



Article Challenges in Land Use and Transport Planning Integration in Helsinki Metropolitan Region—A Historical-Institutional Perspective

Oya Duman *[®], Raine Mäntysalo, Kaisa Granqvist, Emily Johnson [®] and Niko-Matti Ronikonmäki

Department of Built Environment, Aalto University, 02150 Espoo, Finland; raine.mantysalo@aalto.fi (R.M.); kaisa.granqvist@aalto.fi (K.G.); emily.johnson@aalto.fi (E.J.); niko-matti.ronikonmaki@aalto.fi (N.-M.R.)

* Correspondence: oya.duman@aalto.fi

Abstract: Land use and transport integration has been considered a must-have approach in achieving sustainable urban development. However, successful applications of the concept have been few, as institutional reforms to support land use and transport integration have lagged behind. Accordingly, this article argues that understanding difficulties in land use and transport integration requires an analysis of the long-term evolution of formal and informal institutional frameworks in planning practices. For this purpose, this article presents a case study of land use and transport planning in Finland's Helsinki Metropolitan Region, which combines interview research on planners' perceptions with a document analysis of the historical trajectories of the region's plans, policy documents and related institutional and organizational changes. The historical-institutional approach of the article draws on discursive institutionalism as a novel analytical approach for studying how land use and transport integration is institutionally conditioned.

Keywords: discursive institutionalism; Finland; metropolitan governance; path dependency; transport system

1. Introduction

It is a widely held belief that spatial planning has a central role in moving expanding cities and society towards sustainable development [1–3]. However, a major challenge for spatial planning is addressing broad and complex sustainability issues that cross local borders, administrative levels and sectoral divides [4]. To grasp the complexity of sustainability issues, it has been argued that interventions from transport and land use planning fields should be combined as integrated strategies [5–11]. Such integrated strategies are expected to bring about coherent policy goals and means that can produce policy outcomes to tackle with specific large-scale problem contexts, such as sustainability [12] (p. 99). Nevertheless, policy integration between land use and transport sectors is not the only matter that is considered relevant for promoting more sustainable land use and transport planning. For example, Geerlings and Stead (2003) have suggested that inter-territorial dimensions (i.e., policy integration between different neighboring authorities) and vertical dimensions of policy integration (i.e., policy integration between different levels of government) should also be considered alongside inter-sectoral policy integration.

Despite the importance of addressing grand sustainability challenges, examples of successful applications of integrated land use and transport planning on the metropolitan scale remain scarce [12–15]. Beyond the literature on implementation barriers [10,14,16], several scholars have suggested adopting an institutional perspective to understand the difficulties in achieving land use and transport integration [7,9,17–21]. This is because institutions—understood as patterned sets of public norms and rules [22] (p. 2)—condition social interactions between individual or collective subjects and thus condition how integration may be achieved [21] (p. 85). The fundamental premise of integrated land use and transport planning is 'the management of cross-cutting issues in policymaking that



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transcend the boundaries of established policy fields and that do not correspond to the institutional responsibilities of individual departments' [14] (p. 321). From this perspective, there is a need to develop formal and informal governing processes as part of new institutional settings needed for land use and transport integration [7,10,17,23–25].

Irrespective of how commonly acknowledged the need is for integration, the way policy integration evolves and works in practice is determined by both formal and informal institutional contexts [15,20,21,26]. Formal norms are understood as explicit rules and procedures, while informal cultural norms can be understood as socially learned and often implicit rules and guidelines that structure action (e.g., routinised ways of using planning and analysis tools) and taken-for-granted normative guidelines, observable in practice [27]. Thus, as a novel policy idea, land use and transport integration has to not only inform a change in formal rules and structures but also further bridge the deep-seated cultural divide between land use and transport planning cultures. Within this perspective, van Geet et al. (2019) show how, due to the gradual nature of institutional change, the formal and informal institutions may misalign. Such institutional incongruence may occur, for example, when 'old' and 'new' institutions conflict or when actors apply and interpret the same institutional rules in different ways. Correspondingly, Rayner & Howlett (2009, p. 99) have argued that understanding the evolutionary nature of institutional change is key to understanding issues surrounding policy integration. This is because 'the design and implementation of integrated strategies is not taking place on a clean slate, but as always embedded in pre-existing contexts where relics of earlier policy initiatives are found in paradigms, institutions and practices. (...) Policy design is always about re-aligning or de-aligning and replacing certain elements of established regimes and overcoming the "stickiness" of these elements is critical to the success of policy integration.' [12] (p. 99).

Closely linked to the land use and transport integration agendas are the attention to more informal, collaborative planning approaches and the rescaling of planning to 'soft spaces' (i.e., informal and fluid areas outside the hierarchical administrative territories and formal processes of governance) [28] (p. 619). Regarded as more reflective of the real geographies of problems and potentialities, soft spaces have provided new impetus for strategic thinking and policy delivery outside the hierarchical administrative territories [28]. In the current stage of urbanization, metropolitan areas and city-regions have emerged as pivotal soft spaces where sustainability challenges are addressed with integrated strategies, bringing together different sectors, levels and territories of governance [29]. Vigar (2009) argues that the pursuance of integration is conditioned not only by the formal institutional infrastructure of laws, rules and responsibilities but also by "the soft institutional infrastructure of everyday practices, informal rules and cultures. That is, considerable cultural change would be needed among stakeholders engaged in the planning system and beyond for "integrated, spatial planning" to emerge in anything other than rhetorical terms" [15] (p. 1572).

The starting premise of this article is that the process of institutional change concerning land use and transport integration on the metropolitan scale is gradual. As such, transport and land use policy integration is a relatively novel policy idea and discourse, which has informed a change in the traditional institutional landscape of urban planning. In this institutional landscape, transport and land use planning have developed as separate policy sectors through their own paths, with distinct formal and cultural norms. Previous studies have broadened the understanding of how formal and informal institutional contexts interplay and shape policy integration in land use and transport planning [20,21,26]. Yet, little is known about these contexts' historical developments and how they have shaped present-day integrated planning processes. Therefore, this article aims to exemplify through a case study that comprehending contemporary difficulties in land use and transport planning integration needs to be informed by an analysis of the evolution of the formal and informal institutional framework in planning, which conditions present-day attempts to introduce integrated metropolitan policies. The case is the recent Land Use, Housing and Transport plan (MAL 2019) of Finland's Helsinki Metropolitan Region (HMR) and the perceptions of planners in their attempts to integrate land use and transport planning approaches in this plan. The significance of the MAL 2019 plan lies in it being the first plan in the long history of HMR planning to bring together land use and transport planning (and further housing planning) issues into a single plan. In analyzing the planners' perceived difficulties in these attempts, this study looks for historical-institutional explanations. For this purpose, this study combines interview research on the planners' perceptions on the process of making the MAL 2019 plan with document analysis of the historical trajectories of land use and transport plans, policy documents in the region and related organizational and legislative changes from 1990 to 2020. Similar to some earlier studies, this case study highlights the importance of focusing on institutional frictions behind land use and transport planning integration difficulties [20,21,26], but this paper also aims to show the potential of discursive institutionalism as a novel research approach for institutional analysis.

In the next section, the case study context is presented in more detail, including the analytical approach, research methods and data. Then, the results of the case study are presented. The perceived key challenges in land use and transport planning integration in the process of the MAL 2019 plan are identified and connected to institutional complexities that emerged through certain historical trajectories. The study concludes with discussion on the research approach, empirical findings and notions on this study's contribution to the research field.

2. Materials and Methods

2.1. Critical Case Context

The MAL 2019 planning process is a critical case [30] to examine to demonstrate that present-day difficulties in land use and transport planning integration on a metropolitan level are shaped by a historical evolution of the formal and informal institutional landscape, where the planning process takes place. As shown by the analysis presented in Section 3, being the first integrated land use, housing and transport plan in the HMR, the MAL 2019 planning process appears as a novel approach to the integrated challenges experienced since the 1990s in the HMR.

As seen in Figure 1 below, the HMR is located in Southern Finland and consists of 14 municipalities (4 Capital Region Municipalities and 10 surrounding municipalities known as KUUMA municipalities). Being the home for almost 1.5 million residents and 700,000 jobs [31] (p. 7), the HMR is the most populous city-region in Finland. It is estimated that in 2050, there will be approximately 2,000,000 residents and 1,000,000 jobs in the HMR [31] (p. 7). Due to such a growth expectation, the future planning of the HMR is of critical significance. The future is planned with a strategic plan for the 14 municipalities, called the MAL 2019 plan, which outlines how the HMR will develop from 2019 to 2050. The MAL 2019 plan is an integrated land use, housing and transport plan that brought together representatives from the municipalities in the city-region, Helsinki Region Transport (HSL in short, Helsingin seudun liikenne in Finnish) and state agencies and ministries during the planning process between 2016 and 2019.

