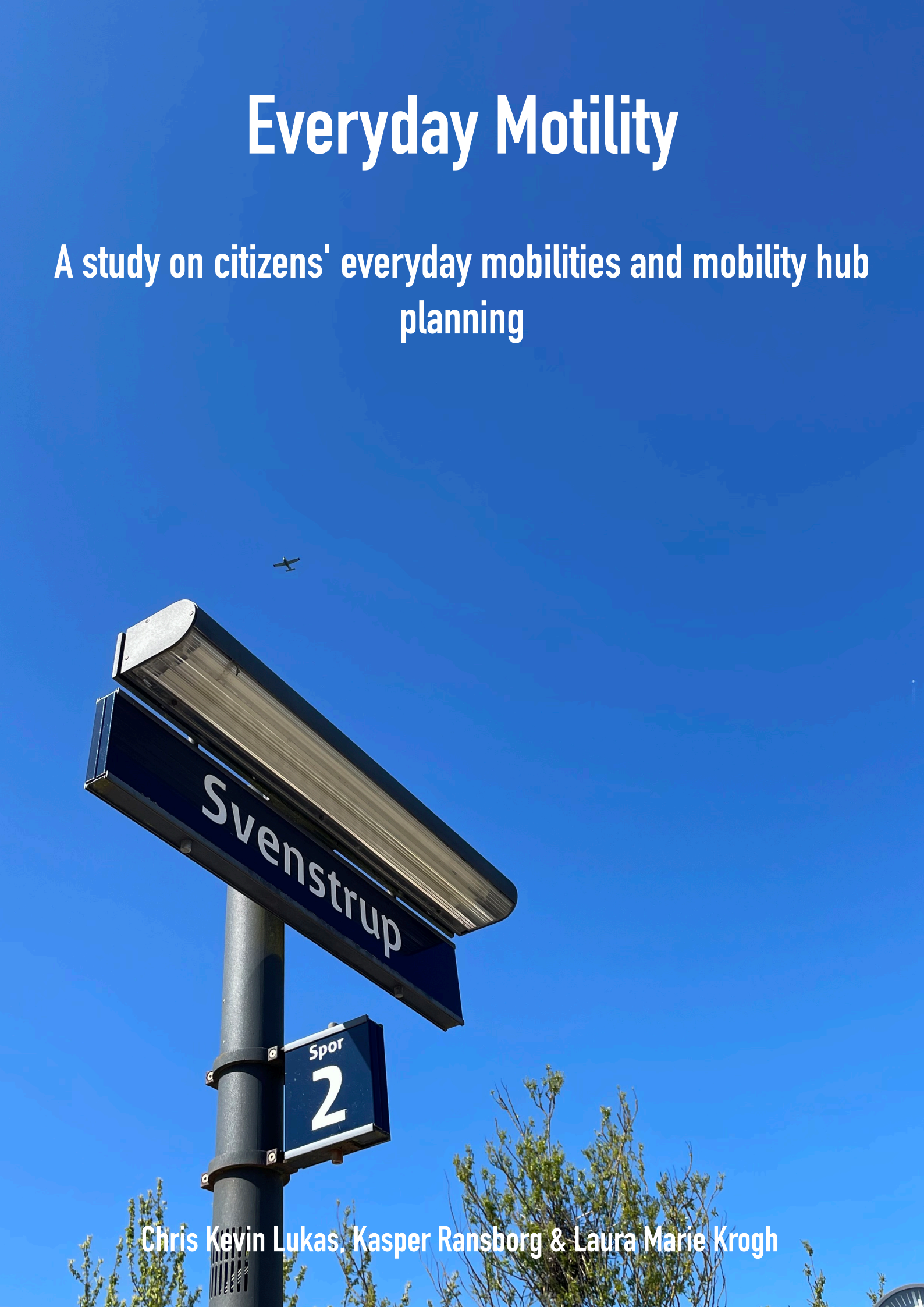
Everyday Motility

A study on citizens' everyday mobilities and mobility hub planning



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Abstract:

Mobility planning has often favored the car, which has not been without consequences. Particularly large cities are combating car-related challenges, including congestion, extensive land use, and pollution. One of the tools used to minimize future car use is mobility hubs which facilitate multimodality and reduce the need for cars. Though mobility hubs' general success and usage vary, some actors prioritize mobility hubs highly in their mobility planning, including the Danish municipality of Aalborg. While it is well known that people's mobility is highly connected to their everyday life, everyday life's connection to the use of mobility hubs has been less explored. This thesis investigates the following research question:

How can an understanding of citizens' everyday mobilities choices contribute to the planning of mobility hubs in Aalborg Municipality?

This research investigates how citizens' everyday life is considered in Aalborg Municipality's mobility planning and how citizens' everyday life affects their use and non-use of Svenstrup's mobility hub in Aalborg Municipality. The investigation of the use and non-use of Svenstrup's mobility hub is conducted through a developed theoretical concept of everyday motility, which is based on an understanding of everyday mobility and Kaufmann's (2003) concept of motility. This research finds that citizens' life highly affects their use and non-use of mobility hubs, and it is crucial to incorporate an everyday life perspective in mobility hub planning. Based on the analysis, this research concludes that Aalborg Municipality's mobility hub planning must include place-related features, ensure flexibility in the car alternatives, revise the role of the car, and must ensure a local sense of ownership and anchoring. Lastly, for mobility hubs to promote sustainable mobility habits, it is crucial that incentive structures are used to push people toward more sustainable mobility practices.

Preface

This thesis is produced by Chris Kevin Lukas, Kasper Ransborg & Laura Marie Krogh during the period from 1st of February to 2nd of June 2023, as part of the 4th semester of the master's program Urban Planning and Management at Aalborg University. The theme of this thesis is mobility hub planning, and how an everyday perspective can improve the planning and reduce the need for car use.

This thesis consists of 8 chapters in addition to appendixes, a reference list and the table of contents. The figures and tables used in this report are numbered according to the chapter they appear in, e.g. figure '2.1' indicates that this figure appears in chapter 2 and it is the first figure within this chapter. Figures and tables that have not been provided with a source reference are created by the project group itself and are identified as own table/figure. Additionally, a series of photos are used throughout the report, those produced by the group are also notes as own photos. The analysis uses a selection of planning documents from Aalborg Municipality, as well as 27 interviews with members of the public and one with a mobility planner. All of this data has been collected in Danish and when cited it is important to note that the citations have been translated by the authors of this thesis.

Throughout the thesis, references will be made using the Harvard method, where the author will appear as (authors last name, year) in the text. In the case of more than two authors, these will appear as (author last name et al., year). The complete reference list and appendices can be found at the end of the report.

Keywords:

Mobility Planning, Mobility Hubs, Everyday Mobilities, Motility, New Mobilities Paradigm

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Summary 1

Since the beginning of human civilization, people have always moved, and movement has been an engine for development and growth [Greene and Wegener, 1997]. For more than half a century, most countries have experienced rapid urban growth and the escalation of car usage. This has led to a variety of societal challenges, including congestion and spatial issues, urban sprawl, and a necessity to travel greater distances to reach the things needed or desired, and society has thus become dependent on cars [Lyons, 2011]. Most problematically, the automobile has particularly been a large source of pollution [Freudendal-Pedersen and Kesselring, 2018]. Society and transport systems are built on the premise of the car, making a change towards a more sustainable system both difficult and urgent [Dennis and Urry, 2009]. A more sustainable transport system requires a reduction in the use of private motorized vehicles in favor of cycling, walking, shared transport options, and public transport [Dennis and Urry, 2009]. Multiple solutions are being explored [Sisson, 2023; Ibraeva et al., 2020; Tsubohara, 2018], and among these is the concept of mobility hubs. Mobility hubs are a way to decrease car ridership and increase the use of sustainable modes of transportation, as they provide the users with the option of being multimodal [Coenegrachts et al., 2021; Anderson et al., 2017; Clayton et al., 2014; Rongen et al., 2022].

Mobility hubs have seen a surge in political popularity as municipalities and cities globally have been implementing this concept [Geurs and Münsel, 2022]. One of the municipalities working with the mobility hub concept is Aalborg Municipality, where the investigation conducted in this thesis will take place. However, the results from working with mobility hubs so far are limited as car ownership per citizens in the municipality is expected to grow further in the future [Aalborg Municipality, 2019b]. Aalborg Municipality is one of the places that has adopted this approach, which is where the research for this thesis will be conducted. Despite this, the impact of mobility hubs has been limited so far as the car ownership per citizen is expected to increase further in the future [Aalborg Municipality, 2019b]. This thesis, therefore, argues for a need to readjust mobility hub planning and the understanding of users and to a larger degree incorporate an everyday perspective in mobility hub planning. Using an everyday perspective makes it possible to research how mobility practices are produced and reproduced, which in turn can provide the knowledge needed for developing sustainable mobility patterns [Freudendal-Pedersen, 2009, 2022]. The aim of the thesis is, therefore, to investigate how an understanding of citizens' everyday mobilities choices can contribute to the planning of mobility hubs in Aalborg Municipality.

The research is centered on a case study exploring Svenstrup mobility hub. This location was chosen as the focus of the study because it is situated in a catchment area for the city of Aalborg, which is an area of particular interest for Aalborg Municipality's mobility planning. Furthermore, the hub is an intriguing case study due to its central location, various transportation options (including a train station, carpooling area, bus links, and car and bicycle parking), and proximity to everyday activities (such as food shopping, work, kindergarten, and school facilities). The physical conditions here are such that it should be possible

for people to use the mobility hub.

In order to investigate how an understanding of citizens' everyday mobilities can contribute to the planning of mobility hubs in Aalborg Municipality, the analysis is divided into two parts. The first part of the analysis deals with Aalborg Municipality's mobility planning, consideration, and goals in terms of mobility hubs, and the everyday perspective supports the analysis and brings a planning perspective from professionals. The second part of the analysis is based on 27 citizen interviews and deals with their mobility habits and their use and non-use of the hub.

For the study, it has been necessary to build a theoretical understanding in order to be able to examine Aalborg Municipality's work with everyday mobility as well as their work with mobility hubs. An understanding of these aspects is gathered using literature about mobility hubs' functions and different types of mobility hubs. In addition, the understanding of everyday mobility and citizens' everyday mobility choices is based on literature from John Urry, Malene Freudendal-Pedersen, and Vincent Kaufmann. The theoretical understanding forms an analytical framework to structure the analysis.

The project concludes with a series of recommendations for future mobility planning, many of which relate to the urgent necessity to include the everyday mobility perspective of the public in mobility planning, as these are highly interconnected. People cannot see their lives beyond their mobility, and changes in mobility habits will therefore also require a restructuring of their lives which highly complicates, but also explains, the current struggles in the mobility sector and the firm grip that the car has on society.

Introducing Mobility Hubs and Everyday Mobility 2

In today's world, transportation is an integral part of our daily lives. However, the way we move has a significant impact on various aspects of our society, including the environment, the economy, and the global climate [Christensen et al., 2019; EEA, 2020]. The current transportation system in many Western societies heavily relies on private cars, leading to increased energy consumption and pollution [Kjærulff, 2011]. Europe's transportation sector depends to a large extent on fossil fuels, which account for approximately 25% of greenhouse gas emissions. Greenhouse gas emissions from the transport sector are further on the rise, and the future of urban mobility is a critical concern in the sustainable agenda [EEA, 2020]. Cities today are designed on a car premise, which is emphasized by the politics and planning carried out in large parts of the world [Freudendal-Pedersen, 2009]. The way in which the transport system is structured is a direct source of congestion and climate issues, which is why a change towards a more sustainable system is urgent [Freudendal-Pedersen, 2009].

The actions to achieve a more sustainable transport system are well known, and there is even agreement about what should be done [Banister, 2008]. It is widely recognized that a more sustainable transport system requires a deprioritization of car-centric planning and a downscaling of the use of private motorized vehicles in favor of cycling, walking, shared transport options, and public transport [United Nations, 2013, 2017; EEA, 2020]. Cities are implementing a range of planning tools and concepts to decrease the car traffic on the road. Some examples are:

- **Transit-oriented development** is one such concept, which suggests that communities should be built around transit hubs, creating a central focus for urban living. This method prioritizes sustainable transportation options and makes them easily accessible and attractive while also maximizing the effectiveness of public transport services by clustering urban development around transport nodes [Ibraeva et al., 2020].
- **Circulation plans** are a concept and strategy used to reduce the ease of car use in cities. Cities are divided into several sectors, and the cars' access from one sector to another is limited using, among others, one-way restrictions. Access to public transport and non-motorized traffic is meanwhile kept good, making them easier to use than cars [Tsubohara, 2018; Stad.gent, 2017a].
- **The 15-minute city** is another mobility concept. The main objective of this approach is to enhance the quality of life for residents by ensuring that all necessary amenities and services are within a 15-minute walking distance or accessible by bike or public transportation [Sisson, 2023; C40 Cities Climate Leadership Group and C40knowledgehub, 2020].
- **Mobility hubs** are a fourth mobility concept and is a way of planning and understanding transport nodes. This concept involves planning transport nodes to improve urban quality around the hub and

to facilitate efficient transportation shifts while supporting the overall transport network within the city. The idea is to create a node that benefits both transportation and the surrounding community [Arnold et al., 2022; Weustenenk and Mingardo, 2023].

An interesting aspect of the mobility hub concept is its integration with the other concepts. In the transit-oriented development concept, mobility hubs function in the form of transit nodes that not only function by virtue of transport but also the functions and activities that are nearby [Ibraeva et al., 2020]. In the circulation plan, mobility hubs are used in the form of Park-and-Rides to enter the city [Stad.gent, 2017b]. The 15-minute city also incorporates mobility hubs as a means of providing fast and frequent public transportation connections to other neighborhoods and work centers, promoting car-free access to various amenities [Sisson, 2023; C40 Cities Climate Leadership Group and C40knowledgehub, 2020]. The focus of this thesis will be mobility hubs.

2.1 Mobility Hubs as a Sustainable Mobility Solution

The concept of mobility hubs has gained traction as a solution to increase public transport ridership [Pfaffenbichler and Vorstandlechner, 2016; Coenegrachts et al., 2021; Anderson et al., 2017] and to decrease the need for cars, particularly in urban environments [Schwarzbauer et al., 2022; Clayton et al., 2014; Rongen et al., 2022]. Mobility hubs are an integral part of many local governments' attempts to achieve more sustainability in the transport system [European Conference of Ministers of Transport, 2007; United Nations, 2013], and several cities have already integrated mobility hubs to a greater or lesser extent [Arnold et al., 2022; Weustenenk and Mingardo, 2023; Geurs and Münsel, 2022]. Mobility hubs have been developed in various different contexts giving them a variety of names such as mobility stations [Miramontes et al., 2017], transport hubs [Conticelli et al., 2021], and transport interchanges [Edwards, 2011] among others.

2.1.1 General Characteristics of Mobility Hubs

Many different mobility hub definitions exist. While some focus more on the physical properties of mobility hubs (see Aono [2019]), others focus on their role in a transport system (see Coenegrachts et al. [2021]; Anderson et al. [2017]). Although the concept of mobility hubs lacks consensus on its definition, some general characteristics do exist [Rongen et al., 2022].

The first general characteristic highlighted in literature is that mobility hubs constitute nodes where several mobility modes intersect, such as cycling, walking, taxis, ride-sharing, and public transport, and allow travelers to change between the different modes of transport [Coenegrachts et al., 2021; Rongen et al., 2022; Anderson et al., 2017; Aono, 2019]. In this context, the frequency of the various public transport modes present is crucial for determining its service level, and it is important for the node aspect of mobility hubs [Weustenenk and Mingardo, 2023].

Another characteristic that is highlighted in mobility hub definitions is a place-focused aspect. Many definitions acknowledge that physical hubs are more than simple nodes in a transport system, but additionally a destination itself, with different functions and activities for both commuters and locals [Rongen et al., 2022; Weustenenk and Mingardo, 2023; Coenegrachts et al., 2021]. This factor is what changes a mobility hub from a mere transport node to a place. Some of the elements that enhance a hub's quality are facilities that improve the experience of waiting at the hub, such as toilets and waiting rooms. Functions that also serve the hub's surrounding area likewise contribute to the overall hub quality,

such as kiosks, food stalls, and other retail or service functions [Conticelli et al., 2021]. This corresponds with Bertolini [1999], who described hubs, particularly train stations, to both have transport node-related functions as well as place-related functions. He named this the node and place model. According to this model, node- and place-related functions are equally important for hubs, and both have to be considered when planning a hub. Node-related functions concern functions related to the access to and from a station. Place-related functions meanwhile concern functions and activities that allow people to interact with the hub [Bertolini, 1999]. By integrating node and place elements, mobility hubs promote multimodality and are connected to activity options at the hub or the surrounding area [Rongen et al., 2022].

For the sake of this thesis, mobility hubs are defined as locations where different mobility modes meet and which facilitate multimodality. Additionally, mobility hubs are also defined by offering non-transport-related functions, thereby allowing transport and non-transport activities to be combined.

2.1.2 Types of Mobility Hubs

While the prior mentioned characteristics contribute to the success of mobility hubs, working with these aspects is only part of what is required when planning a mobility hub. Mobility hubs have different functions in their mobility systems and are placed in entirely different contexts and locations [Weustenenk and Mingardo, 2023]. Mobility hubs, therefore, also have different requirements for their functions and layouts. Different mobility hub typologies have been created in order to understand and categorize mobility hubs based on, among others: their size, scale, location, mobility modes offered, and importance within the mobility system they are part of [Rongen et al., 2022; Weustenenk and Mingardo, 2023].

Weustenenk and Mingardo [2023] provide an example of a typology comprising six types of mobility hubs. The identified mobility hub types are the city center hub, city edge hub, city district hub, suburban hub, neighborhood hub, and community hub. The defining characteristics of these types are facilities, services, and modes of transport, and they vary in their level of complexity and quantity hereof. City center hubs are, for example, characterized by having the highest level of complexity and quantity in terms of facilities, services, and modes of transport. In contrast, community hubs are characterized by the lowest level of services and facilities and a general absence of connections with public transport [Weustenenk and Mingardo, 2023].

Another way of classifying mobility hubs is proposed by Bell [2019]. His typology relates to the location of the hub and the significance of the hub in the context in which the hub is located. He categorizes mobility hub types as within the urban centers and suburbs, as well as regional centers and public transport stops. Like Weustenenk and Mingardo [2023], Bell [2019] focuses on facilities, services, and modes of transport. However, this typology differs by focusing more on the geographical location and settlement structure, and the facilities and services provided do not only concern those at the immediate mobility hub but also the facilities and services within walking distance. Another aspect is that different user groups and the extent to which the hub is used also influence which hub type it is [Bell, 2019]. Since mobility hubs are context-dependent, Weustenenk and Mingardo [2023] argue that no universal hub typology exists and that categorization of hubs will vary from place to place. Therefore, understanding the surroundings and context of mobility hubs is essential when investigating requirements for mobility hubs.

In addition to different types of hubs, supplementing policies are often needed in order for hubs to function and be used [Rongen et al., 2022; Conticelli et al., 2021]. These could, for example, be policies to improve

cooperation between mobility providers to advance interconnectivity and interplay between mobility modes [Conticelli et al., 2021] or planning mobility hubs as a component of an integrated mobility system [Rongen et al., 2022]. Also, flanking policies such as parking restrictions or road-pricing schemes may be needed in order to achieve satisfactory usage of mobility hubs, as they make it more difficult and less comfortable to move around by car and therefore push car users towards alternative mobility modes [Rongen et al., 2022; Gebhardt et al., 2016].

2.2 A Need to Understand the Everyday Mobility

Although mobility hubs are emerging in more and more cities, approximately two-thirds of daily journeys are still made by car in Western countries [Ortar and Ryghaug, 2019]. For many people, it will require a significant change in their daily life to change their mobility patterns and habits. With late modern lives' being increasingly individualized and characterized by an inherent lack of time, the car is associated, by many, as a form of mobility that is flexible and can be adapted to the individual's daily needs [Freudendal-Pedersen, 2009; Nobis, 2007]. The implementation of political mobility strategies and planning of mobility hubs, aiming to change mobility habits and choice, is therefore challenged by firmly rooted rationalities for car use [Nobis, 2007].

Mobility hubs are considered a panacea for solving transport-related problems in the Netherlands [Rongen et al., 2022]. It is one of the countries furthest ahead regarding the mobility hub concept, with examples such as the eHUBS project in Amsterdam [Bösehans et al., 2023], the Shared Mobility Hubs in Utrecht [van Kuijk et al., 2022], and Reis Via Hub in Groningen and Drenthe [reisviahub.nl, 2021]. Nevertheless, moving people away from the individual car has proven to be a complex task. The current share of multimodal transport in the Netherlands is only 4-5%, which suggests that there is still far to go before a fundamental shift from individual car transport to more sustainable modes of transport is achieved [Rongen et al., 2022]. Another study carried out in Munich, Germany, investigated the users of a 'Mobility Station' pilot project, which is a hub for multiple modes of transport connecting public transportation with new shared mobility services. The findings showed that the majority of users were young, educated men with access to various transportation options and experience in utilizing shared mobility services [Miramontes et al., 2017]. These results also suggest that there is a long way to go before mobility hubs are widely integrated into people's daily mobility.

In addition, there has been significant research exploring the use of technology to enhance multimodal transportation, including web, mobile, and big data applications enabled by internet communication technologies [de Sá et al., 2010; Ding, 2020]. Despite the efforts made, the use of private cars remains high [Conticelli et al., 2021]. Although state-of-the-art qualitative social research methods have been utilized in most projects, such as workshops, focus groups, citizen consulting sessions, and participatory observations, they mainly address system-level issues [Bell, 2019]. Gebhardt et al. [2016] addresses that what is lacking is research on the daily practices and motives of users. There has also been an increased demand for knowledge concerning the individual's motivation for choosing certain modes of transportation [Freudendal-Pedersen, 2009].

Freudendal-Pedersen [2022] argues in her book 'Making Mobilities Matter' that achieving a sustainable mobility culture goes beyond technology, efficiency, and accessibility. It is the everyday movements that shape mobility patterns, and choosing a mode of transportation is not solely based on rational factors like

distance, travel time, information, and costs. Often it is influenced by various factors embedded in the complexities and social practices of daily life. The apparent rationalities from which individuals make their mobility choices are not only related to the external structures, such as the restrictions and dynamics of transport systems and technologies but also everyday life and duties [Kesselring, 2006; Freudendal-Pedersen, 2009]. To understand the factors that impact a person's decision on transportation, it is according to Christensen et al. [2019] important to consider the societal structures that shape and support mobility choices. Sustainable mobility solutions that meet society's needs must therefore take into account a comprehensive understanding of factors influencing mobility choice [Christensen et al., 2019]. This means that if people are to use mobility hubs, then the patterns and duties of everyday life must be considered in how mobility hubs are planned. This combination of the everyday mobilities perspective and mobility hub planning has been researched less. Understanding how, why, and why not citizens utilize mobility hubs as part of their daily routine and lifestyle is therefore important. Based on this perspective of mobility hubs, this study is carried out.

2.3 Mobility Hubs in Aalborg Municipality

This thesis will take its departure in Aalborg Municipality due to the municipality's focus on decreasing car usage through the creation of mobility hubs, particularly in its so-called catchment areas to the city of Aalborg [Aalborg Municipality, 2019b]. Aalborg Municipality has a holistic approach to mobility hub planning, mentioning both transport-related aspects, as well as function and place-related aspects in its mobility hub planning [Aalborg Municipality, 2019b], making it an interesting point of departure regarding the integration of everyday life in mobility hubs. This thesis will additionally focus on the case of Svenstrup's mobility hub, which can be found in Aalborg Municipality and is part of Aalborg's catchment areas. Figure 2.1 illustrates Aalborg's and Svenstrup's location in relation to each other as well as in relation to all of Denmark.

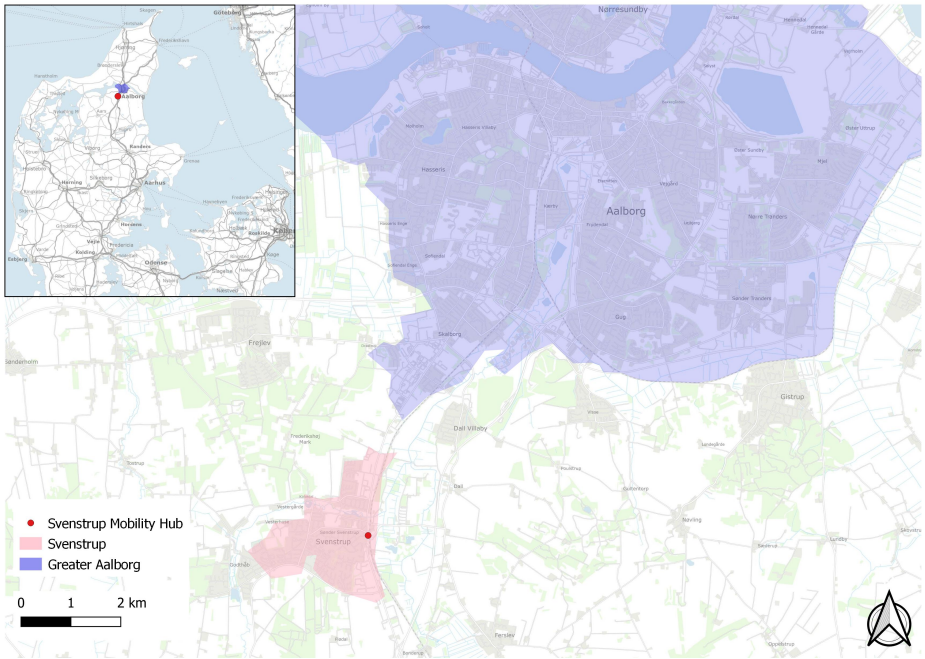

Figure 2.1. Illustration of Svenstrup's location (marked with red) in relation to the greater Aalborg (marked with blue). The red dot marks Svenstrup's mobility hub. Includes data from Dataforsyning [2022].

