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Shared Spaces and Mobilities for sustainable cities from the lens of Social Practice Theory

The cases of Santiago and Oslo Metropolitan Regions

Master's thesis in Urban Ecological Planning

Supervisor: Dr. Tanu Priya Uteng

June 2023

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ABSTRACT

The discussion surrounding shared infrastructure has gained notoriety in recent years as the Sharing Economy phenomenon has entered the urban field, aided by Smart city solutions that enable this modern lifestyle. There is broad consensus that a more collective and inclusive approach is needed. Nonetheless, as cities become denser and more complex, sharing practices present opportunities and significant challenges, as negotiations can be ambiguous, and conflicts arise when diverse users share spaces or assets.

The central research question focuses on assessing the current integration of shared spaces and mobilities in significant urban areas and exploring how their study can support urban planners and decision-makers. The research analyses existing dynamics, challenges, and opportunities around them through the lens of Social Practice theory's elements of practice.

To address this, the methodology involves studying cases in two Metropolitan Areas: Oslo for the Global North and Santiago for the Global South. The object of study is mobility hubs, which serve as flexible structures that offer valuable insights into societal perspectives, needs, and preferences. The research's analytic methods comprise observational studies, literature and document review, stakeholder interviews and surveys. For a comprehensive examination, the discussion covers regional (macro), municipal (meso) and neighbourhood (micro) levels.

Overall, it is found that publicly accessible sharing practices in the study areas are scarce but on the rise. Also, diverse factors have not been considered in the urban planning field, revealing gaps between discourses and practices. The difficulties encountered in the Global North and Global South cases vary, with the first struggling to create regulatory frameworks and environments to promote such practices. At the same time, although they are greatly valued in the latter, local authorities identify other more significant priorities.

The findings imply that the engagement with sharing practices is greatly influenced by several contextual considerations like infrastructure provision and quality, digital literacy, and citizens' needs and preferences, among others. So, it is crucial for urban practitioners to understand these and their influence on promoting behavioural changes while protecting planning values, like inclusiveness and sustainable development. Furthermore, innovative frameworks are needed for governance to enhance social integration and avoid exclusion dynamics.

KEY CONCEPTS

Sharing Economy | Shared Spaces and Mobilities | Sharing Practices | Social Practice Theory
| Social Innovation

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LIST OF ACRONYMS

GORE: Regional Government of Santiago (Gobierno Regional de Santiago in Spanish)

LATAM: Latin America

OECD: Organization for Economic Cooperation and Development

SECTRA: Programme on Roads and Urban Transport (Secretaría de Transporte in Spanish)

SE: Sharing Economy

SI: Social Innovation

SPT: Social Practice Theory

TPB: Theory of Planned Behaviour

1. INTRODUCTION

Considering the sustained growth of the world's urban population, large cities are becoming even more complex environments than before. In many cities worldwide, this growth translates to higher residential densification and a greater concentration of urban services and facilities, enabling better levels of accessibility to citizens. In this sense, implementing and improving common or shared spaces in urban areas is more critical than ever, as people live closer than ever before. This underscores the importance of shared infrastructure, representing a way for communities to share their lives.

From a sustainability standpoint, the compact city model advocates for a denser urban development pattern and encourages the integration of mixed land uses. This approach minimises additional infrastructure requirements (such as transportation, services, sanitation, networks, etc.) by maximising the efficient use of existing resources. This model has implications for public and private life, as compactness implies that people will live closely with one another, opening the possibility for increased community life (Hillman, 2003). In this sense, experiences demonstrate that the negotiation between residents about how to use common areas can enrich a community's social life.

Moreover, public spaces constantly change as they evolve with people, their needs, and their preferences. In addition to the cultural and social factors that shape these spaces, this thesis asserts that the proliferation of diverse transportation modes adds another layer of complexity to intermodal areas, necessitating further investigation and analysis.

This exploratory thesis reflects upon the effect of sharing dynamics among strangers over the urban environment and how the urban planning discipline positions itself in a Global North and a Global South context. The underlying premise is that shared spaces and mobilities constitute a phenomenon that will continue to expand in the future and, thus, poses a significant challenge for urban planners in effectively managing the coexistence of diverse users, spaces, activities, and transportation modes. Therefore, through an empirical study in two capital cities, the thesis focuses on the implications of urban sharing practices over public spaces, especially around mobility hubs.

1.1. Thesis Research Area

This thesis is framed under the **broad research area of 'Shared Economies'**, a wide-ranging concept that describes an economic framework based on the collaborative consumption of goods and services. It stresses the importance of access over ownership of resources, gradually minimising private ownership ([Chan & Zhang, 2018](#)). Despite its economic origins, it offers exciting possibilities to the urban planning arena. It is said to promote individual and collective sustainable consumption practices (Botsman & Rogers, 2010; [Heinrichs, 2013](#); [Martin, 2016](#)), boost more environmentally friendly motorised and active modes of mobility ([Shaheen & Chan, 2016](#)), and create an opportunity to build and strengthen social capital ([Ferrari, 2016](#)) by promoting social interactions that in time can help establish trust among peers.

The **research topic is the study of 'Shared Spaces and Mobilities'**, understood as one concept involving a series of innovative shared urban dynamics ranging from private to public life. Most literature separates 'shared spaces' from 'shared mobilities', and though this thesis aims to understand such concepts within the same umbrella, their definitions are relevant to frame the discussion, as discussed ahead.

To frame the research topic, the thesis focuses on studying mobility hubs in large cities, as these are places where 'shared spaces' and 'shared mobilities' can be observed and analysed together. One of the thesis's premises is that the highly complex dynamics of users and modes of transport are being addressed as a problem of resources and spatial distribution and do not consider relevant physical, social, and environmental factors that positive sharing practices require.

This becomes relevant when considering that once the infrastructure is in place, physical spaces and social dynamics around them can be perpetuated for generations, establishing behavioural patterns that can be difficult (but not impossible) to change later. Given cities' current sustainability and social challenges, integrating more mobility alternatives and supporting the idea of commonplace in pluralistic societies seem like important attributes to prioritise. In this sense, the overall topic discussed in the thesis is the role shared spaces and mobilities play in the configuration of urban spaces in urban areas, where different modes of transport, users, and activities coexist.

Furthermore, this work aims to understand how 'urban sharedness' can be empirically characterised, identifying conflicts and negotiations. The thesis focuses on the physical and social qualities of public spaces around mobility hubs, as these are diverse urban areas where different modes and users are 'thrown together' and, in time, generate spaces of encounter and establish fluid urban dynamics. In addition, the thesis discusses how the learnings from empirical studies can be generalised to a certain degree so that recommendations that enhance positive values and harvest a sense of belonging through the lens of social innovation can be incorporated.

1.2. An urban shift from individual to collective perspectives?

In recent years, there has been a shift in urban policy towards building more compact cities instead of urban sprawls, driven by sustainability concerns. This transition has implications for people's interactions, as increased proximity can result in more encounters and potential conflicts among urban residents. This ongoing transition requires breaking routines and automatic choices deeply rooted in people's habits.

In large cities, people have witnessed significant changes in their mobility patterns, influenced by various factors. One key factor is the digitalisation of mobility services, which has played a crucial role in enabling new travel behaviours and transforming how people navigate cities. These evolving patterns allow the flexible combination of different transport modes, offering individuals greater freedom and customisation in their travel experiences ([Klinger, 2017](#)).

This transport system shift involves transitioning from a reliance on a single mode of transport to embracing intermodality. The aim is to reduce the appeal of car driving and make other modes of transport more attractive for specific commuting trips. This diversification of transportation modes has positive implications for urban dynamics and residents' quality of life, providing them with a broader range of options. Changes in the social and physical environment can influence these behavioural patterns, allowing users to adapt to new routines and embrace the benefits of multimodal travel ([Klinger, 2017](#)).

1.3. Significance of studying sharing practices in urban planning

Cities should be inclusive places that promote diversity, making it essential to move in that direction. In this sense, shared spaces and mobilities entail significant opportunities for improving livelihoods and the possibility to innovate. In the 1960s, Jane Jacobs recognised the significance of diversity in cities, considering it an inherent characteristic of large urban centres. She also emphasised how this diversity can transform cities into thriving innovation hubs where various ideas and enterprises coexist and interact. This perspective directly challenged the prevailing technocratic approach until the 1970s, which focused primarily on defining urban structures and often relied on transportation engineers and top-down planning agencies to create rigid and overly planned urban environments (Jacobs, 1992).

Over the past three decades, there has been a shift in urban planning towards promoting diversity at the street level, with a focus on sustainable mobility strategies and place-making initiatives. This shift has led to significant transformations in public spaces, aiming for safer, more inclusive, and more vibrant streets that are recognised as multi-functional spaces. Recent urban discussions, such as the 'Complete Streets policies', originating in the US and expanding globally, and the 'Shared Spaces tools', developed in the Netherlands and adopted throughout Europe, advocate for inclusiveness in cities. These approaches emphasise physical changes and promote inclusive decision-making processes involving users throughout all project stages, including planning, design, construction, and implementation ([LaPlante & McCann, 2008](#)). In addition, these perspectives favour vulnerable groups and place social justice on the top level of policy agendas ([Sagaris et al., 2020](#)).

However, it is essential to note that spaces of exclusion have materialised worldwide behind the discourse of inclusiveness and 'sharedness', as it occurred in European cities in the 1990s ([Kearns & Paddison, 2000](#)). This acknowledgement raises the importance of having a good understanding of urban and social contexts to formulate appropriate strategies that benefit people in the best possible way.

Thus, through an empirical study that examines motivations, challenges, and outcomes of sharing practices within dynamic urban environments like mobility hubs, the study seeks to shed light on the key factors that either foster or hinder such practices. This research approach intends to contribute to informing urban planning strategies and policies while aiming to create more inclusive, efficient, and sustainable cities that integrate the potential of shared spaces and mobilities to enhance livelihoods and community bonds.

1.4. Studying two diverse Metropolitan Areas: Santiago and Oslo

Integrating sharing practices in cities poses challenges in both Global North and Global South contexts, as diverse users and multiple transport modes can create complexities. By studying sharing practices in two distinct areas with different traditions, cultures, and values, this research explores how these practices are managed at the neighbourhood level, offering valuable insights for fostering successful sharing practices across global contexts. In Global South contexts, sharing practices often emerge spontaneously and may not always be intentionally cultivated or associated with positive attributes.

For my thesis, I have chosen to study the Metropolitan Areas of two capital cities known for their innovative approaches to urban planning and modern transport systems. These cities share a common goal of promoting intermodality to create more sustainable transportation plans which align with environmental sustainability goals. Additionally, focusing on Metropolitan Areas is justified by the significant cultural and economic development that characterises large cities, offering fertile environments for the growth of Sharing Economy solutions ([Kowalska & Wolniak, 2022](#)). Therefore, Oslo has been selected for the Global North, while Santiago will be examined for the Global South.

Norway and Chile rank high on the democracy index, compiled by the Economist Intelligence Unit, with Norway as a full democracy (9,75) and Chile as a flawed one (7,82)¹. These high levels of democracy allow for exploring governance structures and decision-making processes.

1.5. Thesis Proposal Outline

The first part outlines the research topic of the thesis and presents the background for the topic discussed. It also introduces some relevant concepts to be discussed later in the different parts of this work.

The second part comprises a literature review comprising the important concepts cross-cutting topics to the thesis. The main ideas revolve around the Sharing Economy and its implications at the urban scale, as well as Smart City solutions and social innovation.

The third part presents the primary and secondary research questions that inform the selection of the methods and guides this academic work. This section also includes the objectives of this research.

The fourth part of the thesis discusses the methodological framework designed for the research, explaining the approach, components, and strategy for data collection and analysis.

¹ This is one of the highest in the Latin American and Caribbean region, preceded only by Uruguay (8,85) and Costa Rica (8,07). It is important to note that the maximum score is 10.

The fifth part presents the thesis's conceptual framing for analysing the central topic, which is later utilised to assess the research findings. The central theory selected is Social Practice Theory.

The sixth part presents the systematised data gathered during the fieldwork in both Metropolitan Areas, according to three territorial scales. Before delving into the cases, the section introduces essential contextual information, like the structure of urban planning systems and a discussion of some interesting sharing practices for each.

The seventh part comprises a discussion of the main findings extracted from the data results and analysis section through the lens of the theory selected, integrating part of the discussion framed in the literature review. The practical implications of these findings are addressed in the policy implications that conclude this section,

Finally, the eighth part presents the research's concluding ideas and goes back to the research questions to answer these directly. It also includes a reflection on the thesis's limitations and points out considerations for future research.

2. LITERATURE REVIEW

This section introduces and explores two main strands that frame the discussions in the thesis. The first strand revolves around the notion of sharing, examining contemporary debates and reflections. The second strand focuses on the development of innovative Smart City solutions, discussing the opportunities and challenges of promoting shared and liveable spaces.

2.1. Conceptualisations around the notion of Sharing

This literature section begins by characterising the Sharing Economy and its implications for urban environments. It then examines the connection between sharing practices and sustainability, highlighting their role in promoting environmentally and socially sustainable livelihoods. The discussion further explores the relationship between the Sharing Economy and urban planning, focusing on urban design, policies, and governance as key elements. Lastly, the section introduces the central topic of the thesis, which combines two previously studied concepts, providing reasons for their integration.

2.1.1. Sharing Economy: concepts, practices, and debates in urban contexts

The world is undergoing rapid changes driven by technological advancements, digitalisation, climate action, social media, and the recent COVID-19 pandemic. These transformative forces have significantly altered the urban agenda, and the introduction of AI is expected to bring further changes. Within this dynamic landscape, the Sharing Economy (SE) concept has gained considerable momentum over the past decade, influenced by a combination of these factors. While originating from the economic domain, the SE has transcended its boundaries and influenced various aspects of societies, including social interactions, resource utilisation, community dynamics, legal frameworks, and urban planning. This section explores the concept of the SE in urban contexts, emphasising its potential societal benefits while acknowledging the challenges and concerns arising from its implementation. It also delves into contemporary debates surrounding the SE, providing insights into its evolving nature.

Collaborative lifestyles have been present in societies for centuries, but the conceptualisation of a collaborative economic framework gained significant attention during the Global Financial Crisis in 2008 as a means to revive economic growth ([Henry et al., 2021](#)). This emergence was driven by the recognition of population growth and the limitations of resources, prompting economists to view it as a departure from hyper-consumerism (Botsman & Rogers, 2010; [Heinrichs, 2013](#)). The SE aligns with circular economy principles emphasising the efficient use of privately owned assets through innovative sharing practices. This underscores its potential to foster more environmentally responsible consumption practices.

The widespread access to digital technologies and tools has fuelled the rapid growth of the SE in the 21st century. Estimations speculate that about 90% of the world population now has access to smartphones ([Radicati, 2021](#)), providing them access to various apps

dedicated to shared services and goods. This global phenomenon is still in its early stages of development ([Cohen & Muñoz, 2016](#)), with continuous advancements in technologies such as Artificial Intelligence expected to enhance SE practices further. These technologies can facilitate supply-demand matching, dynamic pricing, and improved security systems within the SE.

The concept of the Sharing Economy has sparked extensive discussions across various fields in recent decades, leading to the emergence of different names and definitions, such as Collaborative Economy, Gig Economy, Collaborative Consumption², and Peer Economy³. Yet, it is important to note that there is no universally agreed-upon definition of the SE. This lack of consensus can be attributed to the evolving nature of SE practices and their significant impact across diverse disciplines and industries.

The SE encompasses a wide range of sharing practices that enable access to goods and services without ownership. While platforms like Airbnb and Uber often dominate discussions, numerous other SE practices include community gardens, collaborative libraries, ride-share services, co-housing projects, and co-working spaces. These practices encourage collaboration among communities and can be a valuable societal contribution to tackling the sense of isolation experienced by many ([Cherry & Pidgeon, 2018](#)). Moreover, it is a worldwide movement promoting collaborative consumption with a powerful snowball effect (Botsman & Rogers, 2010). This effect can be observed in modern sharing practices facilitated by online platforms such as 'Finn' in Norway and 'Mercado Libre' in Latin America (LATAM), which enable peer-to-peer exchanges.

The actors involved in the SE can be classified into six main categories ([World Economic Forum, 2017](#)) (Fig. 1). (1) **Individual users** actively participate in sharing practices through platforms and services, engaging in peer-to-peer (P2P) or business-to-peer (B2P) transactions, both for-profit and non-profit. (2) **Social enterprises and cooperatives** offer sharing services with a focus on social or environmental sustainability over profit-making (3) **Non-profit enterprises** prioritise specific social or community goals; unlike the previous category, they do not have business models. (4) **For-profit enterprises** provide services to individuals, leveraging technology and digital tools to keep transaction costs low and generate profits through advertising and service fees. (5) **Local Communities** engage in informal sharing models at the neighbourhood level, often without relying on technology and emphasising interpersonal connections and social or ecological goals. (6) **Government/Public sector** can promote innovative sharing practices through partnerships using public infrastructure and resources.

² For the context of this thesis, it is important to note that in Latin America, the term used to discuss the Sharing Economy is Collaborative Economy ('Economía Colaborativa', in Spanish)

³ Botsman (2013) explains that though these concepts overlap and have similarities with the Shared Economy concept they should not be used interchangeably (though they are in much of the literature available)



Figure 1. The actors of the Sharing Economy, with examples platforms in Chile and Norway | Source: Prepared by the author, based on an adaptation by World Urban Forum (2017).

While the SE has been praised for its potential to address social, economic, and environmental sustainability (Botsman & Rogers, 2010), it is not without criticism. Some argue that the SE can perpetuate consumerism and reinforce neoliberal capitalism (Slee, 2015; [Martin, 2016](#)). Critics also highlight the lack of empirical evidence demonstrating its contribution to environmental sustainability and fair economies ([Schor, 2016](#)). Additionally, concerns have been raised about how the profit-oriented nature of the SE can undermine genuine traditional sharing practices within local communities ([Cherry & Pidgeon, 2018](#)), among other reasons.

Tom Slee dedicates an entire book to criticising the concept of the SE titled *“What’s Yours is Mine: Against the Sharing Economy”* in response to Botsman & Rogers’s *“What’s Mine is Yours: The Rise of Collaborative Consumption”*. His criticism revolves around the notion that many contemporary SE practices are unregulated forms of the free market that are now permeating new (and more private) areas of our lives. He claims that the new forms of SE contribute to exploitative forms of employment, perpetuate the privileges of high-income groups, and favour profit-driven large companies (Slee, 2015). This critique is particularly applicable to prominent SE platforms like Airbnb, Uber, and many food-delivery platforms.

Moreover, Schor (2016) argues that people's motivations for participating in SE practices vary significantly. Some individuals may be motivated by the desire to try new and trendy

platforms, while others may engage out of financial necessity. This raises an interesting aspect of sharing practices for this research, where individuals may engage in sharing practices for different reasons. Schor also cautions that the SE discourse risks alienating individuals who engage in offline or ‘analogue’ sharing practices, as it can create a misleading narrative that assumes SE solutions are universally embraced and applicable to all.

To summarise, the SE has faced criticism for lacking a social standpoint in practical settings by reproducing some of the existing societal inequalities and threatening to undermine traditional sharing practices common in working-class, poor and minority groups. These critiques emerge from empirical experiences with SE solutions in diverse fields. However, many positive experiences around the SE emphasise its potential to contribute to environmental sustainability and strengthen social bonds in societies. While the SE remains a contested concept, there is a shared recognition that it is an evolving and dynamic phenomenon that has experienced significant growth and is expected to continue expanding. Adopting a critical perspective to the study of the SE enables a deeper understanding of both the positive, negative, and potential aspects of it while emphasising the importance of not overlooking or oversimplifying this phenomenon.

2.1.2. The potential of sharing practices for sustainable urban environments

Urban researchers have sought to establish a framework for understanding the sharing economy in cities, given the absence of a universally accepted definition. In their investigation, **a group of researchers defines the Sharing Economy as:**

“a consumption-production mode in a city, in which value is generated through transactions between actors (both organisations and individuals) involving temporary access to idling or underutilised rivalrous⁴ physical assets” (Voytenko, Mont & Sulkakoski, 2021, p. 1).

This definition underscores the value generated by sharing practices, encompassing economic, societal, and environmental benefits. This section explores the implications of sharing practices in urban contexts, focusing on their environmental and social dimensions. By examining the impacts of these practices through a global sustainability lens, we can understand how the SE influences urban environments and contributes to broader sustainability objectives.

Firstly, concerning **economic sustainability**, the SE has significant financial contributions to individuals, and public and private institutions, as discussed extensively in economics

⁴ The word rivalrous is used in this context to assert the idea that a shared good utilised by one individual, prevents the simultaneous use by another individual.

literature. In addition to the possibility of creating profitable business models, SE can improve people's life quality and lead to cost savings in healthcare, particularly in countries with robust welfare systems like those in Europe. For instance, the SE also plays a role in improving public transport services and mobility conditions in urban areas, particularly in state-subsidised systems.

Second, considering climate change and the challenges to **environmental sustainability** present in the modern world, consumers are realising that sustainable growth and high levels of consumerism are not compatible. In this context, the SE can contribute to promoting sustainable consumption habits by assertively encouraging citizens to redistribute assets. The concept of **'Redistribution' is considered a new addition to the existing "R's" of waste management**, including refuse, reduce, reuse, repurpose, recycle, and repair. In this sense, SE practices offer valuable contributions to environmental sustainability by presenting an alternative perspective to the traditional model of private ownership. By embracing a 'usage mindset', sharing practices emphasise the functionality of products or services without the need for individual ownership, which can lead to less consumerist behaviours. Interestingly, Botsman & Rogers note that these practices can unintentionally promote sustainability, even if being greener is not a priority to the user (2010, p. 73). This aspect makes the concept of the SE highly attractive when working towards sustainable development agendas.

In the Norwegian planning context, promoting sharing practices aligns with the Zero Growth Goal set by the government as a policy framework for land use and transport planning. This approach seeks to counteract the massive use of private cars by enabling a further increase in passenger transport to be absorbed by climate-friendly modes, including public transport, cycling, and walking.

In the Chilean scenario, the implementation of mobility-sharing practices at the urban level can be linked to objectives outlined in the country's Long-term Climate Strategy, which aims to achieve carbon neutrality and enhance climate resilience by 2050. Specifically, these practices contribute to two objectives under the 'City sector' contributions, namely the development of compact or polycentric cities and the prioritisation of sustainable modes of transportation. Additionally, the recognition of diverse users is emphasised, leading to more inclusively planned cities.

Third, regarding **social sustainability**, Botsman & Rogers make a powerful critique in their book: "We ended up believing that we were better off relying on corporations rather than cooperating with each other" (2010, p. 42). In this sense, a rightful way of shared economies could help regain that social capital lost in many modern societies, where collective values have been overshadowed. Through sharing practices, individuals can form bonds with like-minded people, fostering localised interactions ([Davidson & Infranca, 2016](#)). This aspect is particularly significant in Scandinavian, where sharing practices can tackle social isolation and loneliness. In contrast, in LATAM, sharing practices often emerge organically within neighbourhood social structures and close-knit communities. However, these practices are

typically confined to ‘closed neighbourhoods’⁵ that divide cities into units, somewhat disconnected from one another (Borsdof, 2014). Furthermore, researchers in LATAM suggest that the SE can contribute to reducing informality in the employment sector, which represents approximately half of the market share ([Buenadicha et al., 2017](#)). This can be achieved through a combination of digital solutions offered by collaborative platforms and regulations that secure rights and safety of participants. Therefore, institutionalising and scaling up such practices to the metropolitan level becomes relevant as it expands their social and economic capital.

To finalise, it is fundamental to note that urban policies and governance standpoints play a vital role in determining the sustainability of SE practices in urban contexts. Clear boundaries and regulations are essential, as a lack of them can amplify capitalist dynamics that exclude important population segments from the many benefits that the SE can bring to society. Therefore, it is necessary to establish appropriate guidelines and frameworks to ensure that the SE operates in a sustainable and inclusive manner.

2.1.3. Implications of the Sharing Economy over the urban planning field

So, while the SE is rooted in economics, its influence extends beyond this realm, also permeating social sciences debates. This is the case in the urban planning field, where the SE gained more space in discussions, notably since the mid-2010s when the concept gained prominence. Research findings revealed that the integration of SE principles into urban plans and policies exhibits significant geographic disparities. This divergence is closely tied to the role of technology, a vital foundation of the SE, which is more widely embraced in Global North regions with greater digital access. Empirical data supports this observation, showing variations in digital competitiveness between regions. For instance, Scandinavian countries, known for their high digital competitiveness, score well in SE evaluations, while values are lower in LATAM.

A study conducted by the World Bank Ease 2019 evaluated the performance of 42 countries, including the variable of the SE ([The Fletcher School, n.d. in Chakravorti, & Chaturvedi 2019](#)). Results ranked Norway 4th with a high average score of 3.32, placing the SE factor within the top 20% of the evaluated countries. On the other hand, Chile was the highest-scoring country in LATAM, ranking 27th with a score of 2.66 and scoring within the lower 10% for the SE. Other LATAM countries like Brazil and Mexico achieved slightly higher scores on SE, reaching middle levels. Generally lower values in LATAM can be attributed to limited access to mobile technologies and internet connections and higher levels of societal distrust ([Quintero, 2018](#)).

⁵ In LATAM, the urban and socio-geographic structure of most cities can be characterised as fragmented and polarised, dividing the urban rich from the poor. ‘Closed neighbourhoods’ have become more popular over time, creating secluded urban areas, where fences seem to offer a quieter life, and therefore a higher quality of life; and though it may seem like a high-income trend, it is a cross-cutting phenomenon in societies.

These discrepancies emphasise the need for increased attention to the implications of the SE in urban planning studies, recognising significant contextual differences between Global North and South cases. Additionally, as established in previous sections, the impacts of the SE go beyond economic considerations and delve into the realm of physical environments. Thus, the following paragraphs will introduce important notions around three critical aspects of urban planning: urban design, urban policies, and governance.

2.1.3.1. Urban design

Infrastructures and urban design play key roles in facilitating sharing practices in cities. Through the provision of community spaces, flexible-use buildings and public infrastructure that supports sharing practices, practitioners can strengthen the integration of the sharing culture in cities. Moreover, some of the ideas behind the SE can be linked to the creation of human-centred and sustainable urban environments, which are often experienced in open community spaces, emphasising the role of urban design in the discussion of integrating sharing practices in lively areas.

In this sense, the work of Jan Gehl is undoubtedly one of the most influential in the urban planning and architectural fields. He advocates for giving cities back, what he calls ‘the human scale’, which is essentially “the city at the eye level”, “the city for 5km/hour” (Gehl, 2015). This standpoint is essential for this research, as Gehl recognises physical and social considerations fundamental for creating good livelihoods, focusing primarily on the micro-scale. He critiques the role of urban practitioners in the last decades by neglecting this human scale, by saying: **“While architects and urban planners have been dealing with space, the other side of the coin – life – has often been forgotten”** (Gehl & Svarre, 2013, p.2). This quote reveals a significant gap in the planning field which can be linked to the discussion framed in this section about how the SE, a phenomenon with strong social implications, has often been neglected in its urban form.

A guide on the human scale in public spaces, jointly created by the Ministry of Housing of Chile, the United Nations Development Programme (UNDP) and the Gehl Foundation, provides valuable recommendations for analysing and designing public spaces in a very comprehensive manner.

“The city we want is a place tailor-made for its inhabitants. A place that can respond to the needs and desires of its residents, granting rights and opportunities” (MINVU et al., 2017, p. 24).

It identifies five key action areas to improve the human experience in public spaces considering the contextual features of Chilean cities, including heritage preservation, sustainable mobility, equity and diversity, urban design at the human scale, and economic and cultural promotion. Overall, it is suggested that successful public spaces are those that integrate four important aspects of people’s lives and their intersections, encompassing culture, recreation/leisure, economy, and civic engagement (Fig. 2).

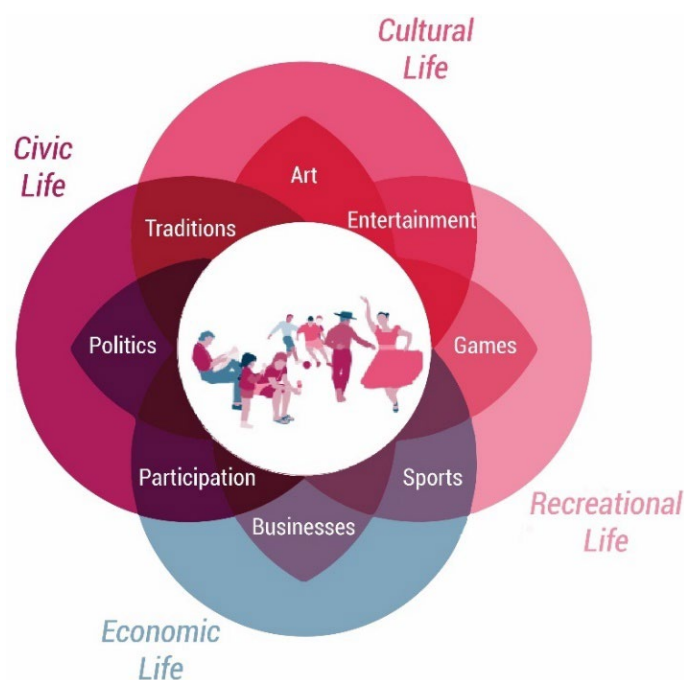


Figure 2. Dimensions integrated in successful public spaces | Source: MINVU et al. (2017), translated by the author.

In the context of integrating sharing practices in urban spaces, this guide serves as a valuable resource, as it promotes a holistic approach to urban design, considering the needs and desires of the community. It provides valuable insights into addressing urban design and social challenges, including balancing individual and collective needs, managing conflicting interests, overcoming cultural barriers, supporting shared resources, and addressing safety and regulatory issues. Overall, by considering the principles of sharing and collaboration, the human scale view can help create public spaces that foster social interaction, inclusivity, and sustainable practices.

2.1.3.2. Urban policies

The implementation of urban policies regarding the sharing economy is increasingly important in today's cities. As Davidson and Infranca (2016) suggest, **the SE is inherently tied to specific locations, with denser areas harbouring a greater abundance of assets and potential users.** Understanding this place-based nature of the SE is crucial in shaping effective urban policies that embrace the potential of sharing practices and create positive impacts on public spaces.

In this sense, many local authorities have embraced the potential of the SE and have integrated its principles into urban planning policies and practices to different extents. Examples can be found in both Global South and North contexts. In their book titled "A Modern Guide to the Urban Sharing Economy", Sigler and Corcoran (2021) reflect upon how this phenomenon has been incorporated into urban plans in different cities, and explore various experiences with urban sharing. The examples presented in this book demonstrate the diversity in which cities have embraced the SE and integrated it into their planning strategies in some cases. For instance, Cohen & Shaheen (2021) discuss the policy

implications of micro-mobility in US cities, such as bike-sharing and scooter/moped-sharing. They suggest that policies should address the incorporation of dedicated curb spaces for micro-mobility due to the congestion of urban curbs. These policies typically include aspects like policy processes, device caps, service area limitations, designated parking areas, fees, equipment and operational requirements, and enforcement (Cohen & Shaheen, 2021, p. 171, 172).

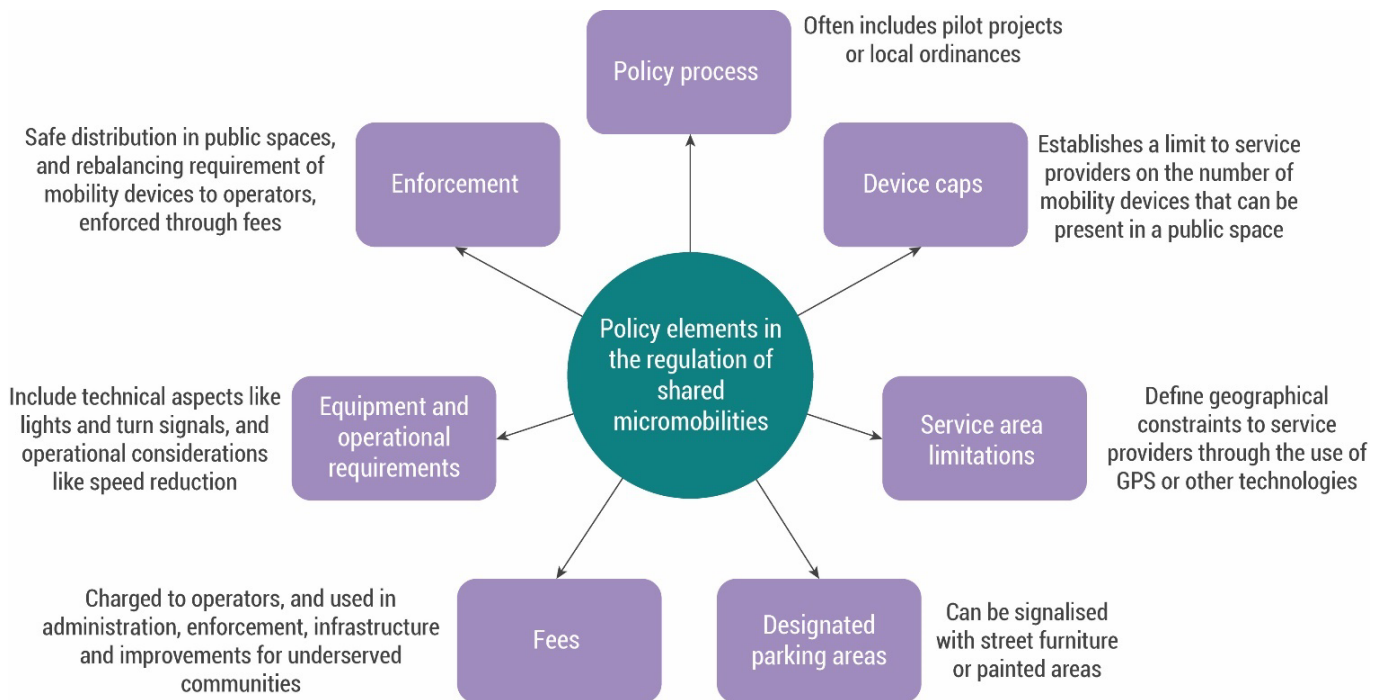


Figure 3. Elements of urban policy to regulate micro-mobility | Source: By the author, based on Cohen & Shaheen, 2021)

They illustrate these policy elements with the case of Seattle, where the approach to secure curb space for diverse users comprised a sidewalk zoning strategy with three distinct zones (Fig. 4). Next to the property line is a frontage zone, which accommodates adjacent building uses and spaces, like sidewalks cafes, store entrances, landscaping, and other features that enhance the pedestrian environment. Then comes a clear pedestrian zone, which is a sidewalk corridor for pedestrian movement that should remain free of any obstacles. Lastly comes a landscape/furniture zone which acts as a buffer between the road curb and the clear pedestrian zone, that can accommodate urban furniture (like bike parking areas), trees, vegetation, signs, and other elements that are important to promote safe and lively active mobilities.

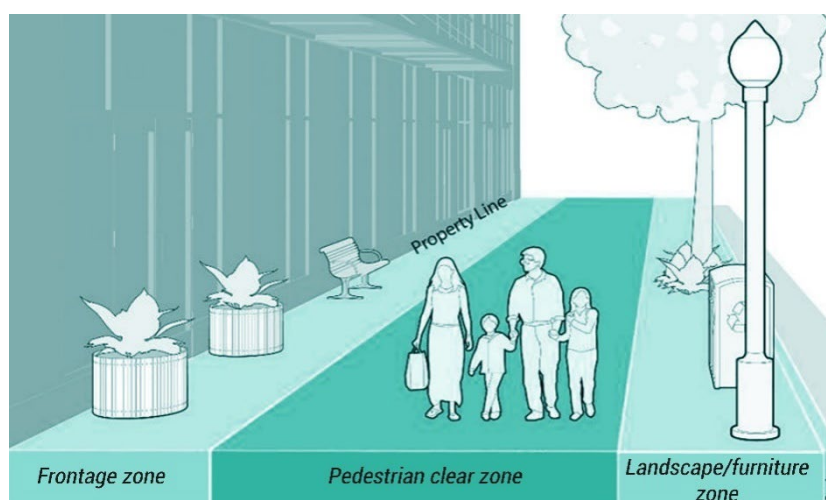


Figure 4. Seattle's sidewalk zones | Source: City of Seattle, 2017 (in Cohen & Shaheen, 2021)

On the other hand, in Brazil, a country where the SE has been thriving in the last 15 years, scholars and mobility service providers agree that in terms of policies, they are still a long way from suitable regulatory frameworks (Movmi, 2022). The main challenges identified around policymaking are balancing the needs of public and private mobility in cities, considering the impacts of this on existing infrastructure, and more inclusive and democratic decision-making mechanisms that include all societal groups. While certain measures have been taken, such as the implementation of a distance-travelled fee for SE transportation companies in Sao Paulo to support road maintenance, additional elements are required at the urban policy level to complement this fee.

To conclude, **it is crucial to emphasise the importance of collaboration and partnerships in successfully integrating the SE into cities.** These partnerships should involve various stakeholders, including urban planners, SE platforms, local communities, and others. A notable example is the partnership established in Amsterdam with the private bike-sharing service provider, *Deelfiets*. This collaboration enabled residents to easily access bike-sharing services across different areas of the city while the city provided the necessary space and infrastructure for parking. Moreover, they actively incorporate user feedback and engage in discussions to address challenges and improve their system. Such collaborations demonstrate the significance of involving multiple actors and working together to create sustainable and user-friendly sharing practices within urban environments.

2.1.3.3. Governance

Regarding the decision-making processes behind the implementation of these urban policies, there are different positions on how these should be carried out. Though national policies and guidelines are important to establish objectives and goals, McLaren and Agyeman recognise that sharing practices can spread regardless of the intervention of the State and can be fundamentally strengthened by local governments and communities themselves (Berg, 2017).

For instance, the city of London has tried a bottom-up approach to formulating urban policies to regulate the effects of the SE over the city through the implementation of an open platform⁶ where citizens can help to design such policies. This approach emphasises the importance of integrating users, businesses, researchers, investors, and others in the discussion (Zvolska et al., 2019). It is important to note that though the discussion on promoting sharing practices in cities is associated with notions of inclusion and participation (bottom-up), this does not ensure that the regulatory process will follow such principles.

A study on governance climate in European cities (Zvolska et al., 2019) identified four distinct municipal governance models for governing urban sharing based on the work of Kern & Alber (2009). These models are governing by authority, governing by provision, governing through enabling, and self-governing. A summary of these models is presented in the following table:

Governing modes	Decision-Making	Municipal Actions	Collaboration and Engagement	Challenges
Governing by authority	Top-down approach with a formal authority at the head	Authorities establish the rules through laws and policies	Limited. These remain as optional to decision-makers	Citizen resistance to authority and associated conflicts
Governing by provision	The municipality is one of many shareholders	Delivers infrastructure and financial policies	Partnership-oriented, focused on infrastructure development	Limited role of the municipality in an internationalised and liberalised market
Governing through enabling	Inclusive approach that makes decisions together with citizens and partners	Facilitates cooperation between public and private stakeholders to ensure provision of services and infrastructure	Strong. Municipality acts as a facilitator and mediator	Depends on cooperation and trust-building challenges. Potential lack of authority and limited resources.
Self-governing	Often called 'network governance'. The municipality acts as a facilitator	Governing its own activities and setting examples for others to follow	Fundamental. Partnerships and cooperative work are crucial to achieve objectives	Limited scope, resource-constrained, policy barriers; difficult to replicate, and limited influence on external factors

Table 1. Summary of governance model main characteristics | Source: Prepared by the author, based on Zvolska et al., 2019 & Kern & Alber, 2009

⁶ This is the Talk London website, managed by London's City Hall.

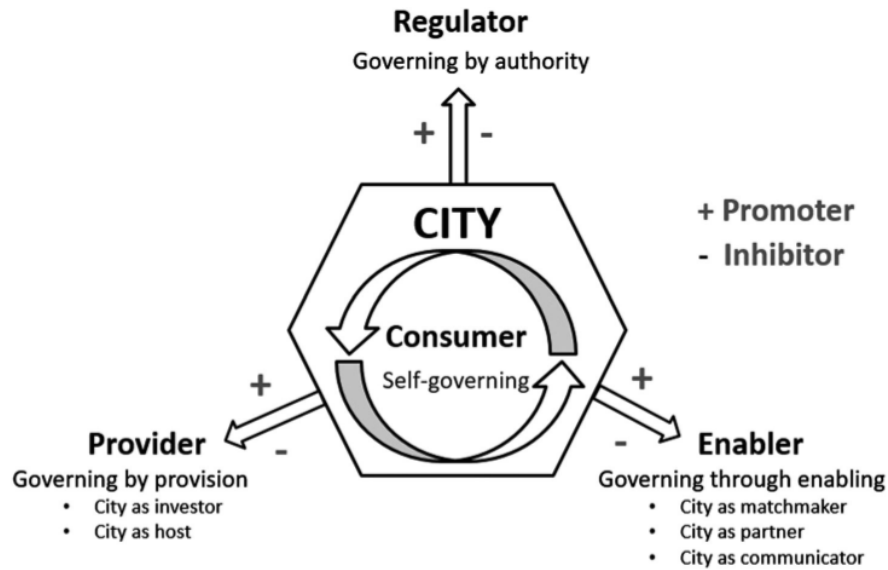


Figure 5. Roles and modes of municipal governance | Source: Zvolška et al., 2019

By discussing these four governing models in relation to the promotion of sharing practices in public spaces, we highlight the presence of various governance approaches. Examining these models helps assess their effectiveness, challenges, and potential in facilitating and regulating the SE in cities. This analysis can provide policymakers and stakeholders with insights into options for promoting sharing practices in urban environments.

In conclusion, it is crucial for practitioners and decision-makers in the planning field to possess a thorough understanding of the implications of the SE to effectively integrate its principles into urban development projects and policies. While the discourse around SE practices may appear inclusive, challenges that can lead to exclusion ought to be addressed. Therefore, adopting a human-centred approach is essential when discussing urban solutions based on SE principles, as the concept can be perceived as asocial and falsely inclusive. This stresses the significance of governance models in developing policies and legal frameworks for the SE in cities. Thoughtful governance can ensure that these solutions align with inclusion and sustainability goals.