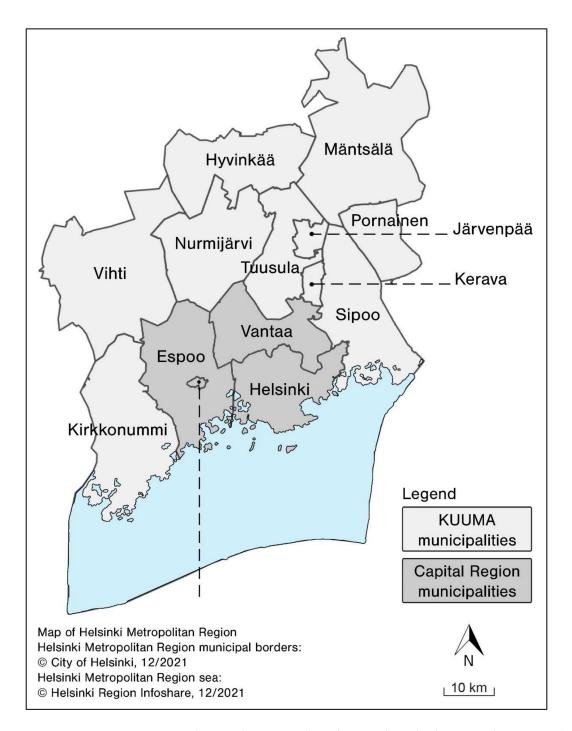


Figure 1. Map showing the municipalities forming the Helsinki Metropolitan Region (Authors' own work). Capital Region and KUUMA Region municipalities together form the Helsinki Metropolitan Region. This map illustrates the differently overlapping institutional boundaries of the intermunicipal cooperative organs within the Helsinki Metropolitan Region.

2.2. Analytical Approach

In order to study the institutional change of land use and transport integration in the HMR, the historical-institutional approach of this article draws on discursive institutionalism [32] (p. 304). As an institutionalist approach, discursive institutionalism has emerged relatively recently to complement the three 'New Institutionalist' approaches, namely, rational choice, historical and sociological institutionalism. As an approach, it shares many core premises of sociological institutionalism, such as perceiving institutions foremost as culturally constructed norms, cognitive scripts and moral templates [27,33,34]. In other

words, both approaches associate institutions ultimately with deep-seated ideas and discourses that provide 'frames of meaning' that condition agents' thoughts and actions [32] (p. 320). However, discursive institutionalism provides additional conceptual means for examining these frames as evolving constructs of meaning. It depicts institutional change as a complex, evolutionary process, in which policies, formal rules and cultural norms all evolve in relation to new ideas, yet in different ways and with different paces [35] (p. 853). Indeed, discursive institutionalism suggests that while situated policies may change rapidly in response to new ideas, such as integrative land use and transport planning, the related institutional frameworks are rather slow to evolve [36]. Therefore, the approach is helpful in comprehending why, in the early stages, novel policy ideas may not be effective in generating successful policy transformation.

In this sense, discursive institutionalism comes close to historical institutionalism [37] and related institutional path dependency analyses. The idea of path dependency was introduced by Arthur (1994) [38] in the field of economics, and it was later applied by Pierson (2000) [39] in the realm of political studies. It is used to explain how random incidents and past events in an organization's or system's past can lock its historical evolution to a certain path which may be exceedingly challenging to change. In path dependency analysis, certain key events or incidences are identified as turning points directing the path. Such turning points are called 'critical junctures'. They are momentary periods of openness which may allow the system, or organization, to jump to an alternative development path, but they may also, conversely, lead to the narrowing down of its existing path. When critical junctures function in the latter way, increasing the path dependency of the organization, they may result into 'lock-ins', such as co-fitting organizational arrangements, legislative norms and professional concepts and tools which further reinforce the given historical development path. According to Pierson (2000), political institutions and organizations have several characteristics that make them especially prone to path-dependent processes. These include the prominence of collective activity, the use of political authority in magnifying power asymmetries, the commonly high ambiguity of political processes and political-administrative institutions' resistance to change. The institutional perspective of path dependency focuses on mechanisms of self-reinforcement in institutions. These mechanisms may concern the functional role the studied institution gains in the broader context of co-existing institutions, the institution's legitimation when it is increasingly perceived as the only legitimate authority in its domain or how the institution distributes power among actors, as the dominant groups tend to support institutional settings that maintain and foster their power [40]. Path dependency analysis is applied also in land use and transport planning research [41–50].

2.3. Methods

The case research combines expert interviews and document analysis. The expert interviews provided insights about the perceived key challenges in land use and transport planning in the MAL 2019 plan-making process. Twenty-four semi-structured expert interviews were conducted during September 2020 and March 2021. The interviewees were public officials who had been directly involved in the MAL 2019 planning process. First, to select the interviewees, key organizations involved in the process (from the ministries, state authorities, regional bodies, city-regional bodies and municipalities-both Capital Region and KUUMA municipalities) were identified by the authors. Then, a land use/housing expert and a transport expert were selected from each identified organization, whenever applicable to the organization's function. As an exception, all metropolitan transport experts were included in the selection due their extensive involvement with the MAL 2019 planning process. This method of interviewee selection resulted in 26 interviews planned, with 24 interviews being conducted at the end without compromising the comprehensiveness of the research (see Appendix A Table A1 for the list of interviewees). Interviews were conducted in two stages. First, 12 interviews were conducted to draw insights on the general issues surrounding the MAL 2019 planning process. Then, the remaining 12 interviews were

conducted to draw more specific insights on the issues identified as key after the first set of interviews. The overarching subject of all interviews was interviewees' own experiences in attempts to integrate land use, housing and transport throughout the MAL 2019 planning process. The main interview themes concerned the main changes in the process when the MAL 2019 planning process is compared to the previous planning processes; the interviewees' own interpretations of the function and significance of the MAL 2019 plan; and their reflections on their own involvement in the process, their collaboration with actors from other organizations and the role of individual sectors of land use, housing and transport in the context of land use and transport integration. All interviews were recorded and fully transcribed, and a content analysis was conducted using the transcripts.

As the second methodological component, the historical document analysis, conducted between June and September 2021, provided the information for constructing the historical path of the development of land use and transport integration in the HMR. Since the insights from the interviews pointed towards key historical events and trajectories, the historical document analysis was thematized. In the vein of path dependency analysis, this analysis examined institutional and organizational changes and the evolution of planning arrangements and contents to identify critical junctures and lock-ins. To perform such analysis, the selection of the documents to analyze started with the city-regional level transport system plans and land use housing plans produced for the Capital Region or the Helsinki Metropolitan Region in the period of 1990 to 2020. Building on these documents, acts and laws that came into force between 1990 and 2020 and were estimated to have an impact on the formal institutionalization of land use and transport integration in the HMR were also included in the document analysis. Predecessors and successors of laws and acts were mapped out to identify the key laws and acts. In addition, the framework programs of the plans explaining the planning processes were also analyzed to build a historical trajectory of the operationalization of land use and transport integration ideas in terms of process organization. Finally, to fill in the knowledge gaps, other documents such as government records, implementation programs and meeting notes of different committees were also included in the documents list as supplementary documents (see Appendix A Table A2 for the list of documents analyzed).

3. Results

This section presents the interviewees' perceived difficulties in MAL 2019 land use and transport planning integration and their historical underpinnings. These difficulties can be broadly categorized into two main themes. The first theme concerns the differences in the institutional authorization of metropolitan planning between the transport and land use planning sectors and the corresponding unevenness of resources when comparing HSL's metropolitan transport planning resources to those allocated by the municipalities for metropolitan land use planning. The second theme concerns a perceived bias in the MAL 2019 planning process and the resulting plan. The planning work was perceived as transport-heavy, despite the shared intention of making the plan as a balanced roadmap for land use, housing and transport development in the HMR. In the next section, each theme is reviewed separately: (1) unevenness of authority and resources and (2) unevenness of planning approaches. The related historical-institutional trajectory is presented first, then the perceived difficulties in land use and transport planning integration that relate to institutional complexities resulting from the trajectory.