With more than 220,000 inhabitants, Aalborg Municipality is the largest municipality in the north of Denmark [Statistics Denmark, 2023] and experiences, like many other larger municipalities in Denmark such as Aarhus and Copenhagen, problems caused by high car usage [Aalborg Municipality, 2019b; Aarhus Municipality, 2021; Copenhagen Municipality, n.d.]. The municipality has a growing population and also an increase in jobs, tourists, and visitors caused by, among others, the municipality's position as the cultural and educational capital of the north Denmark region [Aalborg Municipality, 2020b, 2019b]. Aalborg Municipality also experienced an increase in car ownership from 351 cars per 1,000 citizens in 2008 to 398 cars per 1,000 citizens in 2018, a development that is still ongoing [Aalborg Municipality, 2019b]. These factors, in combination with cars being used on short journeys within the municipality, put significant strain on the existing car infrastructure, in particular in and around the city of Aalborg, and also cause additional problems, such as congestion and noise- and air pollution. Because of these conditions, Aalborg Municipality has made some general goals and plans to reduce car usage and move transport to more sustainable alternatives [Aalborg Municipality, 2019b, 2020b].

Aalborg Municipality's mobility goals concern, among others, traffic safety, how trips should be conducted, and citizens' access to mobility. Examples of these goals are a goal to increase the amount of trips made by cycling or walking to 50% of all trips made in the municipality by 2040. They also plan to reduce the amount of trips made by car with only one passenger to 15% by 2040. Though some goals are quantitative and measurable, like these two goals, other goals are less quantifiable, such as Aalborg Municipality's goal to secure mobility for all, meaning that every citizen should feel mobile and be able to get to where they need to go, when they need to do so [Aalborg Municipality, 2019b]. Though this goal is difficult to measure, it illustrates that mobility, in the eyes of Aalborg Municipality, should not be a barrier and should be adapted to the needs of citizens, including those who are not able to drive a car.

The municipality has initiated several projects that contribute to these goals, including investments in public transport, such as a bus rapid transport line going through the city of Aalborg, and the testing of self-driving public transport, such as an autonomous bus and ferry. Other examples are investments in cycling infrastructure and mobility hubs [Aalborg Municipality, 2019b]. The promotion of multimodality, or flexible mobility and combined journeys, as referenced by Aalborg Municipality, is one of their main goals in order to reduce car usage by making alternatives and the switch between alternatives more attractive.

Though Aalborg Municipality does not directly use the term' mobility hubs' and instead refers to them as 'nodes', 'mobility nodes', and 'transport nodes' [Aalborg Municipality, n.d.a, 2019b], the understanding and use of the terms has similarities to the definition used in literature and this thesis as the following citations illustrate.

> *"We work to [...] establish transport nodes that ensure good change possibilities between car, bicycle, walk, and public transport so that it is not required to take the car all the way from the catchment area to the city"* [Aalborg Municipality, 2019b, p. 29]

> *"We work to [...] establish local nodes for combination journeys in close connection to the [catchment] city's primary meeting spots that also include other activities, for example, school, shopping, spare time, etc."* [Aalborg Municipality, 2019b, p. 32]

As these quotes illustrate, Aalborg Municipality's understanding of mobility hubs entails both a transport node-related side as well as a place and everyday functions-related side. While the first quote highlights the

need to combine several mobility modes in order to compete with the private car, the second quote highlights that nodes should offer and give easy access to non-transport-related functions, thereby integrating them into people's everyday life. Aalborg Municipality's definition, therefore, shows signs of the node and place aspects that many mobility hub understandings use. While it has to be mentioned that most descriptions of mobility hubs in municipal documents, such as the municipal plan and the mobility plan "Mobilitet 2040", focus on the transport-related aspects and the integration of different mobility modes at mobility hubs, it nonetheless shows Aalborg Municipality's attempt to integrate an everyday perspective into its planning.

Aalborg Municipality differentiates between four different mobility hub types that are set apart based on their locations and their purpose. The types are *network hubs*, *destination hubs*, *park and ride hubs*, and *catchment area hubs* [Aalborg Municipality, n.d.a]. Catchment area hubs have the purpose of giving catchment areas to the city of Aalborg access to public transport in order to reduce car traffic going into Aalborg and are highly prioritized in Aalborg Municipality's mobility planning [Aalborg Municipality, n.d.a, 2019b]. This prioritization makes sense as research shows that inhabitants of less dense and more rural environments are more prone to commute by car [Alonso et al., 2023], while city dwellers are already more likely to commute multimodal due to the higher quality of car alternatives in big cities [Gebhardt et al., 2016]. Svenstrup is one of these catchment areas and has its own mobility hub. The city is located about nine kilometers south of Aalborg and is home to about 800 residents. It has many basic functions, such as shops, restaurants, hairdressers, and a public school. The city's mobility hub offers access to train (though only about every half hour), bus, car, and bicycle parking. The mobility hub, therefore, gives a wide variety of mobility choices and caters to many different needs with its close proximity to many of Svenstrup's functions. Because of this, this thesis will focus on Svenstrup's mobility hub.

2.4 Research Question

With the increased attention on the harmful consequences, the car has had on society and the environment, a change towards a more sustainable system is urgent [Dennis and Urry, 2009; Freudendal-Pedersen, 2009; Kennedy et al., 2005]. Various planning tools and concepts have been paving the way in mobility planning as a way to reduce the use of private motorized vehicles in favor of cycling, walking, shared transport options, and public transport. Among these solutions are mobility hubs [Clayton et al., 2014; Rongen et al., 2022]. The potential of mobility hubs is making the concept very popular, in spite of its currently limited and uncertain results [Arnold et al., 2022]. However, the potential of mobility hubs is promising, which makes it interesting to investigate further. The argument is that traditional transport planning has long neglected to understand people's everyday life [Freudendal-Pedersen, 2022, 2009; Kesselring, 2006]. Mobility is far more complex, and the previous tools of predicting and providing are no longer sufficient if sustainable mobility is to be achieved [Freudendal-Pedersen, 2022]. This thesis, therefore, investigates what goes into people's mobility choices and behavior and how the integration of an everyday perspective can influence the use and non-use of mobility hubs.

Aalborg Municipality has political and planning ambitions to incorporate aspects of everyday life in its mobility planning and is already incorporating mobility hubs in its mobility planning. Therefore, this thesis' investigation will be based on Aalborg Municipality. Many of the cars coming into the cities are people who live outside them. It is, therefore, necessary and interesting to investigate Aalborg's catchment areas, which are of special interest to the municipality. Svenstrup's mobility hub is therefore used as a case study for researching the everyday perspective of the public.

As a result of the previous chapters, the following research question will be examined in this thesis.

How can an understanding of citizens' everyday mobilities choices contribute to the planning of mobility hubs in Aalborg Municipality?

The following sub-questions have been created to answer the research question:

SQ1: Why is everyday mobilities important in mobility planning, and how can it be understood?

SQ2: How is citizens' everyday perspective considered in Aalborg Municipality's mobility hub planning?

SQ3: How does citizens' everyday life affect the use/non-use of Svenstrup's mobility hub?

SQ4: How can Aalborg Municipality incorporate citizens' everyday perspective in the planning of mobility hubs?

How the Questions will be Investigated

The first sub-question will be investigated in chapter 4, where various theoretical concepts will be presented. These create the foundation for an analytical framework that is used to structure the analysis and is important for interpreting the empirical data.

The second sub-question is used in chapter 5 and constitutes the first analysis part of the report. The chapter is a document analysis of Aalborg Municipality's use of a citizen's everyday perspective in their mobility and mobility hub planning. It also presents Svenstrup as the case for further research.

The third sub-question constitutes the second analysis part. This analysis is devoted to investigating public input via interviews. It looks at the reasoning for their use and non-use of Svenstrup mobility hub as well as their general mobility habits.

The fourth sub-question is answered through the discussion in chapter 7. This chapter combines the knowledge from the previous analysis and expands the perspective into a planning context by developing a set of recommendations.

Methodology 3

This chapter includes a description of this thesis' philosophy of science, its methodological considerations, and a review of the methods used for data collection. These considerations are defining for developing the research design that directs the course of the report.

3.1 Philosophy of Science

The foundation of this master's thesis rests on the new mobilities paradigm and the need to include an everyday perspective of people in the planning of mobility hubs. Because mobilities research is such an interdisciplinary field, it is necessary to also allow for multiple perspectives to be portrayed. These points help define the philosophy of science that this report is grounded on, namely, social constructivism.

Changes have been happening within planning and understanding of movement. Previous transportation research has been dominated by natural and technical sciences and quantitative and economic measures. But within the last decades, mobility research has been pushed in a societal or sociological direction [Urry, 2000; Drewes, 2005; Freudendal-Pedersen, 2022]. Today's mobility research focuses on aspects that go beyond distance covered and recognizes that the mobility potentials and impact on society and everyday life is what should be researched [Freudendal-Pedersen, 2009]. As Urry [2007] argues, mobility research should not be understood as only one thing but rather as an array of various intersecting dimensions. This new orientation has made certain sociological aspects of mobility interesting. One being: *"[...] the relationships between transport and behaviour, actors and social relations [...]"* [Drewes, 2005, p. 52]. These "softer" concepts and the desire to understand what creates specific phenomena follow the social constructive thinking. Social constructivism is about exploring how phenomena in society are constructed socially and discursively. Generally, the interest in this approach is untangling and identifying how thoughts, words, and truisms are constructed, used, and altered [Egholm, 2014]. It questions the aspects of life that are taken for granted. Therefore, the focus is on specific contexts of specific phenomenons and on how this context created the phenomena, making the process of which the phenomena is made, used, and its impact on the context interesting [Egholm, 2014; Creswell, 2009]. With the everyday mobilities perspective, these phenomena and individual aspects are related to people's everyday practices and mobilities and are what this research is investigating as a way to improve mobility hub planning.

On an ontological level, the social constructivism adheres to the constructivist thinking wherein phenomena do not on their own have an essence. The constructive ontology posits that phenomena can only be studied through the understandings and meanings that humans attribute to them. How these are created and perceived is what is studied [Creswell, 2009]. There are varying degrees of world views in social constructivism depending on its extremity. On the one hand, it is believed that nothing exists outside humans, making everything constructed, whereas lesser radical orientations open up for some aspects to

exist naturally [Egholm, 2014]. With this research, a moderate approach to constructive ontology is applied. In that sense, objects can exist outside of the human construction. However, it is the interaction with these that is interesting and what gives these objects essence. The "object" of this study is the mobility hub. On their own, they do not hold an essence. Instead, they become interesting in their interactions with people. By including the citizens' everyday perspective, the intention is to research the reasoning behind everyday mobility practices, which can be found in the interactions between the individual and society. The social constructive orientation also influences the epistemology, i.e., how and what knowledge is and should be produced [Egholm, 2014]. With the social constructive approach, the nature of knowledge is about understanding phenomena, how they come to be, and what meaning is ascribed to them. Knowledge is then very subjective and is found through interactions between the individual [Egholm, 2014]. Here it is the citizens' everyday mobility, and the researchers investigating what goes into the decisions of using or not using a mobility hub, but also broader themes of mobility thinking. With social constructivism, a key epistemological standpoint is rejecting the idea that some knowledge is worth more than others. Knowledge will always be influenced by its contexts, being time or space, and also the researchers. The creation of knowledge is then again not about the phenomena in question, but rather how humans ascribe meaning to it, which is, for example, influenced by relations between people, things, or places [Egholm, 2014].

An important aspect of this research is the role of the public and the everyday life context, which is brought to the forefront as an aspect that should be considered far more in mobility planning. Social constructivism is suitable for examining the subjective [Egholm, 2014] and thereby an everyday context and choice of mobilities. The perspectives of the public are essential if a transition to sustainable mobility systems is to happen. The citizens' everyday mobilities are, therefore, the key element to understanding how to better plan mobility hubs. The professional perspective is also represented in the study through an understanding of the goals and intentions behind the planning of mobility and mobility hubs and how the everyday perspective is viewed and used. The social constructive mindset emphasizes the value of both citizens' and professionals' perspectives, which aligns with the perspective of the new mobilities paradigm that emphasizes the importance of introducing the social into the otherwise highly quantitative and scientific field [Urry, 2007]. This points out the very need for everyday users' perspectives to be used and valued in planning and why the two should not be separate.

3.2 Methodology

Following the social constructive philosophy of science, this research adopts a qualitative approach [Creswell, 2009]. Merriam and Tisdell [2016] notes that, qualitative research is often characterized by the desire to understand the meaning of phenomena, which is impacted by individuals constructing reality in interactions with their social world. The desire is to understand the process and sense-making rather than just the outcome of the process. People's interpretations of experiences and what meaning they attribute to them are highly qualitative. Meaning is, therefore, a highly constructed and individual term which makes a qualitative approach necessary for this investigation [Merriam and Tisdell, 2016]. According to Creswell [2013], qualitative research is applied when the objective of a research is to understand the perception of people and their experience in the world. Büscher and Urry [2009] makes an interesting point in their discussions of mobility research methods. They argue that: *"[...] while it is important to study how worlds are made in and through the ways in which people make sense of them, it is equally important to investigate how worlds (and sense) are made in and through movement and motion"* [Büscher and Urry, 2009, p. 110].

Therefore, the investigation zooms in on the everyday context and meets people in their mobile settings. How the world and sense is made can then be investigated with concrete examples.

Data collection for this research focuses specifically on understanding the reasonings and mobility practices that occur in everyday life, with the aim of gathering data on preferences and mobility habits. The public's interpretations are investigated, which, because of the constructed nature of opinions and experiences, requires qualitative research methods such as interviews. There is equally a need to conduct qualitative interviews with the planners to give them a chance to elaborate how, why, and with which rationals they work with mobility hubs and the everyday perspective. This form of data gathering is highly characterized by a conviction that reality and the sense we make of it is highly constructed [Creswell, 2009]. The phenomena under investigation is also context-dependent, making the quest of finding one truth impossible. Instead, this research believes that there are multiple truths, and finding the truths of each individual can aid in understanding the entire truth. This also corresponds with an abductive approach [Danermark et al., 2019]. Abduction uses "rules" and relates them to a specific empirical phenomenon which in turn can provide a way to find new assumptions and ways to explain it. What is key is that the abductive study does not claim to find the one truth but instead shows how some aspects might be related to the truth and is thereby relevant. The conclusion of an abductive study uses an interpretation of rules to provide new insight into a phenomenon [Danermark et al., 2019]. *"The conclusion is one of many possible conclusions following on from the fact that we relate different ideas and knowledge to one another"* [Danermark et al., 2019, p.128]. In this research, the use of the analytical framework, which is an interpretation of theoretical 'rules' is used to investigate the context of Svenstrup's mobility hub, which is a way of relating the individual to the general.

3.2.1 Case Study

The qualitative research design of this project is grounded on the methodology of a case study. Because this research is grounded on the mobilities paradigm and aims to include an everyday perspective into the planning of mobility hubs, it is necessary to provide a context to the specific phenomena through which meaning can be investigated [Merriam and Tisdell, 2016]. Because the phenomena investigated is the everyday perspective of citizens and the reasoning for their use or non-use of mobility hubs, it is necessary to narrow down the geography and select a mobility hub that can provide a context for the study. The case that is under investigation in this research is Svenstrup's mobility hub as a concrete entity. On a lesser concrete level, the unit of investigation corresponds to the users and non-users of this hub and what goes into people's decision process. This is investigated through the lens of the everyday mobilities perspective. The case is bounded by the geographical limits of Svenstrup and unfolds through real-time investigations of the citizens' perspectives [Creswell, 2013].

With the goal of improving the planning of mobility hubs through an understanding of citizens' everyday perspective, it is necessary to investigate what goes into the decisions of using or not using hubs. These everyday mobility interpretations and opinions are desired to be unfolded and deciphered, which can be done through a case study. A case study allows the researchers to absorb in-depth knowledge from everyday life, such as behavior or relations, under specific contextual conditions [Yin, 2009]. As mentioned in the section above, the use of a case can, with an abductive approach, aid in finding explanations of the general [Danermark et al., 2019], and as Yin [2009] argues, the case study is precisely used: *"[...] to contribute to our knowledge of individual, group, organizational, social, political, and related phenomena"* (p. 40). A case study is an exploration of phenomena within real-life contemporary bounded systems that are investigated

through detailed and in-depth data collection with multiple information sources. Methods could be interviews or investigations into documents and reports, which is precisely the format for this research [Yin, 2003; Creswell, 2013]. Yin [2009] distinguishes between exploratory, descriptive, and explanatory case studies. This case study contains elements of an exploratory case type, as it involves humans and therefore can never fully explain a phenomena to its full extend caused by variables and varieties in people. Selecting the type of case is directly related to the research question at hand. Questions of "why" and "how" are, according to Yin, questions that call for case studies [Yin, 2003, 2009]. The main question of this research questions how an understanding of citizens' everyday mobility can help improve the planning of mobility hubs. An exploratory case study is investigating new ways of understanding and using theory, here, the analytical framework in section 4.4, and also has the ability to create new or evolve the theory in the context of the case study investigation [Mills et al., 2010]. According to Mills et al. [2010], exploratory cases enable researchers to look at specific phenomena: *"[...] with the aim of understanding its complexity in as complete a way as possible"* [Mills et al., 2010, p. 153]. By collecting data from the case, it is possible to revise and redesign theoretical ideas and better explain and understand the phenomena. Exploring the data found from the case study can reveal patterns in the phenomena, again improving the theoretical 'rules' [Mills et al., 2010].

Exploratory cases will often be critical cases. What characterizes a critical case is its likeliness of confirming or denying the theoretical propositions. The goal will often be to develop on theories which also corresponds to the abductive approach [Flyvbjerg, 2006; Mills et al., 2010]. Svenstrup's mobility hub uses elements from critical case selection because it has conditions that represent some of the theoretical aspects that a successful mobility hub should include and its close relation to the mobility hub definition established in this research. A more in-depth case description can be found in section 6.1.1, however a short reasoning for the case selection is done to justify the selection method. According to Flyvbjerg [2006], a critical case is: *"[...] defined as having strategic importance in relation to the general problem"* (p. 230). Svenstrup's mobility hub is characterized by a central location in the area. It has a variety of modes of transport, including a train station, a carpooling area, bus links, and car and bicycle parking, as well as everyday functions like food shopping and educational facilities nearby.

It is not the goal to determine whether or not Svenstrup is a critical case or not but the logic behind the critical case is used to select the case. Instead, the case study draws more on the exploratory side. Exploring the everyday mobility of the case through investigating people's behavior and mobility reasoning is the clear focus, and the critical aspect of the case is mainly there to qualify the selection of Svenstrup mobility hub. Using this type of case study is relevant when a specific question has no or very little preexisting knowledge ascribed to it [Yin, 2009]. Even though there is much research on mobility hubs and also on everyday mobilities, the link between the two and how they can reinforce each other has yet to be investigated. Therefore, the necessary data has to be collected by the researcher themselves [Mills et al., 2010].

In the literature study of mobility hubs, it has been argued that mobility hubs are highly context-dependent and have various needs, scales, and locations [Weustenenk and Mingardo, 2023]. It is therefore important to note that the case study of Svenstrup's mobility hub does not have the same contextual conditions as any other catchment mobility hubs and can, therefore, not directly be compared to a mobility hub that, for example, does not have a train connection. However, as Flyvbjerg [2006] argues, when engaging in a case study, it is not impossible to generalize from a single case, and one case can indeed contribute to the knowledge accumulation in a given field. Therefore it is also argued that the findings from the case study of Svenstrup's mobility hub could well contribute to the planning of mobility hubs in similar mobility hubs.

3.3 Data Collection

The combination of everyday mobilities and the planning of mobility hubs is not yet widely researched, and this study, therefore, seeks to develop knowledge in an exploratory manner. The methods used for collecting data are all qualitative methods due to the focus on individuals' everyday life and perception. The chosen methods help produce knowledge between the researchers and the objects of this study, i.e., the users and non-users of Svenstrup's mobility hub and the mobility planning of Aalborg Municipality. The methods used are literature review, document analysis, and various types of interviews.

3.3.1 Literature Review

A literature review is a viable method for collecting and consolidating research and relevant data [Creswell, 2009]. In this study, the review fulfilled two main purposes. Firstly, it assisted in setting the scene for the research [Farthing, 2016] by outlining the defining characteristics and significant factors involved in planning mobility hubs, as well as highlighting the significance of everyday mobilities in mobility hub planning. Secondly, the review provided a basis for the research by sourcing pertinent literature to form the analytical framework [Merriam and Tisdell, 2016].

When searching for relevant literature, one of the approaches employed involves locating literature by using specific keywords associated with the topic of interest. This allows for a targeted search that can quickly identify relevant sources [Creswell, 2009]. The literature review included peer-reviewed scientific articles, books, gray literature, and chapters from books. Only books and chapters written by reputable authors who have expertise in their relevant fields have been used. This ensures that the gathered information is reliable and of high quality [Creswell, 2009; Farthing, 2016]. Literature was found with the search engines Google Scholar and Aalborg University's Primo search engine, where search terms, including *mobility hub, multimodality, mobilities paradigm, everyday mobilities, and motility*, were used to guide the search. The search terms were found in articles gathered throughout the initial literature search where key terms were identified. Another approach used is known as the snowball method or chain search method, which involves using the bibliography of relevant literature to uncover more literature. The approach involves delving deeper into specific concepts by looking into literature cited in articles. However, there is a risk of getting stuck in an information bubble where information and phenomena are viewed from a narrow perspective [Rienecker et al., 2013]. Therefore, this approach was combined with the targeted search.

The analytical framework is built upon the new mobilities paradigm by John Urry [Urry, 2000; Sheller and Urry, 2006; Urry, 2007], which delves into the exploration and development of mobilities as a crucial means to comprehend the connections, assemblages, and practices that shape and generate contemporary daily life [Adey and Bissell, 2010]. The literature utilized in the framework to understand how mobility choices are made and to comprehend everyday mobilities have all drawn some degree of inspiration from the sociologist John Urry, including works such as Freudendal-Pedersen [2009], Freudendal-Pedersen [2022] and Kaufmann [2003]. These works have been instrumental in shaping the analysis and providing concepts and insights for the interpretation of empirical data.

3.3.2 Document Analysis

Document analyses allow researchers to use preexisting data, i.e., documents, and generate new qualitative knowledge based on this [Merriam and Tisdell, 2016]. Chosen documents are systematically analyzed and

organized in order to get knowledge about certain topics such as an author's views and rationalities Bowen [2009].

In order to understand the mobility planning in Aalborg Municipality with a focus on the use and non-use of citizens' everyday life in mobility hub planning, a document analysis was conducted. Documents used were official plans, strategies, and policies, in particular the mobility plan *Mobilitet 2040* [Mobility 2040] and the municipal plan. Other documents used were *Fysisk Vision 2035* [Physical Vision 2035], *Cykelpolitik 2020* [Bicycle Policy 2020], and *Kollektiv Transportpolitik* [Public Transport Policy]. The documents were chosen as they are written by Aalborg Municipality and, as such best reflect Aalborg Municipality's goals, rationals, and approach to mobility planning.

Keywords that were searched for in the chosen documents are *knudepunkter* [nodes], a term typically used by Aalborg Municipality to describe mobility hubs, *kombinationsrejser* [combination journeys] used to describe multimodal travels, and hverdag [everyday] when used in relation to mobility, as well as different variations of these words. Additionally, descriptions that concern the access to mobility and the municipality's view on citizens' behavior were looked at as these factors are also greatly connected to everyday life.

Since the analyzed documents are political, it is important to remember that they are likely to highlight positive aspects and ambitions and carefully leave out details or controversial topics [Merriam and Tisdell, 2016]. The analysis, therefore, not only looked at the use and presence of specific terms but also at the concreteness and omissions of them, and in particular, the everyday perspective in mobility planning. Looking at what is said and what is not is important as it illustrates what the authors value as essential. Additionally, looking at the omitted can help to expand on the explicitly mentioned arguments and rationals and give a deeper understanding of them [Rapley and Flick, 2011].

One downside to a document analysis of existing plans and strategies is that these documents were not created with the analysis in mind, which means that the objects searched for might be less prominent [Merriam and Tisdell, 2016]. This is also the case in the analysis of Aalborg Municipality's documents. While Aalborg Municipality describes everyday life as an important perspective for mobility planning in its documents, its understanding of everyday life is not defined and elaborate. In order to get a second viewpoint on Aalborg Municipality's mobility planning, it was therefore chosen to interview a mobility planner at Aalborg Municipality, which is described in a later section. The data generated this way helps to triangulate the findings and elaborate the municipal viewpoint [Bowen, 2009].