Furthermore, the examination of existing literature highlights a gap in how sharing practices are currently addressed within the field of urban planning. This underscores the necessity for a more comprehensive and integrated approach to address this issue.

Despite the challenges involved, the SE remains valuable for planners, offering opportunities to strengthen social justice in urban plans. By strengthening the social justice agenda in urban plans through principles of access, equity, participation, and human rights, desired outcomes can be achieved. Overall, to achieve positive outcomes, it is essential for the urban planning field and decision-makers to fully comprehend the possibilities and limitations of this approach. This will enable them to make well-informed decisions while maintaining a critical perspective on the potential of the SE.

2.1.4. What is meant by shared spaces and mobilities?

As sharing practices have integrated into urban environments, it is possible to find different typologies, like space sharing, mobility sharing and sharing of physical goods (Mont et al., 2022). While all of these practices involve physical spaces, this thesis specifically focuses on studying those that occur in publicly used areas within cities, with a particular emphasis on mobilities and spaces/facilities. There is considerable literature that analyses 'shared spaces' and 'shared mobilities' as two distinct and separate sharing practices. However, this research proposes unifying them into one concept, that of 'shared spaces and mobilities'. Before delving into the meaning of this unified concept, it is important to briefly discuss the underlying conceptions of each individual concept.

Firstly, the concept of **shared space** constitutes a planning tool to adapt streets to the human scale by eliminating physical barriers and signage, turning them into ambiguous spaces where all modes of travel (pedestrians, vehicles, etc.) meet and where 'chaos equals cooperation' (Speck, 2012). Nonetheless, the term 'shared space' can also be used to designate areas where people essentially share something. From the researcher's perspective, they can be characterised as both open and closed spaces where human interactions occur and activities take place. The actions taking place in these spaces will be defined by the needs, interests, traditions, and culture of the communities around them. In this sense, shared spaces can be acknowledged as vital hubs of social interaction for people.

In their research, Chan & Zhang (2018) emphasise the significance of shared spaces as potential generators of social capital within urban communities. Their study identifies three types of shared spaces in cities: urban sharing, shared social spaces, and sharing living spaces⁷. These categories shed light on the often-neglected spatial dimensions of sharing in discussions of the SE and can be applied to different urban scales, facilitating a comprehensive exploration of sharing practices.

Secondly, the concept of **shared mobilities** is a little more recent than that of 'shared spaces', and it represents an innovative shift in the way people move in cities. From the researcher's perspective, shared mobilities refer to the ability of individuals to travel without the need to own a vehicle, offering individual transport solutions while addressing collective needs. The concept has been extensively mentioned in academic literature since the mid-2010s following the emergence of concepts like 'smart cities' and 'the sharing economy' (Castellanos et al., 2021). Although there is a lack of clear definitions, two key notions are important to understand this shift: technology and sustainability.

On the one hand, mobility and technology are strongly intertwined, with the sharing aspect of mobility being recognised as one of the three recent revolutions in the transportation

⁷ Urban sharing encompasses the widespread practice of sharing observed in public spaces. Shared social spaces involve social agreements among individuals or groups with shared interests, commonly found in co-working spaces and hackerspaces. Sharing living spaces refers to the sharing of residential environments, representing a more private aspect of people's lives.

field over the past decade⁸ (Sperling, 2018 in [Castellanos et al., 2021](#)). Undoubtedly, technological and digital advances have played an essential role in creating, implementing, and disseminating shared mobilities, making them accessible to many everywhere.

On the other hand, environmental sustainability is a fundamental consideration in the discourse surrounding shared mobility strategies. This approach encompasses an innovative vision of transport that advocates for environmentally conscious practices in an industry responsible for 17% of global emissions⁹. By promoting shared usage vehicles and the concept of mobility as a service (MaaS), shared mobility strategies aim to reduce greenhouse gas-emitting trips. Scholars and experts have highlighted numerous benefits of shared mobility alternatives, including improved first and last-mile connections leading to more efficient travel times ([Shaheen & Chan, 2016](#); [Yen et al., 2023](#)), enhanced access to job opportunities ([Ahmed et al., 2020](#)), and complementing existing public transport networks ([Aarhaug et al., 2023](#)), among others.

Going back to the definition of the central thesis topic and bearing in mind the definitions presented for each of the concepts presented, **shared spaces and mobilities** can be defined as an all-encompassing attitude that aims to promote sharing practices at the urban level. By understanding the social dynamics of sharing spaces and mobility alternatives as a unified concept, researchers can gain a holistic understanding of individual movements. When examining this concept in the context of publicly used spaces in urban areas, it becomes evident that these practices are interconnected and can mutually influence each other. Therefore, this approach has the potential to enhance our understanding of the interactions between people, space, and transportation.

The integration of these concepts addresses a gap found in the urban planning practice. Although sharing practices have been a subject of previous studies, there is still a notable lack of understanding of the full extent of their impacts on consumption patterns and the local and spatial dimensions associated with these practices. Due to this, having these two individual strands has not contributed to promoting sharing practices at the urban level effectively up until now. By unifying shared spaces and mobilities, a user-centred perspective is adopted, allowing for a more comprehensive examination of people's attitudes towards sharing, encompassing spaces, services, and goods. This user-centred approach is highly valued for its contributions to the psychology of sustainability and provides a valuable lens for studying the connections between individuals, technology, and physical environments, particularly in projects aiming to promote positive physical, mental, and social well-being ([Santi, Leporelli & Di Sivo, 2019](#)). This becomes more significant, considering that sharing practices are becoming increasingly prevalent in residential areas in some cities. At a micro-level, these practices contribute to the proliferation of sharing practices within close-knit and familiar environments, fostering stronger community bonds and enhancing community life over time.

⁸ The other being electric and autonomous vehicles.

⁹ This is only preceded by the energy sector.

Finally, consolidating shared spaces and mobilities into a unified framework offers several benefits in developing comprehensive urban policies, strategies, and planning considerations. As highlighted by Chang and Zhang in their research (2018), urban sharing practices both shape and are shaped by the physical environments they occur in. This underscores the importance of studying the physical contexts in which sharing practices take place and how individuals interact with the various elements and infrastructures within those contexts.

Though studies are addressing individual aspects of shared spaces and mobilities, there is a lack of comprehension of how sharing practices operate at different levels and the role that urban contexts play in that. Having this all-encompassing vision of the interactions between activities and mobilities facilitates the promotion of inclusive and efficient urban environments that cater to the needs and priorities of individuals and communities. By focusing on the aspects that are most important to users, this approach aims to enhance the overall urban sharing experience of people in an inclusive manner.

2.2. The path of innovation and Smart Cities

The discussion on sharing economy practices is often linked to key concepts such as innovation and smart cities. These concepts permeate diverse fields and are frequently employed in contemporary urban planning debates as buzzwords. However, like the SE, these concepts also have their pitfalls and limitations when applied to urban contexts. In the subsequent sections, we will delve into these limitations and explore their implications.

2.2.1. What is Social Innovation?

Urban transformations favouring inclusive and diverse environments put people and communities at the centre of their action. In this context, social innovation emerges as a crucial factor in shaping the way forward. Social innovation (SI) refers to actions that serve the public interest and have positive effects on people's well-being. Although it is not a new concept, its significance has been revitalised in response to contemporary challenges and crises. According to Moulaert and MacCallum, "social, economic and political crises and contexts play an important role in shaping social innovation" (2019: 29). Therefore, sharing practices, as a socio-cultural phenomenon, can be an insightful perspective on how to use social innovation as a framework for more sustainable urban livelihoods.

SI encompasses not only changes in the physical environment but also the reconfiguration of social relations, emphasising the importance of collaboration among various stakeholders. The literature review reveals a strong connection between the SE and innovative practices, with numerous examples worldwide (e.g., community-supported agriculture, time banking initiatives, tools and equipment libraries, co-housing projects and bike sharing programmes).

However, this thesis needs to consider the limitations of the notion of SI. It has been accused of being utilised as a 'magic concept' due to its far-reaching and positive impression in academic, political, and policy-making arenas (Bragaglia, 2021). An important lesson

conveyed by Bragaglia is that SI is not necessarily a good thing in itself, as it can be used as an instrumental approach to justify hidden political or economic interests. The success of SI initiatives also depends on whether citizen involvement leads to a redistribution of power in the decision-making process.

Building socially pluralistic urban environments is easier said than done, and though most mainstream urban planning discourses advocate for sustainable, accessible, resilient, inclusive, and just urban solutions, these visions are not always materialised. In this sense, integrative approaches that create urban spatial strategies based on human-centred approaches are necessary, as opposed to top-down, technocratic urban integration solutions. This is in the spirit of the arguments sustained by Susan Fainstein, who states that “space ceased to be a container of buildings, population, and production but instead became a constituent of the relations of production and reproduction and a contributing source of inequality and by implication injustice” (2012: 1-2). Despite widespread agreement on this vision, exclusionary patterns persist in cities, which can be exacerbated by smart solutions, as discussed in the subsequent section.

To sum up, the effects of poor urban planning and inadequate urban spaces are not only detrimental to citizens but can be especially harmful to the most vulnerable groups in society. Thus, approaching such a challenge with the right vision and set of tools proves fundamental. In response, it is believed that sharing practices, when approached with the appropriate mindset and knowledge, have the potential to tackle urban inequalities through a socially innovative framework.

2.2.2. Smart solutions for promoting sharing practices

Innovative solutions in the context of Smart cities do not make sense unless they contribute to improving the livelihood of its inhabitants. Technological progress can contribute immensely to urban developments, as seen in the recent period with the emergence of AI tools that automatise and facilitate human processes. However, as discussed in this section, their integration into urban discourses does not automatically guarantee inclusivity. Therefore, this section invites readers to consider solutions that address the causes of exclusion of vulnerable societal groups.

The concept of a ‘Smart city’ is a relatively new one, but it has but which is part of mainstream discussions around urban development. As the name indicates, it is a city that uses information in a smart way by optimising available information to ensure the most efficient possible use of resources, for which it relies on technology and digital tools. Moreover, it is often linked to the one of SE in existing literature ([Henry et al., 2021](#)), as the SE relies on digital platforms and technology. It also has strong links to the circular economy and sustainability in all its dimensions, and it is recognised as an approach that ultimately aims to facilitate life in cities while managing resources in a wise manner through participatory governance” (Caragliu et al., 2011 in [Yigitcanlar et al., 2019](#)), Community life is another relevant aspect to it, as a smart city should work towards better livelihoods for

all, to make cities gradually become better places to be in ([Lara et al., 2016](#)). Altogether, these ideas present interesting approaches towards the promotion of sustainable practices in cities, where the notion of inclusion sometimes seems to be embedded in these solutions as a 'magic concept'. Therefore, this section opens a reflection on how inclusive they really are.

“The inequality that matters really is inequality of inclusion. That’s because people are not included in the networks, in the connections, in the infrastructure that allows people to be productive...” Ricardo Hausmann, Founder and Director of Growth Lab, Harvard University (World Economic Forum, 2023).

Nowadays, sharing practices are often encouraged through digital means, such as social media, apps, websites, etc. These solutions have provided a fertile ground for sharing practices to spread in cities and to connect people despite physical distance. Though there is great value in such solutions, scholars have problematised that these measures can unintentionally marginalise certain groups of society who are not able to cope with the requirements of these apps. These pitfalls in smart sharing solutions challenge the concept of 'just sustainability', which emphasises the need to improve livelihoods in an equitable manner (McLaren & Agyeman, 2015). Therefore, this section aims to answer the question of what kind of smart solutions have been adopted to promote sharing practices. It also examines these solutions considering their capacity to exclude users and what is being done to avoid this.

Intrinsically to the spirit of smart cities, solutions have relied on technology and are mostly digital solutions which are highly suitable for millennials, and posterior generations, who are often called 'digital natives' and have positive attitudes towards the adoption of new technologies ([Lee & Circella, 2019](#)). Nonetheless, these solutions are not easily utilised by previous generations who struggle more with digital solutions. To illustrate this, a study carried out in the UK in 2018 asked diverse age groups to perform five digital tasks, out of which 8% of the participants could carry out none, with senior citizens making up 76% of those ([Tabassum, 2020](#)). Therefore, these digital solutions can result in low shares of senior users, which is quite problematic when considering the global ageing trend. To contrast with this reality, initiatives like UK's Digital Access programme, led by the motto "Leaving no one behind in a digital world", are a valuable contribution to the discussion. This project contemplated the digital inclusion of elders and other excluded groups and was well-evaluated for strengthening digital ecosystems through cross-sectoral work and both national and international partnerships.

On the other hand, most mobility-sharing platforms require the use of credit or debit cards for payment, along with potential up-front charges or deposits to guarantee providers their money in the event of issues with the vehicle during the rental period. While the banking system is prevalent worldwide, this requirement still challenges the possibilities for low-income groups to access such services.

Recent data gathered by the World Bank indicates that 76% of the world's population has a bank account, which decreases to an average of 71% in developing countries ([Demirgüç-Kunt et al., 2021](#)). Countries like Norway and Chile score high and relatively high in this, with 99% and 87%, respectively, and show similar values for women and lower-income groups. However, in many other countries in the Global South, women's ownership reaches 10% or less than general adult ownership¹⁰.

Furthermore, recent empirical studies have criticised the implementation of smart city solutions, arguing that the so-called 'citizen-centred' approach is downgraded to a secondary position, placing market-led solutions at the top levels ([Cardullo & Kitchin, 2019](#)), aligning with critiques to the SE of monetising the sharing experience and its lack of social perspective. Moreover, this trend can lead to the commodification of mobility services and the subsequent exclusion of those who don't have access to the financial services mentioned, either because of income or gender. In this sense, a company in San Francisco recognised this challenge and enabled the option to pay for renting their scooters with cash by adding credit to the person's account. The target group for this measure were low-income groups, students, teachers, and employees at NGOs and community organisations, who only pay 50% of the regular fee for the service, contributing to a more inclusive approach towards urban mobility. In Chile, a local company is implementing similar measures to facilitate the use of mobility alternatives.

Finally, an important aspect of Smart city solutions is that they cannot solely be exported from one place to another, as local cultural values are fundamental to the implementation of successful smart city projects. As explained by Lara et al. (2016), smart city proposals ought not to be lightly copied from another context, as cultural and geographic circumstances vary, even within the same country.

In conclusion, smart city solutions are contextual and depend on societal, technological, economic, cultural, and political factors. As illustrated in the discussion, progress around technological solutions does not automatically lead to more sustainable environments if these are not capable of integrating all population groups and, thus, cannot be used by everyone in society. This should be reminded along the way for cities that aim to become smart, as solutions offered tend to look at the population as a homogenous group and, in time, become irrelevant to users. This highlights that the compass of technological development must be pointing towards social justice and its principles instead of mindlessly experimenting with the hopes of providing cities with technological solutions. Ultimately, relevant smart solutions will be sensitive to the context and will, first and foremost, offer solutions to citizens.

¹⁰ Especially in Muslim countries, i.e., Bangladesh, Côte d'Ivoire, Iran, Jordan, Kosovo, Morocco, Nigeria, Saudi Arabia, and Turkey.

3. RESEARCH QUESTIONS AND OBJECTIVES

This section identifies the research area and research questions and integrates the thesis's objectives.

To explore and illustrate the current situation on 'shared spaces and mobilities' in the context of modern capital cities, the thesis analyses sharing practices around mobility, including a Global North and a Global South case study. For the former, the case selected is Oslo, Norway, which houses seven hundred thousand inhabitants. While for the latter, the city selected is Santiago, Chile, characterised by a vast and dense metropolitan area that homes six million inhabitants.

The discussion around shared spaces of mobility is framed in the light of a theory that emanates from the sociology field, which helps to break down the views around sharing practices in elements that make it easier for researchers to look at the benefits, challenges, opportunities, and pitfalls of such practice at the urban level.

3.1. Main Research Question

MRQ: Considering the immense growth of the Sharing Economy as an urban phenomenon, to what extent are publicly accessible shared spaces and mobilities integrated into densely populated areas of both the Global South and Global North, and how can studying them contribute to the decision-making process of urban planners?

This question is quite wide and packed with several perspectives, addressed in the literature review section. To answer this, I will discuss the findings from each of the case study cities (which are more detailed in the complementary research questions), discussing whether they present similar or divergent patterns. For the latter, it is important to explore what factors might be causing this difference so that the results obtained can be extrapolated to similar contexts in the Scandinavian and South American regions, respectively.

3.2. Secondary Research Questions

In order to answer the main research question and reflect upon the topic of shared spaces and mobilities in urban environments, three secondary research questions (SRQ) are proposed.

SRQ1: What type of activities occur around the selected mobility hubs, and what kind of conflicts and negotiations occur at the street level due to the co-existence of diverse users, activities, and modes of transport?

SRQ2: Though the study focuses primarily on the neighbourhood scale (micro), it is still relevant to inform the discussion from the perspective of the overarching territories, for which the discussion requires framing the views from the municipal level (meso) and

regional scale (macro). Bearing this in mind, what are the existing and prevailing planning discourses and practices around sharing spaces and mobilities, at the urban level, in the case study cities?

SRQ3: How can Social Practice Theory contribute to creating more adaptable frameworks to promote innovative approaches to sharing practices around mobility hubs, and what kind of governance capacity does this entail for each case study area?

3.3. Thesis objectives

Thus, the objectives of this thesis are to (1) contribute to filling the gap of lack of literature that looks at shared spaces and -mobilities as a unified concept, (2) discuss some of the existing sharing discourses and practices in a Global South and North context to further the comprehension on the factors that promote/discourse sharing practices, and (3) present an overview of how could we plan for shared dynamics and how these ideas could be implemented in residential (re)developments.

4. METHODOLOGICAL FRAMEWORK

The methodological framework guides the research process and data collection. This section outlines the chosen research methods, data collection techniques, and analysis approaches employed to investigate the research topic. It is divided into three parts which comprise case studies, mixed methods approach and data collection and analysis.

4.1. Case studies

To explore the topic of 'shared spaces and mobilities' around mobility hubs, two case studies cities have been selected. Within these two cities, a total of five case study areas were analysed. It is important to note that it is not part of the thesis's ambitions to generalise Global North and South experiences through these two cases. Instead, their study is intended to present an empirical analysis that can help understand the different perspectives for each of these contexts. The typology of the case studies responds to that of urban sharing practices.

On the one hand, fieldwork was conducted in the **Metropolitan area of Santiago, Chile**. Here, the selection of case study areas focused on the surrounding public areas of metro stations. For the research, four stations were selected, all situated along the same metro line but in different municipalities. The interest in these urban mobility hubs is explained by their diversified nature in terms of users, activities and means of transport. They are important mobility nodes in urban trips in the region and constitute recognisable meeting points that (in time) attract and consolidate diverse activities according to the needs of the community that makes use of these spaces. Thus, the method for selecting case studies was to focus on metro stations around the most recently built line, under the premise that it should have been conceived with contemporary views on public spaces and intermodality.

On the other hand, fieldwork was also conducted in the **Greater Oslo Region, Norway**. Here, the fieldwork is framed under the ReShare project¹¹, which entails multisectoral collaboration among private and public actors. The project aims to promote sharing practices in urban spaces, mobility systems and new residential developments through the principles of circular economy and sustainability. The specific area that was analysed during the fieldwork is Strømsø, in Drammen, a large city that is part of the Oslo Metropolitan Area. Strømsø serves as one of the study areas within the ReShare project, allowing for a focused examination of sharing practices in that particular urban context.

4.2. Mixed methods approach

To characterise and discuss shared spaces and mobilities in diverse settings, mixed methods were utilised to understand the complex relations that urban sharing practices entail and

¹¹ This initiative is led by the Institute of Transport Economics in Oslo (TØI), under Tanu Priya Uteng (project leader) and Eivind Farstad (co-leader). The project addresses the incorporation of shared practices in residential areas, to promote socially inclusive environments through a sustainable view.

to improve the research's robustness by providing a more comprehensive interpretation of data. The value of mixed methods lies in the opportunity to triangulate, which involves the comparison of quantitative and qualitative results so that the accuracy of the findings can be increased (Bryman, 2012).

In consideration of the nature of the research questions proposed, the methods to be utilised in the thesis will be mostly qualitative, as the objective is to describe how shared spaces with mobility are conceived, organised, utilised, and valued by users, and reflect upon how the learnings from these experiences could be included in the urban planning discourse. To a lesser extent, quantitative methods will also be included as part of the observation stage in an integrated manner with the rest of the qualitative data.

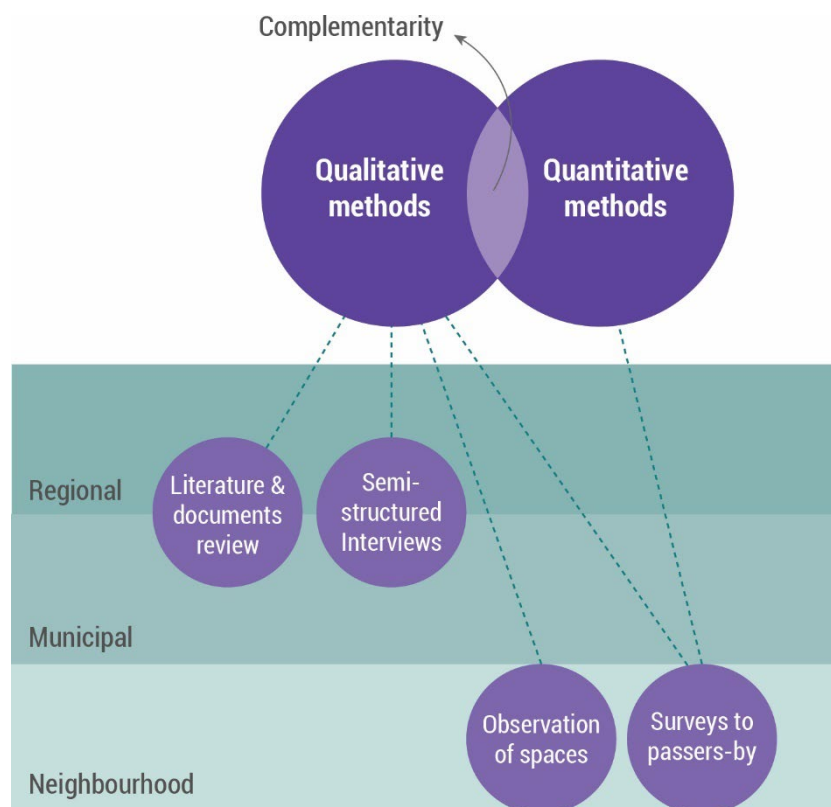


Figure 6. Mixed methods employed in the research | Source: By the Author, 2023.

For answering the first SRQ, regarding physical and social dynamics present in public spaces in both contexts (Santiago and Oslo), observation methods were applied. These are non-participant, naturalistic observations, which included activity mapping (Hillnhütter, 2022) to understand better how public spaces were being utilised. As stated by Tjora (2018), observational studies can be linked to social anthropology and are usually labelled as ethnography, which focuses not only on what is observed but also on how people communicate their views and opinions. It allows the exploration of sociocultural practices as well as people's vision of their environments. Here, quantitative information was also gathered to describe the type of users present and their preferences regarding sharing practices and public spaces during the observation stage through surveys. In Santiago, these surveys were carried out at different times of the day (including morning, afternoon, and evening) for each of the cases selected and comprised a total of 15 surveys per case, adding

up to a total of 60 valid surveys. Similarly, in Oslo, the survey was applied in two different days, including a weekend and a regular working day. Here a total of 20 surveys were validly obtained.

For the second SRQ, about the prevailing planning discourses and practices around sharing spaces and mobilities, the fieldwork also comprised semi-structured interviews with planners and decision-makers, with whom it was possible to explore the discourses and practices in the urban planning discipline about urban sharing practices. These comprised a series of open-ended questions that examined the existence, use, and perception of socially mixed dynamics, giving the participants the chance to give in-depth answers. To better understand how sharing practices work, elaborations and digressions can be encouraged as people recount and reflect upon their experiences (Mazmanian et al., 2013 in Bryman, 2016). This semi-structured approach can also help with the comparability of the different neighbourhood areas to be analysed in Santiago and Oslo. As pointed out by Tjora (2018), these in-depth interviews can be useful to comprehend the participant's reflections about their experiences with urban sharing. Complementarily, relevant documents that looks at these challenges were also reviewed.

For the third SRQ, about how a theory from the sociology field can contribute to creating more comprehensive frameworks for analysing and promoting sharing practices, the thesis develops a theoretical framework through literature reviews. This serves then as a lens to analyse the data obtained through the different methods employed, described earlier.

4.3. Data collection and analysis

The qualitative data was gathered during the observation stage of the selected mobility hubs, for which notes about the use of urban spaces were useful. These helped to identify the physical elements, social dynamics, and activities present in such spaces. Due to their diverse nature and different characteristics, graphic material using the same language was prepared to display the findings, to make their comprehension and comparison easier. Furthermore, quantitative data was gathered through surveys carried out in each of the selected case study areas. This data was later analysed with SPSS and charts were created on Excel.

Additionally, interviews were conducted with relevant stakeholders, including government authorities, municipal representatives, researchers, and other relevant actors (Table 2). As in many other research projects, the snowball effect played an important role in contacting more actors for both case study cities. These interviews were complemented by a literature review of official documents and guidelines.

ID	Country	Organisation/Institution	Department/Field	Date
KI1	CH	Programme on Roads and Urban Transport (SECTRA)	Senior employee in the project's coordination department	8 February 2023
KI2	CH	Programme on Roads and Urban Transport (SECTRA)	Projects coordinator for the Central are of the country	8 February 2023
KI3	CH	Metro Santiago	Senior employee at the transport business management department	14 February 2023
KI4	CH	Metro Santiago	Studies engineer from the transport business management department	14 February 2023
KI5	CH	Providencia Municipality	Senior employee at the transit and public transport direction	22 February 2023
KI6	CH	Providencia Municipality	Senior employee at the mobility and public spaces coordination	23 February 2023
KI7	CH	Regional Government of Santiago (GORE)	Advisor on community management projects	3 March 2023
KI8	CH	Regional Government of Santiago (GORE)	Transport and mobility division	8 March 2023
KI9	CH	La Fábrica	Urban development division	26 January 2023
KI10	NO	Oslo Municipality	Senior urban planner and former employee	31 March 2023
KI11	NO	Drammen Municipality	Senior urban planner	28 April 2023

Table 2. Key interviewees during the fieldwork | Source: Prepared by the author.

The data collection stage began in Santiago, Chile, and was later carried out in Oslo, Norway, in a similar manner. The overall development of the thesis's methods is shown in a timeline in Figure 7, which identifies visits to case study areas (CS) and interviews with key informants (KI). Regarding the methods, it is possible to note that seasonality played an important role in the observation stage, with contrasting situations experienced during the fieldwork stage in the case study areas, with hot summer days on one side, and icy winter days on the other.

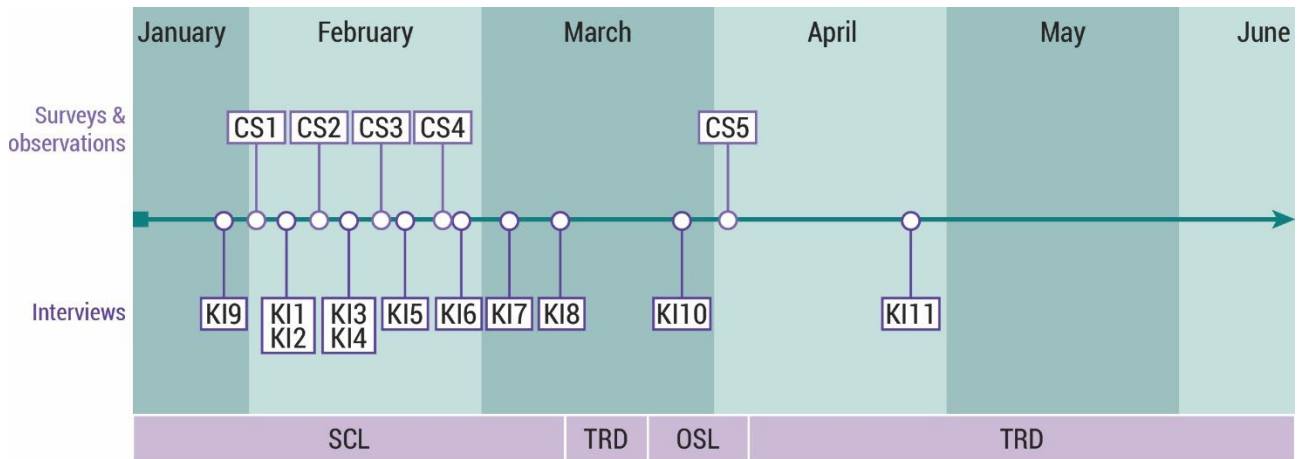


Figure 7. Timeline identifying the thesis methods and milestones | Source: By the Author, 2023.

Due to the nature of the data obtained, this is organised according to territorial scales and is thus presented in three levels which include regional, municipal and neighbourhood levels.

- The first comprises a discussion on existing plans, policies, and views on sharing practices emphasising the regional level, while also keeping in mind national views and how they permeate this level. These sections consist of document reviews and interviews with relevant planners and decision-makers.
- The second level refers to the discussions held at the municipal level, mediating between the regional authorities and the respective communities. Official documents are reviewed and complemented with interviews with municipal employees from the study areas. These sections address challenges and opportunities that municipalities have around the implementation of sharing practices in their territories, including some of the relevant ongoing urban debates about shared spaces and mobilities.
- The third level offers a more comprehensive analysis of the area, identifying social, physical, and cultural aspects that are relevant to the communities that make use of the areas analysed in more detail. The data at this scale centres on the observation of the study areas and the survey's results.

5. CONCEPTUAL FRAMING

The task of analysing shared spaces and mobilities in urban settlements is complex. Many elements and views around them overlap. Doreen Massey's theory of "thrown togetherness" posits that interactions and relations between people continuously produce spaces, which are always in the making (Kohan, Olsson & Aitken, 2015). By extrapolating this concept to public spaces, it becomes evident that not only do people influence them, but also the interaction of people with various elements, actions, and activities affects their experience. Therefore, individual experiences are influenced by different factors such as physical, social, cultural, or emotional elements, as well as seasonality and time. Due to the challenging nature of analysing these inputs altogether, Social Practice Theory was chosen as the conceptual framework to examine the fieldwork results. In this context, integrating Jan Gehl's work on the human scale adds further depth to the analysis. His emphasis on designing public spaces that prioritise the needs and experiences of individuals connects with the exploration of factors influencing individual experiences in shared spaces. Moreover, his insights on observing human behaviour, promoting pedestrian-friendly environments, and creating spaces for social interaction, can further the understanding of how public spaces can be designed to meet the diverse needs and expectations.

5.1. Social Practice Theory around Sharing

As will be expanded in this section, Social Practice Theory offers a relevant perspective to the thesis's topic of 'shared spaces and mobilities'. Thus, the main aspects of this theory will be introduced and explained in relation to the thesis topic. Though this theory covers a broad range of aspects, the following section identifies and illustrates five facets, which are later utilised to discuss the fieldwork results. These are: 1) physical environments modelling practices, 2) habits modelling practices, 3) culture and social norms modelling practices, 4) community and social influence modelling practices, and 5) structural limitations modelling practices.

5.1.1. What is Social Practice Theory?

Social Practice theory (SPT) reflects about people's habits and ways of doing things, as practice essentially entails routinary human action. It originates from the sociology field, deriving from the work of French sociologist Pierre Bourdieu, who became fascinated with the importance of human culture and its influence on societal structures. SPT enables researchers to study diverse daily activities through this lens. For example, cooking can be analysed from the perspective of SPT, as it can be determined by the cook's cultural baggage including traditions, social norms and attitudes, and knowledge of ingredients and techniques. Therefore, practices around cooking may vary between individuals, households, and cultures, even in seemingly homogenous regions.

Shove, Pantzar & Watson (2012) conceptualise the idea of practices by constructing a discourse around three dynamic elements that explain the evolvement of practices (i.e., their origin, preservation, transformations and desertion). These three elements are:

1) Materials: comprises physical resources, technologies, spaces, and other tangible physical entities (such as tools, equipment, furniture, etc.)

2) Competences: involves skills, techniques, and both practical and theoretical knowledge

3) Meanings: includes symbolic significance, ideas, values, desires, ambitions, etc.

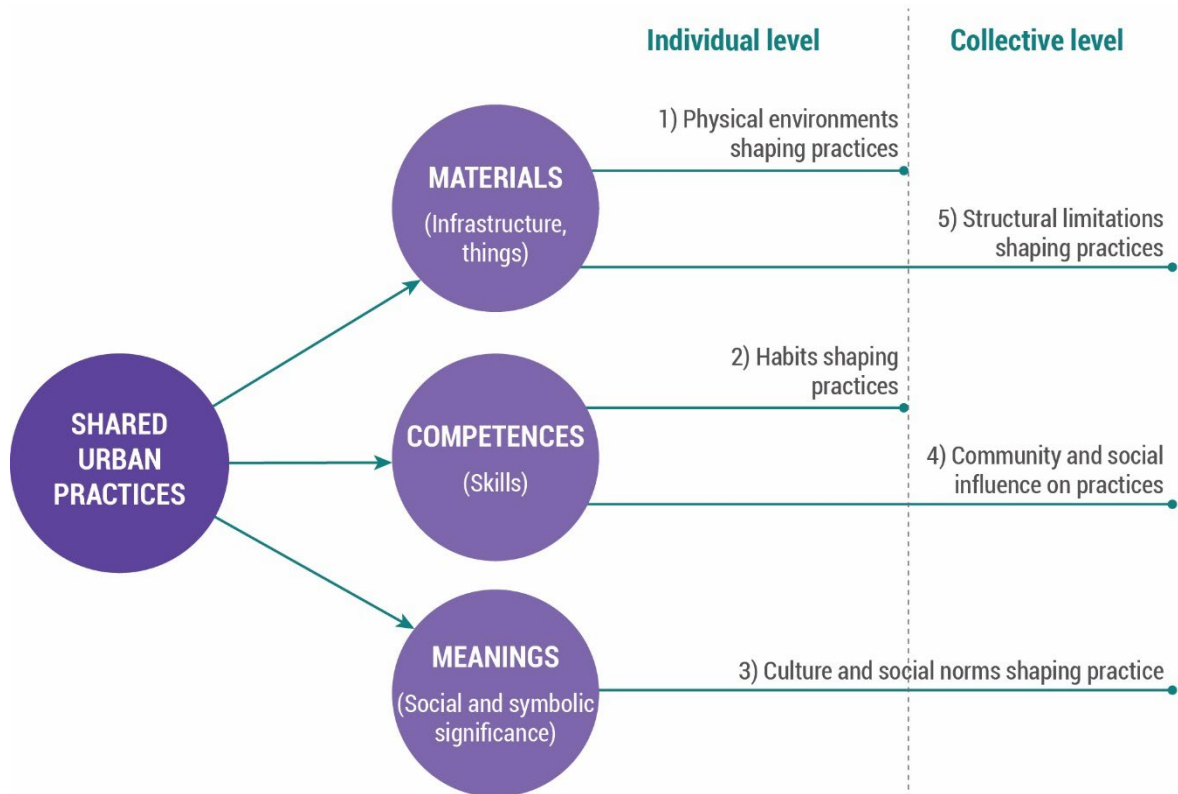


Figure 8. Elements of practice at individual and collective levels| Source: Prepared by the author, based on Shove, Pantzar & Watson’s classification (2012) in Hyysalo (2016).

SPT offers a valuable perspective on the urban planning field. In the recent decade, it has been broadly utilised in the transport planning field to provide a better understanding of what determines travel pattern choices (Kent, 2022) and how can shared mobilities be strengthened (Mock, 2022), among research ideas. Unlike the methodological tradition of focusing on the micro (i.e. individual elements) and macro level (i.e. the physical environment), an approach focused on practices may “allow researchers to take into account and systematically conceptualise aspects that are overlooked by the micro- and macro- approaches” (Mattioli, Anable & Vrotsou, 2016, p. 59 in Kent, 2022).

It is also interesting to establish some parallels between SPT and Theory of Planned Behaviour (TPB). The latter originates from the psychology field was conceptualised by Icek Ajzen in the mid-1980’s. It proposes a framework for predicting and comprehending broad sets of practices, related mostly to three dimensions, health, environment, and consumption (Ajzen, 2020), though it has also been applied to other research areas. It has been utilised for understanding human decision-making processes and has the potential to inform about strategies that promote positive change for individuals.

While SPT talks about practices, TPB talks about behaviour (and intended behaviour), and just like SPT identifies three elements at the core of practices, TPB establishes three key considerations: behavioural beliefs, normative beliefs, and control beliefs (Ajzen, 2012). According to Ajzen, **behavioural beliefs** refer to the individual's view and evaluation of the anticipated outcomes of an action. For example, if an individual engages in the action of recycling, they might evaluate it as a positive action if they view it as their way of contributing to preserving natural environments, or as a negative one if they learn that the garbage collectors mix all the waste in the end. **Normative beliefs** relate to societal expectations over the actions of individuals, recognising that these can be influenced by external factors such as important referents to engage in certain behaviour. Social media campaigns and the birth of media influencers illustrates this very clearly, but this aspect of TPB is present in our lives from before and is one decisive factor for community and social life, where people implicitly or explicitly agree on a way of doing things (like keeping streets clean, helping neighbours, keeping a low volume after late hours, etc.). In this sense, normative beliefs can be shaped by peer pressure, communities that individuals are part of, cultural norms and/or policies. Then **control beliefs** ties to the possibilities and constraints of engaging in an action, where individual performance and capacities play an important role. This is commonly seen in people who want to engage in healthier lifestyles or switch to more sustainable modes of transport. Other than individual competences, this third component also recognises the influence of external factors (like time, money, and infrastructure), environmental constraints and past experiences.

Altogether, it is evident that both SPT and TPB are similar in the sense that they both acknowledge the importance of social context in shaping human practices/behaviours and consider that there are external factors influencing individual actions (i.e., social norms, cultural considerations, social interactions, etc.). In addition, both theories place great esteem on emotional, experiential, and symbolic factors in guiding such actions.

Nonetheless, there are also significant differences between them. Though TPB proves valuable in comprehending the principles guiding individual actions and has made contributions to understanding human behaviour towards emerging technologies, and in many other arenas (Ajzen, 2020), it is recognised that SPT provides a better framework for analysing collective dynamics in an urban environment. This is argued due to SPT recognition of a physical dimension as one core elements to practice, which allows us to root practices to specific urban contexts. Moreover, this perspective offers a more integral vision of the factors in play around human dynamics occurring in the city, and entails a more collective view on practices, as opposed to the individual-centred standpoint of TPB.

Another aspect that makes SPT valuable is that it recognises practices as long-term stable habits in people's lives, which are at the same time rooted in social routines. In their book, Shover Pantzar and Watson state: "In showing how materials, meanings and competences endure and travel, we provide a means of understanding how practices are sustained between moments and sites of enactment" (2012, p.21). By using the term 'sustained' authors are acknowledging a temporal factor that is implicit in practice, which is in the end a prolonged habit, and by 'sites of enactment' they also inform us about practices occurring in physical and social environments.

Additionally, SPT considers the notion of unconsciousness concerning practices, which is not particularly present in TPB, which dwells more on conscious decision-making processes. As activities are defined by pre-existing structures and meaning that are constantly being reproduced around us, people often carry them out unaware of their own intentions (Giddens 1984, in Shover et al., 2012).

In summary, SPT offers a more comprehensive and contextually grounded perspective for studying collective dynamics in urban environments, considering the physical dimension of practices, their sustained nature, and the role of unconscious influences. In this sense, studying human practice in transport research from the SPT lens has been deemed essential for generating valuable insights towards achieving greater sustainability in the field. Therefore, it has been decided to adopt SPT as the conceptual framework for examining the topic of shared spaces and mobilities in the selected case study cities.

5.1.2. Five fundamental dimensions of SPT

The subsequent paragraphs will delve in greater detail into the five aspects of SPT outlined at the beginning of this section, which connect to the three elements of social practices, reflecting upon the implications for individual and collective levels (Fig. 8).

First, an **interesting aspect of SPT is that it helps establish connections between social practices and the physical environments in which they occur**. This can be illustrated through an example from an urban planning perspective, such as the study of public spaces. Their characteristics cannot simply be grasped by observing the physical elements that make them up and comprehending the general culture of the place. Much like suggested in Jan Gehl's guides for evaluating public spaces, a better analysis of them will require diving into the habits of people who make use of them, identifying user types, values assigned to public spaces, activities carried out, main elements of interaction, and degree of usage throughout the day, to name a few. This makes SPT a relevant perspective for the topic analysed, binding socio-cultural to physical aspects and can help explain the attitudes towards sharing practices of different users in the case study areas analysed.

Second, **daily habits shape human practices**. So, according to SPT practices constitute people's way of building social worlds, and it is through individual behaviour and collective social structures that social practices are established. This complex social construction evolves from the primal human instincts that we learn as children.

“Man... is the most imitative of all animals and he learns his first lessons through mimicry” (Aristotle, Poetics in [Bourdieu, 1992](#)).

This quote reflects on our capacity to learn habits from interaction with others, which was one of the key aspects of Bourdieu's work. Once habits are acquired, their systematic repetition will shape human practice. Since practices are made of habits, the study of the latter can contribute to an understanding of individual social practices. Returning to the example of studying public spaces, if we observe that women tend to avoid utilising a particular area within an open public space during certain times, this can inform us about

gendered practices on the use of this space. This observation could suggest that women are being excluded from the space, either knowingly or unknowingly, due to social, cultural, or physical factors. Therefore, observing people's habits in how they use spaces can inform researchers about underlying practices and possible challenges around them.