3.1. Unevenness of Authority and Resources

3.1.1. Regulation and Organization of Planning 1990–2020

Intersectoral planning in some form has been conducted in the Helsinki Capital Region and broader Metropolitan Region since the 1970s; however, the idea of integrating transport and land use planning gained momentum in Finland, including the Capital Region, in the early 1990s. At that point in time, the Helsinki Metropolitan Area Council (YTV in short, Pääkaupunkiseudun yhteistyövaltuuskunta in Finnish) had been operating for nearly 20 years as the statutory cooperation body for the cities of Helsinki, Espoo, Vantaa and Kauniainen (known as Capital Region municipalities, see Figure 1 in Section 2.1.). Among other tasks, the YTV managed cooperation in public transport between the member municipalities, including drawing up a transport system plan for the Capital Region and promoting its implementation. In 1990, the YTV began drafting the first transport system plan, titled PLJ 1994, for the four Capital Region municipalities based on a specific legislation. Following the drafting of PLJ 1994 until the abolition of the YTV in 2009, the YTV was the main responsible party for drafting the mandatory transport system plans for the Capital Region municipalities. To complement the mandatory transport system plans with land use and housing perspectives, the YTV also drafted two voluntary land use visions for the Capital region.

In parallel to the activities of the YTV, the municipal funding schemes underwent major transformations in Finland in the 1990s, especially in relation to how the municipalities received support from the state. An important aspect of the Finnish municipal system is that the municipalities enjoy broad self-governance. Accordingly, municipalities are responsible for a wide range of services, such as healthcare, education, technical infrastructure and land use planning. They can also levy and collect taxes, which is a key element in municipal self-governance; however, the state must also ensure that municipalities have sufficient means to fulfill their duties, via a state-subsidy system [51]. Against this background, the changes in the municipal funding schemes that took place in the 1990s meant more freedom for the municipalities and, at the same time, more responsibilities. Subsequently, the mismatches between municipal territories and functional urban regions, and having dozens of too-small municipalities to take on the heavy burden of municipal service responsibilities, led to the enactment of the temporary Act on Restructuring Local Government and Services (PARAS Act in short) (Act 169/2007).

The PARAS Act was in force from 2007 to 2012. The PARAS Act essentially aimed at enhancing municipal service delivery through municipal restructuring and incentivizing not enforcing—municipal mergers, among other measures. Especially, the seventh section of the Act was of critical significance in fostering land use, housing and transport planning integration among city-region municipalities. It was one of the key legislative supports to such sectoral integration, citing sustainability concerns, functionalist concerns of uncoordinated planning leading to financial issues as well as concerns of unnecessary competition for taxpayers between the city-region municipalities. With the seventh section, the PARAS Act required the 17 largest city-regions in Finland, including the Capital Region, to prepare city-regional plans which deal with issues of land use, housing and transport in an integrated manner.

As the PARAS Act had been in the making for many years, the 14 municipalities in the HMR had already signed a cooperation agreement in 2005 focusing on land use, housing and transport, as well as other metropolitan services, to promote shared interests in the metropolitan region. This agreement led to the foundation of the Helsinki Region Cooperation Assembly (HSYK in short, Helsingin seudun yhteistyökokous in Finnish), a cooperative body of decision makers of the 14 municipalities of HMR. In 2006, the HSYK decided to draft a joint strategic city-regional plan in response to the seventh section of the PARAS Act, on coordinating land use, housing and transport city-regionally. This plan, titled KPS 2007, was approved in 2007. Even though the PARAS Act required a cityregional plan to be made by the 4 Capital Region municipalities only, the HSYK decided to include all 14 member municipalities in joint land use, housing and transport planning. The reason for that is, arguably, that it was obvious to the municipalities that the functional urban region around Helsinki extends far beyond the Capital Region. One may also speculate that the 14 municipalities had a joint interest in displaying good collaboration as independent municipalities without the need to merge into a single metropolitan city. At the time, metropolitan policy was emerging as an issue in the central government; it was first mentioned in 2007 in Prime Minister Vanhanen's second government program. In parallel, it is also noteworthy that the Land Use and Building Act, defining the land

use planning system in Finland, was amended in 2008 (Act 1129/2008) and again in 2016 (Act 196/2016) to require the Capital Region municipalities to draw up a joint master plan. However, as the amendment does not give a deadline for having the joint master plan made, the municipalities have taken no action to follow that legal obligation.

Around the same time that the HSYK was founded, the formal institutional framework of transport planning underwent changes, leading to the abolition of the YTV and the enlargement of the city-regional cooperation area. In 2009, the Act on Cooperation in Municipal Waste Management and Public Transport in the Capital Region (Act 829/2009) dismantled the YTV. The new act transferred the transport system planning responsibility, as well as the procurement of transport services and the collection of public transport fares, from the YTV to a consortium of municipalities. Subsequently, Helsinki Region Transport (HSL) was founded, becoming operational in 2010. Like the PARAS Act, this Act required only the Capital Region municipalities to create a municipal consortium but allowed additional municipalities to join. Accordingly, HSL began with six member municipalities (Helsinki, Espoo, Vantaa, Kauniainen, Kerava and Kirkkonummi), having three more municipalities (Sipoo, Tuusula and Siuntio) join later. Those nine municipalities now form the so-called public transport zone called HSL-area. The newly founded HSL took on the responsibility for drafting the first transport system plan for the Helsinki Metropolitan Region, titled HLJ 2011. Despite HSL including only six municipal members at the time, the HLJ 2011 plan nevertheless encompassed all 14 of the HMR municipalities. Thus, the HSL's transport system planning in the city-region was legally authorized, regardless of it extending beyond the HSL-area. City-regional strategic land use planning, however, lacked such a strong formal institutional status. In addition, in 2005, transport system planning in the HMR became subjected to an environmental impact assessment procedure, as regulated by the Act on Environmental Impact Assessment of Plans and Programs, the so-called SOVA Act (Act 200/2005). Hence, HSL is also responsible for conducting the environmental impact assessment of the transport system plan, which, arguably, has been a key factor in the development of integrated land use and transport system planning practices in the HMR.

These developments created a peculiar formal institutional framework. Land use planning is enacted in voluntary cooperation between the 14 municipalities of the HMR, unaffected by the weakly outlined requirement in the Land Use and Building Act, with HSYK as their cooperative organ. Transport system planning, however, is undertaken by HSL, with a formal, law-defined institutional authority to enact transport system planning in the metropolitan region. It is noteworthy that soon after the establishment of HSL, the central government made the initiative for the establishment of a metropolitan land use planning authority. Nevertheless, such a metropolitan authority has not been established so far, arguably due to the political will to defend the self-governance rights of municipalities and the associated land use planning and tax collection rights [37,52].

3.1.2. Perceived Difficulties in Land Use and Transport Planning Integration

The operations of HSL and the municipalities are regulated by different legislations, addressing their different levels of governance: city-regional and local. HSL takes part as a metropolitan organization whose authority covers metropolitan-level transport system planning, whereas the authority of land use planning belongs to the municipalities, each limited to their own territories. The city-regional transport system planning is formally institutionalized by legislation, whereas the current practice of city-regional land use planning is informal—a soft space for the municipalities' voluntary collaboration. As a result, HSL and the municipalities have different levels of resources that they can allocate to integrated land use and transport planning. The legal responsibilities of city-regional transport system planning have led to the formation of a corresponding agency (HSL) with allocated funding, whereas voluntary city-regional land use planning has had to rely on the municipalities' varying allocations of time and resources for municipal land use planners to engage themselves in city-regional land use planning. Therefore, during the

MAL 2019 planning process, HSL—as the only stakeholder with a legal authority over city-region level planning and, thus, relevant resources—was able to progress at their own pace. In turn, the municipal planners had to follow to the best of their abilities and rely on HSL's expertise and coordination whenever they could. Consequently, as explained by interviewees below, municipal actors had limited opportunities to spare resources to MAL 2019 planning, leading to difficulties in fully and meaningfully engaging in the planning process:

"To be honest, my main goal in this MAL work was just to keep up, just to keep up, just to hang on. There were so many parts in this work, the amount of material was insane. And the rhythm was super fast. And at the same time you don't leave [your other duties] for MAL work, you have so many tasks to do, so many other works to do. And the schedules are super tight. So the way I see it, the only way to survive is to focus on the main things and stick with those. Because if I expand, I'm doomed. So I really have to clarify my thoughts and focus on things that matter the most. And for me, MAL work is all about [subjects related to my specific role in the municipality]. If I expand my view wider, I'm completely lost, because the time you have [available for] this work, it's ridiculously small."

