# Planning neighbourhoods for local living

# New Urbanism ideas in practice

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# Abstract

This thesis explores the effect of New Urbanist planning theory on facilitating sustainable local living behaviours in inner city neighbourhoods. Drawing on the empirical evidence of two New Urbanist neighbourhoods in Lithuania and Sweden, the residents' everyday lived experiences of the key guiding New Urbanist principles of density, mixed land use and walkability are explored. The effect of the built environment on local living behaviours in terms of the use of local services and travel behaviours are revealed.

This study finds that geographical proximity to local services makes everyday life more convenient. Respondents choose the essential everyday services based on the closest option available and often choose to walk. For destinations within 1 km of the residence, respondents perceive walking and cycling as the preferred modes to the car, resulting in increased mix of modes and a reduction on car reliance. However, not all respondents' activities are expected, or even desired, to be found locally, as there remains a wish for a change of scenery and to explore other areas occasionally. Respondents travel outside of the local area for occasional and more specialised activities in search of quality and variety. The study reveals that the design of the built environment is not the sole cause of residents' behaviours and that personal preferences and values, as well as sociodemographic characteristics play a role. The respondents' lived everyday experiences of density and mixed land uses also varies largely by sociodemographic profile and personal values, suggesting that there is a layer of subjectivity in how New Urbanist neighbourhoods are perceived.

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# Table of contents

A	bstract	iii
A	cknow	iii iii
1	Intr	oduction1
	1.1	Background1
	1.2	Aim and Research questions2
	1.3	Scope2
2	Lite	erature Review
	2.1	The Theory of New Urbanism
	2.1.	1 The neighbourhood scale
	2.1.	2 The guiding principles of New Urbanism
	2.1.	3 Related concepts to New Urbanism
	2.2	Behaviourist approach to urban planning9
	2.3	A critique of New Urbanism
	2.4	Conclusion14
3	Res	earch Methods16
	3.1	Research approach16
	3.2	Case study approach17
	3.3	Research stages
	3.4	Spatial analysis19
	3.5	Resident interviews
4	Cas	e studies
	4.1	Why were the case studies chosen?
	4.2	Local policy context
	4.3	Planner's vision
5	Res	earch Findings
	5.1	Spatial analysis results
	5.1.	1 Socio-demographic characteristics

	5.1	.2 Population density	34
	5.1	.3 Mixed land uses	35
	5.1	.4 Walkability and traffic	
	5.1	.5 Access to local services	
	5.1	.6 Comparison of the two case studies	42
	5.2	Interview results: the lived experiences of New Urbanism	43
	5.2	2.1 The lived experiences of density and mixed-use	45
	5.2	2.2 Local living behaviours: using local services	48
	5.2	2.3 Choosing amenities: is proximity the deciding factor?	54
	5.2	2.4 Travel behaviour: influenced by attitudes or built environment?	57
	5.2	2.5 Summary of interview results	65
6	Dis	scussion	68
	6.1	How does the physical planning of the neighbourhood according to the principle	es of New
	Urbaı	nism create the necessary conditions for local living?	68
	6.1	.1 Measuring the principles of New Urbanism	69
	6.1	.2 The lived experiences of New Urbanist planning	71
	6.2	Do behavioural patterns of local living manifest in practice?	72
	6.3	Recommendations for planning neighbourhoods that support local living behavior	urs75
	6.4	Limitations and further research	76
7	Co	nclusion	77
8	Ref	ferences	79
9	Ap	ppendices	86
	9.1	Appendix 1: The Interview Guide	
	9.2	Appendix 2: Interview Transcripts, Kvillebäcken	87
9.3 Ap		Appendix 3: Interview Transcripts, Šiaurės Miestelis	101

# List of tables and figures

Figure 1: Visualisation of the mixed-methods research approach	17
Figure 2: Location of Šiaurės Miestelis in Vilnius	28
Figure 3: Location of Kvillebäcken in Gothenburg	28
Figure 4: Kvillebäcken – the detailed plan	32
Figure 5: Šiaurės Miestelis – the detailed plan	32
Figure: 6 Job density in Šiaurės Miestelis	35
Figure: 7 Population density in Šiaurės Miestelis	35
Figure 8: Population density in Kvillebäcken	35
Figure 9: Job density in Kvillebäcken	35
Figure 10: Land use zoning in Kvillebäcken	36
Figure 11: Land use zoning in Šiaurės Miestelis	36
Figure 12: Traffic flows in Šiaurės Miestelis	38
Figure 13: Traffic flows in Kvillebäcken	38
Figure 14: Qualitative walkability assessment, Šiaurės Miestelis	38
Figure 15: Qualitative walkability assessment, Kvillebäcken	38
Figure 16: Healthcare services in Kvillebäcken	39
Figure 17: Food supermarkets in Kvillebäcken	39
Figure 18: Education services in Kvillebäcken	40
Figure 19: Leisure services in Kvillebäcken	40
Figure 20: Public transport in Kvillebäcken	40
Figure 21: Green spaces in Kvillebäcken	40
Figure 22: Healthcare services in Šiaurės Miestelis	41
Figure 23: Food supermarkets in Šiaurės Miestelis	41
Figure 24: Education services in Šiaurės Miestelis	41
Figure 25: Leisure services in Šiaurės Miestelis	41
Figure 26: Public transport in Šiaurės Miestelis	42
Figure 27: Green spaces in Šiaurės Miestelis	42
Figure 28: Word cloud of Kvillebäcken interview transcripts	44
Figure 29: Word cloud of Šiaurės Miestelis interview transcripts	44
Table 1: Summary of data sources and GIS layers used	22
Table 2: Respondent profiles	24
Table 3: Land use proportions by category in Kvillebäcken	36
Table 4: Land use proportions by category in Siaures Miestelis	36

# 1 Introduction

#### 1.1 Background

Sustainable urban planning has recently taken the trend of densification so that walkable neighbourhoods are designed with good access to services locally and the right conditions are created for local living. Mixed-use developments are planned where residents can live, work and play without leaving the neighbourhood. This approach is intended to achieve more sustainable mobility practices by putting residents close to workplaces and everyday services in order to reduce the need for daily commuting, particularly by private car. This is considered a sustainable urban planning practice, as it reduces the need to travel, cuts greenhouse gas emissions and promotes a sense of connection to the local community.

These planning practices, based on ideas of density, mixed land-use and walkability, are rooted in the New Urbanism movement of the 1990s. The theory emerged in response to the unsustainable urban development practices that focused on separating quiet low-density residential suburbs from industry and workplaces. This created the conditions for urban sprawl and automobile dependence. Separated land uses make long daily commutes inevitable (Hanson, 2004). This phenomenon of spatially disjointed activities, a term coined by Bertolini and le Clercq (2003), creates mobility challenges in many sprawling cities and leads to unsustainable travel behaviour. Would the residents' behaviour change, however, if the activities were available nearby? This study focuses on the application of the ideas of New Urbanism in urban planning and the attempt to solve these issues. It looks at how New Urbanism ideas can facilitate local living.

A neighbourhood which is in line with the principles of New Urbanism is one where all necessities are within a close reach by walking. The everyday life of city dwellers is largely influenced by the local neighbourhood. Without the availability of services nearby, daily commute times increase as residents travel across the city to meet their everyday needs of work and leisure. Therefore, the local scale of the neighbourhood is an important consideration in the planning of sustainable cities. In other words, neighbourhoods can be seen as microscale cities within cities (Perry, 1929, as cited in Talen, 2018; Krier, 1984). Local access to essential everyday services is paramount to the sustainability of neighbourhoods as polycentric nodes within the city structure. Such neighbourhoods can act as self-sufficient centres within cities, meeting the daily needs of residents and reducing the dependence on the main city centre (Perry, 1929, as cited in Talen, 2018; Krier, 1984). The use of local services forms the foundation of residents' attachment to the neighbourhood, which further encourages local living (Jean, 2016).

The purpose of this study is to understand the New Urbanist neighbourhood potential to encourage local living behaviours in residents. Local living behaviours are defined as the use of local services by walking. A cross-country comparison of two neighbourhoods in Vilnius, Lithuania, and Gothenburg, Sweden, is undertaken. The study examines the extent to which the physical planning of the neighbourhood creates the necessary conditions for local living, by assessing the local accessibility of services, walkability, density and mixed-use zoning. It then assesses the impact of these conditions on residents' behaviour to see if local living behaviours are created in practice. It is an important contribution, in that it offers a geographer's perspective to urban planning, enriching a predominantly physical design field. It takes the holistic geographical approach combining quantitative GIS and qualitative research methods. The work draws on the theory of behaviourism in urban planning.

#### 1.2 Aim and Research questions

This thesis is a comparative study investigating how New Urbanism planning principles are applied in practice in two neighbourhoods in Vilnius, Lithuania, and Gothenburg, Sweden. It explores the potential of the physical planning of New Urbanism to encourage sustainable local living behaviours, by asking two distinct questions:

- 1. How does the physical planning of the neighbourhood according to the New Urbanism principles create the necessary conditions for local living?
- 2. Do the residents use the local area as planners intended do behavioural patterns of local living manifest in practice?

The first research question is examined through the use of geo-spatial analysis, to demonstrate the accessibility of services in the neighbourhood, that is - proximity to services by walking. The second research question is examined through the use of qualitative resident interviews to uncover resident behaviour in the neighbourhood.

#### 1.3 Scope

New Urbanism is a broad urban planning theory covering several principles, but the scope of this research is limited to the three key principles of density, mixed-use and walkability. These aspects are chosen because they relate to human behaviour the most, because they enable residents to access services locally. The study looks at what these planning principles achieve in practice in terms of resident behaviour of living locally, as elaborated further in chapter 2.2. For the purpose of this study,

local living is understood as the use of the local neighbourhood and locally available services. Geographically the scope is limited to two case study neighbourhoods, Šiaurės Miestelis in Vilnius and Kvillebäcken in Gothenburg. The study focuses on inner city neighbourhoods, rather than outer suburban neighbourhoods, in order to reflect the shifting attention of New Urbanism to infill projects and the important role this plays in working towards more sustainable cities.

# 2 Literature Review

This chapter sets out the theoretical framework for neighbourhood planning based on the theory of New Urbanism. It outlines the main principles of walkability, density and mixed-use. First, the theoretical grounding on New Urbanism and the discourse about this planning theory is presented. Then, empirical research findings are presented, examining how other researchers have seen new urbanist design influencing local living behaviours, primarily travel behaviours and the use of local services. The discourse on other influencing factors not related to urban design is presented, such as personal preferences, attitudes, and sociodemographic factors. Finally, the key criticisms of New Urbanism are discussed.

The literature search strategy was aimed at balancing the most recent academic articles with earlier texts, as the most influential writing on New Urbanism is during 1990s and early 2000s. It was aimed to balance theoretical literature with empirical findings, with a stronger focus on empirical findings for the literature on behaviourism.

#### 2.1 The Theory of New Urbanism

New Urbanism is a movement that emerged in the US offering an alternative to the modernist planning practices of the 1950s. It critiques the idea of the American Dream as car-dependent suburban sprawl, where zoning separates residential suburbs from commercial activities in the central business district (Calthorpe, 1993; Hebbert, 2003). The New Urbanism approach aims to revitalise urban centres, create a sense of community and shared public spaces, while preserving the natural environment. It is positioned as the remedy for solving the problems of congested car-oriented cities (Duany et al., 2010). These ideas were engrained into the Charter of the New Urbanism and ratified by the Congress of New Urbanism to strengthen the movement (Congress for the New Urbanism, 1996). The idea of the American Dream has had a global reach. The pursuit of owning a house in the leafy suburbs with a private garden has reached far beyond the Anglo-American culture, and thus similar planning issues of suburban sprawl are evident across the globe (Calthorpe, 1993; Duany et al., 2010). This suggests that although the concept of New Urbanism originates in the Anglo-American cultural context, it can also be applied to solving the urban planning challenges in Lithuania and Sweden where the pursuit of the American Dream still prevails with the social preference for a car reliant suburban life.

#### 2.1.1 The neighbourhood scale

According to Hallman (1984), the neighbourhood is defined as a residential area bound by local ties. From the perspective of the resident, it is the space nearest the place of residence, where everyday life is carried out. This will be the definition used for the purpose of this study. The neighbourhood takes an important role in urban planning, as it is the building-block of the city system as a whole. This is an idea that has been prevalent since Perry (1929, as cited in Talen, 2018) and, more recently, Krier (1984), who argue that the neighbourhood is a city within a city. Leon Krier (1984), one of the key founders of New Urbanism, stresses that a neighbourhood, or quarter, should provide all daily functions within a walking distance, including work, leisure and dwelling. This is the grounding idea in New Urbanism, which puts the emphasis on the scale of the neighbourhood as the central focus in urban planning. Recent research by Kourtit et al. (2022) reinforces the relevance of this concept, arguing that cities are heterogenous spatial structures made up of disaggregated units of neighbourhoods. Research at the neighbourhood level is thus important to better understand cities, as it affects the individual experience of the city. Furthermore, the neighbourhood scale has received growing attention recently in urban planning studies, as Grazieschi et al. (2020) find in their metaanalysis of research on sustainable neighbourhoods. The focus is thus on the New Urbanist ideas related to the neighbourhood.

It is hard to universally quantify the size of the neighbourhood area. Krier (1984) defines the neighbourhood quarter based on a walkable size, outlining that it should not exceed 35 hectares and 15,000 residents. In the Lexicon of the New Urbanism, neighbourhood size is also defined by a walking distance, or radius, of five minutes from centre to edge (Duany Plater Zyberk Partners, 2003). City policy documents similarly relate the size of the neighbourhood to a walkable distance. For example, the transport planning policy in Gothenburg suggests the neighbourhood to be the area within walking distance of a home, providing the guiding distance of 400 meters (City of Gothenburg, 2014b). However, the exact distance varies by the individual and the local context. It has been argued that the walking distance is lower in car-oriented societies (Curtis & Punter, 2004). The 400 meters cannot be applied universally, in cities like Gothenburg and Vilnius where people are more prone to walking it is likely to reach further. Instead, the definition adapted here uses the humanistic approach, emphasising the role of the inhabitants and the space they use for their daily life (Kallus & Law-Yone, 2000).

#### 2.1.2 The guiding principles of New Urbanism

Christopher Alexander, one of the key founders of New Urbanism, emphasises that the goal of New Urbanism is to ensure a balance between all the planning principles that are vital to cities (Alexander et al., 1987). The Charter of New Urbanism (Congress for the New Urbanism, 1996) outlines the key planning principles directed broadly at three levels – the city, the neighbourhood, and the block, of which the neighbourhood is the focus of this study. New Urbanism aims to ensure that daily activities take place within walking distance. It highlights the importance of walkability, density, and mixed-use in neighbourhood level most everyday needs of the residents can be met by walking distance, creating the necessary conditions for local living. The scope of this research focuses on density, walkability and mixed-use because these three characteristics of a new urbanist neighbourhood relate to behaviourism the most, as they affect how people behave in the urban space. This section outlines these principles, followed by section 2.2, which explores their effects on behaviourism.

#### Walkability

The first principle in focus is walkability. Gehl positions walkability as the key element to creating liveable neighbourhoods (Gehl, 1987). According to Gehl, several factors contribute to creating the right conditions for walkability. It requires balancing different travel modes to prioritise walking and cycling, suitable urban street design, pedestrianised high streets, and provision of green spaces. Gehl (2010) argues that walkable places are those that are full of life, with inviting public spaces, mixeduse activity around the clock and active shopfronts. Such environments facilitate "eyes on the street", which creates a safe walking environment (Jacobs, 1961). Similarly, the idea of "human-scale" calls for planning neighbourhoods focused on pedestrian distances rather than driving distances (Gehl, 2010). Planning for the eye-level means there are interesting things to look at. It leads to smaller, livelier spaces, which makes them more walkable. These arguments are written at a time when urban planning puts the car rather than the pedestrian at the centre, and thus there is prevalent advocacy to start prioritising walkability. It is commonly agreed that physical planning can influence walkability, although different authors put emphasis on different aspects. Speck (2018) argues that physical planning can influence if a walk is useful, safe, interesting, and comfortable, with mixed-uses and jobs close by. Southworth (2005) similarly emphasises aspects of safety, mixed land-uses, connectivity, and path quality. The common influential factors emerge to be mixed land-uses, safety, green spaces, pedestrian scale and eye-level.

Walkability can be quantified in terms of walking distance, which ranges from 5 to 15 minutes in the literature (see for example (Duany Plater Zyberk Partners, 2003). However, this depends on the cultural context. While in car-oriented Anglo-American societies walkable can mean 5 minutes, in a

European urban context, such as for compact inner-city areas in Lithuania and Sweden it is likely to be further, 10 to 15 minutes. Based on this, a corresponding distance ranging from 500m to 1km is considered walkable in this study. The spatial distribution of local services can also influence walkability; thus it is important to consider if services are close together or far apart, set up around a pedestrian or a car-based catchment.

#### Density and mixed-use

Density and mixed land-use are the other key principles, and they are closely related to the principle of walkability. New Urbanists aim that most everyday needs can be met within walking distance and dense, mixed land-use activity helps to achieve that. The "spatial ordering of uses" is important in creating opportunities for local living and enhancing the quality of life (Congress for the New Urbanism, 1996, p.105). Putting a variety of mixed land-uses together, increases the likelihood of meeting the everyday needs of residents. The essential activities are dwelling, working, shopping, recreation and education, as defined by the founders of New Urbanism (Duany Plater Zyberk Partners, 2003). One way to measure mixed-use is in terms of a jobs – housing ratio (Speck, 2018), aiming for a balance between dwellings and offices. This is a common approach in earlier empirical studies (see for example Cervero, 1989) and is useful only as a proxy when land use data is not available. In addition, mixed-use can refer to various commercial services that provide for the daily needs of residents. For a more accurate representation of mixed land-uses, the residential and commercial floorspace can be measured, 40 % of total floorspace for commercial use being considered a good mix (UN Habitat, 2014). Both of these measures of mixed-use aim to ensure that there is no dominance of one particular land use. For example, in Lithuanian planning policy, an area is considered mixed-use if no single land use type exceeds 50 % (Šabanovas & Kavaliauskas, 2012).

Residential density is paramount in supporting mixed land uses. Densification is a prerequisite for sustaining the viability of commercial services, by providing enough population to support a variety of local businesses. This increases the amount of choice of local services within close proximity and creates convenient places to live for residents. Consequently, this attracts more residents and in turn revitalises urban areas, especially in post-industrial inner-city regeneration areas (Cysek-Pawlak & Pabich, 2021). Density is defined by the new urbanists as the residential dwelling units per land area measurement (Duany Plater Zyberk Partners, 2003). It can either be measured in terms of dwellings, or households, per hectare, or population per hectare (p/ha), 150 p/ha considered the level of density that sustainable urban planning should aim for (UN Habitat, 2014). Duany Plater Zyberk Partners (2003) in the Lexicon of New Urbanism define specific guiding densities based on how urban or rural a locality is and quantify this in terms of average dwellings per acre. It ranges from 6 to 92 dwellings per acre (15 to 230 dwellings per hectare), with 92 for the central core and 6 for rural areas.

This shows that density varies by context, with the inner cities expected to have higher densities than suburban edges. Density and the degree of mixed-use can also vary by scale (Šabanovas & Kavaliauskas, 2012), leading to lower densities and higher degree of mixed-use on a city scale and higher densities with lower degree of mixed-use at neighbourhood scale. Residential density is paramount in sustaining the viability of commercial services and in creating the conditions for a mix of services to exist. Density should be considered in the context of the overall quality of the urban environment. High density is an integral element of urban environments, providing the vitality for street life, but it should come with quality street environments to sustain good quality of life (Duany & Talen, 2002; Lehman, 2016; UN Habitat, 2014). Lehman emphasises the importance of provision of new green spaces in areas where densification processes are carried out, so not to overstretch the capacity of the existing infrastructure (Lehmann, 2016).

It is important to note that most New Urbanists do not define an exact prescription for density and mixed use. The Charter of the New Urbanism is descriptive when it comes to the guiding principles and does not quantify them. In the literature it is mostly referred to vaguely as higher densities and lower densities (Duany & Talen, 2002). Only Duany Plater Zyberk Partners (2003) quantify these principles to the meticulous detail of urban design in the Lexicon of New Urbanism. Most of the literature by the proponents of New Urbanism is focused on making the case for density and mixed use, highlighting the potential benefits in general, and the movement is largely centred on lobbyism to push the principles into mainstream use. This was beneficial in getting the developers to adopt these practices fast, but resulted in less attention on exact guidance on how dense the developments should be or what exactly goes into the mix of land uses and at what proportions. This makes it difficult to evaluate projects and to judge whether the principles of density and mixed-use are fully implemented according to the concept of New Urbanism. Therefore, it is additionally referred to the UN Habitat's guiding norms, which are more specific. This is reasonable given that the movement of New Urbanism has had significant influence in the drafting of the New Urban Agenda of the UN (Mehaffy & Haas, 2020).

Caution should be taken to implement these principles as a complete package, for density alone does not create walkability or access to local services. On the theoretical level, Alexander et al. (1987) have argued on the importance of getting the balance right, and caution against conflicting priorities that may result in excluding certain components in implementation. Moreover, empirical evidence shows that when the key principles work together, the combined effect is stronger in encouraging sustainable patterns of resident travel behaviour (Banister, 2005). However, local government authorities regulate the maximum density and land-use zoning through comprehensive and detailed

plans. It has been argued that rigid zoning policies can hinder the full implementation of New Urbanist principles in practice (Duany & Talen, 2002; Speck, 2018)

#### 2.1.3 Related concepts to New Urbanism

New Urbanism has built on Howard's ideas of the Garden City, and both evidently focus on the balance between urban and natural environments (Hebbert, 2003). The Garden City was the early response to the need to separate industry and residence, it advocated for self-sufficient town centres providing access to services for the surrounding resident neighbourhoods. Particularly, the early New Urbanist projects that focused on suburban towns can be likened to Garden Cities. In Britain, a parallel concept evolved at the same time, known as the urban village (Thompson-Fawcett, 2003). Such wording emphasises combining the benefits of the city with the human-sized scale of the village (Franklin & Tait, 2002). It can be implied that the aim is to reach the middle ground between the busy city and nature, or the calm village. Some have argued that New Urbanism is similar to the modernist and functionalist ideas of Le Corbusier, the very ideas the movement claims to oppose (Beauregard, 2002). Both believe in the superior role of the built form in organising social life and similarly aim at creating urban structures that facilitate local living, density, having mixed-uses within the building and services at close reach. New Urbanist ideas have since evolved into related planning practices such as the liveable neighbourhood and the 15-minute neighbourhood (Caselli et al., 2022). Slow cities, similarly to New Urbanist promotion of walking, advocate for the slow, active transport modes (Mezoued et al., 2021).

#### 2.2 Behaviourist approach to urban planning

The design of the built environment can influence people's behaviour in many ways. New Urbanist neighbourhood planning has been widely explored in the literature for its behavioural influence on local community building (Talen, 1999; Filep & Thompson-Fawcett, 2020), socio-economic mixing to counter segregation (Cabrera, 2019), as well as reducing dependence on the automobile (Elldér, 2020). For the purpose of this research, the focus within the behaviourist literature is on the use of locally accessible services and on travel behaviour. This section explores whether the availability of services locally can influence the residents' behaviour to meet their everyday needs by walking and reduce the dependence on the car.

Spatially disjointed activities in cities make long daily commutes inevitable (Bertolini & le Clercq, 2003), however would the residents' behaviour change if everyday activities were available nearby? There is the view that the need to travel arises from people trying to meet their daily needs by visiting amenities. Residents are pushed to travel far distances if the desired activities are far away, as a result

of separated land-uses (Hanson, 2004). The implication for urban planning is thus to locate services closer to the place of residence in order to minimise daily travel distances and make everyday living more convenient. Previous empirical studies have investigated the effect of locally accessible services on human behaviour. Research in Gothenburg shows that two-thirds of people do choose the option closest to home, given that the quality is good enough, and around half of the people choose to get there by walking (Gil Solá & Vilhelmson, 2022). It is striking that choosing the nearest option is true for both the basic needs like grocery shopping and more specific leisure activities (Gil Solá & Vilhelmson, 2022). Another study similarly finds that geographical proximity of local services leads to residents choosing to walk or cycle to get there, instead of taking the car (Elldér, 2020). Other research from Sweden shows that closeness is not the primary deciding factor in choosing amenities, particularly for specialised activities when other factors, such as quality or personal taste, are more important (Haugen et al., 2012).

There are some insights within the transport behaviour literature on walking behaviours, although car use tends to be the primary research focus. Research has shown that new urbanist design increases walking in the neighbourhood (Joh et al., 2008) and that it is important for walking behaviours that the built environment offers the opportunity to walk, making the car optional (Cao et al., 2009; Handy & Clifton, 2001; Maat et al., 2005). A combination of neighbourhood features such as density, mixeduse and green spaces leads to residents walking to shop locally (Ramezani et al., 2021). Particularly the shorter trips to amenities within 1,5 km are done by walking rather than driving in new urbanist type neighbourhoods (Cervero & Radisch, 1996). Others find that although walking trips increase, they are additional trips and do not necessarily replace car trips (Handy & Clifton, 2001). Even in walkable neighbourhoods, factors such as the individual preference for the car can override the travel behaviour. Empirical studies in Colombia indicate that walkable urban design is most apparent in affluent neighbourhoods where the preference for the car means that the desired walking behaviours are not achieved in practice (Arellana, et al., 2021). Empirical findings also confirm this tendency in Australia, where individual's preference for the car is more influential and therefore walkable urban design does not achieve the intended behavioural change if affluent groups with preference for the car move into such neighbourhoods (Kamruzzaman et al., 2013).

The discourse in the field of travel behaviour identifies several aspects of the built environment that contribute towards a reduction in car travel. The effect of density has been widely studied and the consensus is generally that density influences people to drive less (Elldér, 2020; Næss, 2012). Evidence from Norway shows that urban densification has reduced car travel, despite growing affluence (Næss, 2022). Moreover, empirical studies show that density combined with mixed land-use has a stronger effect on reducing travel, than density alone (Banister, 2005). Extending this to add

factors such as local availability of services and an overall walkable environment, further reinforces the effect on reducing car travel (Breheny, 1992, as cited in Banister, 2005). Recent empirical findings from Lithuania also point to the contribution of the improvement in pedestrian infrastructure on encouraging active travel modes (Dėdelė & Miškinytė, 2021). This implies that the holistic planning concept of New Urbanism would have more influence in reducing travel distances than individual design features implemented in isolation. It should be noted that empirical studies have studied variables in isolation, to assess their individual effects, which can be criticized for it may not reflect the full complexity of different interactions that occur in the urban environment in reality (S. Handy, 2005).

There is contention on the causality in the factors that influence travel behaviour (Næss, 2016). While it is widely argued that density and compact urban form lead to shorter distances travelled (Banister, 2005), Kitamura et al. (1997) challenge this assumption and make a point of reverse causality, arguing that the causal factor is the resident attitudes. Residents choose new urbanist neighbourhoods because it represents their attitudes and the lifestyle they want to lead, and it is these attitudes rather than the built environment that influences the behavioural pattern (Kitamura et al., 1997). Næss et al. (2019) support this argument with the idea that residents self-select themselves into neighbourhoods that fit their already existing attitudes on travel. This leads to suggest that density in itself is not the cause. In order to shed light on the causal relationship, Næss et al. (2018) uses qualitative interview data to explore the individual's transport rationales. Five main reasons explaining an individual's choice of destination are identified, namely quality of facility, variety, shortest distance, reducing other travel expenses, and maintaining social contacts. It was found that people reason their travel choices using these five rationales and that this reasoning is universal, regardless of the cultural context (Næss et al., 2018).

Besides resident attitudes, the socio-demographic factors play a significant role. Recent research in Lithuania finds that socio-demographic variables, such as age, education level and gender correlate to travel mode choice (Dèdelè et al., 2020). Stead (2001) maintains that travel behaviours are influenced more by socio-economic variables than the built environment, identifying car ownership, socioeconomic and employment status as the most influential variables. Yet the built environment still plays a role as it arguably affects the decision whether car ownership is needed (de Vos et al., 2021; Nielsen, 2002, as cited in Næss, 2012), meaning that urban neighbourhoods facilitate not owning a car. Clark et al. (2016) show that lifestage factors, such as having children, are significant in preferring to travel by car. Empirical findings in Helsinki also show that families with children tend to travel by car, while elderly single females are carless and value proximity to public transport (Karjalainen et al., 2021). Another group, highly educated urban young professionals, choose not to

drive. This behaviour has been associated with environmental awareness, although the authors suggest that the choice not to drive is also facilitated by urban lifestyles of having access to services within walking reach (Karjalainen et al., 2021).

Transport literature tends to focus on quantitative studies at the city or regional scale, studying the net effect, however there is a gap of looking at the combined effect of planning decisions in a local scale. Compared to the international context, the empirical research in the Nordic countries tends to focus more on the city scale, lacking studies at the neighbourhood scale (Næss, 2012). The few related empirical research studies that are available from Lithuania, are also quantitative (Dèdelè et al., 2020; Dèdelè & Miškinytè, 2021; Zaleckis et al., 2022) A useful insight thus can be gained when analysing the contextual local scale of the neighbourhood and individual decisions within a particular area context. This area could be explored further by studying the influencing characteristics of a neighbourhood holistically. Most of the empirical literature in this area applies a quantitative research approach, while a combination of quantitative with qualitative methods are seen as novel (Næss & Jensen, 2004). This implies that qualitative interviews would help shed light on the complexities of local resident behaviours and contribute to this gap in the literature.

## 2.3 A critique of New Urbanism

There is a body of literature critiquing New Urbanism, particularly from the sociologist vantage point. It has been argued that the New Urbanist belief that the physical design is the key influential factor in human behaviour is a form of environmental determinism (Berman, 1996). The promising claims that urban design alone would cause people to walk, live and work locally and not rely on the car have been criticized mainly outside the design community (Curtis & Punter 2004). This has been the main line of argument criticizing New Urbanism from the social standpoint, as there are not only physical but a variety of complex social factors at play that shape human behaviour. Physical design such as provision of local services and human-scale are important, however the role the physical factors have in solving complex behavioural problems should not be overstated (Talen & Koschinsky, 2014; Filep & Thompson-Fawcett, 2020).

Aspects of New Urbanism, such as density and local living, can arguably also have negative social implications. Densification is seen as a sustainable urban planning practice because it allows people to live locally and compactly, while preserving the natural environment. However, prioritising the environmental gains in urban containment and densification may overlook the socio-economic issues of dense living, questing whether it is not only environmentally but also socially sustainable (Jenks et al., 1996). The residents' experience of the urban environment and aspects of place quality are

therefore being addressed in recent research (Kourtit et al., 2022). In practice, the residents' experience of living in high-density neighbourhoods can be long waiting lists for admission at the local school, or limited availability and quality of local green spaces (Arnberger, 2012; Colding et al., 2020). This can increase the need to travel to further destinations (Maat et al., 2005), such as for recreational purposes. Careful public policy alignment across sectors is vital in ensuring the provision of public green spaces. For example, in Gothenburg, the transport, urban development and green strategies together combine to ensure that the goals of walkability, densification and local access to green spaces are balanced (City of Gothenburg, 2013; City of Gothenburg, 2014a).

Considering the residents' experience of densification and the promotion of local living behaviour, several critiques focus on the social implications. The attempt to control human behaviour through carefully planned urban structure has been critiqued as social engineering (Filep & Thompson-Fawcett, 2020; Brain, 2005). Density and mixed-use planning can provide the opportunities for local services so that everyday basic needs can be met locally with the convenience of reduced daily travel. However, residents' daily activities can only be contained within the neighbourhood to a certain extent. Empirical evidence shows that for purposes such as maintaining social relations further distances are generally travelled and tend to be driven by car (Lagrell & Gil Solá, 2021). In other instances, it may not be beneficial to promote local living, such as in residential areas of lower socio-economic standing, because staying local would perpetuate the problems of poverty. Instead, wider opportunities for mobility and social mixing are important in improving the lives of residents in such areas (Musterd & Andersson, 2006).

New Urbanist theories to some extent differ in practice, resulting in not realising the intended outcomes in implemented projects. The New Urbanist ideals of creating communities have, in practice, often shown signs of segregation and gentrification. Grant (2007) argues that New Urbanism neighbourhoods are by design and conceptually similar to gated communities, while empirical studies in North America suggest that New Urbanism tends to attract the mobile young affluent population and create socially homogenised enclaves, leading to gentrification (Cabrera, 2019). This suggests that the theories and advocated benefits of New Urbanism differ to how it is implemented in practice at a neighbourhood level. This may be due to the concept not being implemented fully in practice or differences due to the cultural context. Moore (2013) cautions against universal application of New Urbanism as a best practice, because each project is situated in a different context, thus New Urbanism norms should not be applied as a universal formula but rather it should vary to suit the local context. Sharifi (2016) also cautions against prescriptive planning and urges to consider the local context. Moore and Trudeau (2020) similarly argue that there are now multiple new urbanisms, and although physical structure may look the same, the social and behavioural aspects are contextual. Because New

Urbanism has been more widely applied and researched in North America and Britain, other cultural settings could be more explored in order to reveal the different manifestations of New Urbanism.

Finally, New Urbanism has been critiqued for not bringing anything new to urban planning, as the principles that define New Urbanism have already existed beforehand. However, the novelty can be seen in packaging the planning principles under the single umbrella of New Urbanism and successfully promoting this concept to embed it into mainstream planning practices (Garde, 2020). Hebbert (2003) adds that New Urbanism has drawn on the existing theories and converted them into a set of tangible guidelines for practitioners. Much of the criticism has been narrowly directed at individual aspects of New Urbanism rather than evaluating its broader impact as a concept. Therefore, despite the criticism, this paper focuses on the emphasis that New Urbanism places on applying the planning principles as a complete package to create sustainable neighbourhoods. New Urbanism is arguably a powerful lobbyism movement that has employed several strategies to promote its planning concept and to gain dominance. It has mobilised supporters of sustainable planning ideas under the umbrella of the Congress of New Urbanism (CNU), directly positioning itself as a powerful alternative to the modernist Congrès internationaux d'architecture moderne (Moore & Trudeau, 2020). The CNU has ratified a Charter of New Urbanism, and it has used the Charter Awards to incentivise implementation of the concept and label projects as New Urbanist (Trudeau, 2020). As a result, CNU has achieved a turn in urban planning and has made the new into the mainstream. One of the most notable achievements is that the movement has succeeded in setting out the principles of New Urbanism at global policy level, by incorporating it into the United Nations' New Urban Agenda (Mehaffy & Haas, 2020).

#### 2.4 Conclusion

This chapter has detailed the New Urbanist vision and intended outcomes, while also presenting empirical findings on the actual outcomes on behavioural patterns. Although New Urbanism has been criticised for over-stating the role of the built environment, and for not bringing anything new it is nevertheless a powerful urban planning movement that has packaged sustainable urban planning principles under one umbrella and has carried out a successful lobbying marketing campaign to make these practices popular.

The behaviourist critique of New Urbanism invites an interesting research angle for further exploration. To what extent the built environment is deterministic in influencing resident behaviour and whether the opportunities that the built environment creates for local living can mean that residents' daily activities are primarily contained within the neighbourhood. It is not only the built

environment that affects behavioural patterns, but there are also additional influential factors at play, such as resident self-selection, attitudes, preferences and sociodemographic variables. It can be seen from the travel behaviour literature that the relationship between urban design and travel is complex, and the causality is not clear. This may be because the research is conducted on a wider geographical scale, trying to identify trends. As can be seen from the behaviourist research, studies on a city or regional scale employing quantitative methods are abundant, while qualitative research is scarce. Statistical trends are drawn from large questionnaires, whereby the motivations at the level of the individual are lost.

