteborg** (Sweden)
- **Greater Manchester** (United Kingdom)
In the following, the answers are be analysed along the questions of the questionnaire

6.1 Which relevance has the growing older population for public transport?

**Question 1:** “The growing share of the senior population is a highly relevant issue for Public Transport” Please indicate how much do you agree with the phrase

97% (or all but one) of the transport professionals agreed to the statement, that the ageing of society is a challenge for public transport. Half of them regarded it as very important issue, the other half saw it among other problems to be solved during the next years. We must consider that the persons answering to the questionnaire are probably more sensitised to the needs of particular user groups than the average transport professional. So the awareness in the transport sector as a whole is likely to be lower.

**Figure 37: Question 1**

Source: Rupprecht Consult (2007)
6.2 Old and impaired passengers – all the same?

**Question 2:** Many times, the requirements and expectations of senior and impaired passengers are mentioned in the same breath. What do you think are the main differences between these two groups?

In many publications impaired and older passengers are mentioned in the same breath. On an organisational level, i.e. in transport authorities, these two groups are also managed by the same department. The relation between the two groups is evident – many old people suffer from mobility impairments. However, this suggests that the needs and expectations of senior and impaired passengers would be all the same. Therefore, it was interesting to find out how practitioners across Europe assess the differences and similarities between these two important user groups. The differences between these two groups have been described by the respondents as follows (synthesis):

Main **differences** between older and impaired passengers are:

**Older people have needs that are different from impaired people:**

Impaired passengers first of all expect improved physical accessibility. Senior persons expect improvements in safety and security and understandable information/ease of use. They pay more attention on behaviour of staff and other passengers. Moreover, they are often not relying on their own capacities. Whilst the problems of impaired passengers mainly concern the technical level (physical accessibility), seniors hamper more with societal, psychological and cognitive issues. Therefore an advanced understanding of accessibility is required (18)\(^{17}\).

**Seniors are a growing group of costumers and do not necessarily have problems, but are increasingly demanding:**

*Not impaired:* Older people are not necessarily impaired, but enjoy increased health and mobility (8 comments).

*Higher number:* There are much more seniors than impaired people, and the numbers of older people will increase in the future. Therefore, they are an emerging customer group (4 comments).

*Different from the global image:* Older people are more and more in good health and are also more demanding than previous generations (1 comment).

\(^{17}\) Number of comments summarised under this point
The understanding of the needs and requirements of the elderly is still limited, also due to the heterogeneity within this group:

**Heterogeneous user group:** Particularly between the “young old” and the “very old”, there are big differences (5 comments): However, one respondent stated that impaired people are a more heterogeneous user group (1 comment).

**No guidelines:** There are clear guidelines and legal frameworks existing for impaired passengers, for old passengers there are no explicit regulations (2 comments)

**Cultural barriers & misunderstandings:** Particular the war generation seniors are less expecting, they do not postulate their needs and are difficult to address by marketing campaigns. This does not apply to impaired passengers In addition, seniors consider themselves as normal people, and they might refuse special treatment (2 comments).

**Older people show travel patterns that are different from those of impaired persons**

**Different travel patterns:** Many impaired people work; older people use public transport more during off-peak hours. Therefore senior passengers are very important to ensure evenly distributed capacity utilisation and to maintain the level of revenues (3 comments).

**Figure 38: Classification of answers to Question 2**

![Classification of answers to Question 2](image)

Source: Rupprecht Consult (2007)

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18 Please note that this is an analysis of a qualitative issue. The classes are based on the author’s interpretation and the figures only serve to enhance readability! Only questions with more than 20 answers available have been summarised in graphs.
Similarities also have been identified

Environment defines abilities: A deficient person in an adapted environment is not an impaired person and vice-versa. There should be no focus on age, but on enabling conditions for all users (2 comments).

Social exclusion: Both seniors and impaired persons are likely to suffer from it. Public transport is a key to fight exclusion and to develop links in the society (1 comment).

No clear result concerning dependency on public transport

Seniors use it more frequently: Some comments stressed that older people use public transport more frequently as they are more accustomed to it and impaired people are not always able to use mainstream public transport (3 comments).

Seniors are no captive passengers: Others suggested that older people are less depending on public transport due to their reduced need for travel (retired) and increasing car ownership (2 comments).

Impaired more experienced: One participant highlighted, that impaired people are often more experienced in travel problems, while seniors need more training and assistance in order to use public transport.

Conclusions on Questions 1+2

- Most European transport professionals are aware of the fact that demographic change is a challenge to public transport in Europe
- Older people and impaired passengers are perceived as user groups with different needs and expectations. Older people are more vulnerable than younger persons, but most of them are still able to travel.
- Also travel patterns are deemed to be very different from each other.
- It was also highlighted that older passenger are a growing user group and will become more relevant within the coming years.
- Many transport professionals feel it difficult to define exactly the requirements and expectations of older people due to the heterogeneity of this user group.
6.3 How does the European public transport sector assess the issues around old people's mobility?

**Question 3:** What are the issues that constrain a shift towards Public Transport among the senior population?

A rather differentiated picture is delivered when transport professionals assess the relevance of issues. Topics such as physical accessibility, suitable waiting environment and protection from crime and harassment can be described as consensus topics – everybody agreed.

**Figure 39: Deficiencies of Public Transport**

![Diagram showing the percentage of responses to various concerns]

Source: Rupprecht Consult (2007)

On the lower end of the scale, we find surprising topics: If it is true that old people are estimated customers whose needs are well known and who will find a suitable offer from services to tariffs – there would simply be no need for a study like this!

More over, it is astonishing that only some 60% agreed to the statement that seniors are increasingly accustomed to car use.
(and consequently public transport usage could decrease). This clearly shows that many transport operators and authorities are neither aware of nor prepared for the upcoming shifts in licence ownership and car availability among the senior generation. However, this attitude can easily be explained: Many transport operators observe stable or increased numbers of old passengers. In fact, this is mainly due to the rising number of seniors and their increased mobility. But, and this is crucial: The actual market share of public transport among senior citizens is decreasing.

The vast majority (<80%) of Transport Professionals is aware of cognitive restraints – such as difficulties with complex tariff structures or ticketing machines. Different from physical accessibility issues, there are not many solutions proposed to resolve these problems.

6.4 How will these changes vary in the next 15 or 20 years?

Question 4: How will these challenges vary in the next 15 or 20 years; which factors will become more relevant?

6.4.1 Expected Challenges

Older people – an attractive costumer group

Growing group: Most of the answering persons pointed out that the figure of older people will increase within the coming years. People will be healthier and are living longer. On the other hand, the absolute and relative numbers of young people are declining (4 comments).

Growing market relevance: Seniors will become an attractive costumer group with strong impact on patronage (4 comments)

More demanding: The future senior generation will also have greater expectations concerning the quality of public transport. They will better know how to formulate their rights and thus form a powerful lobby (3 comments)

Older people and technology

Technology will help: There are controversial opinions about technology and older people: Some suggest that electronic devices will become more user-friendly and can even assist senior passengers. With electronic ticketing for example, there will be no need to know the tariff system. Furthermore it was assumed that old people will get accustomed to technology and future generations will be more familiar with new devices and communication technologies (5 comments).

Technology will cause new problems: On the other hand, some transport professionals stated that the removal of staff, complex tariff and network structures will cause problems for
seniors. Difficult to use ticketing machines are also an obstacle. At the same time, the future will see more occasional senior users who are less familiar with public transport and will need assistance and training (5 comments).

**Older people and the private car**

*Increasing motorisation:* Older people will become more active and mobile than today. Car availability will grow, particularly among women. As a consequence, less and less seniors will be captive users. However, modal choice will also depend on economical trends (5 comments).

*Role of public transport:* A shift towards public transport needs to be created as many people will have difficulties to drive a car in very old age. Another respondent stated that the ability to drive in old age is perhaps higher than expected, while a third stated that public transport use will also increase at very old age among the future senior generations (3 comments).

**Financial issues**

*Controversial statements:* Some transport professionals expect older people to become wealthier in the future, thus they should pay a reasonable price. On the other hand, the general economical development, changes of fuel prices and restructuring processes of welfare states play a particular role. Particularly in some Central and Eastern European countries, it is expected that the resources of older people will remain low during the coming decades (4 comments).

**Figure 40: Classification of answers to Question 4 - Challenges**

![Figure 40: Classification of answers to Question 4 - Challenges](image)

*Source: Rupprecht Consult (2007)*

19 Please note that this is an analysis of a qualitative issue. The classes are based on the author’s interpretation and the figures only serve to enhance readability! Only questions with more than 20 answers available have been summarised in graphs.
**Dependence on mega trends:** However, there seemed to be consensus that in case of decreasing financial resources of older citizens (e.g. rising fuel prices) an increased public transport patronage can be expected (3 comments).

**Costs of public transport operation:** Another participant was expecting higher operating costs, while funding will be cut back (1 comment).

**Safety and Security**

Safety and security will become an increasingly important issue. Senior passengers are more endangered by accidents while travelling and are more sensitive towards crime. Also, courtesy of staff and fellow passengers are more important to them (3 comments).

**Physical Strains**

When talking about physical accessibility, not only the actual barriers should be addressed, but also physical strains (which can also occur in an “accessible” environment) (2 comments).

### 6.4.2 What needs to be done?

In general, quality, accessibility and information have to be improved in order to meet the needs & expectations of older people. Accessibility has to be thought of in a wider context, it should also include cognitive and psychological accessibility (15 comments).

**Travel assistance, training and marketing**

**Staff:** Helpful and devoted staff at stops and in vehicles is needed (3 comments).

**Ease of use:** It should become easier to plan a trip and purchase tickets (2 comments)

**Training:** More training is needed in order to help older people gain independence and confidence (1 comment).

In general, more marketing and soft measures are needed. It is important to give seniors the basic information that public transport is suitable for them and how to use it (2 comments).