-municipal land use and housing expert

"The commitment to the process is very hard to [make] if you really don't have time to participate and do the work between the meetings actually, that's the most important thing. There's no point if you just can attend a meeting and do nothing between the meetings."

-municipal housing expert

3.2. Unevenness of Planning Approaches

3.2.1. Plans and Planning Processes 1990-2020

Granqvist et al. [53] (p.13) have described how the idea of land use and transport integration surfaced in Finland during the preparations for the Rio Earth Summit in 1992, following the broader international trend [54]. This discussion provided a critical juncture for the development of a new policy practice of transport system planning, in which the issues concerning land use and transport planning integration would be addressed together. Consequently, the first city-regional transport system plan considering land use and transport integration was drafted by the YTV for the Capital Region. The PLJ 1994 plan included the idea that land use should be densified for reducing mobility: "Densification of the urban structure will be enhanced so that the need for mobility will decrease and so that the possibilities for public transport and light traffic will improve" [55] (p.6). This general objective illustrates the land use and transport integration between land use and transport planning, as well as with decision making, was not sufficient and that the plan did not really include any suggestions of how the densification will be achieved in its implementation program.

The next PLJ 1998 plan was essentially an update of the PLJ 1994 plan, with the same objectives. However, more emphasis was put on land use and transport integration during both the planning process and in defining concrete measures for achieving the objectives. The drafting of the PLJ 1998 was linked to the simultaneous drafting of the land use and housing strategy for the Capital Region, called PKS 2020. Both plans were drafted by the YTV, yet in different departments, although only the transport system plan was legally mandated. The population and land use forecasts used in PKS 2020 were also utilized during the drafting of the PLJ 1998. In addition, a land use and transport interaction computer model called MePlan [56] was introduced for assessing the impacts of land use and transport development in the different parts of the Capital Region.

The PLJ 2002 plan and the accompanying PKS 2025 land use and housing strategy relied on the same objectives, measures, and organization as their predecessors. However,

despite the PLJ 2002 planning process including land use projections, there was not a real iteration on land use planning alternatives for the Capital Region. Rather, the reason to include land use input was to have a credible premise for transport system planning. The state also became involved in the process, as some of the transport infrastructure projects required state funding. To agree on the implementation investments for the transport system measures of the PLJ 2002, the Capital Region municipalities and the Finnish State (represented by the Ministry of Transport and Communications) signed a Letter of Intent.

The following PLJ 2007 was also accompanied by a Letter of Intent (signed in 2008), which was essentially an update of the previous letter of intent. One of the five strategies of PLJ 2007 recognized land use policy as a core measure. Nevertheless, the drafting of the plan only included land use projection. The notable difference between the PLJ 2007 plan and its predecessor was that its impact assessment procedure followed the newly enacted SOVA Act. In addition, unlike the previous transport system plans, its development was supported and complemented with multiple processes taking place simultaneously. The newly founded HSYK prepared a city-regional land use plan, titled KPS 2007, for improving the coordination of land use, housing and transport in accordance with the PARAS Act. KPS 2007 was accompanied by an implementation program, titled MAL 2017. In addition, a land use and housing implementation program, titled MA 2017, was signed between the HMR municipalities and the state to increase housing supply in the region. KPS 2007, MAL 2017 and MA 2017 were all prepared for the 14 municipalities of the HMR through the HSYK, even though PLJ 2007 was prepared only for the Capital Region municipalities through the YTV. With this planning cycle, metropolitan level voluntary land use planning and housing policy work in the city-region was transferred from the YTV to the HSYK.

The HLJ 2011 was the first transport system plan that was prepared for all 14 municipalities of the HMR and drafted by HSL. Its preparation suggested a shift towards more integrated land use and transport planning processes for the HMR, citing the integration of land use and transport as one of the key elements emphasized in the plan. Nevertheless, the role of land use planning still remained limited. This is exemplified by the fact that out of 11 studies produced to develop the necessary background knowledge for the drafting of HLJ 2011, only one study had a clear land use planning focus. Following HLJ 2011, a MAL Letter of Intent 2012–2015 was also signed to bring land use, housing and transport projects and investments together for the first time, with a broader set of signatories, including respective ministries and state agencies, the municipalities of the city-region, and HSL. Following HLJ 2011 and the MAL Letter of Intent, a new implementation program, titled MAL 2020, was also prepared as an update of the previous MAL 2017. Despite organizational changes, the planning process remained similar overall, with the HSYK and HSL collaborating through their different committees and departments. The impact assessment of HLJ 2011 followed the guidelines of the SOVA Act and the associated Decree and was conducted using a transport demand model system called HELMET, as well as different GIS software. Under different names, HELMET has been in use in the last decades by the transport planners in the region and it has, arguably, shaped the practice fundamentally.

The next transport system plan, HLJ 2015, was prepared simultaneously with the Helsinki Metropolitan Region Housing Strategy, called ASTRA 2025, and the Helsinki Metropolitan Region Land Use Plan, called MASU 2050 for the first time. These were collectively aimed to form a basis for the MAL Agreement 2016–2019, continuing the MAL Letter of Intent policy. Again, despite significant change in the outputs and clear intention to bring the land use, housing and transport sectors together, the planning process remained essentially the same, with HSL working on HLJ 2015 and municipalities on ASTRA 2025 and MASU 2050.

Finally, the MAL 2019 Plan was prepared for the first time as a joint plan for strategic land use, housing and transport, to form a basis for the MAL Agreement 2020–2031. The main idea behind the process design was to bring together the simultaneous, but thus far separate, processes of land use, housing and transport system planning. Accordingly, specific working groups containing experts from municipalities and HSL were formed:

a land use group, a housing group and a transport system group. Each group, containing representatives from other groups to ensure cross-sectoral interaction, came together periodically as the larger MAL Project Group. This group also included more municipal and HSL experts, representatives from state and regional authorities, academia and others. In order to tackle the complexity of this extensive work, HSL assumed a larger role as the coordinating body for the whole land use, housing and transport system planning work, whereas the HSYK narrowed its role as a cooperative organ. This organizational change provided a critical juncture for fostering the path dependence of transport-heavy metropolitan planning in the HMR.

Within the MAL 2019 planning process, the SOVA Act required the impact assessment to be made only for the transport system side of the plan. Therefore, the impact assessment was conducted mainly by the HSL experts. The portion of the environmental impact assessment required by the SOVA Act was mainly conducted via GIS-based environmental impact analyses, whereas the larger impact assessment of the MAL 2019 plan was conducted using the HELMET transport model. The latter procedure has been especially decisive in the MAL 2019 planning process. The plan was drafted in three iterations, with each iteration ending with an impact assessment and being used for improving the draft accordingly. Nevertheless, land use and population growth had to be fixed in the beginning as is the requirement of the four-step transport model HELMET, without allowing for an extensive use of deliberated land use and housing planning decisions by the land use and housing working groups as the planning process advances. This lock-in of the (1) legislative target and coverage of the plan's impact assessment, (2) transport model system providing the toolkit for manipulating data in conducting such an impact assessment and (3) the transport planning expertise needed for this, determined the path dependence of the primacy of transport-related data and expertise in the impact assessment of the plan.

3.2.2. Perceived Difficulties in Land Use and Transport Planning Integration

In their recollections of the MAL 2019 planning process, the interviewed planners described a planning ecosystem in which the transport system planning methods and mentalities prevail over the land use planning approach, due to legislative requirements and historical path dependencies of transport system planning in the HMR. Overall, as explained by an interviewee below, the MAL 2019 plan is perceived to be quite inclined towards transport issues when compared to land use issues:

"This MAL regional plan is now too much oriented in transportation ... The part of the land use, for example, it's actually very, very small, if you compare it with the transportation, or that role the transportation had in the MAL 2019 plan. [The plan] is not the picture of the region. It's more like [a] list of transportation development procedures now. And I don't think the outcome is very good, if you think about the purpose this MAL process was created in the first place for."

-municipal land use and housing expert

The limitations perceived in the MAL 2019 plan were also identified in the planning process itself when it comes to attempts to reach the level of city-regional land use guidance that would be comparable to the level of city-regional transport system guidance. As described by an interviewee below, the planning method, through which the two forms of sectoral expertise were brought together, was influenced by the HELMET transport demand model system in use:

"If you look at MAL 2019, you could get the impression that now it's really integrated. But maybe it's important to understand what is integration really . . . It's not just the same thing as cooperation. It's taking into account from the beginning different possibilities in land use and transport. And now, the situation has not changed in that way that land use plans are the background and you are getting those [population growth] numbers and the plans, and then you are putting your transport system [on top of it], [to see] how to develop [the transport system] in the future. I think the real integration should be that you are together looking at: We have this kind of transport system and nowadays we have this kind of land use and we want to get this kind of strategic things to happen in this region, for example, more workplaces, more [this and that]. And then you are looking at how we can do that together using land use, transport and services also, and trying to find a solution. But that is not the way we are doing that."

