usability

mobility

accessibility

Promoting active mobility among the older population

Guidelines for cooperation between municipal planning and building authorities and public health services in small and medium-sized towns in Germany

Who is the target audience for these guidelines?

These guidelines address actors in municipal administrations who want to promote mobility and age-friendly municipal development. A particular focus is on the role of the public health services and the municipal planning and building authorities. Due to the distribution of administrative responsibilities for planning and health in Germany, the information addresses districts, towns and municipalities to an equal extent. The focus of the guidelines is on small and medium-sized towns in Germany, which have to face the challenges associated with changing population structures with limited human and financial resources.

What is the objective of these guidelines?

The guidelines are intended to support you in integrating the issues of mobility promotion and age-friendly municipal development in existing planning processes and administrative routines. This should allow your town or municipality to develop into a liveable place in which residents of all ages can pursue healthy, active and independent lives. The guidelines offer support for all phases of the planning process: from needs assessment and public participation to planning, implementation and evaluation. A description of the various ways in which the public health services and municipal planning and building authorities may exercise an influence in each of these phases is provided. By way of example, practical tips, e.g. concerning legal conditions and useful data sources, are given for the Metropolitan Region of Bremen-Oldenburg in the Northwest of Germany (hitherto referred to as Metropolitan Region Northwest).

What are these guidelines based on?

These guidelines were developed in the context of the AFOOT project 'Securing urban mobility of an ageing population'. This was a joint project of the Department of Social Epidemiology of the Institute of Public Health and Nursing Research at the University of Bremen and the Department of Urban and Regional Planning of the Faculty of Spatial Planning at TU Dortmund University, funded by the Federal Ministry of Education and Research, and is part of the Prevention Research Network AEQUIPA 'Physical activity and health equity: primary prevention for healthy ageing'. The research region was the Metropolitan Region Northwest with its 11 districts and 5 towns with district status (Bremen, Bremerhaven, Oldenburg, Wilhelmshaven und Delmenhorst).

These guidelines have drawn on:

- research of existing guidelines,
- interviews with the heads of planning and health authorities in districts and towns with district status, and with representatives from selected towns and municipalities in the Metropolitan Region Northwest,
- interviews with actors from business and practice, and
- three workshops on the cooperative development of indicators in Bremen, Oldenburg and Quakenbrück.

A draft version of these guidelines was tested in three role-playing games in Bremerhaven, Verden (Aller) and Ritterhude and subsequently modified.

We are very grateful to all those involved!

How you can use these guidelines

The table entitled 'Procedure for promoting active mobility among the older population' (p.3) outlines how you can address active mobility among the older population in your work. The table simultaneously shows the way in which these guidelines are structured and gives a short overview of the contents of the individual chapters.

Procedure for promoting active mobility among the older population:

1

Put health and active mobility of the older population on the agenda

p. 4-6

Promoting active mobility among the older population is a new field of activity for most towns and municipalities. Chapter 1 introduces the topic and covers (new) arguments for age-friendly and mobility-promoting municipal development.

2

Develop cooperation structures and cross-sectoral cooperation

p. 7-11

Promoting active mobility requires adopting perspectives and approaches that cross sectoral boundaries. Chapter 2 provides more information on developing cooperation structures and cross-sectoral approaches, and includes reference to intervention points in spatial planning and public health services.

3

Public participation

p. 12

Public participation is essential for the promotion of active mobility. Chapter 3 provides corresponding recommendations.

4

Determining the status-quo

p. 13-16

Appropriate indicators can be used to describe the current situation of your town or municipality. The application of indicators is a fundamental hallmark of public health and planning practice. Chapter 4 presents an appropriate set of indicators.

5

Planning and implementing measures

p. 17-25

Public spaces, cycle paths and footpaths, and the accessibility of everyday destinations are important elements in the promotion of active mobility among the older population. Chapter 5 lists strategies for action and suggested measures linked to existing instruments and actor structures. The recommendations represent starting points for concrete measures that can and should be adapted to your individual local situation.

4

Measuring success and presenting results

p. 13-16

After the implementation of measures it is necessary to assess their impact. Here the set of indicators supplied in Chapter 4 can be used once again, so that the new measurements can be compared to the initial situation.

6

Learning from others

p. 26-27

Chapter 6 presents a number of examples that illustrate implementations of particular aspects of mobility-promoting and age-friendly municipal development.

3

1 Putting health and active mobility among the older population on the agenda

By 2060 over a third of the population of Germany will be aged over 60 and the number of people over the age of 70 will be twice the number of children born. In Germany the number of healthy life years after the age of 65 is only seven, relatively low in comparison to other EU countries [1]. In order to remain competitive and sustainable, towns and municipalities should be equally attractive for families with children, for people living alone, and for those with or without impairments into old age. We will all experience ageing and would all like the chance to do so in good health.

Healthy ageing should be understood as a process. Old age does not occur suddenly and older people are not a homogenous group. However, differences in fitness among the older population are not a matter of chance: the higher the income and physical functionality at a younger age, the better the physical and mental performance in old age. The older people who require the greatest support are thus often those with the least resources [2]. Social inequalities related to environment and health must also be taken into consideration. In recent years research into environmental justice has increasingly shown that the living conditions and characteristics of the built residential environment are not equally distributed across the social spectrum. These inequalities contribute significantly to social differences in health [3, 4]. Relevant mechanisms here include not only differences in environmental exposure that have a direct impact on health, e.g. the effects of noise and air pollution, but also the influence of the built residential environment on health-related behaviour such as physical activity [4, 5].

Regular physical activity in old age is associated with positive health impacts like a lower rate of cognitive impairment, depression, dementia, coronary heart disease, several types of cancer, diabetes, stroke and high blood pressure [6]. Active mobility, defined as walking or cycling to reach a destination, can represent a significant contribution towards overall levels of activity, especially in old age. Even just walking for 15 minutes a day increases life expectancy [7]. Physical activity also improves mental health and quality of life. It helps to maintain social contacts and provides a sense of autonomy and participation [8, 9].

Research results suggest that physical activity is influenced by various factors on a number of levels. The ecological model for an active life (Figure 1) demonstrates the various levels and their linkages to activity behaviour [10]. Firstly, intra-personal factors such as age, health or education influence perceptions of the environment, which in turn influence behaviour. As motor and visual impairment increases with age so does, for instance, fear of falling, so that it is important for the older population to perceive their surroundings as being safe, clean and appealing with high levels of road safety [6]. Secondly, the spatial characteristics of the area, here termed behaviour-related settings, influence behaviour. One of the decisive factors that enables older people to undertake trips actively is the mobility friendliness of the immediate residential environment, also termed walkability. This is defined by high population densities, mixed land uses and networked streets. Easy access to a range of various services such as bus stops, parks and public spaces plays an important role in the decision to make such trips on foot or by bicycle. Especially in old age, the immediate residential environment has increased significance for physical activity and mobility, as the number and length of trips undertaken decreases continually with age [11]. Furthermore, the quality

[1]   OECD: Steigerung der Lebensqualität in Deutschlands alternder Gesellschaft. In OECD-Wirtschaftsberichte: Deutschland 2016. Paris: OECD-Publisher, 2016: 101-141.

[2]   Beard JR, Officer A, de Carvalho IA, et al.: The world report on ageing and health: a policy framework for healthy ageing. Lancet, 2016, 387:2145-2154.

[3]   Bolte G, Pauli A, Hornberg C: Environmental justice: Social disparities in environmental exposures and health. Overview. In Encyclopedia of Environmental Health. Edited by Nriagu JO. Burlington: Elsevier, 2011: 459–470.

[4]   WHO: Environment and health risks: a review of the influence and effects of social inequalities. Copenhagen: World Health Organization, 2010.

[5]   Bolte G, Bunge C, Hornberg C, Köckler H, Mielck A: Umweltgerechtigkeit. Chancengleichheit bei Umwelt und Gesundheit: Konzepte, Datenlage und Handlungsperspektiven. Bern: Hans Huber, 2012.

