

Cooperation of health- and transport planning measures to promote active mobility in cities. Status and proposed actions for Berlin-Pankow.

Master Thesis Part II



Carolin Kruse

Master Student in M.Sc. Transport Sciences (DL)

Student number: 1644848

Supervisor: Prof. Dr. Luc Int Panis

Co-Supervisor: Prof. Dr. Davy Janssens

Hand-in day: 12/01/2020

Preface

This master thesis was done during my Master Studies in Transport Sciences (M.Sc. in distance learning) at the University of Hasselt.

The idea to the topic was developed due to two incidents. On the one hand, I have considered health benefits through cycling in my assignment in the module “Environmental Economic Evaluation” in May 2018. There I have learned about the enormous health benefits of cycling for every person, but particular for the society. This already made me thoughtful why those facts do not lead to a more extensive promotion of cycling. On the other hand, I am working currently in the research project MobilBericht which is to bring different sectors together to optimise the mobility options for the citizens in the district Berlin-Pankow in regards to easiness, social-equality, health and sustainability. Thus, health plays already a part in the project, yet only subordinated. In my view, it can only be beneficial to also tackle the promotion of active mobility from a different angle. Promotion of active mobility can become very emotional as it often goes along with taking away space of motorised mobility. By arguing from a health point of view, the emotions can be replaced by facts which have a relevance to everyone. Since the health effects are obvious, I wanted directly work on the question how promoting health more effectively can take place by bringing the offices together which benefit from promoting active mobility. Next to the offices of transport and city planning, those are health and social units, health insurances and associations promoting active mobility. After having made sure that this topic is also of interest to the district, I decided to answer the question on how a cooperation between those different departments in the district of Berlin-Pankow to promote active mobility amongst the population, can be established, which measures need to be taken and who can and wants to be involved. I am thankful to Anja Bederke who is leading the group Präventionsketten (prevention chain) and is supporting my research.

I also want to thank my supervisor Luc Int Panis and Davy Janssens for the supervision of my master thesis.

Berlin, 10th January 2020

Carolin Kruse

Summary

The master thesis considers the research question how a cooperation between the transport and health sector in the district of Berlin-Pankow to promote active mobility amongst the population can be established and which measures can be taken.

Four objectives were chosen to answer the research aim:

- Assess the importance of active mobility for health.
- Evaluate the importance of inter-sectoral cooperation.
- Identify health-enhancing measures and cooperation which are already in place in other cities in regards to active mobility.
- Analyse the status in Berlin-Pankow of inter-sectoral cooperation.

To answer the objectives a literature review was done. The main findings for the first three objectives were:

- Active mobility is beneficial for physical, social and mental health.
- Inter-sectoral cooperation is of importance to promote active mobility due to more political power.
- Health-enhancing cooperation were seen for Europe, yet only one for Germany. There are some cooperation active, such as the Afoot project, which specialises on mobility with the elderly.

The findings were verified in interviews and focus groups. The interviews and focus groups were analysed with the grounded theory to analyse criteria and concepts. Those outcomes were compared and aligned to the findings of the literature review

It was seen that the findings of the literature match to the notions of the field. Further, no additional cooperation between the health and transport sector were brought up in the interviews. Nonetheless, the perceived importance for those cooperation were seen, particular with health insurances, which again fits to the literature.

Three different cooperation formats exist in Berlin-Pankow. One of it aims to promote health in public spaces. This is not only active mobility, but is also part of it. A need to focus on that matter was seen.

In the course of the research, interviews with external experts in the field of promoting active mobility and health as well as two focus groups with the inclusion of representatives of the district were done. The research process was split in two parts. The outcomes of the first focus group with representatives from the district and interviews with external experts served for the cooperation concept. This concept was presented and discussed in front of the representatives of the district and external experts. A focus in that presentation and focus group was set on the measures which is arguably the main important part in a cooperation.

The research via the first focus group showed different strengths, weaknesses and opportunities for establishing a cooperation. Strengths are the personal willingness of changing something and the current laws such as the mobility law, prevention law and guidelines for participation. Weaknesses are the existing system with too less staff, many authorities and traditional beliefs on transport planning. Opportunities due to new staff and amendments of the current traffic regulation were identified. Through the discussion

of the participants in the focus group, it was further seen that a lack of knowledge about existing cooperation, limited flow of information and competitive-thinking exist. Further, it was evaluated through the focus group that the participants want to collaborate in a transparent, open way and content-related. Here, focuses on integrated thinking and integrating public participation to design neighbourhoods are to be set.

Among the experts of the different organisations, it was seen that many connecting factors for the field of environmental-friendly transport exist. Cooperation with schools to educate pupils and with companies to promote cycling are done. Even if, the health management has seen the importance for the topic, the schools mostly have not. For them traffic education is more important than mobility education. A similar notion is further seen in the government. Although, the transport and particular environmental ministry are seeing the need for promoting active mobility due to climate reasons, a connection to health is not done. Further, current laws hinder to promote cycling, although more people want to become physical active and integrate activity in their daily life. The interviews have shown that there is a desire to work more collaboratively with universities, other organisations and health insurances.

After the first research process, the results were summed up in a simple mind-map to bring some coherences in different statements and opinions. This mind-map was shown in the second focus group to help the participants grasping the outcomes of the first research process.

The interest for collaborating was seen in the numerous participation of the second focus group. Almost every organisation or organisational unit invited took place. The ones who did not come, still expressed their interest for future meetings. They needed to reject the invitation due to clash of dates or other time constraints.

The elaborated cooperation concept has focused on the following aspects:

- Objectives: Focus on improving cycling and walking infrastructure and services, promoting health, reducing motorised individual traffic, enabling participation processes and exploiting legal requirements.
- Topic: Promoting active mobility to allow all inhabitants of all ages to live healthy, active and independent lives.
- Target groups: Eight different groups need to be targeted, the people who
 - o Suffer from the traffic situation (fear of safety, involved in accidents, emissions),
 - o Have a restricted space of opportunity,
 - o Are too little physical active,
 - o Want to be more active,
 - o Cause a lot of traffic,
 - o Are planning in the district.
- Mission statement to promote active mobility.

Those presented aspects have been mainly acknowledged by the participants, only small amendments, such as integrating to reduce motorised individual traffic (see above) were done.

Several possible measures were identified. The ranking by the participants showed the preference for the usage of the mobility law to design the neighbourhoods accordingly,

organising a car-free day and promote active mobility in schools through push and pull measures. Generally also marketing is seen important to educate about new traffic regulation and newly implemented infrastructure, such as a cycling street.

In the course of a cooperation, also about expenses, timetables and distributing tasks need to be decided. This research has only given some recommendations as it was not part of the research. It is further seen more valuable for the process if the participants decide for themselves in the next meetings how to distribute tasks, times and expenses.

The research showed the motivation and willingness by the participants to work together in the future. However, it was further raised that voluntarily structures from certain associations need to be kept in mind.

The thesis finishes with illustrating learnings, limitations of the research and recommendations for future research. It can be claimed, the inclusion of different experts and approaching the participants personally let to a valuable composition for the research and the participants themselves. Dependency on personalities and limited power were analysed as limitations. The process and the outcome highly depend on personalities, thus the same approach might lead to a different result in a different district or city. As the participation in the research has been voluntarily, it can be assumed that also almost only participants took part who had an interest in a cooperation. A formal decision to promote health in public areas exist, yet it needs to be seen as a limitation that none of the participants have sole decision power. For future research, it is recommended to leave more time for the ranking of measures, to add a survey with citizens to get to know more about their needs and to elaborate a subsequent evaluation of the cooperation process.

Table of Contents

List of Abbreviation	7
List of Tables	8
List of Figures	9
1. Introduction	10
1.1. Background of the Study	10
1.2. Aim and Objectives	11
1.3. Structure	11
2. Literature Review	12
2.1. Introduction to Health	12
2.1.1. Prevention of Diseases vs. Promotion of Health	12
2.1.2. Determining Factors and Trends.....	13
2.1.3. Health Status in Germany and Berlin-Pankow	14
2.1.4. Health Politics.....	15
2.2. Introduction to Mobility and Transport	18
2.2.1. Mobility: Active, Passive, Mixed.....	18
2.2.2. Determining Factors and Trends.....	19
2.2.3. Transport Effects	22
2.2.4. Transport and Mobility Behaviour in Germany and Berlin-Pankow.....	22
2.2.5. Transport Politics.....	24
2.3. Active Mobility and Health	27
2.3.1. Interrelations between promoting active mobility and health promotion.....	27
2.3.2. Inter-sectoral cooperation and measures for promoting active mobility in cities	30
2.3.3. Promotion of active mobility in Berlin-Pankow.....	35
2.4. Consequences for the research	36
3. Research Methods and Process	37
3.1. The Methods: Focus Group and Interviews	37
3.2. Piloting	38
3.3. Ethical Issues	38
3.4. Reliability, Validity and Generalisability	39
3.5. Data Analysis	40
4. Research Analysis and Discussion	41
4.1. Research Process	41
4.2. Research Results and Discussion	42
4.2.1. First part of the research.....	42
4.2.1.1. First focus group	42

4.2.1.2.	Interviews.....	50
4.2.1.3.	Interim summary	53
4.2.2.	Second part of the research: Second Focus Group	54
4.2.2.1.	Exchange objectives with each other	55
4.2.2.2.	Define the topic – on behalf of all participants	56
4.2.2.3.	Mission statement	56
4.2.2.4.	Define the target group.....	57
4.2.2.5.	Develop and re-think measures.....	58
4.2.2.6.	Calculate the budget / expense per measure	62
4.2.2.7.	Elaborate a timetable	63
4.2.2.8.	Distribute tasks.....	63
4.3.	Practical Recommendations and Future Research	64
5.	Conclusion	66
	Bibliography.....	69
	Appendices	82

List of Abbreviation

ADAC = Allgemeiner Deutscher Automobil Club

ADFC = Allgemeiner Deutscher Fahrrad Club

AOK = Allgemeine Ortskrankenkasse

BUND = Bund für Umwelt und Naturschutz

BMI = Body Mass Index

DGPH= Deutsche Gesellschaft für Public Health

GVA = Gross Value Added

LGK = Landesgesundheitskonferenz

MID= Mobilität in Deutschland

MIT= Motorised Individual Transport

TOD = Transit Orientated Development

VCD = Verkehrsclub Deutschland

WG = Working Group

WHO = World Health Organization

List of Tables

Table 1: Physical activity.....	14
Table 2: Trips in million per day 2002-2017	23
Table 3: Concept and Criteria in regards to work approach.....	45
Table 4: Concept and Criteria - SWOT	47
Table 5: Concept and Criteria - Cooperation.....	48
Table 6: Concept and Criteria – Interviews	50
Table 7: Ranking of Measures	59
Table 8: Expenses per measure	62

List of Figures

Figure 1: Health prevention: political system in Germany.....	16
Figure 2: Modal Split in Berlin (2018)	23
Figure 3: Modal Split in Pankow (2008)	24
Figure 4: Mobility and Transport: Parameters, Factors, Political instruments and Economy.....	28
Figure 5: Measures for promoting active mobility	32
Figure 6: Target group: Promoting active mobility	33
Figure 7: Analysis Method: Grounded Theory	40
Figure 8: Stakeholder in the research process	41
Figure 9: Work approaches.....	43
Figure 10: Mind-Map - First part of research	53
Figure 11: 8 Steps in a cooperation concept.....	54
Figure 12: Objectives of the working group	55
Figure 13: Topic.....	56
Figure 14: Mission Statement	56
Figure 15: Target Groups.....	57
Figure 16: Measures.....	58

1. Introduction

1.1. Background of the Study

The positive reasons for promoting active mobility, i.e. cycling and walking, but also the use of public transportation, cannot be denied. Active mobility improves cardio-vascular health (Larouche, Saunder, Faulkner, Colley, & Tremblay, 2014); decreases and stabilises a healthy body mass index (BMI) over time (Dons et al., 2018; Mendoza & Liu, 2014); reduces stress (Lambiase, Barry, & Roemmich, 2010), depression, and mortality (Garrard, Rissel, & Baumann, 2012) and fatalities (Jacobsen & Rutter, 2012); decreases risk of lung disease via reduced air pollution (Wilson, Solomon, & Tang, 2007); and increases alertness and attention (Martinez-Gomez et al., 2011).

According to the World Health Organization (WHO), adults should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or a combination (Kohl et al., 2012; Robert Koch-Institut, 2014a).

Additionally, movement and therefore active mobility has a positive impact on mental health; for example walking and cycling are associated with higher vitality (Avila-Palencia et al., 2018).

In 1986, the first international conference on health promotion took place in Ottawa and has published a charter with the goal to generate health for everyone. The discussion also emphasised inter-sectoral cooperation for health. In other words, promotion of health includes more than just medical and social care. Health needs to be on the political agenda at every level and in every political sector. Politicians need to emphasise the health consequences of their decisions and their responsibility for promoting health. Next to the sectors technology, work life and energy production, it was also claimed that the urban development sector has a central significance and requires actions to secure a positive impact on the health of the public (WHO Europe, 1986).

In Berlin, health reporting takes place regularly, which includes the number of pre-school age overweight and obese children. However this report does not detail what is done to reduce the number. Furthermore, no cooperation between the transport and health sector exists. The district of Berlin-Pankow is the research area of this thesis. The district is part of the Gesunde Städte Netzwerk in Deutschland (in Engl.: Healthy City Network in Germany). They see promoting exercise as one of the measures for health. However, they solely offer physical activities for the elderly (Bezirksamt Pankow, 2019b). Thus, a need for a cooperation between the transport and health departments exists.

As a consequence, the form of this master thesis is the analysis how a cooperation can be achieved. The current importance and value of this study is underpinned by the newly existing laws and political statements. Since 2018, a mobility law (Mobilitätsgesetz) exists which prioritise walking, cycling and public transport to motorised individual transport (MIT) (SenUVK, 2018). In addition, the senator for transport in Berlin has the aim that no person in Berlin should need to have a car (FAZ, 2019). This shows that the need for measures for active mobility is high. It can be argued that the implementation of measures can be done quicker, more efficiently and with less political resistance through inter-sectoral cooperation.

1.2. Aim and Objectives

The study considers how a cooperation between the transport and health sector in the district of Berlin-Pankow to promote active mobility amongst the population can be established and which actions can be taken. The positive features of active mobility for the health of the people has been recognised (Avila-Palencia et al., 2018; Dons et al., 2018). In addition, there is a trend reversal for cities to aim for less motorised traffic and a higher usage of environmentally friendly modes. The reasons are diverse. For example, in Paris it is due to air pollution problems (Mobilität, 2015) and in Berlin due to more pollution, traffic jams and safety, (Beikler, 2016). Arguably, a general interest for a cooperation between different sectors to use synergies and fulfil their societal task exists in cities.

The following objectives were chosen to fulfil the overall aim of the research:

- Assess the importance of active mobility for health.
- Evaluate the importance of inter-sectoral cooperation.
- Identify health-enhancing measures and cooperation which are already in place in other cities in regards to active mobility.
- Analyse the status in Berlin-Pankow of inter-sectoral cooperation.

1.3. Structure

Following this introduction, the literature review is presented to establish the basis for this study. Here, the terms health and mobility and transport are deeply discussed, first separately from each other, with its factors, trends, status, effects and politics. Thereafter, the terms are brought together and interrelated to show their dependency and the importance of collaboration between health and active mobility. The structure of inter-sectoral cooperation is discussed and existing cooperation as well as measures are illustrated. Subsequently, the district of Berlin-Pankow with its existing cooperation between different offices and departments are identified. In the third chapter, the methods to analyse the research aim are justified and difficulties are outlined. Thereafter, the outcomes of the two-step research are illustrated in the fourth chapter. Firstly, a focus group and interviews took place. Those outcomes were elaborated in a cooperation concept which then again was presented and discussed in a focus group. Hereinafter, practical recommendation for future research and limitations are shown. In the last chapter, a conclusion is drawn.

2. Literature Review

2.1. Introduction to Health

According to WHO (1946, p. 1) “[h]ealth is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” Health is a condition of the objective and subjective condition of a person which is fulfilled when a person feels the physical, mental and social aspects of its development are being in line with the own possibilities and objectives and the external and social and physical state of life. If not, health is impaired. This can be manifested in symptoms of social, mental and physical saliences (Hurrelmann, 2000).

Arguably, the most obvious health determinant is the physical health. It can be either felt by the person itself or even seen, e.g. a person who has a flu or physical constraints. The main reasons for physical health diseases are cardiovascular diseases, respiratory ailments, metabolic disease, non-healthy nutrition, caries, tumours, infections and liver diseases, immune system and allergies and disabilities. Physical activity is crucial for physical health, for e.g. cardiovascular diseases, respiratory ailments and similar (Trautner, 2006). Many people do not fulfil the recommendation in regards to physical activity by the World Health Organization (Robert Koch-Institut, 2015). Particular children, the youth and adults with a lower social-economic status are less active physically than persons with a higher social status. In addition, older people are less active than younger people, nevertheless since 1998 the physical activity of older people has increased (Robert Koch-Institut, 2015). There are strong connections between obesity and physical health (Nelson et al., 2007) which is also related to cognition and is reflected by the negative correlations between BMI and grey matter ratio in men and metabolic activity (Chan, Yan, & Payne, 2013). Mental health is defined by WHO (2019, p. 1) “as state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.” Common disorders are anxiety, mood and schizophrenia disorders. Further, it is said that every person, independent of their background, is able to develop a mental health problem (Nordqvist, 2017). The social dimension to health is not to be neglected. Many studies prove that social inequality and poor health correlate (Marmot, 2001; Shaw, Dorling, & Smith, 2001; Vogt, 2006; von Rueden, Gosch, Rajmil, Bisegger, & Ravens-Sieberer, 2006). For example, people with a lower socioeconomic status, experience higher rates of morbidity and mortality than people with a higher status. Above, mobility correlates with participation in social life, thus being in physical and mental health improves the social needs (Doblhammer, Georges, & Barth, 2015).

2.1.1. Prevention of Diseases vs. Promotion of Health

The prevention of diseases describes intervention actions which aim towards the reduction and avoidance of health damage by threatened expositions and personal related risks, such as smoking. The aim is to minimise progressing a health disorder or disease into a worse situation (Hurrelmann & Laaser, 2006). In turn, the promotion of health is to strengthen the personal and social health competences, associated with systematic politics which are adjusted to the improvement of the health determinants (Kickbusch, 2003). By means of maintaining and stabilising health and improving and increasing the potential around many people, health promotion can be achieved

(Hurrelmann & Laaser, 2006). In Ottawa at the first international conference on health promotion (WHO Europe, 1986) in 1986, the concept was developed. It has added the dimension on salutogenesis which was first introduced by Antonovsky (1979). For him, the relevant question is not what makes people sick, but what holds people, despite risks and burdens, healthy. Pathogenesis, in return, targets to decrease the burdens (Hurrelmann & Laaser, 2006).

The health promotion is based mainly on two methods or strategies: Establishing inter-sectoral measures and intervention activities in social systems. Promoting health is seen as a cross-sectional task which concerns all political sectors of the society. It is said that only through cross-sectional strategies people and groups are able to improve the health balance - by fulfilling their needs, realising their own strengths and having impact on their environment. Limiting smoking is quoted as an example here, campaigns were done in terms of education, fiscal- and tax policy and legal measurements as well as easiness of selling (Hurrelmann & Laaser, 2006). However, it can be claimed that the tobacco industry and lobby associations remain strong in Germany since, in contrast to other countries, it is allowed to have cigarette advertisements in public spaces. Further, the price for cigarettes in 2017 has been quite low in comparison to other North-Western European countries (sputnik, 2017), yet has been increasing since 2017 (Statista, 2019). Intervention activities, on the other hand, are done in certain settings such as families, kindergartens, schools, companies as well as cities and regions, i.e. in places where many environmental impacts for a personal group (members, population, and employers) are performed and the conditions for health are shaped actively (Hurrelmann & Laaser, 2006).

2.1.2. Determining Factors and Trends

The biggest challenges in the health sector are increased weight, obesity, smoking and the social dimension. Whereas smoking has become less prevalent, the number of people who are overweight or have obesity is increasing rapidly (Robert Koch-Institut, 2015). According to the Robert Koch-Institut (2013), in the years 2008-2011, 67.1% of all men and 53% of all women have been overweight (BMI above 25). In 1998, only 19% of men were overweight and 23.3% of all women. Thus, in only 10 years the numbers have more than doubled. The effects of a high BMI are high blood pressure, heart disease and diabetes. Furthermore, it shortens the life expectancy – for patients with obesity of around ten years (AOK Rheinland-Pfalz, 2017). Therefore, physical and athletic activity is highly important as well as a good nutrition. Next, a social gap exists in health. People with a higher status, have less risk of diseases than lower social status. Children and young adults with a lower socio-economic background, have psychological and behavioural problems, a problematic physical and alimentation behaviour which often leads to the individual becoming more overweight (Robert Koch-Institut, 2015). This group of people is also barely reached by promotion of health (Hurrelmann & Leppin, 2001). This is due to several factors, but also because too little is known of the negative health effects of that target group (Bauer & Bittlingmayer, 2001; Hurrelmann & Laaser, 2006). Furthermore, not only the risks of diseases and the ability to self-help is limited, a further burden arises through the risk of sloth of changes (Bauer & Bittlingmayer, 2001). In addition, the focus on health promotion arguably depends on political willingness, e.g. limiting tobacco consumption in Germany. The car motorisation is seen as a big problem for the health condition due to external factors, such as noise and air pollution, as well as internal factors; it causes stress for many car drivers and limits active mobility. According to Vogt (2006), the topic is not on the agenda on health conferences. It can be agreed that a tipping point in the discussion is still missing, yet it can be claimed

that the discussion is starting around minimising car usage at the moment. For example, at the last conference of Armut und Gesundheit (in engl. poverty and health), there had been two sessions on active mobility and health (Kongress Armut und Gesundheit, 2019a, 2019b). Further, health insurance companies are propagating sitting being the new smoking - "Sitzen ist das neue Rauchen" - which is arguably also true when driving a car (TK, 2016).

As with every political action, the health sector is also shaped by political interests. Economy for health is particular then true when the usefulness is hard to be expressed in money such as campaigns for the reduction of environmental burdens. The short planning horizons are a further issue. Expectations to be able to buy goods and services for one's health (fitness studio, cooking books) make it partially obsolete for the politicians to intervene (Rosenbrock & Gerlinger, 2006). However, it can also be argued and implied that the health sector in Germany does not have the intention to reduce health problems. It is an economic sector with a gross value added (GVA) of around 261 billion Euro which is 10.9% of the GVA in 2012 and has further potential to grow (Robert Koch-Institut, 2015). Public health, on the other hand, has the aim to promote physical and mental health through considering an equal allocation and an efficient use of available resources (DGPH, 2019). To achieve this aim, public health comprises of the entirety of all social, political and organisational efforts. A big focus is the management and evaluation of collective health problems and care confirmation with the objective to develop and operate a health system which offers a good and adequate medical care by applying cultural, medical, efficient, ethical and economic justifiable resources (Franzkowiak, 2015).

2.1.3. Health Status in Germany and Berlin-Pankow

The life expectancy in Germany is 83 years for women and 78 years for men. Around 20% of all deaths are due to cardiac defects. Other common diseases concern the brain (around 6%), lung, breast, intestinal or prostate cancer (around 7%) as well as chronic illness of the lower airways (around 3.5%) and diabetes (around 2.5%) (Robert Koch-Institut, 2015). According to the Global Burden of Diseases, Injuries, and Risk Factors Study 2010, alimentation, high blood pressure, overweight and smoking are the most important risk factors for premature mortality in Germany (GDP, 2010).

Since this master thesis concerns active mobility, the following table shows the physical activity of males and females in different ages.

Table 1: Physical activity

Age	Physical activity Less than 2.5 hours per week	
	Women	Men
18-29 years	62.9	42.3
30-44 years	62.3	51.4
45-64 years	61.2	60.9
65 years and older	73.4	66.5
Sum	65	56.4

Source: (Robert Koch-Institut, 2014b)

It can be seen that most of the people are less than 2.5 hours physical active per week. Men are more active than women, particular in younger ages. The value is particular interesting when considering that women are using fewer the car and walk more often

than men on their daily trips (Deffner, 2018; MiD, 2018b). Besides, only two fifth of the adults and a quarter of the underage people fulfil the guidelines of the WHO. Elderly people are less often active, yet the physical activity of elderly has clearly increased since 1998 (Robert Koch-Institut, 2015). This is due to better health status in old age. Despite a less active value among women, women live longer. Women eat more healthy, behave less risky in younger ages, smoke less and have less problems with cardiovascular diseases (Robert Koch-Institut, 2014b). Through increasing the attractiveness of walking and cycling, more people are physical active which clearly supports meeting the WHO guidelines.

As already illustrated, a lower socio-economic status correlates positively with diseases such as coronary, stroke, diabetes and depression (Marmot, 2001; Shaw et al., 2001; Vogt, 2006; von Rueden et al., 2006). The youth of such milieu tend to eat less healthy, are overweight and have behavioural problems (Robert Koch-Institut, 2015). This group does less athletic activities than higher socio-economic groups. Promoting active mobility can help here to fulfil the physical needs of the body. In addition, external factors strengthen the problem. This group of people often live on bigger roads which are louder due to the traffic and poor air quality (Umweltbundesamt, 2013). The noise also effects the sleep negatively and has negative effects on the vascular function since it stimulates adrenalin (Schmidt, Basner, & Kroger, 2013).

In Berlin-Pankow, the life expectancy in 2013/2014 was 78 years for men and 83.2 years for women (SenGPG, 2018) which is above Berlin average and the male value correlates with the German average and the female value is 0.8 years above German average. The last figures subdivided for the different areas in Pankow are from 2002. Here the inhabitants in the downtown area had a lower life expectancy in comparison to the other areas in Pankow (SenGSV, 2002) and back then all of them are lower than the values for the average German. It can be argued that the lower life expectancy in the downtown area correlates with more noise and a lower socio-economic status in that year (2002). Nowadays, this might be different, since the prices for renting in Prenzlauer-Berg are one of the highest of Berlin (immowelt, 2019). Also the education level of the parents of children who had their school enrolment in 2013, was the highest in Prenzlauer-Berg and the lowest in the outer area Buch (Bezirksamt Pankow, 2014). The same findings for Germany in regards to overweight and obesity is true for the school children in Pankow and children from families with a medium and high social status, have a lower weight (Bezirksamt Pankow, 2014).

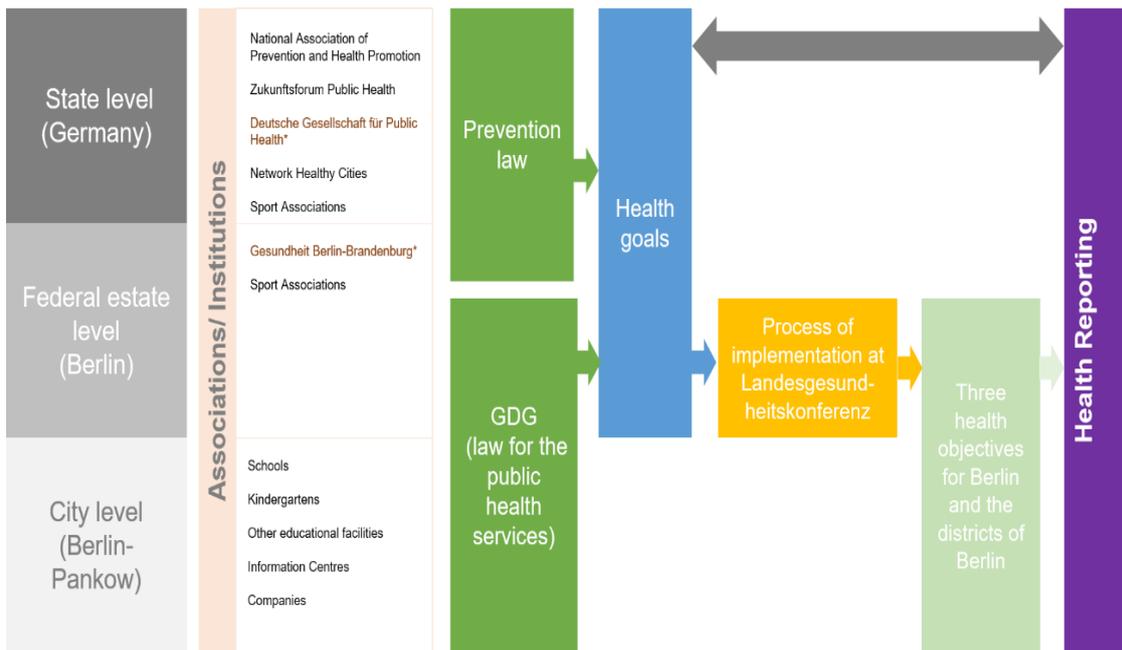
The knowledge about the health status is important for elaborating efficient measures for the district. It is regarded in the master thesis part II.

2.1.4. Health Politics

Governments have the responsibility for the health of their people. Health politics has therefore the normative target to improve the health situation of the population to minimise constraints due to illnesses of the life quality and the premature death (Hartung & Rosenbrock, 2015; Rosenbrock & Gerlinger, 2006). It is the unity of the organisational efforts which lobby on the health of individuals and social groups (Rosenbrock & Gerlinger, 2006).

Figure 1 on page 16 illustrates the relevant health system in Germany with its associations, laws, targets and tools.

Figure 1: Health prevention: political system in Germany



Source: Own figure

References: Blümel (2011), Hurrelmann and Laaser (2006), SenGPG (2019), GDG (2006), Robert Koch-Institut (2015).

Due to the federal state system in Germany, there are different institutions and associations for promoting health and prevention on three levels: state, federal state, city. Medical associations are seen on state and federal level. Non-governmental associations are on all three levels. On the national level there are, among others, the National Association of Prevention and Health Promotion, “Zukunftsforum Public Health” (Future Forum Public Health), “Deutsche Gesellschaft für Public Health” (DGPH, German Association for Public Health), Sport Associations, Network Healthy Cities and Health Promoting Companies. On the federal level, associations for health and promotion of health and sport associations exist. Those are, among others, “Gesundheit Berlin-Brandenburg” (Health Berlin-Brandenburg) who lobby for promoting health and coordinate and connect activities. Institutions on city level are important for health promotion and prevention. Those are schools, kindergartens, other educational institutions, information centres and companies. Interlinks exist between all those institutions and with health conferences and regional committees for promoting health (Blümel, 2011; DGPH, 2019; Gesundheit Berlin-Brandenburg, 2019; Hurrelmann & Laaser, 2006; Zukunftsforum Public Health, 2019). Those associations are important. It was seen the most successful changes came from social movements in the past (Rosenbrock & Gerlinger, 2006).

Pankow is part of the Network of Healthy Cities. In addition, the department of health develops strategies, concepts and projects to promote health, is initiating participation processes and measures with other departments, sport clubs, insurance companies and research facilities (Bezirksamt Pankow, 2019b).

According to the external communication of the associations illustrated in figure 1, the promotion of active mobility takes only place at the DGPH and Gesundheit Berlin-Brandenburg. The DGPH is the interdisciplinary and multi-professional consolidation of

people, institutions, organisations and expert association for public health in Germany. It was seen that it has put the topics of healthy environments and physical activity on their agenda of the first European Public Health Week in May 2019. Gesundheit Berlin-Brandenburg lobbies for promoting health, coordinates and connects activities. A working group with the name physical activity exists there. However, it was not possible to find out if it also targets physical activity in the mobility and transport context (DGPH, 2019; Gesundheit Berlin-Brandenburg, 2019)

When elaborating measures to promote physical health through mobility, the different associations with their political power and expertise need to be kept in mind. The associations are experts in their field, thus it is valuable to integrate them in the research process.

Since 2015, a prevention law is in place which has set health goals. Those include to minimise type 2 diabetes, breast cancer, reduce tobacco consumption, to grow up healthy (living competence, physical activity, alimentation), improve health competences of the patients, reduce depressive diseases, be healthy in advanced age and reduce alcohol consumption (BMG, 2015). Next to the law, health targets are also done on federal and city level. This is due to the increasing interest of the different stakeholders to agree on mutual goals, to pool resources and involve stakeholders outside of the health sector which have influence on the health of the population. This is called health in all policies. In Berlin, health targets have been elaborated and made mandatory in laws (GDG, 2006; Robert Koch-Institut, 2015). To achieve these targets, the Landesgesundheitskonferenz (LGK, in engl. state health conference) was established in 2004. Here, three health objectives were elaborated: extend strategies and measures to promote health on local level and social participation, extend measures to promote physical activity and to motivate elderly to be physical active more often, to promote the social participation of physical ill and elderly people and their relatives and to develop adequate care structures (SenGPG, 2019).

An important tool to evaluate the progress of the achieving of objectives is health reporting (in German: Gesundheitsberichterstattung). It creates transparency through information and evaluation in the health sector. The decision makers receive competences in the orientation and problem awareness (Rosenbrock & Gerlinger, 2006). The health reporting is done on national, regional and city level (i.e. for Germany, for Berlin, for the districts in Berlin). However, in Berlin-Pankow, health reporting has been paused for some time. Yet, just recently in November 2019 a new person has taken up the position. In addition, health targets are phrased. Many institutions and associations want to align their actions on those targets (Schmacke, 1999). Those targets are seen as a guiding element between health politics and health reporting (Wildner & Weitknuat, 1998). In Berlin-Pankow, a working group called "Präventionsketten", in engl. prevention chains, is in place and targets the topic of promotion of physical activity in urban areas since a year (Bezirksamt Pankow, 2018).

After knowing the health of the population, having formulated the goals, the targets are implemented by the relevant stakeholders or model projects are initiated. At last the goals are evaluated. Those four steps is called the action cycle of the health targets (Kooperationsverbund gesundheitsziele.de, 2008).