**Information**

Information is a keyword. It should be visible, audible and understandable. It is important to have it in various formats (i.e. not only digital, but also on paper). It is important for an old passenger to have direct feedback to questions, so telephone hotlines and staff presence are crucial. It is also important to ease the access to the appropriate information for different needs. Moreover, information should not only concentrate on trips, but on the whole mobility of older people (6 comments).
Figure 41: Classification of answers to Question 4 – Action needed

Source: Rupprecht Consult (2007)

Demand-Responsive Transport
More non-mainstream public transport will be needed. Different models of dedicated services or flexible lines should complement regular public transport (5 comments)

Other
One comment suggested that due to gratis public transport the expectations of senior passengers become higher.

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20 Please note that this is an analysis of a qualitative issue. The classes are based on the author’s interpretation and the figures only serve to enhance readability! Only questions with more than 20 answers available have been summarised in graphs.
Conclusions on Questions 3+4

- Transport professionals deemed physical accessibility, safety & security, waiting environment, courtesy of staff & fellow passengers ease of use as the most important issues.
- It was also stated, that older peoples’ issues are already of paramount importance for transport authorities and operators.
- Issues such as increasing car ownership or lack of staff presence, ticketing & tariffs and suitability of services and schedules have a lower priority among transport professionals.
- In the coming two or three decades, an increasing number of older people is expected.
- Concerning the two topics “financial resources of older people” and “increasing car ownership”, different opinions have been advanced.
- There was agreement on that a package of various measures is necessary to improve mobility of older people. Technical solutions seem to be slightly preferred, even the need for non-technical measures was emphasised by many respondents.

6.5 Which measures and policies have been implemented in Europe?

**Question 5: Which types of measures to enhance senior passengers’ mobility have been realised or are planned by your company/authority in the near future?**

This section deals with the measures and policies that have been introduced in different European cities in order to better meet the needs and expectations of older passengers. As stressed before, it is difficult to identify “seniors-only measures”. Therefore, a set of different action fields has been selected, following the experiences of previous projects. The data of course cannot give detailed insight on specific measures. Instead they aim at identifying the status quo and the priority in different fields. For example, stakeholder cooperation can be conducted at various levels and with different approaches.

As expected, measures relating to the physical accessibility of rolling stock and stops are most widely implemented, with a ratio of more than 90%. However, only 20% have already achieved full accessibility while in 2/3 of the cities and agglomerations some efforts have been made but there is still a distance to cover. However, with fleet renewal during the coming years this will become less and less a problem, at least with buses and tramways. In contrast, some Underground/Metro and Train networks will need high investments and also a couple of years of work until the last physical barriers are removed. Transport for London just announced that they plan to make 33% of the Underground stations step-free.
until 2013\textsuperscript{21}. It is also expected that fleet renewal in New Member State cities could take longer.

**Figure 42: Implemented and planned Measures and Policies**

![Bar chart showing percentage of cities with implemented or planned measures for transport improvements.](chart)

Source: Rupprecht Consult (2007)

**Cleanliness and appearance** are of course high on the agenda of all transport authorities – but it is difficult to measure this with objective criteria. In so far, it is crucial how passengers perceive it.

**Improved waiting facilities** and on-trip information can both be found in four fifth of the participating cities, even if only some 15\% see that implementation has already reached full scale.

Two thirds of the cities have introduced **particular tariffs** for older people, many among them provide free off-peak travel to senior passengers. In the UK, this has regulated on the national level since 1 April 2006.

\textsuperscript{21} Valuing older people. The Mayor of London’s Older People Strategy (2006)
**Stakeholder involvement** – such as public participation processes or consultations with seniors’ clubs or user organisations are widely practiced, using a huge range of approaches. These start with consultations with user groups and go as far as transport operators and seniors’ organisations setting-up joint projects in order to improve transport for the older ones.

**Security strategies** are also common use in European public transport – 70% of the questionnaires stated so. However, it must be stressed that this can also include electronic devices such as alarm buttons and CCTV which are less likely to improve the perceived security (which is crucial for improved patronage). Staff-based schemes, which can have synergy effects such as improved information and assistance of passengers are still not very common and often only trialled.

The topics treated from this point on all have one thing in common: Only approx. 50% or less of the cities have implemented them. This applies for example to user surveys while on the other hand many stated that “not enough is known about the need of older passengers”. Staff training, improved ease of use and more approachable service personnel are topics only some 50% of the cities deal with.

**Information and marketing** campaigns addressing senior citizens, dedicated services (such as Dial-a-Ride schemes in many British cities) and passenger training are the least featured ideas – only between 35% and 40% have implemented them at least partly. In some countries (such as Austria and Germany), dedicated services for old and disabled persons are offered by charities and not included in the tasks of the Transport Authorities. So we must assume that the actual number of such services is a little higher than the survey results may suggest.

**Planned measures – future trends?**

Which measures are planned for the future in European cities? In order to find out more about this, the planned measures have been analysed separately (Figure 43). It is surprising that measures aiming at improving the ease of use and the orientation are a top priority for future action. But it can be also be noted that there is a trend towards more staff (categories service/staff and security strategy suggest this), better information and waiting environment and more so-called soft measures, particularly user surveys and marketing campaigns. 10% or three of the cities plan new user training schemes.
Figure 43: Top ten planned measures and policies

<table>
<thead>
<tr>
<th>Measure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>easy use/orientation</td>
<td>27%</td>
</tr>
<tr>
<td>service/staff</td>
<td>22%</td>
</tr>
<tr>
<td>safety strategy</td>
<td>20%</td>
</tr>
<tr>
<td>surveys</td>
<td>16%</td>
</tr>
<tr>
<td>waiting/interchange</td>
<td>15%</td>
</tr>
<tr>
<td>information</td>
<td>14%</td>
</tr>
<tr>
<td>marketing campaigns</td>
<td>11%</td>
</tr>
<tr>
<td>user training</td>
<td>11%</td>
</tr>
<tr>
<td>dedicated services</td>
<td>10%</td>
</tr>
<tr>
<td>stakeholder cooperation</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: Rupprecht Consult (2007)

6.6 Integrated strategy or particular improvements?

**Question 6:** In the light of the previous questions, are you following an integrated strategy / or are there more or less independent measures and improvements?

No dedicated policy on mobility of older people identified

None of the consulted cities and agglomerations has developed a particular strategy (or an equivalent document) on how to meet the challenges of an ageing population. A dedicated older people’s strategy exists in some cities (e.g. Manchester22 and London23). By nature, such document can not provide much detail regarding transport. Answers which were only stating that there is an integrated strategy without explaining it in more detail have not been analysed.

Some of the transport professionals stated, that they implement measures for old people rather independently from strategies and plans. Sometimes, measures are combined with others in order to improve the effectiveness (5 comments).

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22 Manchester City Council (2004): Developing a Quality of Life Strategy for Manchester’s Older People

Local Transport Plans and Accessibility Policies

Most authorities have a local transport plan, which can form the base for an accessibility strategy, but can also address these aspects directly. In some authorities, councils and companies a dedicated unit is taking care of passengers with reduced mobility. Often, these units develop an accessibility strategy for public transport. However, these activities often focus on the needs of impaired passengers and do not elaborate in detail on the requirements of older passengers. In other terms, these documents often do only deal with physical accessibility, omitting cognitive, psychological or cultural aspects. Another weak point is the lack of integrated thinking towards marketing aspects. Addressing old people means both making public transport suitable for them and gaining them as passengers (14 comments).

Figure 44: Classification of answers to Question 624

![Classification of answers to Question 624](image)

Source: Rupprecht Consult (2007)

Universal Design

In a few cases, the idea of “universal design” or “design for all” is implemented or considered. This aims at designing public transport in a way that everybody can use it at any time and at any place. Particularly in Scandinavian countries, this idea is being pushed during the last five or ten years. Most of these schemes tend to address accessibility in a wider context, addressing the needs of all user groups (seniors, children, women, men, immigrants, impaired people) and are including

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24 Please note that this is an analysis of a qualitative issue. The classes are based on the author’s interpretation and the figures only serve to enhance readability! Only questions with more than 20 answers available have been summarised in graphs.
cognitive, cultural, societal or psychological issues as well (2 comments).

**Marketing and communication strategies**

In some cases, particular marketing strategies have been developed. These are clearly targeting the younger and active part of the older generation. The vast majority of these people owns cars and is interested in cultural events or recreation in nature. These strategies can include particular monthly tickets and additional offers such as a magazine which features leisure and culture-related topics in combination with public transport. Some cultural events are also offered exclusively to the monthly ticket holders (4 comments).

**Conclusions on Questions 5+6**

- Measures concerning physical accessibility, cleanliness/appearance, information, waiting environment/interchanges, tickets / fares, stakeholder involvement and safety have been implemented by many cities and agglomerations.

- Passenger and staff training, dedicated services, measures to improve ease of use or awareness raising and marketing campaigns are relatively uncommon. Same applies to staff presence in vehicles and at stops/stations.

- Many transport authorities and operators intent measures to improve ease of use/orientation in the future. Also more presence of staff and improved safety are planned. Measures relating to topics such as marketing, information, waiting environment/interchanges, user surveys, training, stakeholder cooperation are planned by a smaller number respondents.

- There are integrated approaches dealing with impaired and senior passengers at the same time. Most strategies seem to deal with physical accessibility and are probably not addressing the different aspects of accessibility.

- In order to develop a public transport which is suitable for and accepted by older people it is maybe not necessary to develop a dedicated strategy. On the other hand, the challenge of an ageing population has to be addressed in all sections of a (public) transport strategy. This applies to topics such as service planning, quality, marketing, customer attendance, mobility management & soft measures and information. In a few words: A future transport strategy has to combine elements of accessibility and customer orientation.
6.7 Which measures are deemed to be most effective?

**Question 7:** How do you perceive the effectiveness of the implemented measures?

**Figure 45: Effectiveness of measures**

How do you perceive the effectiveness of the implemented measures?

![Bar chart showing effectiveness of measures](image)

Source: Rupprecht Consult (2007)

For new implementers it is important to know, which measures and policies have been successful in other cities. In this analysis, only comments of actual implementers have been considered. Answers of non-implementers have been removed as they are not based on actual experience. Therefore, the sample size is rather small for some of the thematic fields, it is varying between 10 answers (user training) and 28 answers (physical accessibility). So these numbers have to be interpreted as indications, not as representative results.