3.3.3 Qualitative Interviews

Another important method for this research is the qualitative semi-structured interview. The general goal of an interview is to obtain a specific form of information that can only be gained by accessing what is on someone else's mind [Merriam and Tisdell, 2016]. Multiple interviews have been conducted for this research. Firstly, there has been an interview with a municipal planner, who qualified the findings from the document analysis and provided knowledge of Aalborg Municipality's mobility planning. Secondly, interviews with the public were conducted to gain insight into everyday mobility practices. All interviews were recorded. The two interview types will be explained in the following sections.

All interviews were conducted as open semi-structured interviews in order to allow the interviewees to talk about aspects that they value as important [Farthing, 2016]. With a semi-structured interview, it is possible

to stay flexible and open to opinions and insight while staying on track with a list of prepared questions [Merriam and Tisdell, 2016]. According to Merriam and Tisdell [2016], the best interview questions are open-ended, which provides data of a descriptive kind, maybe even including stories about the phenomena in question. This approach has also been used specifically in the discussions with the public. The nature of the interviews allowed the researchers to clarify or to go more in-depth with certain aspects in the cases where it was needed and also ask follow-up questions if some aspects were of special interest [Farthing, 2016].

Interviews with Citizens

As mentioned, the link between everyday mobilities and the study of mobility hubs is not previously explored in research, and for this reason, interviews are a good method to gain knowledge on the specific topic. When investigating the everyday perspective, this knowledge relies heavily on the users' and non-users' perspectives, which can best be found through interviews.

Citizen interviews are of special interest to this research, as it is through these interviews that the everyday life perspective is unfolded, and it is in these conversations that the required knowledge to integrate an everyday perspective into mobility hub planning lies. Semi-structured life-world interviews allow researchers to access interviewees' life world and get an understanding of interviewees' perspectives [Kvale and Brinkmann, 2009]. As it has previously been discussed, the nature of everyday life is highly subjective and personal and specifically calls for a qualitative approach. It is only through asking about individuals' use of mobility modes that the meaning of mobilities in people's everyday life can be understood [Flamm and Kaufmann, 2006]. It is also through asking that it becomes clear whether individuals' choices are fully deliberate and why some mobility options may be disregarded and ignored [Flamm and Kaufmann, 2006].

Qualitative interviews are useful when the data sought for cannot directly be observed. This form of data relates to feelings, thoughts, or underlying intentions, which essentially are the backbone of how people behave [Merriam and Tisdell, 2016]. This research seeks to find the reasoning behind how people interpret the world and how these interpretations affect how people travel and their use and non-use of mobility hubs. The qualitative interviews were therefore designed to target specifically these everyday mobility practices and reasonings that one cannot directly observe.

The goal of the interviews with the public was to have conversations about people's everyday mobility practices. An example of this was the opening task: *Try to describe different situations in your daily life, where you transport yourself in different ways*. Giving open tasks and asking open-ended questions like this provided insights into the individual's daily routines and habits. It also opened up for an understanding of the individual's opinions and values, what meaning mobility has in the individuals' everyday life, and how it creates the conditions needed for them.

In total, 27 interviews were conducted in Svenstrup. The interviews generally lasted between two and five minutes, with one interview lasting 10 minutes. While most interviews were conducted with only one interviewee, some were conducted with two or three interviewees that were part of a group. Three locations were selected as they each portrayed places that are part of the everyday life. The chosen locations were the parking lot of a local grocery shop, a park as a recreational area, and Svenstrup's mobility hub as a commuting spot. All places are within a 400 meters radius of the mobility hub and are illustrated in figure 3.1. It was important not only to stand at the mobility hub and train station in order to interview and catch both users and non-users of the mobility hub. The interviews were conducted as 'stop-interviews', meaning short and

on-the-spot interviews, meeting the citizens in their context and within their everyday life. The interview guide can be found in appendix B.

(a) A local grocery store

(b) Svanemølle Park

(c) Svenstrup's Mobility Hub

Figure 3.1. Interview locations. Own photos.

Due to the sheer amount of data gathered, coding was used to process the collected data. The purpose of coding is to group large amounts of qualitative data into topics making the data easier to handle in further analyses [Mills et al., 2010]. The gathered data were grouped based on the different elements of everyday motility established in the analytical framework: *Physical structures, societal structures, options & conditions, and the individual*, described in section 4.4.

In terms of the interviewed citizen, no specific target group was chosen due to the exploratory approach used in this research. The goal was to get an insight into many people's everyday life and mobility choices. Additionally, due to the social constructed nature of this research, no knowledge can be seen as better than other, which was also a critical factor in selecting participants.

Conducting 27 interviews with different individuals gave knowledge about both users and non-users, which was the main goal. It is, of course, worth mentioning that the selection process did not capture all types of groups in society, and some groups might also not be present in Svenstrup. The goal was to learn about mobility habits, patterns, and everyday context from a variety of people in Svenstrup, which was achieved. However, with the style of the interview, some people naturally also did not want to take part in interviews.

Interview with Mobility Planner

The second type of interview conducted in this research was an interview with Mette Olesen, a mobility planner and team leader at Aalborg Municipality. The goal of this interview was not to gain an insight into the planner's own everyday, but rather to get an understanding of mobility planners' way of planning mobility and mobility hubs in Aalborg Municipality. This form of interview also had the purpose of elaborating and qualifying the information found during the document analysis. A comprehensive understanding of the way the municipality plans its mobility and hubs cannot be found in political documents, as these strategies, goals, and visions rarely paint an exact picture of the municipality's actions and priorities. The documents also rarely go in depth with how the municipality's goals should be reached in practice. An interview helped to fill these gaps in knowledge as planners know more about the concrete work and what is prioritized in the municipality.

The interview was conducted with Mette Olesen and lasted about 1 hour and 10 minutes. Due to her role as a municipal planner, she holds inside knowledge of how mobility planning is conducted and how Aalborg Municipality uses mobility hubs. She also has prior experience working with Danish mobility hub and light

rail projects and could therefore contribute with a nuanced knowledge of the research topic. Findings of this interview used in this research are referenced using Olesen [2023].

The interview was also semi-structured and guided by a list of questions that can be found in appendix A. The semi-structured approach allowed to dive deeper into topics brought up by Olesen. Due to Olesen's rather long and elaborate answers, many such topics were brought up. This includes topic of incentive structures and behavior change, which resulted in additional knowledge still related to everyday mobilities that might not have come up in a structured interview. The semi-structured interview structure also gives the interviewee some control over the interview and makes sure that their perspective can be fully unfolded without being too influenced by the interviewer [Mills et al., 2010; Meuser and Nagel, 2009].

3.4 Research Design

The following figure 3.2 illustrates the structure of this thesis and the methods used in order to answer the research questions described in chapter 2.4. The research will be structured in the following way. Firstly a theoretical framework will be developed based on the findings of a literature review that investigates the role and potentials of implementing an understanding of everyday life in mobility hub planning. This research will particularly investigate the concept motility developed by Kaufmann and the concept of everyday mobilities elaborated by Freudendal-Pedersen [2022], Freudendal-Pedersen [2009], and Urry [2007]. Finally, this part will combine and operationalize the finding in an analytical framework used in the further analysis.

Next, Aalborg Municipality's mobility and mobility hub planning will be analyzed in order to get an understanding of how citizens' everyday life perspective is taken into consideration. Additionally, this analysis focuses on how mobility hubs are perceived and used in Aalborg Municipality's planning. This analysis is based on official planning documents, strategies, and policies and supplemented by an interview with Aalborg Municipality's mobility planner Mette Olesen.

After this analysis, a second analysis will be carried out that investigates Svenstrup's mobility hub and the everyday life perspectives of mobilists in Svenstrup, including users and non-users of the mobility hub. The goal is to get an understanding of how citizens' everyday life affects their mobility choices and the reasonings behind this. This analysis is based on short interviews conducted with local citizens.

Following the analysis chapters, a discussion combines the findings in order to develop an understanding of how Aalborg Municipality can incorporate citizens' everyday perspectives in their planning of mobility and mobility hubs in order to facilitate a shift away from primarily private car use to a more sustainable mobility system.

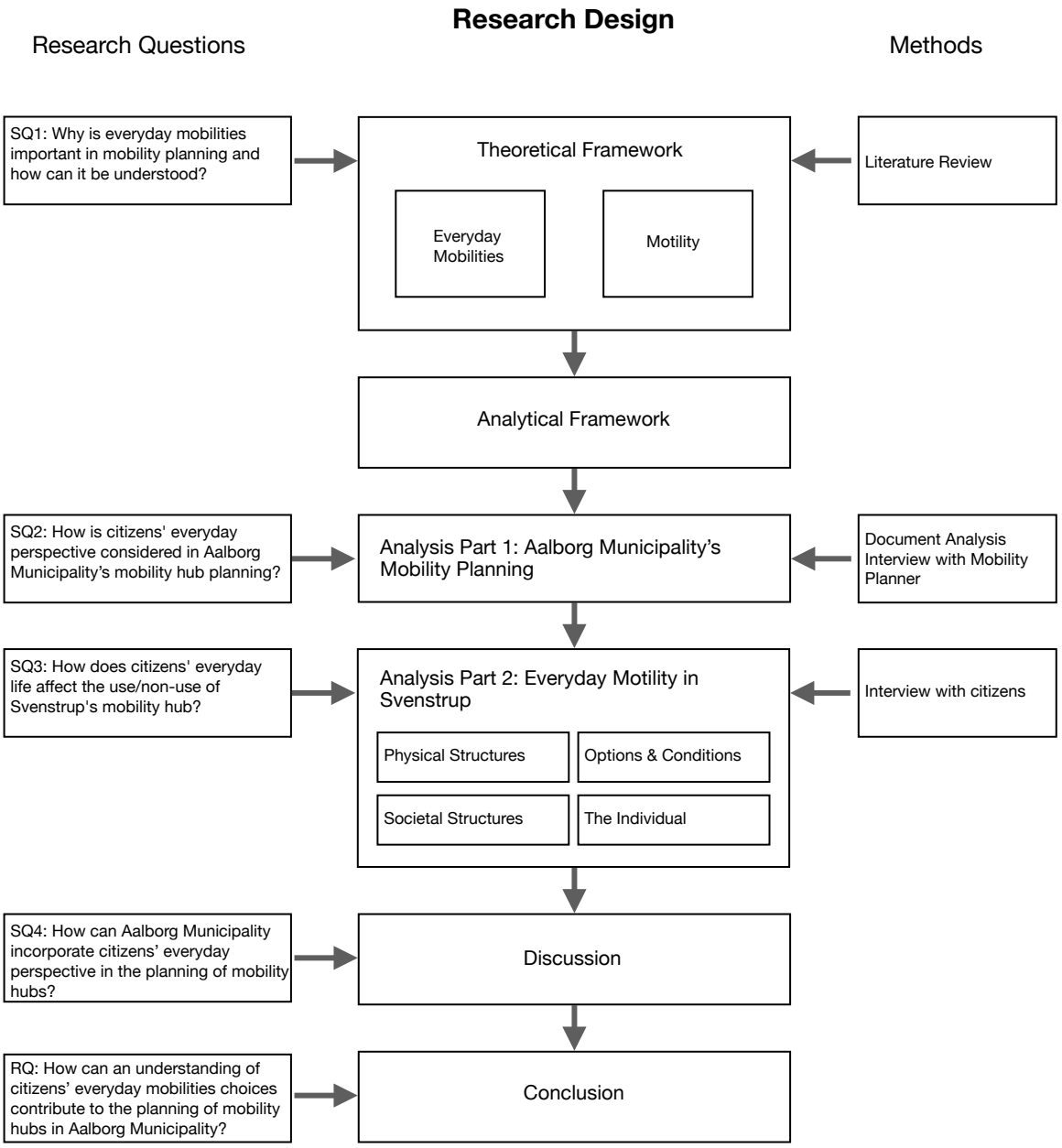

Figure 3.2. An illustration of research design. Own figure.

Mobilities Theory and the Choice of Everyday Mobilities 4

This chapter introduces a theoretical framework for the project. Knowledge about mobility hubs has been found through the literature in chapter 2, and a need to include an everyday perspective has been established. In the following sections, various theoretical concepts related to the everyday mobilities concept will there be presented to build a knowledge foundation to create an analytical framework for analyzing the case of Svenstrup mobility hub.

4.1 The Mobility Turn

Since the beginning of human civilization, movement has been an engine for development and growth [Greene and Wegener, 1997]. People have always moved, and throughout history, this has been the core of society. From the time of hunter-gatherers to the first settlements to today's global cities, the movement of goods and people has always been essential [European Conference of Ministers of Transport, 2007; Freudendal-Pedersen, 2022]. Mobility is, therefore, among the most important parts of modern lives, as it is essential for how people organize their everyday lives and enables the life we know today [Freudendal-Pedersen and Kesselring, 2018]. Whether technical or societal, mobility planning is essential for society's creation, functioning, and continuity. However, there is a need to rethink which kind of transport is planned for [Freudendal-Pedersen, 2022; Freudendal-Pedersen and Kesselring, 2018]. Before discussing how the planning should be rethought, an understanding of the history of planning and what happened before contemporary mobility planning is important, as the previous ways of planning give insight into how optimal movement and transport systems have previously been viewed, as well as why people move and organize themselves today as they do.

4.1.1 A Car Dependent Society

Contemporary transport history starts in the late eighteenth century. People moved by means of horse-driven carriages or by foot, but with the introduction of the steam engine and then the train, transport was changed forever. However, as fundamental as the railway was in transport history, the invention of the combustion engine and the automobile far exceeded this [Freudendal-Pedersen, 2022; Urry, 2000; Wagner, 2013; Newman and Kenworthy, 2015]. The automobile became a symbol of the modern society and gathered family, leisure, and holiday in the 1950s and 60s. *freedom of the road* paved the way for families to separate work and living, creating a surge of people moving away from the cities and out into cleaner suburban air [Freudendal-Pedersen, 2022; Urry, 2000]. As the speed of movement grew, society continued to develop

and spread and still does to this day [Metz, 2008]. For more than half a century, most countries have experienced rapid urban growth and the escalation of car usage, and the developed world, in particular, has been expanding transport systems in order to accommodate the growing motorized mobility [Greene and Wegener, 1997; United Nations, 2013; Lyons, 2011].

Late modern mobility is increasingly associated with car use, as the car has merged into the complex structures of a modern lifestyle, highlighted by the fact that everyday transport is dominated by driving [Nobis, 2007; Kenyon and Lyons, 2003]. Urry [2000] even goes as far as to say that *"[n]ot to drive a car and not to have a car is to fail to participate fully in western societies"* (p. 191). Modern identity is highly connected with mobility, movement, and travel, as well as the convenience that comes with the car. The development has, however, not come without consequences, and gradually, there has been a growing recognition among national governments, regions, and cities that freedom of movement is not the only thing the car has brought [Freudendal-Pedersen and Kesselring, 2018]. The mobility patterns of car usage are not socially and environmentally acceptable [Drewes, 2005; Freudendal-Pedersen and Kesselring, 2018], and urban transport systems worldwide are now struggling with a multitude of challenges as cities increasingly suffer with congestion, accidents, loss of urban spaces, air-pollution, social fragmentation, and increased noise [Dacko and Spalteholz, 2014; Redman et al., 2013; Dijk and Montalvo, 2011; European Conference of Ministers of Transport, 2007; Greene and Wegener, 1997; Urry, 2007]. Transport alone accounts for one-third of the total carbon dioxide emissions as a large part of transport runs of oil-based fuels [Urry, 2007; Freudendal-Pedersen, 2009].

Linked to the history and dominance of the private car through the past century and its effects on people's lives and urban planning, a specific planning rationale has prevailed. Transport planning has traditionally been considered a rational theme wherein decisions were rationally based with transport engineers using traffic models to predict and provide or find the ideal flows and adjust the system accordingly [Freudendal-Pedersen, 2022; Olesen, 2014]. The solution for congestion has for many decades been to build and expand car infrastructure, with a limited number of cities focusing on improving the public transport system in a sustainable way [United Nations, 2013]. This approach and prioritization in transport planning heavily relied on technology-based solutions favoring the automobile and is still clear in most cities today. Freudendal-Pedersen [2022] calls it 'technocentric', with the ideal of flow and "zero friction" as centerpieces of the planning tradition, and argues for a need to move beyond this silo thinking of having traffic as an isolated issue. Therefore, reducing the enormous environmental impacts associated with automobility lies in the planning and regulation of transport [Freudendal-Pedersen, 2009].

4.1.2 A New Mobility Paradigm

A new understanding of movement and mobility goes beyond only looking at transport as one thing. Mobility includes complex mixtures of movements, which not only include the physical movement of people but also the movement of objects, virtual travel, communicative travel, or imaginative travel [Urry, 2007; Sheller and Urry, 2016]. The concept of mobilities encompasses *"[...] the large-scale movements of people, goods, capital, and information, as well as the more local processes of daily transportation, communication, and the travel of artifacts"* [Freudendal-Pedersen and Kesselring, 2018, p. 1]. It is, therefore, a highly complex and broad concept creating the foundation for society and modern daily life [Kaufmann, 2018].

A main character in the mobility turn and in developing the changed understanding is John Urry. He places

mobility as a key concept for understanding society and advocates for a need for further understanding and analysis [Urry, 2000; Sheller and Urry, 2006]. It is recognized that everything is constantly on the move, both people and materials, and this has always been the case, just now with increased speeds and distances [Urry, 2007]. Within social science, mobilities have been seen as a 'black box', wherein different variables, such as transportation and communication, are studied as separate categories [Urry, 2007]. What is suggested from his books is that there are various intersections within mobilities, and these should not be treated as autonomous, but rather as highly interdependent, linking social and spatial dimensions [Urry, 2007; Kaufmann, 2018].

Research in the mobilities field bridges different disciplines and understandings and focuses on how mobilities affect social, cultural, and psychological factors that have not previously been represented in social science [Urry, 2007; Freudendal-Pedersen, 2009]. The mobility turn has a significant view of analyzing movement. Sheller and Urry [2006] argue that often there is a clear separation between a place and those traveling to these places. In that understanding, places are viewed as fixed and with the power to push or pull people there. With the new paradigm, rather than looking at places as fixed, mobilities are more about understanding and analyzing networks, relations, flows, and circulation [Sheller and Urry, 2016]. It is argued that mobility should be understood as much more than just distance covered and getting from point A to point B [Freudendal-Pedersen, 2022]. The paradigm views people's movement as part of their mobile practices rather than routed in places. People, therefore, move to do more than just move. They move to interact, to work, and to consume. Hence, movement is not seen as something separate from actions but rather a part of the structures and practice of social life [Sheller and Urry, 2016; Urry, 2000].

Building on the new paradigm and the importance of the context around movement, Freudendal-Pedersen [2022] argues for lack of attention on the everyday. In the words of Urry [2007]: *"There is too much transport in the study of travel and not enough society and thinking through the complex intersecting relations between society and transport"* (p. 20). Movement and people are not two separate things, and the interconnected nature between these two variables must be understood and considered in politics and planning [Freudendal-Pedersen, 2022; Urry, 2000; Freudendal-Pedersen, 2009].

4.1.3 A New Planning Approach

Mobility planning has changed throughout time and has also been affected by the tendencies of the new mobilities paradigm. While car-centric mobility planning has been prominent for many decades, the car's negative consequences and externalities were already noticed in the 1980s and have slowly steered the focus away from private cars as the best mobility mode towards more sustainable transport types [Kaufmann, 2018]. Strategies and alternatives emerged in the hopes of competing with the qualities of the car, such as flexibility, efficiency, speed, and costs. The solutions that this trend promoted were, among others, tram networks, light rail, subways, and more efficient regional trains. However, these attempts to reduce car usage have mainly attracted pedestrians to the improved public transportation infrastructure and not car users [Kaufmann, 2018]. Though the wish to reduce private car usage still continues today, the large-scale success is still limited [Dacko and Spalteholz, 2014; Redman et al., 2013; Arnold et al., 2022]. One of the reasons for this limited success is that while technical solutions and alternatives pave part of the way towards sustainable change, it is equally important that people's mobility habits change at the same time [Christensen et al., 2019].

To combat the environmental and social externalities associated with the motorized mobility system, Lyons [2011] calls for further attention to be given to individuals' decisions on *"[...] where, when, how, how often and whether to travel"* (p. 1). Kaufmann [2003] argues that there is a tendency to focus on movement in the space and time dimension rather than focusing on the actor. Instead, he identifies the importance of the actor as central to mobility. Similarly, Freudendal-Pedersen [2022] argues that a change to a smart, sustainable mobility culture is not just about technology. No one moves just for the sake of moving, but always because a reason is attached to it. What happens before, during, and after is what matters. Hence, social aspects can not be neglected when change is sought after, as mobility is deeply integrated with people's everyday lives. It is therefore important for planning to take people's everyday activities into account in order to ensure that solutions can become part of people's lives and cater to their needs [Christensen et al., 2019]. Everyday movements must, therefore, not only be seen as speed, accessibility, and efficiency but also as feelings and communities, as understanding these aspects of mobility is an equally relevant driving force for sustainable change [Freudendal-Pedersen, 2022]. The focus of this study is, therefore, everyday mobilities and individuals' choice of physical mobilities such as car, train, and bicycle [Freudendal-Pedersen, 2022]. Policy, planning, and everyday life are interconnected, as it is a societal matter to change and maintain sustainable mobility habits. In other words, everyday life is affected by politics and planning, but it is at the same time through the movements of everyday life that the mobilities unfold and develop, which is greatly influencing the organization of society [Freudendal-Pedersen, 2009; Kaufmann, 2003].

4.2 Everyday Mobilities

The everyday perspective in mobility planning is argued to be important, but according to Urry [2007], the significance of everyday mobilities has often been minimized in social science. To be able to explain how everyday mobility practices can initiate sustainable mobility patterns, it is important to first identify what everyday life is and how it is interconnected with mobility. Everyday life is a highly comprehensive yet abstract term that cannot be defined explicitly. Instead, what can be said about everyday life is that it consists of various activities that are made possible through various conditions [Freudendal-Pedersen, 2009]. According to Bech-Jørgensen [1993], the everyday life can be described through the activities, relations, and processes that occur. Mobilities are an integrated part of everyday life, as the activities that unfold during a day are highly reliant on movement [Freudendal-Pedersen, 2022]. A key point is then, that the everyday life that unfolds must be seen as including mobility and vice versa. Corresponding to the mobilities paradigm, mobility, and the everyday life cannot be separated [Freudendal-Pedersen, 2009].

Everyday activities are often routinized practices that follow different lifestyles, and most people, therefore, do not reflect on, for example, the modes, degree of sustainability, or price. Instead, the choice of mobility is repeated in the individual's routines, which allows the everyday to work best [Freudendal-Pedersen, 2022]. In order to make everyday life function, families make use of the mobility options available to them and construct certain movement patterns accordingly [Urry, 2007; Kaufmann et al., 2004]. Family patterns, for instance, rely on work schedules, getting kids to school, and leisure activities [Freudendal-Pedersen, 2022]. Urry [2007] describes that *"[...] families depend upon patterns of regular visiting, schools are chosen in terms of catchment areas, [and] work patterns depends on the way congestion structures commuting flows [...]"* (p. 19). Most of these activities are not unique to one family because they are created by society. The structures of everyday life often occur at the same time and place, creating issues like congestion. Therefore, society is constituted by movement structures [Urry, 2007; Freudendal-Pedersen, 2022].

What is argued is that everyday life is shaped by mobilities [Freudendal-Pedersen, 2022], and by recognizing everyday life, mobility patterns can be examined, developed, and changed, which is precisely what is needed for the transition to sustainable mobility [Freudendal-Pedersen, 2009]. Using an everyday perspective is thus significant in mobility research, as it makes it possible to research how mobility practices are produced and reproduced. By understanding the routinized everyday mobilities, it is possible to create a starting point for initiating a sustainable change [Freudendal-Pedersen, 2022]. When investigating mobility practices, it is important to keep in mind that changing these practices also means changing the organization of everyday life [Freudendal-Pedersen, 2022], which again emphasizes the fact that mobility and everyday life is interconnected and cannot and should not be separated.

4.3 The Mobility Choice in Everyday Life

An essential part of everyday life is planning and organizing the mobilities that connect one's activities spread throughout the day and in different places [Freudendal-Pedersen, 2009]. Mobility choices are made between different alternative options, such as which transport mode to use or routes to take [Kaufmann, 2003]. According til Flamm and Kaufmann [2006], the choice between different forms of mobility can be considered a choice between instrumental resources people use to travel to fulfill social obligations and expectations and perform daily activities. This means that people choose mobility options according to whether they are able to meet the needs that arise in their daily lives. As previously mentioned, this need is often fulfilled by individual car use, as the car has merged into the complex structures of a modern lifestyle [Nobis, 2007; Kenyon and Lyons, 2003].

In an everyday context, the choice of the car is, among other things, due to the fact that the car provides flexibility and can be used as temporary storage for personal belongings, such as bags, sports equipment, and clothes, and is easy to transport things in, for example, when carrying groceries [Flamm and Kaufmann, 2006]. Additionally, cars offer a private mode of transport and can be a status symbol or a part of people's identity [Redman et al., 2013]. The choice between public and car-based transport is rarely perceived as being between equal alternatives, but rather between a "lesser" mode of transport and a "superior" mode of transport [Redman et al., 2013]. However, this does not mean that public transport cannot compete with the private car. Mobility choices are rarely rational and solely based on factors such as distance, costs, and travel time. Other deciding factors emerge from people's everyday life, purpose, and priorities and shape what the individual perceives as the optimal and rational choice [Freudendal-Pedersen, 2009]. Although public transport reliability and frequency are crucial factors, the specific attributes that are most effective in encouraging car users to switch to public transportation are often linked to personal perceptions, motivations, and contexts [Redman et al., 2013].