It can be summarised that the public health and its politics are a complex field with a lot of independences into other sectors, such as the transport and mobility sector. Lobby

groups, such as tobacco, prevent a fully health promotion, the same is arguably true for car usage. The trends of overweight and obesity with a health risks and the example on the reduction of car usage and its positive outcomes for health underpin the importance of this paper and display a perfect link to the next chapter. The outcomes of this chapter with its dimensions and classifications will be used in chapter 2.3.1 to show the relations between active mobility and health which in return gives the basis for the further field research and answers the first objective.

2.2. Introduction to Mobility and Transport

Transport is defined being “the temporal characteristic of the realised change of location. This process is a result of the temporal parameters of the change of location of persons, goods and data.” (Schwedes, Daubitz, Rammert, Sternkopf, & Hoor, 2018, p. 10) Mobility, on the other hand, integrates the human factor and is about the subjective dimension. It is about the individual opportunity area which is “[...] a result of spatial, physical, economic and societal parameters and the subjective perception” (Schwedes et al., 2018, p. 10).

Sustainable Mobility does not only integrate ecologic determinants, but also economic and social aspects. It aims to improve the efficiency and quality, but not the quantity of transport as well as the objective and subjective safety. The essence of mobility is the role of the human – it is central and is understand as subject and not as an object (Grandjot, 2002).

According to Grandjot (2002) and Deffner (2018), mobility is a basic need. You need to be mobile, or need options to complete your education, go to work, go shopping, do leisure time activities and travel (Aberle, 2009). If people are not able to follow their basic needs which arguably includes mobility, they are victims of injustice and cannot be pursue a good life (Nussbaum, 2016). Yet, to meet the objectives of sustainable mobility, it is important to generate an adequate and sufficient mobility with few traffic (Becker, 2018).

2.2.1. Mobility: Active, Passive, Mixed

According to the WHO French Healthy Cities Network (2014, p. 9) active mobility includes “modes of travel such as walking or cycling, as an alternative to motorised traffic”. Active mobility is also described as slow transport (Götschi et al., 2015). Further, active mobility types with automotive-similar vehicles such as inline-skates, skateboards or rollers count to active mobility transport modes. In Germany, those vehicles are “special transport modes” and have the same rights as pedestrians (“§ 24 StVO,“) and need to be driven at walking speed on pavements. However, a change in law is possibly going to happen soon. The Bundesrat (2019) which is the Federal Assembly in Germany has decided on a legal decree which allows e-scooters with a speed until 20 km/h to use the cycling infrastructure or the roads if no cycling infrastructure exists. Arguably, this counts to slow transport as defined from Götschi et al. (2015), but is passive mobility since no physical activity is needed due to the electric motor. For completeness, it needs to be mentioned that there are two different motivations for walking: walking for recreation and walking for transportation (Zuniga-Teran et al., 2017). Since the thesis

focuses on mobility in the field of transport, walking for recreation is not considered here.

Non-active mobility is passive mobility and thus represents motorised traffic. This can happen on individual level - by driving a car or being the co-driver or publicly – in public transport. Active mobility, on the other hand, is mainly individual.

2.2.2. Determining Factors and Trends

Why people are choosing one transport mode over another and in which situation depends on several factors.

Socio-demographic factors are related, among others, to the available income, education level and preferences. Therefore, the level of the available income, opens up options for private car ownership and car usage, options for availability and usage of other transport modes. In addition, with a higher equality between women and men, a higher amount of car trips are done (Holz-Rau & Scheiner, 2019). Furthermore, it was seen that people are willing to commute over longer distances if they receive a higher income (Sandow & Westin, 2010). These developments have aroused due to an increase in car ownership and a decrease in unit car costs (Holz-Rau & Scheiner, 2019). How children move around highly depend on their parent's perceptions of neighbourhood traffic risk and stranger danger (Eißel & Chu, 2014; Foster, Villanueva, Wood, Christian, & Giles-Corti, 2014; Pizarro, Ribeiro, Marques, Mota, & Santos, 2013). In Germany, half of the trips of the children are trips in a motorised vehicle (MiD, 2019a) If children move independently, it is active or uses public transport. If and how children are getting moved around further depends on the financial resources of their parents (Daubitz, 2018). According to MiD (2019a) there is a strong decline in activeness of households which have an income well below average. The ability to cycle plays a big role, too. In Germany, children have a cycling test in 3rd or 4th grade, yet a decrease of ability to cycle in Germany has been seen in recent years (Die Zeit, 2018). But not only children need to learn cycling, the refugee crisis in 2015 has shown that there was a big need for cycling courses among men and women (Deffner, 2018). Not to forget are people with physical disabilities which have less abilities to walk and often also to cycle. Last, personal preferences have a significant impact on the choice of active modes (Deffner, 2009).

Distances are important for travel choices (Veitch et al., 2017). Walking is generally only done in the neighbourhood and cycling in cities. There is no defined distance until it is said that cycling is acceptable for most people. It arguably also depends on the size of the city and the design. According to MiD (2019a), the average German cyclists has a trip of 4 km. Cycling trips are shorter in small and medium size towns than in big cities and metropolis and in the city centre. But even on short distances there is car usage. In Germany 28% of all trips between 0.5 and 1 km are done by car, 41% between 1 and 2 km and 54% between 2 and 5 km (MiD, 2018b). Often quoted reasons for those short trips are the transport of goods and persons, the weather and the need for a car in a subsequent trip. If the next trip is further away, the car is already used for the first trip due to time constraints (Mackett, 2003; Walton & Sunseri, 2010).

It is seen that the urban environment plays a huge role for transport choices – if it makes cycling or walking available or not. According to Holz-Rau and Scheiner (2019, p. 134), neighbourhoods need to assure “accessibility without the use of cars through integrated

land-use and transport planning with barrier-free transport provision, with local opportunities for activity, and with options for location choices on the local level that avoid structural car dependency.” However, what does such a design look like? There are two main neighbourhood design which encourage walking. Those are either traditional developments with an extensive grid street network or cluster housing. The first provides short and direct routes and has commercial destinations close to home. The second design provides an increasing perception of density and improves the experience of walking (Lee, He, & Sohn, 2017; Zuniga-Teran et al., 2017). Suburban areas do often not add to the scale of active mobility, yet high mean values for mental health and wellbeing were measured. Nonetheless, these built environments have led to traffic jams, social segregation and car-orientated societies (Zuniga-Teran et al., 2017). They have a big effect on the people living in the city centre which suffer from the traffic from the car-orientated suburban areas (Lee et al., 2017). Yet, not only the built environment have effects on walking, it also has high effects on cycling. For attracting cycling, infrastructure needs to exist and it needs to be safe (Gehl, 2015; Lee et al., 2017). Furthermore, it was seen that cycling along big roads, due to noise and air quality, is less attractive (Gehl, 2015; Ghekiere et al., 2014). To promote the usage of public transport, this option needs to be accessible. The term which is reflecting this, is Transit Orientated Development (TOD). By generating accessible neighbourhoods, car usage, particular for trips in the free-time and personal business activities can be reduced (Lee et al., 2017). An inter-sectoral cooperation has the power to analyse the urban environment under these aspects and to change them into walkable and cycle-friendly areas.

There is a debate if green environment invites to use active modes or prevents its use. On the one hand, green routes do invite to walk, but on the other hand, green areas can also cause longer routes and increases car-ownership and needs for parking (Hartig, Mitchell, de Vries, & Frumkin, 2014). Therefore, green areas need to be accessible by walking, cycling and public transport and less car parking needs to be offered to optimise the experience in green areas.

Due to planning car-friendly city in the 50s and 60s, many limitations for pedestrians and cyclists exist. This is not only represented in spaces for the flowing car traffic, but also in terms of parking. It takes huge amount of space, yet the car driver receives the space for a limited amount of money or for free (Gertz, Flämig, Gaffron, & Polzin, 2018; Knoflacher, 2007). Also, big highways are the result of barriers in between neighbourhoods which promotes long routes (Knoflacher, 2007) – by using the car, the population is around 10 times faster than before, yet a lot of places cannot be reached by foot. In addition, it can be seen that transport planning is based on the time constant (Knoflacher, 2007) of around 70 minutes – i.e. 70 minutes a person is in traffic per day (Annema, 2013). This has not changed, yet the distance has increased tremendously (DIW & DLR, 2017). The main group who has planned transport for the MIT were men. In that time, those were also the group of people (and often still are) who have a higher employment rate in comparison to women and thus, different mobility needs. Their need was go to work and go from work to home. However, the group (mainly women), who do shopping, take up other services and take their children around have different mobility needs. Their routes are shorter and they do more routes per day, subsequently have more possibilities in using active modes. However, this group does not actively take part in planning the city or the transport system. This inequality resulted into more investments, also in research, for the motorised transport. Until today, a big gap in

knowledge exist for an integrated transport system which incorporates the needs for every transport user. This is particular seen in the research methods used in transport planning. There is a dominance on quantitative methods, yet those are unsuitable, most of the time, for planning pedestrian and cycling traffic (Deffner, 2018). This highlights that next to the importance of inter-sectoral cooperation, also different sexes need to be included in the planning process.

Additionally, other sectors promote the individual passive mode either directly or indirectly, for example navigation systems make it easier to drive through a city and radio news is highly concentrated on the car traffic situation, traffic jams and radar traps (Knoflacher, 2007). Arguably, this adds up to the comfortableness of driving a car and also puts the car into the centre of attention of the population – if it is talked about every day, it must be important. In addition, the public sector has focused on improving the infrastructure for cars for many years and neglected the infrastructure for other modes, among others, public transport. It has received less and less subsidies and marketing so that it has become less attractive, particular in contrast to the car, over the years (Grandjot, 2002). In Berlin, however, the numbers of users have increased in the last years (BVG, 2019) and it is difficult to debate that the public transport organisation of Berlin, the BVG, is not investing a lot of money into marketing and is not doing extensive marketing in form of social media and campaigns (BVG, 2017; Köhler, 2018).

Finally it needs to be added, that the built environment and the increase of car usage also depends on the development of suburban areas, the placement of employees, particular manufacturing industries as well as supermarkets on the edge of the city centres. Due to having more available free-time and lifetime, more traffic arises (Knoflacher, 2007). As other sectors than the urban development and transport sector are also responsible for this phenomenon, it is necessary to include the usage of active modes in those strategies which makes cooperation inevitable.

For the future, several trends are seen. Positive trends, i.e. trends which promote active modes, are the decreasing ownership of a driving license among young people in and usage of the car, particular in big cities. The smartphone and sharing system lead to a higher degree of mobility and less car ownership and usage (Deffner, Hefter, & Götz, 2014; Holz-Rau & Scheiner, 2019; MiD, 2018a). This group is more multi mobile than their older generation. A high degree of MIT is still seen due to habituate behaviour, decreasing flexibility and less motivation for realignment (Ahrens, Aurich, Böhmer, Klotzsch, & Pitrone, 2010; MiD, 2018a). Furthermore, trip chaining has been growing due to limited time budgets and high value of travel time savings (Hensher & Reyes, 2000). It can be argued that this is particularly interesting since trip chaining often involves carrying around different things for the different destinations (sport, doing shopping, food for a party) and thus limits the usage of the standard bicycle due to less transport opportunities. According to the last survey results of the new survey *Mobilität in Deutschland*, in engl. *Mobility in Germany (MID)*, the number of trips per day are declining among children and the youth (MiD, 2018a). The climate change which demands for less car travel is a chance to promote active mobility in the future. Yet it can be argued that with few investments, a contribution to the climate can be done and without the active mobility, climate change cannot be fought (Deffner, 2018).

2.2.3. Transport Effects

Transportation causes negative effects such as air emissions, noise, climate change, accidents and destruction of nature. These effects not only have a personal impact, but also an impact on society, as society is the entity who pays for these negative effects. That is why they are called external effects or externalities. Externalities in this context are a product of traffic. This means, that many outcomes of traffic are not paid by the perpetrator, but by the society or part of the society (Becker, 2016). According to Essen et al. (2011), the negative external effects from road transport amount to 984€/inhabitant which is about 80bn.€. With that Germany has, after Luxembourg and Austria the highest external costs per inhabitant in Europe.

The external effects of road transport are a high costs to Germany. Next to these costs, a high inequality exists because of these effects; the transport sector is the highest perpetrator of social inequality in Germany. Particular on main roads, high noise and air pollutants affect many people, particular those that are less well-off (Becker, 2016; DUH, 2009; Umweltbundesamt, 2004). Furthermore, it can be said that road transport does not support social factors since it brings barriers to the people. In contrast, active mobility such as walking and cycling, is more social due to closer points of contact (Bucksch & Schneider, 2014). However, it needs to be kept in mind that cyclists and pedestrians are exposed to more air emissions and noise compared to car passengers. However, it is argued that if there is a bicycle friendly environment, more people would cycle which may reduce air pollution (Garrard et al., 2012). In addition, 30% of urban areas are used for traffic (Becker, 2016), thus for people, who do not own a car or do not participate in the road traffic, an injustice exists. It can also be claimed that if cities reduce the MIT, more space would be made available for parks and green areas which could be used by the broader population, and also has positive effects in terms of physical movement, stress reduction and climate protection.

For completeness it needs to be mentioned that air traffic also has high emissions and the noise affects people living close to an airport directly (Becker, 2016), but since this paper focusses on traffic caused within the city, this mean of transportation is not examined here.

This is to show that active mobility is not only good for health – this is explained in detail in chapter 2.3– but can also limit many external factors shown above.

2.2.4. Transport and Mobility Behaviour in Germany and Berlin-Pankow

The aim of the thesis is to elaborate measures on cooperation between the health and transport planning. Therefore, it is important to get to know what the status of transport and mobility is in Germany and particular in Berlin-Pankow to be able to evaluate what potential the promotion of active mobility has.

According to the newest transport survey data MID, more passenger kilometres were done by bicycle than before, yet this is also true for car drivers. The passenger kilometres for passenger drivers have declined which means that less and less people share car rides. In addition, the car fleet increased so that statistically every household owns more than one car. Outside of the city, 90% of the households have at least one car. Germans are on average 80 minutes in traffic every day and therefore are longer in traffic than the average of the world (Annema, 2013). Particular in metropolis in Germany, the traffic is

increasing and the trips per day are increasing too, which is different to other areas in Germany where trips per day are declining (MiD, 2019a).

Most of the trips, see table 2, are done for leisure activities, followed by going to work. Trips for leisure activities and for shopping have decreased, but trips in regards to work (going and official business) as well as educational related have increased (MiD, 2019a).

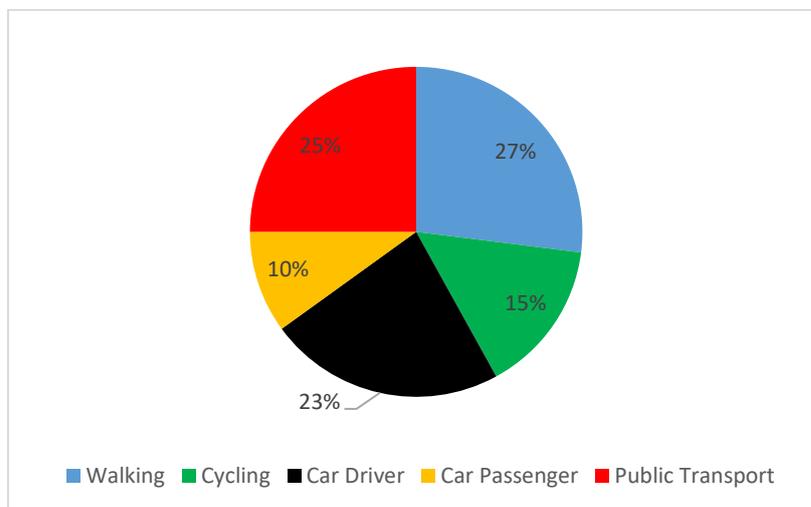
Table 2: Trips in million per day 2002-2017

	2002	2008	2017
To work	40	37	43
Official business	21	19	28
Education	17	17	18
Shopping	53	57	41
Transactions	32	33	37
Leisure	84	89	72
Accompaniment	23	23	21

Source: (MiD, 2019a)

The modal split of Berlin is illustrated in figure 2. Most of the trips are done by foot (27%), followed by MIT and public transport. 15% is done by bicycle and 10% of all trips are car passenger trips (MiD, 2018a).

Figure 2: Modal Split in Berlin (2018)

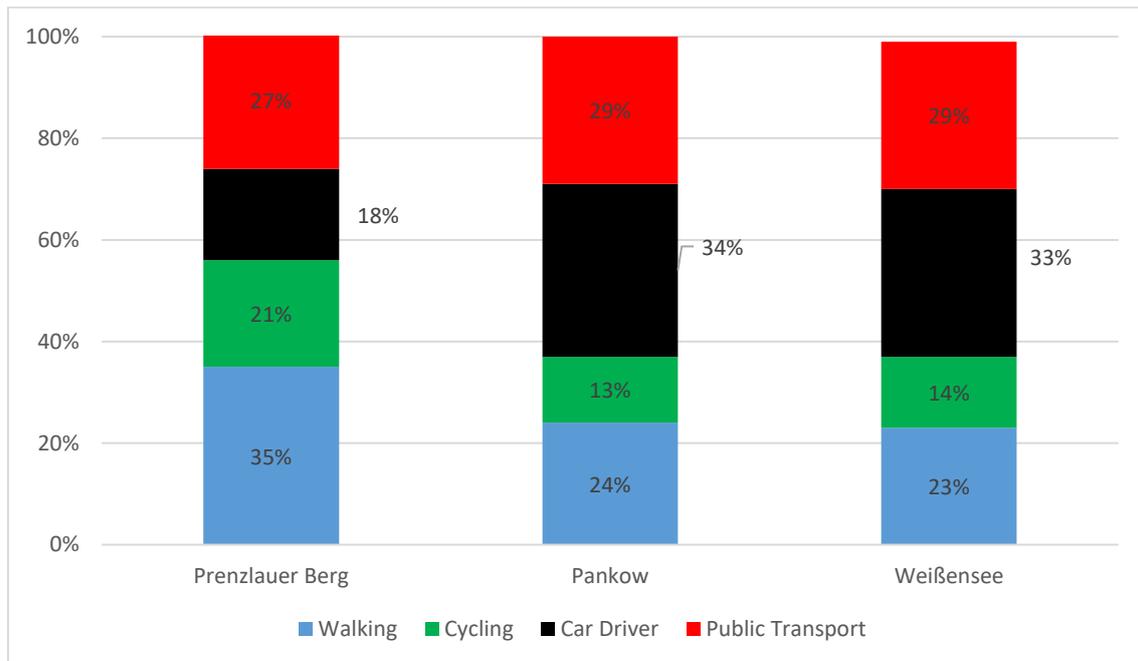


Source: MiD (2019a).

For Berlin-Pankow, the newest data is from 2008 and illustrated in figure 3. The figure shows data for the old districts which are now integrated in Pankow as a whole (Pankow, Prenzlauer Berg and Weißensee). Prenzlauer Berg is the area closest to the city centre and densely populated. Here, it can be seen that already in the year 2008, 21% of the trips were done by bicycle, 35% by foot and only 18% by car. The data from the other districts do not deviate that much from the data of the most recent data from MID. By comparing the data from MID 2008 to data from entire Berlin, it can be seen that there has been an increase in cycling (by 4.2%) and an increase in walking (by 9.5%), a decrease in MIT (by 7%) and an increase in public transportation (by 4.4%) (MiD, 2010).

In addition, the car ownership in Berlin is a lot less than in other cities. 44% of all households do not have access to a car (SenUVK, 2015). Arguably, these numbers are positive in terms of sustainable and active mobility, yet it needs to be kept in mind that Berlin has been growing by around six per cent in the last ten years (SenSU; Zawatka-Gerlach, 2018) and thus, also motorised traffic has increased in absolute terms. In addition, it was seen that the lower number of car-ownership are not compensated by bicycle-ownership which is due to a higher usage of public transport (MiD, 2019a).

Figure 3: Modal Split in Pankow (2008)



Source: SenUVK (2008).

In comparison to other districts in Berlin and Germany as a whole, the citizens already use more active modes. This is arguably a good basis to increase the positive trend. Copenhagen and the Netherlands illustrate that the cycling shift can still be increased further. In Copenhagen, 62% of the citizens in the city ride a bike daily to work or to the educational facility (Copenhagenize, 2015) and the average Dutch person uses for 25% of its trips the bicycle and for 37% between 2 and 5 km ((MiD, 2019b). In addition, Berlin aims for a cycling share of 30% until 2030 (SenUVK, 2018).

2.2.5. Transport Politics

Due to external factors and national and European climate policies, space problems and negative air quality in cities, the transport political system needs to follow-up on the three principals of a sustainable transport system, the three “V’s” – Vermeidung, Verlagerung und Verbesserung, in English: prevention, shift and improvement (Aberle, 2009; Schwedes, 2018). To achieve those principals, an integrated transport system which is based on ecological, economic and social, i.e. sustainable, key objectives is to be promoted by the policy makers (Schwedes, 2014). However, the developments of the last years are of contrary nature. The ministry of transport in Germany invests, among others, in transregional infrastructure such as Autobahnen, highways for motorised traffic, railways and routes for cycling ways next to the highways. In 2016, the expenses

were around 24 billion euro. Over 32% was relatable directly to motorways and Autobahnen whereas the construction of new cycling routes take up less than one per cent of the whole budget (BMVI, 2019a). Thus, an inadequacy exist. Certainly, it can be argued that cycling is only possible on short distances and not for long routes. However, on the one hand, there are still many motorways without cycling infrastructure which connect different villages or a village and a city. On the other hand, the budget for motorways and Autobahn have been increasing by 2 bn. € in the recent years. Further, the expenses for the railway system was increased by 20% in 2016 and the budget only increased by one billion euro. It can be stated that railway systems, due to the possibility of a full electrification and its efficiency in regards to space, should receive more funding. The recent affairs concerning excessive fine dust and nitrogen dioxide values of diesel cars and the absence of measures or even sanctions by the government show clearly how deeply enmeshed the political system is with the car industry in Germany (CAM, 2018; Gnirke, 2018). In addition, purchasing of cars are funded by the state in form of commuting allowances and company cars since many years ("§9 EStG," 2019; juraforum, 2019). Even though, the commuting allowance can also be used by cyclists and company bicycle schemes exist since a couple years (Deutscher Bundestag, 2018), too, it can be claimed that the personal financial benefit and the expenses of the federal estate are a lot less due to lower costs of bicycles and less distance travelled. Those schemes are a further outcome of the car orientation in Germany. It can be argued that if more financial schemes exist which promote active mobility, the orientation might change, too.

Besides, financing non-intensive measures for cycling in the funding guidance NRVP (Nationaler Radverkehrsplan) or helm campaigns (which show young models dressed only in underwear with helmets), the current ministry is not promoting cycling infrastructure (BMVI, 2019c; BMVI & DVR, 2019) and even less walking. The national walking congress in 2018 in Berlin was not organised by the ministry of transport. It was organised, among others, by the ministry of environment (FUKO2018, 2018). The ministry of environment further funds cycling infrastructure measures in cities by the funding guidance Klimaschutz durch Radverkehr (climate protection by cycling) (BMU, 2019a). This shows clearly that a state ministry is able to support active mobility if they want to.

Due to the current relevance of reducing CO₂, the transport sector needs to reduce its emissions by 40% until 2030, every political resort need to elaborate a plan until the end of 2019 how to solve the issue. Measures from transport experts were elaborated which are to give guidelines to the ministry (NPM, 2019). In the end of 2019, a national climate law became effective. It aims to decrease the greenhouse gas emissions by 55 per cent (reference year 1990) until 2030. A price on CO₂ of 25€ per ton is introduced from 2021 (Bundesregierung, 2019). Thus, travelling with fossil vehicles will become more expensive.

For promoting active mobility in cities, the main scope for design and actions have the governments in the cities. According to the Sommer, Saighani, and Leonhäuser (2018), the car traffic costs cities in Germany around three times as much as the public transport system and yet the cycling infrastructure receives the smallest grants. In Berlin, a mobility law exists since June 2018 which targets promoting walking, cycling and public transport and reducing the MIT. It is Germany's first mobility law (SenUVK, 2018). The law itself is split into four parts: cycling, walking, public transport and intelligent mobility. Up to now,

the cycling and public transport law exist and the walking law is elaborated currently (SenUVK, 2019b). The guidelines of the law need to be executed on state and district level. In addition, the traffic regulation were amended (BMVI, 2019d). The new ones which will be in place shortly are going to be more cycling-friendly since parking on cycling infrastructure, a continuous harm for cyclists, is restricted and fines will increase.

In Berlin, the Senat, the governmental unit of the federal estate of Berlin, is responsible for all the main routes, those which interlink other districts, main highways and the Autobahn, and the district is responsible for the other streets. However, if a main route is transformed in a more cycle-friendly way, can highly depend on the district. They are able to propose ideas, yet do not have the last word in the decision. It was seen in the past that this structure does not promote cooperation. An additional challenge is traffic planning in Berlin. This is the task of the Senat, yet, arguably also measures in routes which do not belong to the main routes, have an effect on traffic planning. In Berlin-Pankow, a traffic planner, is working in the urban development office since last year. This is to be seen very progressive and positive. Having competences in that field and not being dependent on the Senat or other planning offices is needed for planning a sustainable, integrated transport system which is interlinked with urban planning measures and involves the needs of the citizens. Currently, a transport planning instrument, Mobilitätsberichterstattung (mobility reporting) is elaborated with and for the district. It has the aim to use the cooperation opportunities with the health, social, urban planning and environment departments in the district and to evaluate the needs of the citizens and the status quo of transport so that social-fair and sustainable measures can be developed. This instrument is the dependence to health reporting and is to be updated regularly (Bezirksamt Pankow, 2019c).

The imbalance in funding is also represented in the member numbers of the different lobby association in Germany. For example the organisations who promote active mobility only have around 230,000 members together (Fuss e.V. (in Engl. Foot Association): 500, Allgemeiner Deutscher Fahrradclub (ADFC, in engl. German Federal Cycling Association): 175,000, Verkehrsclub Deutschland (VCD, in engl. Transport club): 50,000) the Allgemeiner Deutscher Automobil Club (ADAC, in Engl. German Federal Automobile Association), the lobby association for car drivers, over 20 million members. It is also Europe's biggest car club. Further organisation to mention are ProBahn, an association which represents the needs for the railway customers, with around 500 members and changing cities who enabled the mobility law with around 550 members (changing cities, pers. comm., 17.05.2019, see appendix 1). However, as they only exist since 2017, it can be stated that the numbers are irrelevant for lobbying on national level. Arguably, the low member numbers of the sustainable transport association add to the problem why the car lobby is more present in the political debate. The topic health by the association VCD is only mentioned in regards to air quality. The ADFC is raising the topic in cooperation with the German insurance company Allgemeine Ortskrankenkasse (AOK) and their programme "Cycling to Work" and as health risks for travelling (ADFC, 2019b, 2019c; VCD, 2019b).

It can be summarised that small positive steps towards a sustainable transport system which promotes active mobility and focusses on the human, listens to the human and not on the vehicle, can be seen. The debate on CO2 emissions, measures which reduce the climate change is going to shape the political system in the near future and can bring positive ecological changes. The effects on social factors cannot be evaluated so far.

This dimension needs to be included in establishing inter-sectoral cooperation which means that the social department needs to play an active role. The outcomes of this chapter are taken up again in the next chapter which brings health, mobility and transport together.

2.3. Active Mobility and Health

Whereas the last chapters concerned the terms health and mobility with its factors, trends, barriers and politics, this chapter brings those two sectors together and shows their relationship and importance. Next to it, the need for inter-sectoral is illustrated and existing health-enhancing measures and inter-sectoral collaborations are identified. This is to answer the first three objectives. It finishes off with an analysis of inter-sectoral cooperation in Berlin-Pankow which is the fourth objective.

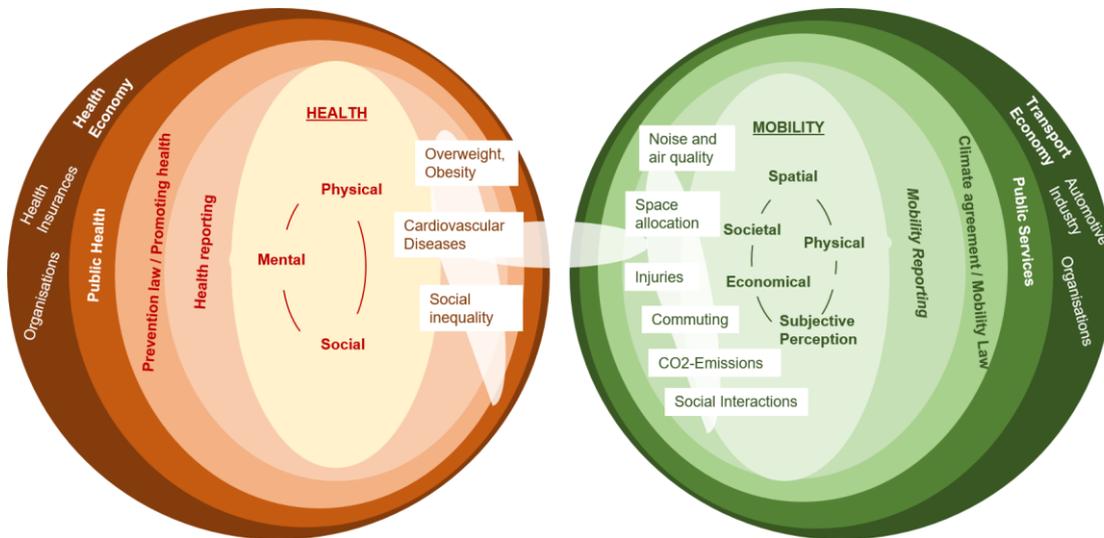
2.3.1. Interrelations between promoting active mobility and health promotion

Figure 4 (page 28) shows the parameters, factors, political and economy influences on health and transport. Both of the sectors are compared and interrelated. In the white boxes in the middle are the challenges with which the fields of health and mobility have to cope with. The faint white stripes are illustrating the connections between those challenges. Next to those (left for health and right for mobility) are the parameters which define both of the terms. On the outside, important tools (reporting), laws, the system and the economy are cited which are relevant for the sector and have an impact for promoting health and active mobility.

Health has three parameters, physical, mental and social health (WHO, 1946). Mobility has five dimensions – spatial, physical, economic and social parameters and subjective perceptions (Schwedde et al., 2018). Overweight and obesity are increasing in Germany (Robert Koch-Institut, 2013) which has an effect on the physical health, in the first place. Through practicing active mobility, this problem can be limited. Particular cycling helps to reduce the BMI, but also walking shows some effects (Avila-Palencia et al., 2018; Dons et al., 2018; Smart, 2018). It was seen that giving up one's car shows the highest reduction in BMI. Particular important for a change in mobility is the living area and if it is walkable and cycle-friendly (Smart, 2018). In addition, premature deaths can be avoided via positive effects of cardiovascular and cumulative protective effects by strengthening the heart muscle and reducing blood pressure, subsequent effects of a low BMI (McCarthy, 2001; Mueller et al., 2018). In addition, it was seen that active mobility encourages a healthy lifestyle (Zuniga-Teran et al., 2017). Nonetheless, there is a risk of physical activity in regards to accidents. Through physical activity, the musculoskeletal health risks are increased which negate some of the added health benefits. However, the additional health effects through active mobility outweighed detrimental effects of traffic incidents as well as air pollution exposure on health (Mueller et al., 2015; Nelson et al., 2007). If musculoskeletal health risks can be reduced by preventing accidents is depending on the infrastructure. Netherlands with a wide network of cycling infrastructure and a modal share in cycling of 39% on trips below 5 km (EU, 2019b) has the lowest accident rate per cycling trip in Europe (McCarthy, 2001). Thus,

safe cycling infrastructure and a higher modal share can reduce injuries, one of the negative effects of transport and mobility.

Figure 4: Mobility and Transport: Parameters, Factors, Political instruments and Economy



Source: Own illustration.

Next to the positive physical outcomes, mental and social effects exist, too. It was seen that mobility impairments in older ages are lower if a person has been physical active before (Doblhammer et al., 2015). Similar is true for children, walking and cycling lead to more autonomy and an increasing spatial action scope. Active mobility improves further psychomotor abilities and is positive for the visual thinking (Deffner, 2018). An increased active scope, is positive for social health which arguably interrelates with mental health. People who live on light-traffic streets have better social contacts and networks in comparison to high-traffic streets. It is important as social contacts are needed for mental health (McCarthy, 2001). Promoting active mobility can help to increase light-traffic streets. Shaping safe, engaging and light-traffic neighbourhoods are seen by the WHO (2016) as “one of the most powerful ways to reach people and to change social norms and behaviour in the long-term”. Therefore, long-term effects which lead to less usage of MIT can occur. On the other side, it needs to be mentioned that motorised journeys, particular for people living in rural areas, can help to link people and help social interactions. In turn, those journeys effect negatively people who live close to traffic routes and damage health through air quality and health (McCarthy, 2001). In Berlin, the group who is mostly effected by traffic noise and poor air quality, are people with a lower socio-economic status living on streets with a high volume of traffic (SenSW, 2017). Noise leads to mental illnesses and poor air quality to physical diseases such as respiratory ailments (Becker, 2016). Therefore, commuting over long distances also has a big effect on this group which further increases the social inequality which is already existent in the health sector (DGPH, 2019). It was also seen that people are willing to commute longer distances when they earn more (Sandow & Westin, 2010). Commuting also has negative effects on the commuter itself. Commuting over long distances increases the stress level which is particular true for motorists (Zuniga-Teran et al., 2017). Perceived personal safety also effects the mode choice. A correlation between

walkability and perceived crime exists. Trees, safe infrastructure and lightning are linked to a higher perception of safety (Zuniga-Teran et al., 2017).