Third, **another significant aspect of practices is how cultural and social codes influence them**. For example, in a Latin American group meal, stretching over the table to reach something is considered rude and it is expected to request things politely from others. On the other hand, in Norway, it may be considered more polite to grab something yourself instead of asking others, as asking could be seen as a greater disturbance. Paradoxically, both types of actions intend to show respect for the private space of others, though they do it in very different (and even opposite) ways. This illustrates how culture and social norms shape practices and highlights the significance of understanding the context when studying social practices.

Additionally, another important dimension of SPT from this perspective is the influence of subjective elements over human practices. So, it is interesting to note that SPT shares a degree of similarity with Utility Theory (which derives from the economic field), in the sense that both recognise that diverse factors influence our individual choices, such as personal preferences, cultural values, and social norms. Nonetheless, SPT takes a different standpoint by recognising that not all human decisions are made through rational or self-interested means. Here culture, values, symbolism, and emotions are acknowledged as possibly decisive factors in human practice, which can seem like counterintuitive or contradictory choices from the perspective of utility theory. It can be hypothesised that culture and social norms play a fundamental role in this choice, but to what extent can these factors be more decisive than rational ones? This is further expanded in the discussion of results obtained from the fieldwork carried out, basing the analysis on survey results and informal conversations held with respondents.

Fourth, **practices are subject to continuous influence from individuals surrounding them**, specifically by the communities and social environments where individuals unfold. As explained before, humans are naturally imitative creatures. We use this mechanism to integrate ourselves and feel like we belong among our peers; and though we adopt this mechanism as children, we continue to imitate others throughout our lives. This is done more critically and selectively as we grow older, choosing the practices that suit our preferences, needs and desires better. So, when we are part of a community, we are more likely to adopt the practices of our peers after hearing positive impressions from them. A trivial example could be when we hear from our neighbours about this new grocery store in the area which sells great fresh vegetables at an affordable price. Then we are more inclined to switch to this store and start eating more green foods when we hear about it from people we know and trust, as their feedback provides legitimacy to this new practice. The adoption of changes in diet can also constitute an example of this aspect of practice. This is when it derives from exposure to the lifestyle and beliefs of others. These two examples unveil a valuable aspect of this dimension, which is the importance of cultural

capital in the production of social order. This is because cultural capital can be transmitted from one individual to another and can thus facilitate the adoption of certain practices.

Numerous examples of the influence of communities and social networks over individual practice can be found in the realm of urban planning. These include the adoption of various practices such as walking, cycling, utilising public transportation, participating in car-sharing programs, engaging in urban gardening, etc. Thus, the more exposed we are to certain practices, the more likely we are to adopt them if they suit our needs, interests, and preferences. Moreover, the SE depends on this. Research on social networks and communities has demonstrated the significance of social connections in adopting new practices (Shove et al., 2012). Consequently, since the SE requires changes in traditional consumer patterns and a transition towards a collaborative approach to using and consuming goods and services, social ties and the diffusion of these new practices is crucial. By recognising the importance of social influence, it is possible to harness the power of communities and social networks to accelerate the spread of these practices and increase their impact. And though changes in practice can be difficult, trajectories can be changed in time and practitioners can be recruited to adopt new habits. So, by taking the cultural context of users and communities into account, planning strategies are more likely to succeed in the promotion of sharing practices among individuals.

Fifth, **there are structural constraints that shape practices**. These are constituted by institutional and legal frameworks and refer to all those conditions that limit the range of possibilities of individual practice (i.e., political, economic, societal, and cultural circumstances), and which cannot be changed by individuals. An example of these limitations can be found in the promotion of sustainable mobility practices in a city, where inhabitants find themselves constrained by the existing infrastructure, public and private transport alternatives, provision of mobility alternatives, prices of such alternatives, etc. So, in a city with inadequate biking infrastructure, the high risk of accidents involving high-speed vehicles may discourage citizens from using bicycles as a means of transportation. In the same way, governance can also establish limitations to practices. One clear example of this is zoning laws which define types of uses and activities that should occur in determinate areas of an urban settlement. Similarly, local ordinances are implemented to address various community issues and are enforced by local authorities. These local regulations also have the power to shape individual practices, making it important to recognise and address these limitations as they can be critical to the promotion of sustainable urban practices.

Altogether these five interlinked dimensions break down the discussion on the relevant challenges to be addressed by the urban planning field when discussing the implementation of more sharing practices in cities, such as shared spaces and mobilities. The focus is then on highlighting inclusive approaches to implementing shared sustainable solutions by looking at communities' social and cultural background as a decisive input in plan developments.

6. CASE STUDIES

The section will cover case study areas, including their context, sharing practices, and detailed information from fieldwork. A multiscale analysis will be included, combining observations, interviews, document reviews, and survey results.

6.1. Fieldwork in the Metropolitan Area of Santiago, Chile

Research fieldwork comprised a series of site visits to the public spaces around the different metro stations selected. The objective of these visits was to observe the case study areas at different times of the day and to talk to users about their habits, experiences, and expectations through standardised surveys. Additionally, the fieldwork included a series of interviews with relevant stakeholders from the governmental, public and private sectors.

6.1.1. Background information of the Santiago Region

Santiago, the largest and most populous city in the country, accounts for over 40% of the national population. Its substantial size can be attributed to various factors, including its strategic location, numerous educational institutions, concentration of industries and businesses, and the availability of diverse work opportunities. As a result, the city has witnessed significant investments in transportation planning, particularly concentrated on improving public transport services in the region. These efforts have garnered international recognition, with Santiago's well-articulated system continuously striving for new and innovative solutions to improve its services. For instance, the city boasts one of the largest electric bus fleets in LATAM, showcasing its commitment to sustainable transportation.

The region where the city of Santiago is situated is known as the Metropolitan Region, and it comprehends an area of 15 thousand km². Within it, the province of Santiago¹² has little over 2 thousand km² and concentrates 78% of the population in the entire region. This means that about 5,2 million people live in the 32 municipalities that make up the province. This high level of fragmentation of the city is challenged by the high levels of inequality experienced in Santiago, as it also occurs in the rest of the country. The latest Gini index recorded is 0,45 ([The World Bank, 2020](#)) which means that there are significant disparities in income and wealth distribution among the population. This is also true for the different municipalities that make up the Metropolitan Area of Santiago, where great levels of inequality are experienced. Figure 9 illustrates socioeconomic division of inhabitants in the Metropolitan Area¹³, identifying the different municipalities that make it up. High-income groups (in blue) are situated on the northeast side of the city, then middle-income areas (in yellow) can be found next to the high-income areas and scattered around the rest of Santiago. These are also neighbouring some low-income areas (in red), which concentrate mostly on the north-south axis of the city. In connection with the thesis topic, it is possible

¹² This is known as the Metropolitan area of Santiago, and it comprises the city's urban areas where most of the population inhabits.

¹³ The methodology to assess these groups in Chile analyses public statistics of surveys, and it considers three variables: income, educational level, and occupational activity.

to note that sharing practices can be found across the whole city, taking many forms. As discussed ahead, these vary greatly with the socio-economic level of the communities that take part in them.

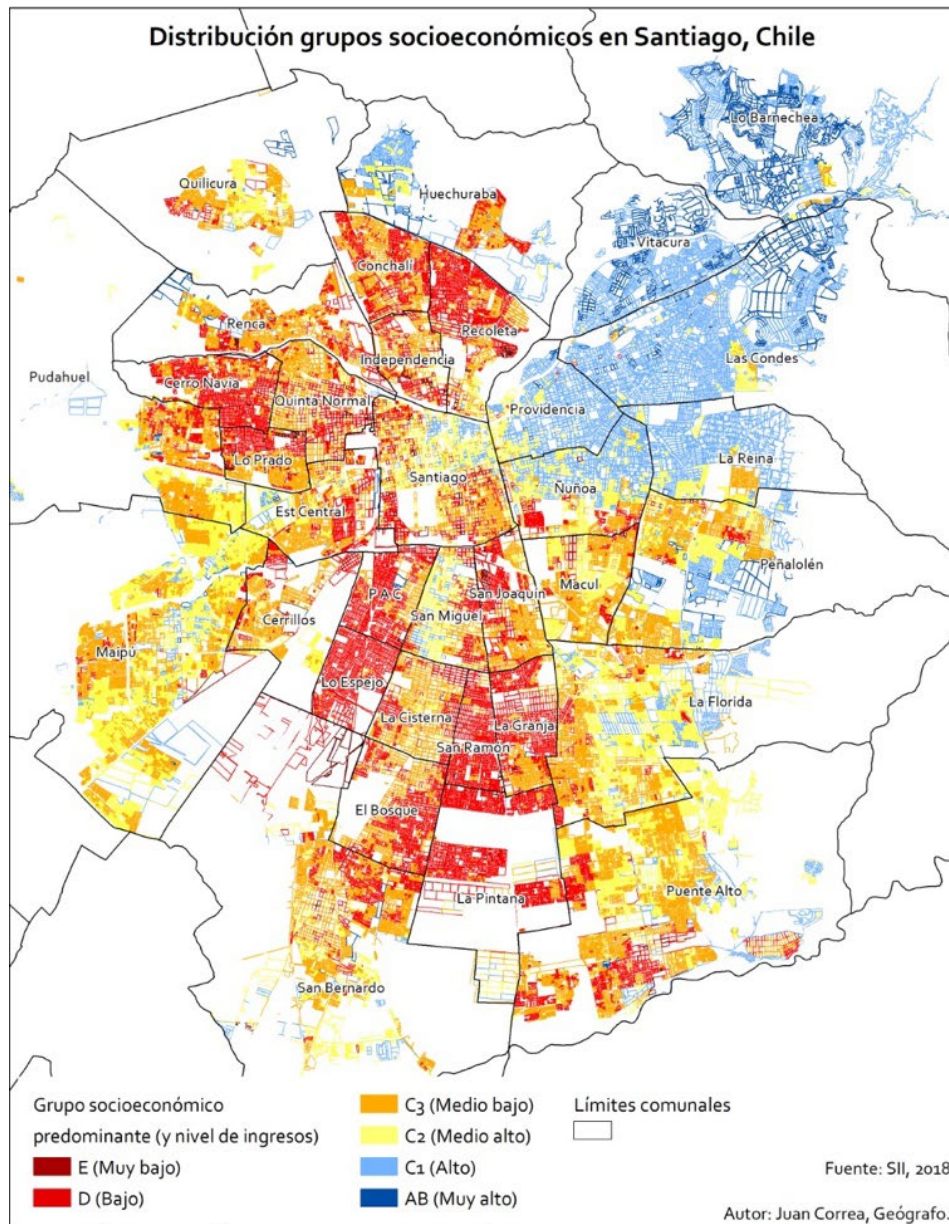


Figure 9. Map of the Metropolitan Area of Santiago according to socioeconomic level | Source: Juan Correa, 2018.

Meanwhile, in response to the region's vast territory, an extensive public transport network was developed to meet transportation demands. Until two decades ago, the city's public transport system was predominantly operated by multiple private companies. Although this satisfied the transport demand, the rapid population growth demanded better integration of transport services. One of these efforts was materialised by extending the metro networks. Originally consisting of one line built in the early 1970s, the metro system has since grown to encompass five additional lines, spanning a total length of 140 km. Plans include the construction of Line 7, expected to be completed by 2027, and the ongoing study

of Lines 8 and 9. Alongside the metro expansion, significant changes were also made to the bus system. It transitioned from a fragmented network with separate fares for each mode of transport to an integrated system with a unified fare. While private operators still run the bus system, their services are integrated with the metro and local train services, reflecting the city's efforts to improve connectivity, efficiency, and overall public transport experience for its residents.

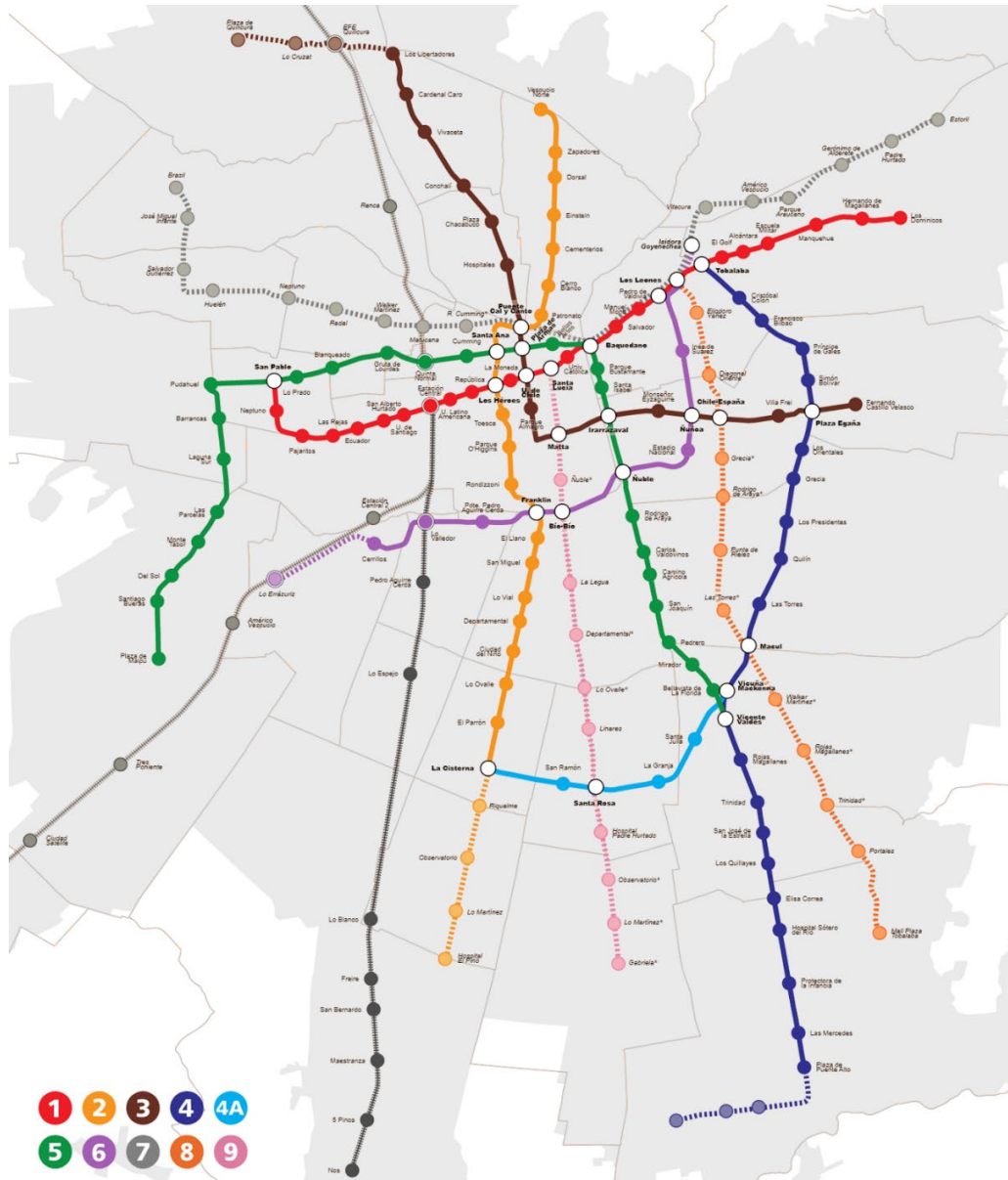


Figure 10. Existing and projected metro lines in Santiago’s Metropolitan Area | Source: Wikimedia, n.d.

Simultaneous to the upgrading of the public transport network and progress on plans to improve connectivity to the rural areas of the region, which are two out of three mobility objectives for GORE (Metropolitan Regional Government), a third objective entails improving and incentivising active mobility. This aligns with a national goal for a more sustainable and efficient transport system. In this sense, active mobility has quickly become one of the guiding principles of the work carried out by regional authorities. These ideas are

condensed in the reverse transport pyramid, which favours the most vulnerable groups and modes of transport, such as walking and cycling, leaving the single occupancy private vehicle at the bottom of the hierarchy.

The approach suggested by this conceptual framework has had a noticeable effect on the built environment in the last decade, where various public initiatives have addressed the integration and enhancement of public spaces to promote active mobilities. These initiatives include tactical urbanism interventions, artistic displays, installation of infrastructure, changes in street profiles for widening cycling and walking areas, etc., Simultaneously, these have been accompanied by media campaigns that promote active mobilities and encourage behaviour change.

It is important to note that this integration has been facilitated through a combination of public and private initiatives, each with its respective focus and objectives. On the public front, regional and municipal governments have undertaken numerous projects in recent years to improve the streetscape for active mobilities. These initiatives have primarily involved the expansion of cycling infrastructure and the improvement of streets, following the principles and recommendations presented in the influential work of Jan Gehl. By implementing these measures, authorities aim to create a more pedestrian- and cyclist-friendly environment, encouraging a shift towards sustainable and healthier modes of transportation.

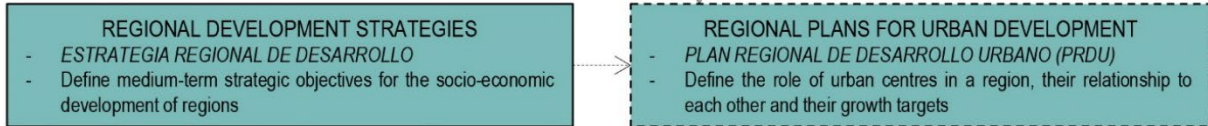
6.1.1.1. Planning system in Chile

The planning system in Chile comprises three levels of government: the national government, 15 regions and 345 municipalities ([OECD, 2017a](#)). Each of these have their own planning mechanisms and strategies, as shown in Figure 11. The National level is responsible for establishing a National urban development policy, which defines the countries goals and lines of action to achieve them. Under this is the regional level, which distinguishes two mechanisms, a Strategy, and a Plan for Urban Development, setting the strategic objectives to be achieved, and specifying the roles that different stakeholders play in their strategies, respectively. In Metropolitan areas, like the one where Santiago is situated, there is an intermediate level between regional and municipal plans. This aims to create more integrated urban plans for densely populated areas. Then comes the municipal level, where local governments establish urban regulations through Communal Regulatory Plans, which include an explanatory report, a local ordinance, and urban plans/maps on: a) public spaces, b) roads and green areas, building zones, c) land-use zonas, and d) heritage and protected zones. In some cases, municipalities will develop sectional plans, which complement the Communal Plan to introduce more detailed regulations for specific areas in the commune.

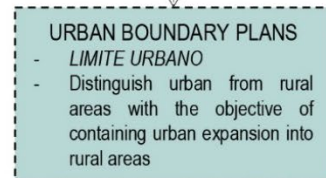
National



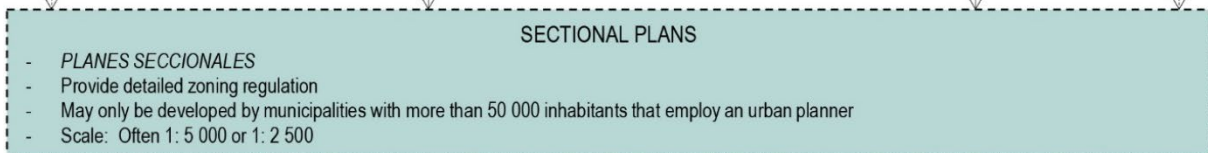
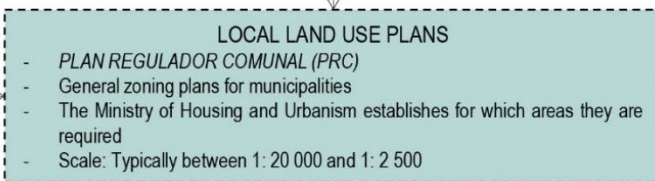
Regional



Inter-municipal



Municipal



- Sub-ordinate plans must conform
- Sub-ordinate plans do not need to conform
- █ Primarily policy / strategic guidelines
- █ Primarily land-use plans
- - - Partial geographical coverage

Note:
An on-going reform aims at introducing regional land-use plans (*PLAN REGIONAL DE ORDENAMIENTO TERRITORIAL*). While some regions have already started to prepare such a plan, the corresponding national legislation has not been passed (as of early 2016) and there is uncertainty about the eventual status of the plans.

Figure 11. Organisation of spatial and land-use planning in Chile | Source: OECD, 2017a.

6.1.1.2. Sharing Practices in the Chilean Context

Sharing practices are commonly found in Chilean society at all levels. Some of these practices have a long tradition and are deeply rooted in community's identities, while others are more recent and can be traced to the arrival of the idea of implementing smart city solutions. In this sense, this section aims to provide background information on the type of sharing practices occurring at the National level so that readers can get acquainted with

societal views around them. In no way is this section trying to cover all sharing practices in the Chilean context (which would be impossible) but intends to show the panorama of sharing practices with concrete examples.

Given the high levels of inequality in Chile's societal landscape, the examples discussed indicate that segregation is also perpetuated through sharing practices, with people's socioeconomic status playing a significant role. In this sense, some of the practices discussed ahead can be found in other Global South contexts, where sometimes solutions are “born out of need” (Duncan, 2019). They can provide an interesting perspective and even be a source of inspiration for Global North contexts. Precarious and unintentional sharing practices will be left out, as they do not embody the types of practices that want to be emphasised in this research. The examples will be presented in three categories: a) housing, b) facilities, services and activities, and c) mobility alternatives (Examples are condensed in Fig. 12).



Figure 12. Compilation of significant sharing practices found in the Chilean context, organised by the categories proposed | Source: By the Author with own and web images, 2023.

Shared housing

One of the oldest sharing practices found in the central areas of Santiago are ‘cités’. These originate more than 100 years ago as a housing solution for rural workers moving into the city, and several of them are now safeguarded by heritage laws. Morphologically, they can be described as a cluster of private residences that usually share a contiguous frontage and encircle a shared, restricted area, which is connected to public streets through one or more accesses (Ortega, 1985). This restricted area constitutes the heart of a cité and takes the role

of a community meeting point, where children play, people have daily encounters, and the community celebrates important events. Moreover, life in *ciés* relies strongly on solidarity and collaboration among neighbours in both daily and occasional circumstances, often forming close-knit communities where residents live for extended periods and many generations live harmoniously together. This strong social connection is one of the keys to their success in terms of collaboration. And though newer projects have replicated the morphological principles of the typology this does not ensure the lifestyle that characterises traditional *ciés*. Sadly, in recent years they have been threatened due to the limited capacity of inhabitants living here to take over maintenance.



Figure 13. Public spaces in two *Cités* in Santiago | Source: CORDE Santiago, n.d. (left) and Velásquez, 2009 (right).

Another interesting example is the Ecological Community of Peñalolén. As the name implies, it is a **community-led housing initiative**, self-established in the hilly part of Santiago in the 1980s. The original concept, which is still preserved, advocates for a life close to nature, with a strong focus on sustainability and community life. The area continues to grow under a co-ownership system of properties, where newcomers buy lands and share their rights with other residents. Besides the residential areas, there are significant publicly used areas here that promote sharing practices and social interaction. These are the open areas, accessible to residents and visitors, where local inhabitants have diverse businesses, which include restaurants, pubs, handcraft shops, grocery stores, a library, and a clothes repair shop, among others. Though these areas could be categorised as private, they are publicly used by residents of the community and outsiders who come to make use of the services offered or to enjoy the atmosphere of the place.



Figure 14. Shared spaces in 'Comunidad Ecológica de Peñalolén' | Source: By the Author, 2023.

In addition, the city of Santiago has seen more experimentation with new residential projects in the last years, based on the concept of **co-housing**, which integrates ideas from foreign countries. Though this concept has been around for some years already, with luxury residences for senior citizens that helped fight loneliness, nowadays these projects have adapted to contemporary circumstances. New initiatives target younger demographics, including students and young professionals. Each student has a private room and bathroom, and then shared cooking and eating areas. In addition, they can find in the building workrooms, a cinema, private study areas, common areas, a gym with lockers, and a room for events and large social gatherings. On the other hand, they also have access to diverse services, such as a cafeteria, laundry and cleaning areas, printing, car-sharing, and group excursions¹⁴. Real estate market experts explain that this trend is likely to keep growing in the coming years. Because of the Covid-19 pandemic, the economic crisis that came with it, and the high prices for real estate in the city. Altogether, this is expected to lead to more flexible attitudes towards housing, as young people are likely to look for solutions that fit the needs and preferences of the stage of life they are experiencing; leading to housing being perceived more like a service than a product. In addition, there is an increasing interest in incorporating middle-income mobile seniors into the co-housing lifestyle, providing them with engaging daily activities for an active and healthy lifestyle and offering a stable social network of like-minded individuals. Unlike some of the existing alternatives for this group, for newer senior co-housing initiatives, consent is fundamental, and it acknowledges that residents should be able to take autonomous decisions about their lives.

Shared facilities, services, and activities

There are many examples in Chilean society, as middle- and low-income communities often rely on social networks for addressing daily challenges. For instance, in recent years a

¹⁴ This description responds to the co-housing model developed by the company Astudent, which is one of the most recent innovative co-housing enterprises in the country.

community-based collaborative kindergarten system has gained popularity among parents. In this system, a close-knit group of parents who are acquainted with each other take turns organising a unique kindergarten experience for their children in the homes of one another. This arrangement offers flexibility and reliability, as the children's needs can be met by a trusted member of the community, often one of the mothers.

In terms of facilities, **local markets, known as 'ferias'** take an important role. These arrangements are typical in LATAM and constitute important social and sharing spaces for communities everywhere. Moreover, they are an important source of income to many, who in case of need can sell some of their belongings and get a hold of money quickly.

On the other hand, more recent facilities promoting sharing practices are influenced by foreign experiences. There are two types, that have gained significant attention in the Chilean context. First, there has been a great boom growth of **co-working spaces** in the country, but mostly in Santiago. These shared workspaces exhibit distinct spatial distributions, predominantly located in the city centre and high-income areas in the northeast. Their geographic placement aligns with the target demographic, primarily white-collar workers and professionals engaged in design-related professions. Much like in the shared-bike system, the first initiatives of this type were arranged by banks and even an airline, who offer these services to their clients, but also to external users for a fee. Here people have access to the typical facilities of an office, with workspaces, meeting rooms, presentation rooms, kitchens, cafeterias, leisure areas, etc. Nowadays it is also possible to find other providers, such as local businesses, municipalities, and even State-funded initiatives that aim to promote technological startups.

Second, this phenomenon has also permeated the plans of some municipalities in Santiago, such as in Providencia and Renca, a high-income and a low-income commune, respectively. These municipalities have established **urban labs**, which act as technological hubs, but also as a community and educational centres; for the first, there is 'Hub Providencia' and for the latter is 'La Fábrica'. An interview with one of the managers of the latter reveals the importance of this space to the community of Renca, which is one of the municipalities with higher levels of social vulnerability in the region. He explains that the lab contributes to accelerating the process of urban transformation of the commune, and since it started its operations it attracted other urban services to the area, such as a pharmacy, an optician, and other businesses. It is known by residents as "the Google of Renca", due to the provision of 3D printing machines and its alliances with innovative public and private organisations. Altogether this place promotes a sense of inclusion and even provides an economic opportunity to many. For instance, an employee explains that "Seniors come to the centre, and with the help of younger members they print knitting sticks" (La Fábrica KI9, 2023), which link to crochet and knitting courses taught in the centre, where elders can teach younger residents. Also, the work of cooperatives in the area is regarded highly, such as the one carried out by "Las Sin Género"¹⁵, a group of local women who lead a workshop on circular economy. This is connected to the work they carry out by recycling fabric leftover

¹⁵ In English 'the genderless', however in Spanish the word 'género' also means fabric, so the name addresses the lack of this material, which they obtain as residues from local companies.

to make plushies, which can later be sold, and passing the rest of the remains to local companies which produce glass wool for construction purposes.

Shared mobility

Some of the practices found in Chile are aligned with many of the recent mobility trends experienced in Global North contexts, including the introduction of **bike-sharing, scooter-sharing, and car-sharing platforms**. However, this has decreased significantly after the Covid-19 pandemic and, more importantly, the massive revolts from October 2019, where public and private infrastructure was seriously vandalised, and public bikes were significantly reduced¹⁶. Also, it is important to note that like the geographic distribution of private co-working spaces, these mobility practices often occur exclusively in high-income areas (Fig. 15).

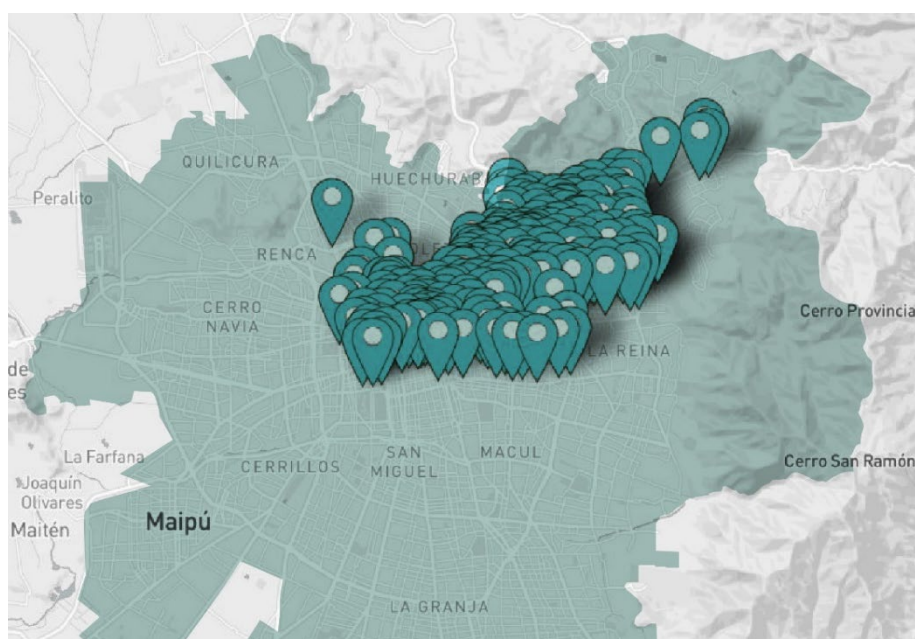


Figure 15. Availability of shared bicycles for one provider in Santiago | Source: BikeSantiago, 2023.

Nonetheless, other sharing practices are widely integrated into people's lives, regardless of income. For example, ride-sharing services have provided a valued alternative to traditional taxis, being utilised for diverse trips, including commuting, shopping, and leisure. The main **ride-sharing** providers in Chile, including Uber, Easy Taxi, DiDi, and Cabify, operate in compliance with national, city and municipal regulations. In LATAM, these alternatives are especially valuable to women, who frequently experience a sense of insecurity when using public transport, specifically when it is dark. A study carried out by Uber in Chile revealed that 60% of female users utilise the share-location feature, which allows a contact to follow the trip in real-time, making them feel safer ([Turk, 2022](#)).

¹⁶ The company Mobike operated for over three years in the city and had nearly seven thousand users in their first year. However, they had to stop their service and were declared bankrupt in 2021.

Other, more traditional mobility practices, which have emerged from people's initiatives and needs, include **carpooling**. People often connect with strangers through platforms such as Facebook groups, blogs, and more recently, dedicated websites to engage in carpooling. These shared trips encompass both commuting journeys for individuals residing outside the metropolitan area or in the urban periphery and sporadic leisure trips, such as long-distance excursions to other cities. In some smaller localities in the country, WhatsApp neighbour groups are frequently utilised for organising such arrangements.

Another intriguing alternative widely employed throughout the country, as well as in other Latin American nations, is **shared taxis, commonly referred to as 'colectivos'** in Chile. These shared taxi services emerged in the mid-20th century in response to the increasing demand for transportation alternatives among urban residents, particularly in densely populated neighbourhoods. They offer a convenient option for intermediate travel distances and typically operate along fixed routes, accommodating up to four passengers. During the fieldwork, it was noted that women highly appreciated these shared taxis due to their affordability and safety. Although planning authorities consider them as complementary alternatives to the existing public transport network, they are not integrated into the fare structure as they are managed by private operators.

Finally, a recent shared mobility trend in Chile is the rise of **motorbike rentals for delivery services**. Mostly utilised by men, including foreigners, it provides an accessible entry point for employment due to the increasing demand for delivery services. Moreover, associated with this rental system, 'mosquito bikes'¹⁷ were observed around the city during the fieldwork. These vehicles have been banned from the streets of Santiago due to their high level of GHG emissions and high speeds, which demand a series of permits, as well as a driver's license. As mentioned by one of the members of the transport and mobility division of the Regional Government, there is an ongoing pilot project to regulate these man-intervened bicycles, so that they can fulfil the existing regulations. This plan acknowledges the importance of these vehicles for making a living.

6.1.2. Case study areas in the Santiago Metropolitan Area

Santiago's Metro Line 3 comprises 18 fully constructed stations, with 3 additional stations still undergoing construction. Based on this, a sample of four stations was chosen considering two variables: socioeconomic level and diversity of users. In terms of socioeconomic level, the selection considered city-level data, which indicated a concentration of lower-income groups on the northwest side of the line, while middle- and high-income groups were more prevalent on the east side. Regarding user diversity, the criteria focused on selecting areas with high attractiveness that attract a transient population during the day, resulting in dynamic spaces, as well as local areas that mainly cater to residents with more fixed and static dynamics.

¹⁷ Their name is attributed to the sound that these bicycles, equipped with an internal combustion engine, make while riding.

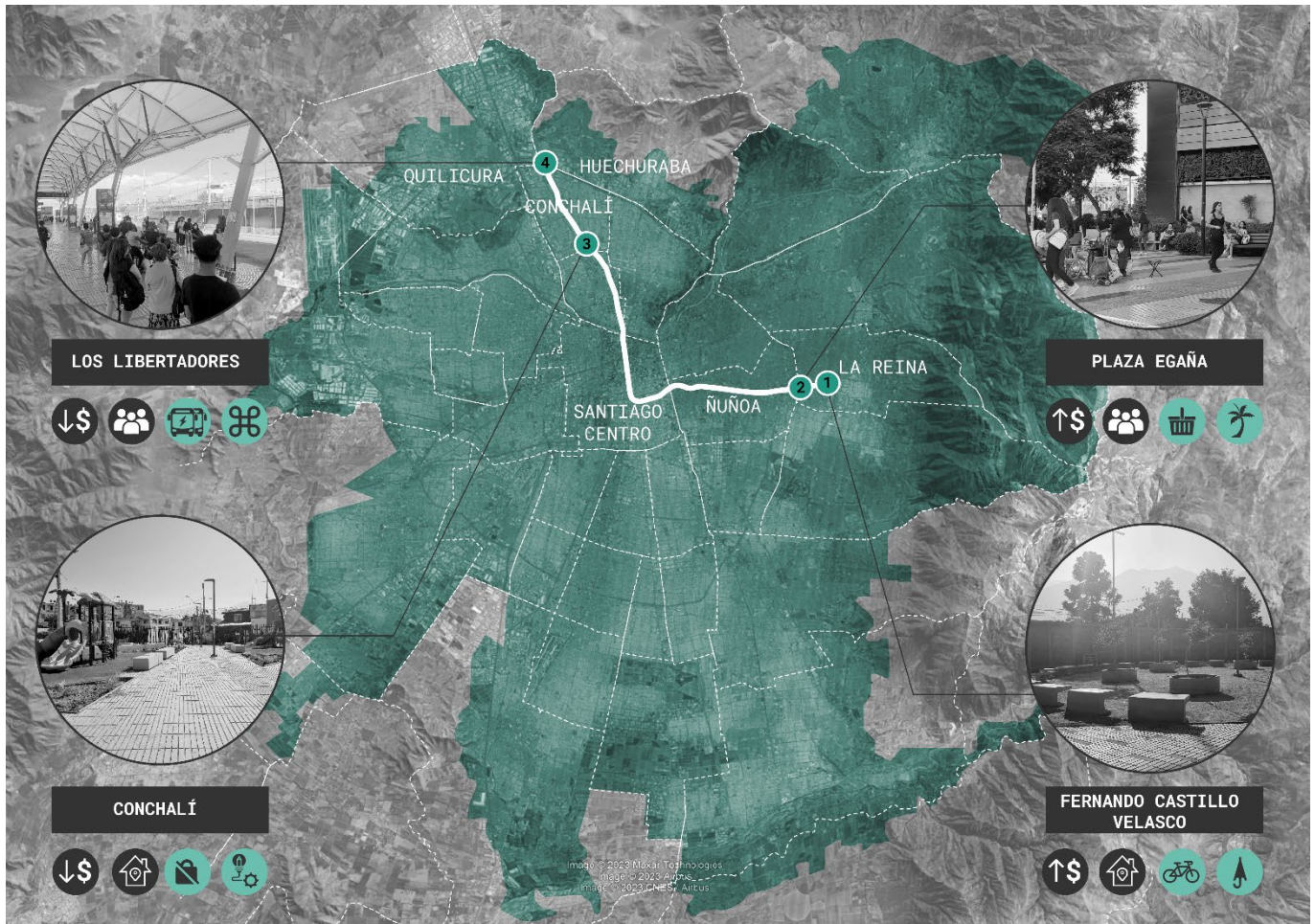


Figure 16. Case study areas in Santiago | Source: By the Author, 2023.

The land around this Metro line's stations, in most cases, had to be expropriated and placed under the administration of Metro Santiago for executing the projects. This can be easily recognised by the fence that confines most spaces and which is closed daily once the underground station is out of operation. As discussed later, this hard limit creates problems of different nature for these publicly used spaces.

Going back to the thesis's central topic, the decision to study the surroundings of metro stations as case study areas in Santiago, in the context of shared spaces and mobilities is justified by several factors. On one hand, **mobility hubs serve as central points that attract and concentrate diverse users engaging in various activities within a defined space**. This concentration of users and activities provides a rich environment to examine the interactions between practices and the utilization of shared spaces. Additionally, **mobility hubs have been observed to be particularly conducive to the occurrence of sharing practices between strangers**. They often serve as meeting points, fostering social interactions and the exchange of resources or services. Exploring sharing practices within mobility hubs allows for a deeper understanding of how individuals come together, interact, and collaborate.

The following sections introduce the selected case study areas and present relevant information gathered during the fieldwork, including observations and insights from

interactions with passers-by and authorities. For each area, the text comprises some essential information and context, observations of users, primary modes of transport and mobility, and activities and utilization of space throughout the day, emphasising sharing practices observed.

6.1.2.1. Fernando Castillo Velasco

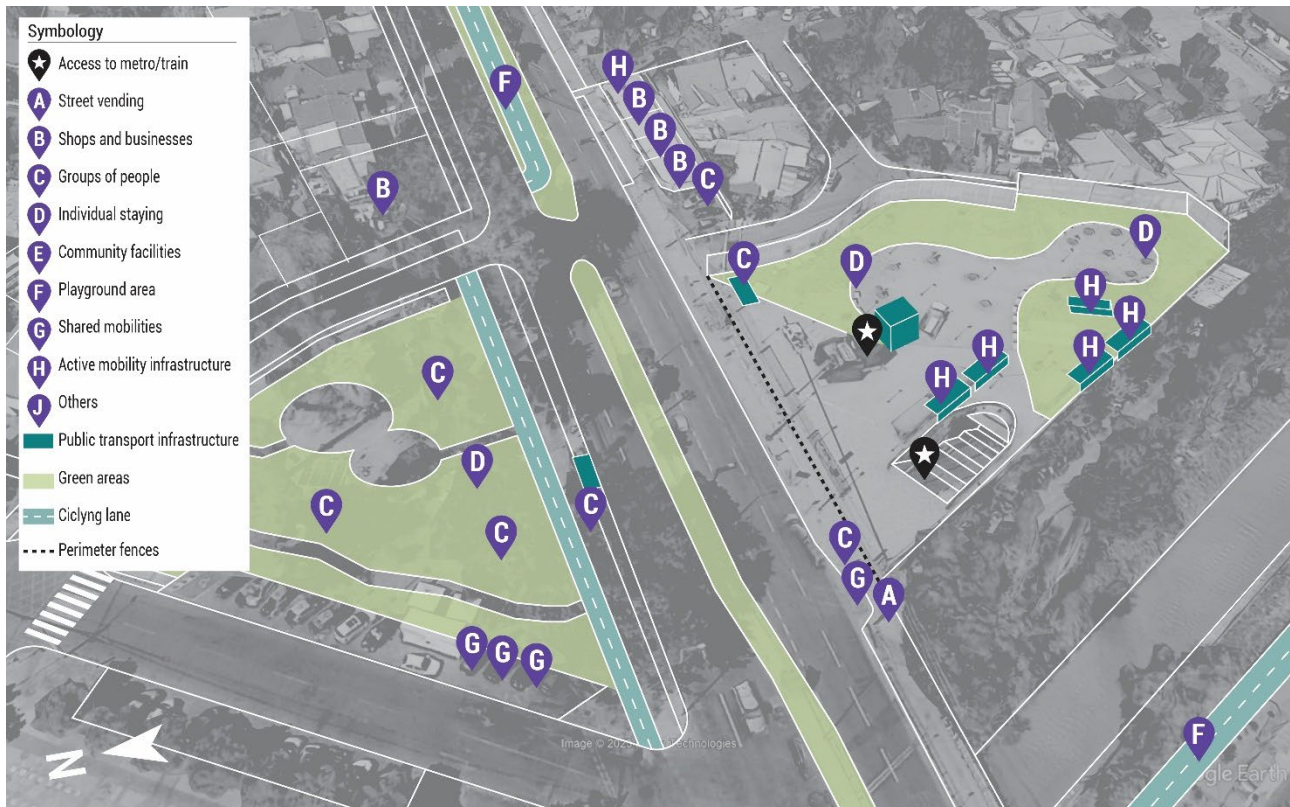


Figure 17. Sketch of physical environment of Fernando Castillo Velasco station's public space, with identification of relevant urban dynamics | Source: By the Author, 2023.

It is situated on the east side of the city, in the commune of La Reina, which is generally characterised by its low-density residential areas and high presence of greenery. Compared to the other cases, this metro station presents a more local character and concentrates on higher-income socioeconomic groups, though there are also middle-income residents in the area. It is the end station of the metro line towards the east side. Right by the station space, there is a canal which runs from south to north, and though there is public infrastructure next to it for bicycles and pedestrians, this is not integrated into the metro station public space.

