Transnational policy transfers in sustainable urban mobility

a case study of Istanbul Sustainable Urban Mobility Plan

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Transnational policy transfers in urban mobility governance: A case study of Istanbul Sustainable Urban Mobility Plan

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Acknowledgements

When I began my search for a master's degree in 2021, my goal was to find a way to learn more about cities, particularly Istanbul, and contribute to the lives of its' people, in any shape or form. Coming to Wageningen University, I thought I would learn cool things about cities and bring my fresh academic knowledge back home. To my surprise, this master's degree broadened my horizons beyond expectations, and showed me the beautiful complexity behind the structures shaping our everyday lives. Even though I still find Istanbul as the most interesting place in the world, I learned to look at cities and environment with a different lens and curiosity.

While searching for a thesis topic, I saw an infographic in an Istanbul metro station about how the city is adapting a European sustainable urban mobility approach which reminded me of an old novel about attempts to bring American agriculture techniques to central Anatolia. Long story short, this infographic sparked my interest, and I became excited to learn more about this process and its outcomes.

During a longer than intended thesis period, I received a lot of support and care from people around me. First of all, I would like to thank everyone who took the time to answer my interview questions and those who gave me referrals to valuable contacts. I am grateful to my close friends, especially my Delila, Simone, and Willem for keeping me going whenever I felt like dropping out and opening up a doughnut shop. My partner, Miltiadis, deserves a special thank you for all the thesis-sitting, encouragement, and continuous support he has provided throughout this period. Most importantly, I would like to thank my sweet parents Birgül and Hakan for their patience and all the proofreading they have done every time I changed my entire thesis and supporting me through everything. Finally, my deepest appreciation goes to my supervisor Dr. Ina Möller, for allowing me to find my own pace, and encouraging me with her invaluable academic feedback and support.

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Summary

This thesis delves into the intricacies of Istanbul's urban mobility landscape, focusing on the transnational policy transfer of the Sustainable Urban Mobility Plan (SUMP). It scrutinizes how Istanbul, grappling with traffic congestion and environmental concerns, adopts and adapts European urban mobility policies to fit its unique context, and why it chooses to do so in the first place. Central to this study is the role of Istanbul Metropolitan Municipality (IMM), which orchestrates this policy transfer in collaboration with various international institutions, highlighting the complex interplay between local needs and global sustainability goals.

The research revolves around the question: what drives this transnational policy transfer in Istanbul, and what are its implications? To dissect this, the study looks into the actors involved in the policy transfer, the key elements adopted from European policies, and the motivations behind this transfer. The thesis is structured into six chapters, encompassing a conceptual framework for policy transfer analysis, methodological approaches, and a discussion and conclusion segment.

A major part of the study results is devoted to understanding the governance of urban mobility in Istanbul. It reveals a decision-making structure marked by a hierarchical yet clustered network of institutions, reflecting imbalances in representation and participation. The social network analysis further demonstrates a bi-centric structure within this governance, with IMM and Transfer Coordination Center (UKOME) playing central roles.

Policy transfer agents, including IMM, UN Habitat Türkiye, and ARUP, emerge as critical in shaping the transfer process. Their motivations range from addressing urban mobility challenges, fostering sustainability, to aligning with international environmental goals. However, the study finds that the adaptation of SUMP in Istanbul is not merely a replication of European models but involves significant customization to fit the local setting, with an emphasis on participatory approaches and strategic alignment with existing plans.

Despite its comprehensive scope, the study acknowledges its limitations, primarily the uniqueness of Istanbul's context and the dynamic nature of urban mobility. There is caution against

generalizing its findings, as similar studies in other cities might yield different insights due to varying local contexts, depending on geographical features, culture, and democratic process.

The thesis concludes by underscoring the significance of local-global interplay in shaping urban policies. It offers practical insights for urban practitioners and policymakers, highlighting the potential and challenges of policy transfer in a interconnected world involving diverse governance structures.

In summary, this thesis provides a nuanced understanding of how a megacity like Istanbul navigates the complexities of transnational policy transfer in urban mobility. It contributes valuable insights into the methods of understanding the local specifics and existing networks, contributing to the discourse in urban mobility governance and policy transfer.

Table 1.1. List of abbreviations

1st Army	First Army Command
AFAD	Disaster and Emergency Management Presidency
Airports	General Directorate of State Airports Authority
ARUP	ARUP
AYD	Active Living Association
BIMTAS	Bogazici Landscape Architecture and Technical Consultancy Anon.
Coast	Coastal Guard
Covenant	Global Covenant of Mayors
DirSecurity	General Directorate of Security of Istanbul
Embassy	British Embassy Ankara
FedDriv	Federation of Drivers and Cars Presidency
Gendarme	Gendarmerie General Command
GFCities	Global Future Cities
Governor	Governorship of Istanbul
Highways	General Directorate of Highways
IETT	Istanbul Electrical Tram and Tunnel Establishments
IMM	Istanbul Metropolitan Municipality
InfraInv	General Directorate of Infrastructure Investments
IPA	Istanbul Planning Agency
ISPARK	Istanbul Parking Establishments Anon.
MoD	Ministry of Defense
MoE	Ministry of Education
MoEC	Ministry of Environment, Urbanization and Climate Change
MoFES	Ministry of Family, Employment, and Social Services
MoI	Ministry of Internal Affairs
MoITech	Ministry of Industry and Technology
MoTF	Ministry of Treasury and Finance of Türkiye
MoTI	Ministry of Transport and Infrastructure
Port	Port Authority
ProgPCSO	Programme for Promotion of Civil Society Organizations
SNA	Social network analysis
SUMP	Sustainable Urban Mobility Plan
TSR	Turkish State Railways
TSR Anon.	TSR Anon. General Directorate
UCLG-MEWA	United Cities and Local Governments Middle East and West Asia Regional Organization
UITP	International Association of Public Transport (UITP)

UKOME	Transportation Coordination Center
UN Habitat	UN Habitat
UNFP	United Nations Population Fund
Union Marmara	Union of Marmara Municipalities
WRI TR	WRI Türkiye
YADA	YADA Foundation

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Chapter 1. Introduction

1.1. Urban mobility in Istanbul

Istanbul, Türkiye's economic and social capital, accommodates 16 million residents, contributing to over one-third of the country's gross domestic product and accounting for 20% of the annual passenger miles traveled in the country (Heineke et al., 2021). The city's rapid population growth and sprawling urban expansion have negatively impacted its' urban mobility which can be observed through perennial traffic congestion, subpar public transport services, and concerning levels of air and noise pollution affecting the quality of life of Istanbul's residents (Canitez, 2020).

The impact of urban mobility is not the only but one of the contending culprits behind Istanbul's air pollution which causes respiratory problems for its' residents such as asthma, chronic obstructive pulmonary disease (COPD), and acute bronchitis (Çapraz & Deniz, 2021). Additionally, Istanbul residents commute around 10.6 km per day on public transport, which results in the longest trip compared to any other urban area globally (MOOVIT, 2022). During this long commute, Istanbuliots cover 1 kilometer of distance in 7.3 minutes, demonstrating the connectivity and efficiency issues in the urban transit (MOOVIT, 2022).

However, these issues are not novel for the city. Throughout the last century, both local and central governments in Istanbul have attempted to address these urban issues through adoption of various urban planning approaches from countries such as Great Britain, France, Germany, United States of America, and the European Union, alongside local planning attempts (Ayataç, 2007). However, the massive internal migration from the 1950s to the 1980s exasperated population growth, and car-dependent urban transport planning, combined with Türkiye's Istanbul-focused economic development, failed to meet the megacity's contemporary needs and lacked a framework to address environmental concerns such as climate mitigation (Ayataç, 2007). In 2018, the Istanbul Metropolitan Municipality (IMM), the main provider of urban mobility in the city, made the latest effort to address Istanbul's mobility challenges by adopting the European Union's urban mobility guidelines and collaborating with several international institutions to develop the Sustainable Urban Mobility Plan (SUMP) for Istanbul.

1.2. Sustainable Urban Mobility Plans and Istanbul

Sustainable ideas and urban policies, including the concepts such as smart, walkable, zero-carbon, and 15-minute cities, have gained popularity in recent years, aligning with climate mitigation and sustainable development goals set by influential international institutions (Pojani, 2020; Stead, 2016). However, scholars from various disciplines have raised concerns regarding the diffusion processes of these concepts (Dolowitz & Marsh, 2000; Minkman et al., 2018; Stone et al., 2020; Ward, 2000). The dissemination of these concepts were critiqued for reasons ranging from potential economic and political leverage gained by countries or institutions due to reinforcement of these paradigms to challenges related to the transfer of codified knowledge and the dismissal of local know-how and practices (Stone et al., 2020). Additionally, differences in governance structures, resources, and cultural components between transferring and receiving localities have intrigued researchers as these variables tend to further complicate the process of disseminating policies across borders (Canitez, 2020; Dolowitz & Medearis, 2009; Evans, 2017).

The concept of SUMP, a prominent diffusion example for urban policies, originated from the EU Urban Mobility Package introduced in 2013 and aims to establish a "functioning" city with accessible and high-quality mobility within and to the urban areas across European cities (Rupprecht et al., 2019). The SUMPs were designed to foster collaboration and connect planners and stakeholders of urban mobility (European Commission, 2013). These plans prioritize people and quality of life over developing car infrastructure, emphasizing social equity, health, environment, and integrated transport modes, with a focus on long-term visions and strategies. Consequently, SUMP concept became an important instrument to support local authorities to balance their efforts in competitive and resource-efficient urban mobility governance across the European Union.

Departing from its geographical origin, SUMP concept was officially introduced to Istanbul in 2018, as IMM assumed responsibility for developing a Sustainable Urban Mobility Plan. However, policy transfer are complex endeavors with varying degrees of success in their implementation. Istanbul, influenced by Western urban planning influence for more than a century, continuously face urban mobility issues in a staggering volume. This situation raises critical questions about the effectiveness of policy transfers, especially to a non-European megacity context.

Therefore, it becomes essential to examine this novel policy transfer process. As the city offers a distinct type of. governance, culture, and infrastructural background, an in-depth analysis is invaluable for policy transfer researchers and policymakers.

1.3. Knowledge problem

Empirical approaches are essential to gain an in-depth understanding of policy transfer processes. Each case of policy transfer has distinctive features that require further examination. This is crucial guiding researchers and policymakers in making informed decisions while transferring foreign policies. Such an examination is valuable to both providers and recipients of the policy transfer, potentially saving time, financial resources, and keeping the inter-locality rapport, which is critical for the future collaborations.

Canitez (2020) states that the differences between transferring localities can build resistance, specifically in the context of SUMP policies. This potential resistance demonstrates the necessity of understanding the core components of the policy transfer, such as institutional settings and actors' motivations, prior to evaluating their effectiveness after adopting the practices.

Supporting this argument, scholars such as Benson & Jordan (2011), Dolowitz & Marsh (2012), and Stone et al. (2020) point at the importance of understanding the underlying conditions before assessing the success of policy implementation in new settings. Adding to this discourse, Pojani (2020) draws attention to the often less-than-ideal success rate of policy transfers in the transport sector, mostly from the Global North to the South, highlighting the challenges not just inherent to the transfer process itself but also across various regions.

Following these insights, this study aims to address the knowledge gap regarding the policy transfer process of Istanbul SUMP and provide a lens to look at these underlying conditions in the receiving locality.

1.4. Research Aim and Research Questions

Through an analysis of the development of the Istanbul Sustainable Urban Mobility Plan, this case study contributes to the empirical understanding of transnational policy transfers in the urban mobility planning. The thesis aims to investigate the conditions that have influenced the urban

mobility policy transfer between Europe and Istanbul, Türkiye, for SUMP in specific. The study adopts an institutionalist approach, considering the choices of actors involved in the policy transfer as integral parts of the political structures in which they are embedded.

Main Research Question

> What drives the transnational policy transfer for urban mobility in Istanbul, specifically the Istanbul SUMP, and to what effect?

Sub-research Questions

1) Who are the actors driving the policy transfer of Istanbul SUMP?
2) What motivates the actors involved in the policy transfer of Istanbul SUMP?
3) What are the key elements transferred from European SUMP policies to Istanbul SUMP?

1.5. Thesis Outline

The thesis report is organized in six chapters. After this introduction, the following chapter presents the conceptual framework, explaining the concept of policy transfer and its analysis and operationalization for the thesis. Chapter 3 outlines the scientific methods employed to answer the research questions, including data collection and data analysis techniques. In Chapter 4, the results of these scientific methods are represented. Chapter 5 discusses the significance of these results and their contribution to the empirical study of policy transfer. Finally, the conclusion is provided in the last chapter, addressing the main research question, and implications for future research are provided.

Chapter 2. Conceptual Framework

This chapter presents a literature review to establish the theoretical foundation for analyzing the transnational policy transfer of the European Union's Sustainable Urban Mobility Plan (SUMP) to Istanbul, Türkiye. The main research question guiding this analysis is, 'What drives the transnational policy transfer for urban mobility in Istanbul, specifically the Istanbul SUMP, and to what effect?'. Additionally, sub-research questions are addressed by using an integrative review approach to explain the key concepts in the analysis.

The literature review systematically collects and synthesizes previous research on the topic, combining perspectives from various authors to offer new insights (Snyder, 2019). Keywords such as *policy transfer, policy diffusion, transnational policy spread, urban mobility policy transfer, SUMP, urban transport planning in Istanbul,* etc. were used to conduct the literature review through the Google Scholar search engine. The literature review contributed to the theoretical understanding of drivers and main components of policy transfer for urban mobility planning.

The chapter is organized in four sections. The first section presents the theoretical background of policy transfer, including related terms such as objects, agents, and drivers of policy transfer, with a specific focus on transnational policy transfers in urban mobility planning. The second section provides an overview of transnational policy transfers to Istanbul, Türkiye. The third and fourth sections integrates the concepts introduced in the previous sections and demonstrates its operationalization in this thesis.