Tasks of the state are to offer public services, hence people are able to go from A to B, to minimise health risks and improve safety. Therefore, public services and infrastructure need to be available to generate high mobility with few traffic. It can be claimed that the tools and laws are available. Germany has signed the climate agreement of Paris, Berlin has an energy transition law, energy and climate protection programme and a mobility law (BMU, 2016; SenUVK, 2017, 2018, 2019a). All those tools aim for active mobility and for less MIT, yet the implementation is lacking. The CO₂-emission in transportation have been increasing in Germany in the last years (BMU, 2017). Those laws are opposing with the prevention law and promotion of health. Yet, as shown in chapter 2.1.4, the measures and discussions hardly face a limitation of MIT. Offering public services, in terms of water, energy as well as transport services, is manifested by law in Europe "Art. 14 AEUV (ex-Artikel 16 EGV), ") which is to ensure mobility. Since not everyone has the financial opportunities, capabilities and legal requirements to own or drive a car, infrastructure and services need to be in place to ensure mobility so that everyone has equal chances to participate in the daily life. Public health also has the objective to allocate physical and mental health equally. Therefore, those concepts influence the health and mobility status of the citizens. Health reporting which is to give the health status of the population is contractual in Germany. For the transport sector, such a tool is not available yet. However, one is elaborated with the district of Berlin-Pankow at the moment (Bezirksamt Pankow, 2019c). Both of those tools are important to get to know the status of health, on the one side, and mobility, on the other side, as well as the needs of the population which is the basis for elaborating measures for those fields. Here, also the subjective preferences are analysed, one parameter for mobility (see figure 4). By updating those regularly, an evaluation can be done. The health and transport economy stands above all. It was illustrated that the income of the health sector is increasing. Already now, it is responsible for 10.9% of the GVA in 2012 (Robert Koch-Institut, 2015). By promoting health the GVA of that sector might sink due to fewer diseases. On the other hand, the insurance companies have a business interest in fewer diseases and can be therefore seen as a proponent of active mobility. In contrast, the automotive industry contributed 4.5% to the GVA in 2017 and has the highest part of the GVA of the manufacturing industries. Next to it, around 870,000 people work for that industry (Statistisches Bundesamt, 2017). This is highlighted since the automotive industry has, due to their GVA stake and employment rate, strong political power which arguably stops active mobility. Particular the development of autonomous cars which might lead to increasing traffic and chance of less active mobility of children stand in contrast to promote active mobility.

Other trends in the mobility and transport sector, see 2.2.2 (e.g. decreasing driving license, less trips, more passenger kilometres), have an effect on future development and will be considered in the focus groups and developing of measures.

Arguably, it is needed to bring the stakeholders, who are in favour for public health and active mobility, together to implement active mobility measures which also promote health. It was shown which health parameters are interlinked with mobility parameters. Those interlinks will be particular important to elaborate measures for the district Berlin-Pankow. Cities are having a key role in developing environments which invite to walk and cycle (WHO French Healthy Cities Network, 2014). It is not only more social, more

healthy for the citizens and thus, for the city in general, active modes also need less space than the motorised traffic and the expenses for the infrastructure are fewer than for motorised traffic – private and public (Becker, 2016; Sommer et al., 2018). Thus, every city should have an intrinsic need to promote active mobility. The WHO claims that an active city is a healthy city (Edwards & Tsouros, 2008).

Herewith, the first objective has been discussed which is about showing the importance of active mobility for health and strengthens the aim of the research.

2.3.2. Inter-sectoral cooperation and measures for promoting active mobility in cities

In the previous chapter, the need for inter-sectoral collaborations were shown to promote active mobility in regards to health. In a cooperation, independent organisations work together to increase their competitive advantage (Mecke). Arguably, on local level, it is not about increasing the competitive advantage, but to improve their services and measures to reach a shared interest for the public good more effectively. Different intensities exist in a cooperation. It can be done for exchange of information, experience, agreements, develop joint work or tasks.

As discussed, promoting active mobility for health reasons, is not solely dependent on measures from the health and transport sector, but also from the urban development. The law of spatial planning in Germany says, municipal need to take into healthy living and working conditions ("BauGB Anlage 2 (zu § 13a Abs. 1 Satz 2 Nr. 2) Abs. 1,,"). That a wider cooperation is necessary was also seen by Böhme and Reimann (2018) in their paper to integrated strategies of local health promotion which was elaborated through stakeholder surveys. Here, they have further identified the social office as an important player. Arguably, the environmental office can also be included, fewer due to health reasons, but for using synergies since that office aims for a low-emission transport sector which goes along with active mobility. Herewith, the second objective about the importance of inter-sectoral cooperation is shown, subsequently it is discussed how to achieve it successfully.

Three practical examples, which show collaborations between health and transport and / or urban planning, are illustrated at this stage. The health report of Switzerland of 2015 illustrates that Switzerland already integrates active mobility in most of the transport-planning measures and an exchange between transport and health sector is partly done. However, the evaluation of the promotion of active mobility is difficult due to the few amount of data (Götschi et al., 2015). On EU-level, the project PASTA – Physical Activity Through Sustainable Transport Approaches, aims to connect transport and health by promoting active mobility in cities (PASTA, 2019). On their website, different EU projects are illustrated such as INHERIT, a EU funded Horizon 2020 project which aims, among others, to test inter-sectoral initiatives to achieve the desired change; unfortunately, it is not finished so that results do not exist yet. SWITCH is another project shown on the PASTA website and has partnered with different cities to implement a campaign which aims for a switch from car to foot / bicycle. Some success examples are shown, however none in Germany. On German level, the Afoot project is to be mentioned here. It has elaborated how to connect urban planning and public health strategically to promote active mobility as a form of daily mobility in old age (Bolte, Brüchert, Baumgart, & Quentin, 2018). Next to these practical examples, research has be done around inter-

sectoral collaborations, e.g. from the programme social city and the research institute difu (ARL, 2014; Böhme & Reimann, 2018).

It was seen that the inter-sectoral-cooperation and establishing of a working group (ARL, 2014) on local level should be placed in the health department, however it is important that all the other departments are equally considered by establishing this group and the strategy so that the objective is set together which limits resistances and promotes more motivation for the working group (Böhme & Reimann, 2018; Bolte et al., 2018). Bolte et al. (2018) have formulated five steps for building up cooperative structures within and beyond the administration. Those are.

1. Ensure the backing of local political bodies and top level administration
2. Name someone to be responsible for the topic in your sector
3. Obtain an overview of the relevant actors
4. Develop cooperation structures within the administration
5. Use cooperation structures in the neighbourhood or municipality

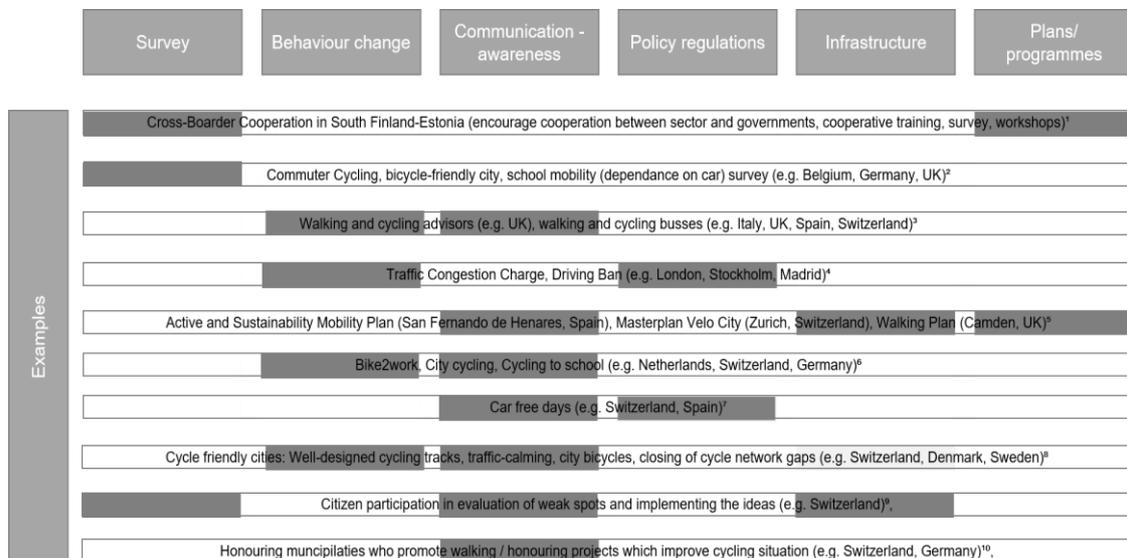
Those steps go fairly in accordance with Böhme and Reimann (2018) who have put forward the group needing to have a coordinator who has the overview of all activities (step 1). This has also efficient reasons. Next, by incorporating other relevant departments from the beginning on, an analysis can be done to see what has already been performed in each of the departments to promote health through active mobility (step 1 and 3). It needs to be regarded that everyone, who is in the working group, sees some relevance to their field of work. A mutual financial budget also strengthens the cooperation for which everyone has mutual responsibility. Next to the experts in the administration, citizens and organisations need to be involved; regularly and in participation processes (step 5). For a successful participation process, the goal of the participation needs to be clear and transparent and also the intensity of contribution so that disappointment can be limited. Nonetheless, it was seen that scepticism in the administration may exist to develop something new. Therefore, and also to be more successful in the implementation, the politicians need to agree on the inter-sectoral cooperation (step 1). Organising health conferences in regards to that topic has the chance to involve the politicians and spark them for promoting active mobility and health (Böhme & Reimann, 2018). Thus, both ways are possible. Either having first the back-up from the political bodies and top level administration or persuade them later in the process. It can be argued that this depends on the command structures, flexibility of work of the administration employees and political agenda. If for example the topic is not high up on the political agenda, it is helpful to first elaborate something before involving politicians and top level administration. Nonetheless, the group need to have the allowance meeting with each other and creating something new, thus flexible work arrangements and not too strict command structures are essential. In the best case a formal political decision exist which give the group the essential scope for their doing. If a group is formed without any back up, the cooperation structure and concept will be cut of before even having the chance to be explained. Besides, a mid- long-term strategy needs to be developed so that not every day, a decision needs to be taken for individual projects (Böhme & Reimann, 2018).

According to an analysis of measures to promote active mobility by WHO Europe (2006), it was seen that most of the measures (52%) are done in cooperation between the health

and transport sector, in 38% of all cases, the health sector, but not the transport sector, was involved and in 10% the transport sector and other sectors but not the health sector.

Having financial resources for implementing measures, which have been elaborated and follow the strategy to promote active mobility due to health reasons, is a key factor. The prevention law, which was passed in 2016, provides 300,000 million euro for promoting health which can be used by the health insurances (BMG, 2015; Böhme & Reimann, 2018). Therefore, to check if a cooperation with those very companies are useful, is recommended. Besides, health data from the population can be obtained if it complies with the data protection law. However, it was seen that the opinions of the health insurances and the municipalities differ which underline the importance of involving representative of health insurances from the beginning on – on the one hand, the cooperation knows which financial resources can be used to fit their ideas and on the other hand, to strengthen the cooperation with the health insurance and bring it to a success. Next, other funding are available, such as project funding around the national climate initiative. They fund neighbourhood project with the aim to reduce CO2 (since active mobility always reduces CO2 in comparison to passive mobility, active mobility projects are possible) as well as building cycling infrastructure (BMU, 2019b). Financial resources are also available on city level. Due to the mobility law which promotes active mobility and has the aim to minimise health damage (SenUVK, 2018), measures which go along with the mobility law can get funded, too. Funding due to climate protection are unfortunately not available as those only target project such as green places, decentral rainwater management (SenUVK, 2017).

Figure 5: Measures for promoting active mobility



Source: Own figure,

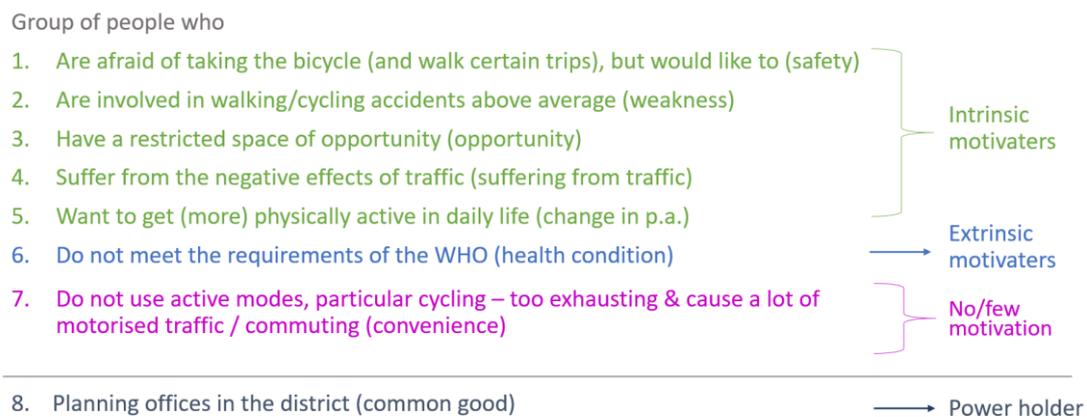
References: ¹Edwards and Tsouros (2008), ²WHO Europe (2006), ADFC (2019a), ³Edwards and Tsouros (2008), WHO Europe (2006)⁴Edwards and Tsouros (2008), Wandler (2019), roadtraffic technology , ⁵Edwards and Tsouros (2008), ⁶WHO Europe (2006), EU (2019a), Klima-Bündnis (2019a), Klima-Bündnis (2019b), ⁷Edwards and Tsouros (2008), WHO Europe (2006), ⁸WHO Europe (2006), ⁹WHO Europe (2006), ¹⁰WHO Europe (2006), BMVI (2019b).

In chapter 2.2.2 determining actors for active mobility were shown. Measures to promote active mobility can be clustered in six categories: survey, behaviour change, communication- awareness, policy regulations, infrastructure, plans/programmes, see

e.g. WHO Europe (2006). This is illustrated in figure 5. If underneath the categories, a field is grey, it means that it belongs to that category, e.g. the first example on cross-border cooperation belongs to survey since surveys are done in that cooperation and a plan is elaborated on how to collaborate and what can be done to promote active mobility.

Figure 5 is not to be seen completed, it rather has the aim to show practical examples and to categorise those examples. Even though, all of those measures intend to lead to a behaviour change, only the measures who are directly aiming towards that change, are arranged to that field. Generally measures in the field of transportation are clustered in push and pull measures (Steg & Vlek, 1997). Push measures are measures which have a direct effect on some transport users. For example, closing a street for cars or a traffic congestion charge have direct effects on those transport users whereas promoting Bike2Work schemes only ask for a change. Thus, policy regulations often are and infrastructure, can be, but not must be, push measures. Push measures are generally less favoured by politicians. The current transport minister of Germany clearly states that he is not a fan of prohibitions and regulations (Pausch, 2019). Nevertheless, the traffic congestion model, a push measure, in Madrid has shown that the NOx values decreased almost by half after introducing the driving ban in the centre of Madrid for everyone, except for citizens who live there and vehicles with exceptional permission (Wandler, 2019). This is arguably positive for the people living in the city centre, yet the social dimension of driving bans and congestion charges need to be considered so that even after those push measures, everyone has similar mobility opportunities. Plans and programmes concern concepts of promoting walking and cycling for a region or city, may include push as well as pull measures.

Figure 6: Target group: Promoting active mobility



Source: e.g. Robert-Koch-Institut (2015), Gehl (2015), Lee et al. (2017), Beikler (2016), SenGPG (2019), Deffner (2018), Daubitz (2018), (Huber, Kirig, Rauch, & Ehret, 2015).

This leads to a further consideration when developing measures. Measures are elaborated for certain target groups. The measures illustrated by WHO Europe (2006) are organised towards target groups of different ages, e.g. children, elderly, employees or kind of group, e.g. visitors, parents, patients, cyclists, inactive individuals. However, it can be argued formulating target groups for promoting active mobility, the target group is more diverse. Not every employee has the same attitude towards cycling or walking, same for inactive individuals. The reasons why someone is inactive are diverse. It can be due to convenience, due to fear or they lack the ability to cycle (e.g. (Deffner, 2018).

Typologies exist why people use active modes or how they consume health. Those typologies (see appendix 2) are helpful for getting to know the types of walking and cycling as well as health and were taken in account in elaborating the following eight target groups. The target groups are formulated in that sense that it targets problem or problem solving. It is illustrated in figure 6. The essence of safety and comfortableness from Deffner (2018) is used as well as the group of health minimalists (Huber et al., 2015) which are only motivated to do something for their health if they really need to (health condition). The other groups arise out of the discussion of challenges for promoting active mobility and health.

Unfortunately, it is not possible for every measure to display which departments and different stakeholders have worked together in performing those, yet it was found out that in regards to the walking and cycling school busses, the city worked together with the schools and non-governmental organisations. For the Bike2Work campaign in Germany “Mit dem Rad zur Arbeit” (in Engl. Cycling to work), Germany’s cycling association ADFC and the health insurance company AOK work together (ADFC, 2019b). This displays an inter-sectoral cooperation between two organisations. In the field analysis of WHO Europe (2006) it was seen, if both the health and transport sector were involved, those measures combined engineering (infrastructure) projects with motivational campaigns. Arguably, a combination should be preferred due to different reasons. First, after implementing an infrastructural measure, not everyone who might benefit from it, might instantly know about it (e.g. if it is on a large street which normally is not used due to high traffic). Second, people might feel a recess in their mobility option, thus those people need to get to informed about the benefit and third, to make the measure successful rapidly, an informational campaign which intends to change behaviour and raise awareness for the topic needs to be done. Above, participation for measures, particular for push and infrastructure measure are effective to receive acceptance up front and further increases social health (Nussbaum, 2016). Particular with push measures and campaigns which might be political controversial, a cooperation is needed. A cooperation has more power and leads to more visibility (Böhme & Reimann, 2018). Besides the sketched measures in figure 5, other measures can help to provide active mobility in cities such as the designing of public housing settlement seen in Milan or Vienna (Edwards & Tsouros, 2008; Stadt Wien, 2019).

It can be summarised that inter-sectoral cooperation are of importance to promote active mobility which answers the second objective of this thesis. Next, some health-enhancing measures and collaborations which are already in place have been discussed. It can be argued that a lot of measures are in place, yet it is not always due to cooperation. Even though, some inter-sectoral cooperation are in place, those kind of collaborations are still in the early stages of development and therefore need to be increased to promote active mobility around cities. Further, it can be claimed that a lot of research exist and ideas, but it is particular important that the mainstream is touched with those (objective 3). It is recommended that cooperation need to be of advantage for employers in their daily working life and measures which are about behaviour change or infrastructure need to be relevant and also of advantage of people in their daily lives.

2.3.3. Promotion of active mobility in Berlin-Pankow

Berlin-Pankow has a population of over 400,000 inhabitants and is the district with the highest population in Berlin. An increase of population of 16% until 2030 is forecasted (Bezirksamt Pankow, 2019d). It contains densely populated areas in the city centre with a population density of 14,682 (Prenzlauer Berg) and 11,121 (Pankow) inhabitants per square metre and more than 220,000 inhabitants (statistik bb, 2016) as well as low-populated area such as Stadtrandsiedlung Malchow (201 inhabitants/sqm) and Blankenfelde (159 inhabitants/sqm).

It can be stated that due to space problems, climate agreements, air quality schemes and the mobility law, active mobility is promoted. A cycling network is elaborated at the moment, however, it is not done for health reasons. The cycling network is elaborated in the office of street- and green-areas with the aid of the urban planning office. Thus, an inter-sectoral cooperation exists here, yet not with the health department. Three relevant inter-sectoral cooperation in form of working groups exist in the district: KIS, RPV, Präventionsketten. To receive further insights about the working groups, personal, telephone and e-mail conversations were done. The contents can be found in appendix 3.

The working group AG Stadtentwicklung, in engl. Urban Development has been formed in June 2016 to coordinate all infrastructure measures with other relevant offices, e.g. urban planning office, environmental office, street- and green areas office as well as school- and sport department, yet the health department is not represented there. It is not integrated since their overall objective is to build educational facilities and to remodel smaller areas. (KIS 2, pers. comm., 23.05.2019). However, the mobility management which is established at the moment aims to integrate health topics in the future. First contacts to the working group of Präventionsketten exist (KIS4, pers. Comm., 24.05.2019). To the working group, the leaders of the departments are invited and other employees depending on the topic of the meeting (KIS4, pers. comm., 06.06.2019). In that working group, also the mobility manager, who coordinates the tool mobility reporting, and the transport planner are situated.

The second working group to mention here is the AG RPV (Ressortübergreifende Planungsvernetzung, in Engl. Inter-sectoral planning network). It has the aim to do planning more efficiently and was founded in 2007 as one of the first inter-sectoral groups in Berlin. Monthly, the planning disciplines of integration, equality, EU-matter meet to plan the public network such as kindergartens, schools, offerings for the elderly (Bezirksamt Pankow, 2019a). The street and urban development department also take place

In 2017 the topic on promotion of health was set in the district of Berlin-Pankow. In the beginning of 2018 there has been a decision from the district to promote it in public spaces through the working group Präventionsketten. The aim is to connect different departments which is also written down in a decision from the district (Bezirksamt Pankow, 2018). Thus, it regards transport measures, e.g. it has organised a cycling tour on Thursday, 23th May 2019 to look at the infrastructure in a certain district in Pankow. This working group is led by the health department. However, the departments such as urban development and street- and green places are hardly showing up to those meetings due to time constraints. This working group is part of health department, but

does not belong to the health office. This is done to be able to work more freely. The health reporting is also part of the health department, yet this personal position has been vacant for several years now, but a staffing process is in place at the moment (QPK3, pers. comm., 23.05.2019). It can be claimed that this working group is already aiming towards the same objective as this study wants to achieve. Due to the limited amount of departments taking part at the meetings, it can be argued that the working group chain of prevention, has not been able to reach its fullest potential. Subsequently, the thesis will look at what can be improved to gain more potential and effectiveness. Through mobility and health reporting, data on the status of the population and the needs can be elaborated. Therefore, necessary surveys for planning effective active mobility measures to promote health are already performed there. Berlin-Pankow is a district of the federal state Berlin and thus often depends on political willingness and the planning agenda of Senat. It was seen that due to the mobility law and funding for climate protection projects, receiving financial resources are possible, however they always need to be applied for. This has the effect of increasing planning horizon and that the federal estate which its own ideas want to be involved. Those cooperation can be arguably quite intense due to different views and fields of work.

2.4. Consequences for the research

Due to the literature research and showing the status quo of inter-sectoral cooperation in those fields and Pankow, following aspects are discussed in interviews and focus group with the different players.

1. Interviews: External health and mobility experts: interviews on performing and possible measures, kind of cooperation, recommendation for the further research.
2. Focus group: Employees in the district: discussion of findings of current cooperation and about what has worked, why it has worked, what needs to be improved to promote active mobility due to health reasons. The learnings of the first focus group will be introduced and discussed.
3. Focus group: Experts and district: The first elaborated measures will be introduced, discussed and rated.

The Senat and politicians are not involved at this stage so that the group can discuss district problems and does not feel limited in their creative thinking which might occur if political bodies are involved in the discussion.

3. Research Methods and Process

Research “may relate to any subject of inquiry with regard to collection of information, interpretation of facts, and revision of existing theories or laws in the light of new facts or evidence” (Adams, Khan, Raeside, & White, 2007, p. 19). There are many different research methods which can be used to answer questions and solve problems. It is important to follow a certain methodology to avoid wrong and worthless results (Adams et al., 2007).

For the purpose of this study, focus groups are performed which is a qualitative method. This chapter provides a justification for the research method applied.

3.1. The Methods: Focus Group and Interviews

Qualitative data is generally of non-numerical nature and makes it possible to construct a new theory. On the other hand, quantitative data is based on collecting numerical data and aims to test a theory (Bryman & Bell, 2007; Robson, 2011).

Qualitative data is generated for this research since it aims to answer the question how inter-sectoral cooperation can be established in the district of Berlin-Pankow. The research is based on inductive thinking which generates new perspectives and according to Cropley (2002) is the base of qualitative research. New perspectives are particularly important for this research as elaborating a new research format is leading for the research aim.

Focus group and interviews are performed to answer the research aim. A focus group is a form of a group interview. It was seen that in group interviews new topics can arise and be discussed which would not have been arisen in a one-to-one interview (Cropley, 2002). Focus group can generate multiple ideas and more importantly, include the exchange and discussion process of the participants among themselves (Henseling, Hahn, & Nolting, 2006; Hoppe, 2003). Arguably, this is particularly needed for this research. In the last years, focus groups are used more and more in the context of environmental and sustainable research to evaluate motives, opinions, needs and desires, to assess concepts and programmes, to check communication and marketing strategies and to develop and check products and services (Henseling et al., 2006). It can be claimed that this research design aims to develop and check the inter-sectoral cooperation in the health and transport sector for Berlin-Pankow which can be seen as a new service in a metaphorical sense. Group discussions are challenging in that sense that the research scientist not only needs to collect data, the person also has to be a good moderator and has to make sure that everyone has an equal amount of speech and that no personal unfair communication arises (mobbing, dominating behaviour) (Fontana & Frey, 1998).

The focus groups are performed according to predefined principles (Merton, Fiske, & Kendall, 1956). Charts, images and possible videos are used to initiate the discussion process, e.g. pictures from a healthy environment (lot of space for active mobility, green environment, absence of smog) and unhealthy environment (few/no space for active mobility, grey environment, lot of traffic, smog).

The target group of the focus groups derive directly from the research aim – who is addressed with that aim and who can achieve that aim (Henseling et al., 2006). Here, the participants in the first focus group are relevant employees from the district. In the second focus group, in which the cooperation concept is presented and discussed, those participants are invited again as well as key external actors in the field of promotion of

health and mobility (also see figure 8 on page 41). The size of the first focus group is around six people (health, mobility, transport, citizen participation, environment, youth representative). The size of the second discussion is bigger, around 9 people, since also the initiatives and other organisation take part. Each discussion will last around two hours which is according to Henseling et al. (2006), a common duration for such a setting. It can be argued that this amount of time is to handle for the participants and gives the group enough time to get to know each other and discuss the topics in depth.

An interview is described being a method which can produce statements. It consists of different answers which has been asked from the interviewer. There are different styles of an interview. For this research, the partly structured interview was chosen. A partly structured interview consists of pre-defined questions, but still holds the chance to ask none pre-defined questions which has not been noted done before. This is done to get to know more information about a certain topic which was brought up by the interviewed person (Cropley, 2002). Since certain answers are expected, taking notes are generally sufficient for the outcome. The research method is used to receive more information on the promotion of active mobility through cooperation from organisations which promote active mobility or health. Those are the ones listed above, such as ADFC, VCD, AOK as health insurance and Fuß e.V. The interview is to find out what they are doing in this regard, why they have been doing it or not, what is planned and what should be done in their perspective.

3.2. Piloting

There is a huge agreement within the research literature on the benefits of piloting a study (Henseling et al., 2006). As a result, a general understanding as well as the flow of the questions and the appropriate approach can be tested (Bryman & Bell, 2007). The focus group design have been presented and discussed with researchers familiar with the method. The interview questions derived from the literature material. The outcome of the first group discussion and the interviews are integrated in the second and final discussion.

3.3. Ethical Issues

Ethical issues need to be considered when conducting research. This is due to four simple principles: avoidance of harm, lack of informed consent and deception, inclusion of privacy issues (Bryman & Bell, 2007). Avoidance of harm and reduction of informed consent are limited through a comprehensive invitation mail and personal telephone calls which explain the research and its aim. In the telephone calls further questions are answered and a personal relationship built. Deception occurs when the research is presented to be something else (Bryman & Bell, 2007; Robson, 2011). This is avoided by outlining the research objectives and aim as well as being transparent with the results in the process of the focus group. Privacy needs to be assured. In the research evaluation names are only mentioned if desired and the audio records will be privately kept and not given to public. Further, the interviewer were asked to sign a data protection sign.

3.4. Reliability, Validity and Generalisability

The criteria of reliability, validity and generalisability are generally used to evaluate the measurements of variables, guarantee the quality of data, the research methodology, and the accuracy of the study (Adams et al., 2007).

Reliability is “the degree to which an instrument measures the same way each time it is used under the same conditions with the same subject” (Adams et al., 2007, p. 235). It can be claimed that the research method is reliable. The target group and research design are clearly identified and even if a participant changes, it will still represent either the administration or external players of promoting health or active mobility. Nonetheless, on the one hand small iterations can happen due to their own experience made in their work and their personal view, yet the general outcome is expected not to change much. On the other hand, it needs to consider that the people who have been brought together in the course of the research are already willing to promote active mobility. The outcome with other representatives from the offices in Berlin-Pankow might have been different when discussing it with people not in favour of active mobility. Though this is not to weaken the research. Research here has the chance to bring together people with the same mindset and work in accordance with research findings which is arguably a great value.

Validity or internal validity, is the accuracy between variables (Adams et al., 2007; Cropley, 2002). Through performing different qualitative methods (interviews and focus groups) with the same participants, but different focusses and compositions of participants, validity is assured. It is possible that positions and statements of a person differ between days due to a group composition, personal states or recent experiences. By mixing the participants and not only having a one-time contact with the participants, the validity can be strengthened. Nonetheless, this is also seen as a limitation in the research as it is worked with opinions and knowledge and humans’ thoughts may differ from one day to another and are never fully objective.

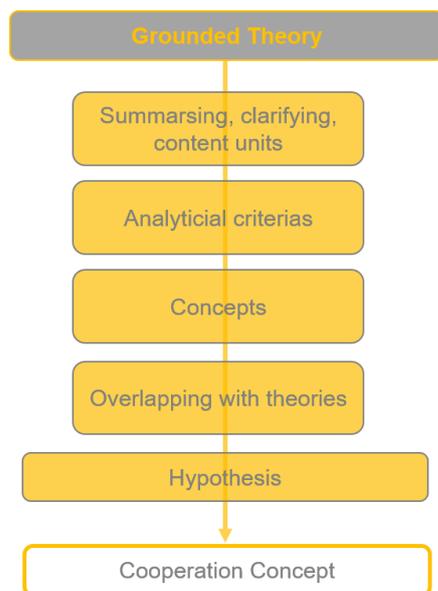
Generalisability, also called external validity, concerns the extent of generating findings which are applicable to other situations (Adams et al., 2007; Cropley, 2002). It can be argued that the study has a high generalisability as it is possible that the outcome of the research in regards to inter-sectoral cooperation to reach a same goal is also applicable for topics other than promoting health through active mobility. For example, through inter-sectoral cooperation of social and environmental sector, a decrease of social inequality can be done by incorporating green areas close to social housing which improves the eco-system and serves as a meeting point free of charge for the citizens.

In reflection, the research can be seen being reliable since everyone took part in the interviews and in the discussion at their free will, i.e. no one was sent from their boss against their will. The research took part among people with the same objective which was beneficial for the outcome. The validity can be evaluated high since most of the stakeholders were integrated twice in the research and did not change their opinion between meetings. In addition, for the interviews, the request was sent out on either to the head of prevention, promotion of cycling or walking or to “general” to find out the contact person. Thus, it can be claimed that the data material gathered through the interviews are of high value and represent the organisation and not the individual. Generalisability, as described in 3.4, is assured since the research has not shown why the methods used should not work for other contexts.

3.5. Data Analysis

The discussions and the personal interview have been recorded. The data is uploaded on a computer and analysed with the programme MaxQDA. The research scientist has already experience with its usage and has access to that programme. A protocol is elaborated in which the statements are categorised to main discussion topics, anonymised and clustered. After every discussion, the central results are summed up and interpreted. The interviews via phone are noted down, summed up and interpreted. At last, all results are combined, the final results and measures elaborated (Henseling et al., 2006).

Figure 7: Analysis Method: Grounded Theory



Source: Own illustration, based on (Cropley, 2002; Glaser & Strauss, 1967)

The grounded theory was used for analysing the data. This method was used as it does not only sets hypothesis, but also comprises making findings apparent (Strauss & Corbin, 1998). The statements of the focus groups and interviews were first summarised, clarified and put into content units. Thereafter analytical criteria were analysed and aligned to each statement. Out of those criteria concepts were built. The concepts are scientific principles which allow the research process to analyse if overlapping to existing theories exist and how those can be classed within the theoretical discourse. In general the criteria are quite specific or event abstract whereas the concept again gives the criteria a frame and is more specific. Qualitative data is unlike quantitative data complex and unstructured. Its full value can only be analysed by focussing on criteria which gives value to the statements. To be able to work with those criteria, more general concepts or clusters are needed to bring an order into the statements and its meanings (Cropley, 2002; Glaser & Strauss, 1967). For example when participants talked about cycling infrastructure and its needed safety. It was first analysed which was mentioned in regards to safety, e. g. subjective safety for being able to promote active mobility. The interviews and some parts of the focus groups also served to receive more knowledge about the association and the cooperation. Therefore, a lot of facts were exchanged and thus, the criteria are not always emotions. In the end, the concepts which evolved from the research were compared and aligned to the findings of the literature review (chapter 2).

an interview that it was passed on. However, no further communication took place. In the second step, Fuss e.V. answered some questions per e-mail. ADFC Berlin and ADFC Germany were also contacted, but no questions were answered since they have stated not to perform any further inter-sectoral cooperation with the health sector as already been known of. Insights about the campaign Bike2Work, a project from the ADFC and the AOK, were already received through an interview with AOK Nordost. Two telephone interviews were held. One with the VCD and one with Changing Cities. In regards to the VCD, no one had time to take part in the discussion on the 27th November 2019. However, they have showed interest to get to know about the future process of the cooperation. Regarding the administration, four of the offices contacted took part in both focus groups (step 2.1 and 3). In the second focus group, the office of KIS4 was even represented twice. They represented the topics of mobility management and transport planning. The double presence was not planned. The transport planner just showed up. This was probably due to a misunderstanding. He actually was invited once when the mobility manager has said that he is not available, but when the availability changed from him, the transport planner was also told that there is need to for him to come anymore. When he arrived, I did not want to send him back and thus integrated him in the discussion. Only one office, the street- and green spaces, needed to be contacted through two different angles. At first, the head of the department was contacted, but no answer was received. Thus, the cycling planners were contacted with the aim to integrate someone specialised in planning infrastructure for an active mode. Two offices, the one for environment as well as children and youth participation were not able to take part due to time capacities.