-metropolitan land use and transport expert

Nevertheless, as explained below by an interviewee, the transport model system in use (HELMET) has been employed by transport planners in the HMR for many decades now, with incremental elaborations on the way—and the pace of change of such culturally institutionalized planning tools might not match with the pace of institutionalizing certain planning ideas, such as integrated land use and transport planning:

"When we have these goals [for the MAL 2019 plan], and we have the specific measures, and tools that we use for those measures ... The biggest tool is the transport model we use. So that already sets some limitations for the kind of impact assessments [we can make] ... Obviously, we do have different other tools as well, but still [the transport model] is the main tool that is used for most things. So in an optimal way, it should be that the goals, objectives and [measures] should be done separately from the tools. And then we should choose what tools we use for these objectives and [measures]. But, we know that that can't be done, because building a tool like HELMET is tens of years of process. So we can't [use] all the tools that we need. We have to use what we have."

-metropolitan transport expert

4. Discussion

The analysis presented in this article reveals how the planners' experienced difficulties in land use and transport planning integration in the MAL 2019 planning process are affected by historical-institutional complexities both in sectoral and scalar terms. Accordingly, the planners' perceived difficulties in MAL 2019 planning related to (1) the unevenness of authority and resourcing of integrated land use and transport system planning and (2) the unevenness of transport and land use planning approaches have historical underpinnings.

Firstly, the legal authorization and resourcing is uneven, not just between the two planning sectors but between the planning scales as well—transport system planning being authorized and resourced city-regionally and land use planning being resourced locally. A critical juncture fostering the authorization and resourcing of the transport system side of planning at the city-regional level was the enactment of the Act on Cooperation in Municipal Waste Management and Public Transport in the Capital Region (Act 829/2009) in 2009 and the following establishment of HSL. Accordingly, the results show that the formal institutional changes in metropolitan transport system planning have been rather straightforward in relation to corresponding land use planning. The YTV had been working on the Capital Region transport system planning for many decades, establishing its institutional role as the main actor in city-regional transport system planning, until the foundation of HSL. From that point forward, HSL has been building steadily on the YTV's transport system planning legacy, despite the expansion of the planning area to include the entire HMR. This gradual formal institutional change has also been strengthened by legislative reforms that have required the drafting of a city-regional transport system plan and the assessment of its impacts. In addition, as shown in the historical analysis of planning documents and processes, the informal institutional changes have also followed a similar path. The organization of transport system planning by the YTV was carried forward to HSL, despite the increasing connections to land use and housing planning.

On the other hand, the changes concerning metropolitan land use planning have been institutionally much weaker, relying on the municipalities' voluntary cooperation in the soft spaces of the Capital and broader Metropolitan Regions. Due to the municipalities' unchanged self-governance rights on land use planning, the actors working on metropolitan level land use planning (i.e., YTV and then HSYK) have had limited possibilities to further

strategic land use planning on that scale, despite the enactment of the PARAS Act and the amendments of the Land use and Building Act. As shown in the historical analysis of planning documents and processes, there have been many planning documents produced and organizational arrangements made to guide metropolitan level land use planning alongside transport system planning. While the initiatives have encouraged joint strategic land use planning as an idea, these efforts have often been marginalized by political maneuvering and defensive routines by the local governments [35,50]. For example, the Capital Region municipalities have not taken any action to draw a legally-binding, joint city-regional land use plan despite the legislation. In turn, the central government's initiative of establishing a metropolitan land use planning authority was turned down by the local governments. Hence, these initiatives did not emerge as critical junctures to push the HMR governance system to an alternative development path. Consequently, the soft space of metropolitan land use planning has been institutionally too weak to override local government-driven land use planning that has relied on the prevailing statutory land use planning system and the planning monopoly it assigns to the local governments.

The unevenness of authority relations in metropolitan transport system and land use planning is, therefore, directly connected to differences in the institutionalization of transport and land use planning at the metropolitan level. The effectiveness and binding nature of the transport system side of the MAL 2019 plan is grounded on the formal institutionalization of HSL by the related legislation. In turn, the land use side of the MAL 2019 plan does not have such institutional support in metropolitan-level land use planning, as the local governments of the 14 municipalities continue to have undivided authority over land use decisions within their own territories. This unevenness in authority relations regarding the institutionalization of the two planning sectors at the metropolitan level has led to uncertainties in gaining commitment from the municipalities towards the implementation of the plan in view of their own municipal land use planning decisions. The MAL agreement policy represents an attempt at 'soft institutionalization' of tying economic incentives by the state to the implementation programming of the metropolitan integrated plan, such as MAL 2019. However, being a soft institutional instrument, the MAL agreement policy lacks the capacity to commit either the local governments or the central government to obey the agreement. Failing to follow the agreement is not sanctioned. Nevertheless, the MAL agreement policy has introduced an incentive system that encourages the search for win-win solutions between the municipalities in metropolitan land use and transport system planning. This hinders, to some degree, zero sum constellations of mutual competition for well-to-do residents, investments and jobs. Then again, the emphasis in MAL agreements is on transport infrastructure investments, as these are the financially heaviest investment targets.

The unevenness of resources in metropolitan transport and land use planning also follows from the above differences in their institutionalization. The transport system planning by the HSL is funded by its member municipalities and the state for its institutionally designated duties, while there are no extra funds reserved for metropolitan land use planning. While the HSYK is a light cooperative organ, there is no actual land use planning agency at the metropolitan level. Instead, the municipal land use planners assign the time that is left to metropolitan level land use planning concerns after having to handle their municipal planning duties, institutionally assigned to them. What follows is that the actions of the municipal land use planners are much more closely observed by the municipal decision makers, and the conflict between the metropolitan and municipal land use interests is evident in their everyday planning work. While a metropolitan body to take charge of land use planning at that level has been missing, a logical consequence was that HSL, with its organizational prowess and resources, assumed the coordinating role in the MAL 2019 planning process. This unavoidably also led to an integrated land use and transport planning context where the transport planning approach is more influential and decisive in the MAL 2019 planning process.

Secondly, transport and land use planning approaches are uneven, drawing on the gradual institutionalization of metropolitan transport system planning's cultural norms and professional routines without being matched by that of its land use planning counterpart on a metropolitan level. As shown in the analysis presented, since the first transport system plan PLJ 1994 until the latest MAL 2019 plan, the understanding of land use and transport integration has been practically limited to the utilization of land use input in the transport model. Several attempts have been made to remedy the situation, for example, aligning the HLJ 2015 transport system planning with the ASTRA 2025 housing strategy-making and MASU 2050 land use planning or bringing all these together as one united process in the latest MAL 2019 planning process. Nevertheless, due to the long-standing culture of transport system planning, these innovative approaches have resulted in the incremental and partial normalization of the new practices of land use and transport integration.

The influence of the transport planning approach was especially evident in the impact assessment procedure of the MAL 2019 plan. The impact assessment process was fundamental in the way the MAL 2019 plan was drafted, as each draft of the plan was subjected to extensive impact assessment results of which would be used to prepare the next version of the draft. The making of the impact assessment regarding the transport system aspects of the MAL 2019 plan was legally mandated, but the way the impact assessment was orchestrated by the HSL was rather culturally determined. Consequently, this affected how the assessment and plan's goals were framed, its impacts conceived, the tools used and data gathered for its drafting. Here, the HELMET model system, originally developed for making traditional four-step travel demand forecasts, became decisive. Despite the best efforts of the planning actors, the development of such models requires years and years, and inevitably and understandably, planning actors need to use the tools that are available to them. As the basic rationale of the HELMET model system remained largely unchanged in the MAL 2019 impact assessment process, land use planning concerns were covered by elaborating the model system regarding land use 'input'. In other words, in practice, the impact assessment calculations had to be set in operation in the HELMET model system before actual land use planning alternatives had even been drafted. Consequently, the HELMET model system, as a toolkit developed for assessing transport-related impacts, determined the goals and objectives of the impact assessment. What was assessed was determined by what could be measured with the model system, instead of having transport and land use approaches to impact assessment acknowledged iteratively and collaboratively for an integrated impact assessment of the MAL 2019 plan.