2.1. Different Approaches to Policy Transfer

Policy transfer refers to the process through which knowledge from one political setting, such as policies, ideas, institutions, and administrative arrangements, influences another political setting (Dolowitz & Marsh, 2000; Minkman et al., 2018). Since the 1990s, policy transfer has gained significant attention in across various disciplines, leading to the emergence of a plethora of concepts related to the phenomenon, including policy diffusion, policy mobility, policy convergence, lesson drawing (Pojani, 2020; Werland, 2020). While these concepts overlap in certain areas, they differ in their focus and approach to analysis of policy transfers. For example,

Obinger et al. (2013) differentiate between policy transfer and policy diffusion by emphasizing the role of knowledge and agency in the former, while viewing the latter as a more interest-based and non-intentional process of policy spread.

Policy transfers have been observed throughout history across various fields, including crime, utility regulation, environmental management, and urban planning (Benson & Jordan, 2011; Ward, 2000). In the domain of urban mobility, policy transfers aim to achieve social inclusion, economic efficiency, and environmental protection (Canitez, 2020). However, the process of this transfer is inherently complex, involving diverse challenges ranging from overarching national-level differences such as variations in governance paradigms, to more specific sectoral and technical considerations, such as stakeholder engagement and resource availability.

Policy transfers do not guarantee seamless application or adoption in the receiving context, particularly when transferring from the Global North to the Global South as pointed out by (Pojani, 2020). Contextual differences, encompassing cultural, economic, and institutional variations between the borrowing and lending localities, can pose significant challenges to the policy transfer process. It is important to note that even within the European Union, the dissemination of SUMP principles have faced difficulties across states (Werland, 2020).

Furthermore, local planning cultures and ideological predispositions can influence the identification, analysis, and application of policies derived from abroad (Dolowitz & Medearis, 2009). The perceptions of the planners in the borrowing context, the complexity of the imported policy, and the structure of the policy search to import can impact the effectiveness of the policy transfer process (Dolowitz & Medearis, 2009).

2.1.1. Policy Transfer Agents

Policy transfer agents play a crucial role in the policy transfer process and can include politicians, bureaucrats, pressure groups, policy transfer entrepreneurs, knowledge institutions, academics, international organizations, and supranational institutions (Pojani & Stead, 2014). These actors are involved in various stages of the policymaking cycle, and their motivations, beliefs, cultural values, and resources influence the trajectory of policy transfer, affecting the selection of policies to be transferred and the stakeholders impacted by them. Some of these actors, referred as *policy*

transfer entrepreneurs, play a central and in-between role in policy transfer networks, facilitating exchanges among other agents (Stone, 2004). International organizations and non-state actors, such as NGOs, might have significant influence in policy transfers, especially when they are part of transnational advocacy networks (Stone, 2004).

2.1.2. Objects of Policy Transfer

Objects of policy transfer refer to the essential elements transferred between two political systems, encompassing the content of the transfer. Understanding these objects are important, as their complexity and content influence the policy transfer process. The objects of policy transfer can be categorized as follows (Dolowitz & Marsh, 2000; Pojani, 2020):

a) *Policy goals:* Policy goals represent the desired outcomes or objectives a policy intends to achieve. They are overarching aims for the policy transfer, such as promoting sustainable urban mobility.
b) *Policy content:* Policy content refers to the specific elements and provisions within a policy such as rules, regulations, principles, and guidelines of the policy. It defines the scope, actions, and approaches to be taken to achieve the policy goals.
c) *Policy instruments:* Policy instruments are the methods employed to implement and enforce policies. These can include legislative measures, financial incentives, information campaigns, and technological solutions.
d) *Policy programs:* Policy programs are more comprehensive and include sets of policies, measures, and initiatives tailored to achieve specific policy goals. They involve a combination of policy instruments and coordinated efforts, serving as the strategic framework for policy implementation and resource allocation.

Understanding the different objects of policy transfer helps researchers and policymakers grasp the intricacies of the transfer process and enables a comprehensive analysis of the policy's impact and effectiveness in the receiving context.

2.1.3. Drivers for the Policy Transfer

In its broadest sense, policy transfers are initiated to address particular policy issues or problems (Dolowitz & Marsh, 2012). Various factors beyond the control of policymakers influence the process of policy transfers. For example, Stone et al. (2020) argue that policy transfers may serve as foreign policy instruments to strengthen relations among countries or regions, while Pojani (2020) emphasizes that certain policies are transferred to secure grants and loans, address politico-economic crises, or manage image concerns of the transferring locality.

While early research on policy transfer focused on transfers between similar political systems, such as among liberal democratic countries, recent attention has shifted to transfers from developed to developing countries, scrutinizing the conditional and coercive aspects of such transfers (Pojani, 2020). However, for this study, the transfer of Istanbul SUMP policies is considered an intentional activity between autonomous actors making sovereign decisions, rendering the discussion on coercive/voluntary policy transfer redundant. Furthermore, the adoption of SUMP policies in Istanbul is not legally enforced, as EU legislation does not bind Türkiye's domestic affairs.

Although not coercively imposed, the policy transfer of Istanbul SUMP involves underlying factors from both the European Union side (pushing factors) and Istanbul side (pulling factors). These factors are the 'drivers' conducting the policy transfer, and it is essential to reveal them.

Therefore, this study treats the statements of policy transfer agents to adopt SUMP guidelines to Istanbul as drivers of the policy transfer. Replacing the coercive to voluntary spectrum of drivers listed in the literature (Dolowitz & Marsh, 2000; Pojani, 2020), the study investigates the policy transfer drivers as the motivations or concerns stated by the policy transfer agents.

To analyze these drivers, the study explores push and pull factors. Push factors represent the context of the exporting institution (EU) aiming to disseminate its norms, policies, and plans. Pull factors represent the importing institutional context (Istanbul urban mobility policymakers) and their willingness to transfer and implement the borrowed policies.

2.1.4. Policy Transfers and Modes of Governance

Urban mobility governance is defined as "a collaborative process of developing and implementing public policies, involving issues of administrative power, public participation, the allocation of resources, and the evaluation of specific plans and actions" (Balsas, 2008, p. 310).

Policy transfers are significantly impacted by the institutional arrangements in which they operate (Dolowitz & Marsh, 2012). Institutional arrangements are formal and informal structures, rules, and procedures governing the function of organizations, government bodies, and other entities involved in policy formulation, implementation, and evaluation. These arrangements include decision-making structures, legal and regulatory frameworks, administrative structures, and governance mechanisms in place. Local institutional arrangements play an important role in identifying factors that may facilitate or hinder the policy transfer process.

Three modes of governance, namely hierarchy, markets, and networks, perform in various ways during a policy transfer process. It can be assumed that when hierarchy is the dominant mode, policy transfer would be a more top-down process, and when networks are the dominant mode, one would expect the process to be a negotiated one. However, a top-down originated policy might fall short in implementation by local agents, or it might perform well when it is dependent on locally extracted data, outperforming a network governance mode.

Understanding the influence of these different governance modes on the policy transfer process is essential to grasp the dynamics and outcomes of the transfer in the context of Istanbul SUMP. Different governance modes can shape the interactions between policy actors, the level of centralization or decentralization in decision-making, and the degree of stakeholder involvement, all of which have implications for the success of policy transfer.

In each case of policy transfer, the dominant mode of governance may vary depending on the specific policy area and the actors involved. For example, the adoption of SUMP guidelines by the Istanbul Metropolitan Municipality (IMM) may exhibit characteristics of both top-down and negotiated processes. While the European Union (EU) provides a framework for sustainable urban mobility planning, the local implementation in Istanbul is subject to adaptation based on the city's urban mobility governance.

However, determining a definitive rule-of-law for governance modes that lead to more efficient or smooth policy transfers can be challenging (Dolowitz & Marsh, 2012). Although policy transfers significantly differ between two political systems, different governance modes can influence the policy transfer in various ways during different stages of the policy process.

2.2. Transnational Policy Transfers to Istanbul

The adoption of the Sustainable Urban Mobility Plan (SUMP) in Istanbul can be categorized as a transnational policy transfer, as it aligns with the definition of policy transfer in multiple aspects. First, the Istanbul SUMP is developed with inspiration and collaboration from international institutions disseminating best practices and experiences in sustainable urban mobility planning. The Plan utilized the guidelines provided by the European Local Transport Information Service (ELTIS), Europe's main observatory on urban mobility. These guidelines, initially published in 2013, were prepared through a collaboration of experts from diverse disciplinary backgrounds with knowledge about sustainable urban mobility and planning.

Secondly, the Istanbul SUMP is based on the European Commission's framework for sustainable urban mobility planning which is based on the fundamental principles and ideas from the European Union. This framework served as a foundation for the development of the Istanbul SUMP, allowing for the integration of European concepts into the local context such as accessible and inclusive urban mobility planning through the functional city.

Furthermore, Istanbul's participation in various international networks and collaborations has facilitated the sharing of experiences and mutual learning among policymakers and experts through memberships in initiatives such as C40, CIVITAS, Global Covenant of Mayors, etc. This engagement with the international community might have contributed to the transnational transfer of policies and practices in urban mobility planning.

To fully appreciate the dynamics of the policy transfer process, it is useful to consider the historical context of Western influence on Istanbul's urban planning. As the capital of Ottoman Empire, Istanbul has a long history of importing ideas and planning systems from European cities, with major influences coming from Great Britain and France in the late nineteenth century (Ayataç,

2007). Over the years, urban planners from various European countries, such as Joseph Antoine Bouvard, André Auric, Henri Prost, Patrick Abercrombie, Hans Högg, have played important roles in shaping Istanbul's urban transport plans (Cana Bilsel, 2015).

This historical context highlights the enduring nature of transnational policy transfers to Istanbul, with different European countries and institutions leaving their marks on the city's planning processes. While some of these historical influences have improved transport efficiency and congestion issues, others have been met with criticisms regarding their impact on the cultural and social fabric of the city. For example, the construction of Vatan Street in the 1950s, inspired by the US-type road infrastructure, faced opposition due to concerns about the loss of historical artifacts on its route (Cana Bilsel, 2015). Such historical experiences demonstrate the complexities and trade-offs involved in adopting foreign planning practices.

Today, as Istanbul adopts the SUMP framework from the European Union, it faces both opportunities and challenges in adapting international best practices to its unique context as a megacity. The transnational policy transfer of the Istanbul SUMP can be seen as a continuation of the historical trend of integrating European urban planning ideas into the city's development.

However, it is important to critically assess the extent to which historical influences still shape the present-day policy transfer process and its outcomes. While the city now exercises autonomy in its policy decisions, lessons from the past and the impact of Western planning ideals remain relevant factors to consider in the implementation of the Istanbul SUMP.

In conclusion, the transnational policy transfer of the Istanbul SUMP is characterized by a long historical context of Western influence and current collaborations with international institutions. Considering this historical continuity is crucial for a comprehensive analysis of the policy transfer process and its implications for sustainable urban mobility planning in Istanbul. By recognizing this component, policymakers can make informed decisions that align with the city's unique needs and aspirations.

2.3. Integrating the concepts to analyze the policy transfer of Istanbul SUMP

This section aims to integrate the concepts introduced in the previous sections to provide a holistic understanding of the policy transfer process of Istanbul SUMP. The policy transfer process is influenced by the factors such as institutional arrangements, policy transfer agents, and the complexity of transferred policy objects.

In this study, the institutional arrangements in Istanbul, including decision-making structures, regulatory frameworks and governance mechanisms, are considered as key factors influencing the policy transfer process. These arrangements shape the context in which policy transfer agents operate and interact during the transfer process.

The study focuses on analyzing the policy transfer agents involved in the Istanbul SUMP process and examining the network of relations among these agents. Policy transfer agents include actors such as policymakers, policy entrepreneurs, and other stakeholders who play a role in the transfer of sustainable urban mobility policies. Understanding their motivations, perceived obstacles, and positions within the policymaking network is crucial to comprehend the drivers behind the policy transfer.

Additionally, the complexity and clarity of the policy objects transferred from the EU SUMP guidelines to the Istanbul SUMP is another important factor influencing the policy transfer process. This complexity includes the extent to which policy goals, content, instruments, and programs from the EU guidelines are adopted in the Istanbul SUMP. A comparison of the two policy documents will provide insights into the theoretical understanding of the transferred policy content.

Finally, the main focus in the analysis is the policy transfer process of Istanbul SUMP. By examining the interactions between the institutional arrangements, policy transfer agents, and the complexity of transferred policy objects, this study seeks to explain the dynamics and outcomes of the policy transfer from the EU to Istanbul.

2.4. Operationalization of Introduced Concepts

This section outlines the criteria and methods used to evaluate the success or challenges of the policy transfer by providing a framework that defines the meaning and indicators of the introduced concepts related to the policy transfer process.

First, the institutional arrangement of Istanbul's urban mobility policymaking system was demonstrated through the governance mode within the decision-making structure which was identified as a hierarchy, market, or network governance.

Secondly, a comparative analysis of policy documents were performed between the EU SUMP guidelines and the transferred Istanbul SUMP. This analysis highlights the alignments between the policy documents demonstrating the extent of the policy transfer through Istanbul SUMP.

Later, the policy transfer agents and policy transfer entrepreneurs involved in the transfer of Istanbul SUMP were identified and analyzed according to their motivations in the process. Additionally, networks involved in developing the Istanbul SUMP were highlighted, as these networks have influence on the policy transfer process. Policy transfer agents were interviewed to explore their motivations, perceived obstacles, and positions within the policymaking network, referring to cultural and institutional compatibilities.

Finally, the study assessed the main drivers of the policy transfer process and compared them with the motivations of the transfer agents.

Chapter 3. Methods

This chapter provides an overview of the methods used to investigate the research questions presented in Chapter 1. The study seeks to understand the drivers behind the policy transfer, types of transfer agents, the local institutional arrangements in Istanbul, and the content of the policy transfer of Istanbul SUMP.

The thesis adopts a qualitative case study design, employing a multi-stage approach that combines content analysis, stakeholder analysis, and social network analysis. This design allows for an in-depth exploration of the policy transfer process and its underlying mechanisms. The conceptual framework provided in Chapter 2 guides the exploration of the sub-research questions, and the empirical results obtained from these sub-research questions are used to answer the main research question: "What drives the transnational policy transfer for urban mobility in Istanbul, specifically the Istanbul SUMP, and to what effect?"

The following sections elaborates on the research design, data collection procedures, and data analysis techniques used in the study. The design of the study allows for an examination of relevant stakeholders, their motivations, and the content of the policies being transferred.

