

The Effectiveness of Participatory Value Evaluation in National Transport Projects

“Uncovering the Added Value of Participatory Value Evaluation in the Multiyear Program for Infrastructure, Spatial Planning, and Transport Process through Policymaker Interviews and Respondent Answer Analysis.”



Reinout Mulder
4655281
Master thesis
Complex System Engineering and Management (CoSEM)

The Effectiveness of Participatory Value Evaluation in National Transport Projects

By

R. M. M. Mulder

Master thesis submitted to Delft University of Technology in partial fulfilment of the requirements for
the degree of

MASTER OF SCIENCE

in Complex Systems Engineering and Management Faculty of Technology, Policy and Management

to be defended publicly on Friday, August 11, 03:30 PM

Graduation committee

Chair: Dr. Mr. N. Mouter, Section Transport and Logistics

First Supervisor: Dr. Mr. N. Mouter, Section Transport and Logistics

Second supervisor: L. Hermans, Section Policy Analysis

Advisor: M. de Vries,

External supervisor: Ir. S. H. P. Wieringa, Mobility strategist at the Ministry of Infrastructure and
Water Management

Preface

This report marks the final step towards my master's degree in Complex System Engineering and Management. In the first period of my master's program, I took the course Advanced Evaluation Methods for Transport Policy. This course discussed various evaluation methods for transport, including CBA and PVE. I found these methods particularly interesting due to the complex issues they involve, such as deciding how to apply a method and how much weight a policymaker should give to the results of an evaluation method. Therefore, I am pleased that I can graduate on the subject “PVE” one and a half years later.

First, I would like to thank Niek for his lessons on transport evaluation methods at the start of my master, which inspired me for his subject. I greatly appreciate that I could investigate PVE with you as my primary supervisor and that I can rely on your expertise. In addition, I would like to thank my entire graduation committee for their advice and feedback during my research. I am grateful to Sjouke, who gave me the opportunity to become involved with the Lelylijn project through the ministry. This access has greatly helped my research in reaching the right people and gathering information. I also want to thank Populitics for providing access to the data collected with the PVE for Lelylijn. I appreciate the cooperation of all interviewees in my research and want to thank them all for that. Finally, I would like to thank Robert for his thorough review of the report.

The past six months have been a very educational and enjoyable time. During my research internship at the ministry, I gained a lot of insight into how theoretical models and concepts are applied in practice. I made many new contacts within the strategy team I was a part of and with the policymakers involved in the Lelylijn project. I discovered that communication with both my graduation committee and the interviewees was crucial for the progress of my research. I am grateful that this went well thanks to the smooth collaboration with all parties involved.

Reinout Mulder
Delft, July 1st 2023

Management summary

Well-being, as a concept of broad perceived quality of life, has become an increasingly important focus in Dutch society and government policy. Dutch citizens and the government themselves attach growing importance to well-being indicators such as housing, health, safety, and social contacts, especially after policy issues like the allowances affair. This has led to a call for a broader conception of prosperity and the need to measure and incorporate well-being alongside the gross domestic product in policy decisions. The Ministry of Infrastructure and Water Management, which implements major infrastructure projects such as roads, bridges, and railways under the Multiyear Program for Infrastructure, Spatial Planning, and Transport (MIRT), is currently exploring methods to incorporate well-being in its project evaluations. Cost-benefit analysis (CBA) is currently used for the evaluation of transport projects options, but it proves challenging to express the concept of broad prosperity in monetary terms. In response to these limitations, a new evaluation method has been developed, called Participatory Value Evaluation (PVE). The PVE involves individuals choosing a portfolio of projects, based on the perceived societal impact of each project and their social preferences. This selection is constrained by a set budget. This method engages citizens in policy decisions and maps their values and concerns, leading to a more inclusive and holistic approach to decision-making. The PVE is still in development, and its application to MIRT projects raises unanswered questions. Therefore, it is important to further research this promising tool and conduct trials to determine the most effective implementation of PVE in project evaluations. This way, a better understanding can be obtained of the impact the PVE can have, which can lead to more informed decision-making and greater public participation.

This research focuses on integrating Participatory PVE into the MIRT process to promote a broader approach to well-being in evaluating transportation projects. The study aims to address the knowledge gap regarding the added value of PVE when applied to MIRT projects. The main question of this research is: What is the added value of applying PVE in national infrastructure projects? This question is explored through a series of sub-questions that focus on three key areas:

1. Where can the PVE be applied in the MIRT process, and what is the perceived added value in the research phase?
2. How do policymakers of MIRT projects experience the PVE?
3. How do participants perceive their involvement in the PVE of MIRT projects?

The intention is to gain a deeper understanding of PVE and the MIRT process and to investigate how PVE can contribute to decision-making in the MIRT process, by answering these questions. Ultimately, this study will result in recommendations for improving the use of PVE in the MIRT process and ensuring better alignment of transportation projects with societal values.

This study uses a case study approach to examine the added value of PVE within MIRT projects. For this case study, the Lelylijn project is investigated, marking the first application of PVE in the exploratory phase of a transportation project. The Lelylijn is a proposed railway line in the Netherlands intended to connect the western region with the north. The introduction of the Lelylijn aims to improve travel times and connections between the northern provinces and the Randstad metropolitan area. The Lelylijn is currently in the research phase of the MIRT process, wherein the scope, challenges, and goals are being examined. The MIRT study will focus on ways in which the economy, housing, and improved accessibility can reinforce each other. Two studies are carried out for the Lelylijn during this phase: a feasibility study, which focuses on various basic alternatives, and the NOVEX rail study, primarily examining spatial-economic opportunities. In addition to these two studies, a PVE is being conducted for the Lelylijn to facilitate participation and gather public opinions on the project. This PVE was carried out by researchers from the Populytics research agency. They developed two concepts for this PVE, including a task where participants could allocate points across different goals/values for the government to consider when designing the Lelylijn (Figure 0.1).

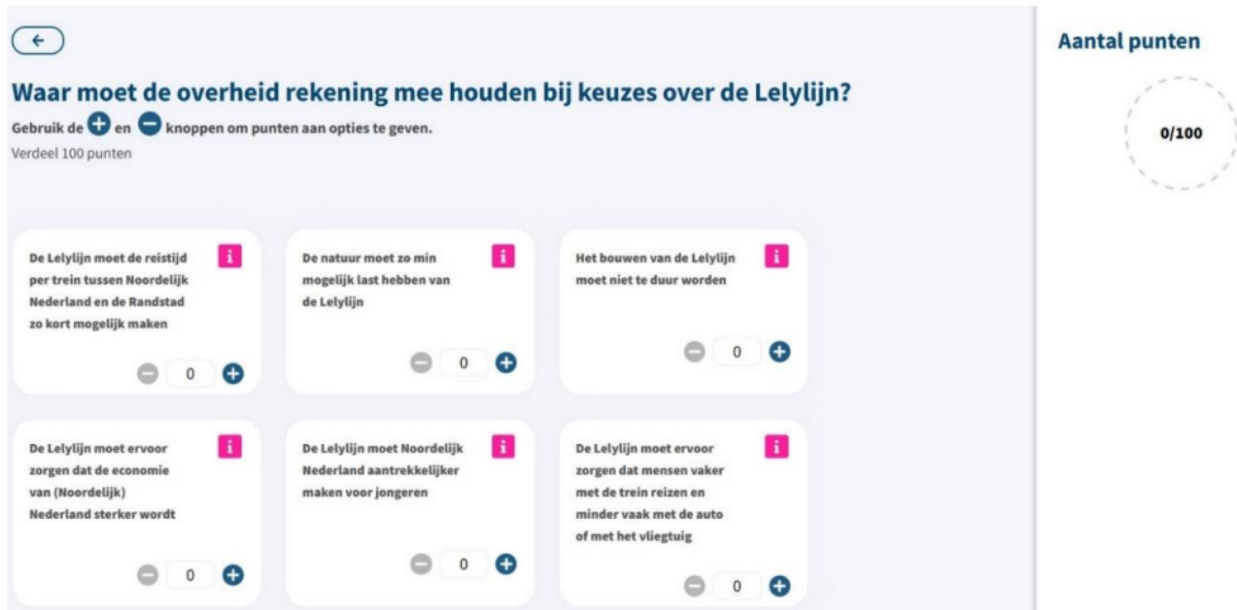


Figure 0.1: Questions concept 1 (Populytics, 2023c)

The second concept involves a discrete choice experiment where participants could choose between two approaches that differed in several characteristics (Figure 0.2).

	Variant 1	Variant 2	Geen Lelylijn
Reistijd tussen Amsterdam en Groningen/Leeuwarden (snelste trein)	90 minuten	70 minuten	120 minuten
Op hoeveel tussenstations stopt de trein die het vaakst stopt tussen Amsterdam en Groningen/Leeuwarden?	3	5	0
Hoeveel treinen rijden er per uur over de Lelylijn?	2 in elke richting	10 in elke richting	0
Hoeveel mensen hebben last van de Lelylijn?	500	7.500	0
Hoeveel belastinggeld geeft de overheid uit per huishouden?	500 euro	850 euro	0 euro
Hoeveel huishoudens kunnen een supermarkt en een basisschool binnen 15 minuten bereiken?	80%	100%	80%

Figure 0.2: Questions concept 2 (Populytics, 2023c)

In addition to these two concepts, participants had the opportunity to share their perceptions of the advantages and disadvantages of the Lelylijn, as well as propose alternative solutions to achieve the goals they deemed important. This PVE was subsequently distributed throughout the Netherlands via an online survey conducted through a panel and open consultation. This resulted in 11,000 responses, which were then analyzed, leading to the generation of a comprehensive report.

Within this case study, three sources of information are utilized: literature on PVE and the MIRT process, interviews with relevant policymakers, and responses from the PVE are employed. The literature is used to address the question of where the PVE can be applied in the MIRT process. To achieve this, both the MIRT process and the PVE are extensively elaborated upon. Subsequently, a connection is established between the two concepts, placing the PVE within the MIRT process. The interviews are conducted to address two research questions: "What are the expectations of policymakers regarding the added value of PVE in the MIRT process?" and "How do policymakers of MIRT projects experience the PVE?". These interviews are conducted with a diverse group of policymakers involved in the Lelylijn project. The first round of interviews involved five candidates, while all seven candidates were interviewed for the second round. They hold various roles, ranging from project directors to environmental managers and project secretaries. The first interview round

consists of eight questions aimed at understanding the expectations and perceptions of policymakers regarding the PVE. The second interview round comprises six questions that focus on comprehending the experiences of policymakers with the PVE and their perception of its effectiveness. This interview structure enables us to gain in-depth insights into the perceptions and experiences of policymakers regarding the PVE in the MIRT process. The analysis of the added value from the perspective of PVE participants is conducted using data obtained from the PVE conducted for the Lelylijn. The analysis specifically focuses on two questions from the PVE: "What do you find positive about this consultation?" and "What do you find negative about this consultation?". The answers to these questions are qualitative in nature. For the analysis of the qualitative responses from the PVE dataset, a coding system based on clusters is employed. These clusters are derived from an initial analysis. Subsequently, 2,000 responses from 1,000 participants are coded using this coding system, enabling quantitative analyses to be performed. This approach facilitates a thorough analysis of both the theory behind MIRT and PVE, as well as the practical application and experiences within the Lelylijn project. By utilizing qualitative data from interviews and the PVE itself, a holistic understanding of the added value of PVE from various perspectives can be obtained, offering valuable insights and recommendations for the further development and application of PVE in MIRT projects.

To determine the added value of the PVE, a framework is used that encompasses all possible values of a participation method. By using such a framework, the findings from this research can be linked to the values of the framework. In this way it can be determined which values are well-scored by the PVE and which are not. The framework presented in table 0.1 is used to identify the added values of the PVE to the decision-making process in transport projects. The framework developed by Beierle (2005), evaluates participatory methods' outcomes, emphasizing social goals in addition to traditional tangible results. It provides a means for assessing public participation's effectiveness across a spectrum of objectives. To ensure that all values are included in the framework, research has been conducted to determine if there are any additional values/goals missing, aside from Beierle's framework. Literature about two conducted PVE's has been consulted for this purpose, resulting in the addition of two values to the framework.

Table 0.1: Framework

<i>Values</i>	<i>Description</i>
<i>Educating and informing the public</i>	Providing the public with sufficient knowledge to actively participate in decision-making.
<i>Incorporating public values into decision-making</i>	Incorporating public values, assumptions, and preferences into the decision-making process.
<i>Improving the substantive quality of decisions</i>	Enhancing the quality of decisions by integrating diverse perspectives.
<i>Increasing trust in institutions</i>	Boosting public confidence in institutions through public participation in decision-making processes.
<i>Reducing conflict</i>	Identifying shared norms and values to reduce conflicts and foster cooperation.
<i>Achieving cost-effectiveness</i>	Assessing whether the chosen method of public participation was the most cost-effective way to achieve the desired outcomes.
<i>Space for Fundamental Discussion</i>	Enabling reflection and exchange of diverse perspectives on underlying assumptions and values.
<i>Accessibility and Inclusivity</i>	Ensuring the accessibility of the participation process for all citizens, regardless of their location, mobility, digital skills, background, education level, age, ethnicity, etc.

The Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT) is a Dutch government tool for planning and developing significant infrastructure projects. MIRT offers a framework for decision-making, integrating spatial development and mobility. It spans various projects from road and rail improvement to water management and urban development. The MIRT process is divided into four phases (figure 0.3): Preparation, Exploration, Plan & Study, and Construction. In the initial phase, collaborative efforts identify and map out infrastructural challenges and solutions. A start decision, based on MIRT's research phase outcomes, commences the Exploration phase, where suitable solutions are developed and refined. The Plan & Study phase further develops the preferred solution into a project decision, defining the scope, funding, allocation, and market approach, assessing feasibility, finance, and environmental impacts. The Construction phase aims to execute the planned project, with a delivery decision made based on a delivery report prepared a year after completion.

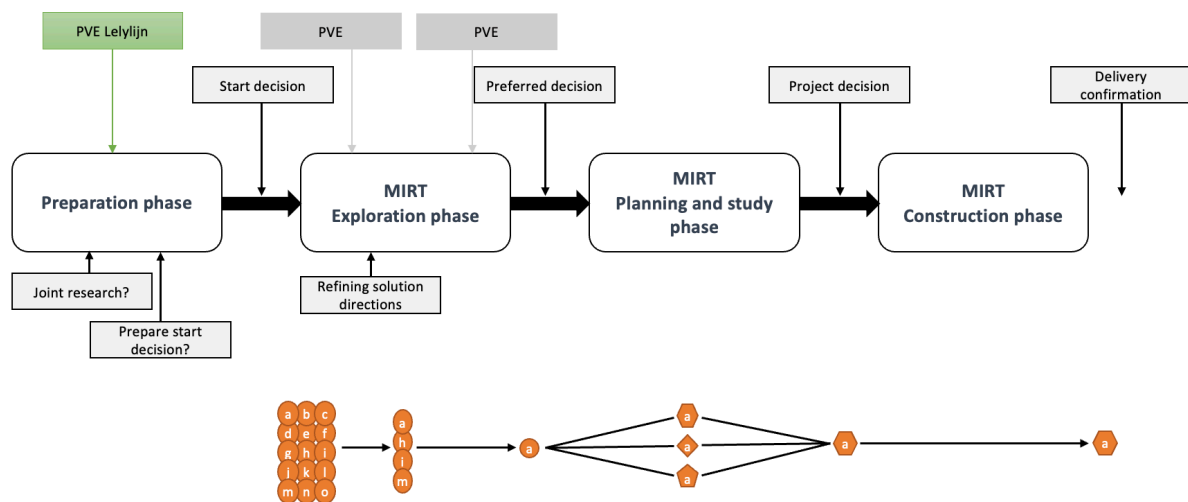


Figure 0.3: MIRT process overview

The Participatory Value Evaluation is an assessment method that involves citizens in government decision-making processes. The method examines how citizens weigh public values and how they believe these values should be incorporated into policy decisions. The PVE can provide insights into the concerns underlying resistance to policies. PVE can be used for two purposes: as an evaluation tool and as a participation tool. The implementation of PVE involves selecting participants, conducting the evaluation, analyzing data, and reporting results. PVE yields four types of information that can be valuable to policymakers: descriptive information, attribute valuations, optimal portfolio, and qualitative motivations. However, there are also risks associated with PVE. It is important that the selection of participants is a good reflection of the population. Other risks include a lack of knowledge among participants and creating expectations among citizens that may not be met, leading to frustration and disagreement. In the context of the MIRT process, PVE can be effectively implemented at three moments to incorporate a broader well-being perspective into the decision-making process (Figure 0.3). These moments are the research phase, the exploration phase, and the preferred decision. In each of these phases, PVE can provide different types of information that are useful for the decision-making process. Overall, PVE can be used throughout the entire MIRT process to facilitate participation and incorporate the interests of stakeholders in the various stages of the process.

In the first round of interviews, which involved five policymakers being asked about their expectations of the PVE, three expectations emerged consistently among all policymakers. These expectations include:

1. Incorporating public values in decision-making (Insight into Public Opinion): Policymakers perceive the PVE as a means to understand comprehensively what is important to the

population and the public opinion regarding the Lelylijn. This also involves generating new insights, particularly about policy objectives considered significant by society.

2. Enhancing the substantive quality of decisions (Supporting and Improving Decision-Making): Policymakers view the PVE as a tool to improve the decision-making process by providing the necessary information in advance, contributing to the development of a well-defined project scope, and serving as an indication of societal support.
3. Accessibility and inclusivity, as well as educating and informing the public (Broader Reach and Participatory Engagement): Compared to other forms of participation, the PVE has the potential to reach a larger audience, resulting in a greater quantity of feedback. This is closely connected to the concept of participatory engagement, where the PVE is seen as a means to involve citizens in the policy process. It involves the transfer of knowledge between policymakers and participants, and vice versa.

The second round of interviews aimed to assess to which extent the policymakers' expectations are met. The findings from these interviews revealed both areas of alignment and areas where expectations diverged from the actual results.

1. Incorporating public values in decision-making (Insight into Public Opinion): The policymakers' expectation of gaining comprehensive insights into public opinion through the PVE was largely met. They acknowledged that the PVE provided valuable information about the perspectives and preferences of the public regarding the Lelylijn project. This information proved useful in understanding societal values and shaping policy objectives. However, policymakers also recognized the complexity of interpreting and structuring the data obtained from the PVE, highlighting the need for further analysis and synthesis.
2. Enhancing the substantive quality of decisions (Supporting and Improving Decision-Making): Policymakers generally believed that the PVE contributed to improving the quality of decision-making. The early-stage information gathered through the PVE helped identify areas where more information was needed, guiding further research and exploration. However, policymakers also acknowledged that it was too early to definitively assess the concrete impact of the PVE on decision-making, as final decisions had not yet been made. They emphasized the importance of evaluating the outcomes of the PVE in relation to the final decisions to fully gauge its effectiveness.
3. Accessibility and inclusivity, as well as educating and informing the public (Broader Reach and Participatory Engagement): Policymakers recognized the PVE's potential to reach a wider audience compared to traditional methods of participation. They appreciated the accessibility and efficiency of the PVE, which made it easier for people to participate regardless of their location or time constraints. Policymakers also highlighted the value of the PVE in identifying areas where more information was needed, allowing for targeted efforts to gather additional insights. However, they also noted the challenge of ensuring the representation of diverse groups, such as the elderly and women, in the PVE process. They stressed the need for a balanced approach that combines digital and traditional methods to maximize inclusivity.

Overall, the results of the interviews confirmed that the expectations of policymakers regarding the PVE were largely in line with the actual outcomes. The PVE was perceived as a valuable tool for incorporating public values, improving decision-making, and engaging a broader audience. However, there were also areas identified for improvement, such as addressing the representation of certain groups and enhancing communication about the results of the PVE.

The analysis of 400 responses from the PVE, involving 200 participants, revealed several clusters. The clusters derived from the answers to the question regarding the positive experiences of the participants are presented in Table 0.3. This table also displays the distribution of the frequency of each cluster occurring among the 1,000 coded responses.

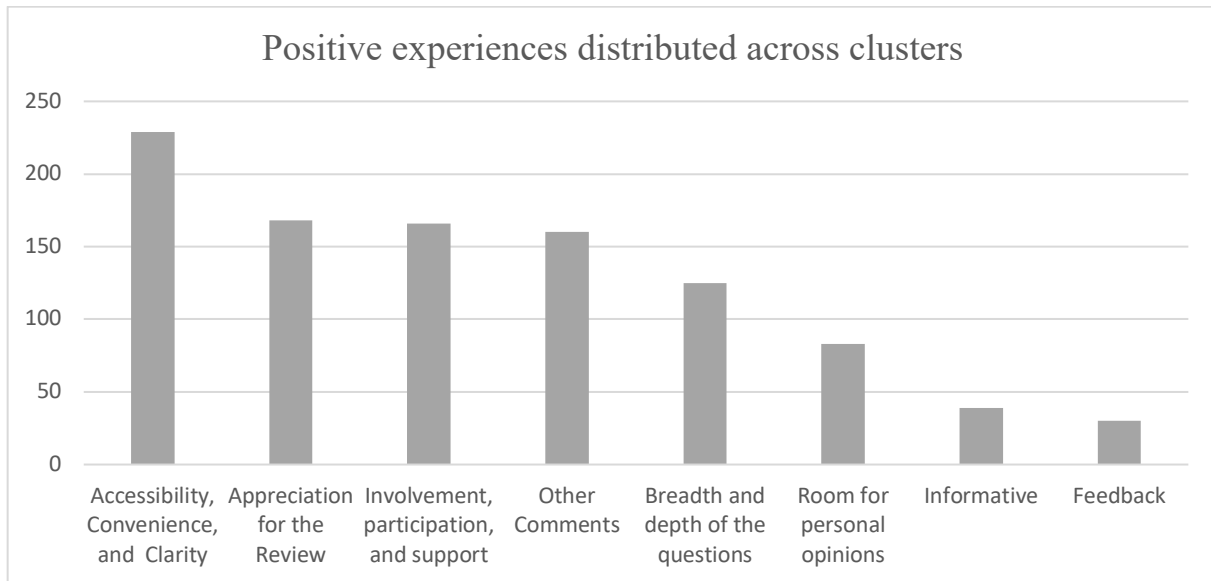


Figure 0.3: Distribution responses positive experience

The clusters derived from the answers to the question regarding the negative experiences of the participants are presented in Table 0.4. This table also displays the distribution of the frequency of each cluster occurring among the 560 coded responses. The cluster “Positive” which contains 404 answers is removed from the graph since this cluster does not indicate a negative experience. This cluster mainly contains responses where participants state that they don’t experience anything negative during their participation.

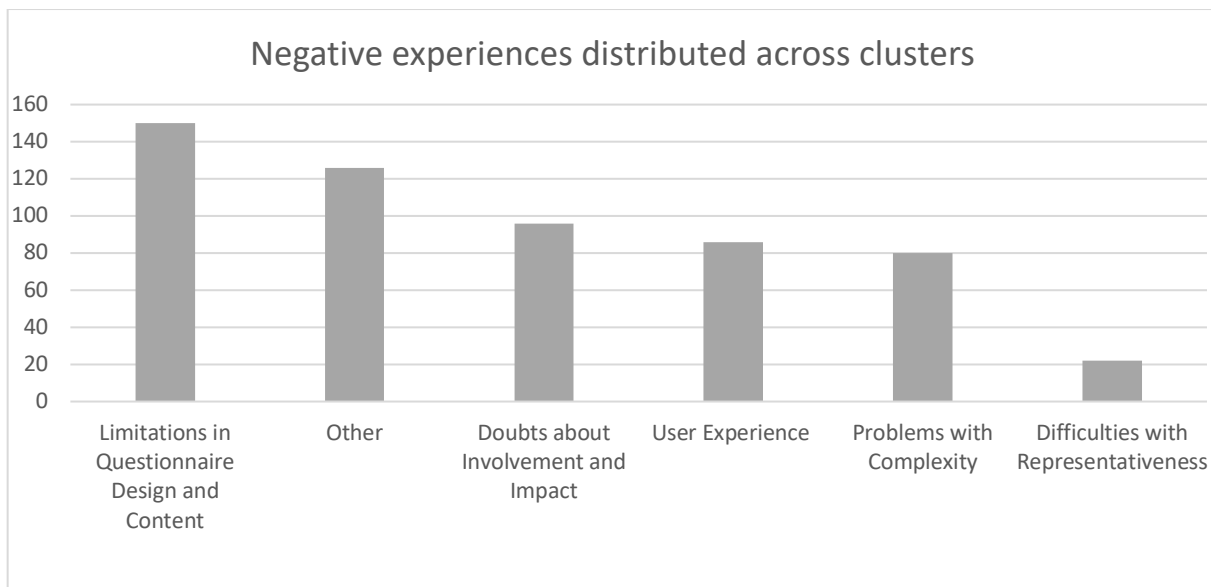


Figure 0.4: Distribution responses negative experience

The results indicate that participants generally had a positive experience with the PVE since 404 responses are “Positive”. By linking the clusters to the framework, the following findings have been identified. Significant benefits included accessibility and inclusivity, trust in institutions, and the educational aspect. Criticisms were focused on limited space for fundamental discussions, ambiguity regarding the use of input, and concerns about the accessibility and complexity of the PVE. When examining demographic characteristics, there were not many differences in responses. However, some interesting variations were observed. Younger participants (under 25) appreciated the accessibility, ease, and clarity of the PVE more but had less overall appreciation for the entire consultation process. The educational level also played a role, with participants at the vocational education (MBO) level

showing less alignment with the "breadth and depth of the questions," while participants with a higher secondary education background (HAVO/VWO) appreciated the accessibility, ease, and clarity more, but expressed less overall appreciation for the review process.

This research investigates the added value of the Participatory Value Evaluation (PVE) when applied to early-stage national infrastructure projects in the Netherlands. To determine this value, a framework was established in table 0.1, outlining eight values that were evaluated in terms of their achievement through PVE. Perspectives from both policymakers and participants were considered, with table 0.3 visually illustrating the extent to which each goal was met, using colours to represent positive or negative experiences. An overall scoring of PVE across these values can be derived from this table, and table 0.2 provides the ranking of these colours, offering a comparative analysis of how PVE performs against these values.

Table 0.2: Framework

Excellent
Good
Okay
Marginal
Bad
Not able to measure
Did not emerge

Table 0.3: Framework

#	Values Framework	Policymakers	Participants	Overall
1	<i>Educating and informing the public</i>		Excellent	Excellent
2	<i>Incorporating public values into decision-making</i>	Excellent		Excellent
3	<i>Improving the substantive quality of decisions</i>			
4	<i>Increasing trust in institutions</i>		Good	Good
5	<i>Reducing conflict</i>	Good		Good
6	<i>Achieving cost-effectiveness</i>			
7	<i>Space for Fundamental Discussion</i>		Marginal	Marginal
8	<i>Accessibility and Inclusivity</i>	Excellent	Okay	Good

The application of the Participatory Value Evaluation in national infrastructure projects offers several key benefits. It facilitates education and public enlightenment about the complexities of decision-making processes. It ensures the incorporation of diverse public values into decision-making and contributes significantly to building trust in government institutions. Additionally, the PVE is also effective in reducing potential conflicts by giving citizens a sense of involvement in the policy process and by serving transparency. However, there are areas where the PVE currently falls short according to the experiences of participants and policymakers. While it offers an avenue for fundamental discussions, the format can be more open or less suggestive according to participants to facilitate a deeper reflection and dialogue. Also, despite its success in engaging a broad audience, participants think that the PVE can improve in terms of accessibility and user experience to ensure more diverse participation. Lastly, the potential for PVE to improve the substantive quality of decisions and achieve cost-effectiveness needs further exploration. In the upcoming chapter on discussion, we delve deeper into these points and offer recommendations for the enhancement of PVE in terms of aspects where it currently scores relatively lower. The goal is to maximise the potential of the PVE in enriching national infrastructure projects.

The researcher's investigation into the PVE used in the MIRT process for the Lelylijn project has provided key insights into areas of improvement, further research requirements, and limitations of the study. This was the first application of a PVE in a MIRT project, serving both as a valuable data source and a learning opportunity. The researcher believes the PVE tool, if properly implemented, could significantly enhance the MIRT process, benefitting both policy makers and stakeholders. It can efficiently gather public opinion, educate citizens about government plans and provide a sense of involvement. However, if poorly implemented, it can be counterproductive. Key factors for a successful PVE implementation include effective communication, accessibility, choice, and representative respondent selection.

The PVE distinguishes itself as a unique participation instrument for MIRT projects due to its combination of depth and broad reach. Compared to other participation methods such as referenda, public hearings, surveys, and advisory councils, the PVE allows for nuanced and in-depth discussions. The PVE's reach extends across the entire country, in contrast to the local and physical nature of public hearings. While surveys offer similar advantages in terms of reach, they lack the depth and nuance provided by the PVE. The same applies to advisory councils, which offer expertise but have limited reach. Nevertheless, there is room for improvement in the PVE, in terms of inclusivity, depth, and space for discussion. The question that arises is to what extent the PVE should improve to provide the same level of depth as a public hearing or to engage the small group of people for whom the PVE is not accessible. The advice is to improve the PVE wherever possible while maintaining its identity. The PVE is a participation method that allows a large group of citizens, the unheard majority, to express their opinions in an accessible way.

The researcher's findings highlighted several areas for improvement in the implementation of the PVE:

1. **Communication:** Participants have high expectations for the impact of their input. Managing these expectations and clearly communicating how input will be utilized is crucial to maintain trust and satisfaction. The results of the PVE should be made easily understandable and accessible to all, and stakeholders should be kept informed about their use in decision-making.
2. **Stakeholder Engagement:** The coordination and communication with regional partners and administrators could be better according to the policymakers. These parties should be informed and involved early in the PVE process to prevent misunderstandings and disagreements.
3. **Question Design:** Respondents found the PVE questions to be leading and restrictive. More open-ended questions or diverse choices should be incorporated, maintaining a balance to avoid difficulties in analysis.
4. **Accessibility and Inclusivity:** The PVE was criticised for being too long, complex, and inaccessible for those not proficient with digital devices. Suggestions to improve this include adjusting the duration and complexity based on individual preferences.
5. **Offline Options:** To reach those without internet access or who find online tools challenging, the PVE could be offered in written form or combined with offline participation methods, such as public hearings.
6. **Scope:** Both policymakers and respondents felt the scope of the PVE was not broad enough. The researcher suggested the possibility of conducting a second PVE later in the MIRT process to address additional topics and information gaps.

This research recommends further investigation into the PVE. Aspects are identified that need to be considered in future research on the PVE. It acknowledges the significant qualitative and quantitative data generated by the PVE yet cautions about the quality of open-ended responses and challenges in establishing causality due to PVE being a snapshot of public opinion. Future research should consider the design and execution of each PVE, time and resources needed, and the possibility of delayed results publication.

The researcher's recommendations for further investigation:

1. Unanswered questions include the optimal time for PVE implementation in the MIRT process, and its applicability in cost-effectiveness and improving substantive decision quality. These values could not be measured in the current study. Further research could explore the PVE's educational impact on the public, as well as its role in conflict reduction.
2. This study also recommends the consideration of how early a PVE should be implemented for optimum results, bearing in mind that some project information is needed before setup. It suggests combining PVE with other participation methods to reach a broader audience and improve inclusivity.
3. The study noticed a trend that highly educated individuals were less positive about the PVE, which requires further investigation. Another interesting dynamic to explore is the initial scepticism and subsequent positive outlook on PVE among policymakers. Understanding this change could lead to strategies that improve policymakers' perception of PVE from the onset.
4. Future research is encouraged to conduct multiple studies using different cases to verify the added value of PVE, taking into account the type of MIRT project and how the PVE is executed. These recommendations aim to refine the PVE methodology and better incorporate public opinion into project planning processes.

The limitations detected throughout the study, aimed to contextualize the research findings better. It sheds light on the challenges faced during the study, thereby enhancing its overall value. This self-evaluation also proposes recommendations for mitigating these limitations in future research.

The limitations of this study acknowledged by the researcher:

1. Subjectivity: The research heavily depends on qualitative data, including interpreted interviews with policymakers. Future research could involve multiple researchers to lessen subjectivity in analysis and in coding qualitative data from the PVE.
2. Mismatch between theory and practice: The MIRT procedure's description is based on literature rather than real-world practices, which could lead to inaccuracies in understanding the procedure's execution and the placement of the PVE within it. Future research should integrate real-world experiences.
3. Limitations of human perception: The study's insights about the PVE's value depend solely on participants' experiences during the PVE, potentially overlooking values outside of participants' direct consciousness or awareness. Future research could use methodologies like longitudinal studies and in-depth interviews to explore both conscious and unconscious values.
4. Limited range of questions: Only two open-ended questions about participants' experiences were included in this study. Including more questions about participants' experiences and using advanced analytical techniques to analyse participant background characteristics could offer a more nuanced understanding of participants' perspectives.
5. Timing of policymaker interviews: Policymakers were interviewed too late in the process, after exposure to interim results, possibly influencing their expectations and perceptions of the PVE. Future research should consider interviewing policymakers earlier in the process to more accurately gauge their initial perceptions and expectations.

Table of Content

Preface.....	5
Management summary	7
Table of Content.....	16
List of abbreviations.....	20
1. Introduction.....	21
1.1. Problem statement.....	21
1.2. Literature review	22
1.2.1. Cost Benefit Analysis.....	22
1.2.2. Participatory Value Evaluation	23
1.2.3. Participatory Value Evaluation vs Cost Benefit Analysis.....	23
1.2.4. Multi-Criteria Analysis	23
1.2.5. Environmental Impact Assignment.....	24
1.2.6. Social Impact Assessment.....	24
1.3. Knowledge gap.....	24
1.4. Research objective	25
1.5. Research questions	25
1.6. Research Approach	26
1.7. Alignment CoSEM.....	27
1.8. Outline.....	27
2. Core concepts	28
2.1. MIRT.....	28
2.1.1. What is MIRT	28
2.1.2. Rules of the Game.....	28
2.1.3. MIRT Process.....	29
2.2. Participatory value evaluation.....	34
2.2.1. PVE	34
2.2.2. Setup a PVE	34
2.2.3. Steps for conducting a PVE	35
2.2.4. Purpose of PVE	35
2.2.5. Type of information that can be gained from PVE.....	35
2.2.6. Risks of the PVE	36
2.3. PVE in the MIRT process	36
2.3.1. PVE in the Research phase	36
2.3.2. PVE and Exploration.....	37
2.3.3. PVE and Preferred decision	37

2.3.4.	PVE and MIRT	38
2.4.	Participation methods.....	38
2.4.1.	Referendum.....	38
2.4.2.	Public Hearing.....	39
2.4.3.	Enquete.....	39
2.4.4.	Advisory Council	40
3.	Framework	41
4.	Research Methodology.....	43
4.1.	Approach	43
4.2.	Case study Lelylijn.....	43
4.2.1.	Lelylijn	43
4.2.2.	PVE Lelylijn.....	45
4.3.	Data collection	47
4.3.1.	Interviews.....	47
4.3.2.	PVE results.....	50
4.4.	Analysis.....	50
4.4.1.	Processing interview data.....	50
4.4.2.	Qualitative to Quantitative PVE data.....	50
5.	Experience PVE policymakers.....	51
5.1.	Results interview before publication outcomes PVE.....	51
5.1.1.	Processing the interviews.....	51
5.1.2.	Preserved values.....	51
5.1.3.	Risks and constrains.....	52
5.2.	Results interview after publication outcomes PVE.....	52
5.2.1.	Processing the interviews.....	53
5.2.2.	What was the policymakers' impression of the PVE?	53
5.2.3.	Did the expectations prior to the PVE match the outcomes of the PVE?.....	53
5.2.4.	What are the positive and negative aspects of the PVE according to the policymakers?	55
5.3.	Conclusion.....	56
6.	Experience PVE participants.....	58
6.1.	Exploration of clusters/themes.....	58
6.1.1.	Positive clusters.....	58
6.1.2.	Negative clusters	59
6.2.	Quantitative analysis clusters.....	61
6.2.1.	Positive experiences	61
6.2.2.	Negative experiences	62
6.2.3.	Demographics	62

6.3.	Conclusions	63
6.3.1.	Values participants	63
6.3.2.	Demographic characteristics	64
7.	Conclusion.....	66
7.1.	Sub-questions	66
7.2.	Research question.....	67
8.	Recommendations and Discussion.....	70
8.1.	PVE compared to other Participation Methods.....	70
8.2.	Recommendation for Practice	71
8.3.	Recommendation for Further Research	73
8.4.	Limitations	75
	References	77
	Appendix A: Informed Consent form – interview	81
	Appendix B: Interview guide of interviews after PVE publication	83
	Appendix C: Coded interviews prior PVE publication.....	84
	Participant 1	84
	Participant 2	86
	Participant 3	88
	Participant 4	90
	Participant 5	92
	Appendix D: Coded interviews after PVE publication.....	94
	Participant 1	94
	Participant 2	96
	Participant 3	98
	Participant 4	100
	Participant 5	102
	Participant 6	104
	Participant 7	106
	Appendix E: Descriptive statistics candidates theme analysis.....	108
	Appendix F: Detailed description of positive clusters	109
	Appendix G: Detailed description of negative clusters.....	112
	Appendix H: Results PVE Clusters and Subclusters	115
	Positive clusters.....	115
	Positive subclusters	115
	Negative clusters	118
	Negative subclusters.....	118
	Appendix I: Results PVE background characteristics	120

Age	120
Positive age	120
Negative age.....	121
Province.....	121
Positive Province.....	122
Negative Province	122
Education.....	123
Positive education	124
Negative Education	125
Independent Samples T-test	126

List of abbreviations

CBA	Cost-Benefit Analysis
IenW	Ministerie van Infrastructuur en Waterstaat Ministry of Infrastructure and Water Management
MIRT	Meerjarenprogramma Infrastructuur, Ruimte en Transport Multi-Year Programme for Infrastructure, Spatial Planning and Transport
PVE	Participatory Value Evaluation

1. Introduction

This chapter serves as an introduction to the research. Initially, a problem statement is presented, followed by a literature review. Based on this review, a knowledge gap is identified. To address this gap, a research question, along with necessary sub-questions, is constructed. Subsequently, the methodology for answering these questions is explained, and the subsequent structure of the report is discussed.

1.1. Problem statement

Well-being is a broad and sometimes somewhat vague concept that has gained an important factor within society in recent years. For instance, research shows that 77 per cent of Dutch people consider well-being more important than prosperity (De ondernemer, 2020). The difference between these two concepts is that prosperity has a more economic perspective and well-being includes a broader perspective of happiness namely the quality of life (Greve, 2019). Not only do citizens in the Netherlands consider this important but also the Dutch government believes that its policies should focus more on the quality of life/well-being of its citizens than they currently do. Taking more care of citizens' well-being has become very important in the Dutch government to prevent duped citizens by policy choices, the surcharge affair is one of the reasons for this high priority (Henley, 2021). The House of Representatives has expressed a desire for a broader conception of prosperity in addition to using a gross domestic product to measure well-being since 2015 (NOS, 2016) (Snellen et al., 2020).

To make well-being more specific, well-being can be seen as a set of indicators that together can reflect a person's well-being. For instance, housing, health, safety and social contacts determine the extent of a person's well-being (Snellen et al., 2020). These indicators are strongly determined by the immediate living environment such as peace and calm, space and environmental quality (Ellen et al., 2001). Government projects that have a large impact on these factors are projects that fall under the Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT). The MIRT includes various national projects and programs aimed at improving accessibility, safety, and spatial planning in the Netherlands. The MIRT Overview is presented annually to the Dutch House of Representatives on Budget Day as an annex to the budget of the Ministry of Infrastructure and Water Management (IenW) (Ministerie van Infrastructuur en Waterstaat, 2022c). These are projects implemented by IenW, such as highways, tunnels, bridges, and railways.