The perceived determination of the MAL 2019 planning and impact assessment processes by a model system, available for one of the two planning sectors, can be understood through a historical path-dependency analysis. Even though the metropolitan transport planning actors actively strive to improve the planning process, the cultural-institutional path-dependency of the HELMET transport demand model system is, inevitably, challenging. This model has been developed through decades, gradually building its place in the transport planning practice. The long-standing use of such tools has also served to set the level of expectations for the extensiveness and accuracy of data used in the impact assessment of the transport system plan, by the state actors observing the validity of the impact assessment to fulfill the SOVA Act and related regulations. This has provided a further lock-in to path-dependent planning that is determined by the institutionalization of certain transport tools, rather than integrated land use and transport planning goals. The informally institutionalized model system required the provision of detailed information on land use early on before the actual land use planning was performed as input for its operations. When land use is utilized within the model system, it also creates a sense of accuracy and validation for the transport model, which leads to the assumption that land use and transport are 'integrated'. This situation, reflected in the frustrations of the interviewees, has the characteristics of a double bind situation. The concept, coined by Bateson (1987) [57] and applied in organizational learning research [58,59], is used to describe the self-contradictory behavior of organizations that are guided by culturally deep-seated

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and historically developed organizational arrangements, conceptual understandings and operative methods and tools that have ceased to respond to the organizations' changed circumstances in their operating environment. In the case of MAL 2019 planning process, none of the organizations involved have the level of resources required to develop the collaborative tools that can be used by both the transport sector and the land use sector at the moment. Therefore, the planning actors have to put their efforts into developing the already existing tools and methods as they have for decades, while, inevitably, being challenged by the integrated land use and transport planning methodology they are trying to implement, further exacerbating the double bind situation that they are in.

5. Conclusions

Land use and transport integration has been deemed a must-have approach in achieving sustainable urban development goals, yet successful implementations of the concept in the practice have been few. Against this background, this article started with the premise that enacting effective integrated land use and transport planning requires institutional change, and such institutional change is evolutionary and gradual. In this institutional change research agenda, recognizing both formal and informal aspects of the integrated planning processes is seen as paramount when it comes to better understanding and, more importantly, better responding to the challenges in integrated land use and transport planning practice [20,21,26]. As also argued by van Geet et al. (2019) and Isaksson et al. (2017), this article shows that new organizational arrangements have received a heightened role as arenas for successful policy integration in land use and transport integration. Yet, the process of changing the 'old' norms of sectoral as well as local and metropolitan planning has advanced slowly as the informal cultural norms can progress—or even regress—at a different pace. In addition, this article distinctly contributes to the existing knowledge by clearly outlining how the historical-institutional factors behind current challenges experienced by the planning actors are fundamental in developing the integrated land use and transport planning practice. Understanding the historical-institutional underpinnings of planning actors' experienced challenges in the case of MAL 2019 planning process provides an analytical tool to develop the integrated land use and transport planning practice in the HMR further.

Another significant contribution of this case analysis is that it aims to show the added relevance of applying discursive institutionalism as an analytical framework in this line of research. Similar to sociological institutionalism, it does not delimit its attention to law-based formal institutions. Such law-based formal institutions assign some organizations with authoritative powers and executive resources and not others. Consequently, this can hinder land use and transport integration when the respective organizations are unevenly supplied by such institutionalization—as was revealed in this MAL 2019 planning case. In addition to formal institutions, long-standing cultural norms and routines may be understood as institutions, despite their informal nature. These may similarly hinder land use and transport planning integration, when the thought models and tools characterizing one planning sector are more institutionalized and path-dependent than those of the other planning sector—as was revealed in the studied case.

Discursive institutionalism has connections to historical institutionalism, too, in its approach to institutions as gradually evolving in time. Especially in cases, such as the case presented in this article, when historically formed institutions prove to be deterministic—despite policy-level efforts to induce transformative change in the integration of land use and transport planning—historical institutionalism and related path dependency analysis can bring further depth to the analysis of institutional evolution. Furthermore, discursive institutionalism adds further insight through its conceptualization of the interplay between policy-level initiatives and the deeper levels of gradual institutional evolution. It enables one to explain how institutions can evolve, not only towards firmer path dependency but also, at times, towards path-breaking trajectories. In the latter cases, policy-level ideas take root as new background ideas for institutionalization, leading to the formation of

new institutions and/or a readjustment of the existing ones. Regarding the institutional landscape of land use and transport system planning in the HMR, such an institutional change is possible, yet highly challenging. Thanks to the efforts of the planning actors to enhance the planning process, the policy-level idea of incorporating metropolitan land use and transport system planning into a single plan has been fruitful yet could not reach its full potential. This is because the guiding frameworks of existing formal and informal institutions, which keep land use and transport planning apart both sector-wise and scalewise, have remained largely unchanged.

Finally, it is important to note that this article provides only one perspective into the highly complex process of the evolving land use and transport planning integration in the HMR. Specifically, document analysis research can have limitations such as insufficient detail and selection bias [60]. As much as this research tries to alleviate those potential limitations with its use of expert interviews and document analysis together, novel methodological approaches to the study of highly complex and networked dynamics of integrated planning processes are necessitated [61]. Correspondingly, more studies looking into the MAL planning process, especially from the perspective of how planning actors navigate daily through such processes, are needed to achieve one more perspective of understanding into the complexity of land use and transport integration. In addition, as another future research need, the historical-institutional approach of this article should be utilized across different governance contexts using both qualitative and quantitative methods. The daily challenges of land use and transport integration and the historical mechanisms through which they emerge in different contexts have the potential to reveal diverse ways to devise effective land use and transport integration mechanisms.

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Abbreviations

ASTRA	Helsinki Metropolitan Region Housing Strategy
HELMET	transport demand model system used by HSL
HLJ	Helsinki Metropolitan Transport System Plan
HMR	Helsinki Metropolitan Region
HSL	Helsinki Region Transport
HSYK	Helsinki Region Cooperation Assembly
KPS	City-regional Land Use Plan
MAL	land use, housing and transport
MASU	Helsinki Metropolitan Region Land Use Plan
PKS	Capital Region Land Use Vision
PLJ	Capital Region Transport System Plan
YTV	Helsinki Metropolitan Area Council

Appendix A

Interviewee Reference	Expertise	Planning Level *		
80	Transport	National		
81	Land use and transport	National		
59	Land use and transport	National		
21	Land use	Regional		
47	Land use and transport	Regional		
69	Transport	Metropolitan		
35	Transport	Metropolitan		
39	Transport	Metropolitan		
34	Transport	Metropolitan		
20	Transport	Metropolitan		
22	Transport	Metropolitan		
38	Transport	Metropolitan		
64	Transport	Metropolitan		
52	Transport	Metropolitan		
50	Transport	Metropolitan		
88	Transport	Metropolitan		
56	Land use and transport	Metropolitan		
63	Land use, housing and transport	Metropolitan		
15	Transport	Municipal		
86	Transport	Municipal		
17	Land use	Municipal		
25	Housing	Municipal		
53	Land use and housing	Municipal		
99	Land use and housing	Municipal		

Table A	1. List of	Interviews	(ordered	according to t	he planning	level	that the	e interviewee	works at).
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* This planning level corresponds to the level and organization that the interviewees had been working during their involvement in the MAL 2019 planning process. As the interviews were conducted after the end of the planning process, some interviewees were working at a different organization than stated in this table at the time of the interview.

Table A2. List of Documents included in the Document Analysis (ordered first according to document type, then chronologically).