3.1. Qualitative Case Study of Istanbul SUMP

Qualitative studies explore the underlying processes and emergences of theoretical concepts within a field (Barratt et al., 2011). Therefore, the research design aims to benefit from the explanatory strength of empirical research on policy transfers to develop an in-depth understanding of the creation of Istanbul SUMP.

The study's main objective is to understand the processes involved in the policy transfer of Istanbul SUMP. In 2018, Istanbul Metropolitan Municipality (IMM) initiated the development of Istanbul SUMP in collaboration with and support from the United Kingdom Foreign & Commonwealth Office's Global Future Cities Programme, UN Habitat, and ARUP engineering company. Being the first Sustainable Urban Mobility Plan (SUMP) of Türkiye, and as the first SUMP attempt in a megacity, Istanbul SUMP was finalized in March 2022, progressing through various global and

local disturbances, such as COVID-19 pandemic, political and economic fluctuations in Türkiye, while adhering to structure of SUMP guidelines consisting of four phases.

In the preparation and analysis stage, the current situation of Istanbul was analyzed regarding demographics, employment, economy, climate change, governance, and also the institutional structures and local planning context. An extensive stakeholder engagement strategy was developed to ensure the inclusion of underrepresented groups in the process.

The second phase involved defining Istanbul's urban functional area. Using the stakeholder engagement and leadership from IMM SUMP Team, scenarios, visions, objectives, and measurement indicators were developed with collaboration of various institutions.

In the third stage, a longlist of measures were evaluated and proposed policies were grouped into measure packages. Final projects were selected based on international best practice, professional experience, and regarding ongoing projects of IMM and stakeholder expectations.

In the final phase, a systematic monitoring and evaluation framework was developed to track the effectiveness of proposed Istanbul SUMP projects. All policies, actions, and projects were developed under four cross-cutting themes: Safety, Inclusion/Gender Equality and Social Inclusion (GESI), Resilience, and Innovation. As a result, Istanbul SUMP generated 26 projects under 3 main themes across the four afore-mentioned cross-cutting themes: Transition to Low Carbon, Seamless Transfer and Integration, and Reducing Congestion (ARUP, 2022), see Table 3.1.

The preparation of Istanbul SUMP was guided by UN Habitat to ensure compliance with the sustainable development goals provided by the United Nations. Despite the limitations posed by the COVID-19 pandemic, 24 online sessions in four stages of the creation of Istanbul SUMP through workshops and focus group meetings (ARUP, 2022). By March 2022, Istanbul SUMP was fully developed and available for guiding the future endeavors of Istanbul.

Table 3.1. Themes and Proposed Projects of Istanbul SUMP

Themes	*Main Objective*	*Proposed Core Projects*
1) Transition to Low Carbon	Ensuring that the mobility system of Istanbul is environmentally friendly and promotes sustainable, active and healthy lifestyles for citizens.	1. Low emission zones 2. Decarbonization of Metrobus 3. Decarbonization of the Public Transport Bus Fleet 4. Cycle Feeder Routes 5. Pedestrian Routes 6. Traffic Calming 7. Junction Improvements for Pedestrians and Cyclists 8. E-Bikes and E-Scooters
2) Seamless Transfer and Integration	Promoting a shift to public transport by ensuring an integrated, inclusive, safe, and comfortable transport system accessible to all citizens.	1. Rail Network Extension 2. Istanbulkart Extension to Include Minibus Operations 3. Istanbul Network Management Control Centre (INMCC) 4. Bus lanes 5. Minibus Feeder Routes: Arnavutköy District 6. Passenger Sea Transport – Fleet Renewal 7. Extension of Transfer Centres 8. Extension of Real-Time Passenger Information and Open Data 9. Bus Service/Frequency Improvement Programme 10. Park and Ride Facilities
3) Reducing Congestion	Improving alternatives to car use by attracting travelers to sustainable modes of transport and creating demand management measures.	1. Congestion Charging 2. Extension of Parking Regulation 3. Residents' Parking Permit System 4. Introduction of an Automated Payment System for Parking 5. Reorganization of Parking Regulation Enforcement 6. Implementation of Institutional Mobility Management 7. Construction Concentration Centres (CCCs) 8. Neighborhood Mobility Service Centres

3.2. Data Collection

Data collection of the thesis involves a combination of primary and secondary sources. The primary data collection methods consisted of semi-structured interviews, while the secondary data collection involved gathering policy documents and mission statements of the involved institutions. These sources played a crucial role in supporting the stakeholder and social network analyses, facilitating a comprehensive understanding of the urban mobility policymaking in Istanbul and contributing to addressing the research questions.

Once data collection is completed and the thesis is written, the data was transferred to the W:Drive folder at ENP for long-term storage.

3.2.1. Secondary data

Policy documents were collected based on their relevance and mention within the Istanbul SUMP report, which served as a valuable resource to support the stakeholder and social network analyses. The main document under scrutiny was the 'Istanbul Sustainable Urban Mobility Plan SUMP' report issued by Arup in March 2022, which was compared with the 'Guidelines for Developing and Implementing a sustainable urban mobility plan' document issued by European Platform on Sustainable Urban Mobility Plans in 2019. Additionally, the legislative papers, action plans, and master plans relevant to Istanbul's urban mobility were collected from the websites of relevant institutions. The data collection followed a governance framework, extending from international to national levels and down to sectoral scales, providing an understanding of the stakeholders involved in the urban mobility policymaking in Istanbul.

3.2.2. Primary data

The primary data was collected via semi-structured interviews conducted with urban mobility experts in Istanbul (SSIs) to gain valuable insights into drivers, barriers, collaborations, and agents of the policy transfer of Istanbul SUMP. The interview questions were tailored to capture the participants' perceptions, and due to the interviewees' familiarity and expertise in the subject of Istanbul's urban mobility, the questions remained consistent across interviews. The list of questions can be found at the Appendix B. The interviewees were recruited using a combination

of stratified sampling with convenience sampling. Participants were selected based on their experience of working for the urban mobility policymaking institutions for more than two years, specifically those actively involved in the planning, implementation, and evaluation phases of urban mobility activities.

Five interviews were conducted with participants reached through online channels such as LinkedIn and Twitter, and e-mail. These interviewees were anonymized and coded with the type of their institution in an Excel table, as specified in the Stakeholder Analysis section. In Chapter 4. Results, these statements were quoted as Interviewee 1, 2, 3, etc.

Following obtaining consent forms and oral consent from the interviewees, SSIs were conducted in Turkish (native language of the interviewees) and recorded on Microsoft Teams as an MPEG-4 movie. Subsequently, these recordings were transcribed, either manually or using the online tool Transkriptor. For language translation, ChatGPT open AI software and Google Translate were employed.

The transcribed semi-structured interviews underwent a thematic content analysis, using the ATLAS.TI software for coding and categorization. First, the transcribed interviews were read and annotated to highlight the statements of the interviewees regarding the motivations, obstacles, and agents related to the policy transfer of Istanbul SUMP. These annotations were coded under interviewee background, alignment with other plans, barriers to implementation, barriers to policy transfer, collaboration, comparison with other cities/regions, culture, institutional involvement, knowledge-sharing networks, policy transfer drivers, stakeholder involvement, SUMP benefits, SUMP Vision, and support for implementation. While initial coding involved fewer labels of drivers, barriers, SUMP Vision and Benefits, Institutional involvement etc., throughout the interviews certain labels surfaced such as culture, comparison with other cities, and support and barriers to implementation of SUMP.

Additionally, the interviewees' opinions on relevant stakeholders were labelled to support the social network analysis. The labeled categories were then interconnected to understand the conceptual hierarchy between them, and key insights were derived as a result. These interviews

were coded and matched with the institution type and the position of the institution within the social network of urban mobility policymaking in Istanbul.

3.3. Data Analysis

3.3.1. Content Analysis

Content analysis was used to address several sub-research questions concerning policy documents, mission statements of institutions, and semi-structured interviews with urban mobility experts from Istanbul. For SRQ-1: "Who are the actors driving the policy transfer of Istanbul SUMP?", content analysis surveyed policy documents to identify relevant stakeholders, policy transfer agents, and policy transfer entrepreneurs relevant for Istanbul SUMP, aiding the stakeholder analysis and social network analysis processes. For SRQ-2: "What motivates the actors involved in the policy transfer of Istanbul SUMP?" content analysis was employed to analyze the semi-structured interviews conducted with urban mobility experts from Istanbul, again using ATLAS.ti for coding and comparison. For SRQ-3: "What are the key elements transferred from European SUMP policies to Istanbul SUMP?" content analysis compared policy goals, policy instruments, programmes, and tools provided in Istanbul SUMP with the ELTIS guideline document using ATLAS.ti.

The content analysis of policy documents involved adopting a predetermined framework with a deductive approach to compare the Istanbul SUMP with the SUMP development guideline document provided by ELTIS. The four policy object types were used to compare the documents. After a broader comparison, the sections from the 2022 Istanbul SUMP and 2019 ELTIS guideline documents were coupled to facilitate the comparison of policy content and programs under three themes mentioned in the Istanbul SUMP: Transition to Low Carbon, Seamless Transfer and Integration, and Reducing Congestion.

This comparison helped to uncover the elements of policy transfer from the European SUMP guidelines to the Istanbul SUMP, as well as identifying the alignments and mismatches between these two policy documents. To distinguish between policies and policy programs, the definitions proposed by Dolowitz & Marsh (2000) were adopted where policies represent broader statements

of intention, indicating the direction to be taken, while policy programs denote the specific means of implementing these policies.

Lastly, the coded semi-structured interviews were analyzed to draw conclusions about the agent motivations and perceived drivers of the policy transfer for SUMP. Using the quotation manager of the Atlas.ti, individual codes were filtered such as SUMP benefits, vision, drivers, motivations, etc. stated by the interviewees. The most frequently mentioned concepts were noted as motivations and drivers for policy transfer in association with the interviewee's institution.

3.3.1. Stakeholder Analysis

The stakeholder analysis aimed to answer the sub-research question 1: "Who are the actors driving the policy transfer of Istanbul SUMP?". Stakeholder analysis is an important tool to identify the key actors in a system and evaluate their interests and influence (Reed et al., 2009). The analysis followed the framework described by Reed et al. (2009) and comprised three steps: identification, differentiation and categorization, and investigation of stakeholder relationships. Two main aspects were addressed in the results: first, the urban mobility governance of Istanbul was provided in the results section 4.1., and second, the relationships with and between policy transfer agents for Istanbul SUMP were demonstrated in results section 4.3.

The identification of stakeholders was based on the content analysis of urban mobility policy documents in Istanbul (see Table 8.2). Stakeholders were defined as "any institution that is affected by or holds the ability to influence the urban mobility policymaking in Istanbul." After identification, stakeholders were grouped into seven types of institutions: central government institutions, local government institutions, urban mobility planning and management organizations, international institutions, emergency and disaster management organizations, civil society organizations, and urban mobility operators.

The analysis of the decision-making structure was informed by several policy documents, including Istanbul SUMP and Law 5216: Law Regarding the Metropolitan Municipalities, as well as other affiliated policy documents such as Istanbul Pedestrian Master Plan, Istanbul Logistics Master Plan, Istanbul Public Transport Master Plan, Istanbul Traffic Safety Master Plan, Istanbul

Vision 2050, Istanbul Climate Change Action Plan, National Transport and Logistics Master Plan, and laws related to municipalities and spatial planning, see Table 8.1.

Next, using mission statements of the institutions obtained from the institutions' official websites, stakeholders were positioned on an interest spectrum regarding urban mobility policymaking: minimum interest, medium interest, or high interest. Statements explicitly mentioning urban mobility concepts such as "urban mobility" "urban transportation" "public transportation", "urban logistics" were coded as *high interest.* Statements involving auxiliary terms to urban mobility such as "traffic safety", "urban development", "urban management" were coded as *medium interest.* The mission statements without any mention of main urban mobility or auxiliary concepts were coded as *minimum interest.*

The stakeholders' interest and influence, as well as their position regarding urban mobility, were evaluated through a theoretical perspective, adopting a deductive approach. Influence was determined based on their decision-making power within the juridical system and their proximity to influencing decision-making bodies.

Stakeholders were categorized into high, medium, and low influence groups. *High influence* referred to stakeholders' ability to take direct action, such as voting on urban mobility policymaking platform. *Medium influence* referred to stakeholders' ability to affect urban mobility policymaking through national regulations and direct consultancy or advisory relationship with policymakers. *Low influence* referred to stakeholders' ability to have an indirect effect on decision-making such as generating publications that influence public opinion and contributing to international advocacy networks which are not party to any agreements between local and international decision-making bodies.

Based on the categorization by Bryson et al. (2011), stakeholders were positioned on the interest-influence grid to identify key players, subjects, context setters, and crowd.

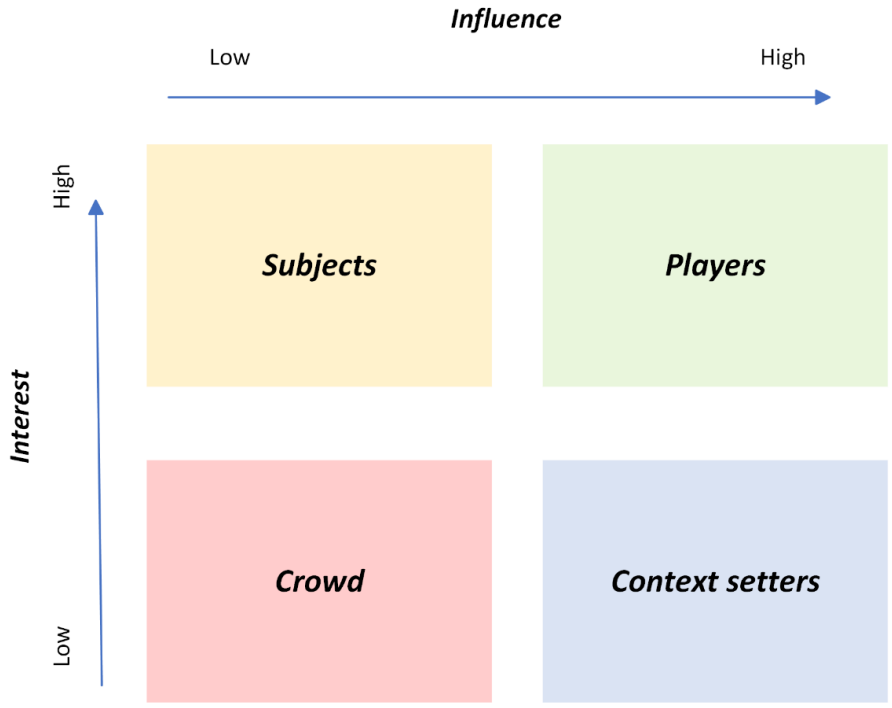

Figure 3.1. Interest-influence grid for stakeholder analysis. *Figure shows the different categories of the stakeholders according to their positioning on the spectrum of interest-influence axis.*

Subjects refer to the stakeholders with low influence yet high to medium interest regarding urban mobility policymaking in Istanbul. These stakeholders see the influence of urban mobility policymaking on their daily lives, business operations, etc. Yet, they do not have authority over the decision-making.