Regarding the primary modes of transport and mobility in the area, it was observed that many people walked, while others used a combination of local buses and the metro. Besides the public transport network buses, free municipal buses were also available. These electric buses aimed to improve residents' mobility, particularly targeting elders and students. For instance, during the survey collection stage, it was observed that many elders used the metro and then took the bus to go to the Military Hospital for medical purposes. Taxis and

collective taxis were widely used by women. However, there was limited space for vehicles to stop (only one designated parking spot, but often more than one car was parked there), and there was no defined space for people to wait for collective taxis (see Fig. 18).

Furthermore, many young people were seen passing through this area as part of their daily commute, often utilising a combination of public transportation and privately owned bicycles (as there was no public bike system here). The presence of bicycle parking infrastructure in the station's public space and a well-connected cycling network with segregated lanes from all directions supported this observation. According to interviews, this particular station had a high demand for bicycle infrastructure (Metro Santiago, KI3, 2023).

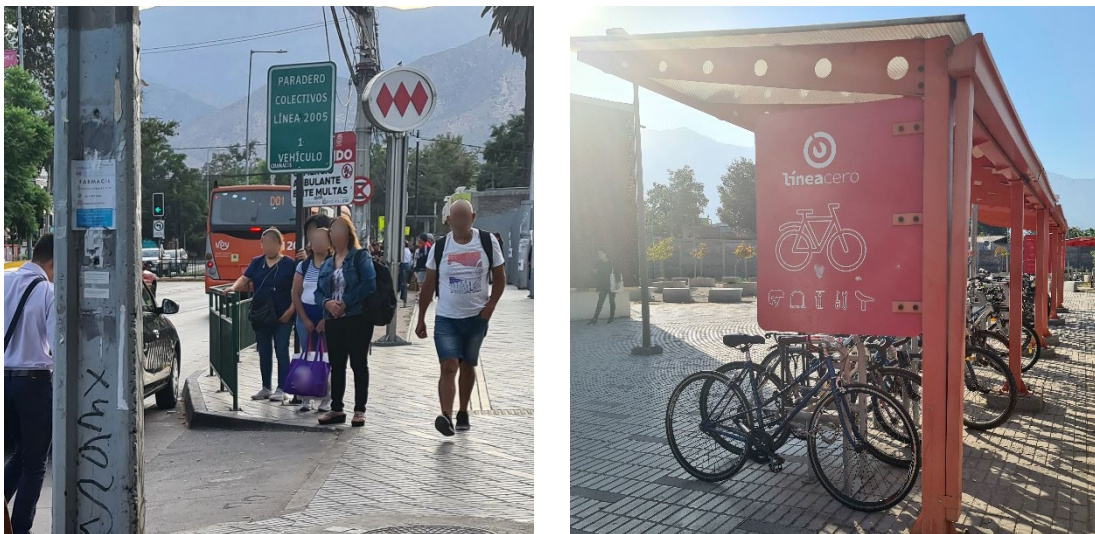


Figure 18. Primary mobility situation around Fernando Castillo Velasco station's public space | Source: By the Author, 2023.

As observed on-site and discussed with passers-by, land uses around the station changed with the opening of the metro station. Adjacent to the metro station (to the north), there used to be a restaurant, which was then turned into various shops that are frequented by residents of the area and passers-by. The assortment of stores comprised a corner café offering varied food options, a vegan grocery store, a bike-repair shop, and a technical support shop for electronics. Additionally, informal vendors were noticed at various times during the visits, although it was noted that they changed throughout the day. Vendors had few elements, like chairs and containers, and offered mostly food to passers-by. Despite the presence of signs indicating that this activity is forbidden and punishable with fees, this did not seem to deter the practice.



Figure 19. Places of interaction present in Fernando Castillo Velasco station's public spaces | Source: By the Author, 2023.

Despite the large open public space situated at the back of the station, people were rarely seen using it. Contrasting with the rest of the space, which barely had benches for people to wait for the bus, this space had many concrete benches. However, as experienced during the fieldwork there were no elements to protect people from the weather (in this case, extreme heat, and sun radiation). Regarding this last point, it was also observed that the size of bus stops was insufficient considering the significant crowds of people observed during the visits. This issue was especially problematic at the bus stop adjacent to the station, where the sidewalk space was limited (because of the border established by the fence) and there were no covered areas. In response to this, ticket controllers devised a simple but effective solution to protect themselves, such as carrying large umbrellas in the summer. Across the street, the situation was better, as there is a fully green park where some passers-by stopped by to relax and meet others. Also, a religious group of people was seen here during the afternoon, approaching passers-by and people at the bus stop while they waited for their bus. Overall, few people made use of the public spaces around the station. It was noted that there was no shadow and it was very hot, making the place feel very uninviting.



Figure 20. Observations of urban elements at Fernando Castillo Velasco station's public space | Source: By the Author, 2023.

6.1.2.2. Plaza Egaña



Figure 21. Sketch of physical environment of Plaza Egaña station's public space, with identification of relevant urban dynamics | Source: By the Author, 2023.

This station precedes Fernando Castillo Velasco and is also situated on the east side of the city, right at the limit between two communes: La Reina and Ñuñoa. Its overall character is marked by the large shopping centre adjacent to the station, which makes it a dynamic place which attracts a transient population throughout the day. The residents around the area belong to high- and middle-income groups. At the street level, the station's public space is divided by one of the city's main streets (Av. Américo Vespucio), into two main areas: one to the east, adjacent to the shopping centre, and one to the west, with a larger open area. Each of these areas have independent access to the metro underground and as discussed ahead, present very different characteristics.

In terms of transport and mobility, this area stands out significantly due to its size and usage, being one with the most metro users recorded in the city. As a bustling transfer station, it serves as a crucial hub where Metro lines 3 and 4 intersect. This location holds significance in terms of connectivity as it is situated in an urban area where two major city roads intersect, resulting in a high volume of public transportation buses. Taxis and collective taxis were also observed in the area, but they did not have designated stopping areas. Instead, they would wait for passengers directly behind designated bus stops spaces. Some people were seen making use of ride-sharing services, such as Uber. Few cyclists were seen during visits, mostly only men using bank company bikes at docking stations in public areas.

Other than this, there was no formal bicycle parking infrastructure at the street level. Cycling seemed like a dangerous practice, as cars have priority on streets and there were no segregated bike lanes. In addition, many people were seen walking in the area, especially crossing from west to east. Even though the perimeter of the large public space has shops and facilities, few people were seen frequenting them. This area also had spaces for car parking, which were mostly occupied, but little movement was observed during the visits.

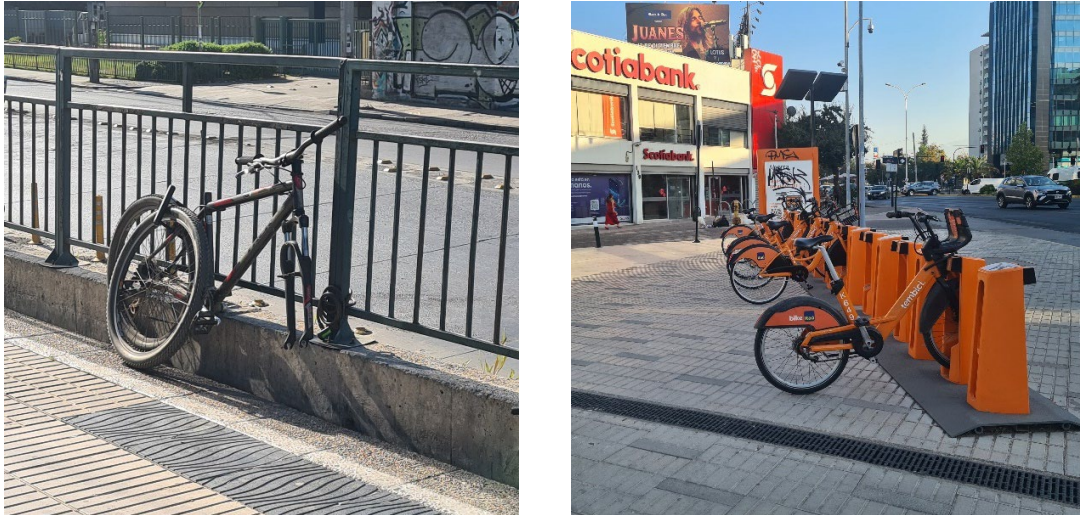


Figure 22. Observations of bike infrastructure around Plaza Egaña station's public spaces | Source: By the Author, 2023.

Public spaces around the station were utilised in very different manners. As a starting point, it can be argued that their spatial characteristic and surrounding land-uses had a lot to do with these disparities. For the smaller area, located at the east side of the main road, many individuals were seen in groups outside the shopping centre or just sitting by themselves, especially women and elders. This was frequent during all the visits to the area and was facilitated by the urban furniture, greenery and sun protection that was present in the area. Many informal vendors (who were mostly women) were present in this place, capitalising on the natural concentration of people attracted to the shopping centre.

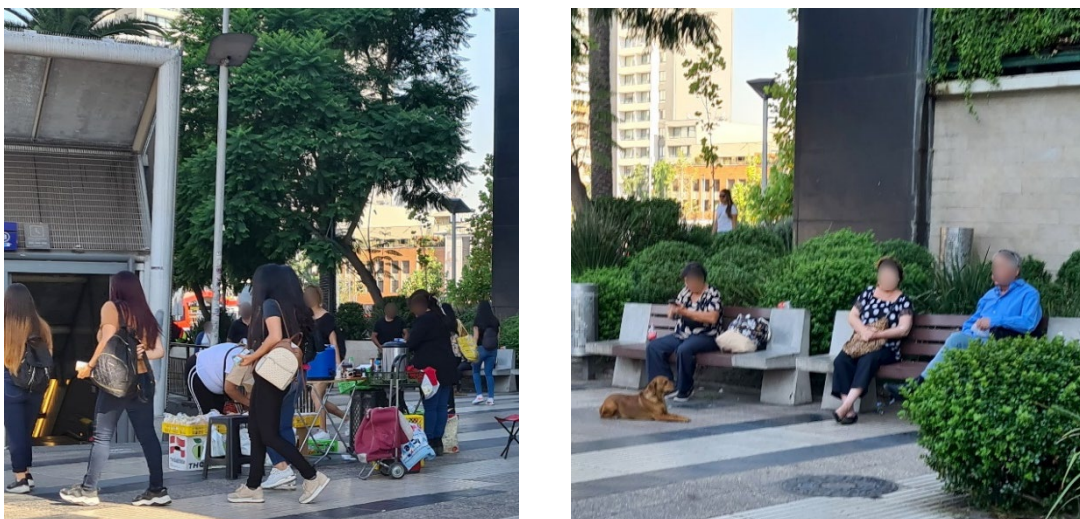


Figure 23. Observations of users and activities around Plaza Egaña station's smaller public space (east of Vespucio) | Source: By the Author, 2023.

The larger area, on the other hand, situated to the west of the main road also had informal vendors during different times of the day. Though the practice is not permitted by authorities, vendors in this space (who were mostly men) had bigger setups, with tents and food carts. Though in the evenings, once most people were finished at work, it was observed that a small group of people would offer handcraft products next to the sidewalk adjacent to Av. Américo Vespucio, as many people would pass here. While doing one of the visits, municipal inspectors were seen asking vendors to take down their setups and did not give them fines. Vendors just complied. Then, further from the borders of the square, there are benches and palm trees in large concrete boxes that also serve as sitting areas. Men tended to remain alone and sit for long periods in the benches or next to the palm trees, where they checked their phones, and some talked over the phone or simply remained there for some time. Some individuals were also seen having lunch here during their lunchbreak.

The design of this public space has faced significant criticism from residents and users, which has even garnered media attention. The main critiques are the lack of trees, lack of greenery, and excessive use of concrete. As observed, palm trees barely provided shaded areas. Some passers-by asserted that the conditions of the space before this project were much better for social interactions and aligned better with community interests. A group of academics from a local university stated: “A ‘civic square’¹⁸ can offer a public space, but its contribution to the neighbourhood and the city [...] is poor, and therefore, Nuñoa and La Reina have lost” ([Velásquez, Vásquez & Giannotti, 2019](#)).

In response to these criticisms, Metro explains that reduction of green areas in the adjacent park, was a technical requirement from their Structural Engineering Department. This was done to avoid having water accumulation over the excavated area, as it could potentially infiltrate the tunnel’s structure and cause damage (Metro Santiago, KI3 & KI4, 2023).



Figure 24. Observations of users and activities around Plaza Egaña station’s larger public space (west of Vespucio) | Source: By the Author, 2023.

¹⁸ In Spanish the concept is “plaza dura” which can be literally translated to English as ‘hard square’. However, it refers to the idea encompassed by ‘civic square’.

6.1.2.3. Conchalí

This station is situated in the central northern part of the region and is part of the commune of Conchalí. It adopts this name because of its proximity to the Municipal building of the commune, and can be characterised as a residential area, with mostly locals passing by. Residents in the area belong mostly to low-income groups. At the street level, the station has one adjacent public space, defined by a fence, and much like in the previous case it seems like a civic square, with some concrete boxes for small plants. In addition, there is also a significant public space across the street, to the west of Av. Independencia, which is the Bicentenario square. An interesting fact about this place is the arrival of metro infrastructure, has attracted densification trends in the neighbourhood, changing its urban morphology with high-residential projects. This is still in an early stage but will likely grow in the years to come. However, in the vicinity to the station, most of the buildings remain small, reaching up to 2 floors, which gives the possibility to have a clear view of the surrounding hills that are typical to the geography of the city and that are often hidden behind high-rise buildings.



Figure 25. Sketch of physical environment of Conchalí station's public space, with identification of relevant urban dynamics | Source: By the Author, 2023.

During the site visits, it was observed that the station was located at the intersection of two important city roads, namely Av. Independencia and Av. Dorsal. This intersection serves as a crucial connection point for internal transportation in the northern part of the city. As a result, there is a significant flow of buses in this area, and bus stops are positioned along the

median of the streets. However, this arrangement leads to the isolation of the bus stops from the surrounding pedestrian public spaces, as they are separated by two lanes of traffic.

Additionally, the bus stop structures themselves are relatively small, providing limited seating under the sheltered area. Taxis and collective taxis were also observed in the vicinity of the metro exit, primarily located near the station.

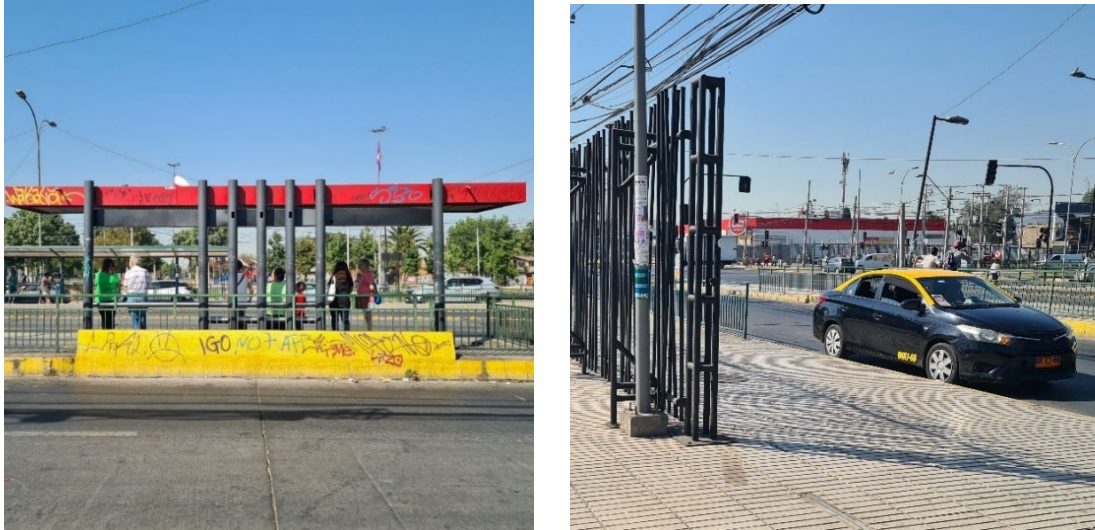


Figure 26. Observation of bus stops near Conchalí station's public space | Source: By the Author, 2023.

Regarding active mobilities, few people were seen riding bicycles and there was no infrastructure to do so safely. Though some bike-parking furniture was available in the area, nobody was seen using it. Most people walked, and many had foldable trolley bags for groceries. Interestingly, some innovative mobility alternatives were observed in this area during the visits, such as a foldable bike with an improvised storage compartment and an electric-powered tricycle, known popularly as 'torito'¹⁹, which are often used by private individuals to transport products, like fruits and vegetables (see Fig. 27 and 29).

¹⁹ This can be translated as 'little bull' in English. They can carry at least 500 kilos and are becoming increasingly popular in peripheral areas of Santiago.



Figure 27. Observations of innovative transport alternatives around Conchalí station's public spaces | Source: By the Author, 2023.

As mentioned, two main public areas were identified around this metro station. To the east of Av. Independencia, where the metro exit is situated, there is a large space enclosed by the fence implemented by metro, which is quite underutilised. Despite having some urban furniture, such as concrete benches and two prefabricated playground areas, these were poorly utilised as they had no shelter and were exposed to sun radiation. And though there are some local businesses in the perimeter of this space –such as a grocery, a butcher, and a barber shop–, the fence prevents these activities from permeating into the adjacent public space. Overall, very little activity was observed in the area, with most people just passing by. This lack of urban life is also reflected by the poor quality of the environment, which had little greenery, no shading elements, and damaged furniture.

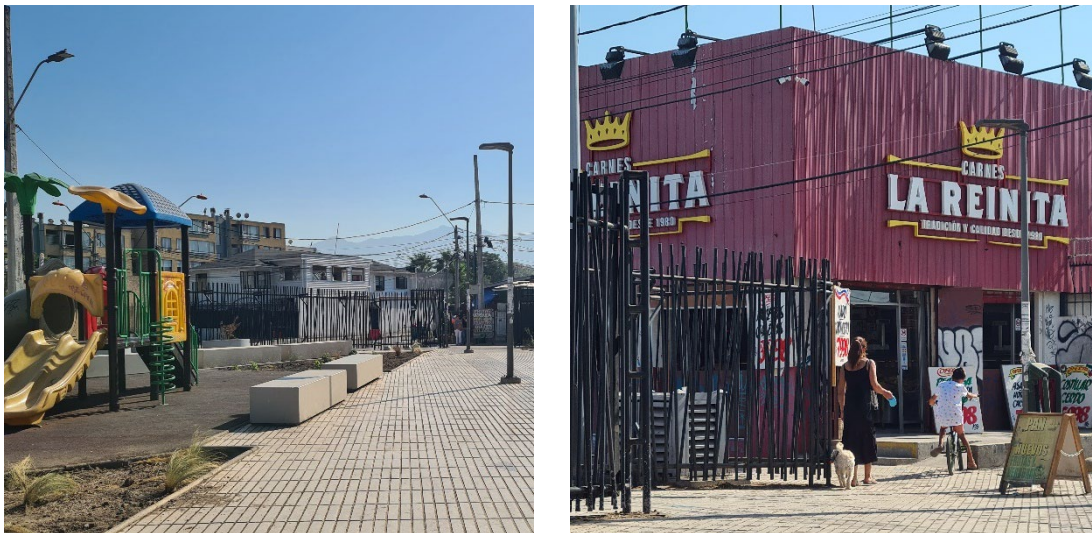


Figure 28. Observations of elements present in open areas around Conchalí station's public spaces | Source: By the Author, 2023.

Other observations captured from the visits was the high presence of elders on the street at different times of the day, where a very senior couple was seen preaching right by the metro exit during the morning visit. Though the area was perceived as safe during the visits, due

to the diversity of age groups, and the presence of women in the space, people problematised the safety aspect of this space, which they perceived as insecure. Additionally, informal vending was also present in this space, though it had less presence than in other cases. The vendors here were changing throughout the day, but overall, they seemed to get along and chatted among themselves in between customers.

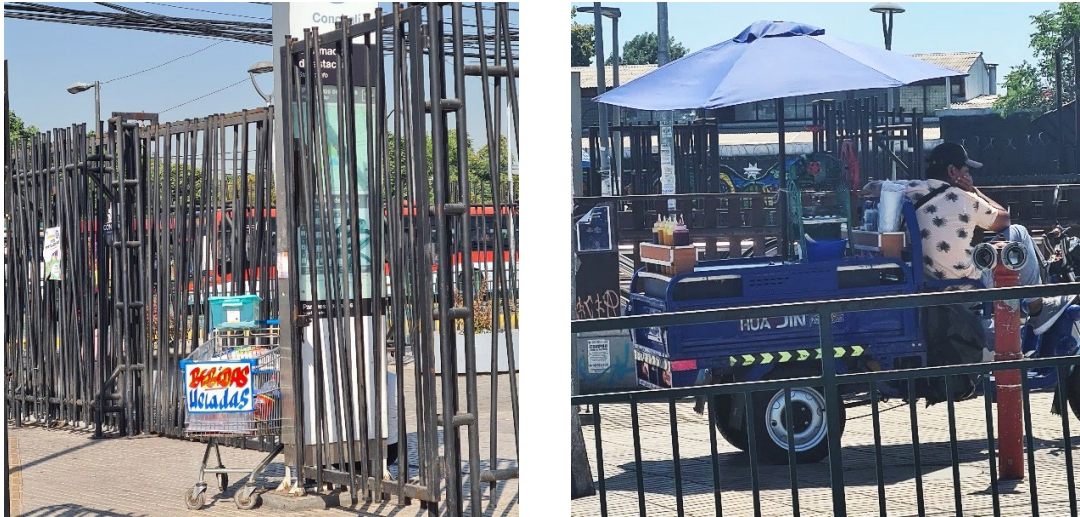


Figure 29. Observations of informal vending around Conchalí station's public spaces | Source: By the Author, 2023.

Few meters north from this space is located the Municipal library of the commune. At a first glance, it was signalled on the street with some furniture and informative panels. It was interesting to see that one of this panels informed residents about working opportunities, and many people were seen taking down some notes from this. Then, the building itself constitutes an important space for the local community as it has multipurpose room, a large hall, meeting areas, and a significant assortment of books for all ages. During one of the visits, an employee explains that the space between the library and the fenced square is often used for municipal activities and that there is a group of girls that sometimes comes and practice dance routines here.



Figure 30. Observations of services offered by the Municipal Library situated by Conchalí station's public spaces | Source: By the Author, 2023.

Across the street, in the Bicentenario square, the situation is quite different than in the public space adjacent to the station. This is a large green area, with big trees and lots of diverse vegetation. It also has several grass areas, where people lay down and even take naps. Unlike the situation observed in the playgrounds across the street, this one is larger, and it has a shading structure, which helps to protect from the weather. Many parents (mostly mothers), and caretakers (like grandmothers) used the shaded playground space with children in the afternoons. Some informal vending was also observed, with vendors sitting by the benches.



Figure 31. Observations of Bicentenario park, across the street from Conchalí station| Source: By the Author, 2023.

6.1.2.4. Los Libertadores

It is located to the north of the city, right where three communes meet, including Quilicura, Huechuraba and Conchalí. It is a sprawling area that can be generally characterised as industrial and with diverse service provision. The population present in the area belongs to low-income groups, according to the categories established. Due to the transport services offered here, it can be characterised as dynamic, as it concentrates a large and diverse group of people throughout the day. It is the terminal station of the line to the north, and it offers connectivity to both urban and rural buses.

It is important to note that this metro station is one of the most challenging ones in terms of urban insertion as it is defined by major adjacent urban roads, including the Vespucio highway to the south and the Libertadores highway to the east. It is also located close to Route 5 which is the backbone road of the country. On top of this, there are concrete plans for developing buildings for Google's data centre, Walmart and CCU (a large beverages producer); all of which will involve introducing additional freight services in the area, increasing the presence of trucks on the road. Moreover, the station is one of the few intermodal stations in the city and one of the first to include infrastructure for operators,

providing bus drivers and employees with spaces for their needs during their shifts²⁰ (Metro Santiago, KI3, 2023).

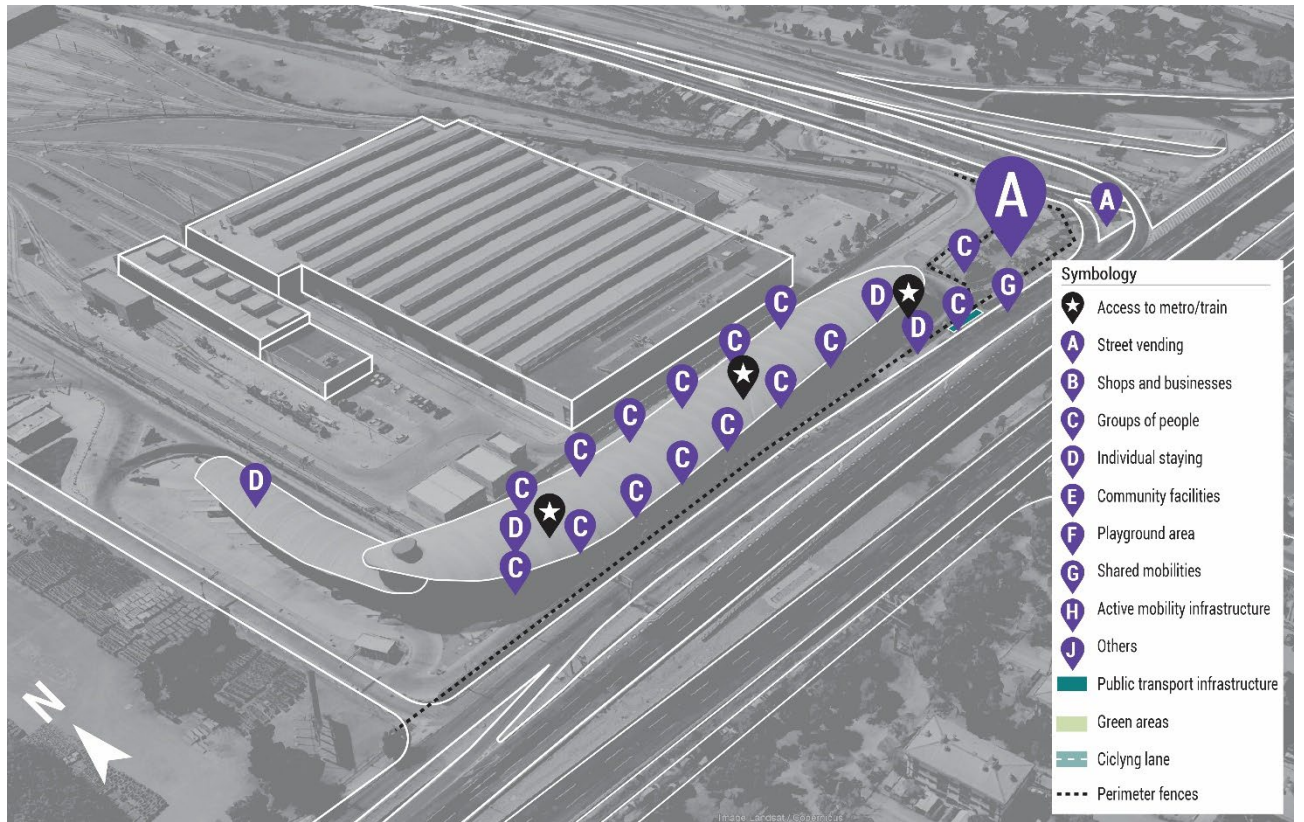


Figure 32. Sketch of physical environment of Los Libertadores station's public space, with identification of relevant urban dynamics | Source: By the Author, 2023.

Transport alternatives were broad, with a large offer of public transport buses that allow people to get closer to neighbourhoods in the northern part of the city. In addition to these buses, there was also an intercity buses section in the back of the station. These are known locally as 'rural buses', which are operated by independent private companies and offer connectivity to areas outside the Metropolitan Region. Also, taxis and collective taxis were seen stopping next to the terminal, as well as private vehicles dropping people. Around the same area, some motorcycles were seen parked on the sidewalk (see Fig. 33). As observed, sometimes groups were picked-up/dropped here by their respective companies or colleagues, facilitating their commuting trips. In addition, no bicycles or bike-related infrastructure was seen here, and due to the high travelling speeds of vehicles it seemed extremely dangerous to engage in such practice.

²⁰ According to one of the interviewees, it is a common practice in Santiago for bus companies to rent houses near the final stations for this purpose. These are accommodated according to their needs but are usually not too close to the terminal station, making them inconvenient.



Figure 33. Observations of transport infrastructure and services around Los Libertadores station's public spaces | Source: By the Author, 2023.

Regarding the activities and uses of the public spaces around the station, it was observed that in the shaded public space of the station, not much was happening. During the visits, many ticket controllers were seen (about one per bus, so at least 13 simultaneously). Though their job involves standing for many hours, the station had no sitting areas at the street level, so they were often seen sitting on the large foundations of the structure's pillars. Besides the lack of sitting areas, there are no shops to buy refreshments from and no informal vendors are present in this sheltered area. In addition, queues for buses were seen, which were especially long in the morning visit. As is part of the unspoken culture, people form orderly queues and patiently wait for their buses without sitting down.

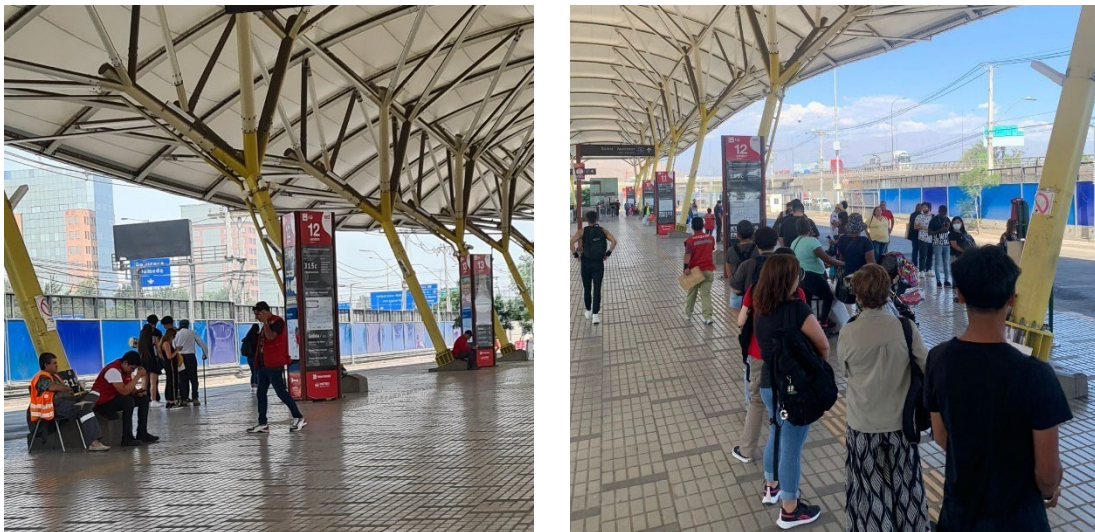


Figure 34. Observations of activities around Los Libertadores station's public spaces | Source: By the Author, 2023.

Despite not finding informal vendors in the intermodal terminal area, on closer inspection, it is possible to find a large market to the west of the covered area, where residents have set up their stalls with tents. They are organised in a linear way, from Av. Independencia and

towards the west access to the intermodal station and offer a diverse range of products and foods.



Figure 35. Observations of informal vending around Los Libertadores station's public spaces | Source: By the Author, 2023.

6.1.3. Data Results and Analysis

The following section presents the findings of the mixed methods utilised for the case studies selected in the Metropolitan Area of Santiago, including on-site observations, surveys, document reviews, and semi-structured interviews with relevant stakeholders.

6.1.3.1. The Regional scale

During the fieldwork stage, interviews with employees of three regional State organizations and institutions were organised, including meetings with employees from the Regional Government (GORE), the Programme on Roads and Urban Transport (SECTRA), and Metro Santiago. This section presents the main points discussed in those interviews, focusing on the discourses that lead their work and its practical implications, including associated challenges and views of future projects.

Planning values and discourses

Regarding the discourses, the input from the interviews reveals that the challenges faced at the regional level are significant. General primary concerns expressed relate to population growth, higher income levels, and the expansion of urban boundaries. In response to this, the National View aims to create inclusive and accessible urban spaces that prioritise intermodality and integrate all three pillars of sustainability. This approach focuses on promoting green development to reduce emissions, ensuring social justice and better access to opportunities, and decreasing travel costs and times while emphasising public transport and active mobility. To improve governance, the National vision seeks to empower regional

authorities by granting them more authority to develop and plan their regions based on the unique needs of their populations. To achieve this, two political figures have been created: the Regional Governor and the Presidential Regional delegate.

The newly created position of Regional Governor (GORE) works with the Regional Council, and together they are responsible for the distribution of State-funded investments, as well as the coordination of public or private funding for sectorial investments. Their main task is to coordinate public policies in their respective urban territory in a holistic manner, which are condensed in the Regional Strategy for Urban Development²¹. According to one of its employees (GORE, KI7, 2023), territorial justice and equity are core values that guide their work. She explains that State intervention alone is insufficient to address the complex issues in the region and emphasises the importance of multisectoral collaboration with engaged and willing public and private actors. She illustrates this through a metaphor, stating, “We need good musicians, but if they don't play music in unison, then it does not work” (GORE, KI7, 2023). Regarding GORE's work in mobility and transport specifically, a division employee says that their work is centred around caring for the most vulnerable people, for which they have created an active mobility policy with a focus on gender. He further states that **“planning instruments must be able to transcend governments”** (GORE, KI8, 2023). This means discussing and aligning sectorial criteria among diverse State departments and Municipal authorities.

At the regional level, SECTRA from the Ministry of Transport, plays a leading role in promoting intermodality in the Metropolitan Region by working collaboratively with many different entities in the city. To this end, SECTRA formed a special work panel in 2012 that includes Metro Santiago (a state-owned company), the State Railway Company, The Ministry of Housing and Urbanism, The Ministry of Public Works, and Regional Government authorities, though sometimes it is necessary to invite other actors to their meetings (Fig. 36). While they highly value this collaborative approach, the abundance of actors within the discussion can pose a challenge to reaching a consensus, as each actor has their own priorities and resources are naturally limited.

When asked about the factors that shape their institutional stance on urban mobility, Chilean organizations identify European cities as their main references. Over the last decade, cities with active mobilities have been the focus of urban development plans. Some of the cities mentioned include Colombia, Mexico, Sao Paulo (Brazil), and the Scandinavian region. Interviewees repeatedly mention London, Amsterdam, and Copenhagen as references for creating bike-friendly cities in Santiago. This is not surprising as they are emblems for good urban design and good quality of life, and they are more closely based on the principles of cities for people. In this sense, authorities have integrated this idea into planning values for the region, which are encapsulated in the slogan **“Santiago at the human scale”**, proposed by GORE.

²¹ Though this has not been updated, and the latest version was a plan for 2012-2021.

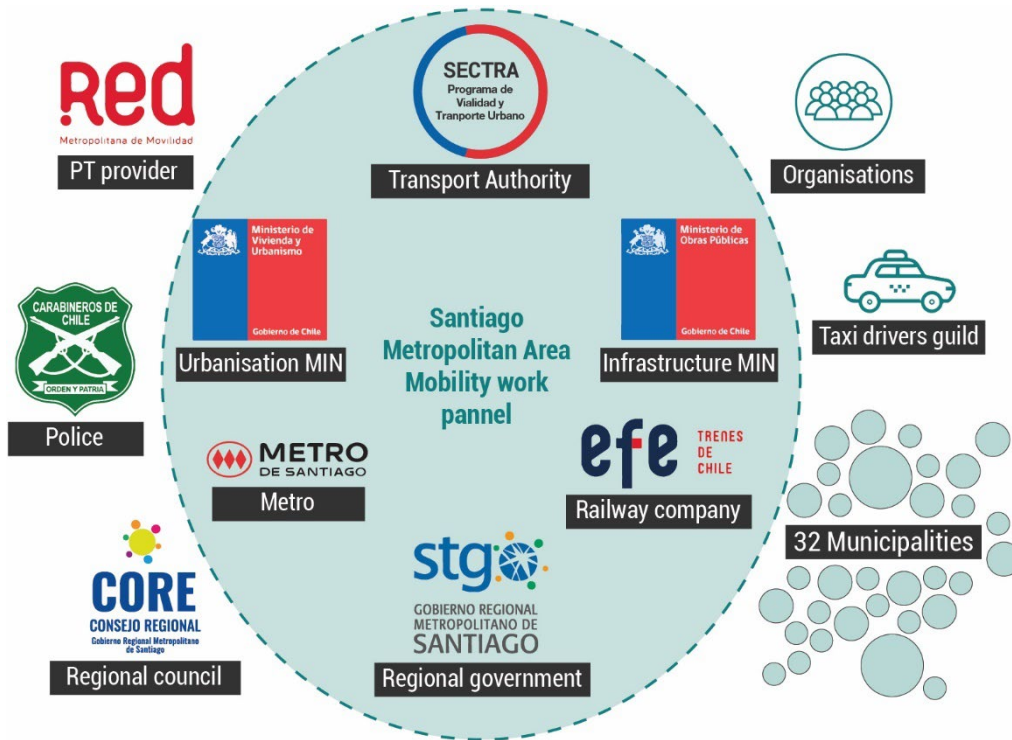


Figure 36. Stakeholder mapping of actors that take part in Santiago’s Metropolitan Region mobility work panel | Source: Prepared by the author.

This standpoint is indicative of a strong interest in prioritising pedestrians, cyclists, and other low-impact modes of transport. However, planners recognise that the methods utilised to evaluate public investments are a great barrier to achieve this vision. They describe the methods as rigid, built on quantitative factors like time and money savings, and indifferent to the presence of green areas or improved social dynamics. This makes it challenging for them to obtain approvals for projects that address social issues such as social justice, which cannot be easily measured in monetary terms.

Practices and practical implications of discourses

In Santiago, SECTRA stands out as a specialised technical institution in transport planning, now shifting its focus towards mobility, as it entails a more inclusive approach than the notion of transport. They propose development plans for urban transport, assess investments and infrastructure implementation, and gather data and methodologies for transport studies. They recognise that the lack of strong planning actions has led to an increase in urban issues related to transport and mobility. For instance, one disturbing trend discussed is the significant growth of trips and travel distances. Over the past decade, private vehicle usage has risen by 5.3%, resulting in a decline in public transportation and active mobility options (SECTRA, 2020). To tackle this, they have developed a strong interest in enhancing intermodality within the region. They aim to improve the overall intermodal experiences of the citizens and are considering publishing recommendations for practitioners in this regard.

Furthermore, they problematise that **until now the intermodal experience has not been taken into consideration in existing metro lines (including Line 3 stations, analysed in this thesis), and is underdeveloped at the city level.** Interviewees (SECTRA KI1 & KI2, 2023) stressed the importance of including the design of such valuable public spaces through the Impact Evaluation Assessment. They highlighted the lack of an existing methodology to enhance intermodality and the utilization of shared spaces and mobilities in the public areas surrounding the current metro stations. However, this issue extends beyond just mobility hubs. Large real estate projects that require Traffic Impact studies also need to compensate for their negative effects. Yet, the compensation system does not align with the views of the Regional Planning Authority, as such investments are materialised either through funds managed by local municipalities²² or are decided by the developers themselves.

The lack of established methodologies for shaping public spaces outside Metro Stations is confirmed by Metro employees (Metro Santiago KI3 & KI4, 2023), who explain that their formal responsibilities ended up until the last step of the stairs leading to the street level, and they had no obligation to design the public space around the metro exit. **Due to the lack of established procedures, these public spaces were resolved in a case-to-case manner with funding obtained from different sources and with homogenous urban design principles.** This was not because they lacked interest in such spaces, but more an issue of prioritising resources. However, the neglect of these spaces took a toll on them after local Municipalities began complaining about safety issues caused by the poor urban design of these spaces. At the same time, they experienced issues around intermodal stations with extremely high design standards in the underground system but “barely had pavements installed” at the street level.

In response to these conflicts, Metro initiated the development of a methodology specifically designed for the creation of public spaces around metro exits. The objective of this methodology is to foster better integration with other modes of transport and enhance overall mobility. Initially, they focused on improving existing public space infrastructure adjacent to metro stations, which presented numerous challenges along the way. The insights gained from these experiences played a crucial role in the formulation of a new methodology. For the upcoming lines eight and nine, each metro station will be subject to a public tender project involving private developers responsible for designing these spaces in a period of nearly 18 months. The methodology will adhere to the following structure:

²² The issue with municipal managed funds is the high territorial fragmentation of the Region; each Municipality develops its own Public Space strategy that is independent of the rest of the Municipalities and does not necessarily have an integrated vision of the Metropolitan Area of Santiago.

Consultation phase	Methodology and requirements for consultants
1) Cadastral Surveying (600-metre radius)	Including all facilities and services within the study area, highlighting three topics: transportation systems available, existing infrastructure, and 'urban insertion' (the existence of specific urban or social dynamics in the area and to understanding the character of the physical environment).
2) Diagnose of the area	Comprises a critical analysis of the information gathered in the previous stage to identify critical areas, together with a baseline situation, and an analysis of the demand produced by Metro (morning and afternoon peaks).
3) Presentation of Solutions	Should address the different modes of transport in their hierarchy: 1 pedestrian, 2 public transport, 3 bicycles, and 4 private vehicles. The solutions should be based on a five-year and a thirty-years projection.
4) Virtual Models	Allow decision-makers and users to visualise the design and functioning of the public spaces and traffic flows around the metro station.

Table 3. Proposed methodology for public space development around metro stations | Source: Prepared by the author, according to Metro Santiago KI3 & KI4, 2023.

Beyond the public space surrounding metro stations, low levels of intermodality at the metropolitan level can also be explained by the existing transport infrastructure in the city. Like many other cities in the world, Santiago prioritised a car-planning approach for some decades (and many would argue that this persists in parts of the city). This translates to a high provision of vehicular infrastructure with urban highways, and streets that are designed for high traffic speed. Though public transport corridors were established, improving the travel times for buses, this high-speed-vehicle-centred development was to the detriment of slower modes, such as cycling or walking.