[6]   Cerin E, Nathan A, van Cauwenberg J, Barnett DW, Barnett A: The neighbourhood physical environment and active travel in older adults: a systematic review and meta-analysis. International Journal of Behavioral Nutrition and Physical Activity, 2017, 14:15.
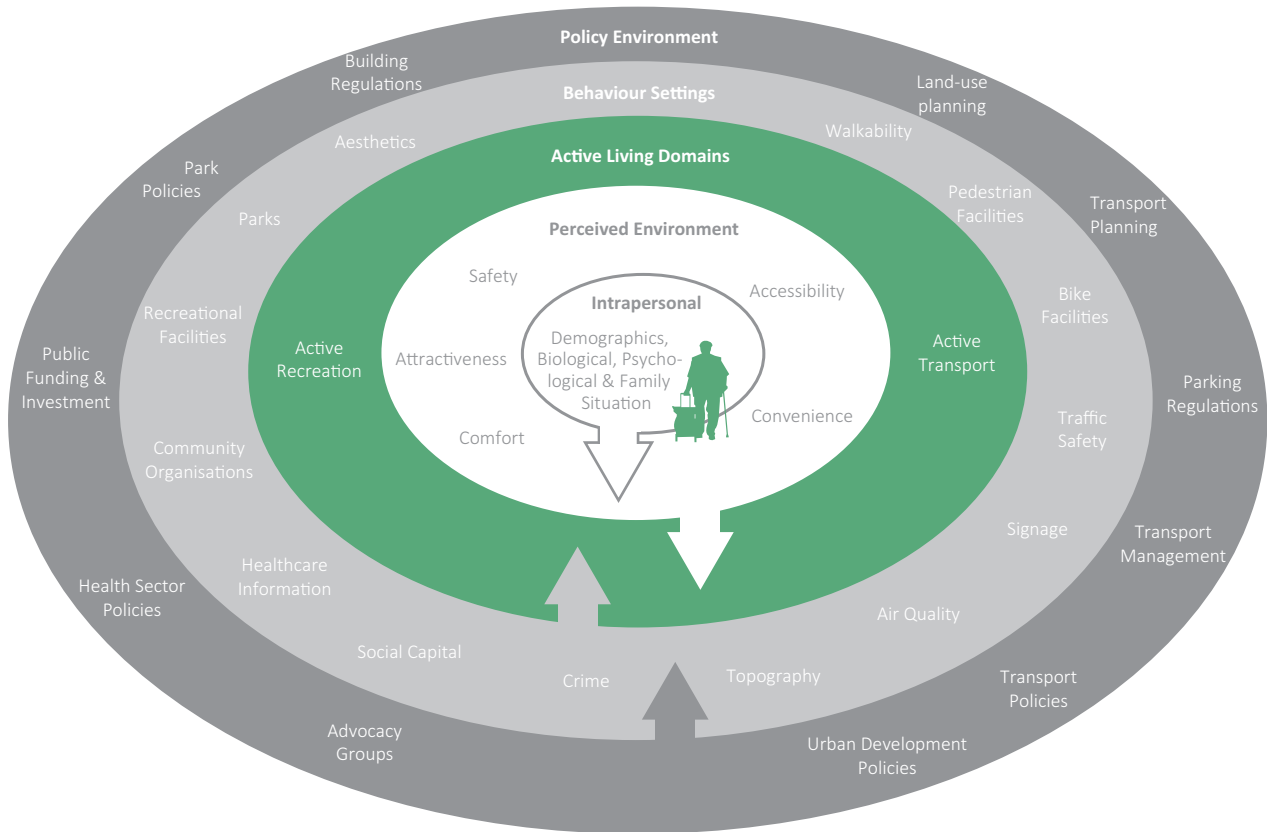
Figure 1: Factors influencing active mobility according to the model for an active life,
simplified depiction based on Sallis et al 2006 [10]

of footpaths, possibilities for resting (e.g. provision of benches), easy access to one's own dwelling and street lighting have been shown to be important factors when deciding whether to make a trip on foot [6]. Behaviour-related settings are in turn influenced by political conditions, such as urban development and health policies. Measures intended to increase physical activity among the population in the long-term are only effective if they operate on a number of these levels [10]. This unavoidably involves interdisciplinary action undertaken by different professions, actors and decision-makers.

Towns and municipalities play a key role in supporting long life, increased social participation and the integration of older people in society. With age-friendly environments they can encourage active lifestyles, provide safe and barrier-free spaces, and promote participation, respect and awareness for older people. Innovations, particularly in the field of urban planning, mobility and services (such as the health system, social services and supply structures) are necessary to cater specifically for the special needs of older people. These goals can only be achieved if the various sectors of the administration work together and involve other important actors in processes of implementation. Mobility is a very cross-cutting issue. Active mobility must be secured for all inhabitants and requires an integrated approach that is both resource efficient and socially responsible. It is not always about implementing new investments but rather about maximising available resources: woods, streets, parks, jobs, community centres and (semi-) public spaces.

[7]   Wen CP, Wai JPM, Tsai MK, Yang YC, Cheng TYD, Lee M-C, Chan HT, Tsao CK, Tsai SP, Wu X: Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study. Lancet, 2011, 378:1244-1253.

[8]   Carr K, Weir PL, Azar D, Azar NR: Universal Design: A Step toward Successful Aging. Journal of Aging Research, 2013:8.

[9]   Moran M, Van Cauwenberg J, Hercky-Linnewiel R, Cerin E, Deforche B, Plaut P: Understanding the relationships between the physical environment and physical activity in older adults: a systematic review of qualitative studies. International Journal of Behavioral Nutrition and Physical Activity, 2014, 11:79.

[10] Sallis JF, Cervero RB, Ascher W, Henderson KA, Kraft MK, Kerr J: An ecological approach to creating active living communities. Annual Review of Public Health, 2006, 27:297-322.

[11] infas, DLR: Mobilität in Deutschland 2008. Ergebnisbericht. Struktur - Aufkommen - Emissionen - Trends. Bonn/Berlin: infas Institut für angewandte Sozialwissenschaft GmbH, Deutsches Zentrum für Luft- und Raumfahrt e.V., Institut für Verkehrsforschung, 2010.

10 arguments that you can use to persuade others of the importance of mobility-promoting and age-friendly municipal development

1. Health   Regular physical activity has numerous positive effects on physical and mental health. A mobility-friendly residential environment encourages walking and cycling on everyday trips, which makes a considerable contribution towards overall activity levels. Promoting physical activity not only improves individual wellbeing but also reduces health expenditure in the long term [12].

2. Independence   Safe and equitable access to destinations catering for daily needs, services, public spaces, institutions and public transport preserves independence and self-determination among the older population. This can enable people to remain in their own homes and familiar environments for longer.

3. Participation   Active modes of mobility and attractive public meeting places increase the opportunities for chance meetings in everyday life. This can have a positive effect on neighbourliness and community life in the municipality and help prevent isolation. Families experience less stress if they know there are supportive neighbours for their older family members [13].

4. Engagement   Older people do not stop making a contribution to their communities or families after retiring. They often enjoy being involved in voluntary work or become politically active. These activities support an active and healthy lifestyle, encourage good self-esteem and preserve social contacts [13].

5. Quality of life   Towns with a great deal of pedestrian and bicycle traffic are often ranked among the most liveable places (e.g. Copenhagen, Vienna, Melbourne, Münster, Groningen, Oldenburg). This can be used to promote the town.

6. Equity   All residents – whether young or old, with or without disabilities – profit from the inviting and barrier-free design of public spaces. Socially disadvantaged groups or people who live in flats with no gardens, e.g., seldom have access to high-quality green spaces. These population groups can benefit from improvements in public spaces the most.

7. Traffic safety and a sense of security   Studies show that traffic calming measures or the complete closure of streets to motor vehicles can lead to a long-term increase in walking and cycling. In contrast, neglected and dirty surroundings, poor lighting, exhaust fumes, high traffic volumes and noise have a negative impact on the utilisation of public space [12].

8. Retail   The revitalisation of public spaces is greatly dependent on the strengthening of the various town-centre functions – as a location for housing, retail, services and meeting places [14]. Such revitalisation can then have a positive impact not only on the utilisation of public space, cycling and walking, but also on local businesses.

9. The environment and climate protection   Increased cycling and pedestrian traffic helps to reduce noise and air pollution, supports the fulfilment of climate protection objectives and reduces the energy requirements of the transport sector. The creation of ample green areas also has a positive effect on urban climate, e.g. through cooling, air purification and dust reduction [12].

10. Conserving resources   The eco-modes of transport (walking, cycling and public transport) are particularly space-saving and are encouraged by compact settlement development. In the long term promoting active mobility thus helps to reduce land consumption and infrastructure costs.

[12] Giles-Corti B, Foster S, Shilton T, Falconer R: The co-benefits for health of investing in active transportation. NSW Public Health Bulletin, 2010, 21:122-127.

[13] WHO: Global age-friendly cities: a guide. Geneva: World Health Organization, 2007.

[14] Bundesinstitut für Bau-, Stadt- und Raumforschung: Die Innenstadt und ihre öffentlichen Räume. Erkenntnisse aus Klein- und Mittelstädten. BBSR-Sonderpublikation, 2015.

Develop cooperation structures and cross-sectoral cooperation

2

The factors that influence active mobility among the older population are largely outside the sphere of responsibility of the health sector. Decisions made in various sectors and policy fields such as urban and transport planning, the environment, housing, education, social services and public safety can, however, directly influence the health of the population, although the relevant actors are not always aware of this. In line with the *Health in all Policies* approach, the promotion of active mobility among the older population thus requires a vision and approach that crosses sectoral boundaries. The health sector's knowledge about health-promoting measures should be combined with the opportunities of other sectors to influence behaviour, and then be implemented. Through the bundling of resources and competences, cross-sectoral cooperation should be combined with public participation to guarantee the needs-appropriate, sustainable and cost-effective planning and implementation of measures.

The following section outlines five steps intended to provide ideas for building up cooperative structures within and beyond the administration. Established procedures and approaches from spatial planning and the health sector that can support cooperation are also discussed.

Step 1: Ensure the backing of local political bodies and top level administration
Taking cross-sectoral action requires political support. At the same time, the wellbeing of the population is a topic bound to interest both local politics and administration.

Step 2: Name someone to be responsible for the topic in your sector
In all cases, it will be necessary to identify an individual who assumes responsibility for the topic, identifies other actors, organises exchange and discussion between the parties concerned, stipulates fields of responsibility – who can, e.g., conduct an analysis, or lead the implementation of measures?

Step 3: Obtain an overview of the relevant actors
Think about which sectors are relevant for your issue and for creating cooperation. Produce, e.g., a list of the individuals responsible. Discussion with these individuals can lead to the extension of your list. Also consider the financing of your plan – who are the important cooperation partners here?