Players are the stakeholders who have both high influence and a high interest in the urban mobility policymaking in Istanbul. These actors hold positions within the decision-making structure which allow them to contribute to long-term vision creation and development of strategies, and the responsibility of enforcing their implementation.

Crowd consists of stakeholders who have low influence and low interest in the urban mobility policymaking in Istanbul. These stakeholders have ties to the analysis through geographic proximity or relationships to other more relevant stakeholders.

Lastly, context setters have high influence in the urban mobility policymaking, yet their main concern is not urban mobility, therefore a low interest in the matter. These stakeholders consist of

authorities that have legal authority and/or obligation to conduct urban mobility related decision-making through legislative arrangements.

Later, policy transfer agents were identified based on their involvement in and mention of transferring the SUMP guidelines to Istanbul, as documented in the Istanbul SUMP report published in 2022.

3.3.1. Social Network Analysis

Ahmadi et al. (2019) propose using a combination of stakeholder analysis and a social network analysis (SNA) for addressing complex problems. In this study, the stakeholder analysis was supplemented with a social network analysis to enhance the descriptive power of the analysis by investigating the relationships between institutions (Caniato et al., 2014; Prell et al., 2009). The purpose of the SNA was to support the stakeholder analysis to portray the decision-making structure of urban mobility in Istanbul, addressing sub-research question 1: "Who are the actors driving the policy transfer of Istanbul SUMP?"

The social network perspective broadens the analysis beyond individual institution characteristics (as in stakeholder analysis) to consider their relationships in a social environment (Borgatti et al., 2009). While SNA has been criticized for its descriptive nature with limited theoretical depth, social network studies suggest that the social environment can be expressed through relational patterns between interacting units, involving flows of information, goods & services, and collaboration, etc. (Wasserman & Faust, 1994; Borgatti et al., 2009).

In this case study, the social network of urban mobility policy institutions was mapped out using RStudio to demonstrate stakeholders holding central and important positions in the network. These relationships were identified from formal connections, such as collaborations within policy documents, derived from the content analysis. However, the significance of these relationships was not comparable across the social network. Therefore, several network measures were introduced to enhance the descriptive nature of the analysis such as network density, degree centrality, and betweenness centrality. Degree centrality (DC) measures how many connections a node has within the network. Nodes with high DC are often considered influential in a network. Betweenness centrality (BC) measures the extent to which a node serves as a bridge between other

nodes in the network and the nodes with a higher BC tend to have higher control of the flow of information and interactions between other nodes. Network density quantifies the proportion of connections existing in a network compared to the total possible connections. If a network has high density, it indicates a high level of interconnectedness amongst its nodes.

In this study, the centrality and in-betweenness of stakeholders in terms of urban mobility policymaking in Istanbul refers to their influence within the network. Policy transfer agents and their positions within the social network of urban mobility policy institutions were examined. The social network analysis was performed using RStudio, represented institutions as vertices, and their relationships as edges. Each relationship between urban mobility institutions, as derived from collaborative or mentioning policy documents, was coded in a branching process directed towards final decision-making bodies such as Transport Coordination Center (UKOME) and IMM. These ties were then converted into dyadic (sender-receiver) columns between institutions, with the institutions presented in rows, and the network was plotted on RStudio and visualized using the Miro online tool for enhanced readability.

3.4. Data Integration

To ensure a comprehensive understanding of stakeholder perspectives, the findings from stakeholder analysis were integrated with findings from social network analysis. This involved synthesizing data from semi-structured interviews and content analysis.

3.5. Ethical Considerations

Before interactions with interviewees, Consent Forms were sent out and collected, should requested the interviewee information to be kept anonymous. Ethical considerations were considered throughout the research process. Informed consent was obtained from all participants of semi-structured interviews, and their confidentiality and privacy were maintained during data collection, analysis, and reporting. The study adhered to the data management policy set by the Wageningen University & Research Ethics Board, regarding the General Data Protection Regulation.

3.6. Scope and Limitations of Methods

The methods employed in this thesis include content analysis, stakeholder analysis, and social network analysis. These methods comprehensively address the main and sub-research questions related to the transnational policy transfer for urban mobility in Istanbul, specifically the Istanbul SUMP. The scope of the methods encompasses data collection from policy documents, mission statements, and semi-structured interviews.

The content analysis compares European SUMP policies with Istanbul SUMP, highlighting key elements of the policy transfer and derives insights from semi-structured interviews. The stakeholder analysis identifies actors driving the policy transfer, categorizing them based on their interests and influence. The social network analysis provides insights into institutional relationships in urban mobility policymaking. Integration of findings from stakeholder and social network analyses enables a holistic view of stakeholder perspectives and policymaking dynamics, focusing on policy transfer agents.

Limitations

The research methods have limitations that need to be acknowledged. First, stakeholder and social network analyses are based on existing data and may not capture real-time changes or emerging actors within the urban mobility policymaking context. Especially, actors who are not or mentioned in the policy documents or SSIs might be underrepresented. Second, semi-structured interview method, while providing detailed insights, relies on participants' willingness to engage fully and provide accurate information. The subjectivity of participants as well as the interviewer's perceptions might introduce potential bias or limitations in data collection, even though efforts were made to minimize these issues with clear interview questions.

The scope of this thesis is limited to Istanbul SUMP, which may not be directly generalizable to other cities due to unique contextual factors.

Despite these limitations, the chosen methods offer a robust framework for examining the policy transfer of Istanbul SUMP, offering valuable insights to the understanding of urban mobility policymaking and facilitating the exploration of the research questions.

Chapter 4. Results

4.1. Decision-making structure of urban mobility policymaking in Istanbul

This section is based on a literature review and stakeholder analysis involving the policy papers related to urban mobility policymaking in Istanbul. The analysis revealed a sparse and clustered network of institutions in the urban mobility governance of Istanbul (Canitez et al., 2019).

Regarding the decision-making structure, 45 relevant stakeholders were identified for urban mobility policymaking based on the examination of 17 policy documents mentioned in Appendix A, Table 8.1. These stakeholders were differentiated according to their institutional type and role in urban mobility policymaking. The institutions were categorized into seven types: central government institutions, local government institutions, urban mobility planning and management organizations, international institutions, emergency and disaster management organizations, civil society organizations, and urban mobility operators (Caniato et al., 2014).

Istanbul's urban mobility is governed through a multi-level decision-making structure. At the national level, the Turkish Ministry of Transportation and Infrastructure sets the agenda with policy documents and master plans, filtering decisions from central to local levels of government. Regionally, the Union of Marmara Municipalities serves as an advisor on urban mobility and provides research on best-practices, without any enforcement to the decision-makers. At the city level, Istanbul Metropolitan Municipality (IMM) is pivotal, comprising the Mayor's office, IMM council, and IMM Executive committee, all influencing urban mobility policymaking and overseeing the Transport Coordination Center (UKOME) operations. UKOME is the nationally mandated decision-making platform for urban transport and mobility in Türkiye. According to the 5216 Metropolitan Municipalities Act, UKOME is responsible for coordinating all transportation services in the metropolitan area, including land, sea, and rail. It has the authority to make decisions, implement, and manage facilities in transportation, traffic, and public transit, following relevant legislation. Although UKOME is relatively independent, the Mayor’s office has the final approval for its proceedings.

Notably, within the IMM as an institution, the cross-departmental collaborations for policy implementation were not explicitly structured in the policy documents. However, such a collaboration was exemplified during the Istanbul SUMP process with the development of a cross-departmental SUMP team.

To demonstrate this decision-making structure in further detail, the stakeholders of Istanbul's urban mobility governance were positioned in an interest-influence grid, enabling the identification of key stakeholder groups within the four categories adopted from Bryson et al. (2011). Figure 4.1 illustrates the significant influence and interest displayed by central and local government institutions, as well as urban mobility operators, in the decision-making structure of urban mobility governance in Istanbul. In contrast, certain international institutions, like the Global

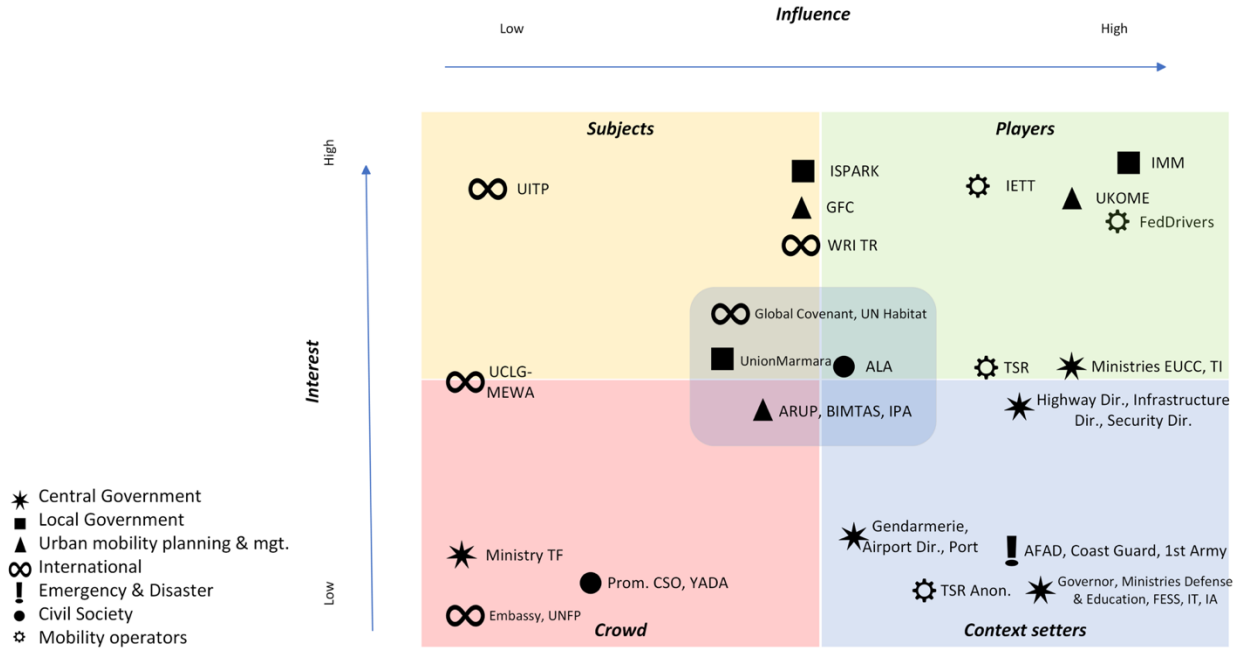

Figure 4.1. Interest-influence grid for stakeholder analysis of urban mobility institutions in Istanbul. *The grid shows different types of institutions with varying degrees of interest and influence on a spectrum.*

Covenant of Mayors and UN Habitat, exhibit moderate levels of interest and influence by providing advisory and consulting services to more influential actors, such as IMM.

However, their impact on decision-making is limited. Many central government institutions fall into Context Setters category, characterized by high influence and low to moderate interest. The

figure also demonstrates the low to moderate influence of various civil society organizations, representing residents, tourists, etc. Additionally, Figure 4.1 demonstrates that the type of institutions that are on the medium to high range within the influence axis fall under the category of the central government institutions.

In addition to the depiction of the stakeholder analysis via a grid, a social network analysis (SNA) supported the understanding of the inter-institutional relationships within the decision-making structure, as shown in Figure 4.2. The SNA indicators of degree centrality, betweenness centrality, and network density were used to explain the stakeholders' role within this social network:

Degree centrality is used to measure the number of connections a node (institution) has within the network. A high degree centrality is considered to indicate the node's influence in the network. Two institutions have had the highest degree centrality score within the network depicted in Figure 4.2, IMM and UKOME, 16 and 17 connections respectively which is higher compared to network mean of 3.94.

Betweenness centrality is a measure for the extent to which a node serves as a bridge between other nodes in the network. BC values range from 0 to 1, and a high betweenness centrality value indicates a high level of control over the flows of information and interaction between other nodes. To calculate the BC, it is necessary to know the shortest paths within the network as well as the network topology. The betweenness centrality of a node is calculated as:

- Betweenness Centrality (node) = Summation (# of shortest paths that pass through the selected node / Total Number of Shortest Paths within the network).

Using the NetworkX tool within Python, shortest paths within the network has been calculated. In the case of network of urban mobility policymaking of Istanbul, IMM scored the highest BC value: $0.\overline{33}$. While UKOME scored 0.1949, WRI TR 0.0357, and rest of the nodes scoring 0.00.

Network density is a calculation of the proportion of connections that exist in a network compared to the total possible connections. A high-density network indicates a high level of interconnectedness amongst its nodes (institutions). Network density is calculated as:

- Density = (# of edges) / [(# of Nodes) * (# of Nodes -1)/2]. In this network, there are 42 nodes and 51 edges. Using the formula, density is calculated as:
  - Density = 51 / [42 * (42 -1) / 2]
  - Density ≈ 0.1186.

This value indicates a relatively sparse network for the urban mobility policymaking in Istanbul, as all possible connections among the nodes (institutions) were not present.

Using these network indicators, SNA demonstrated the clustered and sparsely connected structure of urban mobility policymaking institutions in Istanbul, indicating a bi-centric structure. The institutions of IMM and UKOME, represented as nodes in the network, have the highest number of connections (edges) to other nodes (institutions) within the network. In addition, the SNA revealed the high level of betweenness, hence influence, of IMM within the network through a higher value of the betweenness centrality indicator.