The above presented stakeholders were chosen since they are the biggest and most powerful organisations in the field of promoting active mobility or health and also have a representative on the district level Pankow. Only one insurance company was contacted to firstly not overload the discussion in the beginning of a cooperation and secondly due to their activities in promoting cycling among employees together with the ADFC. The offices on administration level were chosen when their area of activity overlapped with health or active mobility.

4.2. Research Results and Discussion

The chapter starts with showing the results of the first part of the research which is the first focus group and the interviews. The results are summed up in a mind-map. Thereafter the cooperation concept which was developed out of the research outcomes is presented and the results of the second focus group illustrated and discussed.

4.2.1. First part of the research

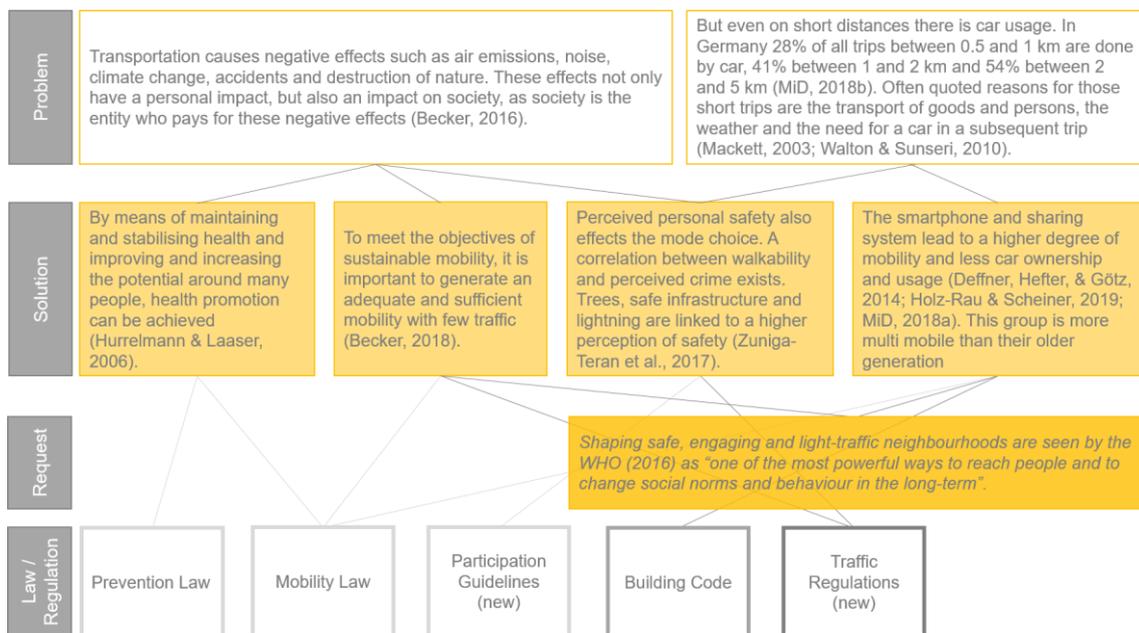
4.2.1.1. First focus group

On the 30th September 2019 the first focus group took part with four representatives with different expertise (health, participation, mobility, cycling). Also see figure 8 (page 41).

Exercise and discussion on the work approach

The discussion started off with asking the participants to select statements which simulated a problem, which reflects their work approach and which reflects their request in regards to the work approach. The interactive exercise and discussion is seen on the one hand as an introduction. On the other hand, to find out if the factors of mobility and health discussed in the literature review of this thesis are also relevant in their work and how those are approached. Further, they were asked to select laws or regulations which promote or hinder their work approach. If a law or regulation was not present, they were asked to add it to the list (dark grey box). The results of the selection is shown in figure 9. The arrows show the connection between the different statements.

Figure 9: Work approaches



Source: Own illustration, based on first focus group (appendix 4).

In total, two statements were selected, four solutions and one request. Thus, the group has seen similar problems and solutions. It needs to be mentioned that the person who does not work content-related in that field, but in participating process, answered in the name of the citizens with whom are dealt with in the daily work life.

The following analysis of the discussion part is split in four parts. First an analysis and discussion is done on their work field. Thereafter planning aspects, motives for active mobility and laws as well as regulations are put into perspective.

Table 3 (page 45) presents the *concept* and *criteria* analysed in the first part of the focus group. In appendix 4 the corresponding statements are illustrated. It was seen that in terms of *planning* some *exclusion* in planning processes exist as well as big topics are *broken down* to small ones to handle it. This is also needed in regards to the *emissions* as the *emissions* in the district are not *distributed* equally. *Office spanning* is done with departments on federal level and forms *cooperation* structures. The person who does not plan, but coordinates *citizens concern* sees herself *far away* of being able to form *attractive* and *safe* neighbourhoods through her work activity. In addition, it was highlighted that a formal decision on participation guidelines which are the base for her work exists. Herewith, she is able to help the citizens to implement *simple* measures,

such as lanterns in streets. Further, the mobility management due to the new role, does *not implement* any measures yet. This will change after implementing the new instrument Mobility Report in the end of 2020 (Bezirksamt Pankow, 2019c). It can be claimed that the group has a good starting point since it covers different needs for a cooperation (planning, coordination, proximity of citizens) (Böhme & Reimann, 2018), yet also lacks are seen in their ranks and *inclusion* in planning processes. According to Bolte et al. (2018), a successful cooperation needs the backing of local bodies. This exists in form of a decision to promote physical activity in public spaces (Bezirksamt Pankow, 2018). It can be argued that the presented work fields and scopes support the aim of the decision. Further, the phrase “I *sit up and take notice* when you talk about planning on neighbourhood level” shows that an exchange among employees in the administration is necessary. In the literature it was seen that an exchange between heterogeneous players can be difficult indeed, but is necessary and is a gain among the different stakeholder (Böhme & Reimann, 2018).

Participants in the group expressed the need for an *integrated* approach to overcome *planning* challenges. As the picked statement by Becker (2018) was seen as an *universal* problem summary of the current traffic system, it can be claimed that solely with *integrated planning* those barriers can be overcome. The need for *research* was further seen. Due to different research projects in the district, this requirement can be approached, e.g. with the Mobility Report (Bezirksamt Pankow, 2019c).

It is to point out that the participants quite often mention planning for neighbourhoods whereas when they have talked about their work scope, social areas were mentioned. An explanation might lay in the more tangible and also practical term of neighbourhoods and the Berlin wide used term “Kiez”. 42 Kieze exist in Pankow (Qontentum GmbH, 2019). Therefore, they are smaller than planning rooms, but consist of more than a street. It is said that most people in Berlin identify themselves with their Kiez (Zlateva, 2018).

Participants have used many adjectives and adverbs when having discussed the chosen statements. Those were, among others, *welcoming, comfortable, safe, healthy living, accessibility, car-friendly* and *cheaper*. Many adjectives were put into the context of cycling, i.e. it needs to be more *welcoming, comfortable, subjectively safe* and easier to access. On the contrary, *car-friendly* infrastructure was seen which hinders those aspirations, yet the infrastructure makes it *available* to go from A to B with the car, particular due to the free parking or very low parking fees. Solutions were further seen in fewer traffic to make *healthy living* available and the *usage* of the smartphone or other *digital* solutions - something *different* to the status quo. It was discussed that this leads to *safer* neighbourhoods and more potential for *integrated* transport system, e.g. through a mobility card. However, *integrated* planning still lacks, but was desired by the participants. It is needed due to the many *interdependencies* traffic and mobility have on other sectors. In addition, the big structures which were set in the past need to be *broken up* to be able to plan without concentrating on MIT. The content of the discussion of the participants go along with the findings in the literature review, e.g. Knoflacher (2007), McCarthy (2001) and Smart (2018). The participants still see themselves far away from shaping safe, engaging and light traffic neighbourhoods, but claim the desire to work for it (also see below). According to the WHO (2016) this is one of the most powerful ways to reach people and to change social norms.

Table 3: Concept and Criteria in regards to work approach

Concept	Criteria			
	Work field	Planning	Statement	Laws/Regulations
Accessibility			Available Optimising	
Attractiveness	Far away		Welcoming Comfortable	
Building code				Hindering
Car-friendly			Existing Cheap Decrease	
Cooperation	Office spanning			
Coordination	Limited			
Digitalisation			Different	
Distance			Available	
Emissions	Distribution		Healthy Living Cause	
Health insurance				Funding
Implementing	Simple No action			Small funding
Mobility law				Beneficial Usage
Negative effects		Universal		
Offer			Integrated	
Planning	Inclusion Break down Sit up / take notice	Research Integrated	Interdependencies	
Prevention law				Beneficial
Prices			Cheaper	
Guidelines on public participation	Citizen concern Formal decision			Qualifying
Reduction			Available	
Safety	Far away		Subjective Holistic	
Structures			Break up	
Traffic regulation				Hindering Needs work Political No knowledge

Source: Own illustration, based on first focus group (appendix 4).

Beneficial laws for their work context are the *guidelines on public participation*, the *mobility law* and *prevention law*. The *mobility law* prefers the environmental friendly modes to the car. Yet, due to the participants it needs to be used more strictly. The *prevention law* helps to receive *funding* from the *health insurance companies*. The *guidelines on public participation* were adopted on federal level and are *qualified* in Pankow with the different offices at the moment. *Hindering* regulations are the current *traffic regulation* which e.g. does not allow to introduce 30 km/h in a street in the inner city per se and the *building code* which limits participation processes. It was brought in the discussion that the traffic regulations are revised at the moment with the aim to promote cycling in the future. Since *no participant* knew about the new amendment, it was not further discussed at this point. The amendment includes higher fees for parking offenders and other regulation which may make cycling more attractive (BMVI, 2019d).

To sum up, this discussion has shown that similar problems and proposed solutions exist among the participants. This is beneficial since a working group or cooperation needs to see some relevance to their field of work (Böhme & Reimann, 2018). Next, successful cooperation structures ask for setting objectives together (Bolte et al., 2018). If the problem, solution and request in their work are already similar or mutual, setting objectives can be done easier. However, it was analysed that the group in that composition does not have the authority to decide. Thus, allies or well formulated projects are needed to give the group more hearing. All of the participants were able to select a statement which derived from the literature material. This shows that the current literature is in alignment with the participants in the focus group. The only amendments were done in form of regulations and guidelines as those were not highlighted in the literature review. But as those legal regulations were justified being valuable and was understood by the researcher, those are considered in the following.

Strengths, Weaknesses, Opportunities and Threats

A discussion on strength, weaknesses, opportunities and threats in regards to promoting active mobility in their daily work were done for about 30 minutes. Strengths and weaknesses define what takes place in the present and opportunities and threats in the future. The activity did not follow a comprehensive SWOT analysis. Generally before doing a SWOT analysis, a comprehensive overview needs to be done about the organisation or the topic on which is focussed in the analysis (Simon & von der Gathen, 2010). Since this was not needed for this thesis, the SWOT concept was used to get to know the participants views on the topic to receive knowledge about their estimates in regards to promoting active mobility. Some aspects, already put forward by the participants in the previous part of the discussion, were noted down and others discussed. The results after coding and analysing can be seen in table 4 (page 47). In the discussion around SWOT elements, similar concepts arose as in the previous discussion. The *prevention* and *mobility law* were mentioned being a strength and the coming *pedestrian law*, part of the *mobility law*, is seen as an opportunity. With the pedestrian law two persons will be employed who only plan for pedestrians. The *guidelines for public participation* are arguably a strength, too, yet the *reach* is seen as a weakness as it is seen that some people such as children or people with a buggy often do not take part in participation processes. However, they have special needs in regards to the design of the infrastructure. The current *building code* is *beneficial* in regards to the regulation of building two cycling racks for every apartment, but it has only changed in 2005 (Starke & Lippert, 2018). Thus, many apartments exist which do not have sufficient parking areas for bicycles. This is a limitation in promoting cycling from the administration site. If the parking situation is insufficient, people might not cycle even if well cycling infrastructure exists. This is a big problem since in private properties cannot be interfered easily. However, also the bicycle parking situation at *administration* buildings are not perceived sufficient, so that even the district cannot be seen as an *idol*. Topics such as the existence of too *cheap car-parking*, the strength of including *research* in *planning* processes and *limited integrated planning* were stated additionally. The district also depends on private *sharing operators*. In the inner city circle many different bike sharing operators can be used, yet this is not the case in the outskirts. If that would also be available there, promoting bicycling there, particular in combination with public transport, would be a lot easier. In regards to administrative structures, the lack of *staff* was mentioned. On the one hand, new *staff* is employed with a mind-set in promoting

sustainable transport, but the quantity of *new staff* is still not enough, many employers still work there who have an *outdated* view on transport planning and follow aspects to build a car-friendly city over years. This also exists in external planning offices so that the change to a sustainable and integrated transport system is seen as a continuous struggle and will probably still need some time. *Complex structures* with many offices and instances exist, responsibilities hinder decisions and even fear exists to decide about certain infrastructure or transport measures. The absence of *project management* is a further problem to work efficiently in those *complex structures*. Nevertheless, the current cycling department was mentioned being *progressive* and more and more *new projects* are implemented which change the transport system in favour of active mobility. A *digital* map which shows all projects in the district is elaborated right now and will help the employees in the future in their work to receive an *overview* and prioritise activities.

Table 4: Concept and Criteria - SWOT

Concept	Criteria		
	Strengths	Weaknesses	Opportunities
Accessibility	Needs		
Administration		No idol	
Building Code	Beneficial	Outdated	
Cycling Department	Progressive New projects		
Digitalisation	Overview		
Guidelines Public Participation	Beneficial	Reach	
Hierarchies		Existing	
Mobility Law	Beneficial		
Participation		Insufficient	
Pedestrian Law			Beneficial
Planning	Research	Selective	
Prevention Law	Beneficial		
Sharing		Limited	
Structures	New staff	Complex Fear Instances Past More staff Responsibilities Outdated Limited Project Management	New staff
Car-friendly		Cheap	

Source: Own illustration, based on first focus group (appendix 5).

It can be claimed that many of the weaknesses cannot be broken up by this thesis, yet the knowledge about it is necessary to know which actions are possible in the participants' scope. Through using the strengths, some weaknesses can be overcome. Arguably, it is positive that no threats are seen. Particular inherited burdens such as structures, regulations and missing budgets are predominant in the weaknesses.

Cooperative structures

At last, a discussion was done on the existing cooperation structures. It served to receive insights about the content of the cooperation, how it is practised and to spread

knowledge among the participants about the different working groups, which are cooperative formats, already in place. Due to bilateral talks during elaborating this thesis, it was noticed that not everyone knows about those formats. The focus group further helped to answer the objective of the status quo on cooperation in Pankow which was already discussed in the literature review. The outcomes are used to form a cooperation to promote active mobility. The discussion focussed strongly on the different cooperative structures in the district and the requests for a new cooperation to promote active mobility. It lasted for about 45 minutes. The statements can be find in appendix 6.

Table 5: Concept and Criteria - Cooperation

Concept	Criteria			
	WG Prevention Chain	WG RPV	WG Urban Development	New Cooperation
Closed Format			Exclusive Invited	
Competitive Thinking		Non-mutual intellectual fertilisation		
Content	Equal Opportunities Promoting health		Comprehensive Considering health promotion	Integrated Mentoring
Cycle		Regular	Regular	
Flow of information		Insufficient	Unclear	
Funding				Easier
Inclusion	Inviting			
Mobility law				Break down Usage
Motivation				Everyone
Participation	Depending SPK SGA	Always QPK3 KIS4 SGA Other person Fewer	SPK Not QPK3 Not SGA High Federal	
Planning/Projects			Discussed	Promoting health Piloting
Power		Able to pass		
Profile				Better
Public Participation		Coordination		Designing
Rank			High	
Support	Luck			
Synergies	Many			
Topics			Set	

Source: Own illustration, based on first focus group (appendix 6).

It was seen that in all of the working groups (WG), i.e. cooperation, only two participants from the focus group have taken part. One person has taken part in three working groups, another person in two, one person in one and one person in none.

Main topics for the discussion were the *content*, *participation* and *cycle* of working groups. Further, the participants have given their perception of and suggestions for the groups.

In terms of the *content*, the *WG prevention chain* aims to enable *equal opportunities* and *promote health*. The *WG urban development*, on the other hand, works *comprehensively*. However, it was commented that the main features of *promoting health* in planning, are not discussed. The *WG RPV* and *WG urban development* meet in a *regular cycle*, once per month whereas the *WG prevention chain* do not follow a regular cycle. The kind of participants in the *WG prevention chain* depends on who the city councils are sending. At the *WG RPV* one city council *always participates*, yet the number of participants are *fewer* than it was in the past. At the *WG urban development*, the mayor as well as representative from the *federal level* *participates*. The *rank* of the working group can be seen *high* as the head of office *sets the topics*. There *projects/planning* are *discussed*. It was seen that the *WG RPV* has *power* due to being *able* to pass a draft resolution on to the members of the city council.

The *WG urban development* is seen as a *closed format* as the participants get invited and are *exclusive*. The representative of QPK3 would like to get *invited* once. On contrary, the *WG prevention chain* is *inclusive* as a brought *invitation* is done. This is probably due to seeing *many synergies* to other topics. *Competitive thinking* in terms of *non-mutual intellectual fertilisation* between the *WG RPV* and *WG urban development* exists. It was also stated that the *flow of information* from the outcomes of the *WG RPV* to the *WG urban development* is *insufficient* which might be due to the fact that the *WG RPV* always takes place a day after the *WG urban development*, but further that the *WG urban development* *not clearly* states which is discussed in their group. It was further mentioned that receiving support for certain concerns is a matter of luck.

For the new cooperation format for active mobility, the participants stressed the importance for *integrated thinking*, to help with *mentoring* in new *projects* and have a *better*, i.e. *clear profile*. Generally, the *projects* and *planning* ideas should be seen as *pilots*. The *mobility law* should be used and *broken down* on local level to analyse every Kiez in Pankow. Further, there is the desire to *close the cycling network* which goes along with the *mobility law*. To *design* neighbourhoods, *public participation* processes need to be done. To finance those ideas, *funding* is to be used. It was said that this is *easier* with existing projects. The participants have closed the discussion with mentioning that *everyone* is *motivated* to participate in such a format.

A cooperation can follow different aims (see 2.3.2). For this cooperation, it can be argued that the cooperation can serve exchange of information, develop joint work or tasks. Beneficial can be seen that everyone is interested in a further cooperation as promoting active mobility for health reasons is not solely dependent on measures from the health and transport sector. In the literature it was analysed that for that matter a wider cooperation is necessary which also includes players from the social office (Böhme & Reimann, 2018). In this focus group, a representative from the social office did not participate, but the person who is charge for children and youth participation, arguably a social field, was contacted and showed her interest, but only in the future. In general, the notion was given that transparency is lacking in those cooperation and therefore some people are or feel excluded. Through the discussion, it was seen that using synergies and non-competitive thinking are important for the participants. Therefore, the new cooperation should follow transparent and inclusive guidelines. This will be considered in the following.

4.2.1.2. Interviews

One face to face interview, two interviews per phone and one e-mail exchanges with experts from organisation promoting active mobility and the health sector, here health insurance were done and analysed for this research. This was done to receive on the one hand knowledge about existing cooperation and which measures are performed. On the other hand, it was about their ideas and thoughts on further measures and cooperation on e.g. district level.

The results are shown in table 6. In appendix 7 the corresponding statements are illustrated.

Table 6: Concept and Criteria – Interviews

Concept	Criteria	Concept	Criteria
Behaviour change	Not safer Further parking More Cycling Not continuously Addressing Dismiss Positive Digitalisation Motivation Funding Empowering Physical Activity Playful Distance	Focus Topics	Sustainability Traffic Safety
Communication	Target Group	Health Promotion	Not seen No focus Integration Medicines Sporting Goods Focus Alimentation Walking Active Mobility Cycling, running, swimming Everyday life
Connecting Factors	Many Environment Health Safety	Marketing	Developing New infrastructure Inauguration
Cooperation	Competencies Universities State Level Federal Level Health Insurance Interdisciplinary	Mobility Education	Comprehensive Traffic School Education
Corporate Identity	Sustainability	Offer	Variety
Determining Factors	Possibility Possession Prevention Programme	Physical active	Everyday Life
Employer	Much Promote Costs Push	Promoting Cycling	Sustainability
		Promoting Walking	Fun Motivation 10.000 Steps
		Safe School Routes	Learning
		Transport Politic	Awareness Connection

Source: Own illustration, based on interviews (appendix 7).

Measures for *behaviour change* to become more active were mentioned solely by the AOK Nordost. This is probably due to the fact that they are the only ones who perform measures to promote health through active mobility directly. Since their main target group are people who are insufficiently physical active, their activities target a *change in behaviour*. It was stated *positively* that more people are participating in the campaign Bike2Work and *cycle more*. Some even *dismiss* their car after participation. They often

start to participate through getting *addressed* by colleagues and are *motivated* by the team concept. The campaign, incorporating a lottery, is not allowed to take place *continuously*. Further, it was mentioned that their scope is limited as they are not responsible for *safer* bicycle routes which is a big barrier for promoting cycling. Further, they offer bike-camps for women to *empower* them, work with schools to promote *physical activity* playfully and support a series of walking bikes to promote the *transition* to cycling. It was also mentioned that the e-bike helps to overcome long *distances* which has the power to encourage behaviour change.

Many organisation who promote active mobility do *not put a focus* on *health* in their communication. *Focus topics* are, e.g. *traffic safety* and *sustainability*. This is due to the corporate identity and the existing system. Schools, for example, are more interested in *traffic* education than in *mobility education*. Despite, all advantages of active mobility are *comprehensively* communicated. In general, *many connecting factors* exist for cycling, those are *environment*, *health* and *safety*. It was suggested to go in schools when new cycling infrastructure is built to *educate* pupils and their parents about it. *Safe school routes* are particular important so that pupils *learn* how to move in traffic. This is arguably particular important as research shows that this leads to more autonomy, spatial action scope and improves physical abilities and visual thinking (Deffner, 2018). *Marketing* shall therefore be done when *inaugurating new infrastructure* so that traffic participants get to know about possible new rules at those sites.

Promoting measures depend on *determining factors*. Cycling cannot be prescribed as a *prevention programme* as it is not certified. For cycling *possessing a bicycle* is necessary and as no possession is allowed to be obtruded, cycling cannot be prescribed. This arguably hinders promoting cycling. Further, riding an e-bike can only be promoted limited either as courses are not reimbursed by the health insurances. For some employees it is not *possible* to cycle to their employer via safe *infrastructure* which complicates promoting cycling. According to Gehl (2015) and Lee et al. (2017), to attract cycling, safe infrastructure needs to exist. Further, it is important to *target* many people who use the infrastructure through *communication* measures.

However, on the side of the *employers* many things have been done to promote cycling in recent years. *They* have noticed the high *costs* of car infrastructure in comparison to cycling infrastructure. It was further noticed that companies want to *push* their employers to cycle and ask for cycling data of their company. This can be also be seen in the increasing number of certificated cycle-friendly employers (ADFC, 2019d). From one interview partner it was said that the programme cycle-friendly *employer* shall be *promoted* in the district to activate people for cycling from a different angle.

Different developments were pointed out. The campaign Bike2Work *developed* its platform and *marketing* further. They started with print media. Nowadays everything is online with the possibility to use print which fortunately is barely done. It is seen easier nowadays to promote cycling as there is a lot more *variety* in bicycles than in the past. Thus, individual demands can be met in a better way.

Some measures are done to *promote walking*. A walk of *10,000 steps* was performed as according to the WHO (2008) doing 10,000 steps leads to health benefits. However, it needs to be regarded that also the intensity is crucial. "Therefore, it is important to point out that the 10,000 steps recommendation is just one way of achieving the required

physical activity level" (WHO, 2008, p. 9). Those activities are to show that walking is *fun*. Doing it together is also more *motivating* than doing it by oneself.

Many statements were highlighted in regards to *promoting health*. In the *past*, cycling was promoted rather due to physical education and health reasons as it is done now. Nowadays, cycling is *not seen* as a health-promoter from official side, e.g. the government. However, this is not the case for companies. *The focus* in companies has changed due to the increase of health management. With those departments, it is also easier to promote Bike2Work. It was stated that activities to promote health direct rather *alimentation*, particular in schools. Here, it was also seen that none of the organisations who promote active mobility, e.g. Changing Cities, Fuss e.V., VCD, communicate the positive health aspects through active mobility directly. Nonetheless, it have been worked together with *medicines* or *sporting goods* manufactures. It was further seen that the health insurance have different offerings which promote physical activity such as Nordic *Walking* or consult how to integrate physical activity easier in *everyday life*. A survey once showed that people want to *run, cycle or swim* more. Arguably, a bicycle is the perfect tool to integrate physical activity in daily life as no or not a lot more time needs to be used to be active. In addition, many swimming pools are closed or only few exist so that this option is not available for everyone.

It was uttered that the *politics* need to be *aware* of the need to promote active mobility due to health reasons. However, it cannot be recognized that this *connection* is seen by leading political players or ministries.

The interview partner emphasised the importance to work with *health insurances*. This aligns with the literature. Here, a cooperation with health insurances is recommended (Böhme & Reimann, 2018). Arguably, the ADFC with their cooperation with AOK for Bike2Work has already successfully formed one. In the initiation of the cooperation, it was seen that different *competencies* exist on both sides. This cooperation has started on *federal level*. It is desired that the different ministries on *state level* who benefit from active mobility (environment, transport, health) connect themselves to push that topic more efficiently. The environment ministry has realised the benefits of cycling. They fund different cycling projects (BMU, 2019a). It was further ascertained that for some projects a cooperation with *universities has been formed* which are seen positively. The need for implementing an *interdisciplinary* cooperation in form of a working group, which is leading for this thesis, was also stated.

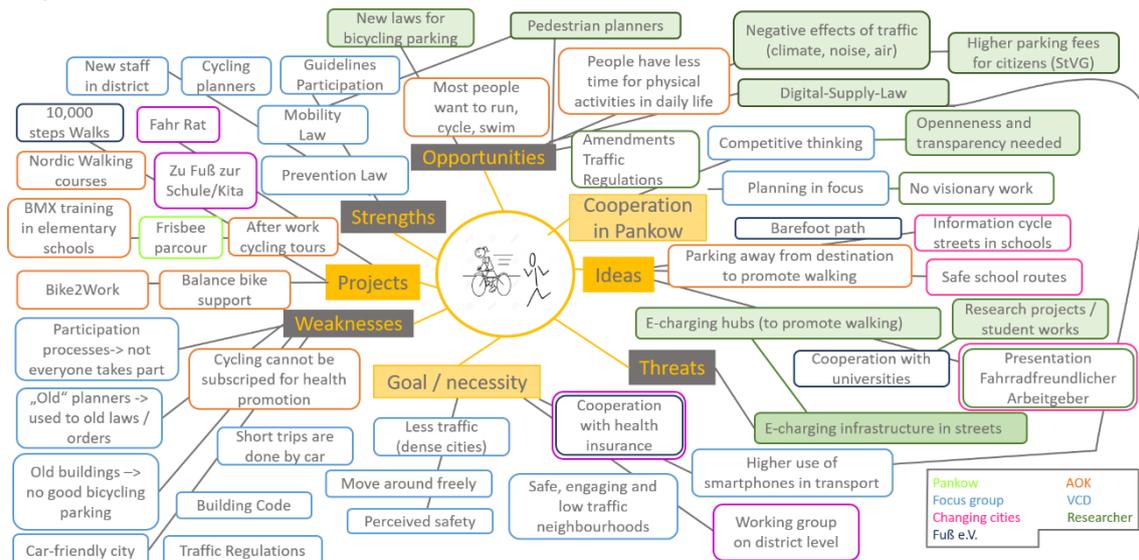
It is seen, even if not many cooperation exist between organisations who promote active mobility and organisations which promote health, that many players see those cooperation beneficial. The number of participants of the campaign Bike2Work has increased in the last years. Thus, a need in the population is apparent for those formats. However, for a change of behaviour more is needed. For example safe infrastructure for cycling needs to be built additionally to make cycling available for most people. Hence, collaborating with planning offices, ministries and alike is inevitable. A positive aspect is that more and more employer see the need for promoting cycling. They can arguably help in demanding cycling infrastructure. When communicating positive aspects of cycling, many aspects can be highlighted. This can be seen as boon and bane at the same time. It is positive as the amount of advantages show the range of opportunities. Negative is as some aspects might be forgotten in the communication or only on some it is focussed to not overload the message. The lack of certified prevention programmes

on national level in regards to cycling was identified being a further barrier. In regards to promote walking, first approaches are done, e.g. by doing a 10,000 step walk for health reasons. Arguably, those initiatives have to be implemented, more extensively and frequently.

4.2.1.3. Interim summary

Figure 10 sums up the outcomes from the first part of the research, i.e. focus group and interviews in a mind-map. It was clustered in strengths, weaknesses, opportunities and threats as well as projects, ideas and cooperation in Pankow and goal or necessity. The colour of the box represents who has said it (see legend down right).

Figure 10: Mind-Map - First part of research



Source: Own illustration.

A mind-map helps to bring some coherences in different statements and opinions (Buzan, 2014). Next to the above analysis, this mind-map put the statements in a more tangible manner together which helped to elaborate the cooperation concept which is presented in the following chapter. It is also used to help the participants in the last focus group to grasp the outcomes of the first research process. In the mind-map not only the main outcomes of the first research process are presented also further thoughts from the researcher (filled boxes) are shown. Those ideas arose in the research process and through new laws and amendments of regulations. Those developments concern the transport and health sector and are therefore not to forget when elaborating actions for the cooperation.

Projects represent existing projects of the organisations talked about and ideas which have been mentioned or which evolved from the research. The goal or necessity are those factors which were mentioned being necessary to promote active mobility more efficiently. Cooperation in Pankow holds the elements which were stated in regards to cooperation in the research.

It can be summed up that on all sides many elements exist. The elements, as already stated, are the base for the cooperation concept illustrated and discussed in the following. It only serves here as an overview. Many different strengths, weaknesses and opportunities are shown. Fortunate is that only one threat exists. This was included by

the researcher as this notion was missed in the discussions. Positively, it is also seen that there are already many projects in place which promote active mobility. Arguably, by using more sectoral synergies those projects can be enhanced and more people reached. The participants are seen being enthusiastic as different ideas were put forward through the research. This is positive as enthusiasm is certainly a good starting point for a cooperation.

4.2.2. Second part of the research: Second Focus Group

After having finished the first part with the focus group and interviews, all results were put and analysed together. Out of the results a cooperation concept was elaborated which was presented and discussed in the second focus group which took place 27th November 2019 with nine participants (see 4.1). In the following, the cooperation concept with its eight steps is illustrated and the discussion of the group shown, analysed and discussed. The presentation presented at that day and the statements can be found in the appendices 8-9. The presentation started off with the research aim and objectives and showed the research process. Afterwards the cooperation concept was presented. In the middle a break was done in the presentation to give the participants time to discuss the proposed concept up to there. Thereafter, the measures were explained and the participants were asked to become active in ranking those measures. Upfront possible funding pools were shown so that the participants knew upfront which funding might be possible to use for the measures. After the interactive phase, the ranking was discussed. The focus group finished with showing the next steps in the research.

A cooperation concept with eight steps was elaborated. It reaches from exchanging objectives with each other over defining a target group up to distributing tasks (Post CH AG). Figure 11 shows the different steps. Thereafter, the contents of each step are presented and discussed in each step.

Figure 11: 8 Steps in a cooperation concept

1. Exchange objectives with each other.
2. Define the topic – on behalf of all participants
3. Define the target group
4. Mission Statement
5. Develop and re-think the measures
6. Calculate the budget / Expense per measure
7. Elaborate a timetable
8. Distribute tasks

Source: Own illustration, based on Post CH AG .

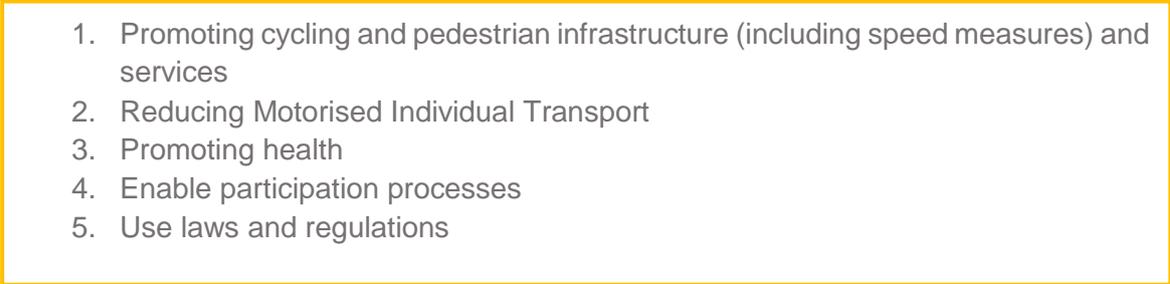
4.2.2.1. Exchange objectives with each other

Out of the focus group and the interviews four objectives were identified.

1. Promoting cycling and pedestrian infrastructure and services
2. Promoting health
3. Enable participation processes
4. Use laws and regulations

The group mentioned four comments to those objectives. Two comments were about integrating aims which have been presented and therefore are no add-ons. One comment concerned the issue that, next to infrastructure, also speed limits need to be introduced to receive, among others, a higher quality of stay and safety. This was approved, but simultaneously said that this is seen as infrastructure measure, too. But to make it more clear, this is added to the first point. Additionally, it was stressed that it is important to formulate the goal to reduce MIT. Just the week before, different associations in Berlin have come together with the aim to reduce the number of cars by a half every ten years (Changing Cities, 2019). Arguably, not only pull measures are needed, also push measure. For reducing MIT and the number of cars push measures are arguably necessary. It can be claimed that push measures are less accepted, but are needed for transport justice. For example, on big streets live on average more people with a low socio-economic status, but are exposed by high-traffic volumes (SenSW, 2017). A wide cooperation of different offices who demand and give requests how to introduce push measures are beneficial for successful implementations (Böhme & Reimann, 2018). Figure 12 sums up the objectives of the working group which were set together.