4.3.1 Understanding Mobility Choice Through Motility

To understand the deciding factors in the choice of mobility in people's everyday life, there is a need to incorporate both spatial and social dimensions of movement and the individual's ambitions and priorities [Hamidi, 2021]. Kaufmann [2003] presents the conceptual term 'motility,' which precisely incorporates both dimensions of movement, and believes that a person's potential for being mobile is where research should start. He distinguishes between mobility, which deals with people's observable travel, and motility, which deals with their potential to travel. The concept of motility is defined as *"[...] the capacity of a person to be mobile, or more precisely, as the way in which an individual appropriates what is possible in the domain of*

mobility and puts this potential to use for his or her activities" [Kaufmann, 2003, p.37]. In order to understand individuals' choice of mobility, it is essential to know which modes of mobility are perceived as suitable options. Looking into motility exceeds the study of spatial mobility as it is not only the travel itself that is of interest but also the argumentation and reasoning behind the choice of mobility [Kaufmann, 2003]. To determine a person's motility, Kaufmann [2003] identifies three themes that constitute important elements: access, skills, and appropriation.

Access

Access is divided into two components: options and conditions. The options are given by the amount and range of transportation means and the services and equipment in the area [Kaufmann, 2003]. Options are linked to the physical environment and the 'degree of attachment' to the various mobility options that are made possible in the physical environment [Flamm and Kaufmann, 2006]. For example, the availability of transportation means is often higher in cities with a larger population [Kaufmann, 2003]. The conditions are comprised of the accessibility that one has to the range of transportation. For these to be accessible, one must have the right opportunities in terms of one's travel schedule and financial resources as well as physical capacities to allow one to make use of mobility options [Kaufmann, 2003].

Skills

Skills refer to the user's ability to use the transportation modes that are made accessible to them. A person's level and variety of skills depend on the stage in life and experience. The skills aspect of motility is divided into three aspects [Kaufmann, 2003]. The first concerns the abilities that one must possess to engage in mobility. This could be eye-sight or the ability to walk. The second refers to acquired skills which are the skills that one must have to act within a mobility setting, and this could be a driver's license or knowledge of road rules. Lastly are the organizational skills, which include the ability to plan and schedule the travel activity [Kaufmann, 2003]. According to Flamm and Kaufmann [2006], it also applies that the more experienced people are in traveling with a certain means of transport in relation to knowing the route and the required travel time so that it fits into the daily schedule, the more comfortable it is to use that specific means of transport in question. This also applies in reverse, so new means of transport will require new skills in connection with the travel activity [Flamm and Kaufmann, 2006].

Appropriation

Appropriation is a person's interpretation of access and skills and is shaped through one's desires and aspirations as well as societal norms and values [Kaufmann, 2003]. Access and skills are the two elements that influence which mobility options are available to each individual. However, it is not every available potential option that is perceived as a suitable option. The individual and reflexive stage of motility stems from personal values, perceptions, habits, and rationales and is the aspect that will help judge if an action should be considered accessible [Kaufmann, 2003]. When deciding on a mode of transportation, there are various factors that come into play, including accessibility, independence, speed, comfort, affordability, safety, and environmental impact. These factors can have a significant impact on which mode of transportation is seen as the most suitable option, and what is deemed important varies from person to person [Flamm and Kaufmann, 2006]. Flamm and Kaufmann [2006] further state that an individual's decisions and actions are heavily influenced by the adoption of societal norms and values. It is widely accepted that owning a car today is considered normal. This is due to the societal belief that having personal transportation is a

guarantee of freedom of movement, which is highly valued in modern society. However, in the last decades, society has seen a shift towards increased awareness of environmental issues. Many people who care about the environment have chosen to reduce their use of individual car use after realizing the significant contribution of transportation to current environmental problems [Flamm and Kaufmann, 2006]. Using and owning motorized vehicles often leads to feelings of guilt for environmentally aware people, highlighting a value conflict between environmental awareness and society's values of flexibility and freedom. But this conflict is typically resolved in favor of the car [Flamm and Kaufmann, 2006].

Together, the three aspects make up individuals' potential to be mobile and how they choose to be mobile. The aspects are very likely to vary from person to person and depend on spatial, social, and temporal contexts. The possibilities for mobilities are naturally characterized by the individual's ability to make use of the available options. But the options for being mobile must also be able to meet the individual's expectations for the trip [Freudendal-Pedersen, 2009]. An essential part of everyday life is planning the mobilities that connect one's activities spread throughout the day in different places, and certain movement patterns are constructed accordingly. As previously mentioned, these patterns could be family patterns that depend on work schedule, getting kids to school, and leisure activities [Urry, 2007; Freudendal-Pedersen, 2022]. Everyday life, therefore, consists of many activities linked together by movement (mobility). It also means that many mobility choices are made in everyday life, consciously or unconsciously. A concept of everyday motility, based on everyday mobility and Kaufmann's motility term, is used to develop a framework to understand these choices.

4.4 Analytical Framework: Everyday Motility

This study focuses on everyday mobilities, as it is through an understanding of the daily mobility patterns and routinized practices that a transition to sustainable mobility can be achieved [Freudendal-Pedersen, 2009, 2022]. The theoretical point of departure is in the mobility turn, where society and social life are regarded through complex relational human and non-human processes of (im)mobilities [Urry, 2000; Sheller and Urry, 2006; Urry, 2007]. Everyday life is highly reliant on everyday mobility, and the choice of mobility is repeated in individuals' routines, which allows the everyday to work best [Freudendal-Pedersen, 2022]. It is through planning and organizing mobilities that one connects everyday activities spread throughout the day in different places [Kaufmann, 2003].

The concept of everyday motility, which is developed in this framework, is based on an understanding of everyday mobility, a sub-category within the mobilities paradigm. Here, everyday mobility is understood as an integrated part of everyday life and consists of routinized mobility patterns that can be examined, developed, and changed [Freudendal-Pedersen, 2009, 2022]. Kaufmann's concept of motility revolves around comprehending the potential for mobility with respect to the number of options available to individuals [Kaufmann, 2003]. On the other hand, everyday motility is more concerned with the reasoning behind people's mobilities choices in their daily lives rather than their potential. Unlike Kaufmann's concept, the adapted concept of everyday motility includes a material dimension, which encompasses not only spatial structures but also material objects like means of mobility. Furthermore, a non-material dimension is utilized as a counterpart. In addition, a distinction is made between external and individual dimensions because mobility takes place in-relations [Freudendal-Pedersen, 2022]. The external dimension affects choices that consist of aspects which the individual cannot always control themselves [Kaufmann, 2003]. Lastly, the individually related dimension concerns the final mobility choice that the individual

makes. To give an example, the everyday activities integrated with mobility patterns (e.g., grocery shopping, commuting, and childcare) are determined via available and suitable infrastructure and technologies, skills, and competencies (e.g., how to schedule public transport or drive a car) as well as social values (e.g., freedom of movement or care for the environment) [Christensen et al., 2019; Kaufmann et al., 2004].

Everyday motility is used as an analytical framework, as it provides a conceptual tool to explore dimensions that shape the choice to use or not use mobility hubs to facilitate mobilities and concentrates on the human physical everyday mobility. The aim is to understand the reasoning that individuals apply to choose to utilize their mobility potential through the use of mobility hubs. In order to operationalize everyday motility, the analytical framework is structured around the four dimensions of what affects daily mobility practices: material and non-material dimensions of mobility as well as external and individual dimensions, see table 4.1.

	External Dimension	**Individual-related Dimension**
Material Dimension	Physical Structures	Options and Conditions
Non-material Dimension	Societal Structures	The individual

Table 4.1. Framework for understanding everyday motility

Physical structures refers to infrastructure, such as roads and railways, physical mobility hubs, means of mobility, buildings, etc., that are not controlled by the individual. A prerequisite for movement is the material structures and physical environment that surround us as mobilists, and enable movements of various kinds [Kaufmann, 2003]. For changes to be made in people's everyday mobility, it is necessary to focus on what mobilities the current physical structures encourage [Freudendal-Pedersen, 2022].

Options and conditions refers to physical access to different modes of transport as well as technologies available to the individual, such as a privately owned car or bike. Physical capacities and skills, such as the ability to see and walk, are also part of physical access. A condition for using mobility options is also financial access. In order to utilize options for mobility, one must also have the financial means to do so, whether through owning the necessary goods or services or being able to purchase them with money [Christensen et al., 2019; Flamm and Kaufmann, 2006]. Another condition for using one's available material options is also that they provide access to the desired destinations and daily activities in a suitable way.

Societal structures encompasses structures of everyday life and daily needs that exist in a society (e.g., going to work). Most of these activities are not unique to individuals because they are created and affected by society Urry [2007]. These everyday activities are often based on a need to be in places at certain times (e.g., workplace, school, leisure activities, etc.) [Christensen et al., 2019]. Social values also influence an individual's mobility choices with expected standards of mobility such as "one needs a car", as owning a car is the norm in today's society, steered by values of freedom of movement and flexibility. On the other scale, people are also steered by social values of caring for the environment [Freudendal-Pedersen, 2009; Flamm and Kaufmann, 2006].

The individual refers to personal values and aspirations, such as an aspiration to live more sustainably. In a mobility context, this could be by avoiding driving [Christensen et al., 2019]. This element encompasses how individuals consider, select/deselect, and deem specific mobility options appropriate. This element also encompasses people's interpretations of their knowledge and skills to use the material options and conditions

in the performance of everyday mobility practices [Kaufmann et al., 2004]. In a sense, the individual aspect of the framework encompasses all the above three aspects, and it is through the individuals' interpretations of the other three aspects that a person makes their mobility choice. As Kaufmann [2003] notes, it is not all available potentials that are considered suitable, and so the individual holds the final say in their mobility choice. It is also important to note how the aspects are highly interconnected and are only separate for the purpose of analyzing and structuring in a clear way.

4.5 Analysis Strategy

The following two chapters will make up the analysis of this thesis and are made on the findings of the literature, theoretical review, and collected data. This analysis strategy helps guide the analysis and explains how the theoretical knowledge will be used to structure both analysis parts. In general, the analysis aims to generate knowledge about how an understanding of citizens' mobilities choices can contribute to the planning of mobility hubs in Aalborg Municipality.

The first part analyzes how Aalborg Municipality considers the everyday perspective in its mobility planning and how they work with mobility hubs. This is done partly through a document analysis and through an interview with a municipal mobility planner. This analysis part investigates how Aalborg Municipality currently understands and works with mobility in an everyday context as well as the municipality's work with mobility hubs. This part also investigates how and if everyday mobility and mobility hubs are used in connection or separately.

For the second part of the analysis, the constructed analytical framework of everyday motility will be used with the purpose of analyzing how citizens' everyday life affects the use/non-use of Svenstrup's mobility hub. To analyze which reasonings apply to individuals choosing or not choosing to use mobility hubs, citizens' interview responses are analyzed based on the elements; physical structures, options & conditions, and societal structures in order to gain knowledge about the individual's choice of mobility. The analysis strategy is illustrated in figure 4.1.

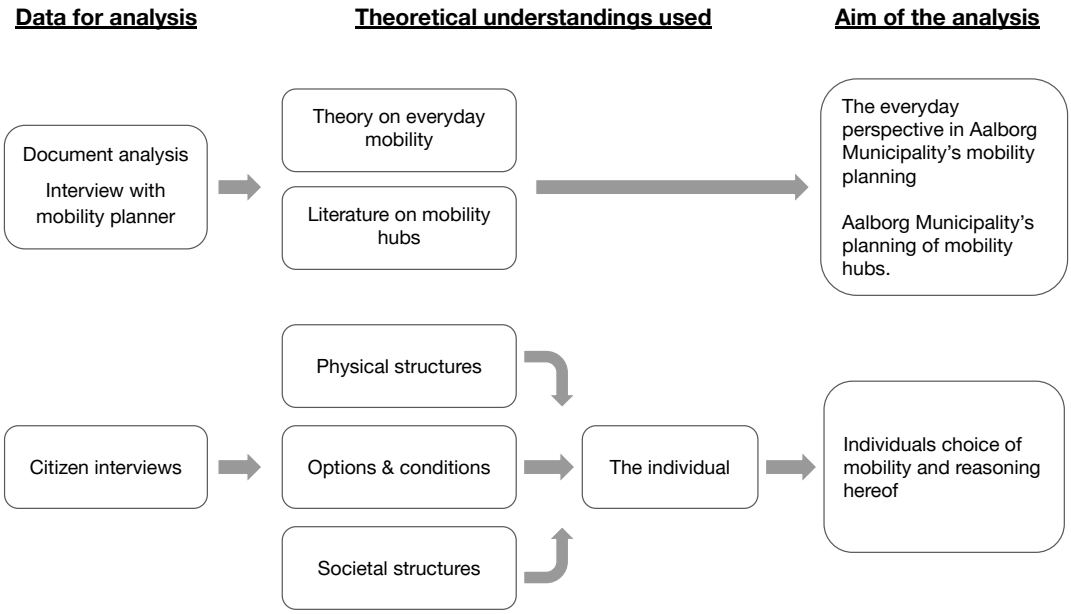

Figure 4.1. An illustration of the analysis strategy. Own figure.

After both analysis parts are conducted, the results from both interview parts are combined in a discussion in order to determine how Aalborg Municipality's planning takes citizens' own everyday perspective into account and how these reasonings for the use and non-use of mobility hubs can be used in a planning context. This discussion ultimately leads to a set of recommendations for Aalborg Municipality.

Aalborg Municipality's Mobility Planning 5

This chapter will investigate Aalborg Municipality's approach to mobility planning, which role citizens' everyday life plays in it, and how it is connected to the planning of mobility hubs. The analysis is based on official documents and plans from Aalborg Municipality and supplemented by an interview with Mette Olesen, who is a mobility planner at Aalborg Municipality.

5.1 Understanding of Mobility and Everyday Life in Mobility Planning

Aalborg Municipality sees mobility as an integral part of citizen's life which is also reflected in the municipality's mobility plans and strategies [Aalborg Municipality, n.d.b, 2019b]. In Aalborg Municipality's main mobility plan describing the municipality's overall mobility goals and action plan named the Mobility 2040 plan, the councilor for the urban and landscape administration, Hans Henrik Henriksen, described mobility as *"[...] a basic prerequisite for us humans to have a good life"* [Aalborg Municipality, 2019b, p. 3]. Aalborg Municipality also describes mobility as an important part of the sustainable development in Aalborg Municipality and as being closely connected to environmental sustainability, economic growth, as well as the social aspect of citizens' well-being [Aalborg Municipality, 2019b].

The municipality uses a broad understanding of the term mobility that goes beyond simply transport. The municipality states that *"[g]ood and sustainable mobility, therefore, considers much more than simply the individual need to get from A to B"* [Aalborg Municipality, 2019b, p. 6]. They instead describe that *"[m]obility is about considerations for people's well-being and everyday life, handling of goods, good conditions for businesses, attractive urban spaces, the possibility of safe and secure movement, urban quality, quality of life, the experience of the journey from A-B, environment and sustainability, growth, and the well-being of all of us"* [Aalborg Municipality, 2019b, p. 6]. With this broad understanding of mobility, Aalborg Municipality goes beyond the mere transport-focused planning often used in the past and embraces a more mobility-focused approach focusing on the social sides of mobility as well [Urry, 2007; Sheller and Urry, 2016; Freudendal-Pedersen, 2022]. The municipality also describes that:

> *"Good and sustainable mobility is an important prerequisite for a well-functioning everyday life. Therefore, we must create the basis and framework for people and goods to move around easily, both in the countryside and in the city. We are all mobilists - we move like never before, and we do not like being limited in our options to move."* [Aalborg Municipality, 2020a, p. 26]

This highlights the connection Aalborg Municipality sees between mobility and citizens' everyday life. Everyday situations and mobility are described as inseparable from each other and must therefore be planned for in relation to each other as mobility is the glue that keeps everyday life together, corresponding to the

arguments by Freudendal-Pedersen [2009]. The municipality's broad focus on mobility includes the social aspect of mobility and a focus on people as mobilists. Aalborg Municipality's mobility understanding, therefore, reflects similarities to the new mobilities paradigm. The municipality has many ambitions that are in line with the connection between mobility and everyday life. Promoting Transit Oriented Development at new and developing urban centers is an ambition to create more sustainable mobility habits [Olesen, 2023]. This is done through densification and through the creation of mobility hubs [Aalborg Municipality, 2019b; Olesen, 2023]. The municipality believes that this kind of development will have a positive outcome on the urban life and, therefore, also those living in and visiting those places. One example of this kind of development happening in Aalborg is the bus rapid transit line which is currently under construction and will tie the city of Aalborg closer together. Its stations will function as local mobility hubs with different place-related functions [Olesen, 2023].

In its different plans and strategies, Aalborg Municipality divides their effort into different geographies. These are the city center, which primarily is about the city of Aalborg and everything in its near vicinity, catchment areas to the city, and the open land, corresponding to the countryside [Aalborg Municipality, 2019b]. These different areas have various mobility needs and issues. The municipality's main ambitions for the city of Aalborg are to promote growth and urban development while keeping the transport infrastructure strong and urban quality high [Aalborg Municipality, 2019b]. Their goals for catchment area cities are to keep them as centers for everyday life and strengthen their connection to the city of Aalborg. The main goal for the countryside is to improve citizens' basic mobility options [Aalborg Municipality, 2019b]. Aalborg Municipality has ambitions to make waiting times connected to the use of public transportation more useful so users do not experience it as wasted time [Aalborg Municipality, 2020b]. Olesen [2023] sees this as an important way of taking everyday life into consideration. Ways in which this could be done are, among others, the option to shop or collect packages at mobility hubs [Olesen, 2023]. Users would then be able to shop on their way home or collect a package and therefore not experience the waiting time as wasted time.

The municipality recognizes that trips are made for different reasons [Aalborg Municipality, 2019b]. These reasons are, according to Olesen [2023], aspects that Aalborg Municipality has to investigate and keep in mind when planning mobility. Public participation, therefore, plays a large role, as it is a way for the municipality to get an insight into users' everyday perspectives. Public participation is, according to Olesen [2023], not only useful to get an insight into users' opinions and needs, it also helps to convey ownership of mobility projects to their coming users.

5.2 Mobility Hubs

Mobility hubs are an important part of Aalborg Municipality's mobility planning. Their plan is to *"[...] support and develop attractive, visible, and strategically well-placed nodes that support the possibility to change between different mobility forms"* [Aalborg Municipality, 2019b, p. 24]. Mobility hubs are also described to have social aspects to them: *"Also mobility nodes have to be used as places for urban life creating functions in order to create good meeting and modal shift spots, and thereby promote both sustainable mobility and urban life"* [Aalborg Municipality, 2020a, p. 21]. This illustrates how mobility hubs are described as combining transport and more social and non-transport-related element. This is in line with the mobility hub definition used in this thesis and the place and node understanding often used in literature [Rongen et al., 2022; Weustenenk and Mingardo, 2023].

According to Olesen [2023], mobility hubs serve two main purposes. The first purpose is to reduce car traffic going into big cities by allowing the change from private car to alternative mobility means, including public transport. The second purpose is for hubs to function as mobility libraries, allowing individuals to borrow and get access to mobility without owning the mobility mode itself. In this way, mobility hubs can improve citizens' mobility. There is no one way to design a mobility hub, and its final design has to be context-dependent, taking the scale, users, and purpose of the hub into consideration [Olesen, 2023]. While Aalborg Municipality's view on mobility hubs suggests that mobility hubs should combine multiple mobility modes [Aalborg Municipality, 2019b], Olesen [2023] thinks that mobility hubs are very different and that everything in some way or another may become a mobility hub. This is also related to the fact that humans seek convenience, and large and formal mobility hubs do not always fit the lives of citizens.

5.2.1 Mobility Hub Typology

Aalborg Municipality uses a mobility hub typology with four different types of mobility hubs. The purpose of the typology is to assist planners in planning [Olesen, 2023]. In this way, planners are able to differentiate hubs and understand their role within the mobility network. The typology includes network hubs, destination hubs, park and ride hubs, and catchment area hubs. The distribution of the different types of hubs in the municipality is illustrated in figure 5.1. Though this typology exists, these types function mainly as ideals, and physical hubs can therefore have characteristics of multiple types [Aalborg Municipality, n.d.a].

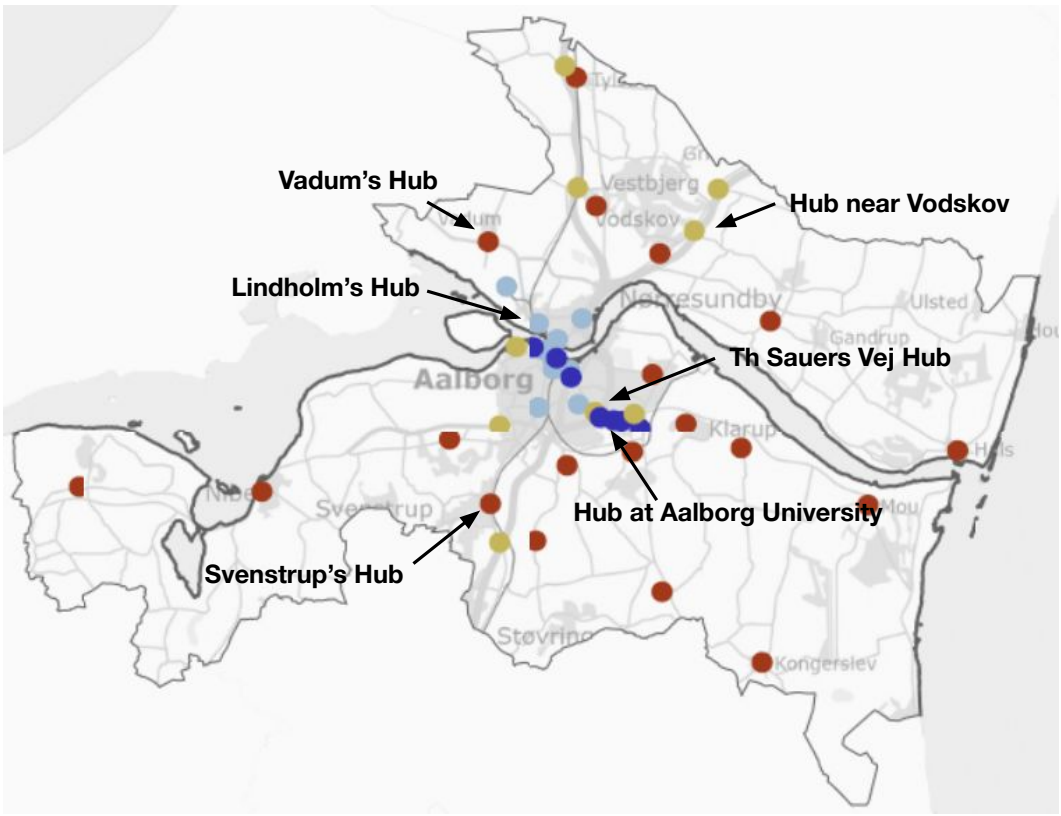

Figure 5.1. An illustration of Aalborg Municipality and the placement of their official mobility hubs. The mobility hubs are marked as follows. Dark blue dots are destination hubs, light blue dots are network hubs, red dots are catchment area hubs, and yellow dots are park and ride hubs. Mobility hubs highlighted with names are referenced later on in this section. [Aalborg Municipality, n.d.a]

Network hubs combine many different public transport options and thereby make sure that users get access to much of the public transport network from a single hub. Aalborg Municipality's network hubs are mainly located in and around the city of Aalborg and include, for example, Aalborg's main station, as well as the airport. Due to their placements, network hubs can sometimes also qualify to be destination hubs [Aalborg Municipality, n.d.a]. Figure 5.2 shows a network hub located in Lindholm.

Figure 5.2. Lindholm Station, a network hub offering several bus lines and train connections. The hub is located close to restaurants and different kinds of stores. [Google, 2022c]

Destination hubs are small hubs, typically located at the beginning or end of journeys, and offer limited choices between different public transport modes. Their purpose is to connect important destinations, such as large housing or working districts, to the public transport network and create lively spaces where different local functions are gathered. Cars are less integrated at destination hubs compared to catchment area hubs and park-and-ride hubs, as pedestrians and cyclists are prioritized. Aalborg Municipality's destination hubs are mainly located within Aalborg's city boundaries and are therefore relatively centralized [Aalborg Municipality, n.d.a]. Destination hubs can, among others, be found at Aalborg University's main campus (see figure 5.3), the university hospital, and also central housing areas.

