Integrated trade-offs in transit

The governance of mobility and urban development in the light of the broad prosperity paradigm

INTEGRATED TRADE-OFFS IN TRANSIT

The governance of mobility and urban development in the light of the broad prosperity paradigm

Master thesis research by

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PREFACE

In early 2023, I first encountered the concept of broad prosperity. Broad prosperity is described as the new best approach to formulating policy. Unlike traditional paradigms, the broad prosperity perspective incorporates diverse values beyond mere economic metrics. It emphasises consideration for people in other regions and future generations. Initially, I was taken aback that such an inclusive approach was not the norm. Should the government not inherently aim to enhance the well-being of its populace? Motivated by this, I sought to understand how policy could contribute to a better world, particularly in urban areas where problems coincide. While preparing and writing this thesis, I discovered that translating these ideas into practice is easier said than done.

Steering policy towards broad prosperity is complex. Is it feasible to ascertain and measure what makes people happy and what they truly need? Should the government then choose measures and facilitate well-being? How can we ensure that decisions are made appropriately? How do we determine whether a measure has the desired effects on the intended target group? These questions have occupied my thoughts over the past six months.

To aspire to a better world where people can lead fulfilling lives, it is crucial to ask the right questions about what people genuinely need and, subsequently, the role of mobility in this context. This is the essence of broad prosperity. I hope this research contributes to formulating these pertinent questions and aligning mobility policy with the needs of people and the world.

I would like to extend my sincere gratitude to the following individuals: My first supervisor from Delft University of Technology, Wijnand Veeneman, for his practical guidance and inspiring me with this topic. My second supervisor, Jan Anne Annema, for his valuable feedback. Edoardo Felici, my supervisor at the Ministry of Infrastructure and Water Management, for his unwavering support, connecting me with the right people, and his willingness to engage in thoughtful discussions. The flexibility in collaboration of my supervisors was immensely helpful and enabled me to seek assistance whenever necessary. My colleagues at the Ministry of Infrastructure and Water Management, and all those who contributed during focus groups or interviews, for their enthusiasm and input. Lastly, my family and friends, for their motivation and assistance, not only during the writing of this thesis but throughout my entire academic journey.

Sanne van Herwijnen
The Hague, June 2024

SUMMARY

In Dutch policy-making, there is a growing emphasis on embracing a broad definition of welfare, transcending traditional economic metrics and encompassing all facets valued for a good life, both presently and for future generations, as well as on a global scale. This perspective, called brede welvaart in Dutch, is referred to as broad prosperity in this research. Despite widespread belief in the importance of cross-domain policy practices for broad welfare, it remains unclear how such policy integration contributes to the broad considerations of welfare in policy-making and how such policy integration should be organised. This thesis examines how governance structures can effectively ensure that broad prosperity principles are utilised in mobility policy-making, particularly through integration with urban development policy-making.

Adopting a qualitative multiple-case study approach, this research systematically investigates the interplay between policy integration in mobility and urban development, broad prosperity considerations, and the resulting policy-making process. Literature review and expert interviews are combined to formulate a conceptual framework for distinguishing broad prosperity policy-making from conventional policy-making and measuring policy integration. A thorough analysis of the decision-making process in mobility plans for the cases Zeeburgereiland, Binckhorst, Valkenhorst, and Merwedekanaalzone is executed through document analysis and stakeholder interviews. This information together with results from focus groups in which workable governance approaches are discussed, provide an answer to the main research question: *How should the governance of mobility and urban development be organised to enable a broad assessment of welfare in policy-making?*

Broad prosperity versus conventional policy-making

The policy-making process can follow a conventional approach or incorporate broad prosperity practices. The main difference between the two approaches is their definition of welfare. The conventional perspective defines welfare primarily in economic terms, while broad prosperity seeks a more inclusive definition of welfare integrating economic, social, environmental, and cultural dimensions. In the context of mobility, broad prosperity policy-making is characterised by seven key features: a dedicated emphasis on opportunities to improve people's accessibility, thereby improving their overall well-being; recognition of mobility as a means to improve prosperity; deliberate consideration of the ramifications on liveability, safety, health, and accessibility, along with a focus on their equitable distribution among demographic cohorts; adaptation of a long-term perspective; explicit acknowledgement and management of trade-offs inherent to policy decisions; active engagement of stakeholders, ensuring representation and consideration of all interests; and strategic and innovative utilisation of policy instruments to achieve desired outcomes effectively.

Mobility decision-making processes in practice

Broad prosperity is manifested in decision-making processes in various ways. The case studies reveal a common practice to consider ramifications on liveability, safety, health, and

accessibility that go beyond the economic efficiency of transport, often adopting principles of sustainability and active modes of transport. However, the equitable distribution of impacts and adopting a long-term perspective are less prevalent. These dimensions of broad prosperity are not well institutionalised.

Moreover, the deliberate consideration of a broad range of effects does not always lead to decisions based on these effects, indicating that merely measuring and reporting the effects ex-ante does not ensure decisions based on broad prosperity principles. Mainly during decision-making, it is difficult to properly include broad prosperity because of the dominance of budgets, because not all effects are reflected in useful decision information, and because sometimes trade-offs are made at a higher level.

The involvement of stakeholders, whether solely at the municipal level or inclusive of regional and national levels, can contribute to a comprehensive assessment of welfare. The cases show differences in the number and diversity of stakeholders involved. Broader participation ensures a wider array of values is represented but complicates the decision-making process, often shifting focus on individual preferences rather than collective goals.

Lastly, the degree of policy integration and the presence of institutions combining mobility and urban development varies across cases. The analysis shows that the effective integration of broad prosperity principles is not guaranteed by the integration of mobility and urban development policy-making. Establishing joint and binding policy frameworks among stakeholders does promote broad prosperity throughout the decision-making process through the coordination of domains. By relying on such a framework when making decisions, synergies are created in an area.

In sum, this study identifies several enhancing mechanisms for broad prosperity policy-making: an area-based approach with a long-term vision; a collaborative process; assigning responsibility for certain values or dimensions; and management of the financial dimension. Conversely, there are hindering mechanisms for the implementation of broad prosperity: the possibility of trade-offs at a higher level; budgetary constraints; required representation of decision information; and time for the application of broad prosperity.

Implementing a broad prosperity approach

This study highlights various guiding principles that can facilitate a comprehensive assessment of welfare in the mobility sector during different stages of the decision-making process. Initially, engaging all relevant stakeholders is crucial for collaboratively defining the problem and establishing objectives based on a vision for the area, thereby creating a concrete and binding framework for the decision-making process. For this joint problem definition, time should be dedicated and the process can be guided by an independent party to ensure focus on the shared values. During the exploration of options, it is vital to look beyond individual domains to identify opportunities for creating synergies and identify the effects of the options on multiple themes, people, locations, and across time. Assigning ownership of various values ensures accountability and commitment from stakeholders. In the actual decision-making phase, it is imperative to consider non-monetary effects thoroughly alongside financial implications.

Explicitly stating the choices made and the rationale behind them enhances transparency and accountability. Based on the previously defined guiding principles, decisions should be made collectively to ensure alignment with overarching objectives. Finally, coordinating projects across different domains and stakeholders, based on their geographical location, is essential for achieving integrated outcomes. Monitoring should involve all stakeholders and should be based on objective and subjective data.

Effective transition to broad prosperity policy-making requires leveraging existing institutions and introducing new frameworks. Key actions include standardising dimensions like intergenerational equity and distribution effects with concrete guidelines, ensuring top-down leadership to drive these principles, and training employees in holistic thinking through practical exercises. Administrative commitment to comprehensive methods and flexible budgeting are essential for integration. This strategic approach addresses institutional barriers, fostering inclusive and comprehensive decision-making to achieve broad prosperity.

Concluding perspectives

The qualitative multiple-case study approach provides a comprehensive investigation but encounters challenges due to the unstructured nature of real-world decision-making. The findings indicate that stakeholder engagement, comprehensive value consideration, and a structured process are crucial, rather than solely focusing on cross-domain policy integration. Future research should explore the long-term effects of governance structures, conduct additional in-depth case analyses in varying contexts, and examine institutional innovations that support broad prosperity policy-making.

In conclusion, broad prosperity can promote inclusivity in policy-making. Effectively utilising the broad prosperity perspective is a challenge. Embracing innovation and interdisciplinary collaboration can maximise the positive impact on community well-being, drawing inspiration from successful case studies and iterative learning processes.

CONTENTS

APPENDICES

LIST OF ABBREVIATIONS

CBA	Cost-benefit analysis
CBS	Statistics Netherlands
CoSEM	Complex Systems Engineering and Management
CPB	Netherlands Bureau for Economic Policy Analysis
EIA	Environmental Impact Assessment (MER in Dutch)
GDP	Gross domestic product
HOV	High-quality public transport
KiM	Netherlands Institute for Transport Policy Analysis
MaaS	Mobility as a Service
MCDA	Multi-criteria (decision) analysis
MIRT	Multi-Year Programme for Infrastructure, Spatial Planning and Transport (Meerjarenprogramma Infrastructuur, Ruimte en Transport in Dutch)
MoVe	Mobility and Urbanisation (Mobiliteit en Verstedelijking in Dutch)
NMCA	National Market and Capacity Analysis
PBL	Netherlands Environmental Assessment Agency
PPP	Public-private partnership
SCP	Netherlands Institute for Social Research
SDGs	Sustainable Development Goals
STOMP	Walking, cycling, public transport, MaaS, private car (stappen, trappen, openbaar vervoer, MaaS, privé-auto in Dutch)
ToC	Theory of Change

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1 INTRODUCTION

Public policy-making should seek to maximise positive effects and minimise negative effects on society, thereby enhancing the well-being of citizens. Despite this seemingly obvious goal, traditional economic metrics like the gross domestic product (GDP) have long dominated public policy-making. However, in recent years, a transformative shift has emerged, expanding the focus beyond conventional economic measures.

This chapter describes the background of this new paradigm in policy-making in Section 1.1. Section 1.2 argues why it is important to find out how this paradigm can be leveraged in the mobility domain, while Section 1.3 presents the research question and objectives. Section 1.4 defines the scope of the research. Furthermore, Section 1.5 discusses the scientific and practical relevance of the research and Section 1.6 discusses the outline of this thesis.

1.1. Background

1.1.1. A shift in policy-making

Public policy-making can be defined as 'the process through which policymakers formulate, implement, and evaluate decisions'. According to Gerston (2010) and Moore (2021), its primary objective should be to improve people's well-being, thereby creating public value. The 2009 report by the Commission on the Measurement of Economic Performance and Social Progress marks the beginning of a new perspective on public policy-making. The Stiglitz-Sen-Fitoussi Commission advocated transitioning from a production-oriented measurement system to one prioritising the well-being of current and future generations (Stiglitz et al., 2009). In the Netherlands, this perspective is known as 'brede welvaart' and it is also known under the name 'well-being perspective. In this research, the term 'broad prosperity' is used for the paradigm.

In response to critiques of the traditional welfare paradigm and its associated policymaking, a parliamentary inquiry into a broad concept of welfare was held in the Netherlands (Hausman et al., 2016; Tijdelijke commissie Breed welvaartsbegrip, 2016). In 2016, the Tijdelijke commissie Breed welvaartsbegrip (2016) concluded that GDP, while used to measure the size of our economy, was never intended to measure societal welfare. Consequently, a new welfare definition emerged in the Netherlands, with the planning agencies Netherlands Bureau for Economic Policy Analysis (CPB), Netherlands Environmental Assessment Agency (PBL), and Netherlands Institute for Social Research (SCP) exploring the concept of broad prosperity and Statistics Netherlands (CBS) developing a 'Brede Welvaart Monitor' (Visser & Wortelboer-Van Donselaar, 2021). Broad prosperity is defined as encompassing everything that people find of value to lead a good life here and now, later, and elsewhere (Centraal Planbureau, n.d.). Embracing the broad prosperity perspective should lead to policy-making that incorporates more values than mere econometric indicators and considers issues more comprehensively to enhance public well-being.

1.1.2. Broad prosperity in the mobility domain

In the context of mobility, it is firstly crucial to recognise that the transport system's impact extends beyond positive implications. While the transport system serves a vital function, facilitating connections between locations and enabling travel and exchange (Gerike et al., 2022), it also presents challenges such as environmental pressure, safety issues, and congestion (van Wee et al., 2013). In the Netherlands, for instance, transport accounted for nearly a fifth of national greenhouse gas emissions in 2021, highlighting its environmental impact (Ministerie van Economische Zaken en Klimaat, 2021). Following the principles of broad prosperity, decision-making regarding mobility should consider these diverse impacts and take into account the distribution of these effects.

We can observe a shift with regard to mobility itself (van Altena, 2023). Traditionally, transport was viewed as an end in itself, with infrastructure development directly linked to economic growth. However, contemporary perspectives recognise that transport's significance to the economy is evolving, influenced by factors such as the information economy and the growing importance of proximity over displacement. Putting this in the context of broad prosperity, we see that transport is not an end in itself but rather a means to achieve broader societal goals, including enhancing well-being and sustainability.

In the realm of mobility, broad prosperity thus signifies a change in perspective, which necessitates changes in the policy-making process. Notably, broad prosperity literature focuses on mobility, not transport. Where transport departs from means of transport, mobility departs from the human need to move or connect, which is aligned with the broad prosperity paradigm.

The Netherlands Institute for Transport Policy Analysis (KiM), among others, explores the implications of broad prosperity on mobility through research and the Dutch Ministry of Infrastructure and Water aims to implement broad prosperity perspectives into its practices through, for example, formulating four broad prosperity dimensions concerning mobility (which are accessibility, safety, health, and living environment), developing their broad prosperity monitor, and establishing guiding frameworks. Other efforts to apply the broad prosperity paradigm to mobility policy-making include Visser & Wortelboer-Van Donselaar's (2021) inclusion of mobility-related welfare aspects in the Dutch 'Monitor Brede Welvaart' and de Vries et al.'s (2023) application of the paradigm to ex-ante policy evaluation. De Vries et al. (2023) argue that the paradigm demands looking more broadly at the tasks and goals of mobility policy, looking more broadly at the effects of mobility policy, and weighing up the effects of mobility policy more broadly. Van Burgsteden (2021) underscores the need for holistic tools in mobility policy, emphasising a clear mission, substantive knowledge, analytics tools, and an institutional context.

It is evident from the literature that broad prosperity requires substantial changes in mobility policy-making, with a perception that mobility must be integrated with other domains to achieve comprehensive policy outcomes. The following section expands on this notion.

1.1.3. A need for policy integration?

The organisational structure of policy administration to support broad prosperity policy-making remains unclear. Various scholars offer insights into different aspects of this challenge. Vollebergh (2023) suggests revising concrete targets in alignment with the scarcity principle, Hoekstra (2021) advocates integrating broad prosperity principles into the policy cycle and involving citizens in the process, while Ederveen & Stoel (2021) emphasise embedding broad prosperity in coalition agreements and policy targets.

Moreover, many scholars highlight the need for policy integration to achieve a holistic perspective on welfare. For example, Putters (2022) argues that despite attempts to break from 'old patterns', the practical realisation of broad prosperity faces challenges due to one-dimensional policy theories that confine the government to a focus within narrow policy silos. Evenhuis et al. (2020) affirm the need for an integrated approach because broad prosperity issues often intersect multiple policy domains simultaneously. However, there has been little effort to date to study this supposition or to establish an institutional policy-making context conducive to such a comprehensive approach. Rayner & Howlett (2009) do indicate the need for a better understanding of the issues surrounding appropriate (integrated) policy strategies.

Literature on policy integration highlights connections between the field of mobility and various other policy areas, as summarised in Table 1.1. Notably, there is a recurring connection with land use, specifically urban development. While these investigations discuss integrated strategies broadly, a significant gap exists in understanding if and how policy integration of mobility and urban development should be institutionally arranged in line with the broad prosperity paradigm.

Table 1.1: Policy fields discussed jointly

	Mobility	Environment	Health	Land use
Alipour & Dia (2023)	X	X		X
Geerlings & Stead (2003)	X			X
Rode & da Cruz (2018)	X			X
Rode (2019)	X	X		X
Stead (2008)	X	X	X	

1.2. Problem definition

The previous section has demonstrated the emergence of broad prosperity as a guiding principle in policy-making. Despite its growing influence, the paradigm is still in its infancy and its application to the mobility domain raises significant questions and challenges for policymakers and researchers alike.

Broad prosperity seeks to improve people's welfare through policy interventions. Existing literature suggests that policy integration has the potential to embed the broad prosperity paradigm into mobility policy-making, thereby contributing to welfare improvement. However, the actual effects of such a comprehensive approach remain largely unknown. Furthermore, there exists a notable knowledge gap regarding the governance of policy integration for a comprehensive welfare assessment.

In short, while broad prosperity holds promise for improving public welfare, its application in the mobility domain poses challenges and uncertainties, particularly concerning governance structures. Addressing these challenges requires further research to develop effective institutional mechanisms and potentially integrated approaches capable of delivering tangible benefits to society. This research is positioned to address these critical gaps.

1.3. Research objective and questions

As outlined previously, the transport system's multifaceted impact on societal well-being underscores the need for a comprehensive policy framework. Even though it is commonly assumed that policy integration can ensure alignment with broad prosperity principles, the significance of this notion has not yet been studied. Additionally, the institutional arrangements enabling broad prosperity remain unclear. Therefore, this research aims to apply the broad prosperity paradigm to transport policy-making. Thereby fostering sustainable, inclusive policies and ultimately improving citizens' lives in line with the broad prosperity paradigm. The objective is to establish guiding principles for developing mobility policies that bolster overall social welfare. This is done through a focus on the integration of mobility and urban development policy.

To reach the objective, the following main research question needs to be answered:

How should the governance of mobility and urban development be organised to enable a broad assessment of welfare in policy-making?

Understanding how governance structures can facilitate a broad assessment of welfare in policymaking is crucial for effectively addressing significant societal challenges related to mobility and urban development, ultimately improving people's lives. This main research question will be addressed with the following five sub-questions:

1. Which factors and criteria indicate how the broad prosperity paradigm plays a role in mobility and urban development policy-making?
2. Which factors and criteria indicate how well mobility and urban development policy-making are integrated?
3. How do specific implementations of policy integration factors in mobility policy-making processes score on the policy integration criteria?
4. How do specific implementations of broad prosperity factors in mobility policy-making processes score on the broad prosperity criteria?
5. How can governance structures that enable a broad consideration of welfare in mobility policy-making be applied in practice?

1.4. Scope

This research delves into the governance for broad prosperity. Bache & Reardon (2016) emphasise the crucial role of the policy perspective in studying well-being. Consideration must be given to how the political system aligns with broad prosperity practices. The challenge lies in reconciling broad prosperity, which necessitates contemplating future generations over longer time horizons, with the typically short-term nature of political cycles lasting only four

years. To address this, the focus is narrowed down to the decision-making process. The research further scrutinises the interaction between regional and national levels of policy-making. At the regional level, where issues from various domains converge in physical space, integrated approaches are evident. Understanding the influence of national-level decisions on regional policies is imperative for comprehensively assessing governance dynamics. Moreover, the research is geographically and thematically confined to mobility and urban development in the Netherlands, with a specific focus on illustrative cases that exemplify the integration of mobility and urban development policies within the Dutch context.

1.5. Relevance

By examining governance structures and decision-making processes, this thesis constructs a comprehensive framework, enhancing understanding of governance dynamics and their impact on welfare integration. Broad prosperity is based on a new definition of what (social) well-being entails and how the government should direct its efforts. This research is scientifically relevant for several reasons. Firstly, it contributes to the definition formation of the 'new' prosperity concept by juxtaposing broad prosperity with the 'old' or current prosperity concept, where classical economic assumptions and efficient resource allocation are predominant. The conceptual framework of this study provides insights into what broad prosperity signifies within the context of mobility, guiding towards an alternative definition of well-being and the application of models and tools. The study presents empirical evidence and theoretical insights that aid in refining the broad prosperity concept.

Secondly, this research provides state-of-the-art scientific knowledge by offering insights into addressing compartmentalisation. Just like in practice, science is also compartmentalised. In this context, efforts are made to work integrally for a holistic evaluation. By examining case studies, this research seeks to identify the tensions and conflicts between existing governance structures and institutions and integrated broad prosperity approaches. The research maps out these scientific conflicts, elucidating what is necessary to reconcile the two. Indeed, it is not feasible to harness broad prosperity without considering the current governance framework.

Additionally, this research helps policymakers navigate the complexities of incorporating broad prosperity considerations into mobility policy-making. This offers practical guidance for policymakers in prioritising long-term citizen well-being in mobility policies within short-term political cycles and considering the distribution of effects. Through grasping these intricacies, this research contributes to developing a system that improves the well-being of citizens.

Furthermore, this research aligns seamlessly with the objectives of the Complex Systems Engineering and Management (CoSEM) programme, particularly the transport and logistics track and the institutional perspective. Understanding policy-making complexities is a typical CoSEM endeavour. The complexity of the transport governance system stems from its embeddedness in other systems (such as the urban environment), uncertainties related to future developments (such as climate change and population growth), and the involvement of various interdependent actors (such as the Ministry of Infrastructure and Water Management,

municipalities, travellers, and transporters). Systematically analysing existing scientific knowledge and real-world practices in an iterative process, as taught in the CoSEM programme, is crucial for the framework's design. Through a multidisciplinary lens, the study delves into the intricate interplay of systems engineering, institutional economics, and organisational science.

1.6. Thesis outline

This chapter has outlined the problem this research aims to address and formulated the research objective and questions to achieve this goal. Chapter 2 will elucidate the chosen research approach and methodology, providing a rationale for the selected methods and outlining the case study design and overarching research design. Subsequently, Chapter 3 and Chapter 4 will expand upon the case study design, specifying criteria and factors relevant to broad prosperity and policy integration respectively, thereby establishing a concrete conceptual framework for empirical investigation. Chapter 5 derives insights from the cases through document analysis and interviews, uncovering lessons that can be learned from the decision-making processes of mobility and urban development. Following a cross-case analysis and interpretation of the insights from empirical analysis in Chapter 6, Chapter 7 will present a design of guiding principles, including a critical assessment of the approach’s feasibility. This thesis will culminate in conclusions, discussions, and recommendations, which inform future research and policy-making in Chapter 8.

2 METHODOLOGY

This chapter outlines the methodological approach undertaken to comprehensively explore governance structures for the application of broad prosperity within the nexus of mobility and urban development. Section 2.1 describes the research approach that is used to answer the research question. Section 2.2 discusses the case study design and requirements for the case studies. Subsequently, Section 2.3 discusses the sub-questions and overall research design. Finally, Section 2.4 argues for methods to answer the research questions.

2.1. Research approach

This study employs a qualitative case study approach to investigate governance structures concerning broad prosperity considerations within the context of mobility and urban development. As discussed in Chapter 1, the paradigm shift towards broad prosperity in policy-making necessitates a comprehensive understanding of its application through an institutional lens.

The choice of a qualitative case study approach is grounded in the complexity inherent in the relationships among governance structures, policy integration, and the broad prosperity paradigm. The complexity of interactions among governance structures requires a nuanced exploration, which the qualitative approach provides (Creswell, 2009). This approach provides rich, detailed data that captures this complexity. By adopting a critical approach to the case study, as articulated by Crowe et al. (2011), this study aims to examine the assumption that policy integration is essential for applying the broad prosperity paradigm and making broad assessments of welfare.

Moreover, context-specific insights help in revealing how broad prosperity principles are applied in different settings. The contextual richness of case studies aligns with the nature of broad prosperity, enabling a thorough examination of practical policy-making. In the field of mobility and urban development, this ensures that findings are relevant and directly applicable, enhancing the study's practical implications. Additionally, this approach facilitates the identification of patterns and themes across different cases, contributing to a deeper understanding of policy integration and policy-making.

Despite its strengths, the qualitative case study approach has limitations. A potential limitation is its limited generalisability to broader contexts (Flyvbjerg, 2006). However, as Flyvbjerg (2006) argues, this limitation does not diminish the scientific value of the study. Instead, the uniqueness of each case underscores the richness and depth of insights attainable through an in-depth examination. Furthermore, qualitative case studies, especially with multiple cases, can be resource-intensive. A meticulously planned data collection and analysis strategy is imperative to maintain the research's feasibility, a consideration this chapter seeks to address.

2.2. Case study design

To effectively investigate the impact of policy integration and broad prosperity considerations on policy-making outcomes, careful selection of cases is essential. This study focuses on mobility development in combination with residential area development at the city or metropolitan area level, employing a holistic multiple-case study design. This approach emphasises local contextual factors that influence governance structures and policy dynamics in mobility and urban development (Yin, 2011).

There are three main points of consideration for the case study. Firstly, the cases must provide insight into institutional structures conducive to broad prosperity considerations in policy-making. Therefore, the selection of cases encompasses governance structures with varying levels of integration of mobility and urban development policy-making, facilitating comparative analysis across different contexts. Additionally, the cases reflect conventional and 'broad prosperity' policy-making practices. This distinction is schematically presented in Figure 2.1.

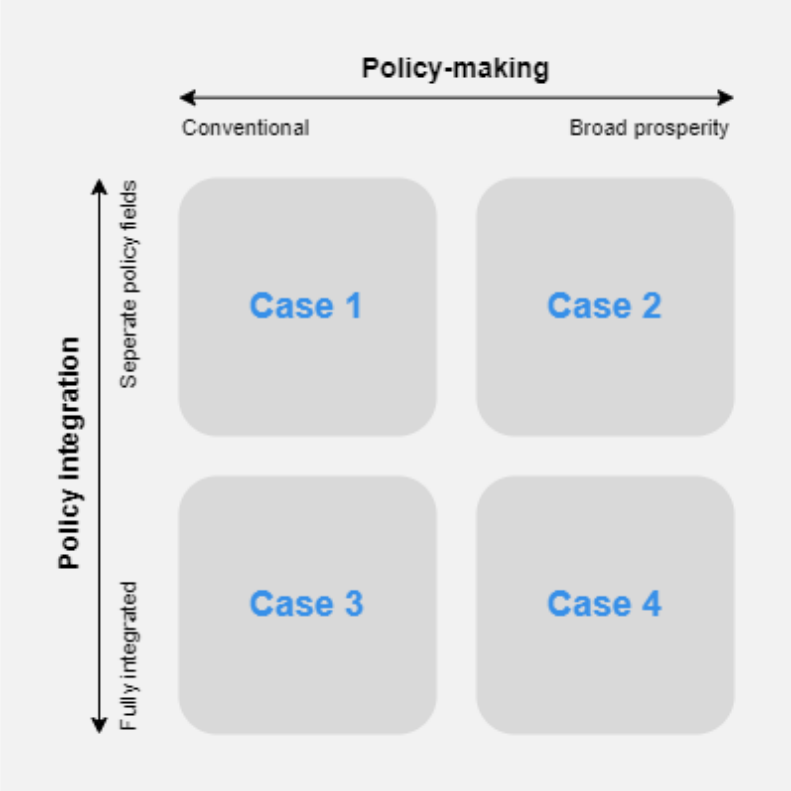

Figure 2.1: Case study design

Secondly, comparability among cases is crucial for meaningful analysis. Cases are considered comparable when they share similarities in aspects beyond the two varying dimensions of policy integration and the aim of policy-making. This includes factors such as project size, type (for example transport infrastructure, residential development), decision-making procedures, and policy context. Notably, all cases are situated at the local level and within a Dutch context. Aligning these dimensions allows the study to provide valid comparisons and insights, which enhances the robustness of the analysis.

Thirdly, the selected cases should provide rich and nuanced data that align with the specific requirements of each sub-question, facilitating an extensive exploration of the research objectives. Access to relevant data, including legal documents, policies, and performance metrics, is essential for a thorough analysis of the institutional frameworks in each selected city. Moreover, establishing collaborations with local experts, policymakers, and urban planners is crucial. Local insights provide a deeper understanding of the practical implications and nuances of the institutional frameworks. Therefore, existing connections with stakeholders and data availability are considered when selecting cases.

The analysis of the cases is designed to gain a comprehensive understanding of the policy-making process. As mentioned, achieving this necessitates a diverse array of case characteristics, adequate information on the selected projects, and ensuring comparability among cases.

2.3. Sub-questions and research design

The objective of this research is to establish guiding principles for developing mobility policies that prioritise overall social welfare, facilitating sustainable and inclusive outcomes in alignment with the broad prosperity perspective. In this section, five sub-questions are formulated to guide the research. Aligned with the main research question, these sub-questions unfold progressively, contributing to a comprehensive exploration of governance structures for broad prosperity assessments in the domains of mobility and urban development. Each sub-question is designed to elicit data essential for answering the main research question.

Initially, a conceptual framework needs to be established based on which relevant aspects of the cases can be analysed. The first two sub-questions are dedicated to the development of this foundational framework. Firstly, an analysis of the scope of policy considerations is required, specifically whether processes align with the conventional way of policy-making or are grounded in the broad prosperity paradigm. This underscores the importance of establishing criteria and factors to gauge the extent to which broad prosperity principles have guided or played a role in policy-making. Clarity regarding the key performance indicators (KPIs) for broad prosperity within both the mobility and the urban development domain is crucial. In addition, it is important to identify what constitutes a decision-making process according to the broad prosperity principle. What organisational aspects differ from a conventional approach? Clarity on indicator, process and stakeholder factors and criteria enables an assessment of whether steering has been rooted in broad prosperity or traditional practices. Sub-question 1 elucidates these dimensions.

1. Which factors and criteria indicate how the broad prosperity paradigm plays a role in mobility and urban development policy-making?

Secondly, it is crucial to assess the level and type of integration between mobility and urban development policy-making. Sub-question 2 aims to identify governance components that provide insights into policy integration.

2. Which factors and criteria indicate how well mobility and urban development policy-making are integrated?

Subsequently, leveraging the established framework becomes instrumental in dissecting the cases, aiming to understand the effects of policy integration and the pursuit of broad prosperity on the policy-making process in the real world. In this phase, data is collected on the degree of policy integration and broad prosperity pursuit. Sub-questions 3 and 4 connect the frameworks of broad prosperity and policy integration with practical policy implications. The ensuing discussion examines closely how the factors from the framework play a role in the case studies.

3. How do specific implementations of broad prosperity factors in mobility policy-making processes score on the broad prosperity criteria?
4. How do specific implementations of policy integration factors in mobility policy-making processes score on the policy integration criteria?

In the concluding phase, translating the insights from case analyses into practical applications is essential. It is imperative to discern whether and how coordination between mobility and urban development leads to better outcomes and what the decision-making process should look like. To achieve positive outcomes in practice, it is crucial to understand how the realisation of this coordination can be actualised. Within this context, identifying barriers to the implementation of the governance structure and elucidating contributing factors assume paramount importance. Sub-question 5 addresses these practical dimensions, thereby enhancing the applicability of the study's findings.

5. How can governance structures that enable a broad consideration of welfare in mobility policy-making be applied in practice?

This set of sub-questions serves as a comprehensive guide for the research, unravelling governance structures, policy integration, and their impact on broad prosperity considerations, thereby collectively addressing the main research question. The research is structured into three parts: theory on broad prosperity and policy integration (sub-questions 1-2), mobility and urban development in practice (sub-questions 3-4), and implementing guiding principles (sub-question 5).

Figure 2.2 illustrates the research flow diagram, providing a visual overview of these three distinct parts and their corresponding research steps. Each sub-question is linked to specific research activities, highlighting the sequential progression of the study. This visual representation aids in clarifying the logical flow of the research, ensuring a comprehensive examination of governance structures policy integration, and their implications for broad prosperity assessments.

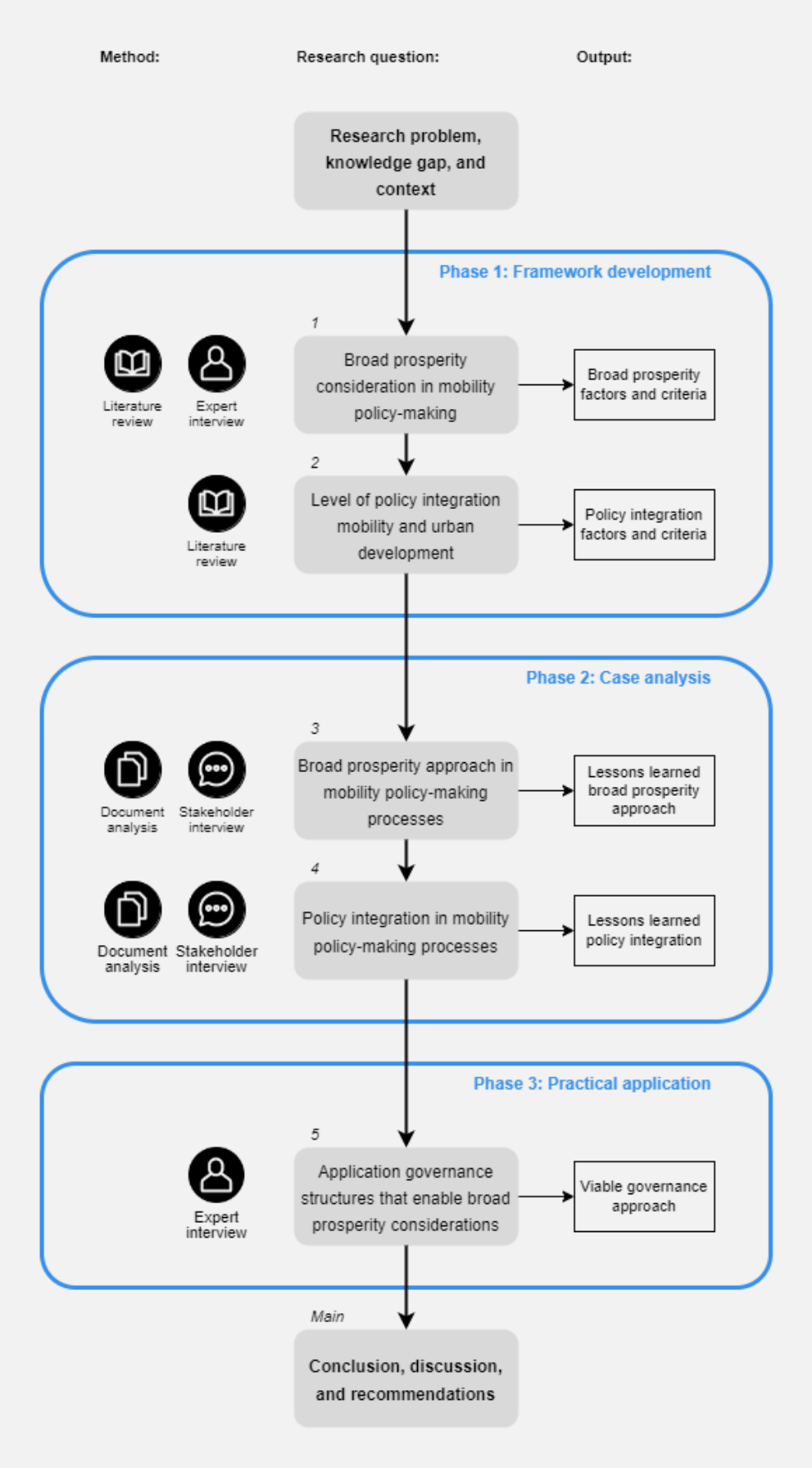

Figure 2.2: Research flow diagram

2.4. Methods

To address the research questions comprehensively, a mix of research methods and tools is employed, aligning with the nature of each sub-question. This section motivates the different methods used in the research. Table 2.1 provides an overview of the research methods and tools employed for each sub-question, illustrating the alignment between data collection methods and analytical tools.

Table 2.1: Overview of research methods and tools
(Tarnavasky Eitan et al., n.d.; TurboScribe, n.d.)

Part	Research method(s)	Data collection tools	Analysis tools
1	Literature review and expert interview	Databases (e.g., Google Scholar, Scopus), semi-structured interviews, and a focus group	• Table overview in Excel • Connectedpapers • TurboScribe • Bullet summary
2	Document analysis and stakeholder interview	Government databases and semi-structured interviews	• TurboScribe • Bullet summary • Process tracing
3	Expert interview	Focus groups	• TurboScribe • Bullet summary

These strategies, though not eliminating limitations, are crucial for ensuring the study's robustness and enhancing the credibility of the findings within the practical constraints of the research design. The use of multiple data sources enriches the analysis and ensures valid conclusions.

2.4.1. Methods conceptual framework development

Part 1, the establishment of the conceptual framework, relies on the theory of broad prosperity and policy integration. The theory is collected through a literature review and expert interviews. Additionally, the inclusion of semi-structured interviews and a focus group acknowledges the novelty of the broad prosperity paradigm, recognising that not all relevant information might be available in the literature.

Literature review

The literature review relies on databases such as Google Scholar and Scopus. The databases allow for extensive searches based on keywords and filters. Table 2.2 presents the keywords that are used for conceptual framework development.

Table 2.2: Keywords literature review conceptual framework development

Research topic	Keywords
Broad prosperity	‘broad prosperity’, ‘well-being’, ‘brede welvaart’
in mobility domain	‘transport’, ‘transportation’, ‘mobility’
Policy integration	‘policy integration’, ‘integrated policy’, ‘interdisciplinary policy’, ‘cross-sectoral policy’, ‘holistic policy’, ‘integrated governance’
Policy making process	‘policy-making’, ‘policymaking’, ‘policy cycle’

Initially, key literature is sought to provide insight into the discourse on broad prosperity and policy integration to situate the concepts. Due to the novelty of broad prosperity and the Dutch context of this research, in addition to scientific literature (such as journal articles), various

reports authored by for example knowledge institutes and governmental organisations are utilised. Subsequently, literature providing insight into relevant factors for the analysis is also sought. This involved a particular search for literature reviews, as they provide an overview of which factors are relevant. Complementarily, forward and backwards snowballing is used to identify key articles. For this purpose, features in the databases and the connectedpapers tool are used. The relevance of identified articles is assessed by looking at the title, abstract, publication year and article type. Articles contributing to answering the sub-questions are selected.

Expert interview

To ascertain the exact features of a broad prosperity approach and where it differs from the conventional way of policy-making, semi-structured interviews are conducted, and a focus group is organised with experts in the field of broad prosperity. This approach was chosen because the concept of broad prosperity is still evolving, and there is no clear-cut definition yet. The advantage of the focus group is that quality control takes place during the session itself.

Figure 2.3: Interview protocol
Adopted from Slangewal (2022)

The interview protocol shown in Figure 2.3 was utilised for this study. The expert interviews aim to identify the factors indicating how broad prosperity plays a role in the decision-making process and to determine the associated criteria. Participants are selected based on their expertise and availability. Table 2.3 details the role and expertise of the interviewees. It is important to note that only experts from the Dutch Ministry of Infrastructure and Water Management are interviewed, which may introduce a bias in the results. The guides in Appendix A.1 were used for inviting and questioning participants. During the expert interviews, (part of) the results of the document analysis are also presented to the respondents. While this carries the risk of influencing their answers, it helps facilitate substantive discussion. Additionally, the open structure allows for free input from the respondents. The empirical focus is not on what the respondents say, but on what they mean. Therefore, recordings of the interviews were transcribed in summary form using TurboScribe as a tool. These summaries were sent to the respondents for verification. The final step involves analysing and processing the results. This is done by comparing the various results from the interviews and the document analysis and incorporating key aspects into the conceptual model.

Table 2.3: Description interviewees conceptual framework broad prosperity

Interview	Organisation	Role	Expertise
1.1	Dutch Ministry of Infrastructure and Water Management	Coordinating policy officer	Data, management and evaluation of mobility, and mobility innovations
1.1	Dutch Ministry of Infrastructure and Water Management	Senior policy officer	Innovation of mobility, sustainability, and broad prosperity theory
1.2	Dutch Ministry of Infrastructure and Water Management	Policy support officer	Data, management, and evaluation of mobility
1.3	Dutch Ministry of Infrastructure and Water Management	Senior advisor mobility and space	Broad prosperity indicators and dashboard, approach mobility
1.3	Dutch Ministry of Infrastructure and Water Management	Policy officer	Innovation of mobility, Theory of Change, and broad prosperity theory
1.3	Dutch Ministry of Infrastructure and Water Management	Data scientist	Broad prosperity dashboard
1.3	Dutch Ministry of Infrastructure and Water Management	Data scientist and transport engineer	Broad prosperity dashboard, urban mobility, travel behaviour
1.3	Dutch Ministry of Infrastructure and Water Management	Policy support officer	Data, management, and evaluation of mobility
1.3	Dutch Ministry of Infrastructure and Water Management	Behavioural research consultant	Travel behaviour, broad prosperity indicators, mobility research
1.4	Dutch Ministry of Infrastructure and Water Management	General strategic advisor	Strategy mobility and broad prosperity

2.4.2. Methods case analysis

Part 2, the analysis of mobility and urban development decision-making processes, adopts a dual approach, utilising both primary and secondary data. Stakeholder interviews are conducted alongside document analysis, utilising semi-structured interviews and government databases. This allows for a critical examination of the practical implications of the broad prosperity approach. The analysis of these data involves process tracing for in-depth case analysis and application of the conceptual framework. Process tracing aids in understanding the sequence of events and involves creating a timeline for each case. The document analysis's reliability depends on document availability. The thorough search and triangulation with interview data will enhance the robustness of the results. In addition, flexibility is maintained during the data collection process, adapting to emerging insights and enabling a more thorough investigation of unexpected relevant issues.

Case selection

The selection of cases involves identifying significant projects in mobility (and urban development) policy-making that display various types of policy-making and various levels of policy integration. Ideally, the study includes each type of case depicted in Figure 2.1. The identification involved collaboration with experts from the Ministry of Infrastructure and Water Management who coordinate the Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT) and examination of the programmes ‘RegioDeals’, ‘NOVEX’, and ‘Woningbouw en mobiliteit’, among others.

The list of identified cases is categorised and evaluated against the predefined criteria including policy integration level, incorporation of broad prosperity principles, comparability, and data and expert availability (see Section 2.2). The type of policy-making and the degree of policy integration are estimated based on a scan of the project descriptions. After assessment, a set of four cases representing varied governance structures and policy approaches is selected for the study: Zeeburgereiland, Binckhorst, Valkenhorst, and Merwedekanaalzone.

Stakeholder interview

Semi-structured interviews with stakeholders were conducted to gain deeper insights into the cases and the factors influencing the decision-making process. The open structure of these interviews facilitated the collection of additional information about the cases.

The interview protocol shown in Figure 2.3 was also used for the stakeholder interviews. However, the goal was to understand the policy-making and policy integration factors for each of the cases. Participants included policy or project staff from a province, municipality, or other organisation involved in the projects related to the case. For the case of Zeeburgereiland, the semi-structured interviews were conducted with various policy officers from the municipality of Amsterdam. The interviews for the case Binckhorst were conducted with people from the independent project team. The interviews for the case Valkenhorst were conducted with policy officers from Katwijk municipality, the province of South Holland, and the Dutch Ministry of Infrastructure and Water Management. Lastly, for the case of Merwedekanaalzone, interviews were conducted with a policy officer from Utrecht municipality, people from the project team of Utrecht municipality, and an employee of one of the area developers involved. Table 2.4 presents how the interviewees are involved in the case. Appendix A.2 presents the guides used for the stakeholder interviews. In addition to the guides, process reconstruction was undertaken during the interviews by re-examining key moments from the document analysis or previous interviews. This data triangulation enhances the validity of the results. The focus of the interviews is on what happened and why. As described in the previous section, the interview data is transcribed as a summary bullet list. The results of the interviews provide input for the comparative analysis based on the conceptual framework, which allowed for the assessment of how specific decision-making processes perform against the broad prosperity and policy integration criteria.

The results of the stakeholder interviews and document analysis were directly utilised to determine the constructs for policy-making and policy integration factors, which are presented in tables in Chapter 5. The interview protocol was aligned with the conceptual framework, enabling direct translation of the interview data into specific policy-making characteristics and policy integration levels for each phase of the decision-making process for each case. This alignment ensured that the data collected could be systematically applied to fill in the values for these constructs, providing a clear and comprehensive analysis of each case.

Table 2.4: Description interviewees cases

Interview	Case	Organisation	Role
2.1	Zeeburgereiland	Municipality of Amsterdam Project Management Bureau	Senior project manager
2.2	Zeeburgereiland	Municipality of Amsterdam	Project and programme manager infrastructural projects
3.1	Binckhorst	Nehemia Project Management	Project manager plan development
3.2	Binckhorst	Municipality of The Hague	Plan study manager of plan products, integrated development and sustainability
4.1	Valkenhorst	Province of South Holland	Strategic advisor mobility, specifically public transport
4.2	Valkenhorst	Ministry of Infrastructure and Water Management	Regional road construction coordinator
4.3	Valkenhorst	Province of South Holland	Area director and senior spatial development advisor
4.3	Valkenhorst	Province of South Holland	Strategic advisor mobility, specifically public transport
4.4	Valkenhorst	Municipality of Katwijk	Project leader
5.1	Merwedekanaalzone	Municipality of Utrecht	Strategic advisor mobility
5.2	Merwedekanaalzone	AM	Project developer area development
5.3	Merwedekanaalzone	Municipality of Utrecht	Project manager

Document analysis

The objective of the document analysis is to gain insight into the decision-making process: when decisions were made, who was involved, and what considerations were taken into account. The document analysis utilises grey literature, such as policy documents, council decision reports, and government agency websites. Relevant documents were identified through web searches related to the cases and associated projects. Additionally, key documents were shared by stakeholders following the interviews.

2.4.3. Methods practical application

The final ‘practical application’ phase, part 3, primarily relies on expert interviews in the form of focus groups. This method provides a deep understanding of the practical implications of implementing governance structures that enable a broad assessment of welfare in mobility policy-making and allows for the validation of results by testing the results of the case analysis. This phase supports iterative analysis, where preliminary findings are redefined and validated through ongoing data collection.

Expert interview

The focus groups aim to generalise the results of this study and enhance the practical applicability of the findings. Therefore, the interviews were designed to test a combination of the following three topics: the conceptual framework of broad prosperity, findings from the case analysis and comparison, and enhancing and impeding governance structures for the application of broad prosperity.

As with the other interviews, the interview protocol from Figure 2.3 was followed. Participants were selected based on their knowledge of broad prosperity and their experience in applying the concept. To address potential biases, a diverse group of participants representing various stakeholders and perspectives was chosen, contributing to a more holistic understanding of the implications. Each focus group consisted of four up to eight participants with diverse backgrounds and versatile and comprehensive expertise on broad prosperity. Table 2.5 illustrates the expertise of each interviewee. Appendix A.3 contains the guides for the focus groups. The focus groups were recorded and transcribed in summary form. The analysis of the results involves outlining the governance lessons for applying broad prosperity and supplementing the identified guiding principles.

Table 2.5: Description interviewees governance design

Inter-view	Organisation	Role	Expertise
6.1	Dutch Ministry of Infrastructure and Water Management	Manager and project manager	Complex political policy dossiers, programmes and projects related to innovation and mobility
6.1	Dutch Ministry of Infrastructure and Water Management	Coordinating policy officer	Data, management and evaluation of mobility, and innovation
6.1	Dutch Ministry of Infrastructure and Water Management	Senior innovation officer	Travel behaviour
6.1	Rijkswaterstaat	Adviser on economy and space	Broad prosperity and area-based work
6.1	Independent	Advisor	Mobility, public transport, economy
6.2	MRDH	Strategic advisor	Climate adaptation, mobility
6.2	BVR Adviseurs	Partner	Spatial development, integral future vision
6.2	Populytics and Delft University of Technology	Researcher	Broad prosperity, ex-ante policy evaluation, participatory value evaluation
6.2	Dutch Ministry of Infrastructure and Water Management	Senior policy advisor	Urbanism, cross-over network systems, urbanisation and infrastructure policy, multimodal hubs, transit-oriented development
6.3	Rebel and Municipality of Rotterdam	Senior advisor	Integral strategic mobility issues, MIRT renewal
6.3	The Social and Economic Council of the Netherlands	Project leader	Broad prosperity
6.3	Dutch Ministry of Foreign Affairs	Policy officer	Sustainable development goals and broad prosperity
6.3	Province South Holland	Strategic advisor on policy analysis and monitoring	Accessibility programme, broad prosperity
6.3	Het PON & Telos	Advisor and researcher	Citizen participation, design thinking, liveability
6.3	Municipality of Amsterdam	Strategist team urban innovation	Broad prosperity, urban development
6.4	Province of North Holland	Policy advisor transport and land use	Transit-oriented development, station area development, smart mobility hubs

PART 1

THEORY ON BROAD PROSPERITY AND POLICY INTEGRATION

3 BROAD PROSPERITY FRAMEWORK

The concept of broad prosperity has predominantly been developed theoretically in policy reports, sparking extensive discussions regarding its definition and implications. This chapter serves to translate theoretical constructs into the groundwork for policy-making according to broad prosperity principles.