It can clearly be stated that most implementers are satisfied with the success of the measures, as between 57% and 89% regard the effectiveness as "very good" or "good". Thematic fields with particular high success rates are stakeholder
involvement & cooperation (43% “very good”), public safety strategies (37% “very good”), tickets and fares for seniors (33% “very good”), improved visual and audible information (29% “very good”).

It is astonishing that measures to improve the physical accessibility and dedicated services, often mentioned first when improving transport for seniors can be found somewhere in the middle, with only 18% (dedicated services) and 25% (physical accessibility) respectively regarding them as really effective. We must admit that these are particularly high cost measures and probably not always increase the revenues as strongly as they have charged the budget.

There is a range of measures and policies which are getting mostly positive notes but no extreme positive/ negative assessments. Apart from the aforementioned, this applies to service and staff presence, staff training, user training and marketing campaigns. It is obvious that these topics are more difficult to evaluate than for example new ticket offers for seniors, which have a direct impact on patronage and revenues.

6.8 Why are measures difficult to implement, why are they not always as effective as expected?

Question 8: What are in your eyes the most important barriers to these measures? Please refer to all relevant phases (planning, implementation, acceptance, operation)

It is very useful for transport professionals to know which problems and issues are likely to emerge when improving the public transport system. These barriers can occur at different stages of the project – planning, implementation, operation and can have different natures such as technical reasons or lack of acceptance. All in all, approx. 70 comments have been analysed along the following categories:

Lack of Financial and Human resources

The biggest part of the comments (24) referred to this topic. Budget restrictions rank first, but at least two comments indicated that with only some more manpower improvements could be achieved. Financial restrictions are a strong indicator that a topic is low on the agenda of decision makers. Some comments suggested this, one stated for example: “Younger passengers seem to be a more ‘profitable’ target group”. Of course one must keep in mind that there are high cost measures such as station/stop retrofitting and fleet renewal and others which are rather cheap such as stakeholder involvement or passenger training.
Acceptance problems

Among senior passengers: It was clearly stated that acceptance problems could occur when stakeholders are not involved from the start. In general, the transport professionals found it difficult to influence people’s behaviour, particularly when aiming at pulling them from the private car to public transport. It was also raised that marketing campaigns could be regarded as “glaring” or “dubious” by seniors. One authority stated that many of today’s seniors take improvements for granted and do not acknowledge them particularly (9 comments).

Among other passengers: Some cities explained that seniors in general and improvements to help them in particular are not well received by other passengers. Particularly old persons and pupils or teenagers feel a mutual disrespect and complain on each other’s behaviour. There is also a conflict of goals when aiming at making public transport faster on the one hand and slowing it down on the other hand (more and longer stops, less acceleration) in order to meet the needs of old passengers (3 comments).

Among public transport staff: Some comments (5) highlighted that it is difficult to convince the one’s own staff (drivers, service personnel) of respecting the needs of older passengers. Drivers are reluctant as they do not see themselves in the role of service personnel and also lose time when driving carefully. It is also difficult to make staff aware of the sense of training measures.

Figure 46: Classification of answers to Question 825

<table>
<thead>
<tr>
<th>Resources</th>
<th>Acceptance</th>
<th>Knowledge</th>
<th>Temporal Aspects</th>
<th>Institutional Issues</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>45%</td>
<td>5%</td>
<td>8%</td>
<td>8%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: Rupprecht Consult (2007)

25 Please note that this is an analysis of a qualitative issue. The classes are based on the author’s interpretation and the figures only serve to enhance readability! Only questions with more than 20 answers available have been summarised in graphs.
Among decision makers: They are often not aware of how demographic change is challenging public transport and that seniors are more and more belonging to the car generation. In addition, older people have not yet been discovered as an interesting target group, the focus is still on younger people (4 comments).

Lack of knowledge on needs and aspirations of older people

A considerable number of comments (10) were related to the lack of knowledge on older passengers’ needs and expectations. Many transport professionals were aware of the demographic shifts to be expected and also clear on that there is a difference between old and impaired passengers. What they missed was information on how to make public transport more suitable and attractive to older people and on the particular situation in their own city or agglomeration.

Temporal Aspects

Network upgrading must be realised step by step, as it would be too expensive otherwise. On the other hand, it needs time to convince people - decision makers who need to recognise that demographic change is a challenge for public transport, Front desk staff & drivers who need to be sensitised for the needs and expectations of older people and also the seniors themselves who still bear a bad image of public transport in mind and stick to their routine behaviour – which means driving a car. These are of course all issues by themselves, but one must admit that once the process has started it needs time until verifiable changes can be observed, even if making high efforts (6 comments).

Institutional Issues

In many cases, the influence of authorities on operators is limited. It is difficult to fix all details in the contracts and changes during the contract lifetime are not easy to manage. It was also raised that the cooperation between different departments within organisations and the cooperation with other organisations/ councils can form a barrier which slows down processes. Sometimes, responsibilities are not clear and no integrated planning is made. There is also the problem of competition which fits into this field. In many areas, a wide range of dedicated services and flexible lines is offered. When trying to integrate these services and in order to create a more transparent and efficient service, reluctance of operators can be expected as one comment stated (5 comments).

Other

The difficulty to translate the political ambitions into concrete actions: This is an issue which was raised only once,
but which is nevertheless is very important. Often, there is a gap between policies and reality. Even where there are local transport plans in power which deal with passengers with special needs, the actual tasks/measures are often difficult to define and no particular resources are dedicated to these improvements. This calls for both technical guidance and dedicated funds.

**Heterogeneity of user group:** As the transport needs of active and mobile seniors are diverging a lot from those of immobile persons, it is difficult to define measures which benefit them (1 comment)

Finally, one comment addressed *technical issues* explaining that the hilly topography makes it difficult to implement accessible stops everywhere (1 comment).

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**Conclusions on Questions 7+8**

- Concerning effectiveness of measures, three groups have been identified. as the number of answers was very small in some cases (only answers of implementers have been analysed):

- Deemed as good/very good by 75% or more of the respondents: Safety strategy, tickets/fares, stakeholder cooperation, more staff presence, staff training, cleanliness appearance and physical accessibility.

- Measures on dedicated services, information, user training and (marketing) campaigns have been perceived as effective by about 65 to 70%

- Improvements on waiting environment ease of use/orientation and user surveys have been well appreciated by around 55%.

- The barriers to implementation can be found on the non-technical side. First, lack of resources (human and financial) is a problem.

- It emerges that low acceptance among passengers and staff as well as lack of awareness among decision makers is the key problem which needs to be addressed.

- Lack of knowledge on the particular needs and expectations of senior people on the local level has also been an important barrier.

- In many cases, it only needs to consider the needs of senior users in the design phase without having additional costs.
6.9 Which role does play Marketing, Training and Soft Measures?

**Question 10:** Previous studies found out that mainly technical requirements have been considered by the public transport sector. Senior passengers stated that they miss measures which address issues such as anonymity of services, ease of use or safety & security. How do you cope with this issue?

**There is still a lot to do concerning these aspects**

Some of the recipients stated that their organisations still needed to develop and implement measures concerning non-technical aspects. They emphasised that the needs and expectations of older people go beyond classical accessibility issues (4 comments).

**Consultation, communication and marketing tools**

Many transport professionals referred to the intensive consultation and participation processes in their cities. These allow them to be aware of the emerging issues and to develop measures which enhance older people’s mobility. This includes site visits with senior citizens, service hotlines, consultation processes when major infrastructure renewal/vehicle purchases are planned. Regular consultation with user groups and the installation of a public known ombudsman for seniors have been highlighted as good solutions. Others emphasised on communication and marketing tools. Some authorities are for example providing cultural events for their senior customers, which enhances customer retention but also helps to establish informal consultation between users and transport professionals (6 comments).

**Staff Training**

A considerable number of cities have developed staff training schemes, mainly for drivers but also for front desk staff and planners. These trainings can include awareness raising on older passengers’ specific needs and expectations, planning tools or “driving lessons” in order to avoid accidents of older passengers during the trip (6 comments).
Dedicated Service Staff
Dedicated staff in vehicles and at stops has been highlighted by 4 participants. Some cities recently re-introduced staff in order to improve information and assistance to passengers and to fight fraud, vandalism and aggressive behaviour on the other hand. This can include permanent staff at stops and in vehicles or teams moving around. Other cities provide personal trip assistance on demand for passengers who need it (4 comments).

Simple tariff and network structures
Particularly smaller cities underlined that they are confronted less with these problems: Their tariff systems are rather simple, drivers provide tickets and information and small networks enhance orientation. Offensive behaviour also seems to be less common in smaller agglomerations (4 comments).

Free Public Transport
Some cities offer free public transport for older citizens, so here the issues with ticketing machines and complex tariff structures are not relevant (3 comments).

Source: Rupprecht Consult (2007)

26 Please note that this is an analysis of a qualitative issue. The classes are based on the author's interpretation and the figures only serve to enhance readability! Only questions with more than 20 answers available have been summarised in graphs.
6.10 How to encourage modal shifts among the senior population?

Question 11: A growing number of today’s seniors are accustomed to car use. Do you address them particularly in your marketing strategy? Which measures are used to attain a modal shift among elderly drivers?

No particular strategy
A dedicated strategy to encourage modal shifts of older people from the private car to public transport in the analysed cities and agglomerations has not been identified. Instead, many of the operators and authorities follow a global marketing strategy (7 comments).

Not much increase in car availability expected in CEE countries
Particularly in the New Member States and Accessing countries, professionals say that older people will continue to use public transport in the future (next approx. 20 years) as their economical situation will not change that much (2 comments).

Not all cities are aware of increasing motorisation of older people
But also in richer European countries, not everybody is expecting that seniors are using the private car much more in the future (3 comments).

Free Public Transport and reduced fares
As already stressed before, some cities offer free public transport to senior citizens, others provide reduced fares (3 comments).

Everybody will be confronted with driving problems
One participant highlighted that even fit seniors will have to reduce or even stop driving sooner or later. So it is crucial to motivate older people to use public transport, which can become an important factor for independent living.