To ensure that broad prosperity is included in the choices of various transport projects, the Ministry of Infrastructure and Water Management is currently investigating suitable evaluation methods. Cost-benefit analysis (CBA) is a tool that has mostly been used to evaluate various transport projects. The CBA compares policy options by quantifying their effects on society by expressing them in monetary terms (Bronsteen et al., 2012). One problem with the CBA is that broad prosperity is difficult to measure since prosperity is difficult to express in euros (Duarte et al., 2010) (Mulley et al., 2016). In response to these shortcomings, a new evaluation method was developed by researchers at the Technical University of Delft, Participatory Value Evaluation (PVE). PVE is an evaluation method that identifies the social prosperity effects of public policies by eliciting individuals' preferences about the allocation of public budgets and their private income (Mouter, Hernández, et al., 2021) (Mouter, Koster, et al., 2021). This is done by making citizens experience the policy dilemma by putting them in the shoes of a policymaker and then asking what the citizen would do. The PVE can also be employed to map out preferences, values, and concerns within society (Mouter, Shortall, et al., 2021). By involving citizens and asking them what values they deem important within the context of a specific project, and what potential concerns they might have, policymakers can gain a more thorough and nuanced understanding of how society perceives this topic. This gathered information can then be applied to centralize societal interests in policy decisions, thereby creating a more inclusive and holistic approach to decision-making.

The PVE is a promising tool that is still under development and whose application to MIRT projects has several unanswered questions. To include broad prosperity in MIRT projects of the Ministry of Infrastructure and Water Management in the coming period, it is important to investigate the promising PVE. Pilots can be used to determine how PVE can best be deployed in follow-up project evaluations. Exploring the PVE further will indirectly contribute to a more livable society. By using pilots to determine the most effective deployment of PVE in project evaluations, policymakers can gain a better understanding of the positive impact a PVE can have. This could lead to more informed decision-making and increased public participation, which in turn could improve the quality of MIRT projects and create greater benefits for society.

1.2. Literature review

The Ministry of Infrastructure and Water Management faces a challenge to assess their transport projects with a broader conception of prosperity. In this, it is important to include both distribution and inclusiveness of prosperity and well-being effects on society. The ministry is currently using Cost-Benefit Analysis (CBA) for assessment and are exploring Participatory Value Evaluation (PVE) for use. To identify exactly where knowledge is lacking, this chapter conducts a literature review of some core concepts. For this review, firstly a selection of scientific sources is collected. The data source Google Scholar was used for this purpose. Combinations of the following keywords were used to find relevant sources: PVE, Participatory Value Evaluation, Transport projects, CBA, Cost Benefit Analysis, and Case study. From all the results that emerged from these search terms, the most relevant sources were selected. In addition to the literature review on PVE and CBA, an investigation will be carried out on three additional evaluation methods that are used to provide policymakers with insights into transport projects: Multi-Criteria Analysis, Environmental Impact Assessment, and Social Impact Assessment. In addition to outlining these methods, particular attention was given to the distinctions between them and PVE and CBA.

1.2.1. Cost Benefit Analysis

The first concept that will be discussed is the Cost-Benefit Analysis (CBA). The CBA compares policy options by quantifying their effects on society by expressing them in monetary terms (Wegner and Pascual, 2011). Effects that cause positive change are seen as benefits and negative changes as costs. These monetary costs and benefits are formed by the actual (implementation) costs and profits of a project and what people are willing to pay for a certain change caused by the project. For example, what is the maximum someone is willing to pay for a 15-minute time loss when travelling from A to B? Comparing policy options from the perspective of utility (willingness to pay) is based on the ethical theory of utilitarianism. Utilitarianism is a theory that favours actions that cause happiness or pleasure and disapproves of actions that cause misfortune or harm. In terms of political decisions, a utilitarian would focus on improving society.

Improving society brings us to the first point of criticism of the CBA. By labelling a project as good if the whole society improves, a large group may deteriorate at the expense of the other. The CBA does not take this into account, leaving distributional effects and equity out of the equation (van Wee, 2012). Another criticism of the CBA is the way values are measured, with the willingness to pay (WTP). Individuals evaluate mortality risk differently in a private than in a public context. Drivers will assign a relatively low value to crash reduction and a higher value to time savings (Mouter, van Cranenburgh, & van Wee, 2018). Another problem that the CBA faces is that certain values are very difficult to express in money (van Wee, 2012). Construction costs are easy to express in money, but values like nature, aesthetics, or social cohesion are not, due to a lack of market for these goods. Not being able to express these goods properly in money or not including these goods in the CBA will affect the completeness of the analysis (Wegner & Pascual, 2011).

1.2.2. Participatory Value Evaluation

A relatively new assessment method is the Participatory Value Evaluation (PVE). This method was developed to overcome the above-mentioned criticisms of the CBA (Mouter et al., 2019a). The PVE is an evaluation method that measures the desirability of public projects and their values through public participation. Individuals are asked to put together the best portfolio of projects or attributes based on the effects each project has on society and their social preferences (Dekker et al., 2019). A limitation of compiling such a portfolio is that they are limited to a certain budget. All participants' choices are then analysed using the multiple discrete-continuous extreme values (MDCEV) model that estimates individuals' preferences for government projects and the extent to which participants think the government budget should be allocated (Mouter, Shortall, et al., 2021).

By allowing people to assess government projects with government budget rather than private income and by allowing the participant to identify with all members of society, spatial equality is reflected in the results of project assessment (Mouter, Koster, & Dekker, 2021a). This means that there is an equal spread of benefits and costs of infrastructure projects across the country.

1.2.3. Participatory Value Evaluation vs Cost Benefit Analysis

The CBA and the PVE are measurement methods that can evaluate project alternatives in different ways. These different ways result in the outcomes of the two methods also being different. Furthermore, they both have their strengths and their weaknesses. Whereas the CBA has flaws in including all prosperity and prosperity effects, the PVE again risks that participants have insufficient knowledge about the subject, resulting in a deterioration of the results (Plottu & Plottu, 2010). A question that remains is whether one method makes the other redundant or whether the methods are complementary to each other. To gain more insight into this, tests were conducted with the PVE and the CBA.

The PVE has been applied several times to different types of cases including the assessment of a transport investment plan for the Transport Authority of the municipality of Amsterdam (TAA) (Mouter et al., 2019b). In this study, 16 transport projects were evaluated using the PVE and the CBA. This paper investigates the differences in outcomes of these two evaluation methods. It showed that safety projects and cycling projects scored higher in a PVE than in a CBA. Furthermore, it is still not clear how to include both outcomes in the decision-making process for which the PVE and the CBA should provide input.

1.2.4. Multi-Criteria Analysis

The Multi-Criteria Analysis (MCA) is a decision-making tool that evaluates alternatives based on multiple criteria or objectives. It compares and ranks different options based on their performance across a range of criteria (Broniewicz & Ogrodnik, 2020). MCA is often used in transport infrastructure projects to assess the feasibility and sustainability of different options (Ward et al., 2019). The MCA process involves several steps, including identifying the criteria and objectives, weighting the criteria based on their relative importance, and evaluating the alternatives based on the criteria (Macharis & Bernardini, 2015).

One commonality between MCA, Participatory Value Evaluation (PVE), and Cost-Benefit Analysis (CBA) is that all three evaluation methods aim to provide policymakers with information to assess the desirability of a transport policy option. CBA requires all benefits and costs to be expressed in monetary terms, while MCA can include a broader range of criteria, including those not valued in monetary terms (Mouter, 2021). MCA also provides more flexibility in determining weights for different criteria, but this flexibility can also lead to subjectivity and inconsistency (Mouter, 2021). The main difference between PVE and MCA lies in who determines the criteria and their importance. In MCA, this is usually determined by the analyst, while in PVE, the relevance of a criterion for the evaluation is determined by the participants in the PVE process (Mouter, 2021). This means that PVE can be more participatory and democratic as it directly reflects the preferences and values of the

public. On the other hand, the selection and weighting of criteria in MCA could potentially be more consistent and less prone to manipulation, as they are carried out by trained analysts.

1.2.5. Environmental Impact Assignment

An Environmental Impact Assessment (EIA) is a comprehensive evaluation of the likely impacts of a project that significantly affects the environment. It's an environmental management tool that is integral to project approval and decision-making processes (Jay et al., 2007). The aim of the assessment is to ensure that policymakers take environmental effects into account when deciding whether or not to proceed with a project (Cenecal et al., 1999). EIAs are often legally required for certain types of projects. This is also the case in the Netherlands, during the preparation of government transport projects that could lead to significant adverse environmental effects (Rijksverheid, n.d.). Chapter 2.1.3.2. delves deeper into this and addresses its implementation within the framework of the MIRT process.

One notable difference between an EIA and other evaluation methods like CBA, PVE, and MCA is the scope of their assessment. While an EIA primarily focuses on the environmental impacts of a project, CBA, PVE, and MCA consider a broader range of effects (Mouter, 2021). Additionally, an EIA includes recommendations for mitigating and managing negative environmental impacts. This feature is generally absent in CBA, PVE, and MCA, which are mainly designed to evaluate and compare different policy options or projects, but not necessarily to propose specific measures to mitigate negative effects (Mouter, 2021).

1.2.6. Social Impact Assessment

Social Impact Assessment (SIA) is a crucial tool used to analyze, monitor, and manage the social consequences of development projects. The objective of an impact assessment is to promote an environment that is not only beneficial for nature, culture, and the economy but also fair for everyone. This is achieved by fostering community development and enhancing their capacities (Vanclay, 2003). In the case of transportation projects, conducting an SIA involves assessing the potential social impacts of the project on the affected communities and stakeholders. This includes evaluating the potential effects on access to services, employment, social cohesion, as well as the potential impacts on the environment and public health (Mottee, 2021).

The main difference between SIA and CBA lies in their respective focuses. CBA primarily emphasizes economic factors, whereas SIA places greater emphasis on social and human factors. CBA and PVE assess the consequences of transportation projects based on the willingness of individuals to pay for them (Mouter, 2021). On the other hand, SIA takes into account all social impacts. In general, SIA is more concerned with the social and human aspects, while CBA and PVE tend to concentrate more on economic factors.

1.3. Knowledge gap

It was retrieved from the literature that in areas where the CBA falls short, the PVE can be a good addition. But, because the PVE has never been applied to transport projects in the MIRT, it is still unknown how the PVE should be included in this process. It is still unclear whether the PVE completely replaces or only complements the CBA and whether the results of the PVE can be reused for other policy decisions (Mouter, Koster, & Dekker, 2021). These findings reveal the following knowledge gap:

It is not yet sufficiently known where the added value of the Participatory Value Evaluation lies when applied to MIRT projects.

There are various values that a participation instrument can add to the policy process, because each form of participation has its own strengths and weaknesses. What these values could be are discussed

in the framework in chapter 3. This knowledge gap indicates the lack of understanding regarding the added value of the PVE when applied within the MIRT process.

1.4. Research objective

The research objective of this study is to gain insight into how the PVE can be best utilized in the MIRT process to integrate a broader welfare perspective into the evaluation of transport projects. By achieving this, this study contributes to a fairer and more inclusive decision-making process in the assessment of transport projects. Ultimately, this study will result in recommendations to improve the use of PVE in the MIRT process and ensure a better alignment of transport projects with societal values by involving stakeholders.

1.5. Research questions

Based on the knowledge gap and the research objective, a research question can be formulated that could contribute to reducing this knowledge gap and fulfilling the objective. The research question that will be answered in the proposed paper is:

What is the added value of applying PVE in national infrastructure projects?

Several sub-questions have been drawn up to help answer the research question of this study. The research question focuses on the research phase of the MIRT process. This is the very first phase that is undertaken in the entire process. This phase is used to map out area-specific or thematic challenges. Its purpose is to identify bottlenecks and offer solutions at both national and local levels. It can lead to follow-up investigations or actions and measures (Ministerie van Infrastructuur en Waterstaat, 2016). The research phase of the MIRT was chosen because it is very interesting to include participation in this phase of the entire MIRT process, as non or just a few decisions have yet been taken on project design in this research phase. As a result, there is still enough room in this phase to incorporate the results of participation in the entire design process of MIRT projects.

1. *Where can the PVE be applied in the MIRT process and what is the perceived added value in the research phase?*

This sub-question forms the basis of the research. It should provide insights into the PVE, the MIRT process, and the expectations of the PVE during the MIRT process. To further clarify this sub-question, it can be broken down into the following four questions:

1.1. *What is the PVE and what are its strengths and risks?*

By answering this question, a deeper understanding of the PVE and its capabilities is gained. The information gathered for this question is important for both the researcher and the reader to gain a basic understanding of the PVE. This is crucial for determining where the PVE can be applied in the MIRT process.

1.2. *What is MIRT and what does its process look like?*

Just as gaining insight into what the PVE is, it is also important to gain a clear understanding of what the MIRT process entails. This requires an examination of the decision-making points in the process and the information flows involved. This is also crucial for determining where the PVE can be applied in the MIRT process.

1.3. *Where can the PVE be applied in the MIRT process?*

With the information gained from the previous two questions, a match can be sought between the information needs from the MIRT process and the characteristics of the PVE. This way, it can be examined at which moments in the MIRT process the PVE can be applied.

1.4. *What are the expectations of policymakers about the added value of the PVE in the MIRT process?*

The question that remains is how individuals involved in the decision-making process of a MIRT project expect the PVE to contribute to the decision-making process. The results of this question can be used to assess whether the expectations prior to the PVE match the outcomes of the PVE.

2. How do participants perceive their participation in the PVE of MIRT projects?

This sub-question aims to determine how participants perceive and evaluate the PVE applied to MIRT projects. By answering this question, we attempt to identify the added value that the PVE has for the participants. This will be done by mapping out what participants experience positively and negatively. This sub-question can be divided into the following four questions.

2.1. How did participants experience the PVE?

To find out how participants perceived the PVE, they are asked what they thought of the PVE.

2.2. What are the positive and negative aspects of the PVE according to the participants?

To gain an even broader perspective on the experiences of the PVE, participants are specifically asked what they like and do not like about the PVE.

2.3. What are the differences in background characteristics regarding participants' perception of the PVE and their experience?

Once the experiences and opinions of the participants are clear, it is possible to examine whether there are differences in background characteristics between the various perspectives and opinions. This can help to identify if there are any patterns in how participants perceive the PVE based on their background characteristics such as age, gender, education level, and geographics.

3. How do policymakers of MIRT projects experience the PVE?

This question is investigated to determine whether the expectations of the policymakers (member of a government department involved by a transport project) that were identified in the first sub-question have been met and what their experiences are. This is done by examining three specific questions:

3.1. What was the policymakers' impression of the PVE?

Understanding the experiences and perceptions of policymakers is important in evaluating the effectiveness and impact of the PVE in the decision-making process. Policymakers have a significant role in shaping the direction of MIRT projects, and their experiences with the PVE may influence their decision-making and overall support for the use of PVE in future projects.

3.2. Did the expectations prior to the PVE match the outcomes of the PVE?

By comparing the expectations with the actual outcomes of the PVE, it is possible to assess the effectiveness of the PVE.

3.3. What are the positive and negative aspects of the PVE according to the policymakers?

By identifying the positive and negative aspects of the PVE of policymakers, it becomes possible to reflect on the PVE and identify areas for improvement in future projects.

1.6. Research Approach

In this section, the research approach is outlined that will be used to answer the research questions and achieve the objectives of this study. The focus is on exploring the added value of PVE in MIRT projects, with a case study of the Lelylijn project. The approach includes a literature review, and case study analysis involving qualitative and quantitative data collection and analysis.

A literature review will be conducted to explore the concepts of MIRT and PVE. The MIRT process will be analysed in detail, highlighting the various stages and decision points. Additionally, PVE will be examined, evaluating its strengths, limitations, and potential applications within the MIRT process. The literature review will serve as the basis for identifying the potential applications of PVE in the MIRT process.

The case study method was chosen because of its ability to gain an in-depth understanding of the application and added value of PVE within the Lelylijn project. The Lelylijn case study will be analysed to determine what stage of the MIRT process the project is at and to examine the application of PVE in this particular case. Semi-structured interviews will be conducted with policymakers involved in the Lelylijn project. The interviews will take place before and after the publication of the PVE results. This will allow us to examine the expectations around PVE and evaluate whether those expectations have been met. Additionally, the interviews will seek to understand the added value of PVE from the perspective of policymakers and the decision-making process.

To determine the added value of PVE from the perspective of participants, data will be collected from the PVE itself, which will be conducted during the Lelylijn project. This will be done by analysing two questions that participants answered about their positive and negative experiences during the PVE process.

This approach ensures a thorough analysis of both the theory behind MIRT and PVE, as well as the practical application and experiences within the Lelylijn project. By using qualitative data from interviews and the PVE itself, a holistic view of the added value of PVE from different perspectives can be obtained, which can provide valuable insights and recommendations for the further development and application of PVE in MIRT projects.

1.7. Alignment CoSEM

This research aligns well with the Complex System Engineering and Management (CoSEM) program, as it has a strong focus on both social and technical aspects. The CoSEM master's program addresses complex issues related to socio-technical systems (TU Delft, n.d.-a). Improving the evaluation process of transport projects involves technical aspects related to tools and projects themselves, as well as social aspects that play a role in decision-making. By examining and linking the added value of PVE to the MIRT process, a bridge is created between the technical and social dimensions of infrastructure projects. This contributes to a better understanding of how decision-making can be improved in complex socio-technical systems and how stakeholders can be effectively involved in the process. Therefore, this research is perfectly aligned with the objectives and core themes of the MSc CoSEM program.

1.8. Outline

The structure of the report is as follows. In the next chapter, chapter 2, the MIRT and PVE are explained based on the literature. Subsequently, a connection is made between these two concepts in this chapter, and the PVE is placed in the MIRT process. Chapter 3 explains the framework that is used in this study to position the found added value of the PVE. Chapter 4 describes the approach of this research in detail. The type of research, the case, data collection, and processing are explained here. In chapter 5, the results and findings from the interviews conducted with policymakers are presented. The added value of the PVE from the perspective of the policymakers can be found here. In chapter 6, the results and findings from the analysis of the PVE participants' responses are presented. This chapter indicates the strengths and weaknesses from the candidate's perspective. Chapter 7 contains the conclusion of the research and answers to the research questions. The final chapter, chapter 8, forms the discussion and reflection.

2. Core concepts

In this chapter MIRT is elaborated, including the MIRT process and its associated steps. Additionally, the PVE is further explained, focusing on the steps involved, the information gained, and how potential risks are addressed. Once both subjects have been thoroughly discussed, a connection is established between the two. The aim is to gain a deeper understanding of the PVE within the MIRT process. This exploration serves as the foundation for determining the current phase of the Lelylijn case and provides a first impression of how the PVE can contribute to this particular case. By understanding the relationship between the MIRT and PVE, it helps to further determine the added value of the PVE within this process. The final subsection in this chapter delves into various participation forms utilized by the Dutch government. This exploration is conducted to subsequently compare the PVE with the strengths and weaknesses of these participation methods in the discussion.

2.1. MIRT

In this section, the MIRT process will be explored in detail. Firstly, we will briefly explain what MIRT entails and how it contributes to the collaboration between the national government and the regions in tackling complex spatial challenges. Next, we will discuss the MIRT Rules of the Game, which serve as a guide for the parties involved in the MIRT process. Finally, we will elaborate on the MIRT process based on these rules, by going through the different stages of the trajectory.

2.1.1. What is MIRT

The Multi-Year Program for Infrastructure, Spatial Planning, and Transport (MIRT) is a national investment program in the Netherlands aimed at achieving better coordinated and substantively interconnected investments in the spatial physical domain. The program ensures transparency in investments and is included in the national budget through the Mobility Fund and the Delta Fund (Ministerie van Infrastructuur en Waterstaat, 2022c). The MIRT consists of five components.

1. Spatial Agenda: This contains the joint vision and identified challenge(s) for a region by the national government and the region together.
2. MIRT Research: An informal research process without procedural requirements.
3. MIRT Consultations: Consultation moments between the involved parties.
4. MIRT Overview: An overview of all projects falling under MIRT.
5. MIRT Rules of the Game: These describe the process with decision-making moments, the working method of the national government and the region, and requirements per phase for national financing.

2.1.2. Rules of the Game

The MIRT Rules of the Game are guidelines for collaboration between the national government and the regions in the Netherlands in planning and executing infrastructure, spatial planning, and transport projects within the MIRT Overview. These rules help the involved parties in organizing their collaboration and going through the different stages of a MIRT trajectory. Some key points of the MIRT Rules of the Game (Ministerie van Infrastructuur en Waterstaat, 2017):

1. Broad Beginning: Involving different parties to identify a wide range of ambitions and challenges, resulting in smart solutions.
2. Funneling and Transparent Decision-Making: Working towards executable projects by making transparent choices from a broad start.
3. Adaptive Programming: Flexibility in decision-making to deal with uncertainties about the future.
4. Thinking in Challenges: Identifying joint challenges to arrive at better and more integrated solutions.
5. Contributing Together: All involved parties are jointly responsible for the success of the MIRT trajectory.

2.1.3. MIRT Process

This sub-section discusses the MIRT process in detail, with all information and insights sourced from the document “Spelregels van het Meerjarenprogramma Infrastructuur, Ruimte en Transport” (Ministerie van Infrastructuur en Waterstaat, 2022d) This document provides a detailed explanation of the steps and guidelines that need to be followed in planning and executing projects within the MIRT. This chapter aims to provide a concise and structured overview of the MIRT process, incorporating the key information and visualizations from the document. The following figure provides a schematic representation of the MIRT process with associated decision points.

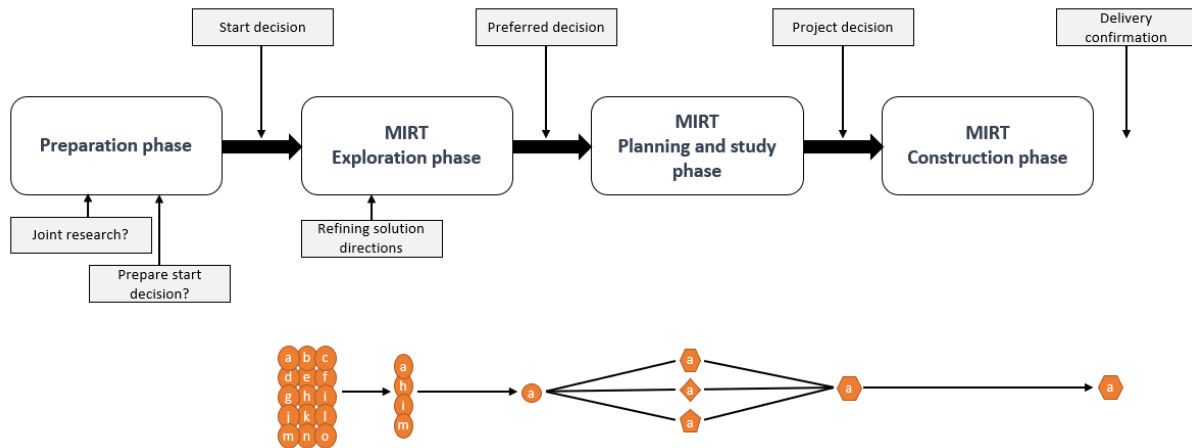


Figure 1: Visualization MIRT process

The figure shows four phases. The Preparation Phase, where the national government, regions, and other parties collaborate to select issues and determine if a MIRT study is necessary. Then, the Exploration Phase, where a thorough problem analysis and identification of solution directions lead to a preferred decision. In the subsequent Planning and Study Phase, the preferred decision is further developed into a project decision, where essential aspects such as scope, implementation period, financing, and distribution of responsibilities are established. In the final phase, the Construction Phase, a project will be realized. After the completion of the construction phase, the project is handed over to the managing party.

In the next four subsections, each phase of the MIRT process will be discussed separately and in detail. This will contribute to a better understanding of the specific activities and decision moments associated with each phase.

2.1.3.1. Preparation Phase

The Preparation Phase in the MIRT process is used for jointly identifying, investigating, specifying, and mapping out solution directions for infrastructure and spatial challenges. The national government, regions, and other parties collaborate to select challenges from various sources such as urbanization strategies, accessibility programs, and bottlenecks. As the Preparation Phase is informal, it can be skipped if sufficient information is available. During the Preparation Phase, decisions are taken on which challenges should be investigated and which should not, based on political-administrative considerations. If it is decided to conduct a MIRT study, the responsible party(ies), goal and result, duration, process steps, involvement of third parties, and financing are determined.

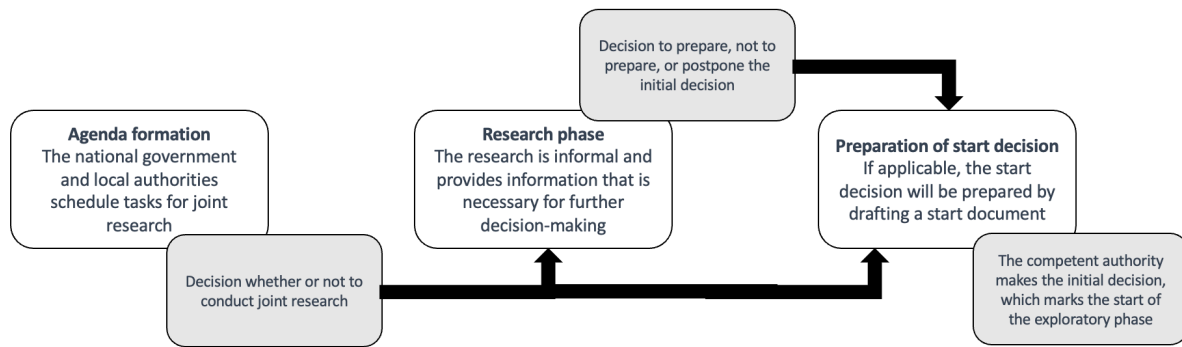


Figure 2: Schematic presentation of the preparation phase

Agenda-setting is the process of identifying and selecting significant issues, concerns, or problems to be addressed by policymakers, organizations, stakeholders, or other involved parties. This process determines which problems receive attention and which do not, and it forms the basis for decision-making and policy development.

The decision to carry out a joint study or not is made in the MIRT Consultation. This decision is a political-administrative consideration without strict criteria. When a MIRT study is initiated, responsibilities, goals, duration, process steps, and financing are determined.

The MIRT Research phase focuses on clarifying the challenges, scope, and stakeholders involved. Depending on the type of challenge, a region-based or thematic approach is used. When investigating mobility challenges and measures, it is recommended to use traffic and transportation models for accurate analysis and predictions. The MIRT study also provides insight into costs and financing options. In some cases, initial indicators of the ratio between benefits and costs (key figures) are presented to indicate the economic feasibility of solution directions.

The decision to prepare, not to prepare, or postpone the preparation of a starting decision is made during the MIRT Consultation. This decision is based on the MIRT Research phase results and the involved parties' considerations. There are three possible outcomes:

1. Preparing the starting decision: If the MIRT Research phase provides sufficient information and insight into the task, possible solutions, and financing, a decision can be made to prepare the starting decision. This means that the task is further developed and made more concrete in terms of goals, measures, and costs.
2. Not preparing the starting decision: If the MIRT Research phase shows that the task is not feasible, not desirable, or not financeable, a decision can be made not to prepare the starting decision. This means that the task is not further developed and is not included in the MIRT overview.
3. Holding the starting decision: If there is insufficient information or insight to make a decision about the starting decision, or if additional coordination or research is needed, a decision can be made to hold the starting decision. This means that more time is taken to further investigate and weigh the task before deciding whether or not to prepare the starting decision.

When the decision is made to prepare a starting decision, a starting document is drawn up. This document contains essential information about the project or program, such as the problem and objective, description of the task, parties involved, possible solution directions, planning and phasing, financial aspects, and conditions and management measures. The starting document is jointly prepared by the parties involved and forms the basis for further decision-making and project development.

The competent authority takes the starting decision, marking the formal start of the project and beginning the exploration phase of the project or program. In the phase that follows (exploration

phase), possible solutions and alternatives are further examined, environmental effects are assessed, and stakeholders are consulted. The exploration phase forms an important foundation for further planning and decision-making in the project.

2.1.3.2. Exploration phase

The aim of the exploration phase is to work towards a suitable and sustainable preferred decision to realise a task based on a thorough problem analysis and a broad inventory of solution directions. In the exploration phase, a task is explored broadly or task-oriented, the objective and problem analysis are concretised, and an insightful balance is made between possible solutions.

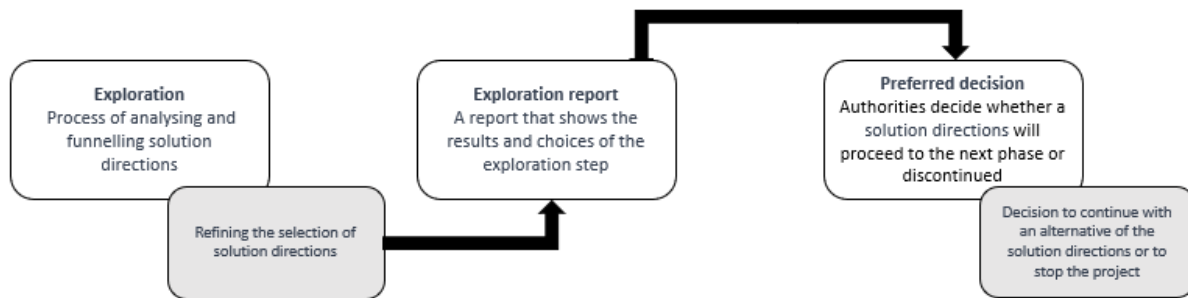


Figure 3: Schematic presentation of the exploration phase

During the exploration phase, potential solutions are generated, followed by the initiation of the funnelling process. This funnelling process is a step-by-step approach aimed at refining and reducing a multitude of potential solution directions down to one or a few preferred alternatives. The goal of this funnelling process is to make well-considered and widely supported decisions by systematically and transparently selecting the most suitable solution for a specific problem or project. This process includes the following steps:

1. **Broad analysis and inventory:** In this phase, a comprehensive analysis and inventory of potential solution directions that fit the project are initiated. Additionally, it is determined in this phase whether, according to the law, an Environmental Impact Assessment (EIA) - known as Milieu Effect Rapportage (MER) in Dutch - needs to be carried out for the project.
2. **Evaluation of solution directions:** The identified solution directions are evaluated based on various criteria such as feasibility, effectiveness, environmental impacts, costs, and benefits. If it is determined that an EIA needs to be conducted, this will be conducted. The EIA identifies the environmental impacts of the different solution directions. This is then linked to a Cost-Benefit Analysis. The CBA is a tool that investigates the broader societal costs and benefits of the different solution directions, including the environmental impacts that emerge from the EIA.
3. **Refinement and selection:** After the evaluation, a selection is made. The solution directions are further refined based on the outcomes of the evaluation, with the most promising alternatives being further developed. By merging the information from both the EIA and the SCBA, a complete picture is obtained of the implications of each possible solution direction. These combined insights are crucial for making a well-considered and widely supported preference decision.

The exploration report is a document that provides insight into the analysis of an integral area task, the problems, opportunities, and objectives. The report includes the choice of a preferred solution, a description of the effects on the environment, costs, feasibility, and societal support. In addition, the report contains information on the involvement of citizens, companies, and social organizations, administrative agreements, finances, legal attention points, and the approach for the follow-up of the project. The exploration report forms the basis for further decision-making and implementation of the project.

A preferred decision is a decision that is taken at the end of a MIRT exploration by involved authorities. This decision determines whether an exploration should lead to further planning and study of one of the alternatives included in the exploration report. The preferred decision can be either negative (no go) or positive (go). If a positive decision is made, there must be an agreement between the involved parties, sufficient financial resources must be available, a carrier must guarantee service (if applicable), and the information to be delivered in the exploration report must be met.

If the exploration results in a positive decision with follow-up actions, agreements are made about the follow-up phase and, if required or appropriate, recorded in a governance agreement. If it is definitively decided to stop after this phase, the project or program will no longer be included in the MIRT Overview and the reserved resources will be released.

2.1.3.3. Planning and Study Phase

The goal of this phase is to further develop the preferred decision into a project decision, where the scope, implementation period, financing, the allocation between parties, and market approach are determined.

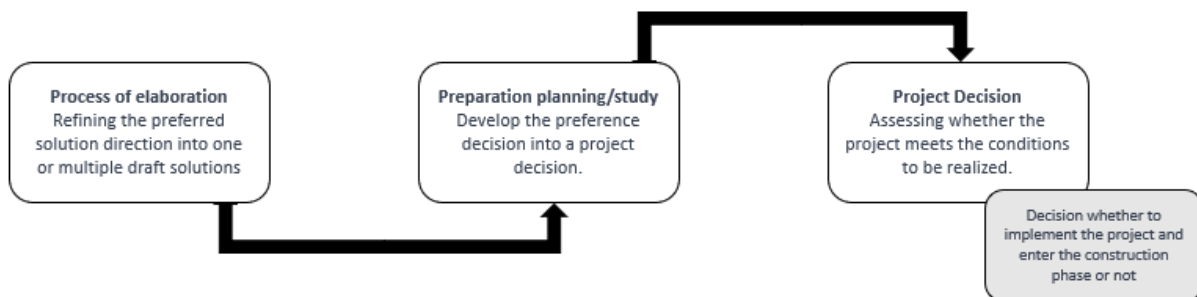


Figure 4: Schematic presentation of the planning and study phase

The elaboration process involves the steps necessary to refine the preferred decision into one or more design decisions. This process focuses on refining the chosen solution and evaluating the feasibility, financing, legal, and environmental aspects of the project.

The purpose of the planning and study phase is to develop the preferred decision into a project decision. Essential aspects such as scope, implementation period, financing, allocation of responsibilities between parties, and market approach are determined during this phase. This enables the involved parties to make an informed decision about the progress of the project to the implementation phase. A preparatory document for the project decision is prepared, which contains the following information:

1. **Analysis and optimization:** Within the scope of the planning and study phase, optimization, sustainability, and opportunities are examined. Expectations regarding uncertainties and possible opportunities are also identified.
2. **Elaboration of solutions:** The preferred solution is further elaborated into one or more design decisions with concrete, feasible, and financially viable actions and measures. There are two types of elaborations: project elaboration (sectoral solutions or a limited number of instruments) and program elaboration (integral package of measures).
3. **Financing:** In this phase, the financing sources and cost estimates for the project are determined, including the necessary resources for management, maintenance, and replacement.
4. **Allocation between parties:** The allocation of responsibilities, tasks, and authorities between the involved parties is determined.
5. **Finances:** A cost estimate is prepared in this phase, and required budgets, potential risks, and financing coverage are made transparent.
6. **Decision-making:** Based on the collected information and elaborations, administrative agreements are prepared. This eventually leads to a project decision in which the scope of the

project, implementation period, financing, allocation between parties, and market approach are determined.

7. Approach for follow-up: Finally, an approach for the follow-up of the project is developed, including an implementation strategy, risk dossier, strategy for environmental changes, and a process design.

A project decision is a formal decision taken after the completion of the planning and study phase of a project regarding the realization or not of a project. This decision ensures that the project can proceed to the actual implementation, where all involved parties collaborate to execute the plans within the determined frameworks. A project decision is taken when the following conditions are met:

1. Agreement among the involved parties regarding the variant to be executed.
2. Availability of sufficient financial resources to realize the variant within the proposed planning horizon.
3. Compliance with legal and regulatory requirements.
4. Meeting the substantive requirements in accordance with the information profile through the planning and study.

2.1.3.4. Implementation Phase

The goal of the implementation phase in the MIRT is to carry out the planned project and work towards a delivery decision. This phase consists of going through the implementation process, preparing a delivery report, and making the delivery decision.

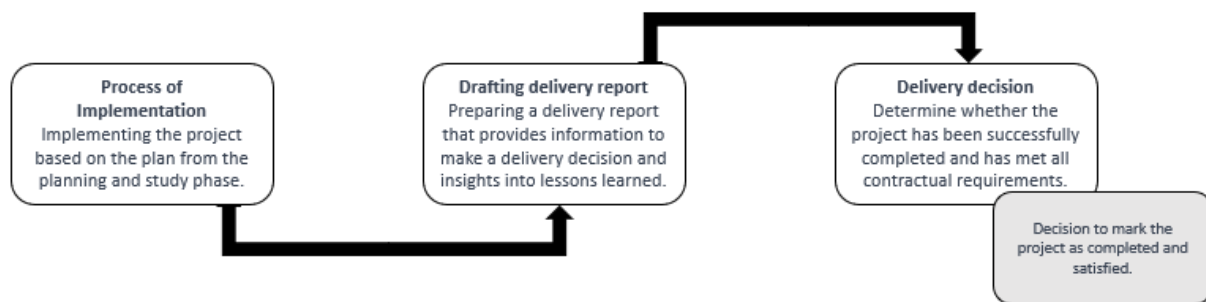


Figure 5: Schematic presentation of the implementation phase

The implementation process in the MIRT involves the realization of the project based on the plan from the planning and study phase.

Preparing a delivery report is offered to the principal one year after completion. This report provides information to make a delivery decision and gain insight into the lessons learned. A delivery report consists of several components:

1. Final report: This includes the financial accountability for the total project costs (including final settlement, any supplementary payments, and auditor's statement in case of a subsidy), agreements on residual risks and costs for management and maintenance (and estimation of life cycle costs), the realised scope and major deviations, the effectiveness of the project, and its progression over time.
2. Information profile: The delivery report contains information about the assignment(s), solutions, parties involved, decision-making, finances, and legal considerations.
3. Recommendations: The report includes recommendations that can contribute to the improvement of infrastructure construction, such as in the areas of process, procurement, technology, and collaboration with contractors.
4. Evaluation and follow-up: The delivery report includes a description of the steps taken to reach the delivery decision, as well as agreements on the evaluation of the environmental effects of the project and future effectiveness evaluations.

The delivery decision is made based on the delivery report that provides the client with the necessary information to complete the project and transfer it to the regular maintenance and management

process. The delivery decision is made when certain conditions are met, such as complying with contractual requirements and meeting the substantive requirements of the delivery report.

2.2. Participatory value evaluation

In this paragraph, the Participatory Value Evaluation (PVE) is extensively discussed based on relevant literature. This includes an examination of what PVE entails, how a PVE is set up and executed, its potential applications, the information that can be derived from a PVE, and the possible risks associated with it.

2.2.1. PVE

PVE is an evaluation method that involves citizens in government decision-making processes through an online survey (Mouter, Shortall, et al., 2021). A PVE examines how citizens weigh public values and how they believe these values should be translated into policy. It simulates the decision-making situation of a policymaker so that citizens can understand the dilemma (Mouter, Geijssen, et al., 2022). It provides citizens with an overview of the consequences of different policy options and the constraints, such as budget (Mouter et al., 2020). With a budget constraint, participants cannot choose all projects because they are tied to a limited budget. This forces them to make trade-offs between projects. Participants make a selection of alternatives with justification, which provides insight into their preferences and common values (Mouter et al., 2019). A PVE can also provide insight into the concerns underlying resistance to policy. PVE has been used in various contexts, including evaluating COVID-19 policies, investments in urban mobility, and national policies on driver's license retention (Populytics, 2023b).

2.2.2. Setup a PVE

To gain insight into how a PVE tool is set up, the example of the PVE used in a policy decision by the municipality of Utrecht on phasing out natural gas in homes is used (Mouter, Shortall, et al., 2021). The process for designing the PVE began with a kick-off meeting with officials involved in the project. In the meeting, several goals were established, such as raising awareness for citizens. The decision problem was also defined, which for this case was “which areas need to get rid of natural gas before 2030 and the government's role in this process”.

For this decision problem, a number of policy options were developed which form the basis for the PVE. Once these options are known, a draft design is made, which includes instructions on the PVE, the problem that policymakers are facing, and the associated dilemma with choice options and their potential consequences.

Subsequently, various workshops are held with stakeholders, including experts, energy companies, private advisers, officials, and citizens, to further develop and refine the PVE design. During these workshops, feedback is given on the visual appearance of the PVE tool, adjustments to the instructional video, and improving the information on the consequences of individual options.

Overall, the PVE design process can be divided into different phases with different stakeholders involved. It begins with identifying goals and defining decision problems and constraints, followed by workshops with experts and stakeholders to further develop and refine the PVE tool. Finally, workshops are organized with citizens to test the design of the PVE tool and gather feedback to further improve the tool.