To achieve this objective, Section 3.1 begins by situating the broad prosperity paradigm within the context of various theories concerning welfare, policy processes, and participation literature, alongside developments in the domain of mobility. Subsequently, Section 3.2 delineates relevant factors for distinguishing different ways of policy-making. This culminates in the development of a conceptual framework. Section 3.3 juxtaposes broad prosperity with a conventional approach to policy-making, encapsulating criteria for broad prosperity. Finally, Section 3.4 concludes the chapter by providing a comprehensive response to sub-question 1.

3.1. Broad prosperity in context

Broad prosperity has evolved within a complex landscape of policy-making and socio-economic advancements. This section delves into this context through literature reviews, aimed at understanding the emergence of the broad prosperity approach. A contextual understanding is paramount for delineating broad prosperity within the domain of mobility policy.

3.1.1. The emergence of welfare approaches

Established social welfare paradigms have faced criticism for their perceived failure to address rising inequality, economic, social, and environmental sustainability, and democratic accountability. Governments and policymakers increasingly recognise that prevailing approaches to policy formulation, design and implementation often ignore the state in which society is and impede progress on critical social and environmental challenges, such as climate change, biodiversity loss and social polarisation.

Several influential reports have played a pivotal role in shaping this discussion and the discourse surrounding alternative paradigms. First of all, the World Commission on Environment and Development highlighted the critical global environmental problems arising from poverty in the South and unsustainable consumption and production patterns in the North in 1987 in the ‘Burndtland Report’ (The World Commission on Environment and Development, 1987). The report advocated for sustainable development, defined as ‘meeting the needs of the present without compromising the ability of future generations to meet their own needs’. Moreover, the Stigliz-Sen-Fitoussi Report aimed to identify the limitations of GDP as an indicator of economic performance and social progress and emphasised the need for more

relevant indicators of social progress and alternative measurement tools (Stiglitz et al., 2009). In 2013, the Conference of European Statisticians Recommendations on Measuring Sustainable Development provided a measurement framework and sets of indicators for measuring sustainable development, aiming to harmonise approaches and indicators used by countries and international organisations (Economic Commission for Europe, 2014). Together, these reports have highlighted the urgent need for a shift towards more holistic welfare definitions and more sustainable practices.

Table 3.1: 'Beyond GDP' approaches
(Bentham et al., 2013; Doughnut Economics Action Lab, n.d.; Raworth, 2012; The Democracy Collaborative Foundation, n.d.; The Foundational Economy Collective, n.d.; The International Financial Reporting Standards Foundation, n.d., 2021; The Organisation for Economic Co-operation and Development, n.d.; United Nations Development Program, n.d.; Wellbeing Economy Alliance, n.d.)

Approach	Vision	Core
Community Wealth Building	Transforming the economic system to benefit communities and individuals rather than concentrating wealth and power in the hands of a few	• Participatory decision-making and ownership • Address wealth inequality • Local level
Doughnut Economics	An ecologically safe (within planetary boundaries) and socially just space (above social foundation) in which humanity can thrive	• Systems thinking • Change the goal, see the big picture, nurture human nature, get savvy with systems, design to distribute, create to generate, and be agnostic about growth
Foundational Economy	A society with the provision of everyday universal basics like food, housing, health services and transport within planetary limits.	• Liveability facilitated by essential services, hard and soft social infrastructure, and disposable/residual income • Equitable access
Inclusive Growth	Economic growth that is both sustainable and equitable, ensuring that all segments of society benefit from increased prosperity and opportunities	• Equality and shared prosperity • Opportunities for growth • Collaboration and trust in institutions
Integrated Reporting	Organisations can effectively communicate how they create value and how they manage their impacts on stakeholders and the broader environment, improving transparency, accountability, and decision-making	• Focus on corporations • Integrated and long-term thinking • Six capitals: financial, manufactured, intellectual, human, social and relationship, natural
Sustainable Development Goals	End poverty, protect the planet, and ensure that all people enjoy peace and prosperity	• Development must balance social, economic, and environmental sustainability • Interrelated goals related to the economy, society, and biosphere
The Wellbeing Economy	A more just, sustainable, and fulfilling world where the well-being of people and the planet is prioritised above narrow economic interests	• Holistic and inclusive approach • Human well-being • Principles: pre-distribution, purpose, prevention, people-powered

Various alternative approaches, paradigms, and models have emerged in response to these reports and developments in welfare discussions. These include Community Wealth Building, Doughnut Economics, Foundational Economy, Inclusive Growth, Integrated Reporting, Sustainable Development Goals (SDGs) and the Wellbeing Economy. As illuminated in Table 3.1 and discussed by Crisp et al. (2023), a shared characteristic among these approaches is their departure from the conventional reliance on GDP as a measure of progress, instead advocating for alternative understandings of prosperity. The approaches represent a broader shift in policy-making practices, of which broad prosperity is a part. They stretch the classical economic definition of what constitutes prosperity and value, incorporating more aspects.

For broad prosperity, this involves making trade-offs explicit by elucidating a wide range of values in non-monetary terms, following a broader view of what policy-making should aim for focusing on liveability within planetary limits, long-term thinking, and a renewed policy-making process. Some of the approaches suggest the establishment of participatory mechanisms to engage diverse stakeholders in policy development and implementation. This is discussed further in the next section.

3.1.2. The contribution of participatory governance

The preceding section highlights the growing demand to transcend economic-centric decision-making paradigms, as observed in criticisms of conventional social welfare frameworks where economic considerations dominate. Concurrently, there is a discernible critique of traditional policy-making practices. Some Beyond GDP approaches, such as Community Wealth Building, advocate for a departure from conventional practices towards more inclusive and participatory decision-making processes. Thus, the emergence of the broad prosperity paradigm is contextualised within the realm of participatory governance and process management.

The advocacy for public policies based on subjective well-being by Beyond GDP approaches, suggests a transformation in policy-making dynamics. According to Fabian et al. (2022), this transformation entails moving away from objective analyses conducted by technical experts towards a more participatory and deliberative approach in defining, analysing, and measuring well-being, culminating in policy decisions. Fabian et al. (2021) delineate two contrasting perspectives: the conventional 'social planner perspective', characterised by technocratic principles and reliance on expert opinion, and the alternative 'citizen's perspective', portraying stakeholder and citizen involvement in co-designing policies aligned with value-laden well-being approaches.

Moreover, McNaught (2024) argues that this concept of collaborative governance has gained prominence in recent years within the public administration, public policy, and public management domains. Various factors, including the inherent complexity and interrelatedness of contemporary issues, uncertainties surrounding policy challenges, governmental limitations in addressing these issues effectively, and the recognition of the value of local knowledge, have spurred the adoption of participatory practices (Ansell, 2012; Bryson et al., 2006; Gray & Purdy, 2018; Ulibarri, 2019). In this context, citizen and stakeholder participation is envisioned

as instrumental in generating public value that aligns with citizens' needs, with a focus on tangible outcomes and societal impact, thereby reflecting the fundamental principles of Beyond GDP approaches and broad prosperity (Andrews & Shah, 2003).

3.1.3. The transformation of mobility and welfare

Aligned with shifts in the approach to prosperity and policy, the transformation of mobility is undergoing a paradigmatic change. Van Altena (2023) provides a comprehensive overview of this transformation in the relationship between mobility and welfare, which can be distilled into the following. Historically, economic growth and prosperity have been closely intertwined with the increasing mobility of goods and people. However, recent developments provoke that physical movement is no longer the primary driver of growing productivity. The rise of the information economy has led to a shift where mobility and infrastructure are no longer ends in themselves but rather viewed as means to facilitate exchange and connectivity. Additionally, Nistor & Popa (2014) argue that the introduction of sustainable development as a principle in the early 20th century complicates and negates the direct effect that infrastructure development has long had on the growth of the economy. Similarly, Helling (1997) states that while transport historically benefited economic development, its diminishing benefits and increasing costs necessitate a structured decision-making approach focused on efficiency, flexibility, and consideration of citizens' concerns for equity, self-determination, and stability.

Looking at policy in the mobility domain, van Burgsteden (2021) shows that many trade-offs in traffic and transport policy and related investment choices are dominated by criteria leaning heavily on paradigms related to fighting congestion, reducing travel time, and increasing road capacity. He terms this the classic 'mobility paradigm', which emerged in the 1960s. In contrast, there is the 'accessibility paradigm', which primarily focuses on the development opportunities and social aspects of travel. This second paradigm aligns more closely with broad prosperity goals. However, according to van Burgsteden (2021), it is not widely implemented in practice.

3.1.4. Broad prosperity in perspective

By putting broad prosperity in perspective of policy-making and socio-economic developments, it becomes clear that this approach is not isolated from other global movements. Alongside other Beyond GDP approaches, broad prosperity represents a growing recognition of the need for more holistic and sustainable paradigms to address the complex challenges facing society and the environment. Broad prosperity should be regarded as a genuine transformation in the approach to policy-making, departing from conventional methods. It transcends the mere quantification of values in monetary terms. Rather, it represents a fundamental shift in policy-making dynamics towards greater participation and inclusivity. In this context, considering the evolving relationship between mobility and the economy, broad prosperity emphasises not only the efficiency of mobility systems but also its role in fostering social equity, environmental sustainability, and overall well-being.

3.2. Toward a conceptual framework of policy-making

The section delineates key factors that influence the significance of the broad prosperity paradigm and its integration into policy-making processes concerning mobility and urban development. These factors underpin the conceptual framework, offering a structured scheme for systematically analysing and comprehending the diverse dimensions of mobility policy-making in the context of broad prosperity.

3.2.1. Policy-making factors

The conceptual framework should encompass factors that characterise the process of policy formulation and decision-making. Section 3.1 demonstrates that broad prosperity represents a novel approach within a larger movement towards considering factors beyond mere economic indicators, thereby providing initial guidance on potentially relevant factors. Additionally, literature on the subject suggests several factors that may be pertinent to this discussion. Moreover, insights from policy experts in mobility and broad prosperity provide critical considerations in policy-making. These experts have experience in operationalising broad prosperity for mobility and mobility in practice (see Appendix B.1). Appendix B.1 presents the findings of interviews with these experts, highlighting several key factors. Four categories of factors for policy-making can be distinguished.

Issue

Firstly, the issue itself is important in the policy-making process, encompassing the factors scope, aim, and mobility, which collectively define the problem at hand and guide decision-making. Scope delineates the boundaries of the problem domain, specifying what is and is not addressed, while aim articulates the desired outcomes. This is closely tied to the discussion on how welfare is defined, as improving welfare should be the overarching goal of policy. Insights accumulated from interviews on the broad prosperity framework underscore the fundamental role of these factors, particularly in contrasting broad prosperity approaches with conventional methods. Furthermore, the way mobility is understood within the issue should be examined, determining whether it is regarded as an objective or as a means to enhance welfare (Snellen et al., 2021; van Altena, 2023).

Effects

Secondly, the effects factors delve into how decision-makers manage, measure, and consider the effects of policy throughout the policy-making process. This encompasses various factors, including range, type, time horizon, and distribution. Range, according to Snellen et al. (2021) is essential for comprehensiveness, as it dictates the span of aspects considered in decision-making. It dictates which themes are considered and which criteria and indicators are used to justify decisions. This involves examining whether decision-makers focus solely on accessibility or extend their considerations to broader societal impacts. Additionally, as suggested by Beyond GDP approaches, the type of effect is crucial, distinguishing between practices focused on subjective or objective measures, as well as differentiating between a focus on input indicators or impact assessments. Including a time horizon is essential for determining the extent to which decision-makers project the consequences of policies into the future. Experts mark this as an important factor (Appendix B interview 1.1). Furthermore,

distribution explores the extent to which the allocation of effects on different geographical areas or demographic groups is considered in the decision-making process. This entails analysing who benefits and who bears the burdens of policy decisions emphasising the necessity of measuring distribution to fully comprehend the underlying issues. Interviews underscore the necessity of measuring distribution to gain a comprehensive understanding of the underlying issues and ensure fair policymaking (Appendix B interview 1.2).

Trade-offs

Thirdly, trade-offs represent the choices inherent in policy-making processes, requiring decision-makers to weigh competing priorities and allocate resources accordingly. The description of, underpinning of and argumentation for trade-offs should be part of the conceptual framework. The description of choices can vary significantly, ranging from simplistic monetary evaluations to more nuanced considerations of diverse values and objectives. Section 3.1 shows that these are different ways of policy-making. Additionally, the underpinning principles guiding these trade-offs play a crucial role, with decisions often rooted in distributive or ethical principles (Snellen et al., 2021, 2022). Lastly, the argumentation surrounding these choices is vital according to experts (Appendix B interview 1.1 and interview 1.4). This is because the transparency and explicitness with which trade-offs are articulated differ between policy-making approaches.

Process

Lastly, the process category encompasses factors related to the decision-making process itself. This includes stakeholder participation and the utilisation of instruments to evaluate options. Stakeholder participation, as elucidated by experts (Appendix B interview 1.1 and interview 1.2) and Section 3.1, is an essential aspect of a policy-making approach. Van Edelenbos has devised a participation ladder, which delineates various levels of stakeholder involvement, ranging from minimal influence at the lower steps to significant engagement and influence at the higher steps (Bovens et al., 2017). This ladder can be used to provide insight into citizen engagement throughout the decision-making process. Additionally, the choice of instruments used to, among others, assess and weigh options is critical. These instruments serve as tools to facilitate decision-making and can range from cost-benefit analyses (CBA) to multi-criteria (decision) analyses (MC(D)A). Understanding which instruments and how these instruments are employed provides valuable insight into the rigour and comprehensiveness of the decision-making process (Mundula & Auci, 2017; Snellen et al., 2021).

A final consideration lies in the overarching influence of politics on policy-making. Both interviews (Appendix B interview 1.1) and the literature underscore the omnipresence of political dynamics in shaping policies. As expressed by Bovens et al. (2017), ‘policy inherently entails political dimensions and necessitates political decisions. While officials draft policy documents, ultimate decisions invariably remain political’. This political dimension is inherent as policies per definition involve the allocation of limited resources and often result in varying degrees of inequality. Nonetheless, the role of politics is anticipated to remain largely consistent regardless of whether a broad prosperity or conventional approach is adopted. Therefore, while pivotal, this factor is not explicitly included in the conceptual model.

3.2.2. Policy-making process

For a comprehensive examination of how the factors outlined in the previous section shape policy development, it is essential to delineate the various components of the policy-making process. Therefore, this section identifies and describes key steps or stages of policy formulation and decision-making relevant to the integration of broad prosperity considerations into mobility and urban development policies.

A prevalent framework employed in structuring policy and decision-making processes is the policy cycle. This framework stems from the idea of organising policy-making complexities, helping to break down and analyse the different stages of the process. Originally proposed by Lasswell (1956), the policy cycle comprises seven functions within the decision process: intelligence, recommendation, prescription, invocation, application, appraisal, and termination. Typically, the cycle is divided into five phases or stages: agenda setting (identifying and prioritising problems), policy formulation (or preparation), policy decision-making, implementation, and evaluation (including feedback) (Bovens et al., 2017). The Policy Compass, the central operating procedure in the Dutch central government, largely aligns with the policy cycle framework (Het Kenniscentrum voor beleid en regelgeving, n.d.). Overall, the policy cycle serves as a valuable conceptual framework for navigating the intricacies of policymaking, offering a structured and practical approach to the case analysis.

In this study, the policy cycle, represented in Figure 3.1, serves as the conceptual framework. Within this framework, the initial stage focuses on identifying the problem or policy challenge and establishing the intended goals or objectives. Subsequently, the stage of exploring options involves assessing various means to achieve the established goals, including an analysis of potential consequences associated with each option. The decision-making phase involves selecting the preferred option among the alternatives considered. Lastly, the evaluation stage entails assessing the outcomes of the implemented measures, including an examination of first, second, and third-order effects, changes in behaviour, and other relevant impacts, as well as the distribution of these effects across society.

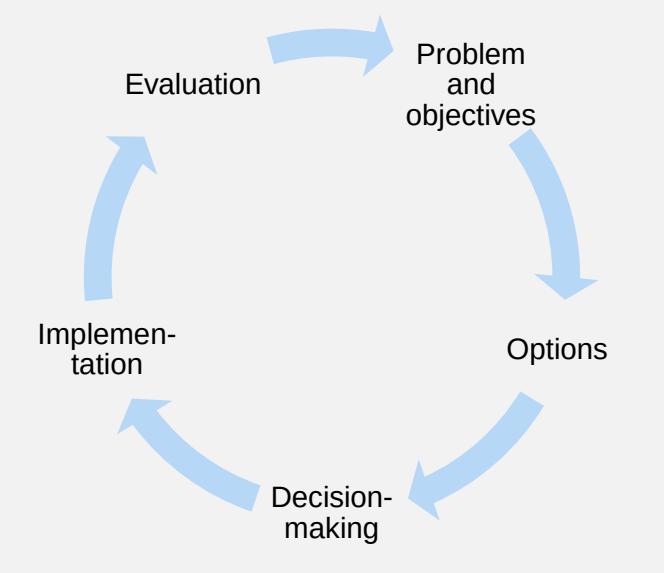

Figure 3.1: Policy-making process

Delineating the policy-making process into distinct steps or stages provides clarity and structure to a complex and multifaceted policy-making process. The framework helps to map the timeline of projects and decision-making and allows for the examination of processes over time, highlighting how decisions evolve and their long-term impacts on prosperity.

However, it is essential to acknowledge that the policy cycle, while a valuable analytical tool, is rooted in normative theory, the actual practice of policy-making is often more intricate and messier. In practice, policy processes involve various stakeholders arriving at decisions not solely based on analytical reasoning but also influenced by political dynamics. While normative perspectives prioritise the rationality of policy choices, political viewpoints highlight the role of power dynamics and resource distribution in shaping policies (Bovens et al., 2017). Consequently, policy discussions and decision-making processes may not always adhere strictly to the orderly sequence of the policy cycle. Policymakers may engage in deliberations on policy options before clearly defining objectives or may incorporate targets from other processes. Therefore, it is crucial to recognise that the apparent orderliness and structure suggested by the policy cycle may not always mirror real-world decision-making processes. As such, the analysis of cases must remain focused on understanding the arguments used to justify choices and how these evolve throughout the decision-making process.

Moreover, within the context of broad prosperity, it becomes evident that the traditional policy cycle may not fully align with the principles of broad prosperity. Experts have raised concerns regarding its compatibility with broad prosperity objectives (Appendix B interview 1.1). Some argue that the policy cycle fails to adequately capture the multifaceted nature of broad prosperity. However, despite these criticisms, the framework can still serve as a valuable tool for structuring analysis, provided that these considerations are taken into account. As highlighted by Capano & Pritoni (2020), critics caution that the policy cycle risks oversimplifying the intricate and interconnected dynamics of the policy process. Simultaneously, the policy cycle offers descriptive utility.

3.2.3. Conceptual framework

Table 3.2 illustrates the conceptual framework for policy-making, merging the policy-making factors with the policy-making steps. This combination is crucial for a comprehensive analysis, as it allows for the examination of factors' relevance at each stage of the decision-making process. By aligning the factors with the policy-making process, the framework provides a structured methodology for examining the nature of policy-making processes, distinguishing between conventional and broad prosperity approaches.

3.3. Conventional versus broad prosperity policy-making

This section presents a comparative analysis between conventional policy-making and the broad prosperity paradigm. Drawing from literature and insights gleaned from interviews (see Appendix B.1), the discussion presents the factors outlined in the conceptual model within the contexts of conventional and broad prosperity policy-making. By delineating the distinct value propositions of these factors, the section establishes a framework for evaluating the extent to which broad prosperity principles inform or shape policy-making processes.

Table 3.2: Conceptual framework policy-making

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives							
Options							
Decision-making							
Implementation							
Evaluation							

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives					
Options					
Decision-making					
Implementation					
Evaluation					

3.3.1. Conventional approach

The approach to policy-making, specifically in the realm of mobility, has evolved, influenced by changing societal norms and priorities. Therefore, it is first important to specify what is meant by the ‘conventional approach’. Policy experts shed light on the shifting landscape of policy paradigms (see Appendix B interview 1.1). Initially, until the mid-1990s, there was a prevalent understanding that the dominance of the car in urban spaces necessitated a holistic approach, focusing on system-wide considerations. This approach, reminiscent of principles now associated with broad prosperity, prioritised the integration of environmental and social factors alongside infrastructural planning. However, a notable transition occurred in the 1990s, marked by a resurgence of car-centric thinking and a shift towards a narrower focus on infrastructure itself. This study deems the latter as ‘conventional’. The conventional approach to policy-making, as understood in this study, is characterised by a dominance of economic indicators, reflecting an embedded reliance on car-centric and infrastructure-based thinking. This perspective is portrayed as the established social welfare paradigm in Section 3.1 and is consistent with the classic 'mobility paradigm'.

Within the conceptual framework of policy-making, the conventional approach is characterised by distinct criteria for each factor and stage of the policy cycle. These criteria, informed by insights from interviews with policy experts (see Appendix B.1), are systematically outlined in Table 3.3. The ensuing discussion explains these criteria and contextualises them within the scope of this study.

The conventional approach to policy-making focuses on facilitating economic growth. Objectives typically revolve around enhancing economic productivity, with an emphasis on

reducing vehicle loss hours to improve traffic flow and promote efficient transport (Appendix B interview 1.3). Additionally, the prioritisation of infrastructure improvements, particularly for automobiles, reflects a historical reliance on bottleneck analysis, where funding allocation has favoured projects geared towards enhancing automobile infrastructure over other modes of transport (Appendix B interview 1.3). The focus of conventional policy-making is on traffic and transport, viewing mobility as limited to its core tasks (Appendix B interview 6.1).

In terms of effects, policies crafted under the conventional approach have limited consideration for distributional effects across different demographic groups or alternative modes of transport. The focus is on economic or accessibility indicators of effects that can be measured and monetised, with no explicit attention given to the broader societal and environmental impacts of proposed policies or long-term effects. While it is not entirely accurate to say that decisions are made solely based on objective measurements, the decision-making information is believed to be objective (Appendix B interview 6.1). The conventional approach emphasises hard, quantifiable aspects.

When considering trade-offs, decisions are typically made based on their perceived economic value, with projects like road expansions being viewed favourably due to their anticipated contribution to economic growth. Utilitarian principles underpin decision-making processes, with a focus on maximising economic benefits (Appendix B interview 1.3).

Finally, regarding the process, the conventional approach typically employs methodologies like CBA to assess policy options and determine their viability. While stakeholder participation may be included to some extent in decision-making processes, economic considerations often take precedence. This process reflects a top-down approach to policy-making, where decisions are primarily driven by economic objectives.

3.3.2. Broad prosperity approach

In contrast to the conventional approach discussed in the preceding section, the broad prosperity approach to policy-making in the mobility domain represents a departure from traditional paradigms that prioritise narrow economic indicators. This section details the criteria for the broad prosperity approach across each factor and phase of the policy-making process. The criteria are derived from a synthesis of findings from literature and interviews with experts (see Appendix B.1) and are schematically presented in Table 3.4.

Broad prosperity has some key characteristics, as outlined by various sources. Tijdelijke commissie Breed welvaartsbegrip, (2016) underscores the multifaceted nature of broad prosperity, highlighting its inclusion of factors beyond market-traded goods and services, such as education, health, and the environment. They emphasise the significance of considering not only welfare here and now but also future welfare and its global impact. Similarly, the Centraal Bureau voor de Statistiek (n.d.) emphasises the importance of assessing the quality of life in the present while considering its implications for future generations and global populations. Insights from policy experts accentuate the holistic nature of broad prosperity, which incorporates societal proximity and transparency, balancing economic, social, and environmental dimensions (Appendix B interview 1.1 and interview 1.4).

Table 3.3: Conventional policy-making

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives	What bottlenecks exist or may arise in the transport system?	Provide accessibility for economic growth	Provide proper traffic flow transport to facilitate transport	Economy and accessibility (traffic)	Mostly objective, measurable, and monetizable	Short-term dominant	Limited consideration for distributional effects on different population groups
Options	What infrastructure needs to be developed?	Understand which measures improve transport best	Provide efficient transport through infrastructure improvement	Economy and accessibility (traffic)	Mostly objective, measurable, and monetizable	Short-term dominant	Limited consideration for distributional effects on different population groups
Decision-making	What is the most cost-effective measure?	Select infrastructure development	Provide efficient transport through infrastructure improvement	Economy and accessibility (traffic)	Mostly objective, measurable, and monetizable, single metric	Short-term dominant	Limited consideration for distributional effects on different population groups
Implementation	How can the measure be implemented?	Ensure fast and cost-effective implementation	Transport facilitation as a goal	Economy and efficiency	Mostly objective, measurable, and monetizable	Project duration	Consideration for direct neighbours
Evaluation	Has the infrastructure been built? How does traffic flow and transport change?	Provide efficient transport and boost the economy	Transport contributes to the economy	Economy, accessibility, and output	Mostly objective, measurable, and monetizable	Short-term dominant	Limited consideration for distributional effects on different population groups

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives	Explanation of the bottleneck and economic effects	Utilitarianism	Problems or economic losses that arise from the bottleneck	No involvement	Traffic models, bottleneck analysis
Options	Perceived value of each measure in economic terms	Utilitarianism	The efficiency with which measures tackle the bottleneck best	Involvement is limited to the opportunity to inspect and provide input or object, top-down decision-making dominant	CBA
Decision-making	Comparison, which alternative is best	Utilitarianism	Economic efficiency argument for a measure	No involvement, top-down decision-making dominant	CBA
Implementation	Process of building the infrastructure	Utilitarianism	The fastest and cheapest way to implement a measure	Limited involvement	Project management
Evaluation	How is the measure implemented	Utilitarianism	Infrastructure improves traffic flow and enhances the economy	Limited involvement	Traffic models

Policy experts concur with descriptions of planning agencies and indicate that broad prosperity has the following key features: aimed at societal impact, cross-sectoral thinking, long-term thinking, focused on chances, not risks, area-based and regional perspective, and data-driven approach (Appendix B interview 1.1, interview 1.2, and interview 1.4). In short, broad prosperity embodies a multifaceted approach that underscores considerations of prosperity here and now, in the future, and elsewhere across various dimensions. The subsequent discussion delves into specific criteria for broad prosperity for each policy-making factor.

Issue

Policy experts emphasise that broad prosperity policy-making should focus on opportunities rather than risks, encompass flexible formulation of policy areas based on mobility considerations, and consider diverse policy options beyond infrastructure construction (Appendix B interview 1.1). Section 3.1 illuminates that the scope of the issue is broader within a broad prosperity approach, allowing for a more extensive debate on problem identification and solution-finding (Snellen et al., 2021). Visser & Wortelboer-Van Donselaar (2021) argue that a broad prosperity approach advocates for a paradigm shift in problem identification, urging policymakers to consider all aspects of societal well-being when defining problem domains.

For the aim of policy-making, Visser & Wortelboer-Van Donselaar (2021) state that human well-being should be the ultimate goal. Broad prosperity policy-making aims to achieve societal impact and promote people's happiness, as highlighted by insights from policy experts (Appendix B interview 1.1 and interview 1.2). Moreover, reducing disparities is recognised as a key aim of broad prosperity, underscoring the importance of government engagement with citizens to address diverse needs effectively (Appendix B interview 1.3).

Regarding mobility policy, Snellen et al. (2021) argue that mobility serves as a means to improve people’s quality of life. Mobility policy from a broad prosperity perspective thus focuses on how to use mobility to contribute to people's welfare, not on mobility or the functioning of the transport system itself. Mobility is part of a larger whole (Appendix B interview 6.1) Policy experts emphasise that within the realm of mobility, broad prosperity initiatives aim to minimise nuisance, enhance health, and improve liveability across all regions (Appendix B interview 1.3).

Effects

In the context of broad prosperity policy-making, the effects are multifaceted and encompass various dimensions. Snellen et al. (2021) divide broad prosperity for mobility into four dimensions: living environment, accessibility, health and safety, a framework adopted by policy experts (Appendix B interview 1.1 and interview 1.3; Vonk Noordegraaf et al., 2021). However, Vonk Noordegraaf et al. (2021) add that the specific indicators utilised may vary depending on the problem or project at hand. When making mobility policies according to broad prosperity, all four themes should be included in the range of considerations. Policies for other domains can include other themes (see for example Horlings (2021)).

Moreover, broad prosperity policy-making integrates various types of effects, both subjective and objective. The CBS expresses the inclusion of subjective welfare measures (Horlings, 2021), while policy experts stress the importance of capturing subjective experiences and opinions through citizen participation (Appendix B interview 1.1 and interview 1.2). Policy experts emphasise the need to move beyond traditional performance metrics towards assessing impact, exemplified by evaluating outcomes such as increased bicycle usage, safety improvements, and health benefits rather than solely measuring project execution (Appendix B interview 1.1). Additionally, Vonk Noordegraaf et al. (2021) highlight that broad prosperity involves considering not only the distribution of resources but also individuals' capacity to utilise these resources effectively. Visser & Wortelboer-Van Donselaar (2021) further underscore the complexity of effects, emphasising the inclusion of non-monetary effects such as habitat preservation, cultural heritage, and social aspects, which are often challenging to quantify but crucial for a broad prosperity approach.

Broad prosperity policy-making adopts a long-term time view, ensuring that present decisions do not compromise the well-being of future generations. The CBS categorises this aspect into economic, natural, human, and social capital dimensions (Horlings, 2021), aligning with the emphasis on long-term thinking by policy experts (Appendix B interview 1.1 and interview 1.3; Visser & Wortelboer-Van Donselaar, 2021). This perspective underscores the focus on sustainable policy solutions that balance immediate benefits with long-term consequences. However, this does not mean short-term effects or measures are fully neglected.

Lastly, broad prosperity policy-making pays considerable attention to the distribution of effects, ensuring equitable outcomes across different geographical areas and demographic groups. Policy experts stress the importance of adopting an area-based and regional perspective, particularly prioritising the needs of less fortunate individuals and future generations (Appendix B interview 1.1). This approach addresses societal disparities and challenges across different geographical areas and demographic groups. A broad prosperity approach could encompass distribution by income, urban density, or age, among others (Appendix B interview 1.2). Additionally, insights from various sources highlight the necessity of addressing health aspects and distributional impacts, particularly among vulnerable segments of society (Snellen et al., 2021; Vonk Noordegraaf et al., 2021).

Trade-offs

Trade-offs in policy-making processes necessitate decision-makers to navigate competing priorities and allocate resources effectively. The description of these trade-offs for a broad prosperity approach involves articulating choices and the assumptions they are based on transparently and explicitly, a principle underscored by policy experts (Appendix B interview 1.1, interview 1.3, interview 1.4, and interview 6.1). Adopting a broad prosperity approach entails providing a wider array of information, including the needs and interests of stakeholders and the elasticities between these interests, to inform trade-offs and decisions (Snellen et al., 2021). This shift towards more transparent decision-making processes aims to prevent choices based on transient factors and ensures comprehensive consideration of trade-offs.

Table 3.4: Broad prosperity policy-making

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives	What does society need? Which opportunities are there to improve welfare through mobility? What are the challenges within an area?	Identify problems or opportunities for human well-being on a welfare theme for (a part of) society with a focus on values	Using mobility to enhance the quality of life. Mobility as part of a larger system.	Subjective well-being, material welfare, health, labour and leisure, housing, society, safety, accessibility, and environment	Subjective and objective, expressed quantitatively or qualitatively	Long-term dominant	Extensive consideration of population distribution e.g., cross-border, over age, urbanity, or income
Options	How can welfare be improved?	Understand how measures affect the various dimensions of well-being and values	Mobility is one of many ways to enhance welfare	Liveability, health, safety, and accessibility	Subjective and objective, expressed quantitatively or qualitatively	Long-term dominant	Extensive consideration of distribution e.g., cross-border, over age, urbanity, or income
Decision-making	Which measure contributes to set welfare goals?	Select a measure that reduces disparities, balances short-term gains with long-term effects and enhances welfare	Approach mobility within other challenges in an area	Liveability, health, safety, and accessibility	Subjective and objective, expressed quantitatively or qualitatively	Long-term dominant	Extensive consideration of distribution e.g., cross-border, over age, urbanity, or income
Implementation	How can the measure be implemented?	Ensure coordinated implementation without major disruptions	Mobility as a means to achieve policy goals	Satisfaction stakeholders	Subjective and objective, expressed quantitatively or qualitatively	Long-term dominant	Extensive consideration of distribution e.g., cross-border, over age, urbanity, or income
Evaluation	What is the overall impact of the measure?	Measure the well-being impact of the measure, provide accessibility to social functions	Mobility contributes to the accessibility of functions	Impact on subjective well-being, material welfare, health, labour and leisure, housing, society, safety, and environment	Subjective and objective, expressed quantitatively or qualitatively	Long-term dominant	Extensive consideration of distribution e.g., cross-border, over age, urbanity, or income

Table 3.4 (continued): Broad prosperity policy-making

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives	Transparent articulation of choices, comprehensive information	Combination of ethical principles, considering the distribution of effects	Consideration of stakeholder interests	Active involvement through input for identification of problem areas and opportunities, and co-decision-making	Broad Prosperity Thinking Framework, indicators broad prosperity mobility domain, Omgevingswijzer, Value Engineering, traffic models
Options	Perceived contribution of each measure to well-being over various dimensions	Combination of ethical principles, considering the distribution of effects	Considerations between effects and their distribution	Co-design with stakeholders, bottom-up decision-making dominant	Ambition Web, Broad Prosperity Thinking Framework, Sustainable Mobility Conversation Guide, CBA
Decision-making	Explicit trade-offs inherent in each decision, reflection own assumptions	Combination of ethical principles, considering the distribution of effects. Balancing immediate benefits with future consequences	Specific trade-offs made and why one was chosen and why not the other	Stakeholder preferences affect decision-making	Participatory Value Evaluation
Implementation	A collaborative process of implementing the measure	Combination of ethical principles, considering the distribution of effects	Consideration of stakeholder interests	Collaborative implementation	Ambition Web, Broad Prosperity Thinking Framework, Omgevingswijzer
Evaluation	Impacts of the measures across dimensions	Combination of ethical principles, considering the distribution of effects	Clear communication of decisions and trade-offs	Co-evaluation of impact measure with stakeholders	Broad Prosperity Thinking Framework, Framework and Roadmap Monitoring and Evaluation

Underpinning these trade-offs are ethical and distributive principles that guide decision-making. Policy experts stress the importance of considering ethical principles and advocate for a holistic approach that takes into account various considerations for each project. While utilitarianism may appeal politically, it is essential to weigh ethical principles against distributional effects to ensure equitable outcomes (Appendix B interview 1.3). Similarly, Snellen et al. (2021) highlight the relevance of distributive questions and emphasise the need to make the distribution principles guiding policy choices explicit.

Furthermore, the argumentation surrounding trade-offs is crucial for transparent and accountable decision-making according to the broad prosperity approach. Policy experts emphasise the importance of clearly communicating not only the decisions made but also the trade-offs involved (Appendix B interview 1.3). Transparency in decision-making processes enables stakeholders to understand the rationale behind policy choices and fosters trust in governance. By explicitly outlining what is and what is not being pursued, decision-makers can ensure clarity and accountability in policy formulation.

Process

Stakeholder participation stands as a defining characteristic of broad prosperity policy-making, necessitating a re-evaluation of decision-making processes to effectively incorporate diverse perspectives. Beyond GDP approaches and policy experts underscore the importance of involving various stakeholders, acknowledging the challenges of ensuring representation and providing comprehensive information (see Section 3.1 and Appendix B interview 1.2). They advocate for a participatory approach that engages citizens and other stakeholders across different sectors, which goes two ways. Citizens and other stakeholders provide input, and the government reflects how the input is used. Scholarly literature echoes this position, emphasising the need for more democratic engagement and participation to integrate the broad prosperity paradigm in actual policymaking practices (see for example Bache & Scott (2018) or Fabian et al. (2022)). Collaborative governance involves engaging stakeholders across public agencies, government levels, and various sectors to achieve common goals (Emerson & Nabatchi, 2015). This participation goes beyond approving or disapproving or having the opportunity to express an opinion and is about opening up the process to get input from a broad set of stakeholders who co-design.

Finally, a broad prosperity approach requires different policy instruments (Snellen et al., 2021). Policy experts mention that broad prosperity policy-making is a data-driven approach, which should be reflected in the tools (Appendix B interview 1.1., interview 1.2, and interview 1.4). While tools such as CBAs are useful, they can be limited in measuring broad prosperity. Gorter et al. (2022) delineate specific instruments for different phases of the policy process. Thereby, the most important thing is not which tools are used exactly, but how they are used. Traffic models, for example, also provide relevant information for broad considerations but the information is used differently (Appendix B interview 6.1). During the problem and objectives phase, the focus should be on identifying the relevant problems and defining the task from a broad prosperity perspective. In the options phase, efforts are directed towards establishing ambitions and indicators in line with broad prosperity and gaining a clearer picture of the broad

prosperity effects. Decision-making should be supported by information on stakeholder preferences. During implementation, tools help to align progress with broad prosperity goals. Finally, in the evaluation phase, the tools should be used to evaluate results to the extent of addressing societal needs and priorities.

3.3.3. Policy-making criteria

The criteria for a policy-making approach have been outlined in this section, establishing a foundation for evaluating the integration of broad prosperity principles into policy-making processes. By contrasting the distinct value propositions of factors for each case to the criteria outlined in this section, the extent to which the case follows a conventional or broad prosperity approach can be determined.

3.3.4. Reflection on contrasting broad prosperity from conventional policy-making

The contrast between broad prosperity and conventional policy-making outlined in this chapter aims to characterise aspects of the decision-making process, rather than to provide a comprehensive definition of approaches or to portray conventional methods negatively. Broad prosperity is an emerging approach still in development, and there are more ways to make broad considerations than indicated in this conceptual framework. This should be taken into account during the analysis by being open to other factors of importance.

Additionally, policy-making is inherently complex and may not fit neatly into the predefined categories of broad prosperity or conventional approaches. Instead, cases are likely to exhibit a nuanced blend of broad prosperity principles and conventional methods, with the balance between the two shifting throughout the process. This dynamic nature underscores the importance of maintaining specificity and continuously questioning the rationale behind decisions. It is essential to remain nuanced when assessing the integration of broad prosperity principles, ensuring a comprehensive understanding of the policy-making dynamics at play.

Although the distinction between broad prosperity and conventional approaches is presented in this chapter as a dichotomy, broad prosperity approaches do not exist independently of conventional methods. Traditional policy-making practices have persisted for a reason, and this context cannot be ignored. Therefore, the analysis should focus on how to integrate broad trade-offs with existing methods, capturing the friction between old and new, and identifying what is essential for decisions based on broad prosperity.

3.4. Lessons broad prosperity theory

This chapter has presented a detailed exploration of the factors and criteria shaping mobility and urban development policy decisions. The analysis has underscored the multifaceted nature of policy-making processes, highlighting the interplay between conventional approaches and the principles of broad prosperity.

The answer to sub-question 1 is as follows:

1. Which factors and criteria indicate how the broad prosperity paradigm plays a role in mobility and urban development policy-making?

Four categories of factors indicate the extent to which the broad prosperity paradigm plays a role in mobility and urban development policy-making. The first category, 'issue', encompasses the scope of the problem, the aim of the process, and the significance of mobility within the context of the issue at hand. The second category, 'effects', comprises the scope and type of effects under consideration, the time horizon of evaluation, and the incorporation of distributive effects. The third category, 'trade-offs', involves the description of, underpinning of, and argumentation for decisions made within the policy-making process. The fourth category, 'process', covers the aspects of stakeholder engagement and the utilisation of specific policy instruments. These factors can be analysed across each stage of the policy-making process, including problem and objectives, options, decision-making, implementation, and evaluation.

The most significant difference between the conventional approach and a broad prosperity perspective lies in the definition of welfare. From a conventional perspective, welfare is primarily about measurable and monetizable outcomes, whereas a broad prosperity perspective includes both tangible and intangible benefits. Several criteria distinguish broad prosperity policy-making from conventional policy-making. The key criteria are:

1. A dedicated emphasis on opportunities to improve people's accessibility, thereby improving their overall well-being.
2. Recognition of mobility as a means to improve prosperity.
3. Deliberate consideration of the ramifications on liveability, safety, health, and accessibility, along with a focus on their equitable distribution among demographic cohorts.
4. Adaptation of a long-term perspective.
5. Explicit acknowledgement and management of trade-offs inherent to policy decisions.
6. Active engagement of stakeholders, ensuring representation and consideration of all interests.
7. Strategic and innovative utilisation of policy instruments to achieve desired outcomes effectively.

4 POLICY INTEGRATION FRAMEWORK

Policy integration is widely recognised as a fundamental approach to addressing broad prosperity. However, discussions surrounding policy integration have permeated various bodies of literature for an extended period. This chapter aims to delve into this discourse, offering an in-depth exploration of the literature on policy integration to establish a comprehensive measurement framework.

To achieve this aim, Section 4.1 explores the concept of policy integration within the context of government and governance literature, as well as in the context of mobility and urban development. This section aims to establish a clear understanding of policy integration as it relates to this thesis. Following this, Section 4.2 outlines the key factors that determine the level of policy integration, providing a basis for assessment. Then, Section 4.3 presents specific criteria for measuring the degree of policy integration. Finally, Section 4.4 concludes the chapter by addressing sub-question 2 and briefly explaining how the conceptual frameworks on broad prosperity and policy integration are employed in the subsequent case analysis.

4.1. Policy integration in context

Within various disciplines, policy integration takes on different names and interpretations. This section delves into these definitions through a literature review, aiming to elucidate what policy integration means for mobility and spatial development within the context of promoting broad prosperity.

4.1.1. The emergence of policy integration as a solution to complex problems

The concept of policy integration, originating in environmental studies, has undergone significant evolution within government-centred literature (Trein et al., 2023). Initially emerging as an approach that fosters coordination to attain multiple goals in urban planning, the concept has since expanded to encompass various notions such as comprehensive planning, policy coherence, and holistic government (Tosun & Lang, 2017). Governments, particularly during the 1990s, grappled with complex challenges in areas like environmental and social policy, prompting a shift towards integrated governance strategies aimed at consolidating policy domains with coherent objectives and instruments (Rayner & Howlett, 2009b). The adoption of SDGs further propelled attention towards policy integration, necessitating interlinkages across sectors and societal actors (Stafford-Smith et al., 2017; United Nations Department of Economic and Social Affairs, 2015).

Rooted in the recognition of crosscutting concerns, policy integration emerged as a solution to address problems that transcend the traditional policy subsystems (Jochim & May, 2010). Governments have increasingly turned to policy integration to tackle these complex cross-cutting challenges effectively (Cejudo & Michel, 2017). Tosun & Lang (2017) explain that concepts such as holistic government, joined-up government, and whole of government emerged to overcome the limitations of the traditional narrow 'silo' approach in public sector organisations, resulting from the New Public Management era.

Scholars examining policy integration from a policy problem perspective have primarily focused on enhancing coherence, complementarity, and coordination among policy instruments (Domorenok et al., 2021b). Specifically, they have been concerned with how cross-sectoral themes are incorporated into policy outputs across sectors, suggesting that the failure to achieve such integration results in partial and ineffective responses to crosscutting problems (Biesbroek & Candel, 2020). This perspective emphasises that for policy integration to be effective, it requires consistency and compatibility among goals, instruments, and processes, necessitating a reframing of policies to generate a common understanding regarding policy problems and their remedies (Tosun & Lang, 2017). In the context of this thesis, these insights highlight the importance of aligning policy objectives, instruments, and processes to effectively address mobility policy from a broad prosperity perspective.

4.1.2. The contribution of governance scholarship

Governance scholarship offers a distinct perspective on policy integration. Unlike government-centric concepts, governance approaches focus more on how policy problems can be effectively addressed, with an emphasis on service delivery, implementation, and efficiency (Tosun & Lang, 2017). Scholars in this domain highlight the significance of formal and informal arrangements, such as coordinated networks and collaborative policy regimes, in achieving integration (Domorenok et al., 2021b). Furthermore, policy integration is viewed as an effort to rectify past shortcomings in policy design, bridging the gap between administrative practice and instrument analysis that was prevalent in earlier governance strategies (Biesbroek & Candel, 2020). Early research in public administration underscored the challenges arising from differences in administrative structures and cultures, leading to calls for more holistic and networked forms of governance (Biesbroek & Candel, 2020).

A central aim across various governance scholarship is the pursuit of greater policy cohesion, necessitating coordinated governmental action to overcome fragmented government structures (Jochim & May, 2010). Scholars have proposed diverse approaches to achieve this, including horizontal governance, holistic governance, boundary-spanning regimes, territorial institutionalism, multi-level governance, and collaborative governance. These concepts draw from organisational theories on inter-organisational cooperation, collaboration, intergovernmental management, and network management. The boundary-spanning regime, for instance, as defined by Jochim & May (2010), fosters integrative action among subsystems by encouraging alignment towards common objectives. In contrast, territorial institutionalism focuses on coordinating between institutional territories, while multi-level governance emphasises coordination across different levels of government (Varone et al., 2013).

Furthermore, Ansell & Gash, (2008), define collaborative governance as the involvement of public agencies engaging non-state stakeholders in collective decision-making processes aimed at policymaking or program management. In essence, while diverse in their approaches, these governance concepts share a common goal of achieving greater policy cohesion through coordinated governmental action, highlighting the multifaceted nature of policy integration across diverse governance contexts.

The governance approaches point out the complexity of policy integration, emphasising the need to consider both intra- and inter-governmental coordination as well as non-governmental stakeholder involvement. This implies the inclusion of various governance dimensions, such as government levels and government entities.

4.1.3. The junction of mobility and spatial development

It has become clear from the preceding sections that policy integration has emerged as a response to complex problems spanning multiple domains or subsystems, aiming to foster coherence and efficiency in policymaking. In the context of urban development, the domains of mobility and spatial development are closely interconnected, as highlighted in Section 1.1. Combining these domains is argued to enhance efficiency, given their mutual influence. According to Bertolini (2012), an understanding of the connection between mobility, spatial development, and broad socio-economic and cultural processes is crucial for addressing the challenge of improving the impact of mobility on well-being with the unsustainable practices of contemporary (urban) mobility. He argues that only a more intensive and critical interaction between different disciplines and at the very least fully integrating transport and spatial development, as well as between planning science and planning practice, is needed to address this challenge. Similarly, Alcantara (2023) emphasises the need for a holistic approach involving multiple domains to mitigate the negative impacts of urban development and truly enhance the quality of urban life. With the increasing demand for urban spaces post-industrial era, urban mobility has become a significant challenge, impacting, and being impacted by various fields beyond transport, including the economy, health, education, environment, and security. Traditional transport planning alone is deemed inadequate to address these challenges effectively. In conclusion, policy integration in mobility and spatial development is twofold: it involves integrating between domains and reshaping the policy-making process itself. This dual integration is essential for designing effective policies that are hypothesised to promote broad prosperity.

4.1.4. Making sense of policy integration

In examining the concept of policy integration within the context of promoting broad prosperity in policy-making, it becomes evident that the term encompasses various definitions across academic disciplines. Meijers & Stead (2004) note that while multiple disciplines address policy integration, they do not always use this specific term. According to Tosun & Lang (2017)), this diversity in terminology arises from the origins of policy integration concepts in the realm of practitioners, where policy innovations are often labelled to attribute them to specific governmental or international organisations. Therefore, it is important to specify the term for this thesis.

