Increased motivation through improved physical arrangements and low threshold services may contribute to increasing the walking activity of older citizens in Kristiansand. Older citizens want better maintenance of pedestrian walkways in winter, dedicated walking and cycling paths in summer, reduced traffic volumes in the most frequently used pedestrian areas, lower speed limits in central areas, wider pavements, lowered kerbs, more seating places in the outdoor environment, and improved lighting and road-marking, especially at pedestrian crossings. At a workshop arranged to discuss these things it became clear that getting information about activities and establishing walking groups would motivate older citizens into walking more, especially those who did not have a companion to walk with. These are the findings of a comprehensive study among citizens 67 years of age and older in Kristiansand, a city in the south of Norway. The results provide a knowledge base for development of a walking strategy to be directed by the municipality of Kristiansand.

The basis for a walking strategy

Walking is beneficial in several ways. It is both a physically and a psychologically healthy pursuit. Chance meetings with acquaintances on the street are commonplace, and people have a different perception of the environment than they do with motorized transport modes. The community, too, benefits from a better climate and local environment, and the better overall health of its residents.

Different groups in the population require varying stimulus and favorable conditions if they are to travel on foot. Older citizens – a group which is expanding in number and in share of the population – need different measures from younger citizens. Growth is especially strong among the oldest, the 80 year olds and above. Improved walking conditions for this group would increase their mobility and bring about positive health effects. Increased walkability among older citizens would reduce the need for motorized transport and in this way contribute positively to the environment and climate.

The purpose of this project is to provide a basis for development of a walking strategy for older citizens that would make it more attractive and safer for them to walk in. One of the goals is that the elderly themselves should be heard throughout all stages of the project; with minor local adjustments, another goal is that it could be used by other municipalities.

The method used in the project consists of several parts: a survey among a sample of elderly in Kristiansand to get an overall view of the situation; a participatory observation where the elderly and planners/scientists walk together on routes selected by the elderly themselves to identify barriers and their perception of
pedestrian areas; and a workshop where scientists, planners and elderly discuss the results emerging in the first two parts and also the measures to be taken. The results then to be used by municipal planners as a knowledge base on which to develop a walking strategy targeting older citizens of the municipality.

**Difficulties walking increase with age**

Well over half of the sample of 3,500 people aged 67 years and older responded to the survey. Nearly 500 were positive to attending the participatory observation, when questions were asked about activities and daily travel, their experiences walking in the neighbourhood, their most important reasons for walking, what they perceived as comfortable/not comfortable pedestrian areas and what they would give priority to if measures were to be taken to improve the conditions for pedestrians.

The survey showed that even though difficulty walking increases with age (figure S.1) – and many elderly above 80 years use an aid of some kind – a large number still walk when carrying out their daily activities. About 40 per cent of this age group walk when doing their grocery shopping, women more so than men. This is in fact a reflection of men more often than women have a driving licence. Measures facilitating walking are important in maintaining good walking habits among the elderly and in developing new habits for those who previously drove a car.

![Figure S.1 Share of elderly with some or great difficulty making use of different transport modes. Percent. Kristiansand 2012](image)

The results show that older citizens living in central areas of the city walk more, which is a reflection of both the wider range of activities and the shorter distances between home and activity. For example, when we look at the most frequently used mode of transport for grocery shopping, there are great differences between the residents in various districts. Nearly 60 per cent of the older citizens in the city walk, while the share of walking in the rural districts is no more than 18 per cent. In these areas, almost 80 per cent go by car when shopping, 60 per cent of them as a driver and 17 per cent as a passenger.
Improved health – an important motivation for walking

The health dimension of walking is important in the motivation for many older citizens. Additional high rated motivation for walking is in getting outdoors, carrying out practical tasks and meeting others.

![Graph showing reasons for walking](image)

*Figure S.2. The main reasons for walking. Share of the elderly who answered "Very important". Per cent. Kristiansand 2012*

Measures to facilitate walking

Areas favoured by pedestrians are: green vegetation, satisfactory winter maintenance (snow removal, gritting), good lighting, safety and seating opportunities along the way.