But marketing should start before people get old
Another transport professional underlined that it is difficult to change behaviour of older people as they are less flexible and are following the same routines for years and years. Campaigns to change behaviour have thus to be started in earlier age.
6.11 Heterogeneity of requirements

**Question 12:** How do you deal with the heterogeneity of requirements (physical and mental condition; expectations) of senior passengers?

Most participants who answered the question referred to the idea of “Universal Design” or “Public Transport for All”, aiming at making public transport as accessible as possible for all user groups. This not only includes the physical accessibility, but also making information accessible, providing an easy-to-use transport system and tackling fears of passengers (5 comments).

**Conclusions on Questions 10-12**

- Some respondents emphasised that there is an increasing need to develop measures concerning training, marketing, communication, campaigning and stakeholder involvement.
- Authorities and operators that are already active in this sector, mainly concentrate on marketing and training.
- Smaller cities and those with free public transport for older people highlighted that there is a lower need for such measures to them.
- There are no particular strategies to attract older car drivers, only global marketing strategies could be identified.
- Some respondents stated that they do not expect dramatic shifts in car ownership of older people. This appears probable for Central and eastern European countries but not so for the majority of European countries.
- The heterogeneity of requirements of older people is best addressed by using “universal design” which is a popular concept particularly among Scandinavian cities.
7 Conclusions

The perspectives of older people and transport professionals share many communalities, but differences have also been identified.

Transport professionals often highlight accessibility of vehicles and stops as one of the most important issues for older people. On the other hand, the users themselves often rank it rather low. Physical accessibility is more a question of physical efforts to them. In this light, a 10cm step is not an obstacle to many older people (but it is for wheelchair users), while having to walk 200 meters between two platforms is (but not for wheelchair users).

Safety and security are an important issue both for older people and transport professionals. This includes also ruthless behaviour of drivers or other passengers. Various examples show that this topic is high on the agenda. However, the solutions preferred by those in charge are often CCTV and security services, while conductors and service staff would much more respond to the expectations of older people.

It is high on the agenda of both groups to have a comfortable and suitable waiting environment. Indeed, most new interchange stations are considering the needs of older people to a high extent. Public toilets, often mentioned by older people are not always included.

The cognitive and psychological barriers are also taken serious. However, not many measures have been mentioned precisely addressing ease of use. It can be assumed that there is a need for creative and practicable solutions to be developed to respond to these issues.

Having more staff at vehicles and stations is high on the agenda of older people, while transport professionals put it rather low. As stressed before, older people would prefer human assistance. This is partly due to lack of experience with electronic devices and ticketing machines. For older people social contacts are much more important than for younger people.

Transport professionals give rather low emphasis to tariffs and ticketing, while older people often complain that fares are too high. Analysing this, one must keep in mind that these statements are subjective.

Stakeholder involvement, training and campaigning do not have much emphasis among transport professionals. However, many comments made by older people let suggest that there is a need for action. In order to reach seniors, more customer orientation is necessary – including understanding their needs and expectations on the local level.
Increasing motorisation of older people and the ageing of the highly mobile baby-boomers will become an important challenge during the coming years. The fact that older people will increasingly live in suburbia also contributes to the need for action in order to achieve good patronage. However, not all transport professionals are aware of the expected changes. It is also an aim of this report to raise awareness on this issue.

In general, older people have a positive image of public transport as such. They perceive it as a comfortable, safe and sustainable way to be mobile. On the other hand, many older people criticise the quality of public transport in their local area. This means that improvements concerning accessibility, quality and image of public transport could have a potential to improve patronage among older people considerably.

When developing a vision of a public transport system of the future, also the older passenger of the future should also be part of our imagination. Such a vision could be the multimodal active older user – a person who uses all transport modes in the optimal way and knows to combine them very well. Public transport is a strong partner in this vision and enables the multimodal user to be active and independent. It provides a high level of accessibility, in physical, cognitive and psychological terms. It responds to the process of ageing by providing different solutions for different needs, taking away the fear of losing mobility from people who have to reduce driving. Last, but not least public transport is a way to ride that older people enjoy and which motivates them to be out and about.
8 Recommendations and Best Practices

8.1 Recommendations and Best Practices on the Local Level
Recommendations: Safety, Security and Training

The topic

Older people are more vulnerable than other passengers and in case of bad experiences it is probable that they will not use public transport anymore or only in a very selective way.

One major issue is accidents: Older people are more likely to have an accident during a public transport trip and have more problems to recover.

Older people often are afraid of crime and victimisation. This might partly be due to media hysteria on trick theft, but it is definitely sure that it affects directly the image and the patronage of public transport. There are also issues between older and younger passengers due to the lack of mutual understanding and respect.

Finally, there are fears concerning coping with situations. Older passengers are more often challenged by complex tariff schemes and ticketing machines. Also when there are unexpected situations like a lost train or schedule deviations, they might feel more uncomfortable than younger passengers.

Good practice: Safety Concept in Lille (France)

About 400 “friendly agents” are on route in Lille’s public transport network. They are operating in groups of 4 persons and it is the target of the operator that a traveller meets them at least every sixth station on his metro trip. To ensure this, the teams are staying for 30 minutes at one particular stop before travelling to the next. Being linked to a security monitoring centre by radio communication, they are able to call for quick support in case of serious issues (violence, accidents). The agents are young people from the Lille region which have difficulties to find a job; most of them have a migration background.

Evaluation of the Security scheme in Lille showed that particularly old passengers welcome the security agents in Metros, Tramways and Buses.

On the site visit in July 2006, it was observed that particularly old people asked for information or assistance, e.g. accompany them to the right platform

Benefits

- Improved Safety & Security
- Additional services: Information, escort passengers who need assistance (e.g. carrying luggage, showing the right way to the platform)
- Decreased fraud rates – generates revenues
- Less vandalism – saves money and improves image
- Better monitoring of quality: Staff can identify messy or broken down infrastructure; passengers are more likely to report directly to staff than via hotlines
- Public transport gets a friendly face – positive image and customer retention
- Less discrimination of other passengers (e.g. youths, immigrants) than in other schemes
- Moderating impact instead of menacing appearance

“Friendly Agents” in Lille

Photo: CUDL
Continuation: Safety, Security and Training

Key recommendations

1. **Train drivers**

   Training of drivers (e.g. how to avoid abrupt accelerating and breaking) in order you can provide your older passengers a safe and pleasant trip.

2. **Sensitise staff**

   Sensitise your drivers, front desk and planning staff on the needs and expectations of older people. Most staff is not aware of the challenges that older passengers experience.

3. **Raise awareness among other passengers**

   Awareness raising campaigns among other passengers in order to avoid conflicts and to enhance understanding of older peoples’ needs. On the other hand, seniors should be encouraged to solve conflicts in a respectful way instead of considering all young people as “little monsters without any sense of respect”.

### Good practice: Passenger and Driver Training in Salzburg (Austria)

Falls and accidents are a serious threat to older people during public transport trips. One bad experience can make people stop using buses and tramways. In order to encourage older people to use buses and to give them tips and tricks how to prevent accidents, the Salzburg bus operator started a training scheme, both for Passengers and Drivers.

During the passenger training sessions, people learn in smaller groups how to enter the bus, how to stand safe inside the vehicle or how to get a seating easily. Afterwards, a trip is organised, where the new learned knowledge can be practised. The training sessions also address people who recently had an accident and are endangered to become immobile. The evaluation showed that people use the bus more frequently and feel safer after the training.

In parallel, training sessions to bus drivers are provided in order to sensitise them for the mobility issues of older people and teach them how to drive safely.

4. **Train older passengers**

   Train older passengers how to prevent accidents and how to use public transport. Passenger training could be provided for different target groups, as the oldest old are particularly interested in accident prevention and “younger” old people might first have to learn how to use public transport. The format must be adapted to these different target groups, as 65 year old car drivers will hardly be attracted by public transport training for older people.

Training for Older Passengers in Salzburg

Photo: www.zgb.at
5. Use more staff at stations and in vehicles

Provide more service staff in vehicles and at stops. In order to improve subjective security and to assist older passengers by giving information or carrying their luggage when changing, there should be trained and friendly staff at fix points as well as teams travelling in vehicles and serving smaller stops. This can also help to deter fraud and vandalism or to detect dirty/defect equipment.

6. Identify weak points in vehicles with the help of older people

Screen vehicles, stops and the area around stops in order to find potential security risks. This can include steps which are difficult to see or have no handles, dark corners, high kerbstones, dangerous access to stops via roads with high traffic volume and others. Existing accessibility guidelines, but even more the old people themselves can help you detecting potential dangers.

Further Information

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Mr. Jean Pierre GUIRAUD, jpguiraud<c@cul-lille.fr

**Salzburg Training Scheme**
Ms. Angelika GASTEINER, angelika.gasteiner<c@stadtbus.at
[www.stadtbus.at](http://www.stadtbus.at)

Ms. Susanne SCHINAGL, susanne.schinagl<c@zgb.at
[www.zgb.at](http://www.zgb.at)
Recommendations: Participative Approaches

The topic

Mobility issues of older people are a relatively new and emerging topic on the agenda of public transport authorities. Therefore, not very much is known about requirements and expectations.

There is a need to involve older people and their organisations in order to develop appropriate answers to upcoming challenges.

Planning Workshop in Munich

Photo: Simone Tiedtke

Key recommendations

2. Consider older people and their organisations as partners

As the older people are the best experts on their own mobility, they should be consulted frequently. Often there are only little barriers to be removed, so it is more a question of organising it than of budget. It should be possible to contact transport operators and authorities easily. Older people appreciate it very much when other listen to their suggestions. However, it is important that a dedicated staff member takes responsibility for these activities. As this will certainly have a positive effect on the image of your organisation, it is useful to combine it with marketing and public.

Finally, there are many organisations dealing with the interests of older people. They often have an excellent knowledge and network, so it will be useful not only to consult them but involve them into projects and strategies.

Older people and their organisations should be considered as partners: They are interested in attractive and accessible public transport and can help you to develop suitable and good value solutions. Furthermore, they are an important strategic partner in order to improve lobbying for public transport among older people and decision makers.