Trein et al. (2023) conducted a review of the empirical literature on policy integration to explore its relation to broader theoretical and methodological developments in public policy studies. In line with the review of this chapter, they identified several labels for policy integration, such as policy coherence, whole-of-government, policy mainstreaming, boundary-spanning regimes, and policy coordination, each with slightly different focuses. While some emphasise coordination between government entities, others highlight coordination among various actors connected through networks. Ultimately, Trein et al. (2023) conclude that these labels are functional equivalents, representing similar phenomena.

In contrast, Cejudo & Michel (2017) suggest that policy integration concepts are sometimes used interchangeably, while other times they denote different degrees of coordination. From their perspective, policy coordination involves organisations sharing knowledge and responsibilities for joint decisions, coherence ensures complementary program designs, and integration aims at achieving a common goal through synchronised decision-making processes. Rayner & Howlett (2009b) further elaborate on integration, defining it as the replacement of specific elements of existing policy mixes by a new policy mix. Similarly, Candel & Biesbroek (2016) view policy integration as a dynamic, multi-dimensional process rather than a static outcome or governing principle.

In line with this processual perspective, policy integration is here conceptualised as a decision-making process wherein organisations relinquish agency to an overarching institution, subordinating their goals to a common objective. This distinguishes policy integration from mere coordination, where organisations retain more autonomy. Policy integration will be further operationalised in the subsequent sections of this chapter.

4.1.5. Policy integration in perspective

By putting policy integration in perspective of government and governance scholarship, it becomes clear that it encompasses various concepts. Policy integration embodies the need to align policy objectives, instruments, and processes to address cross-cutting problems related to mobility. However, it is essential to recognise that integration is not a panacea for solving these complex problems. Instead, it constitutes a systematic approach to policymaking, aiming to mitigate the fragmentation of government action and, ideally, enhance problem-solving effectiveness. Thus, policy integration should be regarded as a process that transcends policy coordination.

4.2. Toward a conceptual framework of policy integration

The section describes the key factors that determine to what extent policy integration has taken place. These factors underpin the conceptual framework and provide a structured approach for systematically analysing policy-making in mobility and urban development. Unlike aiming to elucidate reasons behind the occurrence or absence of policy integration, the objective of the conceptual framework is to assess the extent and manner in which integration occurs. This approach enables a comprehensive understanding of the implications of policy integration on outcomes. The factors identified are aligned with this overarching objective.

4.2.1. Policy integration factors

The conceptual model should encompass factors that characterise policy integration in the decision-making process. Section 4.1 demonstrates that policy integration is a process aimed at aligning diverse policy objectives, instruments, and processes beyond mere policy coordination, thereby providing initial guidance on relevant factors. Additionally, pertinent literature identifies several other factors that contribute to measuring policy integration.

Following the definition of policy integration and the objectives outlined in this research, the conceptual framework will exclude explanatory and various other factors. For instance, Candel (2021) and Domorenok et al. (2021a) delve into explanatory factors for why (dis)integration across policy dimensions occurs. However, these factors do not contribute to the establishment of policy integration. Therefore, explanatory factors, such as the political dimension, are not considered within the framework. Moreover, factors at a high level of abstraction are not included. Rayner & Howlett (2009b) distinguish between two levels: the general ideas and norms that frame the choice of both goals and instruments, the program-level operationalisation of goals (such as targets and benchmarks) and the familiar choice of instruments to achieve them. The higher abstract level is not considered due to the practical approach and focus on the decision-making process of this thesis. Furthermore, it should be noted that although both formal and informal factors (see Domorenok et al. (2021a)) are examined, formal factors will be more measurable and thus prevalent.

Moving towards specific factors, four distinct categories of factors for policy integration can be identified. These categories include factors related to goals, instruments, and settings, which are the traditional elements of a policy regime (Hall, 1993) and more.

Subsystem involvement

Firstly, policy integration fundamentally relies on the effective involvement of subsystems, encompassing various critical dimensions. Varone et al. (2013) delineate three key dimensions within subsystem involvement: coordination between policy sectors, coordination between institutional territories, and coordination across government levels. While coordination between policy sectors predominates in the context of broad prosperity, acknowledging all three dimensions is imperative. The factor first factor ‘actors’ is about the range of actors and institutions (as organised in subsystems) involved in the decision-making process (Candel & Biesbroek, 2016). This includes both governmental and non-governmental organisations as well as intra- and inter-governmental coordination, both highlighted as significant in Section 4.1. The inclusion of all types of actors provides insight into the integration of institutional territories. Additionally, examining domains elucidates the subsystems involved and the density of interactions between policy sectors. Furthermore, understanding levels provide insights into the intensity of vertical coordination.

Policy system

Secondly, the policy system embodies the framework of norms and rules directed towards achieving coherent policy integration (Domorenok et al., 2021a). This encompasses dedicated policy frameworks, plans, programmes, and other instruments aimed at establishing cross-cutting sectoral policy goals and measures, as described by Domorenok et al. (2021b). The

factor of the policy system indicates the extent to which policy instruments are established, providing accountabilities and incentives for aligning policy objectives and processes.

Organisational structure

Thirdly, organisational structure encompasses the factors of institution, procedures, and resources. These factors provide insight into the extent to which the policy process is integrated. Candel & Biesbroek (2016) formulate this as the presence of procedural instruments at a system level to coordinate policy efforts and safeguard the consistency of the instrument mix as a whole. Similarly, Domorenok et al. (2021a) emphasise the importance of vertical and horizontal coordination mechanisms ensuring synergies, complementarity, and cooperation between and across political and administrative structures. The factor of institutions pertains to a coordinating body and its capacity to make decisions regarding the instruments necessary for addressing complex problems. As noted by Cejudo & Michel (2017), policy integration necessitates a decision-making body with authority over the components of new strategies or policies, which may take the form of inter-departmental boards, task forces, or committees vested with a certain level of authority. Procedures are dedicated instruments, methods and techniques enabling policy coordination and consistency, and for example information exchange. Domorenok et al. (2021b) define this dimension as an organisational chart that clearly defines complementary responsibilities and functions of the actors involved, underscoring this is a relevant factor for measuring policy integration. Furthermore, resources include information that is available in the decision-making process through collaborative and inclusive practices and routines. This factor considers both the accessibility of information in decision-making and the allocation of budgetary resources by relevant actors. Ultimately, organisational structure determines the way of working across organisations, for example through shared leadership, pooled budgets, merged structures, or joint teams (Meijers & Stead, 2004).

Collaborative capacity

Lastly, collaborative capacity is relevant and measures the extent to which there are knowledge, competencies and skills facilitating actual coordination and collaborative interactions between and across levels (Domorenok et al., 2021a). This is an individual dimension relating to people involved in the decision-making process. Domorenok et al. (2021b) refer to this as qualified staff capable of designing and managing cross-sectoral integrated strategies. This staff might have targeted training to develop cross-sectoral skills and coordination techniques.

A final factor marked as relevant for policy integration is the extent to which a crosscutting policy frame is recognised as such within a policy and is thought to require an integrated governance approach (Biesbroek & Candel, 2020). This refers to the recognition of an overarching framing that promotes integrated policy actions. It is crucial to note that the existence of such a policy frame precedes policy integration and is viewed here as a prerequisite rather than a direct measure of policy integration. Consequently, while relevant, it is not explicitly incorporated into the conceptual model.

4.2.2. Policy integration process

In research on policy integration and related concepts, specific stages of policy-making are often not considered. Solely the stage of policy implementation stands out as strongly connected to the literature on policy integration (Trein et al., 2023). However, scholars show that policy integration is dynamic and can fluctuate over time, necessitating its mapping throughout the policy-making process, similar to the approach taken for the broad prosperity conceptual framework.

Biesbroek & Candel (2020) advocate for adopting a processual perspective on policy integration, highlighting its non-linear nature. Their study, particularly focusing on a case of climate change adaptation, demonstrates that policy integration is in constant flux, influenced by contextual conditions such as political orientation, economic conditions, and societal preferences. These conditions can trigger mechanisms that either enhance or diminish integration throughout the decision-making process. Similarly, Cejudo & Michel (2017) assert that policy integration is a continuous process that spans the entire policy process, from problem identification to evaluation. Unlike coordination and policy coherence, policy integration operates on a decisional principle that influences every level of management and each stage of the policy process. Moreover, Cejudo & Trein (2023) emphasise that policy integration is in constant tension with the logic of distinct policy domains. They argue that policy integration is not a singular event but an ongoing political process that requires deliberate efforts to overcome the pull towards sector-specific problem definition, policymaking, implementation, and evaluation.

Considering these insights, the policy integration conceptual framework incorporates the five steps of policy-making (which are problem and objectives, options, decision-making, implementation, and evaluation), as outlined in Chapter 3, to ensure consistency. The mapping of policy integration factors will be aligned with the phases of each case, reflecting the dynamic nature of policy integration throughout the policy-making process.

4.2.3. Conceptual framework

Table 4.1 presents the conceptual framework for policy integration, consolidating the policy integration factors with the policy-making steps delineated in Chapter 3. This is pivotal for a thorough analysis, enabling the assessment of policy integration at every stage of the decision-making process. Through the alignment of policy integration factors with the policy-making process, the framework yields a systematic methodology for evaluating the degree of integration between mobility and spatial development policies.

4.3. Separate, coordinated, and integrated policy-making

This section establishes the criteria for assessing the extent of policy integration based on existing literature. Policy integration is depicted as a continuum. However, in the interest of clarity, three distinct levels of policy integration (adapted from Meijers & Stead (2004)) are delineated here: no policy integration, coordination, and fully integrated policy-making. By defining specific values for the policy integration factors of Section 4.2 per level of policy integration, this section provides a framework for evaluating policy integration.

Table 4.1: Conceptual framework policy integration

Phase	Subsystem involvement			Policy system
	Actors	Domains	Levels	
Problem and objectives				
Options				
Decision-making				
Implementation				
Evaluation				

Phase	Organisational structure			Collaborative capacity
	Institution	Procedures	Resources	
Problem and objectives				
Options				
Decision-making				
Implementation				
Evaluation				

4.3.1. Separate policy-making

At the lowest level of policy integration policies are formulated within established domains. The domains of mobility and urban development can be conceptualised as subsystems exhibiting patterns of policy-making. Jochim & May (2010) argue that separate policy-making provides stability and generally reinforces the status quo but fails to formulate well-crafted policies for certain cross-cutting issues that transcend boundaries. Crosscutting problems are addressed from sectors without coordination, although synergy may exist theoretically.

In separate policy-making, issues related to mobility are solely addressed within the domain of mobility, which is reinforced by organisation structures of governmental bodies. Actors involved typically hold specific roles in the field of mobility, such as the transport department of the municipality or a mobility-focused research institute. Other domains besides mobility are not engaged in the process. Moreover, policy formulation predominantly occurs at a single level. Additionally, there is no specific policy system for addressing crosscutting problems. Instead, they are tackled from within the various subsystems. Consequently, there is no distinct organisational structure. There is no new institution with authority, no collaboration according to specific procedures, and processes are within established subsystems. Finally, the policy-making process does not rely on collaborative capacity.

4.3.2. Coordinated policy-making

The middle level of policy integration entails aligning sectoral policies to achieve a common overarching goal. Coordination involves harmonising sectoral policies to ensure they support and reinforce one another. Essentially, it involves organisations' policies sharing similar sectoral objectives (Meijers & Stead, 2004).

At this level, actors from the mobility and urban development subsystems collaborate to address cross-cutting issues. While there is coordination across sectors and potentially between levels of government, organisations and programs retain autonomy over their structures, budgets, and planning processes, even when pursuing shared goals (Cejudo & Michel, 2017). Decision-making bodies may have limited capacity for action, and procedures and structures are often informal or non-binding. Nevertheless, this level of policy integration typically exhibits some degree of collaborative capacity.

4.3.3. Fully integrated policy-making

In general, fully integrated policy-making represents a heightened level of interaction, accessibility, and compatibility, leads to more interdependence, needs more formal institutional arrangements, involves more resources, requires stakeholders to give up more autonomy and is more comprehensive in terms of time, space, and actors (Meijers & Stead, 2004). According to Underdal (1980), integrated policies must satisfy three fundamental requirements: comprehensiveness, aggregation, and consistency. Comprehensiveness involves acknowledging a broader scope of policy consequences across time, space, actors, and issues. Aggregation requires evaluating policy alternatives from an overall perspective to a minimal extent. Consistency mandates that a policy permeates all levels and agencies of government to a minimal extent. Meijers & Stead (2004) further clarify that integrated policy-making culminates in the formulation of a unified policy transcending sectoral objectives, focusing instead on overarching cross-cutting objectives. This departure from sectoral objectives signifies a significant shift towards a more integrated approach to policy-making than policy coordination.

Cejudo & Michel (2017) go so far as to distinguish three levels of policy integration, each representing varying degrees of decision-making capacity within the policy-making body. At the first level, policy integration involves decision-making limited to operational and design aspects of instruments (programs and agencies) within the overall strategy. Progressing to the second level, the decision-making body gains the authority to redefine program designs, adjust operations, and even reallocate responsibilities and resources among organisations and programs. The highest level of policy integration grants the decision-making body authority to utilise and modify existing instruments (programs and agencies), create new ones, or eliminate existing ones, extending beyond the design and operation of programs to include decisions about their very existence. These levels illustrate the spectrum of policy integration, emphasising its nuanced nature rather than a rigid classification.

In fully integrated policy-making, subsystem involvement is marked by the active participation of actors from all relevant domains, including mobility and urban development, in decision-making processes. Moreover, coordination extends beyond sectoral boundaries to encompass multiple levels of government that have a high level of interaction (Candel & Biesbroek, 2016). By engaging actors across various administrative levels, fully integrated policy-making fosters a holistic approach to addressing complex societal challenges.

Table 4.2: Levels of policy integration

Level of integration	Subsystem involvement			Policy system
	Actors	Domains	Levels	
Separate	Actors from the mobility domain only; limited engagement from other domains	Mobility subsystem only	Policy-making predominantly at the municipal level	No specific policy system for crosscutting issues, sectoral policy with no intended synergies
Coordination	Collaboration exists between actors from the mobility and urban development domains	Various subsystems involved	Influences of multiple governmental levels	Alignment of sectoral policies with some shared objectives
Full integration	High level of interaction between formally involved actors from all relevant domains	All relevant subsystems involved	High level of formal involvement of all levels of government	Bounding unified policy framework of overarching strategy with shared policy goals

Level of integration	Organisational structure			Collaborative capacity
	Institution	Procedures	Resources	
Separate	No distinct decision-making body was established, and no loss of autonomy for sectors	Non-existent procedures, decisions made independently within subsystems	Resources allocated based on sectoral budgets	Absence of collaborative capacity
Coordination	Decision-making body with limited power to act	Informal coordination mechanisms exist, limited standardisation or organisational chart	Resources shared across sectors, joint funding for certain projects	Basic knowledge and skills for coordination, such as interdepartmental communication and joint project planning
Full integration	A decision-making body with decision-making authority can utilise, modify, or eliminate existing instruments or form new instruments	Formalised procedures for coordination and decision-making, standardised protocols	Adequate resources allocated based on integrated planning, shared budgets	Comprehensive cross-sectoral competencies and communication skills, facilitated by targeted training and institutionalised practices

The policy system in fully integrated policy-making is characterised by a unified framework that transcends individual sectoral objectives (Candel & Biesbroek, 2016). Policies are guided by overarching goals that reflect a comprehensive understanding of crosscutting issues, ensuring consistency and coherence in policy formulation and implementation.

Moreover, formal institutional arrangements are established to facilitate coordination and collaboration across sectors and levels of government. This includes the creation of intergovernmental bodies with the authority to make decisions and allocate resources (Cejudo & Michel, 2017). Fully integrated policy-making involves the allocation of adequate resources to support the implementation of integrated policies. This encompasses financial resources, human resources, and technological infrastructure necessary to address cross-cutting challenges effectively. Additionally, formal procedures are established to ensure consistency and coherence in policy implementation and decision-making processes (Meijers & Stead, 2004). Standardised protocols for information sharing, coordination mechanisms, and decision-making procedures are implemented to facilitate collaboration and alignment across different actors and sectors.

Finally, collaborative capacity is crucial in fully integrated policy-making, relying on strong cooperation and coordination among stakeholders involved in the policy process. This entails the existence of cross-sectoral competencies, communication skills, and collaborative techniques that facilitate effective cooperation.

4.3.4. Policy integration criteria

The criteria for policy integration are delineated in this section, providing a basis for evaluating the degree of integration in policy-making processes. Table 4.2 offers an overview of the policy integration criteria for each factor. To clearly illustrate the differences between the various levels (separate, coordinated, and fully integrated), they are presented hierarchically. Distinctions between criteria across different phases of the process are not made, as there are no variations present. However, as noted in Section 4.2, it is essential to bear in mind that the degree of policy integration may fluctuate throughout the policy process.

4.4. Lessons policy integration theory

This chapter has developed a structured framework for evaluating policy integration in mobility and urban development. It explores factors influencing policy-making processes, delineates criteria for assessing policy integration levels, and provides insights into separate, coordinated, and fully integrated policy-making.

The answer to sub-question 2 is as follows:

2. Which factors and criteria indicate how well mobility and urban development policy-making are integrated?

Eight factors, divided into four categories, indicate the level of policy integration. The first category, 'subsystem involvement', examines the engagement of various actors and institutions across different domains and government levels, emphasising coordination and collaboration. It encompasses interactions between policy sectors, institutional territories, and government levels to ensure a holistic approach to decision-making. The second category, 'policy system', evaluates the existence of frameworks and instruments aimed at aligning policy objectives and processes across sectors. 'Organisational structure', the third category, scrutinises the institutional arrangements, procedures, and resource allocation mechanisms facilitating policy coordination and coherence. This includes the establishment of coordinating bodies, formal procedures, and the allocation of resources to support integrated policy implementation. Lastly, 'collaborative capacity' focuses on the knowledge, competencies, and skills necessary for effective integrated policy-making.

Several criteria distinguish the level of policy integration. The main criteria that differentiate separate, coordinated and fully integrated policy-making are:

1. Extent of cross-sectoral policy practices
2. Formal embedding of cross-sectoral policy practices
3. Policy output

INTERMEZZO: ASSESSING POLICY APPROACHES

Policy interventions aim to guide society in such a way that public welfare is enhanced. This study examines how decisions are made and seeks to determine how a different structuring of the decision-making process can contribute to a better quality of life for individuals. However, the causal chain from a policy approach to public welfare is long and difficult to establish definitively. The section enhances the understanding of causal relationships between governance structures, policy decisions, and outcomes related to broad prosperity.

Within the Ministry of Infrastructure and Water Management, a Theory of Change (ToC) is employed, as depicted in Figure 4.1. The United Nations Development Group (n.d.) describes a ToC as "a method that explains how a particular intervention, or series of interventions, is expected to lead to a specific change in development, using causal analysis based on available evidence." The ToC serves as a tool for systematically outlining the steps towards the desired objective.

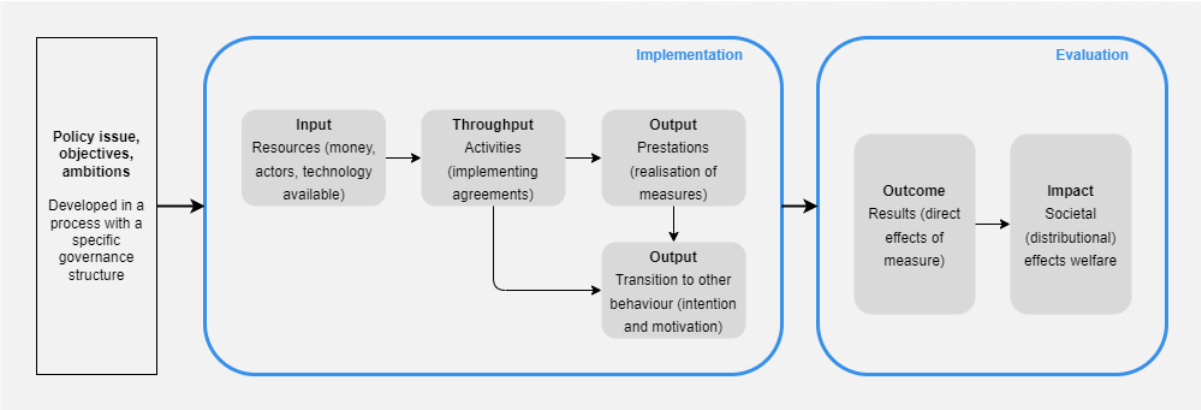

Figure 4.1: Theory of Change
Adopted from ToC Dutch Ministry of Infrastructure and Water Management

This study posits that the application of broad prosperity can result in the utilisation of different resources and activities. The ToC illustrates that such an input shift, as a consequence of the structuring of the decision-making process, can lead to behavioural changes, resulting in immediate effects. This only indirectly affects societal welfare. Similarly, Capano & Howlett (2021) describe from a mechanistic perspective how the use of policy tools influences output through behaviour. Additionally, they demonstrate the distinction between first-order and second-order effects. The CBS distinguishes between resources, utilisation, outcomes, and perception (of first and second-order effects) when measuring effects (CBS, n.d.).

Ideally, this research demonstrates how the organisation of the decision-making process influences perceptions and public welfare at the end of the causal chain. There are numerous statistical approaches to establish such effects (see for example Loi & Rodrigues (2012)). However, based on the case study, no conclusions can be drawn regarding the overall impact

of a policy approach on public welfare. This is partly because second-order effects have not yet manifested for all cases, and partly because this research is based on a qualitative analysis. Nonetheless, as far as possible, this study describes how differences in the organisation of decision-making and the application of the broad prosperity perspective induce changes in the causal chain.

PART 2

MOBILITY AND URBAN DEVELOPMENT IN PRACTICE

5 RESULTS CASE ANALYSIS

Cases provide rich insight into how theoretical concepts manifest in reality and what does and does not contribute to sound policy-making. For this study, four cases have been selected based on the criteria described in Chapter 2. These are the cases of Zeeburgereiland in Amsterdam, Binckhorst in The Hague, Valkenhorst in Katwijk, and Merwedekanaalzone in Utrecht. This chapter aims to analyse the four selected cases using the conceptual frameworks from Chapter 3 and Chapter 4, thereby gaining an understanding of applying broad prosperity to mobility policy.

Section 5.1, Section 5.2, Section 5.3, and Section 5.4 describe the cases based on the conceptual frameworks. These sections detail the projects encompassed by the cases, the decision-making processes, and the degree of policy integration of the cases for the phases of the decision-making process, culminating in key observations. Here, the implementation and evaluation phases are merged as they overlap in practice. To conclude, Section 5.5 provides answers to sub-questions 3 and 4.

5.1. Case 1: Zeeburgereiland

The analysis of the case Zeeburgereiland in this section is based on the interviews about the decision-making process of Zeeburgereiland (see Appendix B.2) and the document analysis of Zeeburgereiland (see Appendix C.1). The interviews are conducted with employees of the municipality of Amsterdam that work on the Zeeburgereiland project. One does so from spatial development and the other from transport. The document analysis provides detailed insight into housing and mobility plans, as well as organisational structures, drawn from key (policy) documents.

5.1.1. Analysis Zeeburgereiland

Zeeburgereiland is an island located north of the city centre of Amsterdam. Plans for the island's development were initiated in 2005. Work commenced on the first residential area, the Sportheldenbuurt, in 2008, with its final phase completed in 2022. Since 2005, a tram has been operating along the IJburglaan (known as the 'crucial mile'), with its schedule expanded in 2018. Moreover, this road serves as one of the primary access routes to the A10 motorway. Plans for other neighbourhoods were initiated in 2018, albeit under a new concept. A joint mobility plan was adopted in 2018 for this purpose. Additional housing development will be phased in over the coming years. The preferred decision on the mobility plans will be determined in 2024, with implementation scheduled to commence from 2028 onwards.

Table 5.1: Policy-making Zeeburgereiland
Based on Appendix B interview 2.1 and interview 2.2, and Appendix C.1

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives	How to ensure accessibility considering the housing development	Prevent future congestion	Provide traffic flow to A10	Internal and external accessibility	Objective expressed qualitatively	Mainly consideration of long-term	No explicit consideration
Options	How to develop IJburglaan? And how to ensure the capacity of public and other modes of transport?	Keep the area accessible, now, during, and after the realisation of the area development	Infrastructure as a barrier, provide internal and external traffic flow to A10	Internal and external accessibility, liveability, and spatial quality	Objective expressed qualitatively	Consideration of long-term and short-term	Distribution over population groups is not explicitly considered, distribution over modalities is
Decision-making	Which scenario provides the best effects within the budget?	Ensure the traffic flow for different modalities on IJburglaan in the short and long term and make the spatial design more compatible with the spatial development of Zeeburgereiland and IJburg		Economy (dominant), accessibility, liveability, spatial quality, feasibility, and complexity	Objective expressed qualitatively	Consideration of long-term and short-term	No explicit consideration
Implementation and evaluation		Check if the plan is on the right track		Counting, travel time measurements and surveys of residents and visitors	Mostly objective but also subjective, qualitatively	Planning updates every half year, monitoring light every year and integral actualisation every other year	Per modality, citizens of Zeeburgereiland and visitors

Table 5.1 (continued): Policy-making Zeeburgereiland
Based on Appendix B interview 2.1 and interview 2.2, and Appendix C.1

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives	Growth of the eastern flank must be accompanied by appropriate capacity and quality of the transport system		Otherwise, this area will become increasingly poorly accessible by public transport, car and bicycle. The existing transport system cannot accommodate the increase in travel		Traffic model Amsterdam
Options	In the further development of Zeeburgereiland and IJburg, there is an accessibility issue on IJburglaan for all modalities and IJburglaan in the current situation forms a barrier for crossing slow traffic with consequences for road safety, liveability, and cross-ability		The tunnel is the most expensive, complex, and risky option, but also leads to the greatest desired effects	Consultation of citizens on options that are developed by the municipality	Traffic model Amsterdam, Integral planning analysis
Decision-making	Choice of tram yard location: Baaibuurt or Oostpunt. Choice of whether to bring the car or tram underground or both, and a follow-up choice of whether this will be a short subway or a longer tunnel	Utilitarianism and the money must be fairly distributed across the city	This option is the cheapest option that solves all problems. No large investment in car infrastructure, while we want to promote active modes	Input from citizens processed in proposals to the city council	CBA, MCA
Implementation and evaluation				Zeeburgereiland residents and visitors provide input for the evaluation	Survey, traffic model Amsterdam

Table 5.2: Policy integration Zeeburgereiland
Based on Appendix B interview 2.1 and interview 2.2, and Appendix C.1

Phase	Subsystem involvement			Policy system
	Actors	Domains	Levels	
Problem and objectives	Municipality of Amsterdam departments of Land Affairs and Spatial Planning, and Traffic and transport and Infrastructure, Transport Region Amsterdam	Separation between urban development, traffic and infrastructure, and public transport	Mainly municipal level	
Options	Municipality of Amsterdam departments of Land Affairs and Spatial Planning, and Traffic and transport and Infrastructure, Amsterdam Transport Region, Rijkswaterstaat	Urban development and public transport are part of the mobility subsystem	Mainly municipal level, region involved through Amsterdam Transport Region, and national level involved through NOVEX	Joint mobility plan Zeeburgereiland with high-level goals
Decision-making	Municipality of Amsterdam departments of Land Affairs and Spatial Planning, and Traffic and transport and Infrastructure, Amsterdam Transport Region, Council of Amsterdam, Dutch Ministry of Infrastructure and Water	Urban development and public transport are part of the mobility subsystem	Mainly municipal level, region involved through Amsterdam Transport Region, and national level involved through NOVEX	Joint mobility plan Zeeburgereiland with high-level goals
Implementation and evaluation	Municipality of Amsterdam departments of Land Affairs and Spatial Planning, and Traffic and transport and Infrastructure, Amsterdam Transport Region, Dutch Ministry of Infrastructure and Water	Partial involvement of urban development and public transport in the mobility subsystem	Mainly municipal level	Joint mobility plan Zeeburgereiland with high-level goals

Phase	Organisational structure			Collaborative capacity
	Institution	Procedures	Resources	
Problem and objectives				
Options	Joint steering committee of the departments and Transport Region	The programme secretary facilitates a steering committee that meets every six weeks	Each department is responsible for one-third of the financing and the national government contributes through NOVEX funds for part of the projects	Some civil servants recognise the need for cooperation
Decision-making	Joint steering committee of the departments and Transport Region	The programme secretary facilitates a steering committee that meets every six weeks	Each department is responsible for one-third of the financing and the national government contributes through NOVEX funds for part of the projects	Stability in collaboration: the same individuals have been part of the steering committee for six or seven years
Implementation and evaluation	Implementation by project teams from a specific department. The joint committee manages the monitoring and evaluation	Project teams report to the joint committee	Each department is responsible for one-third of the financing and the national government contributes through NOVEX funds for part of the projects	

The mobility plan of Zeeburgereiland comprises measures aimed at facilitating the flow of pedestrians, cyclists, public transport, and automobiles. It encompasses projects such as a traffic square, a tram depot, and a cyclist bridge. Additionally, temporary measures for tram and bus stops are included in this case.

Policy-making characteristics

Table 5.1 illustrates the policy-making factors throughout the decision-making process of the mobility plan for Zeeburgereiland. Initially, the decision-making process was fairly traditional, focusing primarily on the prevention of congestion on the IJburglaan. However, during the exploration of potential measures, a broader approach was adopted, encompassing a wide spectrum of effects in effect studies. Distributional effects, however, remain limited at this stage.

In the decision-making phase, economic values tend to be prioritised over liveability effects. Moreover, the process itself is predominantly conventional. The chosen option, a minimal under passage, is suboptimal for liveability and spatial planning. The investments required for a liveability-enhancing alternative, such as a longer underpass or tunnel, are justified by the benefits. However, there is insufficient funding for these necessary investments. At the city level in Amsterdam, significantly more infrastructure is required to facilitate urban growth. Zeeburgereiland is just one of the large-scale development locations. Financially, the city cannot sustain the cumulative cost of the necessary infrastructure. The choice is made to realise the minimal solution that allows the tram to pass to the new depot.

Implementation and evaluation are phased processes. There is considerable attention to the area's accessibility before the major measures are implemented, achieved through temporary or short-term measures. Furthermore, synergies between smaller projects are realised by the steering committee. The evaluation itself is cyclical but limited in terms of the types of effects measured and monitored.

Policy integration

Table 5.2 shows the interpretation of the policy integration factors during the decision-making process for Zeeburgereiland. During the first phase, there is no policy integration. Housing developments were in no way linked or coordinated with mobility developments. Following a conflict between different departments of the municipality of Amsterdam and the realisation that the ‘divide and conquer’ principle is ineffective on a small island where everything comes together in space and time, a more integrated approach was taken.

Stakeholders agree to a coherent mobility package with attention to interrelationships and mutually reinforcing measures. There is also an overarching committee with representatives from the various departments and the Amsterdam Transport Region. There are no shared budgets, but there are shared contributions to projects from all parties. Although the organisational structure is fairly formalised and institutionalised (by meeting procedures), there is coordination because the committee does not stand above the departments. The committee is an institution that regulates cooperation between domains. Implementation is done by project teams. For the major projects, including the tram parking and IJburglaan, all parties

contribute. Other smaller projects are implemented within a domain. However, these projects fall under the overarching plan and adhere to the overarching goals.

5.1.2. Key observations Zeeburgereiland

The Zeeburgereiland decision-making process is summarised in Figure 5.1 based on the analysis of the previous section. Throughout the process, attempts are made to include broad prosperity aspects by considering a wide range of impacts. However, the decision-making process is fairly conventional. In addition, policy integration is explicitly chosen starting from the exploration of options.

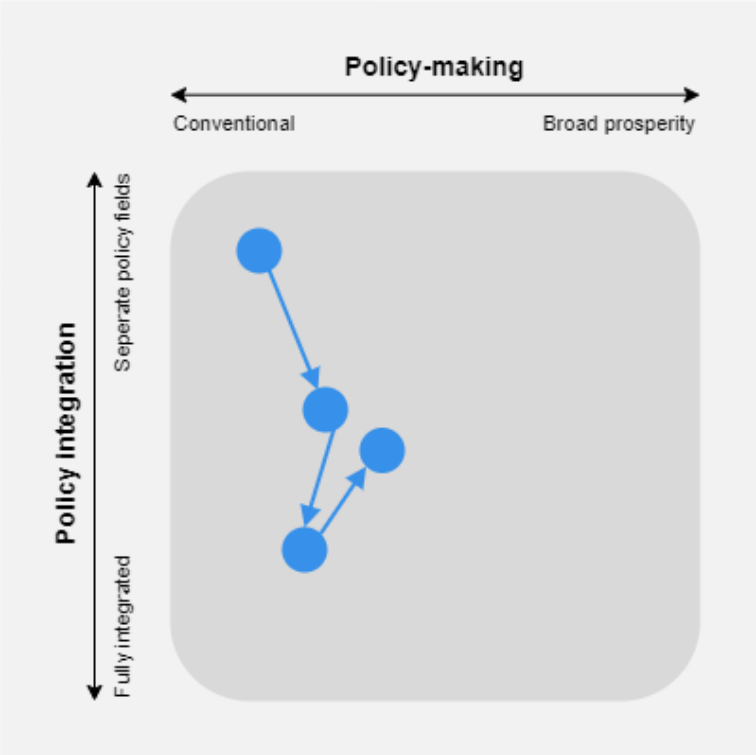

Figure 5.1: Qualitative indication development Zeeburgereiland
Each dot represents a phase of the decision-making process (problem and objectives, options, decision-making, implementation, and evaluation), and the arrows indicate a transition to another governance structure.

The case of Zeeburgereiland illustrates how various types of effects of alternatives can be depicted. However, studies designating a particular alternative as preferable do not hold decisive weight. Despite the possibility of broad ambitions, the municipal council and a budget do play a decisive role. This relates to trade-offs at a higher level that influence decision-making.

Furthermore, it is notable that an integrated approach contributes to implementation within a specific area. It became evident over time that sectoral challenges cannot be solved in isolation and that an integrated plan is necessary. The joint committee positively contributes to coordination within the area without the organisation of full integration. Over time, trust has been established among the involved parties, allowing for reflection on the interrelatedness of projects. This encompasses not only attention to how all plans converge in the long term but also to what needs to be done in the short term.

5.2. Case 2: Binckhorst

The analysis of the Binckhorst case in this section relies entirely on interviews (see Appendix B.3) and document analysis (see Appendix C.2). Two interviews were conducted with members of the independent project team responsible for plan development. The interviews provide perspectives on the decision-making processes within the project. Additionally, the document analysis offers comprehensive insights into the plans for spatial development and mobility in Binckhorst.

5.2.1. Analysis Binckhorst

The Binckhorst in The Hague is transforming from an industrial area into a sustainable residential and business district, with progress being made towards a new mobility system within the area. In 2018, the environmental plan and the area development approach were established for the development of the Binckhorst. The environmental plan provides frameworks for the changes in the Binckhorst. Simultaneously, agreements regarding the implementation of high-quality public transport (HOV) were made in the BO MIRT. In 2019, a "no regret" package was adopted, which includes a dedicated bus lane scheduled to be operational by 2025. As of 2024, the development of residential and business areas is being realised in phases. At the end of 2022, the national government and the region also agreed to invest in a tram connection through the Binckhorst, which is expected to be completed around 2030. The preferred decision for this tram connection was made in 2023.

This case concerns the decision-making process for the HOV line in Binckhorst. This encompasses both the temporary dedicated bus lane and the tram connection. Additionally, there are various supplementary measures in the area, including bicycle routes, hubs, and infrastructure adjustments. It is unclear how the implementation and evaluation phase will be set up for the Binckhorst and what values the factors have for this.

Policy-making characteristics

The approach to policymaking for mobility in the Binckhorst area changes throughout the decision-making process. This is evident in Table 5.3, where the factors are outlined. Initially, the decision-making process was very broad and focused on urbanisation and housing challenges. The CID-Binckhorst was on a national level designated as an acceleration area for urbanisation.

During the exploration of options, the scope was limited, and decision-making was fairly conventionally organised. For instance, the CBA includes effects on travel times, reliability, and journey costs, distinguishing between effects for public transport users, motorists, and cyclists. Other indirect effects briefly considered include vibrations, cultural heritage, and soil. While there was some attention to transitioning mobility to more sustainable forms, the focus was on facilitating the amount of movement required for business and residential development in the area.

Table 5.3: Policy-making Binckhorst
Based on Appendix B interview 3.1 and interview 3.2, and Appendix C.2

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives	How can the urbanisation task be realised?	Realise building challenge inner-city and keep cities affordable, liveable, and sustainably accessible in the future.	Mobility is a way to ensure jobs, schools and amenities are within reach.	Accessibility and economy, and to some extent environment			
Options	Which route and modality has the preference for the HOV route?	Making the traffic and transport system continue to fit the growing number of inhabitants and jobs in the area, addressing bottlenecks in the mobility system (especially for public transport, but also for cars), and fulfilling regional ambitions for public transport and cycling	HOV and potentially 'more' is needed for the development of the area	Focus on accessibility and transport value	Quantitively and partly qualitatively	Long-term and explicit attention to short-term	Distribution over modalities is considered
Decision-making	How to redesign the space of the HOV route and the surrounding area?		Use mobility to further develop the city	Four main: accessibility, spatial quality, business climate, and land use Additionally: energy, materials, ecology, and biodiversity	Quantitively and qualitatively	Long-term	No explicit consideration
Implementation and evaluation							

Table 5.3 (continued): Policy-making Binckhorst
Based on Appendix B interview 3.1 and interview 3.2, and Appendix C.2

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives			Scaled-up public transport with faster, more reliable, and more frequent public transport is needed to keep cities accessible and to keep Southern Randstad internationally competitive.		
Options	Choice of a combination of a HOV tram on the route Den Haag Centraal - Binckhorstlaan (DH) with as much separate infrastructure as possible, a HOV tram via Maanweg to Voorburg station, a HOV tram to Rijswijk/Delft via Binckhorstlaan - Geestbrugweg, and a basic mobility package with measures.	Utilitarianism	The route enables the area development, best solves the mobility bottlenecks, contributes to the ambitions for cycling and public transport, is the most financially feasible, and is the most feasible.		CBA, EIA
Decision-making	Spatial implementation of the preferred variant.		Prioritising walking, cycling and public transport (mobility transition) will create more space in the city for living, working, and staying.	The goal is to involve people in thinking about the layout of the neighbourhood, such as amenities.	Ambition Web
Implementation and evaluation					

Table 5.4: Policy integration Binckhorst
Based on Appendix B interview 3.1 and interview 3.2, and Appendix C.2

Phase	Subsystem involvement			Policy system
	Actors	Domains	Levels	
Problem and objectives	The Ministries of Infrastructure and Water Management, the Interior and Kingdom Relations, the province of South Holland, the Rotterdam-Den Haag Metropolitan Region (a partnership of 23 municipalities) and the municipalities of Rotterdam and The Hague	Mobility issue developed based on urbanisation problems and plans.	Mainly national and regional level	MoVe program
Options	Municipality of The Hague, municipality of Leidschendam-Voorburg, MRDH, South Holland Province, Ministry of Infrastructure and Water Management, and Ministry of the Interior and Kingdom Relations	Housing and mobility plans are conditional but separate decision-making. There is some alignment.	Multiple governmental levels are involved, municipal level	Spatial Vision Binckhorst
Decision-making	Municipality of The Hague, municipality of Leidschendam-Voorburg, MRDH, South Holland Province, Ministry of Infrastructure and Water Management, and Ministry of the Interior and Kingdom Relations	Housing and mobility plans are conditional but separate decision-making. There is some alignment.	Multiple governmental levels are equally involved	Spatial Vision Binckhorst, policy frameworks of municipalities and other stakeholders
Implementation and evaluation				

Phase	Organisational structure			Collaborative capacity
	Institution	Procedures	Resources	
Problem and objectives		Program mobility and urbanisation (MoVe), MIRT	Via MIRT and MoVe	
Options	Municipality of The Hague in the lead			
Decision-making	Independent project management team with a project manager, technical manager, environmental manager, contract manager and additional plan study manager next to the guidance group in which all stakeholders are represented.	The ultimate decision takes place in the BO-MIRT. The project team reports to the guidance group. Each member of the project team has ownership over some values.	The independent team has no decision-making power. All stakeholders in the guidance group need to agree.	New project leader with high ambitions.
Implementation and evaluation				

As the decision-making phase progresses, a broader perspective is adopted, with explicit attention to land use values. Additionally, this phase employs broad conceptual frameworks, such as the Ambition Web, highlighting mobility as something that can achieve more than just getting from point A to point B. The Ambition web was employed to capture all values comprehensively, with explicit attention to nature and biodiversity.

Policy integration

Table 5.4 demonstrates that the degree and form of policy integration change throughout the decision-making process. Housing development and urbanisation challenges prompt the scale leap and plans in the realm of mobility. However, the decisions are not made integrally. There is formal interdependence between the development of the area and the mobility measures to be taken, but this is based on alignment rather than joint action or organised coordination.

In the case of Binckhorst, there is significant integration among governance levels, as all are involved. Initially, there is one stakeholder in the lead and all stakeholders coordinate action. During the decision-making phase, there is increased coordination through an independent project team. The establishment of this project team alters the dynamics of the collaboration. Yet, the independent project team itself has no decision-making power.

5.2.2. Key observations Binckhorst

Figure 5.2 shows the progress of the decision-making process for Binckhorst schematically. The policy-making characteristics vary largely, and the figure illustrates how policy integration across the governance levels fluctuates.

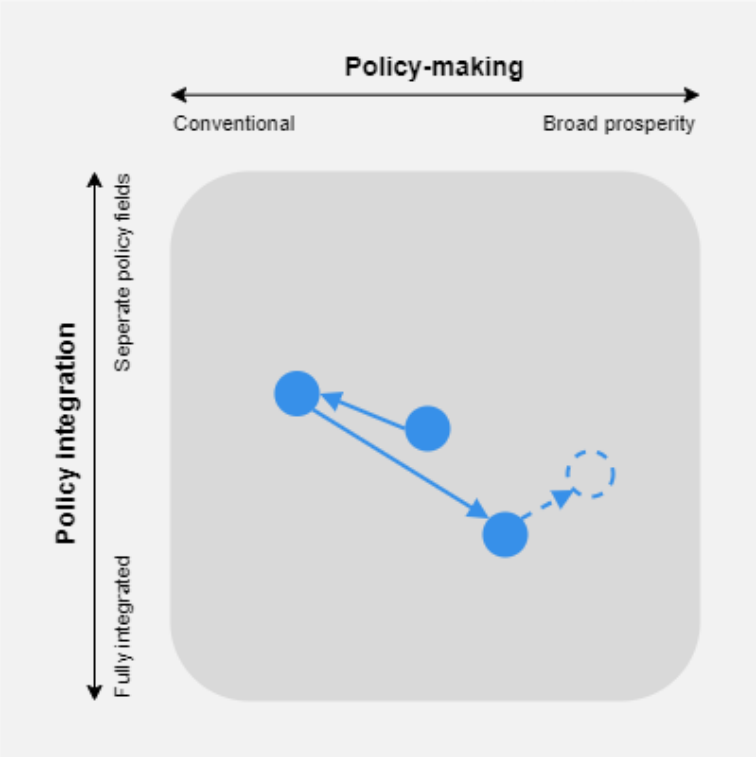

Figure 5.2: Qualitative indication development Binckhorst
Each dot represents a phase of the decision-making process (problem and objectives, options, decision-making, implementation, and evaluation), and the arrows indicate a transition to another governance structure. A dashed line indicates uncertainty about the position and/or transition.

The Binckhorst case exhibits several noteworthy aspects. Firstly, there is a distinct focus on public transport as a solution to the increased number of movements, rather than merely addressing issues related to car traffic. The extent to which broad prosperity characteristics can be observed decreases during the decision-making process to increase again at the decision-making phase. In addition, this change between phases coincides with a change in management structure. Whereas initially one of the parties involved was in the lead, namely the municipality of The Hague, later an independent project team had been appointed. Following the appointment of the new project leader, a specific individual was made accountable for the value of nature and the Ambition Web was utilised to map the goals of all stakeholders.

Secondly, the project involves numerous governance layers, highlighting the extensive collaboration required across different administrative levels. The parties initially collaborated for a national analysis, after which the municipality of The Hague led the specific project, following which the independent project team took over. This latter stage represents a high level of policy integration, but this policy integration is integration between parties rather than between domains. The integration between mobility and urban development in the Binckhorst case is very limited.

5.3. Case 3: Valkenhorst

The analysis of the Valkenhorst case presented in this section is based on interviews (see Appendix B.4) and thorough document analysis (see Appendix C.3). The interviews include a representative from the Dutch Ministry of Infrastructure and Water Management, two officials from the Province of South Holland, and one employee of the Municipality of Katwijk. The document analysis provides the analysis with insights derived from essential policy documents and additional sources.

5.3.1. Analysis Valkenhorst

Valkenhorst is a new residential area on the former naval air base in Katwijk. A route runs along Valkenhorst from Leiden to Katwijk and Noordwijk. Initially (around 2006), there were plans to operate a tram along this route. After these plans fell through in 2012, a governance agreement was signed in 2013 by the province of South Holland and the municipalities of Leiden, Katwijk, and Noordwijk to gradually implement a HOV bus transit line. Since 2021, high-frequency bus services have been operating on the route, and as of 2024, the construction of the dedicated bus lane has been established. In 2020, agreements were also made regarding the development of the residential area and the urban planning framework for the district was finalised, followed by the adoption of the zoning plan in 2022. The bus lane will be completed in 2026, and the delivery of the first residences in Valkenhorst will follow thereafter.

The various measures for the R-net corridor include bus lanes, R-net stops, a tunnel for cyclists and pedestrians under the Zeeweg, and a dedicated bus lane. This analysis is fixated on the decision-making process for this dedicated bus lane. In the realm of mobility, the RijnlandRoute is also being implemented in the area.

Table 5.5: Policy-making Valkenhorst
Based on Appendix B interview 4.1, interview 4.2, interview 4.3, and interview 4.4, and Appendix C.3

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives	How to improve the public transport network around Leiden?	Reduce the region's rapidly growing and increasingly congested car traffic		Accessibility	Objective, quantitative	Long-term	Focus on public transport
Options	Which route and how should the HOV route Leiden – Katwijk be realised?	Ensure that residents of Leiden and Katwijk can travel by public transport quickly and comfortably		Focus on accessibility and travel times, and minimising travel-related disturbances	Objective, quantitative		No explicit consideration
Decision-making	How does the route fit in the urban network?			Accessibility, ecology, culture, and liveability	Objective, quantitative and qualitative		No explicit consideration
Implementation and evaluation							

Table 5.5 (continued): Policy-making Valkenhorst
Based on Appendix B interview 4.1, interview 4.2, interview 4.3, and interview 4.4, and Appendix C.3

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives	Choice for seven high-quality public transport lines instead of RijnGouwelijn. Implement RGL-West as a bus lane with the possibility of later 'tramming'.		The tram on Breestraat in Leiden does not fit and no financing for an alternative. Instead, improve the public transport network, by significantly upgrading existing links 'Something must be done to facilitate public transport'	Few participation, citizen protests	Traffic models
Options	Along the N206 Ir. G. Tjalmaweg and connecting through the Duinvallei will be a (separate) bus lane.		The bus lane needs to be built now to mitigate the effects of the extra traffic due to the new housing at Valkenhorst as much as possible. Running on a separate bus lane will allow both buses and other traffic to move through better.	Information meetings to identify community interests, increase understanding of trade-offs in decision-making and strengthen the project with local knowledge.	Archaeological research RijnlandRoute Traffic models
Decision-making	Choice of specific design features			Through design workshops, the surrounding area was able to contribute ideas on the design of this viaduct, including the landfall on the north side of Valkenburg.	Quick Scan ecology, Preliminary investigation into the risk of finding conventional explosives
Implementation and evaluation					

Table 5.6: Policy integration Valkenhorst
Based on Appendix B interview 4.1, interview 4.2, interview 4.3, and interview 4.4, and Appendix C.3

Phase	Subsystem involvement			Policy system
	Actors	Domains	Levels	
Problem and objectives	Province of South Holland, Holland Rijnland, Municipalities of Leiden and Katwijk, Ministry of Infrastructure and Water Management	Mobility	Regional level and involvement of national level	
Options	Mainly the Province of South Holland and the Municipality of Katwijk	Mobility and urban development	Mainly regional level	No overarching plan, just administrative agreements with process arrangements
Decision-making	Mainly the Province of South Holland and Municipality of Katwijk also	Mobility and urban development	Mainly regional level	HOV vision landscape integration
Implementation and evaluation	Province of South Holland	Mobility	Mainly regional level	

Phase	Organisational structure			Collaborative capacity
	Institution	Procedures	Resources	
Problem and objectives				
Options	The province itself is responsible for the entire procedure	Provincial incorporation plan	No overarching resources	
Decision-making		Administrative agreements with process arrangements	No overarching resources	
Implementation and evaluation				

Policy-making characteristics

Table 5.5 shows that the case of Valkenhorst has been relatively well-defined from the outset. The issue concerns the public transport network and its quality in terms of travel times and the number of users. Due to the presence of various landscapes with distinct values in the area, studies are conducted on these values while developing HOV connections. In this sense, a broader perspective is adopted. Nonetheless, the case appears to follow a relatively conventional approach with a focus on mitigating adverse effects.