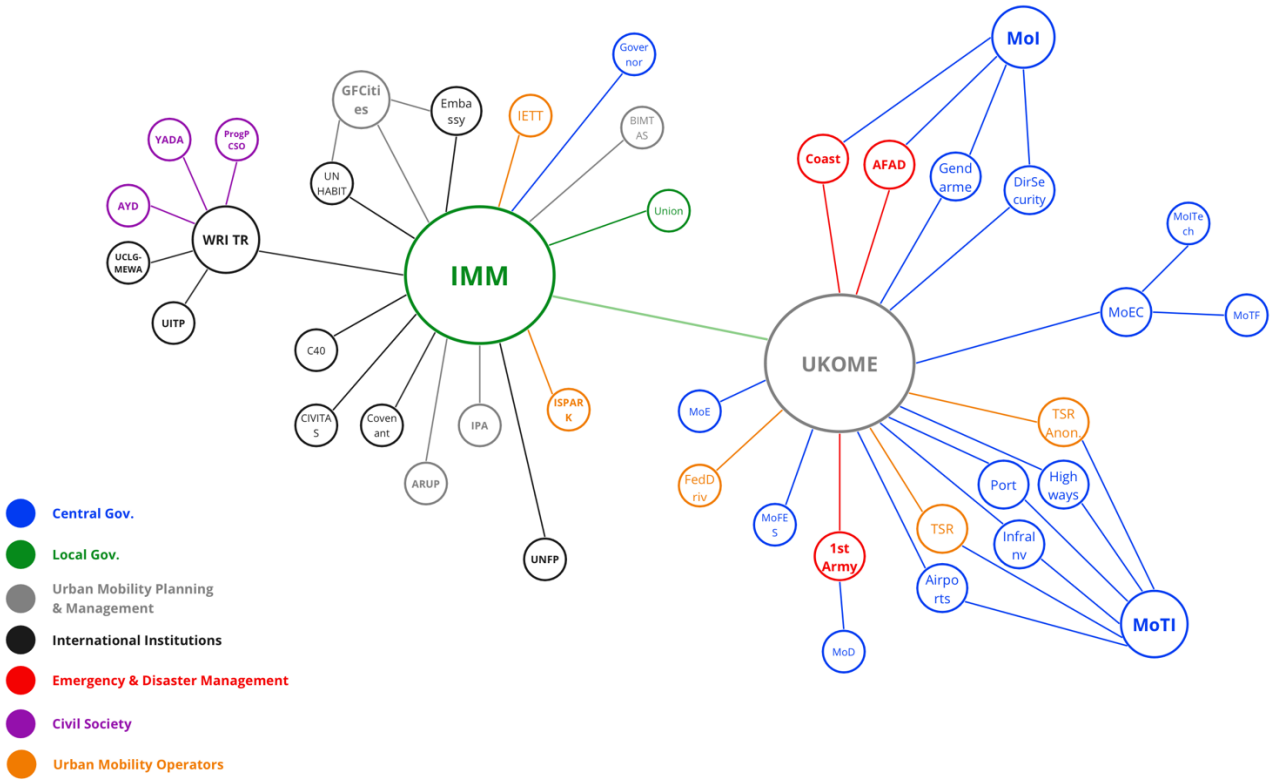

Figure 4.2. Social network of urban mobility policymaking institutions in Istanbul. *Social network depicting the relationships between various institutions, demonstrating the two main clusters of the*

network. The institution types are defined with colors on the legend and the size of nodes represent the number of connections they share with other nodes in the network.

Figure 4.2 illustrates a bicentric social network with distinct typologies of nodes within its two primary clusters with IMM and UKOME as the central nodes, respectively. The cluster of IMM is composed of a rather diverse set of institutions, including international bodies, urban mobility planning and management institutions, and civil society organizations. In contrast, the UKOME cluster is predominantly composed of central government entities and emergency & disaster management institutions.

The relationship between IMM and UKOME is crucial for policymaking and implementation in Istanbul. The success of transferring and implementing transnational policies depends on the embedded relationships in this clustered yet connected governance structure. The network demonstrates the significant international influence on IMM and its' connections to civil society, while UKOME is shown to be heavily influenced by the central government.

The power dynamics of these clusters mirror the political inclination of their leaders. Following the municipality elections in 2019, where Istanbul's Mayor was elected from the main opposition party, the law regarding the structure of UKOME has been changed. This restructuring altered the composition of UKOME and increased the representation of central government institutions. This structural change transformed UKOME from being an auxiliary to the metropolitan municipality to a second authority in urban mobility policymaking. As the hierarchy has shifted, the institutional alignment regarding the policy implementation became more complex, especially for the policy transfer process of SUMP.

4.2. Policy Transfer Agents of Istanbul SUMP

After depicting the general urban mobility decision-making structure in the previous section, this following part answers the sub-research question 1: "Who are the actors driving the policy transfer of Istanbul SUMP?". Each policy transfer agent for the Istanbul SUMP is identified and their policy transfer mechanism is elaborated.

Policy transfer agents were previously defined as actors who facilitate the exchange and transfer of ideas, policies, and approaches between different locales. For the Istanbul SUMP, these agents

were identified through a stakeholder analysis and analysis of the semi-structured interviews conducted with several urban mobility stakeholders. Throughout this process, the policy transfer agents were concluded as:

1) *The Istanbul Metropolitan Municipality* (IMM) emerges as the principal agent and transfer entrepreneur in transferring the SUMP policy for Istanbul. As the legal authority responsible for urban mobility, IMM's central role in decision-making is crucial. It has leveraged its extensive network, including ties with international bodies, to facilitate the transfer of the SUMP policy (as noted by Interviewee 1). Throughout the SUMP's development, IMM employed various mechanisms, such as consultation, collaboration, capacity building initiatives, and adopting EU best practices to enable effective policy transfer.

   Specifically, IMM fostered policy transfer through internal and external collaborations. Internally, it established a dedicated SUMP team that transcended traditional mobility management boundaries within the institution. Externally, IMM engaged with UN Habitat Türkiye and the ARUP consultancy for expert advice. Moreover, it partnered with the Ministry of Transportation and Infrastructure to meet the legal prerequisites for the EU-IPA-2 program application. Additionally, IMM's SUMP team engaged in cross-sectoral collaboration with Global Covenant of Mayor's on an intersectional issue between energy and mobility, during the development of Sustainable Energy and Climate Action Plan (SECAP). IMM's utilization of relational networks and internal structuring have been pivotal in assimilating the SUMP framework into Istanbul's urban planning landscape (noted by Interviewee 2).

2) *UN Habitat Türkiye* was the strategical advisor of the Istanbul SUMP's development process, mainly working with IMM's SUMP team and ARUP. and the institution has been involved in all stages of creating the plan (Interviewee 2). UN Habitat contributed to the policy transfer process with their experience in sharing know-how and lessons learned regarding urban mobility related projects worldwide. Their involvement further emphasized the alignment of Istanbul SUMP with the UN Sustainable Development Goals related to urban areas and transportation (Interviewee 2 and Interviewee 5). The SUMP's

objectives and strategies were vetted using UN Habitat's compatibility tool for SDG alignment.

3) *Global Future Cities programme by UK FCDO* was the coordinating policy transfer agent in the Istanbul SUMP process. While typically a collaboration platform for various cities, in the case of Istanbul SUMP, it acted as a coordinator between the local institution IMM and the UK FCDO, facilitated by the British ambassador to Türkiye, Kenan Paleo.
4) *ARUP* was the contractor of the Istanbul SUMP in Türkiye and worked closely with IMM to finalize the policy transfer. It played two main functions in the transfer process: i) bringing the mobility planning and stakeholder engagement expertise as a human resource (Interviewee 5), and ii) functioning as the financial controller of the project's funding to navigate the complex relationship between the local and central governments.
5) *WRI Türkiye* represented the only transfer agent who was not officially involved in the policy transfer of Istanbul SUMP, yet they played a role in the public relations and communication aspect of the transfer process (Interviewee 1). WRI TR acted as an informant agent to the public about the necessity of sustainable urban mobility, the SUMP as a planning discourse, and the involvement of IMM and GFC in the process of the transfer.

4.3. Motivations of Policy Transfer Agents of Istanbul SUMP

This section answers the sub-research question 2: "What motivates the actors involved in the policy transfer of Istanbul SUMP?"

To reveal these motivations, transfer agents identified through stakeholder analysis were interviewed. The Atlas.ti qualitative analysis tool was employed to analyze the content of these interviews. Interviewees were questioned[1] about their institution's involvement in the process and their perceptions regarding the benefits of transferring SUMP policies from the European Union to Istanbul, Türkiye.

[1] To refer to the institutions of the interviewees: Interviewee 1: IMM, Interviewee 2: UN Habitat, Interviewee 3 and 4: Global Covenant of Mayors, and Interviewee 5: ARUP

The analysis revealed that the policy transfer of SUMP in Istanbul is regarded as an initiative of enhancing know-how, legitimizing intended actions for sustainable urban mobility, and a tool for securing EU funding. The transfer process is also viewed as a catalyst for institutional change, fostering improved collaboration and communication.

A recurring theme in the interviews was the need for an improved urban mobility system in Istanbul, addressing challenges such as congestion, safety, security, and inclusivity for all mobility users. Interviewees had common and diverging motivations to transfer SUMP policies to Istanbul. The local government institution interviewee emphasized SUMP's development and implementation as a prerequisite for securing EU funding. On the other hand, international institutions like the Covenant of Mayors and UN Habitat had additional motivations, such as mitigating the effects of climate change through sustainable energy use, decreasing carbon emissions, and aligning with international environmental goals such as Net Zero targets for urban mobility and transport infrastructure efficiency. Meanwhile, the academic partner from ARUP stated their motivation to policy transfer, by highlighting SUMP's highly participatory and inclusive approach to urban mobility (Interviewee 5). Moreover, strategical alignment with other plans such as Climate Action Plan of Istanbul and UN Sustainable Development Goals, was stated as motivations to follow through the policy transfer in the local context. International collaborations such as memberships in transnational policy networks were considered as ingrained and customary practices.

The motivations of these institutional actors were categorized into seven main motivations with relevant quotations as follows:

1. *Sustainable development and urban mobility connection*: Respondents from both local and international institutions stressed urban areas' role in sustainable development and its strong connection to urban mobility. Interviewee 1 from IMM emphasized the importance of urban mobility for the sustainable development:
   "Cities have an important role in sustainable development,… To support this…, the cities will be the biggest contributors to the country."

The funding opportunities provided by the EU has been perceived as an important tool for urban development attempts by the local government, IMM and its strategic advisor, UN Habitat interviewees.

2. *Addressing mobility-specific challenges:* Interviewees unanimously referred to the urgent need for sustainable, safe, and accessible transportation in Istanbul. They expressed their willingness to address urban mobility challenges like loss of time and money due to traffic congestion and excessive energy use through SUMP principles. Referring to the severity of transportation problems Interviewee 5 from ARUP mentioned that: "Transportation is one of the most worrisome areas in Istanbul."
3. *Participatory aspect of SUMP*: Interviewees (1, 2, and 5) noted SUMP's departure from traditional urban planning by incorporating participation and inclusivity. Interviewee 5 discussed the growing desire for civil society involvement in urban planning and its relation to SUMP:

   "Planning is a process that is very much intertwined with politics, and we already see that these processes are actually an effort to be brought together with some participatory processes, albeit very slowly. This is a process in terms of institutions, but when we look at the process from the point of view of civil society, we see that since 2004, especially with these neighborhood organizations, …, the people have been organizing much more and trying to be involved in some of these processes and to exist in these processes. … So, here's this strategic planning approach that SUMP put forward … being implemented with a more strategic approach. The important part here, … very strong part of the *participatory* dimension, … and we see that these things are already in our planning discipline over time."
4. *Improving accessibility and inclusivity:* Respondents from IMM and ARUP emphasized the importance of fostering accessible and inclusive mobility options to enhance the quality of life for all. Interviewee 5 pointed out the effectiveness of SUMP in introducing participatory approaches, which are instrumental in recognizing and addressing the mobility barriers faced by individuals of diverse backgrounds of socio-economic status, sex, gender identity, disability, and age.

5. *Alignment of SUMP with existing plans and vision*: IMM's past master plans and current action plans followed a direction towards a holistic approach to transport planning, as noted by interviewee 1 and 3, referencing the climate neutrality aim stated by the mayor of IMM. The interviewee 5 from ARUP emphasized the significance of aligning plans across various spatial and sectoral levels in developing Istanbul SUMP.
6. *Climate change mitigation efforts*: All respondents, particularly those from UN Habitat (Interviewee 2) and Covenant of Mayors (Interviewees 3 and 4), viewed climate change mitigation as a primary motivation for adopting SUMP in Istanbul. An IMM respondent remarked:

   "… to mitigate the impact of climate change and to increase the quality of life, one of the most influential sectors is transportation. Transportation both causes climate change and also it is one of the most vulnerable sectors to effects of climate change. Then of course, the sustainability of the transport itself poses itself as a distinct matter, in terms of sociologic, economic and environmental aspects. … SUMP approach is the first thing that comes to mind.". The transport sector playing an important role in energy and climate action plans was stated as a core motivation to incorporate SUMP to Istanbul's urban mobility planning, noted by interviewee 3 and 4.
7. *SUMP as a tool for improving inter and intra-institutional change and communication:* The development of a cross-departmental SUMP team at IMM, made the necessity of enhanced communication and collaboration between institutions as well as within the institution itself. While the Interviewee 1 from the IMM stated the importance of enhanced external collaboration:

   "We need to improve the collaboration, especially with non-governmental and governmental organizations."

   Interviewee 5 from ARUP provided insight to the collaboration proceedings they observed while working with IMM as:

   "(In IMM) communication is done through some bureaucratic means, correspondence, a petition is sent to ask for information, a letter is received from there, and so on. At this point, I think the SUMP may have been useful to the following: … both as academics and

as people who are running this process, or rather working in this process, have made these connections."

While these motivations represent the perceptions of the policy transfer agents, they do not give the full picture of why SUMP approach has been adopted by the city of Istanbul. The analysis of the interviews allowed further examination of transfer agents' interpretations of the drivers behind the policy transfer, as explained in the next section.