Figure 12: Objectives of the working group

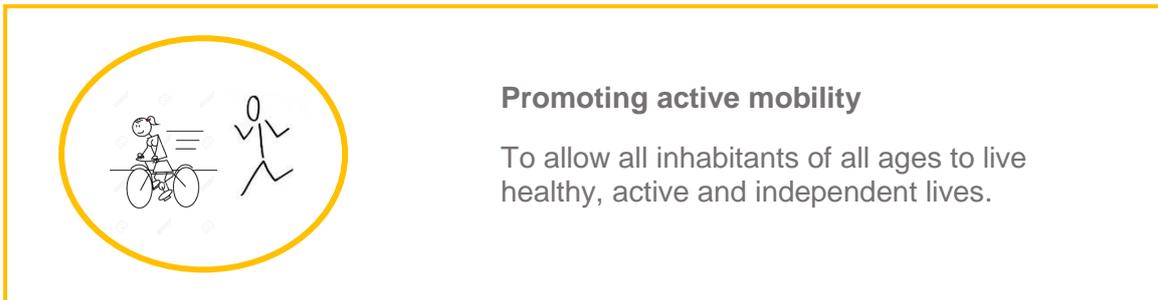
- 
1. Promoting cycling and pedestrian infrastructure (including speed measures) and services
 2. Reducing Motorised Individual Transport
 3. Promoting health
 4. Enable participation processes
 5. Use laws and regulations

Source: Own illustration.

4.2.2.2. Define the topic – on behalf of all participants

In regards to the topic, no additional statements were given which means that the topic having set was approved.

Figure 13: Topic

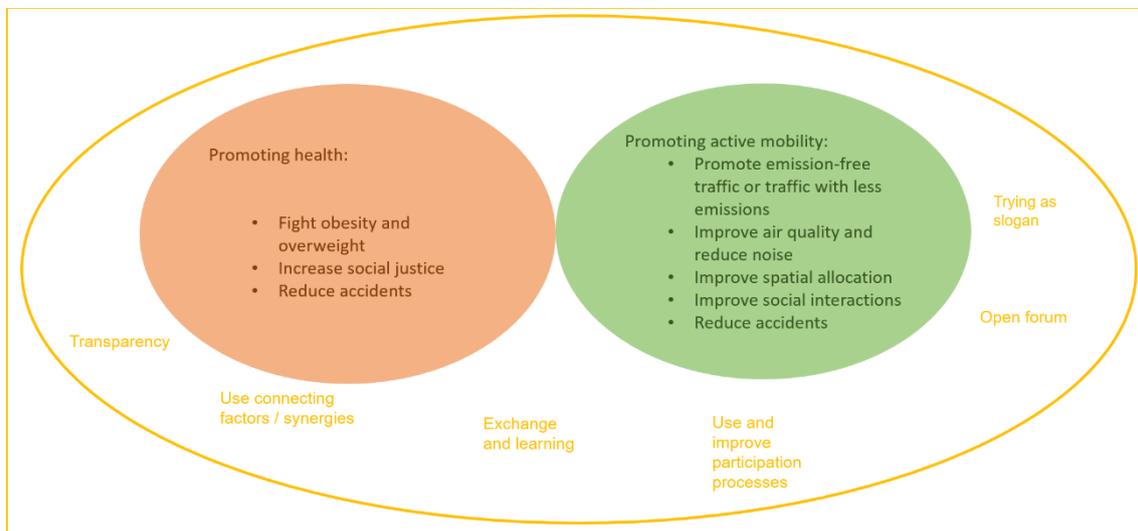


Source: Own illustration, based on: Bolte et al. (2018).

4.2.2.3. Mission statement

Based on the first focus group and the outcomes of the literature, a mission statement was elaborated for the working group. A mission statement defines the mission, the vision and values of an organisation to define what are the most crucial things they want to work on and for what they stand for while working with each other (Online-Verwaltungslexikon, 2019). Figure 14 shows the mission statement with the mission to promote health and active mobility. The bullet points reflect the vision and the words around the values.

Figure 14: Mission Statement



Source: Own illustration.

A participant positively pointed out the fact that reducing accidents is concerning both bubbles, i.e. health and mobility. The participant is in favour of improving traffic safety while promoting cycling

It was seen that the outlined cooperation concept has been widely accepted by the focus group. Only small amendments in the objectives (4.2.2.1) and target group (4.2.2.3) were done. It is beneficial that the involved offices and organisations which want to form the cooperation were present since agreeing on objectives together limits resistance and

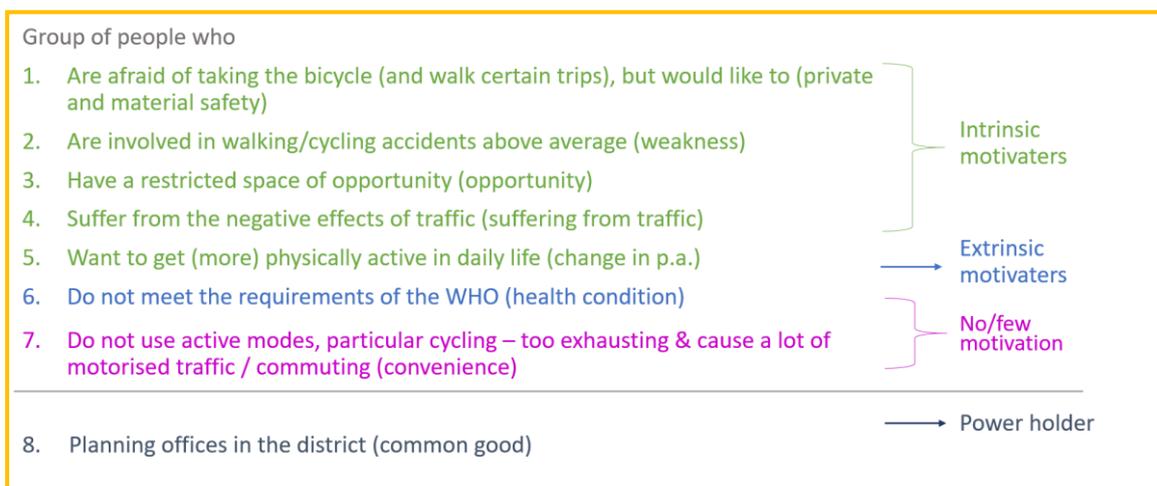
increases the motivation. Everyone needs to see some relevance to their field (Böhme & Reimann, 2018; Bolte et al., 2018).

4.2.2.4. Define the target group

Thirdly, the target group was discussed. The target group as already defined in the literature (2.3.2) was presented at this stage.

Seven comments were brought forward. Four of those concerned measures which are necessary for those target groups and are therefore neglected here. One comment was that inclusiveness is important since everyone has the need to participate in traffic. It was agreed on that this is considered in the group number three which concerns people having a restricted space of opportunity. It was further mentioned that there are people who do not take the bicycle to certain places as the bicycling parking is not safe enough. It was discussed that no extra target group is necessary and it can be arranged to the group number one who are afraid of taking the bicycle or go by foot, but would like to.

Figure 15: Target Groups



Source: Own illustration, based on: Robert-Koch-Institut (2015), Gehl (2015), Lee et al. (2017), Beikler (2016), SenGPG (2019), Deffner (2018), Daubitz (2018), Huber et al. (2015).

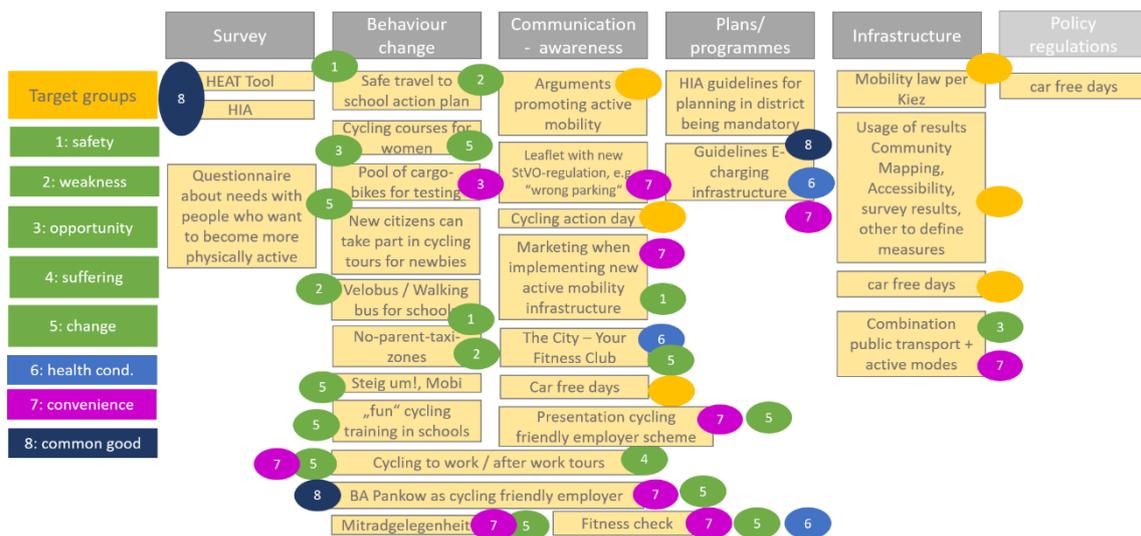
One participant brought up that a lot of people are using those transport modes which they have mostly used in the last years. Those people are lazy in that sense that they do not want to try something different or not even want to get themselves informed about new possibilities to go to work, to friends or to the supermarket. Even if their transport decision might cause stress or longer time in traffic, they barely change as they do not want to change what they have always done. It can also be said that the tipping point for change has not been reached. The target group number seven arguably also targets that problem. The target group is not only about people who find active modes too exhausting, but also about people who cause a lot of motorised traffic due to convenience. It further can be claimed that those people could also be in the target group number five or six. Therefore, those people can be part of different target groups and no additional target group needs to be open up. While discussing about this matter, it was further brought up that it is important to target people who are about to enter a new stage of life, in form of a new job, new place of residence, having a family or having children leaving the house. In those times these people are more open to change something in their life (Hüttmann, 2014). The measures (4.2.2.5) also need to target those people, yet

it was neglected to open up a new target group for those as they can arguably be find in one of the other seven target groups which concern the traffic participants.

4.2.2.5. Develop and re-think measures

Several different measures were presented. Figure 16 shows those, classified to certain headlines and which target groups can be targeted with the measure. The headlines originate from the cluster from the WHO Europe (2006): survey, behaviour change, communication and awareness, plans/programmes, infrastructure, public regulation. Since the working group do not have the power to change laws or other regulation directly, it was disregarded in the elaborating of measures. Only car-free days is classified here as to perform such a day, an order needs to be placed and regulations considered. The detailed contents of the measures can be found in appendix 10 and the given statements in the discussion in appendix 9.

Figure 16: Measures



18

Source: Own illustration, based on WHO Europe (2006).

Table 7 on page 59 shows the ranking of measures according to “easy to implement” and “hard to implement”. Further, it lists which organisation or organisational unit in the district would like to participate in that measure. The different colours in the table show belongings. Thus, car-free days can be combined with safe travel to school action plans and bonus programmes for using active modes among pupils.

It can be seen that many participants want to perform a car-free day and four players want to take part in that. It was said that it is important to make car-free traffic possible to experience. It was mentioned that placing an order for such a day is probably not as easy. It was suggested to use practical examples, e.g. from South America. Many cities there organise car-free days almost every weekend (Mulhern, 2018).

Corresponding to that idea, it was seen beneficial to use the mobility law for every Kiez. It was seen important to use the mobility law for small regions and evaluate with the people who live there, how this can be done most appropriately. Some participant see the pedestrian law here being very useful since it is looked at a limited space. Nevertheless, it can be argued that also cycling infrastructure needs to be in place in the

Kiez to reduce the trips smaller than 5 km. But it has also been rated not being easy to implement as there are 42 different Kieze in Pankow (Qontentum GmbH, 2019). Further those designs need to be seen in the greater context, e.g. an infrastructure measure in one Kiez can have effects on the Kiez next to it. It can be argued as the mobility law is performed law, the working group has a lot of chances to implement that measure successfully. Next, the participation guidelines and § 19, paragraph 2 of the mobility law strengthen public participation processes (SenUVK, 2018).

Table 7: Ranking of Measures

Measure	Easy to implement	Hard to implement	Organisation/(al) unit
Car-free days	6	0	AOK, SPK, ADFC, QPK3
Safe travel to school action plan	6	0	SGA
Marketing when implementing new active mobility infrastructure	6	0	SGA, CC
Mobility law per Kiez	5	3	SGA, SPK, KIS4, QPK3
No parents-taxi-zone	5	0	
Steig um!, Mobi	5	1	CC, SGA, KIS4
Velobus / Walkingbus	4	0	SGA, CC, SPK
Leaflet with new traffic regulation	4	0	CC, SGA, KIS4
Cycling to work / after work tours	4	0	AOK, ADFC
Usage of results MobilBericht to define measures	3	0	QPK3, KIS4
Combination public transport and active modes	3	1	SPK, KIS4
The City - Your Fitness Club	3	1	KIS4
Presentation cycling-friendly employer scheme	3	0	AOK
Pool of cargo-bikes for testing	3	1	ADFC
Arguments for promoting active mobility	2	0	QPK3
Fitness check	2	1	KIS4
"fun" cycling training in schools	1	0	AOK
Questionnaire about needs	1	0	
Mitradgelegenheit – „Shared Cycle Ride“	1	2	ADFC
BA Pankow as cycling-friendly employer	1	0	
Cycling course for women	1	0	
Cooperation	1	0	
HIA guidelines for planning in district mandatory	0	2	CC
New: New Citizens Package			
New: Bonus programmes: Walking / cycling to school			

Source: Own illustration.

The majority sees safe travel to school action plan important and easy to implement. In this regard, it was brought forward that those plans already exist, yet some participants have doubted the quality of the plans. They rather give rise to fear amongst parents by pointing out dangerous spots on the way to the school of their children. In the past a social organisation has elaborated those (CÖGA mbH, 2019). Nevertheless it seems that this will change as one participant thinks that an external planning office is elaborating those plans at the moment. In addition, it was stated that it could be that in regular cycles the school routes are reviewed from the district with Fuss e.V. As this could not have been verified during the focus group, it should be looked up again when taken up the idea of elaborating those plans. No parents-taxi-zone, i.e. a zone in front of the school in

which no parents are allowed to drive with their car to drop them off, was preferred by five persons. A new idea for a measure was further highlighted – a bonus programme in which pupils receive a stamp when walking or cycling to school so that parental taxis are becoming obsolete automatically. It is recommended to look at the materials from VCD or BUND für Umwelt und Naturschutz, in engl. Association for environment and nature protection (BUND) in regards to walking/cycling to school. Those associations already have materials to promote walking and cycling in schools including stamps and stamp templates (BUND-Berlin, 2019; VCD, 2019a). The measure Velobus or Walkingbus which are organised walks or cycles to school, go perfect hand in hand with the safe travel to school plans, no-parents-taxi-zones and incentives for children (bonus programme).

Highly rated were measures concerning marketing when new infrastructure for active modes are introduced and leaflets with new traffic regulations. Two organisational units each are interested to participate in that activity. It was mentioned that the idea of printing and distributing leaflets exist already since a lot of years and has been discussed in the FahrRat, an administrative and political council in which topics about cycling are discussed. It was stressed that connecting marketing for new infrastructure with leaflets is seen beneficial as often infrastructure is introduced which not everyone knows about, even if it is part of the traffic regulations. The example of a cycling street was given here. Even if, creating those materials have already been discussed in other groups, this shall still be regarded as a needed and possible measure. Arguably, a new established cooperation can give those ideas from the past new boost.

Campaigns which gives incentives to people to not use their car for a month were ranked positively by a lot of people, yet no one wants to do it as it seems being a lot of effort, particular for initiatives who work voluntary. It was stressed at this point that they would rather prefer measures which also gives incentives to people who have been using active modes for a long time. Arguably, this is understandable, but for the aim to promote active mobility, people are to target who do not use active modes at all or not as often to change behaviour and increase the health status. Consequently, a measure can be developed which targets people who do not use active modes as often, but also do not own a car. Since the car ownership rate per household is at 70 per cent for whole Berlin (SenUVK, 2015), it can be said that there are still many people not having access to a car. New citizen packages were stressed being suitable here since it targets people who are situated in a transition phase and thus are open for something new (see above). When showing them alternatives to do trips in Pankow and Berlin without a private car, it is more likely that they change their routines towards active modes or public transport.

A further measure presented was “The city your fitness club” which is about showing that a fitness club membership might become obsolete when travelling actively through the city becomes possible. Surveys can be helpful here to get to know what the district needs to offer so that travelling through the district is seen as being fun and active; similar to a fitness club visit.

Two participants want to look closer in the transition between public transport and active modes. Here, it was brought up that currently a lot of new spots for bicycle parking facilities at public stations are analysed and developed which is to help the situation for the transition. It can be argued that those results shall be awaited. After the building plans

are available, it should be looked at again to see if those measures are enough to promote the transition between active modes and public transport.

The two institutions already involved in the campaign Bike2Work and after work tours have shown their interest in further cooperation here. This measure was clustered with the presentation for cycling-friendly employers in the district. It was seen as a perfect match with promoting their campaign Bike2Work. This measure therefore might not be interesting for the cooperation to promote active mobility itself as no further players showed their interest, but might be picked up by the AOK Pankow themselves. This shows that not always ideas or cooperation approaches are created for a cooperation, but also new inputs can create new ideas for their own organisation. Arguably, this is a further benefit of taking part in rounds with different players. In addition, interest was raised to certify Pankow as cycling-friendly employer.

Using the results of the research project MobilBericht was ranked high by some participants as well. This is arguably positive as hereby existing cooperation with universities are used.

Some other measures were also ranked valuable, yet only one institutional unit, if even, want to work on it so that no cooperation for elaborating the measures are seen at the moment.

It was also shown interest to work for the measures fun cycling training in school, "Mitradgelegenheit", in engl. a shared cycle ride, and a pool of cargo bikes. The interest however showed the institution who already perform those measures.

The representative from Fuss e.V. stressed that many of the presented measures target cycling, but few walking. It was highlighted that most of those measures can also be done for walking issues, e.g. new citizens taking part in a cycling tour to get to know the district. Thus, in the following cooperation process this is to be included.

Fuss e.V. was the only organisation or organisational unit who did not show their interest for collaboration. This might be due to the few activities which target walking activities, or due to having few capacities right now and thus not wanting to commit to something which eventually cannot be hold.

Nearly in the end, it was noticed that the measures which were presented underneath survey have barely been rated. This was due to a misunderstanding. In the beginning someone asked if also "survey" can be rated. It was understood that the headline "survey" was meant which was neglected. However, that person meant all of the measures below the headline. Nonetheless, the measure in regards to the HIA was rated being of interest. It is recommended that this measure and also the other proposals shall be looked at again so that everything has once been included and ranked.

In the end, it was brought up by the representative of QPK3 that Pankow was for the European Mobility Week in 2020. The representative of QPK3 already leads the working group prevention chain which also targets similar issues as discussed here. Pankow was already registered for the European Mobility Week in 2019. It was proposed to do some little projects in that week which can be a start of a measure, presenting a finished measure or something new which targets active mobility. It was suggested that many players shall take part to have a diverse programme.

The focus group finished with everyone showing interest to be part of such a working group or cooperation regularly. As also the representative of Fuss e.V. showed interest, it can be claimed that the restraints in working actively for some measures not resulted from lack of interest.

The exercise showed clear favourite measures by the group. Particular positive can be seen that planning offices are in favour of marketing campaigns for their infrastructure. This goes in accordance with the findings of WHO Europe (2006) who have analysed that through a cooperation of transport and health departments, changes in infrastructure were combined with motivational campaigns.

Nussbaum (2016) claims that social health depends on social participation. Since the working group wants to design neighbourhoods in accordance to the mobility law and with public participation, social health can be increased. Due to having a representative of SPK who leads participation processes in the working group, this measure can be performed qualitatively. Here, it is seen important to also reach people who are generally absent from those participation processes such as children or people with disabilities, as well. According to Edwards and Tsouros (2008), a healthy city is an active city. It can be claimed that this can be reached by the designing those neighbourhoods accordingly.

This exercise further showed the interest in collaborating, becoming active in their means of possibilities and performing different measures. It can be argued that due to having one goal, which is crucial according to Böhme and Reimann (2018), several measures were perceived being interesting from different institutional units.

4.2.2.6. Calculate the budget / expense per measure

Table 8: Expenses per measure

Measure	Once	Repetitive	Long-term
Car-free days			
Safe travel to school action plan			
Marketing when implementing new active mobility infrastructure			
Mobility law per Kiez			
No parents-taxi-zone			
Steig um!, Mobi			
Velobus / Walkingbus			
Leaflet with new traffic regulation			
Cycling to work / after work tours			
Usage of results MobilBericht to define measures			
Combination public transport and active modes			
New: New Citizens Package			
New: Bonus programmes: Walking / cycling to school			

Source: Own illustration.

The sixth step in a collaboration step is to calculate the budget or the expenses per measure. In the course of the research, this cannot be done since costs are not known. Nevertheless, assumptions can be done. Table 8 reflects the measures in which more than two institutions or units want to work in (or for the cluster) and the new measures created in the discussion. The measures are classified to “once”, i.e. one-time work, “repetitive”, i.e. working on it repetitively and long-term, i.e. need a long time to finish.

For example a car-free day can be organised once. Therefore, a dark grey field is coloured for “once”, but as it can also be done repetitively, e.g. every year, that field is coloured light grey. For most of the measures to become successful, a multi-time approach is needed. This is the case with campaigns such as “Steig um!”, Velobus and leaflets. Those measures need continuous work to keep up to date. A Velobus route for example needs to be reviewed regular if it is still the best. New ones will also be necessary in the next years since many new schools are built in Pankow. Therefore, having safe travel to school action plans for every school is a long-term task; same as designing different neighbourhoods according to the mobility law. Therefore, before deciding to put in place certain measures, this needs to be considered. It is inefficient and also does not create acceptance if some measure are set up once, such as leaflets and new citizen programmes, but are not revised or used after a while.

To finance the different measures, different funding can be used. From the environmental ministry, prevention law and arguably also from federal level from the transport senate in regards to the mobility law (BMG, 2015; BMU, 2019a; SenUVK, 2018). Those funding possibilities were presented in front of the group (see appendix 8) and acknowledged. No further funding pools were added by the participants during the focus group.

4.2.2.7. Elaborate a timetable

A timetable is to give the group a frame which measure are performed first and when they shall be introduced. It is recommended to start with the measure most institutions wanted to work for, such as designing the neighbourhoods according to the mobility law, car-free days and measures for school mobility. Since Pankow will take place in the European Mobility Week, that week can be used to do the first car-free day. During that week, a design of the first neighbourhood according to the mobility law can be presented and a start for a second neighbourhood celebrated.

For the measures regarding school mobility, it is recommended to talk to the VCD or BUND who already work with schools in that matter. It is known that the VCD has general interest in the working group anyway.

Since marketing material are fairly easy to do and distributed and the amendments of the traffic regulation will come into force soon (BMVI, 2019d), it is recommended to start working on those issues soon, too. By distributing marketing material, the working group receives public attention for their objectives which strengthens the cooperation.

A more detailed timetable is not elaborated at this stage. This needs to be done by the cooperation themselves so that it fits to everyone’s work load.

4.2.2.8. Distribute tasks

Similar applies to distributing tasks. The cooperation itself needs to distribute those in their next meetings. Arguably, the distributing of the tasks needs to be aligned with the expertise of the institution or institutional unit and the time able to spend for the measure.

4.3. Practical Recommendations and Future Research

A high value for the research was seen in talking to the different experts of the organisation promoting active mobility as well as to the representatives in the district. Here, the importance for the topic promoting active mobility and its combination with health among those players were evaluated. Similar important was seen the exchange between those players through the focus groups. Some have talked to each other for the first time. Therefore, the personal meeting was seen very valuable for the aim of the research, but can also be seen for their future work in the district. Further, the participants mentioned the format being very inspiring.

Due to talking to experts from associations which promote active mobility and the health insurance, a broad picture about their activities and aims were gathered. This information would not have been gathered by solely looking at the websites. Through the interviews, it was analysed that many institutions want to collaborate more. It is advised performing interviews to get to know those notion in future research.

It was learned that for forming a working group, i.e. a cooperation, it not solely needs to be looked at which organisational units can be included, but also which persons. Attitudes and willingness to change something in the current system highly depends on persons. The ones gathered showed motivation and the right attitudes towards the topic. Arguably, this can also be a limitation in such a research as it depends on personalities. The same approach of research might have worked differently in a different district or in the same to a different time. By choosing the participants wisely, this limitation can be overcome. The aim is to make a cooperation successful therefore this selection is needed. Fortunately, in this research process, this was not needed. The ones who wanted to take part also were the ones motivated. It can be argued that this might also be the case in other districts or cities. The ones who are not interested are less likely to participate in something which is seen as an add-on to their work load.

In addition, a limitation is seen that none of the participants directly have the power to decide something. Even if a formal decision to promote physical activity in public exists, the ideas of the working group will need to be agreed on from a further authority before putting them into place. By incorporating people with more decision power in the process, measures can be introduced a lot faster.

A limitation is also seen in not having received rankings to some measures which were clustered to "survey" due to a misunderstanding (see above). In future research, the work assignment needs to, next to the oral explanation, also written down. Arguably, that matter can never be overcome totally as misunderstandings or misinterpretations can always occur in every research, qualitative or quantitative. However, the degree shall be limited. As the working group still has the possibility to rank those measures for themselves in the future, this limitation can be limited. Positively, can be seen that due to the direct exchange with the participants, this problem was detected which arguably would not have been the case in most quantitative approaches.

For future research, it is recommended to leave more time in ranking the measures as some participants mentioned the exercise being too short. 20 minutes was given for it. Particular to be able to assess the expenses for the presented measures, more time would have been needed. Yet for ranking and deciding where to work for in the future, the time was sufficient.

Further, interviews or a survey can be done with citizens which represent the target group. Hereby, data can be gathered about the needs of people in regards to changing to active modes due to health reasons. To target the population, e.g. insured people at health insurances can be asked. This information is able to define the mission statement, the approaching target group and objectives more clearly. Arguably, this can still be done by the working group in the future, thus independent from this research.

It is recommended to elaborate an evaluation about the cooperation process in the future. This thesis regarded the set-up, but which measure generates success and leads to a higher share of active modes is not known yet. Interesting is also to see, how the distributing of tasks for a measure will end up and work out. An evaluation of funding pools can further be integrated, i.e. which were used and worked best.

5. Conclusion

The aim of the master thesis is to determine how a cooperation between the transport and health sector in the district of Berlin-Pankow can be established to promote active mobility among the population and which actions need to be taken. To answer the research aim, four objectives were set:

- Assess the importance of active mobility for health.
- Evaluate the importance of inter-sectoral cooperation.
- Identify health-enhancing measures and cooperation which are already in place in other cities in regards to active mobility.
- Analyse the status in Berlin-Pankow of inter-sectoral cooperation.

A qualitative research approach was chosen to meet the study aim and objectives. Two focus groups and interviews were done to get to know insights about existing cooperation from organisations who promote health and active mobility and employees from the district of Berlin-Pankow. Furthermore, the literature review was used to enhance the validity of the arguments and to align the findings to the data collected through the qualitative research.

After having discussed the terms of health, mobility and transport with its factors, trends and politics, the importance of active mobility for health was assessed. It was found that active mobility is beneficial for physical, social and mental health, e.g. cycling and walking helps to reduce overweight (Avila-Palencia et al., 2018; Dons et al., 2018; Smart, 2018). This is a central health issue in Germany nowadays (Robert Koch-Institut, 2013). In the focus group it was seen that the participants agree on the findings in the literature and were able to connect them with their work content.

Different advantages of inter-sectoral cooperation to promote active mobility have been discussed. One advantage is to gain competitive advantage. In the context of the public hand it is to improve their services and measures to reach a shared interest for the public good more effectively. Further, a cooperation raises motivation among the participants to promote a matter they stand for. This was seen in the focus groups. This answers the second objective of this thesis.

For the third objective, some health-enhancing measures and cooperation which are already in place have been discussed. Switzerland already performs different measures to promote active mobility (Götschi et al., 2015). Most of the identified measures are done in cooperation, yet only one measure in Germany follows a collaborative approach (WHO Europe, 2006).

In regards to the fourth objective, three relevant inter-sectoral cooperation in form of working groups in the district were considered for analysing. Even though, all of them include the transport department, only one cooperation in form of a working group is bringing health and mobility together. This is the working group Präventionsketten (prevention chain) which has the aim to promote active mobility in urban areas. It was highlighted that this working group already aims for a tighter cooperation to promote active mobility in the district of Berlin-Pankow. However, as the working group still lacks participation from some department, this research concerned how this cooperation can be improved, which actual measures can be elaborated and who need to be asked for participation. For this purpose different offices in the districts were invited to the first focus

group. Particular important can be seen the presences of representatives from urban and street planning. Also the representative from public participation is seen highly valuable since social health can be enhanced by the use of participation processes (Nussbaum, 2016).

For being able to answer the research aim, it was firstly evaluated that the representatives in the district have similar objectives. This is beneficial since a working group or cooperation needs to see some relevance to their field of work (Böhme & Reimann, 2018). Next, successful cooperation structures ask for setting objectives together (Bolte et al., 2018). In the discussion, strengths, weaknesses and opportunities were mentioned in regards to promote active mobility. The current system with too few staff and traditional beliefs were mentioned. Strengths were seen in new staff, current laws and personal willingness of employees to promote active mobility. Further changes in regulation and continuous staffing processes are seen as opportunities. The notion was given by the participants that in a cooperation in which they want to work in transparency, using synergies and non-competitive thinking are important.

Böhme and Reimann (2018) recommend a cooperation with health insurances. This was also brought up from the interview partners. Further, cooperation with universities and implementing an inter-disciplinary cooperation to promote active mobility was raised too. This goes along with the approach of this thesis and the measures presented. Positively was seen that promoting active mobility in general has increased in the last years in form of participants in campaigns and employers pushing that topic among their employees. Negatively needs to be mentioned, the lack of safe cycling infrastructure, not seeing the bicycle as a health provider from official side and the non-existence of certified prevention programmes to promote cycling.

The research has shown that the outlined cooperation concept has been widely accepted by the participants in the second focus group. Only small amendments were discussed. It is beneficial that the involved offices and organisations which want to form the cooperation were present since agreeing on objectives together limits resistance and increases the motivation. Everyone needs to see some relevance to their field (Böhme & Reimann, 2018; Bolte et al., 2018).

The group clearly favoured certain measures, e.g. designing the neighbourhoods according to the mobility law and organising a car-free day in the district. Next, measures for active school mobility and marketing campaigns were preferred. Possible connections between e.g. school mobility and campaigns were further identified.

The research showed the will to design neighbourhoods in accordance to the mobility law and with public participation. This goes in accordance with Nussbaum (2016) and Edwards and Tsouros (2008). The former claims that social health depends on social participation and the latter argue a healthy city being an active city.

Since deeper elaborations of budgets, timetables and task distribution were not part of the research aim, only brief recommendations were given in these regards. To the group it was recommended to have a look on to those elements and decide on them in detail.

The research has further demonstrated that everyone from the focus group is motivated to meet again to evaluate which measures can be placed in action. In addition, interview partner who were not able to take part in the focus group showed their interest, too.

It was seen valuable to include different players in the research. Further, the research showed that it is positive to integrate those representatives who want to change something. Hereby, a positive work atmosphere was generated. Yet, a limitation needs to be seen in the limited power of the participants due to being dependent on other authorities. For future research it is recommended to give the participants more time during the practical part and to add a survey or interviews with citizens to get to know which measures would make them to use active modes stronger. An evaluation about the first steps of the cooperation is recommended to receive more learnings about what has worked.

Bibliography

§9 EStG, (2019).

§ 24 StVO.

Aberle, G. (2009). *Transportwirtschaft - Einzelwirtschaftliche und gesamtwirtschaftliche Grundlage*. München: Oldenbourg Wissenschaftsverlag GmbH.

Adams, J., Khan, H., Raeside, R., & White, D. (2007). *Research Methods for Graduate Business and Social Science Students*. London: Sage Publications Limited.

ADFC. (2019a). ADFC Fahrradklima-Test 2018. Retrieved from <https://www.fahrradklima-test.de/>

ADFC. (2019b). Aktiv zum Arbeitsplatz: Mit dem Rad zur Arbeit. Retrieved from <https://www.adfc.de/artikel/aktiv-zum-arbeitsplatz-mit-dem-rad-zur-arbeit/>

ADFC. (2019c). Reiseziele, Reisegefährten und Gesundheit. Retrieved from <https://www.adfc.de/artikel/reiseziele-reisegefaehrten-und-gesundheit/>

ADFC. (2019d). Zertifizierte Arbeitgeber. Retrieved from <https://www.fahrradfreundlicher-arbeitgeber.de/zertifizierte-arbeitgeber/>

Ahrens, G. A., Aurich, T., Böhmer, T., Klotzsch, J., & Pitrone, A. (2010). *Interdependenzen zwischen Fahrrad- und ÖPNV-Nutzung – Analysen, Strategien und Maßnahmen einer integrierten Förderung in Städten. Endbericht*. Dresden.