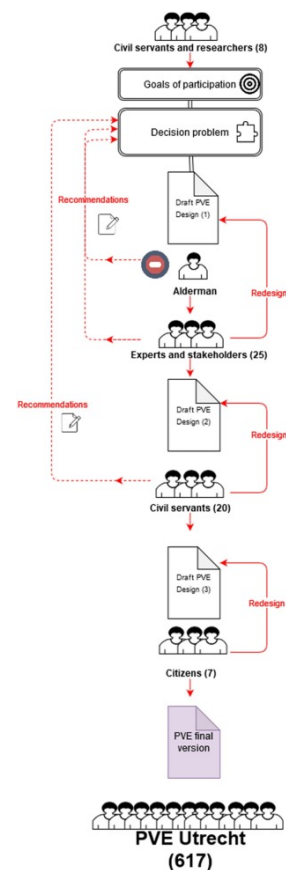


Figure 6: Design proces PVE Utrecht case (Mouter, Shortall, et al., 2021)

2.2.3. Steps for conducting a PVE

In the previous subparagraph, the steps required to design a PVE tool were discussed. In this paragraph, the focus will be on the steps involved in implementing the PVE. The implementation phase includes selecting participants, conducting the PVE, analysing data, and reporting results (Mouter et al., 2022). The first step in the implementation phase is to select and recruit participants for the study. This can be done in various ways, depending on the target group and research objectives. It is essential to have an adequate number and type of participants to ensure reliable and valuable results. The region of origin of candidates and other background characteristics that need to be recruited will be determined based on the scope of the study. To conduct the PVE, the selected participants must be reached and encouraged to participate in the survey. A panel is often used for this purpose where citizens are approached based on the background characteristics established during the selection process (Mouter, Geijssen, et al., 2022). In addition to candidates from the panel, the PVE is sometimes advertised online to reach a wider audience. After enough responses on the PVE, the results will be analysed using various statistical techniques. These analyses provide insights such as the background characteristics of the participants, construct an optimal portfolio according to the choices of the participants, and show clusters of citizens who prefer the same projects and values. Finally, a report is prepared to present all the results and corresponding findings. It is then up to policymakers to decide how to use these findings in the decision-making process.

2.2.4. Purpose of PVE

The PVE can be used for two purposes: As an evaluation tool and as a participation tool (TU Delft, n.d.-b) (Mouter et al., 2019). As an evaluation tool, the PVE aims to map how citizens weigh public values in a specific context and how they believe these values should be translated into policy. The approach of the PVE ensures that individual preferences are better reflected in the evaluation of government policies, as citizens are given the opportunity to express their views on how public resources should be allocated. As a participation tool, the PVE is a method to facilitate and stimulate citizen participation. It enables citizens to actively participate in the decision-making process by expressing their preferences and opinions on government policies and projects. PVE lowers the threshold for participation and makes it more accessible to a wider range of citizens, making the process more inclusive and representative. In summary, the main difference between the two is that the evaluation purpose is gaining insights into the values among the society regarding a policy decision or project, while participation focuses on involving and empowering citizens in the decision-making process. PVE is unique because it combines both functions, thereby supporting both policymakers and citizens in the decision-making process.

2.2.5. Type of information that can be gained from PVE

A PVE provides four types of information that can be valuable for policymakers when making decisions about government policies and projects (TU Delft, n.d.-b): Descriptive information, which includes data on how often certain policy options are chosen by participants. For example, 8 out of 12 projects were frequently chosen, while 4 projects were chosen less often. Valuation of attributes: The economic model analyses the respondents' choices to determine how participants value different attributes of the projects. This can provide insight into what citizens find important, such as travel time savings versus traffic safety or freedom of choice and CO2 reduction in the case of the heat transition in Utrecht. Optimal portfolio: The economic model calculates the optimal combination of policy options that yield the highest societal value. This helps policymakers determine which projects are the best investment to achieve the greatest societal impact. Qualitative motivations: The qualitative data collected by asking respondents for their reasons for choosing certain projects can provide valuable insights into arguments for and against a project that may not yet be known to officials and researchers. This can lead to better problem analysis and assist policymakers in making more informed decisions.

2.2.6. Risks of the PVE

When performing a PVE, it is very important that the selection of participants is a good reflection of the population. If not, certain people are overrepresented, and the results are biased (Plottu & Plottu, 2011) (Chiang, 2015). As soon as a project or type of policy touches on a sensitive topic, it may be the case that passionate proponents or opponents want to make their voices heard (Andrade, 2020). When a PVE is deployed, there is a risk that this group of people are overrepresented in the research. Panel conditioning is another risk associated with repetitive interviewing of the same set of people, which may introduce bias to the data (Amaya et al., 2021). Another risk is that there may be a lack of knowledge among the participants. The assessment of certain transport projects requires scientific knowledge, which may be lacking among participants (Plottu & Plottu, 2011). As a result, choices cannot be properly weighed up and the results are not reliable. Opponents of the PVE will say that the PVE is betting on the ability of the participants. To avoid a lack of knowledge, the participants must be properly informed and trained to participate in this evaluation. By conducting a PVE and asking citizens for their opinions to be included in the decision-making process, an expectation is created among them. Citizens expect their voices to be heard and reflected in the policy decision. However, this may not always be the case, which can lead to frustration and disagreement (Marzuki, 2015).

2.3. PVE in the MIRT process

In this paragraph, the connection between the MIRT process and the PVE is made. We examine where the PVE can be effectively applied within the MIRT process. In doing so, we consider the steps and decisions taken during the MIRT process and the information the PVE can provide. Based on this analysis, it is concluded that the PVE can be effectively implemented at three moments in the MIRT process, in order to incorporate a broader well-being perspective into the decision-making process. These moments are schematically represented in the figure below.

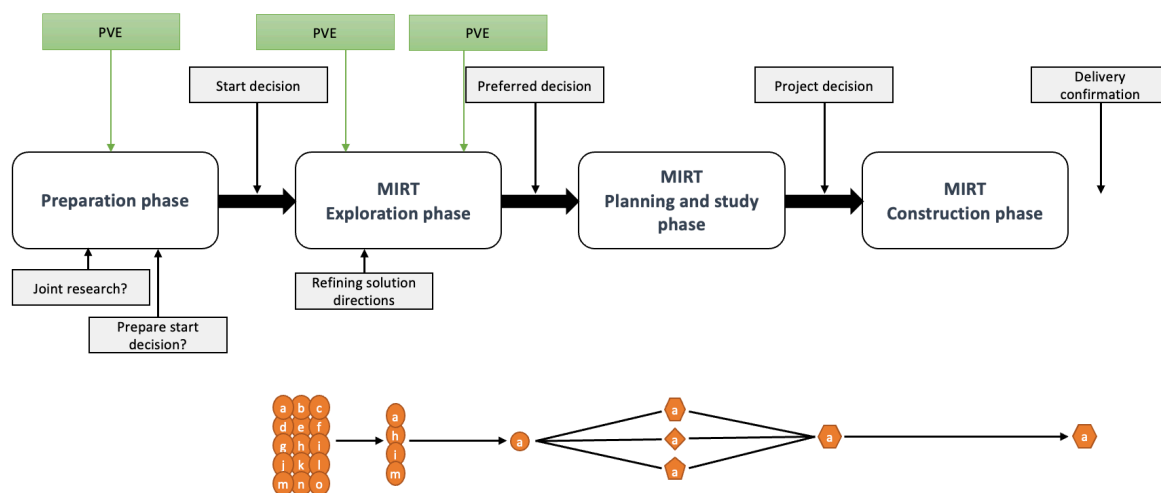


Figure 7: Visualization of the MIRT process with locations to apply the PVE

2.3.1. PVE in the Research phase

Main phase: Preparation phase

Sub phase: Research phase

In this phase, the problem or goal will be broadly investigated whereby the PVE can be employed. The research phase delves deeper into defining the challenges and scope of a particular objective or problem. As an evaluation tool, two information types of the four retrieved with a PVE can be used effectively in this process namely valuation of attributes and qualitative motivations. The valuation of attributes helps to determine which values citizens find important concerning the goal or problem. In the case of a MIRT project, this could be reducing traffic jams on a specific route or a better connection between two municipalities. A problem or goal and its associated requirements identified

by the government may look quite different from the perspective of a citizen. By measuring citizens' opinions and perspectives at this stage, the problem or goal can be mapped out in such a way that it incorporates societal values effectively. It is essential to take this into account as early as possible in the process, as few decisions have been made allowing room for this input. By examining the qualitative motivations of citizens regarding why certain values are important or not, a better understanding of what is happening in society is formed. These motivations can serve as arguments for choices made in this phase made by the policymakers. To use the PVE as a participation tool, can be employed to inform citizens about the problems or objectives that the government is addressing. By involving citizens early on and asking for their opinions, understanding can be created for the decisions that will be made in the process.

2.3.2. PVE and Exploration

Main phase: Exploration phase

Sub phase: Exploration

In this phase, solution directions are generated that can contribute to achieving the goal or solving the problem. After a number of solution directions have been generated, they are analysed based on criteria such as feasibility, effectiveness, environmental effects, and costs. After this analysis, the least promising solution directions are filtered out, leaving only a few remaining. Before deciding which solution directions to choose (Refining solution directions), a PVE could be performed. As an evaluation tool, two information types of the four retrieved with a PVE can be used effectively in this process, namely the valuation of attributes and qualitative motivations. By conducting a PVE in this phase, it can be determined how important citizens consider the selection criteria. Once this is clear, the filtering of solution directions can take into account the criteria deemed important within society. This ensures that the solution directions better align with the needs of society. The qualitative motivations for why certain criteria are considered important or less important can be used in the filtering process to justify decisions. Also, the reasoning of citizens about why they consider a value important or unimportant can be taken into account. The PVE can also be used in this phase to provide descriptive information and an optimal portfolio, but due to the large number of solution directions, the PVE will be less effective. Not all solution directions are financially or technically feasible, making it unwise to present these solution directions to citizens in a PVE.

2.3.3. PVE and Preferred decision

Main phase: Exploration phase

Sub phase: Preferred decision

After refining the solution directions in the exploration phase and creating an exploration report, a delivery decision must be made. This is a moment when a decision is made about which solution direction or solution directions will be carried forward to the planning and study phase. As an evaluation tool, three information types of the four retrieved with a PVE can be used effectively in this process, namely descriptive information, optimal portfolio, and qualitative motivations. The descriptive information indicates which solution directions were chosen most and least frequently by citizens. This provides an initial indication of how citizens feel about the potential solution directions. Subsequently, an optimal portfolio can be created based on citizens' choices, which achieves the greatest utility in their eyes. This portfolio takes into account many broad well-being indicators that are not covered by a cost-benefit analysis alone. Lastly, qualitative motivations can be used to support the delivery decision and provide a better understanding of the reasoning of citizens. To use the PVE as a participation tool, can be employed to inform citizens about the dilemma the government is dealing with when it comes to choosing solution directions. By involving citizens and asking for their opinions, understanding can be created for the decisions that will be made in the process.

2.3.4. PVE and MIRT

In the preceding paragraphs, it has been discussed where the PVE can be applied and why. However, it is not the case that the PVE can only be applied at these specific moments. The information obtained from the PVE can be taken into account throughout the entire process. For example, a PVE can be conducted at the beginning of the process, and its results can be used until the end of the process. This can be done by considering the opinions, important themes, and values of the citizens gathered through the PVE when making every decision that arises during the process. The further a project progresses in the MIRT process, the more decisions have been made. When many decisions have already been made, there is less room for input from the community. For this reason, the earlier the PVE is implemented in the MIRT process, the easier and more effectively the opinions of citizens can be incorporated into the decision-making process. Throughout the entire MIRT process, the PVE can also be used to facilitate participation. Participation is required in the MIRT process to involve the surrounding environment (e.g., residents, road users, businesses, and organizations) in the process. The goal of participation is to engage these stakeholders and ensure their concerns and interests are taken into account during the different stages of the process.

2.4. Participation methods

This section explores various forms of public participation in addition to the PVE. For this purpose, several common participation methods in the Netherlands have been selected, including Referendum, Public Hearing, Survey, and Advisory Council. These participation methods have been chosen from the website "ParticipatieWijzer," which is a platform established by the Dutch government to provide insights into different forms of participation used by the Dutch government (ParticipatieWijzer, n.d.).

2.4.1. Referendum

A referendum is a form of direct democracy where citizens directly vote on a particular issue or proposal, allowing them to actively engage in the decision-making process without relying on elected representatives (Morel, 2012). This method enables individuals to have a direct say in important matters and is commonly employed to make decisions on various topics, including constitutional amendments, changes to laws, and significant policy choices.

Strengths:

- **Direct democracy:** Referendums allow citizens to directly participate in the decision-making process, bypassing elected representatives. This gives individuals a greater sense of empowerment and involvement in the democratic process (Shliakhtun, 2021).
- **Legitimacy:** Referendums can enhance the legitimacy of a decision by giving citizens a direct say in the outcome. When people have the opportunity to vote on a specific issue, it can increase their trust in the decision-making process and make them feel that their voices are being heard.
- **Public awareness:** Referendums can raise public awareness of important issues and stimulate public debate. By bringing a specific issue to a vote, it encourages citizens to educate themselves about the topic and engage in discussions with others. This can lead to a more informed and engaged citizenry.

Weaknesses:

- **Simplification:** Referendums can oversimplify complex issues and reduce them to a simple "yes" or "no" question. Many important decisions require nuanced considerations and trade-offs, which may not be adequately captured in a binary choice. This can lead to oversimplification and a lack of comprehensive understanding of the issue at hand.
- **Polarization:** Referendums can polarize society and create divisions between different groups (Shliakhtun, 2021). When citizens are asked to take a stance on a divisive issue, it can

exacerbate existing social and political divisions. This can result in heightened tensions, increased hostility, and difficulty in finding common ground.

- **Manipulation:** Referendums can be manipulated by politicians or interest groups to achieve their own goals. These groups may use propaganda, misinformation, or emotional appeals to sway public opinion in favor of their preferred outcome. This manipulation undermines the democratic process and can lead to outcomes that do not truly reflect the will of the people.
- Referenda

2.4.2. Public Hearing

Public hearings are conducted in physical settings, typically in meeting rooms or halls, where citizens have the opportunity to attend and publicly voice their opinions. These hearings serve as a method of public participation that allows individuals to actively contribute to the decision-making process and provide input on matters of significant importance to society. By attending these hearings, citizens can express their thoughts, concerns, and feedback directly to policymakers and other participants. This interactive format fosters open dialogue and allows for a more inclusive and democratic decision-making process. (De Melo & De Melo, 2020)

Strengths:

- **Transparency:** Public hearings promote transparency in the decision-making process by providing the public with the opportunity to observe and participate in the proceedings. This transparency helps build trust and confidence in the decision-making process.
- **Inclusivity:** Public hearings provide an inclusive platform for diverse voices to be heard. They offer an opportunity for individuals and groups who may not have access to other forms of participation to express their opinions and contribute to the decision-making process.
- **Education:** Public hearings serve as educational platforms where the public can gain a better understanding of complex issues. Experts and stakeholders can share their knowledge and insights, allowing citizens to make more informed contributions to the discussion.

Weaknesses:

- **Limited impact:** Despite public hearings providing a space for public feedback, policymakers may not always take this feedback into account when making their decisions. Public input may not carry significant weight in the final outcome, potentially limiting the impact of public hearings.
- **Bias:** Public hearings can be biased towards individuals or groups who have the necessary time, resources, and expertise to effectively participate. This may result in certain perspectives being overrepresented, while others, particularly from marginalized communities, may be underrepresented.
- **Lack of diversity:** Public hearings may not fully represent the diversity of the broader population. Certain groups or communities may be less likely to participate or may face barriers that prevent their effective involvement, leading to an incomplete range of voices being heard.

2.4.3. Enquete

An enquête is a research method commonly used by governments to gather information and insights from the public regarding specific topics or issues. By employing enquêtes, governments can reach a large population, enabling them to collect a wide range of perspectives and opinions.

Strengths:

- **Efficiency:** Enquêtes can generate a large amount of data within a relatively short period. This efficiency is particularly beneficial when researchers need to collect information from a large sample size (Kampen et al., 2002).
- **Inclusivity:** Enquêtes can reach a broad and diverse group of people, allowing for a wide range of perspectives and experiences to be captured. This inclusivity enhances the representativeness of the collected data (Kampen et al., 2002).

Weaknesses:

- **Data quality:** The quality of data collected through enquêtes can be influenced by factors such as question wording, response options, and the order of questions (Font et al., 2019). These factors can introduce biases or affect the reliability and validity of the collected data.
- **Response accuracy:** Participants may not always provide accurate or truthful responses due to various reasons, such as social desirability bias or recall bias (Lowndes et al., 2001). This can impact the accuracy and reliability of the findings.
- **Limitations for complex or sensitive issues:** Enquêtes may not be the most suitable method for investigating complex or sensitive issues that require in-depth understanding or qualitative insights (Lowndes et al., 2001). The quantitative nature of enquêtes may not capture the nuances or depth of certain topics adequately.

2.4.4. Advisory Council

An advisory council is a group of individuals that offers advice and recommendations to an government, utilizing their expertise and diverse perspectives to inform decision-making processes (Font et al., 2019). These councils typically consist of experts, stakeholders, or community representatives, and their primary purpose is to support the policymakers in making decisions that impact the public.

Strengths

- **Expertise:** Advisory councils comprise individuals with specialized knowledge and experience in specific fields. Their expertise enables them to provide valuable insights and informed recommendations to guide decision-making processes (Font et al., 2019).
- **Diversity:** By incorporating individuals from diverse backgrounds and perspectives, advisory councils ensure that a wide range of viewpoints are considered. This diversity enhances the quality of advice and promotes more comprehensive decision-making (Font et al., 2019).
- **Transparency:** Advisory councils facilitate transparency in decision-making by involving stakeholders and the public in the process. This inclusivity allows for greater accountability and fosters trust between policy makers and the community.

Weaknesses

- **Lack of authority:** Advisory councils do not possess decision-making authority. Their role is purely advisory, meaning that their recommendations are not binding and must be considered by the organization or agency responsible for the final decision.
- **Limited representation:** Despite efforts to include diverse perspectives, advisory councils may not fully represent all stakeholders or viewpoints. This limitation can lead to a lack of comprehensive representation and potentially overlook certain interests or perspectives.
- **Conflicts of interest:** Advisory council members may have personal or professional conflicts of interest that can influence their advice and recommendations (Font et al., 2019). These conflicts may undermine the objectivity and impartiality of the council's advice.

3. Framework

In this chapter, we introduce a framework that serves as a tool for identifying the values that PVE can add to the decision-making process of transport projects. The framework designed by Beierle (2005) is used for this purpose. This framework assists in evaluating the outcomes of participatory methods and extends the traditional focus on substantial outcomes (such as specific decisions or recommendations) by recognizing 'social goals'. These broader objectives that public participation should pursue can improve the overall decision-making process (Beierle, 2005).

One of the frameworks considered for use in this research is the framework by Rowe and Frewer (2000), which was developed as an evaluation framework for assessing public participation methods in the decision-making process related to science and technology policy. It provides a set of criteria that can be used to evaluate the effectiveness and acceptance of participation methods. The framework focuses on two main aspects: acceptance criteria and process criteria. The acceptance criteria are aimed at ensuring an effective construction and implementation of the procedure, while the process criteria aim to enhance public acceptance of the procedure. The framework consists of nine criteria that support the assessment of participation methods (Rowe & Frewer, 2000). However, when examining the added value of PVE, these nine criteria may not be very suitable. The criteria in this framework are more concerned with the conditions that a participation method should meet in order to ultimately be successful, rather than specifically mapping out the added value. An example of this is the criterion of "Early involvement," which does not directly reflect the added value. The criteria/goals in Beierle's framework appear to better reflect the added value of a participation method.

The framework of Beierle was developed with the intention of emphasising this broader concept of the outcomes of public participation. Additionally, it offers researchers and policymakers a way to assess the effectiveness of public participation processes, taking into account this extended range of goals. Although the framework was originally developed for forms of participation used for environmental decisions, it can also be applied to decision-making processes within Transport and Infrastructure. This is because the principles and goals of public participation are largely universal. These goals are relevant in any context where public involvement is desired or necessary, whether it is the environment, transport, infrastructure, or another policy area.

The six goals, formulated by Beierle (2005), are:

- 1) Educating and informing the public: This goal emphasizes the importance of providing the public with sufficient knowledge to participate in decision-making and to contribute actively to the functioning of the regulatory system.
- 2) Incorporating public values into decision-making. This goal focuses on the necessity of incorporating the public's values, assumptions, and preferences into decision-making processes. It challenges the notion that expert perspectives are the only ones that matter and highlights the importance of public input.
- 3) Improving the substantive quality of decisions. Public participation can help improve the quality of decisions by integrating diverse perspectives, including different types of knowledge and experience.
- 4) Increasing trust in institutions. This goal is centered around the idea that public participation can help restore trust in institutions. Involving and empowering the public in decision-making processes can enhance public confidence in these institutions.
- 5) Reducing conflict. The process of public participation can help in identifying shared norms and values, thus reducing conflicts. It can help stakeholders understand each other's perspectives and build relationships that foster cooperation.
- 6) Achieving cost-effectiveness. This goal addresses the appropriate use and scope of public participation mechanisms. It asks whether the chosen method was the most cost-effective way of achieving the desired results compared to other possible methods. Was the mechanism of

public participation the most cost-effective way (in terms of money, time, risk, and opportunity cost) to achieve the benefits (goals 1 to 5) compared to other mechanisms that could reasonably have achieved the same result?

In order to obtain a comprehensive and complete understanding of the values derived from the PVE, a search was conducted for additional aspects. Through an analysis of a article and report of the PVE, two additional values emerged that can serve as valuable additions to Beierle's existing framework.

- 7) **Space for Fundamental Discussion:** This goal arises from a report indicating that participants struggled with predetermined assumptions in the participation process (Populytics, 2023a). It provides the opportunity for in-depth reflection and exchange of diverse perspectives on the underlying assumptions and values that underpin the policy. Expanding Beierle's framework to include facilitating discussions on the foundations of policy can enhance the quality of the participation process. This can ensure that citizens truly feel heard and considered, rather than simply being consulted within pre-established boundaries.
- 8) **Accessibility and Inclusivity:** This goal arises from the research conducted by Mouter, Shortall, et al. (2021). The goal focuses on the necessity of making the participation process physically, digitally, and socially accessible to all citizens. It raises the question of whether adequate measures have been taken to facilitate the participation of all individuals, regardless of their location, mobility, digital skills, background, education level, age, ethnicity, etc. Moreover, it emphasizes the importance of clear, understandable communication and information about the process.

This framework can make a valuable contribution to the research into the added value of PVE in decision-making around transport projects in the following ways:

- **Contextualization of the value of participation:** By looking at the eight values of the framework, a better understanding can be achieved of the specific value that PVE brings in the context of transport decisions.
- **Identification of strengths and weaknesses:** By evaluating the effectiveness of PVE against these eight , it can help identify the strengths of PVE as a method of public participation, as well as areas where improvements may be needed.

4. Research Methodology

In this chapter, a comprehensive discussion of the methodology applied in the research is presented. Initially, the research approach and strategy are explained. Following this, the specific case study that serves as the foundation for this study is elaborated in detail. After this introduction, the type of data being collected is explored further. Finally, a detailed description of the methods that will be used for the processing and analysis of the collected data is provided.

4.1. Approach

A case study approach has been chosen for this study. The choice of a case study offers several advantages for this research. Firstly, it allows the examination of the PVE method in a real-world context, providing insights into its applicability and effectiveness in national transport projects. Secondly, a case study permits the collection of rich and detailed data about the implementation of the PVE method, encompassing the challenges and opportunities encountered during the process. Thirdly, a case study can assist in identifying the factors that influence the success or failure of the PVE method in national transport projects. Thus, the selection of a case study approach significantly enhances the depth and applicability of this research.

Three steps are required to prepare a case study (Yin, 2012). The first step to be performed is to define the case. It is important that the case being researched is unique and offers new insights regarding the research question. The case of Lelylijn is a good starting point for this research. Because this is a pilot where the PVE is being applied to the research phase of a transport project which has not been done before. The second step is to select a type of case study design. The questions that should be answered are: will only one case study be included in the research, or will the research consist of multiple cases and whether take the case holistically or include sub-cases in an overall holistic case? In this case study, only the Lelylijn case is examined with a holistic approach and no other cases are involved. This results in a holistic single-case design. For the third step, the determination of what kind of data should be extracted from the case study must be made. The three types of information streams needed for this are Literature (what the PVE is and background information about the Lelylijn project), Interviews (with the people who are involved in the PVE) and Documents (results of the PVE).

4.2. Case study Lelylijn

This section delves into the Lelylijn case study, offering an explanation of what the Lelylijn is, its current project stage, and the way the PVE was implemented for the Lelylijn project.

4.2.1. Lelylijn

The Lelylijn, named after the renowned Dutch engineer Cornelis Lely, is a proposed railway line in the Netherlands that would connect the west to the north of the country, from Lelystad to Groningen and Leeuwarden (Nijenhuis, 2022). The goal of this line is to improve travel times and connections between the northern provinces and the Randstad area. The concept of the Lelylijn dates back to 1969 when transport economist Geurt Hupkes proposed a fast hovercraft train or "hoverlijn" from the Randstad via Enkhuizen to Sneek (Van Der Laan, 2019). This would allow residents of Randstad to live in Friesland while still working in the city. In the same year, the Zuiderzeelijn Foundation was established in Friesland to advocate for a high-speed rail line. However, due to the high costs associated with this project, it was not executed. In 2004, a new cabinet initiated the tendering process for the line, setting aside 2.73 billion euros for the project. Despite this, the project was once again cancelled due to financial constraints, leaving northern politicians feeling disheartened (Van Der Laan, 2019).

Despite the setbacks, the proposal for the Lelylijn has been revived in recent years. The Ministry of Infrastructure and Water Management and the provinces of Groningen, Fryslân, and Drenthe have reached an agreement on a MIRT study into the Lelylijn. This study is part of the Northern Netherlands Delta Plan (Ministerie van Infrastructuur en Waterstaat, 2022b). A joint organization has

been set up to coordinate this study, involving residents, stakeholders, and regional authorities. The MIRT study into the Lelylijn should form the basis for a starting decision for a MIRT exploration. For this purpose, a preliminary preferred variant must be elaborated with a reliable cost estimate and a view of at least 75% of the financing of this preliminary preferred variant (Ministerie van Infrastructuur en Waterstaat, 2022a). According to the coalition agreement, an amount of €3 billion has been reserved for the construction of the Lelylijn, co-financed by the region and European funds. This 3 million constitutes less than 75% of the total estimated costs for the Lelylijn. The MIRT study will focus on ways in which the economy, housing construction, and better accessibility can reinforce each other. In addition, the Lelylijn is being investigated as a possible contribution to a better international train connection with Northern Germany (Ministerie van Infrastructuur en Waterstaat, 2022a).

As part of the MIRT study, two major studies are currently being carried out: the accessibility study, which focuses on different basic alternatives (Studio Bereikbaar, 2020), and the NOVEX rail study, which mainly focuses on spatial-economic opportunities (Groninger Internet Courant, 2022). In addition to this, a Cost-Benefit Analysis (CBA) was carried out in the Delta Plan. The Northern Netherlands Delta Plan is an initiative from provinces and municipalities in Northern Netherlands, aimed at building an additional 220,000 homes and improving rail infrastructure, thus stimulating economic and social prosperity in the region (Decisio et al., 2022). The results of this CBA were not particularly favorable for the Lelylijn case (Decisio et al., 2022). The CBA maps out the costs and benefits of a project, which are quantifiable in monetary terms. For the Lelylijn, this showed that the substantial investments required for the rail infrastructure did not seem to balance out the calculated benefits.

However, this approach has faced criticism for not considering broader aspects of prosperity, such as well-being, health, and living environment. These non-material elements, while not easily quantifiable in monetary terms, significantly contribute to the societal value and can influence the perceived success or value of a project. In response to this critique, a more comprehensive approach was advised (Decisio et al., 2022). A PVE has been carried out within the MIRT study of the Lelylijn. The PVE goes beyond the traditional CBA by actively involving stakeholders in the decision-making process and considering a wider range of values. It aims to provide a more holistic understanding of a project's societal value, capturing elements that the CBA may have missed. The execution of this PVE for the Lelylijn will be discussed in subsection 4.4.2. (Ministry of Infrastructure and Water Management, 2022e).

The diagram of the MIRT process is outlined in Chapter 2.3. It illustrates where the PVE can be applied within the MIRT process. This figure can be used to position the Lelylijn case, schematically demonstrating its current phase in the MIRT process. This is shown in Figure 8 in the green square.

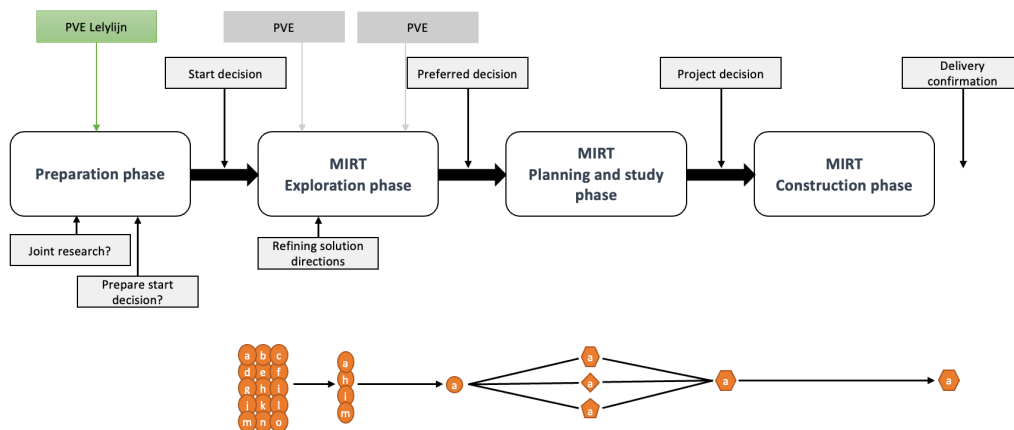


Figure 8: Visualization MIRT process

The Lelylijn case is situated in the research phase, and this is also the phase where the PVE was deployed. What should be noted is that the Lelylijn case diverges from the processes described in Chapter 2.2. According to the MIRT rules, the research phase should entail a problem definition and scope and the exploration phase should generate potential solution directions. Contrary to this, the Lelylijn itself (the rail line) is already a solution direction. According to the rules, this should only be generated during the exploration phase. This divergence should be taken into account when drawing conclusions in this thesis.

4.2.2. PVE Lelylijn

In this subsection, the execution of the Participatory Value Evaluation for the Lelylijn is discussed. The PVE was conducted by researchers from the research firm Populytics. The information derived in this paragraph is based on the report published about the PVE carried out for the Lelylijn (Populytics, 2023c).

The researchers and the Lelylijn Project Team began by establishing a research question that would both be interesting for the participants and provide relevant insights for policymakers. This research question is: "What challenges in the Netherlands should the Lelylijn mainly provide a solution for, and why?"

The researchers developed three concepts for the PVE consultation that could contribute to answering the research question. In a workshop with civil servants and experts, it was decided which concepts would be further developed and optimized. It was noted that one of the three concepts was not feasible in terms of time (specific information was needed that was not available in this early stage), resulting in the choice for the other two concepts. The researchers further elaborated on the selected concepts, including the identification of specific goals and values that the government might consider in relation to the Lelylijn.

Concept 1: PVE choice task in which participants could distribute points over different goals/values that the government can consider when designing the Lelylijn. The decision problem presented to the candidates in the PVE choice task in order to eventually answer this research question is: "What should the government consider when making choices about the Lelylijn?" In the PVE choice task, participants were asked to distribute 100 points over a number of predetermined goals related to the Lelylijn. These goals range from economic growth and the construction of new homes, to minimizing the impact on nature and preserving the identity of Northern Netherlands. The purpose of this task is for participants to distribute their points in a way that reflected their personal values and priorities concerning the Lelylijn. Assigning many points to a particular goal indicated that they wanted the government to consider that goal as a high priority in the development of the Lelylijn. Not assigning points to a goal indicated that they considered it less important.

Some examples of these goals:

- The Lelylijn should contribute to keeping schools, supermarkets, and other important amenities easily accessible for residents of Northern Netherlands
- The Lelylijn should ensure that the economy of (Northern) Netherlands becomes stronger
- The Lelylijn should help the government to distribute the construction of new houses more evenly across the country



Figure 9: Questions concept 1 (Populytics, 2023c)

Concept 2: Discrete choice experiment in which participants could choose between two approaches that differed in a number of characteristics. Participants then had to indicate which version they preferred. Based on these choices, it can be determined which influence each characteristic has on their assessment of the desirability of the project. For the design of this choice experiment, stakeholders decided during a design session which characteristics of the Lelylijn would be included in the Discrete Choice Experiment. These characteristics included travel time savings, the number of stations, the frequency of the train, nuisance, and costs. After selecting the characteristics, a decision was made on the specific levels of these characteristics that would be shown to the participants in the consultation.

	Variant 1	Variant 2	Geen Lelylijn
Reistijd tussen Amsterdam en Groningen/Leuwarden (snelste trein)	90 minuten	70 minuten	120 minuten
Op hoeveel tussenstations stopt de trein die het vaakst stopt tussen Amsterdam en Groningen/Leuwarden?	3	5	0
Hoeveel treinen rijden er per uur over de Lelylijn?	2 in elke richting	10 in elke richting	0
Hoeveel mensen hebben last van de Lelylijn?	500	7.500	0
Hoeveel belastinggeld geeft de overheid uit per huishouden?	500 euro	850 euro	0 euro
Hoeveel huishoudens kunnen een supermarkt en een basisschool binnen 15 minuten bereiken?	80%	100%	80%

Figure 10: Questions concept 2 (Populytics, 2023c)

In addition to these two concepts, participants had the opportunity to share their perceptions regarding the pros and cons of the Lelylijn, as well as the opportunities they see and any concerns they may have. They also had the opportunity to propose any alternative solutions for achieving the goals they found important in the context of the consultation.

These two concepts were revised based on feedback from the Lelylijn Project Team and the workshop participants. Once the concept was well-structured in terms of questions and choice options, an animation was added to explain the content of the consultation in an accessible way to the participants.

The near-final version of the PVE was tested by a test panel and a number of researchers who were not involved in the research. Based on this test, final adjustments were made.

Once the design of the PVE is ready, citizens were approached to execute the PVE. In this part of the study, data was collected via two types of consultations: closed and open consultations. In the closed consultation, participants were randomly selected from an internet panel. The participants received compensation for their participation and were representative of the population based on gender, age, and education level. The open consultation was accessible to everyone. The two consultations were combined to maximize the benefits of both methods and minimize their drawbacks. Corrections were applied by reweighting when the sample did not exactly match the population on relevant characteristics such as gender, age, region, and travel behaviour. Participants who did not take the survey seriously were excluded via data cleaning procedures.

After the data collection, the researchers performed multiple analyses on the data, which provided a number of insights for the Lelylijn. In the following several findings are mentioned that resulted from the analysis of the data gathered. Prioritization of the goals; participants considered nature, environment, and short travel time as the highest priorities. There were few differences in goal priorities between participants from Northern Netherlands and the rest of the country. Factors influencing these priorities were also identified, such as financial situation and travel behaviour. In addition, the PVE showed how participants weighed different characteristics against each other. For example, participants were willing to spend more tax money on a faster Lelylijn, but not at the expense of nuisance or too few intermediate stations. They were also willing to spend an average of 30 euros per household for each minute of travel time saved. Important opportunities were identified, such as better connectivity with Northern Germany and Scandinavia. Concerns included potential landscape pollution, a nuisance to humans and nature, and the cost of train tickets. The participants proposed concrete ideas for the development of the Lelylijn, including innovative technological concepts.

4.3. Data collection

This section covers the process of data collection for this research. Firstly, it delves into the gathering of data through interviews, detailing the manner in which these interviews will be conducted and the questions that will be asked. Subsequently, it elaborates on which data will be obtained to assess the added value of the PVE from the participant's standpoint.

4.3.1. Interviews

To answer the two sub-questions in this research, namely 'What are the expectations of policymakers about the added value of the PVE in the MIRT process?' and 'How do policymakers of MIRT projects experience the PVE?', interviews will be conducted with policymakers involved with the Lelylijn. It is essential for accurately mapping the added value of the PVE that the interviewed policymakers form a diverse group with different perspectives. To ensure this diversity, an overview has been made of policymakers and it has been investigated how they are involved with the Lelylijn. From this list, seven candidates have been selected, each involved with the Lelylijn and the conducted PVE in a different way. Table 1 provides an overview of the interviewed policymakers, including a description of their roles. For the first round of interviews, the first five interview candidates have been interviewed. For the second round of interviews, all seven candidates have been interviewed.

Table 1: Policymakers interviewed and their role

Number (#)	Function
1	Project director of the Lelylijn project team, responsible for quality assurance, preparing and forwarding decision-making documents to officials, and delivering products to clients.
2	Participation advisor for the Lelylijn project, representing the interests of the "outside world," prioritizing the interests of participants in her advice, and striving for indirect influence on the decision-making process.
3	Official responsible for the Lelylijn at the Province of Fryslân, involved in the design and process of the Participatory Values Evaluation of the project.
4	Environmental manager for the Lelylijn project, responsible for connecting knowledge and relationships with the dossier, ensuring the formal governance process, and maintaining favourable perceptions of the outside world while the inside world can continue to do its work well.
5	Accessibility manager involved in studies on the accessibility of the Lelylijn and represents IenW in the official line to pass on decisions about the Lelylijn to the State Secretary.
6	Environmental manager for the Lelylijn project, where close cooperation takes place with regional managers and commitment is made to the success of the project, utilizing previous experience with the Zuiderzeelijn.
7	Project secretary for the Lelylijn project and collaborates closely with the project director. The responsibilities revolve around managing programs and projects associated with the Lelylijn, while striving to ensure its independent operation.

Firstly, the candidates are approached to participate in the two planned interviews. This contact is made via email, in which an 'informed consent' form is included. This form contains an invitation to participate in the research and information about the research itself, including any potential risks associated with participation. Before they can participate in the research, the candidates must agree to the conditions in this form by signing it digitally. This form is included in Appendix A.

For both interview rounds, semi-structured interviews will be conducted. This type of interview offers flexibility in the research process, enabling researchers to thoroughly investigate the perspectives and experiences of the participants (Miles & Gilbert, 2005). Furthermore, it has been decided to conduct the interviews face-to-face to create a better understanding between the interviewer and the interviewee than if the interview were conducted over the phone (Vogl, 2013). Although these interviews will take place face-to-face, they will be conducted online via Microsoft Teams. This provides flexibility for the participants and allows the conversation to be accurately recorded and later transcribed.

4.3.1.1. Interview questions prior to PVE results publication

This subsection delves into the questions asked in the first round of interviews, which contribute to answering the sub-question: 'What are the expectations of policymakers about the added value of the PVE in the MIRT process?' Each interview question is intended to highlight specific aspects of this sub-question. Table 2 provides an overview of the questions that will be posed to the interviewees.

Table 2: Questions interview prior to PVE results publication

Number (#)	Question
1	What is your role in the decision-making process for the Lelylijn?
2	In what way are you involved in the PVE, and what is your role in carrying out this evaluation?
3	According to you, what is the main reason for conducting a PVE in the research phase of the Lelylijn?
4	According to you, what are the advantages and disadvantages of PVE compared to other forms of participation?
5	What do you expect the PVE to yield in terms of new insights or information that was previously unavailable?
6	How do you think the results of the PVE can be used in the decision-making process for the Lelylijn?
7	How do you think the PVE can contribute to improving the decision-making process for the Lelylijn?

8 | Do you think there are any risks or challenges associated with conducting a PVE? If so, what are they, and how do you think they can be addressed?

- Questions 1 and 2: These two questions are crucial for understanding the context and perspective of the interviewee. They help to determine how their views and experiences relate to their role in this project.
- Question 3: This question assists in gaining insights into the interviewee's perceptions of the purpose and value of the PVE.
- Question 4: This question is designed to understand how the interviewee perceives the PVE in comparison to other participatory methods, which can be useful in understanding their expectations of the PVE.
- Question 5: This question directly targets the sub-question and asks about the interviewee's expectations regarding the added value of the PVE.
- Question 6: This provides insight into how the interviewee thinks the insights from the PVE can be integrated into the decision-making process.
- Question 7: This question delves deeper into the potential impact of the PVE on decision-making.
- Question 8: This provides insight into potential limitations or challenges of the PVE from the interviewee's perspective, which helps in understanding potential obstacles to effectively implementing and integrating the PVE into policy practice.