Good Practice: Ombudsman in Salzburg (Austria)

The ombudsman for passengers in Salzburg (Austria) considers the interests of all passengers. However, particularly older people contact Mrs. Gasteiner in order to make suggestions or complaints. Different from the “anonymous” hotline staff, an ombudsman can represent the interface between the public transport authority or operator and the public. When older people have the impression, that their suggestions and complaints are taken serious, this helps much to improve their satisfaction and the image of public transport.

1. Understand better older people’s mobility on local level

Older peoples’ mobility focuses strongly on the own neighbourhood. They prefer to shop and meet people close to their own domicile. Transport planning often has a much larger scale, regarding the city or agglomeration level and is losing sight of the daily mobility issues of the citizens on local level. Often there are only small obstacles, such as a lack of crosswalks on the way to the bus stop, which hinder the mobility of older people.

Therefore, integrated planning (concerning all modes) on a micro level is necessary. Where Public Transport Authorities are also occupied with non-motorised modes and intermodality, such kind of measure is relatively easily to implement.
Continuation: Participative Approaches

3. Address increasing diversification of the older population!

With more and more immigrants reaching pensioner age, Europe’s old will belong to different ethnic and religious groups. They are less often car owners than the average senior and rely on public transport. Language difficulties and other cultural barriers however seem often to prevent that all ethnics can use public transport according to their needs and are aware of ticket and travel options.

It is necessary to consider the growing diversity in the marketing and communication framework and to take particular action if required. Often it is not only language barriers but also the ways and channels information is communicated which makes the difference, as the Birmingham example illustrates.

As there is only limited knowledge on how the diversification of the older generation will affect public transport, there is a clear need for further action. This should include consultation with local communities or organisations and also research work on local or (inter)national level.

Good practice: Urban mobility in local partnership scheme in München (Germany)

An Urban Mobility scheme (“Stadtviertelkonzept Nahmobilität”) was piloted in one selected Munich city centre area in 2003. Transport professionals from various organisations (different city departments, transport operator, consultancies) and citizens from the area have worked together in order to identify problems, assess them and develop solutions.

The scheme included tours with different focus groups (older people, children) and considering different transport modes. It was also possible to make proposals via telephone, letter or e-mail. In a following step, the identified problems have been discussed in groups with citizens and transport professionals and possible solutions were developed during two workshops. It was then the task of the city council and of the transport operator to remove these obstacles. The focus was on small measures on a more organisational than technical level. It included dislocation of bus shelters and new benches or improved lighting. It was also discussed to allow alighting between two bus stops, but introduced only in areas which are situated farther from the city centre.

Being an integrated approach, the scheme not only included senior people and public transport. However, older people and children benefited most from the improvements. The scheme shows very well, how transport professionals and citizens can cooperate in order to improve sustainable transport on local level. It points out that an integrated approach considering all modes is necessary. In the case of older people particularly the way from home to the next bus stop is crucial.

Older people explaining mobility issues to transport planners in Munich

Photo: Kerstin Langer
Continuation: Participative Approaches

Good practice: Cooperation with local communities in Birmingham (UK):

Whilst issuing concessionary travel passes to old people in Birmingham, the local authority found out that older people from ethnic minorities applied less than expected. It became clear that these groups often lack of information on the concessionary schemes and also have language problems which hinder them from applying successfully.

Centro, the West Midlands Public Transport Authority started to cooperate with local communities like the "Heartland older people forum" in the Small Heath area. This enables the mainly Southern Asian seniors to get assistance in their mother language and in close to their house.

At the same time, this cooperation helps the transport authority to understand the mobility needs and issues of older people with migratory background.

Further Information

Urban Mobility on Local Level in München
Ms. Kerstin LANGER, langer<at>kommaplan.de
Mr. Paul BICKELBACHER, paul.bickelbacher<at>t-online.de
www.muenchen.de/cms/prod2/mde/_de/rubriken/Rathaus/25_themen/UmGe/projektbericht_monaco.pdf
(In German, “Stadtviertelkonzept Nahmobilität”

Cooperation with Local Communities in Birmingham
Mr. Daniel PASS, danielpass<at>centro.org.uk
www.centro.org.uk
The topic

Accessibility means not only low-floor vehicles and lifts at stops. It also means that all users can easily obtain the information they need in order to plan and make a trip. Lack of information or the fear not to get the right information can prevent people from using public transport. The relevance of these issues grows with the size of a network. With the baby boomer generation entering retirement stage, a veritable car generation is growing old.

Combined with measures described in the marketing and training sections, information is a key to convince older people to use public transport.

Good practice: Travel Assistance in Göteborg (Sweden)

Many vehicles and stations have been improved during the last years. However, at the same time there have been cutbacks in staff and tasks such as changing the bus can be a big effort for older people, particularly when carrying luggage. In Göteborg, older people will find persons who assist them on request and help them particularly at major interchangers. This service allows many older people to travel mostly independently without needing dedicated services. Travel assistants can also provide information and help to orientate at stations and in networks.

Personal assistance in Göteborg

Photo: Västrafik

However, also seniors who already use public transport frequently will appreciate improvements related to information and orientation. When providing information, not only sensory but also cognitive barriers should be considered.

Key recommendations

1. Provide information in an easily accessible format

As many older people have sensory deficiencies, it is crucial to provide information in audible and visible format. Fonts should be sized big enough, while colours should provide strong contrasts. Unnecessary to say, that announcements should use clear voice and language.

Many people stop to go with each innovation and trend at a certain age. As a consequence, many seniors still use outdated information technology such as teletext or timetables on CD-ROM to plan their trips. It has to be ensured that these information sources will still be offered in the future. If in the future new technologies should emerge and become mainstream, it needs to be sure that today's information technologies like the inter-net or mobile phones still are supported.

2. Personal assistance is a key

Older people rely much on personal information. It is important to them to have somebody to ask, be it the information hotline, at the stop or during the trip. Some older people also need assistance in particular situations, while being able to travel independently in most cases.

Some solutions to achieve this have been presented in other sections, such as the “Friendly Agents” in Lille, conductors in the Midland Metro or Travel Information Centres.

It would also be an option to use kiosks in the reach of stops as “Micro Travel Information Centres”: By training the kiosk staff and providing some basic services (e.g. tickets, toilet, timetables, and information leaflets), good service could be provided with relatively low efforts.
3. Provide useful and understandable information

Also the content of information is important: It should be concise and understandable, so nobody needs to become an expert to cope with urban transport. Older people, particular non-frequent users are easily discouraged by complex tariff schemes and information systems.

In addition, some aspects are more important to seniors than to other passengers. This includes for example to know, where the next toilets can be found and which stations are equipped with a lift.

4. Provide information at all stages of the trip

Older people are less flexible than other passengers. They need to plan their trips more precisely and also need appropriate information during the trip. In the age of real-time information, it is often forgotten that good static information is important, too.

When being inside a vehicle, information on the itinerary (line number, destination, next stop) should be available. Additional to maps displaying the entire network, also the particular line should be shown on a separate map.

In case of deviations and major delays, it is crucial to inform passengers. Particularly older people find it difficult to react on such situations.

5. Enhance orientation at stops

For older people, it is often difficult to orientate at major stops: Clear and simple signposting should be provided. Key information should be available at a glance, without confusing the user by providing too much information.

Good practice: Internet Information in the Rhine-Main-Area (Germany)

Older people often need more information to plan their trip than younger passengers. For example, they may need to know where the next public toilet can be found, where the lift is situated or how to orientate at a major interchanger. In addition, older people prefer to plan trips very well in order to exclude “bad surprises”.

The Rhein-Main Transport Authority RMV has recently included a new tool on its internet homepage: A planning tool for travel without barriers. Here, the users can find detailed information on the equipment of stops and stations including maps. As the internet usage among older people is continuously growing, this can become a useful tool for older people in the future. Nevertheless, electronic information systems will not be able to replace human assistance completely.

Further Information

Rhine-Main Public Transport Information
Mr. Peter VOLLMER, p_vollmer<at>rmv.de
http://rmv.de/coremedia/generator/RMV/Service/BarrierefreiesReisen
(In German)

Göteborg Travel Assistance
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www.kolla.goteborg.se
(In Swedish)
Recommendations: Services & Intermodality

The topic

Mainstream Public Transport is not able to fulfil the travel needs of all passengers, even a dense network and accessible services are provided. Particularly older passengers have difficulties to reach the next stop or change the line during the trip. In order to facilitate independent living and quality of life, dedicated services and improvements on existing services are needed to provide seamless transport for all user groups.

2. Identify and use synergies between different DRT schemes

There are various forms of Demand Responsive Transport (DRT). They differ regarding vehicles, schedules (fixed/semi-fixed/none), terms of use (open to public/restricted to particular user groups), stops (fixed/semi-fixed/door-to-door).

In most cities, different services operate in parallel without centralised booking and scheduling, using different types and vehicles. Some transport authorities, as in Greater Manchester (UK) and Goeteborg (SE) are currently analysing the possibility to combine the different services in order to improve the services for passengers and making it more effective.

3. Improve integration of DRT with Mainstream Public Transport

Nowadays DRT services are mainly used for direct trips between home and the final destination. By improving integration between the regular network and these services, many synergies could be created. This could help to improve services by making them more financially viable. In concrete terms, DRT services could form a (flexible) feeder service to major transport hubs. This would of course require that these interchanges and regular services conform to the requirements of older people. However, not all people are able to change between lines easily, so there still remains a need for home-to-destination services.

Key recommendations

1. Provide and improve Demand Responsive Services (DRT)

In many cities and agglomerations, DRT schemes already exist. However, there are restrictions concerning timely flexibility (often services have to be booked 3 days in advance) and the destinations. Services use to operate only within municipalities and do not cross city limits. Particularly in larger agglomerations with various local authorities, this makes it difficult to get around. In the future, more flexible DRT schemes should be developed in order to improve the mobility of its elderly users.

Good practice: Shopmobility in Birmingham (UK)

Public Transport can offer connection to shopping centres and high streets, but for older people it is often not possible or too exhausting to move between the PT stop and different stores. Shopmobility offers various mobility aids including electric scooters, walking frames and others. They can be borrowed at different points and usually are free of charge. In Birmingham, one of the Shopmobility points is situated inside the Snow Hill station, the city’s second largest train station. This facility offers the opportunity to reach the city centre by train, metro or bus and then moving independently and comfortable in the central shopping area. This service complements very well the PT network in city centres and offers new mobility possibilities to older people with walking impairments or other health problems. Therefore, it can be recommended to integrate Shopmobility with larger PT interchanges and dedicated services (dial-a-ride).