The reliance on quantitative methods is particularly true for the Nordic context, while American and other European researchers focus on case studies at the neighbourhood scale. This suggests that in the Lithuanian and Swedish context, a case study approach would shed light in an otherwise quantitatively dominated field. Furthermore, the neighbourhood scale would be better suited at illustrating the impact of the built form on the individual resident behaviours and revealing the causal relationship. Even more interesting insight can be gained from exploring the contextualised living experiences situated in two different cultural contexts for comparison. From the literature review it is evident that quantitative and qualitative methods need to be combined in order to better understand the causal influences on human actions at the individual level. The research gap is therefore in evaluating the residents' lived experiences in relation to what benefits New Urbanist design creates for affecting the behavioural patterns of the everyday life. It would be beneficial to explore the individual resident's rationales for travel behaviour and the use of local services to evaluate the role of New Urbanist design in the decision making.

# 3 Research Methods

This chapter introduces the methods that are applied to examine new urbanist planning principles, explore the effect of New Urbanist neighbourhood design on resident behaviour and the diverse individual rationale behind it. The research approach is first outlined, followed by the justification of taking a case study approach. Then, the research stages are discussed, which consists of the literature review, spatial analysis and qualitative semi-structured resident interviews.

#### 3.1 Research approach

This thesis aims to explore the potential that the New Urbanism planning theories have in achieving local living behaviours. To do this, it was chosen to focus on the neighbourhood scale and explore the resident behaviour of two different neighbourhood case studies that have New Urbanist planning characteristics, namely Šiaurės Miestelis in Vilnius, Lithuania and Kvillebäcken in Gothenburg, Sweden. Therefore, this takes a comparative case study approach (Yin, 2018).

In order to explore the case studies, a mixed-methods approach is employed (Creswell, 2009) in that it uses both quantitative GIS (Geographical Information Systems) and qualitative interview methods. This approach has been chosen so that GIS can provide objective quantifiable measures of the level of implementation of New Urbanist design features, and the qualitative interview data can shed light on the residents' lived experiences of the space. The knowledge gained by both approaches is brought together by way of triangulation and this makes the research more robust (Creswell, 2009) because it provides a more comprehensive answer to the research aim than a solely quantitative or solely qualitative study could achieve. This methodological choice addresses the dichotomy between disciples of quantitative and qualitative geography, and aims to bring the two together (Maccallum et al., 2019). See Figure 1: Visualisation of the mixed-methods research approach.

This suits the aim, which is to find out how individuals behave under the influence of their personal attitudes and socio-demographic characteristics in combination with the conditions of the built urban form where they reside. Qualitative research methods such as interviews are a particularly good way to reveal the individual rationales behind behavioural patterns (Pugh, 2013). Prominent researchers who study the connection between the built environment and travel behaviour have recently argued that more qualitative research is needed in order to enhance the knowledge of quantitative statistical studies, and to focus on exploring the nuances of the complex causal relationships that influence travel behaviour (Handy, 2017; Næss et al., 2018). Combining this with the case study approach allows to address the real-life complexities of daily living behaviours in a neighbourhood of New Urbanist design.

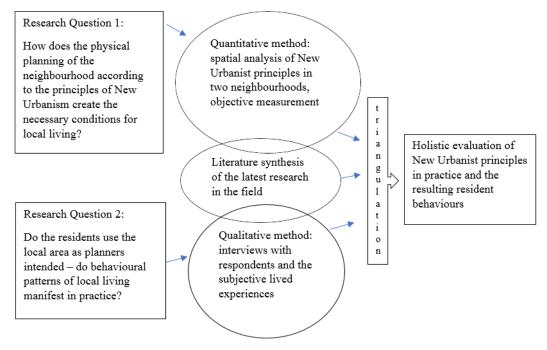


Figure 1: Visualisation of the mixed-methods research approach

#### 3.2 Case study approach

This study draws on the two neighbourhoods of Šiaurės Miestelis and Kvillebäcken. The case study is an appropriate approach for this research enquiry, because the aim is to explain how the theory of New Urbanism works in a particular context. As Yin (2018) points out, case studies help to understand complex phenomena in a given context of a delimited territory, which is relevant in this case of the complex theory of New Urbanism analysed in the context of a specific neighbourhood. Taking a case study approach and focusing on the scale of the neighbourhood is beneficial for this study because it allows for multiple aspects of the New Urbanism theory to be explored in more detail in the specific context of a chosen delimited territory. This means that the New Urbanist characteristics of the case study neighbourhood, such as its density and degree of mixed-use can be related to the impacts on behaviour of the residents in that neighbourhood. It allows to explore the impact of local urban design in that context and provide more insight rather than just observing general city trends.

However, because the case studies are unique manifestations, they are not representative of all New Urbanism projects and thus generalisations cannot be drawn to speak for all cases. In order to overcome the limitation of exploring just one context, two case studies are chosen so that a comparison can be made and some recurring trends can be better observed. This choice provides the benefit of exploring how New Urbanism can manifest in different ways in practice, and comparing what approach provides better results. As Maccallum, Babb and Curtis (2019) point out, using multiple case studies can reveal similarities and differences of how a theory plays out in different

contexts, revealing why one case is more successful than another. This adds validity to the overall argument and research findings, even though in qualitative research more is not necessarily better, suggesting that even one case study explored in depth is sufficient (Maccallum et al., 2019). Similarly, Creswell (2009) highlights the importance of in-depth exploration when using the case study approach. With this in mind, it was decided to focus on two case studies, which still allows for in depth exploration and adds the advantage of comparison, whereby different ways of implementing New Urbanism can be evaluated between the case studies.

The two case studies are intentionally selected as inner-city regeneration projects in former industrial areas. New Urbanism has been traditionally associated with new town developments that are in the outer suburbs or transit-oriented developments and has only recently shifted to inner city infill developments (Larsen, 2005; Moore, 2013). This study contributes to this recent turn in New Urbanism research by looking specifically at inner city neighbourhoods for the reinforced effect of sustainable living patterns made possible through the density and mixed-use that the inner city offers. The choice to study inner city developments also addresses a research gap pointed out by Banister (2005), who calls to further explore the link between the overall quality of the environment in inner city neighbourhoods and the resulting travel behaviour. Inner city locations are important targets for New Urbanism projects as they have a high potential to facilitate sustainable living behaviours due to local access to services and short distances that allow walking instead of driving.

#### 3.3 Research stages

The research methodology of this thesis comprises three stages. The first stage is a literature review, which sets the context, with both theoretical and empirical knowledge to date that relates to the subject of New Urbanism, the characteristics of the built form of a New Urbanist neighbourhood, and its influence on the everyday travel behaviour of residents. Key literature in the field was gathered and summarised with the intention of first defining the scope of New Urbanism as an urban planning theory, with its key principles and applications on the neighbourhood scale. Then the issue of the New Urbanist vision manifesting in practice was identified as an interesting aspect to explore, particularly how the residents act or behave in practice and their everyday experience of the New Urbanist built environment. The theoretical framework of behaviourism from social science was considered as a suitable theoretical vantage point to explore this research question because it concerns the role of the individual social actors. From an epistemological stance behaviourism is rooted in positivism. This means that the role of the individual actor is at the forefront, which challenges the role of the physical structure and, in this case, the role of the built environment. This theoretical

approach has been chosen because it helps to gain insight into the research question, which primarily concerns the role of the individual. The research approach investigates the individual rationales that hinder or support the sustainable behaviours.

The second stage was to employ spatial analysis in order to quantify the New Urbanist features of the selected case study neighbourhoods. Urban density, mixed land uses and walkability were quantified to be able to objectively measure the implementation of New Urbanist principles for the two case study areas in practice. Next, fieldwork was carried out interviewing the residents living in the two neighbourhoods studied, with the purpose of revealing the lived experiences of the New Urbanist neighbourhood, attitudes towards local living and the individual rationales for travel behaviour.

This approach is an embedded model of research design because the qualitative and the quantitative aspects are not equal in size (Creswell, 2009). The qualitative research element forms the basis of the empirical data in this thesis, while the quantitative GIS element plays a supportive role. This approach is chosen in line with the research questions so that more focus can be put on exploring the behavioural aspect of the research enquiry, given the limited timeframe of the thesis project. The research framework has set out to take an exploratory sequential mixed methods approach (Creswell, 2009). In practice, however, this became a concurrent approach as the research stages progressed. The qualitative exploratory interviews followed the quantitative spatial analysis. In light of the interview data the quantitative spatial analysis was later added to, so that new aspects of the built environment that were identified in the resident interviews could be objectively measured for comparison. The following sections look at the two research stages of quantitative GIS method and qualitative semi-structured interviews in more detail.

#### 3.4 Spatial analysis

The spatial analysis component was employed to objectively measure features of New Urbanism, such as access to services, density and mixed land uses. The following section outlines how these features were measured for the two case study areas, the data sources used, the methodological choices and limitations.

Density was measured based on the UN Habitat definition of population per hectare (UN Habitat, 2014). Resident population within the study area of the neighbourhood boundary was used for this. Mixed use was measured both in terms of the residents to jobs ratio and the exact composition of land uses by area size, based on definitions by Speck (2018) and UN Habitat (2014). Data on land-use zoning was obtained from the municipality of Vilnius as open spatial data, while no equivalent was found from the municipality of Gothenburg. Thus, equivalent data was created manually for the

Gothenburg case study, by using fragmented data on land-uses available from OpenStreetMap and adding missing data by digitising land uses from satellite imagery and based on the knowledge of field visits. Total area size was calculated for each land use. Allocation of green space per person was calculated to evaluate the intensity of use.

Walkability is measured in terms of geographical proximity to local services. This choice is based on a recent study by Elldér (2020) and provides the benefit of using geographical proximity as a proxy for walkability because it indicates the opportunities of walking destinations in the local area. Three zones of geographical proximity were chosen: distance buffers of 500m, 1km and 1.5km. Because walking distances and speeds vary significantly by person, the proximity zones act as an illustrative tool. The selection of different distance buffers aims to account for the variation in walking zones and act as a guiding reference. To add a more comprehensive view on walkability, a qualitative walkability assessment was also carried out.

It was chosen to use straight-line buffers over other methods for several reasons. Firstly, it was aimed to be comparable to the method used in a previously conducted study by Žalalytė and Šabanovas (2021), which analysed the spatial characteristics of the Šiaurės Miestelis case study. This way the results of the case study could be compared in this thesis with the additional case study and continuation of the research ensured. Secondly, the scale allows for it. The neighbourhood scale has the advantage of showing the locations of amenities exactly as they are. This meant that no modelling was needed, variables did not need to be aggregated, and indices did not need to be used as has been done in larger scale regional studies (Cervero, 1989). This method choice resulted in the advantage of high readability and precision, producing maps that are easy and straight-forward to read and give an in-depth understanding of the provision of local services in the area. It is important to note that this study has taken the methodological approach of putting more emphasis on the qualitative element exploring the behavioural aspect in more detail, and thus the spatial analysis is smaller in rigour. This is the nature of an embedded model of research design (Creswell, 2009).

In terms of realistically portraying walking distances, the straight-line method has its limitations. It is widely recognised in the field of mobility research that there is a difference between the theoretical walkability calculated from a straight-line distance and the walkability distance achieved in practice that is based on the footpath network. This is called potential and actual accessibility (Curtis, 2021), and it must be noted that in this case the spatial analysis is based on the potential accessibility. This is a limitation because the actual accessibility is a portion of the potential accessibility, which needs to be taken into consideration when interpreting the results of this research on the accessibility of services by walking. It is recognised that other spatial analysis methods are used in order to more

precisely model walking times. In an ideal scenario the GIS element could be expanded to incorporate more exact walking times based on the road network and use the network analyst in ArcGIS, such as in a recent quantitative study by Caselli et al. (2022). The advantage of this approach would be that the actual accessibility could be accounted for, showing which local amenities are realistically within walking reach.

Another useful approach would be to model shopper catchments for the local services. Location planning theory argues for the use of spatial interaction modelling techniques to determine more precise shopper catchments (Clarke, 1998; Haynes & Fotheringham, 2020). This method of modelling service catchments is much more accurate than applying geographical distance buffers. However, it has been argued that spatial interaction modelling may not accurately predict human behaviour patterns and amenity preferences (Eyre, 1999). Having considered these limitations, the distance buffer is used as the chosen method, as it serves the purpose of illustrating the geographical proximity of amenities. The limitations of the chosen GIS method are mitigated by incorporating it into a mixed-method framework, whereby it is strengthened by adding a qualitative research component. This way the understanding of geographical access to local services is enhanced by analysing qualitative data from interviews to explore behavioural aspects.

In order to map the local services, data on six types of services were obtained from OpenStreetMap for Gothenburg and an equivalent open data source the National Register of Companies for Vilnius. The dataset was examined for accuracy and enhanced by using the knowledge acquired during local site visits and from business locations in google maps. The categories of services were selected based on how essential of a service it is for daily life and based on data availability. This choice was guided by literature on New Urbanism (Duany Plater Zyberk Partners, 2003) and also by the methodological choices of previous empirical studies on access to services (Elldér et al., 2022; Lagrell & Gil Solá, 2021;Gil Solá et al., 2018). Bertolini and le Clercq (2003) suggest that the measure of access to services should consider also the quantity and variety of local amenities, because that creates better opportunities for the choice of amenity. Therefore, this study includes the subtypes of services under each category, as a proxy for variety. For example, breaking down leisure services into sports, culture and cafes and restaurants for eating out.

The public transport layer is categorised by the level of connectivity, which is based on the number of routes and frequency of service. High connectivity denotes service frequencies of under 5 minutes and a high number of different routes in the range of 6-10 routes, whereas low connectivity denotes service frequencies of around 30 minutes and a limited number of routes of under 3 routes. Car traffic flows were analysed using secondary data from the relevant municipality traffic authorities. Maps were produced for peak hourly flows, representing counts of vehicles.

A qualitative assessment of walkability was carried out during site visits, based on Curtis (2021). This method benefits the study in two ways. First, it enhances the understanding of walkability in the area by revealing the experiences if walking. This adds to the quantitative measurement of walkability in terms of geographical distances. Secondly, it provides an expert rating of the streets within the local area, so that it act as a guiding measure when comparing against the residents' perceptions. The audit was designed based on some of the key aspects of walkability, as found in the literature by Gehl (2010), Jacobs (1961) and Southworth (2005). The chosen aspects also closely relate to safety, which encourages walkability. Five criteria were chosen: mix of land uses with active shopfronts, traffic levels, quality of footpaths, lively pedestrian-scale environment, vegetation. Each variable was observed and given a rating of 'poor', 'okay', 'great', and were equally weighted to produce a total ranking for each street. The results are mapped indicating the level of walkability in each street as 'high', 'medium' or 'low'. It was found that the benefit of some features was cancelled out by a negative rating of another features. For example, a mixed-use street with active shopfronts but high traffic levels, would result in medium walkability. Residential streets with no active shopfronts, but abundant vegetation and liveliness would result in medium walkability.

It was important to locate equivalent data sources for the two case study areas, particularly because they are based in two different countries. This was a challenge at times, and best efforts were made to ensure that the data sources are comparable. For example, the national population databases differ by country, where in Lithuania open data is available about the population disaggregated by individual variables to the fine scale of 100 m2 grids from the National Statistics Lithuania. By contrast, in Sweden the population total is available for 100 m2 grids, whereas the disaggregation by variables is only available at the scale of 250m2 grids. This is a constraint of the national statistical database from SLU Lantmäteriet, which is available for Sweden only, and no equivalent was found for Lithuania. To overcome this limitation and to enable comparison between the two case studies, education level was used as a proxy for socio-economic status, instead of income. A summary of the spatial data sources and GIS layers used is presented in table 1.

GIS layer	Source		
Socio-demographic variables,	National Statistics Lithuania		
Vilnius	https://osp.stat.gov.lt/detalioji-statistika		
	-Population count, 100m <sup>2</sup> grids, 2011		
	-Daytime population (jobs), 100m <sup>2</sup> grids, 2020		
	-Age, employment status, education level, marital status, nationality,		
	100m <sup>2</sup> grids, 2011		
Socio-demographic variables,	Lantmäteriet. SLU University Library open spatial data for student		
Gothenburg	research, retrieved from https://maps.slu.se		

Table 1: Summary of data sources and GIS layers used

	-Population count, 100m <sup>2</sup> grids, 2019				
	-Daytime population (jobs), 250m <sup>2</sup> grids, 2016				
	-Age, employment status, education level, marital status, nationality,				
	-Age, employment status, education level, martar status, nationality, 250m2 grids, 2019				
	-Household income, 2016				
Traffic flows, Vilnius	Open data from "Susisiekimo paslaugos", a municipal company				
Hourly peak traffic flows by	responsible for transport planning in Vilnius, retrieved from				
street section, 2021	https://judu.lt/kita-informacija/atviri-duomenys/				
Traffic flows, Gothenburg	Open data from Göteborgs Stad, retrieved from				
Hourly peak traffic flows by	https://goteborg.se/wps/portal/start/gator-vagar-och-torg/gator-och-				
street section, 2015	vagar/statistik-om-trafiken/trafikmangder-pa-olika				
Local services, Vilnius	National Register of Companies, 2015, <u>http://www.info.lt</u> + enhanced				
	with knowledge from site visits. Shapefile layer available on ArcGIS				
	Online from UAB HNIT-Baltic				
Local services, Gothenburg	OpenStreetMaps, 2022 + enhanced with knowledge from site visits				
	Shapefile "sweden-latest-free.shp", retrieved from				
	https://download.geofabrik.de/europe/sweden.html				
Land use zoning, Vilnius	Based on shapefile data from the Vilnius City Masterplan, 2021				
	Shapefile retrieved from https://maps.vilnius.lt/bendrasis-planas				
Land use zoning, Gothenburg	OpenStreetMaps land use shapefile data + completed with knowledge				
	from site visits and digitalising missing land uses from satellite				
	imagery				

## 3.5 Resident interviews

The qualitative research component was carried out to answer the second research question. It explores the residents' experience of the neighbourhood, the resulting travel behaviours and reveals the subjective aspects to show the full picture. It comprises of semi-structured interviews with 31 respondents who are local residents in the two case study neighbourhoods.

The interviews were semi-structured and were conducted during two weekends in April 2022. Fifteen respondents were interviewed on 1-3<sup>rd</sup> of April in the neighbourhood of Kvillebäcken and sixteen respondents were interviewed on 8-10<sup>th</sup> of April in Šiaurės Miestelis. The duration of the interviews varied between 10 and 40 minutes. The descriptions of respondents' profiles is presented in table 2 below. In order to ensure that the research was undertaken in an ethical way, the debriefing technique was an integral part (Maccallum et al., 2019). Debriefing was beneficial in increasing the willingness of respondents to contribute to the research, because it meant that the purpose of the research was explained and anonymity guaranteed. All interviews were audio-recorded, and respondents willingly consented to do so, and thus the backup strategy of note taking was not required.

Code	Name	Age guess	Respondent description	Time (mins)	Code	Name	Age guess	Respondent description	Time (mins)
		Loca	tion: Kvillebacken, Gothenburg, Sweden			L	location:	Šiaurės Miestelis, Vilnius, Lithuania	•
SE1	Samuel	37	Male, lives with partner, professional, Chinese decent, resident 2 years, urbanite, walks and cycles	10	LT1	Dovilė	37	Female, lives with husband and two young children, professional, resident 4 yrs, drives	22
SE2	Fatima	23	Female, lives alone, student, Muslim, urbanite, resident 5 months, relocated from suburbs for a change, walks	13	LT2	Irena	70	Female, lives alone, retired, keeps active, walks, resident 6 months	16
SE3	Linda	35	Female, single parent, young daughter, urbanite, professional, Chinese decent, walks and cycles	13	LT3	Agnė	30	Female, young professional, has a car but prefers to walk, resident 10 years	6
SE4	Johan	37	Male, lives with partner and 4-year-old daughter, expecting a second baby, Swedish, resident 7 years, affluent, walks, prefers suburbs	15	LT4	Daiva	55	Female, lives with husband, close to her son and 3 grandchildren, travels by bus, resident 16 yrs, among the first to move in	26
SE5	Astrid	65	Female, retired, walks, Swedish, resident 30 years next to the neighbourhood development	11	LT5	Alina	65	Female, retired, lives alone, socially active, avid walker, resident 5 years	35
SE6	Evelyn	33	Female, lives with husband and newborn baby, Swedish, resident 3 years, walks or drives	12	LT6	Audronė	42	Female, professional, drives to work, likes to keep active, resident 17 years	38
SE7	Mikael	29	Male, lives with girlfriend, Swedish, affluent, urbanite, resident 8 years, walks, does not own a car	14	LT7	Oleg	33	Male, lives with partner, drives, does not spend time locally, Russian, resident 5 yrs	9
SE8	Ana	29	Female, lives alone, professional, from Kosovo, resident 7 years, stays locally, walks	17	LT8	Justas & Nina	26	International couple, Nina is French, young professionals, avid walkers, outgoing, 1 yr	40
SE9	Karl	58	Male, lives with wife, empty-nesters, Swedish, resident 6 yrs, relocated from suburbs, active, walks and public transport, sold his car	9	LT9	Karolis	38	Male, lives with wife and 2 young children, drives everywhere, resident 10 years	35
SE10	Joshua	34	Male, lives with partner and newborn baby, Swedish, resident 2,5 years, prefers suburbs	30	LT10	Aistė	28	Female, lives with partner, medical professional, uses the bus, resident 8 years	13
SE11	Barbara & Sven	57	Couple, professionals, Swedish, resident 2,5 years, active, walk, cycle and car, urbanite	8	LT11	Mantas	37	Male, lives with wife, nature lover, drives, resident 8 years	28
SE12	Elsa	26	Female, lives with boyfriend, Swedish, resident 3 months, cycles and public transport	10	LT12	Justė	28	Female, lives with husband, very active and outgoing, walks, no car, resident 4 yrs	12
SE13	Lina	33	Female, lives alone, teacher, resident 2 yrs, cycles	34	LT13	Jonas	28	Male, lives with girlfriend, works from home, drives, resident 3 years	14
SE14	Dan	28	Male, lives alone, young professional, likes the convenience of the car, Swedish, resident 1,5 years	8	LT14	Arūnas	56	Male, lives with his wife, drives to work, resident 8 years	21
SE15	Charlotte	26	Female, young professional, affluent, resident 2 yrs	12	LT15	Vilgailė	27	Female, works from home, stays local, cycles, resident 2 years	20
					LT16	Ingrida	55	Female, drives, teacher, resident 4 years	10

#### Table 2: Respondent profiles

Recording the interviews has enabled to focus on the conversation without the distraction of note taking, and to establish a better connection with the respondent, in an attempt to encourage them feel at ease. The respondents thus didn't seem restricted to talk despite knowing that a recording was in progress.

It was chosen to carry out the interviews using the intercept survey method. This method is exploratory, which means that it is not the intend to get a large sample representative of the total population of the area, but rather carry out the qualitative interviews with residents in an exploratory way and gauge a set of different perspectives. Resident selection was a decision made spontaneously, approaching people that were out walking in the neighbourhood area. The main advantage of intercept approach benefitting this study was that it allowed to get a variety of opinions from the general public. The alternative option of recruiting interested respondents beforehand would have gathered people interested in the subject of local living specifically, and potentially created a bias of opinion.

The selection criteria were that the person lived in the neighbourhood and that they were willing and had the time to participate. An effort was made to speak to a variety of respondents in terms of age, gender, social status and family status. This meant that a variety of residents' perspectives would be represented. Nevertheless, the researcher's positionality may have been a factor that resulted in the bias of approaching residents that felt more comfortable to talk to. In addition, due to the nature of the intercept method of approaching people that are seen about walking in the neighbourhood, a bias towards walkers could have occurred. These were residents walking their dogs, or those with small children in the playground, or going for a walk to get groceries. As a result, this could have resulted in an underrepresentation of car drivers in the sample of respondents, as those that drive were leaving and entering the building via underground parking and were not approachable for an interview.

Regarding the sample size, in the planning stage of the interviews an assumption was made that enough material would be gained with 12 respondents in each case study area. An even number of respondents between the case studies was planned in order to have comparative data. While carrying out the fieldwork, the quantity has increased to 15-16 respondents in each neighbourhood, resulting in 31 interviews in total. Saturation point was the deciding factor in gauging a sufficient number of respondents. This is the point by which the ideas expressed in interviews were starting to repeat and it was decided that enough data has been gathered in order to draw conclusions (Maccallum et al., 2019).

The interview guide was designed correlating with the reviewed literature so that the key issues raised in the academic debate can be further investigated during resident interviews. Then it was necessary to test the interview guide. Pilot interviews were carried out before the fieldwork in the neighbourhoods began in order to test the interview guide and to gain a perspective on how the questions would be interpreted and whether respondents would answer by providing the relevant data. Maccallum et al. (2019) recommend pilot interviews as part of the interview guide preparation. This was a useful step as it allowed to rephrase and reorganise the questions, and to improve the final interview guide for the fieldwork (see appendix 1). For example, it was discovered that the pilot respondents found it difficult to answer the question "What do you not use in your local area?". To address this, an additional question was added so to begin by asking "What amenities are there in your area? What stands out to you?". This has prompted the respondents to first think about what amenities they are aware of, making it easier to then answer what they do use or not use out of those. The interview guide was formed to encourage open answers, which is beneficial because it allows respondents to guide the conversation (Longhurst, 2016).

The process of analysing interview data involved transcribing, reading the transcript material several times, finding common patterns across the transcripts, coding and organising the ideas under broader themes (Braun & Clarke, 2006). A combination of inductive and deductive thematic analysis was used (Maccallum et al, 2019). It was partially deductive because certain themes that were interesting to explore already emerged from the literature review, and also partially inductive because of the exploratory nature of the interviews, as residents mentioned themes that were not foreseen. The respondents were given a pseudonym for a name and assigned codes, denoting location and number (LT for Šiaurės Miestelis in Lithuania, SE for Kvillebäcken in Sweden). The interviews were transcribed, either in English or Lithuanian, and the transcripts were analysed employing the thematic analysis technique. The transcript material was used to generate word clouds, to give the reader an overview of the most often mentioned topics. Full interview transcripts are included in the appendix, to provide the original interview data for reference, having been translated into English using the open source google translate service (see appendices 2 & 3). It was decided to carry out the analytical process manually, rather than with the aid of transcribing and qualitative data analysis software such as Nvivo or Otter, because automatic transcription did not provide a high accuracy. The decision to transcribe the interviews manually allowed for better engagement with the data, and Braun and Clarke (2006) emphasise the importance of getting very familiar with the data.

In an ideal world scenario, more interviews would have been undertaken with longer duration times. In reality, the length of the interview was limited to the amount of time the respondent had, and if approached at an inconvenient time the questions may have been rushed, resulting in a duration of under 10 minutes. Other respondents had more time and were open to sit down for a coffee, which meant that the duration extended to up to 40 minutes. As a result, some interviews have produced more quality data than others, and in turn the longer interviews with more data are more prominent in the reporting of the findings. Respondent interviews did not need to be of equal quantity in order to be comparable. This illustrates the notion that in qualitative research more is not necessarily better (Maccallum et al., 2019) and as this research method has shown, some respondents provided more in-depth insight. For this reason, it was also intentionally decided when reporting the findings to avoid quantifying and tallying the number of respondents with similar responses.

An effort was made to ensure that the interviewing methods were equivalent in both case study areas. Both case study areas were visited physically so that the interviews could be conducted in person rather than remotely. The fact of carrying out the interviews in different languages may have led to some concepts being understood differently, or have resulted in different linguistic associations for the respondents. Respondents in Lithuania were able to answer in their native language, while respondents in Sweden were asked to answer in English, which could have limited their ability to fully express themselves.

# 4 Case studies

Šiaurės Miestelis, or the *North City* in English, is an area of 12ha approximately 2km north of the central old town area of Vilnius, which is the capital city of Lithuania with a population of around 500,000 (National Statistics Lithuania, 2021). Similarly, Kvillebäcken is a neighbourhood of 10ha approximately 2km northwest of the central core of Gothenburg, which is the second largest city in Sweden and contains a population of around 600,000 (Lantmäteriet, 2019). The area of study refers to Nya Kvillebäcken, or *New Kvillebäcken* in English, which is the recently developed quarter. Both are situated in a compact urban environment close to the central core. The cities of Vilnius and Gothenburg are both experiencing population growth.

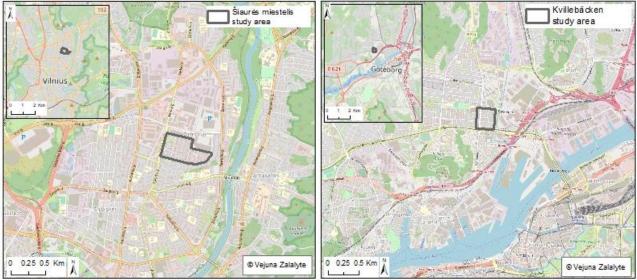


Figure 2: Location of Šiaurės Miestelis in Vilnius

Figure 3: Location of Kvillebäcken in Gothenburg

### 4.1 Why were the case studies chosen?

The initial interest to study these areas was sparked by the researcher's experience of living in both cities, which has led to the observation that both neighbourhoods are trying to implement a similar planning concept in two entirely different contexts. The researcher's positionality of having first-hand experience of living near the two neighbourhoods has the added benefit of familiarity. This has meant that both areas were accessible to the researcher, given the time and travel budget available, allowing to carry out interviews with respondents in person during field visits. It has also resulted in preliminary knowledge that allowed the initial pre-selection of the areas. More importantly, Kvillebäcken in Gothenburg and Šiaurės Miestelis in Vilnius are both living examples of the New Urban neighbourhood principles of walkability, density and mixed-use.

The two neighbourhoods are comparable in that they are residential infill developments built in a regenerated area, in the last 15 years. They both are in relative proximity to the city centre of around

2km and offer good accessibility options by public transport, although Kvillebäcken has higher public transport connectivity than Šiaurės Miestelis. Kvillebäcken is within 5 minutes' walk of a major public transport hub, with multiple routes and frequent service. Šiaurės Miestelis is within 15 minutes' walk to the key public transport stops with frequent service. Both are situated in a mixed-use area with a variety of commercial, residential, recreational and leisure uses, and have a major shopping centre within 10 minutes' walk. The main difference is the local policy context, the socio-economic makeup and the inherent societal norms. The comparison of these two case studies allows to showcase how New Urbanist ideas play out in practice in different contexts. Lithuania and Sweden are interesting contexts to compare, because Lithuanian policy follows the Scandinavian model based on Sweden. Furthermore, it adds novelty that both cultural contexts are less widely explored in the New Urbanism literature than the Anglo-American context.

#### 4.2 Local policy context

The national policy context in both Lithuania and Sweden is supportive of sustainable urban planning. In Lithuania, urban planning has incorporated many ideas that are in line with New Urbanism into national policy. A strong resemblance to the ideas of New Urbanism can be seen in the Lithuanian Charter of Urbanism, which aims to foster social inclusion, mixed-use zoning, access to quality local services, homes and jobs (The Government of the Republic of Lithuania, 2019). The Ministry of Environment holds the Lithuanian Urban Forum annually, in order to promote the dialogue between the public sector, private sector and civil society, and to generate recommendations for national urban planning policy. Ideas of densification, high quality living environments and sustainable mobility have come to the forefront in the recent forum discussions (Ministry of Environment, 2021), whilst the National Property Developer's Association stresses the importance of walkability with the following statement - "in order to make our cities more pedestrian-friendly it is essential to ensure access to local services by walking, whilst also improving access to workplaces" (Dargis, 2008, p.29). The National Comprehensive Territory Plan promotes urban densification, while urban sprawl is controlled through the Spatial Planning Standard, whereby new residential developments must be located between 3 – 15 km of the city centre, and not further (OECD, 2021). Unlike Sweden, however, the transport and land use planning policies function separately in Lithuania, which results in carcentric residential developments (ibid). Lithuanian national policy features the New Urbanist ideas of density, mixed-use and walkability, albeit still facing challenges of sprawl and car dependence.

Sweden has been leading the way in sustainable urban planning practices. Sustainable development has played a key role in national planning policy since the 1990s (Ahlberg, 2009). In response to the

New Urban Agenda, Sweden has taken a number of measures to ensure sustainable urban planning on the national level. The Strategy for Liveable cities, Sweden's first urban development strategy, highlights proximity and the integration of greenery into urban environments. Proximity is seen as the key to making everyday life easier and facilitating walking and cycling (Government Offices of Sweden, 2017). Interestingly, densification is not mentioned in this strategy document, although it is implicitly a precondition for proximity. An additional emphasis is on the importance of the quality design of the built environment, through the engagement of the Ministry of Culture and its Policy for Designed Living Environment (Ministry of Culture, 2017). To ensure implementation, the Council for Sustainable Cities coordinates the efforts of government agencies towards sustainable urban development, and, similarly to the Lithuanian Urban Forum, provides recommendations for national urban planning policy (Government Offices of Sweden, 2021). It can be said that Sweden thus resembles the ideas of New Urbanism on a national level.

On the city level, both cities show increasing efforts towards sustainable urban planning. Researchers find that Vilnius is experiencing urban sprawl challenges (Bardauskienė & Pakalnis, 2011; Cirtautas, 2013). Outer suburban developments are attracting young affluent families in pursuit of owning a house with more private outdoor space, and closer to nature. However, these developments often lack basic infrastructure and services, as population densities are too low to establish schools and local job opportunities (Bardauskiene & Pakalnis, 2011). As a result, there is a daily reliance on the car in order to access the everyday activities, such as work, leisure and schooling. Thus, it can be argued that similar urban development processes are in place as in the Anglo-American context. Nevertheless, urban planning in Vilnius has taken a turn towards sustainability in the recent years. It has been observed that urban sprawl in Vilnius has been halting in the last few years, and densification and quality development of inner-city areas has taken priority in urban policy (Grunskis, 2020). Walkability research from Lithuania, shows that Vilnius is highly walkable, based on a mathematically modelled walkability compass by Zaleckis et al. (2022). The Masterplan of Vilnius prioritises green spaces, walkability and modernisation of the 1960s residential stock (Grunskis, 2020), whilst the Sustainable Transport Plan promotes active forms of travel such as cycling, walking and using e-scooters through expanding the cycling and pedestrian path network to provide safe and pleasant travel environments (Vilniaus Planas, 2018).

The City of Gothenburg has integrated the goals of local living into the Transport Strategy for 2035, with the aim of creating sustainable modes of moving in the city. This is achieved by focusing on improvements for pedestrians and cyclists (City of Gothenburg, 2014a), while the Development Planning Strategy for 2035 promotes densification in order to create lively neighbourhoods (City of Gothenburg, 2014b) and the Green Strategy is ensuring local access to green spaces (City of

Gothenburg, 2020). The densification strategy is supported by research commissioned by the City Planning Authority, which revealed that density supports local services and a vibrant city life. Yet the importance of balancing between densification and access to recreational green spaces is prioritised in order to maintain quality urban environments (City of Gothenburg, 2014b). These policy documents reflect the principles of New Urbanism, as the importance of proximity, density and a mix of functionality is mentioned throughout. Moreover, these three policy documents are intentionally aligned, to pursue the single goal of creating "a simpler everyday life" (City of Gothenburg, 2014b, p.3). This is beneficial, given the importance of maintaining a single goal and balancing the key components essential to cities, as New Urbanists have argued (Alexander et al., 1987).

# 4.3 Planner's vision

The detailed plan for the neighbourhood of Šiaurės Miestelis was devised in the early 2000s, as part of the regeneration plan for a former industrial and military complex. It was a unique proposal at the time of developing the full concept of a city within a city. Special attention was given to mixed-use zoning so that a balance between residential and commercial land uses can be achieved, as can be seen in the detailed plan in figure 5 (JAD Architects, 2002). Several different property developers were employed in building the houses, which has resulted in a variety of housing architecture, similar to Kvillebäcken. Both neighbourhoods were built in phases, and it could be said that the implementation of Šiaurės Miestelis was more incremental, as the public transport connections and public services were developed after the residential buildings were complete. By contrast, the concept for Kvillebäcken was fully thought-through from the outset.