4.4. Drivers of policy transfer

This section presents the main finding from the interviews which is essential to address the main research question of the study: "What drives the transnational policy transfer of urban mobility in Istanbul, specifically the Istanbul SUMP, and to what effect?".

From a broader perspective, the transnational policy transfer of SUMP has been shaped by a set of factors. Central among these is the role of the Istanbul Metropolitan Municipality (IMM) as a bridge between various international and local institutions related to urban sustainability. These bodies acted as pivotal agents, bringing forward diverse motivations including climate change mitigation, traffic management, enhanced quality of life, the provision of affordable and reliable public transportation, and equitable access for all residents of Istanbul.

A dichotomy of motivations emerged from the semi-structured interviews. International institutions' representatives focused on global sustainability goals, such as alignment of Istanbul SUMP to the United Nations Sustainable Development Goals and European energy efficiency standards. Conversely, interviewees from local institutional actors and urban mobility planners emphasized pragmatic urban issues such as traffic congestion, commute times, and the accessibility and safety of transportation.

The analysis of the interviews revealed the six main drivers of Istanbul's SUMP policy transfer as:

i. Resources and authority of IMM: As the central authority in urban mobility, IMM benefits from Istanbul's substantial contribution to Türkiye's GDP and its competent human capital. Respondents from the Global Covenant of Mayors (COM) highlighted this aspect by stating that IMM acts as a pioneer in sustainable urban management while having the necessary resources to

allocate teams for mobility initiatives, unlike smaller municipalities with limited resources (Interviewee 5). Both IMM and COM respondents also pointed at the financial capacity of IMM to adhere to the rules of SUMP development (Interviewee 3 and 4).

ii. Planning culture and individual responsibility: Istanbul and Türkiye has a history of adapting European policies and plans. The institutional setting is accustomed to policy transfers, as seen in the adaptation of environmental laws from Europe (Interviewee 4). The historical trend of adopting European urban planning practices has created a general consensus on the necessity of adopting these guidelines, although there are diverging views on this approach amongst respondents. Municipal officials tend to have a preference for tried-and-tested urban planning strategies (Interviewee 2 and 3). This tendency is often reinforced by consultants who support evidence-based decision-making to justify the allocation of resources. However, the existing hierarchical management structure can stifle local initiative, with administrators typically awaiting instructions from higher authorities. Interviewee 4 from COM highlighted this phenomenon: "There is a culture of looking for a shepherd and not taking individual responsibility" pointing at a reluctance to take risks in this hierarchical administrative structure, leading to a preference for more restrictive approaches in urban planning. However, the understanding of this historical and cultural tendency was contrasted by the Interviewee 2 from UN Habitat, signaling an inflated significance of European influence in Istanbul's urban mobility policymaking.

iii. Guidance and strategic framework provided by SUMP: Across the interviews, it was mentioned several times that the framework provided by the SUMP guidelines was perceived as clear, evidence-based, and strategically sound, facilitating the implementation process (Interviewee 5). The explicitness and transparency of the guideline document were considered as points of attraction for the planning approach.

iv. Adaptability of SUMP to the local setting: SUMP's adaptability to local institutional settings was highlighted as a driver by the interviewees. Istanbul aims to be a pioneer city in terms of dealing with urban issues but also sustainable development, climate change, and environmental problems (Interviewee 1 and 2). While interviewee 2 from UN Habitat stated that IMM's existing plans such as the Climate Action Plan to be compatible with the SUMP approach, the interviewee

4 from COM highlighted SUMP's natural alignment with the national goals regarding Net Zero carbon emissions target.

v. Participation in regional and global networks: The policy transfer entrepreneur IMM's participation in international collaborations such as CIVITAS, C40 Cities, and Global Future Cities has been instrumental to the policy transfer as stated by the interviewees from IMM, UN Habitat, and COM. This participation has been strengthened with various links of funding and knowledge-sharing networks. While the involvement of Global Future Cities has been supported by the UK FCDO funds, COM and UN Habitat were more involved in the strategic guidance and sharing global experiences with the IMM. As the Interviewee 5 have pointed out, the search for a new planning approach started out from the established networks and not in novel locations or paradigms.

vi. EU Funding: A consensus among interviewees highlighted the development of Istanbul's SUMP as a gateway to European Union funding for transportation projects (see Interview 1, 2, 3, 4, ad 5). Notably, the funding mechanism for Istanbul's SUMP deviated from European precedents, being managed by an external contractor (ARUP) due to central government's regulatory constraints to manage funding received from EU.

These six drivers are categorized under push and pull factors. Pull factors are inherent to the local setting, specifically Istanbul and IMM, while push factors originate from the policy disseminating source, in this case EU. Drivers i and ii are pull factors within the local setting as both the capabilities of the policy transfer entrepreneur (IMM) and the existing culture of planning practice exert a pull effect on the policy transfer process. When policy transfer is viewed as a system involving receiving and lending agents, these traits are typical of the receiving party.

Drivers iii and iv are push factors generated by the lending party of the policy transfer. The development of a clear, evidence-based, and adaptable SUMP creates conditions that attract potential policymakers and planners to adopt this planning approach.

Drivers v and vi incorporate both push and pull factors. The fifth driver, participation in regional and global networks, reflects a mutual willingness to cooperate between Istanbul's local representatives and the international institutions such as the EU and its affiliated organizations.

The sixth driver, related to EU funding, also embodies both factors. While IMM and other municipalities in Türkiye implement SUMP principles to secure EU funding and eligibility for future projects, the EU employs these funds as a tool to disseminate best practices in line with its overarching policy goals and objectives.

While some of these drivers parallels the motivations of policy transfer agents, the stated drivers are broader than the motivations previously mentioned. Moreover, the motivations are the intended outcomes for the Istanbul SUMP according to the policy transfer agents, while drivers are considered to be general forces that led to the adoption of European SUMP guidelines.

4.5. Transferred Policy Objects to Istanbul SUMP

This section answers the sub-research question 3: "What are the main elements that are transferred from European SUMP policies to Istanbul SUMP?"

To answer SRQ-3, contents of Istanbul SUMP with the ELTIS guideline document were analyzed and compared using ATLAS.ti. The general outcome of this comparison is demonstrated in Table 4.1, indicating differences and similarities in the two documents. The SUMP guideline document provides the framework and principles (policy content) for cities to develop their own sustainable urban mobility plans, aiming at broad policy goals. In contrast, the Istanbul SUMP document is a specific policy program for Istanbul, detailing the policy content, goals, instruments, and coordinated initiatives tailored to the city's needs.

Table 4.1. Policy object comparison between SUMP guidelines and Istanbul SUMP

Policy Objects	*ELTIS SUMP guideline*	*Istanbul SUMP*
Policy Goals	The SUMP guideline document articulates the broader policy goals of promoting sustainable urban mobility. These goals include improving environmental sustainability, enhancing accessibility and inclusivity, and ensuring efficient urban transport systems.	Istanbul SUMP document encapsulates specific policy goals for Istanbul's urban mobility, such as creating an accessible, integrated, and environmentally sustainable transportation system, reducing traffic congestion, and promoting compact urban development.
Policy Content	This document primarily provides the policy content. It outlines principles, methodologies, and best practices for urban mobility planning. The content includes holistic, inclusive, and collaborative planning processes,	It offers detailed policy content customized for Istanbul, including strategies and action plans to achieve the outlined goals. The content is

	integrated development of transport modes, and the importance of continuous assessment and quality assurance.	tailored to the city's unique challenges and opportunities in urban mobility.
Policy Instruments	While the SUMP guideline itself is not a direct policy instrument, it informs and guides the selection of policy instruments. It suggests various methods like participatory planning, integrated transport development, and regular monitoring.	The Istanbul SUMP outlines specific policy instruments to be employed in Istanbul. These might include the development of public transport infrastructure, promotion of active mobility like cycling and walking, and implementation of traffic management measures.
Policy Programs	The document serves as a foundation for policy programs. By providing comprehensive guidelines, it enables cities to develop their own urban mobility policy programs, incorporating a mix of policy instruments tailored to their specific needs and contexts.	The document itself represents a comprehensive policy program for Istanbul's urban mobility. It includes a coordinated set of policies, measures, and initiatives designed to achieve the city's specific goals. It employs a combination of policy instruments and coordinates efforts across different sectors and stakeholders.

Policy Goals

The policy goals delineated in the ELTIS guidelines emphasize "ensuring that Europe's urban areas develop along a more sustainable path" and "meeting EU goals for a competitive and resource-efficient European transport system". These guidelines are framed with a people-centric approach to urban mobility, prioritizing quality of life and efficiency. The salient themes in these

policy goals are sustainable development, competitiveness, resource-efficiency, compliance with European Union objectives, and enhancement of quality of life. The goals are articulated in measurable terms, as seen in phrases like “meeting EU goals” and “resource-efficient European transport system,” indicating their clarity and specificity.

Conversely, the Istanbul SUMP report, in its Vision section, articulates the goal of creating a transport system that respects and aligns with Istanbul’s unique geography and historical values, contributing to a sustainable and resilient future. The Implementation Road Map section of the same document expands this vision, aiming to establish a political and technical framework that encourages local cooperation and knowledge exchange across all stakeholders. This governance-centric goal is underpinned by principles of effective inter-institutional cooperation, participatory planning, and data-driven decision-making. The primary policy goal of Istanbul SUMP emphasizes the city's holistic development and views its transport system as an instrument for fostering sustainability and resilience. Its themes include sustainable development, respect for Istanbul’s unique characteristics, and resilience. However, the main policy goal in Istanbul SUMP appears somewhat less explicit compared to the ELTIS guidelines, especially regarding its respect for Istanbul's geography and historical values, which are not as clearly defined, thus rendering the policy goal slightly ambiguous.

The guideline document provides principles and actions essential for developing city-specific tailored SUMPs, as detailed in Chapter 1.4. It outlines eight main principles for sustainable urban mobility planning: 1) Planning for sustainable mobility in the functional urban area, 2) Cross-institutional cooperation, 3) Stakeholder involvement, 4) Current and future performance assessment, 5) Long-term vision and a clear implementation plan, 6) Integrated transport development, 7) Monitoring and evaluation of SUMPs, and 8) Quality assurance. These principles are mandatory for cities adopting SUMPs**,** but they allow for customization to fit specific needs and conditions of the locale.

In parallel, Istanbul SUMP report outlines nine strategic objectives: 1) Having an accessible, affordable, integrated and inclusive transportation system, 2) Having an environmentally sustainable transportation system 3) Having an economically sustainable and resilient

transportation system, 4) Improving the safety and security of transport and travelling, 5) Reducing traffic volumes, congestion and automobile dependency, 6) Stimulating the modal shift to public transport, 7) Stimulating the modal shift to active modes such as walking and cycling, 8) Having a transportation system that promotes compact and polycentric development, 9) Having an efficient city logistics system with minimal negative impact.

The comparisons of policy goals between SUMP principles and Istanbul SUMP's objectives demonstrates different roles in urban mobility policymaking. SUMP principles are foundational to inform the approach and methodology of the urban planning practitioners. On the other hand, Istanbul SUMP's objectives target tangible outcomes, desired by the urban dwellers and policymakers. The principles offer a broader framework and focus on the "how" to get to the desired outcomes of a locale's urban mobility vision, while Istanbul SUMP's objectives are more specific and outcome-oriented, focusing on the "what" to achieve such as Istanbul's aims to improve transportation and reduce congestion.

Aside from the obvious difference in targeted geographic contexts between the ELTIS guidelines and Istanbul SUMP, both documents share a focus on sustainable urban development and future-oriented resilience. Nevertheless, the ELTIS guidelines are broader and more direct in emphasizing mobility needs of stakeholders and putting resource-efficiency, competitiveness, and improvement of quality of life at the forefront of their policy goals.

Policy Content

To compare the policy content, the scope and actions stated in the documents were compared. SUMP guideline document provides a comprehensive framework for sustainable urban mobility planning, including methodologies, principles, and best practices. It recommends actions related to stakeholder engagement, integrated development of transport modes, continuous performance assessments, and long-term strategic vision development. These actions are customizable for cities based on their local conditions.

On the other hand, Istanbul SUMP is tailored for the city in specific, including strategies, action plans, and specific measures for urban mobility. The document includes specific actions for Istanbul, for instance, developing certain transport modes, addressing city-specific challenges like

congestion, and incorporating Istanbul's unique geographic and historical aspects into planning. It proposes a clear governance structure and implementation roadmap, emphasizing local context and conditions.

In comparison, the guideline document has a broader scope and is designed to be tailored to different urban contexts while the Istanbul SUMP has a narrower scope, focused on the unique challenges and opportunities of Istanbul. Both documents share a common understanding to sustainable urban mobility but differ in application as the guideline document also provides best examples from all around European Union while Istanbul SUMP focuses on the Istanbul only.

Policy instruments

Policy instruments are methods employed to implement and enforce policies, including legislative measures, financial incentives, information campaigns and technological solutions.

ELTIS guidelines suggest policy instruments to be generated as part of the third phase of SUMP development: measure planning. The ELTIS guidelines do not suggest exact measures or incentives but rather points at good practices and describes how to shortlist and describe policy measures, with suggestions regarding what these measures should entail.

In the Istanbul SUMP report, there are 56 policy measures in 8 measure packages which are grouped under three themes and four cross-cutting themes. The three main themes are Transition to Low Carbon, Seamless Transfer and Integration, and Reducing Congestion while cross-cutting themes consist of Inclusion, Safety, Resilience, and Innovation. In the intersection of these themes, eight measure packages are determined. These policy measures were selected considering international best practices, planner’s professional experience, according to the alignment of ongoing projects conducted by IMM, and the actions suggested by stakeholders during workshops.

Policy Programme

The bulk of Istanbul SUMP document itself can be viewed as a policy program as it demonstrates the means to implement the transferred policies from the SUMP approach. Istanbul SUMP is analyzed under three core themes which groups the 56 policy measures in 8 measure packages.