Shopmobility in Birmingham Snowhill

Photo: www.birminghamshopmobility.org

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Key recommendations

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4. Ensure seamless linkage with non-motorised modes

Most people use to walk to the next public transport stop. However, there are often barriers such as high curbs, badly maintained pavements (particularly in winter!) or streets which are difficult to cross. As public transport can not guarantee for the maintenance of all footpaths, it is recommended to screen the network in a 200m perimeter of the stops. Senior organisations or private persons may assist in finding the most hindering obstacles. Often, they can be removed using a small budget only. In case of more complicated situations (e.g. large streets without possibility to cross), public transport should take the opportunity to push the responsible towards finding a solution.

Cycling is very popular among older people in many European countries, particularly in the North. In theory, it could complement perfectly public transport. However, in most European cities there is a need to install safe and useful bicycle parking facilities. Furthermore, it is often difficult and expensive to transport the own bicycle in public transport. So, many seniors use the own car to get their two-wheeler to areas of natural interest.

5. Ensure seamless linkage with motorised modes

There are also niche products for older people such as shop-mobility which could be combined with public transport: Travelling by metro to the city centre, shopmobility could offer various mobility aids right at the stop in order to facilitate shopping and strolling in the city centre.

Finally, the private car can not be ignored as a growing number of seniors are using it. Park & Ride should be promoted among senior drivers, particularly for trips to the city centre. It is also important to optimise the facilities for older users: Increase safety and security, short distances between car park and platforms, provide parking spaces which are large enough. As many of the seniors here will be non-frequent public transport users, it could also useful to provide staff for information, assistance and marketing purposes, at least in the framework of marketing campaigns.
The topic

Vehicles and stops have always been in the focus when dealing with accessibility issues since a long time. As most measures for impaired passengers are also a benefit for old people, this section keeps rather short in order not to repeat already known issues. Selected examples of station/stop and vehicle design are presented which meet the needs of senior passengers and are suitable to attract more senior passengers.

Older people are indeed more vulnerable than other passengers. They will also find ordinary activities more exhausting, even they do not suffer any mobility impairment. Fitness can vary from day to day in older age, making it impossible to use the private car.

Key recommendations

1. Consider not only barriers but also physical strains

In fact, when planning and purchasing new infrastructure, much attention is already put on accessibility. But in terms of older passengers, it is not a problem to get over a step of 10 cm – while a distance of 300m between two platforms can be a serious issue.

In addition, these barriers work in a much more subtle way: There are not so many clearly identifiable barriers, it is more the estimation of the total efforts that lets a senior decide to do this trip by an alternative mode – or to travel not at all.

Therefore, long footpaths (e.g. between two platforms at interchangers) should be avoided. Unnecessary to mention, that low floor entries, lifts and escalators should become standard in order to lessen physical strains.

Good practice: New Bus Stations in Manchester and West Bromwich (UK)

With vehicles being mainly accessible (or becoming it within the next years), stops and stations are in the focus now. In fact, senior people state that having to change during a trip is a main reason why they do not use public transport. As it is a course of matter that changing can not always be avoided, there should be a focus on improving it.

Both the Greater Manchester (GMPTE) and the West Midlands (CENTRO) transport authorities are implementing a new generation of bus interchanger stations. These hubs share some aspects, which make them particularly suitable to enhance mobility conditions of older people.

They are accessible to wheelchair and walking frame users (only one level, high curb) and have short distances between platforms without having to cross the street level. Information is provided in audible and visual format, also tactile guidance for blind passengers are included.

In addition, a travel information centre provides passengers with information and assistance. Also toilets and small shops are integrated into the building. Finally, a comfortable and clean waiting environment is provided, so passengers are warm and safe from bad weather.

Being an improvement for all passengers, these new interchasers are a particular help for older passengers, who feel it much more difficult to cope with the deficiencies of “usual” stops than younger passengers.

2. Use intuitive design solutions in order to enhance orientation and user friendliness

Older people often feel lost at major interchangers and feel it difficult to use technical devices such as automatic door openers.

When implementing new infrastructure and vehicles, ease of use should be in the focus. It is crucial to use a design that is self-explanatory. Please refer also to the “Information & Orientation” section.
Continuation: Vehicles and Stops

3. Consult older people – they are the best experts!

It is a fact that older people themselves know the best about their needs and requirements. There are many actions that can be taken – like improve fixing points for walking frames or painting handrails and bars in contrasting colours so they can be easier seen. Often, it is cheap and quick to improve things. Older people can provide useful information that can not be found in accessibility guidelines and manuals!

4. Provide useful equipments and services

As stressed before, travelling is a much higher effort for older people than for the young ones. Therefore, the equipment to be found in vehicles and at stops and stations should be adapted to their needs.

This includes a pleasant waiting environment (and vehicle interior), that saves the passengers from bad weather conditions and cold. There should be sufficient seating with armrests in order to facilitate standing up.

While a lack of (clean) toilets is just annoying for younger passengers, it is a serious constraint for many older people. Therefore, vehicles that run longer distances (e.g. commuter trains) and major stops should be equipped with toilets.

5. Ensure appearance and functionality

Particular older car drivers are deterred by dirty vehicles and stops or non-working equipment. Only by offering a high quality level, it will be possible to attract new passengers.

Further Information
Manchester Shudehill Bus Station
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www.gmpte.com

West Bromwich Bus Station
Midland Metro
Mr. Daniel PASS, danielpass<at>centro.org.uk
www.centro.org.uk

Travelshop at the Shudehill Bus Station
Photo: GMPTE

Good Practice: Staff in vehicles in Birmingham (UK)

While metros and tramways usually do not have conductors anymore nowadays, all vehicles of the Midland Metro in the West Midlands operate with service staff. For older people, this means enhanced safety and security, information and assistance during the trip. Tickets can be purchased without using a machine. In addition, these vehicles are cleaner and suffer less from vandalism than on other services. In other words, this approach combines customer orientation with a soft security concept. As it helps to ensure quality, the image of public transport is improved much while costs through fraud and vandalism are decreased at the same time.

The Midland Metro
Photo: Centro
The topic

“Understand your organisation as a promoter of older peoples’ mobility!”

As raised before, mobility problems start not just when people have to stop driving. Often they do use the car under certain conditions only. This results in a reduced mobility. On the other hand, there is a rather high subjective dependency on the private car, meaning that the ability to drive is much related to the individually perceived quality of life.

It is a challenge for public transport to convince the older generation of its advantages – enabling them to be mobile also at night, at bad weather conditions or just suffering from a temporary health problem.

However, such campaigning should be linked to improved services and focus on topics where public transport is strong – such as transfer to the inner city avoiding the heavy traffic conditions.

It is also favourable to link public transport with promotion of healthy and active lifestyle and to motivate people to explore “unknown” areas using train or bus.

In a few words, it is necessary to improve the image of public transport among old people and to promote the benefits!

Key recommendations

1. Remove barriers for (non-frequent) users – create an easy to use public transport system

The generations growing old now and in the future belong to the “car generation”. Most of them have always used the private automobile and are not very experienced with public transport. But also other older people will find it difficult to buy a ticket at a machine or find the right platform with no one to ask. Therefore, tariff systems and ticketing systems should be simple and self explaining. Also e-ticketing solutions for non-frequent users can contribute to attract car older car drivers.

2. Provide attractive and fair tariffs

Different people have different needs and budgets concerning tariffs. While some people are very active and use public transport frequently, there are others which use it less but also want attractive tariffs. Finally, there are and will be old people which can nor afford a private car, nor pay the regular tariff. Tariff schemes should reflect the financial situation of older people, considering as well the need for generating revenues. However, as there are large differences between countries and cities, no universally valid solution can be identified.

Good practice: “BärenTicket” and “Fit & Mobil Campaign” in the Rhine & Ruhr Area (Germany)

The VRR’s (Rhine & Ruhr Public Transport Authority) monthly ticket for frequent users over the age of 60 is a showcase for the integration of ticketing, marketing and communication.

The “BearTicket” is targeting active older people, highlighting public transport as a convenient mean of transport that ensures their participation in society, recreation and culture.

The ticket is valid during the whole day, there are no peak hour limits. During off-peak times, the “BärenTicket” entitles the users to take other persons with them. It is also possible to se the 1st class compartments in trains without extra charge – these are less crowded.

Parallel to the new ticket, the VRR started the “fit & mobil” initiative (“fit & mobile” in English. In this joint initiative, the Transport Authority is cooperating with organisations with social, health, sport, culture, education or recreation background. The target is to motivate older people to participate actively in society and to use sustainable transport modes. For this sake, a magazine is produced and cultural events are organised.

These events are also used to enhance the communication between transport professionals and users. Thus aspects of stakeholder involvement can also be found in this scheme.
3. Promote the Advantages of Public Transport

Public transport has got a high potential among older people – and it can contribute much to be active and independent in later life. This however should be developed and promoted with more emphasis, both towards older people and decision makers. The campaign made by the VRR can serve to illustrate this: A dedicated magazine promotes activities for seniors which can be reached easily by public transport. At the same time, this helps to keep older people fit and active. This way, public transport contributes to political and societal objectives.

Good practice: BOB-ticket in Bremen (Germany)

The BOB-ticket is an innovative pricing strategy for non-frequent PT passengers. Surveys showed that about 30% of citizens use public transport frequently. About 70% of all citizens rarely or never use it and are not familiar with networks, schedules and tickets.

The BOB-ticket is a post-paid e-ticketing system basing on smartcard technology. Unlike standard ticketing systems, the passenger only has to register on the card the stop of destination when starting the trip. The booking system will always select the cheapest price. When several trips are made in one day, only the price of the cheaper day ticket will be charged.

This scheme fits for older car drivers which are not familiar with ticketing schemes and consider public transport being too expensive. It is appropriate to overcome personal barriers and to make them more frequent users.