Policy integration

Policy integration initially occurs between administrative levels and later, to a limited extent, between domains. This is evident in Table 5.6. Initially, many parties were involved in the plans for the HOV network. After the decision on the HOV route, primarily the province and the municipality of Katwijk were involved.

After the elaboration of options and decision-making, some degree of integration was introduced, although not extensive. It is limited to coordination on a few points. For example, the design takes housing development into account, and vice versa. Additionally, the two are legally connected. The argument for extending the RijnlandRoute and widening the N206 Tjalmaweg was that the housing development in Valkenhorst needed these improvements to ensure accessibility. The bus lane is part of the accessibility measures for Valkenhorst. The widening of the N206 Tjalmaweg (the extension of the RijnlandRoute) is also part of this.

However, during implementation, the different projects are completely separate from each other. The reason for this is that both projects have separate decision-making processes, separate project organisations, separate planning procedures, and separate implementation organisations. Moreover, no joint bodies were established for coordination in this case.

5.3.2. Key observations Valkenhorst

The progress of the decision-making process of Valkenhorst is delineated in Figure 5.3. Based on the analysis of the previous section, it can be determined that both broad prosperity aspects and policy integration seem to be limited. Attempts have been made to capture broad prosperity for decision-making, but the policy-making process has many conventional characteristics.

The analysis of the Valkenhorst case study shows that mobility plans had a limited scope from the beginning. Nevertheless, different values have been taken into account in impact studies. This does not lead to a different decision, but the landscape and history of the subareas through which the route passes are considered. It appears that the decision was largely contained, influenced, and fixed by the long history of plans for the route in the form of the RijnGouwelijn.

Moreover, the involvement of many stakeholders means that different impacts of the policy options are addressed in the decision-making process. On the other hand, the involvement of many parties makes the process very slow. For some issues, it is unclear who holds the authority and there are conflicting interests. This leads to extensive discussions about the

ownership of problems and solutions, and what actions to take. A distinguishing feature of this case is that for urban development, there is only one landowner, namely the Central Government Real Estate Agency.

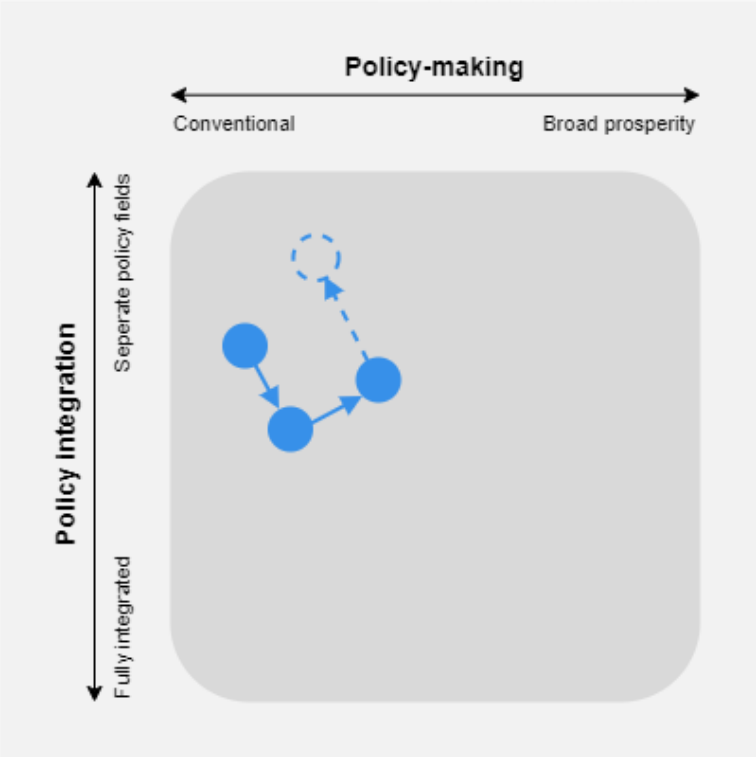

Figure 5.3: Qualitative indication development Valkenhorst
Each dot represents a phase of the decision-making process (problem and objectives, options, decision-making, implementation, and evaluation), and the arrows indicate a transition to another governance structure. A dashed line indicates uncertainty about the position and/or transition.

Lastly, the case of Valkenhorst shows some integration between domains. However, this integration seems to be mostly argumentative. The decision-making processes of the plans for the Valkenhorst neighbourhood, the HOV line and the RijnlandRoute are separate. They are legally connected and one project plan depends on the other for achieving accessibility targets, among others.

5.4. Case 4: Merwedekanaalzone

The analysis of the Merwedekanaalzone case in this section is grounded in interviews (see Appendix B.5) and an extensive document review (see Appendix C.4). Interviews were conducted with two representatives from the Municipality of Utrecht and one representative from one of the developers involved in the project. These interviews offer valuable perspectives on the decision-making processes for Merwedekanaalzone. Additionally, the document analysis provides critical insights into urban development and mobility plans, as well as governance structures.

5.4.1. Analysis Merwedekanaalzone

The Merwedekanaalzone is located within the city of Utrecht and is a large-scale development site. Around 2017, the initial discussions between landowners and the municipality of Utrecht commenced regarding the development of the area. In 2018, the spatial agenda and vision for

the area were established in the Environmental Vision (Part 1). Subsequently, a cooperation agreement between the market parties and the municipality was formalised, and in 2021, the spatial agenda was detailed in the Environmental Vision (Part 2). This included the mobility concept for Merwede. Construction of the area commenced in 2024, with the first residences expected to be completed.

The mobility concept of Merwede is based on extremely low parking standards. Priority is given to walking, cycling, and public transport (in that order). For this analysis, the focus is on the decision-making process for the implementation of a HOV line along Merwede. A dedicated bus lane with two stops on the Europalaan will be established. In addition to this project, there are several other mobility projects, such as parking facilities, shared transport, and logistics hubs.

Policy-making characteristics

Table 5.7 illustrates how the decision-making process for Merwede is structured. A clear direction for the area and mobility has been established at the outset, particularly in the environmental vision. Key principles and conditions have been formulated by the municipality of Utrecht and the developers. In this initial phase, comprehensive considerations have been made for the area, including effects on traffic, the environment, and social aspects. During the options and decision-making phase, the effects of the options are also examined broadly, with specific attention to the dimension of time. Throughout the entire process, considerations are explicitly reported and elaborated upon. Stakeholder participation for citizens on the other hand was relatively conventional.

Policy integration

The Merwede case demonstrates a unique approach to policy integration. As shown in Table 5.8, initially, there is intensive coordination. From the very beginning, decision-making across all domains within the area has been interconnected. The need for housing is a determining factor for choices in other domains. This necessity is reflected throughout the entire process. For instance, many facilities are being established in the area. The design of Merwede is intended to be that of an urban district rather than a residential neighbourhood. Choices for all domains are detailed within the overarching policy systems for the area.

From the decision-making stage, an institution, the mobility company, has been established by the developers and the municipality. The various stakeholders have an interest in this company and, consequently, a voice. After the project's completion, all parties remain involved during the evaluation phase. In this way, all stakeholders can influence whether the area will be realised and used as intended.

Table 5.7: Policy-making Merwedekanaalzone
Based on Appendix B interview 5.1, interview 5.2, and interview 5.3, and Appendix C.4

Phase	Issue			Effects			
	Scope	Aim	Mobility	Range	Type	Time horizon	Distribution
Problem and objectives	Which complementary mobility measures are necessary for building houses in Merwede?	Merwede should be a complete city district that exemplifies healthy and sustainable living: with innovative applications of reuse, energy generation, climate adaptation and innovative mobility solutions.	Mobility as a prerequisite for a healthier and sustainable redevelopment of the city.	Health, sustainability, accessibility, liveability	Objective and mostly quantitative	Short and long-term	Consideration of different mobility users and their needs
Options	Which of the four scenarios is right for the area development?		STOMP	(Economic) accessibility, social, health, sustainability, effectivity		Mainly long-term	Consideration of effects on surrounding neighbourhoods
Decision-making	How to implement the mobility approach?	Residents of Merwede move freely and can do so without their own cars.	Focus on use and not possession of mobility	(Economic) accessibility, social, health, sustainability, effectivity		Mainly long-term	
Implementation and evaluation	Does the new mobility concept function as envisioned?	Grip on the realisation of the envisioned healthy and sustainable urban district.		Monitoring of core objectives and frameworks	Objective and subjective, quantitative, and qualitative	Long-term	In Merwedekanaalzone and direct environment

Table 5.7 (continued): Policy-making Merwedekanaalzone
Based on Appendix B interview 5.1, interview 5.2, and interview 5.3, and Appendix C.4

Phase	Trade-offs			Process	
	Description	Underpinning	Argumentation	Stakeholder participation	Instruments
Problem and objectives	Inner-city densification is beneficial but sets boundary conditions for mobility. Choice for transport modes that take up little space and are sustainable.		Proportionally low car use is needed, and infrastructure must be well-fitted. Efforts should therefore be made to spread bicycle flows and offer HOV for large numbers of new travellers.		Plan-MER, network analysis
Options	The new mobility concept is central to the development: car-free zones, investments in pedestrians, cyclists, and public transport.		Demand for high density with all associated complexities, environmental impact assessment and the capacity of surrounding roads	Standard procedures. Objections from surrounding neighbourhoods about bridges	Traffic model Utrecht
Decision-making	Two new bicycle and walk connections, HOV in combination with shared transport		HOV connects Merwede with the rest of the city using high-frequency buses and, eventually, possibly a tram connection. In mobility hubs, residents can choose exactly the form of mobility they need at that moment. The emphasis on cycling and walking ensures healthy residents with a small carbon footprint.	Community meetings	Logistics analysis
Implementation and evaluation	Comparing baseline assessment and future effects against objectives			Not yet	Liveability impact assessment

Table 5.8: Policy integration Merwedekanaalzone
Based on Appendix B interview 5.1, interview 5.2, and interview 5.3, and Appendix C.4

Phase	Subsystem involvement			Policy system
	Actors	Domains	Levels	
Problem and objectives	Municipality of Utrecht, developers	Mobility, energy, water, spatial planning	Regional	Environmental vision and mobility framework, Spatial Strategy Utrecht
Options	Municipality of Utrecht, developers	Mobility, energy, water, spatial planning	Local	Environmental vision: elaboration of the Spatial Agenda
Decision-making	Municipality of Utrecht, developers	Mobility, energy, water, spatial planning	Local	Urban development plan
Implementation and evaluation	Municipality of Utrecht, developers	Mobility, energy, water, spatial planning	Local and regional to some extent	

Phase	Organisational structure			Collaborative capacity
	Institution	Procedures	Resources	
Problem and objectives		Co-develop sessions		
Options		Co-develop sessions		
Decision-making	Mobility company	Jointly developed structure of an independent company with an independent mobility director. Each party with a share in the company has a voting share.	Investments by the developers and by the municipality of Utrecht. They are long-term owners	
Implementation and evaluation	Mobility company will arrange monitoring			

5.4.2. Key observations Merwedekanaalzone

Figure 5.4 illustrates Merwedekanaalzone's decision-making process characteristics. The case exhibits an increasing level of policy integration and an increasing amount of broad prosperity characteristics. After the decision-making phase, the mobility process will be less integrated with other domains as decisions are made by the mobility company.

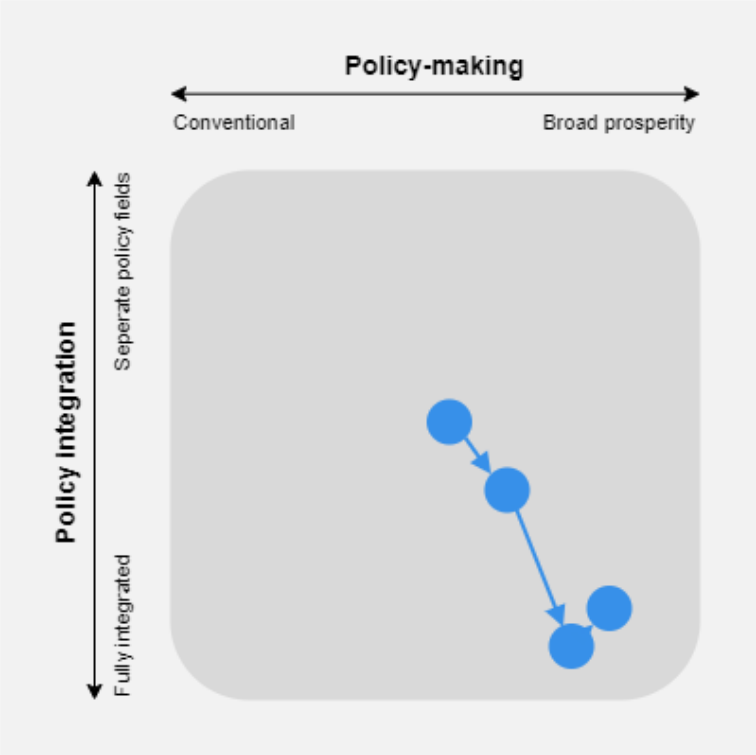

Figure 5.4: Qualitative indication development Merwedekanaalzone
Each dot represents a phase of the decision-making process (problem and objectives, options, decision-making, implementation, and evaluation), and the arrows indicate a transition to another governance structure.

The analysis of the Merwede case highlights that an integrated approach has been followed from the outset. However, the starting point is not an existing bottleneck or problem but rather anticipated effects in the area. Ambitious goals have been set for the area because of the housing shortage. Choices for mobility follow from these overarching goals. Thereby, mobility decisions are not only dependent on housing decisions, but also mutually dependent on decisions on energy, nature, and spatial planning.

The ambitious goals for Merwede are set by the municipality of Utrecht and the developers together in a collaborative process. The municipality was the spearhead of this process, challenging developers to set increasingly ambitious goals for nature, energy, and mobility, among others. Broad prosperity perspectives were mostly reflected. The dimension of 'elsewhere' is evident, for example, in the process of the placement of bridges, the connection with other neighbourhoods by bicycle, and the traffic nuisance in surrounding neighbourhoods when low parking standards are implemented. Nevertheless, the global dimension does not explicitly appear in this case. Additionally, it is noteworthy that there has been extensive reporting on why certain choices were made. The decision-making process is transparent.

5.5. Lessons from the organisation of mobility and urban development

This chapter has analysed four distinct implementations of broad prosperity and policy integration factors. The specification of the factors for each allows for structured assessment based on the conceptual frameworks for policy-making and policy integration. The analysis shows varying ways in which one can apply the broad prosperity perspective for mobility policy-making, providing potential hooks for a broader assessment. This chapter shows that policy integration and the application of broad prosperity are continuous moving processes. The implications of these dynamics are discussed in Chapter 6.

The answers to sub-questions 3 and 4 are as follows:

3. How do specific implementations of broad prosperity factors in mobility policy-making processes score on the broad prosperity criteria?

The case of Zeeburgereiland initially follows a conventional approach, focusing on traffic flow and infrastructure to prevent congestion, especially on the IJburglaan. During the exploration of options, a broader approach is adopted, considering liveability effects and explicit trade-offs. However, the decision-making remains conventional, constrained by budget and scope limitations. Implementation and evaluation are phased, with initial temporary measures to maintain accessibility and limited cyclical evaluations.

For the case of Binckhorst, an initially broad approach focused on urbanisation and housing challenges shifts to a more conventional focus during the options phase, primarily addressing bottlenecks and accessibility. Even though there is some attention to sustainable mobility, the primary focus remains on facilitating movement for business and residential development. During the decision-making phase, a broader consideration of effects, including explicit attention to land use values, is adopted, demonstrating broad prosperity properties.

The scores on the policy-making factors for Valkenhorst lean toward conventional policy-making during the entire process. The issue revolves around facilitating efficient transport and trade-offs are not very explicit. However, during decision-making, broad prosperity elements are present with consideration of a broad range of values and a higher level of stakeholder participation.

Throughout the entire process, the case of Merwede pertains to policy-making in line with the broad prosperity paradigm. The issue is focused on improving well-being and quality of life, and a broad range of effects is considered. Additionally, trade-offs are made explicit. Only the process itself shows less broad prosperity characteristics.

4. How do specific implementations of policy integration factors in mobility policy-making processes score on the policy integration criteria?

The decision-making process of Zeeburgereiland is not coordinated between sectors, domains, or levels during the problem and objectives phase. Coordination is organised during the options phase, facilitated by a joint steering committee, which manages cooperation between domains without full integration. For implementation and evaluation, there is coordination via the steering committee.

The case of Binckhorst scores fairly low on the policy integration criteria during the problem and objectives and options phases. There is some coordination among levels and actors, but no powerful organisational structure. Integration between stakeholders is organised during the decision-making phase with an independent project management team, although this team has no decision-making power and must gain agreement from all stakeholders in the guidance group. Integration across domains is limited to low-level coordination, with formal interdependence based on alignment rather than joint action.

During the problem and objectives phase, there is coordination between stakeholders for the Valkenhorst case. This coordination is characterised by negotiation and less so cooperation. During the entire process, the processes for mobility and urban development are separate. However, there is legal coordination between the two domains.

The case of Merwede has a high level of policy integration across domains. All relevant domains for the area are considered in conjunction. Additionally, the bounding policy system represents a high level of integration. During the problem and objectives and options phases, there is coordination among stakeholders. During decision-making and later phases, there is full integration between stakeholders through an overarching collaborative institution, which is the mobility company.

6 INTERPRETATION OF PRACTICAL INSIGHTS

The analysis in Chapter 5 illustrates the various ways in which broad prosperity is applied during decision-making processes and how it aligns with urban development. These practical insights provide points of reference for making comprehensive considerations regarding mobility, ensuring that the transport system contributes to people's well-being. This chapter aims to identify hindering and enabling governance structures for a broad assessment by comparing the governance structures and practical insights of the cases.

Section 6.1 delves into a structural comparison of key observations and findings of the case analysis. By comparing the cases, patterns of potential solutions become evident. Subsequently, Section 6.2 addresses the conflicts between broad prosperity and current institutions. This section outlines the hindering governance structures for comprehensive considerations during decision-making processes. Section 6.3 discusses enhancing governance structures. The relevance of structures is based on the comparative analysis and complemented by expert input obtained during focus groups (see Appendix B.6). Finally, Section 6.4 summarises the lessons on governance structures.

6.1. Comparison of governance structures

Table 6.1 positions the policy-making approach of the four analysed cases side by side. Similarly, Table 6.2 shows the degree of policy integration for the four cases. By contrasting the cases in this structured manner, patterns of obstruction and enrichment can be abstracted.

Stakeholder involvement across governance layers

Firstly, the comparison reveals significant differences in the number of stakeholders involved and the diversity of governance layers across the cases. Binckhorst and Valkenhorst involve a multitude of stakeholders from various governmental layers, with a more prominent role for regional authorities. In contrast, Merwede and Zeeburgereiland exhibit a more localised approach, with municipalities taking the lead and, in the case of Merwede, substantial involvement from developers.

The participation of numerous parties ensures that a wider array of values is represented in the decision-making process. For example, the municipality of Katwijk introduces cultural considerations into the process. However, this multiplicity of stakeholders also complicates and prolongs the decision-making process. This has been evident in the cases of Binckhorst, Valkenhorst, and Merwede (during the problem and objectives phase), where the process has faced hindrances. The involvement of numerous parties seems to shift discussions towards individual preferences rather than collective achievements, thereby diminishing the focus on long-term effects or potential synergies between projects.

Table 6.1: Assessment policy-making
BP is broad prosperity and C is conventional

	Case 1 **Zeeburgereiland**	Case 2 **Binckhorst**	Case 3 **Valkenhorst**	Case 4 **Merwede**
Problem and objectives	C: traffic flow issue, accessibility and no distributive effects, traffic model BP: trade-off explicit	C: accessibility and economy, trade-off delineation BP: mobility as a means	C: focus on traffic flow, accessibility, traffic models BP: trade-off explicit	C: process, network analysis BP: issue with broad definition of welfare, effects, trade-offs explicit
Options	C: accessibility and focus on infrastructure BP: consideration of liveability, citizen involvement	C: bottleneck reasoning, transport effects BP: distribution over modalities, explicit argumentation	C: route choice, travel times, distribution not considered BP: citizen involvement	C: reliance on traffic model, BP: mobility as a means, different values, effects elsewhere, transparency
Decision-making	C: limited scope, economic argumentation BP: various effects estimated	C: distribution of effects BP: wide range of effects, collective process	C: scope, delineation trade-offs BP: ecology and cultural effects, process citizens, ecology tools	BP: scope, effects, explicit delineation of trade-offs
Implementation and evaluation	C: monitoring completion, travel time measurements BP: stakeholder participation			BP: focus on impact, assessment objective and broad

Table 6.2: Assessment policy integration
S is separate, C is coordination, and I is integration

	Case 1 **Zeeburgereiland**	Case 2 **Binckhorst**	Case 3 **Valkenhorst**	Case 4 **Merwede**
Problem and objectives	S: sectoral approach within the municipality	C: between stakeholders	C: between stakeholders	C: between stakeholders and across domains
Options	C: across domains	C: between stakeholders and across domains	C: between stakeholders and across domains	C: between stakeholders and across domains
Decision-making	C: informal, overarching institution across domains	I: overarching project team for mobility	C: formal, across domains	I: full, across domains and overarching institution for mobility
Implementation and evaluation	S: sectoral project teams for implementation		S: sectoral and no stakeholder collaboration	I: full, across domains and overarching institution for mobility

Conversely, Merwede and Zeeburgereiland have adopted an area-focused approach. In Merwede, this comprehensive focus was present from the outset, while in Zeeburgereiland, it developed from the initial options phase. This approach ensures that all parties work towards shared objectives for the area. Binckhorst later in the process adopted a similar strategy by establishing an independent project team to facilitate more overarching planning.

Policy integration and an overarching institution

Policy integration through overarching institutions varies across the cases. Zeeburgereiland and Merwede have joint organisations, while Binckhorst uses an independent project team. Zeeburgereiland's commission requires consensus from all parties, whereas Merwede's

company has decision-making authority. Binckhorst coordinates between governance layers within the mobility domain, Zeeburgereiland spans multiple domains within one layer, and Merwede eventually formed a public-private partnership (PPP) for mobility. Valkenhorst lacks overarching institutions but shows domain coordination.

The case of Zeeburgereiland demonstrates that policy integration through an institution does not necessarily lead to decisions that enhance broad prosperity. Valkenhorst further illustrates that linking mobility with urban development does not inherently ensure efficient implementation. The comparison highlights that other institutional factors beyond the separation of mobility and urban development complicate the application of broad prosperity. Regardless of the form, a collective framework or policy system can aid by establishing early agreements on principles, facilitating decisions in later stages of the process.

Values, distributional effects, and broad prosperity dimensions

Incorporating values beyond merely facilitating rapid travel from point A to point B is common practice. Sustainability principles, for example, are integrated through Environmental Impact Assessments (EIAs), which have been conducted for all cases. In Binckhorst, one person in the project team is responsible for overseeing sustainability and nature aspects.

However, incorporating other dimensions of broad prosperity, such as distributional effects and the dimensions later and elsewhere, remains challenging. Stakeholders often struggle with how to account for and visualise impacts that occur later or in different parts of the world. Merwede partially addresses the effects on surrounding areas by implementing measures in neighbouring districts. While calculations can be made for certain aspects, for example through EIA, there is currently no method in use to adequately take into account the needs of future generations. This is while reports and data on impacts are crucial in decision-making processes. Spatial and temporal dimensions and distributive effects are not comprehensively addressed in any of the cases.

Broad prosperity principles at different stages of the process

While stakeholders attempt to estimate dimensions of broad prosperity, such as sustainability impacts, during the options phase, this does not consistently translate into decision-making and monitoring processes. For instance, in the case of Zeeburgereiland, despite efforts to demonstrate the liveability benefits of alternatives and support from scientists, decisions were primarily influenced by city council priorities and budget constraints. Similarly, for Valkenhorst decisions are mostly based on prior agreements. In contrast, the Merwedekanaalzone has achieved some success in aligning with specific ambitions within spatial limitations. These examples underscore the challenges of effectively integrating broad prosperity dimensions into all phases of the decision-making process, highlighting the complexities involved in balancing environmental, social, and economic considerations within institutional, administrative, and financial constraints.

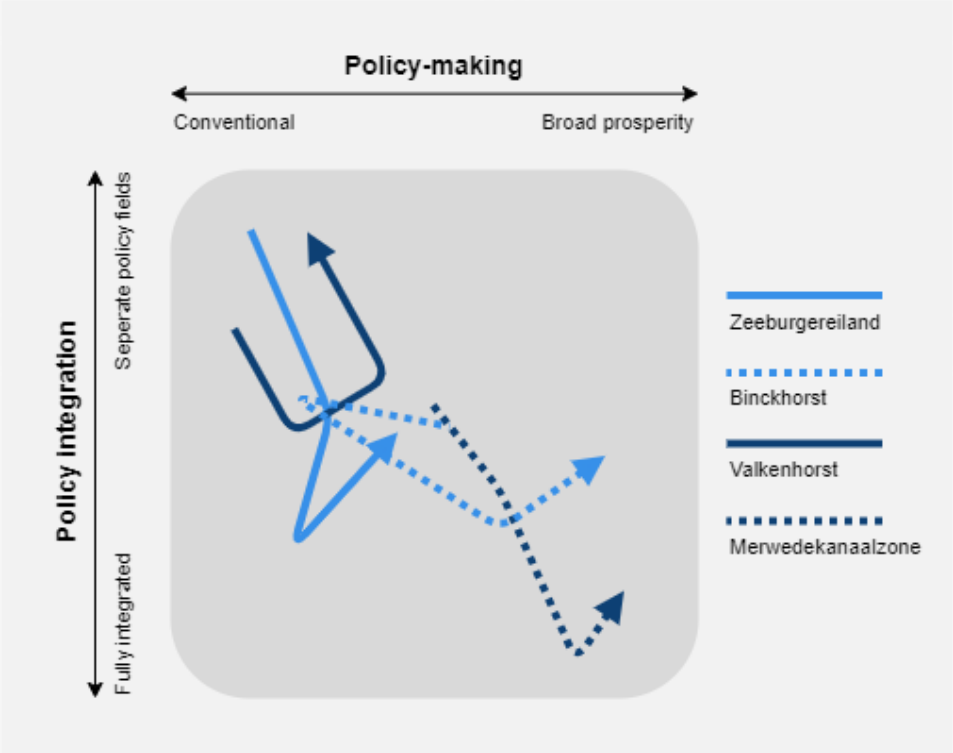

Figure 6.1: Comparison of policy-making and policy integration development

To sum up, the comparison made above and its schematic representation of the case analysis in Figure 6.1 reveals a complex landscape. While there is a widespread understanding of the importance of broad prosperity and there are attempts to include them, the practical integration of these principles faces significant institutional challenges, particularly during the decision-making phase. Policy integration, as observed, does not inherently lead to the comprehensive incorporation of broad prosperity dimensions. These limitations extend beyond the division between mobility and urban development domains, indicating that an integrated approach and consideration of diverse values do not always result in holistic decision-making. These patterns concerning guiding principles and challenges will be further explored in Section 6.2.

6.2. Challenges for broad prosperity posed by governance structures

The preceding section shows that the application of broad prosperity gets stranded at various points. Several institutional structures can be distinguished that hinder making comprehensive trade-offs in mobility policy. This section details the conflicts between broad prosperity and existing institutional structures, pointing out governance structures that appear to be critical.

Broad prosperity versus the level of decision-making

If you want to make a holistic choice, you cannot always do so because choices are made for you at a higher level. As demonstrated by the case of Zeeburgereiland, local decision-making is frequently overridden by higher-level authorities, hampering local adaptability, and undermining well-considered choices. The Rotterdam city bridge project also illustrates how budget limitations laid down by higher-level authorities led to the exclusion of all non-core elements (Appendix B interview 6.2). Problems often arise at levels where they cannot be

effectively addressed (Appendix B interview 6.4), creating significant barriers to implementing welfare-oriented policies.

Broad prosperity versus budgets

The previous conflict reflects a broader issue where financial considerations overshadow goals related to liveability, sustainability, and the distribution of welfare. If you want to follow broad prosperity principles, you cannot always do so because the institutional organisation of finances does not allow for it. Governments prioritise maintaining accessibility for current travellers to ensure economic prosperity (Appendix B interview 6.2). This means that new policies could never negatively impact current mobility, limiting the possibility of incorporating distributional effects. Another hindering institution is the necessity to recoup investments at that specific location as these conflicts with considering the effects of a policy elsewhere (Appendix B interview 6.3). Similarly, rigid budget structures prevent the realisation of synergies between different policy domains. For instance, the social affairs department cannot invest in area development due to inflexible budget allocations (Appendix B interview 6.2).

Broad prosperity versus indicator estimation

If you want to make an informed choice by capturing all effects including subjective effects and their distribution, you cannot always do so because there are not always indicators for the effects, or it is difficult to measure them. This difficulty arises due to the lack of established indicators for these values and the challenges in measuring them effectively. For instance, the global distribution effects of a project are often unrealistic to consider at a local scale. It should be noted that a lot of work is carried out on devising, categorising, and standardising indicators (see for example Vonk Noordegraaf et al. (2021)). However, factoring in effects on future generations, for example, is largely unknown ground.

Furthermore, many decision-makers require tangible metrics for comparison, and not all values can be quantified easily (see Anciaes & Jones (2020) or Mouter et al. (2015)). Consequently, values that cannot be reduced to numerical indicators are often excluded from the decision-making process. A session of the broad prosperity game illustrates what also happens in Amsterdam: when political decisions are made, and the pros and cons are considered alongside tangible money, a decision is made in favour of monetary effects. ‘This is what we will do, and we hope the other broad prosperity aspects will also be somewhat addressed’ (Appendix B interview 6.2). During decision-making, broad prosperity indicators that remain vague often become secondary or are entirely overlooked in favour of more concrete financial metrics (Appendix B interview 6.2).

This exclusion highlights a broader issue: the lack of standardisation for new values and dimensions of prosperity, such as distributional effects. Without standardised indicators and ways to present them, these values do not fit into the familiar decision-making frameworks used by policymakers.

Broad prosperity versus process duration

If you want to involve stakeholders in the process for inclusive consideration, you cannot always do so because you might be rushed. Achieving broad prosperity requires involving

stakeholders in the decision-making process to ensure an inclusive consideration of all values. However, this ideal often clashes with the political and administrative desire for quick results (Appendix B interview 6.3). There is a contradiction between the need to take time to engage stakeholders and the pressure to deliver swift outcomes. The process of mapping out broad prosperity requires time to build trust and capture the full spectrum of values within an area. Without this time, stakeholders may not fully trust each other, leading to the inclusion of numerous reservations and controls, which results in increased bureaucracy and inefficiency (Appendix B interview 6.2). Moreover, policy offers spend a large part of their time on daily tasks, while this time is also essential for applying broad prosperity guidelines and utilising tools (Appendix B interview 6.1).

6.3. Toward institutions for a broad assessment of welfare

Despite the conflicts between the new approach of broad prosperity and existing institutions, the comparative analysis of case studies also reveals enhancing structures. This section highlights these guiding principles for governance, which are strengthened with insights gained from the focus groups.

Broad prosperity through an area-based approach

The first guiding principle is to implement an area-specific strategy, setting overarching goals for the area. This is recognised as successful by experts (Appendix B interview 6.2). An overarching approach can help formulate a coherent plan and develop projects for an area, as seen in the cases of Zeeburgereiland and Merwedekanaalzone. However, there is an inherent tension between the flexibility offered by the absence of established policies and the certainty offered by their presence. While less established policies can give governors more freedom in their decision-making, having an established framework to refer to can help make broad trade-offs. Thus, creating a common strategy, despite its inherent contradictions, is essential for effective governance.

Broad prosperity through stakeholder engagement

Secondly, incorporating diverse perspectives through the involvement of multiple stakeholders is valuable. By engaging a broad range of participants in the discussion, it becomes possible to gain a comprehensive understanding of the various values at play and their significance within a specific area. The case of Valkenburg shows how the involvement of stakeholders contributes to the width of values considered. This inclusive approach ensures that decisions are made based on a wide array of considerations, thereby facilitating more balanced and thorough evaluations. Additionally, establishing a joint committee or project team that includes all stakeholders fosters cooperation and enables the realisation of synergies between projects, as demonstrated in the case of Zeeburgereiland. Ensuring this organisation is independent, rather than dominated by any single party, can help maintain a collaborative focus throughout the process and prevent a focus on the vision of the problem owner (Appendix B interview 6.3). However, it is important to note that this arrangement does not inherently guarantee the inclusion of broad prosperity aspects.

Broad prosperity through ownership of values

The third guiding principle is to assign ownership of values. This can be achieved by designating a member of the project team as responsible for specific values, such as done for Binckhorst. By assigning clear responsibility, it ensures that these values are continuously considered and upheld throughout the process. Experts stress that it is important that this person is involved in the project and not external (Appendix B interview 6.2). This dedicated ownership fosters accountability and focus, ensuring that dimensions of broad prosperity are integrated into the practical aspects of project implementation.

Broad prosperity through a financial framework

Finally, properly dealing with the financial dimension is very important. Budgetary constraints often stifle necessary investments, while substantial investments can lead to lock-in situations, limiting future options. The focus groups highlighted the importance of recognising the value created in different areas or domains and integrating this into budgetary considerations (Appendix B interview 6.3 and interview 6.4). By allowing for the benefits accrued in one sector or region to be factored into broader financial assessments, a more holistic and advantageous approach to investment can be achieved. However, this necessitates a major overhaul of governmental budgeting practices, underscoring the complexity and scope of the financial reforms required to support broad prosperity governance mechanisms effectively.

6.4. Lessons on governance structures

The mechanisms derived from the comparison of case studies, as presented in Table 6.3, highlight both enhancing and hindering factors within governance structures. The hindering structures indicate where the challenges lie for the development of more considerate governance practices following broad prosperity perspectives. By examining the successful elements, it is possible to identify and promote practices that facilitate the effective implementation of broad prosperity within the existing institutional framework.

Table 6.3: Governance structures for a broad assessment of welfare

Hindering structures	Enhancing structures
Possibility of trade-offs at a higher level Higher-level decisions where multiple projects are weighed against each other can narrow the scope.	**Area-based approach with a long-term vision** A long-term vision for an area can be widely debated at the front end. Subsequently, all decisions can be assessed against it.
Budgetary constraints Budget structures and the need to recoup investments within an area have a constricting effect. The custom of taking current transport flows as given is further limiting.	**Collaborative process** Stakeholder involvement promotes the inclusion of diverse values. Joint frameworks of and coordination by stakeholders involved help to exploit synergies.
Required representation of decision information The reliance on measurable effects when making decisions does not function for all broad prosperity dimensions. For some dimensions, there is no standardised manner to include them.	**Assigning responsibility** Make a person in the project team responsible for certain values that need to be considered or a dimension.
Time for application of broad prosperity Political and administrative focus on quick results works against broad prosperity. Daily work and deadlines overshadow broad prosperity efforts.	**Financial dimensions management** Seek to internalise positive and negative effects elsewhere and beware of lock-in. Initially detach the budget and make the task and its effects leading.

PART 3

IMPLEMENTING GUIDING PRINCIPLES

7 PRACTICE OF THE GOVERNANCE DESIGN

The organisation of a decision-making process must be functional to allow for a comprehensive assessment. This chapter advances towards practical principles for the application of broad prosperity. To this end, the governance structures identified in Chapter 6 are utilised to arrive at a strategy for the entire decision-making process.

Section 7.1 and Section 7.2 sequentially discuss which guiding principles are important at various stages of the decision-making process and how the governance design can be implemented from a practical point of view. Insights from the focus groups were used for this purpose (see Appendix B.6). Section 7.3 outlines action points for overcoming the institutional barriers. Finally, Section 7.4 concludes this chapter by addressing sub-question 5.

7.1. Design of the decision-making process

This section examines the critical points within the decision-making process where the guiding principles, identified in Section 6.3, are essential. In doing so, this section adds the phases of the decision-making process to the governance design.

An area-specific strategy should function like a funnel, with broad engagement initially, less during the execution phase, and more again as the process concludes. During decision-making and implementation, it is vital to refer to overarching area-level goals to ensure alignment. During the execution phase, the focus is on specific projects, which can require more specialised expertise and does not always require extensive alignment. Additionally, the overarching project team must remain active even as the plan breaks into various projects. There must be consistent reminders to adhere to the established principles, ensuring cohesive and aligned efforts across all projects.

Incorporating a wide array of values at the outset is crucial. Otherwise, the task may become too narrowly defined, leading to a predetermined path. It is also important to avoid abstract discussions early in the process, as this can disengage citizens and other stakeholders. Instead, the process should start with concrete questions about the area's narrative and functions that should be realised. Effective initial discussions should not revolve around what stakeholders want but rather focus on what should be collectively achieved in the area. If stakeholders do agree on core values from the start, the rest of the process will be smoother (Appendix B interview 6.3). Not every theme needs to be addressed simultaneously. They can be divided and later integrated. This division can be geographic or thematic, ensuring a more manageable and focused approach.

Assigning responsibility is essential at each phase of the decision-making process to ensure the integration of broad prosperity values. In the initial stage having a designated team member accountable for specific values that are not represented by stakeholders ensures these aspects are considered from the outset, shaping the foundation of the project. During the exploration of options, this responsibility ensures a thorough analysis of potential consequences, keeping the broader prosperity dimensions in focus. Later, it helps in evaluating the alternatives based on comprehensive criteria and allows for a meticulous assessment of outcomes.

Finally, addressing financial constraints poses a particular challenge during the decision-making phase. During earlier phases, this principle is about keeping the process open despite financial constraints. During the decision-making phase, this is about finding the right weighting of money against other values. Here, it is very important to internalise as many effects as possible.

7.2. Implementation strategy

Section 7.1 distinguishes which actions that can be taken at what stages. Here, implementation strategies that help in realising the guiding principles and mitigating their weaknesses are discussed. This section focuses on how to apply the guidelines in practice by discussing the feasibility of the guiding principles.

First, it is essential that problems are matched to the appropriate level of solutions. Identifying the correct scale and scope of solutions ensures that the issues are addressed effectively. Often, the level at which a problem occurs does not match the level at which it can best be solved. Once the appropriate level is established, the right parties must be involved, and objectives set at that level. A challenge for this principle is maintaining consistent adherence to overarching area-level goals throughout various projects, risking misalignment and fragmentation. This makes involving the right stakeholders in the right manner even more crucial.

Although involving all stakeholders and working collaboratively from the beginning is resource-intensive, it must be strived for. Introducing values too late risks them being used merely to justify pre-existing alternatives (Appendix B interview 6.2). Similarly, introducing stakeholders too late risks them feeling overlooked and without options to influence the outcome. Once a project is in the planning process, there is often no room left for alternative visions of the area's welfare (Appendix B interview 6.2). Conversely, introducing too many values at the outset may complicate the decision-making process, making it difficult to find a clear path forward. There is a risk of getting caught in debates focused on individual desires rather than collaborative goals, as seen in the decision-making phases for both Binckhorst and Valkenhorst. Therefore, it can be beneficial to employ an independent party to guide the process, focusing on the collective interest in a given area.

For the assignment of specific responsibilities, it is important to ensure this does not lead to tunnel vision within parts of the team or a false focus on the subject. The designated team member may inadvertently prioritise their assigned values over others, leading to a biased decision-making process. To mitigate this, it can be useful to practise viewing issues from multiple perspectives, rotating roles within the team, or to identify personas for different values (Appendix B interview 6.3). Additionally, the inclusion of broad prosperity dimensions should not be merely a box-ticking exercise. The focus group results show that broad prosperity tools and stakeholder participation are seen as items to be checked off (Appendix B interview 6.1). Instead, there should be a genuine commitment to integrating these dimensions into every phase of the project, ensuring that they inform and shape decision-making processes comprehensively, and one should be willing to act on the input of citizens, for example.

A weakness in managing the financial dimension is that participants must be willing to revisit and revise previous decisions and preferences. This adaptability is crucial for navigating financial complexities and ensuring that decisions remain aligned with the broader goals of broad prosperity. Therefore, it is practical to build mechanisms for periodic review and reflection, allowing for adjustments in response to new financial realities. This includes creating flexible budget frameworks that can accommodate the dynamic nature of broad prosperity projects, thus ensuring financial considerations support rather than hinder the overarching objectives.

7.3. Overcoming institutional barriers

To effectively transition towards broad prosperity policy-making, it is essential to strategically leverage existing institutions while also introducing new frameworks or modifying old ones. The institutional barriers identified in Chapter 6 highlight the need for comprehensive and cohesive action points. Figure 7.1 outlines four action points outlines four action points to overcome these barriers and shape the transition to broad prosperity policy-making. The action points are detailed in the remainder of this chapter.

Firstly, the standardisation of broad prosperity dimensions, such as intergenerational equity and distribution effects is crucial. The lack of standardised methods to incorporate and measure these dimensions, as evidenced by the analysed case studies, significantly hampers their inclusion. Current norms often overlook new values and dimensions essential to broad prosperity. While certain values, like environmental considerations, are increasingly reflected in European guidelines and principles such as STOMP, others are not yet normalised. Concrete guidelines are more effective than merely raising awareness. For example, a directive mandating, ‘the provision of accessible public transport routes to all neighbourhoods’, or ‘the inclusion of designated areas for native plant species in new road construction projects’, provides clear and actionable steps towards integrating value-based considerations. Therefore, action points are to further develop indicators across not only more values but also more dimensions of broad prosperity, and to develop new ways of presenting crucial information about these effects.

Figure 7.1: Responses to institutional barriers
The 'start' column shows the urgency of the action point and how quickly the can be started. The 'impact' column qualitatively indicates how much the action can potentially contribute to broad prosperity policy-making.

Secondly, to ensure broad prosperity principles are effectively integrated, a top-down approach driven by political or administrative leadership is essential. Having a committed director or alderman, as well as a dedicated project manager, is crucial for the successful implementation of these principles. Asking open-ended questions from the start can lead to visionary outcomes and ensure that trade-offs between all important values are discussed. However, policy officers need sufficient time to consider impacts thoroughly and build trust among stakeholders. This top-down approach ensures broad prosperity becomes standard practice, fostering more inclusive and comprehensive decision-making processes. Concrete action points include mandating regular reporting on broad prosperity outcomes, incorporating open-ended visionary questions into project planning, and allocating time for policy officers to engage deeply with these concepts.

Thirdly, training employees to think from multiple perspectives is vital for integrating broad prosperity into decision-making. Learning from best practices and, more importantly, engaging in practical exercises can help employees develop a more holistic view. This training should include workshops and scenario-based learning where participants are encouraged to consider diverse values and trade-offs. By regularly practising these skills, employees can

better understand and incorporate broad prosperity dimensions into their daily work. Concrete action points include establishing regular training programs, creating a repository of best practices, and incorporating scenario-based exercises into professional development initiatives.

Fourthly, commitment from administrators to follow a joint project is necessary. This commitment can create the needed space for thorough and time-consuming methods, such as the OGSM (Objectives, Goals, Strategies, and Measures) method (Appendix B interview 6.4). Often, the required capacity for such approaches is not readily available, necessitating strong administrative support. Additionally, budgets must be flexible enough to allow for investments across different domains. This flexibility should be present at various levels to ensure the comprehensive integration of broad prosperity principles.

7.4. Lessons on institutional change

This chapter has discussed how the key guiding principles for making a broad consideration of welfare in mobility policy-making could be leveraged and what institutional changes are required. By delineating specific strategies and identifying critical points in the decision-making process, the chapter outlines how these principles can be effectively operationalised. These strategies, when applied, ensure that broad prosperity considerations are systematically integrated into decision-making and implementation processes.

The answer to sub-question 5 is thus as follows:

5. How can governance structures that enable a broad consideration of welfare in mobility policy-making be applied in practice?

This research identifies four key guiding principles for a governance structure that enables a broad consideration of welfare in mobility policy-making, and when these are essential. First, an approach based on the problem and not administrative boundaries is crucial from the start. Implementing area-specific strategies throughout planning and finalisation ensures that all actions align with overarching goals. Second, incorporating diverse perspectives early in the process ensures a comprehensive understanding of various values, preventing narrowly defined tasks and ensuring balanced evaluations. Third, the assignment of specific responsibilities for values ensures their inclusion. Fourth, financial considerations are integrated by addressing budgetary constraints early in the process, preventing the stifling of necessary investments and maintaining alignment with broader objectives.

Care must be taken to work at the appropriate level, to not over-complicate it, to involve all parties but not get bogged down in a sub-action, and to ensure that broad prosperity is not used to justify decisions taken earlier. Therefore, the key principles can be applied through the strategies of:

1. Matching problems to appropriate solution levels
2. Employing an independent party to guide the collaborative process
3. Having a shifting perspective with genuine commitment to the application of broad prosperity tools
4. Creating adaptable budget frameworks

Besides the above strategy focusing on what you can do during the project, larger institutional changes are needed to apply broad prosperity. This research identifies four key points of action:

1. Standardisation of all broad prosperity dimensions and their distribution
2. Top-down commitment to broad prosperity
3. Training of multi-perspective skills
4. Establishing joint project capacity

8 CONCLUSION, DISCUSSION AND RECOMMENDATIONS

Broad prosperity is a perspective that is based on a new definition of welfare. However, how does one structure the decision-making process so that choices for mobility contribute to social prosperity? This research aimed to determine how mobility policy can be developed in alignment with the broad prosperity perspective. This final chapter provides an answer to the main question in Section 8.1, discusses the implications and shortcomings of the research in Section 8.2, and concludes with scientific and practical recommendations in Section 8.3.

8.1. Conclusion

This study distinguishes between two contrasting paradigms in mobility and urban development policymaking: the conventional approach and the broad prosperity paradigm. These paradigms differ significantly in their methodologies for problem identification, consideration of effects, trade-off analysis, and decision-making processes. While the conventional approach often prioritises economic metrics and short-term gains, the broad prosperity paradigm advocates for a more inclusive and forward-looking assessment that incorporates diverse societal values and long-term impacts. It is often presumed that integration of mobility and urban development policies is needed for a broad assessment of welfare. In this study, policy integration is stratified into three levels, separate, coordinated, and fully integrated, dictated by subsystem engagement, policy system establishment, organisational structure, and collaborative capability.

Through an analysis of the case studies Zeeburgereiland, Binckhorst, Valkenhorst and Merwedekanaalzone, this research illustrates that cross-domain decision-making does not necessarily ensure that values related to for example nature or liveability are balanced against economic values. The effects elsewhere and on future generations are difficult to consider in decision-making. This can be seen in all cases particularly the case of Valkenhorst, where the involvement of many stakeholders does not lead to different options or decisions. Where higher-level trade-offs, lack of experience in incorporating distributive effects, and rigid financial structures within governmental departments hinder the application of broad prosperity, the cases also highlight mechanisms that facilitate enhanced broad prosperity policy practices. Key structures include spatially-oriented decision-making, collaborative process structures, explicit responsibilities, and flexible budget allocation.