Step 4: Develop cooperation structures within the administration
Cooperation structures within the administration are an important element for working cross-sectorally. Here the following approaches are conceivable:
- Develop topic-related cooperation structures that bring together all those in the administration whose work touches upon the field in question, e.g. the Competence Team for Health among the Older Population in the Department of Health in Cologne [15],
- Introduce the topic into existing thematic bodies, e.g. specialist committees,
- Use opportunities for discussion that are not focused on one particular topic, e.g. meetings of the heads of department,
- Network with other towns, municipalities and districts, e.g. Health Region Lower Saxony (see p. 9),
- Project-related cooperation, e.g. the initiative 'Tag des guten Lebens' in Cologne [16],
- Make contact personally, e.g. at lunch,
- Use job shadowing in other departments as part of training programmes in the administration.

Step 5: Use cooperation structures in the neighbourhood or municipality
Ultimately, there are many more actors involved in health promotion than just the public administration. In the long term networking with third parties is necessary. Health services providers, senior citizens' organisations, clubs, action groups, self-help groups, health conferences and round tables are tried-and-tested formats that can support this. Within this framework you should together identify possible sources of private finance for your project.

[15] Stadt Köln: Gesund im Alter. Köln, 2017. Available at: http://www.stadt-koeln.de/leben-in-koeln/gesundheit/gesund-im-alter/ (Accessed 12/2017)
[16] Institut Cultura 21 e.V.: Tag des guten Lebens. Köln, 2017. Available at: http://www.tagdesgutenlebens.de/ (Accessed 12/2017)

Intervention points for health-promoting development in the public health services

The public health services are concerned with the promotion and protection of health. The focus is not so much on individuals but rather on the population as a whole. Public health institutions in Germany are found on the federal, state and municipal levels. Although the concrete responsibilities vary according to the legislation of the individual states there are specific focuses that are found in all legislation, albeit to differing degrees:

- Health protection (especially in terms of hazard prevention),
- Health promotion,
- Healthcare and
- Health monitoring.

Advice and information, coordination, communication, policy advice and quality control are further tasks that are relevant to all these fields.

At the 89th Conference of Health Ministers of Germany in 2016, representatives of the public health services and other experts began discussing guiding principles for the public health services in an attempt to meet current public health challenges [17]. These modern guiding principles are intended to open up new horizons for public health services in Germany. The first draft of the guiding principles from 20.02.2017 declares the tasks of the public health services to include analysis, planning, advice, networking, mediation, coordination, supervision, monitoring and acute intervention. In addition, equity in health should represent a guiding principle for all tasks. In relation to new functions such as support and advice, it is stated that the public health services have an important role to play in introducing the topic of health into the committees of all administrative levels, in line with the **Health in all Policies** approach. The various actors are thus to be made aware of the importance of health as a locational factor, strengthening its position on the local level. The World Health Organisation drew up this health promotion approach as early as 1986, when the Ottawa Charter recognised that health cannot be promoted only by the health sector but must be part of overall policy [18]. This means that all policy fields must be aware of the health impacts of their individual decisions and should together take on responsibility for public health.

The Ottawa Charter also describes starting points for cooperation between the health authorities and spatial planning to further health-promoting municipal development, intended to encourage closer links between the two professions. Here human health is viewed as being closely connected to the social and physical environment and healthy living and working conditions are noted as being an important aspect of health promotion:

> *'Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love.'*[18]

An important point of access for health promotion is thus the **settings of everyday life**, i.e. schools, daycare facilities, workplaces, and also the municipality.

A broad range of tasks emerges overall. Public health staff should (despite the frequent capacity constraints) raise awareness within administrations for the topic of health promotion, assess the health impacts of various measures, supervise developments, and inform and coordinate relevant actors from outside the administration. Achieving health equity in health-promoting municipal development is only possible with intersectoral cooperation.

[17] Akademie für Öffentliches Gesundheitswesen in Düsseldorf: Leitbild ÖGD. Düsseldorf, 2017. Available at: https://www. akademie-oegw.de/aktuelles/konsultationsprozess-leitbild.html (Accessed 12/2017)

[18] WHO: Ottawa-Charter for Health Promotion. First International Conference on Health Promotion, Ottawa, 1986.

[19] Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit (LGL): Gesundheitsberichterstattung für die Landkreise und kreisfreien Städte Bayerns. Handlungshilfe. Band 1 der Schriftenreihe GBE-Praxis. Erlangen, 2016.

[20] WHO: Health Impact Assessment. World Health Organization, 2017. Available at: http://www.who.int/hia/en/ (Accessed 12/2017)

[21] LZG.NRW: Gesundheitsfolgenabschätzung. Bochum: Landeszentrum Gesundheit Nordrhein-Westfalen, 2017. Available at: https://www.lzg.nrw.de/versorgung/ges_plan/ges_folg_absch/index.html (Accessed 12/2017)

Approaches for networking and cooperation in the health sector

In the health sector in Germany there are various instruments and approaches that set health in a municipal context. They can be used by spatial planning or cooperatively further developed.

Municipal health monitoring is a statutory task of public health services in Germany. It prepares data on the health situation of the population and individual population groups on the smallest scale possible. It includes aspects of prevention as well as health promotion. Monitoring perspectives that focus on specific target groups and that are gender sensitive are required [19]. The choice of thematic focus is the responsibility of the department of health concerned. In North Rhine-Westphalia legislation requires that data from the health monitoring reports be applied in municipal planning processes.

Health conferences on the level of districts, towns or municipalities encourage the networking and specialist understanding of all institutions responsible for local healthcare. This includes both public health services and private organisations. In North Rhine-Westphalia, for example, public health service legislation stipulates that health conferences are obligatory for all municipalities. The health conferences focus on healthcare, but other topics can be selected by participants of the health conference themselves. The health conferences often also view themselves as health policy committees.

In 2015 new legislation was passed to strengthen the position of health promotion and prevention – the **Prevention Act (PrävG)**. It explicitly requires that the settings of everyday life be included in health promotion and thus provides intervention points for health-promoting municipal development. The legislation obliges statutory health insurance funds to invest more in health promotion.

The **Healthy Cities Network** [23] is a voluntary association of municipalities. The municipalities involved in Germany commit to implementing a 9-point programme, which includes the designation of an individual to take on responsibility for the topic, the development of cross-sectoral policy, consideration of health issues in municipal planning, and the strengthening of public participation in the design of their everyday settings. The Healthy Cities Network draws explicitly on the Ottawa Charter for Health Promotion [18] and provides a space for debating all aspects of health.

The **Health Impact Assessment** (HIA) aims to assess the intended and non-intended positive and negative effects of (planning) decisions and measures on health. The HIA represents a structured procedure involving actors from various sectors [20, 21]. Some parts of the HIA are compatible with the German environmental assessment procedures.

The **Lower Saxony Health Regions** [24] are a project of the state government of Lower Saxony and other partners intended to support the districts and towns with district status in developing municipal structures for cooperation and model projects for local needs-based healthcare. The focus of the health regions is on the networking of health actors. All healthcare issues including health promotion are addressed. The participation of planners seems both possible and useful, given the spatial context.

The North Rhine-Westphalian Centre for Health has developed a specialist **Health Plan** as an instrument to strengthen health interests in the municipal context. It is intended to communicate the tasks and concerns of the health sector and present the action required in a spatial context. The Health Plan renders health concerns compatible with municipal decision-making processes. The NRW Centre for Health has made two model plans available to the towns and districts [22].

[22] LZG.NRW: Fachplan Gesundheit. Bielefeld: Landeszentrum Gesundheit Nordrhein-Westfalen, 2012. Available at: https://www.lzg.nrw.de/versorgung/ges_plan/fachplan_gesundheit/index.html (Accessed 12/2017)

[23] Gesunde Städte-Netzwerk der Bundesrepublik Deutschland: Informationen, Dokumentationen und Publikationen. Frankfurt am Main, 2016. Available at: http://www.gesunde-staedte-netzwerk.de/ (Accessed 12/2017)

[24] Niedersächsisches Ministerium für Soziales, Gesundheit und Gleichstellung: Gesundheitsregionen Niedersachsen. Hannover, 2017. Available at: https://www.ms.niedersachsen.de/startseite/themen/gesundheit/gesundheitsregionen_niedersachsen/gesundheitsregionen-niedersachsen-119925.html (Accessed 12/2017)

Intervention points for health-promoting municipal development in spatial planning

The subject matter of spatial planning is the spatial development of towns and regions. The topic of health is addressed in parts of the legislative basis of spatial planning in Germany. It is stipulated that municipal land-use planning should take into consideration general requirements concerning healthy living and working conditions (§ 1 (6) No. 1 BauGB). Furthermore, environmental impacts on people and their health and the population overall must be considered (§ 1 (6) No. 7c BauGB). It is envisioned that in the course of environmental assessments municipal and regional planning should assess the likely significant effects on people, including human health (§ 9 (1) ROG).

Spatial planning has the legal mandate to coordinate competing land uses. It is a central legal requirement that public and private concerns should be judged and weighed up against one another (§ 1 (7) BauGB). Health concerns are considered in this process, but must be coordinated with other requirements, e.g. nature protection, employment, agriculture, and passenger and freight transport.

The 'core business' of municipal planning are its formal land-use instruments, i.e. the preparatory and binding land-use plans. What these plans can regulate and how they are compiled is prescribed by law.

- The preparatory **land-use plan**, or zoning plan, controls land use. It describes the type of land use for the entire municipal area (§ 5 BauGB). This includes, for instance, building plots, main transport routes and green areas. This plan creates the preconditions for inner-urban development and ensures a satisfactory mix of land uses and access to green areas and open space. Provision can also be made for green corridors for pedestrian and cycle traffic..
- The **binding land-use plan (B-Plan)**, or local building and construction plan, presents the desired development structure of the municipal area. It can make legally binding stipulations on the use of built-up and non-built-up areas, on the size and orientation of built structures and on the purpose of traffic areas (§ 9 BauGB). The B-Plan can stipulate the dimensions of public squares and streets, and green spaces and traffic areas – including pedestrian zones and bicycle parking – can be laid out. By stipulating the degree to which commercial land use is permitted, mixed-use development can also be encouraged or hindered.