Theme I: Transition to Low Carbon. The main objective of this theme is to ensure that the mobility system of Istanbul is environmentally friendly and to promote sustainable, active and healthy lifestyles for citizens. Eight core projects were proposed under this theme focusing on the creation of low emission zones and decarbonizing public transport, see Table 3.1. As a major part of the policy programme, this theme is transferred from the ELTIS guidelines as it is associated with the stated policy goals of the document such as "meeting EU goals for a competitive and resource-efficient European transport system" and "improving quality of life."

Theme II: Seamless Transfer and Integration. Theme 2 aims to promote the shift to public transport by ensuring an integrated, inclusive, safe, and comfortable transport system accessible to all citizens in Istanbul. Ten projects proposed to achieve this theme's objective include extending the rail network of Istanbul, introducing new payment structures to the public transport, utilizing the sea transport more frequently, and introducing behavioral changes such as Park and Ride to the city. This theme is directly correlated with the SUMP principle of "balanced development and better integration of different transport modes" and the third phase of SUMP, measure planning. SUMP guideline document also provides best-practices from Spain and Poland, regarding the integration of various mobility measures.

Theme III: Reducing Congestion. The goal of this theme is to improve the alternatives to car use by attracting travelers to sustainable modes of transport and creating demand management measures. Eight core projects are proposed for this theme including new parking regulations, payment systems, local mobility services, and congestion prevention techniques.

Chapter 5. Discussion

This chapter provides insights to the key findings of the results and to the main research question: "What drives the transnational policy transfer of urban mobility in Istanbul, specifically the Istanbul SUMP, and to what effect?" The results of the case study is linked with the policy transfer literature and the limitations of the study are presented.

The research aimed to investigate the conditions behind the transnational urban mobility policy transfer process of Istanbul SUMP from the European Union. Thesis demonstrated the clustered governance structure of the urban mobility in Istanbul, identified its influential stakeholders, policy transfer agents and their motivations, the transferred concepts, and the drivers behind the policy transfer itself. The following sections include the key findings and their reflections, grouped in relation to the research-questions.

5.1. Disconnect in Istanbul's urban mobility network

As previously stated, the policy transfers are rarely successful in their application and adaptation to different locales. This is especially visible in the Global North to South policy transfers where the democratic structures and representation are not always comparable due to contextual differences. The study demonstrated the disconnectedness between the multi-level decision making structure in Istanbul, regarding urban mobility. As depicted in the stakeholder and social network analyses, the policymaking structure is dominated by an imbalanced distribution of institutional types. Many decisionmakers, particularly those from the central government, have medium to low interest in the urban mobility. This is concerning as the governance structure disproportionately allocates roles to these stakeholders while overlooking civil society organizations and grass-roots initiatives. A contrast emerges in the representation of mobility operators, who, unlike citizens, are directly involved in the Transportation Coordination Center (UKOME), highlighting the gap in democratic representation.

An additional insight into this governance structure is gained through the social network analysis which reveals a clustered yet sparsely connected network of urban mobility institutions in Istanbul. The low network density indicates a reluctance to fully connect these institutions, leaving their potential underutilized. The two most connected institutions, IMM and UKOME, are

unsurprisingly central to the network. However, the lack of institutional diversity in the clusters, as well as and the gravitation of the central government agencies in the cluster without IMM, accentuates the strained relationship between central and local governments. Such dynamic is less than ideal for the effective implementation of SUMP principles in Istanbul. Yet, the clusters almost perfectly mirrors the existing political rivalry in Istanbul, Türkiye. The local institutions in the IMM cluster and the central government institutions in the UKOME cluster resembles the opposition-ruling party polarization within the institutions. Here, the important addition is the presence of international institutions in the IMM cluster as their influence is exerted to the city via IMM, the policy transfer agent and entrepreneur.

Dolowitz & Marsh (2012) suggests that the hierarchy mode of governance presents a top-down policy transfer process while network governance is expected to present a bottom-up one. The discourse regarding the governance mode's impact on the policy transfer becomes rather complex in the Istanbul example. While the urban mobility is managed through a hierarchical system of governance, the clustered relationships create the imperfect networks which hinder the progress of the policy transfer without completely obstructing it.

5.2. Policy transfer agents and their motivations for urban mobility in Istanbul

The study revealed the actors and their motivations in the policy transfer of SUMP approach to Istanbul. At the heart of the Istanbul SUMP policy transfer is the IMM, emerging as the principal agent and transfer entrepreneur. IMM's crucial role is marked by its extensive network, as evidenced by social network analysis, and its partnerships with UN Habitat Türkiye and the Global COM, enabling cross-sectoral collaboration. This strategy further underlines IMM's commitment to assimilating the SUMP framework into Istanbul's urban planning landscape effectively.

UN Habitat Türkiye and the Global Future Cities programme by UK FCDO play important roles as strategic advisors and coordinators, respectively, showcase the crucial influence of international expertise and guidance. UN Habitat, in particular, has been instrumental in aligning the SUMP with global sustainability goals, demonstrating the impact of international partnerships on local urban planning endeavors.

The involvement of ARUP as the contractor and WRI Türkiye, an unofficial informant agent, adds another dimension to the policy transfer process. ARUP's dual function in bringing mobility planning expertise and navigating the complex financial relationships between local and central governments is evidence to the multifaceted nature of policy transfer. Meanwhile, WRI Türkiye's role in public relations and communication highlights Istanbul SUMP's efforts in engaging public opinion and awareness in policy advocacy.

Knowing the motivations and perceptions of the borrowing policy transfer agents is essential, as these concepts have a significant impact on the success of policy transfer processes (Dolowitz & Medearis, 2009). For Istanbul, study reveals that a diverse and multi-faceted set of motivations behind transferring SUMP policies. First, there is a shared recognition of the critical role of urban mobility in sustainable development, with a particular emphasis on addressing Istanbul's specific challenges such as congestion and excessive energy use. The transfer agents collectively acknowledge the need for a shift towards a more inclusive and participatory urban planning process, as embodied in the SUMP's approach, while IMM, UN Habitat Türkiye, and ARUP referring to this aspect more as a priority. This change signifies a move towards more citizen-centric governance models, reflecting a broader trend in urban planning.

The strategic alignment of SUMP with IMM's existing plans and broader climate change mitigation efforts further underscores a holistic approach to urban planning. The transfer process is not merely about adopting a new policy but integrating it within the existing urban framework, aligning with long-term sustainability goals.

While the transfer agents align significantly on their motivations behind realizing this policy transfer, there are diverging views regarding the foundation of the SUMP policy transfer. The EU is generally viewed as a source of know-how and best practices, yet some respondents claim that the main reason behind the policy transfer is the authorities' need for trying out the most evidence-backed plans and ideas (Interviewee 4). Across the interviewees, there is a general dismissal of planning approaches that are not from Europe, such as Southeast and East Asian countries dealing with the mobility issues of potentially similar megacities.

Perhaps one of the most important motivations revealed in this study is the need for enhanced communication and collaboration among stakeholders. While the cross-departmental team developed by the IMM for SUMP development presents an important example, the interactions between institutions and within institutions obstruct the dissemination of knowledge and ideas across the mobility stakeholders.

In conclusion, the policy transfer of Istanbul's SUMP is a powerful collaborative effort that blends local agents' motivation with international expertise and insights. It highlights the need for a comprehensive approach to urban planning that goes beyond traditional boundaries, incorporating sustainable, participatory, and integrative strategies. The Istanbul case provides a valuable model for other cities embarking on similar urban mobility planning initiatives, illustrating the dynamic interplay of local and global forces in shaping effective urban policies.

5.3. Drivers of the policy transfer

In the context of policy transfer, Dolowitz & Marsh (2012) suggests that transfer are often initiated with a specific policy issue in mind. This foundation is evident in the case of Istanbul SUMP as the transfer of policies is seen as a strategic response to the urban mobility issues.

In the transfer process, IMM has functioned as the bridge between international and local entities, as its' role aligns with Stone et al. (2020)'s interpretation of using policy transfers as tools to strengthen international relations. This is evidenced by statements from the interviews as the international institutions' respondents focus on the global environmental goals and local actors focusing on day-to-day urban issues. ,

Unlike the traditional view of seeing policy transfers in a coercive to voluntary spectrum, especially the ones between developed and developing countries, the Istanbul SUMP is characterized by autonomous decision-making, according to the actors' statements. This supports the study's perspective of treating the adoption of SUMP policies as an intentional activity by sovereign actors, as the transfer has a voluntary nature.

Moreover, the push and pull lens to the drivers provides a nuanced look into the policy transfer, allowing visibility to the interpretation of disseminated and attracted ideas and policies. This lens is crucial for the further examination of the underlying dynamics of the policy transfer process.

The identified six drivers behind the transfer process also aligns with the literature as it acknowledges variety of aspects: resources and authority of IMM, planning culture and individual responsibility, guidance and strategic framework provided by SUMP, adaptability of SUMP to the local setting, participation in regional and global networks, and EU funding.

Finally, the policy transfer of Istanbul SUMP incorporates an amalgamation of local and international dynamics, shaped by a variety of drivers.

5.4. Limitations

The generalizability of the results is limited due to various reasons. First, while case studies are a common method for analyzing policy transfers, the unique characteristics of the city and cultural components might hinder the ability to extrapolate on these findings. The unique characteristics of Istanbul, including its specific socio-political, geographical, and cultural landscape, mean that the insights gleaned here are particularly tailored to this megacity. The extent to which these findings can be applied to other urban contexts with differing characteristics is, therefore, constrained.

The study's reliance on qualitative data through interviews, content analysis, and stakeholder analysis introduces a degree of subjectivity. While these methods provide detailed insights, they are also prone to the biases of both interviewees and the researcher. The interpretations and conclusions drawn from this data might not fully represent all perspectives, especially those not prominently featured in policy documents or interviews.

Another key limitation is the dynamic nature of urban mobility and policy environments. The study captures a snapshot in time, and given the rapidly evolving nature of this field, some findings may not adequately represent future developments in urban mobility, both within Istanbul and in other global contexts. For example, a second and more comprehensive SUMP for Istanbul is already in the works during the writing of this thesis.

Lastly, the methodologies employed, including social network and stakeholder analysis, are bound by their theoretical and analytical frameworks. These methods may not capture the complete complexity of Istanbul's urban mobility governance and overlook certain actors in the process, thus constraining the breadth of these findings. For example, the network density indicators, while useful, rely on explicit mentions of collaboration in policy documents and may overlook more informal relationships.

Despite these limitations, the research remains a valuable contribution to the field of urban mobility governance. It provides a comprehensive case study of policy transfer in a complex urban setting, offering insights into the interplay of local and international factors in shaping urban mobility policies. The study's findings, grounded in a robust methodological approach, offer a nuanced understanding of policy transfer dynamics that can inform future research and practical applications in similar urban contexts.

5.5. Recommendations

There are various ways to build upon and utilize this research in the future for fellow researchers and policymakers. First and foremost, the policy transfer discourse can benefit from this case study to extrapolate on the transfer processes between different institutional dynamics and locales.

From an academic perspective, further research should consider the dynamic nature of urban mobility governance while identifying policy transfer agents. It is crucial to involve a more diverse set of stakeholders in the analysis to capture the full spectrum of perspectives and influences. Relying solely on formal policy documents may not adequately reveal the intricacies of the policy transfer process. Therefore, engaging directly with individuals involved in this process could unveil new insights, possibly uncovering underlying norms and ideas that shape public acceptance of approaches like the SUMP.

On the other hand, policymakers can use this and future studies to assess the necessities related to transnational policy transfers, especially in between two different institutional settings such as the EU and Türkiye. The relationship between the central and local governments can be scrutinized for the effective implementation of a (transferred) policy.

The discourse on the dissemination of EU policies, and specifically SUMP approach, can benefit from the case study as it provides empirical insights into the implementation of its policies in a different locale with a distinct governance structure, cultural background, and resources.

A significant extension to the study of urban mobility policy transfers, particularly in the context of Istanbul, would involve assessing the impact of such policy transfers. This assessment could include examining stakeholders' perceptions of the policy transfer's effectiveness and comparing Istanbul's experience with another megacity that has also implemented SUMP principles. These evaluations could be conducted quantitatively, using metrics such as changes in traffic congestion, air pollution levels, and public transport usage, to provide a more empirical understanding of the policy's impact and success.

Chapter 6. Conclusion

Through an examination of the underlying conditions and dynamics embedded in the urban mobility governance of Istanbul and the transnational policy transfer of Istanbul SUMP, the study contributed to the empirical understanding of policy transfer research.

The study addressed the main research question, "What drives the transnational policy transfer for urban mobility in Istanbul, specifically the Istanbul SUMP, and to what effect?" in a blend of local needs and international influences. The Istanbul Metropolitan Municipality (IMM) played a pivotal role, acting as a bridge between global sustainable urban mobility practices and Istanbul's unique urban landscape. The drivers for this policy transfer ranged from practical concerns like traffic congestion to broader aspirations like aligning with international environmental goals.

Throughout this research, a qualitative case study approach provided in-depth insights. By employing methods like stakeholder analysis and social network analysis, the study painted a comprehensive picture of the decision-making structure in Istanbul's urban mobility governance. However, the dynamic nature of urban mobility and policy environments, alongside the inherent limitations of qualitative research, underscored the need for continual update and broadening of perspectives in future studies.

This thesis contributes new knowledge to the field of urban mobility governance, in the context of transnational policy transfers. It highlights the complexities of adapting international urban mobility guidelines to a local context, influenced by unique cultural, geographical, and institutional factors. The findings underscore the importance of local-global interplay in shaping urban policies.

This research not only adds to the scholarly discourse but also provides practical insights for urban practitioners to grapple with the challenges of sustainable urban mobility. Furthermore, it offers a methodology to have a snapshot of their current situation regarding governance structures. The journey of Istanbul's SUMP, from an international concept to a localized action plan, is an example of the potential and challenges of policy transfer in an increasingly interconnected world with diverse structures at display. The study displays that in addition to quantifiable differences such as population size, vehicles miles, and congestion durations, the institutional setting is a distinct factor to effectively transfer foreign policies and approaches. However, despite the political and

structural challenges between institutions, Istanbul SUMP provides a working example of a transnational policy transfer.

In conclusion, the thesis answers the key questions about the policy transfer of Istanbul's SUMP and offers new avenues for future research in sustainable urban mobility planning. It emphasizes the importance of understanding policy transfers in diverse governance settings as seen in the case of the European Union and Istanbul, Türkiye.