Several conclusions can be drawn regarding the implementation of broad prosperity principles: the complexity of taking broad prosperity into account varies with specific challenges and contexts, standardisation of all broad prosperity concepts is crucial, and while governance

structures are influential, it is of utmost importance to foster collaborative processes that allow stakeholders to coordinate all dimensions and values and formulate a common approach.

The cumulative insights from addressing sub-questions contribute comprehensively to the main research question on institutional structures for mobility to enable a comprehensive assessment of welfare in policy-making. The findings and guiding principles offer a pragmatic framework for structuring the governance of mobility and urban development. The answer to the main research question is:

How should the governance of mobility and urban development be organised to enable a broad assessment of welfare in policy-making?

The governance of mobility and urban development should be meticulously organised to enable a broad assessment of welfare in policy-making. This organisation requires a structured approach that spans multiple phases.

Problem and objective
Initially, it is crucial to engage all relevant stakeholders to collaboratively define the problem. This inclusive approach ensures that diverse perspectives are considered, leading to a comprehensive understanding of the issues at hand. Determining the appropriate level at which the problem can be most effectively addressed is essential for setting collaborative goals. Furthermore, establishing binding objectives and guiding principles within the area creates a clear framework for subsequent actions and decisions. This process can and should take time and should be guided by an independent party.

Options
In the exploration of options, it is vital to look beyond individual domains to identify opportunities for creating synergies. A broad assessment of effects, considering their distribution across different groups, areas, and domains, helps in understanding the comprehensive impact of proposed solutions. Nonetheless, engaged individuals must also be enabled to take in multiple perspectives. The use of co-creation methods facilitates the development of innovative and inclusive solutions by leveraging the collective expertise and insights of all parties involved.

Decision-making
During the decision-making phase, it is imperative to ensure that non-monetary effects are thoroughly considered alongside financial implications. Being explicit about the choices made and the rationale behind them enhances transparency and accountability. Decisions should be made based on the previously defined guiding principles for the area, to ensure alignment with the overarching objectives.

Implementation and evaluation
In the implementation and evaluation phases, coordination of projects across different domains and stakeholders, based on their geographical location, is essential for achieving integrated outcomes. Continuous monitoring of both objective and subjective effects, comparing them with baseline measurements, and assessing whether the pre-established goals have been met, is necessary for tracking progress. Adjustments should be made as needed to stay on course. Involving stakeholders and residents in the evaluation process ensures that the feedback loop is comprehensive and inclusive, fostering ongoing improvement and adaptation.

In conclusion, by deliberately initiating organised stakeholder involvement from the outset, the values and functions inherent to an area can be encapsulated within a cohesive vision across domains defined by specific goals. Policymakers can effectively coordinate mobility and urban development processes, strategically balancing trade-offs in alignment with this vision across structured phases. This approach ensures that policies contribute meaningfully to broad prosperity within the designated area.

8.2. Discussion

This section discusses the added value and relevance of this research. By examining the contributions of the different chapters, the academic added value of the research is demonstrated. In addition, it provides insight into the social relevance and changes the results may bring about. A reflection on the striking results and the broad prosperity perspective complements these insights. Finally, to identify the constraints of this research, both the limits of this research and its scope are discussed.

8.2.1. Implications

This research and associated results contribute to science in the field of broad prosperity and mobility policy governance in several ways. First, the conceptual framework for policy-making in Chapter 3 contrasts broad prosperity with conventional concepts that focus on classical economic assumptions, thus contributing to a new definition of welfare. It provides a framework to test policy decisions against broad prosperity principles and serves as a benchmark for assessment. This comparison between the two policy approaches clarifies the differences, helps classify the cases and summarises how conventional and broad prosperity approaches are represented in the literature. Ultimately, it provides valuable insights for redefining welfare and guiding policy development.

Second, the policy integration literature review and framework in Chapter 4 advances the understanding of how mobility and urban development policies could be integrated, offering a clear methodology for assessing the integration level. By identifying key factors and criteria that shape policy-making processes, it introduces a structured framework to distinguish separate, coordinated, and fully integrated approaches. By contrasting the distinct value propositions of factors against the predefined criteria, the extent of policy integration can be determined.

Third, the case analysis in Chapter 5 provides crucial insights into how the theory of broad prosperity relates to real-world applications. It contributes to understanding the institutional aspects of the mobility policy system and how broad prosperity principles are integrated within this system. The findings bridge the gap between theoretical concepts and practical implementation, offering valuable perspectives on the institutional dynamics that influence the adoption and effectiveness of broad prosperity in mobility policy contexts.

Finally, the case comparison and discussion of the governance design in Chapter 6 and Chapter 7, addresses institutional barriers hindering the application of broad prosperity and proposes strategies to overcome these hurdles. This discussion advances scientific

understanding by offering actionable insights into compartmentalised institutional structures, enhancing policy coherence and promoting welfare-oriented outcomes in mobility governance. Moreover, by outlining specific strategies and identifying pivotal decision-making structures, the chapter provides a roadmap for operationalising broad prosperity principles effectively. It ensures that broad prosperity considerations can be methodically integrated into mobility policies.

Altogether, the research provides insights into structuring the decision-making process to promote comprehensive welfare considerations in policymaking processes related to mobility. It suggests changes in institutional structures: from decisions based on economic value to integral, data-driven, explicit, and deliberate decisions; from compartmentalised financial structures to space for synergies and joint ownership; from opportunistic use of broad prosperity tools to the driven deployment of different perspectives and standardised methodologies; from a system for mobility to a mobility system for welfare. This research presents the first steps of the institutional transition in how trade-offs are made.

8.2.2. Reflection on the results

Upon reflection of the research results, it becomes evident that while the assumption that cross-domain policy integration is necessary holds some merit, its full implications are more nuanced. Indeed, mobility and urban development have intersecting areas, and synergies can arise from their integration. Yet, it appears that the critical factors lie more in stakeholder engagement, comprehensive consideration of all values upfront, and the establishment of an overarching framework, rather than the complete integration of decision-making processes.

While involving more stakeholders may lead to discussions centred on individual interests rather than broad dimensions, a well-structured process facilitated by an impartial entity can foster a broader assessment. Stakeholders are often directly affected by policies and decisions. Involvement gives them a platform to influence outcomes that can directly impact their lives, businesses, or communities, and contributes to the realisation of a value-oriented mobility system.

A final surprising result is that top-down commitment is of critical importance, despite broad prosperity having various bottom-up characteristics. Broad prosperity includes being convinced of the importance of considered options and more and different types of values and projecting this in policy practices. Nevertheless, top-down commitment or support is essential to embed broad prosperity institutionally. The implementation of the Corporate Sustainability Reporting Directive, where regulatory requirements mandate organisations to report on their sustainability practices, is an example of how top-down mechanisms ensure comprehensive and consistent adoption of sustainability practices (Sociaal-Economische Raad, n.d.).

8.2.3. Critical reflection on the added value of broad prosperity

The broad prosperity approach is not an unambiguous perspective. The definition is expansive which makes one question whether then all indicators and all interests are important because then you must include the whole world in decisions. That is not feasible and involves a risk that broader welfare aspects are used to justify a predetermined course of action. You cannot start

your research based on assumptions about the benefits. 'Economically, we cannot change it, so we justify it based on broader welfare' (Appendix B interview 6.2). So, how does a broad prosperity approach lead to sharp insights on mobility policy? What is the added value of the perspective?

Currently, an urban environment is built and then mobility is needed to connect all the places so that people can use all the different functions. By working from the broad prosperity perspective, you can potentially move towards ensuring that mobility does not lag function, but that thought has been given in advance to how people live and what they need to do so. The Merwede case study, for example, shows how the broad prosperity perspective ensures that surrounding neighbourhoods do not experience nuisance and that disabled people have sufficient mobility options. This study proposes several approaches to how broad prosperity can contribute to people's well-being, without ending up with the result of a negotiation or an unmanageable process (see Chapter 7 and Section 8.1).

A broad prosperity perspective should fundamentally alter how we perceive problems and thus lead to the recognition of different imperatives, not merely refinements within existing tasks (van Altena, 2023). According to the model of Meadows (1999), broad prosperity represents an intervention at level 2: a shift in the mindset or paradigm from which the system's goals, rules, delays, and parameters emerge. It challenges assumptions about what constitutes prosperity and how policymaking and the world should function (Meadows, 2009). This research advocates adjustments to the system's structure aligned with this new paradigm, akin to level 4 in Meadows' (1999) framework. The proposed changes go beyond merely mapping more values (upper stream) to addressing the underlying assumptions that inform decision-making and justifying these choices (underlying stream).

Ultimately, broad prosperity is about improving policy-making by revisiting core values, rethinking how we measure them, how we make choices, how we achieve societal well-being, and how we ensure sustainability and fairness in policy outcomes.

8.2.4. Limitations of the research and scope

Despite aiming to provide depth, this research is not exhaustive, and it is important to acknowledge its limitations. Here, the three main constraints are discussed. Firstly, mobility touches more than just urban development. Topics such as energy or cultural aspects are also present in an area. Additionally, urban development extends beyond housing. By solely focusing on the link with urban development in the form of housing, a comprehensive perspective may not be achieved.

Secondly, by adopting a qualitative multiple-case case study approach, the research systematically delved into the decision-making processes of four Dutch cases. Real-world decision-making is not as structured as the systematic and structured nature of the investigation of the governance structures, presenting a challenge for the analysis. Several observations were simplified during the analysis, including the orderliness of steps in the policy process and the classification of cases in Chapter 6. In reality, different steps can intermingle, and cases do not fall into any of the categories of policy integration. This simplification is

necessary because otherwise, the analysis is too complex. Moreover, the cases represent only a narrow fraction of practice. The insights and thus the results of this study should be interpreted within the Dutch context. This, however, does not mean insights cannot be relevant outside of the Dutch context.

Thirdly, adhering to the current policy-making framework may restrict the exploration of broad prosperity. Some policy experts suggest that extensive institutional innovation might be necessary to truly support broad prosperity policy-making, necessitating a reformulation of the entire decision-making process (see Appendix B interview 1.1). Hence, confining the research within the existing institutional framework of a policy-making process may not fully capture the essence of broad prosperity.

8.3. Recommendations

This thesis explored how broad prosperity can be applied to mobility policy-making. This final section presents recommendations for further research and practice. Several scientific studies can be executed to further investigate the application of broad prosperity and the research provides various insights for practice.

8.3.1. Recommendations for further research

On one hand, the concept of broad prosperity needs further development. On the other hand, it is crucial to enhance understanding of its implementation and outcomes. Therefore, three recommendations are proposed here.

First of all, conducting in-depth analyses of additional case studies can offer valuable insights and strengthen the robustness of the research findings. By examining a diverse range of contexts and scenarios, researchers can identify common patterns, variations, and unique factors influencing the integration of mobility and urban development policies. Expand comparative case studies also beyond the Dutch context to include international examples. This expanded dataset would enhance the generalisability and applicability of the research outcomes, providing a richer understanding of the institutional structures of mobility policy-making.

Further, strategies for institutional innovation that support broad prosperity policy-making should be explored. This could involve examining governance structures, decision-making frameworks, and accountability mechanisms that facilitate the integration of diverse values into policy processes. Research exploring these strategies should foster interdisciplinary research that integrates insights from economics, sociology, public administration, and behavioural sciences to enhance the holistic understanding of broad prosperity governance.

Lastly, there is a need to delve deeper into demonstrating effects further along the causal chain, discussed in the Intermezzo. While this research attempted to show how the organisation of the decision-making process influences perceptions and public welfare, it only partially succeeded. The case analysis provides insights into the effects on activities and outputs but falls short in capturing outcomes and impacts. However, achieving this requires thorough measurement and evaluation of a project's outcomes and impacts. Longitudinal

studies to track the long-term effects of governance structures on societal well-being would provide insights into the impacts of broad prosperity institutional structures and identify potential unintended consequences over time.

8.3.2. Recommendations for practice

This research provides several concrete guidelines to transit to broad prosperity trade-offs in practice in Chapter 7. It emphasises that inclusiveness should be prioritised in a collaborative process, that values and challenges in a specific area should be thoroughly mapped, and that sufficient time and resources should be allocated for the standardisation of broad prosperity. In addition, the practice can contribute to knowledge development for broad prosperity in various ways.

The conceptual framework of policy-making from Chapter 3 can be used for specific cases to identify where broad prosperity is or is not being utilised. Additionally, its application can contribute to further theoretical development of the broad prosperity concept. This includes establishing clearer boundaries and methodologies for integrating various values and dimensions and thereby expanding and deepening the conceptual framework. Clarifying the broad prosperity operationalisation based on practical examples ensures it does not become overly vague or all-encompassing.

The added value of real-world cases and best practices is thus essential. Therefore, it is also recommended to promote experimental approaches to broad prosperity policy-making, through well-documented trials and pilot projects. For example, an experimental approach can entail breaking down silos between different domains and transcending traditional boundaries, such as municipal or neighbourhood borders. By embracing interdisciplinary collaboration and exploring innovative approaches, policymakers can harness synergies between various sectors and maximise the positive impact of their policies on community well-being. This allows for learning from failures and successes and helps identify transferable lessons. Practical examples of successful implementation, such as Merwedekanaalzone, serve as valuable learning opportunities that can guide future policy decisions. Policymakers are therefore encouraged to draw inspiration from case studies and actively participate in iterative learning and adaptation processes to promote integrated broad prosperity trade-offs for mobility.

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APPENDIX

A

INTERVIEW AND FOCUS GROUP GUIDES

This appendix provides a detailed discussion on the guidelines adhered to during interviews and focus groups conducted for this research. The appendix distinguishes between three types of interviews, each serving a specific purpose within the study's framework. Firstly, Appendix A.1 outlines the procedures employed in interviews and the study group aimed at establishing the conceptual framework for broad prosperity. Secondly, Appendix A.2 elucidates the scheme utilised in interviews conducted for the analysis of cases. Finally, Appendix A.3 delves into the practical application of governance structures, outlining the guidelines followed in the corresponding focus group. For each type of interview, the templates and scripts utilised are presented.

A.1. Guides framework broad prosperity

For the construction of the broad prosperity conceptual framework, interviews and focus groups are conducted with policy advisors from the Dutch Ministry of Infrastructure and Water who are working on the topic of broad prosperity. These sessions are semi-structured and aim to gather insights on broad prosperity. The following templates and guides are used.

A.1.1. Mail template broad prosperity interview

Frame A.1 serves as the template for the email sent to potential participants, inviting them to participate in the study.

Frame A.1

Dear [name],

I am researching the application of the concept of broad prosperity for mobility policy for my Master thesis at TU Delft. A lot of work has already been done on what broad prosperity means for the policy process and I hope to contribute to this with practical insights. Specifically, I will look at the link between mobility and urban development. Should mobility be designed integrally with urban development according to the broad prosperity perspective? And how should this then be organised (institutionally)?

The first step in my research is to establish a conceptual framework that I can use to analyse the extent to which 'broad prosperity thinking' is applied in case studies. I read online that/[name] referred to you because you are working on broad prosperity. Hopefully, you can help me with my conceptual framework for broad prosperity. I am interested in criteria and factors that indicate the extent to which broad prosperity plays a role in a decision-making process for mobility and spatial development. How can a broad prosperity approach be distinguished from a traditional approach to mobility and urban development? I am thinking of factors for the process itself, stakeholders, and goals or KPIs of a project.

For clarification, I have attached my research proposal. In Section 4.1, under sub-question 2, my question is explained in more detail, which gives a better idea of what I am looking for.

Would you be willing to meet and help me with input from your perspective? I would love to hear from you.

Kind regards,
[Name]

A.1.2. Script broad prosperity interview

Below, the interview guide for interviews with policy advisors about the broad prosperity framework is outlined.

Introduction (10 min)

Consent and data processing: Have participants read and signed the consent form? Your name will not be in the final document, but I will mention your function. I will

transcribe the interview and make a summary. You get the opportunity to review this summary before it is published in the TU Delft repository. I will start recording now.

Introduction interviewee: Can you briefly introduce yourself, your function and your work related to broad prosperity?

Introduction interviewer: Name, background, thesis information, specialisation, and interests.

Introduction research: My thesis focuses on the broad prosperity paradigm for policy-making in the domain of mobility. Specifically, I hope to uncover how the decision-making process should be organised to enable a broad prosperity consideration and if it is wise to make mobility policy in coherence with urban development. I will do this through an analysis of cases with different governance structures. To be able to analyse whether the cases follow broad prosperity policy-making, I am building a conceptual framework.

Goal of this interview: The goal of this interview is to further develop this framework for broad prosperity policy-making. Therefore, we will discuss how you see the broad prosperity perspective and relevant factors for policy-making, relevant steps of the policy cycle, and what constitutes a broad prosperity approach.

Questions broad prosperity concept and policy-making factors (15 min)

Show slide 'broad prosperity concept'. To begin with, I started from PBL's definition of broad prosperity. I also try to build as much as possible on existing thinking frameworks of planning agencies and the Ministry of Infrastructure and Water Management.

Definition of broad prosperity: How would you define broad prosperity? When you think of broad prosperity, do you see it as a goal, a new way of thinking or, for example, an instrument?

Questions policy cycle (5 min)

Show slide policy cycle.

Steps in the policy cycle: What do you see as steps in the policy cycle? What role do you think broad prosperity has or should have in each of these steps?

Questions conventional versus broad prosperity approach (20 min)

Show slide conceptual model and example.

Conventional or broad prosperity approach: For each of the steps of the policy cycle, what do the factors look like if you follow the broad prosperity approach? What would this look like according to a conventional approach?

Criteria: What are the criteria for a broad prosperity approach?

Closing (10 min)

Interviewee input: Are there things we have not talked about that you would like to discuss or mention?

Outlook: Thank you for your time. I will share a summary of this interview via email within a week. Would you please let me know by [date] that you agree to publish the summary or email a revised version to me?

A.1.3. Instruction broad prosperity focus group

Frame A.2 serves as the template for an instruction sent to participants of the focus group prior to the session, explaining the aim and process of the focus group.

Frame A.2

With my research, I want to find out what the decision-making process should look like to make good mobility policy that takes into account more than just economic values. One line of thought that is often seen is that this requires policies to be integrated across domains. In this regard, I draw the link between mobility and urban development. Do you get better outcomes if you develop mobility together with urban development? And what does the decision-making process look like?

In our meeting, I aim to collaboratively establish a precise understanding of the term 'better'. While it is commonly agreed that policy should aim for widespread prosperity, we still need to pin down what that means in practice. By building our understanding together, I hope to make it clearer. This Tuesday, we'll focus on what it means to make policies for general well-being, and how this differs from the old or usual way of doing things.

During the session, I aim to collaboratively establish a precise understanding of 'better'. Broad prosperity is seen as a better way of making policy, but it is not clear what broad prosperity means in practice. By collectively refining the conceptual framework, I hope to make this concrete. We will focus on: What is policy-making from a broad prosperity perspective? And how does it differ from the old/current/traditional approach?

The framework consists of two axes that form a table:

- The steps of the policy cycle
  I have now used the policy cycle (5 steps). Alternatively, I could use, for example, plan, do, check, act, the policy compass, or another framework. If you have other ideas or recommendations for this, please let me know.
- Factors that may indicate differences between a broad prosperity or traditional approach
  This list is not exhaustive, but I think these are the most important factors. We can briefly discuss these factors at the beginning of the session and complement the list if necessary.

During the session, I want to jointly fill in the table according to a traditional approach and fill in the table according to a broad prosperity approach. With this, we define criteria for policy making according to broad prosperity. I can use these criteria while analysing case studies. Eventually, during the next step, I will also fill in the table for each case. By comparing the broad prosperity, traditional and case tables side by side, I can hopefully identify to what extent a traditional or broad prosperity approach has been followed and what effects this has.

Factors way of policy-making and decision-making

Factor	Description
Scope of issue and goal	How is the problem formulated and what goals are associated with it? How is the challenge defined?
Scope of mobility and focus	What is the definition of mobility and what does, or does it not involve? What is the role of mobility within the problem?
Ethical principle	What ethical framework underpins the approach? • Utilitarianism: Maximising overall happiness for the greatest number. • Egalitarianism: Striving for equal distribution. • Sufficientarism: Emphasising sufficient provision of basic needs.
Distribution effects	Which distributional impacts are considered, and how are they factored in?
Dimension here and elsewhere	How is this dimension reflected within the issue, and to what extent is it accounted for?
Dimension now and later	How is this dimension reflected within the issue, and to what extent is it accounted for?
Instruments and process	What does the decision-making process entail? Which stakeholders are engaged, and what assessment tools support decision-making?
Measuring performance	What themes and metrics are incorporated into the issue, and what types of indicators are utilised?
Representation of Considerations	How are decisions deliberated and communicated? To what extent are choices explicit?
Role of politics	How does the political aspect influence the process?

A.1.4. Script broad prosperity focus group

Below, the focus group guide for interviews with policy advisors about the broad prosperity framework is outlined.

Introduction (5 min)

Consent and data processing: Check that participants have read and signed the consent form. Names will not be documented in the report, but functions will be included. I will transcribe the session and prepare a summary. Participants are given the opportunity to revise this summary before it is published in the TU Delft repository. I will start the audio recording now.

Preparation: Check if participants have read the instructions and have any questions in response.

Purpose of this session: The purpose of this session is to jointly explore what policy based on broad prosperity should look like, with a focus on mobility and urban development. We will discuss various factors and criteria that are important in assessing both the traditional approach and the broad prosperity approach in policy-making.

Factors policy-making (5 min)

A range of factors can be important for policy-making from a broad prosperity perspective. This includes aspects such as ethical principles, distributive effects, and dimensions of time and space.

Are there any factors missing? Feedback on the list.

Criteria conventional approach (15 min)

What are the key features that characterise the traditional approach for each step of the policy cycle?

Criteria broad prosperity approach (20 min)

What are the key features that characterise a broad prosperity approach for each step of the policy cycle? What are the differences from a traditional approach?

Wrap-up (5 min)

Input participants: Opportunity to share any other comments or insights we have not discussed but which you feel are relevant.

Outlook: Thank you for your time and contribution. I will share a summary of this interview via email within a week. Would you please let me know by [date] that you agree to publish the summary or email a revised version to me?

A.2. Guides decision-making process analysis

For the case analysis, interviews are conducted with people involved in the decision-making process of one of the four cases. These sessions are semi-structured and aim to understand the policy-making process of the case. The following templates and guides are used.

A.2.1. Mail template case interview

Frame A.3 serves as the template for the email sent to potential participants, inviting them to participate in the study.

Frame A.3

Dear [name],

I am conducting research for my Master thesis at TU Delft on applying the concept of broad prosperity to mobility policy. Specifically, I am looking at the link between mobility and urban development. Should mobility be designed integrally with urban development according to the broad prosperity perspective? And how should this then be organised (institutionally)?

To answer these questions, I will look at the decision-making process of several cases. By interviewing people involved in the decision-making and planning of the cases, I hope to gain insight into the project and understand how and why certain choices were made.

One of the cases I am researching is [case]. [Name], referred to you because you are involved in this project. Would you like to help me, and do you have time to talk to me soon about [case]? / Are you involved in this project, and do you have time to talk to me soon about [case]? And/or can you help me find contacts from the project team?

(If you have any questions about my research or what exactly I want to know about the case, feel free to let me know.)

I look forward to hearing from you.

Kind regards,
[Name]

A.2.2. Script case interview

Below, the interview guide for interviews with people involved in the plan-, policy-, or decision-making of the cases is outlined. This guide provides an overarching overview, acknowledging that not all topics will be addressed within a single interview. Some interviews may delve into project specifics, while others may prioritise discussions on policy integration, for instance. Hence, specific time allocations for different sections have been omitted.

Introduction

Consent and data processing: Check that the participant has read and signed the consent form. Your name will not be documented in the report, but your function will be included. I will transcribe the interview and prepare a summary. You will have the

opportunity to revise this summary before it is published in the TU Delft repository. I will start the audio recording now.

Introduction interviewee: Would you like to briefly introduce yourself? What is your background? What is your position and what is your role concerning [case]?

Introduction interviewer: Name, background, thesis information, specialisation, and interests.

Introduction thesis research: For my thesis, I focus on the broad prosperity perspective for policy in the mobility domain. Specifically, I hope to unravel how the decision-making process should be organised to make a broad prosperity assessment and whether this involves making mobility in coherence with urban development. I do this by analysing cases of housing and mobility plans whose decision-making processes are organised in different ways.

Purpose of this interview: The purpose of this interview is to gain insight into the decision-making process surrounding [case]. In doing so, I am specifically interested in the decision-making process over time and what was taken into consideration. And I am interested in the alignment between the plans for mobility and urban development.

Project

Inform the interviewee what I am already aware of.

Projects within the case study: What mobility projects are in existence? Under which programme does each project fall? Which stakeholders are involved in each project?

Project phases: What did the decision-making process look like? Which steps were completed? Which decisions were made at which time by whom? When did each of these steps take place?

Questions broad prosperity

Ask these questions for each phase of the decision-making process.

Problem (scope, aim, mobility): What is the issue or problem you were facing? How was the problem defined during the decision-making process?

What goals were set in the process? What were the desired outcomes?

How was mobility considered within the issue (end versus means)?

Effects (scope, type, time horizon, distribution): Which effects are considered in decision-making? Have wider social impact factors than just accessibility been considered when evaluating policy impacts? If yes, which ones?

How are these impacts measured or identified for alternatives? In what measure unit are they compared? How are impacts that cannot be quantified or monetised taken into account?

How far into the future is assessed? How does the longer term factor into decision-making?

What distributional effects are included in decision-making? How are these included in considerations? Examples: age, income, gender, origin, neighbouring areas.

Trade-offs (description, (ethical) underpinning, argumentation): Can you describe the trade-offs made during the policy-making process? How were these trade-offs presented to decision-makers?

What principles or values guided decision-makers in making these trade-offs? How were the impacts of proposed policies weighed and assessed during the decision-making process?

How were decisions communicated? And what was the argumentation for them?

Process (stakeholders, tools): How were stakeholders involved during the policy-making process? Did they have control? Which stakeholders were involved? How was stakeholder input incorporated in subsequent steps?

What tools were used to evaluate options and facilitate decision-making? What tools were used to create decision information? How was this information used?

Questions policy integration

Involvement subsystems (actors, domains, levels): Which actors and institutions were involved in the project and decision-making? Which sectors did the stakeholders come from? Which levels of government influenced decision-making?

Policy system: What integral policy goals were set? What policy frameworks, plans and programmes were in place? Which stakeholders were part of these plans? To what extent were the policy instruments implemented and did they contribute to achieving integrated policy goals?

Organisational structure (decision-making body, resources, procedures): By which organisation were which decisions taken? Which organisations had to approve?

In what ways was time and/or money put into creating coherence between the plans for housing and mobility? Which parties did or did not contribute to this?

In what ways were collaborative efforts made? How is information shared? Have agreements on this been laid down? How were tasks in the policy-making process divided?

Collaborative capacity: To what extent were the stakeholders involved in the decision-making process equipped with the knowledge, skills, and competencies to promote effective coordination and collaboration? Did they have experience or training in this? Were there any specific training or development programmes to promote cross-sectoral skills and coordination techniques?

Wrap-up

Interviewee input: Are there things we have not covered that you think are important?

Questioning contact persons

Outlook: Thank you for your time. I will share a summary of this interview via e-mail within a week. Would you please let me know by [date] that you agree to publish the summary or e-mail a revised version to me?

A.3. Guides feasibility governance design

To make the lessons from the case analysis applicable, three focus groups were held. The first session is internal at the Dutch Ministry of Infrastructure and Water with policy staff working on the topic of broad prosperity for mobility policy. The other two sessions are with a diverse group of employees from knowledge institutes, government agencies of different levels, and other organisations working on mobility and the topic of broad prosperity. The following templates and guides were used.

A.3.1. Mail template governance implementation focus group

Frame A.4 serves as the template for the email sent to potential participants of the focus group, inviting them to participate in the study.

Frame A.4

Dear [name],

I hope this e-mail reaches you well. My name is [name] and for my Master thesis research at TU Delft, I am studying how the concept of broad prosperity can be used for mobility policy. Specifically, I am examining the link between mobility and urban development. Should mobility be designed integrally with urban development according to the broad prosperity perspective? And how should this be organised (institutionally)?

[Name] informed me that you might be able to provide interesting input on this topic. Would you like to help me and participate in a focus group during which we will dive deeper into the topic?

I am currently conducting a case study to obtain insights that are relevant to the development and decision-making process of mobility policy that is in line with the broad prosperity perspective. I aim to make these insights applicable in practice. Improving the insights and making them usable is something I want to explore in the focus group.

The focus group will last 1.5 hours, for which you should count about 30 minutes of preparation time. I have identified several possible time slots for the focus group. Would you please indicate your availability via the following link: [link]

If you have any questions beforehand about my research or about the focus group itself, please do not hesitate to contact me.

Kind regards,
[Name]

A.3.2. Instruction governance implementation focus group

Frame A.5 serves as the template for an instruction sent to the participants of the focus group prior to the session, explaining the aim and process of the focus group.

Frame A.5

Dear,

Thank you for participating in the focus group. My research aims to determine what a decision-making process should look like to create a mobility policy from the

perspective of broad prosperity. A common view is that this requires integrated and cross-sectoral policy-making. I am drawing the link between mobility and urban development. Do we achieve 'better' outcomes when mobility is developed in conjunction with housing? And what would this process look like?

During the session, we will discuss what broad prosperity entails in practice, notable aspects of its application, and factors that either promote or hinder it. I ask you to speak from your own experiences and provide examples where possible. Please consider potential cases where something either contributed to or hindered incorporating non-monetary values, long-term impacts, or effects on other areas in mobility decision-making.

The focus group will begin at [time] at [location] and will last until [time]. You can register at the reception desk, after which someone will guide you to the meeting room. If you are unable to attend in person, please inform me via email.

To analyse and document the session effectively, I would like to record the focus group. This audio recording will be used solely by me and will not be shared with third parties or published. I will compile a summary of the discussion based on this recording and share it with you via email for approval and any necessary corrections. The summary will be included as an appendix in my thesis, which will be published in the TU Delft repository. Attached is a consent form for the recording. If you have not already done so, please sign and return it to [e-mail].

I look forward to an engaging discussion during the focus group and to seeing you on [date]! If you have any questions, please do not hesitate to contact me.

Kind regards,
[Name]

A.3.3. Script governance implementation focus group

Below, the guide for the focus about broad prosperity for mobility in practice is outlined.

Introduction

Welcome: Welcome to this session on applying the concept of broad prosperity to mobility policy. Thank you for attending.

Introduction interviewer: Name, background, thesis information, specialisation, and interests.

Introduction interviewees: Before I provide more details about my research and the purpose of today's session, it would be good to have a round of introductions. Could everyone briefly introduce themselves, their place of employment, and the nature of their work related to broad prosperity?

Research and purpose of the session: For my thesis, I focus on the broad prosperity perspective for policy in the mobility domain. Specifically, I aim to unravel how the decision-making process should be organised to incorporate broad prosperity

considerations. A common assumption I intend to test is that policy needs to be integral and cross-disciplinary to achieve this.

To this end, I have developed a theoretical framework for what mobility policy could entail from a broad prosperity perspective, and another theoretical framework for measuring policy integration. I have analysed the decision-making processes of four cases of housing and mobility plans to determine whether and how broad prosperity played a role and to what extent the housing and mobility plans were interconnected. Through this analysis, I was able to identify mechanisms that might be crucial for applying broad prosperity.

The purpose of today's session is to (2 out of 3):

1. Discuss the theoretical framework for broad prosperity from your experience and validate it with you.
2. Discuss the findings of the cases from your experience and validate them with you.
3. Discuss the mechanisms for the application of broad prosperity from your experience and validate them with you.

Process, consent, and data processing: Please speak primarily from your own experiences.

Verify whether the participants have read and signed the consent form. Your name will not be recorded in the report, but your position will be included. I will transcribe the focus group session and prepare a summary. You will have the opportunity to review this summary before it is published in the TU Delft repository. I will now start the audio recording.

Conceptual framework

Ask participants if they agree or disagree with the classification (conventional versus broad prosperity) and if they have any additional suggestions.

Problem:

Conventional:

- Focus on road network congestion, the most cost-effective measures, and the realisation of infrastructure.
- Facilitate traffic flow as the primary objective.
- Facilitate transport with infrastructure.

Broad prosperity:

- Start from societal needs and promote accessibility.
- Facilitate accessibility for different groups as the primary objective.
- Use mobility to enhance prosperity.
    - Other types of measures can also improve accessibility.

Effects:

Conventional:

- Economic and monetarily quantifiable effects.
- Decisions based on objective and measurable effects.
- Limited consideration of effects on future generations or other regions.

Broad prosperity:

- Liveability, health, safety, and accessibility.
- Subjective and objective, expressed quantitatively or qualitatively.
- Consideration of dimensions in the future and elsewhere, and the distribution of effects.

Trade-offs:

Conventional:

- Reasoning according to utilitarianism.
- Description of the bottleneck, economic value of the measure, comparison, and method of implementation.

Broad prosperity:

- Task-dependent reasoning.
- Description of the task, possible solutions, comparison across multiple dimensions.
- Explicit consideration.

Process:

Conventional:

- Task-dependent reasoning.
- Description of the task, possible solutions, comparison across multiple dimensions.
- Explicit consideration.

Broad prosperity:

- Participatory decision-making.
- Citizen and stakeholder involvement.
- Frameworks for thinking, value case.

Case observations

Ask participants if they recognise these observations and if they have any additional suggestions. Ask participants for examples of the observations or contradicting examples.

Observations:

- The difference between a local issue involving a single municipality versus a regional issue involving multiple municipalities and layers of governance. The involvement of more parties in decision-making does not contribute to the depth of broad prosperity.
- Considering different types of values at the outset happens, but monitoring and evaluating these values remains a challenge.
- Sustainability as a given prerequisite. Principles such as sustainability and STOMP are fundamental starting points.
- When a director or alderman is convinced of broad prosperity (and needs to report on it), more values are taken into account.
- The decisive role of the municipal council and budget despite ambitions.

- Studies demonstrating the liveability benefits of an alternative do not carry weight in decision-making.
- Establishment of a joint company to bear public burdens.
- Citizen participation is seen as a box to be ticked.

Application mechanisms

Ask participants if they recognise these observations and see their potential or effect. Ask participants for examples of the mechanisms or contradicting examples.

Enhancing mechanisms:

- A joint steering committee with frequent contact builds trust and provides opportunities.
- A person in the project team responsible for nature, biodiversity, etc.
- Overarching goals that everyone in a region works towards.

How can you ensure monitoring and evaluation of impact (instead of realisation) in the decision-making process? With a national program?

How can you make decisions that truly consider effects on future generations? By appointing a person in the project team responsible for value?

At what level and at which moments is an overarching area-focused approach necessary?

Impeding mechanisms:

- Possibility of trade-offs at a higher level.
- Daily work with urgency.
- Designing from a blank canvas is more challenging than optimising the current state.
- Budget constraints as a given.

Wrap-up

Joint conclusion: Are there any topics we have not discussed that you believe are important?

Outlook: Thank you for your time. I will share a summary of this interview via email within a week. Could you please confirm your agreement with the publication of the summary or email me a revised version?

B

INTERVIEW AND FOCUS GROUP RESULTS

This appendix provides the results of the interviews and focus groups conducted for this research in the form of summaries, categorised into three types. Appendix B.1 outlines the results of sessions establishing the conceptual framework for broad prosperity, while Appendix B.2, B.3, B.4, and B.5 cover the sessions for the analysis of the case studies. In Appendix B.6, findings from sessions on governance structure application are presented. Each section briefly introduces the interviewees involved.

B.1. Framework broad prosperity

This appendix presents the outcomes of sessions focused on constructing a conceptual framework for broad prosperity. The insights derive from semi-structured interviews and a focus group conducted with policy advisors from the Dutch Ministry of Infrastructure and Water, actively engaged in broad prosperity discourse.

The interviews provided a platform to explore perspectives on broad prosperity policy-making. Additionally, the focus groups facilitated collaborative idea generation among policy advisors developing tools to operationalise broad prosperity. The summaries offer valuable perspectives for understanding the multifaceted nature of broad prosperity and its implications for policy and practice.

B.1.1. Interview 1.1

Broad prosperity concept and policy-making factors

- Definition of broad prosperity in line with the definition by the Dutch PBL (‘Everything that people find of value to lead a good life here and now, later and elsewhere’)
- Factors
    - Process is also about ecosystem formation and stakeholder engagement, bottom-up initiatives, and not only bureaucratic processes.
    - Ethical principles and distribution effects are clear.
    - It is unclear what ‘reporting considerations’ means.
    - A political aspect is missing.
    - How is the result of the process reflected in the model? Perhaps in measuring performance?
- Within the directorate we are working on social innovation: legal engineering, financial engineering and other forms of governance, social structures, emotions, and behaviour. How is this reflected in the model?
    - Focus now on technical innovations, so infrastructure. Moving towards broad prosperity might cause emergence of all kinds of other types of innovations.
    - Where is the social aspect in the framework? Where is the citizen? Where is innovation in this whole process?

Policy cycle

- Standard policy cycle could work. However, the ‘act’ of plan, do, check, act is not represented in the policy cycle.
    - Within the ministry of Infrastructure and Water the ‘Beleidskompas’ is used alternatively.
- Does this ‘old’ process (setting policy agenda and objectives, policy options and instruments, policy decision-making, policy implementation, evaluation) accommodate broad prosperity?

Conventional versus broad prosperity approach

- This framework could be used to unravel what the differences are between a conventional and broad prosperity approach.

- What is a classic or conventional approach? Is it classic because we have done it in a certain way for 30 years?
    - Until the mid-1990s, it was very clear that the car was taking up too much space and that we should look at the whole system. This was aimed at everything we are now doing with broad prosperity.
    - And at some point, in the 1990s, car thinking crept back in. It changed from 'the car is part of the system and how should we keep space for greenery and the environment, for people' to 'infrastructure'.
    - So, what is classic? What we do now anno 2024 and have done the past few years?

Criteria broad prosperity approach:

- Key features: aimed at societal impact, cross-sectoral thinking, long-term thinking, focused on chances not on risks, area-based and regional perspective, data driven approach.
- STEP 1: Setting policy agenda and objectives:
    - The dimension later is about raw materials, nature, and emissions.
    - Areas are not formulated based on formal boundaries, but potentially based on mobility. It may be that with broad prosperity, another space is designated as one 'area'.
    - Themes: accessibility, safety, health, and living environment
    - Consider and report broadly and look at other values. Not just numbers or objective, but subjective indicators. Get these subjective indicators from citizens.
- STEP 2: Policy options and tools:
    - Do not look immediately and only at construction (of infrastructure) when trying to solve a problem. Include other types of options, such as behavioural measures.
    - ‘From possession to use’, ‘from rush hour driver to rush hour avoider’.
- STEP 3: Decision-making:
    - A lot of other responsible people will have to be brought to the table to make those decisions. That is not feasible, so we will have to come up with something else for that, and otherwise is not easy.
    - Decision-making with other domains internally or across departments. Broad prosperity is explicitly integral.
    - Emphasis on later generations. Even though, we do not know how yet.
        - Personifying things that cannot be at the table (like nature, animals, later generations).
    - Emphasis on less fortunate and people who cannot use ‘regular’ mobility provision.
    - Do not just report and make explicit what you are doing, but also what you are not doing.
- STEP 5: Evaluation

    - Measuring performance can be 'is the infrastructure built'. That is the old/classical way. Broad prosperity way may not be 'measure of performance', but ‘impact’.
        - Example: What does the municipality aim for with a cycle tunnel? Tunnel realised within budget or not versus bicycle use, safety, and health.
    - Instead of checking figures, go out in the environment and experience what has changed. It is more than just whether the project has been constructed.
    - Measure impact at the end of the ‘theory of change’ more broadly.
- What truly changes with broad prosperity? Is the distribution of the landscape improved, so that it fits together better? Or is it simply better balanced on every square inch?
    - From a broad prosperity perspective, you quickly encounter around 25 interests that appear to be in trade-off with each other. Then you must consider what the future should look like. And is every party willing to work towards that future?
    - It is challenging to envision what a 'broad prosperity solution' entails. It is more than just not building a certain classical asphalt road. It could also be a circular road, a road design with less noise pollution, or a different route. It must, in any case, be a road that takes into account more aspects than just accessibility goals.
    - You need to wear different lenses and look at the 'problem' or the road. What happens in the environment? And what does that road look like then?
- Instruments and process should for broad prosperity include a new way of working.
    - Not talking about and determining for citizens and travellers, but together with. Think quadruple helix (nature and society get a seat at the table).
    - Participatory value evaluation and societal cost-benefit analysis are standardised methods, without involvement of citizen cooperatives. The energy sector does have proper involvement of citizen cooperatives contrary to the mobility sector.
    - Work towards other forms of procurement, vertical steering, shared procurement, shared benefits, and burdens. This requires institutional innovation.
- Broad prosperity is also about more transparent and explicit decision-making, but the process may (partly) remain the same for that.
    - In the conventional way, decisions are made based on information in a memo that is then made public. However, with a broad prosperity approach there is wider array of information provided for trade-offs and decisions. It does change things somewhat in what is provided to arrive at trade-offs and choices.
    - The provided information under broad prosperity may be open to interpretation. The ultimate decision still rests with the decision-maker, but the decision-making process is more conscious, with the consequences of choices explicitly considered. The decision-maker is prompted to recognise the trade-offs involved.

    - At the same time, there can also be a movement towards a transformation of this vertical collaboration between national, regional, and local levels.
        - Officials make the considerations explicit, but which level of governance and who subsequently determines whether one broad prosperity aspect is more important than the other? If 'the citizen' does not agree with a decision, you can no longer vote for that decision-maker in the next elections. Now, as a citizen, you do not always have the opportunity to participate in a decision.
        - You see things emerging where the citizen or 'nature' does get a seat at the table and decisions are no longer made solely about others by politics, but with them.

B.1.2. Interview 1.2

Broad prosperity concept

- Broad prosperity is an approach whereby the ministry of Infrastructure and Water aims to capture various aspects of prosperity in four quadrants (accessibility, health, safety, and living environment), with the goal of getting closer to society and providing more transparency.
    - Provide insight into processes and decisions. Monitor and make what you do as a government explicit for each step.
    - It takes more to make the world liveable and makeable, and to make people happy, than a paycheck. That should be reflected in policy.
    - The government has a responsibility to provide essential services to society and to ensure that policies are aimed at improving the well-being of citizens. This includes balancing various interests and involving citizens in decision-making processes.
    - Each ministry has its own focus and has a share of the responsibility for society.
- Citizen participation is important to integrate societal opinions into projects and policies and measure what society needs in addition to objective indicators.
    - This involves incorporating subjective experiences and opinions of citizens, although objective measurement methods are also important. With subjective perception, you cannot always uncover problems. Just because a train runs, and driving is a good experience does not mean it does not need maintenance.
    - Participation should be facilitated by the government but also requires active involvement of citizens in their own communities.
    - What is the best way to organise participation? It can be challenging to reach a representative group of participants. Specific questions and information must be provided to obtain effective input.
    - But you should also not expect citizens to know everything, understand everything, and always make the right choices. As a government, you have a responsibility to determine that in a well-balanced way.
- Broad prosperity is a transition to bridge the gap between citizens and government. For this, you need resources. In a next phase, we hope to all be happier.

- Mobility and infrastructure are key aspects of broad prosperity, but budgetary constraints have led to a shift towards more focus on management and maintenance, which is not necessarily a problem especially in light of climate change. We need to stay within the limits of the world and the government must take radical steps to ensure this. We cannot expect the citizens to do all the work.

Policy-making factors

- Measuring the effects of policies is crucial to understand how they impact society, although quantifying some aspects of well-being such as happiness can be difficult.
    - It is crucial to know what is happening and what is needed for society before you start, which you do by measuring.
    - You need to know, to make good and targeted adjustments. Here, it is important to have science-based methods to measure things we care about.
    - Measuring then is not just about more indicators, but also distributional effects such as age, gender, degree of urbanisation, etc. Regardless of your education or background, you should be able to be happy.
    - Also, urbanity level and not just geographically, because otherwise you are less likely to know what water is playing and what is the problem you need to solve.

B.1.3. Interview 1.3 (focus group)

Policy-making factors

- It is not about the width of the issue but its scope, with no indication of direction. What does and does not fall within the issue?

Criteria conventional approach

- Key features: utilitarianism, bottleneck-oriented
- STEP 1: Setting policy agenda and objectives:
    - The question and objective concern facilitating economic growth, and within mobility, it is about reducing vehicle loss hours, improving flow, facilitating freight transport (speed and time), and improving accessibility.
        - It is about having more leisure time, and for that, you need to be able to commute quickly to and from work.
    - Focus on auto mobilists and the transport sector. Little attention to distributional effects and other modes.
        - Before the mobility fund, bottlenecks were used to determine where the money would go. Whether there were bottlenecks, was measured only for motorways, so money was allocated to cars and improvement of automobile infrastructure.
- STEP 2: Policy options and tools:
    - There was a different perception of what is beneficial. In an SCBA, the cost of vehicle loss hours is huge. This was seen as enormously important and therefore projects like road expansion were seen as 'good' for society.
        - Focus on GDP and economic value.

Criteria broad prosperity approach

- Key features: focus on long-term
- STEP 1: Setting policy agenda and objectives:
    - The question and objective concern facilitating the happiness of people and within mobility, it is about reducing nuisance, improving health and liveability in all regions.
    - One of the aims of broad prosperity is to reduce disparities. Here, it is important for the government to engage with citizens on what the needs are.
    - For measuring performance include the themes: health, safety, living environment and accessibility. For each theme, consider distributional effects for many target groups.
- STEP 2: Policy options and tools:
    - Participation is very important. Based on what citizens find important, you could assign weighting factors to effects.
- STEP 3: Decision-making:
    - Ethical principle: Do not opt for improvement of the totality but take all three considerations into account for each project and see what trade-offs you must make.
        - Politically, it makes sense to go for utilitarianism, as it generates a lot of votes.
        - Apply ethical principles to distributional effects.
    - Prevent politicians from making choices in the delusion of the day by bringing scientists to the table and presenting choices comprehensively and explicitly.
    - Transparency in decisions and the trade-offs made.

B.1.4. Interview 1.4

Broad prosperity concept

- Broad prosperity concerns the quality of life herein now, and the extent to which it comes at the expense of broad prosperity later generations, and not people elsewhere in the world.
    - Definition of SER is also relevant: For policies, you not only take the financial-economic dimension into account but also the social and environmental dimensions and factors. So, you must look much wider than just at one or two components and strive for a balance.
- Broad prosperity encompasses several dimensions, including economic, social, environmental, and cultural, with a whole range of themes. It is important to consider all these aspects when making policy.
- More expertise and scientific research are needed to better understand the effects of policy measures on broad prosperity. This can help prioritise decisions and identify potential risks and benefits.

Policy cycle and tools

- A broad prosperity thinking framework, such as the framework by the directorate of general strategic advice (developed together with other departments), can help policymakers look beyond economics when making policy.
    - The framework includes 10 topics or themes that the ministry of Infrastructure and Water has an influence on. These are topics that should be considered when making policy.
    - The I&W thinking framework should be used at the beginning of the policy process to guide decision-makers. Additionally, it could be used as evaluation.
- The consequence scan (which is government-wide and can be seen as a broad prosperity framework for Rijksoverheden) can be used to gain insight into the effects of your policy on different aspects.
    - The scan has three themes, people, society, and the environment, with sub-themes, linked to the Sustainable Development Goals.

Conventional versus broad prosperity approach

Criteria broad prosperity approach:

- While tools such as cost-benefit analysis are useful, they can be limited in measuring broad prosperity. It is important to recognise that not all aspects of welfare are quantifiable and that there is room for more qualitative considerations.
- It is crucial to make decision-making transparent and clearly communicate the uncertainties and possible consequences of policy choices (in policy papers). Trade-offs should be formulated as precisely as possible.
    - Policymakers need to be aware of the trade-offs between different aspects of prosperity, as well as the long-term and global effects. Making decisions can be a complex balancing act between different interests and dimensions.
    - Looking at broad prosperity does not mean that you do not have to make trade-offs. It does help to give insight into trade-offs along the themes.
- When formulating policies, numerous trade-offs arise, making it challenging to optimise outcomes for overall welfare. This complexity is compounded by uncertainties regarding the diverse impacts of policies across various domains.
    - Because as a policymaker you often cannot grasp the two- or third-order effects right away, help from (scientific) experts is beneficial for the policy process and including broad prosperity aspects in your policies.