4.3.1.2. Interview questions after PVE publication

This subsection addresses the questions posed in the second round of interviews, which contribute to answering the sub-question: 'How do policymakers of MIRT projects experience the PVE?'. This sub-question consists of three questions that together aim to provide an answer. These questions have been taken into account when formulating the interview questions presented in Table 3.

Table 3: Questions interview after the PVE results publication

Number (#)	Question
1	How do you look back on your overall experience with the PVE that was conducted for the Lelylijn during the past period?
2	Can you provide specific examples of what you perceive as positive aspects of the PVE?
3	Are there any aspects of the PVE that you have perceived as less successful or effective?
4	To what extent do you believe the PVE has contributed to identifying key factors and providing insights into public opinion?
5	In your opinion, has the PVE contributed to improving the substantive quality of decision-making? If so, could you provide specific examples?
6	To what extent do you believe the PVE was successful in reaching a larger audience and promoting participatory engagement?

- Questions 1: This question invites policymakers to share their overall experience with the PVE, including their perceptions of the process, results, and impact on their role. This question helps in addressing the question: What was the policymakers' impression of the PVE?
- Questions 2 and 3: These two questions provide policymakers with the opportunity to provide criticism and suggest potential improvements. It helps in obtaining answers to the sub-question: "What are the positive and negative aspects of the PVE according to the policymakers?"

- Questions 4, 5 and 6: These three questions are designed to answer the question: "Did the expectations prior to the PVE match the outcomes of the PVE?". Each question addresses one of the three expectations identified in the first interview (see 5.2.1.).

As an addition to these 6 questions, several probing possibilities have been developed per question to further explore different aspects of the interview question. This is intended to provide more depth during the interview. These probing possibilities are presented in the interview guide in Appendix B.

4.3.2. PVE results

The analysis of the added value from the perspective of the Public Value Survey (PVE) participants is conducted using data obtained from the PVE carried out for the Lelylijn. This research was performed by the research agency Popylitics, in collaboration with the Lelylijn project team, who together designed and implemented the PVE. The dataset is obtained from this research agency. The executed PVE comprises a wide range of questions, answered by approximately 11,000 citizens, through open and closed questioning methods. To answer the research question "How do participants perceive their participation in the PVE of MIRT projects?", it requires a focus on two specific questions from the PVE: "What do you like about this consultation?" and "What do you not like about this consultation?" The answers to these questions are qualitative in nature. During the initial processing of the dataset, consisting of around 11,000 responses, a filtering process is applied. Responses, where no answer is provided to both questions, are removed, leaving a reduced dataset of just over 5,000 responses. The 5,000 responses are evenly distributed between the origin of panel data and open consultation. This filtered dataset is then used to analyse the added value of the PVE from the perspective of the respondents.

4.4. Analysis

In this section of the report, a deeper dive is taken into the processing and analysis of the data collected in section 4.3. Subsection 4.4.1 describes the procedure for processing interview data. This part delineates how the interviews are transcribed and analyzed, resulting in a concise summary of each question asked and the corresponding answer. Subsection 4.4.2 shifts the focus to the PVE dataset, highlighting the transformation of qualitative data into quantitative data. This transformation is accomplished by employing a clustering system based on themes derived from the responses.

4.4.1. Processing interview data

This section describes how the data gathered in the interviews will be processed. The interviews, recorded via Teams, are transcribed verbatim. These transcriptions are then analyzed to provide a summarized answer for each question asked during the interview. This process results in an overview that includes the questions asked and the corresponding responses from the interviewee. This method filters out irrelevant information and facilitates a comparison of the answers per question from the policymakers. Once this summary has been compiled, it is shared with the interviewed policymaker. The policymaker is then asked to review the interpretations and responses. Any feedback from the policymaker is incorporated to ensure the quality of the response. After these steps, the results can be interpreted, and a response can be formulated to the relevant sub-question.

4.4.2. Qualitative to Quantitative PVE data

For the analysis of the qualitative answers obtained from the PVE data set, a coding system based on clusters identified in this research is used. These clusters are derived from an initial analysis that will take place. This preliminary analysis considers responses from 200 panel participants and 200 non-panel participants. An analysis is performed for each question, with responses clustered based on similar answers. From these clusters, themes are extracted.

Once the analysis is complete, an overview is created of the thematic responses emerging from the questions about what is perceived positively and what is perceived negatively. Each cluster is then assigned a code, forming a coding schema. The next step involves coding 2000 answers within the

dataset. In this process, a manual coding is assigned to each given answer. Randomly, 500 responses from the panel and 500 responses from the open panel are selected for both the question regarding what participants appreciate about the consultation and what they find lacking. This process transforms the qualitative data into quantitative data. By doing this, quantitative analyses can be conducted. This allows for examining the background characteristics of the participants and exploring whether there are any differences in answers based on these background characteristics. The age category, province of residence, and highest level of education attained are included in this analysis.

This analytic approach enables to systematically examine the qualitative data and to answer the research question effectively: "How do participants perceive their participation in the PVE of MIRT projects?" By identifying common themes and coding responses, we can quantify these perceptions and gain a deeper understanding of the participants' experiences and viewpoints.

5. Experience PVE policymakers

In this chapter, the findings from two rounds of interviews with policymakers are presented. Section 5.1 is devoted to the results of the first round of interviews, while section 5.2 discusses the outcomes of the second round. Finally, in section 5.3, an answer is given to the sub-question: 'How do policymakers of MIRT projects experience the PVE?'

5.1. Results interview before publication outcomes PVE

The information obtained from the interviews has been presented in Appendix C. This appendix contains all the coded interviews in the form of a summary per participant. These summaries were used to interpret the expected value of the PVE according to the interviewed policymakers.

5.1.1. Processing the interviews

In this section, the results of the interviews that were conducted prior to the publications of the PVE are interpreted. The findings relate to the research question 'What are the expectations of policymakers about the added value of the PVE in the MIRT process?'. In the analysis of the results, attention was paid to which values were most prominently mentioned in all interviews. These values were then linked to one of the eight values of participation from the framework presented in chapter 3. In addition to the added values of the PVE mentioned by policymakers, they also pointed out some risks of the PVE and conditions that the PVE or the policy process had to meet to reduce these risks. These findings have also been linked to one of the eight values of the framework.

5.1.2. Preserved values

The expected added value of the PVE is described under the following headings. Each heading represents a social value from the framework.

Incorporating public values into decision-making (Insight into Public Opinion)

Policymakers emphasize that the PVE could help identify what participants/citizens consider important before concrete plans are made. The PVE is seen as a way to gain a broad understanding of what is important to the population and public opinion regarding the Lelylijn. As one policy maker stated "You get more information about what people find important and less important." This also includes generating new insights, especially about policy objectives that are deemed important by society.

Improving the substantive quality of decisions (Supporting and Enhancing Decision-making)

Policymakers believe that the results of the PVE can be used to substantiate certain choices in the decision-making process. They view the PVE as a tool to improve the decision-making process by providing the right information upfront, contributing to the development of a proper project scope, and serving as a sign of societal support. The PVE can also contribute to improving the quality of decision-making by integrating social values into the decision-making process. A quote of a policymaker: "The

PVE can add an extra quality to the decision-making process by including people's opinions and what they find important.”

Accessibility and Inclusivity & Educating and informing the public (Broader Reach and Participatory Engagement)

Another significant advantage of the PVE mentioned by policymakers is its broader reach. Compared to other forms of participation, the PVE can reach a larger audience, resulting in a greater amount of feedback. "The PVE has the advantage of reaching a wider audience and generating more feedback compared to other forms of participation." & "The PVE has a broader scope and can involve a larger audience in the process, thereby generating more feedback." This is closely linked to the concept of participatory engagement, where the PVE is seen as a means to involve citizens in the policy process. In which knowledge is transferred from the policymaker to the participant and vice versa.

5.1.3. Risks and constrains

The expected risks and constraints of the PVE are described under the following headings. Each heading represents a social value from the framework.

Increasing trust in institutions (Expectation management)

Participants may have high expectations regarding the impact their input will have on the final policy decisions. If these expectations are not met, it can lead to frustration and dissatisfaction. Policymakers emphasize the importance of having good communication and transparency throughout the process to address this. This includes providing feedback to participants on how their input is being used and being open about the choices made in the decision-making process. As one policymaker highlights: “there is a risk when the most important goals identified during the PVE are not reflected in the explanations or plans outlined. This discrepancy between expectations and outcomes can be problematic.” As expressed by another policymaker, “In my view, the greatest risk is that high expectations could be created among participants regarding the impact of their input, which may not be fulfilled.”

Reducing conflict (Potential division)

In iconic projects such as the Lelylijn, strong opinions can lead to division among participants and other stakeholders. "The greatest risk lies in underestimating the importance of an iconic project like the Lelylijn, which attracts significant attention from both supporters and opponents, thereby exacerbating division. This division can make it difficult to reach a consensus and can slow down the decision-making process. It is important to promote a balanced and fair dialogue and ensure that all voices are heard. Quote: "If you ask the wrong question, you also run the risk of receiving the wrong answer, and that can lead to significant consequences.".

Accessibility and Inclusivity (Engaging diverse groups)

Ensuring a representative and diverse group of participants is an important challenge. There is a risk of certain population groups being marginalized or overlooked in the process, which can undermine the legitimacy of the PVE. This is further emphasized by a statement from a policymaker: "This will be exploited, especially by opponents, to create a lot of chaos." & "Attention should be paid to the communication strategy and dissemination of the survey to ensure that it reaches various regions and target groups."

5.2. Results interview after publication outcomes PVE

The information obtained from the interviews that are conducted after the release of the report of the PVE has been presented in Appendix D. This appendix contains all the coded interviews in the form of a summary per participant.

5.2.1. Processing the interviews

In this section, the interpretation of the interviews conducted after the publication of the PVE is presented. The focus is on addressing the research question, "How do policymakers of MIRT projects experience the PVE?" Firstly, an examination was conducted to determine the overall impression of the interviewed policymakers regarding the PVE. This was accomplished by analysing their response to the initial question, "How did you experience the PVE?" Subsequently, a general experience was derived and presented in section 5.2.2. Furthermore, the policymakers were asked about the expectations outlined in section 5.1.2, specifically the extent to which the PVE fulfilled these expectations. Lastly, an overview of several positive and negative aspects of the PVE, as expressed in the interviews, was compiled.

5.2.2. What was the policymakers' impression of the PVE?

Overall, there seems to be a general recognition of the importance and value of the PVE, particularly in terms of involving citizens in the decision-making process. The PVE is seen as a useful method for gaining insight into the perspectives and opinions of citizens and integrating them into the decision-making process surrounding the Lelylijn project. However, initially, some policymakers expressed skepticism and surprise about the emphasis placed on citizen participation in this specific project, especially since it was not customary in previous projects. There was some concern that the project might be taken less seriously if it were seen as an "experiment." However, as the process progressed and the positive results of the evaluation became apparent, the policymakers' perception of the PVE began to improve.

Some challenges were also raised by the policymakers. One of them was the need to process a large amount of feedback and open-ended responses from citizens. This was seen as a time-consuming process and identified as an area for improvement in future PVEs. Furthermore, it was observed that the communication could have been managed better. There was a lack of a well-thought-out strategy to engage participants in the project for the long term. It wasn't sufficient to just collect opinions initially; there was a clear need for an approach that ensured ongoing interaction, involvement, and updates on how the input from the participants was being utilized throughout the project. In addition, communication towards regional parties was found to be inadequate. These stakeholders were informed too late about important developments and decisions.

Overall, despite some initial concerns and challenges, policymakers indicated that the PVE yielded valuable insights and that the process was worthwhile. It contributed to a better understanding of the desires and needs of citizens and helped policymakers to figure out which parties should be involved in the project and what their specific roles could be. The PVE was generally perceived positively by the policymakers, and it was suggested to conduct a similar evaluation in the later stages of the process as well.

5.2.3. Did the expectations prior to the PVE match the outcomes of the PVE?

Incorporating public values into decision-making (Insight into Public Opinion)

It is clear from the interviews that policymakers unanimously agree that the PVE played a crucial role in providing insights into public opinion regarding the Lelylijn. They all believe that the PVE has yielded valuable insights that helped them better understand the public's views, concerns, and interests.

All policymakers appreciate the broad scope of opinions and feedback collected through the PVE. They recognize the importance of this diversity in obtaining a comprehensive understanding of public opinion. One policymaker noted the contribution of a representative panel, stating, "I believe that the contribution of a representative panel has had a significant impact, and I see it as an important contribution to the project." Unlike a referendum, the PVE is seen as a tool that offers more depth and helps to better understand the nuances of citizens' perspectives. Another policymaker added, "I mean, a referendum is very black and white, whereas with the PVE, you really have the opportunity to bring nuance."

The high number of participants in the PVE was also emphasized by the policymakers. They interpret this high participation as evidence of the PVE's success in engaging the public. One of them said, "Well, that has certainly contributed. After all, we reached 11,000 people. Of course, there are many more Dutch citizens, but I think thanks to this group, we gained a wonderful insight into average life in the Netherlands. Yes, that has definitely contributed."

Although the PVE has greatly contributed to understanding public opinion, policymakers also acknowledge the complexity of interpreting the results. Some pointed out that the results do not provide a clear indication of supporters or opponents. They also noted that some results, such as the ideal number of stations, raised more questions than they answered. There were also concerns that certain aspects, such as area development and the exact number and location of stations, may not have been fully illuminated by the PVE.

Regarding the results, policymakers were surprised to discover that all policy goals were important to respondents, rather than a single dominant policy goal. This indicates that all aspects of the project are significant to the public, posing a challenge for policymakers. Another interesting insight was that there were no significant regional differences in the opinions of people in the northern Netherlands compared to the rest of the country. This was surprising to many who expected regional variations.

In summary, policymakers are convinced that the PVE has been valuable in unlocking public opinion regarding the Lelylijn, despite recognizing that interpreting the results can be complex and that there may have been aspects that were not fully illuminated.

Improving the substantive quality of decisions (Supporting and Enhancing Decision-making)

The interviews strongly indicated that policymakers generally feel that the PVE has the potential to contribute to the quality of future decisions. However, all participants mentioned that it is still too early to confirm to what extent the PVE has concretely contributed to the substantive quality of the decisions since the final decisions have not yet been made. As one policymaker put it, "Yes, it's still too early, really too early, to provide a complete answer to that. I have positive expectations of the PVE, but the decisions have not been made yet, so I cannot say anything concrete about it at this moment." and "I think it definitely contributes to that. Of course, no decisions have been made yet, but they are being prepared."

Additionally, the policymakers seem to agree that the PVE has helped identify areas where more information is needed, which has been useful in guiding further investigations. This is further emphasized by a statement from a policymaker: "But what we can do now is focus on specific areas where we want more information. I think this has helped us tremendously, and it can also contribute to future research." They also believe it improves the quality of the final decision-making by incorporating information from the environment. As one policymaker stressed, "So I think that the decision always gets better when you add information from the environment."

One policymaker emphasized that the timing difference between the PVE and the decision-making process can influence the ultimate effectiveness of the PVE. Additionally, this participant mentioned that a second round of participation may be necessary before the final decision is made.

In general, it appears that policymakers believe in the potential of the PVE to enhance the substantive quality of decisions. However, they also recognize that it is currently too early to draw definitive conclusions about the actual impact of the PVE on the decisions made. The true value of the PVE will only become evident when the final decisions are made and can be evaluated.

Accessibility and Inclusivity & Educating and informing the public (Broader Reach and Participatory Engagement)

The overall trend seems to be that the PVE has been largely successful in reaching a broader audience and promoting participatory engagement in the Lelylijn project. Policymakers acknowledge that the

PWE has been effective in engaging a significant number of people, often mentioning the figure of 11,000 participants. This number is seen as evidence of the broad reach and high participation rate of the PVE, especially compared to traditional participation methods. A key factor that emerges in this recognition of the PVE's success is its accessibility. Policymakers highlight the low barrier and efficiency of the PWE as strengths. As one policymaker aptly stated, "This survey is, of course, low-threshold, not so much for us, but especially for people to participate. You don't have to go anywhere, and it doesn't cost you much time." This emphasizes that the PVE made it easier for people to participate regardless of their location or time constraints.

A recurring point of concern is the representation of certain groups. It is recognized that despite the broad reach of the PVE, some groups, such as the elderly and women, may have been underrepresented. This highlights the need to balance both digital and traditional methods to involve as many people as possible in the process. As one participant suggests, "So we also need to organize information sessions because not everyone is digitally skilled. And even some people who are, sometimes prefer personal, face-to-face contact."

It is also emphasized that the success of the PVE cannot only be measured by the number of participants but also by the quality of engagement. Here, the idea emerges that the PVE can provide valuable insights to participants and help them understand the complexity of decision-making around large projects. As one participant states, "I think this definitely contributed to the expectation that it actually contributes to the experience of participation."

Another reported challenge of the PVE is dealing with disappointment and dissatisfaction when the results do not align with participants' personal beliefs. This is recognized as a larger social issue, linked to the individualization of society and the tension between individual and collective interests. Finally, it is emphasized that transparent communication and accountability regarding the results are crucial for the PVE's levels of engagement. The public needs to understand what happens with their feedback to have and maintain trust in the process.

Taken together, policymakers indicated that the PWE was generally successful in reaching a broader audience and promoting participatory engagement, but there is room for improvement in terms of representation of certain groups, balancing digital and traditional participation methods, and communication about the results.

5.2.4. What are the positive and negative aspects of the PVE according to the policymakers?

Positive:

- Policymakers believed that the PVE played a crucial role in uncovering public opinion regarding the Lelylijn, providing valuable insights for their understanding of public views and interests.
- They saw the process as informative, both in terms of participation and the project itself.
- The accessibility and efficiency of the PVE were recognized as strengths that facilitated participation.
- The broad range of opinions and feedback collected through the PVE was appreciated, with particular acknowledgment of the importance of diversity in obtaining a comprehensive understanding of public opinion.
- Policymakers valued the high engagement of participants and were impressed by the response, which exceeded expectations.
- Policymakers felt that the PVE contributed to identifying areas where more information was needed, which proved useful for guiding subsequent investigations.

Negative:

- Processing the large volume of open-ended responses received was challenging. This required extra time and effort, and some suggested better consideration of how to handle open questions in future PVEs.
- There was low involvement and communication with regional partners and officials, and some felt insufficiently engaged. This was an area for improvement in the future.
- The results of the PVE research needed further translation for policy justification, as the current results were a complex collection of data and preferences that required interpretation and structuring.
- Despite the broad reach of the PVE, there were concerns about the underrepresentation of certain groups, such as the elderly and women, and it was emphasized that a balance is needed between digital and traditional methods to involve as many people as possible.

5.3. Conclusion

In this section an answer is given to the subquestion "How do policymakers of MIRT projects experience the PVE?" is answered. The answer is based on the results of interviews with policymakers conducted after the publication of the PVE, and the key findings have been extensively presented in section 5.2 of this report. These interviews have provided a comprehensive overview of the diverse impressions policymakers have of the PVE, as detailed in section 5.2.2. They have also shed light on the extent to which the expectations prior to the PVE align with the results of the PVE, as further analyzed in section 5.2.3. Additionally, an overview of the positive and negative aspects of the PVE, as experienced by policymakers, has been presented and further explained in section 5.2.4.

Overall, the PVE is acknowledged and valued as a tool for involving citizens in the decision-making process of national transport projects, such as the Lelylijn. Policymakers have emphasized the essential role and unique importance of the PVE, particularly in terms of gaining valuable insights into the perspectives and opinions of citizens and reaching a large group. Despite some initial scepticism about the PVE, policymakers have come to appreciate its value more positively as they observed the positive results of the evaluation. However, challenges have also been identified, including processing a large volume of feedback from citizens and involving regional parties in the process. Improving these aspects was highlighted as an important point of focus for future PVEs.

Regarding the expectations policymakers had before the PVE, they largely aligned with the final results of the PVE.

Incorporating public values into decision-making (Insight into Public Opinion)

Policymakers unanimously agreed that the PVE provided valuable insights into public opinion on the Lelylijn project. Despite recognizing that the interpretation of the results can be complex, policymakers were convinced that the PVE has been highly valuable in gaining a broader understanding of public opinion.

Improving the substantive quality of decisions (Supporting and Enhancing Decision-making)

Policymakers strongly believe in the potential of the PVE to improve the substantive quality of their decisions. They noted that the PVE contributed to identifying areas where more information was needed, which was subsequently useful for guiding further research. Despite this optimism, it was also acknowledged that it is currently too early to draw definitive conclusions about the actual impact of the PVE on the decisions made. The true value of the PVE will only become fully apparent when the final decisions are made and can be evaluated.

Accessibility and Inclusivity & Educating and informing the public (Broader Reach and Participatory Engagement)

In terms of accessibility and inclusivity, the PVE was generally successful in reaching a broader

audience and promoting participatory engagement in the Lelylijn project. However, despite the broad reach of the PVE, it was also recognized that certain groups may have been underrepresented in the process. This highlights the need to strike a balance between digital and traditional methods in future PVEs to involve as many people as possible.

In summary, the PVE was generally positively experienced by policymakers. Although there were some initial concerns and challenges, policymakers agreed that the PVE provided valuable insights and that the process was worthwhile. The PVE contributed to a better understanding of the desires and needs of citizens and provided policymakers with useful insights into which parties should be involved in future projects and what specific roles they could play.

6. Experience PVE participants

In this chapter, the necessary analysis is performed to answer the sub-question "How do participants perceive their participation in the PVE of MIRT projects?" Firstly, this involves identifying themes that emerge from a few open-ended questions derived from the PVE. Following this analysis, a selection of open-ended responses is coded according to the identified themes/clusters. These responses are then quantitatively analysed. Based on this quantitative analysis, answers are given to the questions "How did participants experience the PVE?" and "Do differences in demographic characteristics correlate with varying experiences and perceptions of the PVE?".

6.1. Exploration of clusters/themes

Section 4.2.2 discusses the data used for this analysis, while section 4.3.1 explains how the analysis was conducted. In this section, the results (clusters) derived from these analyses are presented. Firstly, the positive clusters are outlined in 6.1.1, followed by the presentation of clusters derived from the negative experiences with the PVE in 6.1.2.

To gain insight into the existing clusters, 400 responses have been analysed. These responses come from 200 respondents. It's crucial that there is a spread in background characteristics within this group of respondents. When there are different answers between certain groups with different background characteristics, it is important to include the answers of people with different background characteristics in this exploration. To check this, an analysis of the background characteristics of the 200 respondents has been made, including the type of panel (closed or open), gender, age, education, and province. The distribution of these is shown in Appendix E. Looking at the results, it can be seen that there is a good spread within each background characteristic.

6.1.1. Positive clusters

Table 4 presents the clusters that have emerged from the analysis of the answers to the question of what participants find good about the PVE. A brief explanation is provided of what each cluster entails and to which objective of the framework each cluster can be linked. For a more detailed explanation and examples of the clusters and subclusters, please refer to Appendix F.

Table 4: Positive clusters and coding

<i>Cluster</i>	<i>Coding</i>	<i>Sub clusters</i>	<i>Coding</i>
<i>Accessibility, Convenience, and Clarity</i>	ACC	Accessibility for large public	ACC.1
		User-friendliness of the evaluation	ACC.2
		Clarity of the questions and objectives of the evaluation	ACC.3
<i>Breadth and depth of the questions</i>	BDQ	In-depth questions on different aspects of the Lelylijn	BDQ.1
		Ability to explore different perspectives of the Lelylijn	BDQ.2
<i>Room for personal opinions</i>	RPM	Ability to share personal opinions and backgrounds	RPM.1
<i>Involvement, participation, and support</i>	IPS	Sense of involvement and influence in the decision-making process	IPS.1
		Contribution to creating support for the final decisions	IPS.2
<i>Appreciation for the Review</i>	AR	Importance of public participation in the evaluation	AR.1
		Appreciation for the evaluation as a whole	AR.2
<i>Informative Feedback</i>	IF		IF.1
		FB	Comments on missing choices
<i>Other Comments</i>	OTH	Concerns about the actual impact and follow-up of the results	FB.2
		Criticism of the general approach of the evaluation/survey	FB.3
		Other comments that do not fit in any of the above categories	OTH.1

Cluster ACC: Accessibility, Convenience, and Clarity

This cluster is linked to Objective 8: Accessibility and Inclusivity. The subclusters focus on language usage, user-friendliness, and clarity of the questions and objectives. This contributes to the accessibility and inclusivity of the participation process, which is essential for engaging and including a wide audience.

Cluster BDQ: Breadth and Depth of the Questions

This cluster directly connects with Objective 1: Educating and informing the public. The breadth and depth of the questions in a consultation process play a crucial role in shaping the participants' understanding of the issues at hand. If the questions cover a wide range of topics and delve deep into each one, they can facilitate a comprehensive and detailed understanding, thereby enhancing participants' knowledge.

Cluster RPM: Room for Personal Opinions

This cluster is connected with objective 7: Space for Fundamental Discussion. Allowing participants to provide their opinion, creates an opportunity to facilitate discussions about the fundamental assumptions and approaches of the project, which can contribute to strengthening the process.

Cluster IPS: Involvement, Participation, and Support

This cluster is connected to Objective 4: Increasing trust in institutions. It contributes to a feeling of involvement and influence in the decision-making process, which can lead to greater trust in these institutions.

Cluster AR: Appreciation for the Review

This cluster includes positive responses regarding the PVE that was conducted. These responses mainly do not specifically highlight a certain aspect of the PVE. For this reason, this cluster is not directly linked to any of the objectives within the provided framework. Its presence underscores a general sense of appreciation and positivity toward the PVE, reflecting an overall positive engagement with the process.

Cluster IF: Informative Participation Method

This cluster is also connected with Objective 1: Educating and informing the public. By providing participants with more information about the Lelylijn and the challenges associated with it, the public is better enabled to make informed choices and actively contribute to the process.

Cluster FB: Feedback

This cluster is not linked to any of the objectives of the framework. The cluster includes all kinds of feedback (negative answers) that can't be linked directly to a specific objective.

Cluster OTH: Other Comments

This cluster includes all different kinds of answers which can't be clustered in one of the other clusters. It serves as a catch-all for diverse remarks. So this cluster is also not linked to any of the objectives.

6.1.2. Negative clusters

Table 5 presents the clusters that have emerged from the analysis of the answers to the question of what participants find not good about the PVE. A brief explanation is provided of what each cluster entails and to which objective of the framework each cluster can be linked. For a more detailed explanation and examples of the clusters and subclusters, please refer to Appendix G.

Table 5: Negative clusters and coding

Cluster	Code	Subclusters	Code
<i>Limitations in Questionnaire Design and Content</i>	LQC	Leading choices	LQC.1
		Assumptions and suggestiveness in the questions	LQC.2
		Limitations in choice options and personal input	LQC.3
		Irrelevant questions	LQC.4
<i>Problems with Complexity</i>	PRC	The complexity of the questionnaire	PRC.1
		Lack of information and explanations about scenarios and outcomes	PRC.2
<i>Difficulties with Representativeness</i>	DRP	Poor representativeness and reach of participants	DRP.1
		<i>Doubts about Involvement and Impact</i>	DII
<i>User Experience</i>	UEA	Unfriendly in use	UEA.1
		Long time investment	UEA.2
<i>Positive experience</i>	POS	Positive comments about the consultation	POS.1
<i>Other</i>	OTR	Miscellaneous	OTR.1

Cluster LQC: Limitations in questionnaire design and content

This cluster fits best with Objective 7: Space for Fundamental Discussion. The biases and limited choices in the questionnaire design can potentially inhibit meaningful dialogue and engagement by restricting participants to predefined boundaries and not allowing for a comprehensive discussion.

Cluster PRC: Problems with Relevance and Complexity

This cluster aligns with Objective 1: Educating and informing the public. The complexity of the questionnaire and lack of explanation about scenarios and consequences might hinder the participants' understanding, which could be improved with more effective educational materials and information provision. PRC can also be linked to Objective 8: Accessibility and Inclusivity. When the questionnaire is too complex or when the provided information is insufficient for understanding the questions, scenarios, and consequences, these could pose barriers to accessibility.

Cluster DRP: Difficulties with representativeness

This cluster is related to Objective 8: Accessibility and Inclusivity. The lack of representativeness among the participants suggests that the process may not be sufficiently inclusive, and certain groups may be underrepresented or excluded. Measures should be taken to ensure a wider reach and representativeness of the consultation.

Cluster DII: Doubts about involvement and impact

This cluster relates to Objective 4: Increasing trust in institutions. If participants doubt the influence of their input or the reliability of the process, this can undermine their trust in the institutions running the consultation. Transparency about how input will be used and assurance about the value of the participant's contribution can enhance trust.

Cluster UEA: User experience and accessibility issues

This cluster connects with Objective 8: Accessibility and Inclusivity. Issues with user-friendliness and the time required to complete the questionnaire can deter participation, making the process less accessible and inclusive. A more user-friendly design and a reasonable time commitment can enhance accessibility and inclusivity.

Cluster POS: Positive experience

This cluster is not linked to any of the objectives of the framework. The cluster includes all kinds of positive answers that can't be linked directly to a specific objective. Typical answers that can be found in this cluster are "I don't know", "None" and "Not applicable".

Cluster OTR: Other

This cluster includes all different kinds of answers which can't be clustered in one of the other clusters. It serves as a catch-all for diverse remarks. So, this cluster is also not linked to any of the objectives.

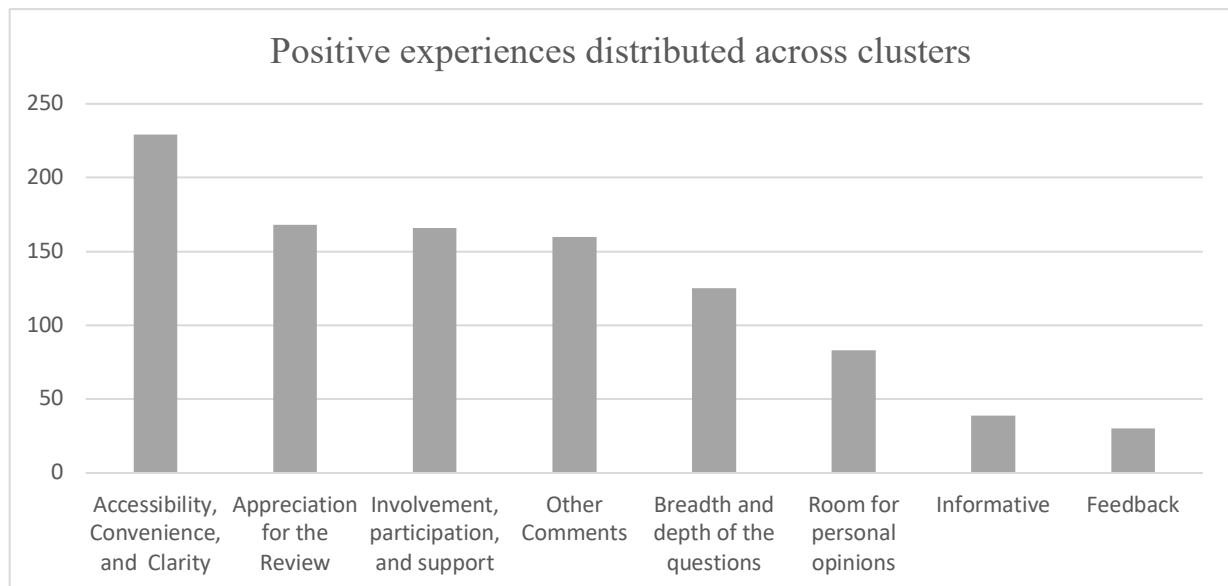
6.2. Quantitative analysis clusters

With the clusters now established, responses from the PVE to the questions "What do you think is good about this consultation?" and "What do you think is not good about this consultation?" can be coded. A random selection was made of 1000 respondents, half of whom came from a fixed panel and the other half from an open panel. For the coding process, each respondent's answer to both questions was manually evaluated to determine which of the previously mentioned clusters it falls under. These responses were then enriched with a code that corresponds to the assigned cluster. This modified dataset was analyzed in SPSS. The results of this analysis are presented in the following three sub-sections.

6.2.1. Positive experiences

The first analysis performed looks at the distribution of responses across the identified positive clusters. It examines the spread across clusters, followed by the spread within clusters (among the sub-clusters). The results of this analysis are presented in Appendix G. Table 6 displays the distribution across the eight positive clusters.

Table 6: Answers spread among positive clusters

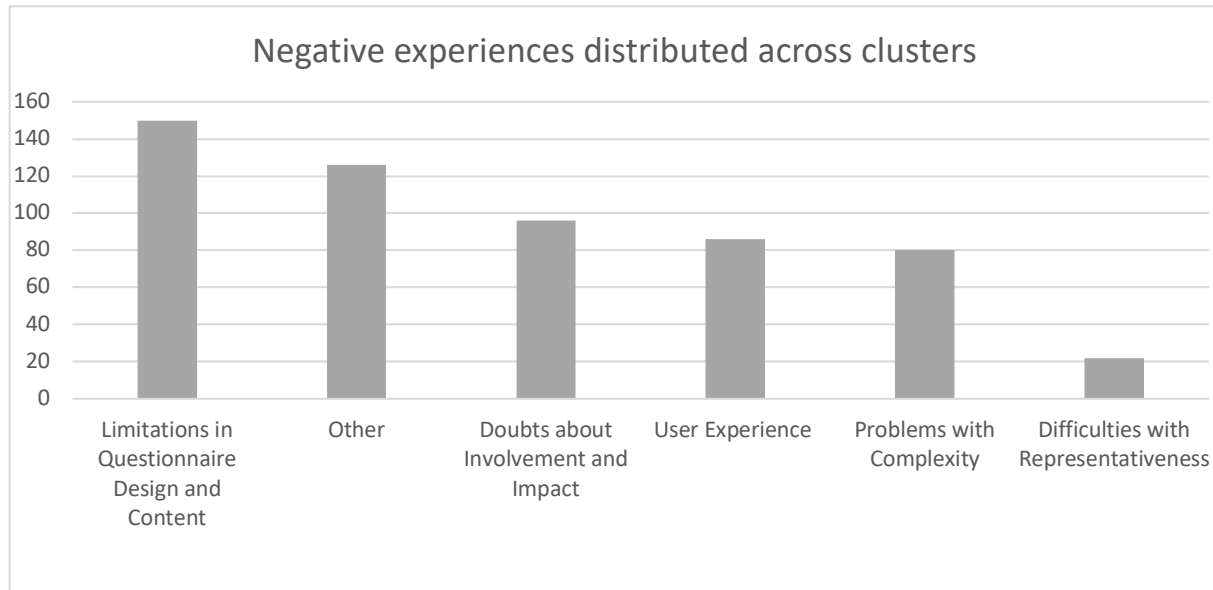


When examining the table, it is noticeable that the majority of the PVE respondents responded positively to aspects that belong to the 'Accessibility, Convenience, and Clarity' (ACC) cluster. Delving deeper into the three subclusters within ACC, it turns out that many answers relate to the clarity of the questions and objectives of the evaluation. Furthermore, 'Appreciation for the Review' (AR), 'Involvement, Participation, and Support' (IPS), and 'Other' (OTH) are mentioned equally often in the responses. AR and OTH are rather general clusters. These clusters do not strongly reflect a specific aspect of the PVE, whereas IPS does. Based on the subclusters, it appears that the answers within IPS mainly concern the sense of involvement and influence in the decision-making process, and not so much the creation of support for the final decision. 'Breadth and Depth of the Questions' (BDQ) emerges as the fifth most chosen cluster. Within this cluster, the emphasis is on the various aspects addressed in the questions. Two clusters that occurred relatively less frequently among the participants are 'Room for Personal Opinions' (RPO) and 'Informative' (IF). 'Feedback' (FB) was the least frequent, as the answers in this cluster do not align with the question of what the participants experienced as positive.

6.2.2. Negative experiences

The first analysis performed also looks at the distribution of responses across the identified negative clusters. It examines the spread across these clusters, followed by the spread within clusters (among the sub-clusters). The results of this analysis are presented in Appendix H. Table 7 displays the distribution across the six negative clusters. The 7th cluster Positive is not included into the graph since this cluster does not represent a negative experience. The Positive cluster contains 404 responses and is by far the biggest cluster. This shows that a large group of the participants does not experience anything negative during their participation of the PVE. This is also reflected in the average rating given by all respondents to the PVE, which is 7.6, indicating a high score (Populytics, 2023c).

Table 7: Answers spread among negative clusters



Looking at the table, it shows that the cluster 'Other' (OTR) and is the second biggest cluster. This cluster does not reveal much about specific aspects of the PVE. The biggest cluster is the cluster 'Limitations in Questionnaire Design and Content' (LQC), offering substantive criticism of the PVE. Reviewing the sub-clusters, the main limitations of the questionnaire are seen in the restricted choice options for personal input. The clusters 'Doubts about Involvement and Impact' (DII), 'User Experience' (UEA), and 'Problems with Relevance and Complexity' (PRC) are cited approximately equally in the responses. Looking at DII's sub-clusters, the majority express doubts about the commitment and impact of the consultation. In the case of UEA, the long-time investments are mentioned slightly more than the user-unfriendliness of the consultation. For PRC's sub-clusters, most responses relate to missing information and explanations, but still a large part of PRC relates to the consultation's excessive complexity. The least selected cluster is 'Difficulties with Representativeness' (DPR). This cluster pertains to participants' doubts about including all important citizens.

6.2.3. Demographics

In the second analysis, the focus is on the demographic background characteristics namely Age, Province, and Educational level. This analysis compares the distribution per category of a background characteristic over the clusters with the average distribution. From this, it can be observed whether the response patterns of participants with a certain type of background characteristic deviate from the average. The detailed results of this analysis can be found in Appendix I.

Age

The participants in this study have an almost equal age distribution, although with a slight underrepresentation of the group under 25 years of age. What is noticeable is that this younger group of participants differed in their responses from the average distribution across clusters. Young

participants chose responses that fell under the Accessibility, Convenience, and Clarity cluster 11% more often when asked what they liked about the PVE. Conversely, they provided 10% fewer responses that fell under the cluster of general appreciation for the consultation compared to the average among the respondents. When asked about what respondents did not like about this PVE, the younger group answered with the User Experience cluster 9% more frequently.

Geographic Distribution

There was a clear inequality visible in the provincial distribution of the participants. The majority of the participants came from the northern provinces of the Netherlands. This trend could potentially be explained by the heightened attention towards the Lelylijn project in these provinces. Upon examining the negative response clusters, it was found that participants from Noord-Holland provided positive responses 11% more often than the average.

Educational Level

Regarding the educational levels of the participants, there was an uneven distribution. Most of the participants had a background in HBO or university studies. Within this group, participants with an MBO level 2, 3, or 4 exhibited significant differences in their responses. When asked what they liked about this PVE they answered differently from the rest. The answers of these respondents fell 10% less frequently than average under the 'Breadth and depth of the questions' cluster, and 13% more often under the 'Other' category. The answers from the participants with an educational level of HAVO/VWO grades 4, 5, or 6 fell 10% more frequently than average under the 'Accessibility, Convenience, and Clarity' cluster, and 11% less often under the 'Appreciation for the Review' cluster. When asked about what respondents did not like about this PVE, there was a noteworthy finding. Individuals with an MBO level 2, 3, or 4 provided a positive response 21% more frequently, while university-educated participants gave positive responses 20% less frequently. In Appendix I, an independent samples t-test was conducted to validate whether higher-educated participants indeed perceive the PVE as less positive compared to participants with MBO levels 2, 3, or 4. The question examined was the rating given by participants to the PVE. The test results reveal that university-educated participants give an average rating of 7.36 to the PVE, while participants with MBO levels 2, 3, or 4 give an average rating of 7.47. This difference is statistically significant according to the t-test, although it is not a very large difference.