Figure 5.3. A destination hub at Aalborg University's main campus. It offers a bus stop serviced by different bus lines. The hub offers access to the university's main campus. [Google, 2022b]

Park and ride hubs are, as the name suggests, park and ride facilities with the purpose of facilitating a modal shift from car to public transport or bicycle and are also meant to promote carpooling. They are located along the municipalities main roads and motorways leading to or out of Aalborg city, which makes them easily accessible for car users. These hubs can be further divided into hubs at the edge of the city of Aalborg and those placed in more rural locations. The purpose of city edge hubs is to facilitate a modal shift towards bicycle and public transport for traffic going into Aalborg, while the goal of traffic going out of Aalborg is to promote carpooling. Bigger park and ride hubs with access to several mobility modes can also function as network hubs [Aalborg Municipality, n.d.a]. Figure 5.4 shows a park-and-ride hub located near the city of Vodskov which only offers parking lots for people planning to carpool. Figure 5.5 shows a newly imagined park-and-ride hub that goes beyond offering parking lots.

Figure 5.4. A park and ride hub located near the city of Vodskov and close to the motorway. It only offers parking lots meant for carpooling. [Google, 2023]

Figure 5.5. A park and ride hub located at TH. Sauers Vej, a street on the outskirt of the city of Aalborg. The picture illustrates the planned renewal of the current hub, and will offer parking lots, a bus rapid transit stop, toilets, and possibly a parcel pickup point and kiosk. Illustration by Niras in The Dansih Road Directorate [2023]

Catchment area hubs serve as mobility hubs for catchment areas in the city of Aalborg. They allow people living on the outskirts of the city or in more rural places of Aalborg Municipality to commute with public transportation to the city of Aalborg, but also more generally within the municipality. They are typically located at village clusters and along the main public transport network of the North Jutland Travel Agency, such as along the train tracks. Their main goal is to give the municipality's more rural population access to the public transport infrastructure and reduce the need for cars when traveling to the city of Aalborg. These hubs typically have large parking lots in order to cater to car users and also promote carpooling, but are also planned to be accessible by cyclists and pedestrians. In practice, these hubs can also be park and ride hubs and destination hubs [Aalborg Municipality, n.d.a]. This concept will be described later on in the analysis. Figure 5.6 shows the small catchment area hub located in the city of Vadum, while figure 6.1.1 shows a much bigger catchment area hub in the city of Svenstrup.

Figure 5.6. A catchment area hub in the city of Vadum. It offers bus stops served by one bus line. However, other bus stops are located close by and served by a wide variety of bus lines. [Google, 2022d]

Figure 5.7. A catchment area hub in the city of Svenstup. It is serviced by different bus and train lines. It also offers parking lots and bicycle parking and is located in close vicinity to, among others, stores and other services. [Google, 2022a]

When looking at the mobility hubs pointed out by Aalborg Municipality, it can be seen that the hubs' size and functions vary a lot [Aalborg Municipality, n.d.a]. The typology used by Aalborg Municipality shows how the municipality distinguishes between mobility hub types based on the transportation modes they facilitate and their location within the municipality. This approach is similar to other typologies found in literature, such as those proposed by Bell [2019] and Weustenenk and Mingardo [2023]. However, this typology puts less emphasis on the presence of place-related functions, and while some mobility hubs offer both place- and transport-related functions, such as Svenstrup mobility hub (see figure 5.7), others only offer a carpooling parking lot far into the countryside with no other mobility modes or place-related functions such as a hub near Vodskov (see figure 5.4). Although Aalborg Municipality believes that mobility hubs should incorporate both place and transport-related functions, some hubs do not live up to this criteria. One of the reasons for this is likely that many of Aalborg Municipality's existing mobility hubs are not planned with their current mobility hub view in mind. A current project to renew one of the existing mobility hubs (see figure 5.5) meanwhile shows how a hub that mainly consisted of a parking lot with a bus connection will become a more full-fledged mobility hub with a parking lot, a bus rapid transit connection, a toilet, and likely also a parcel collection spot and kiosk [The Dansih Road Directorate, 2023].

In general, the typology used seems to put little importance on the non-transport side of mobility and mainly focuses on connecting different locations. The social side of mobility hubs and mobility, including the use of functions, are meanwhile neglected, which illustrates that the typology is not fully embracing the broad view on mobility introduced by the new mobility paradigm, which is otherwise very prominent in Aalborg Municipality's own mobility understanding. Instead, the typology seems to be based on a transport-oriented understanding of mobility even though the typology is relatively new and was introduced into Aalborg's municipal plan within the last five years [Aalborg Municipality, n.d.a, 2018]. Nonetheless, it is possible that the typology will be adapted in the future as Aalborg Municipality has a current project to continue developing its mobility hub concept with a focus on how physical, visual, social, and digital actions support multimodality [Aalborg Municipality, 2019b].

5.3 Mobility for All

The municipality has a goal to secure mobility for all, which can be found in the Mobility 2040 plan [Aalborg Municipality, 2019b]. It mentions that *"[...] all the municipality's citizen must perceive that they are mobile and thereby have access to participate in jobs, activities, social relations, etc."* [Aalborg Municipality, 2019b, p. 20]. This goal is expanded to public transportation in which connection Aalborg Municipality mentions that *"[...] all the municipality's citizen should have access to public transport regardless of geography, age, or specific needs"* [Aalborg Municipality, 2020b, p. 11]. The goal to secure mobility for all illustrates that the municipality believes mobility solutions should adapt to the individual's conditions. Some citizens do not own a car, some are limited due to handicaps, and others live in more rural locations with limited public transport connectivity. Figure 5.8 illustrates the experienced mobility in relation to individuals' age which, among others, is affected by changing mobility needs.

Independent of these personal factors and conditions, Aalborg Municipality wants to secure mobility for all its citizens. This illustrates that the municipality understands that not every citizen has equal possibilities when it comes to access to mobility and skills. This also relates to Kaufmann's (2003) motility term and the potential to be mobile, which Aalborg Municipality wants to improve for its citizen.

Figure 5.8. Illustration used by Aalborg Municipality to describe the experienced mobility (vertical axis) in relation to citizens' age (horizontal axis). [Aalborg Municipality, n.d.b]

Mobility outside greater Aalborg is one of Aalborg Municipality's focus points as mobility choices in these locations are relatively sparse [Aalborg Municipality, 2019b] as is also illustrated in figure 5.9. The mobility outside the city of Aalborg has been negatively affected by budget cuts in public transport [Olesen, 2023]. According to Olesen [2023], statistics also show that about 25% of individuals living in the countryside do not have access to cars and are therefore more likely to have problems sustaining their own mobility needs compared to their urban counterparts. In order to improve mobility, Aalborg Municipality wants to offer more flexible mobility solutions in both catchment areas and the open land. Mobility hubs are a part of this ambition and are meant to function as access points to many different mobility modes.

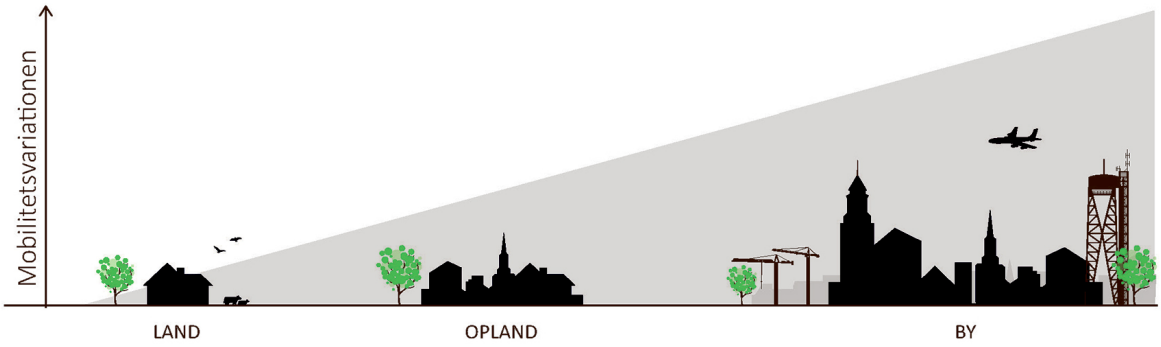

Figure 5.9. Illustration used by Aalborg Municipality to describe the mobility mode variation (vertical axis) in relation to the country, catchment areas, and the city (horizontal axis). [Aalborg Municipality, n.d.b]

Other tools used are the so-called flex and plus trips. Flex trips are an on-demand public transport service offer in the form of small buses and taxis. These are ordered in advance and typically transport people their entire trip. However, unlike taxis, they do not take the shortest route as they combine several ordered flex trips and service several customers at the same time, thereby functioning as a hybrid between a bus and taxi service [NT, n.d.].

Similar to flex trips, plus trips provide on-demand public transportation services. However, they solely cater to individuals in areas without access to public transportation. Their main objective is to address transportation challenges for the first and last mile between a public transport stop and the beginning or end of a journey [NT, n.d.]. These services play a particularly important role in promoting multimodality in less densely populated areas as they give people access to public transport infrastructure without the need for a car. This is also one of the reasons why Aalborg Municipality values plus trips highly in connection with

catchment area hubs as they improve the accessibility of these hubs for non-car users [Aalborg Municipality, n.d.a, 2019b].

While these initiatives show that Aalborg Municipality wishes to improve mobility and access for public transport users in the countryside, the success has been limited. According to Aalborg Municipality [2020b], the general public is not familiar with the solutions and therefore does not use them. This clearly illustrates that these projects have not been locally anchored yet, and the increased accessibility is mainly theoretical. However, it illustrates that Aalborg Municipality attempts to develop mobility forms that are adapted to citizens' specific needs and their everyday life. It also shows their desire to secure mobility for all residents in the municipality.

5.4 Local Ownership

Another part of Aalborg Municipality's work with mobility is giving a sense of ownership to citizens and making sure projects are anchored in the local and social environment. Although local ownership is not included in the municipality's mobility plans, it is, according to Olesen [2023], particularly important when working with smaller hubs, but also in regards to shared mobilities and newly introduced mobility modes. Olesen [2023] presented two examples in the interview which showed how entire projects have failed because they did not get locally anchored, highlighting its importance. In an attempt to improve local mobility, a municipality provided locals with the possibility to rent a small bus if local social clubs, for example, wanted to go on a trip. However, the project never got a foothold partially because most never knew about the possibility. In another town, the municipality helped establish a mobility association for volunteers to debate possible improvements to their town's mobility. The same solution with rentable buses proved to be a big success in this town, particularly because citizens themselves were involved in the decision and therefore knew a need existed [Olesen, 2023].

5.5 Behavior Change

Changing mobility habits is a complex task and is about more than just creating new mobility options [Flamm and Kaufmann, 2006]. According to Aalborg Municipality [2020b] *"[t]he actions [in relation to public transport] must cover the entire range from impact on transport behavior and the need for mobility to concrete construction projects"* (p. 12). Aalborg Municipality expresses that mobility projects must go hand in hand with a change in behavior. Aalborg Municipality [2019b] describes that they want to *"[...] influence transport behavior and change habits to secure a more sustainable mobility"* (p. 32). This is, in particular, an interest outside of the city of Aalborg since those who reside outside the city are more inclined to use the cars for their daily commute [Aalborg Municipality, 2019b].

Mobility is unlike many other aspects deeply integrated in individuals' everyday life and activities [Freudendal-Pedersen, 2022]. This makes it difficult to make changes to one's mobility without changing one's everyday life. Simple changes in mobility will often be experienced as large interventions in one's life that can be difficult to overcome. This makes many individuals stick to what they know best rather than what is best for the society [Freudendal-Pedersen, 2022]. Olesen [2023] therefore also believes that what is needed should be seen as a behavior renewal rather than a simple behavior change and has to be facilitated by the municipality through nudging and an incentive structure functioning through the carrot and stick principle and pushing and pulling individuals at the same time towards a more sustainable behavior.

Aalborg Municipality tries to change citizens' mobility behavior in many ways. They invest in infrastructure such as bicycle and walking path networks. They also invest in campaigns, including bicycle campaigns, in order to nudge and convince citizens to change their mobility habits [Aalborg Municipality, 2019b]. The integration of different mobility modes, such as walking and cycling, with public transport is also one of the municipality's goals as they seek to increase public transport's flexibility and make multimodal travel easier [Aalborg Municipality, 2020b]. The integration of place-related functions with transport infrastructure is an additional goal in order to make behavior change more attractive, particularly at mobility hubs [Olesen, 2023]. Even penalties are described as possible solutions: *"Stricter measures could be to make it more inconvenient and time-consuming to use the car, for example by removing the possibility of getting very close to schools, institutions, etc. by car but easy for cyclists and pedestrians"* [Aalborg Municipality, 2020a, p. 12]. The focus on countermeasures limiting undesired behavior when planning mobility, including mobility hubs, is present in literature, and Rongen et al. [2022] describes flanking policies as an important tool to discourage car usage and make alternative transport through mobility hubs more popular.

Despite Aalborg Municipality's ambitions and plans to change mobility behavior, Olesen [2023] believes that mobility-related projects are often seen too optimistically in regard to the projects' effects. She experiences that behavior-promoting measures are more popular solutions and are often chosen instead of behavior-restricting measures. Examples of this are how mobility hubs are built in order to make multimodality more desirable and to promote multimodal behavior or how bicycle lanes are built and improved in order to reward cyclists. Restrictions for unwanted behavior that could push citizens to other behaviors are meanwhile used much less frequently in Aalborg Municipality. The reason for this is that the promotion of good behavior is seen as a more politically acceptable tool, while restrictions are seen as interventions in people's personal choices and, therefore, their everyday life. Olesen [2023] describes it the following way: *"[...] it [people's mobility choice] is culture we are working with here. It is very difficult to work with [...]. It is also because of this that it is so political since there is also a difference on how much you want to limit people's personal freedom"*. The politicization of mobility planning and the fear of exercising power, forcing individuals to take on a different behavior, seems to be one of the problems that the municipal mobility planners encounter.

5.6 Cities in the Catchment areas of Aalborg Municipality

The catchment areas in Aalborg Municipality are crucial to the daily life of many residents [Aalborg Municipality, 2013a]. They are typically located within reasonable proximity to the city center, and most have established public transportation options. This presents an opportunity for these areas to improve their sustainability in terms of mobility [Aalborg Municipality, 2020b]. The municipality has a total of 40 cities that make up the catchment areas, and the municipality has selected 11 of these cities as areas with special growth potential. There has been a focus on developing plans and strategies in collaboration with the local population since 2013 [Aalborg Municipality, 2019c]. Among these development plans and strategies, there is an ambition to connect these cities to each other and to Aalborg city via mobility solutions. The municipality writes:

> *"Catchment areas contain many functions that help to create the foundation for everyday life. The cities need good connections to and from the city of Aalborg, as many workplaces, educational institutions, and major leisure and cultural functions are located here."* [Aalborg Municipality, 2013b]

An issue that is present in the catchment areas relates to the travel that occurs locally within the cities. Distances to activities and functions within the cities are small, but the private car is still the main mode of transport. The municipality sees this as an issue from a sustainable and health perspective, as many of these shorter trips could be made by means of bicycle or foot. Therefore, the municipality also sees great potential in creating better habits for the local trips by focusing on supporting better flexibility in the use of various modes of transport and the switches between multiple means such as bicycles, walking, public transport, and the car [Aalborg Municipality, 2019b].

5.7 Svenstrup

Among the 11 selected catchment areas with special growth potential is Svenstrup. Svenstrup has a special potential for growth because of its closeness to Aalborg's center, the large retail area of 'City Syd', and because it is close to the highway and the regional railway. Furthermore, the city has the quality of being an independent community with many functions and natural elements around [Aalborg Municipality, 2021]. The cities urban development plan pinpoints that the city should develop as an independent city with its own identity and not just be a catchment area for Aalborg. Identity markers are, for example, the city as a station town, large residential areas, important business areas, and the landscape that surrounds the city [Aalborg Municipality, 2021].

The city is growing and has increased its population with just under 400 residents since 2017 [Statistics Denmark, 2022] and is predicted to continue growing [Aalborg Municipality, 2019a]. Looking at the composition of the residents of the city, its main portion is younger couples and families with children. Compared with the rest of the municipality of Aalborg, Svenstrup has a smaller portion of singles, seniors, and young people. Many of the people moving to Svenstrup do so because it offers space for kids, but also because of its good transportation connections [Aalborg Municipality, 2019a]. According to Aalborg Municipality [2019a], the city has to be able to capture the needs of the everyday life: *"Svenstrup contains many of the city functions that help to create a good everyday life for the citizens of the city and the surrounding area. There is an active leisure, association, and commercial life that must be protected"* [Aalborg Municipality, 2021]. In enhancing and preserving these good conditions, the municipality focuses on ensuring a selection of different housing and a mix of functions, both public and private, like daycares and sports facilities.

Mobility in Svenstrup

A special characteristic of Svenstrup is, according to the municipality, its good connections to Aalborg city and beyond by trains, cars, and buses. However, it is still a goal that sustainable modes of transportation should be promoted. They write: *"Good accessibility must be ensured between housing, leisure facilities, recreational areas, educational facilities, shopping, and workplaces. The infrastructure must support the use of sustainable forms of mobility such as walking, cycling, and public transport"* [Aalborg Municipality, 2021]. In this context, the municipality highlights a need to create a safe and efficient environment for pedestrians, cyclists, people using public transport, and those combining these. Multimodal travel is mentioned as a challenge for the city, underlining the need for improvements in this area [Aalborg Municipality, 2019a]. The bicycle is pointed to as an important feature for creating better mobility. However, there is no real mention of what multimodal travel means and how the municipality intends to promote it. Instead, it mentions that Svenstrup has good networks for pedestrians and cyclists [Aalborg Municipality, 2019a].

In the finalized development plan from 2021, there is a continued strong focus on non-motorized mobilists and how they should be prioritized more in the road network. They specifically highlight areas in the city that are newly developed around larger roads that do not accommodate this group of travelers well enough [Aalborg Municipality, 2021]. Looking forward, this group should also be considered in the development of new housing areas or urban spaces by creating new infrastructure and connecting the existing ones. The municipality argues that doing this will increase the mobility and create more activity and urban life [Aalborg Municipality, 2021].

The municipality believes access to public transport in Svenstrup should be expanded to make sure that everyone has access to it. Svenstrup station is mentioned in regards to the public transport: *"Svenstrup Station is a node for public transport in the city. The node where you change modes of transport must also be an urban node"* [Aalborg Municipality, 2021]. They do not describe how the network should be expanded or what they directly mean with the station area as an urban hub, but the significance of the hub is there.

5.8 Summary

Aalborg municipality has a broad understanding of mobility that goes beyond just transport, as they also incorporate a social perspective. While they strive to create good connectivity between places, they also acknowledge that mobility and citizens' everyday lives are intertwined, making an everyday perspective part of their mobility planning. As part of this social view, they mention, among others, the importance of citizens' everyday lives, well-being, the experience of traveling, and attractive urban spaces as focus points in their mobility planning [Aalborg Municipality, 2019b].

Mobility hubs are one of the places where Aalborg Municipality has an ambition to incorporate a social and everyday perspective. This is done by designing hubs while keeping citizens' different activities and lives in mind [Olesen, 2023]. While all people move, they do so because of different reasons, which results in different needs for their mobilities. Additionally, citizens have different personal circumstances, such as geographical location and so on, that affect people's mobility needs. Because of this and in order to improve the general mobility in Aalborg Municipality, the municipality has a goal to secure mobility for all [Aalborg Municipality, 2019b].

Despite Aalborg Municipality's ambition to incorporate everyday life and mobility, the result is not always clear yet. Currently, the municipality's mobility hubs are to a large extent transport oriented. This is expressed, among other things, in their typology that does not differentiate hubs based on the degree and types of non-transport-related functions offered. Additionally, some of their current mobility hubs offer nothing more than a parking lot near a motorway which allows for limited use and limited integration of everyday life and activities at some hubs. This illustrates that the integration of everyday life in mobility and mobility hub planning is still in its infancy and, therefore, still needs to be expanded on, which also seems to be happening in newer projects.

Everyday Motility in Svenstrup 6

This chapter is structured based on the developed concept of Everyday Motility from section 4.4. It investigates the external factors that either facilitate or hinder the utilization of mobility hubs, as well as the reasons why individuals opt to use or not use mobility hubs. This analysis part is based on interviews conducted with citizens to gain insights into the reasoning and underlying justifications affecting people's decisions concerning mobility options.

6.1 The Physical Structures of Svenstrup Mobility Hub

Within the themes of physical structures as an external factor and material options and conditions as an individual-related factor, various elements are taken into consideration. Everyday mobility is an integrated part of everyday life, and the individual's conditions for mobility are seen in relation to the physical structures, as these are the starting point for the choices regarding the most suitable mobility for the activity carried out.

6.1.1 Svenstrup's Mobility Hub

A prerequisite for movement is the material structures and physical environment that surround us as mobilists, and enable movements of various kinds [Kaufmann, 2003]. Mobility hubs have varying physical structures and layouts depending on their location and purpose [Weustenenk and Mingardo, 2023]. Svenstrup's mobility hub is located in the catchment area of Aalborg city and is therefore characterized by Aalborg Municipality as a catchment area hub [Aalborg Municipality, n.d.a]. The continued section will focus more specifically on this hub, its functions, mobility opportunities, and nearby surroundings.

As established in chapter 2, mobility hubs consist of both transport-related and place-related functions. The transport-related aspect of these hubs is that they serve different shared transport options at a physical location [Geurs and Münsel, 2022]. Svenstrup mobility hub has a central location in the city and a wide range of transport-related functions. Trains depart from the train station every half hour in a northern direction and hourly in a southern direction, and waiting sheds are present on both sides of the tracks. In addition, there are two bus stops from which four different lines run. The frequency of the train especially, and the relatively modest selection of bus routes cannot be classified as high-frequent, which is what is typically considered important for a suburban mobility hub [Weustenenk and Mingardo, 2023]. In the station area, there are also bicycle parking and parking spaces for cars as well as a designated carpooling space, which enables multimodal travel in connection with taking the train or bus. An overview of the layout of the mobility hub is illustrated in figure 6.1.

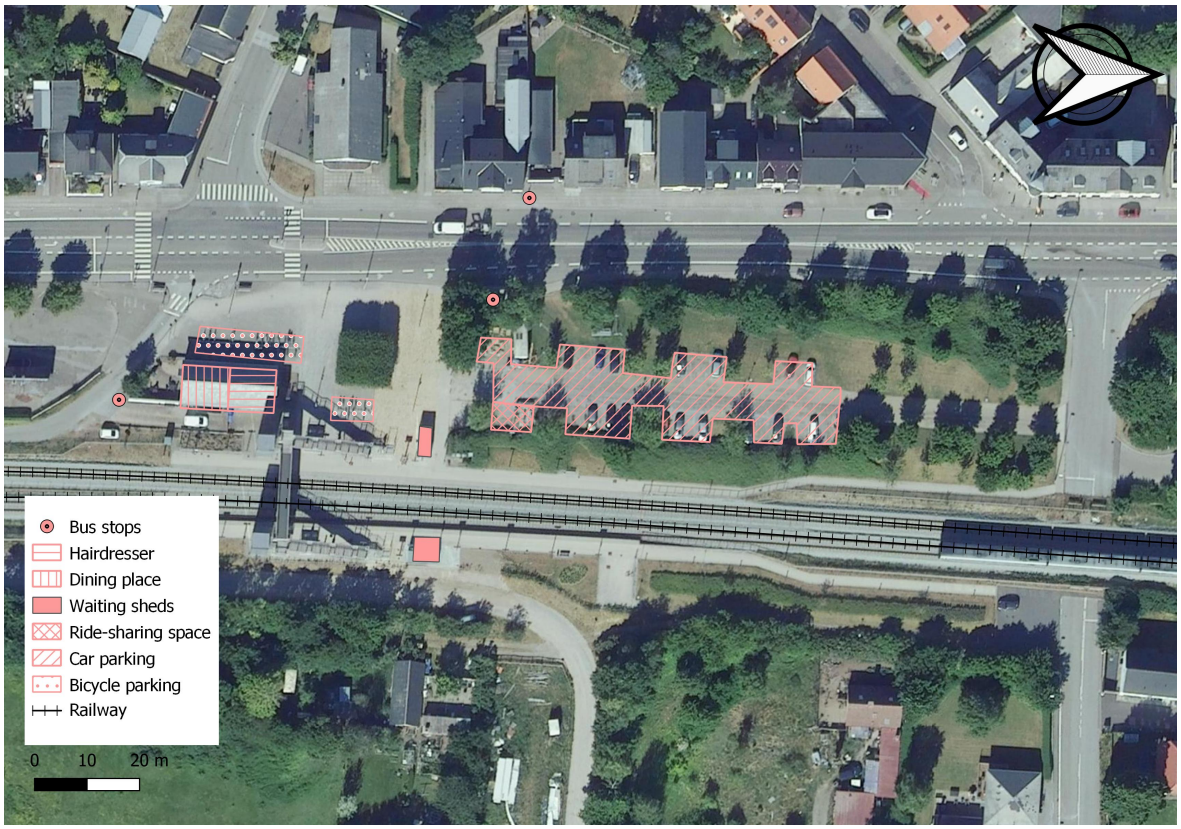

Figure 6.1. An aerial view of the layout of Svenstrup Mobility Hub. Own illustration. Includes data from Dataforsyning [2022].

Furthermore, within the station premises, there are signs such as the national mobility hub sign, a carpool sign, and an information board displaying information about train schedules. These are shown below in Figure 6.2.

Figure 6.2. The sign on the left is a carpooling sign at the ride-sharing space. The sign in the middle is the national mobility hub sign. The sign on the right is an information board near the waiting shed. Own photos.