Annema, J. A. (2013). Transport resistance factors: time, money and effort. In B. van Wee, J. A. Annema, & D. Banister (Eds.), *The transport system and transport policy: an introduction*. Cheltenham, UK: Elgar, E.

Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey Bass.

AOK Rheinland-Pfalz. (2017). Schwere Last: die Folgen von Übergewicht und Adipositas. Retrieved from <https://www.vigo.de/rubriken/krankheit-und-therapie/stoffwechsel/lesen/uebergewicht-und-adipositas-folgen.html>

ARL. (2014). *Umwelt- und Gesundheitsaspekte im Programm Soziale Stadt – Ein Plädoyer für eine stärkere Integration*. Retrieved from Hannover:

Art. 14 AEUV (ex-Artikel 16 EGV), .

Avila-Palencia, I., Int Panis, L., Dons, E., Gaupp-Berghausen, M., Raser, E., Götschi, T., . . . Nieuwenhuijsen, M. J. (2018). The effects of transport mode use on self-perceived health, mental health, and social contact measures: A cross-sectional and longitudinal study. *Environment International*, 120, 199-206. doi:<https://doi.org/10.1016/j.envint.2018.08.002>

Bauer, U., & Bittlingmayer, U. H. (2001). *Zielgruppenspezifische Gesundheitsförderung*. Bern: Huber.

BauGB Anlage 2 (zu § 13a Abs. 1 Satz 2 Nr. 2) Abs. 1,.

- Becker, U. J. (2016). *Grundwissen Verkehrsökologie - Grundlagen, Handlungsfelder und Maßnahmen für die Verkehrswende*. München: oekom.
- Becker, U. J. (2018). Verkehr und Umwelt. In O. Schwedes (Ed.), *Verkehrspolitik 2. Auflage* (pp. 71-88). Wiesbaden: Springer.
- Beikler, S. (2016, 11/04/2016). Rot-Rot-Grün plant Straßenbahnausbau und Radgesetz. *Tagesspiegel*.
- Bezirksamt Pankow. (2014). *Zur gesundheitlichen und sozialen Lage von Kindern im Berliner Bezirk Pankow - Ausgewählte Ergebnisse der Einschulungsuntersuchungen für das Schuljahr 2013/2014*. Retrieved from Berlin:
- Bezirksamt Pankow. (2018). Gesundheitsförderung im Bezirk Pankow. Schwerpunkt: Auf- und Ausbau von Präventionsketten. Retrieved from <https://www.berlin.de/ba-pankow/politik-und-verwaltung/bezirksamt/beschluesse-des-bezirksamts/2018/artikel.677679.php>
- Bezirksamt Pankow. (2019a). Bezirkskoordination. Retrieved from <https://www.berlin.de/ba-pankow/politik-und-verwaltung/service-und-organisationseinheiten/sozialraumorientierte-planungskoordination/dokumente/artikel.535686.php>
- Bezirksamt Pankow. (2019b). Gesundheitsförderung. Retrieved from <https://www.berlin.de/ba-pankow/politik-und-verwaltung/service-und-organisationseinheiten/qualitaetsentwicklung-planung-und-koordination-des-oeffentlichen-gesundheitsdienstes/artikel.141085.php>
- Bezirksamt Pankow. (2019c). MobilBericht. Retrieved from <https://www.berlin.de/ba-pankow/politik-und-verwaltung/aemter/stadtentwicklungsamt/mobilbericht/>
- Bezirksamt Pankow. (2019d). Willkommen in Pankow. Retrieved from <https://www.berlin.de/ba-pankow/ueber-den-bezirk/>
- Blümel, S. (2011). Akteure, Angebote und Strukturen. In B. f. g. Aufklärung (Ed.), *Leitbegriffe der Gesundheitsförderung und Prävention – Glossar zu Konzepten, Strategien und Methoden* (pp. 14-18). Köln.
- Gesetz zur Stärkung der Gesundheitsförderung und der Prävention, (2015).
- BMU. (2016). Pariser Klimaschutzabkommen tritt in Kraft [Press release]. Retrieved from <https://www.bmu.de/pressemitteilung/pariser-klimaschutzabkommen-tritt-in-kraft/>
- BMU. (2017). *Klimaschutz in Zahlen: Der Sektor Verkehr*. Retrieved from Berlin: https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/klimaschutz_in_zahlen_verkehr_bf.pdf
- BMU. (2019a). Klimaschutz durch Radverkehr. Retrieved from <https://www.klimaschutz.de/radverkehr>
- BMU. (2019b). Projektkarte. Retrieved from <https://www.klimaschutz.de/projektkarte>
- BMVI. (2019a). Bundeshaushalt. Retrieved from <https://www.bundshaushalt.de/#/2016/soll/ausgaben/einzelplan/12.html>

- BMVI. (2019b). Der Deutsche Fahrradpreis. Retrieved from <https://www.der-deutsche-fahrradpreis.de/>
- BMVI. (2019c). Förderung des Radverkehrs. Retrieved from <https://nationaler-radverkehrsplan.de/de/bund/foerderung-des-radverkehrs>
- Referentenentwurf des Bundesministeriums für Verkehr und digitale Infrastruktur, des Bundesministeriums für Wirtschaft und Energie und des Bundesministeriums für Umwelt, Naturschutz und nukleare Sicherheit XX. Verordnung zur Änderung straßenverkehrsrechtlicher Vorschriften, (2019d).
- BMVI, & DVR. (2019). Runter vom Gas. Retrieved from <https://www.runtervomgas.de/mitmachen/fahrradhelm.html>
- Böhme, C., & Reimann, B. (2018). *Integrierte Strategien kommunaler Gesundheitsförderung - Rahmenbedingung, Steuerung und Kooperation - Ergebnisse einer Akteursbefragung*. Retrieved from Berlin:
- Bolte, G., Brüchert, T., Baumgart, S., & Quentin, P. (2018). *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*. Retrieved from Bremen and Dortmund:
- Bryman, A., & Bell, E. (2007). *Business Research Methods* (Vol. 3rd Edition). New York: Oxford University Press Inc.
- Bucksch, J., & Schneider, S. (2014). Walkability aus Sicht der Public Health *Walkability* (pp. 47-60). Bern: Hans Huber.
- BUND-Berlin. (2019). Zu Fuß zur Schule. Retrieved from <https://www.bund-berlin.de/themen/mobilitaet/fussverkehr/zu-fuss-zur-schule/>
- Bundesrat. (2019). Top 35 - E-Scooter. Retrieved from https://www.bundesrat.de/DE/plenum/bundesrat-kompakt/19/977/35.html;jsessionid=D30D325C4C7E5FC2B23BF5107F2A02D8.1_cid339?nn=4352768#top-35
- Bundesregierung. (2019). Klimaschutz gilt.
- Buzan, T. (2014). *Das kleine Mind-Map-Buch - Die Denkhilfe, die Ihr Leben verändert* (Vol. 6th Edition). Munich: Wilhelm Goldmann Verlag.
- BVG. (2017). *Zahlenspiegel 2018*. Retrieved from Berlin:
- BVG. (2019). Publikationen. Retrieved from <https://unternehmen.bvg.de/de/Unternehmen/Medien/Publikationen>
- CAM. (2018). *Der Abgasskandal und die Vertrauenskrise im Automobilmarkt – Ursachen, Lösungen und Auswirkungen auf den Verbraucher*. Retrieved from Bergisch Gladbach: https://www.vzbv.de/sites/default/files/downloads/2018/09/13/cam_gutachten_vertrauenskrise_im_automobilmarkt_v1.1.pdf
- Chan, J. S. Y., Yan, J., & Payne, V. G. (2013). The Impact of Obesity and Exercise on Cognitive Aging. *Frontiers in Aging Neuroscience*, 5, 97.

- Changing Cities. (2019). Berliner Strassen für alle! Retrieved from https://changing-cities.org/wp-content/uploads/2019/11/BerlinerStrassenFuerAlle_OnlineVersion_20-11-2019.pdf
- CÖGA mbH. (2019). Die CÖGA mbH. Retrieved from <http://www.schulwegplaene-berlin.de/>
- Copenhagenize. (2015). Copenhagenize Index. Retrieved from http://copenhagenize.eu/index/01_copenhagen.html
- Cropley, A.-J. (2002). *Qualitative Forschungsmethoden - Eine praxisnahe Einführung*. Frankfurt am Main: Verlag Dietmar Klotz.
- Daubitz, S. (2018). Mobilität und Exklusion In O. Schwedes (Ed.), *Verkehrspolitik 2. Auflage* (pp. 209-224). Wiesbaden: Springer.
- Deffner, J. (2009). Zu Fuß und mit dem Rad in der Stadt. Mobilitätstypen am Beispiel Berlins. *Dortmunder Beiträge zur Raumplanung, Verkehr*(Band 7).
- Deffner, J. (2018). Fuß- und Radverkehr. In O. Schwedes (Ed.), *Verkehrspolitik 2. Auflage* (pp. 415-444). Wiesbaden: Springer.
- Deffner, J., Hefter, T., & Götz, K. (2014). Multioptionalität auf dem Vormarsch? Veränderte Mobilitätswünsche und technische Innovationen als neue Potenziale für einen multimodalen Öffentlichen Verkehr. In O. Schwedes (Ed.), *Öffentliche Mobilität* (Vol. 2. Auflage, pp. 201-227). Wiesbaden: Springer.
- Deutscher Bundestag. (2018). *Sachstand - Dienstfahräder*. Retrieved from <https://www.bundestag.de/resource/blob/573434/723ad11cecec3420aad7e46aaf92eb36/WD-5-120-18-pdf-data.pdf>
- DGPH. (2019). Übersicht. Retrieved from <http://www.deutsche-gesellschaft-public-health.de/>
- Die Zeit. (2018, 08/06/2018). Kinder können schlechter Fahrrad fahren. *Die Zeit* Retrieved from <https://www.zeit.de/mobilitaet/2018-08/fahrradpruefung-fahrrad-kinder-nordrhein-westfalen>
- DIW, & DLR. (2017). *Verkehr in Zahlen 2017/2018*. Retrieved from Hamburg: https://www.bmvi.de/SharedDocs/DE/Publikationen/G/verkehr-in-zahlen-pdf-2017-2018.pdf?__blob=publicationFile
- Doblhammer, G., Georges, D., & Barth, A. (2015). *Einschränkungen in Mobilität und Sensorik als Risikofaktoren für Demenzerkrankung, Pflegebedarf und Sterblichkeit*. Retrieved from
- Dons, E., Rojas-Rueda, D., Anaya-Boig, E., Avila-Palencia, I., Brand, C., Cole-Hunter, T., . . . Götschi, T. (2018). Transport mode choice and body mass index: Cross-sectional and longitudinal evidence from a European-wide study. *Environment International*, 119, 109-116.
- DUH. (2009). *Handlungsmöglichkeiten für mehr soziale Gerechtigkeit durch kommunalen Umweltschutz: Umweltgerechtigkeit*. Retrieved from

http://www.duh.de/uploads/tx_duhdownloads/Dokumentation_Umweltgerechtigk eit.pdf

- Edwards, P., & Tsouros, A. D. (2008). *A healthy city is an active city*. Retrieved from Copenhagen:
- Eißel, D., & Chu, C. P. (2014). The future of sustainable transport system for Europe. *AI & Society*, 29(3), 387-402. doi:<http://dx.doi.org/10.1007/s00146-013-0461-3>
- Essen, H. v., Schrotten, A., Otten, M., Sutter, D., Schreyer, C., Zandonella, R., . . . Doll, C. (2011). *External Costs of Transport in Europe*. Retrieved from Delft: https://cedelft.eu/publicatie/external_costs_of_transport_in_europe/1258
- EU. (2019a). Bike2Work. Retrieved from <http://www.bike2work-project.eu/en/>
- EU. (2019b, 2019/05/18). MOBILITY AND TRANSPORT. Retrieved from https://ec.europa.eu/transport/road_safety/specialist/knowledge/pedestrians/pedestrians_and_cyclists_unprotected_road_users/walking_and_cycling_as_transport_modes_en
- FAZ. (2019, 03/01/2019). „Wir möchten, dass die Menschen ihr Auto abschaffen“. *Frankfurter Allgemeine Zeitung*. Retrieved from <https://www.faz.net/aktuell/wirtschaft/mehr-wirtschaft/berlin-verkehrssenatorin-guenther-fordert-verzicht-auf-autos-16067793.html>
- Fontana, A., & Frey, H. (1998). Interviewing: The art of science. . In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 47-78). Thousand Oaks, CA: Sage.
- Foster, S., Villanueva, K., Wood, L., Christian, H., & Giles-Corti, B. (2014). The impact of parents'fear of strangers and perceptions of informal social control on children's independent mobility. *Health Place*, 26, 60-68.
- Franzkowiak, P. (2015). Gesundheitswissenschaften / Public Health. In BZgA (Ed.), *Leitbegriffe der Gesundheitsförderung*.
- FUKO2018. (2018). 2. Deutscher Fußverkehrskongress. Retrieved from <https://fussverkehrskongress.de/#veranstalter>
- Garrard, J., Rissel, C., & Baumann, A. (2012). Health Benefits of Cycling. In J. Pucher & R. Buehler (Eds.), *City Cyling* (pp. 31-55). Massachusetts: Massachusetts Institute of Technology.
- Gesetz über den öffentlichen Gesundheitsdienst (2006).
- GDP. (2010). *A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010*. Retrieved from
- Gehl, J. (2015). *Städte für Menschen* (Vol. 2). Berlin: jovis Verlag GmbH.
- Gertz, C., Flämig, H., Gaffron, P., & Polzin, G. (2018). Stadtverkehr In O. Schwedes (Ed.), *Verkehrspolitik 2. Auflage* (pp. 293-322). Wiesbaden: Springer.

- Gesundheit Berlin-Brandenburg. (2019). Arbeitskreis Bewegung. Retrieved from <https://www.gesundheitbb.de/Bewegung.1352.0.html?&L=414>
- Ghekiere, A., Deforche, B., Carver, A., Mertens, L., de Geus, B., Clarys, P., . . . Van Cauwenberg, J. (2014). Insights into children's independent mobility for transportation cycling—Which socio-ecological factors matter? *Journal of Science and Medicine in Sport*, *20*, 267-272.
- Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Gnirke, K. (2018, 18/04/18). Verkehrsminister blockiert Aufklärung im Fall Porsche. *Spiegel Online*. Retrieved from <https://www.spiegel.de/wirtschaft/unternehmen/porsche-andreas-scheuer-blockiert-aufklaerung-in-diesel-afaeere-a-1203476.html>
- Götschi, T., Kahlmeier, S., Martin-Diener, E., Brian, M., Bize, R., Simonsons, T., & Rathod, A. (2015). *Aktive Mobilität und Gesundheit - Hintergrundbericht für den nationalen Gesundheitsbericht 2015*. Retrieved from Obsan:
- Grandjot, H.-H. (2002). *Verkehrspolitik - Grundlagen, Funktionen und Perspektiven für Wissenschaft und Praxis*. Hamburg: Deutscher Verkehrs-Verlag GmbH.
- Hartig, T., Mitchell, R., de Vries, S., & Frumkin, H. (2014). Nature and Health. *Annu. Rev. Public Health*, *35* 207-228.
- Hartung, S., & Rosenbrock, R. (2015). Gesundheitspolitik. In BZgA (Ed.), *Leitbegriffe der Gesundheitsförderung*.
- Henseling, C., Hahn, T., & Nolting, K. (2006). *Die Fokusgruppen-Methode als Instrument in der Umwelt- und Nachhaltigkeitsforschung*. Berlin: Institut für Zukunftsstudien und Technologiebewertung (IZT).
- Hensher, D. A., & Reyes, A. J. (2000). Trip chaining as a barrier to the propensity to use public transport. *Transportation*, *27*(4), 341-361. doi:10.1023/A:1005246916731
- Holz-Rau, C., & Scheiner, J. (2019). Land-use and transport planning – A field of complex cause-impact relationships. Thoughts on transport growth, greenhouse gas emissions and the built environment. *Transport Policy*, *74*, 127-173.
- Hoppe, A. (2003). *Fokusgruppen als qualitative Marktforschungsmethode*. Hannover: Lehrstuhl Markt und Konsum, Universität Hannover.
- Huber, J., Kirig, A., Rauch, C., & Ehret, J. (2015). *Die Philips Gesundheitsstudie*. Retrieved from Frankfurt:
- Hurrelmann, K. (2000). Gesundheitsförderung - Neue Perspektiven für die Pflege. In B. Rennen-Allhoff & D. Schaeffer (Eds.), *Handbuch Pflegewissenschaft* (pp. 591-607). Weinheim and Munich: Juventa.
- Hurrelmann, K., & Laaser, U. (2006). Gesundheitsförderung und Krankheitsprävention. In K. Hurrelmann, U. Laaser, & O. Razum (Eds.), *Handbuch Gesundheitswissenschaften* (Vol. 4, pp. 749-780). Weinheim and Munich: Juventa.

- Hurrelmann, K., & Leppin, A. (2001). *Moderne Gesundheitskommunikation*. Bern: Huber.
- Hüttmann, B. (2014). Vortrag von Dr. Barbara Hüttmann zur Mobilität junger Menschen. Retrieved from <https://bsl-transportation.com/vortrag-von-dr-barbara-huttmann-zur-mobilitat-junger-menschen/>
- immowelt. (2019). Mietspiegel in Berlin. Nürnberg: Immowelt AG.
- Jacobsen, P. L., & Rutter, H. (2012). Cycling Safety. In J. Pucher & R. Buehler (Eds.), *City Cycling*. Massachusetts Massachusetts Institute of Technology.
- juraforum. (2019). Dienstwagen. Retrieved from <https://www.juraforum.de/lexikon/dienstwagen>
- Kickbusch, I. (2003). Gesundheitsförderung. In F. W. Schwartz & e. al. (Eds.), *Das Public Health-Buch. Gesundheit und Gesundheitswesen*. (pp. 181-188). Munich: Urban & Fischer.
- Klima-Bündnis. (2019a). Stadtradeln - Hintergrund zur Kampagne. Retrieved from <https://www.stadtradeln.de/hintergrund>
- Klima-Bündnis. (2019b). Stadtradeln - Schulradeln. Retrieved from <https://www.stadtradeln.de/schulradeln/>
- Knoflacher, H. (2007). *Grundlagen der Verkehrs- und Stadtplanung*. Budapest: Böhlau Verlag.
- Kohl, H. W., Craig, C. L., Lambert, E. V., Inoue, S., Alkandari, J. R., & Leetongin, G. (2012). The pandemic of physical inactivity: global action for public health. *The Lancet*, 380(9838), 294-305.
- Köhler, R. (2018, 18/01/13). „Weil wir dich lieben“ - Die BVG und ihre Liebeskampagne. *Berliner Morgenpost*. Retrieved from <https://www.morgenpost.de/berlin/article213093505/Weil-wir-dich-lieben-Die-BVG-und-ihre-Liebeskampagne.html>
- Kongress Armut und Gesundheit. (2019a). Fenster zur Technischen Universität Berlin. Retrieved from https://express.converia.de/frontend/index.php?page_id=6802&v=List&do=15&day=734&ses=7443#anker_session_7443
- Kongress Armut und Gesundheit. (2019b). Mobilität - Planung - Gesundheit: zusammen handeln! Retrieved from https://express.converia.de/frontend/index.php?page_id=6802&v=List&do=15&day=734&ses=7434#anker_session_7434
- Kooperationsverbund gesundheitsziele.de. (2008). *Ziele auswählen, entwickeln und evaluieren. Zentrale Konzepte von gesundheitsziele.de. Gesellschaft für Versicherungswissenschaft und -gestaltung*. Retrieved from Köln:
- Lambiase, M. J., Barry, H. M., & Roemmich, J. N. (2010). Effect of a simulated active commute to school on cardiovascular stress reactivity. *Med. Sci. Sports Exerc*, 42(8), 1609.

- Larouche, R., Saunder, T., Faulkner, G., Colley, R., & Tremblay, M. (2014). Associations between active school transport and physical activity, body composition and cardiovascular fitness: a systematic review of 68 Studies. *J. Phys. Act. Health*, 11, 206-211.
- Lee, J., He, S. Y., & Sohn, D. W. (2017). Potential of converting short car trips to active trips: The role of the built environment in tour-based travel. *Journal of Transport & Health*, 7, 134-148. doi:<https://doi.org/10.1016/j.jth.2017.08.008>
- Mackett, R. L. (2003). Why do people use their cars for short trips? *Transportation (1986-1998)*, 30(3), 329-349.
- Marmot, M. (2001). Introduction. In M. Marmot & R. G. Wilkinson (Eds.), *Social Determinants of Health*. United States: Oxford University Press.
- Martinez-Gomez, D., Ruiz, J. R., Gomez-Martinez, S., Chillón, P., Rey-López, J. P., Díaz, L. E., & Marcos, A. (2011). Active commuting to school and cognitive performance in adolescents: the AVENA study. *Arch. Pediatr. Adolesc.*, 165(4), 300-305.
- McCarthy, M. (2001). Transport and health. In M. Marmot & R. G. Wilkinson (Eds.), *Social Determinants of Health* (pp. 132-154). United States: Oxford University Press.
- Mecke, I. *Kooperation - Definition* G. Wirtschaftslexikon (Ed.) Retrieved from <https://wirtschaftslexikon.gabler.de/definition/kooperation-39490>
- Mendoza, J. A., & Liu, Y. (2014). Active commuting to elementary school and adiposity: an observational study. *Childhood Obesity*, 10(1), 34-41.
- Merton, R. K., Fiske, M., & Kendall, P. L. (1956). *The focused interview: A manual of problems and procedures*. Glencoe: Free Press.
- MiD. (2010). *Mobilität in Deutschland - Tabellenband*. Retrieved from Bonn:
- MiD. (2018a). *Mobilität in Deutschland - Kurzreport*. Retrieved from Bonn:
- MiD. (2018b). *Mobilität in Deutschland - Tabellenband*. Retrieved from Bonn:
- MiD. (2019a). *Mobilität in Deutschland - Langbericht*. Retrieved from Bonn:
- MiD. (2019b). *Mobilität in Deutschland - MiD - Analysen zum Radverkehr und Fußverkehr*. Retrieved from Bonn: http://www.mobilitaet-in-deutschland.de/pdf/MiD2017_Analyse_zum_Rad_und_Fussverkehr.pdf
- Mobilität, Z. (2015). AUF DEM WEG ZUR FAHRRADSTADT. *Zukunft Mobilität*. Retrieved from <http://www.zukunft-mobilitaet.net/117042/urbane-mobilitaet/radverkehr-paris-radwege-radschnellwege-rev-foerderung-abstellanlagen/>
- Mueller, N., Rojas-Rueda, D., Cole-Hunter, T., de Nazelle, A., Dons, E., Gerike, R., . . . Nieuwenhuijsen, M. (2015). Health impact assessment of active transportation: A systematic review. *Preventive Medicine*, 76, 103-114. doi:<https://doi.org/10.1016/j.ypmed.2015.04.010>

- Mueller, N., Rojas-Rueda, D., Salmon, M., Martinez, D., Ambros, A., Brand, C., . . . Nieuwenhuijsen, M. (2018). Health impact assessment of cycling network expansions in European cities. *Preventive Medicine*, 109, 62-70. doi:<https://doi.org/10.1016/j.ypmed.2017.12.011>
- Mulhern, S. (2018). Wie uns die Ciclovía in eine grünere, aktivere Zukunft führt. *G Adventures*.
- Nelson, M. E., Rejeski, W. J., Blair, S. N., Duncan, P. W., Judge, J. O., King, A. C., & al., e. (2007). Physical activity and public health in older adults: recommendation from the American College of Sports Medicine and the American Heart Association. *Med. Sci. Sports Exerc.*, 39, 1435-1445.
- Nordqvist, C. (2017). What is mental health? *MedicalNewsToday*, 2019(04/13/19).
- NPM. (2019). *Wege zur Erreichung der Klimaziele 2030 im Verkehrssektor - Arbeitsgruppe 1 Klimaschutz im Verkehr*. Retrieved from Berlin:
- Nussbaum, M. C. (2016). Introduction: Aspiration and the Capabilities List. *Journal of Human Development and Capabilities*, 17(3), 301-308. doi:10.1080/19452829.2016.1200789
- Online-Verwaltungslexikon. (2019). Leitbild. Retrieved from <https://www.olev.de/l/leitbild.htm>
- PASTA. (2019). Bike it. Walk it. Live it.
- Pausch, R. (2019, 19/03/12). Der Straßenkrieger. *ZEIT Online*. Retrieved from <https://www.zeit.de/2019/11/andreas-scheuer-verkehrspolitik-klimaschutz-csu>
- Pizarro, A. N., Ribeiro, J. C., Marques, E. A., Mota, J., & Santos, M. P. (2013). Is walking to school associated with improved metabolic health? *Int J Behav Nutr Phys Act*, 10. doi:10.1186/1479-5868-10-12
- Post CH AG. So entsteht ein Kooperationskonzept. In 10 Schritten zum fertigen Konzept.
- Qontentum GmbH. (2019). Eine Übersicht über die Kieze in Pankow. *Qiez*.
- roadtraffic technology. Stockholm Congestion Charge. Retrieved from <https://www.roadtraffic-technology.com/projects/stockholm-congestion/>
- Robert Koch-Institut. (2013). *Übergewicht und Adipositas in Deutschland*. Retrieved from <https://edoc.rki.de/bitstream/handle/176904/1481/23JuqX9byg62Q.pdf?sequence=1&isAllowed=y>
- Robert Koch-Institut. (2014a). *Beiträge zur Gesundheitsberichterstattung des Bundes - Daten und Fakten: Ergebnisse der Studie "Gesundheit in Deutschland aktuell 2012"*. Retrieved from Berlin: <https://www.rki.de/DE/Content/Gesundheitsmonitoring/Gesundheitsberichterstattung/GBEDownloadsB/GEDA12.html>
- Robert Koch-Institut. (2014b). *Ergebnisse der Studie »Gesundheit in Deutschland aktuell 2012«*. *Beiträge zur Gesundheitsberichterstattung des Bundes*. Retrieved from Berlin:

https://www.rki.de/DE/Content/Gesundheitsmonitoring/Gesundheitsberichterstattung/GBEDownloadsB/GEDA12.pdf;jsessionid=D49384F08780254EDE614500BB1A5544.2_cid390?__blob=publicationFile

- Robert Koch-Institut. (2015). *Gesundheit in Deutschland*. Retrieved from Berlin: https://www.rki.de/DE/Content/Gesundheitsmonitoring/Gesundheitsberichterstattung/GesInDtld/GesInDtld_inhalt.html
- Robson, C. (2011). *Real World Research* (Vol. 3rd Edition). Chichester: John Wiley & Sons Limited.
- Rosenbrock, R., & Gerlinger, T. (2006). *Gesundheitspolitik - Eine systematische Einführung* (Vol. 2). Bern: Verlag Hans Huber, Hogrefe AG.
- Sandow, E., & Westin, K. (2010). The persevering commuter – Duration of long-distance commuting. *Transportation Research Part A: Policy and Practice*, 44(6), 433-445. doi:<https://doi.org/10.1016/j.tra.2010.03.017>
- Schmacke, N. (1999). Gesundheitsziele aus Sicht der Öffentlichen Gesundheitsdienstes. *Die Krankenversicherung*, 51(H.5), 141-144.
- Schmidt, F. P., Basner, M., & Kroger, G. (2013). Effect of nighttime aircraft noise exposure on endothelial function and stress hormone release in healthy adults. *Eur Heart J*, 34(45), 3508-3514.
- Schwedes, O. (2014). Das Leitbild einer integrierten Verkehrspolitik. In O. Schwedes (Ed.), *Öffentliche Mobilität* (Vol. 2. Auflage, pp. 145-167). Wiesbaden: Springer.
- Schwedes, O. (2018). Verkehrspolitik als Gesellschaftspolitik. In O. Schwedes (Ed.), *Verkehrspolitik 2. Auflage* (pp. 3-24). Wiesbaden: Springer.
- Schwedes, O., Daubitz, S., Rammert, A., Sternkopf, B., & Hoor, M. (2018). Kleiner Begriffskanon - Der Mobilitätsforschung: Discussion Paper, 2. Auflage. *IVP-Discussion Paper, 2018 (1)*.
- SenGPG. (2018). *Bezirksprofil Bezirk Pankow*. Retrieved from Berlin:
- SenGPG. (2019). Landesgesundheitskonferenz (LGK). Retrieved from <https://www.berlin.de/sen/gesundheit/themen/gesundheitsfoerderung-und-praevention/landesgesundheitskonferenz-berlin/>
- SenGSV. (2002). *Gesundheitsberichterstattung Berlin - Neueste Lebenserwartungsberechnungen für die Berliner Bezirke*. Retrieved from Berlin:
- SenSU. *Bevölkerungsentwicklung in der Metropolregion Berlin 2002-2020 - Anlage*. Retrieved from <https://www.stadtentwicklung.berlin.de/planen/bevoelkerungsprognose/download/metropolreg.pdf>
- SenSW. (2017). *Umweltatlas Berlin - 07.05 Strategische Lärmkarten (Ausgabe 2017)*. Retrieved from Berlin: <https://www.stadtentwicklung.berlin.de/umwelt/umweltatlas/kb705.htm>
- SenUVK. (2008). *Mobilitätsdaten für Berlin und seine Bezirke - "Mobilität in Städten - SrV 2008"*. Senatsverwaltung für Umwelt, Verkehr und Klimaschutz Retrieved from

http://www.stadtentwicklung.berlin.de/verkehr/politik_planung/zahlen_fakten/mobilitaet/index.shtml.

SenUVK. (2015). *Zahlen und Fakten zum Verkehr "Mobilität in Städten – SrV 2013" - Neue Mobilitätsdaten für Berlin*. Retrieved from https://www.berlin.de/senuvk/verkehr/politik_planung/zahlen_fakten/mobilitaet_2013/

SenUVK. (2017). Berliner Energie- und Klimaschutzprogramm 2030 (BEK 2030). Retrieved from https://www.berlin.de/senuvk/klimaschutz/bek_berlin/index.shtml

SenUVK. (2018). *Berliner Mobilitätsgesetz*. Berlin Retrieved from http://gesetze.berlin.de/jportal/portal/t/140a/page/bsbeprod.psml;jsessionid=55E56D89B4CFEEEE9C536B1B31D29D777.jp28?pid=Dokumentanzeige&showdoccase=1&js_peid=Trefferliste&documentnumber=1&numberofresults=1&fromdoc=todo=yes&doc.id=jlr-MobGBERahmen&doc.part=X&doc.price=0.0#jlr-MobGBEp9.

SenUVK. (2019a). Klimaschutzpolitik in Berlin - Ziele und Grundlagen der Klimaschutzpolitik in Berlin. Retrieved from <https://www.berlin.de/senuvk/klimaschutz/politik/de/ziele.shtml>

Referentenentwurf für Abschnitt 4 zur Förderung des Fußverkehrs im Berliner Mobilitätsgesetz, (2019b).

Shaw, M., Dorling, D., & Smith, G. D. (2001). Poverty, social exclusion and minorities. In M. Marmot & R. G. Wilkinson (Eds.), *Social Determinants of Health*. United States: Oxford University Press.

Simon, H., & von der Gathen, A. (2010). *Das grosse Handbuch der Strategie-Instrumente - Alle Werkzeuge für eine erfolgreiche Unternehmensführung* (Vol. 2. Edition). Frankfurt/New York: Campus Verlag.

Smart, M. (2018). Walkability, transit, and body mass index: A panel approach. *Journal of Transport & Health*, 8, 193-201.

Sommer, C., Saighani, A., & Leonhäuser, D. (2018). NRVP-Projekt "Kosten des Stadtverkehrs" Veröffentlichung von Ergebnissen über die Kosten verschiedener Verkehrsmittel [Press release]. Retrieved from <https://nationaler-radverkehrsplan.de/de/aktuell/nachrichten/veroeffentlichung-von-ergebnissen-ueber-die-kosten>

sputnik. (2017). So viel kosten Zigaretten auf der Welt. Retrieved from <https://www.sputnik.de/programm/zigarettenpreise-steigen-weiter-100.html>

Stadt Wien. (2019). Anbindung und Verkehr - aspern Seestadt. Retrieved from <https://www.wien.gv.at/stadtentwicklung/projekte/aspern-seestadt/verkehr/>

Starke, K., & Lippert, C. (2018). Wohin mit dem Rad im Mietshaus? *ADFC Berlin und Brandenburg*.