6.3. Conclusions

This section gives an answer to the sub-question, "How do participants perceive their participation in the PVE of MIRT projects?". In addressing this primary question, section 6.2 offers insights into two crucial facets: "How did participants experience the PVE?" and "What are the positive and negative aspects of the PVE according to the participants?". This analysis presents a comprehensive overview of participants' sentiments towards their involvement in the PVE. Complementing this analysis, section 6.3 answers the question, "What are the differences in background characteristics regarding participants' perception of the PVE and their experience?". This further dissection allows for the understanding of how diverse demographic characteristics may shape participants' experiences and their view of the PVE.

6.3.1. Values participants

To assess how participants experienced their involvement in the PVE about the Lelylijn, the values that emerged from the first analysis and the frequency from the second analysis are examined. From the overall responses, participants generally had a positive experience with the PVE. This conclusion is drawn based on the frequency of certain response clusters. In response to the question about what participants found not good in the PVE, the most prominent response clusters comprised positive feedback and non-specific answers. Conversely, in terms of what was good about the PVE, the cluster of negative feedback, was notably the smallest. This discrepancy in response cluster sizes provides insight into the participants' overall satisfaction with the PVE.

By examining the specific aspects that participants highlighted as positive or negative about the Public PVE, a more nuanced understanding of the value added from the participant's perspective can be gained. This examination leverages the framework developed in Chapter 3. The objectives most frequently referenced by the participants serve as indicators to determine the areas of added value in the PVE. Simultaneously, the objectives singled out as criticisms of the PVE are taken into account, providing a more comprehensive understanding of the participant's evaluation of the process.

Added value:

Accessibility and Inclusivity (Objective 8): The ACC cluster emerged strongly among participants. This illustrates that the PVE was viewed as accessible, and the questions and explanations were very clear. This shows that participants understood the PVE well and it was clear what was expected of them. This contributes to making the PVE accessible to a wide audience.

Trust in institutions (Objective 4): The IPS cluster was the second most common theme in participants' responses. The primary sentiment within this cluster was that participants felt involved in the decision-making process. Participants felt they were being listened to, which increases their trust in the overall decision-making process surrounding the Lelylijn.

Educating and informing the public (Objective 1): The BDQ and IF clusters showed that participants appreciated the depth and breadth of the questions, which helped them better understand the considerations surrounding the Lelylijn. Participants viewed the PVE as a tool that helps them become better informed about the Lelylijn and the decision-making process.

Criticisms

Space for Fundamental Discussion (Objective 7): The LQC cluster identifies limitations in the design and content of the questionnaire, which restricts participants' ability to express their own input freely. Participants highlighted a need for greater space to contribute their own perspectives. This critique shows a demand for a more open-ended, participatory process that allows deeper reflection and dialogue.

Trust in Institutions (Objective 4): The DII cluster reflects participants' doubts about the impact of their own input. For the participants, it's not clear how exactly their input will be used. Participants also expressed scepticism about how much influence their responses will have on the decision-making process. This leads to participants losing their trust in the PVE and decision-making process.

Accessibility and Inclusivity (Objective 8): The UEA and PRC clusters highlighted concerns about the accessibility and complexity of the PVE. Participants cited the user experience, particularly the duration of the PVE, as a significant hindrance to their engagement. The absence of essential information reduces accessibility because it increases the complexity of what is being asked. Without the necessary information, participants may feel overwhelmed and struggle to understand the questions and formulate well-considered responses.

6.3.2. Demographic characteristics

To investigate the differences in answers based on background, three characteristics were examined, namely age, geographic residence, and education. The analysis showed a relatively consistent pattern of responses across various demographic groups. However, there were a few interesting differences.

In the context of age, it is found that participants under 25 years displayed a different response pattern. They appreciate the Accessibility, Convenience, and Clarity aspects of the PVE, more compared to other age groups. Yet, they were less likely to express broad appreciation for the consultation process. This suggests that the youngest participants in our sample may prioritize clear and practical elements

of the PVE, and their expectations regarding the entire consultation might differ from those of other age groups. When it came to the negative aspects of the PVE, young respondents chose the User Experience cluster more often. This cluster primarily relates to the length of the consultation process. This could imply that younger participants might prefer a less time-consuming consultation, potentially due to their time preferences or other commitments.

Geographic location too introduced some nuances in the perception and experience of the PVE. The northern provinces, directly impacted by the Lelylijn project, were more represented in the participant pool. Notably, the data from participants residing in the province of Noord-Holland were more positive on average, pointing to a possible geographic influence on perceptions of the PVE.

When considering education levels, some interesting patterns emerged as well. Participants with an MBO level 2, 3, or 4, showed less alignment with the 'Breadth and depth of the questions' cluster, and a stronger alignment with the 'Other' category. One plausible explanation could be related to the quality of the responses provided by these participants. If the responses were lacking in clarity or detail, they may have been classified into the 'Other' cluster more frequently. It's also noteworthy that when asked about negative aspects of the PVE, these participants were more inclined to provide positive feedback. Contrarily, participants from HAVO/VWO grades 4, 5, or 6, showed more appreciation for Accessibility, Convenience, and Clarity but were less likely to express general appreciation for the review process.

7. Conclusion

The contextual background of this study lies in the increasing appreciation of well-being in Dutch society and government efforts to emphasize this aspect more in policymaking. The study examines how the Ministry of Infrastructure and Water Management can integrate the notion of broad prosperity into decision-making processes for various transport projects. The use of Participatory Value Evaluation (PVE), a new evaluation tool developed by researchers from Delft University of Technology, was specifically explored. The added value of the PVE was investigated, with specific attention to its application within the context of MIRT projects. Aligned with the identified knowledge gap, the research question "What is the added value of applying PVE to national infrastructure projects?" was formulated. This research aimed to find an answer to this question by studying the experiences of both policymakers and participants involved in the PVE applied to the Lelylijn project. To address the research question, answers are first given to the three sub-questions.

7.1. Sub-questions

Where can the PVE be applied in the MIRT process and what is the perceived added value in the research phase?

To answer this question, the potential applications of Participatory Value Evaluation within the MIRT process were analysed based on literature. The results indicate three crucial moments where PVE can effectively be integrated into the MIRT process to incorporate a broader well-being perspective in decision-making. The PVE can be effectively integrated into the research phase, the exploration stage and before the preference decision stage in the exploration phase. Through interviews, a deeper understanding of the expected added value of the PVE in the research phase was obtained. Policymakers emphasize the expected added value of PVE in contributing to the integration of public values in the decision-making process. Overall, according to the literature and policymakers, the PVE is positioned as a valuable tool within the MIRT process, particularly in the research phase. Integrating PVE at an early stage allows for the full incorporation of citizens' opinions and values into decision-making, leading to better-informed decisions that align with societal needs and preferences. In this way, PVE can play a key role in promoting a broader well-being perspective in the MIRT process.

How do policymakers of MIRT projects experience the PVE?

The answer to this sub-question was obtained through interviews with policymakers conducted after the publication of the PVE. These interviews provided a comprehensive overview of the diverse impressions policymakers have of the PVE. They also showed the extent to which the expectations prior to the PVE have been met. Policymakers acknowledge the PVE as a valuable tool for involving citizens in the decision-making process of national transport projects like the Lelylijn. Despite initial scepticism, policymakers have positively appreciated the value of the PVE. Mainly because it provides valuable insights into the perspectives and opinions of citizens and because of the results of the PVE that showed that the participants generally had a positive opinion of the Lelylijn. Policymakers strongly believe in the potential of the PVE to improve the substantive quality of their decisions. They indicated that the PVE contributed to identifying areas where more information was needed, which was useful for guiding further research. In terms of reach and participation, the PVE was successful in reaching a broad audience and promoting participatory engagement in the Lelylijn project. Overall, policymakers experienced the PVE positively, despite some initial concerns and challenges. The PVE has contributed to a better understanding of the desires and needs of citizens and has given policymakers useful insights into which parties should be involved and what specific roles they could play.

How do participants perceive their participation in the PVE of MIRT projects?

To answer this sub-question, an analysis was conducted that began with identifying themes from open-ended questions derived from the PVE. Selected open-ended responses were then coded based on these identified themes or clusters, followed by a quantitative analysis. Based on this analysis, several added values and some limitations of the PVE conducted for the Lelylijn emerged. Participants of the PVE, conducted for the Lelylijn project, largely perceive their participation positively. The high score

of 7.6, based on the average rating given by all respondents to the PVE, further demonstrates the positive recognition. More specifically, the participants appreciate the accessibility, inclusivity, and sense of involvement in the decision-making process surrounding the Lelylijn. Furthermore, the PVE is recognized as a valuable educational tool regarding the considerations around the Lelylijn. Nevertheless, there was also some criticism. It has been pointed out that there is limited space for fundamental discussions, and there is uncertainty about how their feedback is used and what impact it has on the decision-making process. In addition, comments have been made about the complexity and length of the PVE. While some demographic differences in responses were observed, mainly based on age and level of education, these differences were not very large and did not have a substantial influence on the general positive appreciation.

7.2. Research question

What is the added value of applying PVE in national infrastructure projects?

Now that the added value has been mapped out from both the perspective of the policymakers and the participants, a conclusion can be drawn on the main question of this research. The answer to this question concerns the added value of the PVE when applied to a national infrastructure project in the Netherlands that is in an early stage. To connect the added value from both groups, the framework set up in Chapter 3 is used. Each goal mentioned in the framework is assessed for the degree to which it was achieved by the PVE.

Table 9 presents the eight values with the columns policymakers, participants, and overall. This table uses colours to indicate whether the goal was positively or negatively mentioned in the experience of the policymaker and participants. Then, in the last column, it can be seen how the PVE scores in totality. Table 8 shows the rank order of the colours used. Note that this scale is an indication of how the PVE scores on the eight values of the framework relative to each other.

Table 8: Indication colour scale

Excellent
Good
Okay
Marginal
Bad
Not able to measure
Did not emerge

Table 9: Added value PVE framework

#	Values Framework	Policymakers	Participants	Overall
1	<i>Educating and informing the public</i>			
2	<i>Incorporating public values into decision-making</i>			
3	<i>Improving the substantive quality of decisions</i>			
4	<i>Increasing trust in institutions</i>			
5	<i>Reducing conflict</i>			
6	<i>Achieving cost-effectiveness</i>			
7	<i>Space for Fundamental Discussion</i>			
8	<i>Accessibility and Inclusivity</i>			

Educating and informing the public

The richness of questions, both in depth and breadth, has contributed to a clearer understanding of the different aspects of the Lelylijn. It's important to note that this process not only informed the participants about the specific aspects of the Lelylijn but also provided them insights into the complexity of the decision-making process as carried out by the government.

Incorporating public values into decision-making

Policymakers unanimously agree that the PVE played a crucial role in providing insights into public opinion on the Lelylijn. They emphasize that the PVE, unlike a referendum, offers more depth and helps to better understand the nuances of citizens' perspectives. This quality enhances the diversity and breadth of the collected opinions, enabling policymakers to gain a more comprehensive understanding of public sentiment.

Improving the substantive quality of decisions

While policymakers have confidence that the results of the Participatory Value Evaluation (PVE) will be incorporated into decision-making regarding the Lelylijn and that this will enhance choices, this cannot yet be confirmed. The measurement point to determine if the quality of decisions has indeed improved occurred too early to make definitive statements. For this reason, this objective has been marked grey in the table.

Increasing trust in institutions

While the PVE doesn't guarantee specific outcomes, participants report that they feel heard and valued. They get the impression that their opinions are genuinely incorporated into the decision-making process. Additionally, they gain a glimpse into the inner workings of policymakers, which provides a sense of transparency. This, in turn, results in strengthening trust in institutions.

Reducing conflict

The policymakers had all anticipated a significant divide in opinion over the construction of the Lelylijn between the residents of Northern Netherlands and the rest of the Netherlands. A major risk that emerged was the fear that the PVE would merely confirm this polarization. However, the PVE disproved this assumption, demonstrating that there is an understanding of investment in Northern Netherlands' infrastructure from both groups. It seems that the PVE revealed that there isn't much resistance towards the Lely Line.

Achieving cost-effectiveness

Achieving cost-effectiveness was not specifically examined in this study and cannot be evaluated based on the results of this research. For this reason, this objective has been marked grey in the table.

Space for Fundamental Discussion

Policymakers believe that the PVE has made a valuable contribution to gaining insight into public opinion. However, according to participants, there was insufficient opportunity to express their views. They indicated that the design of the PVE for the Lelylijn was too suggestive and offered limited freedom of choice in possible responses. This feedback underscores the need for a more open, PVE setup that allows for deeper reflection and dialogue.

Accessibility and Inclusivity

Policymakers agree that the PVE has been successful in achieving the goal of accessibility and inclusivity, as it has effectively engaged a broad audience and provided a low-barrier platform for participation. However, concerns have been raised by some participants about the accessibility and complexity of the PVE. They found the duration of the PVE and user experience to be significant obstacles to engagement. The absence of essential information further compounded these issues, making it difficult for participants to understand the questions and provide considered responses. Consequently, despite the successes of the PVE, there remains a need for improvement, particularly in terms of ensuring better representation of all demographics, enhancing the user experience, and providing necessary information.

In summary, the application of the Participatory Value Evaluation in national infrastructure projects offers several key benefits. It facilitates education and public enlightenment about the complexities of decision-making processes. It ensures the incorporation of diverse public values into decision-making and contributes significantly to building trust in government institutions. Additionally, the PVE is also effective in reducing potential conflicts by giving citizens a sense of involvement in the policy process and by serving transparency. However, there are areas where the PVE currently falls short. While it offers an avenue for fundamental discussions, the format needs to be more open to facilitate deeper reflection and dialogue. Also, despite its success in engaging a broad audience, it needs improvement in terms of accessibility and user experience to ensure more diverse participation. Lastly, the potential for PVE to improve the substantive quality of decisions and achieve cost-effectiveness needs further exploration.

In the upcoming chapter Recommendations and Discussion, we delve deeper into these points and offer recommendations for the enhancement of PVE in terms of aspects where it currently scores relatively lower. The goal is to maximise the potential of the PVE in enriching national infrastructure projects.

8. Recommendations and Discussion

As a researcher, during my investigation into the added value, I've gained insights into what could be improved when implementing the Participatory Value Evaluation in the MIRT process, areas that require further research, and deficiencies in my own study. In this discussion, I will elaborate on these points, while also voicing my opinion on whether or not to use the PVE in the MIRT process and discussing notable findings.

The PVE that was implemented for the Lelylijn was the first time a PVE has been utilized in a MIRT project. This resulted in a search during PVE implementation to see how best to implement the PVE. This was also the reason why the PVE for the Lelylijn was viewed as a pilot, and that the PVE, in addition to providing valuable information, also offered learning opportunities regarding the use of the PVE in MIRT projects.

In my view, the PVE deployed for the Lelylijn is a valuable tool, one that with certain adjustments can offer even more added value to both policymakers and participants. The PVE could assist in rapidly gathering public opinion on a subject and informing citizens about government plans and helping them understand the various considerations involved. A well-informed citizen will have a greater understanding of the choices made by the government, and by soliciting the opinion of the public, citizens feel involved. If the PVE is not properly implemented, these objectives cannot be achieved, and the PVE could have a counterproductive effect. Effective communication, accessibility, choice, and a representative group of respondents are essential for the successful implementation of the PVE. In the following paragraphs, I will delve into these points further and provide advice on how to better deploy the PVE in the future.

8.1. PVE compared to other Participation Methods

An interesting discussion revolves around what makes the PVE such a unique participatory instrument for MIRT projects, considering the added values identified in this research and presented in Chapter 7. In Chapter 2.4, four participation methods are outlined, each with its own strengths and weaknesses. By comparing the strengths and weaknesses of these methods with those of the PVE, we can determine what makes the PVE truly unique.

Like the PVE, a referendum can give a voice to many people and can create support in politics among the society. However, a significant difference between a referendum and the PVE lies in their level of nuance. A referendum tends to oversimplify complex issues by reducing them to a simple "yes" or "no" question, whereas the PVE allows for more nuanced discussions.

When comparing the PVE to a Public Hearing, there are similarities in terms of transparency in the decision-making process, fostering trust, engaging unheard groups, and educating and informing the public. However, the PVE differs significantly from a Public Hearing in terms of its reach. Public hearings often have a local and physical presence, attracting mainly older citizens. In contrast, the PVE allows people from across the country to easily express their opinions.

Both a survey and the PVE have the strength of reaching a large and diverse audience within a short period. Similar to the PVE, surveys can also be conducted online, which makes participation more accessible. However, the weaknesses of surveys align closely with those of the PVE. There is a risk of incorrect information due to poorly formulated questions, and participants may not be able to provide objective answers. One limitation of surveys, which is not as applicable to the PVE, is the lack of space for nuance and depth. Surveys are more simplistic compared to the PVE, making it challenging to measure information gathering on complex trade-offs or issues.

The last participation method to compare with the PVE is an Advisory Council. Like the PVE, an Advisory Council offers a diverse group the opportunity to contribute to policymaking and provides transparency in the decision-making process. What sets an Advisory Council apart is the expertise

from different fields it brings together. While the participants in the PVE also possess expertise, the large number of responses often dilutes this expertise within the broader consensus of the majority. Additionally, an Advisory Council consists of a select group of individuals, which limits its reach compared to the PVE.

To answer the question of what makes the PVE unique compared to other participation methods in terms of added value, we can say the following. Each participation method has its own strengths and weaknesses; there is no method that exclusively possesses strengths unmatched by all others. What makes a participation method unique is the combination of certain strengths. In terms of scale, the PVE is comparable to a referendum and a survey. All three methods have extensive reach, but while referendums and surveys lack depth and nuance, the same cannot be said for the PVE. In this aspect, the PVE shares similarities with Public Hearings and Advisory Councils, as it allows for in-depth discussions and ample room for participant input. However, these two methods lack the broad reach of a large participant group. Therefore, the PVE excels in reaching a wide audience while simultaneously collecting high-quality data on complex issues.

8.2. Recommendation for Practice

In section 8.1, the differences between the PVE and other participation methods were discussed by examining the strengths and weaknesses of each method. It was found that the PVE offers depth and a wide reach, which is a unique combination. However, the research also revealed areas where the PVE can improve, such as inclusivity, depth, and space for discussion. The question that arises is to what extent the PVE should improve to provide the same level of depth as a Public Hearing or to engage the small group of people for whom the PVE is not accessible. My advice in this regard is to improve the PVE wherever possible while maintaining its identity. The PVE is a participation method that allows a large group of citizens, the unheard majority, to express their opinions in an accessible way. This chapter provides recommendations on how to enhance the implementation of the PVE to better achieve the goals examined in this research.

What emerged both in interviews with policymakers about the risks they see and in critiques from respondents was the importance of effective communication. In the interviews, it became clear that participants may have high expectations regarding the impact their input will have on final policy decisions. If these expectations are not met, it can lead to frustration and dissatisfaction. Negative experiences from the participants underscored these doubts about the impact of their own input. It's unclear to participants how exactly their input will be utilized, and they expressed scepticism about the extent to which their responses will influence the decision-making process. This is an area that needs improvement to increase trust in the PVE.

One recommendation to address this is to place greater emphasis, prior to the PVE, on explaining what will be done with the results and how this will influence the entire policy process. If the results of the PVE do not weigh heavily in the process, that should also be indicated to prevent participants from having false expectations and ultimately feeling disappointed.

After the PVE, it's important to keep respondents well-informed about the results and how these were used in decision-making. Ensure that the presentation of the results is easy to understand for everyone. The report on the PVE over the Lelylijn, as it was published, looks too complex for everyone to use. Keeping participants involved in the Lelylijn project by regularly providing them with information is also important. High involvement will result in more support for the Lelylijn and will make it easier in the future to ask for opinions again.

Policymakers indicated that the report still needs a translation so that it is more usable for policy purposes. According to policymakers, the current form of the report contains a complex collection of data and preferences that require interpretation and structuring. My advice to Populytics is to assist and guide policymakers in correctly interpreting the report and translating it into policy.

An area identified by policymakers that could be improved is the coordination and communication with regional partners and administrators, such as municipalities. Unexpected reactions came from these parties because they were not properly informed or were informed too late. A recommendation for the future is to inform and involve these parties early in the PVE process. This proactive approach will ensure they are adequately included in the process, which can better prevent questions and disagreements that might arise later.

The PVE is known for providing the opportunity for a large number of citizens to give their opinion on a policy or project of government concern. However, the PVE applied to the Lelylijn scored somewhat low on the goal of "Space for Fundamental Discussion," according to respondents. Respondents felt that the questions asked in the PVE were leading and suggestive; they desired more freedom of choice. It's very important for a participation tool like the PVE to ensure that participants can share their own opinions. The advice, therefore, is to make the questions less leading in the future and include more choices or open-ended questions. Participants felt as though the decision has already been made that the Lelylijn will come and that they no longer have any influence on this. There needs to be careful consideration about where open-ended questions are asked and how many. Open-ended questions are difficult to analyse in large quantities and are very time-consuming. A good balance must be found.

The accessibility and inclusivity could be improved according to some policymakers and participants. Some argued that the PVE took too long for some, or that it could be too complicated. There was also criticism that the PVE is an online tool, making it inaccessible for those who are not proficient with digital devices. These criticisms led people to have doubts about the inclusivity of the tool. As a researcher into the PVE, I have found that the PVE reaches a lot of people and that the distribution of this number of people is quite good. The tool allows a large group of people to give their opinion. When looking at the criticisms that not everyone in society is reached, I can also agree with that. The question is to what extent the tool should be adjusted so that the last few percent can also participate in this method. Several suggestions have been made to ensure that the majority are satisfied with the setup of the PVE.

In terms of duration and effort, there is a wide spectrum of participant preferences. At one extreme, some individuals wish to spend hours expressing their opinion about the Lelylijn and would ideally enter into a discussion, while at the other extreme, some participants find two minutes sufficient for sharing their views. One recommendation to address this diversity is to provide participants with a choice menu at the beginning of the PVE, where they can decide whether they want to engage in an extensive PVE or a shorter version (possibly even something in-between). This way, you can satisfy multiple groups with regard to the effort they wish to put in.

A similar choice menu could be implemented to address the level of difficulty of the questions and language used. For individuals with lower education levels, it could be helpful if the questions are worded more simply and not too complex. On the other hand, for those with higher education levels, they might prefer more in-depth and complex questions. This makes the PVE more inclusive, ensuring it's not too difficult for one group and still interesting enough for the other.

In terms of accessibility, the PVE is an online tool, which allows it to reach many people in a relatively short period. To reach those who do not have internet access or for whom an online tool is simply too difficult, additional methods can be applied. For instance, the PVE could be offered in written form, allowing individuals to fill in the questions offline independently. Another option is to combine the PVE with other participation methods that gather people's opinions in an offline environment, such as public hearings. This way, no one is excluded from participating in the policy process of the respective projects.

What emerged from both policymakers and respondents was that the scope of the PVE was not broad enough. There was a need to inquire about where exactly the stations should be located, instead of just how many, and there should also have been attention to area development. The fact that this falls outside the scope does not mean that the PVE was set up incorrectly, but it indicates that there is a

need for the citizens' opinions on multiple aspects. One suggestion for this is to evaluate later in the MIRT process where there are still information gaps and to consider whether these can be filled with a second PVE. I also find a second PVE extremely interesting to apply during the next phase that the Lelylijn project will undergo when the start decision has been made to continue the project to the exploration phase. Now, the PVE is applied in the research phase, where mainly two streams of information are gathered: valuation of attributes and qualitative information. I see opportunities in collecting descriptive attributes and optimal portfolio in the exploration phase when the different types of the Lelylijn designs need to be filtered and ultimately a design choice needs to be made.

8.3. Recommendation for Further Research

This section provides advice for follow-up research on the PVE. During the investigation into the PVE applied to the Lelylijn, a number of findings were made that should be considered in future studies. The PVE generates a significant amount of qualitative and quantitative data, which can be very valuable for research. However, caution is advised: the qualitative data from the PVE is not always of high quality. With open-ended questions, there is often a large number of respondents who do not or only minimally answer these questions. This should be kept in mind when formulating or selecting questions for the PVE to be included in the research. Establishing causal relationships remains a challenge in PVE research, as the PVE is merely a snapshot of public opinion. Assessing the impact of the PVE on participants may therefore be difficult to measure. This should be taken into account for follow-up research on the PVE, it's advised to anticipate this challenge in the research approach. In researching the PVE, particularly in case studies, attention should be paid to the design and execution of a certain PVE. Not every PVE is identical and can therefore have significant differences compared to other PVE cases. When comparing this case study with future research into the application of PVE to MIRT projects, a thorough examination of the execution of the PVE and its differences is required. A final consideration in PVE research is the time and resources required. To gain access to the data, it is important to collaborate or reach an agreement with the research agency overseeing the PVE. This provides access to the database, which is not publicly accessible in its raw form. In terms of time, it should be noted that PVEs are extensive studies with an unknown amount of respondents and data beforehand. This means that the PVE may remain online for an extended period, delaying the start of data analysis, or there may be an overwhelming response, necessitating the analysis of a substantial amount of data. Both scenarios can result in a later publication date of the PVE results. This should be kept in mind when planning future research that includes a real-time case study of the PVE.

A question that emerged among policymakers was when the optimal moment might be to implement a PVE in the MIRT process. This study investigated, based on literature, what the MIRT process entails and at which moments the PVE can logically be deployed. However, it is not yet clear from this which moment is optimal for the decision-making process. This research examined the added value of the PVE when it is applied during the research phase of the MIRT. A recommendation for future research is to conduct several case studies on the added value of the PVE, examining cases that are implemented at different times in the MIRT process, with a preference for the three moments determined in this study. By comparing the added value of the different cases, it can be determined whether there is optimal applicability of the PVE or whether the values vary to such an extent in the MIRT process that it is optimal to apply several at different moments.

A value from the framework that was not measured in this research was achieving cost-effectiveness. It is recommended to investigate this for the PVE. To measure cost-effectiveness, all efforts, both costs and man-hours, should be measured and compared with the benefits of the PVE. To ultimately determine if the PVE is cost-efficient, other participation and evaluation methods should also be included in the research. Eventually, all these methods can be compared with each other to determine the cost-effectiveness of each instrument. In this way, it will be clear whether the PVE is cost-effective or not.

Another value from the framework that could not be measured in this study is improving the substantive quality of decisions. This goal could not be measured because the point of measurement, whether the decisions made have substantively improved, took place too early. The timeframe of this study was until June, which is still too early in case of the research phase of the Lelylijn for significant or crucial decisions. The advice is therefore to hold another measurement after the start decision has taken place for the Lelylijn. This is an important decision at the end of the research phase in the MIRT. Once this decision has been made, it can be determined which information from the PVE contributed to this decision and whether the decision has actually improved compared to other cases.

The value of educating and informing the public could be further investigated in a follow-up study to determine the extent to which the PVE has contributed to this. In this current study, we looked at what a participant experienced as positive and negative. From this, it was gleaned that participants found it educational. This can be concretely measured by asking the participant in the very first question before any information is given about the Lelylijn, about how much someone knows about the project or political considerations. The question can then be asked again at the end of the PVE. In this way, it can be concretely measured whether and in which areas participants actually gain knowledge. It can also be examined for which groups the PVE is informative and which it is not. Thus, the PVE can be refined to better achieve educating and informing the public.

The value of reducing conflict in this study was only measured among policymakers, as this could not be gleaned from the responses to the PVE. What is recommended is to measure in the PVE whether the PVE actually contributes to reducing conflict from the participant's perspective. One way to measure this is to ask the participant in the very first question before, about how someone feels about the project. Then the participant is informed about the project and has to make considerations in his or her answers, and he or she is actively thinking about the project. After completing the PVE, the participant must be asked again how he or she feels about the project. By adding these two measurement points, it can be concretely measured to what extent the PVE can positively influence the opinions of citizens and thus avoid conflicts.

In this study, based on literature research, it was recommended to implement the PVE as early as possible in the process, in order to fully incorporate the opinions and values of citizens and make better decisions. What needs to be investigated in practice is what information is crucial to have as a project before conducting a PVE. After all, it is not possible to set up a PVE without having any information about a project. It is recommended to further investigate where the balance lies between on the one hand collecting information that serves as input for the PVE and on the other hand deploying the PVE as early as possible to incorporate the opinion of the citizen in the course of the process.

As already advised in the previous section, the PVE could be combined with other participation methods to not only reach the middle group with the PVE but also the extreme groups. In this way, everyone can be involved when participation takes place in MIRT projects and an even broader voice can be mapped out. It is recommended to investigate which forms of participation could be a good addition to the PVE to facilitate even more inclusive participation.

This study has investigated the added value of the PVE that was applied during the research phase of the Lelylijn. To be more certain of its added value during the research phase, multiple studies will need to be conducted on the added value of the PVE. It is recommended to conduct these studies using different cases. This way, it can be investigated whether the added value is the same across cases or whether it is influenced by the type of MIRT project or the way in which the PVE is executed.

What emerged from this study is that highly educated individuals perceive the PVE as less positive than those with lower levels of education. One reason for this could be that highly educated individuals are more critical in describing their experience with the PVE than those with lower levels of education. Another reason could be that the PVE does not provide enough space for highly educated individuals to express their thoughts in the questions and answers presented in the PVE. It is

recommended to investigate the underlying reason that explains this difference. This research could contribute to improving the PVE for participants with higher education.

The second round of interviews with policymakers revealed the following: initially, the policymakers were sceptical about the PVE, but as the results became known, this attitude transformed into a positive one. This change in perception suggests that there are valuable insights to be uncovered, which can be useful for improving the implementation and acceptance of PVEs in future policy. Several factors could contribute to this shifting attitude. For instance, it could be that policymakers were positively influenced by the predominantly positive reactions from respondents towards the Lelylijn. Likewise, it could be that for the policymakers, it became clearer what kind of information the PVE was gathering, enabling them to better appreciate the value and utility of this method. Further investigating this dynamic could lead to useful recommendations for improving policymakers' perception of the PVE, even before the results are published. By understanding what can shift policymakers' sceptical attitudes, strategies can be developed to overcome these barriers from the onset. This could mean, for example, better informing policymakers about what to expect from the PVE process, or providing more transparency about the types of information that can be collected. Delving deeper into the nature of this change in perception could be a valuable topic for future research.

8.4. Limitations

This chapter provides a discussion of the limitations identified during the study, in order to better contextualize the research findings. This self-reflection enhances the value of the research by providing insight into the challenges and limitations encountered during the research process. It also offers the opportunity to make recommendations to reduce these limitations in future research.

A limitation of this study is its subjectivity. The study relies heavily on qualitative data, including summarized interviews with policymakers, in which interpretations have been made by the researcher. The subjectivity was minimized by having the interview summaries evaluated by the interviewed policymakers, allowing them to highlight any misinterpretations. In future studies, this could be improved by having multiple researchers analyse the interviews, thus preventing everything from being judged from the perspective of a single researcher. In the analysis of the qualitative data from the PVE, the study is also limited by the subjectivity of the researcher. Qualitative responses have been coded according to a coding scheme established by the researcher. In future research, multiple researchers could be involved in assigning responses to clusters from different perspectives, which would contribute to making the study more objective.

The research into the appropriate placement of the PVE within the MIRT study encountered certain limitations. These limitations mainly stemmed from the fact that the research relied heavily on literature and did not sufficiently take into account real-world practices. The MIRT procedure was described based on the MIRT rule book, but in reality, its implementation may deviate from this. This discrepancy between theory and practice is a clear limitation. It can give a distorted picture of how the MIRT procedure actually works. This can have implications for the position and effectiveness of the PVE within this context. Therefore, future research should also incorporate real experiences from practice to gain a better understanding of how the PVE fits within the MIRT study. This could be done by studying real-world examples or conducting interviews with professionals who have experience with the MIRT procedure. In this way, a clearer and more realistic picture of the MIRT procedure in practice will be available, and thereby gain better insights into where and how the PVE can best be implemented.

If future research supplements insights from literature with experiences from practice, it can provide better advice on the best way to integrate the PVE into the MIRT procedure. This approach could enhance the usability and relevance of the research findings, which could lead to a more effective deployment of the PVE in policy-making and infrastructure planning.

In this study, the added value of the PVE is based solely on the experiences of the participants during the PVE. It is essential to acknowledge that this approach has certain limitations. The nature of human

experience and perception is such that not all values that emerge during the PVE are directly consciously or tangibly experienced by the participants. For instance, some values may be unconscious or lie outside the direct awareness of the participants, or they may simply be unable to articulate certain aspects of their experiences. This is a known phenomenon in research focusing on human experience, suggesting that there may be values that are less well or not at all represented in the findings of this study. Moreover, the focus on the experiences of the participants during the PVE may limit the study in its ability to understand the broader impact of the PVE. For example, the effects or added value of the PVE might only become apparent in the long term or in a broader context, beyond the immediate moment of participation. Therefore, it is important that future research goes beyond simply asking participants about their immediate experiences during the PVE. Other methods, such as longitudinal studies, in-depth interviews, and other techniques that can provide insights into both the conscious and unconscious values and experiences of the participants, may gain a more complete understanding of the added value of the PVE from the perspective of the participants.

In this study, only two open-ended questions from the PVE were included, asking what the participants experienced positively and negatively. While this provided some insights, including more questions about the participants' experiences in future research could provide a richer and more detailed picture of the participants' perspectives and experiences. In addition, the analysis of the differences in background characteristics among the participants was relatively simple. While this provided basic insights, more advanced analytical techniques could be used. It would be beneficial to include more background characteristics in the analysis to better understand the diversity of the participants. A latent class cluster analysis could be particularly interesting in this context. This method allows for the identification of subgroups or "classes" of participants that are similar in multiple background characteristics, making it possible to identify patterns that would not be visible in a simpler analysis. Incorporating such advanced methods in future research could significantly improve the quality and usefulness of the research results.

In this study, the interviews with policymakers about their expectations regarding the PVE was conducted too late in the research process. As a result, the policymakers had already been given insights into the interim results and were therefore aware of the probable outcomes. This may have influenced their expectations and perceptions of the PVE, which could have caused a bias in the collected data. Ideally, policymakers' expectations about the PVE should be surveyed early in the research process, before they have any knowledge of the results. This would allow for a more accurate measurement of their initial perceptions and expectations, which can then be compared with their experiences and perceptions after the results of the PVE have been presented. The late surveying of policymakers' expectations may also have limited the extent to which the research could investigate their changing attitudes and perceptions towards the PVE. Understanding this dynamic can provide valuable insights into how policymakers interpret and use the information from a PVE, and how their attitudes towards participatory processes can evolve over time. For future research, it is therefore recommended to interview policymakers about their expectations at the beginning of the PVE process, before presenting interim or final results. It could also be beneficial to use longitudinal methods to investigate changes in their attitudes and perceptions over the course of the MIRT process.