6.1.2 The Surrounding Physical Structures

Mobility hubs also function by virtue of the various functions that are near the hub [Aono, 2019]. It is these functions that help to improve the quality of the hub, either in the form of facilities such as waiting rooms and benches or facilities in the surrounding area of the hub [Conticelli et al., 2021]. As shown on the map below (figure 6.3), there are several functions near the Svenstrup's mobility hub that relate to everyday activities. Two buffer zones have been added to the map of respectively 400 meters and 800 meters. The first buffer zone is equal to about a 5-minute walk from the mobility hub. In this zone, there are various activities and functions. Surrounding the hub area are restaurants, hairdressers, and convenience stores. The area also leads up to Svenstrup city center, where there is a library, a fitness center, a kindergarten, a mix of liberal professions, and retail stores.

Figure 6.3. Map overview of everyday functions near Svenstrup Mobility Hub. Own illustration. Includes data from Dataforsyning [2022].

Moving out to about 800 meters from the hub, more everyday functions appear, along with residential homes. From the outer buffer ring, it would take approximately 10 minutes to reach the hub. The functions here include a large industrial complex (Arla Foods), a park, a school with a gymnastics hall, some smaller businesses, and a retirement home. Although there are many mobility functions near the hub, such as bus, train, bicycle, and car parking, and everyday functions, such as grocery shopping, workplaces, school, kindergarten, etc., this does not mean that these functions are considered by the individual as opportunities in an everyday context. The stresses and obligations of daily life can limit the perceived options available even if they initially appear to be plentiful [Kaufmann et al., 2018]. Therefore, it is also necessary to take into account the options and conditions for access to the mobility functions is perceived.

6.2 Options and Conditions for Access to the Mobility Functions

The element of material options and conditions refers to the material dimension and includes physical access to different modes of transport as well as technologies available to the individual, such as a privately owned car or bicycle. Financial conditions are likewise an important aspect of the options and conditions for the choice of transportation [Kaufmann, 2003]. According to Flamm and Kaufmann [2006], access is the condition under which the available mobility options are perceived as viable. Access is, therefore, also about the logic behind individuals' choices in relation to being mobile [Flamm and Kaufmann, 2006]. It is this understanding of access that this analysis part uses. The interviews revealed that the citizens reside in various locations, both within and outside of Svenstrup, and need to travel to different destinations in their daily lives. Undoubtedly, this has an impact on their responses about whether they believe they have access to Svenstrup mobility hub or not.

Access to Mobility in Svenstrup

An important prerequisite for using mobility hubs is that they are perceived as accessible to use [Arnold et al., 2022]. During the interviews, citizens provided various insights into how they perceive and address the distance to Svenstrup mobility hub. Their responses can be categorized into two groups. Group 1) comprises individuals who encounter limited perceived difficulties in reaching the station, either on foot or by using alternative modes of transportation like bicycles or cars.

One of the interviewed citizens shared her experience with utilizing Svenstrup's mobility hub. She mentioned having two bicycles, one parked at her home to reach the train station and the other parked in Randers for her travel to the workplace. This is her preferred mode of transportation as she uses the train instead of a car, and she does this three days a week. During another interview, the respondent shared his daily routine, which involves cycling to the train station and taking the train for his commute. When asked about his choice of transportation, he explained: *"[...] I cycle to the train station and take the train out here. And the same home"*. He used two reasons for this choice of transport. Firstly, he does not own a car and has only just got a driver's license. When he was asked if he was considering buying a car, he replied: *"I have been able to live without one for 40 years, so I guess I can do a little more"*. Secondly, he considers his transport time by bicycle as daily exercise and, therefore, not just as time spent accessing the mobility hub. Even though both of these people have a significant distance to their work, the access to the hub and to their home is perceived as good. They do feel that using the bicycle or train is a barrier or inconvenience.

Another example of utilizing several modes of transport comes from a citizen who lives outside the city of Randers. He catches the train to Svenstrup, where his workplace is located. The citizen feels there is a barrier in terms of distance when discussing taking the bicycle from his home to Randers Station. He described: *"[...] it only takes 25 minutes to the station [by bicycle], but it takes 45 minutes home because it is uphill"*. As a solution, he drives to Randers Station and parks the car there before taking the train. Upon reaching Svenstrup Station, he then rides his bicycle for the last part of the trip to the workplace. These examples highlight the importance of having good transportation facilities that can accommodate both private and public means of transport. As stated by van Soest et al. [2020], one of the main disadvantages for most people in terms of using bicycles compared to private car use is the limited range. However, public transport can complement the use of bicycles and extend their range, which is what has been seen in the three examples above. The interviews with citizens demonstrate that active modes of transportation or private car use also can enhance the accessibility of public transportation.

Additionally, some individuals who do not use the mobility hub on a daily basis still find it accessible whenever they require its mobility functions. A few examples include:

> *"Now I do not use it very often, but I think that the times I do use it, it works fine both with parking and I think it is easily accessible, so... The times I do use it, I think it is easy."*

> *"[...] it has been a great relief for us, also when we have had to travel, for example, from Copenhagen. Just drive down here and park the car and then go to the airport in Copenhagen."*

Based on the responses gathered, it appears that individuals who find Svenstrup mobility hub easily accessible are also more likely to opt for using the alternative modes of transportation that are provided at the hub. This not only reduces the time required to travel but, for some, also provides an opportunity to incorporate daily exercise into their routine during the commute.

Group 2) comprises individuals who experience difficulties reaching the mobility hub. There are those who are physically impaired and therefore have challenges covering their daily journeys without the use of a car. In general, public transport services can pose a challenge for many elderly and disabled individuals who struggle with accessing and utilizing them due to the difficulty of walking to the nearest bus or train stop [Atasoy et al., 2015]. This is also expressed in one of the interviews, where a citizen explains: *"So, once in a while, I can walk, but then it does not have to be very far, but that is because I have an artificial leg, so it comes naturally. I drive a car"*. Using other means of transport more frequently is described as hindered by the artificial leg, which is seen as an obstacle, favoring instead the car as the more accessible and convenient mode of transportation. Another physically impaired citizen who uses a rollator for outdoor trips describes that the mobility functions available work well, but she points out that it is for people who do not use a rollator. When she was asked whether she perceived public transport as rollator-friendly, she replied: *"It is not. And then you also feel like an inconvenience"*. This suggests that access to other forms of mobility is not only a physical challenge but also a mental barrier in relation to feeling like an inconvenience.

Public transport can also be challenging for many people who live in rural areas where schedules and routes are fixed, and frequency may be low. This can make it difficult for users to meet their everyday demands, and the economic sustainability of public transport in these areas can often lead to inadequate coverage and frequency [Atasoy et al., 2015]. One of the citizens said that he mostly uses his car. He lives 10 kilometers south of Svenstrup and feels compelled to use the car, but he used to take the bus: *"[...] in the past we actually had many more buses to Øster Hornum, also at the times when I had to use them"*. Several of these routes have now been discontinued, and he further said that: *"[...] if there were more buses to Øster Hornum back and forth to Svenstrup station, I would definitely use it more, because it is simply easier to get through to Aalborg"*. He highlights an important aspect of mobility planning about how the reduction of public transport and budget cuts have had a negative influence on people's mobility practices making some of them use the car instead. This is also highlighted by another citizen who likewise used to use the bus more but now finds the frequency too poor for her to use it.

For another citizen who lives in Svenstrup city, it is not the frequency that is the issue, but instead the distance to the nearest alternative. She says: *"There are 800 meters down to the bus, and that will make you think twice if I should take the bus or the train into the city [Aalborg]. In other words, they must be easy to access"*. This citizen describes taking the bus or train as competing with the car for convenience. She says that before, she lived 400 meters away, and it was easy there, but now she has moved 800 meters away, and it is difficult.

Summarized, access has a clear impact on how people perceive their mobility options and which options they view as viable for their everyday mobility journeys. Within Svenstrup, there have been found various options for getting access to the mobility hub, the municipality, and beyond. The main barrier to access is distance, both to the destination and to the various public transportation modes, and this issue often makes available alternative mobility inviable.

Access to the Destination

For mobility options to be available, it is necessary to ensure that the times for travel align with one's personal schedule and that the destination can be reached in a timely manner [Kaufmann, 2003]. For such reasons, using public transportation may pose some inconvenience as it is not tailored to the specific requirements of each passenger's intended journey [Atasoy et al., 2015].

It is not enough that the citizens feel that there is access to Svenstrup's mobility hub. It must also be possible to arrive at a specific destination in a desirable way and at a convenient time. Some citizens have expressed difficulty in getting to their desired location. One citizen believes that he could manage his daily life without a car, but in order to do so, he needs better connections with transport to his children and family in North Jutland, and here he elaborated: *"[...] it is the location of the places I am going. That is where the problem is"*. This is also a problem that is pointed out by other citizens explaining the choice of car with: *"It is not easy to just take the bus to work for example. There are too many shifts and it takes too long"*. She elaborates that she has not investigated how long it will take by public transport from her place of residence to her workplace but argues that it will require shifts between buses: *"I do not even know how many times, but it is something that takes time and I do not want to spend time on that"*.

A number of people mentioned the act of changing between different modes of transport as an inconvenience or challenge, or that the options for an entire journey are not good enough, which also creates barriers. As mentioned in chapter 2, the point of mobility hubs and the future of sustainable mobility is precisely to cater to changes between different modes of transport [Coenegrachts et al., 2021; Rongen et al., 2022; Anderson et al., 2017; Aono, 2019]. It is, therefore, important to understand what makes people say or feel these things. A citizen described that it is not because it is not possible to arrive at his destination by making several shifts, but he describes the alternative to taking the car as follows: *"[...] I have to go into Aalborg to Kennedy Arkaden [main station] and then have to go on to the university as an example. It just takes too long, and it is the same when you go back home"*. Public transport is therefore not considered a competitive alternative to the car.

In comparison, the following citizen does not have a car and does not perceive switching between means of transport as a problem. He lives in Svenstrup and goes to school in Aalborg, and travels by train and bus every day. He sees no barriers to using Svenstrup mobility hub and arriving at his desired destination and describes:

> *"So there it is easiest to take the train primarily and then the bus for the last part. It is because that is where the times fit best in relation to when school typically starts [...]."*

His story becomes an example that when the transport network works well in one's daily schedule, switching between trains and buses does not pose any challenge in relation to making everyday life work together. This person does, however, not have access to a car, which might also contribute to his willingness and need to use other means of transportation.

For others, it is challenging to navigate their busy schedules as they have multiple destinations to reach in a day. A citizen explained that her job requires her to drive around to different schools, which makes it necessary for her to use a car. However, she wishes she could take the train instead and use the time spent commuting for other tasks. She suggests that it would be helpful if there were cars available at the train station for her to use when she arrives, so she can reach the different schools and offices easily. In this way, she can use her time on the train more efficiently and still have the flexibility of a car when needed.

There are also some situations where the possibility of switching between different means of transport is not perceived as a problem but rather as a benefit. One of the citizens interviewed explained that he uses flex trips when he is going to an event in Aalborg and knows alcohol will be consumed. He says that he can then take the train from Aalborg to Svenstrup and then be picked up and driven the last distance home to his home. However, he points out that it: *"[...] requires you to order in good time, and it is easy enough if you know you are going to Christmas lunch and so on in good time. [...]. It is something else if you to go out and spontaneously visit someone, then it is hopeless [...]"*.

These aspects help to highlight that planning mobility hubs requires that you look beyond the individual hub, but both focus on the accessibility of the individual hub as well as the hub network, as this has a great influence on how easy it is to arrive at the desired destination. Generally, mobility functions can be considered instrumental resources that individuals take advantage of to journey from one place to another, whether it be to fulfill obligations or satisfy personal desires [Flamm and Kaufmann, 2006]. As it has also been shown, some people find that changing between various types of transportation makes the perceived access worse and less desirable. The question here is then between the questions of whether it is the changing that is complicated and too difficult for people to navigate or if it is more the nature of habit that drives people to choose the mode of transport they use every day, and does not feel a need to change it up when it works well.

Financial Conditions

For mobility options to be accessible, one must have the right opportunities in terms of economy [Kaufmann, 2003]. In general, most citizens perceive the prices of public transport as a financial barrier to using Svenstrup's mobility hub and public transport in general. One of the citizens does not own a car and uses Svenstrup mobility hub weekly to and from work. When he was asked about what improvements there could be in relation to the hub, he replied: *"I would like it to be cheaper. I think it is too expensive. I think it is way too expensive"*. He is not alone in this point of view. Other citizens have similar views:

> *"[...] if we are two, then it is hardly worth it. Then it is cheaper to take the car."*

> *"[...] we actually checked the tickets, and I think we actually have been a bit surprised by the price. We thought it was expensive."*

During another interview, a citizen mentioned that you have to book tickets well in advance to avoid paying high prices. Later in the interview, she went on to explain that because it is more difficult and time-consuming to travel to her destination by public transport compared to a car, then she must save some money by taking public transport for her to even consider public transport as an option. She finished by saying that *"time is money"*.

On the other hand, there are citizens who do not find the cost of public transportation to be excessive. When one of the citizens was asked about his preferred mode of transportation if given the choice, he replied: *"It depends on the distance. When it is far, I like to take the train if it suits me. And then it is cheaper"*. There is also a citizen who pointed out that the car is expensive. He says: *"Even if you can take the motorway and stuff you just drive straight into a queue, plus it is expensive to maintain a car too"*.

The economically related opinions differentiate from each other. Some think the car is cheaper, some think the public transportation is cheaper, and some again just think the car is expensive but have it anyway. Most interesting is the broad consensus is that public transport is too expensive. However, for some, public transport is the only option, and these people have to use this form of transport to maintain their daily routines. The economy can then be a strong access barrier.

6.3 Societal Structures

Within the element of societal structures, various elements are taken into consideration. Everyday structures, activities, and obligations from society are counted as important for determining one's everyday motility. When reviewing the citizen interviews, various travel needs and purposes were found, and these will be presented and investigated in the following section. Furthermore, social values are also counted as determining factors in people's mobility choices and will likewise be investigated. Many of the mobility choices have underlying reasonings behind them, and these are, of course, interesting to dive into.

6.3.1 Everyday Activities

It is obvious from the discussions with the public that transport and mobility play an important part in people's everyday life. Mobility helps people structure their lives and makes it possible to do the things they desire, and it is an important factor in securing a fulfilled life [Freudendal-Pedersen and Kesselring, 2018]. Daily lives are becoming increasingly more complicated as more types of activities are included, as well as a larger spatial separation between these activities, furthering the need for mobility [Flamm and Kaufmann, 2006]. A way to understand everyday life and how mobility is intertwined within it is through the various activities that people do in a day. Most of these activities are made possible through mobilities [Freudendal-Pedersen, 2009; Bech-Jørgensen, 1993; Freudendal-Pedersen, 2022]. When categorizing the interviews, some standard answers were given in terms of the purpose of travel. Especially themes like work/school, shopping, being social and leisure activities were very present. Almost everyone answered by mentioning these themes as reasons for why they travel. The interesting aspect was, however, that although these similar answers were given people's choice of mobility and reasoning varied.

Work

The most frequent answers given for the purpose of travel were commute to and from work or school. This is an obvious everyday activity that most people have to do every day. These activities are also the most rigorous in terms of time and place, being mostly always at the same time, with a set schedule and location. Because this activity happens almost every day, usually at the same time and by the same mode of transport, it is especially routinized in people's lives. As mentioned previously, when something is routinized, people do not think about how they travel. They just do it out of habit [Freudendal-Pedersen, 2022]. Although this activity is the most mentioned, the various answers given in the interviews had interesting varieties in terms of modes of transport and reasoning for why a certain mode of transport was the one they chose.

For many people who choose to go to work by car, the reasoning varies from ease and speed to flexibility. One, for example, said: *"Well the car - it is easy, and you can always have everything with you"*. Most of these people also mentioned other means of transport in their everyday lives, but for the purpose of going to work, the car is preferred.

On the opposite side, quite a few people also answered that they go to work by other means of transport, either only by one form of transport or by multiple means. Some examples include:

> *"I use my bicycle when it does not rain or is too windy. [...]. I am happy to cycle and do not understand why you bother driving around in a car when you can cycle."*
>
> *"Yes, I come up here by train, and then I take the bicycle to work."*
>
> *"So, I use both bus and train when I go to work in Støvring and then back home, of course."*

Either people see this as their only option because they do not have access or prefer not to have a car, or people combine different means of transport to get to work because it makes sense for them. These people can be qualified as multimodal travelers. Some appear to be disappointed that they use the car for parts of their journey and do not claim this as sustainable. However, as mentioned in chapter 2, the multimodal journey is desired, and a switch or reduction of car use is applauded.

Shopping

Another frequently mentioned reason for moving was shopping, both for food and other items for the household. This is not a requirement in everyday life, however, it is still a necessity for most, and getting to and from these places varies a great deal. Most of the people asked, prefer the car. The reasoning varies from the ease to the need to have a vessel to carry goods to shopping on the way home from work.

Two common reasons for their mobility choice are either 1) the car because it can carry groceries or 2) walking or cycling as combined exercise and shopping. For the first category, many of those who answered argued that they used the car to go shopping on their way home from work. One says that the car is her preferred option otherwise, as she says: *"[...] if I travel by bus or train, I cannot shop in the same way, right?"*.

Another person answered that he does not consider cycling as an option for shopping as he feels it is too dangerous to bring home bags on his bicycle because they are too heavy. Others who do consider the bicycle or walking as a way to do food shopping say this gives them exercise at the same time. They do, however, agree that when buying heavy items, they would bring the car. Similarly, one interviewee mentioned bad weather as another reason for driving to do shopping. These reasons also correspond to Flamm and Kaufmann [2006], who mention these factors as secondary functions which compliments travel and in which the car is especially strong. These also include the aspect of securing intimacy, for example, between friends or for phone calls, physical protection against weather, or for personal storage of private items.

Social-, Leisure-, and Free-time Activities

The activities that have been mentioned so far are activities that occur in daily life almost every day. These are, therefore, the most scheduled and need the most efficiency. On the other side, there are also activities in everyday life that are less reliant on timing and are less routinized. These activities occur less frequently and could relate to social activities, leisure, and free time activities.

A very common activity that people often do relates to social activities such as visiting family and friends. Mobility and being social are two highly interacting aspects, as it is through mobility that people can live out their social lives [Freudendal-Pedersen, 2009]. Precisely for this reason, it is important that people feel they have access to places and people. Many people used everyday activities as reasoning for why they have a car. Even people who do not use the car often still enjoy having the car for these activities. As an example, a person from Svenstrup says he rarely uses his car but that visiting his children and grandchildren in Randers and going on holiday is the primary reason why he has a car. He says the car is needed as his family lives further away and that the connections are not good enough for him to reach them using public transport. A couple also mention visiting their children in Kongerslev and Hasseris, and said that for the journey to Kongerslev, there are no bus connections available, and for the journey to Hasseris it requires a change of buses, which they seem to find a bit inconvenient. They say that technically they could live without the car, however, visiting family is something they prioritize, as well as going on holiday, which in their opinion, requires a car. Three other interviewees also consider the car a necessity for visiting family and friends. A woman also mentions that she sometimes has to transport her elderly mother to and from Aalborg city, and says that because of her poor ability to walk, it is simply not possible in any other way than in the car.

In terms of leisure activities, especially holidays and summerhouses were mentioned. For many people, they mention having a summerhouse and going on holiday, as the reason for why they have and need a car. One, for example, said: *"[...] when we drive far and we have summer houses in Blokhus and various things, so we have to have a car"*, another also said: *"I have both a summer house and things that we cannot transport ourselves up to without"*, when asked what would need to happen if their lives were to function without a car. For these people, the car is a matter of course for this activity, and they cannot see any other options available.

On the other hand, many people mentioned the option of going to Copenhagen or Funen by train as a good option, as well as going to Copenhagen airport, when asked how and if they use the mobility hub in Svenstrup. In that sense, there are some trips or activities which for most function well by train, but out of convenience, other activities must be done by car. These opinions and reasonings point out how much habit and tradition influence the nature of mobility choice. Even for more localized leisure activities, such as sports, choir practices, or horse riding, the car is, for many, the preferred mode of transport. Referring back to section 5.6, this dilemma is also shared with the municipality, which likewise sees the potential in creating better habits for the localized smaller trips to increasingly be done by foot or bicycle, instead of the car, as distances within the catchment cities to activities are small [Aalborg Municipality, 2019b].

What is interesting in terms of these types of activities is that they usually do not occur daily but are much less frequent. Yet, people still find these activities so important and valuable that having a car for them is of high importance. Especially when discussing these social activities and leisure desires with the public, the theme of distance was mentioned many times.

Perception of Distance

With the large variety of everyday activities, distance and time are matters that many people mention as important. The various purposes for travel also give different perceptions of distance and the opportunities that are seen as viable. The theme of distance was discussed in section 6.2. However, in the material sense, access to and from mobility hubs is largely to do with distance. In this view, distance is looked at through a lens of how people's interpretations, habits, and values influence the choice of mobility mode. This interpretation of distance, therefore, also highly relates to Kaufmann's (2003) appropriation term.

In the interviews, both with people who use the car on a daily or less frequent basis and those who choose other means of transport, the concept of distance seems to have a very strong deciding power when it comes to choosing the mode of transport. Generally, some say distance is an issue and therefore choose the car, and others say distance is the reason they sometimes do not use the car.

As mentioned above, visiting family and friends is, for many, a valued aspect of everyday life, and by almost all, the car is mentioned as a requirement for this to be possible. For both short and longer distances, cars were considered the preferred mode of transport. When looking at leisure like holidays or visiting summerhouses, there are variations in the opinion on distance. For all of those who mentioned having a summerhouse, the car seemed to be a matter of course. For some, it was even one of the only purposes for having a car. But when discussing holidays, one can see varieties. Some people again mention the car as a means of going on holiday. For example: *"[...] we would like to have one [a car] so we can drive on holiday [...]"* or *"[...] the private [things] also holidays and things like that"*. For these people, the act of going to their summerhouse is so connected to the car, that they cannot see any other options.

But when the discussions were more broadly about holidays, another group appeared. Distance is again a driving factor for the reasoning, and for this group, it is precisely the long distance that makes them choose to use the train. Two interviewees for example said:

> *"What I like about living in Svenstrup is, among other things, that when I go to Copenhagen, I just have to go down here [to the station], then I can get on there. I do not have to go to Aalborg first."*

> *"If you are going to Zealand or Funen. Yes, so it is nice that you can hop on the train down here. That you do not have to go into Aalborg first and find parking with the car and then take the train from there."*

Similarly, two other people mentioned using the train for long distances. One because he thinks it is nice to be able to bring things and that it is easier, and another likewise prefers the train for long-distance journeys and adds that it is also cheaper. Summarized, it is both the location and distance to these places that have a large impact on citizens' choice of transportation, but also the purpose of the trip. It seems that most people still prefer using their private cars for long-distance trips. These trips are a lot less frequent than, for example, the daily work trip, but are equally routinized.

6.3.2 Social Values and the Car

Within the theme of societal structures, there is also the concept of social values, which correspond to the expectation or standards in society that people adhere to or know are correct. A topic could be the environmental crisis, which most people are aware of and know is an important topic. However, another strong aspect in people's lives is habits, which is especially significant in terms of travel behavior [Flamm and Kaufmann, 2006]. According to Flamm and Kaufmann [2006], people's mobility choices are so embedded in individuals' lives, that large personal changes, like moving to a new location or a new job, are required before people think about reconsidering their preferred and normal mode of transport. There is, therefore, also a conflict between the social values that people are well aware of and the personal choices that, in theory, only impact the individual. As Freudendal-Pedersen [2022] argues, everyday activities are highly routinized practices that follow different people's lifestyles. Therefore, the choices of mobilities for these various activities are likewise routinized. Routinized travel behavior can also be argued as habits. According

to Kaufmann et al. [2018], these routines *"escape the logics of choice"* (p. 199), making the alternatives seem unlikely. People then do not use their logical sense but are instead led by, for example, their preferences or personal beliefs.

This routinized manner of everyday activities also became clear from the interviews, when people were questioned if and how it is possible to construct a daily life without a car. The responses can be divided into two. Firstly, there was the group of people who preferred the car as their main source of transport but could technically live without it. Their reasoning was for example:

> *"I think it is mostly in my head [the barriers] [...] it is easy to just take the car as usual."*
>
> *"[Speaking about getting to Svenstrup] There you have many options. It is not that... It is just yourself. It is just because you are also a bit of a person of habit [...] So it is just because you are a bit comfortable."*
>
> *"Well, I am probably like most others, I am a bit too comfortable. Do not have time to wait for a bus to arrive."*

What is clear from these answers is how the habits of people's daily lives are what drive their decisions. They know other options are possible if they had to give up their car, however, they choose the car out of habit and comfort. One could argue that because the car is an option in these people's daily lives, even if it is only really meant for some occasions, the fact that it is readily available makes people use it out of habit. These examples also portray a kind of self-awareness or bad consciousness about an underlying knowledge that a more sustainable choice could have been made and is a social value. This also corresponds to Flamm and Kaufmann [2006], who argue that many people are becoming increasingly aware of environmental issues and know of the needs in the transport-related sector.