Title of the Document *	Author/Publisher of the Document	Publication Year	Document Type	Document Use
Capital Region transport system plan (PLJ 1998)	YTV	1999	Plan	Primary
Capital Region Future Vision (PKS 2020)	YTV	1999	Plan	Primary
Capital Region transport system plan (PLJ 2002)—Summary	YTV	2003	Plan	Primary
Capital Region future vision (PKS 2025)	YTV	2003	Plan	Primary
Capital Region transport system plan (PLJ 2007)	YTV	2007	Plan	Primary
City-regional plan (KPS 2007)	HSYK	2007	Plan	Primary

Title of the Document *	Author/Publisher of the Document	Publication Year	Document Type	Document Use
Helsinki Metropolitan Region transport system plan (HLJ 2011)	HSL	2011	Plan	Primary
Helsinki Metropolitan Region transport system plan (HLJ 2015)	HSL	2015	Plan	Primary
Helsinki Metropolitan Region housing strategy (ASTRA 2025)	HMR Municipalities	2015	Plan	Primary
Helsinki Metropolitan Region land use plan (MASU 2050)	HMR Municipalities	2015	Plan	Primary
Helsinki Metropolitan Region land use, housing and transportation (MAL 2019)	HSL & HMR Municipalities	2019	Plan	Primary
Helsinki Metropolitan Region transport system plan (HLJ 2011) operational program	YTV	2008	Operational program	Primary
Helsinki Metropolitan Region transport system plan (HLJ 2015) operational program	HSL	2012	Operational program	Primary
Land use, housing and transport (MAL 2019) operational program	HSL	2016	Operational program	Primary
Letter of intent on the Helsinki Metropolitan Region transport system plan (PLJ 2002)'s mplementation	Signatories	2003	Letter of intent	Primary
Letter of intent on the Helsinki Metropolitan Region transport system plan (PLJ 2007)'s mplementation	Signatories	2008	Letter of intent	Primary
Letter of intent on land use, housing and transport between the state and Helsinki Metropolitan Region municipalities 2012–2015	Signatories	2012	Letter of intent	Primary
Agreement on land use, housing and transport between the State and Helsinki Metropolitan Region municipalities 2016–2019	Signatories	2016	Agreement	Primary
Agreement on land use, housing and transport between the State and Helsinki Metropolitan Region municipalities 2020-31	Signatories	2020	Agreement	Primary
Municipal state contribution act §688/1992	Parliament	1992	Act	Primary
Aunicipal Act §365/1995	Parliament	1995	Act	Primary
Aunicipal state contribution act §1147/1996	Parliament	1996	Act	Primary
Act on the Helsinki Capital Region Cooperation-Delegation §1269/1996	Parliament	1996	Act	Primary
Regional Cooperation Experiment §560/2002	Parliament	2002	Act	Primary
Regional Council Experiment §62/2004	Parliament	2004	Act	Primary
Act on Environmental Impact Assessment of Plans and Programs §200/2005	Parliament	2005	Act	Primary
Act on municipal and service restructuring \$169/2007	Parliament	2007	Act	Primary
Land Use and Building Act §1129/2008	Parliament	2008	Act	Primary
Act on Cooperation in Municipal Waste Management and Public Transport in the Capital Region §829/2009	Parliament	2009	Act	Primary

Table A2. Cont.

Table A2. Cont.

Title of the Document *	Author/Publisher of the Document	Publication Year	Document Type	Document Use	
Land Use and Building Act §196/2016	Parliament	2016	Act	Primary	
Government's proposal to Parliament for laws on the Helsinki Metropolitan Area Cooperation Delegation	Government	1996	Governmental document	Supplementary	
Prime Minister Paavo Lipponen's II government program	Government	1999	Governmental document	Supplementary	
Administrative committee's comments 28/2006 vp-The Ministry's report on the financial possibilities of municipalities to take proper care of their tasks and obligations	Government	2006	Governmental document	Supplementary	
Government proposal to parliament for a law on municipal and service restructuring and for amending the Local Government Act and the Transfer Tax Act HE 155/2006	Government	2006	Governmental document	Supplementary	
Prime Minister Matti Vanhanen's II government program	Government	2007	Governmental document	Supplementary	
Helsinki Metropolitan Region land use, housing and transportation implementation program (MAL 2017)	MAL Advisory Board/HSYK	2008	Implementation program	Supplementary	
Helsinki Metropolitan Region land use, housing and transportation implementation program (MAL 2020)	MAL Advisory Board/HSYK	2012	Implementation program	Supplementary	
Joint land use and housing implementation program (MA 2017)	City of Helsinki	2008	Implementation program	Supplementary	
Capital Region Advisory Committee's strategic projects 2005, Implementation 2005	Capital Region Advisory Committee	2005	Report	Supplementary	
MAL 2019 Objective, measures and goals of the transport system—Draft	HSL	2017	Report	Supplementary	
Capital Region Advisory Committee—action report 2004	Capital Region Advisory Committee	2005	Action report	Supplementary	
Capital Region Advisory Committee—action report 2006	Capital Region Advisory Committee	2007	Action report	Supplementary	
Helsinki area cooperation meeting 17 November 2005	HSYK	2005	Meeting notes	Supplementary	
Helsinki area cooperation meeting 15 November 2007	HSYK	2007	Meeting notes	Supplementary	
City-regional planning in accordance with 7§ of the Framework Act	Pajunen, J.	2007	Notification	Supplementary	
Committee for preparation of legislation for metropolitan governance VM093:00/2013	Committee for preparation of legislation for metropolitan governance	2013	Legislative prepation	Supplementary	

* These titles are translated from their original language, i.e., Finnish, to English by the authors. They do not directly correspond to the original titles for the purposes of clarity and descriptiveness in this article.

References

1. Griggs, S.; Hall, S.; Howarth, D.; Seigneuret, N. Characterizing and evaluating rival discourses of the 'sustainable city': Towards a politics of pragmatic adversarialism. *Political Geogr.* **2017**, *59*, 36–46. [CrossRef]

2. Davoudi, S. Sustainability: A new vision for the British planning system. Plann. Perspect. 2000, 15, 123–137. [CrossRef]