![Graph showing measures for walking](image)

*Figure S.3. Share of the elderly reporting that these measures are "Very important" for their walking activity. The ten most important measures. Per cent. Kristiansand 2012.*

Winter maintenance, separate walking and cycling paths, more benches along the walkways, lower speed limits for cars, lowered kerbs on pedestrian crossings and at other locations, and smoother and wider pavements are all measures that, if improved, would lead to increased walking activity of older citizens.
Participatory observation among a smaller group of elderly

The purpose of the participatory observation was to examine in more detail the factors that motivate seniors to walk, what they perceive as barriers to walking and what qualities of the physical environment it is that contribute to their experience of the surroundings as more or less navigable, pleasant and safe. The participatory observation was carried out in February and March 2013 and included 44 persons above 67 years.

The starting point was a walking route used frequently/daily by the informants, usually near their homes. After the walk, during an interview lasting about an hour, features of the walking route were discussed and habits for walking, motivation, barriers and social activities were raised.

Motivation for walking

The joy of being out in the fresh air

The motivation most frequently mentioned among the elderly was the joy of getting out and getting a breath of fresh air. As long as they are in good health, inner motivation is probably one of the most important reasons why they walk and this may be linked to mental health, well-being and coping. Some of the interviewees explained that walking had become a habit in their everyday lives.

For the health of it

As in the survey, the health aspect of walking was stressed as important motivation. Concepts and statements such as “health”, “keeping fit”, “fitness” or “exercise” were repeated time and again as reasons for walking. One informant explained that the health aspect had become more important as he got older: “If you just keep sitting in a chair, you probably will not live as long”. Another said that it felt good to move to “keep your body going” and that it was important to stay fit. Recommendation from the doctor was also mentioned as a reason for walking.

Recreation and nature experience

Recreation and getting out into nature are reported by several informants as reasons they enjoy walking – urban outdoor spaces such as Odderøya, Baneheia and Jegersberg in particular. Many people go daily for walks in the woods in their local environment.

Target points in the neighbourhood

When asked what they perceive as enjoyable target points in their neighbourhood, a variety of answers come up: The gym, the bank, the doctor, the local grocery store, the post office, café, the cinema, the cemetery, the library, the theatre/cultural centre “Kilden”, outdoor spaces, promenades such as “Strandpromadenen” and “Markens”, parks, organized activities, construction sites, visiting friends, local centres, fishing places. Target points are basically about shopping trips, everyday tasks, meeting friends and recreation. It seems that the motivation to go out is stronger when there is a target.
Socializing

Walking is one way of meeting and interacting with other people. A statement repeatedly mentioned among the elderly when asked why they walk is the joy of getting out, getting a breath of fresh air and meeting people. Although several of the interviewees preferred to walk alone, they loved meeting people along the way. For some, the interaction with others was actually one of the purposes of walking. Others often walk together with friends or spouses.

Barriers to walking

The greatest and most obvious obstacle the elderly have to walking is the weather and winter conditions. Some of the interviewees also mentioned health and physical shape as obstacles and lack of a walking companion did not help.

Weather and winter conditions

Several of the interviewees explained that bad weather and winter conditions limited their outdoor walking. A minority reported that they walked all year round regardless of the weather, and adapted by wearing crampons in winter or chose alternative walking routes in winter than in summer.

Health

For the elderly, health and physical shape are crucial in determining the length and duration of the walks they feel comfortable with. When asked what might lead to them increasing their walking activity, some mentioned better health.

Feeling unsafe

Being afraid of falling or of walking alone were the most frequently mentioned issues in relation to feeling unsafe. We see that these issues manifest themselves through the participatory observation.

Lack of a walking companion – remaining in the easy chair

It looks like the social aspect of walking is strongly connected with the inclination to get out, but, as already mentioned, an important limitation is lack of a walking companion or reluctance to attend social arrangements/activities where no one is known to you. In other words, a walking companion would contribute to increased walking activity.