The other group of people belongs to those who cannot imagine their lives without a car. When asked if it is possible to live without it, their answers are either defensive sounding or prompt answers saying it is not possible at all. Others think hard about the question but simply do not have the imagination to see their lives without the car. Some answers are:

> *"I really do not know, but no, I can not do without it."*
>
> *"What would be needed... I really do not know. I do not know. I just cannot."*

The answers from both groups highlight the clear routinized practice that driving the car is for people and how it is so deeply embedded in everyday activities that one cannot see beyond it. As Freudendal-Pedersen [2022] and Urry [2007] argue, people do not reflect on their choice of mobility. They just find what works best and repeat this choice every day. The car is, for many of the interviewed people, believed to be a matter of course, and is equally not questioned on a daily basis. This became clear in one interview where an interviewee elaborated on why she has a car. She said: *"It is just because it is something you have, is it not?"*. Her statement is probably one that many would have and clearly illustrates the strong grip that the car had on society and people.

The answers provided showcase how impactful mobilities are in everyday life. By exploring and recognizing this interconnectedness, it is precisely possible to use these patterns to find what is needed for the transition to a more sustainable mobility [Freudendal-Pedersen, 2009, 2022]. However, what is also found in the

responses is the embedded nature that especially the car hold in people's lives. To make steps towards a sustainable mobility practice, a genuine restructuring of people's everyday lives is needed. This is a large task, and when discussing it in these terms, it makes sense how some people simply cannot see beyond their current choice of mobility as their entire lives might be organized around them.

Time as a Crucial Factor

People's everyday lives are generally structured, timed, and scheduled. As it is also clear from the answers, most of the activities that are mentioned to rely heavily on different mobilities, are also those activities that are most routinized. Time is, therefore, also a theme that many people find important to discuss when being interviewed and can therefore be categorized as a social value that enables expected standards and conditions for the individual's mobility.

It is beneficial to divide the section into different groups, as time and its importance varies a great deal. Group 1) uses time as a reason for why they choose or non-choose a specific mobility mode. Group 2) corresponds to those who use everything apart from cars as their means of transport. This group has both positive and negative views on time in their mobilities choice.

In terms of Group 1), time is mentioned as an essential factor in their choice of mobility. One interviewee said that he does not believe the alternative to the car makes sense for him. The distance he would need to travel to a spot where he can change to a bus and then onward to his next spot would simply take too long. Another mentions that she picks the car as the alternative again takes too long, she says: *"[...] then it takes an hour and a half to get to work. When it takes half an hour now"*. A similar answer also discusses how, with the various changes in transport, it would take too long to get to work. She continues to say that she works night shifts and does not even know if it is possible to get home at that time by public transport. She says that she does not want to come home an hour and a half later when she can drive home in 20 minutes. Those minutes are too valuable to her.

A challenge with public transport is, according to another interviewee, that it ends up taking up extra time from one's everyday because the public transport only leaves at specific times. This view is shared by another, who argues that the alternative to the car is too rigid and uses the example of if his kid is sick and must be picked up from school. Then he says it would just take too long to get home.

Group 2) represents three examples of people who use the train and Svenstrup's mobility hub in their everyday activities, all to and from work. They have found it possible to organize their activities using other modes of transport than the car. Two people are specifically positive around the train. One says: *"I have only experienced that the train has been delayed towards Aalborg once in the last two months"*. He hints at how there might be a tendency for people to exaggerate how bad or unreliable the trains are when in reality, it is not that frequent. This person has lived his adult life without a car and does not see the issue with not having it. Another advocate for the train explains how it provides comfort as she can just sit in the train and be cozy, and it takes almost the same amount of time. These two people have in common that time and using a different means of transport has not been an issue in navigating everyday life activities that have an otherwise tight schedule.

Another person, who is also a frequent user of the mobility hub has some reservations about the use of them, which means that she sometimes chooses to use the car instead. She says her use of the train depends on whether she or her husband drops off the kids. If she is to catch the train in the morning and get to work

on time, it is not also possible to drop off the kids. If she were to do both, she would not be at work until after 9 am, which is too late. She also refers to her tight schedule. She is very reliant on one train departure, and if she does not make it, she has to wait an hour for the next departure. Therefore, she feels pressure, for example, if her meeting at work does not finish on time. These conditions are what determine whether she will catch the train or use the car on a specific day. She, therefore, advocates for more frequent trains as she likes the train and wishes she could use it every day.

It is obvious from the answers that time is of high essence for people. Summarized, it is not desirable for those who use a car or those using other means of transport if travel results in inconvenience or time loss. People's commute to work or school should be as efficient yet pleasurable as possible. What is interesting, however, is a point from one of the respondents who argues that one just drives straight out into a queue. He uses the car every day, yet would prefer a different mode of transport, like a scooter, bus or bicycle, because he knows from experience that you get through to the city much faster. However, he finds that the bus options he previously used use do not exist anymore. But what he says about driving is interesting, as it brings out a point that non of the other respondents have mentioned, precisely the time spent in congestion. This was not a question in the interview, but one that would have been interesting, as it is well known that even in the areas around Aalborg the congestion is considerable at peak hours. How do people consider this waiting time when they compare to other means of transport, if they find it wasted or personal free time, would have been interesting as it can point towards what they find most important when choosing their mode of transport.

Returning to time as a crucial factor, mobility is seen as a means of getting somewhere, and it is preferred if it can be done as fast and efficiently as possible. In that sense, there are still remnants of the previous transport understanding, which viewed places as fixed, and had a non-human focus on transportation which was all about efficiency, distance, and speed [Sheller and Urry, 2006]. It does make sense that the mobility understanding in planning today is catering to both the functional aspects of transport, but also the understanding beyond that. It is also clear, as the new mobility paradigm argues, that mobility far exceeds only the journey itself. Mobility today is, as almost all the respondents argue for, a means to make everyday life function, making it essential to intersect different disciplines and looking beyond the understanding of people only moving to move, but moving for a reason in the practice of social life [Sheller and Urry, 2016; Urry, 2000].

Freedom, Independence and Flexibility

Along with the social value of time and distance, some people also have strong opinions about the personal benefits that they believe the car provides. Themes that were very present within the interviews either related to the description of freedom, independence, or flexibility. These are social values that society encourages and which many individuals find particularly desirable [Flamm and Kaufmann, 2006]. These words were used by people who prefer or exclusively use other means of transport than the car to describe their specific mode of transport. One, for example, said that she believed she preferred the bicycle because it gave her the freedom she wanted, and it meant she did not have to coordinate if she had a car or not, or put gas on it. Instead, it is just quick and easy to get out of the door on the bicycle.

Other people used these terms to describe their choice of car as their transport mode but also used them as a disclaimer for why another choice was not taken. One participant for example said: *"I think it is better that you can decide for yourself"*.

Interestingly, many of the people, who prefer the car, use their opinion on other modes of transport as the reason for why they prefer the car. Examples include:

> *"[...] maybe I am just a little closed-minded. The dependence of having to look at the clock [and thinking] OK, I have to catch the bus here at 7:48 [...] In other words, I am not stressed [when using a car] because I can drive when it suits me. [...] even when you are at work, you have to remember to leave now or you cannot catch the bus, otherwise you have to wait at least half an hour to get the next one.*

> *"It is so I am not dependent on certain times or schedules or anything, so I can do it when it suits me. It is the freedom in that it [the car] drives whenever I want. It is not certain that the bus... [hints at its uncertainness]. That is pretty much why I have the freedom to sit and decide for myself.*

> *"It is much easier. Then you avoid having to chase buses or having to adjust to their times."*

> *"It gives me freedom [...] and I do not have to think about time and worry that I have to do this or that, I can do it when it suits me. [...] it gives great value to me anyway."*

From the quotes, it is clear to see a pattern of people believing that having to rely on others than themselves is negative and an inconvenience that they believe will only bring wasted time or constraints on their lives. This view on freedom etc., is a clear link back to the previously prevalent understanding of the car. As authors like Nobis [2007]; Urry [2000]; Kenyon and Lyons [2003] argue that the car provided, from the very beginning, the freedom to move for private people that previously were not readily available. And as infrastructure for the car grew, the dependence on the car followed. This mindset of relying on the car has, therefore, naturally lingered in society, and it becomes clear in the answers from the public that this view and understanding of freedom and the car as mutually connected is still present today in the social values and expectations.

6.4 The Individual

The last element in the analytical framework is the aspect of *The Individual*. As found until now, people's choices of mobility are affected by a series of elements, such as the physical structures around them, the degree of access to mobility solutions, and the various travel needs and social values. What shapes one's mobility choice is, among other things, one's interpretations of these three elements. This interpretation is highly impacted by personal desires and aspirations [Kaufmann, 2003; Freudendal-Pedersen, 2022]. In terms of skills and access, what is required of travelers and their interpretation of these requirements have a determining factor for their mobility choice people's assumptions, especially about public transport, have also been found to shape people's mobility choices.

Interpretation of Skills

In terms of skills and their interpretation of them, a citizen discussed how she could technically take the train, but she does not do it because she is not quite sure how to. She says: *"I am not that good at the internet and finding everything you need to find there and order [tickets] on it. It is just not me"*. Her preference would be to try and catch one of the train conductors and ask how to do it, which is not a viable solution. This brings up the discussion of how some groups have difficulty using and navigating the newer mobility solutions and

how it might be a barrier for some. This is, of course, an issue, as it goes against Aalborg Municipality's goal of ensuring mobility for all [Aalborg Municipality, 2019b]. She has the option but finds it overwhelming and interprets her skills to be insufficient.

On a similar note, a citizen sees how the train is a good option. However, according to him, it is only really worth catching when one plans a larger trip, as he finds it takes more planning to execute a journey with public transport. He refers to Rejseplanen (travel planning service) as something you need to use, which to him is not something he would bother to do daily for trips down to pick up groceries for example. In the previous example, the citizen found her skill set to be a barrier, however in this example, as he says himself, it is more of a mental barrier. He mentions that it is to do with laziness and convenience, though it could also be an issue with the inconvenience or complexity of planning journeys.

Personal Values and Aspirations

The theme of climate awareness was also represented in the interviews and was, for some, an especially significant personal opinion or aspiration. The theme of climate or the environment was mentioned by both people who own a car and those who do not as their reasoning for how they choose to travel.

A citizen said that she no longer has a car and instead uses public transport. She says it is good for the climate that we do not all drive around alone in cars. Also, the choice of an electric vehicle was mentioned. Another citizen said that they chose to switch to an electric car during Covid-19, as they are aware of the climate at home. She continues to say that they also only have one car, which is also because of environmental awareness. This citizen's answer is very contemporary and corresponds to the work of Flamm and Kaufmann [2006] who argued that some individuals choose, in respect of the environmental challenges, to voluntarily reduce how many cars they own.

When asked which mode of transportation would be desired, a citizen said he would use his bicycle or electric car. He said: *"Yes, well we have to think about the environment."* and continues: *"I am not entirely sure that electric cars are so good for the environment that it makes a difference, but we will probably find out"*. He seems to be aware of the environmental issues and how motorized vehicles are not helping, and he, therefore, has decided to get an electric car to accommodate societal expectations. Another citizen also mentioned that he thinks he would choose an electric car if he could, but currently finds that the price to be a barrier.

Many of the people, who are aware of the environmental issues cannot see their lives without the car. According to Flamm and Kaufmann [2006], some of these people might even feel guilty about their car ownership or find it to be a personal conflict of values because it clashes with their everyday mobility needs, which are still so embedded in the car-centric society. In this conflict, the private car usually wins, as the individualization is so deep-seated as a cultural value [Flamm and Kaufmann, 2006]. In relation to this aspect, another quite interesting aspect became clear through some of the interviews. It is related to good intentions, aspirations, or good opinions of public transport that some people have, even though they do not or rarely use it. One person said: *"We have a kind of dream of going down and taking the train to Aalborg or Randers, just because it could be exciting"*, a similar answer comes from a couple who says: *"I have considered taking the train to Randers, and then bringing the bicycles with me, and then cycling to the family [...]"*. Neither of the two use the train, but they see that it could be nice. Another citizen discusses her idea that she will use public transport more. She says: *"[i]t is really good with the public transport and it is not sure either, that I will keep having a car, but right now it is just quite important to me"*. In this way, the words of Flamm and

Kaufmann [2006] are seen in a real-time context, as these people, although they have good intentions and opinions on public transportation, do not choose them and instead just do as they normally do and choose the car.

On a completely different scale, a quite strongly opinionated citizen was asked if he thought anything could be done better in the planning the Svenstrup's mobility hub. To this, he responded:

> *"I think I am the wrong person to ask because I have traveled in all sorts of developing countries and know how it can be, and the train being 5 minutes late and things like that, people have to stop [complaining]."*

He refers to the quality of transportation that Denmark has and how convenient people are. World injustice and Danes being spoiled in terms of mobility is something he seems passionate about and dictates his opinion and choice of mobility. For him, the personal values of climate and sustainability are so strong that they lead his mobility choices in that direction.

Assumptions about Public Transport

Assumptions about especially public transport play a significant role in people's mobility choices. Especially people who own and use the car often see barriers, challenges, or issues when they describe why they do not use other means. Many of these barriers can be categorized as assumptions. Some examples are mentioned below, corresponding to various themes.

Some people use assumptions about public transport as the reasoning for why they do not pick it. One participant said: *"I just know that there are many who take the buses to school, they have to get up very early, and then they are in school much earlier than what is actually necessary compared to if you have a car or other means of transport"*. In this case, she does not think the bus schedule fits her schedule, however, by looking at the answers she gives, it does not sound like it comes from genuine experience but more from assumptions or stories from other people.

Another assumption relates to a presumed crowdedness of a bus. A participant says her ideal solution, other than the car, would be to use the bus that drives directly to her job, but says: *"[...] it seems to be so full that you cannot be sure that you will be picked up"*. This person does, again, not have actual experience with the issue but uses stories from others to argue for why her car is the best means of transportation.

Changes between different modes of transport are also seen as a barrier for some. For those who mostly use the car, the act of changing is seen as an inconvenience. In an example, someone discusses visiting her children in Hasseris. She says she and her husband will sometimes take the bus into the city or out to a nearby mall which is a direct line, however, when discussing visiting their children, they mention that they have to change bus. They do not say why it is a problem or if they have even done it, but the fact that it is mentioned and that the following comment related to the flexibility of the car, hints at the negative feeling they have towards having to change buses. Similarly, another citizen discusses her daily trip to and from work and says that it is not so simple to catch the bus, as there are many changes needed and it takes too long. When asked what too much time is and how many shifts, she says she does not even know, as she has never looked into it. But she knows it will require multiple shifts, and that is not something she is willing to spend time on. In her example, there are multiple interpretations of her answers. One could be that she just has the assumption that it will take a long time when she does not actually know. Another could be that she

is completely right and that the journey would be very long and require many changes. And lastly, it could relate to the aspect of appropriation and how the knowledge of having to change modes of transport feels like a barrier that is simply too complicated to overcome in a busy everyday life. This point is relevant to all the assumptions mentioned.

Along with the assumptions, it is clear to see a form of stigmatization about all other means of transport. People who are not users of them assign opinions like, they are unhygienic, they are late, they are crowded, or they are not practical as a disclaimer or reason for why they are not useful for them. These individual assumptions seem to have a strong influence on the mobility choices made.

Degree of Attachment

On a different note, others have a generally positive opinion about having the mobility hub in Svenstrup but also do not use it. One person says she thinks it is smart that you can just walk down and catch the train. Another person talked about the mobility hub as an attractive element of Svenstrup.

> *"Because you have means of transport both to one and the other place. Then it is attractive for the city. That is for sure. It does not mean anything to me in my everyday life, but to the local community it does."*

In this way, people see the value in having the options, and to most, it sounds like they would not be without it, even if they do not or only rarely use it. A recent article on the potential of local train stations has shown the large identity-creating value that stations have for the locals. In the article, people expressed enthusiasm regardless of whether they were users or not. The local anchoring that a station creates and the identity it gives makes the citizens see their city in a better view than, for example, cities without it [Strandbygaard et al., 2023].

It is a very similar example in the case of Svenstrup, as people see the value in the hub and how it as a place connects the city to other cities. But as it has also been shown, not very many of the people who have these beliefs actually use the hub themselves. This dilemma that some feel, or the bad conscious, or awareness of how some transportation modes should probably be possible to use in the everyday context indicates a potential. Anchoring this station locally is an important step, and as the article also points out, citizens' everyday lives must be incorporated into the planning for sustainable results to be found [Strandbygaard et al., 2023].

6.5 Summary

The goal of this chapter was to uncover how citizens' routinized everyday practices affect their mobility choices in terms of using or not using Svenstrup's mobility hub. In the analysis, the use of 27 interviews with citizens has built knowledge on this specific goal. As a summary, table 6.4 uses the analytical framework to organize the results found and demonstrate the citizens' perspectives.

	External Dimension	**Individual-related Dimension**
Material Dimension	Facilities for multimodal travel improve the access to the hub Train departures in southern direction only depart once an hour which is perceived as an barrier Everyday functions are in the vicinity of the Svenstrup Mobility Hub but are not used in relation to travel with public transport	Individuals have different contexts in relation to access to mobility and everyday functions in Svenstrup Access is perceived and handled differently by individuals It is not only important that access to the Svenstrup mobility hub is perceived as good, but also to the desired destination
Non-Marial Dimension	Everyday mobility activities affected by external factors, social desires and aspiration, and leisure, generate mobility needs with varying reasonings Social values influences mobility choices: themes like time, distance, freedom, and independence are influential in mobility choices	Interpretation of skills and the related barriers Stigma and assumptions about public transport Personal values and aspiration dictate many mobility choices, equally influenced by social values such as an awareness of the environment

Figure 6.4. Summary of analysis part 2

The results are divided into four categories to simplify the results. However, it is important to recognize that the various categories overlap and affect each other.

6.5.1 Physical Structures and Options & Conditions

Svenstrup mobility hub is designed to encourage people to travel in a variety of ways, with parking available for both cars and bicycles. Clear signage, including the national hub sign and a carpool sign, helps users to locate the hub. Interviews with citizens reveal that many people use the hub as part of multimodal travel, often using a bicycle to travel between home and the hub or between the hub and work. Some users also park their cars at the hub when it is more convenient than driving all the way to their destination. However, there are some challenges associated with accessing the hub. For example, physically impaired individuals may have difficulty reaching the nearest bus stop or the hub itself, while those living in smaller towns outside of Svenstrup may have limited transportation options because the connections to Svenstrup mobility hub are inadequate.

It is not enough just to have access to mobility in Svenstrup. There must also be access to one's desired destination, which was a challenge expressed by several citizens. This was either because they considered that it was simply not possible or because there would be too many shifts, which was undesirable. This barrier

helps to highlight the importance of looking beyond the individual mobility hubs when they are planned, but that there is also a focus on the opportunities the hub provides for further travel. Another barrier that was highlighted is the financial one, where public transport was generally described as being expensive compared to if you drive more people by car or that due to the extra time the journey takes because you cannot drive directly to your destination by car. However, other citizens emphasized that, in their opinion, public transport is cheaper than driving a car, and having a car is also costly.

In relation to the surroundings that frame Svenstrup's mobility hub, the hub has a central location in the city near many everyday functions such as convenience stores, kindergarten, and school, but these functions were not something that the citizens mentioned in connection with traveling without the use of the car, but on the contrary, was used as a justification for why the use of car where more suitable for their everyday journeys.

6.5.2 Social Structures and The Individual

People's everyday life is made up of various activities, and all of these activities are bound by mobility. Some activities are influenced by social structures and are highly routinized, such as work or school, whilst other activities are less strict and less routinized, such as free time activities or holidays. A common factor for all activities, however, is the need to choose a mode of transport, and for this, the interviews revealed a multitude of reasonings, descriptions, concerns, needs, and sometimes assumptions. Aspects that were highly influential in people's choice of mobility were time, distance, and convenience. Social values were also revealed wherein people described their choices based on a concern for the environment or wanted to secure their freedom and independence. The answers from the public members who prefer the car as their means of transport were generally more concerned about giving reasons for why they do not choose another mode of transport than for describing why the car is important and needed for them. This illustrated the societal awareness of the sustainable agenda and how people defend themselves. It showcased how many people see the car as a matter of course without always knowing why. At the same time, people who use the car could often not see how their lives could be constructed without it, again underlining the firm grip that the car has on society.

In terms of the individual, this element included people's interpretations of e.g., skills and knowledge and how these sometimes form barriers. Some people, for example, struggled with the planning of journeys or found it too time-consuming. Assumptions and the stigma behind particularly public transport also became present, especially from car users. The assumptions relate to the idea that people traveling by public transport must get up early, that buses are too full, and how changing between transportation means is complicated and time-consuming. The many assumptions and barriers presented were equally disproved by public transport users who saw benefits and enjoyment in their mobility choices. The many interpretations by the individual are in the end what determines the choice of mobility and are therefore crucial in mobility hub planning.

7 Discussion

The previous parts of the analysis concerning Aalborg Municipality's integration of citizens' everyday life in mobility planning and mobility hub planning, as well as the citizens' reasonings for their choice of everyday mobilities, have highlighted problems and potentials in the planning of mobility hubs. It is, therefore, the purpose of this chapter to compare points from the two parts of the analysis with the purpose of presenting and discussing recommendations that can contribute to mobility hub planning in Aalborg Municipality and thereby contribute to more sustainable mobility. When looking into which reasonings the citizens who participated in the interviews had for choosing to take the car rather than use mobility hubs and vice versa, various arguments for decisions were highlighted. The arguments can be divided into two groups consisting of those who feel unable to manage their daily routine without a car and those who are multimodal or generally do not use the car.

The first group wants flexibility in their everyday life, which they believe only the car can give them. This group thereby becomes an example of the embeddedness of the car highlighted by the fact that everyday transport is dominated by driving, which Nobis [2007] believes modern societies are characterized by. These people hold certain assumptions about using public transportation, such as the inconvenience of having to wake up early or the overcrowdedness of buses. Hence, owning a car is seen as essential for carrying out everyday activities. But this does not mean that Svenstrup mobility hub is not important for the citizens. The case of Svenstrup has shown that people see value in the hub and how it as a place connects the city to other cities, similar to the findings of Strandbygaard et al. [2023] who investigated citizens' relationship to their local station in smaller station towns. Some car users are also aware of the potential of using other transportation modes in their daily lives, but changing their current practices may be inconvenient or perceived as impossible for them. One reason why a change away from the car is considered an inconvenience is that changing one's mobility practices also means changing the organization of their everyday life [Freudendal-Pedersen, 2022], and as a result, they do not view mobility hubs as a viable alternative to using cars. This point shows that it is not enough that citizens have knowledge of the other mobility options available to move them from individual car use but that more is needed.

On the other hand, the second group of citizens perceives the use of mobility hubs as an alternative to the car. This sheds light on the various factors that influence people's decision-making when it comes to using mobility hubs. As noted by Freudendal-Pedersen [2009], people's mobility choices are not always based solely on rational factors like distance, costs, and travel time. Other factors, such as their daily routines, goals, and priorities, play a significant role in shaping what people consider to be the most practical and rational choice. In fact, some citizens' responses suggest that climate awareness, the opportunity to cycle to the mobility hub for exercise, or the option to engage in other activities during a train ride, as one citizen describes: *"[...] because there I can sit and do something else and not actively deal with getting around"*, are crucial factors in their decision-making process. These two groups highlight different challenges and

opportunities that will form the basis for the recommendations of this thesis and the rest of the discussion.

7.1 Ensure Flexibility in Car Alternatives and Minimize Public Transport Reductions

In everyday mobility theory, it is argued that people's mobility and their everyday activities are embedded and intertwined [Freudendal-Pedersen, 2009; Bech-Jørgensen, 1993; Freudendal-Pedersen, 2022]. Through the interviews with the public in Svenstrup, this theoretical claim has been verified. People move to do things, and people explain their daily tasks and activities through their mobility choices. In this way, it has become clear how deeply dependent people are on combining their everyday activities with mobility. People's choices of mobility are, therefore, also an important part of their lives as mobility glues it together. Many of the respondents find that the car functions best at gluing everyday life together to make their lives possible and desirable. A valued aspect of the car is its flexibility. Flexibility is often argued to be lacking when discussing other modes of transport, as it is thought to reduce one's ability to move freely. Flexibility is, therefore, a key element in mobility and in ensuring people's freedom to move.

Aalborg Municipality has as a mobility goal to secure mobility for all so all its citizens can access everyday activities in their daily lives. In that sense, the municipality is aware of people's various needs and individual's conditions that often require a flexible mobility system [Aalborg Municipality, 2019b]. But as found in this study and through the discussions with the public at a catchment area hub, this goal is not fulfilled by means of public transport, and many people feel they are not able to meet their mobility needs without using their car. There is, therefore, a need to ensure better flexibility in the alternatives to the car. Designing mobility systems is a complex task, and the big picture and interplay of different aspects have to be kept in mind [Van Nes, 2002]. When discussing the flexibility that the system is lacking, many people mention the difficulty of getting to their desired destinations and find that a large barrier concerns the need for several shifts as no direct connections exist. For some, this was seen as an inconvenience and a waste of time since a car could provide the same service without changes or additional stops. While shifts cannot always be avoided in municipalities with a variety of geographies, it is important to keep the connectivity between different mobility hubs and places in mind. In terms of mobility hub planning, it is crucial to ensure intersecting mobility modes to allow people to change mobility mode in an efficient way [Rongen et al., 2022; Aono, 2019], and it is also important to ensure high-frequency in the services provided [Weustenenk and Mingardo, 2023]. These services are often public transportation, and an improvement of these also plays an important role in Aalborg Municipality's ambitions for their mobility planning as it is one of the main alternatives to the private car [Aalborg Municipality, 2019b]. However, while the municipality sees public transport as an essential part of a sustainable transition, cuts in public transport budgets are resulting in reduced quality and offer [Olesen, 2023]. While the budget cuts have often been caused by dwindling passenger numbers [Olesen, 2023], they also enforce a negative spiral affecting the attractiveness of public transport and future passenger numbers by rising prices and a worsened mobility in more rural areas only enforcing the flexibility issue even further.