The Kvillebäcken neighbourhood was built between 2011 – 2019, as part of the City of Gothenburg's goal of creating sustainable communities. Similarly to Šiaurės Miestelis, a detailed plan was devised for a large industrial area, which allowed for a whole neighbourhood concept to be planned. It was implemented by the municipality developer Älvstranden Utveckling. The planner's vision is discussed, based on the detailed planning documents (City of Gothenburg Office for City Planning, 2008b, 2008a). The project was intended to be a mixed-use neighbourhood, providing a balanced of homes (2,000) and jobs (1,500 workplaces), together with a mix of shops, restaurants, preschools and other community facilities. Access to local services was intended to encourage active travel choices, such as walking and cycling, and to reduce automobile dependency. Moreover, the development site was selected within 5 minutes' walk of a major public transport hub, Hjalmar Brantingsplatsen, which offers the residents high connectivity by public transport. The focus is largely on minimising the environmental impact and making a low-carbon lifestyle an easy choice for the local residents. The project set high ambitions for the neighbourhood to become the green quarter, not only with public green spaces, but also high environmental standards for building design. Private green courtyards

were included and the local park with a children's playground was created. This focus on the green component reflects the Swedish national policy emphasis on the environment.

The detailed plans in figures 4 and 5 for the two neighbourhoods illustrate a powerful contrast in the amount of planned green spaces and the ratio of commercial to residential uses, reflecting different urban planning priorities between the two contexts.

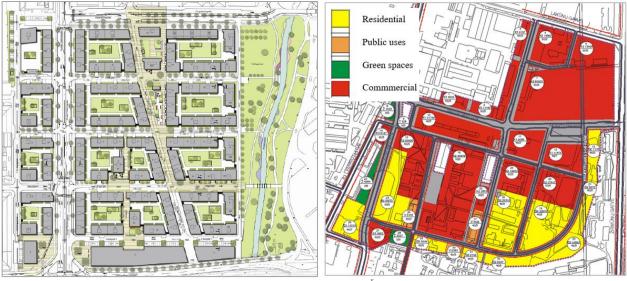


Figure 4: Kvillebäcken – the detailed plan

Figure 5: Šiaurės Miestelis – the detailed plan

In conclusion, both case studies situated in contexts that have a similar approach to sustainable urban planning on the national and the city level. The city planning policies reflect the ideas of New Urbanism, such as density, mixed-use and walkability, although not directly referring to New Urbanism. Whilst the national and city policy contexts promote the ideas of sustainable urban planning that are in line with New Urbanism, it is interesting to see how these translate into practice on the neighbourhood level. Both Siaures Miestelis and Kvillebäcken are conceptually unique and stand out in their local context. The development plans did not explicitly refer to New Urbanism, but it was inferred from the planner's vision that it was close to New Urbanism. Šiaurės Miestelis was a creative experiment of regenerating a large site and turning it into a self-contained neighbourhood. Kvillebäcken is experimental in attempting to meet a stringent low-carbon environmentally friendly concept. It can be argued, however, that the plan for Kvillebäcken has refined the concept of a sustainable neighbourhood more than the plan for Šiaurės Miestelis. This could be due to the difference in the construction date and the local historical context of the planning tradition. The ideas of sustainable urban planning were at experimental stages in Vilnius in 2000s when Siaure's Miestelis was built, as opposed to in Sweden 2010s when Kvillebäcken was built. Whilst Lithuania often adopts policies from Sweden, viewing it as best practice, this should be done cautiously, as the differences in local contexts could mean that the same intentions bring different results.

# 5 Research Findings

# 5.1 Spatial analysis results

This chapter outlines the results of the spatial analysis on the New Urbanist planning features in two case study neighbourhoods. This section addresses the first research question, as it investigates the quantifiable features of the physical planning of the neighbourhood and examines it according to New Urbanism ideas. The results aim to show to what extent the built environment creates the necessary conditions for local living. The chapter is organised thematically, so that both case studies can be compared alongside.

## 5.1.1 Socio-demographic characteristics

Kvillebäcken neighbourhood boundary encompasses the newly built quarter that was in full completion by 2019. The study area is defined based on the detailed plan. It is 10 ha in size (9.87). There are 933 workers (daytime population) and 3214 residents (nigh time population) within the neighbourhood boundary. The socio-demographic makeup of the residential population shows that 85 % of the population is working age, 12 % children and only 4 % retired. 63 % have attained higher education, 86 % are earning an income and 22 % are married, 72 % are single. The household income is higher than average, with 42 % high-income earning households and 33% medium-high incomes. The nationality mix is 69 % Swedish and 23 % non-European born. Thus, the statistics suggests that the majority are highly educated, high-earning singles. The neighbourhood is quite culturally diverse.

The Šiaurės Miestelis neighbourhood boundary is based on the former military quarter boundaries that was in place before the development was built in 2006. The study area outline follows the detailed plan. It is 12.25 ha in size. There are 2900 workers (daytime population) and 3300 residents (night time population) within the neighbourhood boundary, which is almost an even mix of 1:1 jobs to residents ratio. This suggests a large proportion of commercial and retail ground floor units that generate jobs. This indicates that it is a mixed-use area, considering the jobs to resident ratio. Figures 6 and 7 illustrate the population and job density. There are clusters of employment opportunities, as figure 7 shows, scattered within the 500 m area and beyond. Statistically speaking, there are enough employment opportunities to provide jobs locally for all working age residents in the neighbourhood, if personal preference and skills profile were not considered. The socio-demographic makeup of the residential population shows that 75 % of the population is working age, 22 % children and only 3 % retired. 54 % have attained higher education, 56 % are earning an income and 40 % are married, 30 % are single. The nationality mix is 87 % Lithuanian and 7 % Russian. Thus, the statistics suggest that the majority of the residents are highly educated young families and young professionals.

## 5.1.2 Population density

Population density within the neighbourhood boundary of Kvillebäcken is 326 p/ha (people per hectare). This compares to 14 p/ha for the city of Gothenburg. The neighbourhood population density is 23 times higher than for Gothenburg. According to the UN Habitat recommendations, sustainable urban neighbourhood development should aim for densities of at least 150 p/ha. Kvillebäcken neighbourhood has a density that is more than double the recommended norm. The population density map in figure 8 shows that the neighbourhood is much more densely populated compared to the surrounding area. There are some clusters of employment within the 500 m local area, however more jobs are concentrated south of the neighbourhood in the industrial and commercial areas, as well as in the core central area across the river.

In Siaurės Miestelis, the population density within the neighbourhood area boundary is 269 p/ha (people per hectare). This compares to 15 p/ha for the city of Vilnius. The population density in the neighbourhood is 18 times higher than that of the city of Vilnius. The population distribution map in figure 8 shows that it is a relatively densely populated neighbourhood compared to the surrounding area. The UN Habitat recommends urban neighbourhood densities of at least 150 p/ha in order to ensure sustainability, which means that relative to that 269 p/ha is almost double.

The Lexicon of New Urbanism refer to a range of guiding densities based on how urban or rural a locality is (Duany Plater Zyberk Partners, 2003). The guiding measure is provided in terms of average dwellings per acre. Based on these norms, when converted to hectares, the recommended density in urban core zones is 230 dwellings/ha, in urban centre zones 60 dwellings/ha, in general urban zones 30 dwellings/ha and in rural areas 15 dwellings/ha. Dwellings are equivalent to households, and the average household size in both Vilnius and Gothenburg is 2.2 persons. Based on this, Šiaurės Miestelis density measure of 269 p/ha would be roughly 122 dwellings/ha. Kvillebäcken density of 326 p/ha would be roughly 148 dwellings/ha. Thus, the neighbourhoods are on the high density spectrum and sit between urban centre zones and urban core zones according to the New Urbanism norms. This is explained by the inner-city location of the neighbourhoods and close proximity to the city centre.

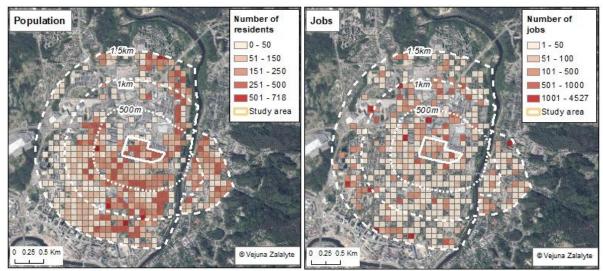


Figure: 6 Job density in Šiaurės Miestelis

Figure: 7 Population density in Šiaurės Miestelis

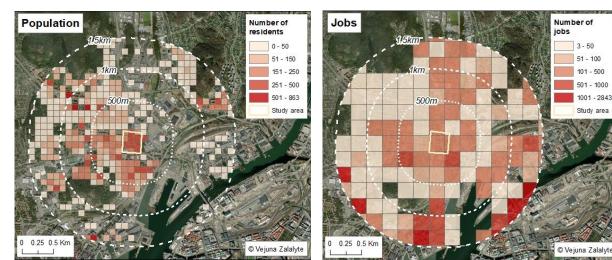


Figure 8: Population density in Kvillebäcken

Figure 9: Job density in Kvillebäcken

# 5.1.3 Mixed land uses

The mix of land uses was analysed by calculating the proportional area of each land use (see tables 2 & 3). The analysis for Kvillebäcken shows that the wider area is mixed-use, while the neighbourhood itself is primarily residential (see figure 10). Mixed-uses measures depend on the scale however, because vertically the neighbourhood is mixed-used, with abundance of ground floor commercial units (Šabanovas & Kavaliauskas, 2012). Inside the neighbourhood study area there is a preschool, bakery, pasta restaurant, massage salon, hairdressers, cafes and offices. The 500m zone is 49% residential, 36% commercial (industrial, retail and services) and 15% green spaces. The 1km zone is 38% residential, 53% commercial and 19% green spaces. There is a high proportion of retail within 500m because there is a big shopping centre, Backaplan. The proportion of green spaces and industry increases as distance from the neighbourhood increases. Overall, it is a mixed-use area, because the residential land use is less than half of the total area. An area is considered mixed when the residential

and commercial floorspace is balanced, with around 40 % of total floorspace for commercial use (UN Habitat, 2014).

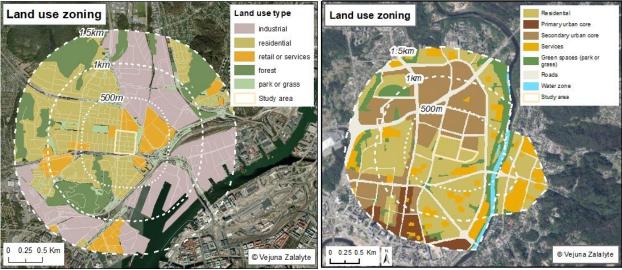


Figure 10: Land use zoning in Kvillebäcken

Figure 11: Land use zoning in Šiaurės Miestelis

	500m area		1km	area	1.5km area	
Category	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)
Total	139		391		751	
Residential	69	49%	149	38%	239	32%
Industrial	16	12%	121	31%	262	35%
Retail or services	33	24%	47	12%	73	10%
Forest	6	4%	39	10%	129	17%
Grass or park	15	11%	35	9%	48	6%

Table 3: Land use proportions by category in Kvillebäcken

Table 4: Land use proportions by category in Šiaurės Miestelis

	500m area		1km area		1.5km area	
Category	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)
Total	192		464		859	
Residential	83	43%	181	39%	298	35%
Secondary urban core area (commercial, retail uses)	57	30%	138	30%	209	24%
Primary urban core area	0	0%	6	1%	39	5%
Retail or services	10	5%	35	8%	87	10%
Green spaces (park or grass)	12	6%	32	7%	80	9%
Roads	27	14%	64	14%	126	15%
Water zone (river)	4	2%	9	2%	16	2%

For Šiaurės Miestelis, the mix of land uses analysis is based on spatial data analysis of the functional zoning layer from the municipality of Vilnius. As the map in figure 11 shows, the area is evidently

mixed-use. The ratio of residential to commercial land use is 43% to 35% within the 500 m zone, 39 % to 38 % within the 1 km zone, 35 % to 34 % in the 1.5 km zone. This is roughly in line with the UN Habitat's recommendations of having at least 40 % commercial land use. The presence of Ogmios shopping centre within 500 m of the neighbourhood defines the commercial component in the area. This is a shopping destination of city-wide significance, thus pulling a wider shopper catchment. According to the Vilnius masterplan's categorisation, retail and commercial land uses are incorporated under the category of "secondary urban core area", which is a category used to describe urban centres other than the central urban core area in the city centre. The presence of such secondary urban core centres shows signs of polycentricism (Juškevičius et al., 2013), where mixed-use urban areas with a large commercial presence offer alternatives to the city centre core, and in turn minimise the distances needed to travel to access services. The presence of such a centre within 500 m of the neighbourhood creates an opportunity to fulfil residents' needs within a short distance, where walking is a feasible means of getting there.

Although the land use within the neighbourhood boundary is residential, according to the Lithuanian planning policy the aggregate residential zoning category also includes "complementary essential everyday services" (The Government of the Republic of Lithuania, 2014). There is also vertical zoning, and elements such as ground floor retail spaces arguably make a residential area mixed-use (Šabanovas & Kavaliauskas, 2012). One of the residential buildings in the neighbourhood has a preschool on the ground floor. There are also multiple offices, beauty salons, restaurants, activity spaces and a bar.

## 5.1.4 Walkability and traffic

Traffic flows and walkability in the area were analysed. Traffic flows refer to the count of vehicles per hour during peak time. It was found that Šiaurės Miestelis is located near streets with the highest peak flows in the city. Maximum traffic flows in Vilnius reach 1040 vehicles per hour, while the streets near Šiaurės Miestelis reach up to 960 during peak time. It is important to note that a high traffic street separates the neighbourhood from the riverside park, which is the main recreational green space locally. This may pose an inconvenience and reduce the ease of accessibility to the park. Kvillebäcken also experiences high traffic flows, in higher volumes than Šiaurės Miestelis. A major city street with traffic flows up to 1920 is located to the south of the neighbourhood edge. This is more than double the amount of traffic in Šiaurės Miestelis. It was found that there is a newly-built pedestrian and cycling lane that goes alongside this heavily trafficked street, which was assigned a low walkability ranking as a result of traffic volumes. There is also a heavily trafficked street passing through the neighbourhood, although the residential roads inside the development are calmer.

Walkability assessment was based on traffic levels, mix of land uses with active shopfronts, quality of footpaths, lively pedestrian-scale environment and vegetation (see section 3.4). The walkability score correlates with the traffic flows, as it is one of the criteria negatively impacting walkers. It was found that the road cutting across the Kvillebäcken neighbourhood diagonally is highly trafficked. It was observed that drivers use it as a shortcut to bypass the congested streets. Streets rated as highly walkable were those that have restricted car traffic, more greenery, high quality pedestrian pavements, and are generally more lively with more people seen out walking. Mixed-uses were found to be most present on the main streets, which also coincides with heavier traffic. This often meant a rating of medium walkability, because the benefit of shopfronts is diminished by the high amount of traffic.

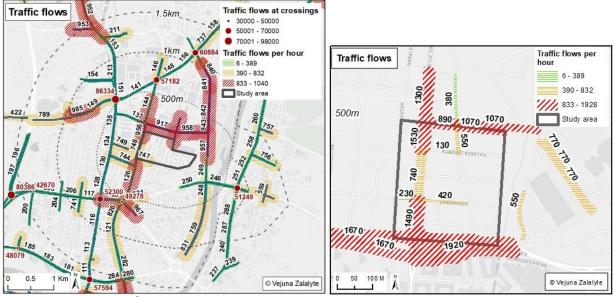


Figure 12: Traffic flows in Šiaurės Miestelis

Figure 13: Traffic flows in Kvillebäcken



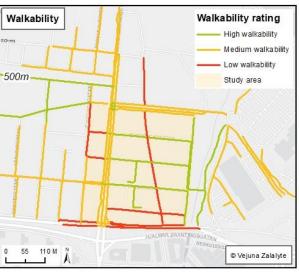


Figure 14: Qualitative walkability assessment, Šiaurės Miestelis Figure 15: Qualitative walkability assessment, Kvillebäcken

## 5.1.5 Access to local services

The mapping results show that residents of Kvillebäcken can reach all essential everyday services within 500 metres, such as healthcare, food supermarkets, schools, leisure, green spaces and public transport. The geographical distribution the local services for each category is displayed in figures 16 to 21. Three ranges of geographical distance (500m, 1km and 1.5km) are used as indication of proximity to services. The maps shows that local amenities are clustered rather than evenly distributed. This correlates with the vast proportions of industrial land uses to the east (see figure 10) and the uneven distribution of population (see figure 8). Healthcare services in the area are scarce, and mostly clustered within 500 m of the neighbourhood. Yet healthcare services of higher order, such as a hospital, serves a larger population catchment and so it is sufficient to have only one. The immediate area of 500 m is very well served by food supermarkets as well as leisure facilities, namely cafes and restaurants. Schools are situated west of the neighbourhood, there is a children's nursery inside the neighbourhood and many schools within 1 km reach. Connection by public transport is good considering the proximity to public transport stops. More importantly the public transport stops closest to the neighbourhood offer high connectivity, which is based on the number of routes and frequency of service. This provides the opportunity to travel by public transport conveniently. Larger green spaces, such as forests, are within fairly close reach of 500 m - 1 km. The proportion of green space is  $15m^2$  per person in the 500 m zone, within 1km zone –  $34m^2$  and within 1.5km zone –  $56m^2$ per person, which is more than triple the amount available in Šiaurės Miestelis.

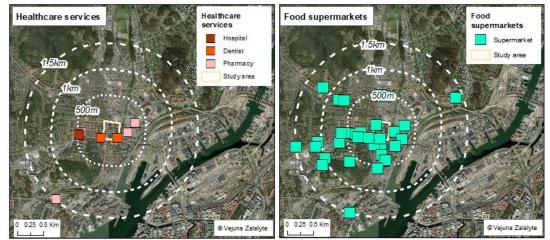
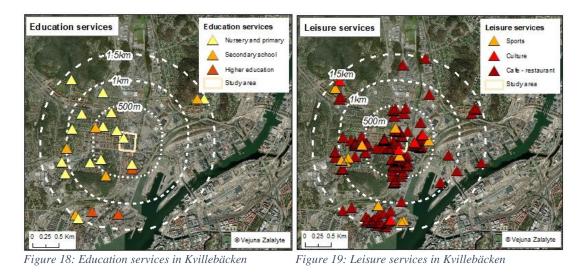


Figure 16: Healthcare services in Kvillebäcken

Figure 17: Food supermarkets in Kvillebäcken



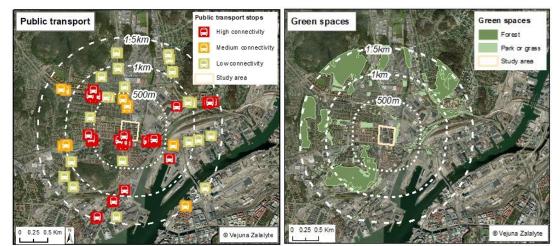


Figure 20: Public transport in Kvillebäcken<sup>1</sup> Figure 21: Green spaces in Kvillebäcken

The residents of Siaurės Miestelis can access most of the essential everyday amenities locally within 500 metres, apart from quality green spaces which are within 1km. The mapping results of six types of local services are shown in figures 22 to 27. Three ranges of geographical proximity (500 m, 1km and 1.5km) are used for reference, taking into account the barrier of the river. Healthcare and leisure services are most abundant and reflect the market demand for these services. Dental clinics makeup the biggest group under healthcare, while restaurants and cafes dominate the leisure category. Restaurants are an important service for the offices in the area, and from comparing figures 7 and 25 it can be seen that the distribution of restaurants correlates with the workplaces. The public transport system provides a good amount of stops within the 500 m radius, however the nearest stops have low connectivity ratings (see figure 26). The network of schools and food supermarkets is less dense, because these facilities provide for larger population catchments.

<sup>&</sup>lt;sup>1</sup> High connectivity denotes service frequencies of under 5 minutes and a high number (6-10) of different routes, whereas low connectivity denotes service frequencies of over 20 minutes and a limited number (< 3) of routes.

Figure 27 shows that green spaces are scare in the area, more than 1 km away from the neighbourhood. The Vilnius masterplan has set out minimum requirements for access to greenery, whereby the municipality aims to ensure that smaller green areas, such as local pocket parks and grass, should be within 200-300m reach from home, and larger parks and forests within 2km reach (Vilnius Municipality, 2021). The municipality of Vilnius also aims to ensure a minimum of 8 m<sup>2</sup> of greenery per person. According to these recommendations, the larger recreational area by the riverside is within the required distance, however there is a shortage of smaller local greenery plots given the high population density. Within the 500m zone there is a  $5m^2$  of greenery per person, within the 1 km zone  $- 6 m^2$  and within 1.5km  $- 10 m^2$ . Thus, for the 1km area, the proportion of greenery is below the recommended 8 m<sup>2</sup>.

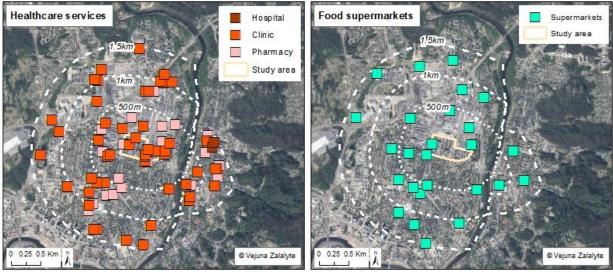


Figure 22: Healthcare services in Šiaurės Miestelis



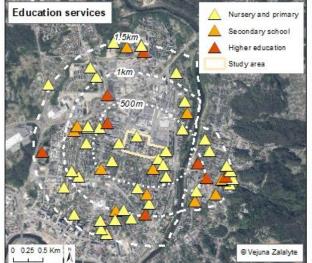


Figure 24: Education services in Šiaurės Miestelis

Leisure services 1/5km 1/5km 1/km 500m 500m 500m 0 025 0.5 km № 8 Vejuna Zalalyte

Figure 25: Leisure services in Šiaurės Miestelis

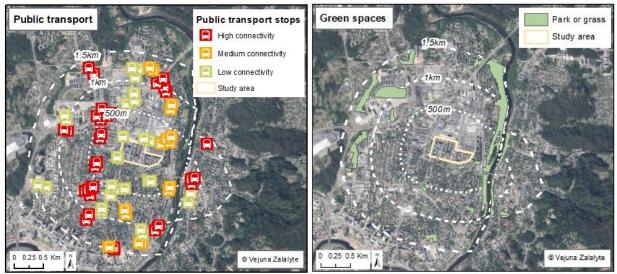


Figure 26: Public transport in Šiaurės Miestelis

Figure 27: Green spaces in Šiaurės Miestelis

# 5.1.6 Comparison of the two case studies

Both case study neighbourhoods are comparable in size, 10-12 ha, yet the Kvillebäcken development is much more dense. The jobs to residents ratio is 1:1 in Šiaurės Miestelis, while in Kvillebäcken it is 1:3, residents exceeding jobs. Šiaurės Miestelis is populated with a higher proportion of families with young children, while Kvillebäcken has more single adults. Both areas have only a small proportion of elderly population, up to 4%. Residents in Kvillebäcken are more highly educated with high affluence, while Šiaurės Miestelis has a lower percentage of higher education. Affluence statistics were not available for Lithuania for comparison, but it can be inferred from the education level.

The local service offer is similar, as there is a large shopping centre within 500 m of both neighbourhoods. Green spaces are more abundant in Kvillebäcken, while Šiaurės Miestelis shows a lack of green spaces. Despite higher population density in Kvillebäcken, the amount of green space is also larger meaning that the proportion of green space per resident is higher than in Šiaurės Miestelis. The provision of healthcare services is particularly scarce in Kvillebäcken. The geographical distribution of amenities is more even in Šiaurės Miestelis, suggesting influence of the former Soviet central planning system. Meanwhile the amenities in Kvillebäcken are more concentrated and correlate with the population density. Absence of services is more evident where industrial land-uses dominate.

In conclusion, the spatial analysis results show that New Urbanism principles have been implemented to varying degrees in the two case studies. Population density is higher in Kvillebäcken (326 people per hectare) than in Šiaurės Miestelis (269 people per hectare). Both areas are much more dense than

the UN Habitat's recommended density for sustainable neighbourhoods of 150 people per hectare. They are on the higher density spectrum in terms of New Urbanist norms for density. Both areas are mixed-use, with the residential land use type occupying less than 50 % of the total area and commercial uses 30-40 % of the total area in both neighbourhoods. Consequently, all of the essential everyday services are within 500 m reach in both neighbourhoods, which is well in line with the average walking distance. This indicates that objectively the right conditions are there to facilitate local living. Not all amenities are in equal abundance, and particularly green spaces. Šiaurės Miestelis shows a shortage of green spaces locally, with the parks over 1km away, whereas Kvillebäcken provides access to both forests and parks within the 500 m – 1 km distance.

# 5.2 Interview results: the lived experiences of New Urbanism

The previous section has shown that the case study neighbourhoods present the right conditions for local living, based on the quantifiable features of the built environment. This represents the opportunity created by the built environment to live locally. This section delves into this further by answering the second research question. It explores the subjective human factor, aiming to show how residents perceive the built environment and whether local living behaviours indeed occur in practice. The results are based on reporting the interview findings from 31 respondents who reside in the two case study neighbourhoods.

There is an equal split of respondents between the two neighbourhoods, and an equal split of female and male respondents. In terms of age, a third of the respondents are in the 25-35 age group (who are referred to as millennials), a third - 35-45 and a third - 45-75, including 10 % retired. Majority of the respondents are singles or couples, and a quarter have children. The nationality is predominantly Lithuanian for Šiaurės Miestelis, apart from two respondents, while in Kvillebacken four respondents are not Swedish. The socio-demographic profiles of the respondents are thus in similar proportions to the statistical demographic makeup of the total resident population in the neighbourhood (see chapter 5.1 for more detail). This suggests that the interview answers from respondents most likely represent the full variety of views.

This section is organised around four themes. First, it reveals how the residents of the two case study neighbourhoods experience the new urbanist design principles of density and mixed-use. It then explores the ways in which local access to services can contribute to local living behaviours. A critical take on local living is also presented from the residents' perspective. The influencing factors for choosing an amenity are discussed, to reveal what significance the geographical proximity has.

Finally, the residents' travel behaviour is analysed, revealing the experiences of walkability, and rationales behind travel mode choice. The role of the built environment is discussed in relation to other influential factors that affect individual travel behaviours.

The presentation of the interview findings uses the stylistic tool of highlighting the key ideas in bold. Whilst the interview data has been organised into themes, several sub-themes reoccur that cross over between themes. Within the context of the primary theme (for example, walkability), other sub-themes are raised that relate closely (use of local services, mixed-land use). Thus bolding is intentionally used in order to flag how respondents perceive those relationships between the different planning principles, suggesting that, for example, the respondents view walkability within the context of mixed-use. This technique brings out the complexity and richness of this qualitative dataset and is a useful signposting strategy. It helps to convey the idea that the planning principles of density, mixed-use and walkability are interrelated.

To illustrate what stands out to residents, the interview transcripts were analysed to generate a word cloud (see figures 28 & 29). This gives an indication of the reoccurring key words. Residents in both neighbourhoods put similar emphasis on walking, public transport and discussing car use. Positive living experiences can be inferred from the frequent use of adjectives such as 'nice', 'like', and 'good'. Respondents in Kvillebäcken often use words such as 'close', 'local', 'area', and 'use', which points to local living. By the same token, in Šiaurės Miestelis, the frequent mentions of 'everything', 'services', 'close' and 'nearby' also indicate local living behaviours. There are also some differences, as respondents in Šiaurės Miestelis emphasise going to work as a primary activity, and mention 'time' as a key consideration in travel behaviour. Leisure activities such as restaurants and shopping stand out in Kvillebäcken. Children are often mentioned in Šiaurės Miestelis, while Kvillebäcken respondents often talk about family and friends.



Figure 28: Word cloud of Kvillebäcken interview transcripts



Figure 29: Word cloud of Šiaurės Miestelis interview transcripts

#### 5.2.1 The lived experiences of density and mixed-use

**Density** is a dominant feature in the planning of both case study neighbourhoods. The residents' perception of density varies greatly, as can be seen from the interview data. It was found that this is due to personal and lifestyle preferences as well as aspects of urban design. Respondents that identify themselves as urbanites, are younger and more outgoing view density positively (Fatima SE2, Justas and Nina LT8, Samuel SE1, Juste LT12), whereas respondents who have young children, and are positively reminiscent of their suburban upbringing experience density negatively (Linda SE3, Joshua SE10, Johan SE4, Mantas LT11, Oleg LT7, Karolis LT9). Many respondents who acknowledge that the area is dense say that it does not feel so because it is designed well. This implies that density is compensated by good urban design.

I heard this is supposed to be one of the densest neighbourhoods in Vilnius, but it definitely doesn't feel that way, because the space between buildings is quite big, so it feels very spacious. – Justas and Nina, LT8

I don't feel like it's dense, because it is nice around. The houses are very close to each other, but I don't mind if they are close because I have two beautiful houses to look at. I really like that the houses don't look the same, very varied and colourful. It reminds me of southern Europe. When I am on my balcony, I feel like I am on vacation. – Lina, SE13

We like that the houses are different from each other, it makes it very special. - Elsa, SE12

Respondents refer to the uniqueness of Šiaurės Miestelis, comparing it to the wider context of urban planning in Vilnius. Respondents rate it positively because it was built on a large industrial land that allowed for a neighbourhood concept to be fully realised, which is contrasted to the residential-only infills that are common today. "It is very spacious here, compared to how they build these days. There would be a building squeezed into the yard here." (Daiva LT4). Similarly, Audronė (LT6) feels confident that "a new building would not pop up in front of my window because the neighbourhood structure is already fully formed". Respondents appreciate that spacious green areas are kept between buildings (Dovilė LT1, Daiva LT4, Justas and Nina LT8, Ingrida LT16) and attribute this to the absence of "a profit maximising culture when it was built in 2006" (Mantas LT11).

By contrast, respondents in Kvillebäcken feel that the development is too dense, and they lack spaciousness. Joshua (SE10) notes that "development companies build to maximise profit" and feels that "there is very little space and it is too packed. The inner yards are too small, you can't throw a ball without hitting a neighbour's window." Elsa (SE12) feels similarly, "we have an inner yard, but we don't use it much, it's quite small, it's nice to look at it out of your window". Karl (SE9) also

finds that "it is a little bit too dense" but finds it reasonable and sees it as an intrinsic part of urban living, "it's town you know so it's too expensive to build. But the buildings are not too high as in other places". Johan (SE4) similarly notes that "they have built too close to each other" but finds it understandable "that it is very expensive to build here".

Respondents feel that **density results in the lack of green space**, which is an aspect of density valued negatively. This is interesting because in theory higher urban density is motivated by preserving space for greenery, so it is an important precondition. While this may be true on the larger city scale, the benefits are not experienced on the neighbourhood scale. For the local resident it means that greenery is further away from home, particularly for the inner-city neighbourhoods studied here. The incorporation of green spaces has not been so well implemented in Kvillebäcken, according to some respondents (Astrid SE5, Johan SE4). Joshua (SE10) stresses that developers should incorporate additional green space, rather than rely on the previously existing greenery. The interviews suggest that it could also be that the lack of nature is an issue that respondents associate with urban living in general rather than as something unique to their neighbourhood.

It is easy for companies to build in this area to sell their apartments because there are parks nearby. But I wouldn't believe that marketing argument, because the parks and forests were always there the developers did nothing about it. For me what matters is what they did – Joshua, SE10

I wish we had more parks, there are not many nearby. But I understand that it is very expensive to build here, so they have to build a lot in a small space in order to make it affordable. I understand it, it's better that they build on old industrial land rather than cut down on green areas to build. – Johan, SE4

Before they started to build Kvillebäcken they were talking that it should be a green quarter, but where is the green? I don't know. In your head you had a different picture of what it finally became. But that's the same everywhere in this city, unfortunately. The neighbourhood squares are nice but who wants to sit here? It's boring because it's too much concrete. They could have a park in the middle, with trees and roses. – Astrid, SE5

If you live anywhere in the city, I think it is inevitable that there will not be enough nature, so you accept the cost that you have to travel further for that. – Dovilė, LT1

**Mixed-use** planning is evident in both neighbourhoods for they are both situated within previously industrial areas, which have had retail and commercial uses introduced since regeneration, including large shopping centres. Most respondents favour having mixed land-uses in the neighbourhood as it provides the benefit of having everything one needs close to the place of residence, which is seen as providing convenience. Density and mixed-use are important preconditions for liveliness, which is what respondents often say they value. Due to the mixed-uses respondents see the Šiaurės Miestelis neighbourhood as a "city within a city" (Audronė LT6, Daiva LT4, Arūnas LT14), especially that the

name translates from Lithuanian as the North City. This implies that respondents favour **self-sufficient**, **mixed-use neighbourhoods** that can cater to a variety of their different needs.

It is a city within a city, I don't know another area in Vilnius quite like it. Previously it was a large industrial site and I am glad the planners had this idea to develop a mixed-use neighbourhood here. Usually, developers in Vilnius are shortsighted to maximise profit and build residential-only projects, without thinking about services. But this neighbourhood is a miracle, it is a destination in itself with a good retail and restaurant mix. – Arūnas, LT14

Interview data shows that some respondents prefer mixed-use neighbourhoods to the sleepy suburbs, in particular for the liveliness and the action that the mix of uses creates. Those relocating from the suburbs highlight the relative benefits. As Fatima (SE2) recounts, "my family rents a place in the suburbs and sometimes it's dead, very quiet. We prefer the city, you should see people around when you open the window." Respondents indicate that they perceive mixed-use as highly valuable. Linda (SE3) notes that "compared to living in the suburbs, I always loved living in a more compact place, where everything is close and I can walk, for example, to the shopping centre without taking the car". Joshua (SE10) acknowledges that "mixed-use is a good thing. If you want to sell your apartment it makes it more attractive that it is in a lively mixed-use area" but it contrasts with his lived experience "for me personally, if I didn't have these things (amenities, mixed-use) but instead had more space I would prefer that". There is a notable difference corresponding with the respondent's age and life stage. Respondents who favour mixed-use and like having activities close, are those who do not have young children, the millennials in the age group of 25-35, as well as empty-nesters at 50-60 who's children have left the household. By contrast, those that have young children and value tranquillity over activity, view mixed-use negatively.

## Too much of a good thing? When services are too close to home

Respondents raise an interesting issue on mixed-use planning, which concerns the **location of non-residential uses**. Having commercial services **too close to home** is perceived as inconvenient. Incorporating retail units at the ground floor level of residential buildings is a common planning strategy for mixing land uses. Such retail units are present in both case study neighbourhoods, and the lived experiences of this feature have negative undertones. Locating commercial units within the residential building has been criticised by some respondents as generating too much traffic and noise, as delivery vans and office workers park vehicles in the residential yards. Respondents are especially critical of the negative externalities created by the amenities that do not benefit them directly. Karolis (LT9) finds shopfronts facing his inner yard inconvenient, preferring them to be kept to the main streets. Joshua (SE10) has similar sentiments because his front door faces the local mixed-use commercial centre. Both respondents agree that local access to services is good but question "how

close does it really have to be?". They highlight the negative aspects of living next door to the commercial units, which generate excess daytime traffic. As both respondents are also parents, their sensitivity on the issue is heightened, as they do not feel secure letting their children play outside.