Informal instruments are an important supplementary measure. They usually involve voluntary municipal tasks and flexible planning processes. Two examples that can be important for the promotion of active mobility are:

- **Integrated urban development concepts** make statements about the development prospects of the entire urban area or of a particular neighbourhood. Based on an analysis of the initial situation in terms of urban and socio-economic development, strategic objectives and concrete projects are developed. The aim here is to adopt an intersectoral perspective. It has been demonstrated that it is possible to focus on the topic of health in this context, for instance by the integrated urban development concept for Bochum-Wattenscheid (see Chapter 6).
- **Transport development plans and mobility concepts** present the strategic objectives for the transport development of an urban area or region. Concrete measures are developed based on an analysis of strengths and weaknesses and a presentation of possible scenarios. The focus is usually not only on car traffic but also on bicycle and pedestrian traffic. The argument that cycling and walking can promote good health can also play a role here, as shown, e.g., in the Transport Development Plan for Bremen 2025 [25] and in the Strategy Plan for Mobility and Transport for Oldenburg [26].

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[25] Der Senator für Umwelt, Bau und Verkehr: Verkehrsentwicklungsplan Bremen 2025. Bremen, 2014. Available at: https://www.bauumwelt.bremen.de/verkehr/verkehrsentwicklungsplan-5586 (Accessed 12/2017)
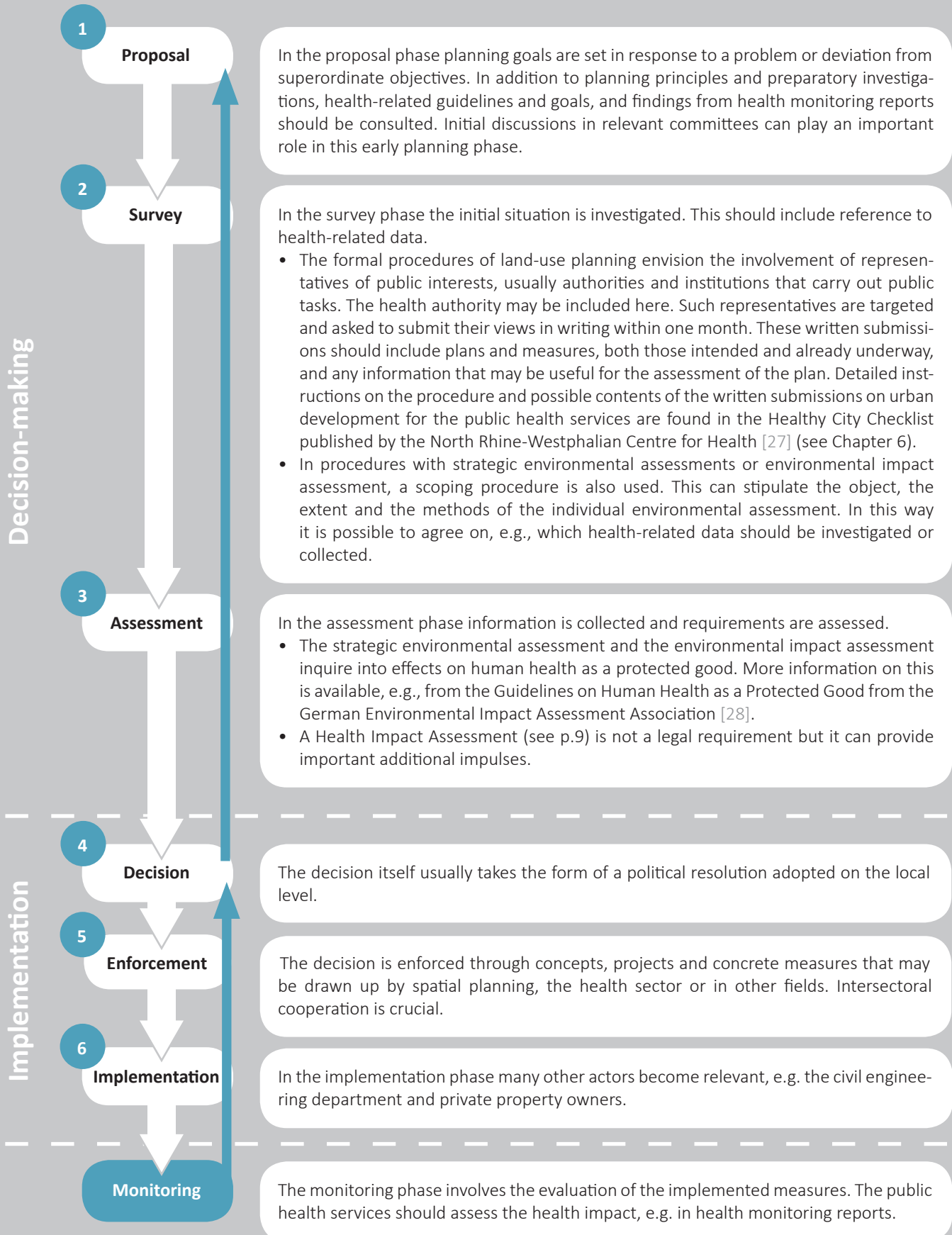
[26] Stadt Oldenburg: Strategieplan Mobilität und Verkehr. Oldenburg, 2014. Available at: http://www.oldenburg.de/de/microsites/verkehr/strategieplan-mobilitaet-und-verkehr.html (Accessed 12/2017)

[27] LZG.NRW: Leitfaden Gesunde Stadt. Hinweise für Stellungnahmen zur Stadtentwicklung aus dem Öffentlichen Gesundheitsdienst. Bielefeld: Landeszentrum Gesundheit Nordrhein-Westfalen, 2016.

[28] UVP Gesellschaft e.V.: Leitlinien Schutzgut Menschliche Gesundheit. Für eine wirksame Gesundheitsfolgenabschätzung in Planungsprozessen und Zulassungsverfahren. Hamm: AG Menschliche Gesundheit der UVP-Gesellschaft e.V., 2014.

Ways to participate in planning decisions

A simplified breakdown of planning decision-making processes allows a phase of decision-making to be distinguished from an implementation phase and a phase of monitoring and review. In line with the *Health in all Policies* approach, intersectoral cooperation is required in all phases:

Decision-making

1 Proposal

In the proposal phase planning goals are set in response to a problem or deviation from superordinate objectives. In addition to planning principles and preparatory investigations, health-related guidelines and goals, and findings from health monitoring reports should be consulted. Initial discussions in relevant committees can play an important role in this early planning phase.

2 Survey

In the survey phase the initial situation is investigated. This should include reference to health-related data.
- The formal procedures of land-use planning envision the involvement of representatives of public interests, usually authorities and institutions that carry out public tasks. The health authority may be included here. Such representatives are targeted and asked to submit their views in writing within one month. These written submissions should include plans and measures, both those intended and already underway, and any information that may be useful for the assessment of the plan. Detailed instructions on the procedure and possible contents of the written submissions on urban development for the public health services are found in the Healthy City Checklist published by the North Rhine-Westphalian Centre for Health [27] (see Chapter 6).
- In procedures with strategic environmental assessments or environmental impact assessment, a scoping procedure is also used. This can stipulate the object, the extent and the methods of the individual environmental assessment. In this way it is possible to agree on, e.g., which health-related data should be investigated or collected.

3 Assessment

In the assessment phase information is collected and requirements are assessed.
- The strategic environmental assessment and the environmental impact assessment inquire into effects on human health as a protected good. More information on this is available, e.g., from the Guidelines on Human Health as a Protected Good from the German Environmental Impact Assessment Association [28].
- A Health Impact Assessment (see p.9) is not a legal requirement but it can provide important additional impulses.

Implementation

4 Decision

The decision itself usually takes the form of a political resolution adopted on the local level.

5 Enforcement

The decision is enforced through concepts, projects and concrete measures that may be drawn up by spatial planning, the health sector or in other fields. Intersectoral cooperation is crucial.

6 Implementation

In the implementation phase many other actors become relevant, e.g. the civil engineering department and private property owners.

Monitoring

The monitoring phase involves the evaluation of the implemented measures. The public health services should assess the health impact, e.g. in health monitoring reports.