References

- Amaya, A., Hatley, N., Lau, A., & Mitchell, T. (2021, June 9). Measuring the Risks of Panel Conditioning in Survey Research. *Pew Research Center Methods*.
<https://www.pewresearch.org/methods/2021/06/09/measuring-the-risks-of-panel-conditioning-in-survey-research/>
- Andrade, C. (2020). The Limitations of Online Surveys. *Indian Journal of Psychological Medicine*, 42(6), 575–576. <https://doi.org/10.1177/0253717620957496>
- Beierle, T. C. (2005). USING SOCIAL GOALS TO EVALUATE PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISIONS. *Review of Policy Research*, 16(3–4), 75–103.
<https://doi.org/10.1111/j.1541-1338.1999.tb00879.x>
- Broniewicz, E., & Ogrodnik, K. (2020). Multi-criteria analysis of transport infrastructure projects. *Transportation Research Part D-transport and Environment*, 83, 102351.
<https://doi.org/10.1016/j.trd.2020.102351>
- Cenecal, P., Goldsmith, B., Conover, S., Sadler, B., & Brown, K. (1999). Principle of Environmental Impact Assessment Best Practice. *INTERNATIONAL ASSOCIATION FOR IMPACT ASSESSMENT*.
https://web.archive.org/web/20120507084339/http://www.iaia.org/publicdocuments/special-publications/Principles%20of%20IA_web.pdf
- Chiang, I. A. (2015, October 13). *Conducting Surveys*. Pressbooks.
<https://opentextbc.ca/researchmethods/chapter/conducting-surveys/>
- De Melo, R. T., & De Melo, H. N. M. C. (2020). THE EFFECTIVENESS OF BUDGET PUBLIC HEARINGS IN THE DEFINITION OF PRIORITIES IN PUBLIC POLICIES FOR THE CONCRETIZATION OF SOCIAL RIGHTS. In Dykinson eBooks (pp. 133–144).
<https://doi.org/10.2307/j.ctv102bm6p.13>
- De ondernemer. (2020). *77 procent werkenden vindt welzijn belangrijker dan welvaart*. De Ondernemer.
<https://myprivacy.dpgmedia.nl/consent?siteKey=l84j2k722qeojc8&callbackUrl=https%3a%2f%2fwww.deondernemer.nl%2fprivacygate-confirm%3fredirectUri%3d%252factueel%252f77-procent-werkenden-welzijn-belangrijker-dan-welvaart%25257E2649131>
- Decisio, MUST, TwynstraGudde, MOVE Mobility, & SWECO. (2022). Gezamenlijke analyse Deltaplan voor Noordelijk Nederland (deel B). In *Rijksoverheid*.
<https://open.overheid.nl/documenten/ronl-37947774ed9791b81fb3f0e1c714fda8ff0c6f2a/pdf>
- Dekker, T., Koster, P., & Mouter, N. (2019). The Economics of Participatory Value Evaluation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3323645>
- Ellen, I. G., Mijanovich, T., & Dillman, K. (2001). Neighborhood effects on health: Exploring the links and assessing the evidence. *Journal of Urban Affairs*, 23(3–4), 391–408.
<https://doi.org/10.1111/0735-2166.00096>
- Font, J., Pasadas, S., & Fernández-Martínez, J. M. (2019). Participatory motivations in advisory councils: Exploring different reasons to participate. *Representation*, 57(2), 225–243.
<https://doi.org/10.1080/00344893.2019.1643774>
- Greve, B. (2019). What is welfare? *Welfare and the Welfare State*, 14–30.
<https://doi.org/10.4324/9780429341199-2>
- Groninger Internet Courant. (2022, December 8). *Onderzoek Lelylijn van start*. GIC.
<https://www.gic.nl/innovatie/onderzoek-lelylijn-van-start>

- Henley, J. (2021, January 15). *Dutch government resigns over child benefits scandal*. The Guardian. <https://www.theguardian.com/world/2021/jan/15/dutch-government-resigns-over-child-benefits-scandal>
- Jay, S. J., Jones, C., Slinn, P., & Wood, C. G. (2007). Environmental impact assessment: Retrospect and prospect. *Environmental Impact Assessment Review*, 27(4), 287–300. <https://doi.org/10.1016/j.eiar.2006.12.001>
- Kampen, J. K., Maddens, B., Bouckaert, G., & Van De Walle, S. (2002). Meten en operationaliseren van de concepten tevredenheid met en vertrouwen in de overheid binnen de context van survey onderzoek. Instituut Voor De Overheid, 3. https://lirias.kuleuven.be/bitstream/123456789/84853/1/IO0505012_meten.pdf
- Lowndes, V., Pratchett, L., & Stoker, G. (2001). Trends In Public Participation: Part 1 – Local Government Perspectives. *Public Administration*, 79(1), 205–222. <https://doi.org/10.1111/1467-9299.00253>
- Macharis, C., & Bernardini, A. (2015). Reviewing the use of Multi-Criteria Decision Analysis for the evaluation of transport projects: Time for a multi-actor approach. *Transport Policy*, 37, 177–186. <https://doi.org/10.1016/j.tranpol.2014.11.002>
- Marzuki, A. (2015). Challenges in the Public Participation and the Decision Making Process. *Sociologija I Prostor*. <https://doi.org/10.5673/sip.53.1.2>
- Miles, J. N. V., & Gilbert, P. (2005). A Handbook of Research Methods for Clinical and Health Psychology (DRAFT). In *Oxford University Press eBooks*. <https://doi.org/10.1093/med:psych/9780198527565.001.0001>
- Ministerie van Infrastructuur en Waterstaat. (2016). *Spelregels van het Meerjarenprogramma Infrastructuur, Ruimte en Transport (MIRT)*. Rijksoverheid. <https://zoek.officielebekendmakingen.nl/blg-790167.pdf>
- Ministerie van Infrastructuur en Waterstaat. (2017). Spelregels van het Meerjarenprogramma Infrastructuur, Ruimte en Transport (MIRT). In *www.rijksoverheid.nl*. https://open.overheid.nl/repository/ronl-fd8952e6-01a8-4da9-a903-b1d4f87b2745/1/pdf/WEB_107287_MIRT_NL.pdf
- Ministerie van Infrastructuur en Waterstaat. (2022a, June 23). *MIRT-brief voorjaar 2022* [Press release]. <https://open.overheid.nl/documenten/ronl-19da07e530535b08afd64a9ac58f8af5ab5a5cac/pdf>
- Ministerie van Infrastructuur en Waterstaat. (2022b, June 24). *Nieuwe fase uitwerking plannen Lelylijn*. Nieuwsbericht | Rijksoverheid.nl. <https://www.rijksoverheid.nl/actueel/nieuws/2022/06/23/nieuwe-fase-uitwerking-plannen-lelylijn>
- Ministerie van Infrastructuur en Waterstaat. (2022c). MIRT Overzicht 2023. In *Mirtoverzicht*. Rijksoverheid. <https://www.mirtoverzicht.nl/binaries/mirt/documenten/publicaties/2023/09/20/mirt-2023/Klikbare+en+toegankelijke+versie+van+het+MIRT+Overzicht+2023.pdf>
- Ministerie van Infrastructuur en Waterstaat. (2022d). Spelregels van het Meerjarenprogramma Infrastructuur, Ruimte en Transport (MIRT). In *www.rijksoverheid.nl*. Rijksoverheid. <https://open.overheid.nl/repository/ronl-5378f78299510103062c1b20ccd7228a733285b7/1/pdf/bijlage-geactualiseerde-mirt-spelregels.pdf>
- Ministerie van Infrastructuur en Waterstaat. (2022e, November 14). *Bestuurlijke Overleggen MIRT* [Press release]. <https://open.overheid.nl/documenten/ronl-f0a837a3348fc8468ea61a50ff3771ab00cda3c6/pdf>

- Morel, L. (2012). Referendum. In Oxford University Press eBooks. <https://doi.org/10.1093/oxfordhb/9780199578610.013.0026>
- Mottee, L. K. (2021). Advancing beyond project-scale Social Impact Assessment of transport infrastructure: insights into contextual constraints on practice. *Impact Assessment and Project Appraisal*, 40(1), 60–74. <https://doi.org/10.1080/14615517.2021.1987135>
- Mouter, N. (2021). Evaluation Methods in Transport Policy and Planning. In *Elsevier eBooks* (pp. 230–235). <https://doi.org/10.1016/b978-0-08-102671-7.10645-1>
- Mouter, N., Geijsen, T., Tuit, C., De Vries, M., Spruit, S., & Fillerup, L. (2022). Een Participatieve Waarde Evaluatie over de inrichting van de Maatschappelijke Raad Schiphol en het Omgevingshuis. In *Populytics*. <https://populytics.nl/wp-content/uploads/2022/07/Rapport-PWE-MRS-en-Omgevingshuis-Populytics.pdf>
- Mouter, N., Hernández, J. I., & Itten, A. V. (2021). Public participation in crisis policymaking. How 30,000 Dutch citizens advised their government on relaxing COVID-19 lockdown measures. *PLOS ONE*, 16(5), e0250614. <https://doi.org/10.1371/journal.pone.0250614>
- Mouter, N., Jara, K. T., Hernández, J. I., Kroesen, M., De Vries, M., Geijsen, T., Kroese, F. M., Uiters, E., & De Bruin, M. (2022). Stepping into the shoes of the policy maker: Results of a Participatory Value Evaluation for the Dutch long term COVID-19 strategy. *Social Science & Medicine*, 314, 115430. <https://doi.org/10.1016/j.socscimed.2022.115430>
- Mouter, N., Koster, P., & Dekker, T. (2019). Participatory Value Evaluation: A Novel Method to Evaluate Future Urban Mobility Investments. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3415411>
- Mouter, N., Koster, P., & Dekker, T. (2020). Participatory Value Evaluation: A Novel Method to Evaluate Future Urban Mobility Investments. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3415411>
- Mouter, N., Koster, P., & Dekker, T. (2021). Participatory value evaluation for the evaluation of flood protection schemes. *Water Resources and Economics*, 36, 100188. <https://doi.org/10.1016/j.wre.2021.100188>
- Mouter, N., Shortall, R. M., Spruit, S. L., & Itten, A. V. (2021). Including young people, cutting time and producing useful outcomes: Participatory value evaluation as a new practice of public participation in the Dutch energy transition. *Energy Research & Social Science*, 75, 101965. <https://doi.org/10.1016/j.erss.2021.101965>
- Nijenhuis, H. (2022, December 5). *DPG Media Privacy Gate*. <https://www.parool.nl/nederland/zal-de-lelylijn-met-steun-uit-brussel-dan-eindelijk-werkelijkheid-worden~b7244f2c/>
- NOS. (2016, April 20). “CBS moet ook niet-economische welvaart meten.” <https://nos.nl/artikel/2100347-cbs-moet-ook-niet-economische-welvaart-meten>
- ParticipatieWijzer. (n.d.). <https://www.participatiewijzer.nl/>
- Plottu, B., & Plottu, E. (2011). Participatory Evaluation: The Virtues for Public Governance, the Constraints on Implementation. *Group Decision and Negotiation*, 20(6), 805–824. <https://doi.org/10.1007/s10726-010-9212-8>
- Populytics. (2023a). 6881 NEDERLANDERS DENKEN MEE OVER MEDISCH KEUREN VAN RIJBEWIJSHOUDERS. In *Populytics*. <https://populytics.nl/wp-content/uploads/2022/06/Rapport-raadpleging-Optimalisatie-Stelsel-Medische-Rijgeschiktheid-Populytics.pdf>

- Populytics. (2023b, February 14). *Case studies - Populytics*. <https://populytics.nl/cases/>
- Populytics. (2023c). *Uitkomsten van de Lelylijnraadpleging*. <https://populytics.nl/wp-content/uploads/2023/05/230515-Rapport-Lelylijn-PWE-raadpleging-Populytics.pdf>
- Rijskoverheid. (n.d.). *Wanneer is m.e.r. of m.e.r.-beoordeling verplicht?* Kenniscentrum InfoMil. <https://www.infomil.nl/onderwerpen/integrale/mer/procedurehandleiding/wanneer-beoordeling/#:~:text=Een%20m.e.r.%20is%20verplicht%20bij,dus%20alle%20drie%20moet%20toetsen.>
- Rowe, G., & Frewer, L. J. (2000). Public Participation Methods: A Framework for Evaluation. *Science, Technology, & Human Values*, 25(1), 3–29. <https://doi.org/10.1177/016224390002500101>
- Shliakhtun, P. (2021). REFERENDUM: THE INSTITUTE OF DEMOCRACY OR THE MEANS OF POLITICAL MANIPULATION? *Politologičnij Visnik*, 87, 99–113. <https://doi.org/10.17721/2415-881x.2021.87.99-113>
- Snellen, D., Bastiaanssen, J., & 't Hoen, M. (2020). BREDE WELVAART EN MOBILITEIT. In *Pbl* (No. 3986). Planbureau voor de Leefomgeving. https://www.pbl.nl/sites/default/files/downloads/pbl-2021-brede-welvaart-en-mobiliteit-3986_0.pdf
- Studio Bereikbaar. (2020, July 15). *Lelylijn - Studio Bereikbaar*. <https://www.studiobereikbaar.nl/project/lelylijn/>
- TU Delft. (n.d.-a). *MSc Complex Systems Engineering and Management*. <https://www.tudelft.nl/onderwijs/opleidingen/masters/cosem/msc-complex-systems-engineering-and-management/>
- TU Delft. (n.d.-b). *PWE als evaluatie-instrument*. <https://www.tudelft.nl/tbm/pwe/pwe-basics>
- Van Der Laan, A. (2019, December 5). *Terug naar toen: Afblazen Zuiderzeelijn was een historisch en impopulair besluit voor het Noorden*. *Friesch Dagblad*. <https://frieschdagblad.nl/regio/Terug-naar-toen-Afblazen-Zuiderzeelijn-was-een-historisch-en-impopulair-besluit-voor-het-Noorden-26795421.html>
- Vanclay, F. (2003). International Principles For Social Impact Assessment. *Impact Assessment and Project Appraisal*, 21(1), 5–12. <https://doi.org/10.3152/147154603781766491>
- Vogl, S. (2013). Telephone Versus Face-to-Face Interviews. *Sociological Methodology*, 43(1), 133–177. <https://doi.org/10.1177/0081175012465967>
- Ward, J. M., Dimitriou, H. T., Field, B. G., & Dean, M. (2019). The Planning and Appraisal of Mega Transport Infrastructure Projects Delivered by Public–Private Partnerships: The Case for the Use of Policy-Led Multi-Criteria Analysis. *Organization, Technology and Management in Construction*, 11(1), 1992–2008. <https://doi.org/10.2478/otmcj-2019-0007>

Appendix A: Informed Consent form – interview

Toestemmingsformulier stakeholders PWE

Kwalitatief onderzoek naar de verwachtingen en ervaringen van beleidsmakers over de PWE die wordt uitgevoerd over de Lelylijn

Verantwoordelijke onderzoeker

Reinout Mulder

Mijn naam is Reinout Mulder, student Complex System Engineering and Management aan de TU Delft. Ik ben momenteel bezig met mijn onderzoekscriptie bij het ministerie van Infrastructuur en Waterstaat, waar ik me richt op de participatieve waarde evaluatie (PWE) in de MIRT onderzoeksfase voor de Lelylijn casus.

Het doel van dit onderzoek is om inzicht te krijgen in de toegevoegde waarde van de PWE en de verwachtingen van de betrokken partijen. Door de bevindingen van de interviews te vergelijken met de uitkomsten van de PWE, kan bepaald worden waar nou de toegevoegde waarde van de PWE ligt binnen de MIRT onderzoeksfase. Door deze waardes inzichtelijk te krijgen kan de PWE in het vervolg effectiever ingezet worden voor MIRT projecten.

Voor mijn onderzoek ben ik op zoek naar beleidsmakers die betrokken zijn bij de uitvoering van de PWE voor de Lelylijn die hun mening en verwachtingen over de uitgevoerde PWE willen delen. Ik nodig u graag uit voor twee interviews. Het eerste interview zal plaatsvinden tussen [Date] en het tweede tussen [Date]. Beide interviews zullen ongeveer 30 minuten duren en via video (Teams/Webbex) worden afgenomen. De focus van het eerste interview zal liggen op uw verwachtingen en van het tweede interview op de mate waarin uw verwachtingen zijn uitgekomen en uw ervaringen.

Het online interview zal opgenomen worden (zowel visueel als de audio) zodat de onderzoeker het gesprek gedurende het onderzoek kan beluisteren. Deze gegenereerde data worden gedurende het onderzoek opgeslagen in een versleutelde en encrypted omgeving waar enkel de verantwoordelijke onderzoeker toegang tot heeft. De onderzoeker zal een transcriptie van het gesprek opstellen en anonimiseren. Dit transcript wordt gebruikt als input voor het onderzoek en zal dan ook toegevoegd worden aan het rapport. Houd er rekening mee dat mogelijk uw identiteit herleid kan worden aan de hand van het transcript.

Uw deelname is vrijwillig en uw antwoorden worden vertrouwelijk behandeld. Gedurende het onderzoek zal ik u op de hoogte stellen hoe uw antwoorden verwerkt zijn zodat u gedurende het onderzoek hier commentaren op kan leveren. Mocht u geïnteresseerd zijn om deel te nemen aan dit onderzoek, reageer dan op deze uitnodiging per e-mail en dan plannen we een moment in voor het interview. Voorafgaand aan het interview zal ik de vragen met u delen. Als u vragen heeft, aarzel dan niet om contact op te nemen.

Contact

E-mail: R*****@min****.nl

Telefoon: +31 6 ** * * * *

In te vullen door deelnemer

	JA	Nee
1. Ik heb de informatie over het onderzoek gelezen en begrepen, of deze is aan mij voorgelezen.	<input type="checkbox"/>	<input type="checkbox"/>
2. Ik heb de mogelijkheid gehad om vragen te stellen over het onderzoek en mijn vragen zijn naar tevredenheid beantwoord.	<input type="checkbox"/>	<input type="checkbox"/>
3. Ik begrijp het doel van het onderzoek en waarom ik gevraagd ben om deel te nemen.	<input type="checkbox"/>	<input type="checkbox"/>
4. Ik ben mij ervan bewust dat mijn deelname aan dit onderzoek vrijwillig is en dat ik te allen tijde kan besluiten om mijn deelname te beëindigen, zonder opgave van reden en zonder nadelige gevolgen.	<input type="checkbox"/>	<input type="checkbox"/>
5. Ik begrijp dat deelname aan dit onderzoek de volgende aspecten omvat: <ul style="list-style-type: none"> ○ De opnamen zullen worden getranscribeerd naar tekst om de verkregen informatie in het onderzoek te analyseren en te verwerken. ○ Vernietiging van opnamen: Na het transcriberen van de opnamen naar tekst, zullen de originele audio- en video-opnamen worden vernietigd om de privacy van de deelnemers te beschermen en de verzameling van persoonlijke gegevens (PII en/of PIRD) te minimaliseren. 	<input type="checkbox"/>	<input type="checkbox"/>
6. Ik begrijp dat mijn deelname aan dit onderzoek inhoudt dat er persoonlijke identificeerbare informatie en onderzoeksdata over mij worden verzameld. Hoewel de onderzoeker maatregelen neemt om mijn privacy te waarborgen, ben ik mij bewust van het risico dat ik uit deze informatie geïdentificeerd zou kunnen worden.	<input type="checkbox"/>	<input type="checkbox"/>
7. Ik ben mij ervan bewust dat de resultaten van het onderzoek in rapporten, artikelen en/of presentaties kunnen worden gepubliceerd.	<input type="checkbox"/>	<input type="checkbox"/>
8. Ik begrijp dat de interpretaties van de door de deelnemers verstrekte informatie door de onderzoeker met de geïnterviewde zullen worden gedeeld, zodat de geïnterviewde de kans krijgt om eventuele onjuistheden of misverstanden te corrigeren en feedback te geven over de interpretatie van hun bijdrage.	<input type="checkbox"/>	<input type="checkbox"/>
9. Ik begrijp dat eventuele opnamen van het interview alleen voor onderzoeksdoeleinden zullen worden gebruikt en dat deze veilig zullen worden opgeslagen en na afloop van het onderzoek zullen worden vernietigd.	<input type="checkbox"/>	<input type="checkbox"/>
10. Ik heb de contactgegevens van de onderzoeker ontvangen en begrijp dat ik te allen tijde contact kan opnemen voor vragen of opmerkingen over het onderzoek.	<input type="checkbox"/>	<input type="checkbox"/>
11. Ik geef toestemming voor het archiveren van de geanonimiseerde data die over mij verzameld worden in het TU Delft Repository archief, zodat deze kunnen worden gebruikt voor toekomstig onderzoek en onderwijsdoeleinden.	<input type="checkbox"/>	<input type="checkbox"/>

Handtekeningen

Naam deelnemer

Handtekening

Datum

Naam onderzoeker

Handtekening

Datum

Appendix B: Interview guide of interviews after PVE publication

Sub-question: How do policymakers of MIRT projects experience the PVE?

1. Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?
 - Kunt u enkele belangrijke leerlessen delen die u uit dit proces heeft getrokken?
 - Wat heeft de PWE het project opgeleverd?
 - Zijn er aspecten van het proces die u, terugkijkend, anders zou hebben aangepakt?
 - Zou u, gezien uw ervaring, overwegen om de PWE in de toekomst opnieuw te gebruiken in het Lelylijn proces of andere transport projecten?
2. Kunt u specifieke voorbeelden geven van wat u als positieve aspecten van de PVE ziet?
 - Hoe hebben deze positieve aspecten invloed gehad op het besluitvormingsproces van de Lelylijn?
 - Zijn er aspecten van de PVE die u in eerste instantie als negatief zag, maar die uiteindelijk positief bleken te zijn?
3. Zijn er aspecten van de PVE die u als minder succesvol of effectief heeft ervaren?
 - Wat waren volgens u de grootste uitdagingen of problemen bij het uitvoeren van de PVE?
 - Welke verbeterpunten ziet u voor de PWE in de toekomst?
4. In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?
 - Kunt u specifieke voorbeelden geven inzichten die de PWE heeft helpen identificeren?
 - Waren er verrassingen, inzichten die er voorheen niet waren, die naar voren kwamen uit de resultaten van de PWE?
 - Zijn er aspecten van de publieke opinie of belangrijke factoren die u denkt dat de PWE mogelijk niet heeft kunnen belichten? Zo ja, welke?
5. "Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?"
 - Zijn er beslissingen die u anders zou hebben genomen als u de resultaten van de PWE niet had gehad?
 - Zijn er gevallen waarin de resultaten van de PWE niet hebben bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u dit toelichten?
6. "In welke mate denkt u dat de Participatieve Waarde Evaluatie succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?"
 - Kunt u specifieke voorbeelden geven waarin de PWE naar uw mening effectief was in het bereiken van een breder publiek dan andere participatiemethoden?
 - Hoe heeft de PWE bijgedragen aan het effectief bereiken van een breder publiek, anders dan andere participatie methoden?
 - In hoeverre denkt u dat de PVE heeft bijgedragen aan het betrekken van burgers in het beleidsproces?
 - Zijn er aspecten van publieksbereik en participatieve betrokkenheid waarin de PVE volgens u tekortgeschoten is? Zo ja, welke?

Appendix C: Coded interviews prior PVE publication

Participant 1

Vraag 1: Wat is je rol bij het besluitvormingsproces voor de Lelylijn?

Participant 1 is de projectdirecteur en voorzitter van het projectteam Lelylijn. Hij is eindverantwoordelijk voor de producten die het projectteam aan opdrachtgevers levert en aan bestuurders. Zijn rol is om leiding te geven aan de stukken die nodig zijn voor het besluitvormingsproces. Het projectteam neemt beslissingen, maar dit zijn niet de echte bestuurlijke besluiten. De stuurgroep en directeuren nemen deze besluiten. Het projectteam bereidt de besluiten voor en participant 1 bepaalt welke stukken worden doorgeleid en welke niet, en speelt een belangrijke rol bij de kwaliteitsborging. Hij heeft dus een soort procesverantwoordelijkheid.

Vraag 2: Op welke manier ben je betrokken bij de PWE en wat is je rol bij het uitvoeren van deze evaluatie?

Participant 1 was niet betrokken bij de start van het PWE-project, toen hij in december in functie kwam, was het project namelijk al gestart. Hij heeft geen rol gehad in het ontwerp van de PWE, behalve dat hij vragen heeft gesteld over waarom de PWE-methode werd gebruikt en waarom dit niet bij andere onderzoeken werd gedaan. Hij heeft geen bezwaren gemaakt tegen het gebruik van de PWE-methode.

Vraag 3: Wat is volgens jou de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn?

Volgens Participant 1 is de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn om input te krijgen van de burgers en zo te vermijden dat de overheid vanuit hun ivoren toren bepaalt wat goed is of nuttig kan zijn. Het is belangrijk om ook mensen te betrekken die op iets meer afstand staan. Het doel is om op een open en transparante manier te werken en het draagvlak te vergroten. Het uitvoeren van de evaluatie in een vroeg stadium is belangrijk om te voorkomen dat er al oplossingen zijn bedacht waarbij de inbreng van burgers wordt gemist.

Vraag 4: Wat zijn volgens jou de voordelen en nadelen van PWE ten opzichte van andere participatievormen.

Volgens Participant 1 heeft de PWE een groter bereik dan inspraakavonden omdat het niet beperkt is tot een select clubje mensen dat tijd heeft en de moeite neemt om bijeenkomsten bij te wonen. Vergeleken met referenda zet PWE de overheid in een betere positie omdat het niet slechts een ja/nee-vraag stelt en de overheid nog steeds de beslissingen neemt, maar het geeft de overheid wel een idee van wat mensen ervan vinden. Een nadeel van PWE is dat er geen forum is waar nee gezegd kan worden en er geen echte weerstand geuit kan worden, maar de spreker vindt dit niet zo'n groot nadeel omdat de overheid uiteindelijk toch de beslissingen moet nemen.

Vraag 5: Wat verwacht je dat de PWE zal opleveren in termen van nieuwe inzichten of informatie die voorheen niet beschikbaar was?

Volgens Participant 1 is het lastig om precies te zeggen welke nieuwe inzichten of informatie de PWE zal opleveren, omdat de inhoud van de PWE nog niet volledig bekend is. Hij verwacht echter dat het contact met burgers en andere belanghebbenden in ieder geval nieuwe informatie zal opleveren die anders niet beschikbaar was. Hij denkt dat de PWE enkel kan helpen om meer inzicht te krijgen in wat mensen belangrijk vinden bij zo'n project en wat de betekenis daarvan kan zijn. Door de antwoorden van de deelnemers te analyseren, kunnen er mogelijk nieuwe inzichten naar voren komen over de behoeften en wensen van verschillende doelgroepen.

Vraag 6: Hoe denk je dat de resultaten van de PWE kan worden gebruikt in het besluitvormingsproces voor de Lelylijn?

Participant 1 geeft aan dat de resultaten van de PWE zullen worden gedeeld en dat het belangrijk is om open te zijn over de uitkomsten. Als er bijvoorbeeld uitkomt dat er veel kritiek is, dan vindt hij dat dit ook op tafel moet komen. De resultaten zullen niet alleen worden gedeeld met betrokkenen bij het Lelylijn proces, maar ook openbaar worden gemaakt. Participant 1 benadrukt dat de resultaten van de PWE niet heilig zijn en dat er nog steeds nagedacht moet worden over hoe het bestuur de besluitvorming benadert. De uitkomsten zullen worden gebruikt om het afwegingskader bij te stellen, als dat nodig is.

Vraag 7: Hoe denk je dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn?

Participant 1 geeft aan dat het moeilijk is om op dit moment te zeggen hoe de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn. Hij suggereert dat het misschien beter is om dit na afloop van het proces te onderzoeken. Hij verwacht wel dat de PWE extra kwaliteit kan toevoegen aan de besluitvorming en dat het belangrijk is om de opvattingen van mensen over het project te horen en mee te nemen in de besluitvorming. Hij erkent dat dit het proces ingewikkelder kan maken en meer tijd en geld kan kosten. Er kunnen ook verwachtingen worden gewekt die niet kunnen worden waargemaakt, en er is een risico dat mensen niet tevreden zullen zijn met de uitkomst. Het is dus belangrijk om deze risico's in overweging te nemen bij het implementeren van de PWE.

Vraag 8: Denk je dat er risico's of uitdagingen verbonden zijn aan het uitvoeren van een PWE? Zo ja, welke en hoe denk je dat deze kunnen worden aangepakt?

Er zijn zeker risico's en uitdagingen verbonden aan het uitvoeren van een Participatieve Waarde Evaluatie volgens Participant 1. Eén van de grootste risico's is dat de verwachtingen van de deelnemers niet kunnen worden waargemaakt. De deelnemers kunnen denken dat hun input leidt tot een bepaalde uitkomst, terwijl dit niet het geval is. Ook kan het project een iconisch karakter hebben en veel mensen aanspreken, zowel in positieve als in negatieve zin. Dit kan leiden tot verdeeldheid en emoties bij de deelnemers en andere belanghebbenden.

Om deze risico's en uitdagingen aan te pakken, is het belangrijk om duidelijk te communiceren over wat een PWE inhoudt en wat de verwachtingen zijn. Het is belangrijk om aan te geven dat het geen referendum is, maar een methode om een werkhypothese op te stellen. Daarnaast is communicatie een belangrijke beheersingsmaatregel en is het belangrijk om in gesprek te blijven met de bestuurders en andere belanghebbenden. Door deze maatregelen te nemen, kan het risico worden verkleind en kan de uitvoering van de PWE soepeler verlopen.

Participant 2

Vraag 1: Wat is je rol bij het besluitvormingsproces voor de Lelylijn?

Participant 2 is een participatieadviseur voor het Lelylijn-project en vertegenwoordigt de belangen van de 'buitenwereld' in het besluitvormingsproces. Echter, het is een groot, complex project en daarom zoekt ze nog naar haar exacte rol binnen het projectteam. Als participatieadviseur voor het Ministerie van Infrastructuur en Waterstaat werkt ze nauw samen met de overkoepelende omgevingsmanager van het project, Participant 4, en de omgevingsmanagers uit Groningen, Friesland, Flevoland en Drenthe. Hoewel ze niet zeker weet of ze een directe invloed heeft op het besluitvormingsproces, geeft ze prioriteit aan de belangen van de deelnemers in haar advies en streeft ze ernaar om het besluitvormingsproces indirect te beïnvloeden.

Vraag 2: Op welke manier ben je betrokken bij de PWE en wat is je rol bij het uitvoeren van deze evaluatie?

Participant 2 is betrokken bij de PWE, waarbij zij als participatieadviseur vanuit het ministerie van Infrastructuur en Waterstaat (IenW) betrokken is geweest bij de inkoopprocedure van het onderzoek en het opstellen van de vragen en opties voor het onderzoek. Haar rol is om het belang van de participanten en belanghebbenden op tafel te krijgen en om te adviseren hoe dit het beste en op de meest passende manier kan gebeuren. Ze werkt hierbij samen met haar beleidscollega, die vanuit een beleidsmatig oogpunt betrokken is. Haar rol is dus om input te genereren vanuit de belanghebbenden en om te kijken hoe dit meegenomen kan worden in het onderzoek en de uiteindelijke besluitvorming.

Vraag 3: Wat is volgens jou de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn?

Volgens Participant 2 is de belangrijkste reden om een PWE uit te voeren in de onderzoeksfase van de Lelylijn om inzicht te krijgen in hoe de lelylijn leeft bij mensen en welke doelen zij belangrijk vinden. Hoewel deze informatie nog niet concreet is, geeft het een belangrijke ondergrond waarop verder kan worden gewerkt. De resultaten van de PWE kunnen bewust of onbewust worden meegenomen in de vervolgstappen van het onderzoek. Het is dus een belangrijk instrument om een breed beeld te krijgen van wat mensen belangrijk vinden bij de ontwikkeling van de Lelylijn.

Vraag 4: Wat zijn volgens jou de voordelen en nadelen van PWE ten opzichte van andere participatievormen.

Volgens Participant 2 zijn er veel voordelen van het PWE ten opzichte van andere vormen van participatie. Het is bijvoorbeeld breed toegankelijk en bereikt een representatief panel. Daarnaast gaat het dieper dan een simpele enquête omdat mensen worden gevraagd om na te denken en hun antwoorden af te wegen tegen verschillende doelen. Echter, een nadeel van het PWE kan zijn dat het voor sommige mensen te hoog gegrepen is vanwege de gebruikte taal en/of het online karakter. Mensen die niet de hele dag op social media zitten kunnen het missen, en ook moeten mensen een handeling verrichten om op de computer te gaan. Dit kan een nadeel zijn in het bereiken van een zo breed mogelijke groep mensen.

Vraag 5: Wat verwacht je dat de PWE zal opleveren in termen van nieuwe inzichten of informatie die voorheen niet beschikbaar was?

Volgens Participant 2 zal de PWE veel nieuwe informatie opleveren en het inzicht vergroten in wat mensen belangrijk vinden. Zij verwacht dat er verrassingen kunnen zijn, bijvoorbeeld in hoeverre Noorderlingen anders denken (of juist niet) dan de rest van Nederland, en of kosten voor hen belangrijker zijn dan voor anderen. Participant 2 heeft al een preview gehad van Niek en denkt dat de informatie waardevol is, maar de doorwerking ervan in het vervolg van het MIRT-onderzoek is van belang. Het is belangrijk dat de deelnemers horen wat er met hun input is gedaan en dat participatie serieus wordt genomen. Als dat niet gebeurt, kunnen mensen afhaken en wordt het participatieproces ineffectief.

Vraag 6: Hoe denk je dat de resultaten van de PWE kan worden gebruikt in het besluitvormingsproces voor de Lelylijn?

De resultaten van de PWE kunnen worden gebruikt als input in het besluitvormingsproces voor de Lelylijn. Het is van cruciaal belang dat er tijd en budget beschikbaar worden gesteld om de resultaten van de PWE serieus te laten doorwerken en dat er ook serieus rekening wordt gehouden met de bevindingen uit de PWE in de volgende MIRT-fase. Er kan worden overwogen om de belangrijkste doelen van de deelnemers aan de PWE als uitgangspunt te nemen voor het ontwerp van de Lelylijn. De ontwerpers kunnen vervolgens ontwerpen maken waarin deze doelen centraal staan en deze toetsen op haalbaarheid. Het is belangrijk om transparant te zijn over de keuzes die worden gemaakt en de redenen waarom bepaalde doelen wel of niet worden opgenomen in het ontwerp van de Lelylijn. Daarnaast kan de Lelylijn worden gekoppeld aan woningbouw, waardoor ook daar rekening kan worden gehouden met de uitkomsten van de PWE. Het is echter spannend of de tijd en het budget toereikend zullen zijn voor verdere participatie naar aanleiding van de uitkomsten van de PWE.

Vraag 7: Hoe denk je dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn?

Participant 2 geeft aan dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn door het ophalen van informatie en inzichten uit de samenleving. Het is belangrijk om het proces eerlijk te doorlopen en alle alternatieven serieus te nemen om draagvlak en acceptatie bij de hele samenleving te creëren. Door het uitleggen van het proces en het afwegingskader kan het besluit steviger onderbouwd worden en kan het meer acceptatie krijgen. Het is echter onzeker of er ook draagvlak in de politiek zal ontstaan, omdat er andere politieke belangen kunnen spelen. Het mooiste zou zijn als uiteindelijk de politiek zich committeert aan de uitkomsten van het participatietraject, maar dat blijft spannend omdat de uitkomsten onzeker zijn.

Vraag 8: Denk je dat er risico's of uitdagingen verbonden zijn aan het uitvoeren van een PWE? Zo ja, welke en hoe denk je dat deze kunnen worden aangepakt?

Er zijn zeker risico's en uitdagingen verbonden aan het uitvoeren van een PWE. Een van de grootste risico's is dat er hoge verwachtingen worden gecreëerd bij burgers en stakeholders, en als deze niet worden ingelost, kan dit leiden tot een vergroting van de kloof tussen overheid en samenleving. Het is daarom essentieel dat de resultaten van de PWE worden meegenomen in het besluitvormingsproces en dat de belangrijkste doelen van de PWE worden geïntegreerd in het uiteindelijke besluit. Om dit risico te verkleinen, moeten de overheid en het projectteam transparant zijn over het besluitvormingsproces en ervoor zorgen dat de burgers het kunnen volgen en begrijpen. Andere uitdagingen kunnen zijn het betrekken van een brede en diverse groep burgers, het zorgen voor een representatieve steekproef en het omgaan met mogelijke conflicten tussen de belangen van verschillende groepen. Deze uitdagingen kunnen worden aangepakt door goede communicatie, transparantie en het bieden van mogelijkheden voor dialoog en feedback.

Participant 3

Vraag 1: Wat is je rol bij het besluitvormingsproces voor de Lelylijn?

Participant 3 werkt voor de provincie Fryslân en is ambtelijk verantwoordelijk voor de Lelylijn. Hij heeft zich intensief beziggehouden met studies en lobbies en besluiten die zijn genomen rondom de Lelylijn. Hij maakt deel uit van de begeleiding van de organisatie van het onderzoek en is verantwoordelijk voor alles wat er binnen de provincie Friesland wordt georganiseerd om gemeenten en andere partijen bij het onderzoek te betrekken. Daarnaast houdt hij zich bezig met de lobby voor de benodigde middelen, zowel nationaal als internationaal.

Vraag 2: Op welke manier ben je betrokken bij de PWE en wat is je rol bij het uitvoeren van deze evaluatie?

Participant 3 was betrokken bij het ontwerp van de Participatieve Waarden Evaluatie van de Lelylijn. Hij was betrokken bij het proces van het goed krijgen van de vragen die gesteld worden in de PWE en het oprekken van de termijn waarin de vragen beantwoord werden, tot na de verkiezingen. Zijn rol was dus voornamelijk bij het ontwerp en het proces van de PWE.

Vraag 3: Wat is volgens jou de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn?

Volgens Participant 3 is de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn om het betrekken van belangengroepen en bevolkingsgroepen bij de totstandkoming of uitvoering van beleid te verbeteren. Hij benadrukt dat de regio meer betrokken is bij haar burgers en participanten dan de rijksorganisaties, waardoor het belangrijk is om de communicatie en betrokkenheid te organiseren. De participatieve waarde evaluatie kan helpen bij het preciseren van de onderzoeksvragen en het beter begrijpen van wat er leeft en speelt onder de belanghebbenden en belangstellenden. Het geeft ook een breder perspectief en beeld van wat belangrijk is en welke vragen beantwoord moeten worden bij het uitvoeren van het onderzoek.

Vraag 4: Wat zijn volgens jou de voordelen en nadelen van PWE ten opzichte van andere participatievormen.

Participant 3 bespreekt enkele voordelen en nadelen van de PWE-participatievorm. Een nadeel is dat het een momentopname is en geen continu inzicht biedt in hoe mensen denken over het project. Het biedt geen opvolging en continuïteit in de communicatiestrategie. Een voordeel is dat het inzicht biedt van hoe de Nederlandse burger denkt tegenover de Lelylijn. Als de PWE serieus is ingevuld, kan men veronderstellen dat er een representatieve steekproef is. Een tweede nadeel is dat de PWE mogelijk gebruikt wordt door tegenstanders om rotzooi te trappen. Digitale instrumenten hebben de neiging om voor de tegenstanders te zijn en weinig voor de mensen die iets willen doen. Tegenstanders zijn vaak beter gemobiliseerd dan voorstanders.

Vraag 5: Wat verwacht je dat de PWE zal opleveren in termen van nieuwe inzichten of informatie die voorheen niet beschikbaar was?

Participant 3 is vooral benieuwd naar de eerste vraagreeks en opmerkingen van de PWE, omdat hij denkt dat deze kunnen helpen om de onderzoeksvraag precies te krijgen. Hij denkt dat de tendens van de antwoorden ook belangrijk is omdat dit laat zien dat het onderwerp leeft en mensen het belangrijk vinden. Verder denkt hij dat de positieve grondhouding die uit de antwoorden blijkt, kan helpen in het vervolgotraject en bij het nemen van beslissingen. Hij hoopt dat de PWE duidelijkheid kan bieden over maatschappelijk belangrijke issues en thema's die moeten worden meegenomen in de studie. Ten slotte denkt hij dat de PWE kan helpen bij het opstellen van een onderzoeksrapport waarin geen vraagstukken worden vergeten.

Vraag 6: Hoe denk je dat de resultaten van de PWE kan worden gebruikt in het besluitvormingsproces voor de Lelylijn?

Participant 3 denkt dat de resultaten van de PWE kunnen helpen bij het opstellen van de juiste vragen in het besluitvormingsproces voor de Lelylijn. Hij denkt dat de positieve feedback van de respondenten op de vraagstelling in de PWE ook een maatschappelijk teken is, en dat de politiek dit zal gebruiken. Hoewel de PWE niet primair hiervoor bedoeld is, verwacht Participant 3 dat de omvang en uitkomsten van het onderzoek gebruikt zullen worden om te benadrukken dat er draagvlak is voor de spoorverbinding. Participant 3 gaat ervanuit dat de resultaten uiteindelijk wel een rol zullen spelen in de besluitvorming. Hij weet zeker dat de resultaten al op korte termijn zullen worden gebruikt in de onderzoeksvraagstelling en verwacht dat het iets zal doen in de besluitvorming.

Vraag 7: Hoe denk je dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn?

Participant 3 denkt dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn door het bieden van de juiste informatie aan de voorkant. Door de onderzoeksvraag zo breed mogelijk te maken, wordt er geprobeerd om de belangrijke vraagstukken voor een dergelijk onderzoek te identificeren. Hierdoor krijg je betere informatie beschikbaar die nodig is bij het afwegen van wel of geen Lelylijn. Dit zal uiteindelijk leiden tot een beter besluitvormingsproces.

Vraag 8: Denk je dat er risico's of uitdagingen verbonden zijn aan het uitvoeren van een PWE? Zo ja, welke en hoe denk je dat deze kunnen worden aangepakt?

Participant 3 denkt dat er risico's en uitdagingen verbonden zijn aan het uitvoeren van een PWE. Hij benadrukt dat de vraagstelling in de PWE cruciaal is en dat deze neutraal moet zijn om gekleurde antwoorden te voorkomen. Als de vragen niet goed zijn geformuleerd, kunnen de uitkomsten van het onderzoek ook verkeerd zijn en tegen je werken. Daarnaast is er het risico dat het onderzoek niet representatief is, omdat het niet genoeg is gepromoot onder de brede doelgroep die je wilt bereiken. Om deze uitdagingen aan te pakken, moet de vraagstelling zo neutraal mogelijk zijn en moet er voldoende promotie worden gemaakt onder de brede doelgroep om de representativiteit van het onderzoek te waarborgen.

Participant 4

Vraag 1: Wat is je rol bij het besluitvormingsproces voor de Lelylijn?

Participant 4 was verantwoordelijk voor de ontwikkeling van de Lelylijn als kwartiermaker en fungeert momenteel als omgevingsmanager voor het project. Hij benadrukt het belang van het formele governanceproces voor het project, maar ook van het informele, en ziet zijn rol als het verbinden van kennis en relaties met het Lelylijn-dossier. Zijn belangrijkste taak als omgevingsmanager is om ervoor te zorgen dat de perceptie van de buitenwereld over het project gunstig blijft en dat de binnenwereld het werk goed kan blijven doen.

Vraag 2: Op welke manier ben je betrokken bij de PWE en wat is je rol bij het uitvoeren van deze evaluatie?

Participant 4 is betrokken bij de PWE als projectmanager en is verantwoordelijk voor de coördinatie van de evaluatie. Zijn rol bij het uitvoeren van de evaluatie is om ervoor te zorgen dat het proces soepel verloopt en dat alle betrokken partijen hun taken en verantwoordelijkheden begrijpen en nakomen. Participant 4 heeft vanaf 1 februari deelgenomen aan ontwerpessies voor de PWE, maar heeft niet direct bijgedragen aan hoe de PWE eruit komt te zien.

Vraag 3: Wat is volgens jou de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn?

Participant 4 geeft aan dat de belangrijkste reden om een Participatieve Waarde Evaluatie uit te voeren in de onderzoeksfase van de Lelylijn is om in een vroeg stadium met de mensen te praten die uiteindelijk door het beleid geraakt worden. Volgens Participant 4 is dit omdat het belangrijk is om te weten voor wie je werkt en wat de overwegingen zijn voordat je iets op papier zet. Hij citeert ook een hoge ambtenaar in Den Haag die zei: "Geen pen op papier voordat er is gesproken met de buitenwereld." Participant 4 geeft verder aan dat beleidsmensen allerlei opvattingen hebben en redenen waarom ze met bepaalde zaken bezig zijn en dat het belangrijk is om te weten wat er speelt bij de mensen om zo domme opmerkingen en demonstraties te voorkomen. Participant 4 voegt hieraan toe dat participatie voor een gemeente ambtenaar een vanzelfsprekendheid is en dat dit ook blijkt uit historische voorbeelden, zoals referenda en open plan processen. Hij benadrukt dat beleidsmensen vaak een bepaalde sectorale bril dragen en dat participatie kan helpen om deze blik te verbreden. Door de externe toets van de buitenwereld te gebruiken, kan er beter beoordeeld worden of het beleid aansluit bij de behoeften en belangen van de betrokkenen.

Vraag 4: Wat zijn volgens jou de voordelen en nadelen van PWE ten opzichte van andere participatievormen.