Attractive pedestrian areas

Various characteristics of the physical environment affect whether streets, roads and areas are perceived as good/not good to walk in. These include:

- Small traffic volumes
- The existence of pavements
- Pavements reserved for pedestrians only
- Pavements that are wide, smooth and with no obstructions
Walking strategy for older citizens – knowledge base for planning in Kristiansand

• Pedestrian crossings where it is safe to cross easily, where sufficient green time is given and where there are lowered kerbs
• Well-maintained shortcuts
• Green vegetation such as trees, bushes and flowers
• Benches at interesting locations to rest one’s legs
• Areas that are clean, neat and orderly
• Satisfactory lighting
• Winter maintenance of pavements and roads (snow removal, gritting)
• Good public transport, bus shelters and benches

In sum, older citizens perceive pedestrian areas as pleasant where they can walk safely and where it is neat and orderly.

Measures to facilitate interaction between the environment and own resources

A number of issues and initiatives have emerged and been discussed throughout all parts of the project. Their implementation will contribute to improving the environment, so that elderly people who have reduced physical mobility will be able to move around more easily. The measures are classified below along with the authority responsible for implementation:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Responsible/initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>The municipality, National Public Roads Administration (NPRA), private actors</td>
</tr>
<tr>
<td>• Removal of snow, gritting</td>
<td></td>
</tr>
<tr>
<td>• Clearing of snow away from walkways</td>
<td></td>
</tr>
<tr>
<td>• Maintenance of pavements</td>
<td></td>
</tr>
<tr>
<td>• More rubbish bins at strategic places along the roads</td>
<td></td>
</tr>
<tr>
<td>Physical design</td>
<td>The municipality</td>
</tr>
<tr>
<td>• The existence of pavements</td>
<td></td>
</tr>
<tr>
<td>• Wider pavements</td>
<td></td>
</tr>
<tr>
<td>• Lowered kerbs</td>
<td></td>
</tr>
<tr>
<td>• Practical design of staircases and railings</td>
<td></td>
</tr>
<tr>
<td>• More benches to sit on</td>
<td></td>
</tr>
<tr>
<td>• Improved lightning, especially at pedestrian crossings</td>
<td></td>
</tr>
<tr>
<td>• Improved marking of pedestrian crossings</td>
<td></td>
</tr>
</tbody>
</table>
Mobility groups

- Clear lines of demarcation between pedestrian and cycle areas
- Separate walking and cycle paths
- Reduced traffic in central pedestrian areas
- Lower speed limits for cars in central areas

Overall planning/public transport

- Improved public transport services reaching attractive urban outdoor spaces more easily
- Coordinated land use and transport planning to reduce distances between target points

Measures to further motivate seniors to walk

Many older citizens live alone (almost 40 per cent), and the number is even higher among the oldest women, which means that many lack a walking companion and wish for someone to accompany them when walking. A walking companion would facilitate walking, but the elderly often miss out on information about ongoing activities and about where to get in touch with others in a similar situation. Since the elderly are not in work, many want to take a morning walk. Some of the measures and responsible/initiators that were discussed throughout the project were:

<table>
<thead>
<tr>
<th>Measures</th>
<th>Responsible/initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity calendar with information about existing events and arrangements disseminated through different media channels</td>
<td>The municipality</td>
</tr>
<tr>
<td>Establishment of an ideas bank to start various activities, and an available contact point to the municipality</td>
<td>The municipality</td>
</tr>
<tr>
<td>“Low threshold” local walks in the neighbourhood; information disseminated locally (newspapers, inquiries, the internet)</td>
<td>Private actors, the municipality</td>
</tr>
<tr>
<td>Regular everyday walks starting at the same time and place, preferably in the morning and disseminated through different media channels</td>
<td>Private actors, the municipality</td>
</tr>
</tbody>
</table>
Walking strategy for older citizens – knowledge base for planning in Kristiansand

- Arrangements in parks and other public places and information about them disseminated through different media channels
  
  Private actors (businesses), the municipality

- Good walking paths in housing areas and in areas with centres for the elderly
  
  The municipality

- Esthetic arrangements – flowers, trees and shrubbery – enhancing the pleasure of walking
  
  The municipality, private actors

In conclusion, the workshop demonstrated the need for intersectoral action at municipal level and for coordination at various levels in the public administration. At the same time, it was concluded that NGOs and other actors succeed in developing a good walking strategy for the elderly in Kristiansand.