3 Ensuring public participation

The residents of your town or municipality are the target group of your measures. They are experts in their own needs and possible obstacles. Give inhabitants the opportunity to get actively involved in the needs assessment, planning, implementation and evaluation of measures (Figure 2). Good participative processes require much time, many resources and consistent implementation – but they pay off! The success of a measure and its sustainability are largely dependent on the extent to which residents support the measure in question.
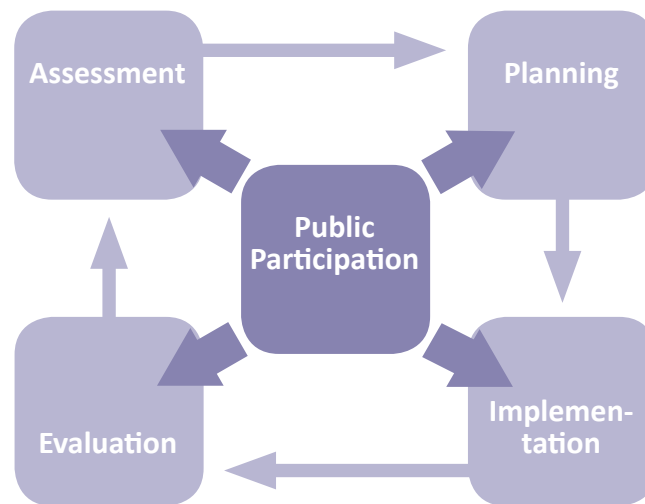
Figure 2: Public participation in all phases,
authors' compilation after Wright/Block/von Unger 2008 [29]

The greatest problem with participation processes is often that minorities or those in disadvantaged socio-economic positions do not get involved. It is therefore important to take your participative processes to places where you will meet such inhabitants, e.g. community centres, organised meetings ('coffee mornings'), club houses and schools. For some people the need to make a trip to the town hall may discourage participation. Ensure that the location selected is barrier-free and easily accessible (central, close to bus routes – check the timetable!) and time the event carefully to suit the target group. Be sure also to choose forms of participation and presentation that are easily understandable to a broad public.

Possible participative methods:

- **Focus group talks:** Group discussion with inhabitants on specific topics.
- **World Cafés**: Various topics are discussed on a number of tables. After a specified length of time participants change tables.
- **Walking groups:** Walks with residents through the neighbourhood in order to examine problems and special features together.
- **Community Mapping**: Residents sketch their neighbourhood, recording the places and objectives that are important to them.
- **Photovoice**: Residents bring their own photos of problems or good examples; these are then discussed together.

Feedback results, successes and failures to inhabitants from time to time throughout the process as well as at the end. If inhabitants have the feeling that their comments have been noted and used in planning and implementation it increases their willingness to participate in such exercises again.

[29] Wright M, Block M, von Unger H: Partizipative Qualitätsentwicklung. Berlin: Gesundheit Berlin e.V. Landesarbeitsgemeinschaft für Gesundheitsförderung, 2008. Available at: http://www.partizipative-qualitaetsentwicklung.de/partizipative-qualitaetsentwicklung.html (Accessed 12/2017)

Defining the initial situation and measuring progress

Where do I start?

If you want to make your town into a liveable place that allows inhabitants of all ages to live healthy, active and independent lives, then local requirements and needs are of primary significance. At the beginning of the process a targeted description of the status quo should therefore be compiled. This chapter presents a set of indicators that you can use for a status analysis of this sort.

The indicators are categorised into six areas, of which three are related to the population and three to the built environment. They are supplemented by consideration of equity with reference to the environment and health, thus relating the different areas to one another (Figure 3). The set of indicators represents minimum requirements that you can supplement with other locally specific indicators. Included for all the indicators are tips for collecting data or for existing data sources in Germany and possible partners and actors who may help you with data collection and analysis.

(Socio-) Demography — 1

Wellbeing — 2

Mobility Behaviour — 3

Health and Environmental Equity

4 — **Public Spaces**

5 — **Footpath and Cycle Path Infrastructure**

6 — **Everyday Destinations**
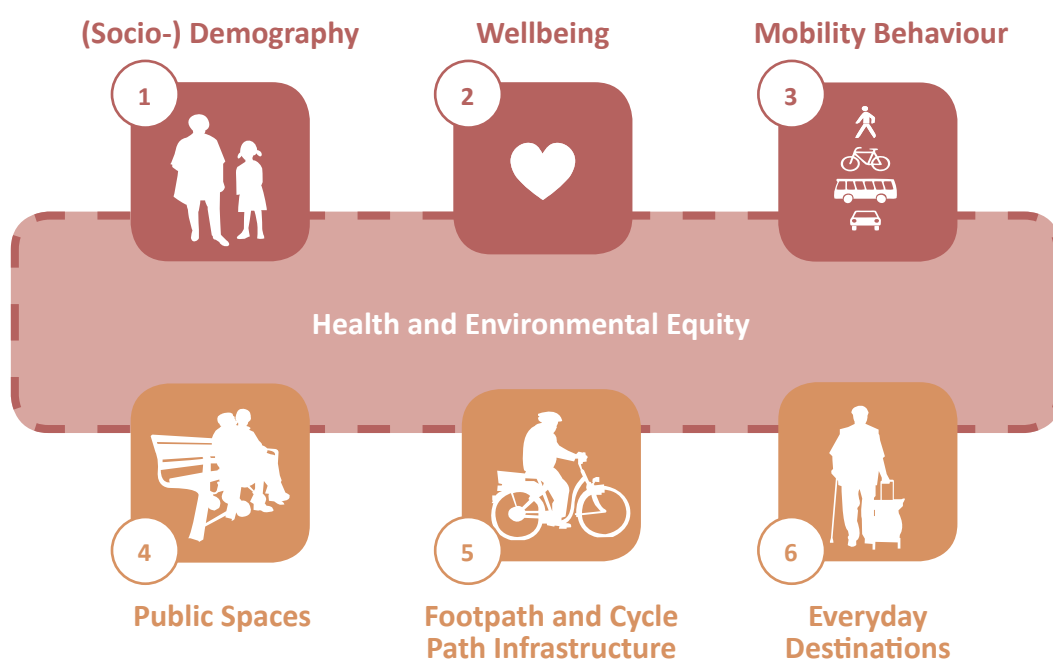
Figure 3: Overview of the set of indicators

How do I know whether I have achieved my goal?

After you have implemented the measures for promoting active mobility among the older population you should use the same indicators to evaluate the success of your measures. Which changes can be detected and what significance do they have? Here quantity and quality are of equal importance. When you erect a bench in a street where there was previously no bench it is just as good as moving five benches into a more sheltered position. Even small changes can be important. Establish a monitoring system that regularly repeats the evaluation. Not only can monitoring assess the sustainability of a measure but it can also reveal any new need for action and safeguard social and political support in the long term.

How reliable are my results?

When interpreting your data always consider when and how they have been collected. Ask yourself, e.g., whether the data apply equally to all neighbourhoods (e.g. residential areas, town centre, disadvantaged neighbourhoods), whether only certain groups of people were surveyed or whether the time of survey (e.g. time of day or year) could have affected the results.

Indicators	Parameters	Comments	Data collection and availability	Partners
1 (Socio-) Demography				
Core indicator: Age Supplementary indicators: Gender Unemployment rate Income Family status Social security benefits Education Migrant background	Proportion of residents over 65 years of age	The data should be differentiated according to neighbourhood. This differentiated view of neighbourhoods can uncover possible requirements, such as appropriate levels of supply for older people or possibilities to make a neighbourhood more attractive for younger people or families. The additional indicators are required for the analysis of equity (see p. 16).	Data on the level of districts and towns with district status can, e.g., be found in the regional monitoring of the Metropolitan Region Northwest [30]. Data on the level of the neighbourhood is provided by the demography monitoring of the municipal association [31]. Small-scale data on age structure, gender and family status is available from the Residents' Registration Offices. Data on level of education, income and migrant background needs to be gathered in dedicated surveys.	State Statistical Office Residents' Registration Office Social services
2 Wellbeing				
Self-perceived wellbeing	Subjective assessment of wellbeing on a five-point scale from very good to very poor	In this case the subjective assessment of inhabitants is of interest. In addition to self-perceived wellbeing, questions inquiring about concerns, pessimism about the future or feelings of fear and loneliness can provide relevant information. Health can also be approximately measured objectively, e.g. using life expectancy (data is available in the official statistics). Subjective and objective dimensions can, however, vary greatly.	Here a survey of inhabitants is necessary. Tips on the methodology to be applied and suggestions for questions can be found with the German Ageing Survey (DEAS) [32].	Social services Universities Research institutes
3 Mobility behaviour				
Modal split	Proportion of trips undertaken on foot, by bicycle, by public transport, and by private car	The aim should be to increase the proportion of trips made on foot, by bicycle and by public transport. In order to record the number of trips made on foot realistically, surveys should inquire about trip stages, e.g. from home to the public transport stop or car park [33].	Data for your own town or municipality must usually be gathered via a survey of inhabitants. Comparative data – also differentiated according to state and type of town — can be taken from the countrywide Mobility Survey of Germany (MiD) [34].	Transport planning Universities Research institutes

Indicators	Parameters	Comments	Data collection and availability	Partners
4 Public spaces				
Public toilets	Number of publically accessible toilets and barrier-free toilets	See Chapter 5: Design multi-functional (semi-) public spaces.	Ideally, undertake a walking tour with inhabitants. In this way it is possible to identify, e.g. privately provided and informal seating, such as benches in front of shops or low walls. Draw up a map to give a better overview and visualisation of under-supplied areas.	Associations for the older population Universities Research institutes Other partners see Chapter 5
Seating	Number of seats along everyday routes and in (semi-) public spaces			
Multi-functionality	Number and quality of places and squares with multi-functional uses			
5 Footpath and cycle path infrastructure				
Footpaths and cycle paths	Number of metres of existing pathways, new pathways and/or renovated pathways at least 2.50 m wide	See Chapter 5: Prioritise active mobility on everyday trips.	Produce a map to provide a better overview and visualisation of under-supplied areas. To evaluate the quality of footpaths and cycle paths, bicycle parking provision and the perceived safety of road crossings it is best to organise a walk of the area with inhabitants.	Road and traffic authority Other partners see Chapter 5
Road crossings	Number and type of road crossing aids on main thoroughfares			
Bicycle parking facilities	Number and type of bicycle parking facilities			
6 Everyday destinations				
Accessibility of everyday destinations	Proportion of inhabitants who can walk (500m radius) or cycle (2 km) to important everyday destinations (e.g. supermarket, post office, bank, public transport stops, chemists, doctors, graveyard)	See Chapter 5: Ensure the accessibility of everyday destinations through urban development.	GIS-based accessibility analyses are very time-consuming and can thus often only be used as part of larger research projects [35, 36]. An alternative is to survey inhabitants, asking how far away (in metres or miles) the relevant everyday destinations are. Data on proportions of green spaces and recreational areas on the level of districts and towns with district status is provided by the regional monitoring of the Metropolitan Region Northwest [30]. The municipal association Bremen-Niedersachsen can provide comparable data for all its cities and municipalities [37]. Other localised data can be taken from existing plans (e.g. the preparatory land-use plan) or must be collected during inspections of the area in question.	Parks department Business development Universities Research institutes Other partners see Chapter 5
Provision of public meeting places	Number of inhabitants per freely accessible social meeting place			
Provision of green spaces	Square metres of green space per inhabitant			

How do I measure equity?