When they [planners] say we need to have things close by, I mean how close do they need to be. Things should be close by, but not exactly where you live. On a Monday morning, there are many delivery vans here delivering parcels to the shops, workers park their cars. Because these things are close, okay it's good but there is a price for it. – Joshua, SE10

There is a high-end home interior shopping centre nearby, which is not relevant for me as a local service, because it is too expensive. It attracts customers from the whole city and generates traffic. <...> It doesn't add value for me to have a hairdresser downstairs, because I don't use it. – Karolis, LT9

#### 5.2.2 Local living behaviours: using local services

#### Local access to services makes everyday life more convenient

Respondents expressed different attitudes around the **idea of local living**. On the one hand, many have said that having a variety of services within close reach makes everyday life more convenient, especially at the beginning of the conversation it is often the first benefit mentioned of living in the area. A vibrant neighbourhood with opportunities to do activities locally means that it is interesting to spend time locally. Geographical proximity, variety, abundance and having options to choose from are what respondents value the most about local services. However, upon reflection and as the interview progresses, respondents start to show hints of hesitance towards spending all of their time locally. There is a preference to keep a further distance to destinations such as work and the city centre. There is also a tendency to occasionally escape the neighbourhood for a change of environment.

Local access to services has been commonly reported among the respondents as the key feature that attracted them to the neighbourhood and stands out as the key benefit of New Urbanist planning that impacts residents' lives directly. This includes being able to find everything you need nearby, which for Justė (LT12) is "like being on a cruise ship, where you just go downstairs and can always find something, without having to leave your neighbourhood". Others feel similarly, "I often joke that I could practically live here without ever stepping foot outside my neighbourhood, because I have absolutely everything I need here" (Audronė LT6). It encourages Samuel (SE1) to "stay local more", because "within this area now I feel like I have most of the things I need." The fact that respondents name this as a primary benefit of the neighbourhood shows the significance of having everything within a close reach, as it allows people to organise their daily lives more smoothly. Having grocery stores nearby means you can "pop to the shop during the lunch break" when working from home

(Dovilė LT1, Audronė LT6). The local gym is convenient "because you don't need to plan, even if you are feeling lazy, you just get up and walk across the street" (Jonas LT13, Irena LT2).

I don't have to go by bus anywhere, I don't need to plan it or make a project of it, it's just right there - Lina, SE13

The gym is right here, so it's easy you don't have to plan, you can just run when it's time to go there. – Barbara and Sven, SE11

Variety of local services creates convenience, and it is possible to sustain it because of high residential density which generates sufficient market demand. Variety means that international residents' needs are catered, as Nina puts it, "even for me, as I am French, the international store Assorti has so many products from home, so if I miss one specific thing this is literally the one place in Vilnius where I can find it for sure". Fatima mentions having the Asian supermarket nearby was an important deciding factor for her to move, as before relocation her family would drive specifically to this supermarket to purchase halal meat. With no family ties in the neighbourhood, international groceries help contribute to a welcoming environment and a sense of home. Justė (LT12) is happy that she finds all that she needs locally, even as her interests change from pottery and painting classes to keto diet.

I was surprised to even find very niche things. We were looking where to take drawing lessons or a pottery class with a friend, and the closest was on our street. When I started a Keto diet, I thought I would struggle to find groceries, but then there turns out to be a specialised Keto food shop here just round the corner. Once I needed to buy a particular cycling helmet and I searched all over town without success, only to accidentally spot the right shop right here while walking my dog. – Justė, LT12

Abundance of services and having many options close together has been commonly referred to as making everyday life easier. Many have said they plan their route to run a few errands in the same trip and often combine it with going for a walk (Ingrida LT16, Daiva LT1, Justė LT12, Samuel SE1, Barbara and Sven SE11). Having an abundance of services within a walking reach creates the opportunity to do so. "On the school run I go to the farmers market and the library, because both are next to the school, and having parked my car there I walk into work" (Dovilė LT1). Residents seek multi-purpose destinations. Having multiple services close together creates a more attractive destination than a stand-alone amenity. For Nina (LT8), even if the preferred brand has a store nearby, she does "not go there because there's nothing around it, for me" instead choosing the equivalent store in the city centre, for the opportunity to "shop around it". Similarly, lack of surrounding activities can be discouraging, "besides the park there is nothing to do there on that side, so we prefer to walk to the city because there is more stuff to do" (Justas LT8). This is similar to the previous

findings by Næss (2012), who argues that there is a preference for the possibility of choice from having many activities near each other, rather than the single nearest facility.

The interview results show that just **the possibility of having options is valued**, even if residents do not use all of the services. Lina (SE13) says "I feel that I use the local café even if I don't go in and buy anything there, I appreciate walking past it every morning on the way to work and seeing people sitting outside, so in a way I feel that I use it". Elsa (SE12) similarly notes that "I like that there is a lot more to explore", also Justas and Nina (LT8) value the fact that "there's still things here that we haven't tried." Alina (LT5) has her favourite café, but she appreciates "that there are more options, if I want to try a different café it is good to know that there are more of them". For Lina (SE13), it is the imagined possibilities that the local neighbourhood amenities enable, which creates the appeal of living in the neighbourhood. Therefore, it can be argued that local access to services, coupled with density and mixed land-uses, create the conditions for vibrant and exciting neighbourhoods that people want to spend time in, as Samuel (SE1) puts it, "I'm happy here because it's very varied and you never get bored".

I think I use it [the local area] quite a lot, but there are more restaurants and cafes to explore. I think of myself as a person who would buy fresh baked bread every Saturday morning at the local bakery Dahl's, and I would walk there with my backpack. I don't do that but I have an image that I could do that. It's the opportunity that it's there. It feels good when you talk about it, to say that I have the local bakery and I have all these restaurants. I like the feeling of that. - Lina, SE13

There are many weekends that I only stay locally, that I don't go to the city at all and it doesn't feel like I am stuck here, I *chose* to stay. As you get older, I don't feel that I have to go out in the city that much, I prefer to catch up with friends and sit in the restaurant, and I can do that here. – Lina, SE13

If we want to go out to eat with some friends, there are many restaurants to choose from here locally. I don't have to go out of this area all the time, because I have what I need here. – Ana, SE8

However, it was also revealed during the interviews that **the level of awareness of local options** differs by the individual, as some perceive there to be many local services and other struggle to think of what they use locally. Some residents seemed more engaged and curious about the various types of local services that exist. Others were less outgoing and less active in making use of the local services. This coincides with the **respondent's propensity to drive**, which possibly means less awareness of local options and less engagement with the local area as a result of driving. Those that were more engaged and excited about the abundance of local services where those that walk more and thus have the opportunity to discover local options, such as dog walkers or recreational walkers.

#### Too much local living can be negative

A common theme emerged among the respondents that too much of local living can have negative connotations. With the changing working patterns during the pandemic, working from home meant that more time is spent in the local area. Respondents found that staying in the local area all the time encourages them to seek out the opportunity to use amenities further away, "just for a change of surrounding" or "sometimes I just want to experience something else", even though there are analogous options close to home (Justas and Nina LT8, Alina LT5, Audronė LT6, Daiva LT4, Karolis LT9, Jonas LT13, Elsa SE12).

A lot of people actually come here to go out to our local bar Alaus Studija. It is so popular that we even have friends coming over from the old town to Alaus Studija, but we don't initiate it because I also personally like going to the old town because I work from home so I'm here all the time, so I feel like a change of surroundings. – Justas and Nina, LT8

While the younger residents like to go out to the city centre for leisure, bars and to eat out, others choose family days out to the cinema or a walk in the nature. Interestingly even those that perceive green spaces locally as high quality and convenient, prefer to explore further out in the city in the weekends or visit the family countryside cottage (Daiva LT4; Audronė LT6). This suggests that the decision is not motivated by the push factors of poor local green spaces, but the pull factors of curiosity to explore other places. Audronė and Karl see it as part of their nature to explore:

Of course, there is still the need to change your surroundings, you are not going to just stay all closed up in your village. I am not someone who can just stay put at home, I am curious to go and explore other areas, travel. – Audronė, LT6

Backaplan, [the local shopping mall] has every store in there, you don't need to go anywhere, then you need *some* change sometimes. I like to go to shop at other centres further away like Mölndal [another mixed-use neighbourhood], it has the same shops, but I just like to go to see another place. – Karl, SE9

Interview results show the importance of keeping a certain distance to destinations such as work and the city centre. There is the preference among the respondents to **separate work and home life**, which relates to the findings of Haugen (2011) in Sweden, that proximity is undesirable to destinations that are valued negatively, and that it is important to keep **just the right distance**. Distance to work has been a frequently mentioned issue among the respondents, having just the right length of commute (Nina and Justas LT8, Lina SE13, Audroné LT6). Others overcome the distance by choosing a faster travel mode such as the car, so that the journey length is reduced (Mantas LT11).

By the same token, having the right distance to the city centre is important to the respondents. It was reported by many as a benefit to be living within close reach of the city centre, but not too close so that it is still relatively peaceful (Mikael SE7, Ana SE8, Justas and Nina LT8, Arūnas LT14). The younger respondents explain this as a need to "separate between the party vibes and the living vibes" (Nina and Justas LT8). Similarly for Mikael (SE7) "it's nice that it's quiet here, when you come back

late in the evening all the noise stays in the city centre, but here in the neighbourhood it is calm. In one direction you come to the calmness, the nature reserve, in another direction the busy city centre. So, it's a nice balance, it's **the middle ground**." For older respondents "the city centre is too busy, noisy and polluted, while here in the neighbourhood you have a better environment and are still within close reach to the action" (Arūnas LT14). This balance between the quiet suburban world and close proximity to the city centre for work, is what residents have been found to value about New Urbanist neighbourhoods in previous research from the USA (Cabrera, 2019).

#### Lack of access to green spaces pushes residents further away

A lot of respondents mention the importance of having the right **balance between the centre and nature** (Justas and Nina LT8, Audronė LT6, Mikael SE7, Barbara and Sven SE11). Having somewhere nice to go for a walk locally is important for the respondents, as it provides the opportunity to take a "mental health walk" outside the doorstep (Nina LT8, Vilgailė LT15). More than half of the respondents say that there is a **lack of pleasant green spaces** that could be accessed within easy walking distance. Because recreational walking is an activity of high importance for most of the respondents, it poses a constraint on daily life if this activity cannot be done locally. This has important consequences for travel behaviour because accessing nature areas further away is frequently the **primary reason for driving**. Therefore, geographical proximity does matter for local access to the essential services, and in turn for local living behaviours.

Several causal factors play a role here, such as residents' perceptions and attitudes, micro location of the respondent and elements of the built environment acting as barriers. The case of Šiaurės Miestelis reveals interesting results on residents' perception of access, since the area is particularly lacking in greenery, with only one local park by the river. Respondents living geographically closer to the riverside park, talk about the availability and ease of access to green spaces, while those residing furthest away from the riverside park say there is a lack of green spaces, because the park is not near enough to be encountered in the everyday life. This implies that geographical distance affects the **awareness of local amenities**.

Interestingly, what is near and walkable is largely influenced by the individual's perception, attitudes and values, such as being an avid walker or a car driver by preference. The built environment does not have as much influence on behavioural tendencies. Alina (LT5) points out that geographical distance to the riverside park creates barriers, such as having to cross busy traffic streets, and yet this does not deter her from walking, as Alina is an avid walker. By contrast, Mantas (LT11) prefers to drive to bigger and better-quality nature areas, instead of using the local options. Samuel (SE1), who is an active walker, thinks he has nature nearby that he can walk to, while Dan (SE13) who is by preference a car driver chooses to drive further out.

We like to walk, we're nature lovers, and there is nowhere to walk around here. The riverside path is full of cyclists. We drive out to nature three times a week. We need a car to be able to reach nature. – Mantas, LT11

I drive further out to the forest, bigger parks. The closest park is not so good, an open field and if it is a dry day and windy, there are dust clouds. The area lacks greenery. We have a green space next to our building but it is just grass without trees, not very inviting, maybe just okay for dog walkers. – Karolis, LT 9

There's a nice big park, Hisingsparken, about 10 minutes walk away. It's actually Gothenburg's largest park, I spend a lot of time there as well. That's why I love this place, because it's city and you have this forest and nature area. – Samuel, SE1

If I want to get close to nature I drive there because there is not much nature around here. I like to explore nature areas further out, being here it's not so nice, it's very dense and urban. I like trees and nature, I don't like concrete. You don't really get that here, so you need to go further out. I live here because I like that it's a lot of buildings and a lot of things close by. But I always have the possibility because I can just drive somewhere if I want nature so I can find a balance here. – Dan, SE13

This suggests that residents like Mantas (LT11), who live closest to the local park, and residents like Dan (SE14) who live within 500m-1km to forests in Kvillebäcken, still perceive local access to greenery as not meeting their preferences. While this could be due to lower quality of local green spaces, perception of quality is also subjective and varies by the individual. Furthermore, the respondents' lifestyle preference for driving means they would drive to reach nature further out, as due to the fast mobility of the car they do not perceive geographical distance as an obstacle. It is interesting to note that being fond of nature does not correlate with choosing environmentally friendly modes of travel in some respondents. Vilgailé (LT15), who has millennial environmental values and is not by preference a car driver, still uses the car three time a week to access nature reserves further outside of the neighbourhood. Karolis (LT9), chooses to drive because of the smell of pollution on the street, without considering that his choice to drive may add to pollution. This suggests that if the local neighbourhood environment is restricting in terms of access to green recreational spaces, the residents are pushed outside of the local area to seek quality recreational green spaces. Greater geographical distance means that there is the tendency to choose unsustainable modes of travel and drive to reach nature further out, even among those that have environmentally leaning values.

## 5.2.3 Choosing amenities: is proximity the deciding factor?

More than half of the respondents say that geographical proximity is the key deciding factor when choosing amenities. This is more strongly reflected in Kvillebäcken than in Šiaurės Miestelis. For example, Elsa (SE12) and Johan (SE4) highlight that closeness is important because they don't have a car, and a big distance can even discourage them from doing a leisure activity, such as sports and recreation. Johan (SE4) exemplifies an extreme case of sensitivity to proximity, as he adapts his hobbies and social contacts based on what is available in the local area and close to home. He explains that it is more convenient for the everyday, as he prefers to walk for his hobbies locally rather than drive further out.

We have been thinking of taking a daytrip to the island Hönö, then we saw that it would take 1,5 hour by public transport one way. So, we decided not to go, maybe some other time. So, it's got to be close enough. – Elsa SE12

If something I need wouldn't be here, I probably wouldn't go get it. Some hobbies I used to do before, I don't do it anymore because it's not available locally. I used to do Thai-boxing 4 times a week, in a studio next to my house but when they moved further away, I don't go anymore because it is not convenient. If I do it daily, the distance is important because I don't use the car. If it is monthly, it is okay that it is further away. – Johan SE4

Leisure is not an everyday essential activity however, and the interview results revealed that the **rationale** for choosing the local option varies a lot by the category of the amenity and by frequency of the activity. Some more essential services are chosen based on proximity, while others are more specialised and depend on factors such as the personal relationships with staff, or the quality of service. There also appears to be a clear **distinction between the everyday and the weekend** needs. On the one hand the everyday needs, such as grocery stores, preschools and beauty salons, are convenient to have nearby to save time on a busy workday. On the other hand, the weekend routine with more occasional outings for leisure, nature, and family visits, can be further from home because time is then not perceived as such a big cost. These trips are **driven by car** even by those that support the idea of carless living, because during off-peak hours and less traffic it feels not so far to drive further in the weekends (Daiva LT4, Karolis LT9, Vilgailė LT15, Mantas LT11, Lina SE13).

The **most essential everyday** need among the respondents is **grocery** shopping. For this, most of the respondents say they choose the supermarket that is the closest for convenience. "What's the point of going to the same shop further away, if you have one right here" says Daiva (LT4). The interviews revealed a wider range of perspectives on grocery shopping among the respondents, with some choosing the bigger stores for entertainment "because it's fun, I like walking through the isle and looking at products that I am not going to buy" (Nina and Justas LT8), some choosing the small local store for the attachment to staff and because it takes less time than walking around a big store (Alina

LT5). There are those that choose by price, hunting bargains and stopping by a few stores to take advantage of the discounts on offer (Dovilė LT1, Justas LT8, Alina LT5).

Second most frequently mentioned activity is **going for a walk** locally, for which green spaces are needed. The purpose of walking is mostly recreational, although many also mention they usually walk to local amenities. The need for walking is universal across the respondents' ages, family status, wealth or car ownership. The interview results have revealed a variety of rationales behind walking behaviours. The retired respondents have mentioned they walk because they have more time, those with young children go for local walks to the playground, dog owners walk their dogs, and young professionals walk for exercise or, as Nina (LT8) puts it, for "an essential mental health walk when you're sitting in front of the screen all day". Mikael (SE7) walks "every day for one hour in the parks" and appreciates that "there are many nice places to walk, there's a real forest with deer." This suggests that for some respondents who are avid walkers, green spaces are important, but not for everyone, like Karl, who "usually walk(s) everywhere, every day. When I walk, I usually find all that I need. I usually walk for one hour in different directions, both for leisure and for training." The abundance of walkers among the respondents may be due to the research bias of the intercept interview, as those residents seen about walking in the neighbourhood were approached.

**Preschools** although often an influential factor when choosing a neighbourhood to live in, interestingly were not mentioned among the closest services used. Although several respondents expressed that a local preschool option would be easier, none seemed to use the local provider. For Šiaurės Miestelis, this could be explained by the lack of provision of state preschools, meaning that the local options are expensive private preschools. One reason is that the school run is combined with the trip to work, utilising the proximity area of work rather than home (Johan SE4, Karolis LT9, Dovilė LT1). From the perspective of a single parent, Linda (SE3), seeking out the closest preschool for her 2-year-old daughter was a priority as time is an especially constraining factor. Others drive their children to a preschool further for wanting a higher quality or specialised education (Daiva LT4), or a cheaper state preschool alternative (Dovilė LT1, Karolis LT9).

Specialized services that are not used on a daily basis, such as the dentist and the hairdresser, respondents choose further away because of the trust they have built over the years with the service provider. Lina (SE13), Nina (LT8) and Audronė (LT6) believe a hairdresser is a service that you wouldn't experiment so much with, once you have found your one. Audronė notes that "even if there are five hairdressers on my road I still go to my one further away, you just get used to the service", similar to Lina, who thinks that "the hairdresser is a service that you're used to. There are probably local hairdressers here, but I went to the one I am used to, it's a big step to take." Others, such as Alina (LT5) are not too selective and choose the local hairdresser for a lower cost. These services are

based on personal relationships with staff, and there have been cases where respondents have started to use the local dentist next door, and have grown accustomed to the service so that they continue going even after the dentist relocated further away (Karolis LT9). Also, specific hobbies are chosen by quality rather than proximity. Vilgailė (LT15) chose her dance studio further away because of "the teacher, style and quality, rather than proximity" and Audronė (LT6) does not use the local gym and instead chooses a further option because it has "specialised climbing facilities".

Most of the respondents support the view of using the service that is "close and good", which is in line with recent empirical findings of Gil Solá and Vilhelmson (2022) in Sweden. For example, Charlotte (SE15) explains that her choice of amenity is influenced by a mix of proximity and quality "I don't necessarily choose the closest amenity, but mostly. If I know something is okay or good here, then I will take it because it's convenient. But I can go further also if it's something really nice." Price is important, for example Karl (SE9) says he "would not pay double just because I want to go close", while Arūnas (LT14) factors in the cost of travel into the price and maintains that searching further away is not necessary because he finds everything he needs locally, form hairdressers to car maintenance - "I doubt that you would be able to find anything particularly cheaper by traveling further, because it will cost you both time and money to travel to a further facility". Vilgailė (LT15) also seeks out the local option "I look for services that are nearby, for example healthcare, groceries. If I am looking for a massage, then I would find a nearby option to avoid sitting in traffic and having to travel for it. When I looked for a dog training school, it was a priority that it would be close enough to walk".

The majority of the respondents mention **variety and quality** as the key factors driving them to seek options further out, particularly for shopping. Other occasions, such as wanting something special, a nicer restaurant to go out for dinner or a culture event often means choosing the city centre where more is on offer. Social meetings with friends and family visits are also major reasons for going outside of the neighbourhood. Some mention as well that negotiating activities together with friends means that the location is chosen in the city centre so that it suits everyone (Agnè LT3, Lina SE13). In addition, the location of the workplace is a very specific destination that is less easily changed, and many respondents mention they would not need to leave the neighbourhood or have a car were it not for the journey to work.

This exploratory interview research has also revealed an unexpected pattern regarding shopping, showing counter-consumerist attitudes among some respondents (Mikael SE7, Johan SE4, Joshua SE10, Mantas LT11, Vilgailė LT15). Although retail land uses and shopping is stated as an important component of mixed-use by New Urbanists (Duany Plater Zyberk Partners, 2003), this group of residents do not view shopping (other than for food) as an essential need. As a result of personal

values and attitudes, this group does not prioritise shopping. Instead of local shops, recreational spaces are more important for this group to facilitate their local living behaviours. Walking and exercise stand out as daily needs, for which local green spaces are needed. They also express the wish to have a quiet bench to read a book, a forested area, or an outdoor sports area. It can be inferred that a resident with this view would prioritise having recreational facilities locally rather than shopping opportunities. This finding shows a different understanding of using the local area, which leads to suggest that the assumption to think of local living behaviours in terms of the use of local shops may be limiting as it does not uncover the full picture.

I am not really a buyer type. I try to consume as little as possible and the only thing I buy is food. I don't use many local shops. I don't like shopping for environmental reasons, but also, we are saving money to buy a house, so I don't want to consume much. We go to the parks a lot; we use the playground. – Johan, SE4

People choose to drive out of habit. If you think about it, so many trips are not necessary, you don't really need to drive to the shopping centre to buy new clothes and shoes three times a week. The consumerist culture creates the desire to go shopping so often. We don't go to shopping malls at all, something bad needs to happen to make me go there. We don't like shopping. – Mantas, LT11

#### 5.2.4 Travel behaviour: influenced by attitudes or built environment?

#### **Reliance on the car for the everyday**

Driving behaviours can be **encouraged or restricted by the built environment**. A key difference between the two case studies is that Kvillebäcken is designed to limit the car, while Šiaurės Miestelis facilitates car use. Respondents in Kvillebäcken only mention neighbourhood design features that restrict car use, such as restricted on-street parking, high underground parking costs (Karl SE9, Dan SE14), traffic calming measures (Fatima SE2, Ana SE8), and the shared road principle within the neighbourhood, where pedestrians and cyclists take priority over the car (Charlotte SE15, Joshua SE10). These are powerful measures in curbing car use and have led to some respondents even selling their car upon moving to Kvillebäcken (Karl SE9, Lina SE13). Karl now commutes 20km to work by train "because it is too expensive with a car... for the underground parking. I don't need a car for here, if I do, I rent a car, it's cheaper". In addition, Karl is an avid walker, which may weigh in on his decision to sell the car. Charlotte (SE15) is discouraged to drive within the neighbourhood because it is not easy to navigate the shared road with pedestrian flows. Others are not deterred and continue to drive, in spite of the limitations. For example, Dan (SE14) parks his car further away to save costs. His persistence to keep driving can be attributed to attitudinal factors, as he calls driving his 'lifestyle preference'.

Almost all respondents say they prefer not to take the car to the city centre, due to the inconvenience of finding parking and navigating busy traffic. For the trips to the city centre active travel modes and public transport are the preferred option for most residents, particularly given that both neighbourhoods are within 2km of the city centre, which enables the option of slower transport modes. Thus, it can be inferred that it is an effective planning measure when restrictive urban design conditions are coupled with connectivity by public transport. While Kvillebäcken is 5 minutes' walk away from a major public transport hub, in Šiaurės Miestelis public transport stops with higher connectivity are 15 minutes' walk away. As a result of these factors, the majority of the respondents in Kvillebäcken do not use the car to travel to work.

By contrast, in Šiaurės Miestelis, respondents often mention that the neighbourhood design makes it easy to have a car, the roads are wide, the driving distances are short, it is always easy to find free parking, and there is a lot of space dedicated to parking on the street as well as underground (Ingrida LT16, Oleg LT7, Audronė LT6, Mantas LT11, Daiva LT4, Arūnas LT14, Jonas LT13). Thus, half of the respondents in Šiaurės Miestelis use the car daily. They view the choice of car as necessary for the commute to work, as it is faster than public transport. For those that work within closer geographical proximity car use is not necessary because more opportunities for mixed modal use open up, such as walking, e-scooters, cycling, or public transport. Respondents tend to choose the travel option by comparing the journey time of alternative transport modes. Justas (LT8) prefers to walk to work, because the difference in journey time is not so big compared to taking the bus. Similarly, Agnė (LT3) and Vilgailė (LT15) walk to work rather than take the bus because the time difference is negligible. Justė (LT12) shows a particularly wide range of modes in her carless travel behaviour.

We don't have a car, because we don't need it. It takes 45 minutes to walk into town along the river, so that's very quick. In the summer I walk, cycle or use the rental e-scooters, and in the winter I take public transport, the taxi or walk. – Justė, LT12

Besides the built environment, the **tendency to drive is influenced by personal preferences**, attitudes and socio-economic characteristics. In Šiaurės Miestelis among the respondents that prefer to drive are families with children and 35 to 55 year-old working adults, while those that choose not to drive are younger 25 to 35 year-old adults and the retired. The interview findings point to generational attitudinal factors, where the respondents who are millennials prefer active, healthy, environmentally friendly lifestyles and postpone getting a car by choosing deliberately to be carless. This generational shift has also been identified previously in another study and is potentially forming new car-less habits (Thigpen & Handy, 2018).

It makes a difference that you always have the option to walk, because the distances are so short. How I choose to move depends on how I feel and on the weather, but I try to walk more because it's all so close. The time difference is only 15 minutes if I walk or drive to work, so I walk if it's good weather. – Agne, LT3

"I choose not to have a car because it's cheaper and I don't think I need it because I have everything within a walk. And I don't want to be a lazy person. I see my siblings when they have a car, they drive 500 meters to the store. But I like to be active, I like to walk, I like to move. So, it's mostly that. I don't want to have a car that takes that away from me, because if I have the option of a car it's easy to take it. Someday I will need to get a car, but I like to postpone that as long as I can and live without a car now." – Mikael, SE7

Some respondents show a strong preference for driving because they perceive the car as an upgrade, and such a type of person is found in both case studies. Dan (SE14) says "I used public transport more when I was a student, but now I upgraded to the car. It's nicer, faster and more convenient" similarly to Oleg (LT7) who claims "I don't remember the last time I've been on a bus. I drive now". Oleg and Dan both fall within the 35-45 age range and thus do not share the same attitudes as the millennial generation. Interestingly, some respondents describe the preference for the car over the bus metaphorically as a religion, as Daiva (LT4) describes her 37 year-old son's attitude not to take the public transport as a firm belief.

Our son is in his later thirties, and he is of the religion to choose e-cars over public transport. As for us, we happily take the bus and it is no big deal, because the bus stops here connect to many destinations. – Daiva, LT4

Other respondents have the opposite relationship with the car, and perceive driving as stressful, complicated and unpleasant (Lina SE13, Aistė LT10, Vilgailė LT15). Lina, Aistė and Vilgailė are females within the 25-35 millennial age group. It could be inferred from this that besides the age group, there is a difference in behavioural patterns between male and female respondents in terms of the relationship to the car. This supports the findings by Bergstad et al. (2011), who argue that men are more likely to show affectionate attachment to the car, which reinforces viewing it as a lifestyle preference.

I hate driving in the city with all the traffic, and to find a place to park. I would definitely choose to go into the city by public transport. I don't really like driving, so it would only be because it takes faster and if it's easy traffic. I recently sold my car, I had it for trips in the summer only, when it's less traffic and it is much easier with the car to go for a trip to the ocean. – Lina, SE13

Life stage appears to be an important factor, as respondents with young children drive for convenience, and the elderly do not drive anymore due to health conditions. Five respondents have children and most of them argue that they do not envisage their lives without a car because of it. Dovilė (LT1) hesitates about going carless "well... it would complicate things without a car, unless if the preschool was right here then maybe you could get by without a car but even then, we would need it for weekends... it would be really inconvenient". Karolis (LT9) drops the children off to

school by car in the mornings on the way to work, and his wife picks them up by walking in the afternoon. This shows that it is doable by walking but for reasons of saving time in the mornings, comfort and personal preference Karolis uses the car. This finding relates to a recent empirical study by Janke et al. (2021), who show that active travel modes tend to be low for parents. Whilst Janke et al. (ibid) argue that this is due to the challenge of combining travel to work and school runs with active travel, Linda's case shows that some still manage to do school runs by bike. Linda (SE3) is a single parent, and she usually does the school run with a bicycle and then continues to work. She reasons her choice in terms of convenience rather than particularly accentuating environmental or lifestyle preferences. The built environment facilitates cycling in Linda's case because the connections between her home, preschool and work are better facilitated by cycling lanes rather than by bus routes. But even then, Linda finds it convenient to own a car for emergencies.

It makes my life easier that the kindergarten is so close, and that's why I love it here. I don't need a car to do my daily life, but I just have a car now because I have a kid. Before having a child I had a car that I shared, because I didn't need one, it's very well connected by public transport and that's the charm. So I don't use the car so much, only twice in the weekend, but on a daily basis I cycle. But of course, it is convenient to have a car just in case something happens to her. – Linda, SE3

The reason that only very few respondents drive in Kvillebäcken compared to Šiaurės Miestelis could also be due to residential self-selection. As observed in previous research in the USA and Norway, people intentionally choose to live in neighbourhoods that reflect their travel preferences (Wolday et al., 2019; Cao et al., 2009; Kitamura et al., 1997). This could help explain the difference in travel behaviour between the two case studies, besides factors of the built environment. Respondents who have carless preferences choose to move to Kvillebäcken and often quote good connectivity by public transport as the key feature they like about the neighbourhood. By contrast, respondents in Šiaurės Miestelis show that they seek environments that enable them to continue driving conveniently. For example, Mantas (LT11) and Oleg (LT7) mention being able to park the car easily as one of the key features that they like about the neighbourhood.

Car parking is great here, which is personally very important to me. If you couldn't park your car properly that would mean a lot of discomfort... having to constantly worry about where to squeeze your car in. – Oleg, LT7

We don't have any problems with parking here, because I am confident that I will always be able to find a spot within 200 metres of my door. - Mantas, LT11

In terms of **reducing dependency on the car**, for the respondents who prefer to drive, improving pedestrian and public transport infrastructure alone is not likely to convert them to alternative modes. For someone like Oleg (LT7) "I wouldn't be able to comment if my decision to drive is related to how far bus stops are, because they are not relevant for me. If I had been using the buses here before and only recently got a car then maybe. But I have been driving for a while now. I don't remember the last time I've been on a bus". Oleg sees driving as an improvement in his life situation and would not go back to using the bus. The design of Kvillebäcken has had more success in achieving sustainable travel choices, because it has combined features that limit the car, but also provided the alternative of good connectivity by public transport. Yet even then, some residents would remain car drivers if they have such strong car preferences as the respondent Dan for example, who illustrates an exception to the trend of non-dependency on the car in Kvillebäcken. Nevertheless, there were a group of respondents in both neighbourhoods who have sold their car upon moving to the neighbourhood or reduced the number of cars in the household from two to one, because they simply felt they do not need it anymore (Karolis LT9, Lina SE13, Daiva LT4, Karl SE9).

There are those that do not rely on the car daily, but do **drive occasionally** on **weekends**. It is interesting to note the finding that occasional car use does not require car ownership, due to the abundance of opportunities to use a car sharing service. Respondents mention opting for mobility as a service more broadly, including e-scooters and e-cars. Daiva (LT4) describes this as a generational trend, "my children in their 30s find it more convenient to use the e-car sharing services, because you can always easily find one here, and you don't need to worry about car maintenance. But I would say it is also because they like to show off, because it is trendy now among their peers. As for me, I happily get by with public transport". Interestingly, respondents also reported several cases of car sharing with neighbours, or friends and colleagues who live nearby, for trips to work as well as travelling for a leisure activity (Audrone LT6, Vilgailė LT15, Linda SE3, Ana SE8).

Attitudes towards **cycling** differ between the case studies. More respondents in Kvillebäcken cycle daily to work (Samuel SE1, Linda SE3, Barbara and Sven SE11, Lina SE13), while in Šiaurės Miestelis only Vilgailė (LT15) commutes by bike, while other respondents view cycling as a recreational activity or "not practical for commuting to work" (Jonas LT13, Karolis LT9, Mantas LT11). This view may be partially conditioned by the built environment, as cycling lanes are more abundant in Gothenburg, with well-connected commuter routes, whereas in Vilnius near the case study recreational cycling paths dominate. As the respondent Arūnas (LT14) mentions, "planners should first create the opportunity and then residents will see that cycling can be a convenient option". It can also be due to personal attitudes and perceptions, for example Samuel cycles to work for 10km saying that "it's not that close but it's on the right side of town", while respondents in Šiaurės

Miestelis reason taking the car because the office is 10km which they perceive as far (Jonas LT13), and for others even 5km is far (Mantas LT11, Jonas LT13) or rather faster by car compared to bus routes. Other respondents, for example Elsa and Samuel, see cycling as a lifestyle preference above all.

I really like cycling, so it's important for me that we have cycle lanes here, so it is easy to cycle here. I choose to cycle because I really like to take my bike, it's easy because I don't have a car, so I can be spontaneous and not plan how I take my trip. It's nice to feel the breeze in your hair (smiling). – Elsa, SE12

First of all, I enjoy cycling a lot. I train a lot, it's good to keep active and to exercise. And lastly, because of the rising fuel prices. – Samuel, SE1

I use the bike as a mode of transport, rather than recreationally. I cycle to the gym, to work, because I get further and faster by bike, also it is healthier. Everybody values time a lot these days. I think the cycling infrastructure is good enough, you can park anywhere easily. – Vilgailė, LT15

#### Experiences of walkability: what makes an area walkable?

Walkability is influenced by a combination of factors, such as the built environment, personal preferences and other circumstances. The role of the built environment features in the interviews, as respondents note that a pleasant walking environment encourages them to walk. Respondents identify walkable environments with characteristics such as safety, liveliness, community, green spaces, and close distances to amenities. These characteristics can be influenced by the built environment. But the decision to walk is also largely affected by personal preferences and other circumstances, such as the weather conditions and the time budget. Thus, not only the built environment but also personal preferences and attitudes play a role in walking behaviours. A lot of respondents express the preference to walk for health reasons, to stay active, which can also be said for other active modes of travel, such as cycling. For example, Vilgailė (LT15) notices she started walking locally much more since moving here because the local services are easy to reach by walking, implying that pedestrian-scale and density of services influence this behaviour. Vilgailė chooses to walk because she is a walker by preference but also because the built environment is conducive to walking:

I particularly like that everything is nearby and so I walk much more since living here, rather than getting the bus because the bus stops are not so close. I generally prefer to walk and I don't like driving. I often take the bike if the weather is good. – Vilgailė, LT15

**Perception of safety** influences walking behaviours and it appears to be related both to the urban design, the presence of other people as well as to the socio-economic characteristics of residents. Both neighbourhoods have been described as feeling **safe to walk** because "there's a lot of people

everywhere so you never feel alone" and "it's lit up at night, which makes it really nice and cosy" (Samuel SE1, Fatima SE2, Linda SE3, Justas and Nina LT8). Some female respondents feel safe within the neighbourhood development, but not safe in the surrounding industrial area (Ana SE8, Charlotte SE15). As Charlotte puts it, "I don't feel safe walking around Backaplan, there is a big difference from the new development to the surrounding industrial area. The old industrial area is not very nice, but the new development is nice to walk in, but it's a lot of concrete, not very green. It's still good to walk in but I prefer the park or riverside for a walk", whereas Lina (SE13) regularly takes a walk in the industrial area precisely because she likes the contrast "I like the rough part next to the modern part, I like the mix of it". Johan's girlfriend chooses to drive because she feels unsafe to walk home at night. Perception of safety may be explained by the individual's affluence, and consequently contrast to a more affluent area where one grew up, as for Charlotte (SE15) and for Johan's girlfriend.