Participant 4 geeft aan dat hij alleen maar voordelen ziet van participatie in het algemeen, ook van PWE. Het nadeel is niet specifiek voor PWE, maar geldt voor participatie in het algemeen, namelijk dat het voor de buitenwereld moeilijk te begrijpen is waarom je de buitenwereld om advies vraagt. Het is daarom belangrijk om aan de voorkant goed uit te leggen waarom je participatie organiseert en wat je ermee wilt bereiken. Verder geeft Participant 4 aan dat participatie altijd een belangrijk aandachtspunt is en dat verwachtingenmanagement rond participatie cruciaal is. Participant 4 ziet PWE als een mooie aanvulling op de tools die er al zijn, en hij sluit niet uit dat de indirecte effecten van PWE uiteindelijk belangrijker zullen zijn dan de directe effecten.

Vraag 5: Wat verwacht je dat de PWE zal opleveren in termen van nieuwe inzichten of informatie die voorheen niet beschikbaar was?

Participant 4 geeft aan dat hij niet veel spectaculaire nieuwe inzichten verwacht, maar hij sluit niet uit dat er toch nieuwe dingen naar voren kunnen komen. Hij denkt dat de PWE meer in de details zal zitten en hij is benieuwd naar wat mensen nog meer te melden hebben. Hij is echter wel benieuwd naar de specifieke tips en opmerkingen die mensen zullen geven en of hij hier iets mee kan doen. Hij vindt het belangrijk om open te staan voor deze feedback en er tijd voor vrij te maken om er ook

daadwerkelijk iets mee te doen. Echter, hij heeft nog geen idee welke nieuwe informatie hij precies kan verwachten uit de PWE.

Vraag 6: Hoe denk je dat de resultaten van de PWE kan worden gebruikt in het besluitvormingsproces voor de Lelylijn?

Participant 4 denkt dat de resultaten van de PWE gebruikt kunnen worden in het besluitvormingsproces van de Lelylijn. Aangezien de PWE waarschijnlijk duizenden of zelfs tienduizenden reacties zal genereren, zal clustering nodig zijn om de gegevens beter te begrijpen en te organiseren. Dit kan helpen bij het identificeren van gemeenschappelijke zorgen en prioriteiten onder de respondenten. Participant 4 verwacht echter niet dat de clustering van de PWE resultaten veel nieuwe informatie zal opleveren die we nog niet kennen. Hij waarschuwt dat de resultaten kunnen worden misbruikt, afhankelijk van hoe ze worden geïnterpreteerd en gepresenteerd. Uiteindelijk zal de beslissing over de Lelylijn worden genomen door bestuurders op basis van de resultaten van de PWE en andere factoren zoals kosten, uitvoerbaarheid en politieke haalbaarheid.

Vraag 7: Hoe denk je dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn?

Participant 4 denkt dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn door ervoor te zorgen dat de binnenwereld een permanent oog heeft voor de buitenwereld. Dit betekent dat ambtenaren, die gewend zijn om alleen met de binnenwereld te werken, zich bewust worden van de buitenwereld en de verschillende perspectieven die daar bestaan. Hierdoor wordt het besluitvormingsproces gevoed met meer informatie en kunnen betere afwegingen worden gemaakt. Participant 4 geeft aan echter dat het uiteindelijk aan de bestuurders is om de beslissingen te nemen en dat het moeilijk kan zijn om een richting aan te geven wanneer er zoveel verschillende perspectieven zijn. De PWE helpt om deze perspectieven in kaart te brengen en de discussie te voeden, maar uiteindelijk moet er een keuze worden gemaakt door de bestuurders.

Vraag 8: Denk je dat er risico's of uitdagingen verbonden zijn aan het uitvoeren van een PWE? Zo ja, welke en hoe denk je dat deze kunnen worden aangepakt?

Ja, Participant 4 denkt dat er risico's en uitdagingen verbonden zijn aan het uitvoeren van een PWE. Hij noemt twee specifieke uitdagingen, namelijk verwachtingen die gewekt worden qua inhoud en tijd en het risico dat de resultaten van het PWE-traject niet geaccepteerd worden door de meerderheid. Participant 4 noemt als voorbeeld een referendum over de ontwikkeling van de Grote Markt in Groningen waarbij het plan na vijf jaar in de prullenbak belandde omdat 80% van de mensen tegen was. Hij denkt dat het belangrijk is om deze risico's te verkleinen en daar wordt momenteel over nagedacht. Hij benadrukt ook dat PWE als middel heel goed kan werken, maar dat het belangrijk is om de inhoudelijke uitkomsten serieus te nemen en te respecteren, ook als deze niet overeenkomen met de verwachtingen van de meerderheid.

Participant 5

Vraag 1: Wat is je rol bij het besluitvormingsproces voor de Lelylijn?

Participant 5 heeft meerdere rollen in het besluitvormingsproces van de Lelylijn. Participant 5 is betrokken bij de onderzoeken naar de bereikbaarheid van de Lelylijn als bereikbaarheidsmanager. Daarnaast zit hij namens IenW in de ambtelijke lijn om de besluiten over de Lelylijn door te geven aan de staatssecretaris.

Vraag 2: Op welke manier ben je betrokken bij de PWE en wat is je rol bij het uitvoeren van deze evaluatie?

Participant 5 is betrokken bij de PWE vanuit de beleidsdirectie. Zijn rol is om bij te dragen aan het formuleren van de vragen die gesteld moeten worden tijdens de evaluatie. Welke vragen vinden wij als IenW meerwaarde hebben en waar willen wij antwoord op krijgen. Hij is betrokken bij het ontwerpproces en zal ook een Kamerbrief schrijven om de bevindingen van de evaluatie te communiceren naar de regering. Participant 5 geeft advies aan de staatssecretaris over alle zaken die verband houden met IenW en het beleid van IenW.

Vraag 3: Wat is volgens jou de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn?

Volgens Participant 5 is de belangrijkste reden om een participatieve waarde evaluatie uit te voeren in de onderzoeksfase van de Lelylijn om te kijken wat de participanten belangrijk vinden voordat er überhaupt bekend is wat er gedaan gaat worden (richting van onderzoek). Het doel is om te kijken naar de doelen die met de nieuwe infrastructuur bereikt kunnen worden op een hoger abstractieniveau, zodat er niet alleen gekeken wordt naar concrete tracés. Dit zou volgens Participant 5 de beste uitkomst opleveren in de onderzoeksfase.

Vraag 4: Wat zijn volgens jou de voordelen en nadelen van PWE ten opzichte van andere participatievormen.

Participant 5 geeft aan dat hij andere participatievormen niet goed genoeg kent omdat hij hier nog geen ervaring mee heeft opgedaan. Hij ziet als voordeel van PWE dat je een groter publiek in een keer kan bereiken omdat het online is en het aantal reacties dat je krijgt is dan ook groter. Een nadeel is volgens hem dat je geen interactie hebt en geen feedback kunt krijgen op de antwoorden die gegeven worden. Je kunt dus niet reageren op wat er gezegd wordt of nog vragen stellen. Dit maakt het lastiger om diepgang te vinden in de input die je krijgt en het kan soms moeilijk zijn om te achterhalen wie welke input heeft gegeven.

Vraag 5: Wat verwacht je dat de PWE zal opleveren in termen van nieuwe inzichten of informatie die voorheen niet beschikbaar was?

Participant 5 verwacht dat de PWE nieuwe inzichten zal opleveren over beleidsdoelstellingen die vanuit het de maatschappij belangrijk worden gevonden, met name de verdichting langs het tracé om de natuurwaarde te beschermen. Hij denkt ook dat het feedback zal geven over ontwerpen en dat het hen zal helpen om rekening te houden met de feedback. Participant 5 is erg benieuwd of er nog nieuwe inzichten of informatie beschikbaar zijn waar ze niet eerder aan gedacht hebben. Hij denkt dat de PWE wel iets nieuws kan opleveren.

Vraag 6: Hoe denk je dat de resultaten van de PWE kan worden gebruikt in het besluitvormingsproces voor de Lelylijn?

De resultaten van de PWE kunnen worden gebruikt als onderbouwing voor bepaalde keuzes die worden gemaakt in het besluitvormingsproces voor de Lelylijn. Er moet worden aangegeven welke beleidsdoelen wel of niet worden gehaald, en het is belangrijk om terug te koppelen wat er met de resultaten wordt gedaan. De resultaten kunnen ook worden gebruikt in bereikbaarheidsonderzoeken, waarbij er gekeken wordt naar welke varianten het beste scoren op de belangrijke zaken die naar voren

zijn gekomen uit de participatie. Het is mogelijk dat er een variant wordt gekozen die goed scoort bij de participatie, maar dat is niet de enige reden waarom een alternatief wordt meegenomen. De resultaten kunnen dus worden gebruikt als een extra argument om een alternatief wel of niet mee te nemen in het traject. Het is echter belangrijk om op te merken dat er in de onderzoeksfase nog geen definitieve keuzes worden gemaakt.

Vraag 7: Hoe denk je dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn?

Participant 5 denkt dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces voor de Lelylijn door de belangrijkste doelen die mensen hebben eerder in beeld te krijgen. Dit kan helpen om voort te bouwen op wat er al is gedaan en om te voorkomen dat er in de verkenningsfase opnieuw beslissingen worden genomen. Participant 5 waarschuwt echter ook voor het gevaar dat er in de verkenningsfase opnieuw participatie plaatsvindt (verplicht), wat kan leiden tot verwarring en frustratie bij mensen die al hun mening hebben gegeven. De vragen die gesteld worden, moeten bijvoorbeeld goed van elkaar verschillen om niet dezelfde mening te vragen.

Vraag 8: Denk je dat er risico's of uitdagingen verbonden zijn aan het uitvoeren van een PWE? Zo ja, welke en hoe denk je dat deze kunnen worden aangepakt?

Participant 5 denkt dat er risico's en uitdagingen zijn verbonden aan het uitvoeren van de Participatieve Waarde Evaluatie (PWE) en noemt het risico van het uitleggen van de PWE aan buitenstaanders en de complexiteit van het uitvoeren van participatie in verschillende fases. Hij vindt dat er in het Lelylijnproject te weinig is nagedacht over hoe de participatie in verschillende fases samenhangt en hoe hierover afspraken gemaakt moeten worden. Participant 5 denkt dat het risico verminderd kan worden als er vooraf goed over nagedacht wordt en er afspraken worden gemaakt. Hij hoopt dat de PWE kan bijdragen aan het verbeteren van het besluitvormingsproces van de Lelylijn, maar ziet ook dat het samenhangt met andere factoren en afspraken in het proces.

Appendix D: Coded interviews after PVE publication

Participant 1

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Participant 1 erkent het belang van het betrekken van burgers bij het besluitvormingsproces en ziet de waarde van de PVE hierin. In het begin was Lechner in eerste instantie kritisch over de PVE. Zijn scepsis kwam voort uit het feit dat de PVE specifiek voor de Lelylijn was uitgevoerd, terwijl dit bij andere projecten niet het geval was. Hij vroeg zich af of dit wel een eerlijke aanpak was en merkte op dat het introduceren van burgerparticipatie in deze fase van een project de zaken wellicht gecompliceerder zou maken. Lechner deelde ook zijn zorgen dat de Lelylijn, ondanks dat het een serieus project is waaraan de overheid aanzienlijke fondsen heeft toegekend, mogelijk minder serieus zou worden genomen als het als een 'experiment' werd beschouwd. Tegelijkertijd merkte hij op dat de PVE niet werd behandeld als een simpel referendum, wat hij als een positief punt zag. Referenda, volgens hem, hebben een zekere digitaliteit en simplificatie, terwijl de PVE een meer genuanceerde weergave van de problematiek rond de Lelylijn bood. Dit vereist echter een bepaald instapniveau van de deelnemers, wat een mogelijke uitdaging vormt. Ondanks zijn initiële bezwaren, gaf Lechner aan dat de PVE in zijn ogen waarmaakt wat het belooft. Hij merkte op dat er bij de regionale stakeholders in eerste instantie enige scepsis was over de PVE, vooral uit zorgen over mogelijke negatieve feedback van de burgers. Na de ervaring met de PVE lijkt Lechner echter overtuigd van de waarde en het potentieel van de methode. Over het bereik van de PVE is Lechner minder zeker. Hij vraagt zich af of de PVE daadwerkelijk een breder publiek heeft bereikt dan traditionele methoden, en wijst erop dat de deelname van alle lagen van de bevolking een uitdaging blijft. Wat betreft de resultaten van de PVE, stelt Lechner dat het nog te vroeg is om conclusies te trekken, aangezien het team nog bezig is met het verwerken van de bevindingen. Hij geeft wel aan dat het proces een aanzienlijke hoeveelheid aandacht van de media, beleidsmakers en overheidsfunctionarissen heeft getrokken. Als negatief punt wijst Lechner naar het open karakter van de opzet van de PVE, waardoor er een verscheidenheid aan antwoorden ontstond die vervolgens geanalyseerd moesten worden. Dit leidde tot de noodzaak van een extra taak om de open antwoorden te verwerken, wat Lechner als een potentiële verbetering voor de toekomstige toepassing van de PVE ziet.

Vraag 2: In hoeverre denkt u dat de PVE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

Participant 1 gelooft dat de PVE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom het Lelylijn-project. Hij benadrukt echter dat de PVE niets zegt over voor- en tegenstanders van de Lelylijn, aangezien dit niet specifiek is gevraagd. De interpretatie van wat de Lelylijn is, varieert aanzienlijk onder de bevolking. Hoewel de PVE niet heeft opgeleverd of mensen voor of tegen de Lelylijn zijn, heeft het wel informatie opgeleverd over wat mensen belangrijk vinden. Het heeft ook de vooronderstellingen van het projectteam aangescherpt. Een verrassende bevinding was dat er geen significante verschillen waren tussen meningen van mensen in het noorden van Nederland en de rest van het land. Dit was tegen de verwachtingen van Participant 1 in. Participant 1 merkt op dat de PVE zich voornamelijk richtte op de infrastructuur van het project, terwijl de Lelylijn zowel een infrastructuur- als een gebiedsontwikkelingsproject is. Hij suggereert dat de PVE mogelijk ook had kunnen vragen naar aspecten van gebiedsontwikkeling.

Vraag 3: Heeft de PVE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Participant 1 gaf aan dat het te vroeg was om dit te bevestigen, aangezien de beslissingen nog niet waren genomen. Echter, hij had wel een positieve verwachting dat de PVE zou bijdragen aan de

kwaliteit van de toekomstige beslissingen. Hij kon op dit moment geen specifieke voorbeelden geven om zijn standpunt te onderbouwen, maar bevestigde zijn geloof in de waarde van de PWE.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Participant 1 erkent dat PWE succesvol was in het bereiken van een breder publiek en het bevorderen van participatieve betrokkenheid. Hij benadrukt dat het de moeite en tijd die men neemt om deel te nemen aan het proces bepalend is voor het bereik. Ook zegt Participant 1 dat er beperkingen zijn aan het digitaal participeren. Niet iedereen heeft de digitale vaardigheden om gemakkelijk deel te nemen aan een digitaal proces. Dit kan mensen omvatten die ouder zijn, degenen zonder toegang tot internet of apparaten, of mensen die gewoon niet comfortabel zijn met het gebruik van digitale technologie. Er is dus een evenwicht nodig tussen digitale en traditionele methoden om ervoor te zorgen dat zoveel mogelijk mensen betrokken kunnen worden bij het proces. Participant 1 benadrukt verder dat mensen sceptisch zijn over de bereidheid van de overheid om naar hen te luisteren, en de PWE kan helpen om deze perceptie te veranderen. Hij geeft toe dat het moeilijk kan zijn voor ambtenaren en bestuurders om los te komen van hun eigen denkbeelden en open te staan voor de meningen en percepties van het publiek. Hij stelt dat het belangrijk is om duidelijk te communiceren wat er wel en niet met de feedback wordt gedaan, en benadrukt dat het cruciaal is om de resultaten serieus te nemen en daar verantwoording over af te leggen. Ten slotte suggereert Participant 1 dat de PWE effectief is in het betrekken van een breder publiek in vergelijking met andere participatiemethoden.

Participant 2

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Participant 2 benadrukt de betrokkenheid van de staatssecretaris, die een belangrijke drijfveer was om de PWE te organiseren en burgers te betrekken. Participant 2 vond de PWE een mooi voorbeeld van hoe burgers bevestigd kunnen worden en ze is positief over de nuttige inzichten die het heeft opgeleverd voor het verdere proces. Ze merkt op dat het opvallend was dat alle deelnemers dezelfde top 3 van doelen hadden, wat een sterke leidraad biedt voor het ontwerp van het project. Ze geeft aan dat ze veel input hebben ontvangen en dat ze hierop een actie hebben moeten ondernemen om dit behapbaar te maken en in perspectief te kunnen plaatsen. Participant 2 vertelt dat er tijdens de implementatie van de PWE voor het Lelylijn-project coördinatie- en communicatie-uitdagingen waren. Ze wijst op een laag niveau van betrokkenheid en communicatie met regionale partners en bestuurders, bijvoorbeeld bij gemeenten. Hoewel regionale partijen via hun vertegenwoordigers in het projectteam betrokken waren, waren er onverwachte reacties. Ze stelt dat dit in de toekomst beter moet worden gepland. Tenslotte merkt ze op dat de resultaten van het PWE-onderzoek nog verder vertaald moeten worden voor beleidsmatige onderbouwing, omdat de resultaten in hun huidige vorm nog een "grote brij" van gegevens en voorkeuren zijn die geïnterpreteerd en gestructureerd moeten worden.

Vraag 2: In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

Volgens Participant 2 heeft de PWE goed bijgedragen aan het inzichtelijk maken van de publieke opinie. Hierbij noemt ze dat er 11.000 mensen deel hebben genomen en dat ze hierdoor een goede inkijk hebben gekregen in het gemiddelde Nederlandse standpunt. Hoewel er drie belangrijke waarden naar boven kwamen, merkt Participant 2 op dat er geen enkel doel volledig afviel. Dit maakt de taak voor de beleidsmakers uitdagender omdat elk aspect van het project belangrijk blijkt te zijn. Een verrassing voor Participant 2 was dat de opinies van Noord-Nederlanders vergelijkbaar waren met de rest van Nederland, aangezien Participant 2 aanvankelijk dacht dat hun standpunten misschien zouden verschillen. Op de vraag of er bepaalde aspecten onbelicht zijn gebleven door de PWE, geeft Participant 2 aan dat de evaluatie zeer compleet is en gelooft ze dat er voldoende invalshoeken en keuzetaken zijn opgenomen om een goed beeld te krijgen van de standpunten van de deelnemers.

Vraag 3: Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Participant 2 heeft aangegeven dat ze denkt dat de PWE zeker heeft bijgedragen aan de inhoudelijke kwaliteit van de beslissingen. Hoewel er nog geen definitieve beslissingen zijn genomen, heeft de PWE veel informatie opgeleverd die nuttig zal zijn bij het voorbereiden van deze beslissingen. Ze benadrukte dat er op drie verschillende manieren informatie is verzameld. Dit proces heeft verschillende kansen en zorgen aan het licht gebracht, waarbij iedereen de mogelijkheid had om zijn mening te geven en alternatieven aan te dragen. Desalniettemin bevestigde ze dat het momenteel nog te vroeg is in het proces om precies te beoordelen in welke mate de verzamelde informatie in de uiteindelijke beslissingen zal worden opgenomen en wat de effecten hiervan zijn.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Participant 2 was bijzonder positief over hoe de PWE in staat was een groot publiek te bereiken en te betrekken. Hoewel ze toegaf dat het mooier zou zijn geweest als er 20.000 mensen hadden deelgenomen, was ze onder de indruk van de groep van 11.000 mensen die uiteindelijk betrokken raakten. Participant 2 erkende dat er aanzienlijke communicatie-inspanningen nodig waren om het publiek bewust te maken van het project. Toch gelooft ze dat deze inspanningen vruchten hebben

afgeworpen, door het vergroten van de participatie en het versterken van het gevoel van betrokkenheid bij de deelnemers. Een indicatie van dit succes was de positieve feedback van de deelnemers. Participant 2 vertelde dat de deelnemers gemiddeld een 7,6 gaven aan hun ervaring met de PWE. Ze beschouwt deze positieve beoordeling als een sterke aanwijzing dat de PWE haar doelen heeft bereikt. Participant 2 waardeert de diepgang die de PWE in de vraagstelling biedt. In plaats van eenvoudige ja/nee-vragen, dwingt de PWE deelnemers om na te denken, wat zij als een cruciaal aspect beschouwt. Ten slotte benadrukte Participant 2 de impact van de PWE op het bereiken van een grote hoeveelheid mensen. Dit is een onderscheidend kenmerk van deze participatiemethode en draagt bij aan het succes ervan.

Participant 3

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Participant 3, deelt over het algemeen positieve ervaringen met de Participatieve Waarde Evaluatie. Hij merkt op dat de communicatie goed was en dat de respons van 11.000 mensen indrukwekkend was, waarbij de feedback bruikbaar was. Toch waren er een paar problemen. Participant 3 voelde dat de aanloop naar de communicatie niet goed was gepland en dat er meer strategisch nadenken nodig was over hoe de boodschap zou worden overgebracht en hoe iedereen erbij betrokken zou worden. Dit had betrekking op zowel de communicatie naar de deelnemers als naar andere belanghebbenden. Hij benadrukt dat deze participatie een onderdeel moet zijn van een grotere strategie, niet slechts een momentopname. Volgens hem begon het project pas na de PWE na te denken over een grotere strategie. Participant 3 vond dat er vooraf nagedacht had moeten worden over hoe de mensen te betrekken en enthousiast te maken voor toekomstige participatie. Participant 3 miste ook een duidelijke strategie voor community-vorming. Hij gelooft dat er meer nadruk had moeten liggen op interactie met de deelnemers, ze op de hoogte te houden van wat er met hun input gebeurt, en ze betrokken te houden bij toekomstige stappen. Participant 3 stelt dat communicatie niet alleen moet gaan over het weten wat mensen denken, maar ook over het organiseren van betrokkenheid en interactie. Hij gelooft dat dit de kracht van het instrument zou vergroten. Hij merkte ook op dat het wat tijd kostte om tot de juiste vraagstelling en proces te komen, maar dat hij uiteindelijk tevreden was met de resultaten. Participant 3 was aangenaam verrast door het succes van de PWE en merkte op dat de reacties doordacht en genuanceerd waren, in plaats van oppervlakkig. Ten slotte noemt hij problemen met de communicatie naar andere stakeholders. Participant 3 merkte op dat de communicatie met andere stakeholders niet optimaal was tijdens de PVE van het Lelylijn project. Hij benadrukte dat de aansluiting met stakeholders vaak laat plaatsvond, wat leidde tot weerstand, vooral op gemeentelijk niveau. Een voorbeeld hiervan was de lancering van het project door de minister of de staatssecretaris, waarbij bepaalde stakeholders pas op het laatste moment werden uitgenodigd om deel te nemen. Dit leidde tot weerstand omdat deze partijen zich niet voldoende geïnformeerd voelden over wat er gebeurde, vooral omdat deze acties plaatsvonden in hun eigen gemeenten.

Vraag 2: In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

Participant 3, gaf zijn visie op de impact van de PWE op de publieke opinie omtrent het Lelylijn project. Hij gelooft dat de PWE een bijdrage heeft geleverd aan het inzichtelijk maken van de publieke opinie, maar hij benadrukt dat de publieke aandacht vluchtig is en snel afgeleid kan worden door andere nieuwsgebeurtenissen. Hoewel de PWE aanvankelijk veel media-aandacht kreeg en de publieke opinie heeft beïnvloed, stelt Participant 3 dat dit effect tijdelijk is. Participant 3 benadrukt het belang van continue communicatie en interactie met de omgeving om de publieke opinie positief te houden. Hij merkt op dat projecten die een periode van 'radiostilte' ondergaan vaak negatieve publieke meningen genereren, omdat mensen beginnen te speculeren over wat er gaande is. Hij suggereert dat het belangrijk is om betrokkenheid te bevorderen door middel van structurele initiatieven zoals het installeren van projectbureaus, informatiecentra, het houden van inloopmarkten en het toestaan van publieke toegang tot bouwplaatsen. Participant 3 wijst op zijn eerdere ervaringen met projecten in Leeuwarden en Sneek, waar continue communicatie en gemeenschapsbetrokkenheid hebben geleid tot een positieve publieke opinie, ondanks mogelijke verstoringen door de bouw. Hij gelooft dat dergelijke continue communicatie en gemeenschapsbetrokkenheid ook nodig zullen zijn voor het Lelylijn project om een langdurige positieve invloed op de publieke opinie te hebben. Kortom, terwijl Participant 3 erkent dat de PWE heeft geholpen om de publieke opinie inzichtelijk te maken,

benadrukt hij ook het belang van blijvende betrokkenheid en communicatie om de publieke opinie over het project positief te houden.

Vraag 3: Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Hoewel er op het moment van het interview nog geen definitieve beslissingen waren genomen, gaf Participant 3 aan dat de PWE nuttig was bij het verhelderen van de meningen en standpunten van de regio. Hij merkte op dat de resultaten van de PWE hebben geholpen om de argumenten van de regio te motiveren, met name over kwesties zoals de inpassing van het project in de omgeving en natuurgebieden. Een specifiek voorbeeld dat Participant 3 noemde, was dat de uitkomst van de PWE duidelijke "piketpaaltjes" heeft geslagen - punten die de regio als cruciaal beschouwt. Bijvoorbeeld, in plaats van het creëren van een massieve dijk dwars door het land, het project zou moeten passen in de omgeving waarin het zich bevindt. Dit was een essentieel punt voor de regio en de PWE bevestigde dat het publiek dezelfde mening had. Hij merkte ook op dat de PWE een extra druk heeft gecreëerd om goed naar de inpassing te kijken en dit aspect serieus te nemen. Een ander belangrijk punt dat uit de PWE naar voren kwam, was dat de voorgestelde spoorlijn langs de A6, A7, A32 zou moeten lopen - dit was een opinie die in het noorden werd gedeeld door alle partijen en de PWE hielp om dit te ondersteunen. Over het algemeen gelooft Participant 3 dat de PWE heeft geholpen om deze belangrijke punten naar voren te brengen en dient als een waardevolle ondersteuning van de meningen en standpunten van de regio.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Participant 3 gaf aan dat de PWE redelijk succesvol was. Hij merkte op dat het aantal van 11.000 deelnemers aan het project een goed resultaat was en dat geen enkele andere PWE tot nu toe zoveel succes heeft gehad. Hij gelooft dat de verbeterde communicatie en de inspanningen van gemeenten en provincies om mensen aan te moedigen om deel te nemen, heeft bijgedragen aan dit resultaat. Desondanks erkende Participant 3 dat 11.000 mensen in vergelijking met het totale aantal mensen dat door de Lelylijn zal worden beïnvloed, een klein aantal is. Hij suggereerde dat de participatie groter zou moeten zijn en dat het proces structureler moet worden gemaakt.

Participant 4

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Participant 4 zei dat hij in eerste instantie verrast was over de nadruk die op bewonersparticipatie werd gelegd en toonde zelfs enige scepsis over het proces. Hoewel hij aanvankelijk struikelblokken ervoer, begon zijn perceptie te verbeteren naarmate het proces vorderde, voornamelijk dankzij de positieve resultaten van de evaluatie. Participant 4 erkende dat er een bepaalde spanning bestond tussen de ambitie voor een succesvolle participatie en de concrete projectresultaten. Niettemin, ondanks de hobbelige start, werd dit dilemma uiteindelijk opgelost. Hij deelde ook enkele van de uitdagingen die hij tegenkwam. Een daarvan was dat de participatieprocedure vroeg in het project begon, zelfs voordat het project zelf was gestart, wat soms tot verwarring leidde. Een andere uitdaging was het verwerken van de enorme hoeveelheid feedback van burgers en het weergeven van deze feedback in hun rapporten. Hoewel dit proces tijdrovend was, was het volgens hem uiteindelijk de moeite waard. Ondanks deze struikelblokken gelooft Participant 4 dat het team veel heeft geleerd van het proces. Hij sprak over de rijke ervaringen opgedaan, zowel in termen van participatie als over het project zelf. Het ontwerpproces zette de beleidsmakers aan het denken over welke partijen betrokken moeten worden bij het project en wat hun specifieke rol was in relatie tot de PVE en de Lelylijn. Dit was niet alleen cruciaal voor het bepalen van de koers van het project, maar stimuleerde ook effectieve communicatie en samenwerking tussen de verschillende te betrekken entiteiten. Een bijzondere ontdekking uit de resultaten was het gemeenschappelijke gevoel van waardering voor de rust, ruimte en natuur, onder zowel de lokale bevolking als mensen uit andere delen van Nederland. Deze bevinding bevestigde de vooropgestelde doelen van het project, zoals een snellere trein met extra stops en het behoud van natuur.

Vraag 2: In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

Participant 4 gaf aan dat hij gelooft dat de Participatieve Waarde Evaluatie (PWE) aanzienlijk heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn. Hij suggereert dat het proces hen in staat stelde om een diepgaand inzicht te krijgen in de gedachten, opvattingen en bezorgdheden van de mensen die door het project zouden worden beïnvloed. Ondanks aanvankelijke scepsis, de uiteindelijke resultaten van het proces over het algemeen positief waren. Een belangrijk punt dat hij benadrukte was de grote hoeveelheid feedback die ze van mensen ontvingen. Hij suggereert dat deze grote respons een indicatie was van een succesvol proces, en hij was over het algemeen tevreden met de 'afdronk' van het proces. Als reactie op de vraag of er verrassingen waren, gaf Participant 4 aan dat hij inhoudelijk niet verrast was. In plaats daarvan zag hij de resultaten als een bevestiging van wat hij al wist, met name met betrekking tot het 'stad-regio'-gevoel. Hij sprak ook zijn hoop uit dat anderen, politieke bestuurders in Den Haag, de resultaten verrassend zouden vinden en hieruit lering zouden trekken. Een andere belangrijke observatie was de ontdekking dat mensen buiten Noord-Nederland, waar de Lelylijn zou lopen, vergelijkbare opvattingen hadden over de noodzaak van het project. Hij benadrukte dat deze resultaten belangrijk waren en dat ze ook in Den Haag ter harte genomen moeten worden. Over het geheel genomen leek Participant 4 tevreden te zijn over de manier waarop de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn. Hij beschouwde de ervaring als positief en gelooft dat de opgedane inzichten nuttig zullen zijn voor toekomstige projecten.

Vraag 3: Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Participant 4 benadrukt dat het nog te vroeg is om te bepalen of de Participatieve Waarde Evaluatie (PWE) heeft bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen. Hij stelt dat een dergelijke beoordeling beter gemaakt kan worden wanneer ze verder in het proces zijn, specifiek noemt hij een moment "na de zomer" wanneer ze meer inhoud en een duidelijker beeld van de financiering zullen hebben.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Participant 4 erkent dat de PWE een effectief hulpmiddel kan zijn, maar wijst erop dat het uiteindelijke succes sterk afhangt van de interpretatie en toepassing van de resultaten. Hij merkt op dat de PWE betrokkenheid van een groter publiek heeft gegenereerd - hij noemt het getal van 11.000 mensen - en benadrukt dat dit iets is dat ze anders nooit hadden gedaan, zoals het betrekken van mensen in de rest van Nederland. Hij stelt dat de PWE waardevolle inzichten kan bieden aan de deelnemers, met name in het begrijpen van de complexiteit van de besluitvorming rond grote projecten. Huyink bespreekt ook de uitdagingen van de PWE, waaronder het omgaan met teleurstelling en ontevredenheid als de resultaten niet overeenkomen met de persoonlijke overtuigingen van de deelnemers. Hij erkent dat dit een grotere sociale kwestie is, gekoppeld aan de individualisering van de samenleving en de spanning tussen individuele en collectieve belangen.

Participant 5

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Participant 5 keek over het algemeen positief terug op zijn ervaring met de PWE. Hij was vooral onder de indruk van de respons, aangezien 11.000 mensen reageerden, meer dan oorspronkelijk werd verwacht. Inhoudelijk was hij verrast dat alle beleidsdoelen ongeveer gelijk gescoord werden, en hij had meer variatie verwacht. Daarnaast had hij verwacht dat er meer verschillen zouden zijn tussen meningen van mensen in de Randstad en die daarbuiten, wat ook niet het geval was. Dit leidde tot nieuwe inzichten. Participant 5 merkte op dat er tijdens het proces aanpassingen gemaakt werden. Bijvoorbeeld, de sluitingsdatum werd verplaatst vanwege provinciale verkiezingen, en later werd er een kwalitatieve analyse toegevoegd. Deze aanpassingen waren gebaseerd op reflecties en inzichten die gedurende het proces naar voren kwamen. Participant 5 was verrast met de gedetailleerde feedback en opmerkingen die deelnemers gaven, ondanks de beperkte ruimte om dingen in te vullen. Hij benadrukte dat er geen grote negatieve aspecten waren, en het algemene sentiment rond het proces was redelijk positief. Het enige negatieve aspect dat hij naar voren bracht, betrof de betrokkenheid van regionale partijen. Hij merkte dat sommige van hen zich niet genoeg betrokken voelden en het spannend vonden om bepaalde informatie naar buiten te sturen. Dit was een gebied waar Participant 5 voelde dat er mogelijk ruimte was voor verbetering.

Vraag 2: In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

Participant 5 geeft aan dat hij gelooft dat de PWE aardig succesvol is geweest in het inzichtelijk maken van de publieke opinie rondom de Lelylijn. Hij merkt op dat er veel mogelijkheden waren voor publieke inbreng, zowel via een panel als via vrije inbreng, en dat er niet veel verschil was tussen de resultaten van deze twee methoden. Hij waarschuwt wel dat de resultaten niet moeten worden geïnterpreteerd als een soort referendum, aangezien er bijvoorbeeld wordt opgemerkt dat vier vijfde van de respondenten voor de aanleg van de Lelylijn is. Hij benadrukt dat de PWE er voornamelijk op gericht was om inzicht te krijgen in hoe de publieke opinie ligt, en gelooft dat dit redelijk goed gelukt is. Participant 5 is ook verbaasd over het feit dat er niet veel verschil in mening was tussen Noord-Nederland en de rest van het land, en dat mensen het niet onrechtvaardig vonden dat er vooral naar kosten werd gekeken. Deze resultaten gingen, op een positieve manier, tegen zijn verwachtingen in. Wat de resultaten van de beleidsdoelen betreft, merkt Participant 5 op dat ze allemaal hoog scoorden, hoewel hij had verwacht dat sommige doelen duidelijk bovenaan zouden komen. Hij merkt op dat er uiteindelijk drie doelen waren die enigszins bovendreven, maar dat er geen substantieel gat was tussen deze doelen en de rest. Dit impliceert dat er geen enkel overheersend belangrijk beleidsdoel was, en dat alles als redelijk belangrijk werd beschouwd. Ten slotte uitte Participant 5 enige onzekerheid over de vraag of alle relevante aspecten adequaat zijn gemeten door de PWE. Hij merkt op dat sommige resultaten, zoals de suggestie van een ideaal aantal van vijf stations, meer vragen oproepen dan ze beantwoorden, vooral omdat het niet duidelijk is waar deze stations zouden zijn.

Vraag 3: Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Participant 5 stelde dat PWE heeft geholpen bij het identificeren van specifieke gebieden waar extra informatie nodig was, wat gunstig was voor het sturen van vervolgonderzoeken en het verbeteren van de informatie die tot een besluit leidt. Hij gaf echter aan dat het misschien nog te vroeg was om te zeggen dat de PWE daadwerkelijk de inhoudelijke kwaliteit van de uiteindelijke beslissingen had verbeterd. In zijn mening zou een tweede ronde van participatie nodig kunnen zijn voor de definitieve beslissing. Daarnaast merkte hij op dat het timing verschil tussen de uitvoering van de PWE en het moment van besluitvorming invloed kan hebben. In hun geval werd de PWE uitgevoerd ongeveer 1,5 jaar voor de beslissing, wat een heel andere situatie zou zijn dan wanneer de PWE vlak voor het nemen van een besluit werd uitgevoerd. Verder verduidelijkte Participant 5 dat het besluit waar ze naar streven een "startbeslissing" is om verder onderzoek te doen, wat aangeeft dat de PWE deel

uitmaakt van een langdurig proces van onderzoek en verkenning voordat er een definitieve beslissing wordt genomen.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Participant 5 gelooft dat de PWE in zekere mate succesvol is geweest in het bereiken van een breder publiek en het bevorderen van participatieve betrokkenheid. Participant 5 vertelde dat 11.000 mensen betrokken waren bij de PWE, wat hij als bevredigend beschouwt. Hij gaf echter ook aan dat bepaalde groepen, met name vrouwen, ondervertegenwoordigd waren in de PWE. Hij suggereerde dat dit kon zijn omdat het infrastructuurthema van de PWE mogelijk niet zo aantrekkelijk was voor vrouwen. Participant 5 merkte ook op dat de PWE een veel groter aantal mensen kon betrekken dan traditionele methoden, zoals openbare vergaderingen. Ondanks de ondervertegenwoordiging van bepaalde groepen zag hij de PWE als een aanzienlijke stap voorwaarts in het bereiken van een breder publiek en het bevorderen van betrokkenheid bij besluitvorming.

Participant 6

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Het lijkt erop dat Participant 6 grotendeels een positieve ervaring heeft gehad met de PWE die werd uitgevoerd voor de Lelylijn. Ze was betrokken bij het project vanaf begin maart en werkte nauw samen met verschillende belanghebbenden, waaronder het ministerie, om de resultaten te interpreteren en de rapportage te verfijnen. Een aspect dat ze zeer positief vond, was de betrokkenheid van de deelnemers en de genuanceerde meningen die naar voren kwamen uit de evaluatie. Ze waardeerde dat deelnemers tijd hadden om na te denken over de vragen en dat dit leidde tot inzichten die dieper waren dan de typische polariserende meningen die vaak op sociale media te zien zijn. Desondanks waren er ook enkele leerpunten. Ze merkte op dat het moeilijk was om te navigeren door de grote hoeveelheid open reacties die werden ontvangen en dat daar meer tijd voor nodig was en vooraf beter over nagedacht had moeten worden. Hoewel dit uiteindelijk werd opgelost, was het een uitdaging die extra aandacht vergde. Als gevolg hiervan stelde ze voor om in de toekomst beter na te denken over hoe om te gaan met open vragen in een dergelijke evaluatie. Over het algemeen leek Meiboom tevreden te zijn met de PWE en stelde ze voor om een soortgelijke evaluatie in een later stadium van het proces uit te voeren.

Vraag 2: In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

Participant 6 gelooft sterk dat de PWE een aanzienlijke bijdrage heeft geleverd aan het inzichtelijk maken van de publieke opinie. Ze ziet bijzondere waarde in de combinatie van een representatief panel, iets dat vaak ontbreekt in traditionele methoden zoals openbare inspraakavonden, die volgens haar vaak een vrij smalle doelgroep trekken. Een van de inzichten die Participant 6 noemde, was het in de afweging meenemen van het kostenaspect. In tegenstelling tot de normale vormen van inspraak waarin de kosten als onderwerp vaak worden vermeden, konden de deelnemers hun mening delen over het rechtvaardige gebruik van investeringen voor de Lelylijn, met vergelijkingen naar projecten zoals de Noord-Zuidlijn. Verrassend voor Participant 6 was hoe belangrijk het thema landschap was voor de respondenten. Ondanks dat er reeds andere factoren zijn die impact hebben op het landschap, zoals de landbouw en infrastructuurontwikkeling, kwam het landschap sterk naar voren als een belangrijke overweging bij de aanleg van de Lelylijn. Deze zo sterke focus op landschap was onverwacht, gezien de primaire discussie gericht was op een treinverbinding.