Equity in the context of active mobility exists when all inhabitants have the same opportunities to travel actively. Equity cannot be captured by using just one indicator but requires consideration of all the above-mentioned indicators. The analysis of equity is intended to establish whether there are differences in environment and health between neighbourhoods or particular population groups.

Carry out, as described below, analyses to determine the equal or unequal distribution of the various indicators. Include the additional (socio-)demographic indicators.

Step 1: Are there differences between population groups?
Calculate averages for individual population groups, e.g. according to gender, age, income, and compare them with one another.

Examples:
- Women cycle less often than men (5% vs. 10%)
- People with low incomes report poor wellbeing twice as often as people with medium to high incomes (10% vs. 20%)

Step 2: Are there differences between neighbourhoods?
Calculate averages for individual neighbourhoods and compare them with one another.

Examples:
- More older people live in neighbourhood A than in neighbourhood B.
- The pedestrian and cycle infrastructure in neighbourhood C is poorer than in neighbourhood D.

Step 3: Do the differences found suggest a need for action?
Relate the differences found to one another.

Example:
- In neighbourhoods with above-average proportions of older population the pedestrian and cycle infrastructure is poorer than in neighbourhoods where more younger people live.

[30] Metropolregion Bremen-Oldenburg im Nordwesten e.V.: Regionalmonitoring. Available at: http://regionalmonitoring. frischkoepfe.de/atlas.html (Accessed 12/2017)

[31] Kommunalverbund Niedersachsen/Bremen e.V.: Demografiemonitoring. Available at: http://www.demografie-monitoring.de/ (Accessed 12/2017)

[32] Deutsches Zentrum für Altersfragen: Deutscher Alterssurvey (DEAS). Available at: https://www.dza.de/fdz/deutscher-alterssurvey.html (Accessed 12/2017)

[33] Sauter D, Pharao T, Tight M, Martinson R, Wedderburn M: International Walking Data Standard Treatment of Walking in Travel Surveys. Internationally standardized monitoring methods of walking and public space. Available at: http://www.measuring-walking.org/ (Accessed 12/2017)

[34] infas: Mobilität in Deutschland. Available at: http://www.mobilitaet-in-deutschland.de/ (Accessed 12/2017)

[35] Bundesministerium für Verkehr und digitale Infrastruktur: Aktionsprogramm regionale Daseinsvorsorge. Abschlussbericht Projektassistenz. BMVI-Online-Publikation Nr. 03/2016.

[36] IPEN International Physical Activity and the Environment: Methods & Measures. Available at: http://www.ipenproject.org/ methods_gis.html (Accessed 12/2017)

[37] Kommunalverbund Niedersachsen/Bremen e.V.: Regionalmonitoring auf Gemeindeebene. Available at: http://www.statistik-bremen.de/Regionalmonitoring/RegionalmonitoringAufGemeindeebene.html (Accessed 12/2017)

Planning and implementing measures

Public spaces, cycling and pedestrian infrastructure and the accessibility of everyday destinations are significant fields of action for promoting active mobility among the older population. Based on three action strategies, the following section presents recommended measures that you can adapt to local conditions. Consideration is also given to the scope for action that is offered by existing planning processes such as land-use planning. Furthermore, the possibility for implementing measures in the course of the renewal of existing built fabric, urban redevelopment or in the context of the German Social City programme should be reviewed. Mention is made of partners from beyond the public health services and municipal planning and building authorities who can support you in planning and implementing these measures.

Action strategy A: Designing and equipping multi-functional (semi-) public spaces

Public squares, parks and streets and also semi-public spaces such as school-yards, the terraces of cafes and community gardens represent the foundation of lively neighbourhoods. They are the places where people meet, networks are built up and a sense of neighbourhood develops. They should therefore play a central role in the everyday life of residents. The functionality of (semi-) public spaces is closely connected to neighbouring land uses, e.g. food services, retail and public institutions. Many small and medium-sized towns are characterised by the decline of town-centre functions, which has a negative impact on the liveliness and quality of time spent in (semi-) public spaces.

Multi-functional (semi-) public spaces should ensure the best possible levels of usability in these circumstances. They create differentiated offerings for different user groups and needs. They furthermore offer a space for temporary uses and appropriation. There is also potential for such areas to form a higher level network of open space.

(Semi-) public spaces that can be flexibly used not only invite people to linger and enjoy the area, they also promote walking and cycling as forms of transport. They encourage people to leave their homes and go outside, and offer resting points that guarantee relaxed mobility. This facilitates the maintenance of contacts to family, friends and neighbours and enables independent, healthy and active lifestyles – an important precondition for a good quality of life at all ages.

Recommended Measures	Examplary Approaches and Instruments	Potential Partners
1 Develop (semi-) public spaces as multi-functional green areas and open spaces		
• Develop a functional network of green areas and open spaces in the town and region, e.g. as a network of paths, biotope network, fresh air corridor • Plant (semi-) public spaces and unused spaces, e.g. with raised beds, trees, green roofs and facades • Tend existing green areas and parks and continue to develop them, e.g. with playgrounds and exercise equipment, seating, grassed areas for games and sports • Ensure that (semi-) public green areas and open spaces are accessible and without barriers	• Plan green corridors in the preparatory land-use plan so as to create a green network stretching through the entire urban area • Stipulate appropriate dimensions for public squares, street spaces and green areas in the binding land-use plan • Draw up sponsorship contracts with residents or local businesses who will help tend the public green areas, e.g. by watering plants, mowing the grass, weeding or undertaking annual planting	• The parks department, whose staff know which areas are used how, and can estimate the long-term maintenance costs • The building authorities • Residents • Local businesses • Local associations and initiatives • Schools
2 Enable the multi-functional use of urban squares		
• Take different user groups into consideration, e.g. children, young people, the older population, and enable the different groups to meet one another • Create zones for different needs, e.g. calm areas and active areas, and thus avoid conflicts of use • Create pleasant conditions, e.g. by providing shade, protection from the weather, drinking water, and diverse sensory inputs, e.g. by using water and green plants as design elements • Support temporary uses like town festivals and farmers markets, e.g. by providing technical infrastructure (electricity, water) and options for other uses, e.g. areas for boules, giant chessboards, community gardens	• Draw up an urban development contract with a private investor so that if an area is redeveloped or converted public access to a high-quality (semi-) public space is guaranteed • In the context of the participative planning of play facilities, pursue the objectives of family-friendly and inter-generational design	• Inhabitants who want to use the spaces themselves and best know what the important features are • Private investors and housing companies who are interested in designing appealing residential surroundings • Advisory body for the older population • Local food services • Cultural institutes
3 Design public paths and squares to be safe, clean, well-lit and clearly visible		
• Ensure sufficient lighting on public paths and squares • Prune bushes and shrubs and when redesigning an area use trees and flowers that restrict the view less • Provide rubbish bins and clean (semi-) public spaces regularly • Avoid pathways, such as subways, that are not easily visible • Use graffiti as a design element so as to prevent vandalism	• Issue local building regulations, e.g. regulating the design of buildings and front gardens, the planting of open spaces, uniform and attractive street furniture, signposting and lighting • Draw up a lighting concept and find local businesses as sponsors	• The parks department, whose staff know when and how bushes and trees should be pruned • The building authority • Waste management department • Local businesses and local retail

Recommended Measures	Examplary Approaches and Instruments	Potential Partners
4 Ensure barrier-free access to the everyday destinations of the older population		
• Choose even and non-slip surfacing • Give preference to design options that avoid steps and stairways • Provide unavoidable steps and stairways in public spaces with a handrail and an accessible ramp suitable for people with disabilities • Extend handrails beyond the last step so that the end of the stairway is obvious • Signpost important places and paths clearly with contrasting designs	• Observe the legal standards for barrier-free design, especially regulation DIN 18024-1 for streets, squares, paths, areas of public transport infrastructure, green areas and playgrounds • Demand innovative approaches for barrier-free access in urban design competitions • Create synergies with the barrier-free development of public transport, e.g. at access points to stations and stops	• Civil engineering department, which is responsible for the technical planning, building and maintenance of footpaths and cycle paths • Advisory body for the older population, who know, for instance, which routes and destinations are particularly relevant for older people • Local retail
5 Create and maintain sufficient and diverse seating		
• Create diverse seating, e.g. across corners, on lampposts, on walls, to lean on • Position seating where it is needed, e.g. on central squares, on shopping streets, at bus stops, to offer protection from the weather and traffic noise • Make sure that the seating is easily useable, i.e. with different heights, parking spaces for rollators, arm- and backrests • Choose robust, easy-care and well-insulated materials	• Grant special rights of use to permit businesses and food services to utilise the pavement space in front of their businesses, e.g. for seating, as long as it does not restrict the use of the footpaths or cycle paths or hinder barrier-free access • Mobilise extra funds for seating through sponsoring	• Local retail and businesses who want to help bring life into the town centre • Physiotherapists and nursing staff who know which types of seating ensure that older people do not have difficulties getting up
6 Provide sufficient barrier-free and publically accessible toilets		
• Maintain toilets and ensure they are well signposted • Ensure toilets are easy to use, i.e. not too high-tech • Combine them with other uses, e.g. cafes, kiosks or town hall • Facilitate the use of toilets in semi-public spaces	• Facilitate the public use of toilets in food service outlets, e.g. using the concept that originated in the town of Aalen: 'the nice toilet' [38]. A sticker on the main door refers to the toilet and all toilets that can be used in this way are marked on a town plan.	• Local food services • Local retail • Public institutions