"My girlfriend doesn't feel safe to walk here, this area has a lot of problems with burglary, violence and crime because this building near us is rented for social housing, so it is a lot of substance abuse. For me it's okay, but my girlfriend comes from a more affluent suburb area, so this is a downgrade for her." – Johan, SE4

Safety is related to the **community** and the socio-economic makeup of the area. Residents feel safe in areas where they feel a sense of belonging by living near people similar to themselves. As Audronė (LT6) puts it, "now that I think about it, the majority of my friends and acquaintances live around here, and I guess maybe it is to do with the similar social status in this area, we have something in common". Respondents in Šiaurės Miestelis attribute safety to seeing a lot of young families out with children (Jonas LT13, Alina LT5, Justas and Nina LT8) "I feel very safe, because it's more families, you always see people around, at night it's very well lit. It contrasts to the older soviet-built neighbourhoods where the social fabric is also old-aged, and the areas feel bleak and dark". By contrast, the neighbourhood of Kvillebäcken was more often perceived as an area that is not safe for children by respondents who are parents (Linda SE3, Johan 4, Joshua SE10), even if those without children, perceive the urban design as family friendly due to the presence of the playground and the preschool (Samuel SE1, Ana SE8).

"Since I got a kid, I didn't want to live here because our buildings is directly on the main traffic street. Because of the busy traffic I can't just put her on a bicycle". – Linda, SE3

"We are expecting a second baby. It's not a good area for kids to grow up in. It's much traffic, much noise, and we think they have built too close to each other. It was okay until we got a family. I think this area is more for youngsters. We want to move to a house in the suburbs. I don't see my future here, I want somewhere less loud, less hectic, more safe. But right now, it's fine." – Johan, SE4

"It is not safe for my child to run around outside by herself, because the traffic is too busy outside our doorstep. There is a local playground here, but other than that there is not much to do for children here." – Joshua, SE10 Walkability and safety are associated with **liveliness**, and the idea of eyes on the street. The interview findings confirm that Jane Jacobs's ideas of street life are relevant to the respondents in these neighbourhoods. Urban design can create the conditions that draw people into the streets "because the buildings are new and there is a lot of space, it feels quite safe and clean" (Nina and Justas LT8) and "I like the stone pavements, it's light. Even though it's a lot of houses here it feels like it doesn't get dark and heavy" (Lina SE13). The urban design ideas were implemented yet with a few shortcomings. This study revealed that the idea of active shopfronts in making the streets livelier and safer was not fully realised in Šiaurės Miestelis due to cultural attitudes. Residents have observed that recently the windows of ground floor retail units have been covered with non-transparent adhesive shields, which does not allow one to peek into the shop from the street. This concept has worked better in Kvillebäcken, where shop fronts noticeably add the benefit of bringing life to the street.

It is interesting with the shopfronts, possibly it is the Lithuanian mentality. Because I remember that in the Netherlands you can see right into someone's kitchen, while Lithuanians would close the window shutters and also put up a fence... I guess there is the need for privacy, maybe it is a more closed culture. – Audrone, LT6

"I feel that I use the local café even if I don't go in and buy anything there, I appreciate walking past it every morning on the way to work and seeing people sitting outside, so in a way I feel that I use it" – Lina, SE13

Residential **density contributes to there being more people**, and also the modern new-built development attracts more affluent, young residents, as well as the hipster cafes and restaurants pull visitors and generate a feeling of **liveliness**. Arūnas (LT14) thinks it would be a good idea to pull even more life into the area by creating a local night-time economy.

"What makes it nice to spend time here is that other people are using the place, it's lively, and I want to be part of that, to contribute to that." – Elsa, SE12

Bringing in night life through local cultural events would generate more round-the-clock liveliness in the neighbourhood. Even the restaurants go quiet at night, which really surprises me, I see it as unfulfilled potential. Cultural events would bring more people into the neighbourhood, make it more lively. More movement and buzz would make it more safe, and more interesting to live here. – Arūnas, LT14

**Walkable distance** varies by individual and by context, although most respondents refer to 10-15 minutes as the optimal distance. Most respondents think in terms of walking time rather than distance, but it can be inferred that this roughly equates to a distance of 500m to 1km. The walking distance reduces to 5-10 minutes if it is to go to the local grocery shop, and increases to 30-40 minutes if it is for recreational purposes or to meet a friend. Younger adults quote longer walking times because they like to keep fit, and by the same token the retired walk longer for exercise and also because of more time available. Respondents with young children and dogs choose local walks that are shorter

distance. The employed respondents who are pressed for time say that they walk during the lunch break or take longer recreational daytrips during the weekend.

This study interestingly found that a threshold of 1km or 15 minutes was often referred to as the cutoff line by respondents. This distance increases the likelihood of multi-modality to occur. The vast majority of respondents use a mix of travel modes for distances under 1km particularly concerning the daily journey to work. This finding thus suggests a tendency whereby respondents start to increase the variety of travel modes with the decreasing distances. This is because slower modes of travel, such as walking, become accessible. It was found that alternative travel choices are compared by travel journey time, meaning that with shorter distances walking becomes comparably faster and more straight-forward than taking the bus or driving. Other costs associated with the trip, such as time spent waiting for the bus, or finding where to park the car mean that walking is often perceived as the faster option. Respondents in both neighbourhoods often mention that because of the short distances walking is often faster than taking the car in the local area, which promotes the behaviours of walking to local services. This is in line with previous research, where it was found that lower car speeds raise the competitiveness of the slower modes of travel (Maat et al, 2005).

Too far is another city (laughing). I have no problem to walk an hour for recreation. If I go to the shop I prefer the bus – Mikael, SE7

I would say it is a longer distance for me because when you are young and like to walk anyway, especially here now I find that I walk a lot because everything is nearby. – Vilgailė, LT15

It depends how much spare time I have. Me, alone, I could walk even 7 km but if I am with the kids... and if you don't have time, then of course you drive – Dovilė, LT1

## 5.2.5 Summary of interview results

This section explored the behaviours of residents, the role of the built environment in influencing those behaviours and the residents' lived experiences of neighbourhoods that are dense, mixed-use and conveniently walkable. As the research approach was exploratory, the interviews with respondents revealed some interesting and unexpected insights into how New Urbanism is experienced in the everyday. The results report on how residents experience density, mixed-use and access to local services, and the influence of the built environment on residents' behaviours regarding travel and the use of local amenities. It was particularly interesting to find that the relationship between the three planning principles is important, whereby respondents talk about walkability in relation to mixed-use and density, and vice versa.

High density and mixed-use neighbourhoods have both positive and negative connotations from the residents' perspective. On the one hand, it is what makes places lively and provides easy access to local services. Respondent interviews indicate that such places are interesting and engaging environments to live in. Overall, the respondents perceive these as positive qualities that add value to the neighbourhood, regardless if they themselves use the amenities or not. On the other hand, density generates more traffic, oversubscribed local services and overused green spaces. In addition, some respondents claim to be negatively affected by non-residential land uses that are located too close to their homes. Density can mean building homes at the expense of local green spaces, which has been found to discourage local living behaviours and induces travel by car to reach greenery further afield. Density is higher in Kvillebäcken than in Šiaurės Miestelis and has therefore received more negative mentions from the residents. Šiaurės Miestelis is perceived as more mixed-use than Kvillebäcken, and consequently residents express that the variety of local services satisfies their most diverse and niche needs. Respondents who have moved from the suburbs, as well as millennials or those who identify as urbanites, childless, or outgoing singles, perceive their experience of high density and mixed-use neighbourhoods as positive. Those who have young children or are planning a family, prove to be more nostalgic about their upbringing in the suburbs, while the less outgoing couples and those who prefer to drive cars, describe their experience of density and mixed-use neighbourhoods with more negative tones.

Density and mixed-use are necessary preconditions for local access to services. The majority of respondents say it makes their everyday life easier to have everything nearby. No identifiable differences in opinion were noted on this topic with regards to socio-demographic profiles. Many respondents refer to Šiaurės Miestelis as a city within a city, where all their needs can be met without ever leaving the area. This implies that it is perceived as suitable for local living. Kvillebäcken, on the other hand, is perceived as having less capacity to meet all the residents' needs locally, but respondents stress that everything, including the city centre, is close, allowing them to reach amenities fast. This refers to the high connectivity by public transport in Kvillebäcken, which makes the city centre accessible within 5-10 minutes. Many residents in Šiaurės Miestelis reflect that even if they can potentially satisfy all their needs locally, there remains a desire to explore other places. Similarly, for Kvillebäcken, some respondents would travel to other town centres with a similar retail offering just for a change of surroundings. Interview results suggest that there is an intrinsic need to explore new options. Humans do not behave in rational ways and do not always choose the closest amenity.

Geographical proximity is not always the main deciding factor when choosing an amenity. Respondents seek out further options primarily for two reasons – quality and variety. Other reasons are ambience, customer service, and cost. The role of proximity also varies by the type of service. Respondents differentiated between their everyday needs and their occasional needs, stressing the importance of having the everyday essentials nearby. This includes services such as food shopping, childcare and places to exercise such as the gym or a local park to take a walk. Often respondents say they walk to access these services locally. Occasional needs include social and leisure activities, such as family visits, culture, specialised hobbies, and visiting nature reserves and forests. Respondents express a willingness to travel further for occasional needs, and often do so by car. Making the decision whether to choose a local service or not, shows the largest variation from individual to individual, as the respondents value services differently and have different priorities. While some respondents choose everything based on proximity, in order to save time and would choose to discontinue using a service once it relocates, other respondents behave the opposite way and follow their favourite hairdresser or dentist after relocation due to the trust established or attachment to customer service.

Lastly, it was found that travel behaviour is influenced by factors of the built environment, as well as circumstance and attitudinal factors. As a direct result of the built environment, all but three respondents in Kvillebäcken have no daily reliance on the car and two have even sold their car upon moving in. This is a result of limiting factors such as restricted on-street parking, expensive underground parking, and the shared road space principle, with restricted speeds and the prioritisation of the pedestrian. By contrast, respondents in Šiaurės Miestelis exhibit more daily car use and view the built environment as facilitative of the car, with wide lanes, free on-street parking and car-oriented shopfronts. Half of the respondents in Šiaurės Miestelis rely on the car daily, while the other half use a mix of travel modes. Besides the built environment, socio-demographic characteristics are influential. Families with young children, males, and respondents in the 35-45 age group, express a preference for the car as a lifestyle choice. By contrast, millennials and the retired, as well as females prefer not to drive. It was found that for shorter distances, under 1 km, walking or cycling is a more attractive option than driving to the latter demographic group, primarily due to minimal differences in total travel time. Thus, even though car use is not eliminated, there is evidence that New Urbanist planning enables a more varied modal mix, increases the possibilities of walking and reduces the relevance of the car.

## 6 Discussion

This chapter is organised in four parts. First, a discussion of the New Urbanist planning concepts, their implementation and residents' lived experiences of them. Second, the resulting behaviours in travel choices and use of local services, where the effect of the built environment is discussed in relation to other contributing factors. Third, the arising recommendations for planning neighbourhoods that encourage local living. Lastly, limitations and suggestions for further research.

# 6.1 How does the physical planning of the neighbourhood according to the principles of New Urbanism create the necessary conditions for local living?

New Urbanism is an urban planning movement that emerged in the 1990s as a response to the modernist planning, which dominated in the decades preceding it. In short, New Urbanism addresses the problems of urban sprawl, separated land uses and long daily commutes (Calthorpe, 1993; Duany et al., 2010; Congress for the New Urbanism, 1996). Through the design of the built environment New Urbanism aims to achieve more sustainable behavioural patterns, such as providing good access to services available within close geographical proximity. This approach aspires to encourage the use of local services to meet the everyday needs of local residents and aims to facilitate walking rather than driving to reach those services. The planning principles most directly affecting these local living behaviours are density, mixed-use and walkability. These ideas have now become widely accepted as sustainable urban planning practices and are also reflected in the United Nations' New Urban Agenda, indicating that New Urbanism has been a successful campaigning movement (Garde, 2020; Mehaffy & Haas, 2020).

The ideas of New Urbanism have, nevertheless, received criticism. It is interesting to note that the proponents of New Urbanism have been so focused on the promotion of the principles that the benefits have possibly been overemphasised, and the drawbacks overshadowed. Although effective for the lobbyist purposes of the movement, this has resulted in an exaggerated role of the principles in causing sustainable behaviours (Talen & Koschinsky, 2014; Filep & Thompson-Fawcett, 2020). Due to the practical relevance, developers have been quick to adopt the principles (Hebbert, 2003), yet have failed to fully consider the challenges of implementation (Grant & Bohdanow, 2008). This has resulted in a plethora of different manifestations of New Urbanist ideas in places with different contexts (Moore & Trudeau, 2020). Two examples of how New Urbanism is implemented in practice were chosen in this research to explore this issue in more detail.

This thesis tested the concept of New Urbanism in two neighbourhoods, each portraying the salient features of density, mixed-use and walkability. Comparable neighbourhoods in two countries were chosen, so that the differences in implementation could be examined. Kvillebäcken in Gothenburg and Šiaurės Miestelis in Vilnius are both inner-city regeneration projects within compact urban environments in a northern European context. It is important to note that the development plans did not explicitly refer to New Urbanism, but it was inferred from the planning principles that it was close to New Urbanism. Spatial analysis was used to measure the level of density, mixed-use and geographical proximity to essential services in both neighbourhoods. Moreover, walkability was assessed qualitatively. It was found that the concept of New Urbanism was implemented to a large extent in both neighbourhoods, albeit with variations in each principle.

#### 6.1.1 Measuring the principles of New Urbanism

Kvillebäcken was found to be more dense (326 persons/ha) than Šiaurės Miestelis (269 persons/ha). To put it in context, the population density of Manhattan is 290 p/ha (U.S. Census Bureau, 2020). Yet Kvillebäcken is within walking distance (500m) of a forest, while Šiaurės Miestelis kept more green space between buildings but lacked recreational forests within walking distance. Density was assessed against the UN Habitat recommendations for sustainable neighbourhoods, of 150p/ha (UN Habitat, 2014), which means that Kvillebäcken is more than double the recommendation, and Šiaurės Miestelis is almost double. The majority of the literature on New Urbanism was less specific on density, apart from the design recommendations in the Lexicon of the New Urbanism, which provides a range of densities based on the rural-urban continuum (Duany Plater Zyberk Partners, 2003). Based on this, the neighbourhoods are on the high-density end of the spectrum and represent urban core or urban centre zones according to the New Urbanism norms. Therefore, the criteria for density was fulfilled.

It was found that both neighbourhoods are mixed-use and meet the minimum requirement of 40% for commercial land uses, as per the UN Habitat's recommendations for mixed-use developments. Yet Kvillebäcken has a larger proportion of green space (19%) than Šiaurės Miestelis (7%), within the walking distance of 1km from the neighbourhood area boundary. The exact mix of uses is not specified in the literature on New Urbanism, however, which impairs implementation. Jobs to residents ratio, which is another measure of mixed-use, is more balanced for Šiaurės Miestelis (1:1) than for Kvillebäcken (1:3). This suggests that Šiaurės Miestelis has sufficient local job opportunities for residents and can provide dwelling, work and leisure activities as per Krier's (1984) requirements for a New Urbanist neighbourhood. The mix of land uses, however, reflects the local area within a walking distance, thus it cannot be attributed to the direct efforts of the neighbourhood design, but rather to the location of the neighbourhood within the wider urban structure. This study supports the

argument that the measurement of density and mixed-use depends on the scale, or area size (Šabanovas & Kavaliauskas, 2012). This refers to vertical and horizontal scale of mixed-use, whereby within the neighbourhood boundaries residential land use dominates, albeit vertical zoning showing mixed-uses in ground floor retail units. Density is high and mixed-use is low on the neighbourhood scale, with mixed-use increasing for the 1km radius and wider area. This means that the measuring of these principles can be interpreted differently and also manipulated.

Walkability was measured both quantitatively, as geographical proximity to essential services and qualitatively, as expert assessment of street walkability. The results show that five out of six categories of the essential services studied can be reached within as little as 500m radius in both neighbourhoods, apart from green spaces in Šiaurės Miestelis. This suggests that residents should be able to fulfil their daily needs within walking distance of home. Walkability assessment revealed the constraints on walking resulting from heavy traffic. This finding showed that the liveliness and active shopfronts, which contribute to walkability as per New Urbanism (Gehl, 2010; Southworth, 2005; (Jacobs, 1961), are in reality on the main streets, accompanied by heavy traffic, which consequently reduces walkability. Walkability had high scores within the neighbourhood boundaries, where traffic was restricted, because the environment was more safe, pedestrian friendly and had street vegetation.

Based on these findings, it is argued that the two neighbourhoods have implemented the principles of New Urbanism, although not to the full extent. Moreover, each neighbourhood shows strengths in some aspects but has deficiencies in others. This has been observed before in Canada, that the ambitious New Urbanist projects become more conventional during the implementation phase (Grant & Bohdanow, 2008). The results revealed that the implementation of different principles can even be conflicting in practice and that it is important to get the balance between all of the components right. This conflict of priorities is stressed by Christopher Alexander, one of the founders of New Urbanism, and his proposed solution was to have a single process with a single goal, which is "the creation of wholeness in the environment" (Alexander, 1987, p. 22). The findings of this study show that while this single process may work conceptually as the theory of New Urbanism, in implementation some aspects take priority over others. As shown in the case studies on balancing density with green spaces. The varying degrees of implementation resulted in interesting differences between the two neighbourhoods on the lived experiences and behaviours of residents. Even though causality cannot be suggested from this research study, it gives an indication of travel behaviours in the set neighbourhood context. It is not only the built environment that influences the lived experiences and behaviours. Personal attitudes, preferences and other circumstances also play a role. This is discussed next.

#### 6.1.2 The lived experiences of New Urbanist planning

Interview findings show that from the residents' perspective, New Urbanist planning makes everyday life more convenient because the essential services are within a short distance, which supports previous research from Sweden and Norway (Haugen, 2011; Næss et al., 2018; Elldér, 2020). Geographical proximity to services creates the convenience of saving travel time, which is the main consideration for frequently used daily activities. It was found that density is experienced positively when compensated by good urban design, such as green courtyards, sunlight, mix of building designs. The balance between density and nature, or tranquillity, results in a positive lived experience, as the example of Kvillebäcken has shown. This is in line with Lehmann (2016), who stresses the importance of quality design to ensure that high density residential design is liveable.

In line with previous literature (Talen & Koschinsky, 2014) this research shows that not only the built environment, but the sociodemographic profile affects how New Urbanist features are perceived. Density and mixed-use are generally more well perceived by millennials (25-35 age group), urbanites, the childless, and the more outgoing respondents because they prioritise having activities close. It is negatively perceived, however, by respondents who have children or are planning a family, because they value outdoor space and tranquillity more. Grant (2007) argues that New Urbanism fails to meet the needs of families for this reason. Walkability is more positively perceived by the 25-35 age group because they prioritise exercise, and the retired because they have time to walk. The area is perceived as less walkable by parents because walking pace becomes slower with young children and time is a key consideration for managing family life.

It was found that respondents compare the New Urbanist neighbourhood to their previous experience of living in the suburbs, and the perceptions vary according to the individual values. Based on the sample of respondents in this research, millennials perceive themselves as urbanites, having always liked compact urban life, while the 35-45 age group with young children favour the suburbs. This shows that there is a large variety of subjective human experiences within the neighbourhood. This suggests that residents may self-select themselves into neighbourhoods that reflect their lifestyles, as Kitamura et al. (1997) have argued, and that there is no one ideal type of environment that would meet all of the individual lifestyle preferences.

The residents' daily experiences point to how physical planning could be improved to facilitate local living behaviours. Even if the New Urbanist neighbourhood provides spacious inner yards and less density as in Šiaurės Miestelis, respondents still feel the lack of recreational nature areas nearby. Lack of green spaces is a restricting feature of the built environment, although it depends also on the surrounding area of the location and not all is in the hands of the developers. Kvillebäcken, albeit more dense, has nearby forests which result in positive residents' experiences. On mixed-use, the

71

study finds that the location of non-residential land-uses placed too close to residents has a negative effect. Some respondents from both neighbourhoods thought that commercial uses generate liveliness in a negative sense by attracting more traffic and parked cars, making it unsafe for children to play outside. This observation has not been made by previous studies.

Respondents differentiate between everyday and occasional services, and this leads to an argument that not all services are needed locally. Prioritisation of the identified essentials such as groceries, preschools, gyms and parks should be available in abundance, as the lack of these services causes constraints on daily life. Occasional needs, such as niche hobbies and cultural activities, are more specialised and are not expected to be found close to home. Lastly, despite local job opportunities, residents do not work locally, which indicates that New Urbanist ideals of working and living locally do not manifest in this case. It was found that instead, proximity and connectivity to the city centre and other business districts were more important in easing the commute to work for the respondents, which suggests the importance of where the New Urbanist neighbourhood is placed within the overall urban structure. Even if it does not mean that locals work locally, office uses nevertheless bring more vitality to the neighbourhood, help sustain shops and services, and decentralise rush hour traffic flows.

#### 6.2 Do behavioural patterns of local living manifest in practice?

The local living behaviours explored in this study were resident travel and use of local services. Some of the travel behaviours can be attributed to the design of the built environment. However, this research also found evidence that social attitudes and values can override factors of the built environment and lead to unexpected behaviour patterns.

The role of the built environment on travel behaviours is important. Both neighbourhoods show different urban design choices in this regard, in that Kvillebäcken is restrictive of car use, while Šiaurės Miestelis is more car friendly. Kvillebäcken was intentionally designed to enable a low-carbon lifestyle, with restricted parking, but at the same time easy connectivity by public transport. Corresponding behaviours in car use were consequently observed, with less car reliance in Kvillebäcken than in Šiaurės Miestelis. It could also be that the inherent societal norms reinforce driving behaviours in Šiaurės Miestelis, whereby developers reflect market needs of drivers, and in turn strengthen driving behaviours. Whilst there were exceptional cases where strong personal preferences for driving meant that driving behaviours persisted, there were several cases in both neighbourhoods where respondents have sold their car upon moving in, because the short distances to daily activities made car use redundant. This shows the role of density, mixed-use and proximity to amenities in reducing car use, and supports previous studies (Elldér, 2020; Næss, 2012; Banister,

2005). This study, therefore, arguably demonstrates that people will use the car where it is easy to do so, but will find alternative options where it is restricted, unless motivated by particularly strong attitudinal factors.

The built environment also plays a role in encouraging cycling. Cycling lanes, coupled with density and short distances to services, make it easier to cycle (Haybatollahi et al., 2015). Several respondents found it more convenient and quicker to commute to work by bike, and have even combined cycling to work with the school run for children in their household. The two case studies nevertheless differ in cycling behaviours, and this can be related partially to attitudes and norms inherent in the different cultural contexts. Cycling was perceived as a recreational activity by more respondents in Šiaurės Miestelis, while Kvillebäcken had more respondents using cycling as a means of transport. Empirical findings from Dėdelė et al. (2020) in Lithuania also point to low cycling levels for the work commute.

Generally, it was found that short distances make active travel modes such as cycling and walking more competitive in relation to the car, which is also found by Maat et al. (2005) in the Netherlands and Dėdelė et al. (2020) in Lithuania. It was found that short distances to daily activities tend to increase the modal mix, and the threshold for the majority of respondents was within 1km or 15 minutes' walk. This is similar to previous research in the UK, where it was found that people rarely walk further than 1 km (Barton et al., 2012). Geographical proximities to local services in both neighbourhoods means that residents walk to them, supporting previous research in Sweden (Elldér, 2020). Yet most of the walking activity is recreational. This means that proximity to parks is essential to support these walking behaviours. More local walking behaviours were observed in Kvillebäcken than in Šiaurės Miestelis, likely due to closer green spaces. In Šiaurės Miestelis, by contrast, the quest for recreational walking results in driving in order to access nature reserves. Therefore, the built environment can restrict local living behaviours.

Besides the built environment, personal attitudes, sociodemographic profile and other circumstances play a role. Similar to studies by Dédelè et al. (2020) in Lithuania and Bergstad et al. (2011) in Gothenburg, this research finds higher driving preferences among the males who were interviewed. Families with young children prefer the car for convenience, which confirms what Oakil et al. (2016) find in the Netherlands and Karjalainen et al. (2021) in Finland. By contrast, millennials choose not to drive, and are intentionally postponing car ownership, as it is seen as unnecessary in this life stage. This has also been found in other studies and is identified as a generational shift in values (Janke et al., 2021; Thigpen & Handy, 2018). It was further found that human travel decisions are not always predictable and can depend on other circumstances such as the weather, the mood, the time available and purpose of the trip. Avid walkers were found among all age groups, and the motivations to keep active and healthy drive this behaviour. Strong personal preferences to walk can override limiting

built environment factors, such as busy traffic or industrial landscapes. This suggests that residents have pre-existing travel preferences based on their attitudes or sociodemographic profile and self-select into neighbourhoods that support their lifestyles. The resulting sustainable travel behaviours in New Urbanism are therefore not all attributed to factors of the built environment.

It was found that the use of local services is based on proximity and convenience for the essential needs. This supports the findings of studies in Sweden (Gil Solá & Vilhelmson, 2022; Elldér, 2020). Similarly, in Finland, Hasanzadeh et al. (2021) find that dense, mixed-use environments result in polycentric activity spaces, meaning that most of daily life happens in the local neighbourhood. Interestingly it was found that the level of awareness of local options correlates with the respondent's propensity to drive, which suggests less engagement with the local area as a result of driving. By contrast, respondents who walk more often, such as dog owners, are more familiar with local services. This aspect has not been highlighted in previous research. Services further away were chosen in most cases for reasons of quality and variety, rather than convenience, and this depends on the individual values and preferences (Haugen, 2012). Dentists, hairdressers, hobbies and culture are among this group of services mentioned by respondents. These services are more specialised and less frequently used, and thus are not expected to be found locally. The rationales behind these travel behaviours support what Næss (2019) found for Norway, and further confirm that they apply in this context. Respondents value convenience in the daily activities, due to small time budgets, whereas weekend activity is more flexible due to larger time budgets. Thus, in this study it was observed that walking behaviours replace the car for short daily trips, but not for longer occasional trips. Occasional car use on weekends is still to be expected, especially for social relations purposes, which is similar to earlier findings by Haugen (2011) in Sweden.

Even if the neighbourhood can meet all needs, as in Šiaurės Miestelis, respondents do not wish to spend all of their time in the local area, and still have the need to explore other places for a change of surroundings. This is in line with Mokhtarian et al. (2015) who argue that travel behaviour is also motivated by subjective experiential reasons and is not always a rational or functional decision. The findings show that respondents do not always choose the closest rational option but can be motivated by experiencing something new and choose an equivalent amenity further away. Therefore, it can be argued that even in the ideal conditions of New Urbanism that provide the opportunity to live locally, the human behaviour will not necessarily follow. Perhaps it should not be the aim to contain all of the residents' activities within the local area, but rather provide the choice to do so, and focus on allowing residents to organise their everyday life in a convenient manner.

# 6.3 Recommendations for planning neighbourhoods that support local living behaviours

Placing the findings of this study in the broader context of encouraging sustainable living behaviours within cities points to several recommendations for urban planning.

As evidenced by the impact of personal preferences, values and attitudes, and the resulting variations on the lived experiences of the New Urbanist neighbourhoods, there is no single type of development that would meet all the needs and preferences of all residents. Nor is it advisable to devise an ideal neighbourhood model that would be universally applied, because it is important to consider what works in the particular local context for the particular group of local residents (Moore, 2013). Instead, a variety of neighbourhood planning is needed, albeit still within the sustainable planning spectrum. Resident self-selection would then result in attracting those residents with corresponding lifestyle preferences. Moreover, neighbourhoods do not need to be planned to accommodate for all eventualities of life in order to facilitate local living. From the residents' perspective, local living patterns help to save time for daily routines, whereas for occasional activities and weekends, larger time budgets mean that residents travel further. The implication for planners is to focus on the everyday services and ensure that the development of neighbourhoods does provide a good variety and quality of everyday services.

Given the additional influencing factors, such as personal preferences and attitudes, the built environment may be seen as the difficult and expensive way to affect travel behaviours (Breheny, 1992, as cited in Banister, 2005). Pricing policies and taxation have been suggested as more effective measures in reducing car use, rather than just the physical planning of the infrastructure (Curtis & Punter, 2004). Also, the physical urban structure does not always guarantee the intended New Urbanism outcomes upon implementation, and thus additional incentives are needed to encourage local living behaviours. This suggests that local policy changes should be employed in addition to the physical planning of infrastructure. For example, the unforeseen negative implications of servicing non-residential uses, located in the ground floor units of residential buildings, could be mitigated through local policy decisions, such as restricted delivery times and special parking permits.

As has been shown, not everything is bound to the neighbourhood development site; thus there are only certain solutions that a developer can implement. In the examples studied, mixed-use and availability of services such as green spaces were already present in the area before the New Urbanist neighbourhood was built. The neighbourhoods benefit from areas that already have a good balance of different land uses, density and greenery. In areas that are lacking in these features, public – private partnership efforts could help. The municipality could place requirements on developers to improve

or create new quality green spaces or to improve the existing infrastructure beyond the boundaries of the development site, in an effort to create better quality environments. This study shows that the success of New Urbanist neighbourhoods depends on the location choice and the assets of the wider area. Thus, sites for new infill developments should be selected carefully to include assets such as greenery, public transport connectivity, and proximity to city centre, as in the case of Kvillebäcken. Or alternatively, such infill developments could be used as a tool to revitalise inner city areas. As the example of Šiaurės Miestelis has shown, public transport connectivity and greenery were enhanced after building the neighbourhood in an effort to regenerate the wider area.

#### 6.4 Limitations and further research

The findings of this study have some limitations, and this in turn suggests areas that could be researched further. The findings are based on a particular context, scale and locality, and help to explain resident behaviours in neighbourhoods with a similar context but may prove to be different in other places. This study draws conclusions on the effectiveness of New Urbanist planning principles on the local living behaviours from two case study neighbourhoods. The chosen case studies represent a northern European context. Moreover, they represent very dense urban areas, situated within the inner city. Although these provide two different contexts for comparison, the results could be further supported by replicating this research in additional case studies. This would give more insight into the variations of New Urbanism in other contexts and the different resulting resident behaviours. Further research could explore suburban neighbourhoods, as well as cases in other countries.

Another limitation is that the thesis has focused on the neighbourhood scale and taken a mixedmethods research approach. This has allowed it to incorporate both quantitative and qualitative methods, which has given a holistic understanding of the case study, although may have resulted in less depth of quantitative methods or the ability to generalise findings. Further research could develop on these neighbourhood scale findings and expand it to the city or regional scale through the use of quantitative modelling that would test the validity of the findings on a broader scale.

This study has focused on local living behaviours in terms of the use of local services. Yet the study findings have revealed an unexpected pattern from the interview data, showing that shopping is not an essential need for some respondents. This reveals a different understanding of the idea of local living, because residents who do not prioritise shopping, do not necessarily associate the use of the local area with using the local shops. Further studies are needed to explore other components of local living behaviours beyond the use of local services, so that planners can be better informed about designing more attractive places to live and spend time in for a diverse set of residents' needs.

## 7 Conclusion

Densification is a key strategy applied in sustainable urban planning, whereby walkable neighbourhoods are designed with good access to services locally and the right conditions are created for local living. The theory of New Urbanism envisions mixed-use neighbourhoods where residents can live, work and play without leaving the neighbourhood. This thesis has examined the effectiveness of the theory of New Urbanism, through the guiding principles of density, mixed-use and walkability, on encouraging sustainable local living behaviours in residents. Two New Urbanist neighbourhoods of Šiaurės Miestelis in Vilnius and Kvillebäcken in Gothenburg were studied. First, in terms of the necessary physical environment features that create the potential for local living behaviours, and secondly, in terms of the residents' lived experiences and the actual local living behaviours carried out in practice. A mixed-methods research approach was applied, using quantitative spatial analysis for the first part and qualitative intercept interviews with residents for the second part.

Both neighbourhoods represent the ideas of New Urbanism in practice, yet the different components were implemented to varying degrees. These cases show that the aspirational ideas of New Urbanism are difficult to implement to the full extent and that some elements take priority over others. Both areas are similar in the land-use mix and the essential services of healthcare, education, food supermarkets, leisure, public transport and green spaces being within 500m of the neighbourhood. Yet, mixed-uses and access to local services are more a result of the surrounding compact urban environment, rather than of the direct efforts of the neighbourhood design. Kvillebäcken is more dense, restrictive of car use, and has better access to public transport and green spaces, whereas Šiaurės Miestelis is relatively less dense, facilitative to car use and has poor access to public transport and green spaces. The differences in the implementation of the New Urbanist principles resulted in interesting differences in the lived experiences and behaviours of the residents between the two neighbourhoods.

Planning neighbourhoods that facilitate local living needs to ensure that everyday uses are provided nearby. Thus, it is important that neighbourhoods contain green spaces locally, as walking for recreational purposes was identified as one of the most important daily activities. A lack of green spaces results in travelling outside of the neighbourhoods, and often by car. In addition, the choice of food supermarkets, preschools and gyms is sensitive to geographical distance because these facilities are viewed by residents as essential daily needs. Residents will travel further for specialised services, such as leisure, dentist or the hairdresser, because, in these cases, quality and variety override proximity. Longer distances are generally also accepted for activities that individuals value more, including family and social visits. Interestingly, it is not expected, or even desirable, that

neighbourhoods should cater for all residents' needs locally, as the respondents still expressed the inclination to experience a change of scenery and to explore other areas occasionally.

Respondents evaluate travel mode alternatives in terms of journey time. Shorter geographical distances, within 1 km from the place of residence, make it easy to access services by foot, and thus slower transport modes, such as walking and cycling, become more competitive in relation to driving. This diversifies the modal mix, and thus reduces reliance on the private car. The built environment of Kvillebäcken restricts the car by limited on-street parking space, expensive underground parking and the shared road space principle, which prioritises the pedestrian. As a result, respondents show less daily reliance on the car and some report having sold their car upon moving in. By contrast, the built environment of Šiaurės Miestelis provides free and easy on-street parking as well as wide driving lanes, and this is reflected by half of the respondents relying on the car daily. Besides the built environment, personal preferences and attitudes based on socio-demographic characteristics are influential. Families with young children, males, and respondents in the 35-45 age group, express a preference for the car as a lifestyle choice. By contrast, millennials in the 25-35 age group, the retired, as well as females, prefer not to drive.

To conclude, the built environment can encourage sustainable local living behaviours, when the balance between the essential components of density, mixed-use, walkability and greenery is ensured. Neighbourhoods do not need to be designed to accommodate all eventualities in life, but they should offer a good variety and quality of the essential services. Moreover, the location where a New Urbanist neighbourhood is placed within the overall urban structure, matters. Infill developments are likely to be more successful if placed in compact inner-city rather than sparse suburban contexts, as this amplifies the intended outcomes of New Urban design. Such environments make everyday life more convenient by increasing the possibilities of walking and, in turn, reducing the relevance of the car. While this research draws on two neighbourhoods, it offers an important contribution towards understanding how inner-city neighbourhoods should be planned in order to encourage residents to live locally and travel sustainably.

## 8 References

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# 9 Appendices

### 9.1 Appendix 1: The Interview Guide

**Introduction:** I am doing some research about this neighbourhood for my master's thesis at the University of Gothenburg. I am curious what's it like to live here from your experience, do you have 10 minutes?

#### **Opening questions:**

- 1. Do you live around here? How long have you lived here?
- 2. What attracted you to move to this neighbourhood? What do you like about the area, why? (do you like living in a dense area where everything is close?)
- 3. What do you think about the way this area is designed (if things are close, density, traffic flows)?
- 4. Do your family or friends live nearby?