Even each trip has to be registered on the smartcard via a terminal inside the vehicle, the handling is much easier than of standard ticketing machines, as the passenger only has to know the destination of his trip. However, this task might be difficult for older people with mobility impairments.

Good Practice: Concessionary Schemes in the UK

Since 1 April 2006 all people aged 60 and over and disabled people are entitled to free bus travel within the local authority area they live.

The Secretary of State for Transport has announced that from April 2008 this will be improved to allow free travel on any local bus across England.

In the Greater Manchester and in the West Midlands, these concessionary fares are valid after the morning peak hour and are very well accepted by older people.

Particularly in regions and areas where many poor aged people are living, concessionary fares are an adequate mean to ensure people’s participation in social life.

However, it remains important to push forward further quality improvements and to maintain existing door-to-door services in order to provide attractive transport to all seniors.

4. Don’t call it a “Seniors’ Product”

Older people do not like to be labelled as “old” or “senior” and to buy the respective products. On the other hand, they ask for products which are adapted to their needs and aspirations. Marketing and communication will have to consider this, be it a new monthly ticket or be it reserved parking spots at park & ride facilities.

Sechzig sein ist 1. Klasse!

Photo: VRR
Continuation: Marketing, Communication, Tariffs & Ticketing

Good Practice: “Mobility Day” in Salzburg (Austria)

For the first time in 2006 a mobility day for older people was held in Salzburg. The event addressed public transport and non-motorised modes and was held on the site of the local public transport operator “Stadtbus”. It included an exhibition of about 40 companies that provide products related to the mobility of older people – from leisure offers over specially adapted bicycles to walking and hearing aids.

In parallel, information on public transport was offered in form of presentations, brochures and guided tours. Older people had the possibility exchange views with key staff and to “test” vehicles in calm ambient.

The event attracted some 1.000 visitors and was very well received by the local press. The mobility day 2006 was successful at combining elements of information, marketing and communication. It improved the image of public transport in the public and helped also to raise awareness on older

Further Information

BärenTicket and “Fit & Mobil” Campaign
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hauschildt<at>vrr.de
www.vrr.de/imperia/md/content/en/abc_e.pdf

BOB Ticket

Mobility Day
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www.salzburg-ag.at/content/default.asp?mainid=9&kapitel=53&newsid=624&page=4&find=%25%25%25&find2=&show=1www.stadtbus.at
www.zgb.at

Concessionary Fares
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Mr. Daniel PASS,
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http://www.gmpte.com/content.cfm?subcategory_id=423034
www.centro.org.uk/wwwroot/Mobility/usrMCconcessionary.asp?hdWhichMenu=CONCESIONARY
Overall Recommendations & Integrated Approaches

The topic

In the previous sections, recommendations and measure have been presented more or less independently from each other. However, most measures have impacts on various levels and their success often is dependent on each other. Therefore, this section aims at describing two examples of integrated approaches and to formulate overall principles and recommendations.

Key principles and recommendations

1. Regard all Aspects of Accessibility

Technical aspects of accessibility should not be overestimated. Other elements such as staff and passenger training, passenger assistance and overall acceptance (e.g. staff) are crucial for success.

2. Provide seamless travel

No trip starts at the bus stop! It is important to consider also the way to stops and stations. Having to change often means additional stress to senior passengers. Older people tend to perceive a whole trip to be too demanding or stressing instead of particular barriers.

3. Consult older people

Intensive consultation and direct stakeholder involvement in planning and decision making processes is crucial in order to understand the needs and expectations of older people on local level.

Good Practice: Good practice: KOLLA project in Göteborg (SE)

Like many other cities in Europe, Göteborg is providing various demand responsive services for passengers with mobility impairments or living in areas not served by the standard bus lines. These services are rather expensive to maintain and further analysis showed that more people would be able to use mainstream public transport, if accessibility and quality was improved. In other words, the KOLLA project aims at making public transport accessible for all. The costs to achieve this will partly be covered by decreasing the need for door-to-door transport.

The KOLLA project comprehends the following elements:

- Adjusting of stops including elevated platforms, improved information and orientation
- Low floor vehicles with enhanced interior design are purchased
- KOLLA also pays attention to the stop environment: walking paths in the 200m perimeter are assessed and adjusted
- A new flex line scheme is implemented which is offering a mix between door-to-door transport (for mobility impaired passengers) and a flexible-stop concept (for other passengers)
- All staff, including drivers and administrative personnel will be educated
- Travel training for old and disabled persons is provided
- Personal assistance is offered at 4 major interchangers. Passengers can ask for an assistant who will helps them changing between the lines, carrying their luggage or providing them with information
- As a consequence, the authorisation criteria for door-to-door transport will be changed: Only persons who are not able to walk even short distances or to change independently will be entitled to use door-to-door services in the future.
- A new IT system will help the passengers and the providers to plan and schedule the trips more effectively.

Adjusted Footpaths to Bus/Tram Stops in Göteborg
Photo: Göteborg City Council
Good Practice: Combination of Non-technical Measures in Salzburg

In networks with buses and trolleys only, technical accessibility issues are at a smaller scale. The approach of the Salzburg bus operator Stadtbus therefore is to develop non-technical concepts to improve public transport and to increase patronage.

Without being an official strategy yet, various elements are integrating and forming an integrated approach, with impacts at various levels. The activities relate to training (passengers and drivers), public relation (newspapers, radio, television and public presentations), Marketing and Information (mobility day). The topic communication is addressed (ombudsman) and thanks to the lively dialogue between public transport operator and the older community, there is much involvement of stakeholders.

The described activities are all affecting the non-technical level, however they have much impact on the awareness of the issues of older people and improve the image of public transport. In addition, these consultations cause also improvements on the technical and service level, as the intensive dialogue enables the operator to respond quickly to the requests of older people.

3. Consult Older People (cont.)

Older people and their organisations can not only provide you with valuable input, they can even be a partner in developing solutions!

4. Understand your organisation as a promoter of older people’s mobility

Public transport helps older people to maintain an independent life and provides comfortable and safe travel. It can contribute to keep people active and enjoying their life – the list of advantages is long. However, public transport should play an active role in order to promote its important role for the mobility of older people. It would also be interesting to widen these activities on other sustainable modes such as walking and cycling, which have an important share among the senior generation.

5. Be an Approachable Organisation

Many requirements and expectations of older people are related to more staff presence and courtesy. New concepts have to be applied to tackle anonymity of services by keeping them financially viable. For older people, it is always crucial that there is a contact person, they can ask for information and assistance.

6. Offer a pleasant trip

As an increasing number of seniors will own a car in the future, it will become crucial to attract them and make them satisfied passengers. Therefore, quality and appearance of public transport will play an increasing role, also among the senior market. In the end, a suitable transport system has not only to be accessible but also attractive to older people.
7. Provide an easy to use public transport system

Easy access to public transport means also that it should be easy to use. Many of the future older people will not be very experienced with buses and trams, therefore information, tariff schemes and terms of use should reflect this. Many older people are able to use to public transport and to benefit of it, however they are not aware of it. Therefore the public transport sector should contribute to strengthen the competences of older passengers and help to overcome the psychological barriers which prevent older people from not using it.

8. Tackle Fears of Older People

Fears and psychological constraints can prevent older people from using transport and using the private car – or staying at home in the worst case. It is crucial for public transport to address these fears, be it the fear of falling, misbehaviour or simply buying the wrong ticket.

9. Develop strategies for the Urban Fringe

Many of the older people of tomorrow will live in suburban areas with low density of buildings, shops and public transport services. As distances are often too large to walk or cycle, there is a need for tailor-made mobility concepts for these areas.

Further Information

Kolla project
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www.kolla.goteborg.se
(In Swedish)

Salzburg
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www.stadtbus.at
www.zgb.at
(In German)
8.2 Recommendations on National and European Level

Some of the issues addressed in this report are beyond the responsibility of public transport authorities. In order to achieve improved mobility for all older people, the following recommendations are made to decision makers on National and European level.

Develop National and European policies and strategies on ageing societies

In order to define and advance common fields of action and improve networking of stakeholders, national and European policies should be defined. Sustainable urban transport and social inclusion should be an integrative part of such strategies. Needless to say that older peoples' representatives as well as public transport authorities should be involved among other stakeholders.

Set up large scale demonstration projects

It is obvious that there are already a certain number of studies on the needs and requirements of older people. However, a large number of issues remain to be solved. Transport authorities and operators lack resources to develop solutions of their own. Therefore, the aforementioned policies should be accompanied by large scale demonstration projects, in order to develop and test suitable solutions for the future. These should address the points raised in the “Recommendations and Best Practices on the Local Level” section.

Tackle exclusive urban structures

There are diverging trends in urban planning and in demography: While there are more old people who prefer short distances, shops and services are moving away from the high streets into the urban fringe, concentrating on ring roads. In more general terms: Urban sprawl and concentration of retail in commercial areas will make it difficult for older people to reach them as they prefer walking and/or public transport. Car-orientated urban structures are difficult to supply by public transport and the distances are often too far for non-motorised modes.

National and European policies should therefore address more explicitly the link between mobility and urbanism and develop tools and policies to assist local planning and transport authorities.

Enlarge research activities on the mobility of older people

Despite a certain number of surveys dealing with the mobility of older people, there is still a lack of knowledge considering
several aspects. Furthermore, it should be considered to shift the perspective we use to look at the mobility of older people.

**Statistical data:** There is not much data available on the European level. It is hardly possible to compare the developments in different countries, as the data often are not consistent (for example, the definition of “trip” is different in each country). In addition, people beyond the age of 60 and 65 are treated as one group. It would be crucial to provide more detailed age groups, which make it possible to better analyse older people’s mobility.

**Mobility behaviour and cohort studies:** There is not much known of how the mobility of individual persons changes during the process of ageing. With highly mobile generations reaching the retirement age, the mobility of older people will change. This implicates the need for more cohort studies. In general, there is a need to find out more about the determinants of older people’s mobility and to go beyond an age-orientated perspective. This should consider factors such as health & abilities, phase of life (incl. household size), socioeconomic factors (incl. car availability). The personally perceived age and individual preferences will play a bigger role. Future studies should focus on finding out how older people decide on their trips and how this decision can be influenced towards a multimodal and more sustainable mobility.