[38] STUDIOO GmbH: Die Nette Toilette. Das öffentliche Örtchen in über 240 Städten und Gemeinden bundesweit. Available at: http://www.die-nette-toilette.de/ (Accessed 12/2017)

# Action strategy B: Prioritise active mobility on everyday trips

Active mobility refers to human-powered modes of transport – walking, cycling on two or three wheels, or using a wheelchair, a scooter or skates. The great advantage of these transport modes is that they are theoretically available to everybody at any time and at a low cost. In practice, however, this is only true if the spatial surroundings create the appropriate conditions. Uneven, overly narrow and unlit paths can represent as much of a hindrance as long waiting times at traffic lights and feelings of insecurity caused by unclear pathways and, especially, motorised road users

Many small and medium-sized towns are negatively affected by non-local through traffic. The central thoroughfare through the town is often the street where retail and public institutions are located. Among the tasks that can be addressed from within the municipality are reducing traffic speeds, providing crossing points for pedestrians and cyclists, and improving the attractiveness of the area for spending time in. Tasks that extend beyond the neighbourhood include connecting separate neighbourhoods and linking the urban area with its surroundings.
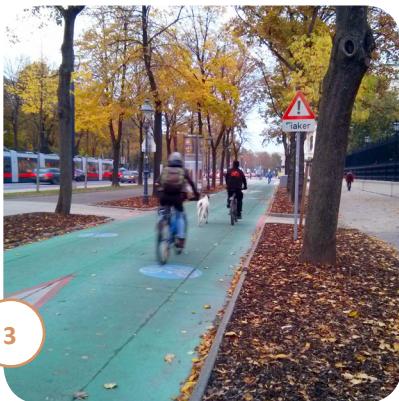
Transport facilities should be planned from the point of view of pedestrians and cyclists. In order to ensure that the older population can also easily walk around or cycle, it is important to ensure that streets offer enough space, are not constricted by physical barriers, and are clearly structured. Ageing involves increasing limitations in terms of strength, agility and balance, reduced perceptive abilities and slowed reactions, which means that traffic safety and subjective perceptions of safety gain significance.

Recommended Measures	Exemplary Approaches and Instruments	Potential Partners
1 Give pedestrians and cyclists priority		
• Plan sufficient space for cyclists and pedestrians • Create conveniently placed, easily visible and secure bicycle parking that is also suitable for electric bikes and tricycles • Shorten waiting times for pedestrians and cyclists at traffic lights • Extend traffic calming measures for motorised traffic, e.g. speed restrictions, speed bumps, narrowed lanes and crossing areas	• Include green corridors that can be used by pedestrians and cyclists in the preparatory land-use plan • Include transport infrastructure such as pedestrian zones and bicycle parking in the binding land-use plan • Issue local building regulations, e.g. regulating the provision of areas for bicycle parking • Monitor adherence to existing traffic regulations, especially speed restrictions, through traffic surveillance	• Civil engineering department, who are responsible for the technical planning, construction and maintenance of footpaths and cycle paths • Road authority of the district or state, who are responsible for signposting, speed restrictions, and traffic lights on the various categories of road • Housing companies • Local retail
2 Create clearly visible and easily understandable street spaces		
• Indicate cycle lanes clearly, particularly at intersections, e.g. using coloured markings or different road surfaces • Link up foot paths and cycle paths and void routes that end abruptly • Signpost everyday destinations for cyclists and pedestrians, e.g. the town hall, chemists, public toilets • Restrict road signs to those necessary for traffic safety and avoid large billboard advertising • Increase recognisability and facilitate orientation, e.g. by varying the design of facades or highlighting historical facades, using planting schemes or water as guides, installing art in public spaces	• Plan continuous path networks and design options for intersections in the traffic development plan or mobility concept • Issue local building regulations, e.g. regarding the design of buildings and front gardens and regulating advertising billboards	• Civil engineering department • Road authority • Local retail • Local or regional tourist office
3 Provide barrier-free, safe and sufficiently wide footpaths and cycle paths		
• Ensure footpaths do not have uneven surfaces or obstacles that could cause tripping, are constructed with flat and non-slip surfacing and are cleared of fallen leaves, snow and ice • Footpaths should be sufficiently wide so as to allow two people, even with rollators, to walk next to one another or pass in opposite directions • Cycle paths should be sufficiently wide so that tricycles can use them and there is room for quicker cyclists to overtake • Footpaths and cycle paths should be well-lit • Maintain existing foot and cycle paths and protect them from misuse by other modes of transport, e.g. unlawful parking • Ensure that tourist cycle paths are suitable for everyday use	• Include appropriately sized traffic areas in the binding land-use plan • Respect the regulations governing urban streets (RASt 06) • Respect the legal standards governing barrier-free access, especially the DIN 18024-1 for streets, squares, paths, public transport areas, green spaces and playgrounds • Monitor adherence to existing traffic regulations, especially parking regulations, through traffic surveillance • Educate residents and traders about the desirability of keeping pavements unobstructed	• Civil engineering department • Public order office • Waste deposal and delivery services who sometimes restrict the usability of pavements and cycle paths by obstructing them with rubbish bins or vehicles • Local or regional tourist office

Recommended Measures	Examplary Approaches and Instruments	Potential Partners
4 Provide safe and barrier-free road crossing points		
• Ensure there are crossing points, especially on the everyday routes of the older population • Lower curb stones and install, where appropriate, zebra crossings • Split crossings on broad streets, for instance by using traffic islands • Set traffic lights so that even slower pedestrians have enough time to cross	• Respect the regulations governing urban streets (RASt 06) • Respect the legal standards governing barrier-free access, especially DIN 18024-1 for streets, squares, paths, public transport areas, green spaces and playgrounds	• Civil engineering department • Road authority of the district or state
5 Increase traffic safety and subjective perceptions of safety		
• Strengthen consideration for others among road users • Offer training and test runs with bicycles, tricycles and electric bikes • Provide affordable safety checks and repairs for bicycles.	• As individual training sessions or as part of larger events, give older residents an opportunity to test and learn about new forms of mobility, e.g. taking buses with a rollator, using an electric bike	• Advisory body for the older population • General German Bicycle Association • Local bike retailers • Road safety organisations who provide information on traffic safety, also for the older population
6 Understand cycling and pedestrian transport as supplementing public transport		
• Link public transport stops to attractive and barrier-free footpaths and cycle paths • Facilitate or extend the taking of bikes on buses and trains • Provide bicycle parking at public transport stops • Provide opportunities for people to (re)learn about using public transport, e.g. training for using buses with a rollator	• Include cross-mode networks in the local transport plan, e.g. by facilitating the taking of bicycles on public transport or by providing appropriate parking areas at stops	• The district authority or (regional) transport association responsible for planning local transport • Bus operators running the lines in question

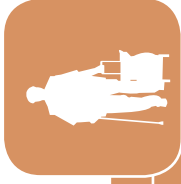# Action strategy C: Ensure the accessibility of everyday destinations through urban development

Many older people wish to stay in their own homes for as long as possible. In the light of declining population figures and the lack of public transport facilities outside the urban centres, caring for the older population is a great challenge, particularly for small and medium-sized towns with dispersed settlement structures.

The accessibility of everyday destinations is a basic precondition for an independent and autonomous life in old age. As spheres of activity shrink with ageing, i.e. trips become increasingly shorter, the importance of the immediate residential environment, the neighbourhood or urban district becomes decisive. The older population should be able to satisfy their most important everyday needs here: to buy food, post a letter, withdraw money, access medical support or healthcare and maintain social contacts.

In order to ensure that trips remain short enough to be undertaken on foot or by bicycle, compact settlement structures with a mixture of land uses including residential, retail, services and social infrastructure is necessary. This requires municipal and regional development planning that is based on inner-urban development and that prevents further urban sprawl. New locations for retail facilities and infrastructure should be planned so that the greatest possible proportion of inhabitants can reach them on foot or by bicycle. Where low population densities mean that distances are too great for walking or cycling, needs-oriented and affordable public transport, citizens bus projects or an alternative transportation model will be required.

The focus on the local area that comes with ageing also offers opportunities for the municipalities. Thus age-friendly housing can counter the loss of functions that many town centres suffer from and active members of the older population can enrich public life in the municipality, e.g. through voluntary work.