#### Everyday activities in the local area:

- 5. Do you spend a lot of time locally, or use the local area?
- 6. What do you think of as your local neighbourhood? What does local mean for you? (this street, a short walk, the whole area)
- 7. What amenities are there in your area? What stands out to you?
- 8. How far do you usually walk? Is it nice to walk around here, why?
- 9. What do you use in the local area and why?
- 10. What do you not use and why?
- 11. Let's talk about your typical week, what activities do you do locally and what do you do elsewhere? (Daily, weekend, where you shop, eat out, what activities are you involved in are they near your home or further away)
- 12. Apart from the area you live in, where else do you carry out your daily activities? (near your work, study, or where your family and friends live)

#### **Choosing local services:**

13. When you are deciding where to go for an activity, what influences your choice?

What is your decision making? Deciding factors (if it is nearby, quick and easy to get to, or quality, variety, price)

Do you choose the closest amenity? Or it's not necessarily the closest?

#### The use of the car:

- 14. Do you drive? How often do you use your car? Do you rely on your car for your daily needs? Or occasional?
- 15. How much of your daily activity is done by walking or cycling? public transport? How far would you walk to a shop and when would you drive instead? Why do you choose to walk, cycle or drive?
- 16. What would encourage you to use the local area more?

## 9.2 Appendix 2: Interview Transcripts, Kvillebäcken

N.B. Transcription includes the respondents answers only, with the corresponding question number

#### **SE1 Interview 1:**

Samuel – male, was walking his dog, used to live in London. 37, lives with partner, urbanite, Asian decent, local living, walks and cycles, works at Volvo, keeps active and fit

1. Lived here 2 years, but in another apartment in the same area before that.

2. We just needed a bigger place, that's why we had to move. Our landlord offered a bigger apartment in this new part of the neighbourhood. We already knew the area. First of all, it's quite close to the centre, it's family friendly, close to work that's the main thing. You have a lot of stores, restaurants, small shops everywhere. A lot more cultural stuff, quite an interesting area. I enjoy the local parks.

3. I like how they developed the place because I remember six years ago this was quite an ugly place, really empty, just flat.

4. Yes I do have family and friends living nearby. This area is where I feel at home.

My office is close, it's the Volvo, I cycle to work it takes 20 minutes. It's not that close but it's on the right side of town. Why do you cycle? First of all, I enjoy cycling a lot, I train a lot, it's good to keep active and to exercise. And lastly, because of the rising fuel prices. Do you walk a lot? I walk most of the time to the local shops.

8. Walkability: What makes it nice to walk here? For me it's quite safe, there's lights everywhere so you can walk at night, there's a lot of people everywhere you never feel alone.

9. I use the local shops, the gym, there are two here, about 7 minute walk from here. If I walk to most of the local amenities. There's a nice big park, Hisingsparken, about 10 minutes walk away, it's actually Gothenburg's largest park, I spend a lot of time there as well. That's why I love this place, because it's city and you have this forest and nature area. Kieler's park is about 4 minutes from here as well. So I have a few parks to choose from.

10. I go to central Gothenburg across the river for bigger shopping, clothes, or for more varied restaurants. Why? More variety

11. I go to the gym 4 times a week, locally, walk with the dog, meet family who live a 5 minute walk away, seeing friends, go out to the restaurants here if I have time. I stay local more, I don't go further out so often. Because within this area now I feel like I have most of the things I need.

12. Proximity areas: Around work, there is a gym there, and the city centre to see friends that live there.

13. Proximity is a key deciding factor for me when choosing an amenity, I like that everything is close. I would go further away for variety, if I want to try something else, a restaurant. Or to see friends.

14. I don't drive, don't feel like I need a car living here. I think it's quite close to everywhere, and it is well connected by public transport. I mostly cycle, it gets me further than walking.

I'm happy here, it's very varied, you never get bored.

#### SE2 Interview 2.

Fatima - female, student, 23, lives alone, walks. Muslim, Asian decent

1. Lived here for 5 months.

2. First of all, the area is so close to the big shopping malls in Backaplan and Nordstan. Especially, I am muslim and there are many arab shops here that sell halal meat, also halal restaurants. Because before y family would drive very far for halal groceries. So it was an ideal place for use because we have access to everything. Me and my family we like the city, you should see people around when you open the window. My family rents a place in the suburbs and sometimes it's dead, very quiet. When we wanted to invest, a place that we own, we wanted it to be a place that we like.

3. The place is very modern, it's a nice neighbourhood. I really like it here compared to where I lived before. Traffic calming measures, it's nice to walk here and it's safe. Especially at night it's lit up and really nice, cosy.

4. No family or friends living nearby.

5. I don't use the local area very much because I study at home all the time. It's a shame I don't have the time to go around

6. My local neighbourhood I would say is around my building, the inner yard that's a place that I think is ours.

7. I don't know the area too well yet what amenities there are here, but the shopping centre at Backaplan.

9. I can do most of my daily activities without leaving the local area. I use the big shopping centre Backaplan, local supermarkets. I walk there. The closest foodshop ICA is small so you don't find everything there, so I walk to the bigger supermarket. I use the bus stops, the local park. I use the local food takeaways, but even if it is so close I often order an online delivery on foodora, when I am studying a lot it is more convenient rather than walking there.

10. I don't use many local amenities because I am busy with studies. I would use it more if I had more time. But I use what I need, like groceries. I would really like to explore this place more when I finish my studies, because there are a lot of good places to eat here and cafes.

11. Mostly I study at home. I go to my internship, university, and to visit my parents. I use the tram for that. I would like to cycle but for now it is easy to take the tram, because the stop is so close.

13. Proximity is the main thing for me when choosing a place to go. So that it takes little time.

14. Transport mode: I don't own a car or bicycle, but I will buy a bicycle so that it is quicker to cycle to my internship, cycling would take 15 minutes but the bus now takes 30 minutes. How far would you walk? 15-20 minutes is walking distance, more than that I would take the tram. You don't need to have a car living here, unless you have kids I think. But for me as a student I don't.

#### SE3 Interview 3.

Linda, female, single parent, 35, Chinese decent, lives near the study area. Mum with 1,5 year old daughter. Was with her daughter in a pram, on the way walking to Coop.

1. I lived in this area for 9 years, before this new neighbourhood was built.

2. I was raised here, so it was natural for me to get an apartment here I had friends and family here. And it is even closer to get to the city centre from here, because it is well connected by public transport. I lived in another area in Majorna before. Compared to living in the suburbs, I always loved living in a more compact place, where everything is close and I can walk, for example to the shopping centre without taking the car. I like this environment, it suited my life earlier, but when you have a family it's different. Since I got a kid, because of the busy traffic, I can't just put her on a bicycle.

3. I think the environment is better now with this new development, because before it was some old industrial buildings. When I got a kid, she is 2 years old, then it was a bit harder because I didn't want to live here when I got a kid because our building is directly on the main traffic street, next to the police station so it

is really loud. But it's okay, I feel I can go out in the middle of the night, I feel safe. (lifestage, not family friendly)

I cycle, I take my daughter to kindergarten in a carriage on my bicycle and then cycle to work, but I had it stolen recently downtown. It takes only 15 minutes to walk to the kindergarten so it's not so far, but then I have to go to work a little further, and there is no bus connection. So I am using my car more often now. It makes my life easier that the kindergarten is so close, and that's why I love it here. I don't need a car to do my daily life, but I just have a car now because I have a kid. Before having a child I had a car that I shared, because I didn't need a car living here, it's very well connected by public transport and that's the charm. I go by car to see my parents, or siblings, because it is too far to go by bike with my daughter. So I don't use the car so much, the car 2 times in the weekend, but on a daily basis I cycle. But of course it is convenient to have a car just in case something happens.

6. There are a lot of nice restaurants here, the harbour is very close and we often go for walks there.

8. That's the charm. I can walk really close, just 100 m to go to the closest supermarket, or I can walk 10 minutes to the bigger shopping centre.

9. I use the local amenities because they are close and it is easier to walk there with my daughter in the pram, instead of going by train. It makes my life easier to have things close, I am a single parent so I have to take here everywhere I go, so yes it's easier to stay local.

13. It depends, but now with the child it is important that it is close. It's really nice to have the big shopping centre Backaplan nearby because you can get most of the things here. But if we want to go to IKEA it is nice to have a car but we don't go there very often.

#### SE4 Interview 4.

Johan – male, dad, 37, with 4 year old daughter in pram, was at the playground with her walking home. Lives with girlfriend and expecting a second baby. middle-class, prefers a house in the suburbs,

My house was one of the first ones built here. We (me and my girlfriend and daughter) live in a very small apartment 45m2 and now we are looking for a new place because it's not a good area for kids to grow up in. We are expecting a second baby. It's much traffic, much noise, and we think they have built too close to each other (density, not family friendly, lifestage). Our balcony is 1,5 m to our neighbour's. It was okay until we got a family. I think this area is more for youngsters. Now we want to move to a house to the suburbs Torslanda near the coast, where my girlfriend is from.

1. lived here for 7 years. I grew up nearby, so that's why I picked this place because it is close to family.

2. I moved here because I was desperate, it is hard to find a place to rent in Gothenburg. I was borrowing a friend's apartment and I needed a place to live, and the opportunity came to buy here. I had some offers but I chose here because I was familiar with the area, having grown up nearby. Now I am happy, I didn't think it would be a nice area then. I study at the university at Lindholmen, so it is 5 minutes away, it is close to all the shops and our hobbies. It is a great area for young people if you are out a lot, it was better for us 5 years ago than now with the family. Now it is not a great area. There is a local playground here but other than that there is not much to do for children here.

I take the bus or walk to university. My job, is 5 minutes away by bus. That's one good thing about here, it's close to everything, it's well connected and it's close to the city. I could do everything by walking, but I take the bus when it is bad weather. I never take the car, it's always my girlfriend who takes the car she is lazy, I'm not. She works at a preschool further away, she drives there in the morning and drops off our daughter there for school. She doesn't feel safe to walk here, this area has a lot of problems with burglary, violence and crime because this building near us is rented for social housing, so it is a lot of substance abuse. For me it's okay, but my girlfriend comes from a more affluent suburb area so this is a downgrade for her.

We walk in the local area, 10 minutes to go to the groceries, 15 minutes walk to see grandmother. So we try to walk everywhere with my daughter so she doesn't get lazy as well.

We have some parks, cafes, restaurants, good public transport connection. I am not really a buyer type. I try to consume as little as possible and the only thing I buy is food. I don't party, I don't drink alcohol. I don't use many local shops. I don't like shopping for environmental reasons, but also we are saving money to buy a house, so I don't want to consume much. We go to the parks a lot, even the bigger parks further way, we use the playground. I wish we had more parks, there are not many nearby. But I understand that it is very expensive to build here, so they have to build a lot in a small space (densely) in order to make it affordable. I understand it, it's better than they build on old industrial land rather than cut down on green areas to build.

11. Everyday I go to university in Lindholmen, then for a walk with my daughter to the playground and to visit grandmother. I stay very local. In the evening I meet with my friend who lives next door, (joking) if I move out I will not meet him anymore, we will see.

13. It makes it easier to have everything nearby. If something I need wouldn't be here, I probably wouldn't go get it. Some hobbies I used to do before, I don't do it anymore because it's not available locally. I used to play soccer before when I lived somewhere else, but now I use the local sports studio, I am adaptable to my area.

For a daily activity it is important to have it close by. I used to do thai-boxing 4 times a week, in a studio next to my house but when they moved further away I don't go anymore because it is not convenient. If I do it daily, the distance is important because I don't use the car. If it is monthly it is okay that it is further away. I go further away for jogging with a friend twice a month, to a bigger nature area, because this area is not very fun to jog in. I go further to visit friends, most of them have kids and moved away from this area. So that's the only time I use the car.

I don't see my future here, I want somewhere less loud, less hectic, more safe. But right now it's fine.

Living here you don't need to rely on the car. My girlfriend prefers to drive because she doesn't feel safe coming back in the evening. I choose to walk because it's healthy, and I am cheap (jokes), it saves money. I sit a lot when I study, so walking helps me to move and stay active. I don't see a reason to use a car.

#### **SE5 Interview 5**

Astrid. Female, 67 year old pensioner. Long resident here, 30 years living in the building next to this development, saw it being built. Always lived around Hissingen. Retired 2 years ago.

I walk a lot for recreation. I went out to buy lunch today, it was more to get outside and get a walk. Down here in the neighbourhood it's not that nice for walks, but you do have Ramberget and Slatterdam, which is a nice area, so sometimes I walk in the neighbourhood streets, to get a bit of exercise. I walk to the city centre, but it's not that nice to walk because it's industrial area. I choose to walk because of health reasons mainly but also because if you take the car, you have to think about the environment and the rising petrol price at the moment. But it's mainly to get some exercise.

I walk a lot, because I'm not working, I am retired. I try to walk 5km a day. Now that I don't work I spend a lot of time locally.

I use the local library often, I use the dentist here and healthcare, the shops. I use them because it's close, 15 minute walk. When you can walk to something it's a lot easier than having to take the car or the bus. I use the same dentist out of habit, since I was young, I use the same company. Healthcare I changed a few times because I found it not so good. It has to be good and it has to be close.

I go further out to Eriksberg, 20 minute walk away, because I like the riverside, there are nice bars, meet a friend at a cafe, and an old cinema that I go to, for culture events, it's over 100 years old, very atmospheric. I have a cottage house by the ocean further out, I go there by car if the weather is nice. I also drive to see

family, where it's not convenient to take the bus. When I worked, I used the car to go to work. I drive once a week, during summer more to visit friends in other places.

To walk in the neighbourhood is not so nice because there is not much sun, the buildings are too high, not much greenery. Before they started to build it they were talking that it should be a green quarter, but where is the green? I don't know. In your head you had a different picture of what it finally became. But that's the same everywhere in this city, unfortunately. They could have a park in the middle, with trees and roses. The squares are nice but who wants to sit here? It's boring because it's too much concrete, no café or anything.

#### **SE6 Interview 6**

Evelyn. female 33, recently had a baby, Comes here for local restaurants, cafes, the second hand shop.

Walking distance for the food shop 5-10 minutes. Depends, on the weekends I walk further (because have more time). Depends on the weather, if it's good weather I could walk 40 minutes. The area changed a lot since I moved here 8 years ago, it got more lively. We moved here because it's close to the city, close to everything, riverside is nice to walk. We miss green spaces, parks and we are thinking of moving because of that. I'm home now with my newborn 5 month child so we walk a lot and spend a lot of time locally. Now that I have the pram, it's easier to walk than to get on public transport. Also it feels easy to walk, because it's not long distances. The environment makes it's nice to walk, and also the possibility to stop on the way.

Before when I worked in the office, I used the area around the office for shopping. Now since working from home, more local around the home.

Locally I use the gym, shops, restaurants, cafes, parks. I walk to them. I go further for variety, to see something else, and also if it's a special café or restaurant that we don't have nearby I would go further to.

We have a car, my husband uses it to go to work, but every other week he shares the drive with his colleague, so I have the car. We use it a few times a week, in the weekend and to go visit friends. Don't rely on the car for the everyday. During the pandemic I woudn't say I stayed local more, because I used the car instead of the bus and would go further

I like the opportunity to use things (local amenities) but I'm not sure I do it weekly but it's nice to know that you can go get a coffee. Just the idea of having them I think is nice, gives me something.

#### SE7 Interview 7.

Mikael –smiley man from Malmo, 29, lives with his girlfriend, Swedish, chooses to walk to keep active, does not own a car. affluent

#### 1.8 years

2. were among the first to move here. I was a bit younger then, and it was cheaper to buy here. I love it, I think it's an amazing area, a mix of people – different cultures, ages, gender, different political views. If I chose the society would look more like that. You have everything here. Near to the city. The buildings are alright, I like older buildings better. I always lived in the city, so I think it's nice It's quiet here, when you come back late in the evening, all the noise stays in the city centre, it is quite calm here. In this lifestage I like living in this compact urban area, because it's close to everything. Someday I will need to get a car but I like to postpone that as long as I can and live without a car now. Maybe when I am older I would prefer a house in the suburbs.

4. My girlfriend's family lives nearby in Tulve, 10 minute drive away. She had a good feeling, we could see from the plans how the area will look like, we thought it's going to be a good neighbourhood, near the city.

It's quite nice to take the public transport from the city to home. We don't have a car, we don't need to use the car because everything is close.

7. We have one of Sweden's nicest spa, Sankt Jorgen 10 minutes drive away, a forest also 10 minutes drive away, there is even a farm. So in one direction you come to the calmness, in another direction the busy city centre. So it's a nice balance, it's in the middle.

9. I go to the local gym, restaurants, and I walk everyday day for 1 hour in the parks. There are many nice places to walk, there's a real forest with deer. I use the local restaurants because I like them and they are close. It's not the fanciest restaurants, but they are nice. I shop my groceries weekly in the big supermarket Coop. In the shopping centre Backaplan you can get almost everything you want.

10. I go to city centre for cinema, culture and leisure. Other culture places like museums, I don't need to have here locally for my daily life. Apart from that what I need for everyday life I have here locally.

11. I work in the city every day, I take public transport there. I use the local gym, buy groceries and walk in the park. Family is only 10 minutes drive to visit.

12. Proximity areas, around work in the city centre.

13. It depends on the day and the mood, if I just want a pizza I get it locally, but if I want to go out for a good dinner I always go to the city. For quality and variety.

14. I choose not to have a car because it's cheaper, I don't think I need it because I have everything within a walk. And I don't want to be a lazy person, I see my siblings when they have a car they drive 500 meters to the store. But I like to be active, I like to walk, I like to move. So it's mostly that. I don't want to have a car that takes that away from me, because if I have the option of a car it's easy to take it.

8. Too far to walk is another city, I have no problem to walk an hour for recreation. To go to a shop I prefer the bus.

16. During the pandemic I was working from home so more time spent locally. But I like it on this side, I have no problem to spend the day here.

17. I would like to have a cinema here. I don't know if I would like to have a high quality restaurant here, I think it's not the type of area for it. The hipster places work better here than uptight restaurants.

#### **SE8 Interview 8**

Ana – 29, lives alone, single, born in Stockholm, family from Kosovo, was walking her sister's dog.

1. Live here for 7 years, since 2015.

2. It's quiet, good people, but some of my neighbours were burgled. I feel it is safe to walk in this neighbourhood, but the surrounding area in Backaplan is less safe. I like that it's so many apartments here, a lot of people (likes density).

4. I had friends that moved in here at around the same time.

6. This new development area I think of as my local neighbourhood.

It's easy to walk around here, if you have kids or dog there is a local park with a children's playground. It's close to the city, Nordstan shopping centre. I prefer the shopping centre in Nordstan because it has a bigger variety of stores. It's good that everything is so close, there are a lot of restaurants here, the local gym.

9. I use the bus a lot, bus stops are very close, it's very well connected by public transport. It's easy to go go downtown or other places.

10. I go to the city center for work and for clothes shopping, because not all the shops I want are here. Or if you want to go out in the evening there are no bars here. Almost daily I take the bus because I go to work, 5-10 minutes is quite close for me.

11. I walk to do grocery shopping and to my local gym. If we want to go out to eat with some friends, there are many restaurants to choose from here locally. I go to work everyday, after that to the gym. I don't do so much daily but in my free time I like to go to the mall, just to go out for a drink downtown. Now during the winter I am more at home. In the summer it is nice to go to the harbour. I don't go to parks further away.

I prefer to take public transport, because there is too much traffic here to drive. I don't have a car, and I don't feel like I need it because I live so close to everything. Car can be expensive to have in a city. I have a driving license, but I don't think I need a car right now.

13. Sometimes I like to just go to see a different area. We don't have all the shops here. I shop a lot online more than going to the shopping centre. Only groceries I go out for.

16. I am not the type that likes to go out all the time, I go to work and the gym. So lockdown wasn't a big change for me. The lockdown wasn't very strict in Sweden.

I don't have to go out of this area all the time, because I have what I need here. I have friends with cars so if I have to buy bigger things, I ask them for help.

#### **SE9 Interview 9**

Karl - 58 swedish man, lives with wife. Empty-nesters

1. I lived here 6 years, from the beginning 2016. I wanted to move closer to the city but not in the middle, but we have everything here so we don't even need to go to the city. Live with my wife now, children moved out.

2. It is a little bit too dense, but it's town you know so it's too expensive to build. But the buildings are not too high as in other places. It's nice to walk here, it's not so many cars because it's not the highway. The streets outside are busier but inside the neighbourhood.

4. No family or friends live nearby. But youngest daughter studies in Gothenbrug, so closer for her. My work is in Lerum I take the train to work everyday because it is too expensive with a car, 1600 kr a month for the underground parking. I don't have a car, I sold it when I moved here. I don't need it for here, if I do I rent a car, it's cheaper. Everyday things like grocery shopping I do by walking.

5. I'm a big football fan so I go everywhere all over Sweden to see the football games for my team. I am not out here so much.

You can go out and eat here and things like that, but I'm not so much out. I like to be home when I come from work. I work out all the day at my job, after a work day outside in the sun. I do my local grocery shopping here, I use the Backaplan shopping centre. It has every store in there, you don't need to go anywhere, then you need some change sometimes. I like to go to shop at other centres further away like Molndal, it has the same shops but I just like to go to see another place.

I usually walk everywhere, everyday. I take public transport to work, and the rest I do by walking. I walk 4 times daily, I like to walk.

I go further out to see football matches and to visit my grandchildren in Kungsbacka. Now they live further away but they are moving up here, so will be closer.

13. I choose what is close, but the price is also important. I don't pay double just because I want to go close. I like having it close. I don't necessarily choose the closest thing, but most of the times.

When I walk I usually find all that I need. I usually walk for 1 hour in different directions, both for leisure and for training. I don't cycle, maybe when I was younger, but now I am too lazy for that.

#### SE10 Interview 10

Joshua – male, Swedish, with newborn baby, 34 years old.

1. Lived here for 2,5 years. I am from Gothenburg originally and when I finished my studies I wanted to move back. It was difficult to find an apartment for rent so I bought here.

4. My brother lives close by so that influenced the decision to move here.

3. The traffic is designed very poorly inside the neighbourhood. Older neighbourhoods in Gothenburg keep the traffic flows out, but here anyone can drive through. This area was designed for few people, but now when it's built up more densely it's a lot more people and more cars, which means more traffic. A lot of cars drive through the neighborhood to bypass the congested main roads. The traffic signs are not well thought through, it is unclear how one-way traffic should flow.

The inner yards are too small, you can't throw a ball you would probably hit a neighbour's window. Some neighbours use the bbq area in the inner yard but because that part of the park kind of belongs to them, it is closer to them atleast, I'm not sure probably we could barbeque there as well but it wouldn't feel comfortable because our apartment is further away. I am comparing this to older areas built 50 years ago, that are more spacious and inviting. But there are parks outside provided by the municipality and they are better.

Density – it's quite dense here, I woudn't say it's bad but it's not the typical Swedish style of building, especially for Gothenburg. I grew up in Johanneberg, much lower buildings, lower density. (prefers suburb living because of place where grew up) Gothenburg is not known to have tall buildings apart from the million homes programme areas. Those buildings are taller, but they were designed better, people still have their yards and their space but here we don't have any of those but the buildings are taller. So it's very dense. And I wish it were different. I would like to have more private space, I really see my neighbour and I know that they see me.

It is not safe for my child to run around outside by herself, because the traffic is too busy outside our doorstep. If there was less traffic, or roads closed off to traffic, it would be a nice place to walk through,

Mixed-use is not an issue, it's a good thing, if you want to sell your apartment it makes it more attractive that it is in a mixed-use lively area.

But for me if I didn't have these things but instead had more space I would prefer that. Because we have the Coop and Willy's 5-10 minute walk away, and it's not far. The city centre is 5 minutes away by tram, so nothing is actually far. (He lives on the edge of the development, in front of a multi-purpose commercial centre with services such as the library, small grocers, dentist, bank). So when they say we need to have things close by, I mean how close do they need to be. Things should be close by, but not exactly where you live. On a Monday morning, there are many delivery vans here delivering parcels to the shops, workers park their cars. Because these things are close, okay it's good but there is a price for it. I don't need to have the amenities too close, it can be a 10 minute walk. It doesn't need to be walking distance, it can be car distance or tram distance. We have a car, but my wife uses it more, I use it very very rarely. My wife used to use the car to drive to work, but now she is on maternity leave. I don't use the car, because of the environment and because it's more expensive to take the car, but actually economically it's not an issue for us but we choose not to drive the car. I don't need the car because here it's very well connected by public transport and everything is so close by. We use the car a few times a month, short distances usually, less than 10km. We take the car to places to go outside of the city, where public transport connection is not that good. But actually today we walked there, it is a recreational nature area in Tuve, with an animal farm, a nice family day out.

I feel he doesn't like the commercial developments, or commerce. Quite critical of maximizing profits and squeezing people into compact apartments. It is easy for companies to build in this area to sell their apartments, but it has nothing do to with this neighborhood development. I wouldn't believe that marketing argument that there are parks nearby, because the parks and forests were always there the developers did nothing about it. For me what matters is what they did, how they build the apartments, how tall they are, how

far they are how much freedom I have. These things are limited, they are not as in the apartments where I grew up. The apartments are not built for the comfort, there is very little space and it is too packed. Instead of trying to give customers a good product, development companies build how they want to maximise profit and know that there will still be customers willing to buy, because there is a housing shortage. They pack people in. I want to move from here, main reason is the traffic.

5. I spend very little time near the block, but we use the nearby parks, or go to parks in the city. We go there by public transport or walk. We use the local playground when it is quite on Saturday mornings. I use the local gym, and for groceries I prefer Willy's because that's where I've been shopping since my childhood so it is tradition to go there. I use the local cafes. I use the local bakery, the have quality products, but they have become quite expensive lately.

6. The Kvillebacken development is the local neighbourhood for me.

13. I usually choose what I like and go there, as long as it's not in another city. Closeness is still important, maximum half an hour distance.

#### SE11 Interview 11

Barbara and Sven - Older Swedish couple, 57, walking home from Backaplan with their shopping.

1. 2,5 years.

2. Because it's really urban, we have everything close, the trams, the stores, the restaurants, we have everything close and it's easy to get anywhere, to work to the city.

3. For us it's perfect, we see a lot of people with dogs, I'm not sure for the elderly but for us it works. Unfortunately we had to gate the inner yards, because people could walk through and some things got stolen. So most of the inner yards are now locked. We use the inner yard. Lived in the suburb in Frolunda before, so it's a nice change.

4. My nephew lived nearby. We wanted to move close to the city and we looked at different places, it was between here and the riverside.

We can do most of our things by walking. You can walk everywhere, we even walk over the bridge to the city centre, it's a 15-20 minutes walk. We walk most of the time, it's only when we don't have enough time. I drive to work because it's outside of Gothenburg. Husband walks and cycles almost everywhere. Husband cycles to work every day. We choose to walk because it's nice to be outdoors, when it's not raining. I own a house further out, so I drive there, and to do bigger shops, and during the pandemic I've been driving to work to avoid meeting too many people. Drive twice a week.

6. The gym is right here, so it's easy you don't have to plan, you can just run when it's time to go there. Cafes, restaurants. We have almost everything here, except for the ocean. But we've been cycling to the ocean too, it's a bit far.

9. We use the restaurants, Saluhallen, shopping, the gym, Escape room, we've been to both of them. So almost everything I think.

10. Is there anything that you don't use? No, I don't think so.

Before we would still go into city to do all these things, but now it's just closer. We don't need to rely on going into the city.

11. Going to work is the only thing we did outside of the area last week.

16. During covid we spent more time around here, and since we avoided public transport we walk a lot during the pandemic, we worked from home. It's nice to walk around here, there are many bigger parks 10-

15 minutes walk away, Ramberget, Hisingsparken, you can also go down to the riverside and walk by the boats. 10 minutes to walk to the park is very close, we usually walk for 10 km on the weekend for recreation.

#### SE12 Interview 12

Elsa, Swedish female, 26, moved in with her boyfriend in the past year.

1. I moved in 3 months ago, because my boyfriend already lived here, he moved here 9 months ago. So we moved in together.

2. We liked that we have nearby the shopping, it's calm but at the same it has a lot of movement and life. So we like that combination. There's a lot going on here, but at the same time you have the cafes, shops.

3. We like that the houses are different from each other, it makes it very special. We have an inner yard, but we don't use it much, it's quite small, it's nice to look at out of your window. But I like that you can walk 10-15 minutes down to the bigger park Slatta damm with a lake, and take a walk.

4. My sister lives nearby. But that's not why we moved here, we just thought it would be a nice area to live in.

6. The new built block is what I think of as my neighbourhood, it's a community in sort of a way.

5. I spend a lot of time here locally for sure.

7. The park, cafes, Saluhallen, the restaurants, that's the things I like to have close by.

8. 10-15 minute walk, both to the nature and to the shops.

9. Yeah I do use the cafes often. It's a hard question, I haven't live here so long so I haven't experienced the whole thing yet. But I like that there is a lot more to explore. I use the Backaplan shopping centre, I don't have a car so it's really nice to have that close.

We don't have a car and we don't feel like we need it, because my boyfriend and I both take the bus to work. And we have the shops and we have everything you want at Backaplan and the nature is really close by too. We have been thinking about getting a car, so that we can take daytrips to explore other places, but we will see, maybe it's not worth it. A car is nice to have to go somewhere for a trip, but it's not really worth it because we have everything around here. For our everyday life we don't need a car. It's very good to have Hjalmar Bratnings plats that close, it's very well connected by public transport.

11. On weekdays I go to work, I commute to another town to Boras, so it's a bit long it takes an hour. I come home to have dinner, then I go to the gym which is also nearby. On weekends, we like to do something in the city or take a daytrip, meet my sister, or we just hang out in the neighbourhood there's things to do here.

13. Closeness and convenience is important, just because we don't have a car. We have been thinking of taking a daytrip to the island Hanno, then we saw that it would take 1,5 hour by public transport one way. So we decided not to go, maybe some other time. So it's got to be close enough. We have places nearby to explore, the riverside at Lindholmen, Sannegarden, Eriksberg and the city is also really close.

Variety is also important, we have a lot of different shops here but not really if you want to go shopping for clothes, we want to go to the city. And if you want to experience something else, different surroundings.

I walk or I take my bike. I really like cycling, so it's important for me that we have cycle lanes here, so it is easy to cycle here. I choose to cycle because I really like to take my bike, it's easy because I don't have a car, so I can be spontaneous and not plan how I take my trip. It's nice to feel the breeze in your hair.

17. What makes it nice to spend time here is that other people are using the place, it's lively, and I want to be part of that, to contribute to that.

#### SE13 Interview 13

Lina, 33, school teacher, single, lives alone.

1.2 years

2. I felt like I wanted to buy something because I only rented before. And I started to look at the eastern part of Gothenburg, because I liked those old houses, and it's a nice area and I have a lot of friends there. But then I work here on Hisingen at Lindholmen, and I started to think about living closer. I lived right next to the school where I work but it was too close, I saw the kids all the time and I though no I need a break when I get home. I looked at this area because when I bike to work it's only 10 minutes, so it's close but far enough to not have all my kids in the neighbourhood. That's what I like. It's funny because I looked at all these old houses in the eastern part but then when I came here, it's all new and modern, and then I realized that it's more me, I like the clean, modern style. Then when I started to look at some apartments here I felt that it was better for me. An opportunity came to buy, and it was a quick decision, but I am so happy with it. I really liked it when I looked here for the first time, and I am starting to like it even more.

3. The houses are very close to each other, but the thing I like when I look outside of my window it is nice houses to look at, so I don't mind if they are close because I have two beautiful houses to look at. One is white with red windows, one is a brick house. It looks a little bit like southern Europe, when I am on my balcony I feel like I am on vacation. I like the stone pavements, it's light. Even though it's a lot of houses here, it feels like it doesn't get dark and heavy. I really like that the houses don't look the same, very varied and colourful. I don't feel like it's dense, because it is nice around. I have a really small balcony, but it is still a balcony. Because in the eastern part of Gothenburg when I lived there Lunden, Kalltorp. The small apartments and old houses usually don't have a balcony.

4. I had one of my close friends living a few blocks away. But most live in other parts of town, Guldheden, and eastern part. But that's the thing, it's easy to go everywhere so it doesn't feel far away, 15-20 minutes with one bus. It feels like they're close anyway, even though it's another part of town.

5. Not as much time as I want to, but I ordered food many times from my local favourite restaurant Past Benne, and I have friends who want to come to me so that we can go to Benne. I also like Salluhallen, And the restaurants around Vagmastareplatsen, I have been there a lot with friends especially in spring and summer to sit on the terrace. On a sunny day you can almost always get a space to sit outside, it's less crowded than in the city centre. I use the local library a lot, a small ICA and all the stores at Backaplan. I think I use it quite a lot, but there are more restaurants and cafes to explore. I think of myself as a person who would buy fresh baked bread every Saturday morning at the local bakery Dahl's, and I would walk there with my backpack. I don't do that but I have an image that I could do that. It's the opportunity that it's there. It feels good when you talk about it, to say that I have the local bakery and I have all these restaurants. I like the feeling of that.

6. I think of this new development as my local neighbourhood. But I also like when I go for a walk to walk down the Kvillebacken river to the harbour. And I like to walk through the industrial area, I like the rough part, next to the modern part. It's a different surrounding. I like the mix of it.

9. On a daily basis I would use the library, the grocery stores, both the small ICA for fast shopping and the bigger COOP. But I also liked when I moved here that I have the homeware stores here, with everything you need for the house. I didn't need to go far, it was only a 10 minute walk away. I think yes I use those stores because they are close. Many of the stores here are the same in different places, so I would probably go to the same store in another place if I lived somewhere else. But now it's just nice that it's so close, I don't have to go by bus anywhere, I don't need to plan it or make a project of it, it's just right there. (convenience)

There is a local branch of my gym here, I used the gym close to my work because I knew it and I liked it. But now that I have the same gym chain near my home, I will start to go here.

10. Some of the restaurants I don't use, there are a lot of grill restaurants, I know one that is good and use it, but it's funny that there are so many grill restaurants. So you can choose where to eat, but I have my favourite.

11. I go to work by bike, I met some friends outside of the neighbourhood. I went to my hairdresser, because that is a service that you're use to. There are probably local hairdressers here but I went to the one I am used to, it's a big step to take. On a local basis, I went grocery shopping. On weekends, I visit friends in another area, on Fridays I eat out with friends locally. We went for an activity with colleagues, at the Escape room in this area. There are activities and restaurants that you can go to here locally. I like to get out on weekends to visit friends who live outside of Gothenburg. And when friends come to visit me here it's nice that there are things to do around here, so you don't have to go to the city. There are many weekends that I only stay locally, that I don't go to the city at all and it doesn't feel like I am stuck here, I chose to stay. As you get older, I don't feel that I have to go out in the city that much, I prefer to catch up with friends and sit in the restaurant, and I can do that here.

13. First, it would depend on where my friends live, what we want to do. If it's just me, I would look here first, for the closest local option, I don't want to take the bus or tram if I don't have to. If I have to travel, I will. But if it's available here then I choose that.

14. I recently sold my car, I had it to use for trips in the summer only. I want a car in the summer time because I want to go out to the ocean and the islands, I have many friends who have summer houses so then it's so much easier to take the car from here. There are many places to swim closer to home, but I like to go further north to the islands because I have friends there. You can go by bus but it takes much longer. I also use the car to visit my parents. But during winter I don't need it. I hate driving in the city with all the traffic, and to find a place to park. I would definitely choose to go into the city by public transport. But when I want to go out to the ocean in the summer it's so much easier with the car, it's not so much traffic. Now I visit my parents by train, but they pick me up from the station by car. It still feels easy to go there by train, I don't feel the need to have a car, it's just nice to have a car in the summer. I don't really like driving, so it would only be because it takes faster and if it's easy traffic.

If it's close, I bike or walk. What is close? A walk I could do further, but I don't want to bike more than 20 minutes, and if it takes longer I would take public transport. To work it's perfect to cycle 10 minutes. Around here I only walk. To visit friends and family I take public transport. I choose to walk and cycle first because I don't like driving, it's easier in the city to come straight to the place and not have to look for a parking space. Because I don't want to be stressed out with parking. I find it easier to navigate when walking or cycling, if I'm lost I can just stop and look at the map where to go. I like to take walks for 1 hour for exercise and recreation, I have two routes that I do locally.