Similarly, SECTRA recognises that although active mobility and intermodality are their priorities for planning urban mobility and transport networks, their work is limited by two main factors: financial resources and institutionality. Firstly, they find their work constantly limited by the boundedness of resources that limit their possibility for generating more investment projects in the city. Secondly, they identify an issue around institutionality in the city, from two main perspectives. **They highlight the challenges of having several and often divergent voices in the decision-making process**, as well as the role of municipalities and police on safety, which is threatened by the increasing presence of informal vendors and the issues that their presence in crowded public spaces can carry. In this respect, metro representatives also problematise the presence of mafias²³ in the

²³ Authorities problematise that these mafias pose a huge safety threat to their staff, who have suffered threats and attacks from such groups, but they also put in risk the safety of pedestrians

informal vending environment surrounding metro stations. One of the measures implemented to address this was to establish zones within Metro's paid area for entrepreneurs and vendors to offer their products free of charge, in what they called "*Mercado a un metro*"²⁴. However, this seems insufficient, as informal vendors can still be found both in the underground spaces as well as in public spaces outside metro stations. But this problem goes beyond the scope of their work and constitutes an important social problem to address in the city (Metro Santiago KI3, 2023).

On a related note, a government employee (GORE KI7, 2023) explains that they are undergoing training to apply the CPTED (Crime Prevention Through Environmental Design) methodology. This approach is combined with social programs that support the formalization of the physical and working conditions for informal vending.

Finally, regarding governance, among the organizations and institutions interviewed, there was consensus on the possibility of GORE taking the role of the longed-for figure of great mayor which exists in cities like London and Bogota. Though this institution, whose leader was elected democratically for the first time in 2021, has the potential to become this great Metropolitan Authority, some of the interviewees expressed the need for this institution to strengthen its position as a Metropolitan leader. One GORE employee (GORE, KI8, 2023) explains that the role of the Council can sometimes be scattered, but he is optimistic that this can improve, as the institution is relatively young and is still setting the foundations for its work.

Future projects

Regarding future projects in the city related to shared spaces and mobilities, GORE is currently developing a Masterplan for a strengthened bicycle network at the Metropolitan level. This aims to promote the bicycle as a viable commuting alternative, by extending the cycling network and providing safe parking areas. In addition, they contemplate the improvement of critical areas in the city by humanising them and making the city more pedestrian-friendly through tactical urbanism interventions and other innovative tools.

When discussing the future of shared mobilities in the city, an employee from GORE recognises a short-sighted view on this matter at the regional scale. **Most projects in the matter are implemented at the municipal or neighbourhood level and do not have a global view of the city** (GORE KI8, 2023). Overall, authorities identify that more civic education is needed around mobility alternatives²⁵, as well as more and better communication and interoperability between different sectors. Although there are private companies interested in utilising public spaces with scooters, authorities do not see

because they make it difficult for people to move around with their improvised stands and have engaged in some cases in violent fights when confronted by local authorities.

²⁴ Market within one metre, in English.

²⁵ This responds to the harsh criticism that cycling projects have received in some parts of the city, where residents are under the impression that more bike infrastructure can cause further vehicular congestion and increase criminality.

significant benefits in these alternatives as they tend to cater to the more affluent sectors of the city with greater purchasing power.

Furthermore, some informants warn about issues in intersectoral collaboration between Metropolitan scale agencies and local municipalities, which are attributed to the high turnover of staff in between administrations, for the latter. According to Metro, which regularly collaborates with different municipalities and several other public and private stakeholders, another issue identified is the challenges that the excessive need for permits entails. Therefore, **they recognise that the extensive bureaucracy poses a significant challenge to their ability to carry out urban interventions within the expected timeframe, which is often aligned with the population's demands and expectations** (Metro Santiago, KI3 & KI4, 2023).

6.1.3.2. The Municipal scale

To gain further insights into the challenges at the municipal scale, interviews were conducted with employees from the Providencia Municipality, known for their pioneering efforts in shared mobility systems and innovative public space projects, and for being a well-articulated municipality (better than others in the region). The interviews involved individuals from the Urban Assessment and the Transit and Public Transport Departments, allowing for a reflection on their perspectives regarding "Shared Spaces and Mobilities" within their jurisdiction. It is worth noting that Providencia Municipality is home to a diverse population, primarily consisting of middle and high-income individuals across various age groups. The municipality has experienced success in their initiatives, thanks in part to the residents' openness and willingness to actively participate in urban debates. Similarly to the previous section, the main points discussed in the interviews are presented ahead, focusing on the discourses that lead their work and its practical implications, and is complemented by their views on shared spaces.

Planning values and discourse

"Even though regional government leadership plays a crucial role, it is the municipalities that bear the legal responsibility for public space matters" (Metro Santiago, KI3, 2023).

The views of the Municipality of Providencia align with those of the regional level regarding sustainable development and inclusion. However, they identify other key areas of development according to their specific physical and social considerations. According to the Plan for Municipal Development (2022), moving towards environmental sustainability in a responsible manner is one of the key challenges to address in the period 2022 – 2027. They identify two objectives in this line: a) promoting a resilient culture; and b) improving the quality of public spaces and green areas, to tackle climate change and drought. Additionally, another important strategy, which relates greatly to the thesis addressed in the topic, is to promote a healthy coexistence in public spaces among actors with diverse interests and

lifestyles. The two objectives defined to address this challenge encompass: a) enabling streets for better road-sharing practices, providing them with spaces for people to remain; and b) improving infrastructure and services that contribute to creating a more resilient commune. It can be recognised that these objectives integrate the variables of mobilities and spaces.

Overall, this Municipality displays immense interest in advocating for more inclusive public spaces and alternatives, that take in consideration people's heterogeneous needs and preferences. In this sense, one municipal employee (Providencia Municipality, KI5, 2023) states that the institutional perspective of the local government has consistently prioritised sustainable mobility models over the past decade.

Practices and practical implications of discourses

Their work on inclusiveness and sustainability initiated with the design and construction of an urban bike corridor in 1996, which conceptualised a new mobility alternative for the city. Although this intervention was modest in scale, at it signalled a shift in urban planning by placing pedestrians and cyclists at the forefront of the urban hierarchy.

More than ten years later, the Major's office discussed the idea of implementing a public system with shared bicycles, which was materialised in 2008 with a large investment. The system was precarious but effective, and it was manually operated by people who were present at the distribution stations, taking note of the pickup and delivery places. The Municipality covered 93% of the expenses of the publicly tendered system. Providencia was a pioneer in implementing this system in the region, attracting municipal delegates from various cities in LATAM who travelled to learn from it.

Later, the system was improved through technology and some functions were automated through mobile applications. The municipality actively sought out a provider to take over these services, drawing inspiration from international experiences. One employee (Providencia Municipality, KI5, 2023) highlighted the bike system established in Norway and the bike network in the Netherlands as sources of inspiration for the local authorities' efforts.

During this period, discussions took place with neighbouring municipalities to form alliances with service providers, resulting in an expansion to 14 communes. This proved impactful as operators often place restrictions to the operational areas of these alternatives, which work only in limited municipalities. However, this agreement proved to be short-term, and each municipality reverted to negotiating individually with the providers²⁶. In subsequent negotiations, the municipality successfully signed a contract with a provider, joined by two other affluent municipalities in Santiago. The objective of this collaboration was to achieve broader coverage at the metropolitan level, emphasising the importance of regional cooperation in enhancing the shared mobility network.

²⁶ It is common for private companies to subsidise these bike-sharing systems, as they are part of their commitment to corporate social responsibility.

Complementarily, the Municipality has a separate department that deals with the coordination of mobility and public space projects. Their work is very much aligned with the views of the national authorities, in the sense that they work on the promotion of sustainable and inclusive practices, but at the local level. They have many ongoing and upcoming projects that enhance active mobilities and encourage more lively uses of public spaces. Some examples of these initiatives are the implementation of safe crossings, 'lively streets'²⁷, traffic calming measures, the expansion of the bicycle network, to name a few.

These interventions are facilitated by new standards for public infrastructure, which require less investments than in the past. Tactical urbanism interventions, requiring low levels of investments are often implemented, as they are an affordable and easy solution, which they do not need to consult with the municipal council, where projects often get stuck due to bureaucracy and lack of consensus. Overall, **the improvement of public infrastructure has gone from construction to installation, "because the city cannot wait longer"** (Providencia Municipality KI5, 2023).

Views around shared spaces

Regarding the ongoing and planned agenda on promoting sharing practices, one informant (Providencia Municipality KI5, 2023) discusses the positive experience they have had with a car-sharing platform in the commune, and how there is an acting municipal policy in this regard. They are also interested in integrating a shared tricycle system, but this is still in an early stage. Moreover, experiences with scooters have not been so positive, due to the conflicts registered between pedestrians and scooter users. Despite the pressure from service providers seeking permits to establish distribution points, the municipal council strongly opposes it due to the previously mentioned disputes. In this sense, another employee (Providencia Municipality, KI6, 2023) believes that scooters will come once there is a consolidated network in place.

Regarding public spaces around metro stations in the commune they explain that their efforts have been towards integrating more active mobilities around them. Concrete actions include the elimination of car parking areas near metro stations and the introduction of more bike parking furniture instead, which will gradually take more of the car space on streets. However, there is criticism to the way Metro Santiago intervenes public spaces in the commune. **"They intervene emblematic urban spaces and they do not take accountability for public spaces [...] they eliminate trees gradually if projects require them do so"** (Providencia Municipality, KI6, 2023) is what a key informant manifest. Some of these criticisms have been incorporated into the Environmental Impact Statement which needs to be approved for the construction of a large project, demanding more than just a paved space. It is worth noting that such criticism extends beyond this specific municipality.

²⁷ These are proposed as streets with car traffic, but where pedestrians are prioritised. They integrate businesses and stores and a levelled sidewalk and vehicular space.

6.1.3.3. The Neighbourhood scale

Complementing the observations presented in section “6.1.1.2 Case study areas in the Santiago Metropolitan Area”, this segment examines the data obtained for the case study areas through survey results. Though the survey data is not large enough to build a regression analysis, it is still possible to discuss the data distribution. The sample size comprised 60 respondents, evenly distributed among the four case study areas. The selection of the random sample took into consideration gender and age balance. The representation of certain age groups in the sample reflects their higher presence on the street.

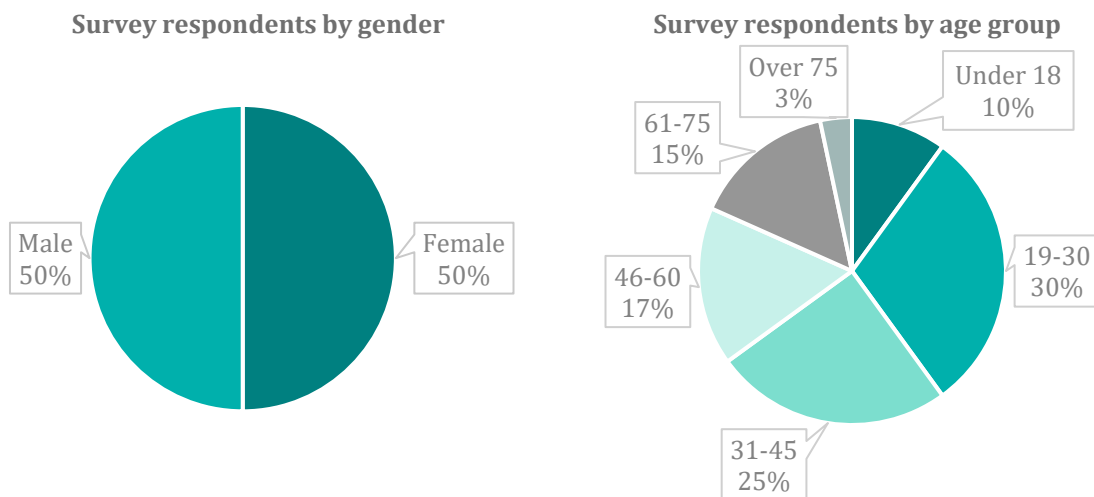


Figure 37. Survey respondents by gender and age (N=60) | Source: By the author, based on Survey.

An essential aspect to consider was the correlation between engaging in contemporary forms of sharing practices and demographic factors such as gender, age, and educational attainment.

When asked about prior use of shared mobility alternatives, it was interesting to note that there were differences between genders, with most of the man responding “yes” (63,3%) and most women responding “no” (56,7%). The data obtained then might indicate that men are more prone to engaging with mobility related sharing-practices.

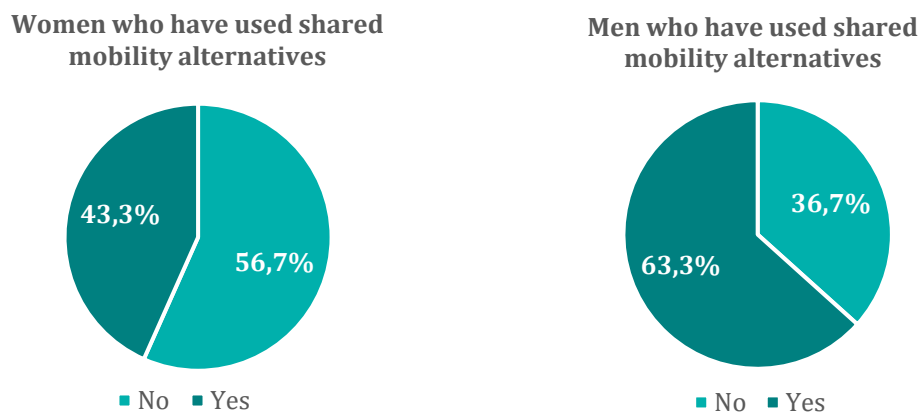


Figure 38. Prior use of shared mobility alternatives, by gender (n=60) | Source: By the author, based on Survey.

There is an apparent correlation between age and engagement with mobility alternatives, as younger age groups have previously utilised some of the mentioned alternatives.

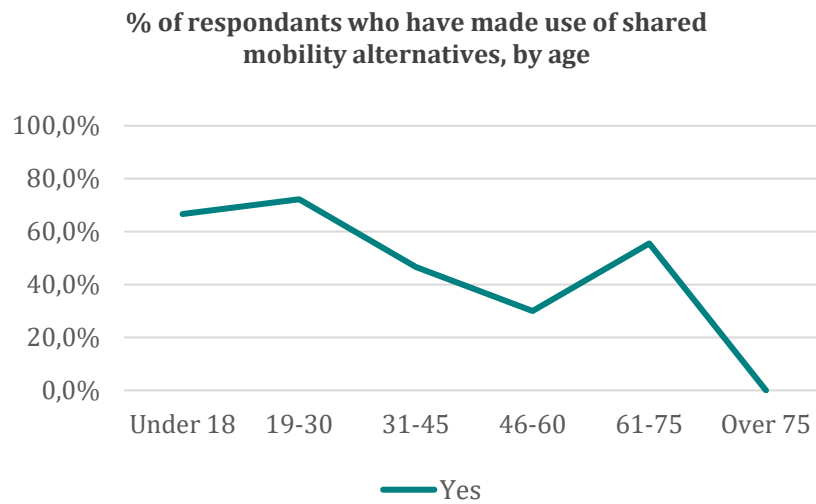


Figure 39. Prior use of shared mobility alternatives, by age (n=60) | Source: By the author, based on Survey.

The results obtained for the variable of completed educational level reveal somewhat of a relation between the two. It is possible to recognise a trend, which indicates that **individuals with higher levels of education are more likely to engage in shared mobility practices.**

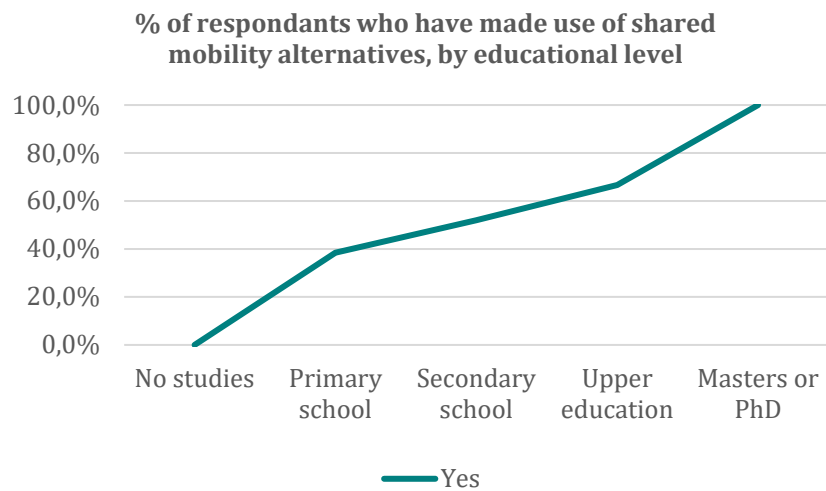


Figure 40. Prior use of shared mobility alternatives, by educational level (n=60) | Source: By the author, based on Survey.

When asked whether they had made use of shared mobility alternatives before, little over 50% stated that they had priorly used some sort of shared mobility. Among the responses recorded, shared bikes and collective taxis were the most frequently mentioned, concentrating 70% of all mentions altogether. Then these were followed by scooter, electric bicycle, and last, hourly rented motorbike. It is interesting to note that no respondents had made use of car-sharing platforms.

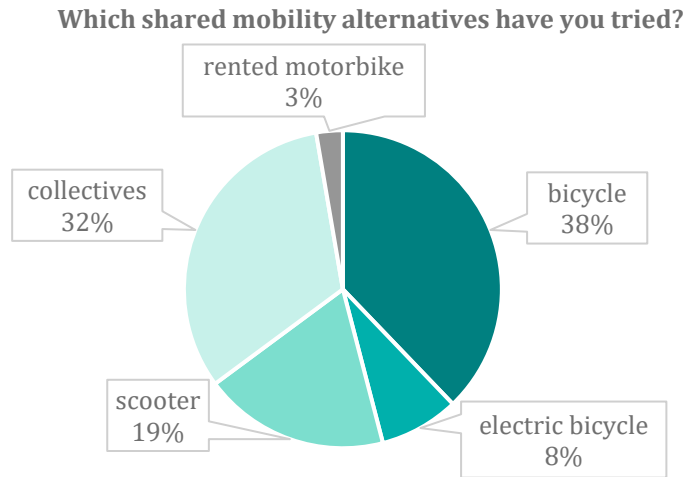


Figure 41. More used shared mobility alternatives (n=32) | Source: By the author, based on Survey.

Due to the limited size of the sample, it was recognised that the distribution of these shared modes does not show any patterns regarding age groups. Nonetheless, it is interesting to note that collective taxis are used by all groups, regardless of gender and educational level.

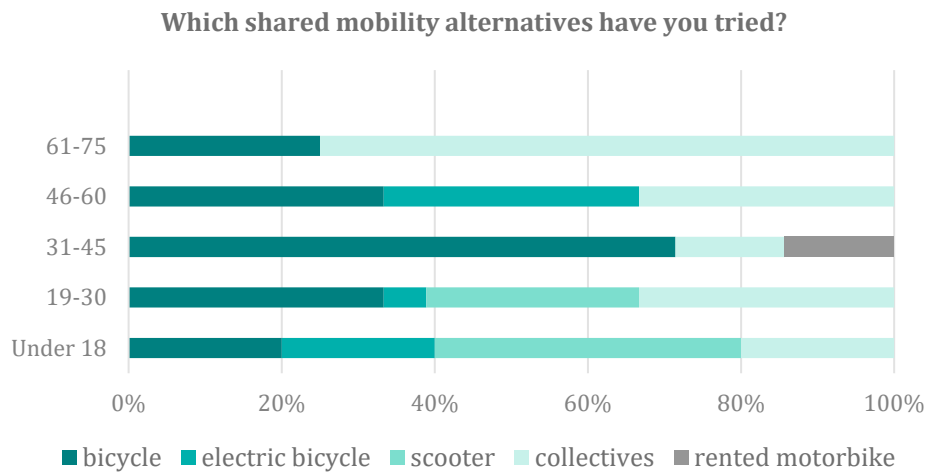


Figure 42. Distribution of shared mobilities used before, by age group (n=32) | Source: By the author, based on Survey.

For those who had not made use of shared mobility alternatives, who represent 47% of the sample, the reasons mentioned were related to these practices being perceived as unsafe, unnecessary, scarce in offer, prone to accidents, expensive, unfamiliar, uncomfortable, scary, and difficult to use. Some of these mentions were:

“There is no availability of these alternatives in the areas where I move around”. (Male in Los Libertadores, 19-30 y/o)

“I used to drive a car for over 40 years but now I lost my driver’s license because of my bad sight and since then I only use uber and public transport, but mostly metro, and I also walk sometimes”. (Male in Conchalí, over 75 y/o)

“They seem expensive, and I barely have (enough money) for public transport”. (Female in Plaza Egaña, 46-60 y/o)

When asked about which shared mobility alternatives would make the last part of their trip better, **responses show that around 1 out of 5 respondents are content with the existing public and private transport alternatives provided.** The remaining respondents shows preference for shared bicycles (23%), followed by scooters (19%), collective taxis (16%), and electric bikes (9%). In lesser degree, they show interest for hourly rented cars (7%) and motorbikes (4%), together with tricycles for carrying goods (2%). The latter were popular among street vendors. Results sorted by case study area (Fig. 43) reveal that all areas, except for Los Libertadores prioritise, in more than 50%, low-emission alternatives of transport. Nonetheless, as described before conditions for active modes are quite challenging around this station.

Moreover, it is interesting to compare these results with the actual transport offer observed in the four case studies selected, which is greater in higher higher-income areas. In Plaza Egaña there is even a shared bicycle module, provided by a private company. In Fernando Castillo Velasco there are several bicycle-parking structures, responding to a high demand for such service from the users of the metro station.

Would you like to have other mobility alternatives in this space? Select all the necessary ones.

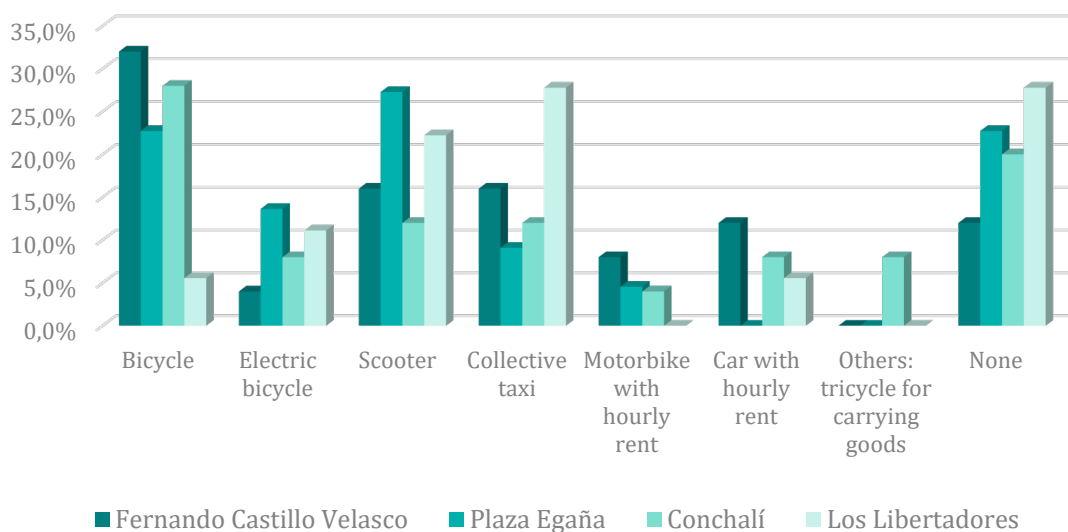


Figure 43. Desired mobility alternatives, by metro station (n=60) | Source: By the author, based on Survey.

When asked about the positive and negative aspects of the experience of using a shared mobility alternative, whatever that is, respondents identified a series of factors. Some of the positive mentions were:

“I liked how fast my trip was and the autonomy I had with it (scooter)” (Female in Fernando Castillo Velasco, 19-30 y/o)

“The trip (by bicycle) is more beautiful, and one gets more air”
 (Female in Plaza Egaña, 19-30 y/o)

“Buses are usually very full, so using other alternatives allows a more relaxed trip and with more space.” (Male in Los Libertadores, 19-30 y/o)

After carefully reviewing people's responses, key words and ideas were extracted to summarise the large dataset. These key words have been incorporated into Figure 44, revealing the most important factors influencing users in Santiago to choose shared mobilities as alternative modes of transportation. These factors include travel time efficiency, well-being (both physical and mental health), reduced travel time compared to public transport, comfort and spaciousness during trips, low emissions for sustainability, affordability, and the sense of independence and autonomy not tied to fixed public transport schedules.



Figure 44. Positive key words for good sharing mobility experiences (n=29) | Source: By the author with worldclouds.com, based on Survey.

Complementarily, the same procedure was followed for people's negative experiences with shared mobilities (Fig. 45), though it was observed that people identified more positive than negative aspects overall. Some of the negative mentions include:

“I'm afraid because other cars don't respect bicycles so the chances to have an accident are big” (Female in Conchalí, 46-60 y/o)

“It is not accessible to everyone, and the pavements are in bad conditions in many cases, so it's difficult to ride the scooter safely”
 (Female in Fernando Castillo Velasco, 19-30 y/o)

“The price (for collective taxis) is not integrated to the rest of the public transport fare” (Male in Fernando Castillo Velasco, 31-45 y/o)

It is important to note that price was one factor that appeared both as a good and bad thing about shared mobility alternatives, as it depends on people’s socioeconomic situation. So, while some found the service affordable and convenient, others said it was costly because it was an additional cost to their already high transportation expenses.



Figure 45. Negative key words for poor sharing mobility experiences (n=23) | Source: By the author with worldclouds.com, based on Survey.

When asked about what elements could be added to the public spaces surrounding the metro stations, the responses included a series of ideas that have been summarised in Figure 46 as key words. **Though there are very different spatial and physical conditions in each of the four case study areas, it is common to hear about the need for more green areas, shading structures for weather protection, more sitting areas, and overall, more spaces for people to enjoy their permanence/transit in these places.** In this sense, Metro representatives explain they are regularly asked to incorporate diverse programmes in the public spaces surrounding the stations, such as parks, leisure areas, skateparks, shaded areas, illuminated areas, safe areas, and good provision of urban furniture.

Although most of the responses address lack of elements and activities in public spaces, there was an interesting input in one of the cases, where no sitting areas were available to users. Regarding this, one users of this space said, “I prefer not having benches because then the queues (for the buses) would be a mess” (Female in Los Libertadores, 31-45 y/o).

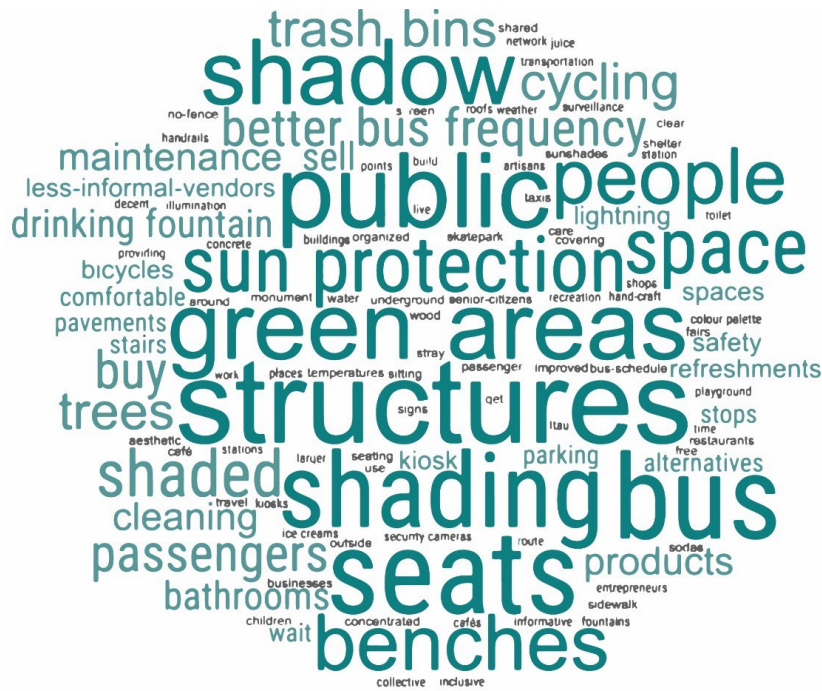


Figure 46. Keywords for what respondents would like to integrate in the public spaces around the different metro stations | Source: By the author with worldclouds.com, based on Survey.

Despite the level of criticism and the admitted lack of care for public spaces (Metro Santiago, KI3, 2023), respondents largely perceive that public spaces around the stations are accessible to diverse users, indistinct of the location and characteristics of the station.

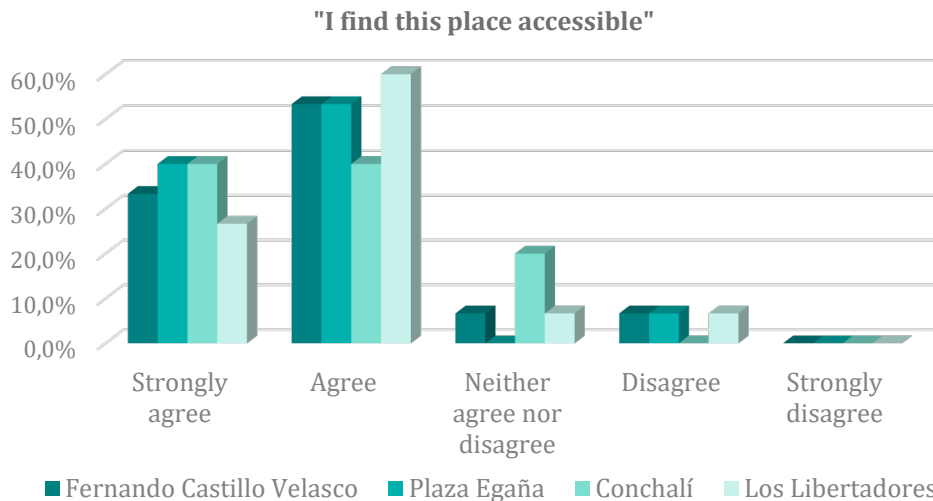


Figure 47. Evaluation of accessibility in public spaces surrounding the metro stations | Source: By the author, based on Survey.

Regarding the perception and evaluation of other users in the analysed public spaces, most respondents held a positive impression of the people around them and showed appreciation for the diversity of users. However, in lower-income areas, a small percentage (10%) expressed disagreement with this statement. In this sense, **informal vending was observed at all the selected case study stations, and is a practice extends beyond a single metro line and is prevalent throughout the entire network.** The rise in informal activities can be attributed to three main factors: the nationwide social revolts from 2019,

the impact of the Covid-19 pandemic, and the subsequent increase in unemployment rates, which were further exacerbated by the preceding events.

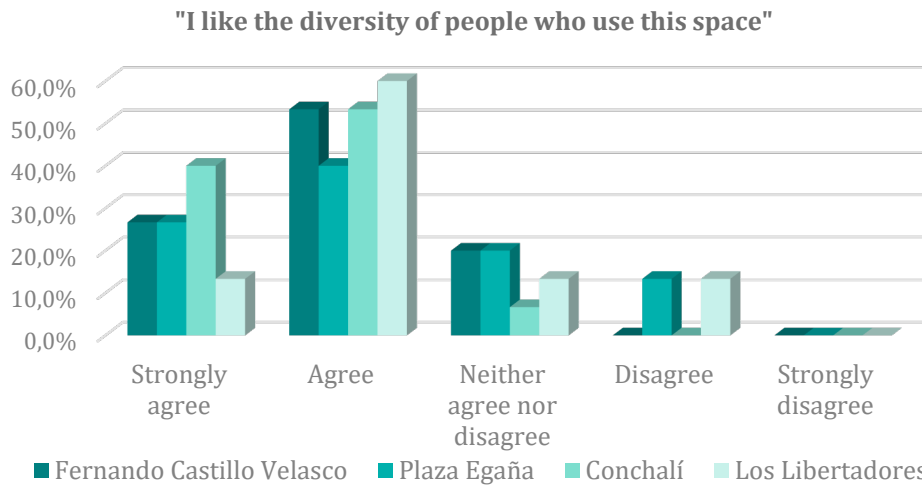


Figure 48. Evaluation of human diversity in public spaces surrounding the metro stations | Source: By the author, based on Survey.

Overall safety is also positively evaluated (Fig. 49), especially in the higher-income areas, where the levels of satisfaction are over 60%. Conversely, in lower-income areas levels of insecurity are slightly higher, but all cases had more divided views on this question than on previous ones. Furthermore, Higher levels of insecurity were recorded in Conchalí, which is often stigmatised as a dangerous area. One female vendor there explains that she does not stay in the park for so long because once it gets dark, it feels dangerous, and many others also talk about the surrounding areas of this public space being dangerous in the evenings.

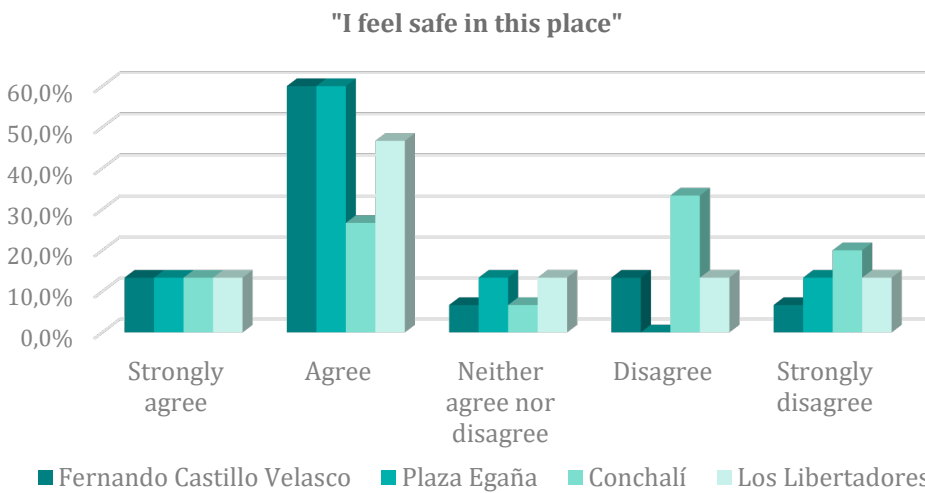


Figure 49. Evaluation of safety in public spaces surrounding the metro stations | Source: By the author, based on Survey.

6.2. Fieldwork in the Greater Oslo Region, Norway

Research fieldwork comprised three site visits to the Strømsø area. The objective of these visits was to observe the case study areas at different times of the day and to talk to users about their habits, experiences, through a standardised survey. Additionally, the fieldwork included a couple of interviews with relevant stakeholders from the public sector.

6.2.1. Background information of the Oslo Region

The Greater Oslo Region is the most populated region in the country, concentrating about 25% of the population at the national level. It comprises a total of 2 counties and 31 municipalities and extends for ca. 10.000sqm. Amongst these municipalities, Oslo is the largest in terms of population density, with over 700.000 inhabitants.

After the rapid urbanisation process experienced in the 1970's, planning authorities have limited the expansion of urban areas in the Oslo Region since the mid-1980s and have managed to implement policies that reduce land consumption and generate denser urban areas (Næss et al., 2011). The reason behind this strategy is sustainability, in its different dimensions. The compact city model advocates for stronger coordination between land use and transport planning, to reduce not only land consumption but also GHG emissions and energy demands. In addition, it highlights public transport investments and reduces the need for additional transport infrastructure (such as building roads in the urban periphery). In this sense, the sustained demographic growth²⁸ and increased urban density have pushed the city's transport and mobility system to adapt to the circumstances and strive for sustainable solutions.

The work of planning authorities has focused greatly on the public transport network and the integration of active mobilities, including the expansion of the existing train and metro network, and the improvement of bus routes and frequency. Also, great efforts have been placed in integrating these solutions, so that together they facilitate travel for individuals. One important factor in this transformation of the public transport system is the role of technology and use of electricity as an important energetic source. Oslo is internationally recognised for its strong standpoint on electromobility, having a largely electric bus fleet, and even experimenting with autonomous vehicles for public transport. In addition, one final important progress in this field is the accessibility improvements that the mobility alternatives have experienced, providing better solutions for those with disabilities or reduced mobilities.

Due to the high levels of connectivity achieved by the large extent of transport infrastructure in the Greater Region of Oslo, long-distance commuting has become a common phenomenon, with Oslo having one of the highest levels of in-commuting at the national level in the early 2000's (SSB, 2001).

²⁸ National Statistics show that population density in urban areas (inhabitants/km²) was 2.874 in 1999 (SSB, 2000) and increased to 5.356 in 2022 (SSB, 2022), meaning that it almost doubled in 23 years.

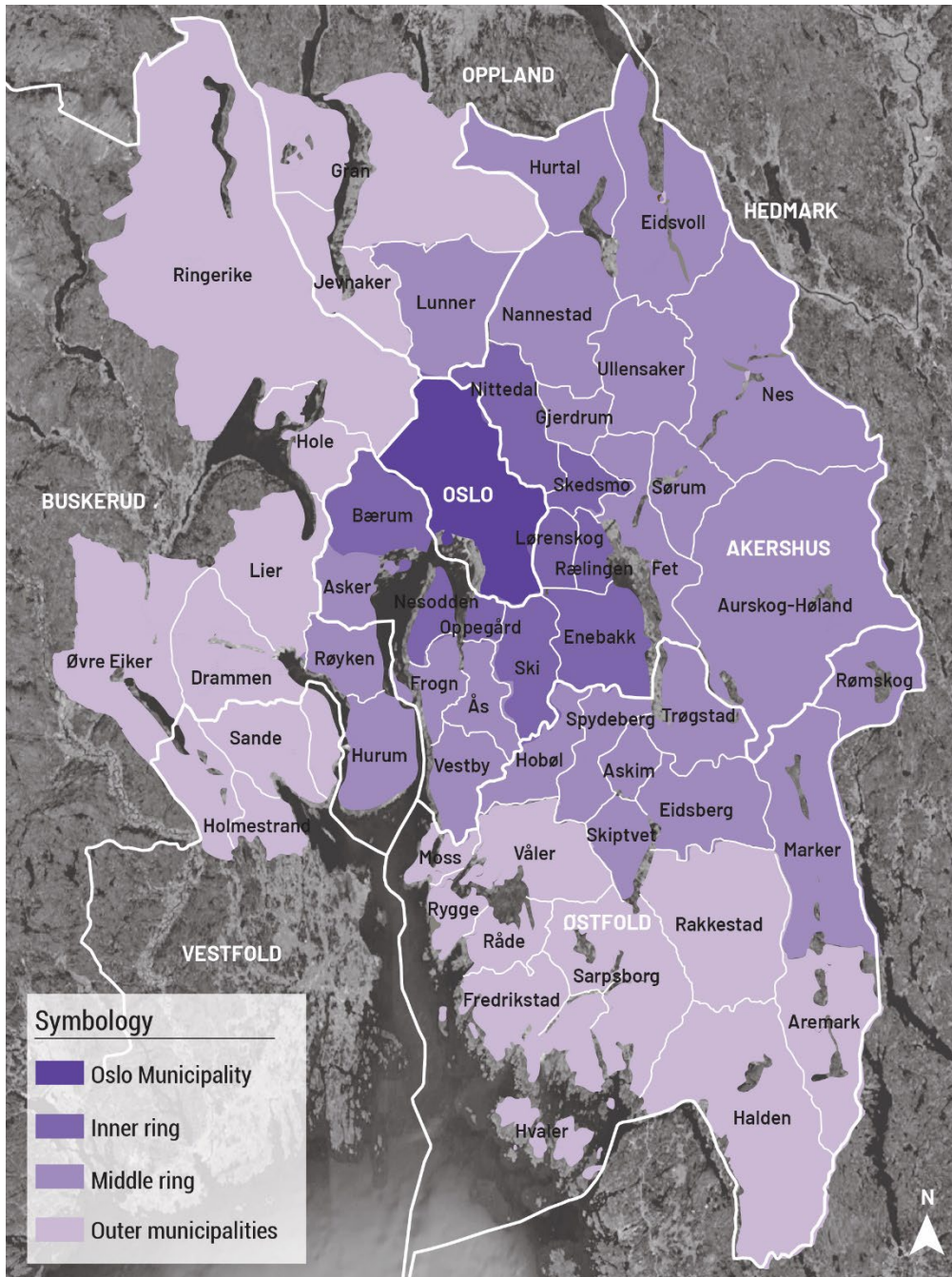


Figure 50. Map of the Oslo Region | Source: Prepared by the author, based on Opdal, 2017.

Nonetheless, there are other municipalities in the region that have experienced significant increases in population density over the past few decades, surpassing the 100,000 mark. This is the case of Bærum and Drammen, with 127.577 and 111.036 inhabitants respectively ([SSB, 2022](#)). And it is undeniable that the experiences obtained from the work carried out in the city of Oslo have been valuable inputs for the urban development of these cities, which will continue to grow.

Norway has a more equal socioeconomic landscape than Chile, with low disparities in income and wealth among the population, with a reported Gini of 0,28 ([The World Bank, 2019](#)). However, a study carried out in 2017 across the Nordic Region sought to assess

individualised Gini coefficients at the municipality level (Fig. 51) and found that Norwegian municipalities exhibit significantly lower levels of inequality compared to neighbouring countries such as Sweden and Finland, except for a few municipalities in Norway, like some within the Greater Oslo Region, including Oslo, Bærum, Drammen, and a few more surrounding municipalities.