This reduction has also not gone unnoticed by the public, and a few of the interviewed citizens also mentioned how it has impacted their mobility choices and still does. Some mention how the reduction has forced them to stop using public transport, whilst others feel the pressure of the tight schedule that the low frequency brings to their lives. Limiting the accessibility to public transport and its quality reduces people's flexibility and equally their desire to use it. The municipality's goal of prioritizing public transport

is, therefore, an important goal, and it cannot go hand in hand with budget cuts or an unbalanced priority between the city and more rural areas such as catchment cities.

The question is how this negative spiral can be stopped, and future ridership increased. One way this can be achieved is through increasing public expenditure on public transport in order to keep public transport accessible and the quality high in order to attract more people [Vindum, 2023]. However, the actual ridership still has to be taken into consideration, and flexible mobility alternatives may therefore be a good alternative for areas with a low ridership in order to keep expenditures relatively low while also keeping the quality of public transport high. Flex and plus traffic are two examples of options that allow for more flexibility [Aalborg Municipality, 2019b]. Particularly plus trips are helpful for mobility hubs outside of the city of Aalborg as they allow more citizens to access the mobility modes offered at mobility hubs. However, as noted by one of the interviewees, these flexible mobility options cannot replace regular bus and train services as they have to be booked in advance. The person argues that for spontaneous visits or trips, these solutions are hopeless, which therefore does not enhance day-to-day flexibility.

As a concluding remark and recommendation for the municipality, ensuring flexibility in and around mobility hubs is an important factor in people's choice to use or not use the hub. People have to see the logic in using the hubs, which means these need to connect people to the places they desire, ideally without spending more time or moving longer distances than necessary to reach the final destination. Reducing public transport opportunities is therefore also not an ideal situation as it reduces people's flexibility even further and creates further gaps between the rural and non-rural areas. The municipality should therefore enforce the focus on public transport whilst creating and using flexible solutions to ensure easy access to mobility hubs whilst focusing on connecting the mobility system further.

7.2 Revised Role of the Car in the Future

The context of catchment area hubs is what makes them especially interesting. It is from these areas that the majority of cars come from, and it is also in these areas that mobility is lacking the most [Alonso et al., 2023]. These areas are, therefore, of high importance for Aalborg Municipality when discussing the transition to sustainable mobility as there are great potentials [Aalborg Municipality, 2019b]. There is, however, a large dichotomy between rural and urban areas which undermines this potential. It relates to the supply of mobility modes. Urban city environments generally host large varieties of mobility solutions that run with high frequency, which makes them competitive with cars [Alonso et al., 2023; McKenzie, 2020]. In larger cities, the mobility patterns tend to be more sustainable as a result of the much larger degree of multimodal travel [Gebhardt et al., 2016]. As the distance to the cities' dense mobility services increases, car dominance grows. This is precisely the case in Svenstrup where the car dominates, and the supply of high-frequency public transport is relatively limited compared to the city center, has been found.

Throughout this research paper, it has generally been made clear that the car is a means of transport that is causing many problems in society, like congestion and air pollution [Kjærulff, 2011]. In history, the car prevailed because it gave people the freedom to move wherever they wanted without having to rely on anyone else [Wagner, 2013; Newman and Kenworthy, 2015; Urry, 2000]. Although public transportation and shared mobility have evolved a lot since the beginning of the car, it still lacks many of the aspects that make the car so attractive. The issue in this research has therefore been about understanding why the car dominates, how people structure their everyday lives, and ultimately how this can help understand the use and non-use of

the mobility hub in Svenstrup.

In general, the car is being equated with an unsustainable mobility system [United Nations, 2013, 2017] as it is the goal of mobility hubs to reduce car use. Although this thesis has taken this generally negative view on car use, it is important to note that the car is not a problem on its own. For a sustainable society to function both economically, socially, and environmentally, it is obviously not possible to have buses or trains driving empty so that everyone, both inside and outside the larger cities, can reach all corners of the country. The car, either private or as a sharing solution, has a special flexibility that no other mode of transport can compete with at the moment, and it has the potential to close those difficult first and last-mile issues that have been highlighted throughout the interviews. The goal of mobility hubs and sustainable mobility is to reduce car use and dependence and potentially make the car a part of people's journeys instead of the sole mode of transport. For some journeys, the car can simply not be replaced and will be the best available mode of transport, and this should not be seen as purely negative. The important thing is that the use of the car is not seen as the only option but rather as a part of multimodal travel that opens up the use of mobility hubs and alternative mobility modes. As Aalborg Municipality believes, all citizens should have the opportunity to travel freely [Aalborg Municipality, 2019b]. Cars are, therefore, likely to still be needed as a part of the mobility system and as a supplement for other mobility modes in order to serve citizens in particular circumstances, such as those living in remote locations far away from other alternatives. This is not problematic per se as long as the car is viewed as a supplement rather than the sole or primary mode of transport. The car must therefore have a revised role in society.

7.3 Include a Place-Related Perspective in Mobility Hub Planning

The view that mobility hubs have a twofold function combining both transport- and place-related functions are shared by both literature and Aalborg Municipality [Weustenenk and Mingardo, 2023; Aalborg Municipality, 2019b]. Despite this, the analysis showed that some of Aalborg Municipality's mobility hubs offer rather limited options, and some only offer a parking lot near the motorway without any place-related functions whatsoever. Aalborg Municipality's mobility hub typology also puts little emphasis on place-related functions and primarily focuses on hubs' role in a transport network [Aalborg Municipality, n.d.a]. This makes it clear that the municipality's understanding must be an ambition rather than an already well-implemented understanding. This highlights that there is still some way to go in order to finish the integration of transport and place, which according to Bertolini [1999] is a rather important part of hubs and the integration of everyday life. With the everyday mobility concept, mobility and everyday functions must be thought of together as mobility is so intertwined with people's everyday lives [Freudendal-Pedersen, 2009; Bech-Jørgensen, 1993; Freudendal-Pedersen, 2022]. As mentioned in the analysis, some citizens already combine their everyday mobility with daily tasks by, for example, buying groceries while driving home in their cars. Giving users an even better option of combining everyday functions with their mobility could therefore create a better incentive and opportunity to choose more sustainably. As it has been seen in the interviews with citizens, people highly value their time and flexibility, which are factors that some find are limited when using public transport. A way to improve the use of time and make waiting and traveling time more useful is to make sure that everyday functions are incorporated in mobility hubs [Conticelli et al., 2021].

While it is important to incorporate place-related functions in mobility hubs, it should be remembered that there are different types of mobility hubs that serve different purposes and are placed in different locations

and contexts. This is also argued by Olesen [2023], who says that the integration of everyday life functions at mobility hubs should be context dependent and that not all types of hubs need the same degree and types of functions. The sayings "one size fits all" or "copy-paste planning" are therefore not suitable in mobility hub planning, as the context and needs vary a great deal.

7.4 Ensuring Local Ownership

Svenstrup city is, among other things, known as a station city. When the municipality writes in their strategies that they want Svenstrup to develop its own identity as an independent city, they themselves mentioned the station as an identity marker [Aalborg Municipality, 2021]. As part of the interviews with the public, the researchers questioned people's use or non-use of Svenstrup mobility hub. The overarching point was that all interviewees knew of the station. While some used it, it had, for many of them, no function in an everyday context. However, some people point to the station's local identity by arguing how much they like that it is there and how it creates good local conditions for the city. In that sense, the station as an entity is well anchored in people's minds but not well enough for people to recognize it as a feature in their everyday mobility. This is where the theme of local anchoring comes in. In the municipal documents, this theme is not mentioned. However, mobility planner Mette Olesen [2023] confirms the importance by referring to various mobility projects wherein some were well anchored and had success with the public, whilst others were not. She argues that anchoring is crucial for changing behaviors and continues to contend that this process must be carried from the bottom up, even though it is a time-consuming process. People need to see the relevance for them to be engaged and spark an interest.

Although it may be necessary to expand on infrastructure and create new technology, it is important to see beyond this 'technocentric' planning tendency. People only make use of these new options if they find them appropriate in their mobility context [Flamm and Kaufmann, 2006]. By anchoring them in people's lives and functions, as well as creating a sense of ownership, this can be done. If people see the value of the mobility hub and find that it is anchored in their lives and not just in the city, there is a greater chance of provoking a behavior change [Olesen, 2023; Strandbygaard et al., 2023].

7.5 Incentive Structures are Needed to Achieve a Change in Behavior

The goal of mobility hubs is essentially to improve the conditions for sustainable mobility in society by providing options that can reduce the need and use of private motorized vehicles [Arnold et al., 2022]. What has been found in the analysis of citizens' everyday perspective is an overwhelming attachment to the car. This strong attachment also corresponds to the highly intertwined nature between mobility and everyday life, which makes a change in mobility patterns incredibly difficult. When the car is the preferred mode of transport, changes in this practice would be perceived as large interventions in people's lives.

The routinized practice of people's everyday mobility became clear in the interviews with the citizens in Svenstrup. Interestingly, many people simply could not see how their lives could function without a car, and some proceeded to defend their mobility choice. Others, however, acknowledged that they do not really have a good reason for why they need the car but describe it as a habit, a comfort, and a societal must. This was highlighted by an interviewee who said that the car is just something you have, underlining the fact that the car is considered, by many, to be a matter of course without further consideration. Precisely for that reason, the theme of behavior change is especially present from the municipal perspective in chapter 5. Aalborg

Municipality expresses a need to influence transport behavior and change habits in securing more sustainable mobility [Aalborg Municipality, 2019b]. They are aware of the need to combine the everyday perspective in their work, and this is important for impacting transport behavior [Aalborg Municipality, 2020b]. Some of the aspects that the municipality works on in affecting citizens' mobility behavior are their work with mobility hubs and the integration of more everyday functions in a transport-related environment to make mobility more flexible and versatile and encourage combined travel. They also work with investments in infrastructure for bicycles and pedestrians as well as various campaigns [Aalborg Municipality, 2019b]. Penalties are also described as possible measures to make private car use less convenient and more time-consuming by making it less easy to access specific functions or parking [Aalborg Municipality, 2020a]. Mobility planner Mette Olesen [2023] describes how she feels there is a need for the municipality to help facilitate the change and that both pull and push incentives must be used to guide the public towards a more sustainable mobility behavior.

Although the planning documents highlight the option for using restrictive measures, there is still a tendency to use primarily pull measures and also a continued focus on expanding the options instead of reducing some. This means that the municipality, for example, will spend money on public transport infrastructure such as the bus rapid transit or creating more express bicycle lanes Aalborg Municipality [2019b], however as Flamm and Kaufmann [2006] writes: *"[...] the improvement of a form of transport is probably not sufficient to change the cognitive appropriation of an individual"* (p. 181). He continues and refers to a study of individuals, who says that *"[...] they [people] never pay attention to advertisements concerning new transport systems or services and consider that the organization of their daily mobility is good enough to not instigate the effort of looking into possible alternatives"* [Flamm and Kaufmann, 2006, p. 199]. This last aspect is especially interesting for the discussion of incentives because people will always stick to what they know best, and it requires drastic changes in people's lives or degradation of the modes available before people will question their practices or see an issue [Flamm and Kaufmann, 2006]. People do not use their logic sense, but more their preferences or personal beliefs [Freudendal-Pedersen, 2022; Urry, 2000; Kaufmann et al., 2018]. It is, therefore, a difficult task but likewise an important one for the sustainable agenda.

Vindum [2023], chairman of the industry association Danish Public Transport Authorities, argues *"[i]f we really mean something with the green transition, sustainability, and less pollution in the cities, we have to limit the number of private cars [...]"*. In that regard, it is necessary to enforce incentive measures. The municipality and Olesen [2023] are therefore right in their considerations of using incentives to push people into better decisions by increasingly making it more difficult and expensive to be a car user. Even an interviewee mentioned that force might be necessary to make her change her car-dependent mobility practice, she says: *"The alternative is that I am forced to do it"*, which again highlights the need for these incentive structures. As Freudendal-Pedersen [2009] argues, the solution lies in planning and regulation and an understanding of people, not in expansions and keeping to the historical understanding. Regulatory and limiting incentives must be used for changes to be found.

Conclusions from a study in the Netherlands also found that for mobility hubs to be successful, flanking policies are a necessity [Rongen et al., 2022]. They highlight parking restrictions as an important feature and that if people can easily get to their destination, and if parking is available, then people will not consider hubs as a solution. Parking restrictions can then help encourage people not to complete their journey only by car. Road pricing is also an option to regulate specific vehicles, places, or traffic at specific times. Rongen et al. [2022] note that for these measures to be successful, they must be done in collaboration among authorities.

As transport is flowing beyond borders, it is useful to think on a regional scale. In a Danish context, this will put pressure on the political field, which has to see beyond its political popularity and enforce some of the regulatory measures. As Olesen [2023] argues, some of the mechanisms must come from the state, as municipal politicians might be too close to the citizens. Her point also corresponds to that of Rongen et al. [2022].

Although many of the interviewees preferred the car as their main mode of transport, there were also many people who used other means of transport or were multimodal. Some of the car users also showed their awareness of environmental issues. Both car users and non-users demonstrated a new direction in society wherein societal values and expectations are changing and affecting how citizens feel and make their mobility choices. This alteration came to light through some people's decisions to only use public transport, for some to choose an electric car, or for others to only have one car instead of multiple. But because the car still has such a firm grip in society, some people might feel a conflict between personal values and desires but also societal values and expectations [Flamm and Kaufmann, 2006].

7.6 Summary of Recommended Feature in Mobility Hub Planning

Through the analysis and the discussions, a series of conclusions have come to light with the help of the theoretical background, a review of existing literature, a view on municipal planning, and, importantly, the public view on the topic. This combined view makes it possible for this research to finalize a list of recommended features that the municipality of Aalborg should consider in its continued planning of mobility hubs.

- Ensure flexibility in car alternatives and minimize public transport reductions
- Revise the role of the car in the future
- Include a place-related perspective in mobility hub planning
- Ensure local ownership
- Incentive structures are needed to achieve a change in behavior

As can be seen from the recommendations, many of them correspond with previous findings from the literature, both about mobility in general and also from the literature on mobility hubs specifically. This exploratory case study has reviewed a catchment mobility hub, which, unlike other literature, is not widely researched yet [Alonso et al., 2023]. This research, therefore, brings a new context to the research field. The combined view of mobility hubs and the everyday perspective has enabled the researchers to get up close with the citizens' opinions which, in terms of the socially constructive manner of the research, is crucial, as it provides the research with knowledge from subjective mobility stories that connect to daily life.

To ensure that these recommendations are embedded in future planning, it is important that the municipality embraces the everyday perspective more in their mobility hub planning and spends time investigating hubs' different contexts and their different needs. Although the recommendations are built on the findings from the case of Svenstrup mobility hub, they are not tailored to Svenstrup alone but can be used in other contexts. As is established in the report, context is very important, which also means that no place or hub can be compared or viewed as the same. However, the manner in which the recommendations are made they are generalized and should be able to be used in other contexts. This is because the issues concerning mobility hubs, in the cities and outside the cities, are quite similar and would require similar actions, which is also why many of the recommendations are in line with those from the literature.

Conclusion 8

Mobility is an important part of people's life and is carried out on a daily basis. With the introduction of the mobility turn and the start of the new mobilities paradigm, our understanding of mobility has shifted away from a merely technical and transport-oriented focus to also include a social focus. Mobility hubs are one of the mobility planning tools that include this twofold view and typically combine both transport and place-related functions. However, while the advantages of mobility hubs and requirements of transport- and place-related functions are well described, the success of mobility hub projects is still varying. An aspect that has been less explored is why and why not citizens utilize mobility hubs as part of their daily routine. This combination of the everyday mobilities perspective and mobility hubs planning is the foundation for this thesis' research question: *How can an understanding of citizens' everyday mobilities choices contribute to the planning of mobility hubs in Aalborg Municipality?*

In order to conceptualize everyday life's connection with mobilities choices, this research has combined an everyday mobilities perspective with Kaufmann's (2003) motility concept. The result of this merged understanding is the concept of *everyday motility*. The concept was developed with the aim to understand and analyze how individuals' determine their mobility options and make their decision.

The research question of this thesis was answered with a two-part analysis, with the first part of the analysis focusing on how citizens' everyday perspective is considered in Aalborg Municipality's mobility hub planning and the second part of the analysis investigating how citizens' everyday lives affect the use and non-use of Svenstrup's mobility hub. Based on the results from the analysis, it can be concluded that Aalborg Municipality has a comprehensive understanding of mobility that includes both transport and social perspectives. Especially their social aspect has been found to focus on the importance of citizens' everyday lives and the role of mobility. The municipality works with mobility hubs in their planning and likewise has ambitions to incorporate an everyday perspective. However, their current planning is largely transport-oriented, and the typology used by the municipality has elements from an outdated mobility understanding. Mobility and mobility hub planning is still at its beginning, and the municipality must therefore continue to expand on the integration of everyday life, which is already happening in newer projects.

In the second part of the analysis, the focus was on the various reasonings for people's choices of mobility. These reasonings were affected by a series of aspects and factors. Physical access to the hub was found to be of high importance for people's use and non-use of the mobility hub. The mobility options also dictated if people found the hub to be a possibility in their daily mobility. This corresponded to the many different activities that require mobility in peoples lives. Independently of whether people were users or non-users of the mobility hub in Svenstrup, there was general consensus on their everyday mobility activities. A general conclusion is that people are highly routinized in their mobility habits and remake their mobility choices. The reasons for choosing a particular mode of transportation were diverse and included factors

like time, travel distance, and convenience. The financial aspect of using the hub was also largely seen as a barrier enforced by high prices. Social values and individuals' interpretations of skills and knowledge also influence people's choices. Some people choose to use environmentally friendly modes of transportation, while others prioritize freedom and independence. This likewise makes these important factors to consider when planning mobility hubs. Although the analysis found that many people in Svenstrup use the mobility hub, the vast majority still see the car as a necessity in their daily lives.

The research clearly illustrates that even though mobility hubs may combine both transport and place-related functions, their mere presence is not enough to ensure actual usage. This is also the case at Svenstrup's mobility hub, that despite its many functions, is opted out by many. The car is an integral part of everyday life and is by many seen as a matter of course. Though mobility hubs, such as the one in Svenstrup, can offer alternatives to many people's mobility needs, the dominating role of private cars is so integrated into individuals' thought processes that alternative mobility choices are often unimaginable. Based on the results generated from the analysis, a number of recommendations have been prepared that should be used in Aalborg Municipality's mobility hub planning.

- The first recommendation for Aalborg Municipality's mobility hub planning is to ensure flexibility in the mobility system that the mobility hub is a part of and the mobility services integrated at the hub. This is important in order to allow citizen's to easily carry out multimodal travels to reach their destinations. Additionally, public transport budget cuts should be minimized as they have a negative effect on public transport's flexibility and accessibility, particularly in remote areas.
- The second recommendation is to revise the car's role in society and in mobility planning from being the primary mode of transport to being a supplement for other mobility modes. While cars are the reason for many problems, they still offer much value and can solve problems that are difficult to achieve otherwise. Particularly at locations with poor access to other mobility modes, cars can function as a first-mile vehicle connecting citizens to other modes of transport at mobility hubs.
- The third recommendation is to incorporate place-related functions at mobility hubs. Since mobility and everyday activities are intertwined, the integration of place-related functions at mobility hubs can make the usage of hubs more favorable and an integrated part of people's lives.
- The fourth recommendation is to ensure local ownership. Although mobility hubs are an important element in a sustainable mobility system, it is necessary that citizens see value in the mobility hub and find that it is anchored in their lives and not just in the city.
- The fifth recommendation is to make incentive structures in order to achieve a behavior change in the public. Due to the car's overall advantages, it is difficult for alternative mobility modes and mobility hubs to compete with it directly. It is therefore important for Aalborg Municipality to not only implement rewarding measures such as mobility hubs but also restricting measures such as the removal of parking spots in order to encourage behavior changes.

The overall conclusion of this thesis is that mobility and everyday life are inextricably linked. It is, therefore, crucial to understand the everyday perspective of people. By integrating an understanding of everyday mobilities in the planning of mobility hubs, an understanding of the perceived barriers that citizens experience in relation to using mobility hubs can be formed. This will create the basis for the planning of both the individual hub, but also the mobility system and it will ultimately pave one of the paths towards sustainable mobility.

Further research

Because this research has been conducted as an exploratory case study, further research could showcase additional aspects and themes. In terms of the methodological approach, further research could deepen the understanding of the individuals' opinions. As the everyday mobility perspective is a highly personal issue, reasonings, and mobility choices vary to a great extent, which has also been found in this study. Various assumptions, beliefs, and personal values came to light in this research, and these would be highly interesting to develop further. With the exploratory approach that this study uses, it was the goal to explore the variety in answers and reasoning's, not to dive into the individuals underlying perceptions. Future research in this field could therefore include in-depth interviews with mobilists to further develop an understanding of people's everyday perspective and how it influences the public's choice of mobility.

This research spends significant time explaining how important place-related functions are in ensuring the success of mobility hubs. In the discussions with the public, however, it was not a direct question in terms of their use or non-use of the hub, and very few of the citizens who already use the hub commented on the fact that the surrounding facilities including, for example, grocery shopping and a local school. The direct effects of having place-related functions at a hub were therefore not investigated but would be highly interesting in testing the theoretical importance of place-related functions as a way to influence people's desire to swap the car for other means of transport.

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Appendix: Interview Guide - Mette Olesen Interview A

Vi arbejder med hvordan mobility hubs og hverdagslivet spiller sammen, og hvordan en forståelse af brugere kan bidrage til at kvalificere planlægningen af mobility hubs. Vi har valgt at fokusere vores undersøgelse på Aalborg Kommune og brugen af mobility hubs her i kommunen. Med det her interview vil vi først spørge ind til din erfaring og generel viden om Mobility hubs, og derefter går vi ind i Aalborg Kommunes arbejde specifikt.

- Må vi optage interviewet?
- Må vi citere dig i rapporten og nævne dig ved navn?
- Vil du læse et referat af interviewet inden vi bruger det?

Fortæl os om dig selv og din erfaring med mobility hubs.

Hvad er et mobility hub i din optik? Og hvad kan de?

Hvad gør et mobility hub godt?

- Hvilke potentialer har mobility hubs ift. et mere bæredygtigt transportsystem?

Hvad er de største ulemper ved planlægning af mobility hubs?

- I forhold til at planlægge?
- I forhold til at få folk til at bruge dem?
- Har I på nuværende tidspunkt set en reel effekt på borgernes mobilitetsvalg ved brug af mobilitets hubs?

Hvordan arbejder I i Aalborg Kommune med mobility hubs? Hvordan planlægges mobility hubs?

Hvad er Aalborg Kommunes målsætninger ift. Mobility hubs og mobilitet generelt?

- Gennem vores teori ser vi en to-deling. På den ene side arbejdes der med at udbygge og udvide vejnettet, mens der på den anden side arbejdes med alternativer til privatbilismen: offentlig transport, samkørsel, restriktive midler til biler
- Hvordan vil du vurdere, at Aalborg Kommune prioriterer?

Hvordan samarbejder i med NT (andre?), og hvad er deres holdning til mobilitetes hubs?

- Fremtidige planer?

Hvordan benytter I typologierne I præsenterer i kommuneplanen?

- Netværksknudepunkter / Oplandsknudepunkter / Destinationsknudepunkter / Parker og rejsknudepunkter
- Global / Regional / Lokal

I Mobilitet 2040 skriver I at I arbejder med hverdagslivet i mobilitetsplanlægningen.

- Hvordan forstår I hverdagslivet?
- Hvordan arbejder I med det? Og hvorfor?
- Hvilken rolle spiller borgeren i jeres mobilitets arbejde?

Har du en god case, hvor I har arbejdet med hverdagsliv i forbindelse med planlægning og implementering af mobility hubs?

Appendix: Interview Guide - Citizen Interviews B

Prøv at beskrive forskellige situationer i din hverdag, hvor du transporterer dig på forskellige måder.

Hvis du frit kunne vælge, hvordan kunne du så godt tænke dig at transportere dig? (og 'hvorfor dette transportmiddel?' som opfølger)

Har du bil? Hvorfor har du bil/ikke bil?

Hvis fantasien får frit løb, hvad skal der så til for at få hverdagen til at hænge sammen uden bil? Og hvorfor?

Hvis fantasien får frit løb, hvad synes du, der skulle forbedres ved alternativerne til bilen? Og hvorfor?

Hvilken rolle spiller Svenstrup station i din hverdag? Og med stationen mener jeg både toget, busholdepladsen, cykelparkering og muligheder for samkørsel på parkeringspladsen

Hvis den spiller en rolle, hvorfor og hvordan?

Hvis den ikke spiller en rolle, hvorfor ikke og hvilke barrierer gør, at du ikke anvender dens faciliteter? Og hvad skal der til for, at du vil anvende stationen?