16. Not much changed during covid, I still worked in the school. The pandemic hasn't affected how I would use my area.

17. The area has it all, it's more up to me to decide to use it. The more I live here and get to know the area better, the more I use it. Even though I don't use it, I really to see it, I love to walk by the café on the way to work in the mornings and there's always people there, I love to see people there, and it feels like I am a part of it. I feel like even if I don't buy coffee there, I use it, for me just seeing it is using it. Having the café there makes the street more lively, I wouldn't like them to take it away even if I don't go in there to use it.

#### SE14 Interview 14

Dan, Young professional, male, Swedish, single, 28, likes the convenience of the car.

1. I lived here for 1,5 years.

2. Because it is closer to the city centre, and I wanted something new modern. It doesn't get a lot of sunlight here, because of the density.

7. It's nice that the gym is close, all kinds of restaurants. I use them because it's close, convenient. I mostly use the lunch restaurants.

11. I work outside of Gothenburg so I drive to work. I use the car everyday, I go to play discgolf, or drive to see my family, if I want to get close to nature I drive there because there is not much nature around here. I don't really do much on the regular weekdays. I don't go to the gym, but if I would use it it's nice that it's close. Cafes and restaurants twice a week. I use one that is close and good. I don't take my car to what is close, I walk to get groceries and to eat out. I take the car for convenience, when it's inconvenient by public transport. It's pretty expensive to have a car, I park it further away from my apartment so it's cheaper. I don't use the public transport now, I used it more when I was a student. But now I upgraded to the car, it's nicer, it's faster, more convenient. It's a lifestyle preference. I don't have to take the car but it would take an extra two hours of my day if I don't drive.

13. Proximity is the main factor, close and easy to get to.

Walking distance is 10 minutes for me. On a sunny day I would walk longer. If I want to go to a park I would walk there, but if I want to go to a bigger nature reserve I would drive. I like to explore nature areas further out, being here it's not so nice, it's very dense and urban. I like trees and nature, I don't really like concrete. You don't really get that here, so you need to go further out. I live here because I like that it's a lot of buildings and a lot of things close by. But I always have the possibility because I can just drive somewhere if I want nature so I can find a balance here.

#### SE15 Interview 15

Charlotte, Young professional, female, Swedish, 26, single, affluent,

1. I used to live down the road in the old neighbourhood for 5 years, and then moved in here 2 years ago.

2. I lived far away before, and just happened to get an apartment here to be closer to university. When I had to leave my student apartment, I wanted to stay in the area because I liked it. I like that it's really close to the city centre, a lot of buses and trams, a lot of restaurants, a lot of shops. The most positive thing is that it's so close to the city, but it's not too many people, and it's very well connected by public transport. A lot of places to choose from to eat out and it's really close.

4. No family or friends nearby

5. I spend most of my time locally but I am mostly at home. I don't really do much much, I go for walks to local parks. For leisure I would go for 5-8km walks to the Ramberget park or to the Eriksberg harbour.

9. I do my grocery shopping locally, there are 4 supermarkets within 5 minute walk, and use the local restaurants to eat out. I use the local gym 4 minutes to walk.

8. Maximum walk 10 minutes, because everything is so close, 10 minutes seems far even though it's not. If I want to go to the park then I walk, 15 minutes, and sometimes I would walk into the city. But mostly I take the tram. I have a car, I drive to work once a week, I mostly work from home. I drive because it's far, and it's comfortable to take the car. I don't have the need to use the car every day. I don't really need a car, but I don't want to sell it either. I have family who live further away so I drive to see them. If I want to go shopping it's harder to go by car, then just to walk there. I don't cycle. I mostly walk, because I don't need to go very far. The old industrial area is not very nice, but the new development is nice to walk in, but it's still a lot of concrete, not very green. It's still good to walk in, but I prefer the park or riverside for a walk.

13. I don't necessarily choose the closest amenity, but mostly. If I know something is okay or good here then I will take it because it's convenient. But I can go further also if it's something really nice. It's a bit of both. I don't really shop in the nearest shopping centre Backaplan because it's (laughs) not that good, it's really boring, because it's not a lot of stores. It doesn't have the quality or variety of shops that I want, so for clothes shopping I would go to the city.

There's a lot of traffic, and inside the neighbourhood it's not clear where you can drive which way. So sometimes cars come in the wrong direction. There's a lot of people walking and drivers know that and are careful. I like this urban lively environment, but I like that it's quiet when I close the windows. I like that it is not just residential, but also a variety of other things.

I do think basically everything is here, so I don't miss anything. I just don't like the industrial Backaplan area, it's not very nice, I don't feel safe walking around here, there is a big different from the new development to the surrounding industrial area.

# 9.3 Appendix 3: Interview Transcripts, Šiaurės Miestelis

*N.B.* The transcript includes responses only, with corresponding question number. Original language, Lithuanian, has been translated into English using open source Google Translate software.

#### LT 1 Interview

Dovile, 37, lives with husband and two small children, drives for convenience with children

1.4 years

2. We used to live in nearby Šnipiškės and were looking for new construction. We already knew the area, we wanted to be close. Most of all, it was close to the former place because we were declared here and thought that we would get a kindergarten in Šnipiškės, so that we would not be very far from the kindergarten. The price was normal, parking, everything needed.

3. As you walk here, the streets are probably more. Not during my lunch break that I just don't go for a walk, more to go to the store . The stores are really full. And with the kids, it's a playground across the street, a lot of children's playgrounds, I really don't complain. And we love Ogmios whole park, there are kids of all kinds out there, so we often go there.

4. No family ties, don't live nearby.

5. Stores I would say really pretty, and all the big stores are really close. We are going to Šnipiškės for the children of doctors, we have written it down before, it is state. I am enrolled in Antakalnis polyclinic. These are not public treatment facilities. But since my husband and I have private health insurance, we usually go to Northway, here very well, very close. And our work is definitely not here, a little further, the kindergarten is also further there. My child had just attended a private nursery here across the street while we waited in line at the state.

9. Old people are very comfortable with a man, if something is needed at home you can go.

10. We don't use a lot here, like a dentist, it's right across the street, but I'm used to handling in Antakalnis, I don't even know how many years ago, and I don't go near it. The State Tax Inspectorate (laughs) somehow I don't really need to, although I once had to go it was very convenient. Thinking not so much here, a lot of all kinds of wood centers, paint, maybe relevant to someone. I wasn't even in the Beer Studio.

8. Convenient distance to walk - I would say maybe depending on how much free time you have. Because I can go 7 km though, but if I don't have time it's clear. 2 km. Well for example to Žirmūnai RIMI I really go during the lunch break, it's 15 minutes.

11. On weekdays it is home, kindergarten, and home. I go to work once a week, mostly working from home. For lunch, I usually pass through the shops, RIMI or here to Ulon Maxima. And at the weekend we were with my husband's parents here in Vilnius. Since the weather isn't very good, we don't go out after work, but if we go out it's usually around here, walking to those places. Kindergarten at the Calvary Market, Šnipiškės. We ride because with the kids that's it.

12. Those things are quite rare, whatever the doctor, I was in the library, here at the Kalvarijai market near the Šnipiškės library. I was at the Calvary Market. I was at work, drove to kindergarten, left the children, then went for a walk to work, then went back to lunch, went to the market to shop, took the car back to work, then brought the children back in the evening. It's actually along the way that movement and it happens that if you need to go that way there and do those things a lot less. After walking the children to work, I already walk, then work from kindergarten nearby.

13. Services like the doctor's, where we go before, maybe it's a matter of getting used to it more. Unless, for example, a doctor knows if you need something urgently, call him, and where he will probably take you there and go. And you choose the grocery store according to what you want, for whom the promotion

(laughs) where the discounts. Or if you want more shopping go for the bigger one. If there is not much to do quickly, go to Ulonu Maxima or IKI (the one closest across the street).

14. The machine is used daily by either me or a man. That's because we carry kids, I would say it every day . Well, it's complicated somehow without a car, if it's close to kindergarten it's maybe still possible somehow, but still somehow on the weekends some other things would be really inconvenient.

As far as walking ... I go out for lunch, and that's all. Because the nursery machine, and the returning machine. Unless we go for a walk in the evening. It would be difficult to walk to the center, it is somehow not very convenient in public, so we usually already choose a car. There is a stop here, but maybe two buses run every 20 minutes or less, which is inconvenient. If I go to the Giedraičiai stop, I have to go there already. It's also inconvenient to go to that stop when you descend here just to the center and you can walk. We do not use a bicycle, children only, in our free time we go for a walk - children with bicycles and we go for a walk.

Probably depends, I alone went a couple of miles to the store. With the kids it's ... maybe up to 1km and we'll walk.

16. During a pandemic, work became out of the house, but you actually spend more time at home than at home.

17. There is nothing missing, but there could be a state polyclinic, kindergartens could be state. There are private kindergartens here at all, but would prefer the state to be just cheaper and closer. Because there really are a lot of those families with young children here. Even the school, where we think next to the school where we will let the daughter go, we think it would be closer and clear that it would be like normal (laughs).

If you are looking for a new job, try to be somewhere nearby. It would take me half an hour to walk to work, to Panorama, and the man is closer to the center of Žalgiris, it is a 15-minute walk for him, he is either walking or by car. But since I drive to kindergarten and then go for a walk, it gets a total of 25 minutes.

In the times when they were built, it is still logical and orderly enough here , not like it is now that some patch of land is being given and built. Here the whole distances between the houses are maintained, there are natural leaves, trees . It's definitely too far for us to go to the river, we won't really go . In the summer here is like a little little nature. But I don't know where to live in any district of Vilnius, anyway, that nature would be small , you would go to the park. But still, I drive the car further because of nature. We used to go to Oz Park, I didn't go that far here, I liked it, now it's not.

#### LT 2 Interview

p. Irena, Pensioner 70, doesn't drive anymore, walks, moved here recently into her daughter's apartment

1. 4-6 months. You won't do anything, the kids have moved me here. The daughter bought an apartment 15 years ago.

2. The children bought here because a new district was being built. There are enough natural equals here, except for some green spaces between the houses with the dog. I don't know much about Neris yet, I was gone. Not too far away? And what if you get ready and go (laughs). Here it is good that there is a place to walk, there is always a playground full of children.

This place is sympathetic to me, and especially that there are lives, children play here, dogs are led .

3. In some places the snakes did not keep their distance (she worked as an architect) when the buildings were of this height. It is angry, it is a violation of norms. I worked as an architect for 40 years. I realize I wanted to accommodate more, but that's not possible, someone confirmed. I would say too densely, and still that heights. It's a plus just for them that it fits in more and gets more money.

4. The son lives nearby near the Acropolis.

5. That's how I spend time here and where you're going. I find something to do, we go to a gallery with a friend, to an exhibition, to a concert. More in the old town, it doesn't happen here most often. There are also activities here in Aville, a seniors club, at first I really enjoyed it, I attended a fun exercise here, and I walk across the street right next door. Sometimes I don't have health, or I'm lazy, but it's convenient to go next to it.

There are shops too, I'm just starting to watch, I'm trying to find myself. There is also a canteen, I went when I was lazy to cook. The area is still unfamiliar to me, a lot has changed since my studies, but I get used to it.

If there are events outside the city, then the son takes him. I no longer use the machine for ages. You don't need a car to live here, all the shops near you can walk away, you can go right here. If a machine is needed, the son will be transported.

9. I don't know much about shops here yet, but I use that cuisine, butcher's. I go to the shops, but I also just go for a walk for sports when the weather is especially good.

## LT 3 Interview

Agnė, 30, Young woman with her shopping bags from the car walking home. Young professional

1. 10 years.

2. Just, during the study year, the parents bought an apartment, found out that there will be a good place here.

3. The communication is very good, close to the center, close to the shops, and the whole infrastructure is very good. I will use public transport, stops nearby.

4. I really have a lot of family, friends who live here. I got rid of it first, and then accidentally got it so much that friends nearby got up too.

5. Definitely yes, it makes it easy for anyone to be able to walk anywhere because everything is close. I spend quite a lot of time here in the neighborhood, because you can walk and walk by the river. Yes, it is all these things close to everyday life. The most important thing is to be able to walk. To go to town and to work close to me, of course it is very good to have shops nearby and if you want and cafes and bars are all there is no need to go anywhere somewhere far away.

8. For me 40 minutes it is close to walk, but everything is closer here, the bar is right here, the shops are also 10 minutes slow. But in half an hour, it can go anywhere. The city center is a 45-minute walk away (happy smiling).

9. Shops, bars, walks were especially useful during the quarantine (laughs). That's when I discovered most of the area while walking . I use beauty salons.

That's just everything in the area, and walks and shops, everything is usually here already unless something very specific is needed then you drive on . And friends can be invited here, they really succeed because there is nowhere to go.

At work I walk half an hour, if I drive a car it's 15 minutes it's very convenient here. I work towards the calvary. And you can ride a scooter because the bike paths are so very convenient.

15. How I choose to move depends on the desire , but I try to walk more, because the distances are so short , only 15 minutes differ by car or on foot, then on foot if the weather.

14. I use the machine. Well va this week it was bad weather I used it. If you go to the store for bigger things, then I use it, but if it's such a perfect option, let's say once a week, sometimes I don't use it.

13. If I choose the nearest food store, and there are stores of all sizes, small and large, I usually shop here. And if going out to a cafe or bar somewhere depends on who I go with , you need to coordinate. But it really happens here too.

# LT 4 Interview

Daiva, Female 55, with 3 young grandchildren in the yard, son 34

1. 16 years old, the first to be built

2. At that time there was little construction, here was one of the developing quarters. Enjoyed a good location, right on the banks of the Neris, close to the center, to public transport. We would certainly not have gone to any further districts in Fabijoniškės. Public transport in particular has led to a great deal.

Now I like, though, that absolutely everything is, in fact, a town, a town town. You can't get out of here . Everything is, very very good, very convenient.

3. Very spacious here compared to how it is now being built. Va here between (in the yard) the house would be (laughs). Here are still very good distances between houses, sunlight falls, there is no way to make windows. Here are the first, most spacious areas maybe. It was still very normal here at the time. High only 7, elsewhere maybe 12. Lucky, just God brought it (laughs), just got together at the time, now I really wouldn't move anywhere, really not, because it's very, very convenient. Not only the bedroom, but also the mixed-use, nu town, lives up to the name indeed . Well I would say so a successful example of planning . Each house was built by different builders, but they are similar in style.

4. Later, the son and his family moved in nearby

10. The only thing here is that there is a problem with Northway signing up, because it ruptures from people here (oversubscribed). Because here it takes from all over the city, let's say you live behind one house and still can't see a family doctor. Seniors Beehive is here I don't use it, I don't fall into that age category yet (laughs).

9. And what's more, it's all here, for both dentists and beauticians. The stores are absolutely all Rimi, IKI, Senukai. The whole transportation hub, ideally like a bigger city that's all for sure. Pharmacy va right next door, very good. Children go to kindergarten to the Neris to private, but there are full of those kindergartens, those ordinary kindergartens without education. It is difficult to get to state kindergartens, oversubscribed , there are no state schools in the North.

For leisure activities, watching what people need, others go, there is a dance, yoga, pilates, painting studio. I don't have that much time, I don't exercise. The son goes to the gym here at home. We do this with the kids, our sports va, grandchildren watching. And on the weekends we go to the village, we need cars.

There are shops on the ground floors ... there are not many, few in our building, there are more companies here than there are dentists. Žukauskas g is full of five beauty salons within a radius of 100 meters, but they are always full. Still, there are a lot of people here, those small salons fill it up. Here are mainly beauty salons and offices, and dentists. The stores are changing a lot according to the need, those small stores are just what they didn't have, they close and another one opens.

We use it all because it is very convenient for someone who makes sense from somewhere else. Here, even the very convenient RIMI delivers to your home for free. When there was quarantine, small children, it was convenient, brought very quickly.

Here is the best Beer Bar in Vilnius, there are no people who don't know it, there are people roaring here. It's a lot of fun here when we ever come with my husband. It is an extremely popular place here.

8. Walking 10 minutes, here itself to the city of Ogmios, there is everything and entertainment, a zoo and everything, cafes, pizzerias, fountains. We spend time there with the kids or to buy something. There, our past track is very convenient.

11. A man walks to work on foot, I am now more with my grandchildren. You go to the shops. With the children we go here to Ogmios, there is a salt room.

14. I do not use the car, although I have the rights, the man who works in the center does not use it, because he goes here in 40 minutes. It's us from those who don't use that handy. Because here you can even return from the event from the Cathedral Square. That daily life is made easier when you don't need a car. Of course, the apartments here are more expensive, but convenience and speed pay off.

And while walking around here, I don't need anything else, I can take a walk here. For everyday life, everything here can keep my feet up. If you already need where we go. I walk because I need to move,

The son had two cars, now one is left because there is still a need to drive outside the city, the other parents live on. It is necessary to transport the children to kindergarten, but one is enough. Because it is raining or winding, there is a need for a carriage for children anyway. Unless there was a nursery here around the corner. You don't even have to have your own car, there are always both Sparks and e-scooters, and you drive an electric car. Because there is no need to worry about tires, fuel or cleaning. When needed, sit down. Well, it's more expensive anyway, but they say it's better, but I think it's still crazy about the style. Well they drive more with the car. Well his, such a generation, what a trolleybus to ride here, (not level). Children of ours over the age of 30 mean they have the religion that they are better off with an electric car than public transport. We take it by public transport where it is needed and there is no tragedy here, as there are stops here in all directions, there are many directions.

Parking is very easy to find anywhere here, just underground. Žukausko st. the traffic is very heavy, and here in Kubilius it is nothing.

We really agree that it is really possible to live in such areas in Vilnius without a car. Sure, if you work far away you need a machine, but if you're near offices or downtown it really isn't. Clearly, parking in the center has become so expensive that the desire to park a car for a full day if you arrive has probably passed.

Was it planned with the idea of being adapted for walking? It did not develop here, at first there was no such thing as planning a comfortable walking area. Here, the transport hub (the North Town bus stop complex near Senukai) appeared only recently, it was not there at the beginning - the stops and bus routes were brought to the quarter later. Maybe in the distant future and it was planned that this would happen. We used to go further to the stop. About 7 years ago, the whole hub appeared that there are a lot of buses going in all directions, and to the suburbs . And now it's practically anywhere you can go.

It 's very interesting to go to another area. If you go to another place, it is obvious that you can walk here and next to Oz, or to Siemens Arena if there are any events. But... kurnors and to Vingis, there is an opportunity to see Vilnius as well, because you don't go out much, so you drive and come up with kurnors to visit at the same time. Not far away, Vilnius is not big.

It is important that daily life is more comfortable, that it saves time - yes, the most important thing. And so I go for a walk on the weekends to Vingis Park, to Markučiai, but it's here when there is no traffic to go for a walk on the weekend.

And here there is nature instead, and the forest on the slope will be tidied up, the river is not far to go either, the environment is tidy there as well. Or here in the backyards. Enough of the green spaces anyway, now the bike paths are made here as well. I don't have a bike, looks good would be but I don't have a place to store it, and the season is short. But anyway there is a possibility, new trails can go a lot. But if you stop or go to the toilet, there is no bike to help safely, we have not fully developed such things yet. Made the trails first, but not everything else yet.

# LT 5 Interview

Alina, 65, retired, lives alone, socially active

1.5 years

2. They wanted to be close to the center, but not to be bare, masonry, sidewalks to be green. And there are greenery in Žirmūnai. To be close to public transport, Juste was not driving at the time. To be safe to drive, she will go to the clubs young, returning in the evening to be safe. Very eager for greenery, but if there will be a fringe, away from the street, pass through the dark park on the way back. And it's safer when you see people around you when public transport is moving, residential houses are standing. To be close to the main street so that there is no forest. Okay when life is there, agility, but that's not too much.

3. I find practically everything near the house I need and still discover what you didn't expect it is a wonderful thing. There is already such a plus for the urban city. If you live in a small town, you won't have that thing, you'll have nature, but. Here, for example, the seniors' club is located, Avilys and I never even dreamed about it, it's very good, it's well organized, it's not just on paper that we do something. (quality service).

For shops. Hairdressers can try to find the best one in the whole city, but for whom to look, you have a lot of them around you. You look at each other and choose from them and have your own. The discovery of the Calvary Market, I go twice a week, I really like it. Fitness club with pool next door, girlfriend offers to walk but also expensive.

Pleasant environment for walking. When the district was built, there were also homeless houses and factory workers' quarters, but we got along so well when we bought it all here, the city of Ogmias was formed and tidied up here, public transport was developed, there were no ..., what kind of people live around, what kind of drunk are these units here. It's nice to walk when the greenery is out, albeit on a lot of machines right now. That the cars are parked right next to the windows in the yard, everyone wants to get as close as possible to the door to park, pollution in the morning when the cars start up, I have to close the windows. A larger natural place is already needed to walk. I have to cross a few busy streets and go to the Neris, I have to cross very busy streets, that's not much for me. When I go for a little exercise in the morning it is a newly arranged sports stadium next to the school. It's nice to see how many people come to exercise, sports teams, men grown up as beautiful that sports are amazing. Youth and retirees.

4. The family lives far away in another city. It is convenient to visit by train.

5. Yes, I cut here near the street because the students cut there but it's cheaper and it doesn't matter to me that it doesn't cut a bit, it's important that the hair is still there . I go for a lot of walking when I work from home [teacher private tutor] so during breaks I go for a walk t here. I checked into the clinic now across the street, which is very convenient. Another library is nearby.

8. People are now very busy now, both young and old, and a man will not be so strange that he would go for an hour to do something about it, or unless he is forced to. If so, people feel sorry for the time. Or sometimes I do it so that I go for a walk together and sort things out together, but I already have to plan. That half an hour and it is already far away, I love it, but the shoes have to be comfortable already, you won't get around your heels. With sneakers, don't wear it.

I really like to walk to the old town, change the environment, my heart recovers there, the architecture attracts me . It is very nice to walk by the river and although far away it is worth walking. New paths for bikes and people. When I have time, I set aside two to three hours, cross all the streets, walk to the river, and then take the river back and forth. I'm going to have more coffee to drink than I'm a coffee lover, but it's a great pleasure to go to a traditional local bakery, and the price is good, according to everyone's pocket. When I meet a friend, although he can go to the cafe at home somehow differently, I will be happy to serve you.

But it doesn't stop if there are more of those cafes, to change something, if there is one cafe I'll go there, well, plus I already talk to the seller almost familiar, But I have no choice. If I want to change to another, it is better if more.

9. If thou be in doubt as thou passest by, thou beholdest him, and thou be a hive. Having activities nearby within walking distance helps you to discover

10. I don't go to big concerts here, like anyone.

13. I choose the small local supermarket, because it is close and it doesn't take so much time to find everything like in a big supermarket. The smaller you do everything the faster. Here are the features of capitalism to make a great choice. But is that great choice always good for man? Here we think we want diversity, but here we do not want it, but those who produce a lot of goods and need to sell them. The capitalist world is here. And it doesn't matter if there's a smaller choice, whether you choose from 5 types or 20 types.

Price matters. And we were even more politely served in smaller stores, during a pandemic when we had to wait in line outside and it was cold, it would be the first to miss the first ones faster. Very influenced by polite service, the employee is very influential. You already know the seller at the smaller store.

11. I didn't drive at all all week, I didn't have to leave the local area. The only reason I thought about the end of the week was that I hadn't been out all week and I was going out to my favorite Giedraičių street, it had been tidied up recently. And I decided to go for a walk to the Skalvija Cinema and pick up the app, I chose the movie where I wanted to go. The price of a ticket went up a lot. The cinema is not close by, you already have to walk further but you don't need it every day. On that occasion you go out to the old town for a walk.

Since I grew up in a village, I really wanted to go to the city, and so far it has remained, but now I want the greenery of the countryside, more nature. And here it is in the middle, although the weather is not good due to pollution because there are a lot of busy streets, big intersections. I would get here with the car, I was still driving here and then the car broke down, and I still survived that it broke, but I just don't need it . That stress while driving, well other people like to drive. But on the other hand, without a machine, a lot less stress, a lot less thinking, maintenance of that machine (no need to worry), prices, time not knowing how long it will take to get in a traffic jam. And let's count down the time and you know exactly how far you're going. And I think walking now is remarkably declared for people's health, to the fullest, to reduce stress. Feel better, sleep well. Maybe too much is advertised here that it is necessary to walk 10km every day, but you will not go every day 10, so what will you do nothing more than just walk then? But I think walking is much better than exercising indoors because of the fresh air.

I wasn't such a big walker, but during the pandemic, I started walking more to boost my health to be more resistant to the virus. I see more people walking around, moving around. Here such a trend in part, trends come and go. But I think there is a good trend here. And here you have to go, you have to have fun, it is fun, it is nice to watch birds and kittens. I have been following the same route for 2 years in the morning, I know every foot but because of this I do not experience the same.

# LT 6 Interview

Audronė, 42, professional, keeps active, grew up in the area

1. 17 years old since the house was built.

2. How I joke that I can live here at all without even leaving my area, because there is absolutely practically everything : Northway clinic, dentists, beauticians, all possible shops. All supermarket chains apart from Norfa. See what kind of promotion, buy IKI on the way, then put Rimi in your nose, and still Ogmios Maxima, you buy more than you need . Everything from car service, car washes, clothing outlets, sports clubs, entertainment, whatever you want . City within a city .

3. I think there is enough space here compared to Pašilaičiai, there are spaces and green areas here. Thought Street as a park, plans a new beautiful park nearby. When I was looking after a friend's dog, I got to know all the other dog walkers (and I thought where to take him here, it's really full) and there are plenty of green spaces where to walk your dog. Now I started jogging, I leave the house through the pine forest, I descend to the river, these are the bike paths, I run to Valakampiai by the river. I keep changing the track because I get bored.

I like that the whole structure is already formed here, I know they won't build me up, because I won't put any more houses in it. An acquaintance said that this place was no longer chosen for the conversion, as it is estimated that the rays from here to all strategic objects and from the city are the fastest most convenient place. To be a real center here, equally accessible from here.

The traffic is heavily dependent on the holiday shopping season when the Christmas sales start so it is not possible to even get out of the house because of a traffic jam on my street when I leave the house in both directions. Because there's a lot of traffic going shopping here, not residents . I envy those who work here at the Domus Gallery because my office is about 20 km away. If you go to the theater after work, or to a concert, or my sport is elsewhere, it is very difficult for me to get home and leave here after work. Because you leave in the morning, and you see how people who work come to your parking spaces and if you come back earlier and are still busy.

4. Grew up nearby across the river in Antakalnis, so family lives near. The fact that I grew up here was very influential, I wouldn't even consider further afield. I got an offer and bought it without even seeing the apartment because I knew I liked the area.

5. Anyway, everything is, but .. I really use the local area for shopping, but since you are attached to some of the services not so much by the place as by the service people. Having your own hairdresser, having your own dentist, and usually how deliberately they are somewhere else at the end of town, it's not like everything is here. I go to the hairdresser in the old town on foot or by bike. Dentists in the new town, there with a car. The gym (climbing gym) is also at the other end of town, it comes with a car because you carry a lot of equipment. Specialize. While there are five hairdressing salons nearby, I go to my own. Get used to the service.

On the ground floors of highly specialized stores, they exchange specific sporting goods, they said, very high rental prices. It is interesting with the shopfronts, possibly it is the Lithuanian mentality. Because I remember that in the Netherlands you can see right into someone's kitchen, while Lithuanians would close the window shutters and also put up a fence... I guess there is the need for privacy, maybe it is a more closed culture.

9. I use primarily those everyday items, household, food, clothing. Because convenient, close.

10. I haven't been to a beer studio in a few years, but when you pass it, it's the hustle and bustle of people. The funniest thing is when friends come and call, we sit in a bar near your house here, coming from another area because there is a good bar here. and invites you to descend. I rarely go to cafes and restaurants unless I meet someone. Not much I go to eat every day, it doesn't suit me there. More when you go on vacation.

It's clear I still want to change the environment because I didn't sit like that in my village closed . You could walk around here in circles, but you still go to the old town to change the environment. There is a need to change the environment, I could not just sit there without going anywhere. I'm not a housewife, I need to go fly somewhere to travel, I couldn't yes (instead of just being).

8. When I walk a lot, I can walk a lot, and I walk to the old town if the weather is good, without hurrying for about 40 minutes. If I have time, I go out earlier and go to the hairdresser. And I take a walk. I choose to walk. I'm used to moving at all, I can't sit down, I go everywhere, I climb, I play a lot of sports, I don't sit on the couch. For me, sports, movement is one of the main things. During the quarantine we had a walking club with friends no matter what the weather. Most of my friends live nearby, and maybe that social status is more similar in this area, but there's something in common. More similar people live here, yesterday running around watching my neighbor run away, groping. And because of new construction. Because you go where

the old house is, look there old retirees with their cats feeding and the like, there are no such. Young families, children, or apartments for rent.

11. I go to work once, twice a week. If I work from home, I don't sit at home during the lunch break, I decide if I need to go to the farmers market to buy something, or I go for a walk. Either you come up with a goal somewhere, or when you run away, I do something. After work, I go to the climbing gym every other day. On the weekend either at home, or shopping, or in Ogmios town or in the old town to meet friends. My mother and son live in Antakalnis, have a weekend lunch with my mother, and I visit it quite often several times a week, it is very convenient to walk. And on the occasion I have fun and visit my mother.

13. There is a very industrial warehouse at work, there is nothing there, not much will be done there. If you need to do something in the city that day, it is a tragedy, difficult to drive, and a lot of fuel and time. Now so happy when I can get away from home. Combine to be on the way, I get a job - a sport - a house on the way.

14. To work without a machine - no way. Now that you work from home (I work in a hybrid), once or twice a week to the office, then it's still possible without a car, but that too. And when I went to work I couldn't imagine my life without a car. When the machine was in service, I took CityBee. I once thought I would take it and go to work anyway, with three shifts if I didn't hit it two hours before work. I used to have a ride someday, and there are not many homes near the stops anyway.

I'm now wondering when was the last time I drove a car, I say no to a car. I really wasn't in the car for a couple of days, I don't even remember where I parked it. Because when I don't need to work in the gym I don't exercise. I drive twice to work, and twice to the gym. But to Antakalnis to my mother, to the old town on foot, and now that the weather has warmed up, if possible by bike. The summer will clearly start, because we are going to sail to the lake, because it is difficult to ride a bike, but you can swim 10-15 km for a long time . Towards Nemenčinė, Balži Lake. But we meet friends and ride together in one car . The Nemenčinė bike path has now been renovated because it was old and even dangerous, the roots of the trees have been removed, and I am already riding this spring to see that everything has already been renovated. Cycling together is both a sport and a vehicle, faster than walking, and comfortable and healthy, now it's clear on the street I'm afraid to ride between cars, it depends on where the bike paths are. I drive along the sidewalks if needed to the bike path because there aren't many people here.

I never drive to the city because in the summer from the house by bike for 10 minutes, because there are convenient bike paths. If it is possible not to use the car, I do not use it in any way to work in public. Cars only if you do more shopping, or drive further out of town.

15. I do most of the work on foot. Once I went to RIMI by bike, and forgot that by bike, and bought mineral blocks, heavy goods, I go where my car is here, and there stands my bike. It's like from an Indian village, I carried a bike lined with such pounds. You can't bring so much with a bike, but you don't have to buy so much.

### LT 7 Interview

Oleg, man 33, likes to drive, moving out soon

1.5 years

2. I found an apartment that I like. And we always rented next to this area and then found it here. Now we bought an apartment and moved to Pilaitė, but I really enjoyed everything here, very satisfied with this place. Just here are very expensive apartments to buy .

3. There is a lot of planning about how much time I had to visit friends elsewhere in Vilnius, comparing other districts thinks no no no. And here is spacious, cozy, communication, walking is where . The layout is good, the parking issues are resolved, which is very important to me personally, if you can't park normally it

already causes a lot of discomfort when you have to constantly turn your head on which meadow to leave the car.

14. I use the machine all the time, practically every day. I work from home, but I work different jobs as an event host so I have to travel a lot, but I also work from home.

7. There is what you need, most basic grocery stores, old people, and all other things. It is more convenient to be nearby. For household purposes, the store clearly does not need a car, all the time walking. If you are close, how you sit here, it is better to go for a walk, then you will go there and see there.

9. I go to the gym here, for leisure things. There is such a bar but here it is already ... Well it is, okay, well but it is not my most visited place, there is no reason that I will live here because there is a Beer House or there wow as a faina. Even such things are somewhere you go to sit. I rarely use it.

13. If the sports club or shops you need as Senukai, I use it here as the closest. I'm not going anywhere else to look for a gym, so I pick the one closest here. And if for leisure ... it's good to have a Beer Studio here, but if you're going to meet someone, you 're not saying we're all gathering here because I'm close here. You're going somewhere in town anyway. And the center is not so far away, and I came back more than once on a walk or with a scooter. I drive to the center by car, but for what matters. If you're not going to a car for a party, but if you're going to a movie or theater performance, you're going with a car.

8. I prefer and pass, I can walk 10-15 minutes it's not far. but it depends on how you are in it, want to go or think what I am going to do here. I choose to go just because you have moved, not because I will save some time. With a car, it's faster, clearer, and time-saving. In your free time, if you don't have to hurry somewhere , you can go to meet a friend, you can go without rushing, you can go quietly and not rush anywhere, and the car when you need it specifically. Even on buses, I don't remember when I used to. There are stops, but it's not relevant to me just, I've been with the machine for a long time. If I had switched to the car just a year ago, I could say stop there as convenient or inconvenient, but I just haven't used it in a long time.

11. I have to move from the area only for my own affairs, either for work or for a meeting, now I am looking for a couch so I ride to those places. And as for here, that's all there is to it, all those everyday things.

### LT 8 interview

Justas and Nina, couple, 26, young professionals, Nina is from France

#### 1.1 year

2. I felt drawn to this neighborhood because my mum used to work here, I would spend time here at Ogmios . It's very convenient, it's very close to the city. It's very close to the forest, it's very walkable . I thought a lot about Naujamiestis , because it was supposed to be more hip or urban , but having lived here I wouldn't want to move to Naujamiestis , because it is more expensive by now, more packed, less green space, probably more loud on the main streets. And here we have more convenient stores around us .

Nina: walkable - We love to walk in general and we walk to the city center, you can take the bus if you're on a tight schedule or on your way to work , but in the weekends for a month now we walk into the city center to get some exercise, to enjoy the sun . It looks nice as well, the walk is not too annoying, roughly 30-40 minutes and there are nice stops along the way for coffee, you can stop at the farmers market , it's a very nice little area we got.

This feels like it could be anywhere pretty much , especially the modern newbuilt look.

3. I heard this is supposed to be one of the most dense neighborhoods in Vilnius, I don't know the statistics but it definitely doesn't feel that way, maybe because there are not many tall buildings. Our building is not on the main street, there's not that much noise. What I like about the way it is built, is that the space between the buildings is quite big, so it feels very spacious. We have quite a few windows so we get a lot of light. I feel like in a lot of other newly built places the space between buildings is always very small and you get far

less sun and far less light. The buildings here are far enough that you can't see what your neighbors are doing, you have your private space. I like that it's new built, it's very family oriented, even Ogmios as a concept is family oriented. I like the calmness, that's what I appreciate, I want to separate between the party vibes and the living vibes . My friend lives in the city center, they need to be in the middle of the action all the time but I don't need that. In the city center maybe you get very tired, all the things are more expensive. Here is a middle ground, because you're not too far from the city but you have this quietness . I come from Paris, and in comparison here especially I feel very safe, because it's more families , you always see people around, at night it's very well lit. Because the buildings are new and there is a lot of space, it feels quite safe and clean . As a woman if I was walking home alone at 2am in another area I would think twice, but here I am not scared at all.