- 3. Williams, K. Sustainable cities: Research and practice challenges. Int. J. Urban Sustain. Dev. 2010, 1, 128–132. [CrossRef]
- 4. Högström, J.; Balfors, B.; Hammer, M. Planning for sustainability in expansive metropolitan regions: Exploring practices and planners' expectations in Stockholm, Sweden. *Eur. Plan. Stud.* **2018**, *26*, 439–457. [CrossRef]
- 5. Banister, D. Assessing the reality—Transport and land use planning to achieve sustainability. *J. Transp. Land Use* **2012**, *5*, 1–14. [CrossRef]
- 6. Bertolini, L. Integrating mobility and urban development agendas: A manifesto. Disp-Plan. Rev. 2012, 48, 16–26. [CrossRef]
- Curtis, C.; James, B. An institutional model for land use and transport integration. *Urban Policy Res.* 2004, 22, 277–297. [CrossRef]
 Geerlings, H.; Stead, D. The integration of land use planning, transport and environment in European policy and research. *Transp. Policy* 2003, 10, 187–196. [CrossRef]
- 9. Hrelja, R. Integrating transport and land-use planning? How steering cultures in local authorities affect implementation of integrated public transport and land-use planning. *Transp. Res. Part A Policy Pract.* **2015**, *74*, 1–13. [CrossRef]
- 10. Hull, A. Integrated transport planning in the UK: From concept to reality. J. Transp. Geogr. 2005, 13, 318–328. [CrossRef]
- 11. Wegener, M. Possible Future Transport and Land Use Strategies for Sustainable Urban Development in European Cities. In Proceedings of the IB-W 101 & GCOE Workshop Urban Infrastructure and Land Use Control, Tokyo, Japan, 13 June 2009.
- 12. Rayner, J.; Howlett, M. Introduction: Understanding integrated policy strategies and their evolution. *Policy Soc.* 2009, 28, 99–109. [CrossRef]
- 13. Duffhues, J.; Bertolini, L. From integrated aims to fragmented outcomes: Urban intensification and transportation planning in the Netherlands. *J. Transp. Land Use* **2016**, *9*, 15–34. [CrossRef]
- 14. Stead, D.; Meijers, E. Spatial planning and policy integration: Concepts, facilitators and inhibitors. *Plan. Theory Pract.* **2009**, *10*, 317–332. [CrossRef]
- 15. Vigar, G. Towards an integrated spatial planning? Eur. Plan. Stud. 2009, 17, 1571–1590. [CrossRef]
- 16. Te Brömmelstroet, M.; Bertolini, L. Integrating land use and transport knowledge in strategy-making. *Transportation* **2010**, *37*, 85–104. [CrossRef]
- 17. Hatzopoulou, M.; Miller, E.J. Institutional integration for sustainable transportation policy in Canada. *Transp. Policy* **2008**, *15*, 149–162. [CrossRef]
- Kaufmann, V.; Sager, F. The coordination of local policies for urban development and public transportation in four Swiss cities. J. Urban Aff. 2006, 28, 353–374. [CrossRef]
- 19. Lee, J.; Arts, J.; Vanclay, F. Stakeholder views about Land Use and Transport Integration in a rapidly-growing megacity: Social outcomes and integrated planning issues in Seoul. *Sustain. Cities Soc.* **2021**, *67*, 102759. [CrossRef]
- Isaksson, K.; Antonson, H.; Eriksson, L. Layering and parallel policy making–Complementary concepts for understanding implementation challenges related to sustainable mobility. *Transp. Policy* 2017, 53, 50–57. [CrossRef]
- 21. Van Geet, M.T.; Lenferink, S.; Arts, J.; Leendertse, W. Understanding the ongoing struggle for land use and transport integration: Institutional incongruence in the Dutch national planning process. *Transp. Policy* **2019**, *73*, 84–100. [CrossRef]
- 22. Salet, W. Public Norms and Aspirations: The Turn to Institutions in Action; Routledge: London, UK, 2018.
- 23. Stenstadvold, M. Institutional constraints to environmentally sound integrated land use and transport policies: Experiences from the Norwegian integrated land use and transport planning scheme. *J. Environ. Plann. Manage.* **1996**, *39*, 593–606. [CrossRef]
- 24. Stead, D. Institutional aspects of integrating transport, environment and health policies. *Transp. Policy* 2008, 15, 139–148. [CrossRef]
- 25. Paulsson, A.; Isaksson, K.; Sørensen, C.H.; Hrelja, R.; Rye, T.; Scholten, C. Collaboration in public transport planning–Why, how and what? *Res. Transp. Econ.* **2018**, *69*, 377–385. [CrossRef]
- 26. Hrelja, R.; Monios, J.; Rye, T.; Isaksson, K.; Scholten, C. The interplay of formal and informal institutions between local and regional authorities when creating well-functioning public transport systems. *Int. J. Sustain. Transp.* **2017**, *11*, 611–622. [CrossRef]
- 27. Hall, P.A.; Taylor, R.C. Political science and the three new institutionalisms. *Political Stud.* **1996**, *44*, 936–957. [CrossRef]
- 28. Allmendinger, P.; Haughton, G. Soft spaces, fuzzy boundaries, and metagovernance: The new spatial planning in the Thames Gateway. *Environ. Plann. A* **2009**, *41*, 617–633. [CrossRef]
- 29. Herrschel, T.; Dierwechter, Y. Smart Transitions in City Regionalism: Territory, Politics and the Quest for Competitiveness and Sustainability; Routledge: London, UK, 2018.
- 30. Flyvbjerg, B. Five misunderstandings about case-study research. Qual. Inq. 2006, 12, 219–245. [CrossRef]
- HSL Land use, Housing and Transport Plan 2019 Summary Report 2019, p. 7. Available online: https://www.hsl.fi/sites/ default/files/uploads/mal_summary_report_210x260_en_rgb.pdf (accessed on 16 November 2021).
- 32. Schmidt, V.A. Discursive institutionalism: The explanatory power of ideas and discourse. *Annu. Rev. Polit. Sci.* 2008, 11, 303–326. [CrossRef]
- 33. Anthony, G. The Constitution of Society: Outline of the Theory of Structuration; University of California Press: Berkeley, CA, USA, 1984.
- 34. Bourdieu, P. Sosiologian Kysymyksiä; Osuuskunta Vastapaino: Tampere, Finland, 1985.
- 35. Granqvist, K.; Humer, A.; Mäntysalo, R. Tensions in city-regional spatial planning: The challenge of interpreting layered institutional rules. *Reg. Stud.* **2021**, *55*, 844–856. [CrossRef]
- 36. Schmidt, V.A. Reinterpreting the rules 'by stealth'in times of crisis: A discursive institutionalist analysis of the European Central Bank and the European Commission. *West Eur. Politics* **2016**, *39*, 1032–1052. [CrossRef]

- 37. Granqvist, K. Dialectical institutionalism: Spatial imaginaries in tensions between strategic and statutory planning in city-regions. Ph.D. Thesis, Aalto University, Espoo, Finland, 2021.
- 38. Arthur, W.B. Increasing Returns and Path Dependence in the Economy; The University of Michigan Press: Ann Arbor, MI, USA, 1994.
- 39. Pierson, P. Increasing returns, path dependence, and the study of politics. *Am. Political Sci. Rev.* 2000, 94, 251–267. [CrossRef]
- 40. Mahoney, J. Path dependence in historical sociology. *Theory Soc.* 2000, 29, 507–548. [CrossRef]
- 41. Needham, B.; Louw, E. Institutional economics and policies for changing land markets: The case of industrial estates in the Netherlands. *J. Prop. Res.* **2006**, *23*, 75–90. [CrossRef]
- 42. Sorensen, A.; Hess, P. Building suburbs, Toronto-style: Land development regimes, institutions, critical junctures and path dependence. *Town Plann. Rev.* 2015, 411–436. [CrossRef]
- Sorensen, A. Taking path dependence seriously: An historical institutionalist research agenda in planning history. *Plann. Perspect.* 2015, *30*, 17–38. [CrossRef]
- 44. Ghitter, G.; Smart, A. Mad cows, regional governance, and urban sprawl: Path dependence and unintended consequences in the Calgary region. *Urban Aff. Rev.* 2009, 44, 617–644. [CrossRef]
- 45. Tasan-Kok, T. Analysing path dependence to understand divergence: Investigating hybrid neo-liberal urban transformation processes in Turkey. *Eur. Plan. Stud.* **2015**, *23*, 2184–2209. [CrossRef]
- De Vries, J. Planning and culture unfolded: The cases of Flanders and the Netherlands. *Eur. Plan. Stud.* 2015, 23, 2148–2164. [CrossRef]
- 47. Urry, J. The 'system' of automobility. Theory Cult. Soc. 2004, 21, 25–39. [CrossRef]
- 48. Bertolini, L. Evolutionary urban transportation planning: An exploration. Environ. Plann. A 2007, 39, 1998–2019. [CrossRef]
- 49. Tongzon, J.L.; Ng, A.K.; Shou, E.C. Institutions, transport infrastructure governance, and planning: Lessons from the corporatization of port authorities in East Asia. *Environ. Plan. C Gov. Policy* **2015**, *33*, 1467–1483. [CrossRef]
- 50. Salo, R.; Mäntysalo, R. Path dependencies and defensive routines in Finnish city-regional land-use policy cooperation: Case Ristikytö. *Int. Plan. Stud.* 2017, 22, 128–144. [CrossRef]
- 51. Nousiainen, P. Municipal self-governance. In 100 Social Innovations from Finland: How Finland became Finland: Political, Social and Hands-on Inventions; Finnish Literature Society: Helsinki, Finland, 2018; pp. 28–30.
- 52. Hytönen, J.; Mäntysalo, R.; Peltonen, L.; Kanninen, V.; Niemi, P.; Simanainen, M. Defensive routines in land use policy steering in Finnish urban regions. *Eur. Urban Reg. Stud.* 2016, 23, 40–55. [CrossRef]
- 53. Granqvist, K.; Mäntysalo, R.; Valli, R.; Kanninen, V.; Herneoja, A.; Kosonen, K.; Ronkainen, T.; Piippo, T. Strategisuus ja transskalaarisuus liikennejärjestelmäsuunnittelun ja alueidenkäytön suunnittelun yhteensovittamisessa: Alueidenkäytön ja liikennejärjestelmän suunnittelun yhteensovittaminen ilmiölähtöisesti. 2020. Available online: https://julkaisut.valtioneuvosto. fi/handle/10024/162344 (accessed on 16 November 2021).
- 54. Tosun, J.; Lang, A. Policy integration: Mapping the different concepts. *Policy Stud.* 2017, 38, 553–570. [CrossRef]
- YTV. Pääkaupunkiseudun liikennejärjestelmäsuunnitelma PLJ 1998; Pääkaupunkiseudun yhteistyövaltuuskunta: Helsinki, Finland, 1999.
 Moilanen, P. Liikenteen ja maankäytön vuorovaikutusmalli: Meplan-koeprojekti pääkaupunkiseudulla. Master's Thesis, Helsinki
- University of Technology, Espoo, Finland, 1993.
- 57. Bateson, G. Steps to an Ecology of Mind; Aronson: Northvale, NJ, USA, 1987.
- 58. Argyris, C. On Organizational Learning; Blackwell: Cambridge, UK, 1993.
- 59. Engeström, Y. Learning by Expanding; Orienta-konsultit: Helsinki, Finland, 1987.
- 60. Bowen, G.A. Document analysis as a qualitative research method. *Qual. Res. J.* 2009, *9*, 27–40. [CrossRef]
- 61. Eräranta, S.; Mladenović, M.N. Networked dynamics of knowledge integration in strategic spatial planning processes: A social network approach. *Reg. Stud.* 2021, *55*, 870–882. [CrossRef]