B.2. Decision-making process Zeeburgereiland

This appendix covers interviews on the decision-making processes for Zeeburgereiland. This includes both mobility and housing decision-making. The interviews are presented as bullet summaries and aim to provide insight into the projects, the type of decision-making process, and the degree of policy integration of the Zeeburgereiland case.

B.2.1. Interview 2.1

Project

- Zeeburgereiland began very small with housing development in tenders and has grown into a major development location. The island is located next to the A10 between IJburg.
    - The aim is to create an integrated urban district with a mix of residential and commercial functions.
- Zeeburgereiland has a long history:
    - 1970s: There was a sewage treatment plant that was dismantled in 1998.
    - 1990s: First plans for Zeeburgereiland as a connection between the city and IJburg.
    - 2005: Development of a spatial plan.
        - The island is intersected by infrastructure, which has led to it being divided into four quadrants. Therefore, not too high a density of housing.
            - Additionally, the soil quality is poor.
        - The plan was for a sub-urban blue-green low density and mono-function neighbourhood (meaning no shops and amenities, only houses). However, there were plans for one primary school.
        - This was the development of the Sportheldenbuurt (in 2008).
    - 2008: Start of credit crisis, development stalls.
    - 2014: The district is being developed with some amenities.
    - 2015: The Sportheldenbuurt is underway and plans for the Sluisbuurt are revisited, but with a completely different vision from that of 2005. Intensification is needed.
    - Now: Plans for a high-rise neighbourhood in Sluisbuurt (among others), intensive construction, high density, and amenities. However, no buildings higher than 125 meters (due to height restrictions from Schiphol Airport and UNESCO).
        - 5.500 homes and more in the long term, as developers build more.
        - The housing plans for the Sportheldenbuurt are finalised and amenities will be placed in the old silos. The financing for this is uncertain, but important for demonstrating support for amenities (offices) to policymakers.
        - This will bring many people to live within a three-minute walk radius. This allows for amenities such as specialty shops (for example, a bakery) to be established, creating a mix.

    - February 2024: For the incorporation of the Crucial Mile on the island (and thus a consideration in the Island's Spatial Framework) there will be no extra funding for liveability and additional housing.
    - Planning: before summer 2024: Decision by B&W on spatial framework, on crucial mile, tram parking and cycle bridge (City Council after summer).
- Planning for Sluisbuurt: Houses are fine, but accessibility for public transport and cycling needs improvement. The car infrastructure acts as a barrier between the neighbourhoods (in the different quadrants).
- Mobility; external accessibility:
    - Currently, there are two bridges: one to the north and one to the east. Additionally, there is a temporary ferry from Amsterdam Noord to the Sluisbuurt.
    - The IJtram operates with high capacity, but IJburg is also expanding. Will there be sufficient capacity in the future?
    - Rijkswaterstaat will not build a new bridge, so a cycle bridge against the existing bridge.
    - Extra tram not until 2042.
- Mobility; internal accessibility:
    - The car infrastructure acts as a barrier between the neighbourhoods (in the different quadrants).
- Joint study by the municipality of Amsterdam, Amsterdam Transport Region, and the Ministry of Infrastructure and Water Management: 'Advisory Committee on River Crossings in Amsterdam's State Waters' led by D'Hooghe.

Type of policy-making

- What shall we do with the IJburglaan?
    - The IJburglaan is important for access, as it is one of the major roads to the A10. However, the IJburglaan acts as a barrier on Zeeburgereiland.
    - Development of different scenarios:
        - 0-plus: Minimal interventions
        - 1-min: Shorter underpass
        - 1: City square with car underpass
        - 2: Zeeburgerstrip with long car tunnel
- Option 2 involves a long car tunnel and a tram depot, reducing noise and eliminating the barrier. This provides more urban space but is quite expensive.
- Option 1 involves a shorter under passage, making it an underpass with different safety requirements. This is cheaper but still costly.
- Option 1-min involves a minimal under passage, with good ground-level bicycle flow and safety, but it does not meet the liveability objectives.
- Public consultation: "Please build the long tunnel."
    - After public consultation, the proposal was sent back to the councillor, with arguments in favour of the longer tunnel option. However, this was to no avail.
    - It is politically sensitive to invest 'so much money' in car accessibility with a better tunnel.

Policy integration

- Background on collaboration between sectors within the Amsterdam municipality:
    - Before: Amsterdam Public Works Department
        - This was a large and powerful organisation responsible for traffic, housing, and all physical aspects of the city. However,
        - Public Works had a vision for the existing city (called 'City Railway Plan' among others, but also other plans 'Downtown Note-1963') and the city centre because of car problems:
            - Much demolition for the construction of the metro. Half the city was bought up for demolition, and people had to move.
            - New neighbourhoods with space for cars.
    - Early 1970s:
        - Squatters in the purchased houses.
        - ‘Grootschaligen’ wanted traffic routes cutting through the city.
        - ‘Kleinschaligen’ versus ‘Grootschaligen, with ‘Kleinschaligen’ winning within the PvdA (Labour Party) and thus the Amsterdam city government.
        - ‘Kleinschaligen’ found the public works department too powerful and split it into:
            - 1: Land affairs
            - 2: Spatial planning
            - 3: Traffic and Transport
            - 4: Infrastructure
    - Consequently, area development and infrastructure were not combined for a long time, leading to an 'us versus them' mentality.
        - Land development within the fence: 'us'. Beyond that, main infrastructure with its own program and finances: 'them'.
        - No collaboration between departments.
- History of policy integration for Zeeburgereiland:
    - 2015/2016: Better accessibility via a cycle bridge for housing can be arranged by the 'Land and Development' department itself, but colleagues from the traffic and transport department are needed for public transport and roads. This led to a conflict.
        - "How can you build houses without our accessibility plans?!"
        - 'Land and Development' has no budget for a new tram. For 'Traffic and Transport', the tram is not a priority because the North-South line is higher on the list.
    - 2017/2018: Something needs to happen. Joint mobility plan for Zeeburgereiland (traffic and transport and land, thus infrastructure and area).
    - 2018: Caretaker council approves the plan. VVD councillors did not wait for a new council because the policy framework is not at the execution level, but at a higher level of goals.

        - The bill for the plan was not covered.
        - Mobility plan forwarded to the Council for information purposes.
    - 2019: Programme managers need to develop plans and start working together.
        - The reason for collaboration is that the island is too small for 'divide and conquer'. It will happen anyway (physically, in time, and in coverage of costs).
        - Building an organisational structure with multiple clients and project teams.
    - Parallel: New spatial vision for Zeeburgereiland, simultaneously with plans for accessibility.
        - The vision provides the integrative framework for spatial considerations and substantiation of infrastructure needs.
    - 2021: Governance assignment for Zeeburgereiland.

B.2.2. Interview 2.2

Project

- There are at least seven or eight major projects underway on Zeeburgereiland and IJburg. The area development on Zeeburgereiland is one of these projects.
    - In the field of mobility, there are projects such as the ferry connection and the extension of the IJ tram.
    - All these projects need to be coordinated and somewhat aligned with each other.
- There are three major infrastructure projects: the new vision for IJburglaan 'crucial mile' (tunnelling, bridge, intersection), tram depot, and the bicycle bridge next to Amsterdamsebrug.
    - The bicycle ferry is a smaller sub-project.
- The memorandum of principles with the spatial framework and major infrastructure projects:
    - Will be submitted to the council before the summer of 2024.
    - After approval, the plan can proceed to the municipal council.
    - Thereafter, the design process of the major projects can commence, with assurance that the financing is secured.
- Around 2017: Realisation that an integrated plan for mobility in the area was necessary, leading to the establishment of the steering group. Without this, something could go seriously wrong on the islands.
    - Urban planning in the area has been ongoing for much longer.
    - Decision that the three involved parties must convene at this level, as they have vested interests.

Type of policy-making

- There is a mobility plan for Zeeburgereiland and IJburg (developed seven years ago). It includes an analysis of the problem of inadequate accessibility when 32.000 homes are built without addressing mobility. This would lead to congestion.

- Considerations for infrastructure projects:
    - Crucial Mile (IJburglaan):
        - Focused on car accessibility and related to liveability.
        - Liveability is paramount; the goal is for people to want to live, study, work, or visit the island. The IJburglaan is a significant issue as it runs directly through the island.
            - This road, however, does not affect the accessibility of the island as it is for through traffic.
        - Four scenarios for the Crucial Mile:
            - The higher the number, the higher the urban planning quality.
            - Scenario 4: IJtram and cars entirely underground across the island.
                - This is financially completely unfeasible.
            - Scenario 1-: The shortest possible car tunnel.
                - This is the current approach.
                - It is not optimal for liveability and spatial quality due to the tunnel entrance and the need for two parallel roads to access the neighbourhood from the A10. However, it creates a car-free traffic square above, allowing safer and quieter crossings for cyclists and pedestrians. Additionally, the tram can pass on the north side of the island.
                - It is a compromise. Liveability is partially sacrificed for financial reasons. A practical dilemma between the ideal solution and financial reality and constraints.
                - A 'Heads Up session' was held with various external experts. They were highly critical of this limited solution. “Liveability is so important that additional funds must be allocated, otherwise the liveability goals will not be achieved.” The project team is somewhat less sceptical about this.
    - Tram depot: The current tram depot is in Baaibuurt, but housing needs to be built there. The tram depot must be relocated to an area outside the dikes as no housing can be built there, but the operational function can be fulfilled.
        - Focused on public transport.
        - The relocation of the depot can only occur if the tram can cross the IJburglaan. For this, the Crucial Mile must be completed.
        - The tram depot and the Crucial Mile are technically, spatially, and financially interconnected.
    - Bicycle bridge next to Amsterdamsebrug: a bridge on the south side of the island to triple the number of cyclists from the islands towards the city in the coming years.

        - Focused on bicycle accessibility.
        - The current Amsterdamsebrug cannot handle such a large flow of cyclists.
        - Ideally, a bridge would have been built between Sluisbuurt and the Eastern Docklands (over the Amsterdam-Rhine Canal). This would have been a logical connection to the centre of Amsterdam.
            - This was not optimal for Rijkswaterstaat due to nautical management. The municipality wants bridges over the Amsterdam-Rhine Canal due to the city's growth.
            - City development cannot proceed without ensuring accessibility, even over water, such as to Amsterdam North, but this conflicts with inland shipping.
        - A stalemate between the state and the municipality of Amsterdam led to a study by a professor concluding: Two bicycle bridges can be built from Amsterdam Centre to Amsterdam North; one on the west side and one on the east side of the central station. However, the bridge for Zeeburgereiland to connect Sluisbuurt by bicycle has been scrapped.
    - The necessity and significance of the three projects are outlined in the memorandum of principles, along with general plans for their construction.
- Paradox of the island: it is a large island close to old Amsterdam but also directly next to the A10.
    - One of the busiest roads in and out of Amsterdam runs across the island, with 40.000 cars per day.
    - As a result, the island can never become a green oasis, and the entire spatial framework is a kind of compromise.
- Context of the liveability dilemma: Amsterdam will grow significantly in the coming years, but there is no master plan for this scale. This population and housing growth are not integrated decisions but proceed per area, island, or neighbourhood. The traffic system lags the facts. A lot of infrastructure of various types is needed for the city's growth. Financially, the city cannot bear the cumulative cost of the necessary infrastructure, but the houses are still being built.
    - Six major residential areas are under development in different parts of the city.
    - A working group at this regional scale is attempting to list the investments for all major projects. They conclude that the city cannot cover the required amount. Therefore, priorities must be set.
    - Aldermen and the council must weigh all projects, while the project team only weighs within its own project. The money must be fairly distributed across the city. Additional cost-benefit analyses or reports advocating for the impact or liveability of a project will not make any difference.
    - Within the municipality, there are conflicting forces: urban planning quality versus the business side.

- The input from the public consultation rounds is currently being processed into the spatial plan, including feedback from the island's residents.

Policy integration

- The urban development plan, or spatial framework, for Zeeburgereiland outlines the number of housing units to be built, the anticipated level of congestion, how accessibility will be ensured, and the extent of green spaces. A single major administrative decision will be made for the three major projects and the spatial plan. This is referred to as the memorandum of principles.
- For both the crucial mile and the tram depot, there is a contribution from the Ministry of Infrastructure and Water Management and the Ministry of the Interior and Kingdom Relations from the NOVEX funds.
- Involved parties:
    - From the municipality of Amsterdam, three departments: Traffic and Public Space, Land and Development, and the Amsterdam Transport Region.
        - Roughly (it varies slightly per project), each department is responsible for approximately one-third of the financing and has veto power. All three financiers must give the green light before anything can proceed to the council.
            - For the Amsterdam Transport Region, the financing indirectly comes from national funds.
        - These three parties are part of a joint steering committee called OGO (commissioners' consultation) Zeeburgereiland IJburg. They discuss both operational and strategic issues.
            - Each party has appointed an official commissioner (the highest civil servant involved in a project) to this steering committee.
            - For over six or seven years, these have been the same individuals. The stability of this group is a strength of the plan, fostering cross-boundary collaboration. During this time, mutual trust has grown.
                - These individuals know each other well, can address and negotiate with one another.
                - Example: There was a funding shortfall for the ferry connection. The commissioners were able to resolve it quickly through direct communication.
            - The three commissioners recognise that they are working towards a higher objective beyond their own domains.
            - The commissioners deal with the directors of their departments and three corresponding fund managers.
            - The commissioners do not have absolute power. They must engage their directors, ensure alignment with the overarching goal, and maintain oversight. They also participate in the regional group to 'defend' projects.

            - There is a programme secretary who facilitates the steering committee (agenda, documents, organisation).
                - Not all project leaders can bring all their issues to the committee.
                - Decisions must be traceable, accountable, and well-founded.
                - Minutes are shared with a standard reading group, project leaders, and other relevant parties.
                - There is a library of all minutes, memos, etc.
            - The steering committee meets every six weeks.
        - Three key partners from the ministries are involved remotely. They must meet a reporting obligation for the NOVEX funds. The ministries are not directly involved in design and implementation.
- Basic matters are well-organised:
    - There is an integrated mobility plan, ensuring coherence in the traffic network.
    - There is extensive coordination between area development and mobility projects to avoid poor decision-making.
    - The steering committee provides oversight and stability.
    - Nonetheless, it is a messy process.
        - Example: The application for NOVEX funds from the state reduced the project scope in one day.
        - Example: A report from the De Hoge committee caused the bicycle bridge to go from promising to halted within a week.
        - At a higher level (director or administrative level), trades are often made between unrelated matters. This can suddenly alter the reality of a project.

B.3. Decision-making process Binckhorst

This appendix covers interviews on the decision-making processes for Binckhorst. This includes both mobility and housing decision-making. The interviews are presented as bullet summaries and aim to provide insight into the projects, the type of decision-making process, and the degree of policy integration of the Binckhorst case.

B.3.1. Interview 3.1

Project

- Developing a tram in an area versus developing an area with a tram
    - In the CID Binckhorst, they approach mobility differently.
    - Developing area in which mobility is also 'needed'/developed.
- Project team sets broad ambitions.
    - 12 themes with ambitions
    - Municipal councils support this with motions in areas such as liveability and safety
    - Establish ambitions first, talk about money later.
        - ‘Task-setting budget’ is not desirable.
        - Investing in developing ambitions might be expensive but could save money later.
        - You can make money through sustainability.
    - Questions about ambitions set out to all clients (municipalities, MRDH, ministries, etc.)
- Ambition for the project is the target ambition.
    - This is the highest/most ambitious ambition from all clients, and an extra step.
- Construction of houses and tram are formally dependent.
    - No houses without tram and the other way around
    - However, the design processes of both are independent and do not run (fully) in parallel.
- Final decisions on ambitions for the project in April and May. The preferred mobility solution (tram route) is already in place.

B.3.2. Interview 3.2

Project

- A spatial vision for the Binckhorst is being developed, linked to an Environmental Impact Assessment. This then transitions into an environmental plan, ensuring legal and planning correctness.
- Progress:
    - 2019: Exploration phase of MIRT trajectory
        - Researching route and modality variants (metro/tram/bus).
        - Completed in December 2023: decision on tram connection in principle with a basic mobility package including street redesign.

        - It is stipulated here that it is about more than just laying tram tracks; there is also a need to add to the neighbourhood. Making this addition concrete in the following phases.
    - September 2023: Initiation of MIRT trajectory exploration
        - December 2023: Administrative agreement for collaboration.
        - Plan development involves a new integrated project management team.
        - External engineering firm is engaged in the design.
    - 2024: Sustainability and integrated ambitions are detailed in an Ambition Web.
    - A preliminary design of high-quality public transport, a spatial vision, and an associated EIA will be developed, entering decision-making processes from early 2025.
        - August 2024: draft spatial vision
        - October 2024: draft preliminary design
        - EIA process runs alongside to assess. Recommendations from this must be incorporated into the spatial vision and the preliminary design.
- A preliminary exploration was conducted for the Ambition Web with all seven commissioners, querying their ambitions for the project. Subsequently, various sessions and refinements were undertaken.
- Basic mobility measures package: To achieve all sustainable mobility ambitions, a comprehensive package of measures is required. The package includes measures such as Mobility as a Service (MaaS) initiatives, street redesign, and cycling provisions. These measures ensure the project aligns with the STOMP principle.

Type of policy-making

- It is not just about laying tram tracks, but also about redesigning the space. You use mobility to further develop the city. Many topics are considered within this, such as ensuring safety, liveability, greening, and climate adaptation.
    - The STOMP principle is used to think broadly about prosperity within mobility.
- An Ambition Web with twelve themes is used to encompass all goals broadly.
    - With the Ambition Web, you can get bogged down in semantic discussions, but it helps to clarify the various ambitions.
        - This includes all client requirements from the various commissioners. These requirements and legal regulations provide a vast array of specifications, which are not always aligned.
    - Four of the twelve themes are the main ambitions for the project: accessibility, spatial quality, business climate, and land use.
        - Each commissioner has at least one theme they prioritise. Consequently, you need to address everything.
        - Additionally, the project team proposed focusing on energy, materials, ecology, and biodiversity as main focal points based on policy and the legal framework of the partners (seven commissioners).
            - These established goals of the commissioners form the basic ambitions.

        - The project team has added some additional aspirational goals for certain themes to be adaptive and because developments are happening rapidly.
- The ambitions (from the Ambition Web) have been translated into actions during the planning phase to give them substance, as well as to determine how they fit within the scope and cost considerations and based on that, budgets. This helps make decisions later on. This way, ambitions are considered in the deliberations.
- A cost-benefit analysis was conducted, but it was still relatively limited. Sustainability themes were not clearly highlighted.
    - In the exploration phase, the focus was mainly on accessibility, not broader ambitions such as sustainability.
    - Hooks were given in the exploration phase to want more than just a tram line, without specifying what "more" entails. The MIRT rules allow for the development of an Ambition Web.
    - The Ambition Web revealed that more than just accessibility is deemed important. This prompted a shift in focus. The project leader takes these hooks very seriously and has hired someone responsible for ensuring the other ambitions are maintained.
        - It is important to explicitly address interests (beyond accessibility) and assign ownership. This is organised within the project team.
        - By assigning a person (to sustainability), it ensures that the interest is considered.
- Sustainability within the project is broadly defined. You need to identify all opportunities upfront, for example, by conducting a nature scan. You need to consider how to align with various values.
    - Themes: ecology, nature
    - New provincial policies come with an action list of what should be done differently. There is a movement towards nature inclusivity.
    - City ecologists have named certain iconic species. By attracting these to the area, you create a specific ecosystem. The Binckhorst area already has an ecological main structure. How do you align with and strengthen these structures? It is important to establish connections between areas and avoid creating barriers.
        - You can distinguish between different ecosystems: wetlands, forests, dunes, etc.
        - Tram as a barrier or connector.
    - One person is responsible for developing a vision, ambitions, and concrete requirements in this area. For example, you must have 400 meters of green space.
- Social aspects within the project mainly concern liveability. This is reflected in the Ambition Web. People are concerned about noise, vibrations, and traffic congestion

due to the tram. They want to live in a pleasant, green, and climate-adaptive environment.
    - One of the ambitions is to achieve 80% satisfaction among stakeholders (i.e., residents, etc.). Additionally, there is an environmental manager to engage people in the project.
    - The participation process regarding ambitions has yet to begin.
        - The goal is to involve people in thinking about the layout of the neighbourhood, such as amenities.
    - There are significant differences between Rijswijk, Leidschendam-Voorburg, and The Hague.
        - Rijswijk and Voorburg are concerned that the neighbourhood will become congested due to the large development in Binckhorst.
        - There is a green area near Voorburg Station that is heavily used, and the tram route currently passes through it. Is there an alternative solution?
- The EIA pays a lot of attention to monitoring, and the planning phase requires looking ahead to the management phase. HTM manages the tram, but the municipality manages the greenery around it. You need to identify their interests and desires during the studies.

Policy integration

- Guidance group of seven commissioners: Municipality of The Hague, Municipality of Leidschendam-Voorburg, MRDH, South Holland Province, Ministry of Infrastructure and Water Management, and Ministry of the Interior and Kingdom Relations.
    - Housing and infrastructure/mobility are represented in the two ministries.
    - The representation in the guidance group must safeguard all interests of the parties. For example, the person representing the Municipality of The Hague in the guidance group must consider both mobility and housing.
    - The large number of commissioners makes it complex. All plans must pass through three municipal councils, each with their own conflicting interests.
        - Contradiction: The focus in The Hague area is mainly based on the STOMP principle. Rijswijk and Voorburg want to maintain parking and accessibility; you cannot shift the problem to the outskirts, and the large city of The Hague should not compromise liveability by redirecting traffic through our neighbourhoods.
        - MRDH has a comprehensive view of the entire area.
    - Power dynamics among the seven commissioners are still unknown.
        - The Ministry of Infrastructure and Water Management contributes the most funding.
        - Decision-making ultimately takes place in the BO-MIRT.
    - Development of the Innovation District falls under the Municipality of The Hague and is not part of this assignment.
- Working with an integrated project management team; the steering group.

    - Previously: During the initial phase, the project was led by the Municipality of The Hague, Mobility Department. This conflicted with housing. Now: independent project team. After plan development: new project team with a new structure.
        - After the initial phase, a different structure was explicitly chosen, but not explicitly to exclude the same people from the project team.
    - The team has a fixed structure, as envisioned by Rijkswaterstaat, including a project manager, technical manager, environmental manager, contract manager, and (new role) plan study manager.
    - The project manager oversees the project's broad ambitions, specifically focusing on sustainability.
    - Various team members have experience collaborating within large projects or public-private partnerships in their own ways.
- Some tasks are specifically the responsibility of the municipality, such as drafting the spatial vision and the environmental plan. The project team is actively involved by providing input on, for example, the stops and (road) profiles.
    - Municipalities are further involved in the guidance group.
    - Everything the project management team produces as a product must go through the guidance group. Municipalities review, ask questions, and agree whether it can proceed for decision-making.
- Dependency on mobility and housing.
    - The project is part of the MoVe program, where mobility plays a more prominent role than housing. But they are interdependent. A certain number of homes are needed to run the HOV, and for those homes and businesses to develop, the HOV line must be in place. There is mutual dependence.
    - The current spatial plan for Binckhorst (by the Municipality of The Hague) provides for 5.000 homes. Some of these are already being realised. Construction of new homes cannot proceed until public transport is available.
        - The spatial plan also does not yet allow for new homes. A new spatial plan is therefore required.
- The participation process is conducted jointly with the team responsible for further developing the homes because citizens do not see the two as separate and perceive the government as one entity.

B.4. Decision-making process Valkenhorst

This appendix covers interviews on the decision-making processes for Valkenhorst. This includes both mobility and housing decision-making. The interviews are presented as bullet summaries and aim to provide insight into the projects, the type of decision-making process, and the degree of policy integration of the Valkenhorst case.

B.4.1. Interview 4.1

Project

- The bus route along Valkenhorst has a long (political) history:
  - There has long been discussion on building a tram under the name 'RijnGouwelijn'. In 2013, this was rejected.
  - The project was divided into seven HOV-lines. One of them is the HOV-bus line Leiden-Katwijk-Noordwijk.
    - Politically, parties want to keep the option of turning the corridor Leiden-Katwijk-Noordwijk into a tram open.
    - However, research did show that a bus corridor has ample capacity for the projected passenger growth.
- The plan is to build a separate bus lane with two stops at Valkenhorst. Katwijk's zoning plan also states that another (regular) bus line will go through Valkenhorst.
  - This conflicts with the desire to build a car-free neighbourhood.
  - Only people without a choice will use such a 'slow' line through the neighbourhood. Decisions about this will ultimately be enshrined in the public transport tender.
- An HOV corridor with HOV quality is challenging along the entire route.
  - Administrative agreements on traffic flow measures on the road network have been made with all municipalities bordering the corridor.
  - In the reference situation, unlike most municipalities in NL, cyclists in Katwijk do not have priority at roundabouts. If this is changed by Katwijk, it means something for speed and reliability on the entire corridor.

Type of policy-making

- The decision-making process always takes place within current laws and regulations.
  - For example, you must always conduct a societal cost-benefit analysis.
  - Decision-makers often want to make choices on a case-by-case basis.
    - Controversy: The fewer established policies, the more freedom you still have as a governor. At the same time, established policies also help you to fall back on when making and defending your political choices.

Policy integration

- Many different parties are involved in the project, including the Central Government Real Estate Agency (‘Rijksvastgoedbedrijf’), which owns the land.
- The housing construction plans stipulate that the bus lane must be operational before the houses are completed.

- However, there is already high-frequency service along the route, so the change is not significant.
- This was initially only because of limiting (second) car use, but it was later also a necessity for realisation related to nitrogen space.
- The bus lane along the N206 and the widening of the N206 (part of the RijnlandRoute) are separate projects, resulting in patchwork implementation.

B.4.2. Interview 4.2

Project

- History of Planning:
  - 2008: Desire of the province of South Holland to construct the RijnlandRoute as a motorway.
    - There was no major bottleneck on the main network (according to the predecessor of the Integrated Mobility Analysis (IMA)). However, there was a substantial local bottleneck of a lot of traffic passing through Leiden.
      - Therefore, the verdict was that it was a local problem.
    - The RijnlandRoute was a solution to the local problem combined with a solution to the need for better access to development sites with interventions in the underlying road network. It is a good solution to divert traffic passing through Leiden either below or above, reducing traffic through the city centre.
    - At the same time: The connection from Leiden to Katwijk and Noordwijk with a 2x1-lane on the Tjalmaweg is not smooth.
    - At the same time: The Leiden Bio Science Park and ESA are expanding, requiring improvements to accessibility.
    - At the same time: There is a need for housing development. Houses will be built in Leiden and in Katwijk, among other places, including on the Valkenhorst airbase.
  - It was clear that something needed to be done. Therefore, a MIRT Exploration was conducted.
    - Also considering variants for underground traffic along the Churchillaan (through Leiden).
  - Around 2010: The RijnlandRoute passing under Leiden is the preferred decision of the MIRT exploration.
    - This addressed all challenges: accessibility of housing, Bio Science Park, and ESA site, reducing traffic through Leiden.
    - Better regional connection between the A4 and A44.
    - There has been much debate between the ministry and the province.
    - The Deputy of the province of South Holland believed that the Ministry of Infrastructure and Water Management was responsible for the RijnlandRoute. According to the Ministry of Infrastructure and Water Management, it was a regional problem for which they were not

responsible. According to the ministry, it is a regional access road, and it is essential to ensure a good connection to the national motorways.

- 2012: The 'Provinciale Staten' agreed to further elaboration of the RijnlandRoute as it emerged from the joint MIRT-Verkenning of national and regional government in 2010.
  - The province of South Holland is the body that will implement the project because it mainly involves the underlying/provincial road network.
  - The province opted for a deepened position. The province later decided in favour of a bored tunnel, after several public participation responses.
- 2013: Administrative Agreement (BOK) between the Ministry of Infrastructure and Water Management and the province of South Holland with a plan and division of roles including planning. Cooperation agreement (SOV) between the Ministry of Infrastructure and Water Management and the province of South Holland.
  - Core of the Administrative Agreement: The Ministry of Infrastructure and Water Management was needed for this project for subsidy, as there was too little financial support for the RijnlandRoute from the province of South Holland. In addition, there was decision-making for the A4 and A44 alignment.
    - The minister must agree to the road design (and did), because of the effects on the main road network.
    - The maximum subsidy is EUR X million and the minister will take two 'Tracé Besluiten'. These are declared irrevocable by the Council of State.
  - The province provides a provincial integration plan. The province fully manages the Tjalmaweg and Europaweg.
  - Subsidy from the state is limited to X amount. Due to the significant share of the main road network, the ministry bears risk.
    - The ministry of Infrastructure and Water eventually bears 15% of the risks (after all) regarding the work on the A4, A44 and the new provincial connection between the A4 and A44.

Type of policy-making

- The poor connection from Leiden to Katwijk and Noordwijk, the development of Leiden Bio Science Park and its necessary accessibility, housing construction in various locations, and the significant amount of traffic through the city centre of Leiden prompted action and presented a challenge.
  - This led to the MIRT Exploration around 2008-2010.
  - These are spatial planning matters and traffic congestion in the city of Leiden. Therefore, the Department of Highways Programming of the Ministry of Infrastructure and Water did not envision a motorway.
- Context:

    - Since 1800: Safety, accessibility, and liveability are important considerations in decision-making. However, there is a focus on improving accessibility within the framework of safety and liveability. Compliance with legislation regarding safety and liveability is sufficient.
        - Emphasis on improving travel times, reducing economic damage, reducing traffic congestion, etc.
    - Over time, traffic safety has become more important than accessibility. Hence, you did not want to make traffic safety any less safe.
    - Now: There is a shift towards considering the living environment and safety as equally important as accessibility.
        - Legislation still only requires staying within, for example, a noise ceiling. This means you could increase the noise, but only up to a certain limit.
        - Values existed previously, but they are being approached differently within the Ministry of Infrastructure and Water Management.
- MIRT Exploration focuses on traffic-related matters (traffic and transport).
    - An increase in noise, for example, is not considered in the decision-making. We reason whether it increases, and if it does so excessively, then measures must be taken. You must ensure you stay within the norm.
    - From a traffic perspective, the current RijnlandRoute was the best solution. Building the road through Leiden would not solve the problem. However, the current RijnlandRoute does cut through nature.
        - Both routes involve elements of liveability but with different indicators: noise pollution and pollution in the city versus a road cutting through nature.
        - However, the route through nature remains within all norms.
    - According to MIRT rules, a cost-benefit analysis must be conducted for the project. It is not mandatory for the cost-benefit analysis to be positive.
- An Environmental Impact Assessment was also conducted for the area.
- Choosing a route through Leiden or through a nature reserve is challenging.
    - It is impossible to argue why you should or should not go through a piece of nature. It is a trade-off: the traffic flow goes left or right, and neither option is ideal. You choose the most optimal route.
    - For the RijnlandRoute, the option passing under the nature reserve below Leiden was considered more optimal than going through the city, considering the associated costs. The traffic flow and its growth were assumed.
- There was also much debate about choosing between a depressed alignment (potentially with sound barriers) or a tunnel for the connection between the A4 and A44. Considerations come into play.
    - Preferred decision: Depressed road through greenery, as it aligns with statutory noise standards.
    - Various activist groups and an engineer (through letters) advocated for the tunnel option due to nuisance.

    - Two factors influenced the choice of a tunnel by the South Holland province:
        - 1: A tunnel is much more expensive, but acquiring land from various parties for road construction is costly. Land acquisition is expensive, but if you build a tunnel, you do not need to acquire that land.
        - 2: Traffic forecasts show continued growth. This meant increasingly more integration measures were needed. Increasingly higher barriers or a deeper road, which would require thinking about foundations. The depressed alignment became so expensive that the difference to a tunnel became smaller.
    - Ultimately: Choice for a bored tunnel. Next discussion is about its length.
        - Liveability versus costs and safety due to distance to junctions.
- Participation process on route decisions and MIRT process.
- Broad prosperity played a limited role. It was a project to ensure that less traffic passed through Leiden, while ensuring that Katwijk, ESA, Leiden Bio Science Park, and the new residential area were well connected. A traffic engineering solution was devised that met the criteria for safety and liveability.
    - This does not mean that adhering to the current approach to broad prosperity would have led to a different outcome.

Policy integration

- Directorate of Roads and Traffic Safety, Department of Highway Programming is the principal for Rijkswaterstaat for road studies. This includes the RijnlandRoute.
    - The Directorate of Roads and Traffic Safety leads from exploration to plan editing.
    - From the execution decision, Rijkswaterstaat takes the lead.
    - From the execution decision, the Ministry of Infrastructure and Water Management remains involved for subsidy handling.
- The Ministry of Infrastructure has a subsidy framework for 'Major Regional Projects', but it is a regional/local responsibility and problem being addressed with the RijnlandRoute. Therefore, the role of the Ministry of Infrastructure and Water Management is limited to subsidising and importance in connection to A4 and A44.
    - Based on the route decision, only the minister can make changes to the A4 and A44.
- The decision for the variant of the RijnlandRoute under Leiden is a joint decision of the province and the Minister of Infrastructure and Water Management, taken in the BO-MIRT. It concerns a motorway and a regional road.
    - The province represents municipalities in the BO-MIRT after regional coordination in regional administrative consultations.
        - Many different interests play a role at the local level.
    - The minister decides how much money to invest, and for which preferred variant.

- The province is responsible for spatial planning and defending the plan up to the Council of State. The ministry spends money from the infrastructure fund (now mobility fund) based on the subsidy scheme and is the principal for the interventions.
- The ministry does not set requirements for the connection but does for the connection to the main road network. Road design for the connections must be approved by the ministry and Rijkswaterstaat.
    - Coordination on road design and traffic was necessary, then each must arrange their own part.
    - One project involving multiple road authorities. One road authority cannot work on part of another road authority according to the law.
- The State Property Enterprise (RVOB) had a significant interest in housing construction, as the land belonged to the RVOB. Therefore, the RVOB also has an interest in housing access.
    - The RVOB invested 20 million euros in access via the subsidy decision of the Ministry of Infrastructure and Water Management.
    - Therefore, the subsidy decision includes that the Tjalmaweg must be ready in time for the access to Valkenburg. There is an obligation for the province. There must be an uninterrupted construction flow for housing construction.
        - Housing construction cannot be halted for access via the N206 Tjalmaweg. No agreements on a date by which the road must be ready.
- Sufficient housing access must be facilitated. Otherwise, the Council of State will annul the zoning plan.

B.4.3. Interview 4.3

Project

- Developments in the Area Surrounding Valkenhorst:
    - The State (State Real Estate Agency) owns 85% of the entire area. Valkenhorst is a former airfield owned by the State Real Estate Agency, which intends to allocate the lands to developers to build 5.600 residences in total.
        - 500 residences are being constructed by BPD.
    - There exists a zoning plan for Valkenhorst residential area. A legal procedure is ongoing in the Council of State (Raad van Stat) between Wassenaar and Katwijk regarding this zoning plan.
    - Within the ZLPLG program (a provincial derivative of the national program for rural areas), the parties aim to do something with the green zone of land and nature.
        - There is a possibility to buy out landowners for the sake of nature and recreation in the area.
    - There are still a considerable number of issues within the area, divided among different deputies of the province.
- History of Valkenhorst and N206 development:
    - In 2006, the RijnGouwelijn was proposed.

- Around 2006, initial ideas for residences at the Valkenhorst location emerged.
  - The location was no longer intended to remain as an operational airfield. The initial idea was to potentially transform it into a residential area.
  - The original name was ‘Plangebied Valkenburg’, which was changed to ‘Valkenhorst’ after a competition.
- In 2011/2012, the RijnGouwelijn was definitively rejected.
  - Its success might have been possible if there had been more attention to participation from the outset.
  - The project did not proceed, among other reasons, because the municipality of Leiden did not want a tram to pass through the Breestraat in the old city centre. There was no consensus within the municipality.
  - Instead of the RijnGouwelijn project, there will be seven HOV corridors, including the HOV corridor - Leiden - Katwijk - Noordwijk, along Plangebied Valkenburg. In 2013, the agreements on HOV corridors will be laid down in an administrative agreement.
- 2018: Administrative agreements realisation agreement between Province and Katwijk on construction of bus lane along Valkenhorst Plan area.
- In 2020, administrative agreements were made for Valkenhorst
- In March 2023, zoning plans for residences were finalised and approved.
  - Since then, we have been awaiting the decisions of the Council of State.
- In early 2024, an appeal by residents led to a Council of State procedure for the bus lane.
  - It is uncertain whether these residents are admissible.
  - If it is estimated that this procedure will be won, it could be advisable to proceed with construction to save costs. This is realistic for the bus lane. Downside if residents win proceedings is having to bring back to original state and cost to province.
  - Province gets right, but project delayed. Planning is still that bus lane can be commissioned before first houses are completed.
- In May 2024, the Council of State procedure for the Valkenhorst residences itself commenced.
  - This will be a challenging procedure. The outcome of this procedure is uncertain due to objections raised on 10-12 points.
  - Because this procedure is ongoing, construction cannot yet begin.
  - The municipality of Katwijk has already invested. Therefore, they would like to see that the objections (from the municipality of Wassenaar among others) to be withdrawn, so they can proceed.
- The original timeline was to complete the bus lane by the end of 2025 and have the first residences delivered by early 2026. However, the Council of State procedures are causing delays.
  - It is expected that public transport and the dedicated bus lane along the N206 will be completed much earlier than the residential area.

- 2013: Various governance agreements were signed, one for the entire Leiden-Katwijk-Noordwijk corridor by the collaborative body Holland Rijnland, and several separate agreements with municipalities for infrastructure measures to realise high-quality public transport.
- The current bus line operates at high frequency (R-net). With a dedicated bus lane along Valkenhorst and the development of the N206, this line can operate even more frequently.
- Housing development: Much groundwork has been laid, but after detailed planning, it is not yet complete. It is only now truly beginning.
    - Valkenhorst is not complete merely with the existence of a zoning plan.
    - Decisions on energy routes, for instance, are not yet finalised. Additionally, other prerequisites are incomplete, while the district must be designed with these considerations (such as energy and water) in mind.

Type of policy-making

- Background on Residences: The State Real Estate Agency sees Valkenhorst as a development location where profit can be made. Subject to favourable conditions, they are willing to be flexible and are quite accommodating. It has long been unclear what the municipality of Katwijk desires. Other governmental organisational were willing to construct more than 5.600 residences. Eventually, 5.600 residences will be built, including 500 in the high-end segment on the Wassenaar side (from the perspective of the State Real Estate Agency). It is a compromise because, considering the current demand for housing, many more residences could in theory be realised, especially since there are two high-quality public transport stops.
    - The concept of the RijnGouwelijn also implies a desire to develop along the route. Valkenhorst offers this option. Initially, the RijnGouwelijn was not a profitable route. Considerable effort was required to attract potential users to the tram line.
    - According to the province, there could also be a higher degree of densification.
    - However, the municipality of Katwijk initially had a more restrained approach. Katwijk is a village with accompanying values. A residential area of such magnitude would likely mean a significant influx of residents from Leiden and change in character, which would entail a considerable shift to a more urban area.
        - Katwijk values its village character and social amenities.
    - The province once suggested that the district would become part of Leiden if Katwijk remained obstructive. This was to get a breakthrough in this file which had been going on for more than a decade.
        - This underscores the intensity of the debate.
- Roadways in the Area:
    - There is an ongoing debate about whether the current alignment of the N206 is sufficient or whether additional elevation is desired along Katwijk due to noise concerns raised by the municipality of Katwijk.

        - The improvement of the N206 terminates before the village of Katwijk, resulting in congestion within Katwijk itself.
        - The N206 Tjalmaweg (RijnlandRoute) transitions into a road along Katwijk. This road was initially named the Northern Ring Road, later the Pioniersbaan, and is now referred to as the elevated Duinvallei.
        - The province's standpoint is that the point where the RijnlandRoute ends marks the end of the province's interest, and thus, the regional issues are resolved. Further concerns are deemed more local issues and lobby.
    - The municipality of Katwijk intends to downgrade the N441 to a local municipal road with a speed limit of 50 km/h, so that all traffic is consolidated on the N206 and during peak hours, no detour traffic travels via the N441 through Wassenaar to The Hague.
        - This is also discussed within the same Council of State procedure.
        - The municipality of Wassenaar has a significant stake in this matter.
- Public Transport in the Area:
    - There was no consensus within the municipality of Leiden for the RijnGouwelijn because it involves a tram passing through the city centre where space is limited.
        - This means that there is no tram service to Katwijk.
        - It is stipulated in the governance agreement that there must always be the option to convert the line into a tram. Regional parties failed to agree on the terms on which making the line a tram was possible.
            - The MIRT exploration of the Leiden junction also suggests that a tram on the Leiden-Katwijk line should not be ruled out, but it is unclear what this entails. Could it be a reserved space that could otherwise be used for real estate?
        - The municipality of Katwijk does not want the tram to terminate at the boulevard, and the municipality of Leiden does not want the tram to pass through the city centre. Thus, you would have a tram from nowhere to nowhere, which nobody would use.
        - Nevertheless, politically no one wants to draw a line under the tram option once and for all. In practice, this may mean that when the bus lane is realised, additional costs will have to be incurred for later tramming. During the planning phase, it was examined whether trajectory could eventually be run with tram, and this appears to be the case. It was also decided not to make any additional investment for this. This means that viaducts, for example, will not be deepened or widened in advance.
    - A separate bus lane along the N206 was chosen for reliable traffic flow. The objective is to ensure bus operation even in case of traffic congestion.

    - Two bus stops are located at the edge of the residential area along the dedicated bus lane. There is a question whether additional residences or other facilities should be concentrated around the stop, to ensure social safety.
        - This is to prevent having just a stand-alone bus stop in the woods.
    - Significant investment is made in the stops to turn them into regional hubs where passengers can transfer.
- According to the zoning plan, the residential area of Valkenhorst should be car-light (driving at walking speed), with several high-speed cycling routes traversing the area. The zoning plan does not include strict parking requirements.
- The potential for nature conservation lies not necessarily within Valkenhorst itself but in the corridor from Valkenburg Lake to the dunes.
    - This corridor serves as green compensation for the Valkenhorst residential area.
    - The Mient Kooltuin (the strip along the N441) is currently owned by farmers and partly consists of vacant properties of old nurseries.
        - This area is part of the Land and Area program, which aims to transform it into a green, park-like zone through land buyouts, recreation, and serving as a buffer zone for the dunes.
            - The State Real Estate Agency is considering buying out landowners.
        - This aspect is still uncertain due to the complexity arising from multiple landowners.
    - Regarding the part adjacent to Valkenburg Lake, nature conservation will be implemented, although this officially falls outside the planned area.
        - It belongs to Wassenaar, Katwijk (partly), and the State Real Estate Agency.
    - There is also a search for a testing ground for the drones of Unmanned Valley, which ideally should be located in the same area. Is it feasible to combine this with nature preservation?
        - Everyone desires nature conservation, but not on their own territory as it does not generate revenue.
- Monitoring the use of the bus lane revolves around the number of passengers.

Policy integration

- Valkenhorst is a small village in terms of size, situated along an existing artery. The investments in the RijnlandRoute are expected to contribute to Valkenhorst's accessibility.
- Due to the nitrogen dossier, the plans for the residential area stipulate the necessity for zero-emission transport. This encompasses not only the new bus lane but also the new concession for the operation of the bus route.
    - The current bus concession expires at the end of 2024. The new operator from 2025 onwards must comply with this requirement.

- The municipality of Katwijk and the State Real Estate Agency also aim to establish a bus line towards Unmanned Valley.
    - If you aim to adequately unlock that area from a public transport perspective, you would need a decision preceding the zoning plan. This has not yet occurred.
    - Financing remains a topic of discussion. There is still no clarity on when, how, and what options should be pursued.
        - Partly because it concerns a former military site. This necessitates cleaning up the area, as there may still be ammunition in the ground.
    - The State Real Estate Agency is a ZBO (Independent Administrative Body) falling under the Ministry of the Interior and Kingdom Relations. There is a need to generate revenue from the area.
- Delays in the construction of the residential area do not affect the bus lane concession, as it is not a separate route. However, the operator of the South Holland North concession may choose to reduce frequency based on demand.
    - This flexibility is built into the concession. The operator is not obliged to run more frequently than the basic R-net service.
- The municipality of Katwijk comprises various villages, including the village of Katwijk, Valkenburg (located next to the N206 and Valkenhorst), and Rijnsburg. Therefore, it is challenging in discussions whether representatives advocate for the interests of the municipality or the village of Katwijk.
- There is some consensus regarding the residential area, for which the zoning plan has been established, but the relationships with the surrounding areas are complex. This is related to compensation for, among other things, nature, and meadow birds, which must be offset. However, parties hold different perspectives:
    - For instance, Wassenaar has long impeded development. The municipality mainly obtains the nuisance from the development (in the form of detour traffic) and not the benefits. They wield considerable power, despite the area not being under their jurisdiction.
        - Views of the districts differ. On the Wassenaar side, high end housing will be programmed. No urban densities will be realised here.
    - The village of Valkenburg also raises various objections. Its residents have been experiencing the construction of the RijnlandRoute for years, and now construction is underway across the road, with little benefit to them.
        - The N-road is not specifically widened for current residents.
        - Previously, they had a road with a view. Now, although they will have a sunken road, it will become increasingly congested, leading to emissions and noise pollution.
    - There is a dynamic of interests: when one party advocates for something, other parties retort with "then you should foot the bill." This procedural nature significantly prolongs the area's development.

B.4.4. Interview 4.4

Project

- The municipality of Katwijk and the Central Government Real Estate Agency (RVB) collaboratively developed an urban planning scheme during the preliminary phase. Calculations were made to determine the requirements for a zoning plan. In 2013, this resulted in an agreement for high-quality public transport.
    - This high-quality public transport, the dedicated bus lane along Valkenhorst, will soon be realised.
- The RijnlandRoute comprises various components, including a section near Katwijk, namely the N206.
    - The Tjalmaweg N206 near Katwijk has already been completed. This road is designed to accommodate the 5.600 homes.

Type of policy-making

- Valkenhorst represents, on one hand, an opportunity for development. On the other hand, it addresses the local, regional, and national housing agendas.
    - When considering the municipality of Katwijk, a lower number of houses is required to meet the demand compared to what is planned for Valkenhorst.
    - Early in the process, Katwijk committed to contributing to the regional housing task under several conditions.
        - One of the conditions is that road accessibility and public transport must be well-organised.
- Plans have been proposed for 10.000 homes in Valkenhorst. This was deemed excessive by local politics. Such a high level of urbanisation does not align with the surrounding areas. This resulted in a compromise of 5.600 homes and the associated area development (15 hectares of business activity).
- 2009/2010: The RijnGouwelijn did not proceed due to objections from the municipality of Leiden regarding a tram over the Breestraat. This led to the development of the R-net, which now includes the bus lanes, ensuring urban areas remain accessible.
    - ‘We will not implement the RijnGouwelijn, but something must be done to facilitate public transport.’
    - This resulted in an administrative agreement in 2013.
- The reason for extending the RijnlandRoute to the Katwijk section, N206 Tjalmaweg, is the Valkenburg housing location.
    - Some people advocate for further widening, as the N206 currently acts as a bottleneck. However, the municipality of Katwijk prioritises investment in efficient public transport and cycling routes.
        - You can travel at 80 km/h in the tunnel, but then come to a standstill until reaching Katwijk.
        - For the long term, it is important to first organise public transport properly, so that not every resident immediately needs to own two cars.
- In the long term, the municipality of Katwijk aims to upgrade the bus lane to a light-rail-like connection, as this would be even more efficient.