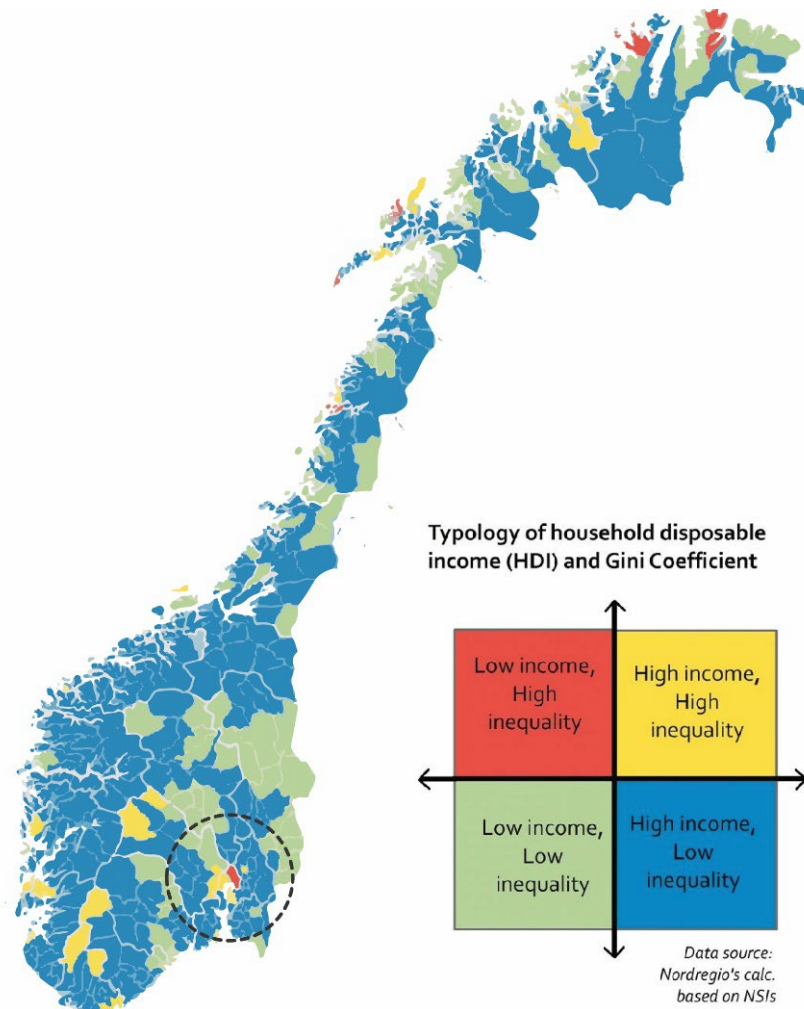


Figure 51. Income and inequality typology in Norwegian Municipalities | Source: Norlén, 2017.

6.2.1.1. Planning system in Norway

The planning system in Norway also comprises three levels of government: the national government, 19 counties and 428 municipalities (OECD, 2017b). Figure 52 illustrates the distinct urban planning mechanisms and strategies employed by each of these levels. At the national level, there are limited direct links to urban national policies. Its role is to provide guidelines for spatial planning at lower levels. Parallely, Norway has a comprehensive planning system that integrates spatial planning and sectoral planning for various areas, like transport. Then at the regional level, the planning system also operates through Strategies and Plans, which provide specific goals and priorities the different geographic territories. Following a similar logic, the municipal level comprises strategies and plans, and

develops a comprehensive Commune Plan which comprises a plan description, planning regulations with guidelines and definitions, and an area plan map. In case certain areas need more detailed information, zoning plans can be developed. Unlike plans at this level in Chile, these can override the Commune Plan.

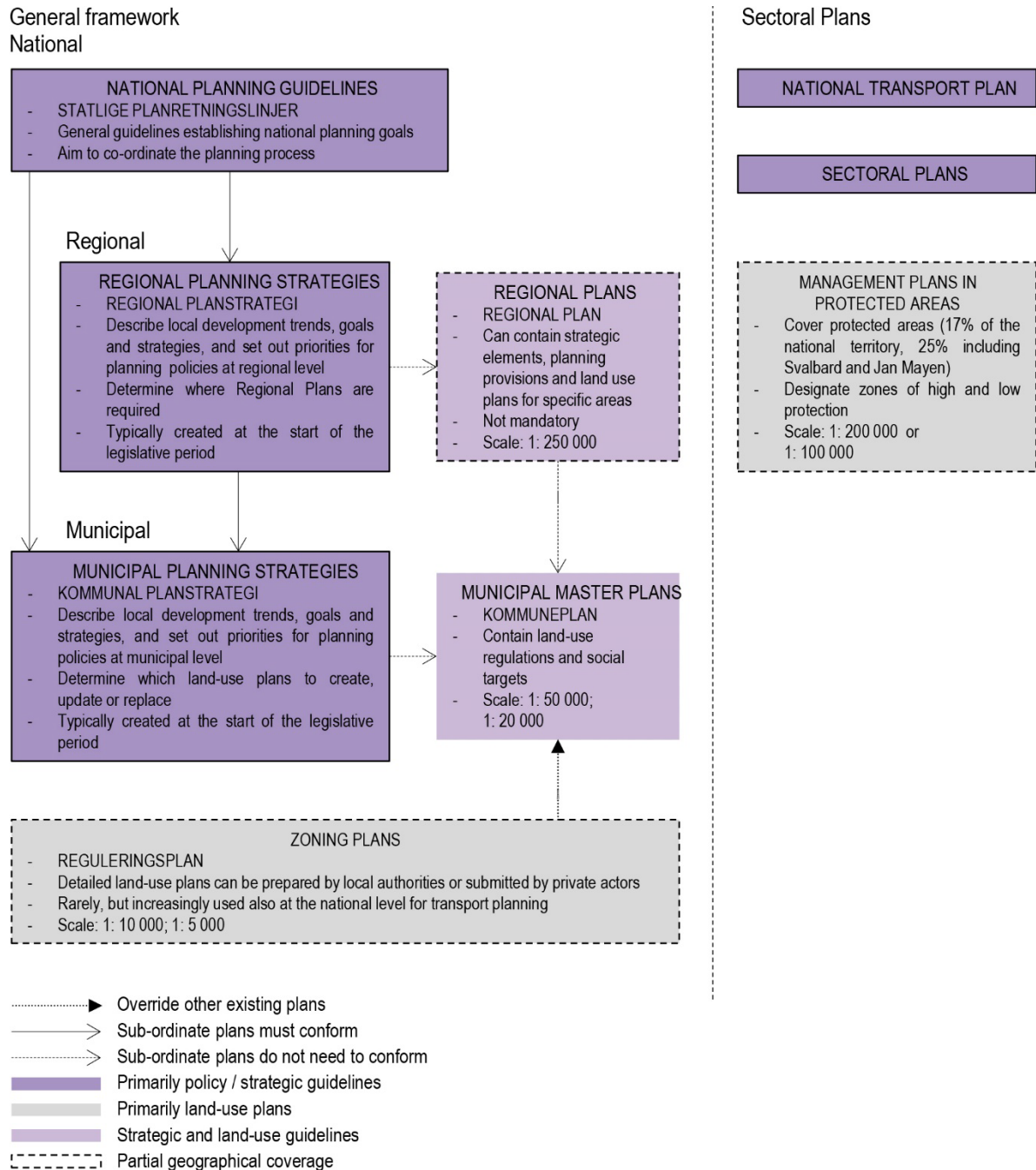


Figure 52. Organisation of spatial and land-use planning in Norway | Source: OECD, 2017b.

6.2.1.2. Sharing Practices in the Norwegian Context

Experiences demonstrate that the negotiation between residents about the way of using common areas and the connections that these spaces provide, enrich the social life of a community. Nowadays, sharing practices are commonly found in projects in Europe, promoting the idea that people can benefit economically, socially, and environmentally by sharing resources, skills, or assets with others. In the Global North decision-makers have been promoting the creation of alliances between city officials, private actors, and civil groups so that more sharing infrastructure is encouraged in not only in mobility hubs but also in residential areas. In this sense, one of the interviewees (Oslo Kommune, KI10, 2023) mentions that public and private institutions all over Norway are promoting sharing practices in diverse urban projects. For example, the city of Oslo wants to develop a sharing module that becomes an integrated part of future development projects.

Like in the Chilean context, sharing practices can be found at various levels in Norwegian society. Following the structure proposed earlier, in this section we review sharing initiatives in the Norwegian context, including some interesting and innovative solutions regarding housing, facilities and services, and mobility alternatives (Examples are condensed in Fig. 53).



Figure 53. Compilation of significant sharing practices found in the Norwegian context, organised by the categories proposed | Source: By the Author with own and web images, 2023.

Shared housing

One interesting case to mention is **Svartlamon in Trondheim**. The area was originally regulated for industrial and transport infrastructure purposes, but by mid-80's when there was a threat of eviction and demolition of the houses, youths from the area began their activism for its preservation and the area started to get inhabited by 1987. For 'svartlamonitts' it constitutes a space of resistant to neoliberal practices. Nowadays it is inhabited by people of diverse educational level, interests, family structures, income, etc. Residents share both indoor and outdoor spaces, which created strong community bonds. One of the residents explains that these shared spaces are "characterised by flux and transformation which produces a rather 'chaotic appearance' from the perspective of outsiders. But [...] it is exactly this condition that promotes change and innovation" ([Gotsch et. al, 2023, p. 31](#)).

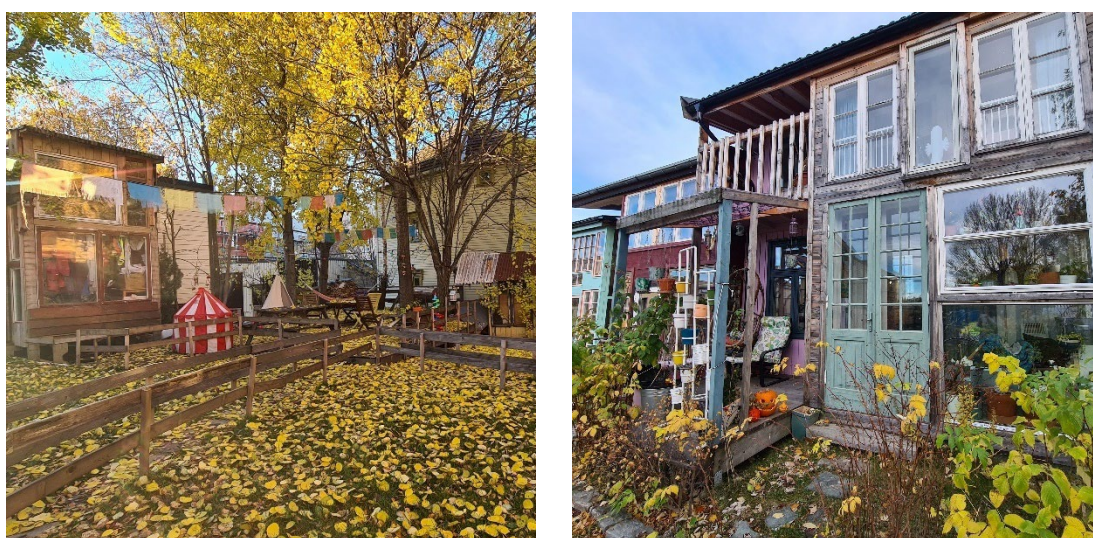


Figure 54. Svartlamon housing community in Trondheim | Source: By the author, 2022.

A more recent housing initiative found in the Norwegian context is **Vindmøllebakken, in Stavanger**. This housing community has been catalogued as an innovative, sustainable, and inclusive form of living. The idea behind it has been conceptualised under the name of "gaining by sharing" ([BBC, n.d](#)). This notion derives from the SE, and addresses the challenges of loneliness and high property prices in large cities, through a social design approach. Besides offering residents with their own private living spaces, the area has several common spaces for different functions and activities, like a kitchen, family room, amphitheatre, workshops, laundry room, library, guest dormitories, roof terrace, outdoor courtyard, greenhouse, and playground.



Figure 55. Vindmøllebakken housing project in Stavanger | Source: Helen & Hard architects

Another interesting initiative related to housing smart solutions is the **app Heim**, developed in Norway as a tool to promote sharing practices in medium to high-density residential areas by enhancing social sustainability. The developer's initial diagnosis was that though most housing projects depicted shared areas as lively community spaces, in reality, these were underutilised in most cases and did not contribute to reducing loneliness. Thus, the app offers co-living and sharing solutions to housing associations in Norway, including 4 main categories of services: 1) activities organised either by the service provider or the community; 2) reservations for diverse goods and services such as sports equipment, tools, bicycles, shared vehicles, guest bedrooms, etc.; 3) neighbourhood sharing practices where community asks and offers help to other neighbours; and 4) neighbourhood services, where the provider together with the project developer establish agreements with external companies to provide services for the residents, such as cleaning, laundry, etc.

Shared facilities, services, and activities

Some notable practices include **flea markets** (løpemarked in Norwegian). These happen across the country and often occur at the end of spring. They use public infrastructure, like schools, where people can sell, or swap their things with others. Many parents use this as an opportunity to redesign or get rid of clothes of their growing children. Similarly, 'garage sales' are held in some neighbourhoods (like Rodeløkka, in Oslo) when residents need to sell some things.

In addition, **public libraries** play a significant role in the Norwegian context and are often dynamic and attractive spaces. They combine the uses that normally a library and an urban lab have in Chile and offer even more activities. In this sense, the Deichmann network of libraries, present in many neighbourhoods in Oslo presents a valuable example of a shared space where people can carry out diverse activities and interact with others. The activities ultimately depend on the library, with some being bigger than others, but they often have activities for all age groups, and offer courses and equipment loans, among others.

In terms of leisure, **saunas** constitute a sharing practice that is rooted in Norwegian culture and traditions. Back in the past, communities often shared saunas, which were built by themselves and were used collectively about once per week (Oslo Kommune, KI10, 2023). Nowadays people go to private saunas and share the space with others.

Shared mobility

There are many notable initiatives taking place in Norway in recent years. For instance, **car sharing** is a growing trend and has experienced an explosive growth over the last two decades, with apps like Getaround, Otto, and Bilkollektivet, to name a few. Also **scooter and bike sharing** apps abound in large Norwegian cities, like Oslo, Bergen, and Trondheim, with services provided by private companies.

On the other hand, the car-free programme for liveability implemented in the centre of Oslo has led to the incorporation of several sharing initiatives related to transport and mobility that have brought many benefits to the residents of the region. One of these initiatives is the **pink bus for the elderly**, which offers differentiated routes and reduced tickets for elders, while providing more targeted service with their specially trained staff. Another initiative is the **acquisition of double bikes by retirement homes**, so that seniors can still go around the city, accompanied by someone else, being a practice highly enjoyed by users (Oslo Kommune, KI10, 2023).

To finalise, another notable example worth mentioning in the Norwegian context is the **redevelopment of the Hovinbyen area in Oslo commune**, which aims to integrate sharing practices from all three categories identified earlier. The project has a strong focus on circular economy and urban resilience, by changing the face of this industrial area into a mixed one, integrating new inhabitants and jobs, and fostering innovation. As explained by one of the interviewees, circular economy “can be challenging for developers and engineers, but it is promoted by the EU” (Oslo Kommune, KI10, 2023). In this sense, this initiative aligns with the Paris agreement, SDGs, and the EU’s Green deal, as well as with municipal sustainability goals ([Pådriv, n.d.](#)). The project (which is comprised of several projects at the same time) was adopted by the City Council of Oslo in 2019 and consists of a public-private partnership that integrates the knowledge on urban and business development from each stakeholder, aiming to connect these two in a better manner.

6.2.2. The case of Strømsø in Drammen

The case study area selected for Norway is situated in the commune of Drammen. Located in the southwestern part of the Greater Oslo Region, within Viken county, Drammen is approximately 40 km away from the city of Oslo.

The fieldwork is carried out specifically in the Strømsø area. This borough is one of the oldest and most distinctive areas in the city. It is situated to the south of the river that divides the city in two areas and it faces the borough of Bragernes, one of the oldest in the Municipality. These two areas are connected through a bridge that mediates their

contrasting urban characteristics, with Bragernes following a rigid structure (after a massive fire) and containing most of the civic buildings of the city, and then Strømsø, shaped in an organic manner and constituting an important mobility hub to the city.

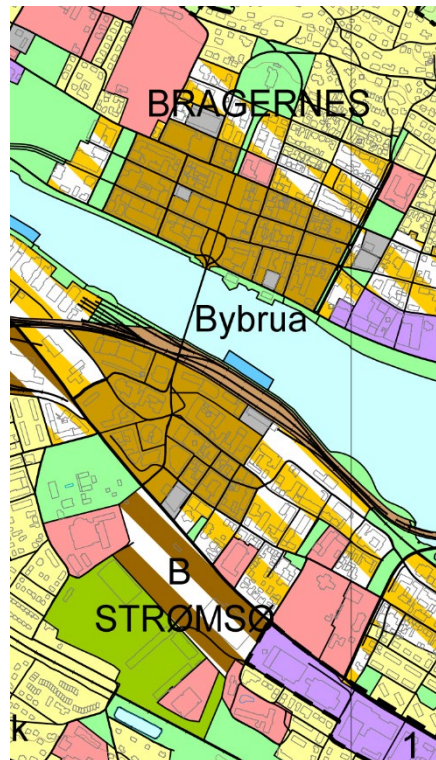


Figure 56. Map of the city's central areas | Source: Drammen's Municipal Plan (2014-2025)

The area of Strømsø can be divided into two areas with distinctive socio-economic divisions, as can be experienced after a tour around its streets. To the northwest of Strømsø Square is Grønland/Nybyen, where most of the large urban investment projects are concentrated, and to the southeast is Brandenga/Rundtom, which concentrates a larger share of the immigrant population, with a majority being renters. During the visits, it was possible to see a high presence of foreign shops in this area, offering groceries, clothes, food, carpets, and home décor, mostly.

Within the area of Strømsø, the area studied in greater detail is around the square that takes the name of the borough. It is a complex space which articulates many different activities and land uses. Firstly, it constitutes a mobility hub, situated adjacent to the train station from where regional trains depart. Due to this, it is an important meeting place for the community living in this area, and for those commuting to Oslo or other municipalities nearby.

One of the characteristic urban landmarks of Strømsø is the Globusgård Centre, built during the 1960s in a prime location, right next to the train station. Together with Strømsø Square and the bridge, it is said to be a fundamental piece in the city axis that acts as an articulation between Bragernes with Strømsø. The round-shaped building fosters diverse facilities and services, including restaurants, shops, cafés, a hair salon, and a dental centre, among others.

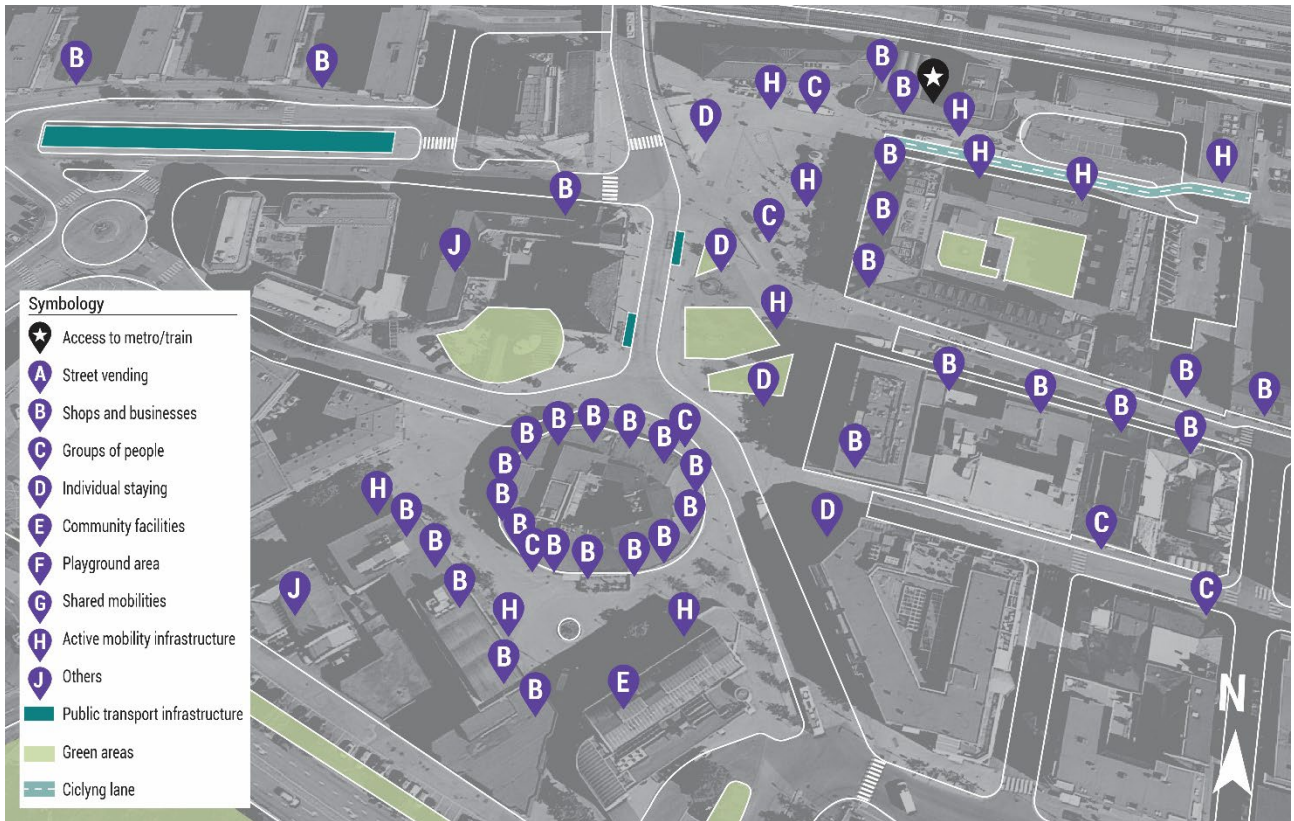


Figure 57. Sketch of physical environment at Strømsø's surrounding public spaces, with identification of relevant urban dynamics | Source: By the Author, 2023.

Strongly defended by the community, the press and historians, threats to demolish the building have been discarded, and the owners state that it will be preserved, and its surrounding spaces will be intervened to enhance more public life around the building. Though, as discussed ahead, the area will change significantly with the construction of new residential buildings for high-income groups.



Figure 58. Photographs of the Globusgård building | Source: DT archive (left) and Author's, 2023 (right)

In terms of transport and mobility alternatives observed during the fieldwork, the train station was clearly one important mode that generates a lot of movement around the area²⁹. In addition, during one of the visits conducted in the late afternoon when most people had finished work or studies, the area exhibited a notable presence of cars, particularly taxis. It was also observed that the space inside the Globusgård building is used as a parking for private vehicles, whose owners are probably connected to the building.

Regarding more active modes of mobility, few scooters and bicycles seen during the visits, but it is important to note that it was wintertime, when mobility services are not operational. So, though few people were seen riding bicycles, the parking infrastructure might indicate a high level of use of this modality during the rest of the year. By the train station there is a bicycle hotel, that promotes the combination of these two modes of transport, and there was new parking furniture. Though it was not observed during the fieldwork, the municipality has entered into an agreement with a private provider (Bolt) to introduce electric bikes in the city. These bikes are dockless but have designated parking areas, which saves the municipality costly investments on the equipment and infrastructure that bike-sharing schemes require. Additionally, during the warmer months, scooters are also available in the city.



Figure 59. Photographs of the Globusgård building | Source: By the author, 2023.

Not much activity was seen around some of the shops at the first level during the weekend. However, a visit after working hours showed more dynamism around some of the shops. For instance, the bakery attracted diverse people and generated interactions around it. Some other restaurants also attracted people, like the Turkish one, which was full, and the Asian one, where many seniors were seen. A beauty centre also had quite some movement inside, with mostly foreign women. Similarly, teenagers were seen gathering outside the old Globus café. They come to the Felles Verket centre, which is run by the Red Cross and organises activities for the youth three times a week, during the afternoons. Most of the

²⁹ It is worth mentioning that during the period in which the fieldwork was carried out the train system was under maintenance, so public buses were running as an alternative.

children and teenagers that came to this place were of immigrant descent. Other shops/activities in the building included a: gold shop, dental centre, jewellery and decorations shop, dessert bar, second hand clothing and accessories store, architecture studio, traffic school, drycleaning service, and an antique and clothing store,

During the fieldwork visit, it was observed that the second floor of the building was partly empty, but it seemed to be equipped enough to carry out some activities, host community events, or have gatherings, as it had chairs, tables, fridges, storage spaces, restrooms, etc. (Fig. 60). Though there is a group of Iranian citizens making use of the space sporadically for meetings and community activities.

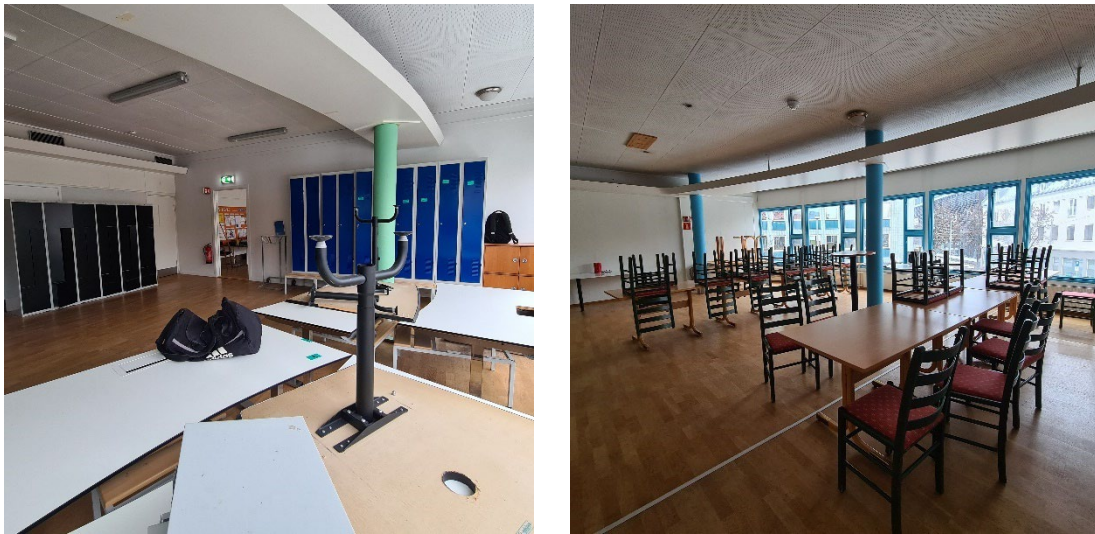


Figure 60. Photographs of the Globusgård building | Source: By the author, 2023.

6.2.3. Data Results and Analysis

The subsequent section presents the results obtained from the mixed methods employed in the selected case study area within the Greater Oslo Region. These methods included on-site observations, surveys, and semi-structured interviews conducted with relevant stakeholders.

6.2.3.1. The Regional scale

This section presents the main points extracted from publicly accessible municipal documents, focusing on the discourses that lead their work and its practical implications, and exploring the regional standpoint of the county on matters that relate to the integration of sharing practices in urban areas.

Being Viken county a relatively new administrative division, certain plans from the former counties still apply in certain instances due to their recent establishment.

Planning values and discourses

The Greater Oslo Region is largely contained within the Viken county, the second-largest county in Norway. The formation of Viken county in 2020 brought together three regions, namely Akershus, Østfold, and Buskerud. Some of the principles that constitute the base of Viken's planning system state that it must be carried out based on UN's sustainability goals, being oriented to achieving long-term goals. In addition, it should encourage a holistic approach that integrates diverse disciplines and promote their interactions. It must be based on knowledge and on partnerships with diverse stakeholders, among others. This last aspect is greatly emphasised in many of the regional plans, stressing the importance of partnerships with diverse stakeholders in society, including universities, research centres, private companies, etc. Moreover, the country declares that there are important themes that must weigh in the work that follows the regional planning strategy. Here, climate and the environment, public health and cooperation are cross-cutting themes that must be integrated in all regional plans.

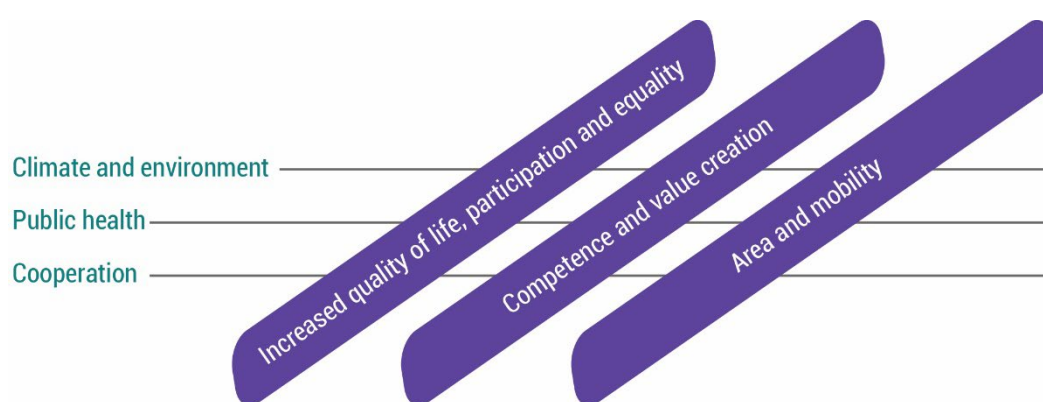


Figure 61. New regional plans in connection with cross-cutting themes | Source: Viken county municipality.

The Action programme for the county's transportation system for 2022-2025³⁰ ([Viken Fylkeskommune, 2022](#)) outlines key priorities for the upcoming years. It emphasises four investment areas such as addressing overdue maintenance tasks, smart and sustainable infrastructure utilization, seamless and user-adapted mobility, and promoting walking, cycling, and public transport. Here, a central theme guiding their efforts is the zero-vision goal, aiming to prevent any increase in private vehicle traffic and eliminate serious accidents resulting in injuries or fatalities. Furthermore, they suggest that a holistic mobility offer is needed in the region that can impact diverse aspects of their work, including business development, education, and public health.

Complementarily, the county of Viken has developed an Innovation strategy for 2021-2024, which aims to contribute to achieving regional planning strategic goals. The importance of integrating innovation in the public sectors is laid down in principles that altogether emphasise the importance of politicians, public authorities, managers, and public enterprises to work within and towards innovative frameworks ([Viken Fylkeskommune, 2021](#)). In this sense, the county's commitment to the circular economy is significant, recognising that the local government should transition to a more environmentally

³⁰ Handlingsprogram samferdsel 2022 – 2025, in Norwegian.

conscious economic model that replaces traditional consumption patterns with a reutilization paradigm ([Viken Fylkeskommune, 2020](#)).

Practices and practical implications of discourses

Regarding the challenges of enhancing mobility in urban areas and its relevance to the thesis topic, the document highlights the significance of organising spaces around transportation hubs ([Viken Fylkeskommune, 2022](#)). This involves incorporating transfer options, food facilities, parking areas for commuters, and infrastructure for charging fossil-free vehicles. Such arrangements aim to enable users to utilise the various mobility services available easily and efficiently. Shared mobility solutions, such as car sharing and bike sharing schemes, are acknowledged for their sustainability and potential to be more efficient in terms of space and cost compared to existing practices. The significance of technological advancements, emerging sharing models, and automation is also acknowledged, with the understanding that effective management and regulations are crucial for adapting to these evolving trends in the coming years. Altogether, technology and behavioural change are seen as potential contributors to reducing land-use and transportation requirements in urban areas ([Viken Fylkeskommune, 2020](#)).

The region where the city of Drammen is situated is formerly known as Buskerud. For some years already, this area has become part of the Oslo housing and employment market, with many commuting to Oslo on a regular basis. Nonetheless, this growth also creates negative externalities in urban environments, such as increased car usage and greater demand for lands. In this sense, a regional plan for land use and transport recognises the main challenges for the urban planning field, including the reduction of greenhouse gas emissions, population growth and urban sprawl, adoption of sustainable travel habits, and fostering the potential of business areas and associated transport needs ([Buskerud Fylkeskommune, 2018](#)).

Concerning shared spaces/facilities, the regional positions is that urban areas need good quality meeting-spaces that promote social interaction and enhance community life. In this sense, facilities like libraries and other cultural institutions are valuable as they provide citizens with arenas for encounter, debate, and public life. Moreover, facilities with social functions (also called social infrastructure) should be facilitated in the entire region, including workspaces, social meeting spaces, and recreational and open areas accessible to all, with contextual solutions. Special emphasis should be placed on disadvantaged groups like children, young people, elderly, and those with disabilities.

Regarding sharing residential spaces and facilities, this responsibility is left to the housing market. The compact city model implemented in major Norwegian cities promotes the growth of sharing practices, particularly in terms of residential spaces. Rising housing costs and the desire to live in central areas have increased citizens' acceptance of smaller units with shared spaces. While this trend is on the rise, researchers recommend that local governments incorporate provisions for common areas and shared solutions in new zoning plans (Aamo et al., 2021).

To summarise, there are five takeaways about sharing practices from the regional planning perspective. Firstly, shared mobility solutions are recognised as important and desirable solutions to integrate further in the transport sector. Secondly, there is a recognised value in enhancing public spaces around transport hubs by incorporating additional facilities, activities, and mobility options to strengthen these areas. Thirdly, significant potential is attributed to technological progress in the emerging sharing models, underscoring their capacity to foster innovative frameworks and enhance sharing practices in the future. Fourthly, it is necessary to create effective management and regulatory frameworks to adapt to these evolving trends in sharing practices, both for spaces and mobilities, ensuring their integration and successful implementation in urban areas. Lastly, innovation should be integrated in the work of the public sector, including collaboration among stakeholders, which can drive the development and implementation of innovative sharing practices in both spaces and mobilities.

6.2.3.2. The Municipal scale

During the fieldwork stage, interviews with current and former employees of Drammen and Oslo Municipalities, respectively were arranged. This section presents the main points discussed in those interviews, focusing on the discourses that lead their work and its practical implications.

Planning values and discourses

The Municipality of Oslo, is broadly known for its commitment to sustainable development, placing a strong emphasis on creating inclusive and people-centric urban environments. One way of ensuring this is the application of a survey based on Jan Gehl's work, to explore how people experience the city, and which are the challenges to address. Notably, this municipality has taken significant steps towards ensuring inclusivity in its mobility plans, particularly regarding the integration of elders and children. Prior to 2014, these vulnerable groups were often overlooked, but the municipality recognised the need for change and implemented measures to address their specific needs (Oslo Kommune, KI10, 2023).

On the other hand, Drammen is a smaller municipality which is also committed to sustainability but is a little behind Oslo in terms of the population embracing such practices. It is a city that is experiencing many changes in the last decades and will continue to do so in the years to come. From the Municipality this is a central concern that is being addressed through diverse projects that ultimately aim to delineate the principles for urban development for the city through strong urban plans. To explore the challenges behind these rapid urban transformations, an interview with a Senior Architect from the Urban Planning Municipal Department was carried out, revealing an insightful perspective of the work carried out by the local authorities, as discussed later in this section.

One important change experienced by the Municipality of Drammen is the incorporation of the former communes Nedre Eiker (to the west) and Svelvik (to the East) into the new municipal limits in 2020. This led to the formulation of a new Municipal Plan that can

contribute to a better integration of these territories. Overall, some of the guiding principles to this new plan include i) quality urban growth thorough the city, ii) preservation and enhancement of the city's features and attributes, and iii) strong focus on environmental sustainability.

Practices and practical implications of discourses

Within the Municipal Plan, the area of Strømsø plays a fundamental role as it is one of the most important mobility hubs in the entire commune. Because of its centrality and urban attributes, both public and private stakeholders have manifested their interest in carrying out projects in the area to capitalise on those positive characteristics. Also, from the perspective of the Municipality this area should be denser and have higher buildings than other parts of the city (Drammen Kommune KI11, 2023). So, within the framework of the General Municipal Plan, authorities have decided to work on a **'Feasibility study for Strømsø'**, which presents possibilities for the development of the area in the years to come, taking in consideration the effects that any physical interventions can have over the area. It is carried out as a public-private partnership³¹, and it works out with the Municipality providing an agenda and structure, and the developers conducting the study. This plan can eventually serve for establishing more detailed regulations for the area, but for the moment it remains flexible and open to change. Because of this, developers were asked to make a proposal for the area as a whole, instead of simply exploring the effects of their individual interventions around their immediate environments (see Fig. 62).

It was known at the end of the thesis development that this project was approved by politicians in Drammen and is expected to receive further approvals soon, in which case, the plan would be materialised by 2030.

The core elements of the Feasibility study for Strømsø respond to Municipal requirements to address five aspects of the proposals, and that should align with the General Municipal Plan. These are:

- Building and cultural environment protection
- Definition of building heights and sight lines
- Enhancement of urban life and prominence of street spaces
- Density assessment and land use
- Comprehensive mobility solutions for all traffic modes

³¹ The study was carried out by DRMA, together with Solli Arkitekter and Oslo Works, on behalf of their respective clients, Strømsø United (for Globusgård and Torgeir Vraas plass), Union eiendomsutvikling (for the residential developments in Kefas and Lothegården), and Utstillingsplassen eiendom (for hotel Ambassadeur).

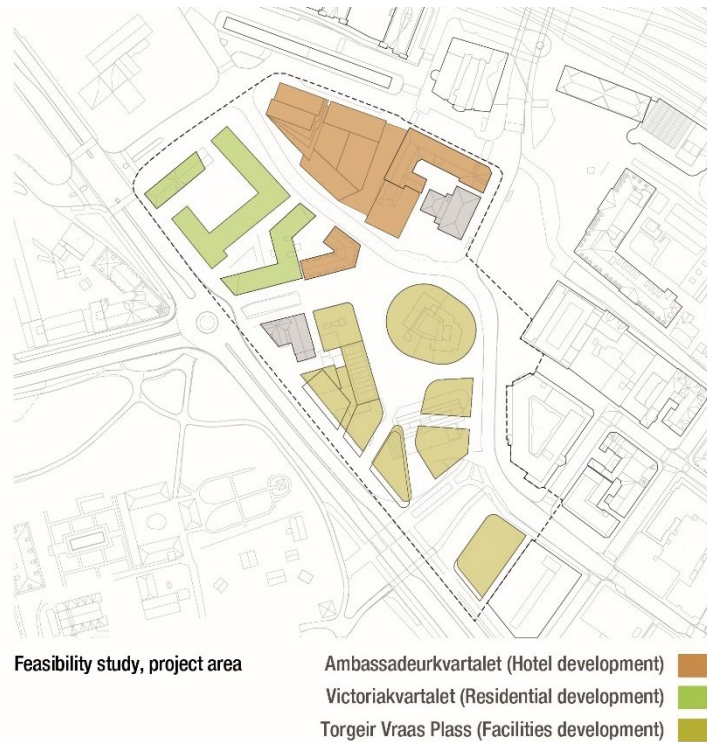


Figure 62. Map of the Strømsø area with main stakeholders in the Feasibility Plan | Source: Strømsø Sentrum Mulighetsstudie, Drammen Kommune (March 2023).

The proposal developed depicts an ambitious vision for the area, involving major changes that include demolishing and constructing new buildings. Strømsø Torg, which constitutes the heart of the area, is kept as an open space around which buildings gradually increase their height, following a ‘volcano principle’. This strategy argues for more emphasis on urban life around the square, keeping sight lines clear, and highlighting the city’s main axis (byakse).

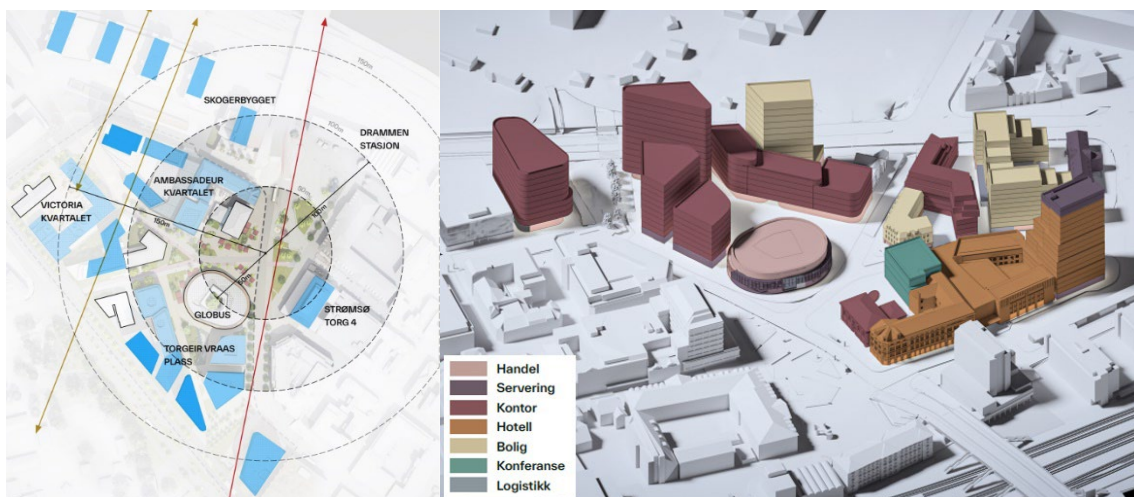


Figure 63. ‘Volcano principle’ for defining building heights (left) and proposed land uses (right) | Source: Strømsø sentrum Mulighetsstudie, Drammen Kommune (March 2023).

From the lens of advocating for the integration of ‘shared spaces and mobilities’, one interesting measure from the proposal is the elimination of car traffic around the main

public spaces of Strømsø, promoting the pedestrian conquest of these spaces. This is not minor, as explained by the interviewee who mentions that mobility in this area can be a headache. Though the presence of bicycles and scooters is greatly valued for the range of possibilities that they offer to citizens, “they come with a price” (Drammen Kommune KI11, 2023). In this sense, though shared mobilities like e-bikes and scooters allow the municipality to save public funds on equipment, they also come with issues related to safety, high-speeds, exposure of the elderly to accidents, and street obstacles, among others. In response to this, the Municipality considers it important to learn from these challenges and negotiations and improve urban regulations to avoid conflicts.

Simultaneously, it is important to note that unlike other Norwegian municipalities, Drammen does not have regulations in place yet. However, in addition to the (low³²) street ground rent that operators pay, the Municipality is considering introducing regulations that can limit the number of operators in the area so that they can have a better dialogue and have their services meet their demands (Ydersbond et al., 2023). They must carefully negotiate this partnership as there is limited interest from rental companies in this market, unlike in Oslo.