Statista. (2019). *Preis einer Schachtel Zigaretten in Deutschland in den Jahren 2002 bis 2018 (in Euro)*. Retrieved from Hamburg: <https://de.statista.com/statistik/daten/studie/377779/umfrage/preis-einer-schachtel-zigaretten-in-deutschland/>

- statistik bb. (2016). Einwohnerinnen und Einwohner in Berlin in LOR-Planungsräumen am 31.12.2016. Retrieved from <http://daten.berlin.de/datensaetze/einwohnerinnen-und-einwohner-berlin-lor-planungsr%C3%A4umen-am-31122016>
- Statistisches Bundesamt. (2017). Automobilindustrie trägt 4,5 % zur Bruttowertschöpfung in Deutschland bei [Press release]. Retrieved from https://www.destatis.de/DE/Presse/Pressemitteilungen/2017/09/PD17_326_811.pdf.pdf?__blob=publicationFile
- Steg, L., & Vlek, C. (1997). The role of problem awareness in willingness-to-change car use and in evaluating relevant policy measures. . In T. Rothengatter & E. Carbonell Vaya (Eds.), *traffic and transport psychology. Theory and application* (pp. 465-475). Oxford: Pergamon.
- Strauss, A., & Corbin, J. (1998). Grounded theory methodology. In Denzin & Y.S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 158-183). CA: Sage: Thousand Oaks.
- TK. (2016). *Beweg dich, Deutschland - TK Bewegungsstudie 2016*. Retrieved from
- Trautner, C. (2006). Medizinische Grundlagen der Gesundheitswissenschaften. In K. Hurrelmann, U. Laaser, & O. Razum (Eds.), *Handbuch Gesundheitswissenschaften* (Vol. 4, pp. 117-146). Weinheim and Munich: Juventa.
- Umweltbundesamt. (2004). *Die NaRoMI-Studie. Auswertung, Bewertung und vertiefende Analysen zum Verkehrslärm*. Retrieved from https://www.cornelsen.de/fm/1272/NaRoMi_Studie_Charite_Umweltbundesamt%202004.pdf
- Umweltbundesamt. (2013). *Umweltbewusstsein in Deutschland 2012 - Ergebnisse einer repräsentativen Bevölkerungsumfrage*. Retrieved from Dessau-Roßlau:
- VCD. (2019a). Aktionstage "Zu Fuß zur Schule und zum Kindergarten". Retrieved from <https://www.zu-fuss-zur-schule.de/>
- VCD. (2019b). Verkehrswende: Gut für die Gesundheit. Retrieved from <https://bw.vcd.org/themen/gesundheit/>
- Veitch, J., Carver, A., Salmon, J., Abott, G., Ball, K., Crawford, D., . . . Timperio, A. (2017). What predicts children's active transport and independent mobility in disadvantaged neighborhoods? *Health & Place*, *44*, 103-109.
- Vogt, M. (2006). Psychologische Grundlagen der Gesundheitswissenschaften. In K. Hurrelmann, U. Laaser, & O. Razum (Eds.), *Handbuch Gesundheitswissenschaften* (Vol. 4, pp. 147-182). Weinheim and Munich: Juventa.
- von Rueden, U., Gosch, A., Rajmil, L., Bisegger, C., & Ravens-Sieberer, U. (2006). Socioeconomic determinants of health related quality of life in childhood and adolescence: results from a European study. *Journal of Epidemiology and Community Health* (1979-), *60*(2), 130-135.
- Walton, D., & Sunseri, S. (2010). Factors influencing the decision to drive or walk short distances to public transport facilities. *Int. J. Sustain. Transp.*, *4*(4), 212-226.

- Wandler, R. (2019, 19/05/13). Fahrverbote zeigen Wirkung: Madrid atmet auf. *Der Standard*. Retrieved from <https://derstandard.at/2000102987063/Fahrverbote-zeigen-Wirkung-Madrid-atmet-auf>
- WHO. (1946). *Constitution of the world health organization*. Retrieved from <http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf?ua=1>.
- WHO. (2008). *Pacific Physical Activity Guidelines for Adults - Framework for Accelerating the Communication of Physical Activity Guidelines*. Retrieved from https://www.who.int/dietphysicalactivity/publications/pacific_pa_guidelines.pdf
- WHO. (2016). *Physical activity strategy for the WHO European Region 2016–2025*. Retrieved from Copenhagen, Denmark:
- WHO. (2019). Mental health: a state of well-being. Retrieved from https://www.who.int/features/factfiles/mental_health/en/
- WHO Europe. (1986). *Ottawa-Charta zur Gesundheitsförderung, 1986*. Retrieved from
- WHO Europe. (2006). *Collaboration between the health and transport sectors in promoting physical activity: examples from European countries*. Retrieved from Copenhagen:
http://www.euro.who.int/__data/assets/pdf_file/0010/87499/E90144.pdf
- WHO French Healthy Cities Network. (2014). *Active mobility every day – The role of local government* Paper presented at the 4th High-level Meeting, Transport, Health and Environment Paris.
- Wildner, M., & Weitknuat, R. (1998). Aufbau einer epidemiologisch begründeten Gesundheitsberichterstattung. *Das Gesundheitswesen*, 60(Sonnerheft 1), 11-16.
- Wilson, S. R., Solomon, K. R., & Tang, X. (2007). Changes in tropospheric composition and air quality due to stratospheric ozone depletion and climate change. *Photochem. Photobiol. Sci.*, 6, 301-310.
- Zawatka-Gerlach, U. (2018, 18/09/18). Berlin wächst langsamer als erwartet. *Der Tagesspiegel*. Retrieved from <https://www.tagesspiegel.de/berlin/amt-fuer-statistik-berlin-waechst-langsamer-als-erwartet/23078220.html>
- Zlateva, T. (2018). Berliner wollen in der Hauptstadt alt werden. *Blog der Berliner Sparkasse*.
- Zukunftsforum Public Health. (2019). Aktivitäten.
- Zuniga-Teran, A.-A., Orr, B.-J., Gimblett, R.-H., Chalfoun, N. V., Guertin, D. P., & Marsh, S. E. (2017). Neighborhood Design, Physical Activity, and Wellbeing: Applying the Walkability Model. *International Journal of Environmental Research and Public Health*, 14(76).

Appendices

Appendix 1

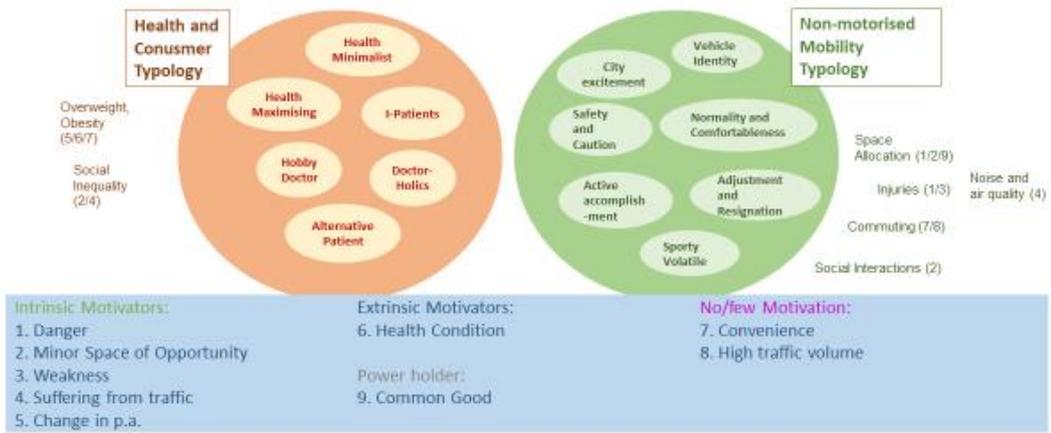
E-Mail Communication

Changing Cities (17.05.2019):

Original: Fördermitglieder haben wir zurzeit ca. 550, ordentliche Mitglieder maximal 12, und Aktive? Da nenne ich immer 150 Ehrenamtliche.

In English: At the moment we have around 550 supporting members, regular members 12 max, and active ones? There, I always mention 150 volunteers.

Typology: Health and Active Mobility



Source: Beale (2016), Dauterz (2018), Defner (2018), Gerri (2015), Lee et al. (2017), SenGPG (2019), I. Kooen-Kooh-Institut (2019), Zukunftsinstitut (2015).

26

Appendix 3

E-Mail Communication

KIS 1 Pankow (24.05.2019):

Original: Die Organisationseinheit Koordination Infrastruktur-Standortentwicklung (KIS) gibt es seit Juni 2016. Das hängt davon ab, was unter Bewegungsförderung gemeint ist. Mit dem neuen Arbeitsgebiet Mobilitätsmanagement werden zukünftig natürlich auch neue Ideen in die Stadtplanung einfließen. Aktuell ist bei uns das Thema Mobilitätskonzepte aktiv. Aber ohne Bezug zum Gesundheitswesen. Die tatsächliche Verknüpfung kann dann erst über die Maßnahmen erfolgen, die der MobilBericht liefern soll. Conrad hat schon diesbezügliche Kontakte geknüpft.

In English: The organisational unit coordination infrastructure-site-development (KIS) exists since June 2016. It depends, what is meant by promotion of health. With the work area mobility management will also flow new ideas into city planning in the future. The topic mobility concepts is active at the moment. But without the connection to the health sector. The actual connection can only be done through measures which the MobilBericht should deliver. Conrad has done networking around it already.

Phone Call

KIS 2 Pankow (23.05.2019):

Question: What kind of role plays health in the working group AG KIS?

Answer: It is not integrated since their overall objective is to build educational facilities and to remodel smaller areas.

Direct Conversation

KIS 2 Pankow (06.06.2019):

Question: Why are only the leaders of the departments invited into AG KIS?

Answer: That is not true. To the working group, the leaders of the departments are invited and other employees depending on the topic of the meeting

QPK Pankow (23.05.2019):

1. Question: Since when does the group Präventionskette exist?

Answer: In 2017 the topic on promotion of health in public areas was set. In the beginning of 2018 there has been a decision from the district for the topic. In January, the topic of promotion of physical activity was set on the health conference.

2. Question: Who is invited?

Answer: Different departments. There is a decision from the district that several departments such as social, urban development and transport need to show up. However, the some departments barely show up. Due to other priorities.

3. Question: Since how many years the position of health reporting is vacant?

Answer: Since many years, not sure how long.

4. Question: The health targets are manifested by law in Berlin? What kind of law is this?

Answer: The Landesgesundheitskonferenz is setting the targets. Have a look there.

5. Question: You are part of the Healthy Cities Network? What kind experiences do you have?

Answer: We meet every two month. Every year there is a conference of three days. Every district, apart from Reinickendorf, Steglitz-Zehlendorf and Spandau, take part. . It is a good exchange, yet active mobility is not on the agenda there.

6. Question: How dependent are you from the Senat?

Answer: Berlin has a two-stage administration. In that sense we depend on decisions from the federal state of Berlin.

Appendix 4

Work Approach

Heading	Concept	Criteria	Statement
Statement	Accessibility	Available	allow changing from stations
Statement	Accessibility	Optimising	Parking garages; digitalisation/rental systems - public transport - personal view - changeover. BVG / VBB App
Statement	Attractiveness	Welcoming	It must become more inviting so that you don't think about it in terms of safety - helmet / overtaking with the truck. That's why they're not changing
Statement	Attractiveness	Comfortable	Over 50% within 5km - comfortably by bike. There people for the bike can win.
Work field	Attractiveness	Far away	not trusted - safe, attractive neighbourhoods point to set, as far away from management level.
Laws and Regulations	Building code	Hindering	Obstructed: Building code - rigid framework, little to be allowed in citizen participation
Statement	Car-friendly	Existing	Infrastructure has been created - parking in front of the door is good and moving around well with a car
Statement	Car-friendly	Cheap	Driving short distances by car - to set up. It's pretty important. Parking fees - 30€ year for 2 years. You don't spend much time thinking about it, because you're paying anyway.
Statement	Car-friendly	Decrease	Increase residential parking
Work field	cooperation	Office spanning	Working together with infravelo
Work field	Coordination	Limited	Coordination office for social space only.
Statement	Digitalisation	Different	other mobility with smartphone (does not see increase, note: definition insufficient)
Statement	Distance	Available	short trips with private car - be made possible
Work field	Emissions	Distribution	Distribution of urban space - my area -
Work field	Emissions	Distribution	Traffic emissions less in Prenzlauer Berg, more in the north and Weißensee (initiatives that join forces there)
Statement	Emissions	Healthy living	Keeping healthy with climate protection with CO2, air.
Statement	Emissions	Cause	Thesis - Emission Caused by Traffic -
Work field	Guidelines on public participation	Citizen concern	From concerns of the citizens
Work field	Guidelines on public participation	Formal decision	Guidelines for citizen participation adopted at state level
Laws and Regulations	Guidelines on public participation	Qualifying	Are about to qualify for Pankow with planning offices.
Laws and Regulations	health insurance	Funding	Receive funds from health insurance to obtain funding and implement projects

Work field	Implementing	Simple	A citizen comes, e.g. putting up lanterns - fast realizable solutions; My work: social-space-oriented planning coordination. She is to coordinate all planning. Are in the process of building us up. Office of Citizen Participation. First contact point for citizen participation even if we often forget that SGA, for example, has already done a lot of citizen participation. Only existing as an organizational unit for one year; (new) support initiatives - first contact person (can also be a person). We don't get our hopes up. Give information / obtain and pass on information. When more active. Ganier between office and citizens. Everybody is responsible for how to make initiatives hopeful (with abstruse ideas - simply less hope). Mauerpark as an example: Noisy / We are looking for the best compromise so that none falls down too deep and hard).
Work field	Implementing	No Action	Do not implement measures yet
Laws and Regulations	Implementing	Small funding	Small projects because no big budget
Laws and Regulations	Mobility law	Beneficial	Mobility Act - beneficial and what will happen.
Laws and Regulations	Mobility law	Usage	Mobility Law - has great components and would have to be implemented much more clearly - everything takes time and we are on it.
Planning	Negative effects	Universal	negative effects of traffic - since only one can be chosen, the all-encompassing quote taken
Statement	Offer	Integrated	Mobility card - system for the whole of Berlin - secure bike infrastructure at train stations - one environmental card / mobility card for everything (car and bike sharing)
Work field	Planning	Inclusion	Are not directly involved. involved in district issues - that they work with information on parking (where)
Planning	Planning	Integrated	More: integrated planning for the neighbourhood
Work field	Planning	Sit up	Planning in the neighbourhood - listen up.
Statement	Planning	interpedencies	transport and other sectors
Work field	Planning	Break down	breaking big ones down to local ones.
Planning	Planning	Research	Now already work, research with would like to consider context studied.
Laws and Regulations	Prevention law	Beneficial	Stay healthy / promote health - the prevention law helps
Statement	Prices	Cheaper	public transport more favourable (increased mobility)

Statement	Reduction	Available	generate more / less traffic.
Statement	Safety	Subjective safety	perceived safety - many people do not feel safe on the bike. Want to ride a bike. Many people do not feel comfortable with protective strips on roads. Should plan so that the pensioners feel comfortable, then rather with the car to the supermarket
Statement	Safety	Holistic	that leads to safe neighbourhoods.
Work field	Safety	Far away	not trusted - safe, attractive neighbourhoods point to set, as far away from management level.
Measures	Structures	Break up	Although small projects are not enough because we have to deal with large structures
Laws and Regulations	Traffic regulation	Hindering	Thus negative point on current traffic regulation and which points of contact I have with it
Laws and Regulations	Traffic regulation	Needs work	Traffic regulation - traditional and very much in need of overhaul.
Laws and Regulations	Traffic regulation	Obligation	Transport policy must be regulated.
Laws and Regulations	Traffic regulation	No knowledge	Traffic regulation - amendment - I have not yet dealt with it further.
Laws and Regulations	Traffic regulation	Hindering	Thus negative point on current traffic regulation and which points of contact I have with it

Appendix 5

SWOT

SWOT	Concept	Criteria	Statement
Strength	Accessibility	Needs	Requirements for accessibility -> take over in planning
Weakness	Administration	No idol	Parking facilities (at offices) - no model
Strength	Building code	Beneficial	Regulation Parking facilities on residential buildings
Weakness	Building code	Outdated	Inadequate parking facilities in apartments
Strength	Cycling Department	Progressive	Dept. of Cycle Traffic Planning - more advanced
Strength	Cycling Department	New projects	Planning of new plants
Weakness	Not considered (measure not SWOT)		Car parks
Weakness	Not considered (measure not SWOT)		Detours for MIV
Strength	Not considered (not part of SWOT)		Examples according to the Mobility Law (necessary)
Weakness	Not considered (measure not SWOT)		Park & Ride
Weakness	Not considered (measure not SWOT)		Traffic light circuits (preferably MIV)
Opportunity	Not considered (measure not SWOT)		Extending traffic light changes through mobility law for pedestrian traffic
Weakness	Not considered (measure not SWOT)		50 km/h urban
Opportunity	Digitalisation	Overview	Project and curtain list in map -> early 2020
Strength	Guidelines Public Participation	Beneficial	Guidelines for public participation
Weakness	Guidelines Public Participation	Reach	Participation of children / prams.
Strength	Guidelines Public Participation	Reach	meinberlin.de
Weakness	Hierarchies	Existing	Hierarchies
Weakness	infrastructure	crossings	Detours to cross crossroads
Strength	Mobility Law	Beneficial	Mobility Law
Weakness	Participation	Insufficient	Insufficient participation
Opportunity	Pedestrian Law	Beneficial	Pedestrian Law
Weakness	Planning	Selective	Only selective weaknesses are eliminated
Strength	Planning	Research	Mobility Report
Strength	prevention law	Beneficial	Prevention Law (Health)

Weakness	Sharing	Limited	Rental systems not outdoors / (public transport)
Weakness	Structures	Complex	Different Authority
Weakness	Structures	Fear	Road Traffic Authority - Fear
Weakness	Structures	Instances	Many administrative bodies
Weakness	Structures	Outdated	Existing planners (planning from the past -> min. width)
Strength	Structures	New staff	New jobs/occupations
Weakness	Structures	More staff	More jobs needed to cope with tasks
Opportunity	Structures	New staff	New positions / staffing
Weakness	Structures	Project management	Few / no project management
Weakness	Structures	Responsibilities	Responsibilities
Threats	Structures	Outdated	Planning offices external -> old planning
Opportunity	Structures	Responsibilities	Mayor should stand above city councils (more decision-making power)
Weakness	Structures	Limited	Administrative staff only reporting to their city council
Weakness	Traffic regulation	Cheap	Low parking fees (federal law - parking for residents)

Appendix 6

Cooperation

Heading	Concept	Criteria	Statement
WG Urban Development	Closed Format	Exclusive	People are invited
WG Urban Development	Closed Format	Invited	QPK 3: shall be invited
WG RPV	Competitive Thinking	Non-mutual intellectual fertilisation	Think competition to WG Urban Development not fertilisation / splitting of topics
New Cooperation	Content	Mentoring	Mentoring for new projects
New Cooperation	Content	Integrated	comprehensive thinking
WG Prevention Chain	Content	Equal opportunities	Equal opportunities and justice, especially in PB-Ost, Weißensee and Buch a topic
WG Prevention Chain	Content	Promoting health	to promote movement in public spaces
WG Urban Development	Content	Considering health promotion	QPK 3: important to include health topics there, which supports the prevention law
WG Urban Development	Content	Comprehensive	Is cross sectional
WG Urban Development	Cycle	Regular	on a monthly basis
WG RPV	Flow of information	Insufficient	Therefore, WG Urban Development is discussed, but in WG Urban Development no longer about RPV events
WG Urban Development	Flow of information	Unclear	Mr. xx does not clearly specify what is done in WG Urban Development.
New Cooperation	Funding	Easier	easier to use funding for existing projects
WG Prevention Chain	Inclusion	Inviting	Everyone is welcome.
New Cooperation	Mobility Law	Break down	Think mobility law per neighbourhood
New Cooperation	Mobility Law	Usage	Closing the gap Cycling as an issue
New Cooperation	Motivation	Everyone	all want to work with
WG Prevention Chain	Participation	depending	City councils sometimes send leaders sometimes clerks
WG Prevention Chain	Participation	RPV	SPK participated, SGA and KIS not yet
WG Prevention Chain	Participation	SGA	Mr. xx from SGA takes part
WG RPV	Participation	Always	1 city council should always participate / change
WG RPV	Participation	QPK 3	QPK 3 has participated

WG RPV	Participation	KIS4	Mobility Officer not yet
WG RPV	Participation	SGA	SGA not yet
WG RPV	Participation	Other person	KIS does not participate, because one person from the urban development office is participating
WG RPV	Participation	Fewer	fewer and fewer people come to WG RPV because it always takes place on the day after WG Stadtentwicklung.
WG Urban Development	Participation	RPV	SPK participated as deputy
WG Urban Development	Participation	Not QPK 3, SGA	SPK and SGA were not yet there
WG Urban Development	Participation	High	The mayor is there
WG Urban Development	Participation	Federal	also the Senate
New Cooperation	Planning/Projects	Piloting	think in pilots
New Cooperation	Planning/Projects	Promoting health	Pin Offices - Planning has priority
WG Urban Development	Planning/Projects	Discussed	Planning is discussed
WG RPV	Power	Able to use	the WG has the possibility to write BA-templates and to present them directly to the city council, BVV receives it for knowledge
New Cooperation	Profile	Better	better profile (interfaces and added value)
New Cooperation	Public participation	Designing	Redesigning neighbourhoods according to the Mobility Act with citizen participation
WG RPV	Public participation	Coordination	Coordination of citizen participation and qualification
WG Urban Development	Rank	High	at head official level
WG Prevention Chain	Support	Luck	Frisbee course: there was a lot of concern about it / luckily found someone to support her as Amt was not willing to do so
WG Prevention Chain	Synergies	Many	Interfaces - very many
WG Prevention Chain	Topics	Content-related	work content-wise
WG Urban Development	Topics	Set	Topics given
Not considered			Knowledge+Networks - old and new on one level

Appendix 7

Interviews

Interviewee	Concept	Criteria	Statement
AOK Nordost	Behaviour change	Not safer	Normal commute: do not teach anyone to walk. Do not make the way to work any safer.
AOK Nordost	Behaviour change	Further parking	Some park a little further / park further away
AOK Nordost	Behaviour change	More cycling	Ride more bikes / partly return your car
AOK Nordost	Behaviour change	Not continuously	Sustainability: who goes on? May not make the action continuous. There must be a break for the competition
AOK Nordost	Behaviour change	Addressing	Many started because a colleague was approached and noticed that it works really well.
AOK Nordost	Behaviour change	Dismiss	Sometimes even abolish car.
AOK Nordost	Behaviour change	Positive	Positive development in Berlin with participant numbers
AOK Nordost	Behaviour change	Digitalisation	Healthy companies - set up a microsite - receive daily evaluations to incite people
AOK Nordost	Behaviour change	Positive	A year of slight decline - no matter what the weather - numbers have steadily increased. Do not moor to the weather. I can't. But period also big enough to pick out the good days. But according to km and number of days - weather is not important. Cyclist - now I change - at some point he said himself that he doesn't need a car for the few kilometres.
AOK Nordost	Behaviour change	Motivation	Reasons / Motivation: Team building - team prizes from 4 persons - prizes are drawn by lot - the new ones often much sharper on the price -> incentive. Once you are in the team - would also like to ride a bike. Working atmosphere. Employees - keeping together and communicating. It should not be about top athletic performance. Conscious: low-threshold approach. It's about taking the person who moves little with you.
AOK Nordost	Behaviour change	Funding	Events with the ADFC: after-work tours with ADFC local associations. Marketing and financial. Supply - drinks. One is responsible and nobody should dehydrate

			A bike camp for two years. By women for women. Many would drive, but are afraid that something will go wrong. To put women in the position - to drive in their areas. Technique / gearshift / tyres / tubeless / how to ride in a group. Shall as multipliers - cycling app / speed / distance stands - cycling together. App from the cooperation partner where women meet over it. Synergies are created - Cyclique - everyone has the opportunity to see something. Enable persons - not limited. Was very well received / flyer printed. When we took over layout - before the flyers were printed, places were gone. Before the fair, there were places gone. High demand. About the camp - multipliers on the way - have made extended seminar. Stay in contact and see how things progress. Stabi-training / Innovations. Goes over 4 days with entrance test / groups are put together. Heart rate monitor etc. Biopedance analysis. Show that muscles have to be laid
AOK Nordost	Behaviour change	Empowering	
AOK Nordost	Behaviour change	Physical activity	Berlin: Sixties - school action - schools are invited. Elementary schools that are coming up. With BMX association / mobile BMX track / bicycle safety and control. Bumptrack - body tension is important. Fitness goes on and on down.
AOK Nordost	Behaviour change	Transition	Wheel series we support - transition from wheel to pedals / bike control / playful - BMX sport - up and down curb. Drive with one hand. Berlin /MV - bicycle driving licence. In the Velodrom - to ride a round on the track. Police - demonstrate blind spot - drive to friend / training. Women / children affected - due to speed - blind spot
AOK Nordost	Behaviour change	Distance	In the e-bike area - could make much more length - in certain range on ascent - you can balance pulse. Not refundable as a course. Want to change it
CC	Communication	Target group	Many people reach out to those who use it
VCD	Connecting factors	Many	There are therefore different points of reference,
VCD	Connecting factors	Environment	In the field of mobility, there are many points of contact such as health, environment/sustainability and traffic safety
VCD	Connecting factors	Health	In the field of mobility, there are many points of contact such as health, environment/sustainability and traffic safety

VCD	Connecting factors	Safety	In the field of mobility, there are many points of contact such as health, environment/sustainability and traffic safety
AOK Nordost	Cooperation	Competencies	Back then: mutual understanding. Even before the action member / event together / guided tours made together. Create offers / create cooperation. In competent hands so that it is safe
Fuss e.V.	Cooperation	Universities	you should definitely cooperate with colleges/universities
VCD	Cooperation	State level	We demand that the ministries (environmental-health-traffic-education) network more closely at federal level. The issues of promoting cycling have so far only been dealt with by the BMVI and BMU, but it should also come from the Ministry of Health and be promoted
VCD	Cooperation	Universities	However, we have the NRVP project "Pedelec instead of car - but safe" to make the older population fit for the pedelec. For this purpose, fitness plans were written around the pedelec, among other things, in order to increase road safety through exercise and to see the pedelec as a piece of sports equipment. This was done together with the German Sports University.
AOK Nordost	Not considered		Road patrol and slalom racer
VCD	Cooperation	Universities	In the NRVP project "RADschlag- Infos rund ums Rad" (RADschlag- Infos around the bike) we also worked together with the German Sports University
VCD	Cooperation	Health Insurance	In Lower Saxony, a cooperation with the VCD bicycle youth campaign has been established (note Carolin: from transparency about quality programmes for health promotion in schools and day-care facilities for children in terms of behavioural and relationship prevention). There, the AOK - The Health Insurance Fund for Lower Saxony, the State Association for Health and Academy for Social Medicine Lower Saxony e.V. and the Centre for Applied Health Sciences (ZAG) of the Leuphana University of Lüneburg work together. Website: https://www.dieinitiative.de/
Fuss e.V.	Cooperation	Health Insurance	Cooperation with health insurance companies would certainly make sense
VCD	Cooperation	Health Insurance	We would like to win the health insurance companies as partners for the youth bicycle campaign. However, this is still pending
AOK Nordost	Cooperation	Federal level	Start of action - start in Bavaria / launched there. Then on AOK Germany and prepared

VCD	Cooperation	Interdisciplinary	An interdisciplinary working group on mobility - health, mobility, youth, environment, planning, transport - needs to be brought together
VCD	Corporate Identity	Sustainability	Since our corporate identity - ecological transport club Germany (VCD) - is based on sustainability, we should also mention other topics, but not focus so strongly on them
AOK Nordost	Determining factors	Infrastructure	Framework conditions must be in place - big limits in the infrastructure. Many countries ahead e.g. netherlands, copenhagen, spain (valencia). Pankow - place is no longer there. 23h Cars standing / space is taken as a pedestrian or cyclist. cars out - at least in the centres. Spain - complete blocking for cars - shuttle service for e.g. refrigerator. There was an outcry but then re-elected 5 times
AOK Nordost	Determining factors	Possibility	Not being able to come to work - also exclusionary abilities if you cannot cycle to work
AOK Nordost	Determining factors	Possession	Nothing must be forced on people
AOK Nordost	Determining factors	Prevention Programme	No certified prevention program -> is the aim being pursued? Cycling is not offered as prevention. Cycling must not be prescribed (central test centre). One may not prescribe cycling because one needs an own bike for it - is considered equipment training. Acquisition is the problem. Dutch wheels - bad. The seating position is important. Currently - depending on the device. You can ride your bike in the gym
AOK Nordost	Determining factors	Prevention Programme	In the e-bike area - could make much more length - in certain range on ascent - you can balance pulse. Not refundable as a course
AOK Nordost	Employer	Many	But a lot has been done on the AG side
CC	Employer	Promote	Bicycle-friendly employer
AOK Nordost	Employer	Costs	Employers have realized that cars cost money - employers have strongly encouraged cycling. Shower / changing room
AOK Nordost	Employer	Push	Companies: want to push - ask the AOK. Need evaluation - anonymized data. On that day / how many km etc.
VCD	Focus topics	Sustainability	The VCD focuses on sustainability and road safety
VCD	Focus topics	Traffic Safety	The VCD focuses on sustainability and road safety
VCD	Health promotion	Not seen	Bicycles have been recognised as climate protectors, but have not yet been included in health prevention and promotion

CC	Health promotion	No focus	Thinking about it, not at all specifically the focus, except statement - cycling is health
CC	Health promotion	Intergration medicines	Medical letter for the referendum
CC	Health promotion	Sporting goods	Sporting goods manufacturers - most obvious
AOK Nordost	Health promotion	Focus	Meanwhile many health mgmt or personnel. At that time: applied for action / many participants / they complained. To place in companies - multipliers sought. put up posters. Banners also placed inside. companies consciously developed. Much contacted / after hours - Dachser - tours / Federal Criminal Police Office - compete with each other. And then tours are accompanied
AOK Nordost	Health promotion	Alimentation	Main focus of the cooperation: maintaining health - nutrition very important. Prevention and nutritionists. Become active with doctor yourself. Nutrition courses - insured say want to be advised. Nutrition and exercise - advice - what do I need to pay attention to? Interpedance analysis -
VCD	Health promotion	Alimentation	At the municipal level there is the moving / healthy school, but this is often only associated with healthy food. Every aspect of a healthy life should be considered
AOK Nordost	Health promotion	Walking	Everything that promotes health / Nordic Walking courses are promoted
VCD	Health promotion	Active mobility	But we have not yet done anything about active mobility and health
AOK Nordost	Health promotion	Cycling, running, swimming	Sports - cycling, running, swimming - whatever you want to do to get fitter. Often no time - advise to integrate the movement into everyday life / conditions.
AOK Nordost	Health promotion	Everyday life	Often no time - advise to integrate the movement into everyday life / conditions.
AOK Nordost	Health promotion	Swimming	Swimming pools many too. You can go jogging anywhere. Many bathing accidents. Swimming courses are offered for children at mother-child cures. Not being able or having learned to bathe accordingly. Opportunities that are then to be used
VCD	Health promotion	Past	In the past, cycling was mainly advertised with sport/health. Now it is seen more in terms of sustainability, as for example in the campaign on city cycling (target co2 savings) or the VCD's youth cycling campaign.

AOK Nordost	Marketing	Developing	Project is constantly evolving - starting with print media. Action calendars were printed. In the meantime - almost completely online. Steady growth. Northeast - with 11,000 registered participants and 8 print participants (for MV). Print is offered
CC	Marketing	New Infrastructure	Getting concrete actions done - applying with all arguments
CC	Marketing	Inauguration	Inauguration of a bicycle road with the authorities and clubs / Application for new infrastructure
VCD	Mobility Education	Comprehensive	Work strongly in mobility education - there we address all aspects - keywords: sustainable, healthy, safe and moving mobility. For the climate on tour, the advantages of walking and cycling are included in the argumentation and presentation
VCD	Mobility Education	Traffic	Schools are more interested in the topic of traffic safety and school route safety.
CC	Mobility Education	School education	With schools - go to schools in time and inform parents - Fahrradstr. works like this and like that
CC	Mobility Education	School education	at school level
AOK Nordost	Offer	Variety	ADFC - Cycle industry - Cyclists are becoming more. Wide range of bicycles
Fuss e.V.	Promoting walking	Fun	Actions like these show that walking can be fun and also create a bit of awareness - and you can do something in the community, get into conversation with each other
Fuss e.V.	Promoting walking	Motivation	can motivate many to do so alone. We need to see how we can create incentives (and occasions) for walking
Fuss e.V.	Promoting walking	10.000 steps	For example, a long time ago FUSS took a 10,000-step walk, because health experts say that anyone who walks 10,000 steps a day keeps fit and can prolong their life
CC	Safe School Routes	Learning	Safe ways to school - children - learning to move in Berlin
VCD	Transport Politic	Awareness	It is important that the external framework provider recognises this, because e.g. in the field of air pollution control, sustainable/active mobility has become a focus of attention for the municipality
VCD	Transport Politic	Connection	At present, we do not yet perceive that the external framework provider links problems such as obesity with the promotion of active mobility - keyword - parental taxis
AOK Nordost	Not considered		Outside bicycle test - very brave. Often they still have to deal with driving control

			and when they take a bicycle test they have to pay attention to traffic rules
AOK Nordost	Not considered		MV in the 2nd year (northeast) / Berlin (3rd) - 2000
Fuss e.V.	Not considered		Barefoot walking is the healthiest way, there is the barefoot path
AOK Nordost	Not considered		Flat lands less. Brandenburg better for infrastructure, Mecklenburg-Vorpommern worse. Federal road with crash barriers.
AOK Nordost	Not considered		Traffic regulation: where can I drive. Up to 8 must, up to 10 may

Appendix 8

Presentation 27th November

Cooperation of health- and transport planning measures to promote active mobility in cities



Status and proposed actions for Berlin-Pankow

Presentation of cooperation concept and measures & discussion

27th November 2019, Rathaus Pankow
Carolin Kruse, M.Sc. Transport Sciences
Student University Hasselt

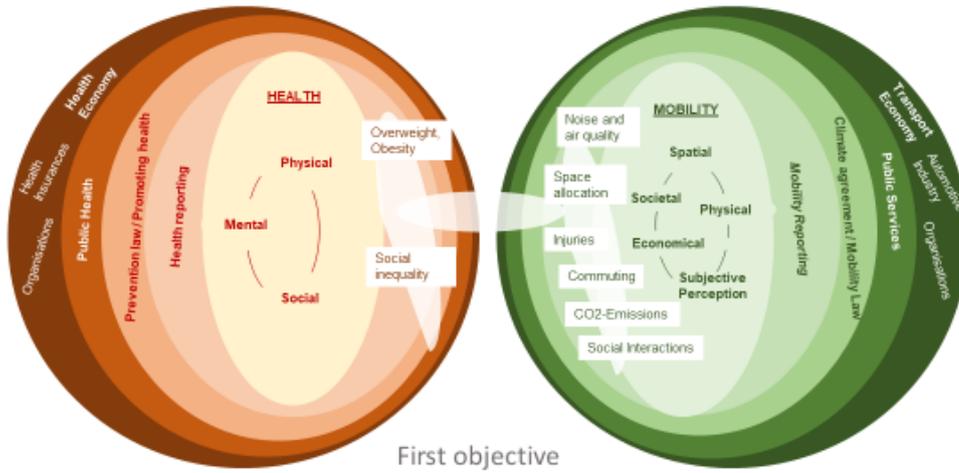
Aim and Objectives

1. Assess the importance of active mobility for health.
2. Evaluate the importance of inter-sectoral cooperation.
3. Identify health-enhancing measures and cooperation which are already in place in other cities in regards to active mobility.
4. Analyse the status in Berlin-Pankow of inter-sectoral cooperation.