    - Katwijk will soon have 80.000 inhabitants and will be the largest municipality without a train station. This is a sensitive political issue.
    - The bus will operate like a metro, which is currently sufficient for a place like Katwijk.
    - In the village of Katwijk, the bus line does not have a separate lane. Here, houses are built close together, making it unrealistic to construct a dedicated bus lane.
        - The bus lane could circumvent the core, but this would place the stops far from the final destinations.
        - For Katwijk, it is more important that the section in Leiden along the Plesmanlaan to the station is reliable and that it allows for continuous travel.
- The municipality of Katwijk is committed to a sustainable, inclusive, and safe mobility system, aiming to minimise traffic-related disturbances.
    - The network in and around Valkenhorst will be designed to make cycling an attractive mode of transport. To support this, facilities such as a primary school will be included in the neighbourhood.
    - The plan for Valkenhorst incorporates low parking standards.
        - This approach encourages reduced car ownership and usage, preventing the urban agglomeration system from becoming congested due to inner-city housing developments.
        - Lower parking standards are feasible closer to high-quality public transport stops.
- The urban axis in the region will be densified. This improves the mobility profile as travel distances are shortened, increasing the likelihood that people will opt for alternatives to car travel. However, densification also complicates liveability issues.
    - It is crucial to maintain open spaces (outside the axis). Not all green areas should be built upon, ensuring that everyone retains a pleasant, green living environment.
- Traffic models are used for forecasts. These models incorporate all established infrastructure, expected socio-demographic data for the entire Netherlands (at a granular level), projected mobility behaviour, and its development. Plans can be input into these models to calculate their effects on the number of cyclists, public transport usage, and car usage, thus identifying potential traffic congestion and delays.
    - For example, in the area between Valkenburg and Valkenburg Lake:
        - There is an inquiry regarding the location of a large research institute. Various scenarios assess the impact.
        - 1: What are the needs? What types of housing? What kinds of businesses? How tall are the buildings and how many people will work there? → Several scenarios are developed.

        - 2: These scenarios are tested in the traffic model to determine what changes are necessary in the mobility profile or infrastructure to accommodate the plans.
            - This involves the layout of the site itself (e.g., as a campus) and the regional road structure.
        - 3: The results of the traffic model in terms of delays (and side effects such as rat running) are compared with standards to determine necessary measures.
    - Mitigating measures for Valkenhorst have been based on model calculations of traffic flows.
        - Policy-wise, the goal is to improve, but legally it is about mitigating negative effects.
        - It is essential to ensure that traffic flow remains as smooth as it was before the houses were built.
- Citizen participation played a significant role, especially in the initial stages.
    - Initially, 10.000 homes were planned. The residents expressed their disapproval, as this would make Valkenhorst four times the size of the existing Valkenburg, leading to a massive influx of inhabitants.
        - The regional housing crisis versus the needs of a village.
    - This feedback was gathered through municipal council sessions and community meetings. Stakeholder organisations were engaged in one-on-one discussions.
    - The separate bus lane and the Tjalmaweg are being constructed under a provincial integration plan (zoning plan of the province). Despite the land being in the municipality of Katwijk, Katwijk does not have the authority to make the decision.
        - Therefore, the province is responsible for community participation and addressing public input.

Policy integration

- Sequence of public transport and housing development:
    - There has long been a focus on the accessibility of urban areas, and HOV lines fit this context. In the 1990s, significant attention was given to bridging the scale gap between transport systems.
        - Successful examples: the Karlsruhe area (inspiration for Randstadrail and RijnGouwelijn).
        - During the studies on RijnGouwelijn, housing development in Valkenhorst was not yet a concrete issue. The focus was on the accessibility of urban areas.
        - Initial ideas for HOV concerning R-net were not linked to housing development.
            - All levels of government were involved in this process.

    - Gradually, housing development became part of the equation. It is an interplay between the design of the neighbourhood and the infrastructures being established.
        - The neighbourhood design focuses on sustainable development with low car ownership and considerable attention to cycling.
        - Road structures in the neighbourhood are aligned with the HOV stops.
    - Legally, the Tjalmaweg is linked to housing development.
    - At the last moment, HOV was also added to the zoning plan as a mitigating measure.
        - The zoning plan states that HOV is necessary for housing development. The line was added as a conditional requirement afterwards.
        - Traffic studies and Environmental Impact Assessments indicated that housing would generate additional traffic unless certain measures were taken. One such measure is the realisation of the HOV line.
- Up to implementation, the widening of the N206 Tjalmaweg and the separate bus lane were separate projects.
    - A significant amount of money could have been saved if these two developments were combined into a single project.
        - Example: A temporary road was constructed to realise the sunken position of the N206. If the bus lane had been constructed first, it could have served as the temporary road. This resulted in considerable extra costs and inconvenience.
    - The reason for this is that both projects had separate decision-making processes, separate project organisations, separate planning procedures, and separate implementation organisations.
        - The province is responsible for both the bus lane and the widening.
        - The municipality of Katwijk has an interest in both projects, providing input and such. The same people within the municipality are involved in both projects.
- Coordination within the Municipality of Katwijk:
    - The housing department is responsible for housing forecasts (based on analyses of target groups and needs) for the next 10-20 years.
        - This also applies to business locations and is conducted both regionally and locally.
    - The mobility department has a vision for how the mobility system should develop.
    - Other departments are involved, such as those handling green spaces and climate adaptation.
        - Example: the task of capturing peak water during heavy rainfall.
    - It is easy to work in silos, but housing forecasts and mobility developments must be regularly compared, and plans adjusted accordingly.
        - This is an iterative process.

        - Many elements are interconnected in the urban environment, making it complex.
- In the region (part of Holland Rijnland), a vision for the development of the urban axis (perpendicular to the old line) has been developed, as it is a single urban agglomeration from Alphen to the coast with Leiden as the central hub.
    - This helps determine where interventions are needed.
    - The municipality of Katwijk attempts to coordinate with other municipalities to avoid all building at the same rapid pace.
- There is no overarching plan for the area. However, there are administrative agreements with process arrangements.
    - These are supported by project groups.

B.5. Decision-making process Merwedekanaalzone

This appendix covers interviews on the decision-making processes for Merwedekanaalzone. This includes both mobility and housing decision-making. The interviews are presented as bullet summaries and aim to provide insight into the projects, the type of decision-making process, and the degree of policy integration of the Merwedekanaalzone case.

B.5.1. Interview 5.1

Project

- New concept for parking: for some of the residents of the Merwedekanaalzone, there will be a place in the Mobility hub XL (in Papendorp) or at P+R Westhaven. There will not be a parking spot for everyone.
    - P+R facilities are closer for residents, while those for city visitors are located farther away at regional hubs like Breukelen or Driebergen-Zeist.
    - The Merwede area has been particularly advanced in implementing this new concept, with ongoing efforts for several years.
- An investigation was conducted initially for the entire network in Southwest Utrecht, considering new housing developments. The outcome indicated the necessity for a major upgrade in public transport. Consequently, a MIRT exploration was initiated for the Merwedelijn, titled 'OV en wonen Regio Utrecht'.
    - For a long time, a metro line has been one of the options, but the cost is very high for the numbers of people in Utrecht. Now there will probably be a tram.
        - The preferred decision is expected by the end of 2024, although impending budget cuts raise uncertainty over project continuance.
- In the coming years, a monitoring programme will be set up to track the effects of the car-free area development in the Merwedekanaalzone zone, among others, and adjust if necessary. And to collect 'evidence' for the various innovative mobility concepts.

Type of policy-making

- There is always a tailor-made approach for an area, outlining a vision for the area and working out several scenarios for housing development. There is a discussion (also in the Council) about what is desirable and what the potential effects for mobility are.
    - This involves, among others, looking at traffic movements and broader environmental effects and then choosing the desired/feasible amount of housing. This choice is the ‘Programme’.
    - Subsequently, a traffic study evaluates the district's development effects, informing decisions and accompanying measures for traffic and flow.
    - Once the project is executed, monitoring of its effects lacks a standardised approach but aims to inform future area developments.
- Impacts of the area development are primarily about additional traffic movements based on key figures.
    - Calculations at the front end are pretty rough and outline of the plan.
    - Key figures on the number of cars per household and how often people go out are used to determine the impact of the area development on traffic movements.

On this basis, an estimate of the number of additional vehicle movements is made, which is done for all modes.
        - Bicycle congestion is also an increasing problem in Utrecht.
        - For public transport, in case we build a bus lane or a tram, what are the effects on traffic flows?
    - Other effects such as for the environment and energy consumption are derived from traffic. Traffic is used as input.
    - There is also a focus on green spaces and biodiversity, which are increasingly important issues.
    - Ultimately, you would also want to know a bit about behaviour and how concepts such as low parking standards and shared mobility affect this.
        - You do not know what exactly the people who are going to live in the Merwedekanaalzone want. Do they still need a car if you facilitate proximity and alternative modes of transport? Will parking spaces be used? Cannot be estimated but is important to monitor in the future (to adjust).
        - Still needs to be made measurable.
- MIRT exploration 'OV and living in Utrecht Region' is aimed at the liveability of new and existing residents of Utrecht Southwest.
- Plan/ideas for monitoring:
    - A baseline assessment is currently underway, based on sensors and similar movement counts.
    - Residents are not yet involved in this, but their perceptions can be sought later.
    - Project-based approaches are common here as well. While the focus often lies on construction realisation and specific traveller numbers, broader perspectives are desired, which are currently not fully integrated into the system.
        - Clear agreements exist regarding demonstrating realised outputs but scoring against policy objectives (outcomes) could be further professionalised. Nonetheless, awareness of outcomes already exists.
    - Annual monitoring of standard benchmarks is conducted. However, separate studies are required for adjustments. For Groot Merwede, measurement points are currently being established for the next 15-25 years.
        - Uncertainty remains regarding threshold values and timing for adjustments, given their political sensitivity.
- Broad prosperity is not a goal in itself, but broad objectives are considered in other ways. Many tools exist for broad assessment, but measuring effects and considering distributional impacts remains challenging.
    - Which groups are distinguished and are logical to consider? Does this vary per project, or can the same groups be identified?
    - For each issue, it should be examined which indicators are logical to include. This is partly political, but also requires societal consideration.

Policy integration

- There is a Mobility Plan 2040 in Utrecht that integrates mobility with other urban challenges. This plan addresses how we can facilitate other challenges, such as housing, through mobility.
    - It also outlines the municipality of Utrecht's aspirations for the living environment.
    - Mobility is used to create space for other functions.
        - This entails promoting forms of transport that occupy little space, such as cycling, walking, and shared mobility, while discouraging car traffic.
        - Various measures are being considered, such as abolishing parking spaces and increasing parking fees. Parking solutions such as Park and Ride (P+R) locations are being developed to address the growing demand for mobility.
- Within the region, under U Ned, there is a regional collaboration programme called 'Utrecht Nabij'.
    - It aligns with Utrecht municipality's Mobility Plan 2040 to prevent growth in car traffic.
    - For this purpose, parking policy and hubs in the area are crucial.
- Merwede is a relatively large area with many residences, providing a large scale to work with.
    - Additionally, densification is happening in Utrecht, including areas like Papendorp and Groenewoud.
    - Therefore, it is important not only to consider the project but also the entire area.
    - Concerns from Rijkswaterstaat are that all traffic is being pushed towards the ring road, leading to issues on the ring road.
- It is uncertain whether conditions have been imposed on the housing development of the Merwedekanaalzone regarding the construction of a HOV connection.
- The focus is on a larger area of the city and not just the neighbourhood.

B.5.2. Interview 5.2

Project

- AM is one of the developers of the Merwedekanaalzone.
    - In 2017, AM purchased land from a land investor with the aim of remaining involved until construction is completed.
        - The land investor buys land to wait until its value increases and then resell it, while AM does not intend to sell it in the same condition.
        - The development of the land can take the form of housing or various other types of buildings, such as commercial or societal functions.
    - End of 2017: Commencement of discussions between developers/landowners and the municipality of Utrecht regarding the optimal plan for mobility management.
        - It was quickly determined that this is a unique task (it is one of the largest urban tasks) and that collaboration is necessary.

        - "Together what must be done together, alone what can be done alone".
    - 2018: Collaboratively shaping the best city
        - The municipality of Utrecht, both in terms of private and public law (as the owner of a portion of the land and from the public interest perspective), and all owners/developers in the area.
            - There was only one change in land ownership thereafter, but the agreements were adopted by the new party.
    - 2018 and 2019 saw intensive collaboration between the municipality of Utrecht and market parties in working groups for mobility, sustainability, liveability, quality, housing programs, and more.
        - A plan was developed based on the working groups, encompassing all requirements and ambitions in a joint package that is achievable.
        - The municipality of Utrecht requested the plan to be formulated as a package.
        - End of 2019: Package offered by market parties to the city: 'Offer to the city'. The municipality used this offer as a starting point for negotiations.
        - Subsequently, market parties were compelled to be even sharper and more ambitious after collaborating in the working groups.
    - After sharpening and negotiation: term sheet signed by municipality and developers.
        - Partially outlined and partially detailed.
    - After further sharpening and negotiation (2019/2020): cooperation agreement forming the basis for the zoning plan.
        - This zoning plan is still pending approval by the Council of State, which is delaying the development.
        - The cooperation agreement was concluded during a period of economic prosperity, allowing market parties to be more ambitious. However, from 2021-2023, house prices declined again, making it difficult to realise the detailed ambitions.
    - 2019: Environmental vision with mobility concept for Merwede.
    - 2022: Adoption of zoning plan.
        - It is the spatial mutual assessment framework that the plans must comply with.
    - 2025: Construction of the first homes.
    - 2027: First residents in the area.
- The Merwede Canal Zone consists of several areas. In Merwede 5 (Groot Merwede), the car-free district, 6.000 homes will be built with a low parking standard.
    - In Merwede 4, all residents will be able to park their cars, making this a very different mobility issue.

Type of policy-making

- A developer operates at risk. The objective is to create a pleasant place to live, work, and recreate, but there must be a feasible plan, both financially and socially, as well as environmentally sustainable, among other factors.
    - The developer does not construct themselves but pays a fixed amount to build the development.
- On the grounds of Merwede, there were among others old logistic buildings. These were demolished to create a residential area within Utrecht.
- Complexity of the Merwede area:
    - A significant urban task close to the centre of a G4 city.
    - There is a high demand for housing. Hence, the choice to achieve high density.
        - Not just row houses, as this would only yield a few hundred homes. The goal is to provide more housing to address the city's housing demand.
        - The stakeholders aim to alleviate the housing shortage in Utrecht, and Merwede presents a unique opportunity for this purpose.
    - Different demographics need to be housed in the area, but in a qualitative manner, ensuring a liveable environment.
        - AM adheres to three themes: move to climate positivity, design for well-being, and create social impact. This pertains to sustainability, circularity, healthy urban living, inclusivity, and similar themes.
    - Achieving high density in a qualitative manner necessitates a different approach.
- Reasons for a car-free district:
    - 1: Demand for high density with all associated complexities.
        - This concerns the space available in the area. To achieve the desired quality of living, the public space should be as green as possible instead of used for roads or parking cars.
    - 2: Environmental Impact Assessment and the capacity of surrounding roads.
        - This concerns the capacity of the A12 exit and also the Europalaan. There is insufficient capacity for 6.000 homes, each with two parking spaces, and the associated traffic movements.
- The Environmental Impact Assessment indicates that 800 parking spaces will be available in the area. This is the given framework. Within this framework, the aim is to design the most efficient system possible to enthuse future residents or owners.
    - On one hand, this is to create a very pleasant living environment. On the other hand, it is also for us to be able to sell those homes later.
    - The district is not intended for people who want to own two cars. However, it must also cater to those, for example, paying 1.5 million euros for a penthouse and desiring to have a car (parking space).
- Energy considerations: For example, either a small heat pump within each plot or a few large heat pumps for the entire area. The latter is more efficient but requires cooperation.

- Mobility considerations: For high density with many people living close together, high-quality public space is necessary. Considering the current traffic network capacity (including planned high occupancy vehicle lanes), a maximum of 1800 parking spaces can be accommodated. Thus, a new mobility concept is required.
    - Rule for high-quality public space: "It is green unless ...".
    - Every inch of underground space must be utilised. Part must be used for drainage and cables, and the rest for plants and tree roots. This means roads cannot be constructed as conventionally done.
    - Bicycle and pedestrian paths are necessary, and the area must be accessible to ambulances, but no space is allocated for parking cars or allowing cars to drive. Hence, the choice for a car-free district.
    - If creating a car-free district, consideration must be given to the Europalaan (the main road alongside the district in a north-south direction). When exiting this road, people should be able to park immediately, without traversing through the district first. Therefore, the few parking garages that do exist should be situated directly on the Europalaan.
        - One does not want too many exits from the Europalaan.
        - These parking garages or mobility hubs will be located at three points, 30 meters from the Europalaan.
    - Parking permits will be introduced in surrounding residential areas to prevent congestion from parking due to limited or no parking in Merwede.
    - P+R locations are necessary near the highway as staging areas for those not parking in the area itself. This is for residents and visitors.
    - Additional questions regarding the low parking standard and mobility concept:
        - How to manage the available parking spaces? Will parking spaces in the area be sold? How to facilitate double use? How to guarantee someone a space? What are the costs of a parking management system, and who bears these costs?
            - The outcome is that individuals can subscribe to a parking right in the garage. Parking spaces are not purchased.
            - A mobility company has been established to manage this.
        - How to deal with shared mobility?
        - How can an ambulance enter the area? Can a parcel delivery service enter the area? How is waste collected?
        - How to facilitate connectivity for pedestrians and cyclists in the area? How do they access the city centre or their workplaces?
            - Bridges will be constructed over the Merwede Canal.
            - The potential inconvenience these bicycle bridges may cause in surrounding neighbourhoods has been a point of discussion. The discussion revolves around where they will be located and how many will be built.

        - Note that 6.000 homes equate to the size of a medium-sized village being added to the city.
- Specific considerations for public transport:
    - The responsibility for organising public transport primarily lies with the municipality of Utrecht.
    - Given the mobility concept and the low parking standard, an HOV line is necessary.
        - The municipality of Utrecht also aspired to establish an HOV line.
        - HOV entails having a rapid bus service every 5 minutes, or preferably a tram or metro along the Europalaan directly to the station and, on the other side, to a P+R location.
        - Therefore, there must be stops bordering the area for the mobility concept to succeed.
    - The HOV line could evolve into a metro line, tram line, or rapid bus connection.
        - A metro is ambitious but would provide the best connectivity.
        - Initially, it might be implemented as a rapid bus line. A metro line may be introduced later. This also depends on the growth models of the area. The population of the area will increase over time.
            - The environmental permit for a separate bus lane on the Europalaan is now in progress.
        - This point is being examined in a MIRT exploration of the Merwedelijn due to the magnitude of the investments.
- Agreements were made at an early stage regarding sustainable development. Hence, there is less flexibility later on. This may result in:
    - Sustainable ambitions being impractical in practice.
    - Being sustainable on certain aspects but not holistically sustainable.
        - For example, the energy requirement and the number of solar panels necessitate more panels than can fit on the roof, requiring steel structures.
    - In hindsight, it may not have been necessary to detail all agreements in advance.
- Evaluation and monitoring will be carried out with the assistance of the mobility company, ensuring continued involvement of various parties. The exact nature of this process is yet to be determined.

Policy integration

- The developer coordinates with all possible actors and stakeholders, of which the municipality of Utrecht is a key one.
    - The developer seeks advisors, architects, installation consultants, sustainability experts, a builder, and others for the development, and ultimately, end-users. End-users may include investors seeking rental properties, supermarket chains desiring ownership of a supermarket, or individuals seeking to purchase a home.

- AM is involved in 1/5 to 1/4 of Merwede 5. There are other developers in the area, including the municipality of Utrecht.
- To achieve high density, intensive collaboration is required for various subjects, including mobility and energy.
    - Often, different developers on a plot each pursue their own plan within their own plot. However, certain aspects need to be addressed across plots to realise the best plan in a qualitative manner.
    - Not everything is done collaboratively due to complexity. In addition to urban development plans, image quality plans, zoning plans, and environmental plans, two topics are jointly developed: energy and mobility.
        - Energy: How can we build sustainably and best utilise geothermal energy?
        - Mobility: How can we facilitate and realise high-density mobility?
    - Collaboration and agreements for mobility concern: Where should mobility hubs be located? Who will realise the hubs? And what will the reimbursement structure look like?
- The cooperation agreement is typically concluded between one developer or market party and the municipality. For Merwede, the cooperation agreement was signed between all market parties and the municipality of Utrecht instead of one-on-one.
    - The municipality of Utrecht wanted to outline and document everything upfront for all parties equally.
    - This is beneficial for reliability but challenging for further development.
- The mobility company for mobility in the Merwede area:
    - The developers and the municipality of Utrecht are long-term owners of the mobility company. It will be a private limited company.
        - This is a new concept. After 10 years, the municipality will become the sole owner of the mobility company.
        - This way, developers can ensure that future residents have satisfactory parking rights in the long term and share in the risks of the exploitation.
    - The mobility setup incurs significant costs. The municipality purchases the parking spaces and leases them to the mobility company. The mobility company hires an operator to organise it practically.
    - The mobility company also makes agreements regarding shared mobility, logistics supply, and parking rights.
        - These agreements concern: How long are parking rights valid? Who receives the rights?
    - The company's structure is jointly developed and is novel.
        - In other places, an area development company (GEM) has been established. It includes the municipality and developers, each contributing their land to jointly develop plans. This is at a joint account and risk.

        - The general collaboration outside the private limited company is a hybrid model, more akin to a public-private partnership, where not everything is consolidated.
        - A characteristic is an owners' collective, which meets every two weeks to coordinate agreements.
            - In the past, there have also been 2- or 3-day sessions to discuss numerous topics.
            - The collaboration is very intense. The task demands societal value and monetary investments. On the other hand, there is a lot of joint organisation, which incurs significant advisory costs.
                - With slightly fewer regulations and more upfront flexibility and trust in each other, perhaps not as much time and money would need to be invested, leading to more efficiency.
        - Developers are also participants in the energy company.
        - The mobility private limited company is a new business model/collaboration model.
    - Organisation within this company:
        - Each party has a share in the mobility company, their voting share is proportional to this.
        - Collaboration between developers and the municipality in time becomes less intensive and more at the steering group level, meeting every few months to evaluate and recalibrate.
            - External advisors can also be enlisted for this evaluation and recalibration.
        - A mobility director will be appointed for day-to-day operations. The company will become a fully-fledged entity with its own staff.
- Developers do not influence whether an HOV line is realised.
    - In the minutes of meetings, it is documented that an HOV line will be implemented, but private parties do not have formal influence over this.
    - This is not necessarily a concern, as the municipality also has a significant interest in a good HOV connection.
    - The HOV line should be operational upon the delivery of the first homes; otherwise, people cannot access their homes properly.
- During the preliminary phase, there was also much coordination with Rijkswaterstaat for the highway's handling. The Environmental Impact Assessment has shown and supported that there are no issues, leading Rijkswaterstaat to approve the plan.

B.5.3. Interview 5.3

Project

- In total, 10.000 residences will be constructed in Merwede, of which 6.000 will be located in subarea 5. Subarea 5 is characterised by its high density and low parking standards. No more than 1.800 parking spaces can be accommodated.
    - End of 2024: commencement of construction
    - 2027: first residences

Type of policy-making

- The reason for the low parking standards and discouragement of car usage was that the city already surrounded the district. It was a strict prerequisite. Additionally, this aligns with policy ambitions to promote healthy urban living.
    - Merwede is typical of many current large-scale area developments. Previously, with the VINEX districts, construction expanded outward, but now it is focused inward, leading to increased density.
        - Densification occurs partly on former industrial sites that were once on the city's periphery but are now centrally located.
        - There is a realisation that these areas can be repurposed.
        - As a result, the (automobile) infrastructure leading to these districts can no longer be expanded.
        - Thus, it is necessary to promote reduced car usage, which has always been a starting point for Merwede.
    - Healthy urban living entails increased active mobility, space for green play areas, and similar amenities.
    - Traditionally, when developing a district, a minimum parking standard is applied to ensure that surrounding areas do not experience inconvenience. In Merwede, a maximum parking standard is employed. It must be demonstrated that sufficient mobility is provided to future residents and that inconvenience to surrounding districts is prevented.
        - Inconvenience can be prevented by implementing paid parking. This is not difficult, but it is politically sensitive. Nevertheless, this is being introduced in the surrounding areas.
    - The infeasibility of a higher parking standard facilitated the ambitious development of the district. More parking spaces would result in increased car traffic, which would overwhelm the traffic system.
- To ensure the minimum amount of mobility required by people, the STOMP principle (walking, cycling, public transport, MaaS/shared mobility, private car, in that order of priority) is employed.
    - An important measure in Merwede is that all daily amenities (supermarket, primary school, daycare) are located within the district. These facilities are generally closer than car parks and can be accessed on foot. This prevents much unnecessary car travel and movement.

        - This is an inclusive measure that everyone can utilise. It makes amenities accessible to all.
    - Weekly amenities (sports, culture, and hospitality) are partly within the district, but must all be within cycling distance. Additionally, there are ambitious bicycle parking requirements.
        - High-quality bicycle storage facilities will be provided near residences. Investments are also being made in cycling infrastructure along and through the district.
        - Two additional bicycle bridges over the canal will be constructed, eliminating this barrier to the rest of the city, making it easier to cycle to the city centre.
    - For public transport, investment is being made in a high-quality public transport lane, which is hoped to eventually accommodate a tram or metro.
    - There are very high-level ambitions for shared mobility compared to existing neighbourhoods in Utrecht and elsewhere, but not extreme compared to other large-scale area developments anno now.
    - The inner part of the district is car-free. This significantly enhances the district's liveability. Private cars, along with shared cars, are housed in hubs or parking garages at the district's edge. This is along the Europalaan on the district's west side.
        - The design of the parking garages is not the challenge; rather, the ownership and management are challenging.
        - Built parking is necessary to enable concentrated development. Built (indoor) parking is much more expensive than creating a parking space on the street. Additionally, the government wants control over the management of the spaces due to public objectives.
            - One might suggest that the developer should bear this cost, but this would leave the developer with less money to realise sustainable ambitions, install greenery and solar panels on roofs, or design attractive buildings.
            - Consequently, the parking spaces themselves become very expensive. One cannot purchase a parking space but can subscribe to one, costing around €250 per month, which still does not cover costs. A shared car provider would also not want to pay this amount and thus would not offer services in this location.
            - Disabled individuals have no choice and need a dedicated disabled car for transport. How much can be reasonably asked of these individuals for a parking space?
        - Governance issue: Who owns the parking space? Is it private, public, or something in between? Who manages it? If management is necessary, leading to less profitability, who bears the cost?

                - Many public values are realised in public spaces. However, the parking garages are internal and therefore privatised.
                - In area development, developers and government agencies are accustomed to thinking in terms of one-time costs and balanced budgets. It costs x to build, and you get y in return upon sale. This does not align with the ongoing cost of a parking garage.
                - By designing the area and the parking garage in this way, value is created, but no direct revenue is generated. The entity that benefits from the value does not necessarily need to be at the table, and the value might not be monetised.
- A HOV line will be developed for the Merwedekanaalzone. The HOV line, in the form of a tram, is not a prerequisite for the realisation of Merwede.
    - A dedicated bus lane will be constructed along Europalaan, enabling HOV bus transport to and from the station and in the opposite direction.
    - Various plans have been made for an HOV line, and it was later revealed that a MIRT exploration into a tram connection is being conducted.
        - Because Merwede is not far from the station, travel times will not significantly differ whether the connection is a bus, tram, or metro. However, the travel experience may vary.
        - The metro line is relevant for the development of the A12 zone.
        - Nonetheless, the housing numbers in Merwede are used as an argument for the metro line (at the national level).
            - Merwede may benefit less from the metro line in absolute terms than neighbourhoods further away from the station (such as the A12 area and Rijnenburg).
        - This line poses a risk to Merwede because there is insufficient budget to optimally realise the metro (entirely underground).
    - The line only connects to the train station, while only a small part of the population travels by train daily. For the average Merwede resident, it is more important how easily one can travel by HOV to the Science Park or Papendorp.
        - The current HOV system is oriented towards the station. Therefore, attention is needed for infrastructure to and from workplaces located in a circle around the outskirts.
            - There is a risk that the metro will run at high speed at ground level alongside Merwede. This will hinder the east-west cycling connection, pedestrian flow, and green corridor.
- Requirements have been set for greenery in private areas of the district. All greenery in public spaces will be developed by the municipality.
    - The fundamental starting point is it is green unless otherwise specified. The district is essentially a park with paths running through it and buildings located within. It is not a hardened district with occasional green patches.
    - Biodiversity and ecosystems are taken into account.

    - This is expensive to implement and maintain and is complex. The advantage is that because so many houses are being built, all paying property tax (OZB), the cost per household for maintaining this public space and extensive greenery is relatively low. It is very high per square meter, but it balances out in the municipal budget.
        - Internally, it is challenging that this money is allocated to a different part of the budget.
- €250 per month for a parking space is not inclusive or accessible for everyone. Therefore, remote parking is available.
    - Research has been conducted into what an average household in Utrecht spends on mobility (depending on income). The top 25% can afford this price, but the bottom 75% cannot. On one hand, a high price can contribute to the mobility transition, but it is not very fair.
        - Higher incomes are often less dependent on the car to perform their work.
    - For the vulnerable group that sometimes needs a car but cannot afford the high costs, remote parking is available. This is a reverse Park & Ride location, for which a cheaper subscription can be obtained.
        - The location is 1-2 kilometres from Merwede and is accessible by bicycle (10-15 minutes) and bus.
- Two factors have influenced the process:
    - 1: For the Merwedekanaalzone project, there was no other area in the Netherlands developed in this way. Therefore, the municipality's policy was insufficient, and much policy was created during the project.
        - The wheel is being invented during the process.
    - 2: All the land was already privately owned. This means that the government could enforce fewer requirements.
        - The municipality could not design a residential area upfront and impose conditions and then put these demands to the market.
        - Throughout the entire plan and process, all parties had to agree. All design choices were negotiations.
            - This makes the process lengthy. Many decisions are postponed until a compromise must be reached.
            - It is impossible to agree on everything at the beginning, as it is not yet clear what will be realised.
        - This results in very limited flexibility, making it politically complex. The council eventually receives a negotiated result, which is already a compromise. The council may not agree with it, but there is little room to change it other than paying for it themselves.
            - This was done for the costs of disabled parking spaces.
- Mobility studies and research were conducted at several moments. These independent results contributed to the acceptance by the various involved parties.

    - The first was when the plans became more concrete. At that time, a traffic and systematic analysis was conducted to determine the number of cars and parking spaces that could be accommodated.
        - This resulted in a technical advisory report.
    - Later, when it was known how much space there would be for cars, a second report was written about the logistics. How should the concept be organised?
        - The mobility concept was already known.
        - Logistics were included in this research.
        - The mobility company was proposed in this report.
    - Even later, the link between the average income of people and the proposed mobility options was examined. Where are the gaps or risks? Attention was given to distribution effects.
- Two bicycle bridges will be constructed over the canal to the east of the district, along with an infrastructure network around it. These are choices made by the municipality of Utrecht based partly on the urban planning concept for which the bridges are needed and partly on the policy ambition to improve the cycling network and promote cycling.
    - An earlier proposal was to construct three bridges. There were objections from two quarters: canal users (e.g., rowers) for whom the bridges would be barriers, and residents across the water who feared the negative effects of additional cyclists in the small streets.
        - People on the other side are somewhat inconvenienced by the new district but can also use and benefit from the new amenities.
- Several community meetings were held. Standard procedures were followed, but it was legally and planning-wise promised to monitor what happens. This monitoring is both quantitative and qualitative.
    - People were asked how they viewed the plan's development and how they would react to a district where they can no longer own their own car. This input was used. However, you only really know what people think once they experience it. You only truly understand their views once the district is built and there is little room for adjustment.
        - It is still relevant information for future developments.
    - It is not just about counting cars but also measuring whether people experience mobility poverty or happiness.
    - This monitoring still needs to be developed further.

Policy integration

- The municipality does not have a dedicated fund to structurally finance societal goals across all themes. There is no money available to provide subsidies to third-party services. This is why a mobility company has been established. Through this, societal goals and public values can be safeguarded.
    - The company is a public-private partnership between the municipality and all developers involved in the area. It is a limited company (B.V.) and thus a commercial enterprise.

    - All parties with a stake in the area, meaning land ownership, are shareholders in the mobility company in proportion to their ownership.
    - The mobility company is responsible for the operation of the hubs, including all shared mobility, visitor management, bicycle parking, and more. The company manages the system.
    - Funding for adjustments must come from the shareholders according to their shares.
    - There is tension between focusing on societal contributions and the economic responsibility of shareholders.
        - Ultimately, it is fair because all parties that benefit from the high-density concept and make money from it are also partly responsible for the costs associated with the mobility system.
    - The mobility company employs a mobility director whose task is to independently manage the mobility offerings.
- Apart from the municipality of Utrecht and developers, no other parties are involved in the Merwede 5 project. It is fairly inward-focused.
    - However, parties are legally confronted with external stakeholders through individuals who initiate legal proceedings against the zoning plan.
- Parties involved in the Merwedekanaalzone are not directly involved in the MIRT exploration of the Merwedelijn (tram). They are kept informed of developments and their opinions are solicited.
    - Another team from the municipality of Utrecht is more intensively involved.
- Many lawyers are involved in negotiations and agreements between the municipalities and private parties. Lawyers assist in drafting all agreements.

B.6. Governance design

This appendix provides the outcomes of the focus groups about the governance design. The focus groups were interactive sessions with various stakeholders. One focus group was conducted with policy officers of the Dutch ministry of Infrastructure and Water Management and others involved in broad prosperity theory for mobility. The other two focus groups and the interview included participants from municipalities and knowledge institutions, among others, who are actively engaged with the topic of broad prosperity in their work.

The bullet summaries allow validation and generalisation of observations from the cases. Above all, the sessions provide insights into a governance design for mobility decision-making that allows for a broad consideration of values.

B.6.1. Interview 6.1 (focus group)

Conceptual framework

- Issue
    - Conventional Approach: The focus is on accessibility rather than necessarily on congestion.
    - On one hand, there are bottlenecks in the road network, and on the other hand, there are opportunities and threats. The conventional approach limits mobility to its core tasks, while the broader welfare perspective views mobility as part of a larger whole.
    - The most significant difference between the conventional approach and broader welfare is the definition of welfare. From an economic perspective (conventional), the definition differs.
- Effects
    - It is not entirely accurate to say that we now only make decisions based on objective measurements, but we do believe that the decision-making information is objective.
    - The conventional approach focuses on traffic engineering effects, while broader welfare also considers other effects. Even with the current approach, other effects are often made visible, but they are not used in the deliberation. A conventional approach assesses whether the bottleneck is resolved and whether funds are available.
    - The conventional approach emphasises hard, quantifiable aspects, whereas broader welfare also concerns the softer aspects. Quantification is done by expressing effects with a single metric. The softer aspect also pertains to how you make, describe, and argue the considerations.
    - It is not true that first everything went into hard, quantified, capitalist magnitudes versus now soft, broad, inclusive prosperity. As a politician and top official, you score with big projects and not maintenance and getting capacity up to standard.
- Trade-offs

    - The conventional approach is not solely utilitarian. Even with a conventional approach, multiple considerations are used; the difference is that this is done unconsciously. Utilitarianism does, however, dominate.
    - In a broader welfare approach, you also consider your own assumptions and are aware of the assumptions on which you base your alternatives.
- Process
    - Even with a broader welfare approach, a task can be structured as a project.
    - The broader welfare approach may be more participatory, but the minister or other official still makes the final decision. However, broader welfare allows for more flexibility and less predetermined outcomes. This also affects the point in the process at which there is citizen involvement.
    - Traffic models still have a role within broader welfare. People are always looking for information that can help in decision-making. It is simply about how you apply and use the models.

Case observations

- There is a distinction between a local issue involving a single municipality and a regional issue involving multiple municipalities and administrative layers. When more parties and interests are involved, the discussion focuses on those interests, leaving less time and space in the process for other broader welfare dimensions.
    - Comparing local and regional issues is challenging, but multiple partners complicate the process.
    - In larger municipalities or a Transport Region, hundreds of people are engaged with an issue. There is more consideration, but it is harder to reach decisions. In smaller municipalities, an official may devote one day a week to mobility and other days to other topics. While less extensive consideration is given to the issue, broader welfare is more practically applied.
    - When someone has a specialised task, they automatically consider it the most important. When handling multiple dossiers, one views a problem from various perspectives, becoming more adept at thinking from different interests, thus more easily utilising broader welfare.
- Citizen participation is seen as a checklist item.
    - Other tools are also seen as items to be checked off, such as the policy compass within the Ministry of Infrastructure and Water Management. This may be because people do not perceive their added value.
    - It is important to determine upfront why you want citizens to think along with the issue or why a policy compass should be completed. What does it add to my project?
    - Additionally, one must be willing to act on the influence and input of citizens. It should not be a checkbox to justify something you were already planning to do. This sometimes happens.

        - The timing of participation is crucial. Example: the PWE Lelylijn project at a stage where the decision had already been made to proceed, but it was not yet time for citizens to provide input on the design.
    - What is done with participation input depends heavily on who the project leader is, as well as the municipality and official behind it.
        - Government organisations work from the inside out and tend to explain what is happening during participation, while citizens experience what is happening.
        - "We have identified a bottleneck. We have determined from expertise that this and that is happening. And we will discuss with the citizen how to resolve this bottleneck in a way that..."
        - Participation should focus on the citizen's experiences, not the problem as seen by the government.
    - The challenge of participation: There is a significant gap between the solutions offered by the government and the feelings of the citizens. The government's solutions never align with the citizen's feelings about what mobility and policy do to them. Therefore, this link can never be made in such a citizen participation process.
    - The same type of people always participates in these processes. It takes energy and time to engage people.
- The establishment of a joint company for public value that needs to be created.
    - This is a very old idea. For the tunnel in The Hague, there was also a public-private partnership with pension funds.
    - In Korea, it happens more often for the development of entire neighbourhoods. These neighbourhoods are in the hands of a huge company, creating lock-in for citizens. This is good for value capture but less for freedom and competition (two things valued in Europe).
- Sustainability as a given condition.
    - Within Rijkswaterstaat, 'Everything we do, we do sustainably.' This ensures that calculations are made for every project to reduce environmental impact.
    - Construction before and after 2015 is radically different due to conditions set up front and in the requests.
    - Other examples where values as conditions have significant impact: public health after the war (windows must be able to open), COVID.
- For some projects, the first step is to decide what they want to do in an area and then produce traffic evidence to support it.
- In many projects, the focus is on acting in the interest of 'our' entity: our municipality, our district, my constituency, my party, myself personally. So, when Rijkswaterstaat proposes something and offers substantial funding, it is also an opportunity to achieve various objectives.

Application mechanisms

- Enhancing

    - Assigning a person within the project team to be responsible for a value such as nature, biodiversity, etc.
        - Sustainability is interpreted in various ways. Within Rijkswaterstaat, it involves reducing CO2 emissions, reducing materials, and promoting circularity. Therefore, it is important to define this clearly from the outset.
    - If the use of a framework is driven politically or administratively, it occurs more frequently. If it does not happen bottom-up, then it must happen top-down.
    - Concrete guidelines, such as "if a road is constructed, there must be a grid for plants to grow through," are more effective than merely raising awareness. Normalisation is necessary.
    - Combining projects in an area can yield economies of scale and prevent a street from being excavated multiple times. For this, the scope must first be large and then worked out in smaller projects.
- Impeding
    - Institutional and organisational barriers are the largest barriers to broad prosperity.
        - Within the ministry, much time is spent on daily tasks and answering parliamentary questions, leaving no time to reason from a broader welfare perspective.
        - There is no time to address issues integrally, while time is needed to apply the guidelines and tools.
            - For example, if you have written a memorandum and are required to fill in the policy compass, but it must be in the Friday bag while it is Thursday, the completion will not be done properly and will miss its purpose.
    - Local politics can also influence whether there is cooperation and whether regional issues are addressed.

B.6.2. Interview 6.2 (focus group)

Case observations

- When more parties are involved in decision-making, there is less room for in-depth consideration of broader welfare.
    - If an organisation undertakes something independently, it is not necessarily challenged to think broadly. Involving other parties can help, as it necessitates deeper consideration of all interests on the table.
        - Example: The doubling of the railway line between Delft-Zuid and Schiedam. If this is done solely by mobility parties, the railway is quickly and effectively doubled. However, when Delfland gets involved, they insist that it must also fit into the landscape and include bicycle routes. This broadens the perspective compared to a one-dimensional view.
    - This observation contradicts the notion that all perspectives are needed for broader welfare.

- Whether the involvement of parties is enriching or narrowing depends on what the parties are involved in and at what stage.
    - In the Lelylijn project, broader welfare was an explicit goal with many parties involved: the national government, regional, and social partners. Subsequently, citizens also had to be involved in the design. This did not succeed initially. During the design consultation, researchers aimed to broaden the scope, but it was not possible due to its integration with NOVEX. The MIRT structure and the increasing number of parties involved led to a narrowed plan. Involvement was narrowing.
    - The initial design session with the Ministry of Infrastructure and Water Management for the mobility vision was very broad. When stakeholders from the cyclists' union were involved, the scope broadened even further.
    - Coordinating many parties when decisions need to be made can be challenging.
- Depending on your perspective, different aspects become important in an area.
    - The conflict over connections at a Stadsmakerscongres in Rotterdam shows that different issues emerge when thinking from another perspective, such as transport value or social value.
- Once a project is in the planning process, there is often no room left for alternative visions of the area's welfare.
    - The Koopmanspolder example shows that involving stakeholders before concrete ideas are formed leads to a very different process.
    - Do not investigate projects first and then consult; instead, involve people right from the start.
- The way you involve citizens matters.
    - If you put people in a room and let them speak from their own interests, they will do so. However, if you involve people in the design process, they adopt a more public perspective and contribute much more.
- For in-depth broader welfare, you must be able to ask open questions from the outset. When you can ask these questions, different outcomes emerge.
    - You can sketch a visionary future by asking various questions. For instance, what if we design the city based on soil and water principles? What if we base it on a 15-minute city concept? This brings up entirely different issues.
    - Do not design based on the interests and views of a single party; instead, discuss the trade-offs between all the values we consider important.
- This is not a straightforward process.

- Research demonstrating the liveability benefits of an alternative does not decisively influence decision-making.

    - On one hand, financial considerations often outweigh liveability effects, but on the other hand, people choose to maintain the mobility system.
        - In Wassenaar, there is an ongoing debate regarding the N44. From a liveability perspective, it would be better to downgrade this road, but the mobility system 'needs the road'.
        - Governments place great importance on accommodating current travellers. Therefore, whatever action is taken cannot come at the expense of the mobility that some people already have. Economic prosperity must always be ensured.
    - There is also a risk that broader welfare aspects are used to justify a predetermined course of action. You cannot start your research based on assumptions about the benefits.
        - 'Economically, we cannot change it, so we justify it based on broader welfare.'
        - Designing from a blank slate is challenging.
- Sustainability and STOMP are basic principles.
    - Broader welfare is based on values and what we consider important. These can be identified by involving people. Many aspects and values in the broader welfare compass are now also embedded in European guidelines.
        - Everyone will advocate for themselves and speak from their own interests. Example: A12 zone.
        - Water quality, for instance, is established at the European level. If you do not consider this in your project initiative, citizens and organisations can successfully challenge it. Other examples include habitat guidelines and nitrogen regulations.
    - Other standards, such as those from the traffic engineering perspective, work against this. There are guidelines from CROW used as standards for parking policy. You must provide enough parking spaces, or you cannot develop the area.
    - Despite this, we spend much less money on walking infrastructure than on cars.
        - In many places, footpaths do not meet basic standards.
    - It is difficult to implement concepts like 'living streets', where cars are only allowed on the outskirts of the neighbourhood.
        - Developers find it challenging because they believe buyers want their cars at their doorstep. This poses a risk to their investment.
        - Successful examples are urban. In Brabant, for example, where everyone drives, it does not happen.
    - Despite these principles, it is impossible to ignore that people travel by car.
- At the outset, there is consideration of different types of values, but monitoring and evaluating these remains a challenge.
    - There is generally little evaluation. Once something is constructed, it is not reversed, and there is little accountability.

    - In Heerlen, there is a twenty-year urban development plan with a long-term vision. They have a long-term goal and are setting up effective monitoring.
        - The ambition is to ensure that children, in thirty years (the children of the current children), score higher than the national average in the Netherlands.
        - This is part of a national programme.
    - In Rotterdam-Zuid, crime is well-monitored under a national programme.
    - A national programme begins with a social issue.
- Project management is often organised sectoral, causing projects to stall.
    - Example: widening of the A4 in Midden-Delftland.
    - A project-based approach is becoming less effective because increasing scarcities are felt in both the physical and social domains. Consequently, parties become more vocal. In other words, when you try to manage things project-wise, you primarily organise your own resistance.
- Sometimes, during a municipal council process, a cultural aspect is added at the end to secure a political majority. This could be an artwork or a library. This is not comprehensively weighed but is added hastily.
- A session of the broader welfare game illustrates what also happens in Amsterdam: You can broadly map out broader welfare, but when political decisions are made, and the pros and cons are considered alongside tangible money, a decision is made. This is what we will do, and we hope the other broader welfare aspects will also be somewhat addressed.
    - Because non-monetary values remain vague, there is a fallback on tangible things. All the different broader welfare indicators are overlooked during decision-making.
    - How can you assign value to saving two minutes on a commute for someone who already has a short commute?
- It is a political choice to invest in regions or vulnerable areas. A route like the RijnlandRoute always wins because it carries a lot of traffic to justify the cost. Routes with fewer travellers always lose out in this way.
- Government agencies make many assumptions about why a project is good and what people want, but this does not always align with reality.
    - Consultation for the Lelylijn revealed that, contrary to assumptions, housing was not the primary concern for residents, but rather other values were important.
- Broader welfare is considered interesting as long as it does not come at the expense of what those who already have something possess. Thus, broader welfare is acceptable if it means poor people become less poor, as long as rich people do not become less rich.
    - A genuine discussion about fair distribution is often not conducted.

Application mechanisms

- Enhancing

- The establishment of a joint steering group with frequent contact builds trust and offers opportunities.
    - Joint steering groups help to work across siloed departments. Municipalities sometimes desire a broad prosperity plan for the city, but if there is no one to address the connections, nothing materialises.
    - It is essential to have individuals who can effectively navigate the collective interests. Someone needs to keep an eye on the overarching interests and connect the pieces.
    - Example: energy strategy in Food Valley.
        - There were a few municipalities passing the responsibility for wind turbines required for a sustainable system to one another. A few aldermen agreed to adopt a broader perspective, working together with social partners and residents to tackle the issue.
        - After new elections, two of the three new aldermen withdrew from the plan, causing the collaborative body to disband and nothing to come of it.
    - A steering group is often administrative. The typical members already have numerous responsibilities, which might result in them dedicating less attention to the steering group.
        - These individuals are skilled at managing risks.
    - There may be potential in forming an alliance.
        - External perspectives can drive progress; if you can motivate people, progress will be made.
- Making a person from the project team responsible for a value such as nature or biodiversity.
    - Assigning this responsibility to one person can be effective, but it is a limited interpretation of broad prosperity. When done, these topics become a more natural part of the process, and more studies from advisory firms will examine them.
    - It is crucial that this person is internal and involved in the project, not external.
        - It is noticeable that few individuals from social and societal sectors are involved in spatial processes.
            - People from education or health sectors rarely participate in mobility discussions.
            - This is partly due to personal ambitions of employees and partly due to the space provided within government organisations. The education department has no budget for thinking about infrastructure.
                - Financial participation may also foster involvement.