Returning to the proposal, the project also seeks to improve the conditions for active mobilities and use of public transport, diminishing frictions between what they call ‘hard and soft groups’ of road users. Interestingly, it also incentivises the use of shared mobilities and mentions an undetermined reward system for users who use car-sharing and carpooling systems and more bicycle parking arrangements around Strømsø Square.

Another aspect of the plan considers improving the attractiveness of the area, which is already recognised as a cultural milestone in the city. Therefore, the proposal works towards strengthening the realisation of activities and human presence in public spaces and underscores the importance of outward-looking activities at the street level as a strategy to ensure the desired level of street life. The suggested recipe is to establish attractive land uses on the ground level with 40% retail shops and 35% restaurants, adding up to a total of 75%. The rest is distributed among offices, a hotel, a conference space, and parking areas for logistic purposes.

Complementarily to the Feasibility Plan, there is another ongoing initiative in the area, conducted by the Municipality with State funds. This is the **‘Area development strategy for Strømsø’**³³, which focuses on improving the living conditions of residents of the area and places great importance on the sense of belonging of residents. Unlike the Feasibility study, this initiative centres more on social and community aspects and its main areas of

³² According to Ydersbond et al., 2023, this is 1 Norwegian crown per electric scooter, per day. So far, Drammen is the Norwegian municipality to introduce this fee. The low threshold responds to European Economic Area (EEA) laws that require actors in similar legal and financial positions to be treated equally, so this can lead to difficulties in the future as it is challenging to identify other actors in the market who also need to pay this fee, making equal treatment difficult to implement.

³³ Områdetutviklingsstrategi for Strømsø in Norwegian. It is also known for its acronym, OUS, or as Strømsø 2030 for its projected horizon.

interest encompass employment, education and upbringing, living and local environment qualities, and health. In the context of this initiative, a sociocultural study (Ruud, 2023) suggests providing better housing offers with improved living conditions can help protect them from gentrification. The measures indicated include ensuring typological diversity and promoting home ownership, providing better economic opportunities to vulnerable groups (e.g., offering job qualifications to immigrant women), and integrating their concerns in the discussions with developers through regular dialogue.

6.2.3.3. The Neighbourhood scale

Complementing the physical and social observations presented earlier in section “6.2.1.2 The case of Strømsø in Drammen”, this section examines the survey results and some of the conversations held with respondents. Like in Santiago, the survey data is not large enough to build a regression analysis, so data distribution will be discussed. The survey provided to respondents can be found in its English version in the Appendix.

The sample size for this study consisted of 20 respondents. The selection of the random sample took into consideration gender and age balance, though the language barrier proved difficult when communicating with senior residents.

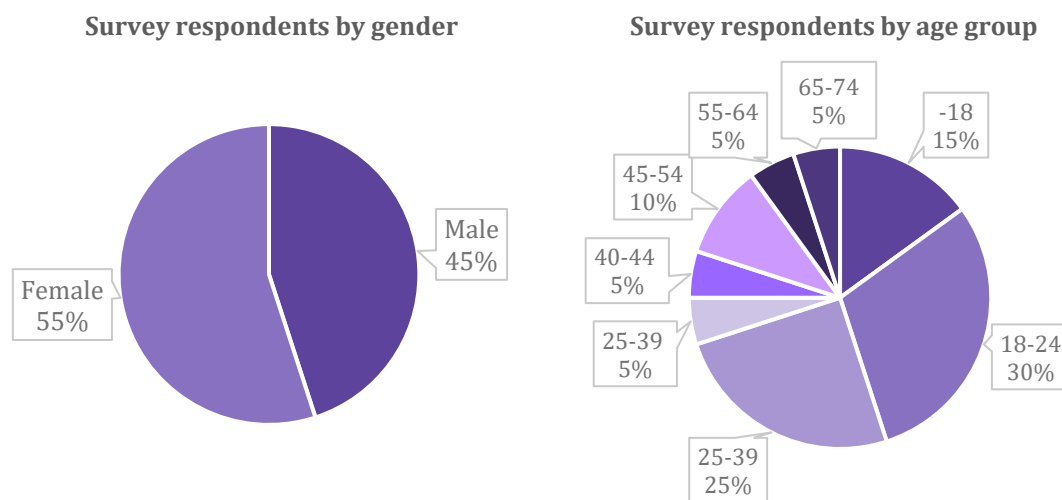


Figure 64. Survey respondents by gender and age | Source: By the author, based on Survey.

There are clear differences between genders regarding the engagement with sharing practices, integrating mobilities and spaces (Fig. 65). Just like in the case study areas in Santiago, **men seem more prone to take part in sharing practices**, with even greater differences in the Drammen case study area.

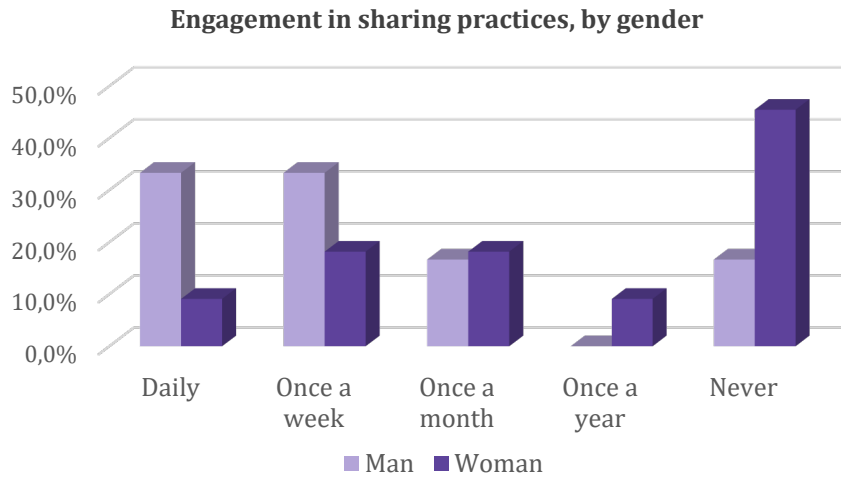


Figure 65. Percentage of frequency in use of shared mobility and spaces, by gender | Source: By the author, based on Survey.

Similarly like in Chile, educational levels also show some degree of correlation with the engagement in sharing practices, and individuals with higher education levels display higher use of these alternatives (Fig. 66). Nonetheless, this tendency becomes less apparent when looking at the responses of those who don't engage in sharing practices, which is almost evenly distributed between less and more educated groups.

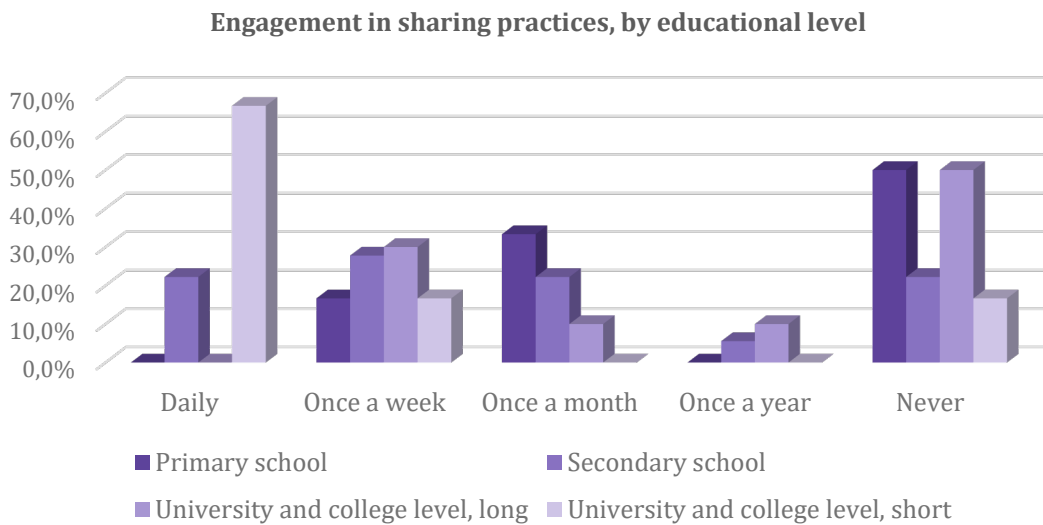


Figure 66. Percentage of frequency in use of shared mobility and spaces, by educational level | Source: By the author, based on Survey.

Regarding shared mobility alternatives, overall responses show that 1 out of 3 respondents does not make use of them (Fig. 67). During the fieldwork some respondents criticised that there are limited mobility alternatives, which might explain this result. Then, passenger car takes the second place, followed by bicycles and electric bicycles, and finally by electric scooters/moped.

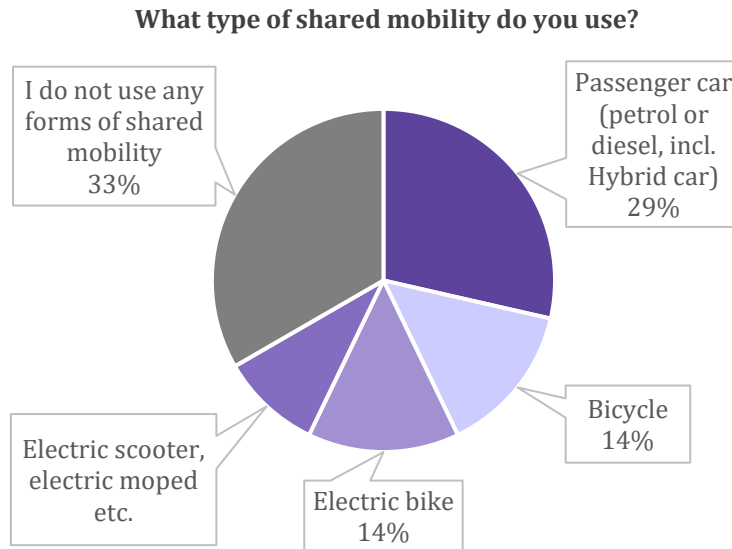


Figure 67. More utilised shared mobility alternatives | Source: By the author, based on Survey.

The participants who utilised shared mobility options were surveyed about the reasons that motivated them to use these services, considering seven predefined alternatives. They were also given the opportunity to include any additional reasons. Here, the main key words were affordability and safety, followed by sustainability, well-being, convenience, and leisure. The attributes associated with different means of transport are represented in Figure 68.



Figure 68. Main attributes associated with shared mobility alternatives | Source: By the author, based on Survey.

Regarding shared areas/spaces, respondents displayed a higher level of engagement compared to mobility alternatives. **Approximately 1 out of 4 respondents admitted not using any of the shared space options.** Among the remaining respondents, popular shared spaces included residential exercise rooms, residential libraries, co-working spaces, and common storage areas.

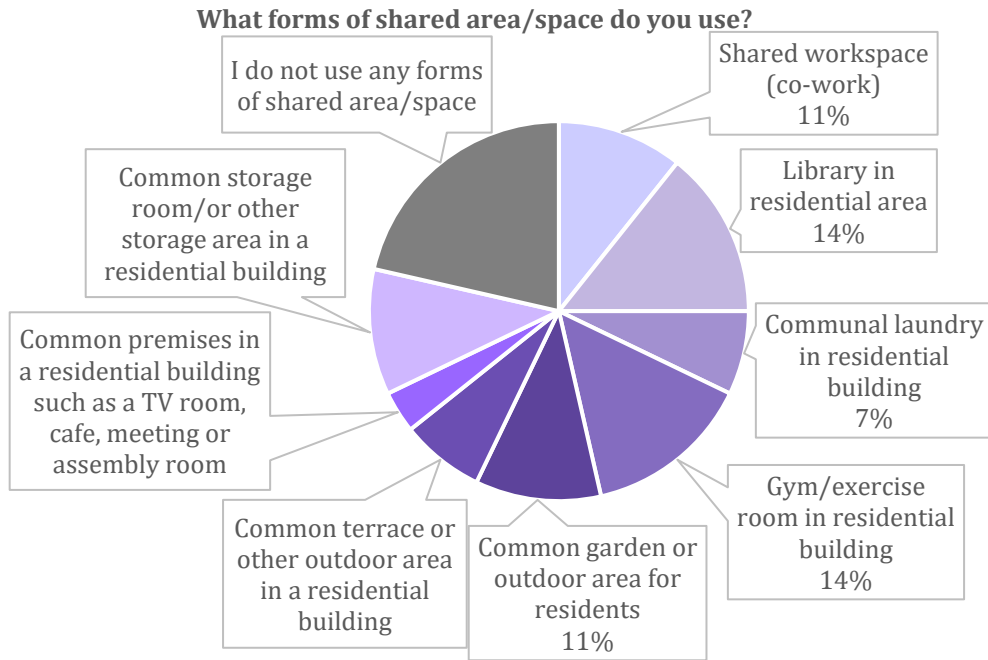


Figure 69. More utilised shared area/space alternatives | Source: By the author, based on Survey.

When consulted about the motivations for using these shared spaces, the main reasons were related to individual factors such as well-being and convenience, followed by leisure, affordability, social interaction, and sustainability.



Figure 70. Main attributes associated with shared space alternatives | Source: By the author, based on Survey.

7. DISCUSSION OF FINDINGS: GLOBAL SOUTH AND NORTH CASES

In light of the research results and analysis, this section presents the key findings. Firstly, it includes a section on comparative discussion of results, which integrates the theoretical perspective with the data analysis. This is followed by a second section which identifies the policy implications of this research, presenting some recommendations.

7.1. Comparative discussion of results

The following section critically assesses the results obtained from the fieldwork carried out in the Metropolitan areas of Santiago and Oslo, establishing connections and divergences between them. The structure responds to the framework established in the theoretical section of the thesis by the Social Practice Theory, and thus, is organised in five sub-sections.

7.1.1. Physical environments modelling practices

An essential aspect for individuals to engage with practices is to fulfill a material dimension that enables them to carry them out. In this case, integrating sharing practices in public spaces, like mobility hubs, requires having infrastructure and other physical elements available to support them (e.g., flexible spaces, areas to remain comfortably, urban furniture, mobility equipment, etc). While conducting the fieldwork, various occurrences were observed in the study areas. This segment, discusses how these events impacted people's experiences, with a particular emphasis on the individual level, as referred to by Gehl as the "human scale."

Santiago Metropolitan Area

Physical environments around metro stations largely lacked more and better facilities and infrastructure. **Many of the open spaces provided around the metro stations can be characterised as 'pretentious spaces' (Priya Uteng, 2024) and 'dead spaces', as opposed to 'interactive spaces',** as they were originally conceptualised. Upon closer observation, it becomes apparent that several public spaces lack the necessary elements to activate public life, with perimeter fences contributing to their isolation in most cases. Though they may display a few features, they are often underutilised and do not serve their intended purpose. In essence, these spaces are merely pretending to be something they are not (Fig. 71).

Their spatial qualities are fundamental factors to the low presence of people in them, making them inhospitable, unattractive, and, in some cases, perceived as unsafe. This is highly problematic, as these spaces are situated nearby areas with high concentrations of people, where activities still occur, despite the lack of good quality infrastructure. Furthermore, as a trait of a highly resilient society, individuals and communities find innovative solutions to address inadequate infrastructure. Clear examples of this are the arrangements made by tickets controllers in a couple of cases, where they lacked sheltered and sitting areas.



Figure 71. Pretentious spaces observed at Conchalí (left) and Fernando Castillo Velasco (right) | Source: By the Author, 2023.

In response to this situation, individuals resorted to using portable umbrellas for sun protection and utilised the foundations of station pillars as seating and resting areas during their shifts. However, while these makeshift arrangements addressed basic needs, they do not foster inclusive sharing practices. Certain groups may still face disadvantages due to the physical limitations of the space, which could lead to the creation of exclusionary spaces (Kearns & Paddison, 2000). For instance, limited infrastructure dedicated for children and elders was found in these spaces. This is critical, because this groups often have less mobility, recreational and leisure alternatives in other city spaces.

In this sense, the shift from construction to implementation that municipal employees in Providencia experienced, shows a flexible framework that is valuable for these challenges and offer a feasible alternative. This enables local governments to do physical interventions that improve spaces in an inclusive and equitable manner, keeping the planning values at sight.

Another example of self-managed arrangements is the broad presence of street vendors in the public spaces of all case study areas observed in Santiago. Though they are categorised as informal due to the lack of municipal permits, they are often organised, and in Los Libertadores, they even functioned as a market. They operate daily and, in some cases, had even established strong collaboration networks. In the 'attractive' case study areas, vendors often had larger setups with dismountable tents, and had an organised collective system for using the space. In the more 'local' cases, vendors had smaller and more mobile setups and worked individually. Their presence in public spaces is not surprising, as the offer of food and drinks in these public spaces is limited and they fulfill a demand that is not met within these spaces. Despite the criticism from authorities, explaining how these practices pose a risk to users and bring criminality, it was observed that these stalls created lively conditions in public spaces. For example, in Los Libertadores, the intermodal station has no urban furniture that people can use while waiting, constituting a 'dead space', while street vendors gathered around the east metro entrance, transform an otherwise dull area into a more interactive space (Fig. 72). In this sense, informal vending can be even seen as contributions

to an increased perception of safety in them, as not many sharing facilities were successfully integrated in or around these spaces. In this sense, one of the few cases with a shared space was Conchalí, with library situated close to the station, which offered a multipurpose room, reading areas, and meeting spaces. However, these spaces were shared with municipal employees, who often organised meetings here, limiting the space that residents can use.

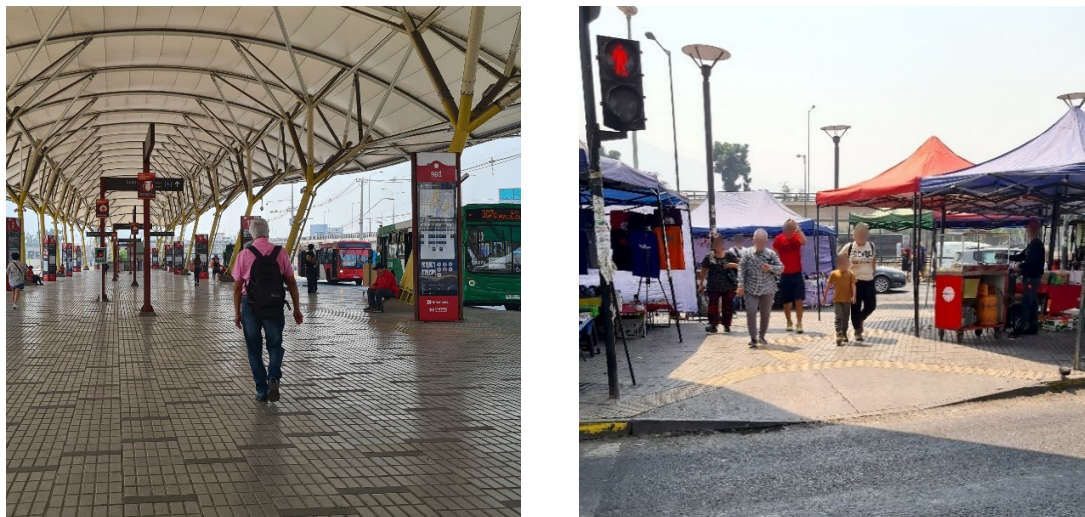


Figure 72. 'Dead space' in station's public space (right), and lively area with street vendors (left) in Los Libertadores | Source: By the Author, 2023.

Moreover, the location of public infrastructure and the presence of large-scale infrastructural elements highlight how other material factors can affect human practices. In the case of Los Libertadores, for example, the busy public space is surrounded by high-speed roads and industrial buildings, making it challenging to envision the successful integration of safe active mobility alternatives in the area. This underscores **the importance of the human scale for conceptualising more sharing practices in cities**. Moreover, as research has demonstrated ([Sovacool et al., 2018](#)), higher levels of shared mobility seemed to be linked with higher levels of walkability. Thus, it is possible to conclude that the physical conditions and the dynamics of a place are determinants of the growth of intermodality that promotes active mobility.

Oslo Metropolitan Area

The situation in Strømsø was better in terms of infrastructure and consideration for the human scale compared to the cases in Santiago. Here, sustainable mobilities were supported with the provision of infrastructure, with a generous number of bicycle parking spaces, levelled roads, cycling lanes, and a large pedestrian area at the centre of Strømsø. However, there was a high presence of parked vehicles around the Globusgård and at the square, mostly taxis that remained in the area waiting for clients, which can deter active mobilities.

Cars on-street presence is facilitated by the urban design of the area, which follows the principle of the naked street, with large extensions of concrete pavements, leaving room for cars to take over spaces. Moreover, though the area is accessible, it has limited provision of greenery and landscape areas, and does not integrate many human

scale elements around the round-shaped building. This is something that the new proposal for the area, contained in the feasibility study from Strømsø, is aiming to change, by integrating more green areas, lively urban furniture, and a more pedestrian-oriented design overall.

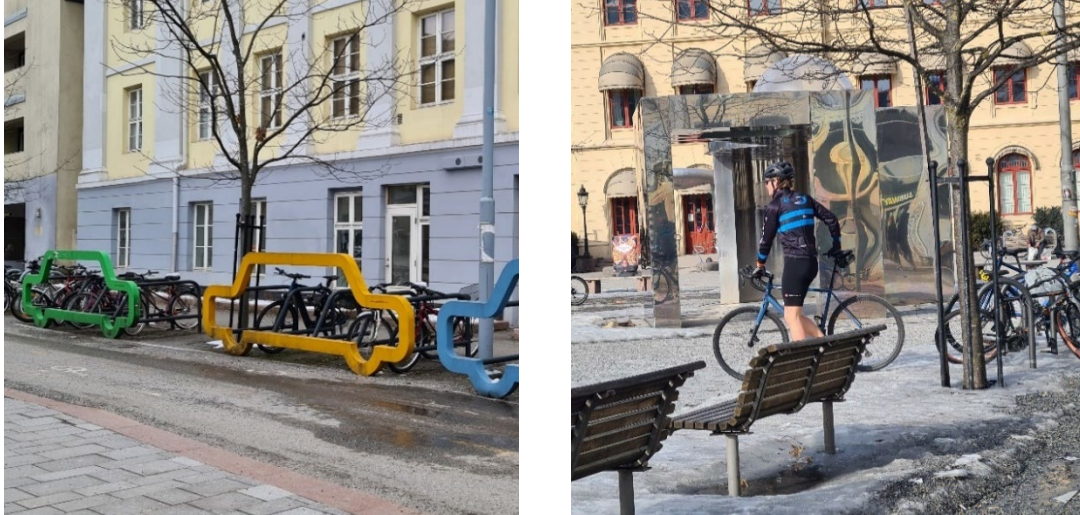


Figure 73. Urban furniture and overall design promoting active mobilities in Strømsø | Source: By the Author, 2023.

In terms of activities and facilities, the area had a generous assortment of shops and facilities that catered for diverse users, including restaurants, cafés, grocery shops, etc.; however, community spaces and non-profit facilities were limited. In this sense, it was recognised that there was potential to consolidate the second level of the Globusgård building as a community space, since some activities are already taking place there.

Though not in the case study area itself, Drammen’s municipal library, situated at a 10 minutes’ walk from Strømsø, seemed like a very attractive space for diverse age groups, who had multiple activities to do in this place, like working and studying, individual/group reading, playing videogames, watching movies and TV, eating/having a refreshment, or simply relaxing.

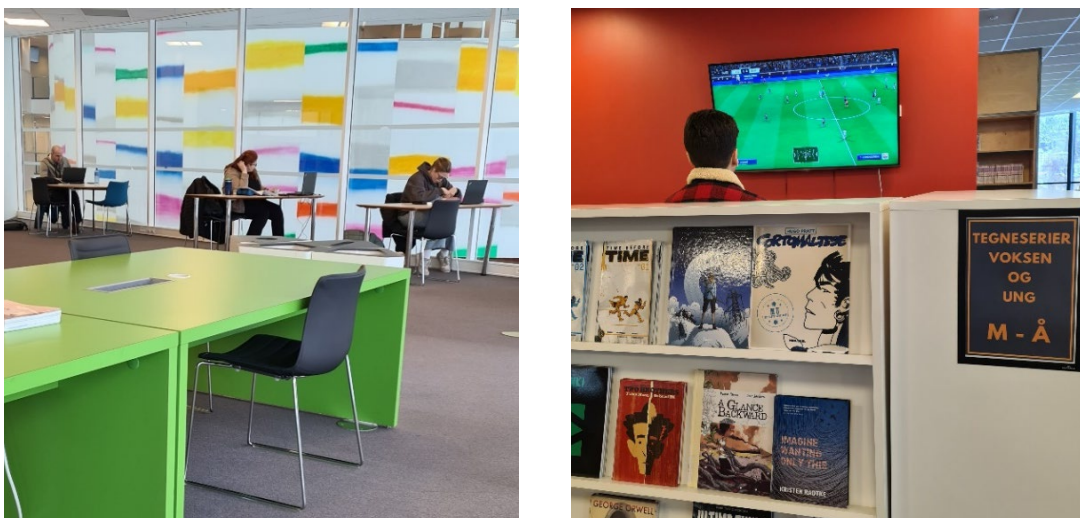


Figure 74. Attractive spaces in the Drammen municipal library | Source: By the Author, 2023.

7.1.2. Habits modelling practices

By looking at the role of habits in shaping individual practices it is possible to uncover the factors that drive users to engaging with sharing practices. This approach offers insights of user's motivations and interests that are valuable to planners, as their comprehension can help boost sharing habits and sustainable practices at a larger scale.

Santiago Metropolitan Area

Overall results obtained showed that a large group (47%) had never used shared mobility alternatives. This is not surprising as the offer in the studied areas was limited. Also, many people were unfamiliarised with the renting systems and the way to operate the vehicles, which is natural, as they are not exposed to these practices. Global results obtained in Santiago show that age, gender, and educational level might influence sharing habits. This is also found to some extent in Strømsø, where young, educated men were the most engaged group with active shared mobilities (i.e., bicycles and scooters). During the fieldwork in Santiago, a young man explained that he tried a shared bike platform while living temporarily abroad, and he continued to engage with this once he had returned to the country. In this sense, **it is possibly to recognise clearly how materials and competences** (Shove et al., 2012) **affected human practice as the improvement in cycling infrastructure, and the strong influence of cycling culture** (Goletz et al., 2015) **increased the use of bicycles in the modal distribution of Santiago**. This increasing in cycling motivated Providencia Municipality to insist on partnerships with neighbouring communes so that their investments in public infrastructure for mobility would have continuity beyond municipal limits.

However, despite shared active mobilities being more utilised by a segment of the population, **the use of collective taxis in Santiago shows that sharing practices can be adapted when people are exposed to them on a regular basis**, with this transport mode being used by all age groups in the Santiago cases, regardless of gender, age, and educational level. Moreover, there were interesting mobility alternatives observed in Santiago that can open pathways for integrating other alternatives than those found in other countries, like the massive use of collective taxis and the more recent trend of utilising electric-powered tricycles. The latter is especially interesting, as these are mostly used by lower-income groups for making businesses, and thus can offer the potential to include these groups into sharing practices.

Regarding shared facilities, though they were scarce in the case study areas, they are often integrated in residential areas, but their manifestations vary greatly among socioeconomic status and show clear elitist patterns for higher-income neighbourhoods. So, while in these cases people might have access to multipurpose rooms, communal laundry, outdoor terraces, common storage space, common gardens, etc., residential areas with social housing projects often do not integrate such facilities, and have mostly shared open areas, that depend on their capacity to maintain them. This is due to the cost-efficiency methods used to evaluate and approve these projects, which do not take into consideration that these additional square meters built can provide a larger arena for interaction, while offering residents the possibility to save money.

Oslo Metropolitan Area

On the other hand, in Strømsø only 2/3 of respondents engaged in shared mobility practices, prioritising car-pooling. Their motivations for this were primarily affordability and safety, and sustainability placed third, being a secondary factor influencing user's motivations. Regarding their habit of using shared areas/spaces there has higher level of engagement, reaching 4/5 of respondents. Residential exercise rooms, residential libraries, co-working spaces, and common storage areas being the most frequently selected, and the motivations in this case had to do with well-being and convenience. Sustainability was also placed third in this case. Results then show that **individual benefits are the main drivers for engaging with sharing practices in this case, so these can be emphasised when creating campaigns promoting sharing practices.**

Moreover, it was observed that common infrastructure was visible around the Strømsø square, with elements such as shared post-boxes, bicycle parking and a public bicycle hotel. These elements hold significance as they familiarise and integrate sharing practices into daily routines.

To finalise, it is possible to argue that the differences in the engagement in mobility and facility sharing practices in the case of Strømsø sheds light on the importance of integrating sharing habits in familiar spaces, such as residential areas, as it is easier for people to take part in them in known environments.

7.1.3. Culture and social norms modelling practices

Engaging in practices (or not doing so) can sometimes be attributed to subjective factors that vary at the individual and collective levels, acknowledging that not all decisions are necessarily rational, as discussed in the theoretical framework. These elements often include emotions, culture, symbolism, and values. Before proceeding, it is crucial to recognise that addressing symbolic elements is equally important as addressing material and competency factors if planners aim to promote the adoption of sharing practices in cities. For example, one governmental interviewee in Santiago explained that they were trying to implement a bicycle route in a central area of the city and were optimistic of the local community's response to it, as it was a traffic congested area. However, residents reacted negatively to the project, arguing that it would worsen the congestions issues (GORE KI8, 2023). Authorities though that the project would almost certainly help with congestions issues, but in this case people's perceptions were contrary to the technical assessments, so the project was paused.

Santiago Metropolitan Area

Some of the reasons manifested by survey respondents reveal the existence of emotional components for not engaging with the practice of using sharing mobilities, such as these practices being perceived unfamiliar, uncomfortable, scary, and difficult to use. Similarly, some of the reasons for engaging in shared mobilities also had an emotional component,

like people mentioning that these alternatives can make them feel good, independent, relaxed and offer the possibility to have a more beautiful trip with fresh air.

Other factors that can affect people's engagement with sharing practices relate to the culture of places. In this sense, it was observed that in Santiago community diversity and overall accessibility were positively evaluated in all four case study areas. Safety perception was also positive, but a few respondents admitted feeling very unsafe at times in these spaces due to the risk of being robbed or attacked, especially once it gets dark. Overall, this positive evaluation of the public space users can be seen as an argument for recognising the potential of these areas to introducing more sharing practices, where strangers interact.

Furthermore, local governments and authorities work, being guided by values, also displays a degree of subjectiveness –like Providencia Municipality, aiming to strengthen resilience, which can be an emotional value. This is also applicable to the urban planning field, where values play an important role in the definition of goals and subsequent plans, policies, and strategies. In this sense, there is widespread consensus among regional authorities in Santiago that high levels of inequality in the city need to be addressed urgently. Hence, introducing gender and social justice as guiding principles in Santiago's transport and mobility plans is regarded as highly positive. It responds to people's needs and has the potential to balance the scales of inequality. Another interesting shift in planning views is the focus on a human-scale vision from the regional authorities, offering excellent potential for the city to address inequalities through mindful urban designs and a 'governing through enabling' (Table 1) type of approach, which can help strengthen urban plans and participation mechanisms in the long-term.

Oslo Metropolitan Area

The Norwegian scenario presents distinct characteristics. A notable cultural aspect is the prevalence of shared residential facilities in high-density cities, following the compact city model. This concept extends from student housing to retirement homes³⁴, emphasising the culture of sharing as a life-long practice in Norway. Additionally, innovative sharing initiatives like the 'gaining by sharing' projects offer valuable insights into the challenges and opportunities associated with sharing practices at the residential level. Furthermore, 'dugnad,' a deeply ingrained practice in Norwegian society, involves communal cooperation and volunteering, with individuals contributing to collective benefits without monetary compensation, and is highly valued by decision-makers.

Interestingly, survey results in Strømsø revealed that user's motivations mainly were based on individual interests related to more rational motives, like affordability and well-being. However, the discussion around the Globusgård building reveals an important emotional component, with many defending it as a symbol of the area's history and their own story as a community.

Regarding the planning values implemented in this context, the national welfare system establishes a comprehensive and inclusive social framework that prioritises values such as

³⁴ Aldershjem or skehjem in Norwegian.

democracy, human rights, solidarity, and trust (Oslo Kommune, n.d.). These values often permeate regional and municipal views in the planning field, while integrating a holistic view on physical and social environments. For instance, in the county of Viken this translates to the definition of three core elements in planning, which are climate and the environment, public health and cooperation. In the case of Drammen, the planning values reflected from the plans and interview can be summarised to sustainable development, inclusivity, economic prosperity and development, environmental preservation, and community focus. However, as will be discussed further (in section 7.1.5), these values can entail conflicting interests.

7.1.4. Community and social influence modelling practices

We are constantly influenced by those around us, and many of the practices we adopt are likely inherited from the social environments in which we participate, starting with those we live with. For practices to be adopted, we learn from others and consciously or unconsciously imitate them. This highlights the existence of a hidden knowledge pool, known as social capital, which is passed down through these practices. Important components of this dimension include societal skills, civic participation, and the formation of partnerships.

Santiago Metropolitan Area

As in many Latin American contexts, solidarity can be recognised as a strong societal skill, with collaborative practices abounding at a micro scale, but these are often restricted to residential boundaries. Though this is highly valuable, it is also important to find ways to scale up the benefits of sharing practices. In this sense, it is recognised that technical societal skills display geographic disparities (also linked strongly to limitations in physical infrastructure), and while digitalisation is being strengthened, levels of digital literacy are still limited among the population³⁵ (Wiley, 2021). Therefore, since many sharing practices rely on digital tools, more education is needed to support inclusivity. This is also true for civic education and engagement, which need to be strengthened. In this sense, the role that urban labs are having has enormous impact for residents, offering them skills, networks, and new opportunities for personal and professional development. In this sense, municipal urban labs found in Santiago play a significant role in empowering residents by providing them with skills, networks, and new opportunities for personal and professional development.

Moreover, institutional skills are fundamental to creating adaptable frameworks for urban development. In this sense, the work methodology adopted by Metro Santiago, the ones in charge of the public spaces around mobility hubs in Santiago, is quite rigid. Due to the large scale of intervention and the complexity of the projects, their planning mechanisms are prepared with much anticipation, making them inflexible. This makes it virtually impossible

³⁵ According to the referred source, Chile remains in the lower levels of digital skills, scoring 3,8 out of 10 and placing 98 out of 134 countries.

to make last-minute adaptations to public space projects, which are also the last stage of the execution and therefore have a reduced budget.

Regarding the formation of alliances, though strong partnerships exist in Santiago at the regional level, such as the dedicated work panel aimed at promoting intermodality, their effectiveness is often hindered by differences in priorities and bureaucratic procedures. Therefore, enhancing coordination of public policies, improving communication, and fostering interoperability to strengthen multisectoral collaboration can be highly valuable. Furthermore, the high administrative fragmentation of the territory poses a challenge to integrating more and better mobility alternatives, as each entity operates under its own regulations, budgets, and interests. However, addressing mobility solutions requires a holistic approach that transcends the fragmented pattern prevalent in urban governance within the metropolitan area. In this regard, regional and municipal planning authorities have recognised the need for GORE to assume a stronger role as a Metropolitan Authority.

Oslo Metropolitan Area

In the Norwegian scenario, on the other hand, there are overall high levels of digital competitiveness and digital literacy³⁶, facilitating the massive adoption of sharing practices that operate through digital platforms. In Strømsø, particularly, these alternatives are very valuable, as this hub is often a compulsory stop in people's commuting trips. This makes it important to understand how people move and what encourages them to try more sustainable alternatives. Furthermore, the presence of migrant groups in the area adds an important contextual aspect, necessitating consideration of their specific needs and preferences regarding mobility and amenities. This diversity can offer valuable social capital, as sharing practices can both enhance human diversity and be enriched by it.

Regarding civic engagement, given Norway's high scores on democracy indexes, it comes as no surprise that residents in Strømsø actively voice their opinions and interests through local media channels. Press articles in local newspapers ([Evju, 2021](#); [Klausen, 2021](#); [Thorkildsen, 2021](#)) highlight the demand for non-profit activities that enrich the cultural and social life of the community in this part of town. During the fieldwork, two female residents in Drammen expressed their dissatisfaction with the municipality's approach to the development of Strømsø and its surroundings. They perceive a lack of environmental awareness from local authorities, as green spaces are diminished in favour of buildings. Additionally, they are concerned about the privatization of public spaces, and the introduction of more profit-oriented facilities, and feel that the municipality lacks effective dialogue with residents and occasionally acts unilaterally. They emphasise the importance of community opposition in such cases.

Nonetheless, one area where municipalities demonstrate significant skills and competences is in the establishment of public-private partnerships. These partnerships are commonly observed in Norwegian planning contexts and are strongly encouraged due to their potential to incorporate innovative solutions. An example of this is the collaborative feasibility study conducted for the Strømsø area involving developers and the municipality,

³⁶ Here, Norway scores 7,2 and takes the 6th place at a worldwide level.

where the latter outlines essential considerations to uphold planning values. However, as residents have pointed out, it is crucial to maintain a critical perspective on these collaborations, as conflicting interests may arise.

7.1.5. Structural limitations modelling practices

Finally, there are additional material factors that impact practices, which have been conceptualised as structural limitations, and it refers to the underlying mechanisms modelling and influencing collective practices. These limitations encompass constraints or boundaries that can either restrict or enable practices. They are imposed by institutions, norms, policies, and overarching structures, often operating at a macro scale, and remaining unnoticed by individuals. These include factors such as infrastructure and technological barriers, economic considerations, power dynamics and institutional arrangements and access disparities.

Santiago Metropolitan Area

Infrastructure was constrained by financial resources, but it was also unevenly distributed in the city, as evidence in the case study areas. **This is consistent with a study on multiple cities that revealed that shared mobilities are not equally shared by all, with trends favouring higher income and more educated groups** ([Dill & McNeil, 2020](#)). Regarding public infrastructure for mobility, users and local authorities agree that more on this could be done to improve conditions for travelling more sustainably, especially for intermediate trips. As shown by survey results, poorly maintained pavements, limited circulation networks and poor protection from vehicles deter people from using active mobilities. So, though many respondents want to engage in more sustainable practices, the city does not have the physical conditions for them to do it smoothly and safely.

Institutionality and resources are recognised as one of the greatest challenges to the development of intermodal strategies in the city by one of the main transport planning authorities. In this sense, cooperation between local governments and investors/sponsors is important, as pilot projects, urban labs, or other kinds of solutions can be implemented collaboratively in public spaces to address these challenges. For instance, dialogues between municipalities in Santiago and Metro Santiago resulted in the creation of a project that installed bicycle parking outside all metro stations. Metro representatives argue for the importance of this project for cyclists that cover large commuting distances in the Metropolitan Area through a combination of at least two modes of transport.

Another challenge to promoting sharing practices related to the availability of the equipment. So, though Santiago is leader in electromobility solutions in public transport in the region, these are still scarce at the individual level in the private sector, and there is restricted access to electromobility to most individuals, due to the high prices of electric vehicles, and the limited range covered by electro micro-mobilities in the city (as they are available in few municipalities).

In terms of economic considerations that impose limitations, low wages often hinder users from utilising alternative modes of transportation that are not covered by the public transport fare. Given the city's size and the need to pay for buses or metro, additional expenses for the last mile can become burdensome in the long run. Another significant factor is the prevalence of street vendors around the studied mobility hubs in Santiago, which stems from poor working conditions in the formal job market. These vendors primarily sell food, beverages, small electronics, and household items. While municipal ordinances prohibit their presence in public spaces near the observed areas, it is virtually impossible to control these practices. Consequently, these activities are not factored into the design process, leading to safety concerns such as reduced walkways. However, in certain parts of the city, some municipalities have adopted an alternative approach by organising designated spaces for vendors, ensuring adequate areas for pedestrians and other slow modes of transportation, like the municipality of Santiago, which has opted for a regulatory approach rather than outright prohibitions ([Latorre & Canales, 2021](#)).

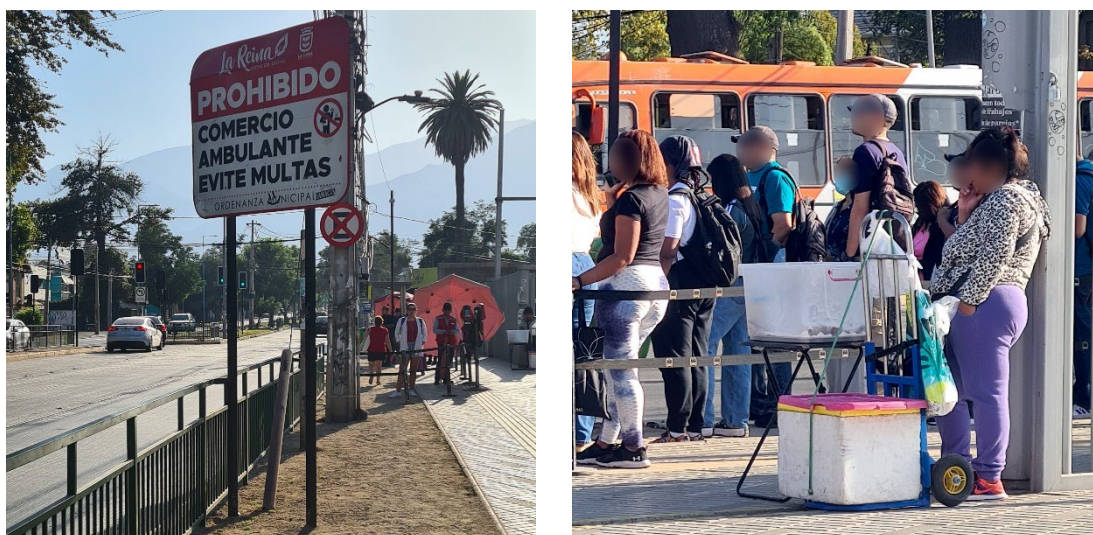


Figure 75. Sign with municipal restrictions to informal vending (left), next to a woman selling breakfast sets to passers-by (right) | Source: By the Author, 2023.