Nina: What I like about it personally, is that you can find anything in your region, all the shops if you want electronics, clothes, a snack, groceries, there's so many options. But now that I am working from home there is one thing that I miss, there are not many green spaces in my reach. Sometimes I would just like to go for a 20 minute mental health walk and I don't do it because I will walk in a very concrete area, and I don't want to do that because it's a bit gray and sad.

The river park is not that far but there's nothing on that side besides the green space . (implies that it's not encouraging to go) In winter we would go there to see the snow, but in summer we would go to the city because there is more stuff to do.

5. For groceries for sure everything that we need is covered, from regular groceries to fancier stuff, there's an Asian shop, an Indian shop in walking distance. You can have more basic cheaper Lidl and more high-end Assorti within 10 minutes, it's not like Paupys [new affluent neighborhood development] where it's just expensive stuff. Anything we would like on a daily basis, even for me as I am French, I'm very happy that I live so close to Assorti [the international foodshop], they have so many products from home, so if I miss one specific thing this is literally the one place in Vilnius where I can find it for sure. And this is a really good surprise for me. We have some specialty cafes and restaurants, a nice Georgian bakery recently opened here, and it's the only one that exists in Vilnius. And the local Italian restaurant is surprisingly very good, it's not too expensive, great quality for the price, it looks like a small family business. It was nice to have places to go out for daily lunch during lockdown while working from home, you could walk, sit in a sunny terrace for lunch and be back within an hour, in other neighborhoods you wouldn't be able to do that. For clothes shopping there is 20 minutes on foot, and a cinema, so we do that sometimes. For more fun activities like going out for drinks with friends, it's not like it's a problem with the neighborhood but it's a problem with Vilnius that we have this one main city center. But again if you compare all the existing neighborhoods, this is again probably one of the best, because where else can you find a bar that is actually cool next to your house . A lot of people actually come here to go out to our local bar Alaus studio . Even we have friends coming over from the old town to Alaus studio, but we don't initiate because I also personally like going to the old town because I work from home so I'm here all the time, so I feel like a change of surroundings. Also in the city center you can switch places, but here you don't have that many options. But here the bars are very cool, a few within 5 minutes walk, and they're very cool at night. But if you don't get in, then it's annoying to go all the way to the city if you didn't plan to.

9. Justas recently signed up to the local gym, I don't go to the gym myself but there are a lot of gyms here so that's a plus side. There's quite a few places we can have a drink. We go to Ogmios, to pick up something at Assorti or just to pass the time. In the weekdays we spend our time locally but in the weekends we try to go to the city center, because of the change of surroundings but we could also very easily spend the weekend here between the mall and the cinema. Here's the billiard and a bowling place that we always wanted to try. There's still things here that we haven't tried. The fact that we have Ogmios especially is a big plus, they have a lot of small restaurants, we go every now and then, not super often but on Sunday nights, when we don't feel like cooking and it's sunny outside we go out for a nice Italian meal. It's not a full trip, it's 5 minutes from home. It's a 1 hour affair, you're going to walk there, eat your dish and be home to sleep in an hour . Calvary market , the farmers market , I like that there is this opportunity to get fresh locally produced vegetables if you want to. It's really nice to know that there is such a place close-by. I guess in the city center you can get organic markets, but they are more up-market and expensive, whereas this one feels more real

and authentic. Calvary The market is more fun, feels more like a real market [jokes] and less organic, it's normal vegetables.

10. (what you don't use locally and why) I like to get my nails done in the city center, because I know they would speak English there, even if there are many places here locally. I wouldn't even try the local salon, because it's more comfortable for me to know that I can speak English . If I was bilingual I would use the local one here, it would probably be cheaper. Justas: But it is not always cheaper here, I tried a local hairdresser here and it was more expensive than the one I use in the city center. I started going to the one in the city center because it was close to my office, and I've been going to that one ever since. Nina: I have very specific hair so I go to my hairdresser in Paris, because I trust their competence, I wouldn't trust a local hairdresser here.

11. Typical week. We work remotely or hybrid. I take the bus to work but if I have time I try to walk back. Personally I don't really shop here for cosmetics or clothes, for instance I love the concept of Drugs but it is not here. There is one a bit further away, but I don't go there because there's like nothing around it for me to go, so yeah I would rather go to the city center and be like okay if I go to Drugs I'm going to stop around it. Although here is a cosmetics shop, it exists and I know that I can buy stuff from there. They are a bit expensive. This area slowly turned into a very upper-class.

My mother is very snobby, she came from Paris to visit and I was afraid that she would judge a bit, because I love living here but it's not a particularly beautiful neighborhood, compared to Paris. But even from her fresh perspective, she came to Ogmios, Assort, and she loved it here, she really enjoyed that you have everything within your reach, and things are more conveniently organized here compared to Paris.

12. We're often in the city center, we don't go to other neighborhoods much, apart from Antakalnis (nearby) because there is a forest and Tastmap [a specialty cafe] and we are big coffee fans. That's one thing that I do miss, now that I'm working from home it's a bit depressing for me to just be alone with my screen all day all week so sometimes I go all the way to the city center for no reason other than go to any café that has plugs and wifi . Because here [at the local café] it is a weird vibe, because there's not that many people, and they don't have very good coffee. So sometimes I would go to the city center just for that now, just to break the routine, to feel a nice atmosphere. I wish there was a Tastemap closer by because 20 minutes is fine for the weekend, but in the week when I have to rush during my lunch break I need the convenience. But then again there is no better neighborhood in Vilnius, where you can actually walk to a nice cafe, we have 6 different cafe chains here.

So for something that is important to use like a good cafe, we would walk further 20 minutes but a grocery shop 5 minutes. And it's a very Lithuanian thing to have a food supermarket very close, when we lived in Paris they were very far, especially if you want a big supermarket, while here it is simple. Here we have all the supermarket chains within a walk, here I have a lot of choice, I can go to the more expensive Rimi , or if I want something cheaper in Maxima, or IKI. I can switch things up depending on what I'm looking for. While in Paris if you want to do your groceries it's a bit further away and it will be an expensive place, you don't have a choice between different target audiences, so it's only very expensive grocery stores. I don't have the luxury of choosing, if I need anything, I will have to pay more, because I live in an up-market neighborhood.

I would go outside of the neighborhood for seeing people, good coffee and humana. There is a Humana nearby, but I like Humana vintage in the city center. We would go to visit parents for a further trip. Now of the times that we're seeing friends it's still in a restaurant in the city and not at their place

13. Justas: It depends on the context, we choose the closest if we only need a few grocery items. When we do our weekly shopping we usually try to go to Maxima because it's cheaper or sometimes you choose based on where there's a discount. Nina: I'm very partial for RIMI, I really like it because it entertains we much more, I love spending a lot of time looking at stuff I'm not even gonna buy. They have everything, it's fun, souvenirs, books. If I really have to rush, let's say if I have half an hour and I have a call, I would run to the Maxima because it's closer and faster, but for me I would never go to the Maxima unless I'm on a budget or I

know of a special discount, because RIMI is more fun, there's more things around it, other small shops inside the gallery, an organic shop so if I want something from there it's also convenient.

8. Supposedly we should believe in the 15-minute walkable city concept, but for me would I would say it depends on the day and the context and how much time I have. Now I prefer to walk home from work if the weather is nice, and if I don't have anything. So for me I guess anything up to an hour is okay, well anything that is not too much of a difference when you compare with public transport. Because with public transport, by the time you go to the bus stop, the journey is 30 minutes. If I walk all the way it's 45 minutes. So the difference is comparatively small, unless you're in a rush. Or if you're in a rush to take a car, Spark [electric car sharing service], you don't even take public transport. The walk to the bus stop from our house is 10 minutes, but then the ride itself is also 10 minutes so it's okay. And also 10 minutes and it's a bit muddy, then it's annoying, but it's not such a hassle. But then if the bus stop is literally out your door, you don't walk at all. I come to start to enjoy this little walk to the bus stop because you breath a little, you see your people, you rest your eyes from the screen, you move your legs,

15. Why do you choose to walk? Justas: First of all, it's better health wise to walk. Nina: we both also generally like to walk as people, no matter what. From my perspective it's not the most breath-taking view, the surroundings when you walk, but it's not bad. There is still a lot of space, the infrastructure is pretty new so there are no holes or bumps, which can be the case in older areas or in Paris. The sidewalks are very big and wide, compared to where I come from where it's very tiny and it's a struggle if there are two people crossing each other. There are nice things to stop for on the way, if you walk towards the city center, it's a fun perspective if ever I have time to waste I can go and look at stuff, or you can stop at the farmer's market they have fresh sweet juice , it's a nice spot. We like to go almost every weekend now.

We don't cycle. But for those that cycle or for e-scooters there's avery convienient cycle lane here.

14. We don't have a car. On a daily basis we really don't need a car, it's more for weekend trips or getting to other cities. Within the city there is Spark, CityBee [car sharing], we don't even use it that much, we walk a lot and take public transport to go to work. Because the neighborhood itself is very well situated, compared to where I grew up in the suburbs, where I know what bad access by public transport means, because there is not enough demand.

We prefer this urban living for now, but what we have to keep in mind is our needs. My parents [living in the suburbs] don't go to have a carrot cake every weekend, and if they do they go by car. Because once again the need to have a car because they live far away, they don't need to be going out and meeting people all the time, they just go for a walk, put on a barbecue and they are happy with that. I wouldn't want that, maybe in 20 years I will be like that. Nina: Also when you have children, you want them to have access to a green place, to play out in the garden. Our neighborhood is very family friendly, but if I have very young kids I would like for them to have a garden to play in with the dog. Justas: but what do we do when the children get older and start going out, and then they have to come back home at 10 to get the last bus, I'm not going to pick them up, so then do you move back to the city? [laughing] They need to have fun, to go out. Nina: yes but struggling with the public transport system is a formative experience [laughing].

17. Even conceptually, I don't think I would want everything in one place . I know that the walkable city concept is great but do I really want everything in one place? Because it really allows you to compartmentalize between your private life and your work life. I like going to the city but it's work or fun. And here it's quite, home, I can do my shopping, I can take my time, I can go out without makeup. I think it's nice that we have this distance , and if it's walkable it's nice.

I worked at the embassy before, and I lived upstairs, so my daily commute was 45 seconds between my bed and the office and I would not recommend it. It was very depressing and I would force myself to go out and just walk to a random shop, just walk 10 minutes breathe the fresh air. It's such an important thing for your mental health. So I think it's better that work is 10-15 minutes away at the very least. When I lived in the suburbs and it would take 1 hour to get to work, then it was too much. Now it's just the right amount.

## LT 9 interview

Karolis - man 38, with two children, likes to drive

1. 10 years

2. We rented in this area before and we felt it was a cozy neighborhood, with young families. There are plenty of schools and kindergartens here, the city center is a walkable distance. Closest to us is a private kindergarten, but we use a public kindergarten further away.

3. Our inner yard is turned into a parking lot, there is a children's playground but I don't feel it is a safe environment. I would prefer if it was gated for residents' use only.

4. My brother lives nearby.

5. It is convenient to have a grocery store next to our building, I don't even need to keep food in my fridge. It is nice to have many ground floor retail units in our building, but that generates car traffic in our inner yard, the shops should be located further away on the main streets . ( too close is not good ) Having commercial uses (mixed-uses) next to home means more daytime traffic and parked cars. What services do we need for daily use? Hairdressers, beauty salons, healthcare, massages, kindergartens, these should be within 0.5-1km away from the home, it doesn't have to be in the neighborhood . It should not be too close to where you live, because having a kindergarten in your building generates noise and traffic for residents and reduces your property value. We have a private school next door, but it is not the local residents that use it. It is very expensive, and it just generates traffic during the school run. I think the neighborhood should be residential only, and commercial uses can be outside it in the main streets. Having mixed-uses creates more problems than benefits.

7. Here I have grocery shops, household stores, you can walk to a big shopping center, some local gyms. Jogging paths by the river, and cycling lanes are close. And we use everything because it is close and convenient. You can reach most of the things on foot. My office is 20 minutes walk away, but it is not pleasant to walk through the nearby district where houses are heated by firewood, and there is pollution in the mornings.

10. We do not use some of the local services, such as the private schools or private healthcare clinics, because it is too expensive . There is a high-end home interior shopping center nearby, which is not relevant for me as a local service, because it is too expensive, it attracts customers from the whole city. It doesn't add value for me to have a hairdresser downstairs, because I don't use it. We started using the local dentist downstairs and now that they moved, we continue to use them and drive there, because we really like the service.

13. I don't always choose the closest amenity. The last couple of years I try not to waste my time on grocery shopping and order online. For the last two years I'm trying at all not to waste time, everything of Barboros to order, let it carry couriers, then I do not need to waste own time.

Up to 30 minutes walking is tox comfortable distance , 3-4 km slow tempo . (Everything is nearby and you can walk, but the actual behavior is that he drives everywhere.) Why would you choose to walk instead of driving? The need to stay active, it is healthier to walk. I would choose to drive when the weather is bad, it is cold, I need to pick up something heavy, or if I go together with my children, who don't walk so fast. I drive my children to school, on the way to the office. My wife walks them home. " It simply came to our notice then nice go , therefore when in winter kurenasi chimneys in the morning and in the summer very much a lot dust , main streets . Now that done bicycles trail , separated the street from pedestrian with greenery area . Pedestrians grab from running gear and more pleasant go ". Now with the new cycling lanes you can even cycle to work in 5 minutes . I use the bicycle for leisure only, but not for commuting to work .

11. Last week I drove to IKEA, I drove to my local gym. I tried to walk a few times but it is not so pleasant to walk through the main street due to the heavy traffic and breathing the pollution, so I drive instead, it takes

3 minutes by car. I drove to the office. But everything else is here locally. I use the car everyday . Yes it's possible to get by without a car, you can use public transport, but I save time by driving, I don't need to carry bags, it is simply more comfortable to drive . Especially with the short distances, it's easy to drive here. The machine is for comfort matter completely . Alternatively, it is very easy and cheap to take a taxi, maybe even cheaper than owning a car.

Driving: I drive further out to the forest, bigger parks. The closest park is not so good, an open field and if it is a dry day and windy, there are dust clouds. The area lacks greenery. We have a green space next to our building but it is just grass without trees, not very inviting, maybe just okay for dog walkers. We also like to go to the old town for a change of surrounding. I drive to the office, to the bigger shopping centers, also to visit family.

Walking: Because it is close I walk to the grocery store or the household store to pick something up. I walk with the children to visit my brother nearby. But now of the time I take the car and drive to the bigger park or forest for example. We like to spend our time in nature with the children, rather than going downtown. I find the city parks too crowded, so I prefer to drive out to nature. We sometimes go cycling here along the river path.

### LT 10 interview

Aistė - 28, medical young professional, lives with partner

1.8 years

2. The place was not cared for at first, it is important that the sleeping area is not very far away.

3. Compact everything close to what you need, shops, gym, communication is really very good, that young people live in houses of new construction. The forest is not very far away.

4. There were no family or friends here, friends just moved out afterwards.

5. We don't spend a lot of time here during the summer because everything is close and convenient, and in the summer more in the center. I don't shop anywhere other than here in the Outlet shopping center, to the local Beer Studio.

9. I use grocery stores every day, at the bar a couple of times a month. Public transport stops are very close to home, a 5-minute walk away. I continue to go to work and formerly to sports at the center, and now I go here to sports on Impulse. Cultural events in the center because there is no place here .

8. Me and the center close by on foot, in the summer I walk to the center about 30-40 minutes. If by bike 10-15 minutes. I would walk to the store in about 10 minutes.

10. I don't use a local hairdresser because I have my own elsewhere. But if it were a case, I would find it here as well. I use Antakalnis in the polyclinic, where I used to live and enjoyed walking there. And the clinic next door is private and too expensive,

13. Groceries are definitely the closest, and other services are not necessarily that close but in terms of service quality, as they are not routine.

14. I don't have a car, I can easily do it without a car, because public transport is good. Very lazy to drive, I get quieter on the bus. I take public transport to work. To the city center I cycle, because the cycling lanes are good, and it takes a quicker to cycle than the bus. It helps me to excercise, and especially in the summer cycling is more pleasant than taking the bus. I cycle to the park for recreational purposes.

17. Having local access to healthcare services and culture would be nice.

## LT 11 Interview

Mantas - man, 37, lives with wife, walking his dog

1.8 years

2. We were looking for newbuilds, and this was at the time the only attractive development. The whole infrastructure has been developed here, the center is very close to these main things. Now that the city of Ogmia is in order, we go there to eat in the summer, to have a drink.

I am very happy with the way this neighborhood is designed, compared to the current developments that are more dense. This neighborhood was built not to maximize profits, we have larger green spaces between buildings. It feels cozy here because it is compact, you see houses and green yards, the layout is friendly, away from the main traffic streets.

This quarter is built when people didn't pay to make money, so they were lucky. Now Hanner would have put in three more houses. This area is so compact when the house here looks so cozy. It is so friendly,

4. We didn't have a family nearby, we just liked the area.

5. We are getting spoiled here. Everything seems to be needed, it is. If you want to go for a walk, we are with the puppy when we walk right here on the river trail. In the summer evenings we go to the quay for a drink . 5 km is the limit where it is good to pass . Old people nearby. Previously my offices were here nearby, it can be walked in 5 minutes, now I have moved on in a 15 minute drive. The puppy hairdresser is next door, there are two food shops in use. The workout was here at the local Lemon Gyme. If you live here, you practically don't need a car. This neighborhood, I wouldn't even call it his bedroom, is still such a mix . Everywhere on the ground floors there are shops, services, offices, but it also causes inconvenience, someone constantly comes in, someone leaves . The North Way is nearby but we don't use it because there were no places. We signed up for Europe, and we did so without having to drive. Because here those distances are so short, to the center 7 minutes by car, 20 minutes on foot.

14. The car is needed before the office if I drive or if you go for a walk. But our neighbors have kids, so I ca n't really imagine if you have kids like without a car break. Those bastards of Šimašius are fainny but about nothing (the mayor's initiative to move without a car) does not go without a car. You will not ride scooters. And if you live a more active life then a machine is needed. It is good to park with us, because I know that when I always come back I will find a place to park the car within a radius of 200 meters.

I take the car if I need to go to the office, or we drive further out to take a walk in nature.

15. I choose to walk because I need to walk, I sit all the time working so I stand up I pick up the dog and travel. I don't think you need a car if you live in an area and you don't need to leave it, you don't need a car anyway, except when you need to drive somewhere further . If people are working who need to drive to the office, then so is the need for a car. There is a problem with bus stops here, although on the scale of Vilnius it is not as far away as it is, but the stops that are here for public transport. Well, that wife hasn't ridden public transportation . Now we're just getting where we're going, we've become more sedentary. You may pretend you really need a ride (jokes). But now I don't go to meetings live, I'm going remotely . Once a week I just go to the office to get out to people. But you can handle everything at a distance anyway, it's not the need to drive . That's why it's so crazy here.

I don't like cycling in the city, and I don't like cycling. For me, a bike is not a vehicle, but a leisure, a sport. Leisure on the streets no.

That's out of habit, I think so. It's a matter of awareness. I laugh to make the bezin even more expensive. I think of those riders, where are they all going? It's not here with all these riders, nowhere to go for you. You don't need that much to go to the Acropolis, you don't need to buy that much clothes or shoes a week to ride there. Barbora comes here herself if she really wants to, in the sense that there is such a showdown.

People choose to drive out of habit. If you think about it, so many trips are not necessary, you don't really need to drive to the mall to buy new clothes every week. The consumerist culture creates the desire to go shopping so often.

11. We were preparing for war, it was necessary to put the basement in order, all kinds of things. Then we went to help the Ukrainian war refugees, these are the things to do. Parents, father-in-law, live further away from Vilnius, we drive to visit it a couple of times a month. And we like to walk, there are such natural people, and there is nowhere to walk here, because everyone rides bicycles along the river, we go to Kernavė, to Nemenčinė, on the Neris trail at least three times a week. Cars are needed to go to nature. What is needed, what is going on. We live like our friends in the old town, if you want to have a drink there is a beer bar next door, you can have fun there, we go there. There are interesting places to invite friends out to eat in Ogmia.

We don't go to the malls absolutely, something bad has to happen to go there. We don't like to go shopping if there are two clothing stores nearby. - check this quote

10. There are a lot of dentists here, but we already choose such a service based on recommendations and quality of service, not because it is close to home .

13. We choose more important services, such as health or dentistry, on the recommendation of friends . We choose daily services according to what is closest, I choose grocery stores, puppy hairdresser, car service nearby, because it gives me the desired quality of service, so I transport the car there and I am very comfortable, if the quality does not suit, then I should drive somewhere further.

8. Walkable distance can be 5 km if I am going for a walk to excerise , but to the shop I would walk 10-15 minutes. If it's more than that, I would drive.

We like to live close to work and activities, especially when we were more outgoing because it is easy to reach the city. We like to travel, the airport is easy to reach by taxi. But as we get older we are planning to move close to nature.

This neighborhood could cater more for more diverse needs. There are children's playgrounds, but there could be more for other ages, such as outdoor gyms, or designated facilities for dog walkers, such as dog parks, dog waste bins. Otherwise there is everything you need, good local facilities for cars, such as e-charging, petrol stations, carwash services. Where to play sports is , food to buy is , beer to drink is . I have local gyms, groceries, bars.

16. Not much changed during the pandemic , maybe we started looking for nature even further, to get away from the city.

I would like to see more alternatives for leisure activities locally, because I don't like going to bars (because I don't drink for example). For outdoor sports I go outside the neighborhood. There is enough purchasing power in the neighborhood, there could be more varied leisure and entertainment options locally.

When you're not interested, you don't know what's around here.

### LT 12 interview

Justė - female, 28, creative young professional, lives with husband

1.4 years

2. We moved here by accident. We rented an apartment here, formerly lived by a sister, then a brother before moving. My husband and I are now living in a temporary apartment until we find a place to buy. But here we are considering shopping for the elderly, because it is convenient here, everything is nearby, and the town of Ogmia and the river, we walk to the old town, such a fun area. Convenient public transport, close to the stop

3. The biggest lack is a large park nearby, albeit right next to the river.

5. May not even leave the North Town , and high-quality medical facilities are, dentists. Here, like a cruise ship, you find something somewhere downstairs , even activities like painting. When you're looking for activities, check out the nearest one you'll find in the North Town. We wanted to play with clay with my friend, you will find it in the North Town. You will find everything all the time and you may not even leave your quarter , so it is a lot of fun . I was surprised that I can even find very niche things here locally. At one point I started engaging in Keto nutrition, and when I thought about where to find that Keto food right now, I found that there was a Keto store, looking for where and showing up here on the corner. My husband and I even laugh if someone opens this town in the North. When I walk with my dog I still notice new shops. I was once looking for specific bicycle helmets, I went around Vilnius or it was too expensive, and I went and found that helmet in the North Town right next to the house. It's fun to have everything nearby.

9. We use the dentist, and healthcare clinic locally.

10. Since we do not install a home, it is not relevant for that store.

11. What is very strange is that I work in the old town, and I still have to go to the North Town, because there are the nearest shops here. I work in a productive job where I need to look for where to find something cheaper, to look for something specific. We ride to work with scooters, it's fun to have bike paths comfortable downtown and to have a scooter area here.

13. For starters, I look at the next ones because they want it fast and right away. The hairdresser, I arranged my nails nearby, I do everything in the North town, it's very convenient. If it is close, I will choose a local service.

14. We don't have a car because we don't need to . 45 minutes to the old town by the river, very fast. I choose to go because this place is nice to go and find everything. In summer on foot, by scooter, by bicycle, and in winter by public transport, taxi or walking. It depends on the desire, but we also sometimes choose to take a walk.

We use bicycles for transport.

### LT 13 Interview

Jonas - man, 28 years old, lives with girlfriend. Walking his poodle dog.

1.3 years

2. We just looked for new construction to make the area safe enough because I was with my friend. Young families here, safe. Accessibility, good communication with the city. It's very convenient that you don't have to get out of here anywhere, everything is here. I go to the gym here across the street, I can also park my car here.

Convenient access to the car, I drive the car. I used to work at the center, so I had to go to work every day and come back to my parents, or weekly shopping if I needed to bring a lot because it was inconvenient to pull everything. But anyway, everything is walking, walking to the gym, if you need to go to the store for a short time.

8. 10-15 minutes is the optimal walking distance.

Very pleasant, quiet area for walking. Although there is a bar here, nothing is heard. I don't visit, I've only been to that bar 2 times. Now we work from home so we don't leave the city anymore. We continue to go to nature with the dog. Drive to the forest 15 minutes by car.

In our free time, we like to ride bikes as there are bike paths. I've been riding a bike to work in the summer, but it's not comfortable because it 's warm, impractical. It's better not as a vehicle but for leisure.

16. We use the car twice a week because we went to nature. We use the car a little now, but we used to drive to the center to work with the car.

10. We don't use the bar, everything here is according to my needs. My bank is here, Senukai, service, pharmacies, shops. I don't use the clinic, because it's only private here, so I went to Santariškės. I go to the dentist elsewhere because I needed a different service.

12. I choose according to the goods if I go further to Lidla to buy food because it is cheaper there. If I make something and need something specific that is not LIdle, then to the more expensive Rimi. Anyway, I choose everything according to availability. The bike was broken, I found it here near where to fix it. I choose based on feedback, recommendations if good enough and not far away then I go there.

14. I choose the machine if I need to continue driving or bring something heavy. But if I just go to the post office, I don't use a machine. I try to walk as much as possible because I work at the computer for 10 a.m. I have a dog to move me.

We don't use local restaurants, I make it at home. If we go out for dinner for a chance, we choose to change the environment in the center.

## LT 14 Interview

Arūnas, 56, man, lives with his wife

1.8 years

2. I liked two things, first of all a pretty quiet place here and a 30 minute walk to the center, next to the Ogmia service center, lots of outlets that are necessary for everyday life, also 15 minutes. Because living in the old town itself is unpleasant, because it is dusty and noisy, and here you live practically as in the old town (close enough), next to the river, such a very convenient location, very close to the center, if you go by bike in 5 minutes.

4. Friends recommended, told about the possibility to buy here. I appreciated the circumstances and rejoiced. I accidentally got fucked here, I didn't choose.

And I've lived all my life close to the old town, but I really wouldn't want to live in the old town itself. This is the optimal option here.

5. Virtually all the shops I need around here are, whether household or grocery, even restaurants. The restaurants here are even better than in the old town because they feel more competition from the old town and you feel more welcome in these restaurants.

Grocery stores are all here, Norfa is great but it's already 5 minutes by car. The hairdresser thinks here, the household goods store Senukai. Even if you need special goods, even clothes to buy here again. Even billiard is available. 90 percent of my life needs are met in this area. If I continued to live, I would have come to this area anyway. Even while living in another area, I came here to shop. And now it's convenient that I live here.

And nature, we walk for half an hour and you are in the forest of Silo, 15 minutes you are already by the Neris. And again, if I lived in another part of the city, I would still be going to this forest of Silo anyway. Wat and it gets that very comfortable that close. I miss only one thing, that there is a lack of a higher quality, higher artistic value of cultural life. But the old town is a half-hour walk away, or a 5-minute bike ride so.

There could really be more higher art here than theater, small concert halls. Spaces that are when the school closes in the evening could turn into a cultural space. There is a shortage of evening life here, even the restaurants fall silent in the evening, which really surprises me. These are untapped opportunities. In London, I liked it when the parking lot becomes a cultural space in the evening, because of this, Vilnius still has a great perspective. Developers scale that if there is no need, then they do not develop, but do not think that the

need in people needs to be stimulated, to create an opportunity. If you take the first step and create cluttered western even night spaces here, then there would be customers who want to take advantage of those cultural spaces. Need to go ahead with the customer's wishes, guess the needs for the future.

Life, mobility would bring people more desire to enjoy life, and the joy of life consists of quality of life. As I listened to on the radio, Jane Jacobs 's idea that when there's movement across the street, then it's safer than when you block it from movement, then the biggest robberies take place in affluent neighborhoods because there's no movement there. And when there is a movement, when you create it, then it is safer for a person to live, and more interesting for him to live. In the evening you go to the sleepy quarter, and if you attract cultural activities, visitors, more people and learn about the quarter.

Now there is a trend, the first floor of a residential house is used for service, shops, in itself a neat chaos business, shop owners already decide what activities to do there, but they already have the opportunity created by developers. There are shops on the ground floor everywhere you go in this quarter, so not very crowded, very niche but it is a place for fantasy, now yes, later different. The city of Ogmia if you have already thought that it is a city for life, activity, business, then you bring culture there.

Isn't that movement hindering the population? It is almost in the city center, no need to fantasize that there will be a completely quiet sleeping area. It wants to be unwilling here, there must be action here, and people who do not necessarily need night silence will live here. Retreats for anyone who wants to be on the move. And the closer you get to the center, the more you have to understand that you live in the city. And because of that parking, it's an empty parking lot in Ogmia in the evening, another life can start at 9-10 in the evening.

You already have to go further if you want to go to the theater. If you want a high level of culture. Even the main arena of the concert hall, where concerts and sports events take place, is a 15-minute walk away. I just need to drive to work from here by car, and it's 10km by car in 20 minutes. I practically don't even imagine what other activities I need, I get everything here.

8. 15 minutes walk to the maximum, meaning close.

On foot I go for a walk in nature . I also go to the store on foot because it is close. There is no need to start a car with which you pass 4 traffic lights and it will take 10 minutes or you will walk within 11 minutes. But just a bike these days is an alternative to a car, and walking away won't go away fast. And the bike went down even faster because you don't have to waste time parking like you would with a car. Bicycle as a green vehicle. And here is a very convenient place because of the plane. I don't use the bike as often as I could because I realize there is nowhere to park safely near the shops. If developers do not provide an opportunity, then one does not imagine that it can be and does not do, one must first create an opportunity. If it were comfortable for cycling, the person who tried it would no longer want to return to using the car for short distances.

Due to the movement on foot and by bicycle, there is a lack of lighted safe bicycle locking stations in this area. There is no place to lock your bike when you get to the shops, then it would be much easier. Then it could become a cycling town here. Everything is convenient for the car here, but it is not necessary to use that car here.

13. I doubt that if you keep driving you will find something especially cheaper because it will waste time and money to get there. And here in the center of Ogmia there is even an Outlet and a good clothing store for every household, and even to have a car repaired, I didn't change tires in this area. I practically don't need to drive anywhere (far away). Now when you ask me, I don't even know what to drive to the other part of town, carry it here like a mini-city. Town in the town. Even if you say kurnors in Vilnius, I don't even know such an area. After all, there used to be a large industrial area here , thanks to these planners who thought it was worthwhile for them to make such a town. After all, usually everyone builds only a house and does not measure the service, and here is such a miracle that even if I need to meet friends, they come to me and we go for a walk and the choice of restaurants and shops.

14. I need cars because I go to work. If I didn't need a car to do the work, I could live without it, because I could cycle to the city center in 5 minutes. But for work I need to drive, work is related to a car, I need to buy something, go to meetings, and get the car to be my friend. It's just a time saver. When a work issue needs to be resolved within 10 minutes and you can't carry the materials in your hands, it's public transport... (not suitable). But if there is an opportunity to ride the bus with pleasure, because then there is no need to survive due to parking problems in the city center. And here there is free parking and very easy access from several highways. It is convenient to have a car while living here, it does not complicate completely.

15. Every day I move more by car and walk for 20 percent of the activities. I choose a car

## LT15 Interview

Vilgailė, 27, lives with her boyfriend, works from home, stays local, cycles

1.2 years

2. we searched here because from here in the middle for me and a friend to go to work.

You can spoil it because everything you need is around . Except maybe the forest. There is everything here except enough nature. Although we started planting trees near our house when Vilnius municipality was doing a tree planting campaign, we initiated it here.

4. There were no family friends nearby. Friends later moved here nearby.

5 - 9. Locally: I spend more time here now because we recently bought a dog, I lead it, I talk to the locals more, there is more involvement. I like walking or cycling to the Impulse Pool . I am also looking for services closer (doctors, veterinarians, seniors, food). Clinic in Žirmūnai. If you are looking for a service such as massage, you are also looking closer to not have to sit in a bus on the bus after work. I was also looking for a dog training school to get closer and walkable, and to save time and it's more fun to travel on foot than to sit in traffic jams . Locally we use cafes. In Ogmia, I visit cafe restaurants more for food, not for shopping, although there are also specific things to buy as delicacies, and I use it there. There is a local cure open 24 hours a day, but you can go and pamper yourself anytime.

10. Now I think what I don't use, because when I don't use it I don't know much. Certainly not all cafes have been tested. Bars, the night out is not so relevant, we are not frequent visitors to the bars, and anyway when you can't sleep through that bar at night it is less sympathetic, we have only been to the beer studio a few times. There are sports activities, dance studios that I don't use because I'm finding something I like somewhere else. I prefer sails according to quality, style, coach. Not by proximity.

11. I ate lunch locally, bought pizza in Ogmia town, went to the veterinary clinic, went to Rimi, a friend repaired a car here nearby. And on the weekend we usually leave Vilnius at all. There is a great lack of nature here. If we drive closer in the evening after work (Antakalnis forest, Balžis lake), we choose this side of Vilnius to avoid traffic jams and save time. With a car. And the weekend continues

13. If we meet for two or with local friends, it is next to the town of Ogmia, Beer Studio. If you meet someone else who lives elsewhere, this is the center you choose. Depends on the service, if what I need is close then I choose closer. And if you are not close, I will often choose to order online.

8. It is up to 30 minutes walk by foot. I have a greater distance because when you are a young person and like to walk, you just like that there is a lot more nearby and I walk much more now than I get on the bus because the stops are not so close. I choose to walk because I like to walk and I don't like to drive a car, I often choose a bike if the weather is good.

14. A friend needs a car to work for 10 km, but rides with a friend who lives nearby shares a car. And anyway, we usually walk everywhere, the car only for him to work and us to other cities on weekends. I work from home and all other services are around. I order more online because I just don't like walking around the shops very much (laughs). Maybe I'm more on the bus, friend more on the car.

I use a bike as a means of transportation than I do for leisure. Go to the pool, to work, because you can ride a bike faster and healthier. There is no lack of infrastructure for bicycles, there is a place to park a bike at the store, unless there is some fear that it will be stolen but if you tie it up well. These days, everyone really values time.

17. There is a lack of nature and recreation areas just where you go to read a book. There are playgrounds, but it is not relevant for us because we do not have children.

## LT 16 Interview

Ingrida, 55, school teacher, drives

1.4 years

2. We used to live nearby, so there is some attachment to this area. It's very close to the center, but also very calm and peaceful here. Easily accessible by public transport, or we even walk to the city center. An opportunity came to buy a flat here and we decided immediately, because we knew we liked this location.

3. It's not very densely built up, it's quite a lot of space, and green spaces, easy to find where to park your car for free. But we don't have everything here, public healthcare services are further away, although there are private ones. There are some leisure activities such as cafes, bars, spa services, and shops mainly. I would go for a walk only to go to the shops, but there is no bigger park nearby. If I wanted to take a walk for leisure it would be a longer walk to the riverside, about 10 minutes away.

4. No family living nearby

5. I do my grocery shopping locally, all the homeware stores. I sometimes meet my friends at Ogmios, the local shopping center, because they like coming here, it is a nice destination even for people from further away.

8. 10 minutes for me is a walkable distance, but for bigger weekly grocery shopping I would take my car. Calm, peaceful residential roads, I can take a walk and at the same time do some errands. I had a dentist locally, but now they moved and we will not use it anymore because it is far.

13. I would say I choose amenities for the quality not for the closeness . I like that the amenities are close together, and I can do multiple things in one go, go to the pharmacy, while I do my grocery shopping, and stop by for a coffee. Before I didn't have a car so I walked more often. When we just moved, I walk to get to know the area better. So it is very doable by walking, but now it's more comfortable to drive especially if coming back with big bags and also it saves me time. So it is walkable and I can do many things in one go.

9. I go outside the neighborhood for work, and for the doctors because there is no public health service nearby . But everything else I can do locally. It is very well connected by public transport to other areas as well.