How a cooperation between the transport and health sector in the district of Berlin-Pankow can be established to promote active mobility amongst the population and which measures can be taken?

Mobility and Transport: Parameters, Factors, Political instruments and Economy



3

Approach: Inter-sectoral cooperation and measures



maxientd.de



terralok.org



dfu



Öban



WHO Europe



Bezirkamt Pankow

Second objective

Third objective

Fourth objective

4

Methods - Qualitative Research

E-Mail Exchange

E-Mail exchange:

- ADFC
- Fuß e.V.

Interviews

Face-to-face:

- AOK Nordost

Telephone:

- VCD
- Changing cities

Focus Group Discussion

QPK: Health Promotion

SPK: Civic Participation

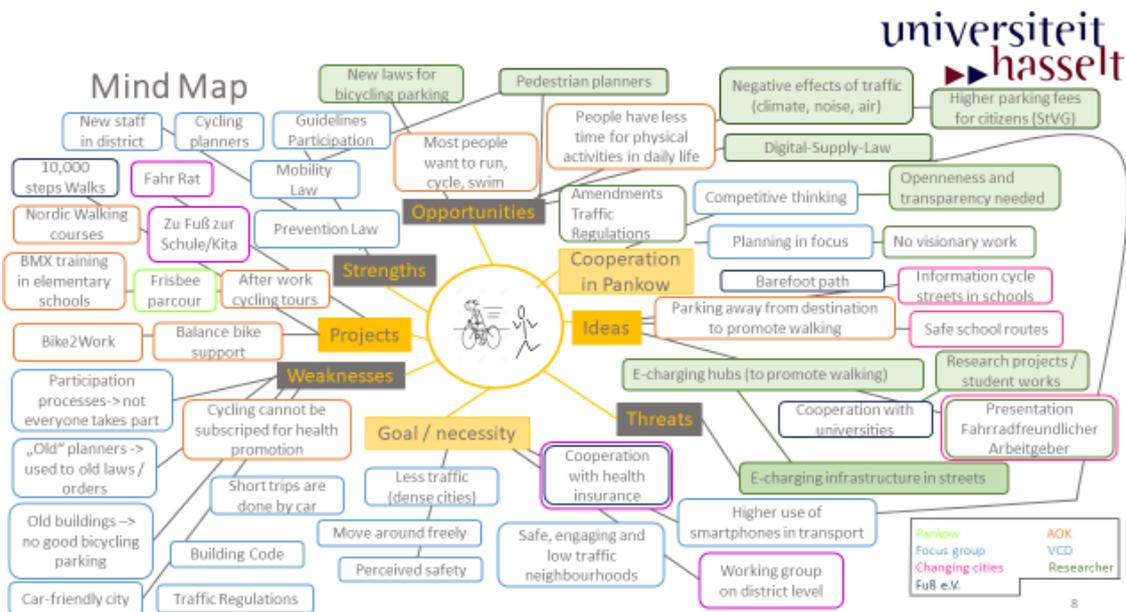
KIS4: Mobility Management

SGA: Cycling Planning

September-November 2019

30th September 2019

7



8 Schritte zu einem Kooperationskonzept

1. Legen Sie gegenseitig Ihre Ziele dar

2. Definieren Sie das Thema-> Interesse von allen Partner*innen

3. Leitbild

4. Definieren Sie ihre Zielgruppe

5. Erarbeiten und überdenken Sie ihre Maßnahmen

6. Kalkulieren Sie das Budget / Aufwand pro Maßnahme

7. Erarbeiten Sie einen Zeitplan

8. Verteilen Sie Aufgaben

Referencing: Post CHAG (o.J.)

9

1. Ziele

- Förderung von Fahrrad- und Fußverkehrsinfrastruktur (Verkehrsherausforderungen zu bewältigen) und Dienstleistungen
- Förderung der Gesundheit
- Partizipationsprozesse ermöglichen
- Gesetze und Richtlinien ausnutzen

Source: Focus Group Discussion, September 2019

10

2. Thema



Förderung der aktiven Mobilität

Damit alle Bevölkerungsgruppen jeden Alters, gesund, aktiv und unabhängig leben können.

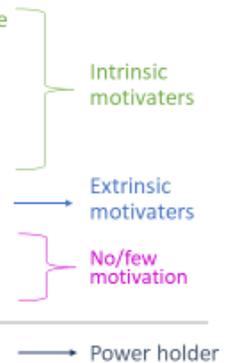
Source: Böhm, G., Brächer, T., Baumgart, S., & Quarmby, F. (2018)

11

3. Zielgruppe

Group of people who

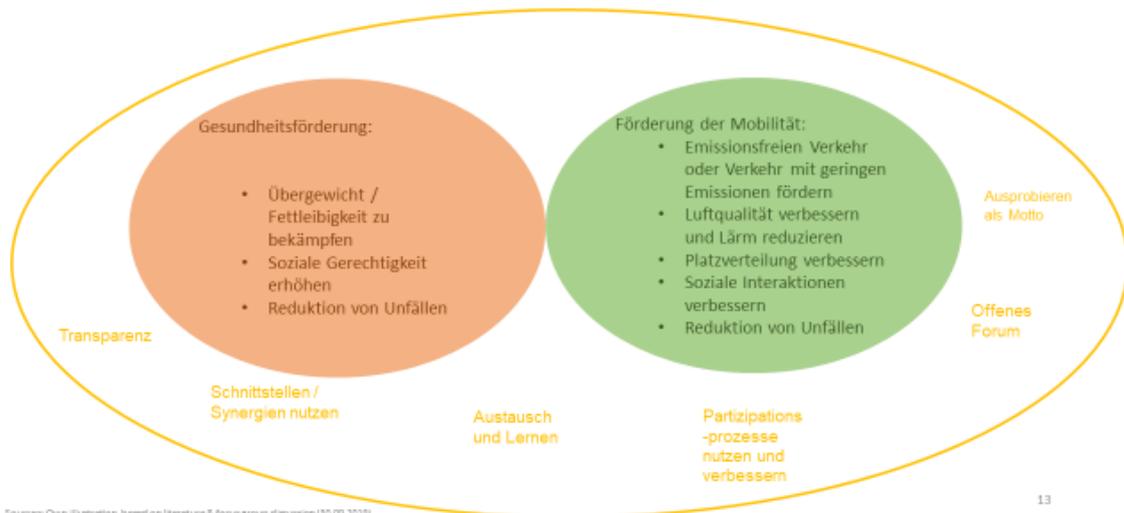
1. Are afraid of taking the bicycle (and walk certain trips), but would like to (private and material safety)
 2. Are involved in walking/cycling accidents above average (weakness)
 3. Have a restricted space of opportunity (opportunity)
 4. Suffer from the negative effects of traffic (suffering from traffic)
 5. Want to get (more) physically active in daily life (change in p.a.)
 6. Do not meet the requirements of the WHO (health condition)
 7. Do not use active modes, particular cycling – too exhausting & cause a lot of motorised traffic / commuting (convenience)
-
8. Planning offices in the district (common good)



Sources: e.g. Robert-Koch-Institut (2015), Gehl (2015), Lee et al. (2017), Bekker (2016), SenGPG (2019), Dettmer (2018), Draubitz (2018).

12

Leitbild um aktive Mobilität zu fördern



13

Cut!

Feedback zu:

- Zielen
- Themen
- Zielgruppe
- Leitbild

Habe ich etwas vergessen?

Falsch eingeordnet?

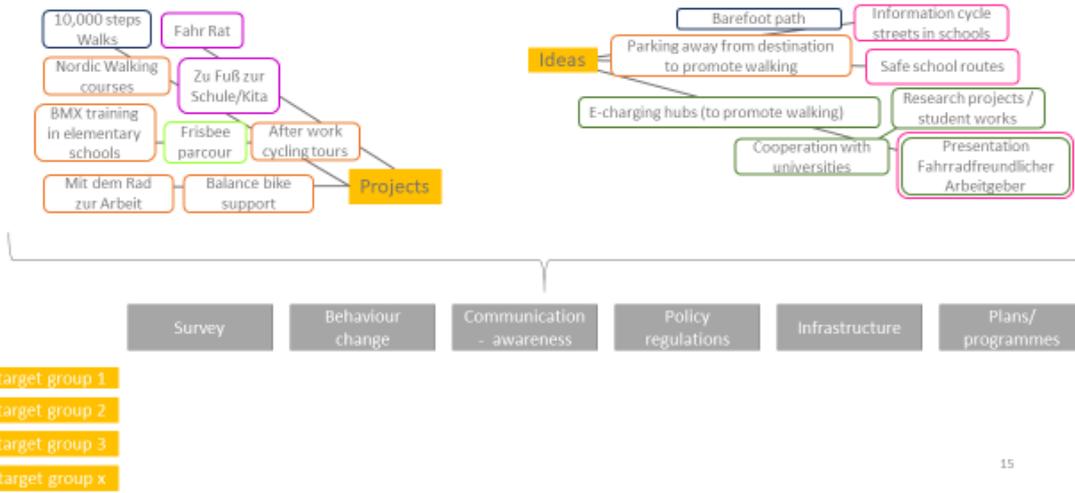
Was ist ihnen besonders wichtig?

WENN ALLES OKAY IST, MÜSSEN SIE SICH AUCH NICHT ÄUßERN!



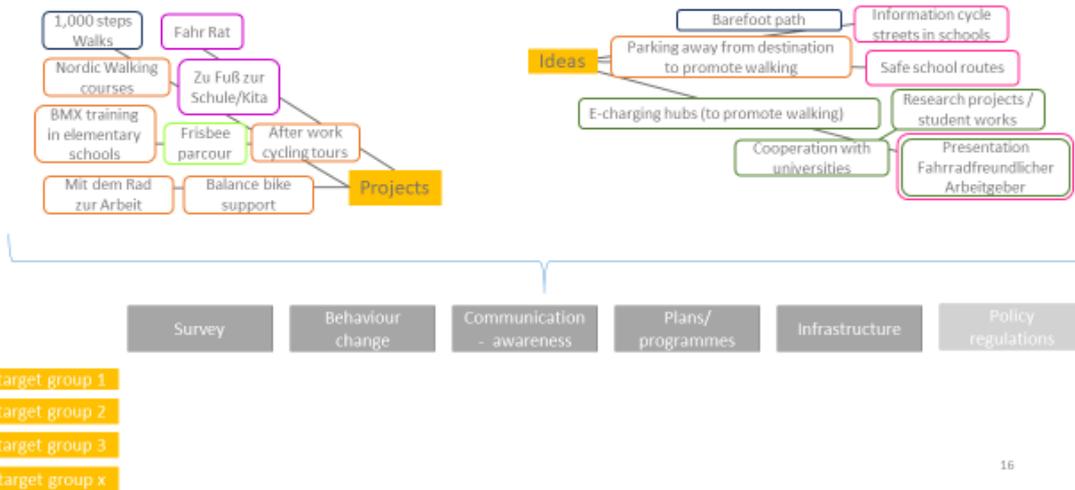
14

4. Maßnahmen: entwickeln und überdenken



15

4. Maßnahmen: entwickeln und überdenken



16

4. Maßnahmen: entwickeln und überdenken



4. Maßnahmen: entwickeln und überdenken - Beispiele

Steig um!, Mobi:

- Steig um!: Tausch des Autos gegen 400€ Mobilitätsbudget/Monat. Projekt aus Hamburg
- Mobi: Mobilitätsspiel 'From5to4' aus den Niederlanden. Das Ziel des Spiels ist Mitarbeiter*innen zu ermutigen besser / smarter zur Arbeit zu kommen (e.g. zu Fuß, Fahrrad, öffentlicher Verkehr). Sie treten in Wettkampf zu Freunden und Kollegen

Zielgruppe: change

HEAT Tool:

- Health economic assessment tool (HEAT) for walking and for cycling. Analysis of (new) infrastructure on the aspects physical activity, air pollution, injuries and carbon impact. A cost-benefit-analysis is done in regards to health benefits. Easy to use / online-based

Zielgruppe: common good

Cycling to work scheme (presentation/tours):

- Das Programm Fahrradfreundlicher Arbeitgeber berät und zertifiziert fahrradfreundliche Mitarbeiter*innen. Campus Berlin-Buch ist ein Fahrradfreundlicher Arbeitgeber. Einladung aller Unternehmen zu einer Präsentation zum Programm und Zertifizierung in Buch
- Vermarktung von Feierabend-Radtouren in Betrieben (in Kooperation mit der AOK)

Zielgruppe: change

4. Maßnahmen: entwickeln und überdenken



5. Budget / Aufwand

- Kommunalrichtlinie (Radinfrastruktur, Mobilitätsstationen)
- Klimaschutz durch Radverkehr (Radinfrastruktur)
- (Kurze Wege für den Klimaschutz – letzter Aufruf in 2018)

- Nationaler Radverkehrsplan 2020: Förderung nicht-investiver Maßnahmen für den Radverkehr (Kommunikation und Forschung)

- Präventionsgesetz: Krankenversicherungen haben die Möglichkeit 300-500€ jährlich in Gesundheitspräventionsmaßnahmen zu investieren (7€ / Versicherte*n)

Ihre Zeit! (20 Minuten bis 17:15 Uhr)

- Welche Maßnahmen finden Sie gut und sind umsetzbar? (9 rote, braune, blaue Klebepunkte)
- Welche Maßnahmen finden Sie gut sehen Sie aber derzeit nicht umsetzbar? (5 grüne, weiße, gelbe Klebepunkte)
- An welchen/r Maßnahme/n möchten Sie mit arbeiten? Schreiben Sie Ihre Organisation dazu.
- Für welche Maßnahmen brauchen Sie Unterstützung (Studienarbeiten, andere Ämter, weitere Forschung und Initiativen)? Schreiben Sie dies dazu.
- Schätzen Sie den Aufwand der Maßnahmen an denen Sie auch Mitarbeiten möchten: Gering (-), Mittel (+), Hoch (++)
- Welche weiteren Finanzierungsmöglichkeiten gibt es? Schreiben Sie diese auf und kleben Sie es an die Wand.

Danach:

- Ihre Begründung
- Gemeinsame Bewertung / Priorisierung

21

8 Schritte zu einem Kooperationskonzept

1. Legen Sie gegenseitig Ihre Ziele dar	✓
2. Definieren Sie das Thema-> Interesse von allen Partner*innen	✓
3. Leitbild	✓
4. Definieren Sie ihre Zielgruppe	✓
5. Erarbeiten und überdenken Sie ihre Maßnahmen	✓
6. Kalkulieren Sie das Budget / Aufwand pro Maßnahme	In process: rough draft in thesis
7. Erarbeiten Sie einen Zeitplan	In process: rough draft in thesis
8. Verteilen Sie Aufgaben	In process: rough draft in thesis

Referringto: Post-DHAG (p.1.)

22

Nächsten Schritte

- Auswertung des Tages und auf Papier bringen bis Ende Dezember
- Personen sind anonymisiert und werde auch nur auf die Gruppe und nicht einzelne Organisationen hinweisen. Ich kann Ihnen gerne die Abschriften der heutigen Veranstaltung zukommen lassen. Kommen in die Anhänge der MA. Wer möchte dies?
- Mitte Januar ist die Einreichung
- Ende Januar meine Verteidigung
- Falls Ihnen / Euch noch etwas einfällt, dann schreiben Sie / schreibt mir gerne

23

Many thanks for the attention

Carolin Kruse

Master Student „Transport Sciences in Distance Learning“ at Hasselt University

carolin.kruse@student.uhasselt.be

+49 176 633 17065

24

Appendix 9

Focus group II: 27th November 2019

Step	Kind of (goal/target group/measure)	Statement
Goals	n.a. as already considered	foot traffic infrastructure does not occur. Do not leave common areas indoors / marinate pavements. Isn't that important? / n.b.: But - described that way. / Okay
Goals		To keep through traffic out, needs more than infrastructure. Also 30 km/h (which Pankow cannot afford in itself). / n.b.: signs for me also infrastructure. Promotion of the quality of stay is important.
Goals		reduction of the MIV is still necessary. It is nice that associations have joined forces to halve the number of cars in Berlin. This should be recorded here
Goals	n.a. as already considered	to improve participation processes. Better to function. Who are less strong. / n.b.: Good that you say that, we already had that in our first nudist group. I have simply summarised this under "Improving participation processes". It's good that you brought it out, then you got it again.
Target Group	n.a. as measure	This also applies here. Should not only encourage cycling and walking, but barriers must also be created. / n.b.: This is not yet about the measures, but yes, that would be important
Target Group	n.a. as measure	Important who you want to address. Commuters to work and leisure traffic - they prefer to travel in the countryside. For this purpose, appropriate infrastructure would have to be provided
Target Group	n.a. as measure	I miss the connection with other means of transport. Many are also motivated to walk when public transport is better. / n.b.: We will see this later in the measures
Target Group	inclusion	Inclusion. All can participate in traffic. Topic Inclusion. / n.b.: I see all the possibilities here - one could still include the word inclusion
Target Group	n.a. as measure	Subjective safety - not only the state of the art - but also that you feel safe. Here I am not only thinking about infrastructure but also about courses to drive safely. / n.b.: We're not at the measures yet. Am completely with you. insecure - does not feel safe, does not have to be objectively insecure
Target Group	safety	Not only my safety but also the material safety. If I put the bike down somewhere, it is still where I put it down. There's a certain fear. When I buy a better bike. / n.b.: The question whether another ZG is needed for this or whether this is not described under the first point, that here also the material security is meant

Target Group	convenience	To the intrinsic motivation stories. The system is extremely cumbersome. You have your mobility needs. Every day, however, is not calculated what is best for my health, does what has always been done in the last 10 years. I don't know where to put this, this extreme inertia. / n.b.: Inertia- under 7th point - convenience - cosiness. How trying. You can offer a lot, but up to a tipping point has reached. A factor that plays a role for certain groups of people. Other question: Lack of information? Answer: No, the information is there. But I've always done it this way. Others: There are ways to intervene when life breaks down - children to school, moving house, new job, you try something new. If you've always done it this way, you don't worry too much. / n.b.: I see that especially under the heading of comfort. The tipping point has not yet been reached, so you have no motivation to change
Mission Statement		Accident reduction is in it for both. Problem: Dutch people live with the serious accidents. Count on the people who live longer because of cycling. But I don't stand for that, I find cynical. Good to tackle the reduction of accidents
Further (1-4)	healt with e-bikes	Health effects of active mobility. Cycling is better than in the car, but actually cycling is far too effective to be a sporting challenge. Slow vs. Cozy. Very diverse and a lot to do with speeds / n.b.: Yes and no - lecture on e-bikes. Much better to cycle for 10 minutes. Still there at 30 minutes/increase, but at some point it no longer has a major health effect. There is a study on e-biking as an NRVP project. And there, riding an e-bike probably still belongs in the WHO guidelines. It is useless against overweight. Cycling is too effective for that
Measure	Mobility Law	Interdepartmental / administrative. Also set a point. Important to check and implement on the local area. With local solutions and local people. I have a feasibility point. SPK - can involve citizens well and use them as experts on the ground. Why so many "more difficult to implement"? For Pankow - difficult - very many. And as a cycling view - there is more distance involved. More of a pedestrian issue. What does this mean to apply it to the neighbourhood? I find that very difficult to imagine. / KIS4: Have set "difficult to implement", must be seen in context. Find it doesn't have to contradict. Certain cycle routes must be registered. Mobility in the neighbourhood. Increase of the quality of stay through the Mobility law. / n.b.: Are we referring to the foot and wheel law here? Or also to the other parts of the law such as intelligent mobility (divided, autonomous, delivery traffic)? [Repacked upstairs]

Measure	Communication	<p>Several points in communication and behavioural change. What I noticed - what I miss / central I find. New Citizens Package. New residence - everyone who moves in - one month free public transport with city map. More useful than giving money to motorists. Not fair. You have a car and you still get 400€. New in Berlin - 150€ which the employees receive from the state of Berlin and can use for the Jobticket, public transport tickets for employers, can also be paid out - so even car drivers would receive it. 150€ per gross. Starting in November, it will be. Actually capital city allowance - because of increased rents etc. And negotiated with BVG to convert it into a job ticket (and then pay even less). Think it's weird that motorists get it too. / n.b.: Would it be okay if the 150€ could also be spent on a bike? / Yeah.</p>
Measure	Car-free days	<p>I find it very important to make the campaign / experience it. If people want it, it can be done. Legally it is probably not quite so banal. Orientation to South American cities where several streets are closed. / n.b.: Even if they do nothing else for cycling - but that doesn't have to be the case here</p>
Measure	Safe travel to school action plan	<p>School route maps already exist. For cycling and for foot traffic. It just makes sense to start at the age when children start cycling at an early age. / Are there any for cycling? I only know some that are primarily aimed at foot traffic. The ones I've seen so far were just foot traffic. / They're all aimed at everybody. Because the children are so young and must or may use the pavements. Unless there are other / I have an old plan lie. It's not on the homepage. / n.b.: Is that enough for us? Because there are initiatives that are committed to a safe way to school. / I know those plans too. Actually, I'm against the plans. Because it only says where it is dangerous. These are plans that tell parents that they cannot go to school alone. It is of course sold in such a way that the children know where it is dangerous, but it can also turn into the opposite. Requirement - sicherzurschule.de. If too many danger points are on the plan to eliminate them which of course can be implemented again. / Schools start bonus program when children come to school on foot or by bike / Then parents ride their bikes to the corner and walk the last bit / Yes, at the end of the year they get a bonus and then prefer to walk to school to get the reward / But when indeed intersections are not safe. n.b.: Would the SGA be interested in looking at school routes? In other words, to work out a prime example in order to develop a school route concept. / There are employees in the SGA who are involved in the way to school - looking at the way to school. There are regular inspections, also together with Fuss e.V., Schulland, school management? / Which group is that? / Steering group school route safety / I am not involved in that / There are regular inspections together with the plans. / Who makes the plans? / One office and one employee from different departments. Foot traffic commissioner with us. Pavement extensions where it is intended. Senate Department does that. LK Argus makes preliminary plans for the district for foot traffic over all weak points.</p>

		<p>Not just school routes. / And that's new now? / It already exists. I didn't realize it existed until now. / n.b.: Is very new that LK Argus is doing this? / don't know that. / I knew the school route maps from years ago. This is a free carrier that does this. Didn't find it very convincing. Would like to have the walk to school theme with the walk-bus and no-parent taxi zone. Which I would like to try again. In Hanover, this is therefore also conceivable for Berlin, that the school streets are closed to motor traffic from 7:30-9:00. This is a pilot concept which would fit into the context. There is a model in Hanover where this was carried out. To choose 1-2 schools for this - which otherwise do not get along so well. / I would like to cluster with the Mobility law Check. In a LOR there might be 2 schools for which this is a possibility and this would be a good idea.</p>
Measure	Leaflet with new traffic regulations	<p>people are actively informed about the new legal situation. There is an obligation to use cycle paths which has been abolished. / Flyer or other / 4 years ago the FahrRat already decided to use signs to draw attention to cycle paths that must be used. But for various reasons this has not been done in the last 4 years / I would like to cluster with application of new infrastructure. Because that is exactly what it is connected with the establishment of a new bicycle road. Once a car driver can point to traffic regulation, but also to show cyclists now also to drive this way.</p>
Measure	Pedestrian projects	<p>I noticed that there are some good ideas for cycling. Many of these can also be done with foot traffic, especially when there are community projects. not everyone rides a bike or can do it so well. Also an introductory walk to the district. Or Janes-Walks these are guided walks for citizens* without any special background, but passionate activities to get to know the district. It is important to increase the motivation to do something in community. Not everyone wants to do sports. In the community, more so.</p>
Measure	fun cycling training in schools	<p>We are already in cooperation in Pankow and with the SixDays, in order to teach cycling in day-care centres or to inspire enthusiasm for cycling. In this context, we offer action days in the day care centres throughout the year.</p>
Measure	fun cycling training in schools	<p>and I could imagine to add fun/action to bike courses in schools like the bike courses in the day-care centres in order to focus more on the bike rather than being brought to school by car</p>
Measure	Bike2Work	<p>Based on this, for the employee who cycles to work, where we are already partners with the ADFC, where we encourage employees to cycle to work, where they can win prizes / although I have long demanded that this be extended to the whole year and not just 3 months a year / n.b.: it is not allowed because of the competition. Need a beginning and an end / Could it be September. But yes, old discussion / It has already been expanded. May to end of September. They have already expanded and don't want to expand it much further, because they want to get people to switch to the bike and they only do that when the weather is fine. We have campaign stands in the companies to point out</p>

Measure	Weak points in the transition between public transport and foot/bike	is correct, but it must also be maintained. How does it look like after some time, e.g. S-Bahnhof Pankow - beautifully made bicycle facilities. But does the red one stay red or will it soon be yellow? A before - after comparison / To complement the few steps is - infravelo makes potential study at all public transport stations. You see what you can do. Therefore, it may only be necessary as an addition to the cooperation here, as it is already done. / Better look to see if it's all right / or rather look on the fingers / Are such projects done in cooperation with the Deutsche Bahn /BVG? / Partly in the S-Bahn stations. I find these points important and exciting, but I cannot do voluntary work. So I think that if there are any intersections you can work, but the main performance should not be a task of volunteering (ADFC).
Measure	Steig um!	n.b.: Everybody thinks it's good, but nobody wants to do it / yes here also from me, it's not a volunteer job
Measure	Cargobike sharing	In a few places ADFC written about it, even if not directly ADFC Pankow. But there's already the ADFC fleet. And already the BVV decision for Flotte Kommunal (cargo-bike sharing)/ n.b.: Is for all citizens? / Yes, for everyone and especially for the suburbs. Is ongoing / n.b.: Is it clear how many / where? / 20 per district. No telling how far Pankow is. End of next year / Mrs. Holz at the city council as no infrastructure measures and sponsorships are to be created / Yes, but the ADFC is slowly reaching its limits where exceptions are made / At present already 18 wheels and mainly with voluntary work possible
Measure	Cycling-friendly employer	all feasible, but nobody feels responsible for it. / Should we contact Bike2Work The Campus Berlin-Buch has already been awarded if I remember correctly / n.b.: have held silver one year ago / we should connect with Bike2Work because the AOK is already quite active there. / n.b.: Yeah, it doesn't take much. Needs a place. See which companies can be contacted. / Book is also on "Who cycles the most?" Also different again. The other is a project of the ADFC Germany. This is just the certification and are very keen to sell this. It is also not quite cheap to get certified. This goes back to the health insurance as a bonus. Gives a woman at the federal association who does this and is certainly willing to explain how it works and is paid by it. / n.b.: Can talk about it bilaterally as I am involved but not part of it.
Measure	fitness check	n.b.: partially implementable or not implementable. What was the reason for it? [no one answers]
Measure	cycling-friendly employer / Mitradgelegenheit	n.b.: Pankow as FFA / Mitradgelegenheit. At first only one actor is interested in it. I'll take it like this for now. But would that be something that could be discussed further in working groups and should be taken up? / From me at Mitradgelegenheit - are things we do anyway. Could then link to other things. If BA comes up to us and asks whether we can extend this, then the willingness is there. But otherwise I do not see the capacity to bring this into BA organisationally.

Measure	survey	n.b.: Have a quite good picture / as I understood it, we should not score in the last column? /However, everything should be scored. / gave a point. / n.b.: Yeah, that was right. / Okay. / Asked and was told no. / n.b.: I just didn't want a point to be made on the term "survey."
Measure	European Mobility Week / further cooperaiton	What I was getting at. I'd like it to be "The City - Your Fitness Club". That a survey would be useful for this - can ask what is really fun. How would you like to move through the city. The scooters don't come from anywhere or whatever else there are as game variations and that doesn't make the city to a gym / e-scooter rather the opposite? More likely to pick the people who are lazy? / For me a smooth transition to the fun factor. Whether it's laziness or fun. / n.b.: Your point was not to promote e-scooters / Yes, to find out exactly what the motivation is behind it, in order to use it for health promotion

Appendix 10

Explanation of measures

<p>HEAT Tool: Health economic assessment tool (HEAT) for walking and for cycling. Analysis of (new) infrastructure on the aspects physical activity, air pollution, injuries and carbon impact. A cost-benefit-analysis is done in regards to health benefits. Easy to use / online-based Target group: common good</p>
<p>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. Target group: common good</p>
<p>Questionnaire about needs with people who want to become more physically active Research of the needs that want to move more. Target group: change</p>
<p>Safe travel to school action plan Development of a footpath concept to ensure a safe and independent way to school. Cooperation e.g. sicherzurschule.de Target group: weakness, safety</p>
<p>Cycling courses for women Offer cycling courses for non-cyclists. Cooperation e.g. with Bikeygees, e.g.: City of Offenbach, Osnabrück Target group: less chances, change</p>
<p>Pool of cargo-bikes for testing Trying out day/pool of cargo bikes for the population of Pankow or certain population, e.g. young families Target group: change, opportunity, convenience</p>
<p>New citizens can take part in cycling tours for newbies People who have moved to Berlin have the opportunity to take part in a cycle tour for "newcomers" to get to know the cycle paths and the district, e.g. the city of Munich Target group: change</p>
<p>Velobus / Walking Bus for schools Children walk / ride together to school via different stops. Care of parents or children, e.g. Austria, Körnerkiez Neukölln Target group: safety, weakness</p>
<p>No Parent Taxi zones Parents are not allowed to bring their children to school to increase road safety. Example: City of Osnabrück Target group: safety, weakness</p>
<p>Steig um!, Mobi:</p> <ul style="list-style-type: none">• Steig um: Change your car for a mobility budget of 400€ per month. Project from Hamburg• Mobi: Mobility game 'From5To4' from the Netherlands. The aim of the game is to encourage employees to get to work smarter (e.g. walking, cycling, public transport). They compete with friends and colleagues <p>Target group: change</p>

<p>"fun" cycling training in schools Children not only learn the "cycling basics" at school but also tricks to give the bicycle a different status Target group: change</p>
<p>Cycling to work / after work tours Marketing of bike tours in companies after work (in cooperation with the AOK) Invitation to participate at Stadtradeln or / and Bike2Work Target group: suffering, change, convenience</p>
<p>District Pankow as cycling friendly employer The Berlin-Pankow district is certified as a bicycle-friendly employer Target group: common good, change, convenience</p>
<p>Bike rental Students and employees* meet at certain main roads to cycle together. Cooperation with Mitradlegenheit/fahrradbande (BUND Jugend) Target group: change, convenience</p>
<p>Fitness check A fitness check is offered for the population. After that, the person commits to walking / cycling more often. After approx. 3 months, the fitness check takes place again to analyse changes. At the same time they have to record their routes with an app. Zielgruppe: change, health condition, convenience</p>
<p>Arguments promoting active mobility Development of arguments for the promotion of active mobility for the communication measures. Orientation e.g. to Afoot guidelines: Health, Independence, Participation, Engagement, Quality of Life, Equity, Traffic safety and a sense of security, Retail, The environment and climate protection, Conserving resources Target group: common</p>
<p>Leaflet with new traffic regulation, e.g. "wrong parking" Elaboration and distribution of a flyer which informs about the StVO amendment to various regulations, e.g. parking on bicycle lanes: Target group: convenience</p>
<p>Cycling action day Bicycle Action Day, where different manufacturers present their bikes, a bike course is set up and cycling initiatives can be presented with the aim of communicating the advantages of cycling Target group: All</p>
<p>Marketing when implementing new active mobility infrastructure After or shortly before the completion of a new bicycle infrastructure, informing about it so that it becomes a direct success, e.g. a bicycle road Target group: convenience, safety</p>
<p>The City - Your Fitness Club Promoting the advantages of cycling strongly through sportiness. Compare how many calories are burned to drive up Prenzlauer Allee, how long you have to go to the gym, etc. Target group: change, health condition</p>
<p>Cooperation Cooperation with initiatives, research projects and other groups to achieve the goals of the AG</p>

<p>Presentation cycling friendly employer scheme</p> <p>The Bicycle-Friendly Employer programme advises and certifies bicycle-friendly employees*. Campus Berlin-Buch is a bicycle-friendly employer. Invitation of all companies to a presentation on the program and certification in book</p> <p>Target group: change</p>
<p>Car-free days</p> <p>Block a street / neighbourhood for one day for motor vehicle traffic and use it for active mobility. For example, South American cities (Bogota, Quito, Mexico City).</p> <p>Target group: All</p>
<p>HIA guidelines for planning in district being mandatory</p> <p>Integrate the Health Impact Assessment as a fixed and prescribed component in planning</p> <p>Target group: common good</p>
<p>Guidelines E-charging infrastructure</p> <p>The e-charging infrastructure is being expanded. Develop guidelines / concept how / where this can be developed to promote active mobility.</p> <p>Zielgruppe: convenience, problem health, common good</p>
<p>Mobility law per Kiez</p> <p>Use the Mobility law per neighbourhood. Taking stock with the citizens* and conducting initial analyses.</p> <p>Target group: All</p>
<p>Usage of results MobilBericht (Community Mapping, Participant Observation, Accessibility, survey results) to define measures</p> <p>Use the results of the MobilBericht project to define measures</p> <p>Target group: safety, weakness, opportunity, suffering, change, common good</p>
<p>Combination public transport + active modes</p> <p>Identify weak points in the transitions between public transport and active mobility and develop recommendations for action.</p> <p>Target group: opportunity, change</p>