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Chapter 8. Appendices

Appendix A. Content Analysis Data

Table 8.1. Regulations concerning urban mobility in Istanbul, adapted from (Canitez et al., 2019).

Law/Document	***Date***	***Main Objective***	***Relevance to Urban Mobility***	***Relevant Institution***
National Transport and Logistics Master Plan	2022	Being the implementation, monitoring, and evaluation tool of the national Transport policy, which aims to create a transportation and logistics system in Turkey that caters to societal needs, boosts economic development, and addresses environmental concerns.	As Target 4.5. indicates, the plan aims to be the cooperation tool between relevant institutions to increase smart and sustainable mobility in urban transport and logistics.	Ministry of Transportation and Infrastructure
5216 Metropolitan Municipalities Act	2004	Enhancing the operational efficiency and effectiveness of municipal services through the regulation of the legal standing of metropolitan municipalities.	It bestows upon metropolitan municipalities complete regulatory authority over urban transportation within the metropolitan region, encompassing both the urban and suburban areas.	Ministries of Environment, Urbanization and Climate Change; Interior Affairs; Treasury and Finance
3194 Spatial Zoning Act	1987	Regulatory framework for road infrastructure construction jurisdiction	It denotes the authority regarding constructions, involving project approval of transportation infrastructure.	Ministries of Defense; Environment, Urbanization and Climate Change;

				Interior Affairs; Transportation and Infrastructure
2918 Road Traffic Act	1983	Ensuring the road traffic safety in roads and highways and specification of traffic rules	Municipalities' traffic departments ensuring the regulation of flow and safety of traffic in urban roads	Ministries of Transportation and Infrastructure; Interior Affairs
19788 Regulation on Construction of Spatial Plans	2014	Establishing the principles and procedures for the creation and implementation of spatial plans that makes land use and construction decisions to protect and enhance physical, natural, historical, and cultural values, ensure a balance between conservation and use, support sustainable development at the national, regional, and urban levels, and create high quality, healthy, and safe environments	This regulation emphasizes the necessity of creating harmonious strategies with urban transport master plans and generates the framework for any plan involving spatial decision-making.	Ministry of Environment, Urbanization and Climate Change
Law 5393: Law Regarding the Function of Municipalities	2005	Demonstrating the areas of authority and responsibility for the municipalities in Türkiye	This law frames the area of responsibility for municipalities, in terms of repair and maintenance of road infrastructure, parking services, and payment management systems	Governor, Ministries of Environment, Urbanization and Climate Change; Interior Affairs; Industry and Technology

Marmara Region Spatial Development Strategic Framework Document	2021		This document supports the sustainable urban mobility research and policy development in the Marmara region	Union of Marmara Municipalities
Istanbul Parking Master Plan	2013	Creating a framework related to parking regulations, and payment infrastructure, related to traffic demand management.	This master plan emphasizes the importance of parking management and offers strategies to curb the parking related congestion and payment issues	IMM, ISPARK
Istanbul Bicycle Master Plan (revised)	2020	Creating an extensive bicycle lane network throughout Istanbul by incorporating existing paths and new routes to enhance the share of cycling in city's transportation.	The plan analyzes Istanbul's current and past situation to develop an action plan to support bicycle transportation and to contribute to sustainable urban mobility.	IMM, WRI Türkiye
Istanbul Pedestrian Master Plan	2019	Developing strategies to enhance the pedestrian mobility in Istanbul	The plan incorporates various urban mobility concepts such as functional pedestrianization, accessibility, children's urban mobility and integration with public transportation	IMM, WRI Türkiye
Istanbul Logistics Master Plan	2017	Developing strategies to increase the competitiveness in logistics sector in Istanbul while emphasizing a healthy spatial development	The Master plan is integrated with the 2011 Transportation Master plan of Istanbul.	IMM

Istanbul Public Transport Master Plan	2011	Developing strategies to manage the population increase and public transportation demand in Istanbul.	The transport master plan has been integral to the mobility planning and road infrastructure investments in Istanbul.	IMM
Istanbul Vision 2050 Document	2021	Aiming for a democratic, inclusive, participatory, fair, resilient, wealthy and transparent city planning in Istanbul.	The document summarizes the results of the workshops re	IMM, IPA, BIMTAS
Istanbul Climate Action Plan	2021	Developing strategies and actions to reach the 2050 Carbon neutrality goal of Istanbul.	The plan has been prepared in collaboration with the Istanbul SUMP to decrease the carbon emissions of the transportation sector in Istanbul.	IMM, Global Covenant Of Mayors For Climate & Energy, Covenant Of Mayors, Compact of Mayors, C40 Climate Leadership Group, Turquoise Cities (National group for Sustainable Urbanism Project)
Istanbul Local Equality Action Plan	2019	Developing strategies to promote inclusivity of urban areas in Istanbul with a focus on women's issues such as poverty, unemployment, etc.	The plan emphasizes the inclusion of underprivileged groups in the society to be represented in the urban management actions, such as mobility.	IMM, United Nations Population Fund

Istanbul SUMP	2022	Developing an efficient urban transportation system in Istanbul upholding the unique characteristics and values of the city	The first SUMP attempt in Türkiye, first SUMP developed for a megacity in the world.	IMM, British Embassy Ankara, UN Habitat, Global Future Cities Programme by UK FCO, ARUP

Appendix B. Stakeholder elaboration & Interest-Influence Classification

Table 8.2. Explanations for Stakeholder Classification

Stakeholder	***Type***	***Interest***	***Influence***	***Role in Istanbul UM Policymaking***
Active Living Association	Civil Society	Medium	Minimum	Civil society organization encouraging active modes of transport such as cycling, walking, etc.
AFAD (Disaster and Emergency Management Presidency)	Emergency & Disaster Management	Minimum	High	The disaster management agency of Türkiye, working in close contact with urban infrastructure management. Member of UKOME.
ARUP	UM planning & management	Medium	Medium	Contracting private company for the development of Istanbul SUMP
Bimtaş	UM planning & management	Medium	Medium	Urban mobility planning agency, auxiliary to the municipality. Member of UKOME
British Embassy Ankara	International	Minimum	Minimum	Coordination and communication point for the UK FCDO in Türkiye. Related to Istanbul SUMP
Coastal Guard	Emergency & Disaster Management	Minimum	High	Member of UKOME
Federation of Drivers and Cars Presidency	Operator	High	High	Represents the mobility providers' rights, member of UKOME.
First Army Command	Emergency & Disaster Management	Minimum	High	Related to transportation via highway patrolling. Member of UKOME
Gendermarie	Central	Minimum	High	Member of UKOME
General Directorate of Highways	Central	Medium	High	Member of UKOME
General Directorate of	Central	Medium	High	Member of UKOME

Infrastructure Investments				
General Directorate of Security of Istanbul	Central	Medium	High	Member of UKOME
General Directorate of State Airports Authority	Central	Minimum	High	Member of UKOME
Global Covenant of Mayors	International	Medium	Medium	International platform of collaboration for mayors, working on sustainability and development
Global Future Cities	Planning & Management	High	Medium	Programme for sustainable urban development. Related to UK FCDO & Istanbul SUMP development
Governorship of Istanbul	Central	Minimum	High	Central government representative in Istanbul. Member of UKOME
IETT	Operator	High	High	Transportation operator in Istanbul. Member of UKOME
International Association of Public Transport (UITP)	International	High	Minimum	International organization advocating for public transport and sustainable mobility
ISPARK	Operator	High	Medium	
Istanbul Metropolitan Municipality	Local	High	High	Through various departments, Mayor and the Council, IMM is the main authority responsible for urban mobility policymaking and implementation in Istanbul. IMM is the secretariat for UKOME platform.
Istanbul Planning Agency	Planning & Management	Medium	Medium	IMM auxiliary, planning agency for urban issues.
Ministry of Defense	Central	Minimum	High	Ministry of Defense is not an urban mobility focused institution according to their mission

				statement. Ministry of Defense has ties to UKOME through the First Army Command of Istanbul.
Ministry of Education[1]*	Central	Minimum	High	Member of UKOME
Ministry of Environment, Urbanization and Climate Change	Central	Medium	High	Legal authority over the construction of transport infrastructure. Member of UKOME
*Ministry of Family, Employment, and Social Services**	Central	Minimum	High	Member of UKOME
Ministry of Industry and Technology	Central	Minimum	High	Member of UKOME
Ministry of Internal Affairs	Central	Minimum	High	Member of UKOME
Ministry of Transport and Infrastructure	Central	Medium	High	Legal authority over the national transport and infrastructure. Various intersecting areas of jurisdiction within the functional urban area. Member of UKOME
Ministry of Treasury and Finance of Türkiye	Central	Minimum	Minimum	Member of UKOME
Port Authority	Central	Minimum	High	Member of UKOME
Programme for Promotion of Civil Society Organizations	Civil Society	Minimum	Minimum	Civil society organization working with others to promote sustainable urban mobility
TSR Anon. General Directorate	Operator	Minimum	High	Member of UKOME
Turkish State Railways	Operator	Medium	High	Semi-public railway corporation of Türkiye. Member of UKOME

UKOME	Planning & Management	High	High	Transportation coordination center of cities in Türkiye. Platform for urban mobility policymaking. Legal requirement to be established for urban areas
UN Habitat	International	Medium	Medium	International organization working on sustainable development. Agent related to Istanbul SUMP
Union of Marmara Municipalities	Local	Medium	Medium	Regional advisory for sustainability in urban areas of Marmara municipalities.
United Cities and Local Governments Middle East and West Asia Regional Organization	International	Medium	Minimum	International non-governmental organization. Awareness building efforts related to sustainable urban mobility
United Nations Population Fund	International	Minimum	Minimum	International organization working on human populations
WRI Türkiye	International	High	Medium	International organization working on awareness-building and knowledge-sharing regarding sustainability, urban mobility, and environment.
YADA Foundation	Civil Society	Minimum	Minimum	

Appendix C. Semi-structured Interviews

The interviewees were presented with the Informed Consent Form provided by Wageningen University & Research.

Table 8.3. Interview Consent Form

Statement of Informed Consent

Research Study Title:	Sustainable Urban Mobility Plan of Istanbul as an urban transport policy transfer
Researcher Name:	Çılga Buse Kızılay

Description of the study

You are being asked to take part in a study. This is a study about the analysis of Sustainable Urban Mobility Plan of Istanbul as an urban transport policy transfer. You are being asked to participate due to your professional relationship with institutions involved in this process. This information is important for this thesis which aims to highlight the networks and relationships necessary for the policy transfer.

You will be asked to participate in a semi-structured interview. It will take around 35 minutes to complete. Before signing, please read this form and ask any questions.

Risks and Benefits of Being in the Study

This study poses little to no risk to you. You may stop participating and answering the questions at any time. There are no direct benefits to you from taking part in the study. Your input will be important to research projects and publications by improving our knowledge of the policy transfer processes between different political systems. Your input is important to these discussions.

Confidentiality

- The data derived from this study may be used in student projects and published in academic journal article(s) but you will not personally be identified without your consent.
- We will videotape the interview. We will not take pictures, screenshots, or any type of still image. This recording will be used only for the transcription process.

Voluntary Nature of The Study

We thank you very much for your participation. Your decision to participate is completely voluntary. You may choose not to answer any part of the study or stop taking at any time without any penalty to you.

Contacts and Questions

If you have any questions, concerns please contact Çılga Buse Kızılay, cilgabuse.kzlay@wur.nl. If you have additional questions regarding your rights as a research subject, please contact the Wageningen University and Research Scientific Integrity Committee at cwi@wur.nl .

_____ Yes, I would like to take part in the research.

_____ No, I would not like to participate in the research.

Please write your name: _____

Date:_____

Signature:

_____

Recording Permission

I have been told that video recording may be taken during my participation but that these recordings are not for publication in any format. I have been informed that I can ask that the recording be turned off at any time. I agree to be videotaped under the above stated conditions.

☐ Yes

☐ No

_____

SIGNATURE

To be filled in by the researcher registering consent:

Date:_____

Signature:_____

Table 8.4. Semi-structured interview template for questionnaire

Focus	***No***	***Questions***
Introduction	1	Can you please introduce yourself and briefly describe your professional background and expertise related to urban mobility and transportation?
Perception of SUMPs	2	What is your perception of SUMPs (Sustainable Urban Mobility Plans)? How do you view their importance and impact on urban mobility planning?
	3	How did you first encounter SUMP, and what made you go in that direction?
Motivations for Policy Transfer	4	What were the primary motivations or drivers that led to the policy transfer in your opinion?
	5	Were there any specific incentives or benefits that influenced the decision to adopt the SUMP approach?
Compatibility and Alignment	6	How compatible do you think Turkey's efforts in this regard are with the EU's SUMP vision? Especially in the context of Istanbul, how much do these visions resemble each other?
	7	You mentioned connected plans to SUMP, both theoretically and conceptually. Can you tell us more about these plans?
Institutional involvement	8	Can you give a picture of the institutions that played a role in preparing and implementing the SUMP in Istanbul? Which institutions did you collaborate with during this process?
	9	Regarding the legal management of transportation in Istanbul, how did your collaboration with the decision-making stakeholders work?
Challenges and Impediments	10	How did you achieve the transfer of experiences from different parts of the world in the context of urban mobility planning in Istanbul?
	11	What kind of impediments did you experience during the SUMP preparation process in Istanbul?

	12	Are there any specific institutional, regulatory, or cultural obstacles that you have identified in the policy transfer process?
	13	From a cultural perspective, what are your thoughts on the implementation of SUMP and related plans in Istanbul?
	14	What do you think about the implementation of European Union projects in Istanbul?
	15	In your experience, what are the main factors or challenges that have impeded the policy transfer of Istanbul SUMP?
	16	Can you describe the information-sharing networks you use in this process, and how they contributed to the implementation of the plan?
	17	What are the private institutions involved in the SUMP process in Istanbul? How did you collaborate with them during the development of the plan?
Evaluation	18	How do you evaluate the existing mobility institutions in Istanbul in terms of their effectiveness and ability to address urban mobility challenges?
Conclusion	19	What are other aspects you would like to add or highlight about the SUMP process in Istanbul related to urban mobility planning in the city?