Recommended Measures	Examplary Approaches and Instruments	Potential Partners
1 Maintain mixed-use and compact structures in core areas		
• Maintain mixed land use with housing, services and retail in the town centres so as to keep trips short • Prioritise inner-urban development that revitalises brownfield sites and vacant property rather than permitting new settlement development on greenfield sites • Calculate long-term infrastructure costs for new settlement areas realistically, e.g. using the follow-on cost calculator for construction sites [39]	• Set the foundations for compact settlement development on the district level in the regional spatial planning programme. • Create the preconditions for inner-urban development, a sufficient mixture of land uses and access to green and open spaces in the preparatory land-use plan. • Influence land use by regulating the permissibility of commercial uses in the binding land-use plan	• The authorities responsible for regional planning • Actors responsible for regional development • Municipal political bodies • Transport companies
2 Prioritise accessibility on foot and by bicycle		
• Consider accessibility on foot and by bicycle when designating locations for retail and take into account mobility-related follow-on costs when facilities are closed • Stipulate infrastructure for bicycles and pedestrians early on in the designation of new development areas • Ensure unobstructed access for pedestrian and bicycle traffic in central locations, e.g. by providing rights of way through semi-public areas and passages through cul-de-sacs • Link up green areas and parks so they connect residential areas with important destinations and create attractive routes for pedestrian and bicycle traffic	• In the preparatory land-use plan, provide for footpath and cycle path networks and green corridors. • In the binding land-use plan, provide for traffic areas such as pedestrian zones and bicycle parking of a sufficient size for tricycles and cargo bicycles. • Draw up an urban development contract with a private investor so that if an area is redeveloped or converted public rights of way have been agreed upon. • Issue local building regulations, e.g. regulating the provision of areas for bicycle parking.	• Building authorities • Private investors • Local retail • Local food services • Cultural institutions
3 Maintain and promote local supply structures		
• Keep or attract retailers to the town centre, especially those providing everyday goods • Improve the capacities of retail, services and social infrastructure by the targeted linking of functions, e.g. by using schools as places for intergenerational encounters • Cooperate with neighbouring municipalities so that supply structures can be maintained even in small settlements	• Set the foundations for successful local supply structures in the regional spatial planning programme, and stipulate where facilities should be concentrated • Working together with other municipalities, local business and civil society, develop approaches for sustainable regional development in a regional development concept	• The authorities responsible for regional planning • Actors responsible for regional development • Intermunicipal alliances • Local retail • Initiatives for village shops etc.

Recommended Measures	Examplary Approaches and Instruments	Potential Partners
4 **Ensure everyday destinations are accessible by public transport**		
• Adjust timetables to suit opening times and events, e.g. Tuesdays for the weekly market, Thursdays for the library • Consider the everyday destinations of the older population when positioning and naming stops, e.g. supermarket, medical centres • Provide needs-based shuttle services to major public transport axes, e.g. with a citizens bus scheme • Offer reduced rate tickets for the elderly	• Match the routes and timetables of public transport with everyday destinations • Use opportunities provided by digital networks, e.g. for shuttle services	• The district authority or (regional) transport association responsible for planning local transport • Bus operators running the lines in question
5 **Provide public and semi-public meeting points**		
• Design public spaces so that they facilitate meeting others (see p.17-19) • Provide space for community activities, e.g. neighbourhood meetings • Create incentives for traders and associations to open up their rooms for non-commercial uses • Advertise existing offerings, e.g. topical town plans	• Record important everyday destinations in a town plan for the older population; this includes the position of post boxes, public transport stops, seating and toilets that may be used by the public	• Local associations • Local retail • Social institutions • Advisory body for the older population
6 **Create opportunities for physical activity close to home**		
• Plan playgrounds and sports areas (also for the older population) and parks in residential areas • Develop networks with public and private providers of sport and health courses so as to create low-threshold and affordable offerings • Promote networks between inhabitants, e.g. walking groups	• Explore urban design options for providing physical activity opportunities • Found a walking group that meets regularly to take walks in the residential area	• Housing companies • Sports associations • Schools • Countrywomen organisations • Advisory body for the older population

[39] Gertz Gutsche Rümenapp - Stadtentwicklung und Mobilität: Folgekosten von Baugebieten in Ihrer Gemeinde, Hamburg. Available at: http://www.folgekostenrechner:was-kostet-mein-baugebiet.de/ (Accessed 12/2017)

6 Learning from others

Creating different types of seating: Griesheim, a SITtable town

The older residents of the medium-sized town of Griesheim in southern Hessen like to meet one another, see something and have a short break. This has been made possible in the SITtable town using three types of seating. First, seating that encourages meeting and socialising; these seats are arranged so that those using them face one another and can talk. Second, seating that allows older members of the population to watch public activities, that offers interesting views, a comfortable seat with a backrest and perhaps also space to park a rollator. Third, seating suitable for a short break on a longer walk, e.g. on low walls or folding seats attached to the walls of houses. This joint project between the town of Griesheim and the Evangelical High School in Darmstadt surveyed 300 members of the older population about their routes and staging posts through the town and thus identified the most important locations for the new seating.

Further information under:
https://www.griesheim.de/bildung-kultur/besitzbare-stadt/

Providing sufficient space for all transport users:
The thoroughfare through Rudersberg

In order to make spending time in the town pleasant for non-motorised transport users despite the through traffic, and to enable the historical marketplace to be enjoyed, the municipality of Rudersberg in Baden-Württemberg has redesigned its thoroughfare. Drawing on the Shared Space principle a situation has been created where the different transport modes can coexist acceptably. Since the completion of the project in March 2015 the volume of traffic has been reduced by about 30% and the average speed of cars is now just over 30 km/h. As well as the reduction in noise, it has been possible to witness positive developments in retail and in the willingness of property owners to invest. The redevelopment created pavements that are between 1.70 m and 6.50 m wide and that thus provide plenty of room for people to stand around and pass by, even with rollators and pushchairs. The height of the curbs has been reduced to 2-3 cm and a guidance system for the visually impaired has been established. Twelve benches have been erected and numerous trees planted. Cooperation with other municipalities from Baden-Württemberg in the Intermunicipal Initiative for Urban-friendly Roads also contributed to the success of the project.

Further information under:
http://www.ortsdurchfahrt-rudersberg.de/

Ensuring supply facilities close to the home:
Federal Association of Multi-functional Village Shops

In many places shops have disappeared from the townscape. Anyone without a car or who is not physically fit finds it difficult to access food supplies and other everyday necessities. It is not only the possibility of shopping close to home that is disappearing here, but also places of social interaction. This is the idea of the multi-functional village shop. Committed residents all over Germany are setting up their own village shops that function not only as shops but also offer other facilities such as post office services or a cafe. The focus is not on economic gain but on improving quality of life and promoting the local community. In 2016 the Federal Association of Multi-functional Village Shops was established to promote initiatives to improve local supply facilities, particularly village shops organised by local inhabitants and supported by local municipalities. A village shop handbook describing how to set up a village shop was put together in 2008 by the creators of village shops in Otersen, Lower Saxony, and has since been updated and extended many times.

Further information under:
http://www.dorfladen-netzwerk.de/

Investigating the age-friendliness of towns:
The neighbourhood analysis of Weinheim-West

The local health authority of the Rhein-Neckar district and Heidelberg joined with other actors from both the administration and civil society to investigate the age-friendliness of the neighbourhood of Weinheim-West. The methodological approach involved a cartographic representation of the age structure and infrastructure of the neighbourhood, local networking, walks through the neighbourhood with residents, and qualitative interviews with older people living isolated lives. Results included, e.g. new civic activities (such as bus training for people with rollators), sponsored benches appropriate for the older population, and initial construction work in the neighbourhood to remove barriers. The neighbourhood analysis of Weinheim-West was granted a Good Practice Project award by the cooperation network Equity in Health and the Federal Centre for Health Education.

Further information under:
https://www.gesundheitliche-chancengleichheit.de/good-practice/alternsfreundliche-kommune-stadtteil-analyse-weinheim-west/

Applying health-related knowledge in a targeted fashion: The Healthy City Checklist

The Healthy City Checklist from the North Rhine-Westphalian Centre for Health are based on a checklist from the Health Ministry of New South Wales (Australia) and have been adapted to the situation in North Rhine-Westphalia. They are intended to improve cooperation between spatial planning and the public health services. The guidelines focus on the use of the written submissions of the public health services on urban development. The German planning system is therefore clearly explained and the points where health-related issues can exercise an influence are highlighted. Discussion is divided into ten topics ranging from mobility to public open spaces and physical activity, to social cohesion and access to healthy food. For each topic the current state of research, a catalogue of questions relevant for evaluating planned projects, and tips for further research are presented. Further attention is given to three specific spatial-development contexts: urban renewal and inner-urban development, greenfield development, and rural areas.

Further information under:
https://www.lzg.nrw.de/versorgung/ges_plan/gesunde_stadt/

Discovering health as a spatial planning focus:
Integrated urban development concept for Bochum Wattenscheid

In 2014 the city of Bochum produced an integrated urban development concept for the neighbourhood of Wattenscheid which included consideration of health issues. Under the motto 'Healthy Wattenscheid – family-friendly and fair to all generations' the housing and living conditions in Wattenscheid are to be managed so that all generations can live healthily and independently in the neighbourhood. The topic of health is used here for sustainable urban development, and health issues are taken into consideration in all economic, infrastructural, social and developmental decisions. Physical influencing factors such as air quality, noise emissions, barrier-free design and access to open space play a role, as do the creation of lively neighbourhoods, social networks and the provision of supply structures and services in the neighbourhood. In the preparatory investigations particular attention was paid to the living conditions and ways of life of inhabitants. Measures were developed for the fields of housing and building, green and open spaces, mobility, paths and squares, retail, the local economy, health, free time and social issues.

Further information under:
https://www.bochum.de/C125708500379A31/vwContentByKey/W29EJKU9997BOCMDE

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