Regarding power dynamics and institutional arrangements, unlike Oslo, the Metropolitan area of Santiago faces significant challenges in power dynamics and institutional arrangements. The area is highly fragmented, with each of the thirty-two municipalities having their own urban regulations, infrastructure plans, mobility plans, and social goals. This fragmentation extends to their budgets, with some municipalities struggling to cover basic expenses. Additionally, these municipalities are not obligated to follow the guidelines provided by GORE, making the implementation of large-scale projects dependent on extensive negotiation and consensus. Many interviewees stressed the need for a Metropolitan Authority in transportation to establish a unified plan for the entire urban area and agree that GORE should be the institution filling that role. However, despite the support for this idea, the establishment of a Metropolitan Authority has faced political obstacles, as it is seen as potentially concentrating too much power in a single political figure, creating a competition with the position of the president, given Santiago's significant population concentration.

Moreover, **access disparities represent a significant obstacle to the adoption of sharing practices**. These are still largely present in the context of Santiago and other Latin American cities and will continue to be worsened by the 'closed neighbourhood' residential model. Therefore, it is important for planners to consider Social Practice Theory as a valuable input, **avoiding the sole reliance on individual behaviour change and emphasising the need for substantial infrastructure investments**. This is because spatial factors play a crucial role in shaping habits, which ultimately influence practices.

Oslo Metropolitan Area

Meanwhile, in Strømsø it is also possible to find infrastructural barriers that challenge the use coexistence of users in public spaces. Firstly, it is acknowledged that the Globusgård building holds significant importance as a landmark for the community. However, due to inadequate private management, the space has deteriorated, and its prime location has not been utilised effectively as a community space.

Secondly, the use of scooters proves problematic and though authorities recognise that they have many virtues in terms of accessibility and affordability, they also identify many challenges around them that still do not seem to find solutions. The conflicting nature surrounding the use of shared scooters in cities is not exclusive to a particular area; it is a common experience in all cities that have adopted this alternative. In Drammen, specifically, these issues relate to impeded sidewalks, high speeds, and safety risks to visually/hearing impaired residents. In this regard, it is interesting to look at what was been done by the municipality of Oslo where local regulations for scooters were introduced in 2021, after much discussion with many stakeholders involved in the matter. The measures introduced include limited operational hours, restriction on the number of companies operating simultaneously (set to three), cap restrictions on number of devices for zones (up to 8.000, so they require redistribution), liability insurance and safety regulations ([Ydersbond et al., 2023](#)). Though these regulations have reduced the number of trips, they have also created safer conditions for users, who experience less accidents than before regulations were in place. In this sense, Drammen could strengthen sanction mechanism against operators breaching contracts, but also establish closer dialogues with them, so that the needs of the Municipality in terms of caps for operators and devices can be clarified.

Regarding the former, another significant challenge around mobility solutions, raised in both contexts is the two-sided character of shared mobility solutions which are seen as a business model by operators, and as integral solutions to urban mobility by planners and decision-makers. In this sense, the city bike-sharing system in Norway was initially launched as a part of the advertisement campaign (Clear Channel), and not as a part of intermodality discussions. It is only later that assessments have established how the city bikes serve two independent mobility functions: as a mode for access-egress, and undertaking independent short cycling trips (Priya Uteng et al., 2020). Therefore, it is only through a long process of discussions and negotiations that these two sides can come into balanced terms.

Regarding economic factors, it is recognised that a pitfall of the Feasibility Plan for Strømsø is the (almost certain) possibility of gentrification and displacement of lower-income immigrant renters in the borough's east side. Currently, this group has no financial possibility to acquire the properties where they live and have limited incidence over the maintenance and beautification of public spaces around them (Drammen Kommune KI10, 2023). So, this creates more room for developers to argue that they could improve the area through urban renovation investments. However, it is believed that one of the great virtues of this area is the possibility to have socially mixed residents living in one of the prime areas of the city.

Moreover, it is possible for this project to create disparities in terms of access. Despite the great value of the outward-looking activities proposed by the Feasibility Study in Drammen, it can be criticised that the plan tends to monetise the experience in public spaces, by considering mostly indoor facilities that generate revenue, going against the desires manifested by residents who expect the Globusgård building to gain a more prominent role as a community landmark, with cultural and sharing spaces. This profit-centred mentality is not surprising though, as the plan is developed by private investors. Therefore, Municipal planners ought to advocate for open spaces that people can use free of charge for diverse community activities and that do not alienate any group, leaving room for spaces for youth, elders, and immigrant groups that currently make use of spaces in the area.

7.2. Policy implications

This section will firstly present the key findings of the research, to then delve into the policy implications of these for each of the case study regions.

7.2.1. Key findings

These are organised according to the three elements of practice of Social Practice Theory:

A) Materials: lack of/poor infrastructure in mobility hubs challenges the adoption of sharing practices, like mobilities and facilities. Moreover, weak urban design and poor locations are factors that can create inhospitable and unattractive conditions in public spaces, leading to their underutilisation; much like unclear regulations can hinder the engagement with active mobilities, like scooters. Simultaneously, profit-oriented approaches in planning may also limit the development of community-oriented spaces, so these the impact of these economic considerations over spaces should also be consider. In the Global South case studied, individuals often responded to scarcity with resourceful solutions, which though useful do not reflect desired planning values, like inclusivity and equality. Also, informal activities are undeniably important components to urban life, and despite disapproval from local authorities, these created lively conditions in these spaces. In the Global North case studied, material conditions can be generally characterised as good, but there are also great challenges in what relates to the human-scale approach, as urban design remained uncritical of the prevalence of cars in what ought to be people-centred spaces.

B) Competences: as modern sharing practices are often implemented through digital solutions; digital literacy is an important factor to keep in mind for promoting such practices. In the Global South case limited awareness and familiarity with these alternatives was found, and educational levels had a strong impact on this, with gender and age having a lesser effect. In opposition, more analogous forms of sharing (that is, non digital) were better received and had more inclusive patterns of utilisation. In the Global North case, individuals were more familiarised with sharing practices, which they experience not only as mobilities, but also in residential spaces, as common facilities. The latter is facilitated by the adoption of the compact city model, which characterises modern Norwegian cities.

C) Meanings: as found in both cases, there are emotional/symbolic components influencing people's engagement with sharing practices. Negative perceptions are often linked to feelings like unfamiliarity, discomfort, and fear; and addressing these perceptions can be as important as providing more infrastructure. Also, planning values are important to understand, as they also display subjective views that relate to the contextual characteristics of societies. In the Global South case, passers-by evaluated positively the overall environment around mobility hubs, like diversity, accessibility, and safety, suggesting that there is potential for introducing more shared practices. In the Global North case, individual benefits were important motivations for engaging in sharing practices. In addition, for the Global South case it was experienced that in lower-income areas individuals had a sense of abandonment from the local authorities, limiting their interest and expectations in accessing such practices.

7.2.2. Policy implications

As discussed earlier in the thesis, the (platform-based) Urban Sharing Economy is a revolutionary phenomenon, which offers great benefits to citizens and governments, and can contribute to more sustainable consumption patterns. But its introduction to the urban environment is also associated to great conflicts, like creating undemocratic outcomes and ambiguous regulatory environments, that challenge urban practitioners and decision-makers all over the world.

Paraphrasing Chan & Zhang's words, "drawing out the know-that of [sharing practices], rather than the situated and the tacit lived experience of know-how—then anticipates the future environmental and policy design that will likely build on this knowledge." (2018, p. 163). Thus, this section delves into the effects of research on policies and urban practices. The goal is to identify areas for improvement in creating more inclusive urban development, with an emphasis on sharing spaces and mobility around important public areas such as mobility hubs.

Inclusivity and Equity

In a broader scope, research shows that urban sharing practices can create better livelihoods and offer individuals with more environmentally friendly and affordable solutions, but also worsen levels of inequality and exclusion when they do not comprehend

social societal contexts (like availability of infrastructure, digital literacy, vulnerable groups). This finding suggests gaps in inclusivity and equity agendas and strategies in relation to such urban practices. Therefore, it seems crucial to promote social justice in sharing practices, involving equal access to all sectors of society, so that no one is left behind. This can be taken up by National level Policies/Guidelines, which can encourage local governments to narrow this gap, and it can also be addressed through Regional and Municipal strategies particularly in terms of sharing practices, which in the case of Norway already mention shared mobility alternatives but does not make deeper mention of shared spaces/facilities. For the latter, citizen's consultations can be carried out to create comprehensive strategies that integrates sharing practices catering to different age groups, emphasising children, youth, seniors, and other vulnerable groups.

Partnerships and Collaboration

Another large scale finding with practical implications is the large number of stakeholders involved around the promotion of sharing practices, who represent diverse interests. This implicates that planning values need to be given great importance, so that they are not lost among these interests in negotiations with partners and collaborators, and that intersectoral collaboration is key to achieving meaningful progress. This can be addressed through Regional and Municipal strategies, by promoting dialogue and cooperation between authorities and private companies, organisations, universities and research centres, foundations, and other relevant actors, to collectively develop and implementing sharing initiatives. Furthermore, these partnerships can contribute to increase awareness and education of the potential of sharing practices, emphasising collective benefits (like sustainability) and individual ones (like affordability and well-being) to encourage greater engagement.

Infrastructure and urban design

In a narrower perspective, findings reveal that physical environments are determinant to the engagement with sharing practices, as this provides the basic material condition for them to happen. However, infrastructure provision is not enough, and urban design plays an important role in this, as attractive spaces are more capable of creating the synergies necessary to have successful sharing spaces. This suggest that policies need to prioritise the development of robust infrastructure, conceived by the principles of the human scale vision, to support sharing practices in an equitable manner. This can be addressed through Regional Strategies and Plans in both contexts. For the Santiago Metropolitan Region, the regional perspective on a fair distribution of networks and equipment for active mobilities is especially important, to prevent these trends from worsening social issues. In this sense, underserved and segregated areas with significant population density should be prioritised. Furthermore, municipalities can incorporate shared spaces and mobilities as part of their Communal Plans. In the case of Santiago, funds obtained from Impact Evaluation Assessment can be directed towards this strategy. Additionally, to enhance user experience, it is crucial to supplement these plans with comprehensive regulations on micromobility.

For instance, Oslo's Act on the rental of small electric vehicles on public land has paved the way for better scooter management.

Funding and Incentives

Furthermore, research shows that the multiplication of sharing practices can be constrained by financial frameworks. For instance, shared mobility alternatives are often taken up by private operators as part of their business models, which also help municipalities save public funds. Findings suggest that sustainable funding mechanisms should be explored based on innovative funding models (e.g., street ground rents implemented in Drammen) that contribute to sustainability goals but also create attractive opportunities for investors and operators. This can be addressed by municipalities directly, but regional involvement is also important. It can create more cohesive conditions for municipalities in urban agglomerations, so that less densely populated areas are not left behind for being less profitable than neighbouring communes. Municipalities can also boost existing community infrastructure and encourage their expansion and harness existing sharing practices, such as communal cooperation and volunteering, to encourage and support these collective practices. Regarding shared spaces/facilities, these can be taken up by municipalities through public-private partnerships and can consider the materialisation of pilot projects in mobility hubs or significant public spaces, for people to be familiarised with sharing mobilities and facilities.

Monitoring and Evaluation

Finally, a relevant dimension to consider during and after the multiplication of sharing spaces and facilities in cities is their assessment. Currently, there is limited data gathered by local authorities about people's consumption patterns, and how shared alternatives impact and contribute substantially to sustainability and social goals. Therefore, methodologies to monitor and evaluate the impact of these practices need to be created, partnering with mobility operators, for instance, so that the effectiveness of these initiatives can be measured, and areas of improvement can be easily identified.

8. CONCLUSIONS

Through comprehensive data collection and analysis, the research aims to contribute with valuable insights into the dynamics, challenges, and opportunities associated with shared spaces and mobilities in cities. The segment is structured in three parts. Firstly, we will delve into the research questions proposed earlier; secondly, reflections on the thesis development and limitations encountered will be provided; lastly, some ideas for future research will be discussed.

8.1. Going back to the research questions

This section will return to the research questions formulated for the thesis, summarising and highlighting the most important findings and considerations for each of them, as concise as possible. Secondary research questions (SRQ) will be discussed first, and then a discussion that integrates these and other perspectives will be presented for the research's main question.

SRQ1: What type of activities occur around the selected mobility hubs, and what kind of conflicts and negotiations occur at the street level due to the co-existence of diverse users, activities, and modes of transport?

During the thesis fieldwork, it was observed that the five mobility hubs had diverse users and dynamics. In the Santiago Metropolitan Area, various activities such as leisure, recreation, trade, mobility, faith, and social interactions were present, but they were not as frequent and diverse as anticipated. The overall observation revealed that poor infrastructure, lack of interactive elements/spaces, and poor urban design, which did not align with Jan Gehl's concept of human-scale, constrained human practices in these spaces. Users often expressed dissatisfaction with the absence of green areas and shading elements that would enhance comfort. Despite being public spaces, they lacked inclusiveness and vibrancy, rendering them lifeless and superficial.

In terms of mobility, interesting alternatives complementary to public transport services were observed, including bicycles, collective taxis, car-pooling services, and tricycles. Tricycles provide market and street vendors with more flexible alternatives, making them especially interesting from an innovation perspective.

Regarding conflicts and negotiations in these spaces, informal vendors were noticeable in all study areas in Santiago, regardless of the income levels of the surrounding areas. They adopted different scales and modalities according to the characteristics of the areas, like having larger set-ups in the stations with higher presence of transient population. Interestingly their presence did not seem to significantly affect users' perceptions of safety or accessibility. Despite local ordinances prohibiting their activities being in place in many municipalities in the region, informal vendors continue to operate in these spaces. Besides providing vendors with a source of income, trade around mobility hubs serves as an opportunity for commuters to access goods and/or services while in transit.

Furthermore, significant challenges were identified around transport and mobilities, like the chaotic vehicular situation, due mostly to traffic congestions, which created some issues between public transport buses, collective taxis, and taxis. Also the lack of public infrastructure to facilitate safe and comfortable active mobility, especially cycling, posed obstacles. The current cycling network is limited, pavements are often in poor condition, and there are few areas available for parking bicycles safely. These factors, along with others, deter people from utilising these alternative modes of transportation.

On the other hand, the case studied in Drammen displayed very different characteristics. This location, which includes the train station, serves as a crucial transportation hub within the city, attracting numerous commuters who travel between Oslo and Drammen. The provision of infrastructure and elements to support active mobilities was quite good, as the area had bike-parking areas in many points. Furthermore, in public spaces it was possible to observe diverse users utilising the services and facilities at the Globusgård building, though some of these were not very lively. Also, a large portion of the second level is currently empty, and sometimes used by an immigrant community for their local activities. Moreover, the community recognises this building as a valuable landmark and express their desire for it to foster more community spaces, as those are scarce in this part of the city. It was also found that towards the east side of Strømsø, residents are predominantly non-western migrant communities, who often rent the properties where they live. Complementarily, non-western migrant youth were seen around the Strømsø square. They made use of a community centre run by an NGO, which is open three times a week after school hours and offered a place for them to engage with fun and social activities. However, the opening hours of this centre are limited, and these groups did not have many other places to use in this area.

In relation to conflicts and negotiations in the area, it was observed that the accumulation of ice and snow during the winter months, and cold temperatures seems to deter active mobilities, revealing some challenges with the maintenance of sidewalks and bicycle lines, as often occurs in these latitudes. Also, there was a high presence of stationary cars in the area, especially taxis, which does not create a favourable environment that promotes active mobilities. About active mobilities, bicycles experience less conflicts as they mostly make use of cycling lanes, but scooters experience more issues, as users often ride the sidewalk, creating a safety hazard for pedestrians. In terms of the quality of public spaces, residents express concern for the reduction of green areas with latest urban developments. This can be counterbalance by the recently proposed project contained in the Feasibility Plan for Strømsø. This initiative can improve the physical and social conditions of the Strømsø area, but it has a high risk of marginalising groups: a) by introducing more revenue making facilities and not considering free-open spaces for the community; b) by its high risk of gentrification in the east side of Strømsø, risking the displacement of immigrant groups who are mostly renters.

Overall, all case studies display distinct characteristics in terms of infrastructure, social composition and specific issues that are intrinsic to the nature of sharing. However, **a common factor to the five case study areas is the role that urban design plays in enabling/constraining human practice.**

SRQ2: What are the existing and prevailing planning discourses (at the macro and meso levels) and practices around sharing spaces and mobilities (at the micro level) in urban environments, in the case study areas?

Firstly, **at the macro or regional scale:**

In Santiago, there is a strong interest among national and regional authorities to promote intermodality and sustainable practices in line with the country's sustainability pacts. However, there is a lack of priority in strengthening sharing practices, despite their potential to contribute to inclusive and sustainable goals. This is reflected by the fact that private operators seeking to introduce their vehicles face limitations due to local regulations and municipal plans. Moreover, shared spaces receive limited attention at the regional level, with discussions primarily focused on local parameters at the municipal level. However, there are contradictions between discourse and practices, as public spaces around mobility hubs are neglected, due to the lack of methodologies and limited resource allocation. Therefore, it is possible to say that Smart City sharing practices are still in the adaptation phase and are a long way from overcoming unequal patterns in their geographic distribution.

To face these (and other) urban uncertainties, authorities agree that stronger leadership and power in a metropolitan authority are needed to prevent fragmentation of plans and policies among the multiple communes that comprise the city.

Viken County, on the other hand, has embraced shared mobilities as a key element of its Smart City solutions, recognising its notable contributions to sustainability and efficient space utilization. This aligns with their long-time adoption of a compact city model, prioritising the halt of land-use expansion on urban soil, and instead focusing on creating denser urban areas. Furthermore, they focus on creating denser urban areas, promoting sustainable development, and addressing climate adaptation and transportation safety, through zero vision goals. Additionally, Viken County recognises the importance of establishing shared spaces that are accessible to communities, fostering interaction, dialogue, and community life to promote social cohesion and a sense of belonging. They also emphasise integrating innovative approaches within the public sector to enhance public services and improve residents' well-being, positioning themselves at the forefront of urban planning and governance advancements.

Overall, both cases present a strong focus on sustainability, especially in what relates to climate adaptation solutions. Also, they have a strong focus on promoting intermodality in urban areas, strengthening active mobility alternatives, and reducing car usage. Community interaction and social cohesion are also common to their discourses, and planners and decision-makers on both sides understand that accessible and well-designed shared spaces can contribute to better livelihoods.

Nonetheless, there are significant differences between them. Santiago, as the largest region in the country and a densely populated area, tends to focus on a larger scale, involving national authorities. In contrast, Viken county takes a more localised approach, centred on county and municipal-level planning and decision-making. Additionally, there are notable disparities in financial resources, with Viken operating with significantly more funds than

Santiago. Moreover, the Norwegian scenario demonstrates stronger public-private cooperation than the Chilean one, enabling the implementation of more innovative urban solutions. Lastly, **while both aim for equal access and inclusivity, Santiago exhibits inequality patterns regarding shared mobilities, which are not clear in the case of Viken.** This aspect needs further exploration with the providers of shared mobility, especially private actors.

Secondly, **at the meso or municipal scale:**

Planners and decision-makers in Santiago emphasise the importance of learning from foreign experiences and adapting them to the local context. Collaborating with shared mobility operators is seen as important but challenging due to their requirements and the lack of adequate infrastructure. Partnerships with the metro system also pose difficulties, as interventions often prioritise convenience and cost over contextual considerations. Integrating human-scale solutions prioritising pedestrians and slower modes of transportation is a key focus for creating shared spaces in municipalities with more resources, like Providencia.

Moreover, in practice shared mobility solutions are often limited to privileged areas and seen more as advertising tools than integral mobility solutions. Private service providers in Santiago, primarily affiliated with the banking industry and operating shared mobility services as part of their corporate social responsibility, tend to prioritise higher income areas when deploying their vehicles, displaying clear unbalanced geographic patterns that reproduce already existing urban inequalities. However, partnerships with operators are still valued as they can lead to financial savings for the municipality. Furthermore, in Providencia municipally, funded active mobility initiatives are being implemented in residential areas, involving local communities in the process. These have been quite successful but are still in an early stage.

In Drammen, sustainable development takes centre stage, driven by a strong emphasis at the national level. The municipality's comprehensive plans embody a holistic approach, integrating considerations for both the physical and social environment to promote overall well-being. There is also interest from the Municipality on capitalising on the attributes of the Strømsø area, as a city axis and an important mobility hub, in the context of a region with high commuting levels.

In practice, shared mobilities are widely regarded as valuable assets that enhance people's mobility and contribute to improved livelihoods. However, their implementation poses challenges in terms of road coexistence with other transportation modes. Additionally, the Municipality faces limitations in imposing requirements and regulations on shared mobilities due to its relatively small market size. Consequently, negotiating favourable terms with service providers becomes difficult, as they are more interested in winning the public tenders for larger cities, like Oslo.

Altogether, in both cases municipalities prioritise integrating sustainable development strategies at the local level. They recognise the benefits of shared mobility options, which increase accessibility and mobility. However, shared mobility also presents challenges for

road coexistence. So in both contexts, municipalities are focusing on designing more human-centred urban areas that prioritise pedestrians and slower modes of transportation. Negotiating favourable terms with shared mobility providers is a challenge in both contexts, but for different reasons. Drammen's small market and limited population density make service providers less interested in contexts other than larger Norwegian cities. In Santiago, socio-economic status plays a key role in agreements negotiated on an individual basis with municipalities. Lower-income municipalities struggle to attract providers compared to wealthier ones. Additionally, Norwegian municipalities demonstrate greater coherence in their plans from the national down to the local level, while the Chilean case has limited municipal capacity to regulate smart city solutions due to a lack of experience with sharing practices. **The municipalities also differ in their approaches to designing public spaces around mobility hubs. Drammen prioritises these hubs, while Santiago experiences abandonment in these areas.**

Lastly, **at the micro or neighbourhood scale:**

Limited sharing practices were observed in these spaces in Santiago. Some of these included sharing playground areas, a municipal library, trading spaces, the use of shared-bikes system, car-pooling and the use of collective taxis. Though as discussed in interviews it is also possible to find scooters and car-sharing services in other parts of the city. Altogether, between all these alternatives, 62% of survey respondents had tried some form of shared mobility. Nonetheless, it is important to emphasise that they displayed clear elitist patterns by concentrating their offer in higher-income areas of the city. Despite the great interest of users in making use of more shared mobility alternatives (80% of survey respondents), people often expressed that they felt limited to do so due to limited infrastructure and offer or services, lack of familiarisation with the system, and fear of having bad experiences, among others.

In Strømsø, shared mobilities are already integrated in the city, with availability of scooters and electric bicycles during the warm months. Additionally, other sharing practices were also integrated in public spaces, like post-boxes and a bicycle hotel. According to the survey carried out, engagement with sharing practices was overall positive in this case, with most respondents making use of shared mobilities (67%) and a similar share taking part in sharing practices in residential spaces (70%). Furthermore, the rounded shape building also fostered some shared spaces on the second floor, where a local community gathers regularly and organises events.

It is without a doubt that sharing practices in LATAM are deeply rooted in social dynamics and culture, thriving within close-knit communities. However, the challenges of introducing smart sharing practices in urban areas cannot be overlooked, as **lower-income groups are often marginalised from the increasing trends of the Urban Sharing Economy**. In Norway, shared practices are more commonplace, and incorporating them at the residential level has a positive impact on the overall sharing mentality in a familiar environment. **It is imperative to implement more comprehensive frameworks that recognise the potential of sharing spaces and mobilities in a contextual manner**, to further strengthen community practices in all analysed areas.

SRQ3: How can Social Practice Theory contribute to creating more adaptable frameworks to promote innovative approaches to sharing practices around mobility hubs, and what kind of governance capacity does this entail for each case study area?

Social Practice Theory Provides an innovative framework to studying sharing practices and sheds light not only on physical aspects, but also on intangible ones like competences and symbolism. Its application on the research topic, distinguishing between the elements of practice and the scale of implications of these (individual versus collective) provided new insights that can help strengthen policies and governance frameworks for promoting such practices. Here, some of the critical findings of the thesis are summarised, based on the core three elements of SPT that explain the evolvement of human practices, to try to answer the question of what kind of governance is needed to promote more of these sharing practices.

- The material dimension: a) stresses the importance of equitable infrastructure and equipment for the users to engage in sharing practices; b) acknowledges the importance of urban design and the integration of human scale principles; c) recognises the existence of structural limitations to practices, that go beyond the scope of what individuals can affect.
- Competences/skills enable the possibility to: a) address societal readiness in the implementation of new practices in cities, like assessing the digital competitiveness and digital literacy that is required for smart city solutions; b) recognise the importance of social capital and the power of conscious or unconscious imitation in the reproduction of these practices; c) reflect upon the level of civic engagement and education of communities engaging with shared practices.
- Meaning and symbolism emphasise: a) that the impact of emotions and perceptions is crucial in promoting sharing practices, as negative perceptions can dissuade people from engaging with them (even when data shows their benefits), and building familiarity within local communities is key to fostering positive perceptions; b) the role that culture and symbolism plays in the adoption of sharing practices, both at the individual and collective levels; c) the underlying planning values that guide urban plans and policies.

In terms of governance capacity, it is possible to conclude that innovative frameworks are needed, as the Sharing Economy is a fast-moving phenomenon that has the capacity to enhance integration and inclusivity, in the same way that it can create (or worsen) segregation and exclusion dynamics, so it affects all of society. In this sense, it is recognised that different types of governance attitudes are required to regulate urban sharing in relation to the scope of authorities work, in this case the regional and the municipal levels.

So, taking in consideration the discourses and practices found in the case study areas, for the regional level it is recognised that governing through enabling provides a valuable framework for planners, especially in the Global South, where resources are more constrained, and governments have less capacity to act as investors (which would be possible for some municipalities in Norway). This encompasses an effective approach that involves coordination and facilitation of partnerships with private actors, while also encouraging community engagement. It requires experienced professionals who can create

effective partnerships through dialogue and incentives, to foster cooperation between stakeholders. The latter should include municipalities, service providers, local businesses, organisations, citizens, and all other relevant partners. Contrary to other governance approaches that adopt a rigid top-down approach, this method prioritises flexibility and adaptability. These traits are particularly crucial when it comes to regulating dynamic spaces such as shared spaces and mobilities.

For the municipal level, self-governing proves valuable as it empowers local authorities to regulate their own activities related to shared spaces and mobilities, integrating their unique contextual views and needs into a larger system. This way, municipalities can enhance their sustainable practices and promote them through these spaces. **By adopting a proactive stance that adheres to the regional framework, municipalities can develop standards, guidelines and projects that promote shared spaces and mobilities.** This offers them with the possibility to create cohesive plans that at the same time have a good degree of flexibility.

Going back to the main research question:

MRQ: Considering the immense growth of the Sharing Economy as an urban phenomenon, to what extent are publicly accessible shared spaces and mobilities integrated into densely populated areas of both the Global South and Global North, and how can studying them contribute to the decision-making process of urban planners?

Despite the great momentum that the SE has gained in the last decades, it was found that sharing practices were scarce but growing around mobility hubs in both case study areas. Though the city of Oslo has many initiatives in place in this regard, the city of Drammen, situated in the Greater Oslo Region, illustrates a different situation. Being the SE a density-based phenomenon, Drammen remains a small market for operators, limiting their possibility to form strong alliances with mobility service providers. In the Santiago Metropolitan Area, the urban sharing phenomenon also has not gone unnoticed, and is a slowly growing market, which remains limited now. In the same way that the city displays significant inequality patterns, smart solutions promoting shared mobilities continue replicate these, however there are some valuable initiatives carried out by different municipalities that contribute to shared space, like municipal urban labs. And though there are many plans and ideas for the city, as exposed by the regional authorities, they find greater issues to address before being able to dig deeper into the logic of shared spaces and mobilities.

Overall, local governments show great interest in the discussion of promoting more shared mobilities using the digital potential that smart city solutions entail, with this aspect having much more mentions than shared spaces/facilities. Also, the latter requires more contextual measures, as these spaces need to be defined considering the need, preferences and culture of the local communities present in the area. Nonetheless, it is evident that the compact city model that is in place in large Norwegian cities contributes to the promotion and expansion of sharing practices,

As a reflection to the thesis topic, it is possible to state that sharing practices are a two-sided coin: private interests are on one side, with business models and marketing strategies; and social interests on the other side, offering collective benefits to individuals while adopting a sustainable attitude regarding consumption of resources. So, part of the challenge lies in reconciling these two positions in the best possible way, ensuring that the interests of both parts (but more importantly those of citizens) are satisfied. In this sense, it is important to study the preparedness of cities to sharing practices, to reduce the impacts of the conflicts that come with these alternatives. Experiences from the city of Oslo show that to achieve satisfactory results, dialogue and negotiation are fundamental, and urban planners should be prepared to make compromises with private partners in a way that does not compromise planning values and developmental goals.

Furthermore, in response to the famous motto “sharing is caring”, I would argue that **at the city scale, sharing does not necessarily mean caring**. Sometimes it is motivated by self-centred needs and preferences, while other times it can be forced upon individuals by personal circumstances, or also by cultural factors and traditions. So, it is not an attitude that ensures a contribution to community life per se. **Urban sharing practices need to be oriented and given meaning to, so that despite the motivations driving people, these practices can contribute to sustainability measures and inclusiveness in urban environments.**

Finally, studying two metropolitan areas with great differences in terms of infrastructure, competences, and symbolic elements, proves challenging when trying to establish parallels at the neighbourhood or community level. Nonetheless it offers valuable insights regarding the discussion of policy and plans implications for the urban planning field, and the planning values that need to be protected for these solutions to be effective contributions.

8.2. Reflections and limitations of the thesis

Regarding the thesis exploratory approach, it is possible to recognise that the research is subject to several limitations, which have been divided into six aspects, as discussed ahead.

Time constraints

- The thesis plan considered an ambitious itinerary to cover fieldwork in two cities in a short period and carry out diverse methods. But it would have been desirable to have more than one case study area in the Norwegian context, as well as arranging more interviews with planners and decision-makers in the Norwegian context, but these were more difficult to obtain, and time was limited at this stage.
- The impossibility to go back to the case study areas due to time and costs, also proved challenging.

Language challenge

- Many concepts or words in Spanish or Norwegian were difficult to translate to English, because social and cultural contexts matter when explaining them, so part of the original meaning can be lost in translation.

- The impossibility to use of verbatim quotes, which are highly valuable in social research, as they can support the interpretation of specific individual experiences, personalising the results ([Al-Amer et al., 2016](#)).
- Going back and forth from Spanish to English. For instance, translating the survey and interview material to Spanish, and then translating these back to English. For the Norwegian case, all information had to be translated to English as well.
- The language barrier created difficulties specially when surveying older participants in Norway and created difficulties to understand legal terms in Norwegian policies, by using translating platforms.

Cultural bias

- Having spent most of my life in the city of Santiago, it is likely that my position as a researcher is highly influenced by my experiences as an inhabitant.

Impact limitations

- Though the study aims to build an analytical generalisation, where the cases enable the representation and illustration of the applications of Social Practice Theory over urban sharing practices in Global North and Global South areas, the research has a strong regional and contextual focus.

Limited access to data

- Difficulty of collective quantitative data in the case study areas. For the case of Santiago, no data of this kind is collected by local authorities, so there is little understanding of how people interact around mobility hubs. This makes it even more difficult to plan for the integration of more mobility alternatives. So, this data gathering should be addressed by local governments.
- In the case of Oslo, though there is some data collected by the authorities, this is extremely difficult to access, and samples are often too small to make more comprehensive analysis.

Issues with research samples and selection

- One initial challenge experienced regarding the survey was the importance of having a short survey that could be responded by passers-by in less than 5 minutes, as most people were approached while waiting for buses or other means of transport. Though this allowed to gather a large sample for the thesis, with 80 valid responses, this limits the possibility to obtain more insights from people.
- Though the number of respondents was deemed large for the development of the thesis fieldwork, the sample is insufficient in size for statistical measurements.
- It was difficult to define what shared means, especially considering the cultural differences between survey respondents, so it is likely that they considered different parameters for it according to their own biases.
- The findings from the surveys are limited to the demographics of the randomly selected sample and are not necessarily representative of the population in the case study regions. Also, respondents were mostly public transport users, which can bias the results when considering the entire population.

8.3. The way forward

This research recognises the importance of studying urban shared dynamics, specifically around spaces and mobilities, understanding the impacts of their benefits and limitations. While significant efforts have focused on the study of shared mobilities, a holistic understanding of how engagement to sharing practice in public areas works remains largely unknown to planners. The significance of this is immense, as the Sharing Economy will continue to spread in cities, aided by digital and technological progress. This means that societies will need to share more infrastructures, assets, and spaces in the future, as the population grows, resources become scarcer, and the climate crisis worsens.

Taking into consideration the research limitations discussed in the previous section, probable bottlenecks to future research are the limited access to publicly accessible data gathered in cities, especially regarding shared spaces/facilities. However, on this regard, it would be relevant to develop further research with data gathered by providers of shared facility/mobility services.

Another important factor is the scalability of the research, which affects its degree of impact. As discussed in the research, sharing practices have a strong cultural/symbolic component, so integrating this into a analytical generalization can prove challenging. Finally, dealing with cultural bias is also important. It is difficult to detach the researcher from the citizen's views and prior experiences with sharing practices, which can affect the research standpoint, and thus research outcomes.

Considering some suggestions for future research, I think a further step could include looking at sharing practices in private spaces, establishing few comparable neighbourhood units to analyse. Also, it is interesting to explore the needs of different groups in different cultures, especially those left out from many sharing practices, like children and seniors. For this, ethnographic studies can prove highly valuable to improve comprehension of individual motives around sharing practices, taking cultural and contextual considerations into account. Furthermore, it would be important to address sustainability measures about the impact of urban sharing practices over their surroundings, focusing on how these practices contribute to municipal/regional environmental and social goals.

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- Ecological Community: By the author
- Senior residences: <https://www.seniorsuites.cl/residencias/nunoa/>
- Student co-housing; <https://astudent.cl/cohousing-el-nuevo-formato-de-convivencia-que-crecera-post-pandemia/>
- Collaborative kindergarten: <https://www.junji.gob.cl/aportes-para-construir-vinculos-con-las-familias-que-se-integran-a-las-comunidades-educativas/>
- Ferias: <https://murnanesinsantiago.com/2013/03/12/feria-libre-barrio-brasil/>
- Co-work: <https://www.df.cl/mercados/banca-fintech/work-cafe-de-santander-ingresos-superan-a-sucursales-tradicionales-y>
- Urban labs: <https://innovacionchilena.cl/tag/la-fabrica-de-renca/>
- Bikesharing, scooters: By the author
- Car-pooling: <https://www.t13.cl/noticia/tendencias/cuanto-dinero-puedo-generar-siendo-chofer-aplicacion-mes>
- Collective taxis: <https://www.nomadicchica.com/es/guia-de-transporte-en-santiago-chile/>
- Motorbike rental: https://twitter.com/no_mas_motos_

SHARING PRACTICES NORWAY:

- Svartlamon: <https://www.kommunal-rapport.no/nyheter/forskningsrapport-alternativ-boligbygging-krever-nytenking/147714!/>
- Vindmøllebakken: <https://www.dagsavisen.no/rogalandsavis/nyheter/stavanger/2020/09/14/bor-alene-sammen-med-60-andre-veldig-kjekt/>
- Heim App:
- Student housing: <https://skibnes.no/prosjekter/lerkendal-studentby/>
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- Public libraries: <https://www.itbaktuelt.no/2020/10/15/deichmanske-bibliotek-nominert-til-norsk-lyspris-2020-sammen-med-16-alt/>
- Saunas: <https://www.fodors.com/world/europe/norway/oslo/experiences/news/photos/10-things-you-absolutely-need-to-know-before-getting-your-sweat-on-in-one-of-oslos-many-urban-saunas>
- Bikesharing, scooters: By the author

- Car sharing: <https://en.visitbergen.com/visitor-information/travel-information/car-hire>
- Pink bus in Oslo: <https://noonline.2023outlet.com/category?name=rosa%20busser>
- Double bikes: <https://sykepleien.no/2018/07/sykkelturer-er-noe-av-den-beste-medisinen-vi-har>

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10. APPENDIX

Survey handed in Santiago

Age group: Under 18___ 19 – 30___ 31 – 45___ 46 – 60___ 61 - 75___ Over 75___
Gender: Female ___ Male ___ Other___ N/A ___
Completed Educational level: Preschool___ Highschool___ Higher level___ Postgraduate___
Train station: Drammen___ Holmlia___ Ås ___
Time of the day: Morning ___ Afternoon ___ Evening ___

1. How often do you pass by this place (near the respective train station)?

- a) Every day
- b) Every working day
- c) More than twice per week
- d) Once per week
- e) Sometimes in a month
- f) I don't usually come here

2. How did you get here?

- a) Walking
- b) Bicycle
- c) Scooter
- d) By car (driver/passenger)
- e) Bus/tram
- f) Train
- g) Taxi
- h) Other (uber, Cabify, collective, etc): _____

3. Thinking about the rest of your trip, would you like to have other shared mobility options in this space? Select all the ones you consider necessary.

- a) Bicycle
- b) Electric bicycle
- c) Scooter
- d) Collective taxi
- e) Shared motorbike (rented hourly)
- f) Shared car (rented hourly)
- g) None
- h) Others: _____

4. Have you tried any of the mobility alternatives mentioned before? If yes, which ones? If not, why not?

5. What was good and/or bad about using that/those mobility alternative(s)?

6. What elements of this place do you like? Select up to 3.

- a) Transport/mobility alternatives
- b) Urban furniture (benches, light poles, playground, garbage bins, etc.)
- c) Trees and green areas
- d) Proximity to urban services (shopping areas, café/restaurants, pharmacy, etc.)
- e) Surrounding architecture (buildings, facades)
- f) People who make use of this space
- g) None
- h) Others: _____

7. If you had the opportunity to improve the public space of this place, what would you like to have built here? You can think about all the elements and/or shared facilities you consider necessary.

8. Please comment on your level of agreement/disagreement with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
"I think this place is accessible"					
"I like the diversity of people that make use of this space"					
"I feel safe in this space"					

9. Reflecting on your own experience in this place, how would you evaluate the public spaces around this train station from 1 (lowest grade) to 7 (highest grade)?

1___ 2___ 3___ 4___ 5___ 6___ 7___

Survey handed in Drammen

1 Please select your sex

Man Woman Rather not say

2 Please select your age group

- 18 y/o	18-24 y/o	25-39 y/o	40-44 y/o	45-54 y/o	55-64 y/o	65-74 y/o	75-84 y/o	+ 85 y/o
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3 What is your educational level? (Please select the highest level completed)

- Primary school
 Secondary school
 Vocational school
 University and college level, short
 University and college level, long
 Unspecified or no completed education

4 Language

Norwegian Swedish Danish English Other language

5 What is your profession or main occupation?

- Student
 Administrative managers and politicians#
 Academic
 High school professional
 Office and customer service
 Sales, service, and care
 Agriculture, forestry, and fishing
 Craftsmen and similar
 Process and machine operators, transport workers, etc..
 Occupation without education requirements
 Military occupations (not civilian positions in the armed forces)
 Retired
 Unemployed
 Other.....

6 If any, what is your employment?

- Full-time employee
 Part-time employee
 Student
 Self-employed or employed
 I am not employed, self-employed or studying

7 In which Municipality do you live?

Drammen Oslo Another Municipality

8 In which Municipality is your main place of work or study?

Drammen Oslo Another Municipality Not working or studying

9 How do you usually get to/from Strømsø in Dammen?

- Usually by car
- Usually by bus
- Usually by train and/or subway
- Usually by non-motorized means of transport (walking, bicycle)
- Other means of transport

10 What type of shared mobility do you use?

- Passenger car (petrol or diesel, incl. Hybrid car)
- Electric car, hydrogen car or another zero-emission car
- Bicycle
- Electric bike
- Electric scooter, electric moped etc.
- Other form of shared mobility
- I do not use any forms of shared mobility

10.3 Approximately how often do you use shared mobility?

- Every day Once per week Once per month Once per year Less than once per year
- Never

10.4 In case you use shared mobility, what do you like about it/them?

- Affordability Convenience Sustainability Cleanliness Safety Leisure
- Well-being Other:.....

11 What forms of shared area/space do you use?

- Shared workspace (co-work)
- Library in residential area
- Communal laundry in residential building
- Gym/exercise room in residential building
- Common garden or outdoor area for residents
- Common terrace or other outdoor area in a residential building
- Common premises in a residential building such as a TV room, cafe, meeting or assembly room
- Common storage room/or other storage area in a residential building
- Other form of shared areas in a residential building:.....
- I do not use any forms of shared area/space

11.3 Approximately how often do you use such shared areas/spaces in residential buildings?

- Every day Once per week Once per month Once per year Less than once per year
- Never

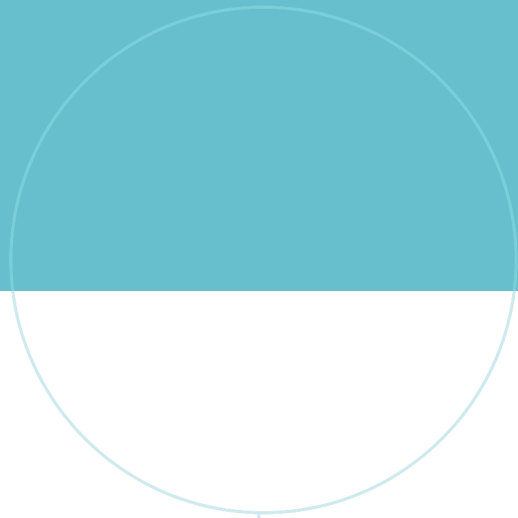
11.4 In case you use shared spaces, what do you like about it/them? Select all that apply

- Affordability Convenience Sustainability Cleanliness Leisure
- Well-being Social interaction Other:.....

12 Would you be willing to be contacted later to be part of a focus group about shared spaces and mobilities for the Strømsø area?

- No
- Yes

Contact information (email and mobile):.....



 **NTNU**

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