A growing number of pensioners will have an immigration background. At the moment, it is very difficult to assess, how this will affect urban transport in the future. Keywords are language barriers and cultural differences, socioeconomic aspects, particular needs and preferences.

**Facilitate active participation of older people in European societies**

Older people want to be an active part of our societies and to be able to travel contributes very much to their quality of life. For example, going shopping without help is the daily proof of autonomy for many older people. In addition, outdoor mobility is an event in itself and means socialising at the same time.

It is also of lively interest for governments and the European Commission, to keep Europe’s older people active and mobile. Apart from contributing to high level political objectives (maintaining quality of life of older people), this also helps to save social costs which could emerge in case older people are not able to lead an independent and active life: Costs for services such as care and home deliveries is increasing. Inactive seniors are more likely to lose abilities earlier and to suffer from chronic physical, psychological and mental diseases.

Funding priorities on the national and European levels should therefore prioritise approaches which contribute to an active and independent lifestyle of older people.
Bibliography


BECKMANN, Klaus C. et al. (2005): Mobilität älterer Menschen – Analysen und verkehrsplanerische Konsequenzen


BURNETT, Alan (2005): In the right place. Accessibility, local services and older people.

CERTU (2001): La mobilité des personnes âgées. Analyse des enquêtes ménages déplacements

CERTU (2005): Personnes âgées et transports collectifs

CRACOW UNIVERSITY OF TECHNOLOGY and UNIVERSITAT DE VALÈNCIA (2003): The SIZE project – results of focus-group interviews and in-depth interviews with senior citizens and experts


DEPARTMENT FOR TRANSPORT (2001): Older People: Their transport needs and requirements – Main report


ENGELN Arnd & Bernd SCHLAG (2001): ANBINDUNG Abschlußbericht zum Forschungsprojekt


ECMT (2002) Transport and Ageing of the Population

ECMT (2004): Improving Access to Public Transport

ECMT (2006/1): Improving Transport Accessibility for All: Policy Messages

FÖBKER Stefanie and Reinhold GROTZ (2003): Leisure-related mobility of elderly people: ways to sustainability

HIEBER Annette et al. (2006): Mobilität und Alter - Kontinuität und Veränderung

GRÖNVALL, Oscar, STÅHL Agneta and Monica BERNTMAN (2006): The SIZE project – Summary of the results of Area 3


INSTITUTE OF TRANSPORT AND LOGISTIC STUDIES (2005): Travel Behaviour of Seniors in an Aging Population: An exploratory Study of Trip Chains and Modal Preferences in the Greater Metropolitan Area of Sidney


MINISTRY OF TRANSPORT, PUBLIC WORKS AND WATER MANAGEMENT (2002): Mobility of senior citizens in the Netherlands


PRSKAWETZ Alexia, LEIWEN Jiang and Brian O’NEILL (2002): Demographic composition and projections of car use in Austria


STÄHL Agneta (1999): Public Transport or Special Service or a Mix?


UNIACCESS PROJECT CONSORTIUM (2006): Understanding the Evolution from Accessibility to Universal Design

VAN DER MEER, M.J. (2006): Older adults and their sociospatial integration in the Netherlands


VCÖ (2007): Mobilität und Verkehr im demographischen Wandel
Annexes
Please take 20 minutes participating in this study and you will receive a free copy of the final report!

The European Metropolitan Transport Authorities (EMTA) in Paris is an organisation that aims to enhance the exchange of information and best practices between the public authorities responsible for planning, integrating and financing public transport services in the large European cities.

This questionnaire purposes to obtain an overview on how different Public Transport Professionals from authorities, operators and city councils across Europe assess the issues of the growing share of senior population and which practices they have developed in order to cope with.

The EMTA working group on accessibility is presently conducting a study on the challenges of the growing senior population for Public Transport. The survey goes beyond accessibility issues and also addresses issues related to marketing and expectations of travellers beyond working age. In this light, not only the requirements of elderly disabled persons, but also of fit and active seniors are relevant. One of the study’s crucial points is to identify strategies how to initiate a shift towards Public Transport among an increasingly car-orientated and demanding senior generation.

As important stakeholder the Public Transport Professionals have the opportunity to provide valuable observations and examples in this questionnaire. The study is conducted by Rupprecht Consult in Cologne (Germany) on behalf of EMTA. In case of any question you may contact Mr. Matthias Fiedler: +49 221 6060 55 22 (e-mail below). Mr. Fiedler speaks English, German, Spanish, French.

Please return the completed questionnaire to: Rupprecht Consult GmbH, Waltherstr. 49-51, D-51069 Cologne, Germany or fax to: +49 221 6060 55 29 or e-mail to: m.fiedler@rupprecht-consult.de no later than 31 May 2006

<table>
<thead>
<tr>
<th>General perception of the issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ‘The growing share of the senior population is a highly relevant issue for Public Transport’</td>
</tr>
<tr>
<td>Please indicate how much do you agree with the phrase!</td>
</tr>
<tr>
<td>Absolutely agree</td>
</tr>
<tr>
<td>☐</td>
</tr>
</tbody>
</table>

2. Many times, the requirements and expectations of senior and impaired passengers are mentioned in the same breath. What do you think are the main differences between these two groups?

1) ..............................................................................................................................................................................
2) ..............................................................................................................................................................................
3) ..............................................................................................................................................................................
3. **What are the issues that constrain a shift towards Public Transport among the senior population?**

*Please indicate how much do you agree with the following statements.*

**Seniors passengers…**

<table>
<thead>
<tr>
<th></th>
<th>Absolutely agree</th>
<th>Mostly agree</th>
<th>Mostly disagree</th>
<th>Absolutely disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>are less sensitive towards crime and harassment than other passengers</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>pay more attention on accessibility and physical strains</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>are easily discouraged by complicated tariff schemes and ticketing machines</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>put more relevance on courtesy of staff and fellow passengers</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>do not feel a lack of approachable staff</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>are sufficiently considered in the planning of schedules and services</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>should be considered better in the planning of ticketing and tariffs</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>require more adapted pre-trip and on-trip information</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>expect a convenient and pleasant waiting environment</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>have already been discovered as an attractive customer group</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>have needs that are mainly unknown to Public Transport officers</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>need to be addressed more by 'soft measures' (e.g. campaigning)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>have low expectations towards Public Transport quality</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>are increasingly accustomed to car use</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>other:</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

4. **How will these challenges vary in the next 15 or 20 years; which factors will become more relevant?**

1) ............................................................................................................................ ......................................

........................................................................................................................................................

2) ............................................................................................................................ ......................................

........................................................................................................................................................

3) ............................................................................................................................ ......................................

........................................................................................................................................................
### Implementation of particular measures

5. *Which types of measures to enhance senior passengers’ mobility have been realised or are planned by your company / authority in the near future?*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Imp.</th>
<th>Partly Imp.</th>
<th>Pl.</th>
<th>nc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving accessibility of vehicles and stops / stations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Convenient waiting zones and short footways at interchanges</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Specially adapted tickets and fares for seniors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>‘Easy to use’ ticket machines and timetables, enhanced orientation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visual and acoustic information (on trip and pre-trip)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Dedicated services for seniors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>PT training for elderly passengers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>‘Transport courtesy’ training for PT staff</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Public safety strategy</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Approachable service staff at stops and stations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ensuring cleanliness and appearance of vehicles and stops / stations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Marketing campaigns focussing on senior passengers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Surveys on needs and satisfaction of senior passengers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Co-operation with user groups, city councils, public housing associations or other stakeholders</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other:</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</table>

6. *In the light of the previous questions, are you following an integrated strategy / or are there more or less independent measures and improvements?*

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
### Assessment of particular measures

#### 7. How do you perceive the effectiveness of the implemented measures?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving accessibility of vehicles and stops / stations</td>
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<tr>
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<tr>
<td>Public safety strategy</td>
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</tr>
<tr>
<td>other</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

#### 8. What are in your eyes the most important barriers to these measures?

*Please refer to all relevant phases (planning, implementation, acceptance, operation)*

1) ........................................................................................................................................
2) ........................................................................................................................................
3) ........................................................................................................................................

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Mobility of the senior generation – challenge or opportunity for Public Transport?

**EMTA**
9. One aim of our study is to identify ‘best practise’ examples that meet particularly well the requirements of senior persons in Public Transport. Could you quickly list the most appropriate measures to enhance elderly peoples’ mobility in your city (or agglomeration) and tell us where more information on these projects can be found?

1) ..............................................................................................................................................................

2) ..............................................................................................................................................................

3) ..............................................................................................................................................................

10. Previous studies found out that mainly the technical requirements have been considered by Public Transport providers or authorities. Senior passengers said that they would appreciate if also their more emotional and perception related requirements would be addressed (e.g. anonymity of services, lack of transport courtesy or simply the fear of buying the wrong ticket). How do you cope with this issue?

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11. A growing number of today’s senior citizens are accustomed to car use. Do you address them particularly in your marketing strategy? Which measures are used to attain a modal shift among elderly drivers?

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12. How do you deal with the heterogeneity of requirements (physical and mental condition; expectations) of the senior passengers?

Comments

Please feel free to add further comments!

Contact details

Thank you for your information! We would appreciate if you could give us your contact details, so we can contact in the case of further questions. As we are planning to conduct in-depth case studies in 4 cities this is particularly important to us. As thank for your efforts, we would like to send you our final report (spring 2007)

☐ Yes, I am willing to provide further information and will participate in a telephone interview (about 60 min.)
☐ I would like to receive the draft final report and to contribute with my comments
☐ I am interested in this topic and would like to participate in the validation workshop in September 2006 in Frankfurt (Germany)

✈ Please insert your contact details:  ☐ Mrs/Ms  ☐ Mr

Family name: ..............................................................................................First name: ..............................................................................................

Position & Department: ..............................................................................................

Organisation: ..............................................................................................

E-mail (priority means of communication): ..............................................................................................

Address: ..............................................................................................

Postcode: .................................. City: ..............................................................................................

Country: ..............................................................................................

Tel.: ..............................................................................................Fax: ..............................................................................................