        - Furthermore, the discussion often revolves around abstract topics that neither officials nor citizens engage with. It is necessary to make it concrete. This can be achieved, for example, by dividing an environmental vision into three areas that are later combined.
        - Thinking spatially demands a lot from people. Water authorities are transforming from engineers to a broader orientation.
    - It is important that the director or alderman (the decision-maker for the project) is convinced of the need to consider broad prosperity. This necessitates reporting on it.
    - Successful area developments often have a highly skilled and driven project manager with considerable social intelligence and substantial subject knowledge.
    - An area-based approach with a long-term vision is crucial.
        - Multiple issues inherently exist within any given area.
        - Often, a team works on a product or development framework, usually a fairly integrated team looking through various lenses. What follows is often project development, where smaller projects are named. That is when things can go awry, but there are certain mechanisms you can employ.
            - Examples include having a good director who continuously emphasises the seven principles for the approach or a Commission for Spatial Quality. Such a commission should be able to assist the director and the area in addressing certain topics proactively.
            - Do not start with a quality team too late, as they will only be able to assess things retrospectively.
    - "Make it broad, and nothing will happen." Broad prosperity is a complex issue, and we cannot afford to tackle everything in a completely broad manner. There must be an area-based consideration with a defined scope. It is crucial to be aware of and communicate what is included and excluded.
- Impeding
    - The possibility of making trade-offs at a higher level.
        - Ambitions always exceed the available funds and personnel. Therefore, it is necessary to prioritise. Currently, municipalities find maintaining housing production very important, but also mobility interventions. These are interconnected.
            - There is an ongoing search for how the mobility transition can be shaped by structuring housing development in a certain way. This is programmatic.

                - “Here is a public transport line, so we will build here.” However, other factors also come into play around that public transport line, such as the economic value of an area, the city's culture, and more. These aspects get overshadowed by the focus on housing production.
                - On the other hand, housing and mobility can also support each other.
        - Many ideals are lost to financial constraints. The case of the city bridge in Rotterdam shows that all elements not serving a specific core goal are lost due to the availability of funds.
        - Synergies between domains are evident, but the current structuring of budgets, for instance, prevents these synergies from being utilised. The social affairs department does not have the capacity to invest in or contribute to area development.

B.6.3. Interview 6.3 (focus group)

Case observations

- When a director or alderman is convinced of broad prosperity (and it needs to be reported on), more values are taken into account.
    - This is a classic approach that certainly helps and may even be a prerequisite. You need someone who wants to take a broader view as a starting point.
        - Subsequently, it still needs to be specified what broad prosperity entails for a project.
        - If this is your starting point, you have to consider it and cannot claim that there are no means for it.
    - Broad prosperity is not yet well institutionalised. Therefore, you need a quartermaster to get it started. Ideally, it should become standard practice.
    - Additionally, you need someone within the project who wants to implement broad prosperity, as this is the person responsible for its execution.
- The involvement of more parties in decision-making does not contribute to the depth of broad prosperity.
    - It is important to hear more parties. You may then have less elaborated indicators, but they are more supported.
        - There is less time for the outcome, but it gains depth in another way.
    - The example of Eindhoven shows that the involvement of more parties does not contribute to depth, but it does contribute to coherence.
        - The large municipality of Eindhoven knows what they want, but smaller municipalities find it harder to translate the theme.
        - The first step is to find synergies within an area.
            - Eindhoven is working on parking policy, but the villages and the province are not. Coherence is needed to make the transition successful.

                - There needs to be a common starting point.
    - The contradiction between political and administrative desire for quick results and the involvement of more parties, which requires time to seek depth.
        - The bottleneck is that parties want to see results at the beginning.
        - Good joint discussions are needed at the start.
            - Not about “I want this, and I want that,” but about what should be jointly realised in an area.
        - If you do not agree on values at the start, the rest of the process will only take longer.
            - Example of the ribbon village between Rotterdam and Breda, where trucks and cars drive straight through. Years of discussion about the nuisance from the road and route choices. Many studies, but no decision. A broad prosperity study that did not focus on the road but on the area with homes and facilities made the difference and provided a new direction for the solution. The countryside was appreciated by everyone.
            - By involving more parties, new ideas emerged, and more depth was achieved.
    - The generational test aims to involve young people in decision-making at the outset.
    - Different parties such as municipalities and a province often do not think very differently and share many ambitions.
        - These ambitions are set from each one's perspective.
        - Joint sessions help to find common ground and set joint goals and talk about the same things.
            - During the process, you can refer back to this.
    - Involving parties may delay the start but accelerates the end.
- Studies demonstrating the liveability benefits of an alternative do not determine decision-making.
    - Sometimes the municipality or an alderman says something will not happen to protect their own image.
        - In the example of Kaam, land was bought for housing development. Later, a study showed that this was not an ideal location. Yet the plans went ahead.
    - Everyone embraces broad values; no one is against welfare. But when it comes to practice and becomes concrete, it is difficult because everyone has their background.
- To achieve the paradigm shift of broad prosperity, the whole organisation needs to change. This is fairly ideological.
    - People find it difficult to let go of their expertise and field. You feel responsible for, for example, traffic.

- Decisions often need to be made for mobility that cross areas. The question is then who will pay for this.
    - People quickly look to Rijkswaterstaat, the province, or NS.
    - Example of the A12 zone in Utrecht as a multimodal hub. If you want to realise that you also need to add a lot of real estate, while there is no physical space for it or in the zoning plan.
- Broad prosperity sometimes serves as a hook to put something on the agenda.
    - Example: conflicts between car and bicycle can be addressed with a broad prosperity approach or by framing these conflicts in terms of healthy mobility.
- Environmental visions are not binding for lower scales. Everyone can decide for their part, resulting in a lack of coherence.

Application mechanisms

- Enhancing
    - How can monitoring and evaluation of impact (instead of realisation) be ensured in the decision-making process? With a national programme?
        - At the national level, there is the broad prosperity monitor. This can also be implemented at the regional level.
        - The disadvantage of monitoring is that it looks back, is often quantitative, and not coherent. It should be used to also look forward qualitatively and coherently.
            - So, not only the impact on one aspect but also how this relates to other themes and the environment.
            - For project evaluation, you should not evaluate within the project boundaries.
        - Joint fact-finding at the start and a baseline measurement. The theory of change helps to understand how different projects contribute to change and what synergies exist.
            - But moving from a score of 4 out of 10 to a 5 says nothing.
            - The Regio Deals formulate a clear task at the start based on a theory of change. How do the different actions contribute to the various aspects of broad prosperity?
        - Practical examples, such as in Maastricht, help and can inspire new projects.
        - There is tension between wanting to see short-term impact and long-term effects.
    - How can decisions be made that truly consider the effects on future generations? By making someone in the project team responsible for this value?
        - Ladder of funding: there are always direct and indirect beneficiaries. The indirect beneficiaries often experience the effects only in the long term.
            - Example: IJsselmeer connection and design of Rotterdam Central Station over 20 years.

            - You need imaginative capacity to envision the long term.
        - You must make the effects for generations tangible to steer by them.
            - This can be done using artist impressions.
        - It is also about asking the right questions. You need to ask young people at the start what they think, but also make it visible that new generations are coming who do not yet have a seat at the table.
            - Green chairs in ministries symbolising future generations. This makes people think.
        - Identify personas for different values.
        - Assist municipalities with a decision-making framework.
        - Diversity in decision-making.
            - Often the same and older people with time participate.
    - At what levels and at what times is an overarching area-oriented approach necessary?
        - Future visions for municipalities must be determined at the start based on values. You need to create a separate vision for an area, preferably in sub-areas, based on what is happening.
        - Governments tend to institutionalise everything, but the problem should be addressed at the level where it needs to be solved. The level at which the problem manifests often does not match the level at which it needs to be solved.
            - Problems transcend scale levels.
            - Example: Many cities want zero-emission transport. This works well in city centres, but at the outskirts, where people generally have fewer opportunities, it causes problems.
            - Thinking about broad prosperity requires looking across levels.
    - A joint problem analysis is important. It is not just one party presenting its problem.
        - This requires the involvement of all parties, and people must be willing to let go of their own field and interests (a little).
        - It can help to stand in each other's shoes. Write the piece from another field's perspective. This creates awareness.
    - An independent process facilitator or chair for joint sessions, so the problem owner is not the one making decisions during the discussions.
        - This prevents the focus from being solely on the vision of the problem owner.
    - It is important to conduct a broad joint problem analysis at the outset, which you can refer back to later. This makes the rest of the process manageable.
        - Goals should be central, and the way to achieve them can be determined at a lower level.
- Impeding

- Financial investments in a particular solution often lead to that direction being followed, even if it later proves not to be the best solution.
    - This is also related to the fact that earning potential must always be realised at the specific location.
    - Due to land exploitation, you must recoup your investment within a certain boundary. Budgets are not cross-boundary, but the tasks are.
- Who is responsible for and will therefore invest in integral plans?

B.6.4. Interview 6.4

Case observations

- Principles such as sustainability and STOMP are foundational principles or preconditions. Other dimensions, such as those related to elsewhere or later, are not as clearly defined.
    - Initially, intensification or densification was the basis in the structural vision; now it is termed more efficient land use.
        - This can encompass various measures, but the objective is to optimize the use of areas surrounding stations.
        - Housing should first be constructed in the vicinity of the station area before expanding to further locations.
        - Regional action programs and housing agreements are in place for this purpose.
    - As a municipality, one must act locally but think regionally to account for these dimensions. This is complex, as the crisis itself is already intricate.
- At the forefront, considering different types of values and bringing them into perspective happens, but heavily weighing them in a decision is challenging. Even though research indicates the liveability benefits of an alternative, this is not decisive.
    - Corridor A7-A8: In a comprehensive exploration of all options in terms of modalities, substantial funds still go towards roads when it comes to critical moments. The financial distribution favoured the automobile sector. This stemmed from a MIRT exploration.
        - The expected future demand on the roads was the greatest, so funds were allocated there.
        - However, one could argue that these bottlenecks are inconsequential, and that the principle should be no additional road construction.
        - In such cases, a firm choice is rarely made. All modalities receive at least some funding. It is never a principle to refrain from investing in additional roads.
        - Ultimately, the Ministry has a significant influence because most of the funding originates there.
- Problems do not manifest at the level where they need to be resolved.
    - The challenges surrounding the Zuidas illustrate this.

        - For the Netherlands, if nothing is done to increase the station's capacity at the Zuidas, no additional trains can run. This also means no more international trains or an additional intercity to Nijmegen can operate.
        - It is thus not just about Amsterdam but a project benefiting the entire region, even the whole country. Convincing the national government to invest is crucial.
        - It would be beneficial if municipalities in the northern part of North Holland also advocated for this, as they too benefit from increased train services.
    - The situation around the Alkmaar ring road demonstrates this as well.
        - Many (over 10.000) houses are being built in and around Alkmaar. The ring road is congested, affecting not just Alkmaar but everyone.
        - Heerhugowaard also wants to build houses, but this necessitates resolving issues further south.
- Citizen participation often occurs, but the way in which the results are utilized varies greatly.
    - During the 'Knooppuntendag', participants first walked around a station area (with residents) in the morning and then discussed how the future station should look. People find it challenging to provide input on such matters.
        - Residents need some initial information or context to respond and engage effectively. They are not specialists in conceptual thinking without guidance.
        - Short-term for the government (e.g., five years) is long-term for residents. The perspectives are entirely different.
    - For the provincial road near Crommenie Assendelft, liveability measures were addressed. A digital map was created for residents to provide feedback.
        - There was significant response, leading to adjustments based on the collected input.
        - People respond quickly from their own perspective: something is planned where they live, so what does it mean for them?
            - Maps can be interpreted differently.
        - A focus group was also formed to present alternatives, but this did not represent a broad demographic. It is challenging to involve certain target groups in discussions.

Application mechanisms

- Enhancing: If one can quantify the liveability effects in monetary terms, it aids in convincing people and supporting the business case.
    - It is feasible to make meaningful statements about the impact of reduced pollution on life expectancy.
    - Example: The A2 tunnel in Maastricht, where the liveability effects proved to be much higher than initially estimated.

        - Gaining experience in seriously estimating these effects can demonstrate that they indeed exist.
- Enhancing: Exchanging funds between parties in the region.
    - A budget must be balanced within an area, even though effects may be generated elsewhere. Your budget may not balance, but it might for another party if you consider the benefits.
    - For instance, in the municipality of Purmerend, an investment needs to be made that benefits the region. How do you convince other municipalities to contribute as well? This is particularly challenging towards the municipal council.
    - It would be interesting if regional exchange and mutual support were possible, for example, through a regional investment fund for a corridor. This is difficult to sell to municipal councils but would be suitable for regional development.
- Enhancing: Establishing a binding long-term vision for an area to which everything must contribute. Overarching goals towards which everyone in an area works.
    - For the corridor approach, a target is set for where we want to be in 2040 and the steps needed to get there.
        - The ambition must be set realistically. NS used the OGSM model (objectives, goals, strategies, measures).
            - Under the ambition, you set goals with strategies to achieve those goals and the corresponding measures.
                - A one-page summary of what you want to achieve together and how you will do it.
            - It is challenging to formulate how the ambition is measurable.
            - Municipalities appreciated knowing the direction of their efforts.
            - It is important to prioritize because it is a large action program and attempting to do 20 things will not be effective.
            - Agreements were made with all parties about the first three actions to be undertaken and who would lead them. After a year, new items were taken up.
        - Monitoring the overview is usually done by the province, but it is not explicitly organized.
            - It is difficult to make objectives measurable, although it is important.
                - Example: x% of social-recreational visitors travel to the region by train.
                - Setting specific objectives is politically sensitive. Perhaps because people can be held accountable if objectives are not met. Additionally, there is debate over whether the entity setting the objectives has the authority to do so.
    - For a project at P+R Ijmuiden, a long-term vision for a mobility hub is also being developed.

        - Although there were no funds, the vision was interesting, and efforts were made to see what could be done to work towards the vision.
        - It is important to build in some degree of flexibility.
    - The OGSM method was also applied in Den Helder, resulting in a 10-point plan. It helped to make it concrete.
- Impeding: People are too caught up in daily concerns to think deeply about broader welfare.
    - First, commitment from administrators to follow a joint project is necessary. This commitment can provide space.
        - For instance, the OGSM method takes considerable time. It is not a given that there is capacity for this.
    - It helps if financial resources can also be offered to municipalities for certain commitments. They want to know: Why are we doing this together? What are the benefits?
        - Visible or tangible results help in convincing.

C

DOCUMENT ANALYSIS

This appendix presents the document analysis that underpins the subsequent case analysis. It provides a comprehensive overview of key documents, a factual description of urban development focusing on housing, and an outline of mobility plans, alongside descriptions of organisational structures. Each case, namely Zeeburgereiland (Appendix C.1), Binckhorst (Appendix C.2), Valkenhorst (Appendix C.3), and Merwedekanaalzone (Appendix C.4), is discussed in detail.

C.1. Background Zeeburgereiland

Zeeburgereiland is an island in Amsterdam situated to the east of the Indische Buurt and the Oostelijk Havengebied, and to the west of IJburg within the A10 ring road, and to the south of Schellingwoude (see Figure C.1). Previously, the area was solely occupied by a sewage treatment plant and has been utilised as a military terrain. However, it is now regarded as a large-scale development site for residential and commercial purposes (Gemeente Amsterdam, n.d.-c). The mobility plans concerning the accessibility of the island and the construction of various neighbourhoods are integral components of the case study for this research.

Figure C.1: Map Zeeburgereiland
Housing development is orange, mobility project is marked in blue

C.1.1. Key documents

Numerous reports and governance documents have been published for the Zeeburgereiland case. These documents contain information regarding the decision-making process for Zeeburgereiland. Figure C.2 schematically represents the key documents.

The Development Plan for Zeeburgereiland describes the initial programmatic and financial frameworks for spatial developments in Zeeburgereiland and defines the areas to be developed.

In 2018, a study was conducted on Public Transport for the Eastern Flank to identify future bottlenecks. This encompasses not only Zeeburgereiland but also a larger area including IJburg, among others. Based on this study, the Mobility Plan for Zeeburgereiland was developed, outlining the tasks, ambitions, a cohesive package of measures per modality, and subsequent steps (Gemeente Amsterdam, 2018).

Problem and objectives (1990s - 2018)	• 2005 - Development plan Zeeburgereiland
Options (2018 - 2023)	• 2018 - Mobility plan Zeeburgereiland and IJburg • 2022 - Statement of Principles
Decision-making (2023 - 2026)	• 2023 - Completion report of Zeeburgereiland administrative order • 2023 - Ruimtelijk Kader Zeeburgereiland (concept)
Implementation and evaluation (2026 - ...)	

Figure C.2: Key documents Zeeburgereiland

In October 2021, the Municipal Executive (College van B en W) approved a governance assignment for the Zeeburgereiland. This assignment entailed ‘making clear the choices available for spatial claims and measures on the Zeeburgereiland, contributing to an area development with urban quality and improving accessibility for all modalities, including in the short term’ (Gemeente Amsterdam, 2023a). As part of this assignment, several products were developed: a Spatial Framework for the Zeeburgereiland, with financial exploration, a Statement of Principles (with CBA and MCA) for the Crucial Mile IJburglaan, a Statement of Principles for the final tram depot on the Zeeburgereiland, and a Statement of Principles (with a Preferred Alternative memorandum and Environmental Impact Assessment (EIA)) for the Zeeburgereiland connection (Hoefsloot, de Pater, et al., 2022; Hoefsloot, De Pater, et al., 2022; Witmond et al., 2021).

The Spatial Framework for Zeeburgereiland is the comprehensive main product resulting from the governance assignment. It includes a long-term vision for the entire island and a map of conditions that will serve as a framework for assessing spatial claims in the coming years (Gemeente Amsterdam, 2023b). Additionally, it outlines the subprojects for infrastructure and the phasing.

This collection of documents provides a comprehensive insight into the decision-making process of Zeeburgereiland. Based on their content, the values for the policy-making and policy integration factors can be determined. In addition to these documents, annual area agendas and area plans are drawn up for Zeeburgereiland, IJburg, and the entire East district. Despite the relevance of these files, they are not part of this analysis because the data is not accessible. The following sections of this appendix elucidate several substantive points recurring in the documents.

C.1.2. Housing

Zeeburgereiland is a green and water-rich urban island within the Amsterdam Ring. Already home to 5.000 Amsterdammers, it will see the addition of over 5.000 more residents in the coming years (Gemeente Amsterdam, n.d.-c). Alongside Sluisbuurt, Zeeburgereiland comprises residential and commercial neighbourhoods: Sportheldenbuurt, Baaibuurt East and West, Bedrijvenstrook, and Oostpunt. Sportheldenbuurt is nearing completion, while construction has commenced in Sluisbuurt. Furthermore, the transformation of Baaibuurt West into an urban residential neighbourhood with a maximum of 1.800 dwellings is imminent, with Baaibuurt East following suit in due course (Gemeente Amsterdam, n.d.-a).

The vision for the island embodies urbanity, liveability, and accessibility. The aim is to add, connect, and green a complete urban neighbourhood, prioritising cycling, and public transport (Gemeente Amsterdam, 2023b). Associated ambitions include creating a new piece of land, fostering a pleasant living environment, providing space for cyclists and pedestrians, facilitating smooth traffic flow and crossings, ensuring good accessibility by bicycle and public transport, and forming an island with a green perimeter (Gemeente Amsterdam, n.d.-b).

C.1.3. Mobility

In the field of mobility, several projects are underway. The imminent bottlenecks include: the capacity of the IJtram, the increasing bicycle traffic facing obstacles between Zeeburgereiland and its surrounding destinations, and the intersections on Zeeburgereiland and IJburg (Gemeente Amsterdam, 2018). The ambition is to address accessibility in a timely manner with three objectives: promoting sustainable modes of transport, developing an urban area connected to the rest of the city, and encouraging a healthy, active means of travel (Gemeente Amsterdam, 2018).

To improve spatial quality and traffic flow on the Crucial Mile IJburglaan, four scenarios have been developed in conjunction with a permanent tram depot and evaluated based on a Cost-Benefit Analysis (CBA) and Multi-Criteria Analysis (MCA): softening and postponing, short underpass, long underpass, and tunnel (Gemeente Amsterdam, 2023a). For the short term, temporary measures have been chosen for tram and bus stops in the Sluisbuurt. These measures are necessary because, with the arrival of Hogeschool Inholland in 2024 and the Montessori Lyceum Amsterdam in 2025, the Sluisbuurt will become busier around the public transport stops and pedestrian crossings at the intersection of Zuiderzeeweg and IJburglaan (Gemeente Amsterdam, n.d.-d).

C.1.4. Organisation structures

The municipality of Amsterdam is developing Zeeburgereiland in collaboration with the Amsterdam Transport Authority and developers. Participation includes a residents' meeting in March 2022, a public cycling tour in June 2022, previous physical and online residents' meetings, and a survey (Gemeente Amsterdam, 2023a). Workshops assessed integral development scenarios and sub-tasks, involving participants from various departments and external parties, such as participants from the Directorate of Space and Sustainability (developer of Spatial Framework), the Directorate of Traffic and Public Space (developer of

other mentioned products), Directorates of Land and Development, Project Management Bureau, Engineering Bureau, East District, Amsterdam Transport Authority, GVB, Rijkswaterstaat, and occasional external parties (Gemeente Amsterdam, 2023a).

C.2. Background Binckhorst

Binckhorst is an area in The Hague consisting of four major zones: Binckhaven Trekvlietzone, Mercuriuskwartier, and Binckhorst-Noord (Gemeente Den Haag, n.d.). The Binckhorst is transitioning from a former industrial area to a modern, creative, and innovative urban district by 2050 (Gemeente Den Haag, n.d.). The area is conveniently located close to the city centre, motorway, and railway (see Figure C.3). The scope of this case is the housing development in Binckhorst and the mobility plans in the area, including the development of the Koningscorridor.

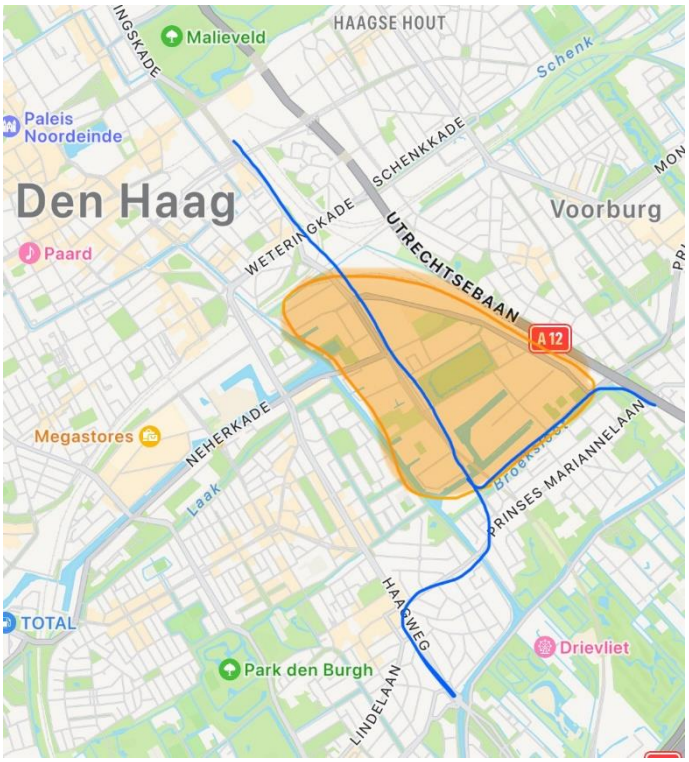

Figure C.3: Map Binckhorst
Housing development is orange, mobility project is marked in blue

C.2.1. Key documents

Various reports and administrative documents have been published concerning the Binckhorst case, detailing the decision-making process. Figure C.4 presents a schematic overview of the key documents.

The MIRT Study on the Accessibility of Rotterdam and The Hague is one of the MIRT studies that originated from the National Market and Capacity Analysis (NMCA, updated in 2013). The report offers solution directions and principles for further development. The four ambitions formulated in the report are: strengthening the spatial-economic structure, increasing the attractiveness of the living environment, enhancing opportunities for people, and improving the attractiveness of the transport system (De Zwarte Hond et al., 2017).

Problem and objectives (2016 - 2018)	• 2017 - MIRT Research accessibility Rotterdam The Hague • 2018 - Scaling up public transport The Hague and region • 2018 - Environmental plan Binckhorst • 2019 - No-regret package administrative agreement CID Binckhorst
Options (2018 - 2023)	• 2020 - MIRT Exploration Mobility CID-Binckhorst • 2022 - The Design Master Plan accessibility
Decision-making (2023 - 2025)	• 2023 - Plan of approach Planning and study phase
Implementation and evaluation (2025 - ...)	

Figure C.4: Key documents Binckhorst

With the scale jump for public transport, the city and region of The Hague are focusing on faster light rail lines with high frequency and reliability, increased capacity, and predominantly grade-separated tracks (Lek & Postma, 2018). By providing direct connections from the region to the city, eliminating the need for transfers, public transport will become more attractive to more passengers. This initiative includes the development of three major public transport corridors, including the Koningscorridor, which will pass through Binckhorst (Gemeente Den Haag et al., 2018).

The Binckhorst Environmental Plan, formally a zoning plan with an extended scope, is a pilot project developed based on the Decision Implementation Crisis and Recovery Act. This plan provides the legal and planning framework necessary for the area's transformation. The Environmental Plan includes various factsheets covering topics such as soil quality, odour, cultural-historical values, and the economy (Gemeente Den Haag Algemene Raadscommissie, 2018).

The administrative agreement stipulates that certain measures will already be implemented because they contribute to, among other things, the Mobility and Urbanisation (MoVe) programme (De staatssecretaris van Infrastructuur en Waterstaat et al., 2019). These so-called no-regret measures will be realised in the short term.

Through a Pre-Exploration of the Scale Leap for Regional Accessibility CID-Binckhorst in 2018, a Start Document for the Exploration of Regional Accessibility CID-Binckhorst in 2018, and various reports, progress is being made towards the assessment of the MIRT Exploration for CID Binckhorst Accessibility (Hotic & van Veen, 2018; Lek & Postma, 2018). The pre-exploration examines mobility solutions that contribute to the development of the CID and Binckhorst, as well as exploring area development possibilities that aid the mobility transition.

The start document outlines the common ambitions, challenges, and assessment framework. It also introduces four solution directions in the form of coherent packages of mobility measures. The reports include effect studies of promising alternatives, elaboration of alternatives, route assessment sieve 1, a CBA, a transport value study, and EIA (Arcadis, 2022).

The Design Master Plan Accessibility outlines the rationale for the preliminary preferred variant (variant 1T) and a package of mobility measures (APPM management consultants, 2022). The Action Plan details how this preferred variant will be developed in the next phase (APPM management consultants, 2023).

Together, these documents provide an overview of the decision-making process for the Binckhorst. Based on their content, the values for the factors of policy-making and policy integration can be determined. The following sections of this appendix discuss several substantive points.

C.2.2. Housing

Since 2016, the Binckhorst industrial estate has been gradually transformed. The Binckhorst is becoming a modern, creative, and innovative urban district where people live and work. According to the Binckhorst Environmental Plan, there is space for 5.000 additional homes and 80.000 square meters of commercial space. The Binckhorst is also intended to be a healthy, clean district ready for the future. The municipality has set high standards for sustainability, climate adaptation, and nature inclusivity (Gemeente Den Haag, n.d.).

C.2.3. Mobility

There are three interconnected challenges in the field of mobility involving interests of the State and the region: enabling urbanisation, facilitating area development, and enhancing the economic strength of the (inter)national top locations CID and Binckhorst; contributing to the accessibility of the Southern Randstad by preventing, reducing, and/or solving NMCA issues in the (regional) public transport and preventing additional burdens on the main road network due to the urbanisation of CID-Binckhorst; and contributing to the realisation of regional ambitions regarding public transport and cycling (MoVe et al., 2019). The No-Regret package consists of 17 measures divided into the topics of high-quality public transport (HOV), slow traffic, land use, smart mobility, stations, and logistics (MoVe et al., 2019). One of these measures is a dedicated bus lane along the Binckhorstlaan, improving the accessibility of Binckhorst in the short term (Binckhorst Bereikbaar, n.d.-c).

The objectives for the scalability leap, of which the HOV line is a part, are increasing economic agglomeration strength, providing opportunities for people to access jobs and facilities, enhancing the city's spatial structure, and ensuring sustainable and profitable systems (Gemeente Den Haag et al., 2018). The alternatives for the HOV line differ from each other based on the choice of HOV form (bus, tram, light rail) and a possible regional connection. Additionally, all alternatives include measures for slow traffic, smart land use, smart mobility, increasing public transport frequencies, and upgrading existing train stations (Lek & Postma, 2018). The preliminary Preferred Alternative consists of HOV variant 1T, comprising an HOV

tram on the route from The Hague Central to Binckhorstlaan (DH) with as much dedicated infrastructure as possible, an HOV tram via Maanweg to Voorburg station, and an HOV tram to Rijswijk/Delft via Binckhorstlaan, combined with a basic mobility package with measures (APPM management consultants, 2022).

C.2.4. Organisation structures

The area development of the Binckhorst is carried out by the municipality of The Hague. There is a quality team that guides, assesses, and advises on the development of all building plans and layout plans for the outdoor space from the pre-initiative and initiative phases to the preliminary design stage (Gemeente Den Haag College, 2019).

For mobility, collaboration involves many different parties. The municipalities of The Hague and Leidschendam-Voorburg, along with the Metropolitan Region Rotterdam The Hague (MRDH), the province of South Holland, and the national government, have explored where an HOV connection can be established between The Hague Central and Voorburg station, and to Rijswijk and Delft (Binckhorst Bereikbaar, n.d.-a). These parties collaborate under the MoVe program.

The environmental plan for Binckhorst from 2018 was developed with input from various stakeholders within and outside the district, such as residents, entrepreneurs, and other professionals (Gemeente Den Haag, n.d.). In terms of mobility, residents, entrepreneurs, and other stakeholders are kept informed and engaged at various times and in various ways. For instance, there is a platform of 24 residents, entrepreneurs, and other stakeholders, and several drop-in sessions have been held (Binckhorst Bereikbaar, n.d.-b).

C.3. Background Valkenhorst

Valkenhorst is a new neighbourhood located between Katwijk aan de Rijn, Valkenburg, Leiden, and Wassenaar (see Figure C.5). The new residential area will be built on the former Valkenburg Naval Air Station and is part of the municipality of Katwijk (Gemeente Katwijk, n.d.-b). This study focuses on the neighbourhood itself and the mobility measures along the ir. G. Tjalmaweg (N206).

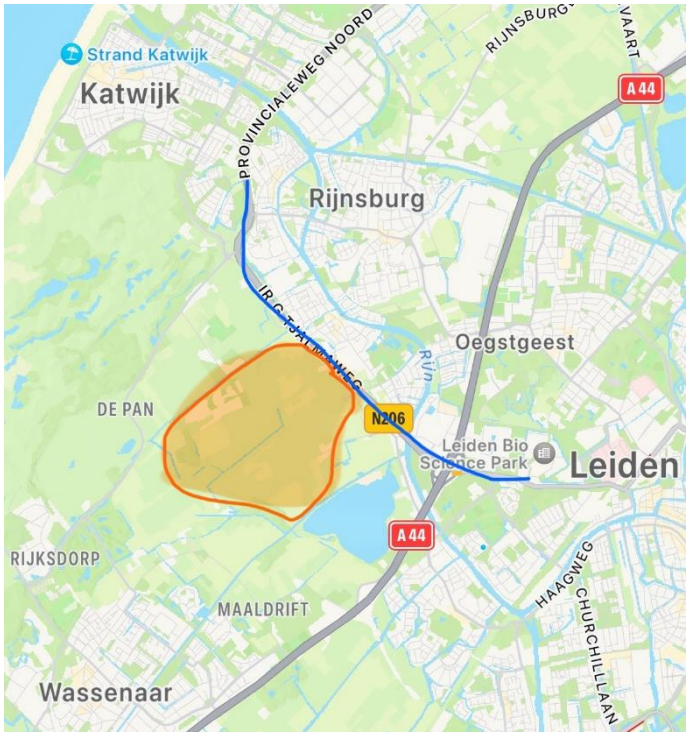

Figure C.5: Map Valkenhorst
Housing development is orange, mobility project is marked in blue

C.3.1. Key documents

The developments surrounding Valkenhorst have been documented in various papers. Additionally, several studies have been conducted to aid decision-making. These seminal documents for decision-making are summarised in Figure C.6.

The Integral Structural Plan for the Valkenburg location embodies the high level of ambition envisioned by responsible policymakers and designers during the planning phase (Project locatie Valkenburg et al., 2008). It outlines the area, its sub-areas, and principles for the development of the area, then referred to as Nieuw Valkenburg.

In 2013, the Minister of Infrastructure and the Environment and the Deputy of Traffic and Transport of the Province of South Holland signed a governance agreement for the RijnlandRoute and the phased implementation of various measures along the route, Leiden – Katwijk – Noordwijk, aimed at enhancing the quality of the R-net connection (De Minister van Infrastructuur en Milieu & De Provincie Zuid-Holland, 2013).

Problem and objectives (2006 - 2013)	• 2008 - Integral Structure Plan New Valkenburg
Options (2013 - 2020)	• 2013 - RijnlandRoute administrative agreement • 2014 - R-net and RijnlandRoute subarea N206 Tjalmaweg and A44 junction
Decision-making (2020 - 2024)	• 2020 - Urban development framework • 2022 - Spatial assimilation HOV Leiden-Katwijk - Planning notes • 2022 - Zoning plan Residential area Valkenhorst • 2022 - Spatial integration HOV Leiden-Katwijk
Implementation and evaluation (2024 - ...)	

Figure C.6: Key documents Valkenhorst

In the years following, various studies were conducted, including an archaeological desk study in 2014, a preliminary investigation into the risk of encountering conventional explosives in the area of the HOV line in 2019, and a survey to identify the (potential) presence of protected species and assess possible effects of constructing the bus lane on these species (ECG, 2019; Posthouwer, 2019; Royal Haskoning DHV, 2021b). The HOV Landscape Integration Vision from 2021 outlines a vision of how the bus lane can be integrated into the landscape (Royal Haskoning DHV, 2021a). The Spatial Integration HOV Leiden-Katwijk - Planning Note is the plan of approach describing the design process to develop a preliminary design for the HOV bus lane in Duinvallei (RHO Adviseurs, 2022). All these studies provide input for the explanatory memorandum of the Spatial Integration HOV Leiden-Katwijk from 2022 (ten Linkel Hekkert et al., 2022).

The urban development framework for the northern part of the Valkenburg Location contains an interpretation of the planning area, a vision for the area, a spatial framework, and a breakdown of the neighbourhoods (KCAP Architects & Planners, 2020). In September 2020, the municipal council approved the urban planning framework for the initial area of the Valkenburg Location (now 'Valkenhorst').

The zoning plan for Valkenhorst was approved by the municipal council in July 2022 (Gemeente Katwijk, 2022). In 2021, the public consultation period took place for the zoning plan 'Residential Area Valkenhorst' along with its accompanying EIA and quality book (Commissie voor de milieueffecrapportage, 2013; Gemeente Katwijk et al., 2021).

Together, these documents provide a comprehensive overview of the decision-making process for Valkenhorst. Based on their content, the values for the policy-making and policy integration factors can be determined. The subsequent section of this appendix highlights several substantive points.

C.3.2. Housing

In the future, housing will be the primary function of Valkenhorst (Gemeente Katwijk, 2022). A diverse range of housing options is desired, and there must be sufficient amenities available. Additionally, the 'Residential Area Valkenhorst' should accommodate innovative employment opportunities in the form of Unmanned Valley, a testing location for unmanned aircraft and drones. In Valkenhorst, a total of up to 5.600 homes and community and commercial facilities will be built. This will include social rental homes, private sector rental homes, affordable homes, and more expensive homes for purchase (Gemeente Katwijk, n.d.-b).

The seven principles for the location include the establishment of an independent, inclusive centre, the provision of distinctive residential environments for various target groups, and the utilisation of landscape and cultural-historical qualities (KCAP Architects & Planners, 2020). The core values underlying the design of the public space are putting people first, incorporating water and creeks, ample accessible and enjoyable public green spaces, and a village-like character. These four core values formed the basis for creating the urban planning framework for the 'Residential Area Valkenhorst' (Gemeente Katwijk, 2022). The quality book also describes that the neighbourhood will have a village-like character with a focus on greenery (Gemeente Katwijk, n.d.-a).

C.3.3. Mobility

Adjacent to Valkenhorst lies the N206 Ir. G. Tjalmaweg. A dedicated bus lane will be constructed parallel to this road on the Valkenhorst side, featuring two bus stops. This bus lane is part of the R-net bus corridor between Leiden-Katwijk-Noordwijk and is integral to the accessibility measures for Valkenhorst. Furthermore, there will be expanded and improved cycle paths for school and work commuting as well as recreational cycling. The N206 will also be widened and deepened for cars as part of the accessibility measures for housing development (Provincie Zuid-Holland, n.d.).

The landscape integration vision concludes that the HOV traverses various landscape types while also connecting sub-areas. The route along Valkenhorst has limited space. The spatial boundaries there are more or less determined by the development of the residential area Valkenhorst and the deepened Tjalmaweg (ten Linkel Hekkert et al., 2022). Various aspects included in the vision for the route are enhancing landscape experience, recognisable stops and hubs, links for slow traffic, and the route as a connection (ten Linkel Hekkert et al., 2022).

C.3.3. Organisation structures

The province of South Holland and the municipality of Katwijk are jointly working on the plan for the bus lane (Provincie Zuid-Holland, n.d.). For the section between Valkenburg-Oost and the intersection of N206 - N441, a preferred route has been developed in collaboration between the province, BPD Bouwfonds Gebiedsontwikkeling, and the municipality. This route is largely incorporated into the zoning plan for Valkenhorst and the Provincial Integration Plan for the RijnlandRoute. To facilitate the construction of the bus lane, the province has initiated a Provincial Integration Plan procedure (Provincie Zuid-Holland, n.d.).

The Central Government Real Estate Agency is developing the former naval airbase Valkenburg, together with the municipality of Katwijk, into the new residential area Valkenhorst. The Central Government Real Estate Agency does not construct or sell homes itself but rather sells land to developers (Rijksvastgoedbedrijf, n.d.).

As part of the route for the dedicated bus lane at the Valkenhorst section, a cycle/pedestrian viaduct is to be constructed at the location of the Oude Broekweg. Through design workshops, the community was able to contribute to the design of this viaduct, including its connection to the northern side of Valkenburg. Additionally, several information sessions have been held (Provincie Zuid-Holland, n.d.).

C.4. Background Merwedekanaalzone

The Merwedekanaalzone is an area in Utrecht between the Merwedekanaal and Europalaan (see Figure C.7) (Gemeente Utrecht, n.d.-c). A major inner-city redevelopment will take place in this former industrial area (Eigenarencollectief Merwede, n.d.). The focus of this study is on subarea 5 'Stadswijk Merwede' and the surrounding mobility infrastructure and measures.

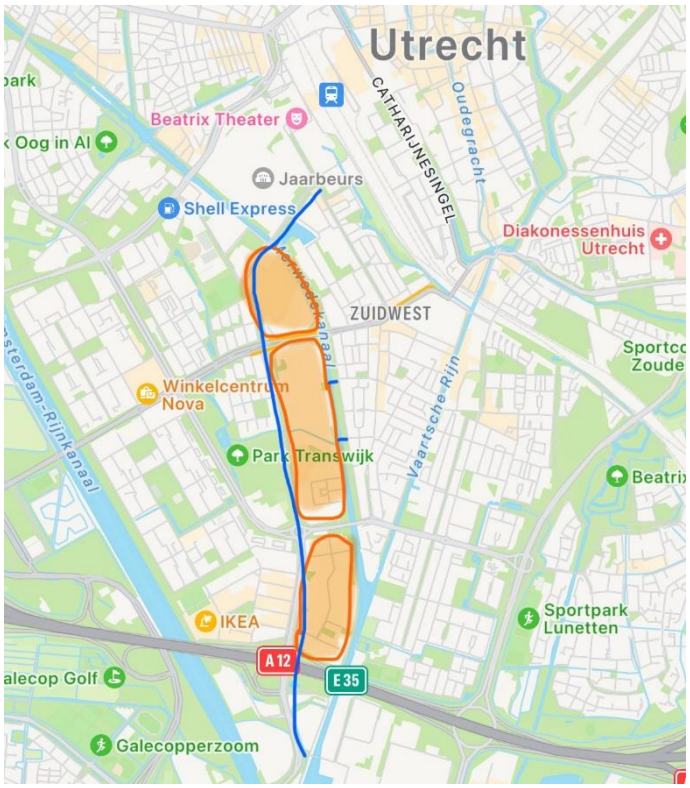

Figure C.7: Map Merwedekanaalzone
Housing development is orange, mobility project is marked in blue

C.4.1. Key documents

Documents about the plans for the Merwedekanaalzone in the areas of mobility and urban development provide comprehensive insights into the decision-making process and underlying motivations. Figure C.8 presents a chronological overview of the key documents.

Part 1 of the Environmental Vision for the Merwedekanaalzone contains a spatial agenda for the future of the area (Gemeente Utrecht, 2018). It outlines the direction and ambitions for the region, as well as the vision and development strategy. The adoption of this document marks the end of the problem and goals phase. Attached to this document are appendices that include a list of cultural-historical buildings and structures, facilities, and a review of the Inspiration Evening and City Discussions. Additionally, this environmental vision incorporates recommendations from the EIA and poses several specific elaboration questions and discussion points.

Problem and objectives (2016 - 2018)	• 2018 - Environmental vision Merwedekanaalzone part 1
Options (2018 - 2021)	• 2020 - Mobility Merwedekanaalzone • 2021 - Environmental vision Merwedekanaalzone part 2
Decision-making (2021 - 2023)	• 2021 - Merwede urban development plan • 2022 - Zoning plan, Merwedekanaal zone subarea 5
Implementation and evaluation (2023 - ...)	

Figure C.8: Key documents Merwedekanaalzone

During the decision-making process for the Environmental Vision (Part 1), it was emphasised that additional mobility measures are necessary to build more than 6.000 housing units in the Merwedekanaalzone. The 2017 EIA also demonstrated this need. Interim results of the study on the required mobility measures were published in 2018, with the final report released in 2020 (Kwantes et al., 2020). This research builds on previous mobility studies, including the EIA on the effects of the Merwedekanaalzone, a feasibility study on mobility hubs, and the mobility section of the Merwede Urban Design Sketch Plan (sub-area 5).

The mobility study outlines why the development of the Merwedekanaalzone, with 10.000 housing units, necessitates an ambitious mobility strategy (Kwantes et al., 2020). It details the design principles for the future mobility strategy for the Merwedekanaalzone, the outcomes of the numerical analyses with the traffic model, the mobility prerequisites for the development of the Merwedekanaalzone, and the elaboration agenda for the subsequent steps.

In March 2021, Part 2 of the Environmental Vision for the Merwedekanaalzone was adopted. This document elaborates on the spatial agenda and contains detailed sections on the vision, various programmes (such as those for the living environment, sustainability, and mobility), and a development strategy (Gemeente Utrecht, 2021a). Several reports and documents were appended to the decision-making process for this plan, including the previously mentioned mobility report, an overview of public participation, a baseline measurement for the liveability of Rivierenwijk, Transwijk, and Dichterswijk, the traffic study report, the monitoring approach for the Merwedekanaalzone, and an addendum to the EIA (Gemeente Utrecht, 2020, 2021b; Projectteam Merwedekanaalzone, 2021; Terlouw, 2019).

Where the Environmental Vision outlines the broader frameworks within which sub-areas 4, 5, and 6 of the Merwedekanaalzone can be developed, the Merwede Urban Design Plan provides a concrete implementation of these frameworks. The Urban Design Plan describes how

Merwede will function spatially, programmatically, and socially, as well as how it will perform in areas such as mobility, greenery, sustainability, and circularity (Eigenaarscollectief Merwede et al., 2021). It delineates routes and connections for both humans and animals and situates functions in locations that hold significance beyond Merwede itself. An integral component of the Merwede Urban Design Plan is the Merwede Image Quality Plan (Eigenarencollectief Merwede et al., 2020). The zoning plan serves as the legal translation of the Urban Design Plan (Gemeente Utrecht, n.d.-b).

Together, these documents provide a comprehensive overview of the decision-making process for the Merwedekanaalzone. Based on their content, the values for the policy-making and policy integration factors can be determined. The subsequent section of this appendix highlights several substantive points.

C.4.2. Housing

In Merwede, a mix of (social) rental and owner-occupied homes will be available for starters, families, seniors, and singles. Additionally, there will be shops, hospitality venues, employment opportunities, schools, and healthcare facilities for both new and current residents of the city (Gemeente Utrecht, n.d.-c). In the Merwedekanaalzone, 10.000 new homes will be built, with 6.000 of them in the Merwede City District. It is anticipated that the first homes will be finished in 2027.

For the Merwedekanaalzone, four core values apply: quality of life, vibrant mix, sustainable and smart, and robust and flexible (Gemeente Utrecht, 2018). Additionally, there is the challenge of accommodating the growth of the compact city of Utrecht, from 330.000 inhabitants in 2016 to 430.000 inhabitants in 2030 (Eigenaarscollectief Merwede et al., 2021). The increasing urbanisation and the necessity for sustainability have shaped the mission of Merwede. Consequently, a high density will be achieved in sub-area 5, providing space for 12.000 residents (Gemeente Utrecht, n.d.-b). It will become a high-quality, attractive, healthy, and sustainable mixed urban area where living, working, and recreation coexist (Gemeente Utrecht, 2018). In addition to the core values for the Merwedekanaalzone, the mission for Merwede can be summarised in five themes: mobile Merwede, healthy and sustainable, vibrant urban district, green unless, and scenescape city (Eigenaarscollectief Merwede et al., 2021).

C.4.3. Mobility

In the realm of mobility, Merwede adopts a unique approach and ambitious strategy. Mobility is based on the following main pillars: spatial design focused on walking, cycling, and public transport; an ambitious parking strategy promoting walking and cycling; flexibility integrated into spatial design; network system overhaul for all modes of transport; mobility hubs to encourage shared mobility; differentiated accessibility for target groups; and dynamic traffic management to regulate flows (Kwantes et al., 2020).

The neighbourhood will be car-free, with only parking garages located at the edge of the neighbourhood and 250 shared cars. Therefore, the parking standard is low. Additionally, there will be 21.500 bicycle parking spaces in the buildings, continuous cycle routes, two logistics

hubs, and various public transport stops (Eigenaarscollectief Merwede et al., 2021; Gemeente Utrecht, n.d.-b). The accompanying zoning plan for the changes to the Europalaan (main road along Merwede) was approved by the municipal council in February 2022 (Gemeente Utrecht, n.d.-b).

C.4.4. Organisation structures

The municipality of Utrecht collaborates with the nine other landowners on the plans and designs for Merwede. The collaborating parties for Merwede include area developer AM/Synchroon, Bouwfonds Property Development, Greystar, G&S Vastgoed/Boelens de Gruyter/Round Hill Capital, Janssen de Jong Projectontwikkeling/Lingotto/3T, and the municipality of Utrecht (Gemeente Utrecht, n.d.-b). There is an independent quality team responsible for assessing building plans and plans for the layout of public spaces (Gemeente Utrecht, n.d.-b).

Additionally, a special structure has been devised for mobility. The municipality and developers have jointly created a plan and share responsibility for realising it. For mobility, this means establishing and maturing a Mobility Company, a public-private partnership (PPP) jointly formed by the parties (Royal Haskoning DHV, n.d.). The Mobility Company leases parking spaces to residents, selects providers of shared mobility and MaaS, manages visitor bicycle parking, and provides logistics services to residents. Above all, the Mobility Company is responsible for setting up, monitoring, and adjusting the mobility concept as needed (Gemeente Utrecht, n.d.-a; Royal Haskoning DHV, n.d.).

The various documents also provide insight into participation efforts. For example, stakeholders have collaborated to create a vision for the Merwedekanaalzone, and various thematic meetings have been organised (Gemeente Utrecht, 2018). Additionally, a distinction has been made between different stakeholders. Collaboration has occurred with a users' forum for the Merwedekanaalzone, advisory groups, residents, and district councils from surrounding neighbourhoods, as well as temporary tenants, entrepreneurs, and users (Gemeente Utrecht, 2020).