Vraag 3: Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Hoewel ze opmerkt dat er op dit moment nog geen beslissingen zijn genomen, plant ze de inzichten van de PWE te gebruiken in een aankomend besluitvormingsmoment volgend jaar. Ze geeft aan dat ze van plan zijn om te laten zien hoe hun voorstellen scoren op de doelen die in de PWE veel waarde hebben gekregen. Participant 6 gelooft dat het toevoegen van informatie uit de omgeving de kwaliteit van de uiteindelijke besluitvorming verbetert.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Participant 6 is van mening dat de PWE succesvol was in het bereiken van een breder publiek en het bevorderen van participatieve betrokkenheid. Ze merkte op dat het onderwerp van de Lelylijn een veelvoorkomend gespreksonderwerp was en dat mensen het interessant vonden om over dit nieuwe project na te denken. In vergelijking met andere raadplegingen die ze heeft gedaan, zoals die van energieprojecten, vond ze de Lelylijn raadpleging relatief eenvoudig en begrijpelijk voor de deelnemers. Ze gaf aan dat er nog steeds mensen waren die het te moeilijk vonden, maar merkte ook op dat de grootte van het project, dat meerdere provincies bestrijkt, en de nieuwheid ervan bijdroegen

aan de grote deelname. Participant 6 vergeleek de PWE ook met andere participatiemethoden, en ze zei dat de PWE relatief neutraal en laagdrempelig was, waardoor de deelnemers het makkelijk konden doen, zelfs tijdens het reizen. Ze gaf toe dat ze misschien enkele mensen missen, maar ze gelooft dat de voordelen van de PWE, zoals de lage kosten voor deelnemers en het gemak voor de deelnemers om mee te doen zonder ergens naartoe te hoeven, opwegen tegen de nadelen. Ze suggereerde dat de combinatie van de PWE en persoonlijke gesprekken kan helpen om een meer volledig beeld te krijgen.

Participant 7

Vraag 1: Hoe kijkt u terug op uw algehele ervaring met de Participatieve Waarde Evaluatie die afgelopen periode voor de Lelylijn is uitgevoerd?

Ze waardeert het feit dat participatie wordt gegeven in dergelijke grote projecten en vindt het belangrijk dat beleidsmakers en besluitvormers zo goed mogelijk geïnformeerd zijn om de juiste besluiten te nemen. Ze benadrukt dat dit een project is voor Nederland en dat burgers, die ook belasting betalen, moeten kunnen bepalen wat er gebeurt met hun geld. Echter, hoewel ze de resultaten van de PWE heeft bekeken, uit ze haar zorgen over de vraag of iedereen daadwerkelijk bereikt is door de evaluatie. Ze vraagt zich af of de juiste conclusies zijn getrokken en of iedereen die bereikt had moeten worden, daadwerkelijk is bereikt. Dit is een zorg die ze bij elk onderzoek heeft en is niet uniek voor de PWE van de Lelylijn. Ze stelt ook de vraag of ze alles hebben gedaan om iedereen te bereiken, inclusief degenen waarvan ze niet weten dat ze bestaan. Uit haar antwoorden blijkt dat ze zowel positieve als kritische overwegingen heeft ten aanzien van de PWE. Ze waardeert het principe van participatie en ziet de waarde ervan in, maar heeft zorgen over de implementatie, met name over de vraag of alle belanghebbenden daadwerkelijk zijn bereikt en of hun meningen zijn meegenomen in de uiteindelijke resultaten.

Vraag 2: In hoeverre denkt u dat de PWE heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom de Lelylijn?

In het interview gaf Participant 7 aan dat de PWE zeker heeft bijgedragen aan het inzichtelijk maken van de publieke opinie rondom het Lelylijn project. Ze gaf echter aan dat de effectiviteit van deze methode afhankelijk is van hoe breed het bereik is. Als het iedereen bereikt, dan kan het een zeer nuttig instrument zijn. Als het echter bepaalde groepen mist, dan zou het volgens haar geen meerwaarde hebben boven traditionele methoden. Participant 7 benadrukte de noodzaak om ook de 'unusual suspects' te bereiken, die vaak worden gemist in dit soort evaluaties. Ze sprak haar zorgen uit over de mogelijkheid dat de PWE een bepaald beeld kan geven dat niet volledig de werkelijkheid weergeeft. Participant 7 gaf bijvoorbeeld aan dat de PWE de indruk kan wekken dat heel Noord-Nederland de Lelylijn wil, terwijl er mogelijk ook weerstand of twijfels zijn in andere delen van het land. Verder merkte Participant 7 op dat de vragen mogelijk niet diepgaand genoeg waren. Ze gaf aan dat de vragen wellicht te veel gericht waren op de voordelen van de Lelylijn en te weinig op de mogelijke nadelen of gevolgen, zoals milieu-impact. Ze suggereerde dat er meer evenwicht nodig was in de vraagstelling om een meer accuraat en gebalanceerd beeld van de publieke opinie te verkrijgen. In haar slotopmerkingen benadrukte Participant 7 dat de resultaten van de PWE zowel nuttig als misleidend kunnen zijn voor beleidsmakers. Ze gaf aan dat het belangrijk is om de resultaten zorgvuldig te interpreteren en dat beleidsmakers zich bewust moeten zijn van de beperkingen van de methode.

Vraag 3: Heeft de PWE naar uw mening bijgedragen aan het verbeteren van de inhoudelijke kwaliteit van beslissingen? Zo ja, kunt u specifieke voorbeelden geven?

Allereerst erkent Participant 7 de mogelijke bijdrage van PWE aan het besluitvormingsproces. Volgens haar kunnen de antwoorden die uit de PWE komen, een belangrijke rol spelen in de besluitvorming, zolang alle relevante stakeholders zijn bereikt en hun bijdragen hebben geleverd. Dit is een significant inzicht, omdat het aantoont dat PWE's potentieel invloedrijk zijn in het vormgeven van beleidsbeslissingen. Echter, Participant 7 benadrukt ook dat er complicaties kunnen optreden bij de implementatie van PWE. Zij geeft aan dat het proces van besluitvorming kan worden verlengd als gevolg van het overwegen van de vele antwoorden en inzichten die uit de evaluatie voortkomen. Verder wijst Participant 7 op het inherente dilemma van participatieve besluitvorming: het betrekken van iedereen op microniveau kan leiden tot een complexiteit die de besluitvorming bemoeilijkt. Ze

erkent dat dit een uitdaging kan vormen in het gebruik van PWE in de besluitvorming rondom de Lelylijn. Ten slotte benadrukt Participant 7 dat er altijd onvoorziene factoren kunnen optreden die de projectvoortgang kunnen vertragen, zoals individuele bezwaren. Dit illustreert de onzekerheden die gepaard gaan met brede participatieve processen. Samengevat biedt het interview met Participant 7 waardevolle inzichten in de rol van PWE in de besluitvorming van het Lelylijn project. Hoewel de PWE waardevolle input kan leveren voor het besluitvormingsproces, onderstreept Participant 7 ook de mogelijke uitdagingen en complexiteiten die hiermee gepaard gaan.

Vraag 4: In welke mate denkt u dat de PWE succesvol was in het bereiken van een groter publiek en het bevorderen van participatieve betrokkenheid?

Het lijkt erop dat Participant 7 gemengde gevoelens heeft over de effectiviteit van de PWE in het Lelylijn project. Hoewel ze denkt dat er in zekere zin succes is behaald in het bereiken van een breder publiek, geeft ze aan dat ze twijfelt of het PWE erin slaagde om echt een groot publiek te bereiken. Ze benadrukt dat er meer inspanning nodig is om dit te bereiken, niet alleen in woorden, maar ook in daden. Ze suggereert dat de inspanningen tot nu toe voornamelijk beperkt zijn gebleven tot woorden en dat er concrete actie moet worden ondernomen om een groter publiek te bereiken.

Appendix E: Descriptive statistics candidates theme analysis

<i>Source</i>	<i>Percentage</i>
<i>Panel</i>	48,8
<i>Open</i>	51,2

<i>Gender</i>	<i>Percentage</i>
<i>Men</i>	61,6
<i>Woman</i>	37,1
<i>Prefer not to say</i>	0,8

<i>Age</i>	<i>Percentage</i>
<i>Younger than 25</i>	13,3
<i>Between 25 and 34</i>	25,8
<i>Between 35 and 44</i>	17,9
<i>Between 45 and 54</i>	17,6
<i>Between 55 and 64</i>	13,8
<i>65 or older</i>	11,3

<i>Education</i>	<i>Percentage</i>
<i>Klas 4, 5 of 6 havo/vwo</i>	8,4
<i>mbo-niveau 2, 3 of 4</i>	24,0
<i>HBO</i>	32,5
<i>University</i>	29,4
<i>Other</i>	5,6

<i>Province</i>	<i>Percentage</i>
<i>Drenthe</i>	10,5
<i>Flevoland</i>	14,8
<i>Fryslân</i>	22,3
<i>Groningen</i>	19,7
<i>Noord-Holland</i>	11,5
<i>Other</i>	21,2

Appendix F: Detailed description of positive clusters

Cluster ACC: Accessibility, Ease of Participation, and Clarity

This cluster encompasses aspects that ensure the evaluation is accessible and comprehensible to a wide audience. It considers factors such as the language used in the evaluation, its availability on various platforms, and its user-friendliness. Additionally, it examines the clarity of the questions, objectives of the evaluation, and the resulting outcomes.

Subcluster ACC.1: Accessibility for a wide audience, including language usage and availability on multiple platforms

Example answers:

- Easy participation
- Accessible to everyone
- Low threshold for participation, resulting in increased response rates

Subcluster ACC.2: User-friendliness of the evaluation, including layout and instructions

Example answers:

- Clear and organized
- Animated elements
- Well-functioning website

Subcluster ACC.3: Clarity regarding the questions, objectives of the evaluation, and results

Example answers:

- Openness of the questions
- Clear choices
- Clear explanations and inquiries

Cluster BDQ: Breadth and Depth of the Questions

This cluster focuses on the depth and breadth of the questions posed in the evaluation. It examines the level of depth in questions related to various aspects of the Lelylijn, such as economics, environment, and social impact. Furthermore, it considers the ability to explore different perspectives, for example, through the inclusion of various scenarios.

Subcluster BQD.1: In-depth questions about different aspects of the Lelylijn, such as economics, environment, and social impact

Example answers:

- Comprehensive coverage of the different aspects and choices involved in the construction of the Lelylijn
- Multiple options, not just one or two variants, providing a broader perspective
- The breadth and depth of the questions provide insight into the effects of different choices

Subcluster BQD.2: Ability to explore different perspectives, for example, through various scenarios

Example answers:

- "Different perspectives were offered. The overall picture should represent what residents want. The government needs to weigh whether the desires are affordable in relation to the goal. More insight into residents' preferences can help make good choices."

- Scenario thinking
- Clear and concise, good that these dilemmas are presented

Cluster RPM: Room for Personal Opinions

This cluster addresses the opportunity given to participants to express their personal opinions and backgrounds. This can be done, for instance, through free-text fields.

Subcluster RPM.1: Ability to share personal opinions and backgrounds, for example, through free-text fields

Example answers:

- Also asking why I didn't choose something
- Being able to express your own opinion
- It's great that residents are asked for their opinions. The tool is easy to use.

Cluster IPS: Involvement, participation, and support

This cluster focuses on the extent to which participants feel engaged in the decision-making process and have influence over the final decisions. Additionally, it examines the contribution that the evaluation can make to creating support for the ultimate decisions.

Subcluster IPS.1: Feeling of involvement and influence in the decision-making process

Example answers:

- Appreciation for involving citizens in the decision-making process
- The ability to share your own ideas
- Feeling involved and caring
- Gives the impression that residents' concerns are being listened to

Subcluster IPS.2: Contribution to creating support for the final decisions

Example answers:

- I think it's good that they let residents participate... it builds trust. And ultimately, it leads to a better future.
- Building support

Cluster AR: Appreciation for the Review

This cluster revolves around the overall appreciation of the evaluation, with a focus on the importance of public participation in the process.

Subcluster AR.1: Importance of public participation in the evaluation

Example answers:

- The fact that the public is allowed to participate
- The fact that the residents of the Netherlands are asked to contribute their thoughts
- Overall appreciation of the consultation

Cluster IF: Informative participation method

This cluster focuses on the participants' acquisition of information about the Lelylijn and the challenges surrounding it. It examines the extent to which participants have gained knowledge and awareness of the project and its associated complexities.

Subcluster IF.1: Informative

Example answers:

- Interesting to see the considerations
- Comprehensive and informative
- It was interesting to learn about the choices the government has to make
- Comprehensive with sufficient opportunities to learn about the interests/dilemmas.

Cluster FB: Feedback

This cluster focuses on the feedback provided by participants regarding the evaluation. It may include comments on missing choices, concerns about the actual impact and follow-up of the results, and criticism of the general approach of the evaluation/consultation.

Subcluster FB.1: Comments on missing choices

Example answers:

- I miss the choice between a local train and a high-speed train.

Subcluster FB.1: Concerns about the actual impact and follow-up of the results

Example answers:

- It's good, but is it useful?

Subcluster FB.2: Criticism of the general approach of the evaluation/consultation

Example answers:

- Nothing, because I've received it 50 times already.
- Consultation is okay, but that doesn't relieve the experts of giving good advice and the politicians of making choices. The latter should start doing that again...
- A bit oversimplified
- Nothing

Cluster OTH: Other Comments

This cluster includes other comments that do not fit into any of the above clusters. These can encompass diverse remarks that cannot be easily categorized.

Example answers:

- Keep it
- It's cleverly designed
- X

Appendix G: Detailed description of negative clusters

Cluster LQC: Limitations in questionnaire design and content

This cluster focuses on issues related to the questions and answer options in the questionnaire. It includes biased and limited choices, assumptions and suggestiveness in the questions, limitations in choice options and personal input, and irrelevant questions.

Subcluster LQC.1: Leading choices: This refers to questions or answer options that push participants in a certain direction, potentially influencing their responses.

Example answers:

- Steering in choices, free input would have been better
- Limited choices, steering
- Too much steering towards the construction of the Lelylijn

Subcluster LQC.2: Assumptions and suggestiveness in the questions: This concerns questions that make certain assumptions or are suggestive, which may hinder participants from providing honest or complete answers.

Example answers:

- It already assumes certain things
- The consultation is too focused on the question of how the Lelylijn should be constructed
- The starting point of the questions is the construction of the Lelylijn; in my opinion, that's not a good idea to begin with

Subcluster LQC.3: Limitations in choice options and personal input: This refers to the limited choices provided, preventing participants from fully expressing their opinions or perspectives.

Example answers:

- Too little personal input
- There is no question about climate, nature, sustainability, or other similar points.
- Missing the opportunity to indicate route choices

Subcluster LQC.4: Irrelevant questions: This refers to questions that are not relevant to the target audience or the topic of the consultation.

Example answers:

- The topic is not relevant to me personally, and I can hardly say anything about it
- Not all questions are relevant to me
- A lot of pros and cons are listed that are completely unimportant to me

Cluster PRC: Problems with Relevance and Complexity

This cluster addresses issues related to the difficulty and relevance of the questionnaire. It includes the complexity of the questionnaire and the lack of information and explanation about scenarios and consequences.

Subcluster PRC.1: Complexity of the questionnaire: This concerns the difficulty level of the questionnaire, which may demotivate participants or make it challenging for them to understand the questions.

Example answers:

- Too complicated and time-consuming to complete
- The options in part 2 are difficult to understand
- Difficult questions, too difficult for me

Subcluster PRC.2: Lack of information and explanation about questions, scenarios, and consequences: This refers to the insufficient context, information, or explanation provided about the different scenarios or consequences of the consultation.

- No explanation about the assumptions underlying the scenarios
- More visuals and explanation of consequences needed

Cluster DRP: Difficulties with representativeness

This cluster pertains to issues regarding the representativeness and reach of the participants, as well as the awareness of the consultation.

Subcluster DRP.1: Poor representativeness and reach of participants: This indicates that the participants in the consultation may not be representative of the intended target audience, potentially biasing the results.

Example answers:

- Possibly difficult to reach certain population groups in this manner
- It should be a reflection of society

Cluster DII: Doubts about involvement and impact

This cluster includes concerns about the extent to which participants have actual influence on the outcome of the consultation and the reliability and influence of the participants. These issues can undermine the credibility of the consultation and raise doubts about the value of the obtained feedback.

Subcluster DII.1: Uncertainty about the binding and impact of the consultation: This refers to participants' uncertainty about how the results of the consultation will be used and the level of influence their input will have.

Example answers:

- I fear that citizens' advice will be ignored. A project for the "experts."
- Unclear what the weight of this consultation is
- Too little impact.

Subcluster DII.2: Poor reliability of the participants: This relates to doubts about the reliability of the feedback provided by the participants, resulting in unreliable results.

Example answers:

- Probably only people with strong opinions about the Lelylijn will fill this in
- People who disagree are more likely to mobilize and stop the project
- You don't know what kind of dimwits are participating and generating strange outcomes

Cluster UEA: User experience and accessibility issues

This cluster addresses problems with the user-friendliness and accessibility of the questionnaire, such as a poor user experience and a significant time investment.

Subcluster UEA.1: Unfriendly in use: This refers to issues with the user-friendliness of the questionnaire, such as a complicated interface, or a poor layout.

Example answer:

- Distributing points doesn't work well on mobile
- Fairly long scrolling
- If you're presented with too many dilemmas (option 1 or option 2), there's a chance that people won't take it seriously and just click randomly.

Subcluster UEA.2: Long time investment: This cluster pertains to the time participants need to spend on completing the questionnaire.

- It takes too much time, and people who don't know how to articulate their opinions well may drop out because of it
- Too many questions, questions are sometimes vague or too open-ended, too much information and answers to formulate, too little explanation
- All separate text boxes, time-consuming, and you need data to make sense of them, not just opinions

Cluster POS: Positive experience

This cluster includes positive feedback about the consultation.

Subcluster POS.1: Positive responses about the consultation: This sub-cluster comprises comments in which participants express their satisfaction or appreciation for the consultation or state that they have nothing negative to report.

Example answers:

- None
- No opinion
- Found it completely fine
- No, the survey is good, and I find it enjoyable

Cluster OTR: Other

This cluster encompasses other comments that do not fit directly into the previously mentioned clusters.

Subcluster OTR.1: This cluster includes all different kinds of answers which can't be clustered in one of the other clusters. It serves as a catch-all for diverse remarks.

Example answers:

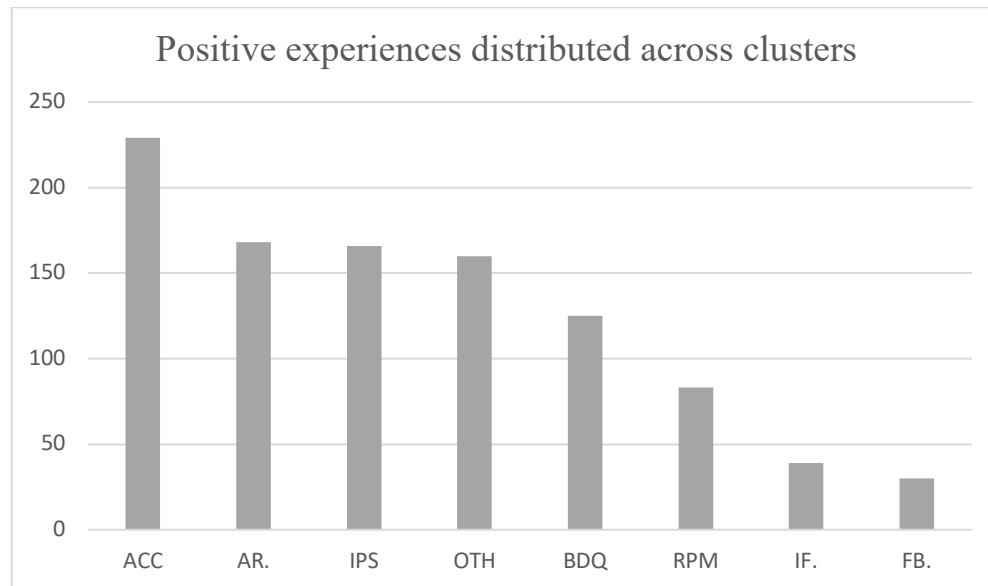
- Everything
- I've said enough about it
- Yeah, I don't necessarily know, I just find it mediocre
- Half

Appendix H: Results PVE Clusters and Subclusters

Positive clusters

Figure H1 shows a bar chart representing the distribution of responses to the question "what do you like about this consultation?" across the 8 clusters. It can be seen that the majority of answers fall within the cluster of Accessibility, Convenience, and Clarity. This is followed by Appreciation for the Review and Involvement, participation, and support.

Figure H1



Positive subclusters

Figure H2 displays the distribution among the subclusters within the ACC cluster. From this, it can be concluded that the subcluster of Clarity of the questions and objectives of the evaluation occurs most frequently by far.

Figure H2

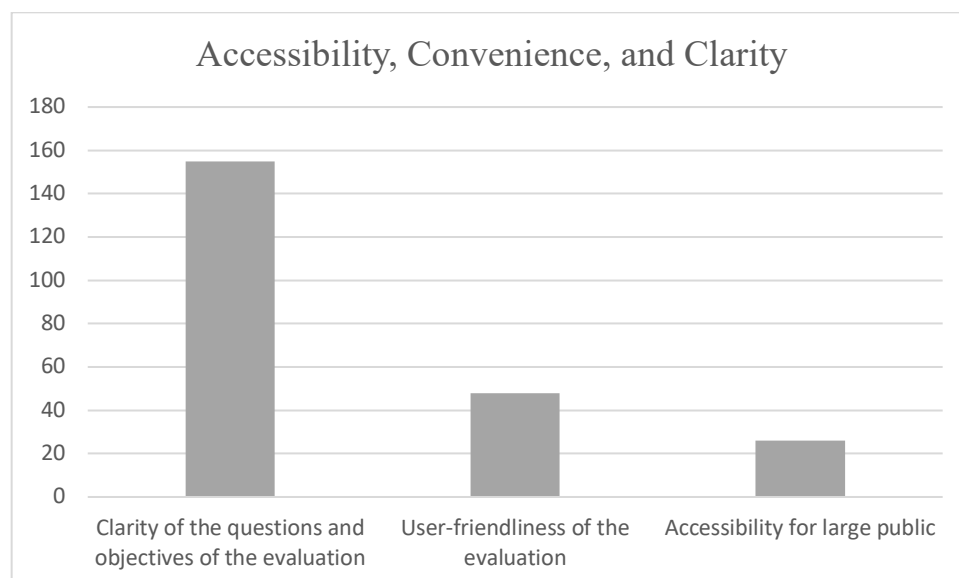


Figure H3 presents the distribution among the subclusters within the AR cluster. From this, it can be concluded that the subcluster of Appreciation for the evaluation as a whole occurs most frequently by far.

Figure H3

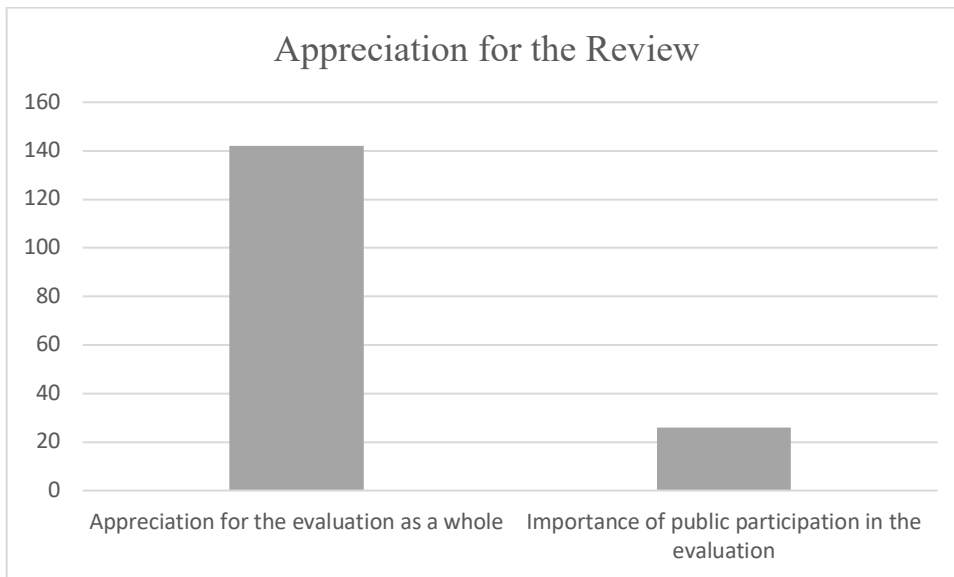


Figure H4 illustrates the distribution among the subclusters within the BDQ cluster. From this, it can be concluded that the subcluster of In-depth questions on different aspects of the Lelylijn occurs more frequently than Ability to explore different perspectives.

Figure H4

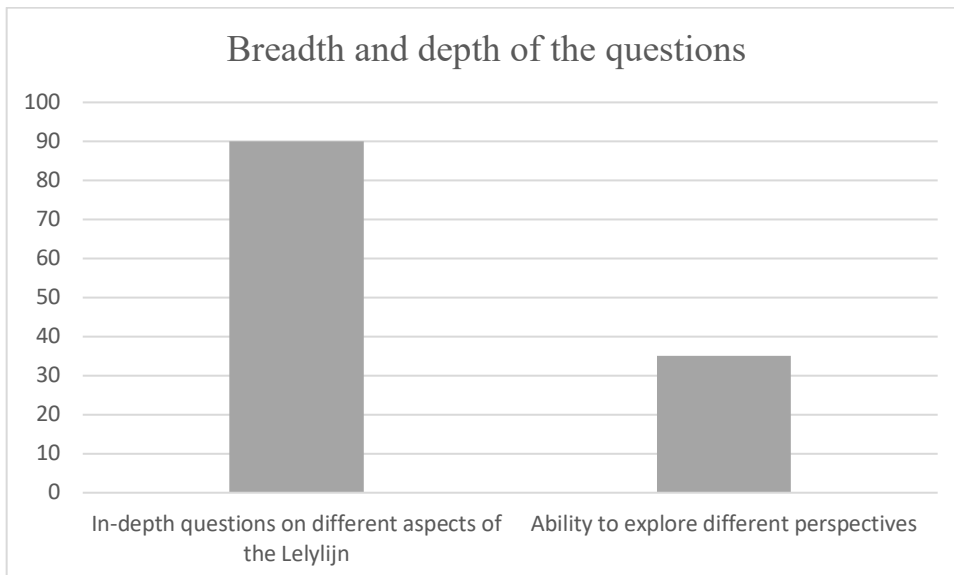


Figure H5 shows the distribution between subclusters within the FB cluster. From this, it can be concluded that the subclusters of Concerns about the actual impact and follow-up of the results and Criticism of the general approach of the evaluation/survey occur much more frequently than comments on missing choices.

Figure H5

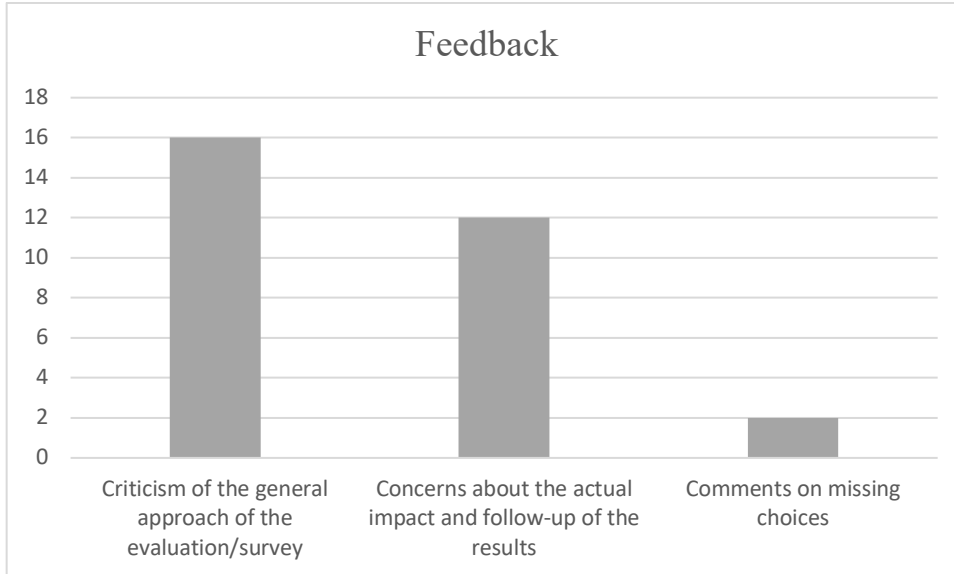
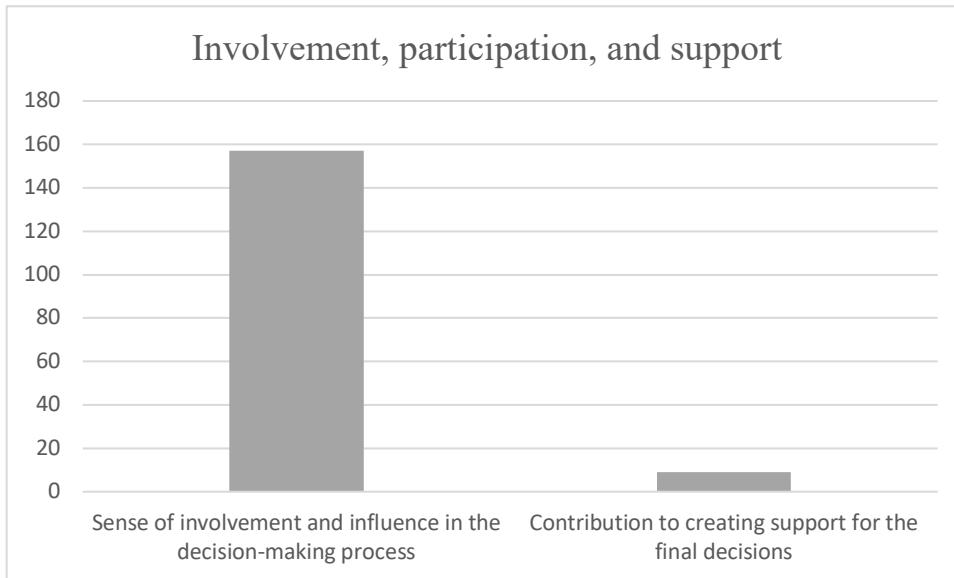


Figure H6 displays the distribution between subclusters within the IPS cluster. From this, it can be concluded that the subcluster of Sense of involvement and influence in the decision-making process occurs most frequently by far.

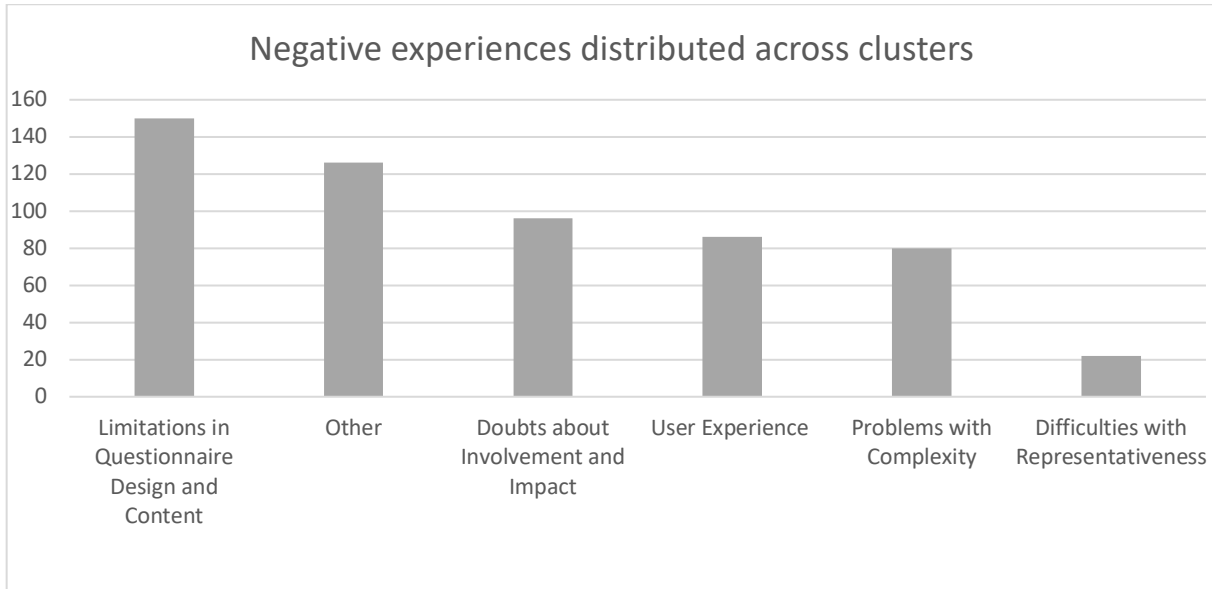
Figure H6



Negative clusters

Figure H7 presents a bar chart representing the distribution of responses to the question "what do you dislike about this consultation?" across the 8 clusters. The answers which do not contain a negative answer are excluded from the graph. This is the cluster positive which contain 404 responses. It can be observed that the majority of answers come from the subcluster Limitations in Questionnaire Design and Content and Other. The cluster Other do not provide much insight into negative experiences as they consist of incomplete/unassignable answers and responses that pertain to positive experiences. The next most selected cluster is Doubts about involvement and impact.

Figure H7



Negative subclusters

Figure H8 shows the distribution between subclusters within the LQC cluster. From this, it can be concluded that Limitations in choice options and personal input occur most frequently among the four subclusters.

Figure H8

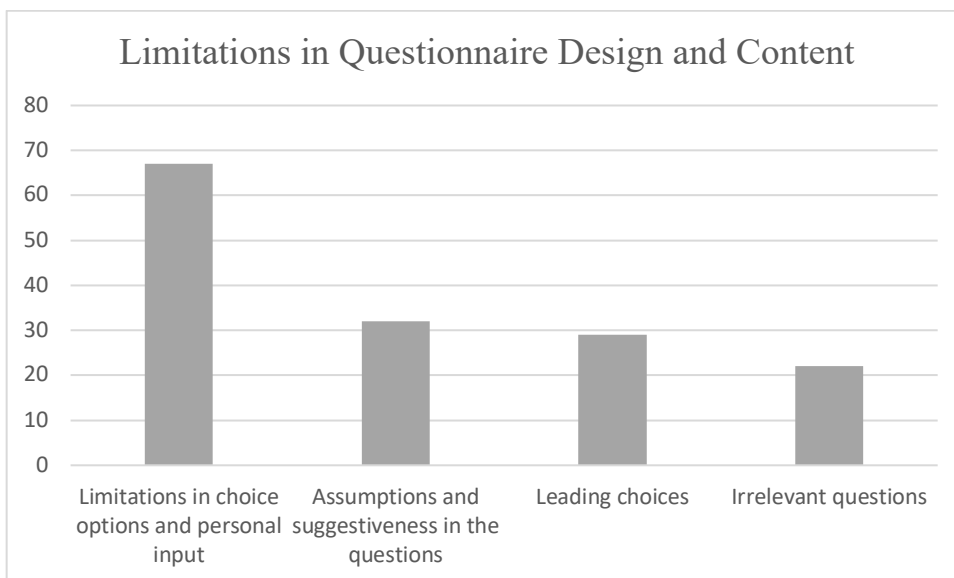


Figure H9 shows the distribution between subclusters within the DII cluster. From this, it can be concluded that Uncertainty about the binding and impact of the consultation occurs most frequently.

Figure H9

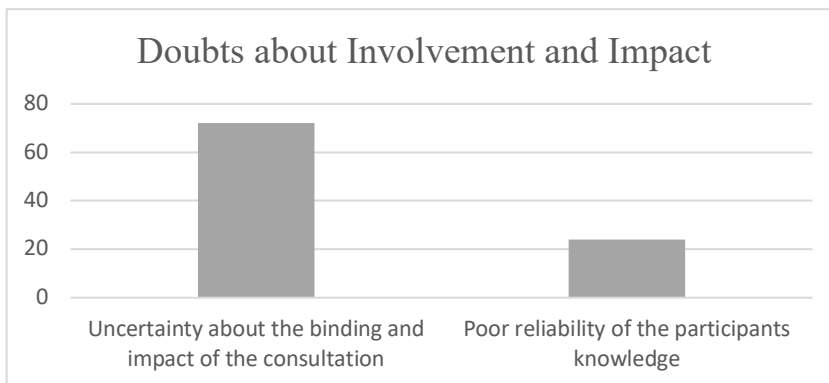


Figure H10 displays the distribution between subclusters within the PRC cluster. From this, it can be concluded that Lack of information and explanations about scenarios and outcomes occurs most frequently, although the difference is not significantly large compared to Complexity of the questionnaire.

Figure H10

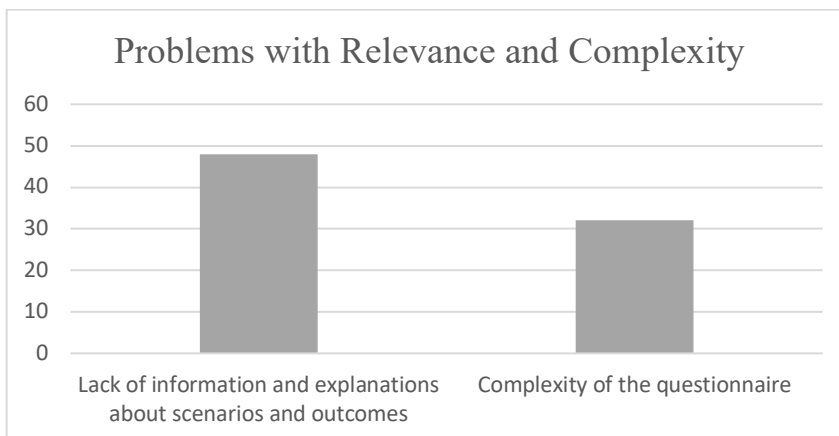
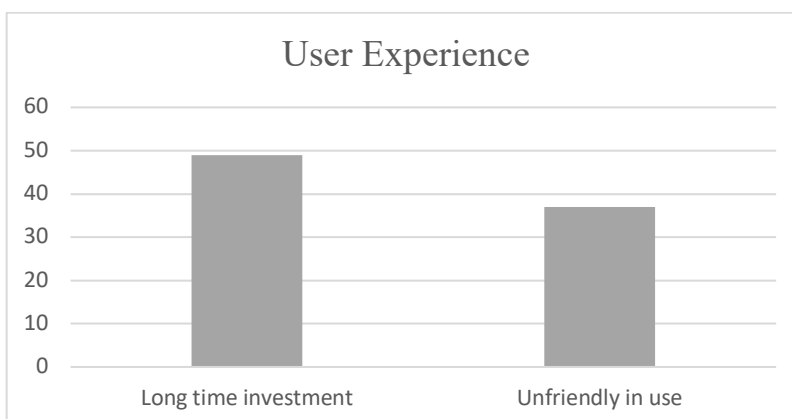


Figure H11 shows the distribution between subclusters within the UEA cluster. From this, it can be concluded that Long time investment occurs most frequently, but the difference is not significant compared to Unfriendly in use.

Figure H1

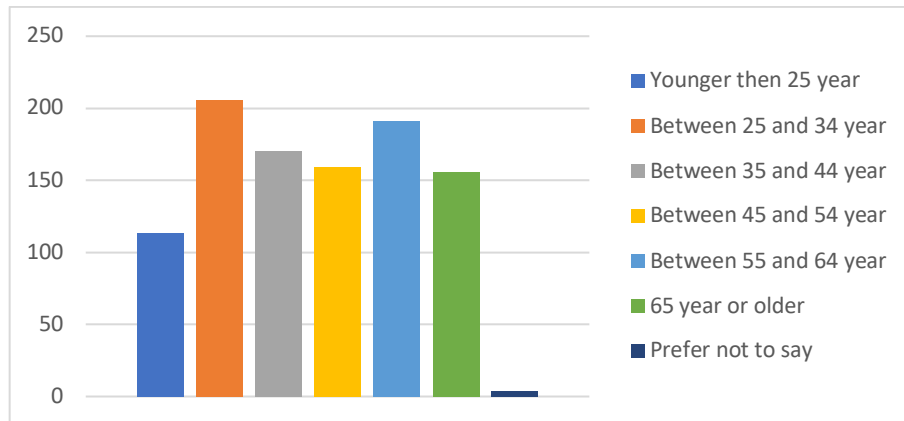


Appendix I: Results PVE background characteristics

Age

In figure I1, the distribution of participants in this sample is shown based on age categories. It is notable that the distribution is fairly equal, with slightly underrepresentation of individuals younger than 25 years.

Figure I1



Positive age

Table I1 represents the percentage distribution per age category across the positive response clusters.

Table I1

	Younger	Between 25	Between 35	Between 45	Between 55	65 year or	Prefer not to	Total
ACC	34%	24%	19%	26%	21%	17%	0%	23%
AR	7%	18%	14%	21%	18%	19%	18%	17%
BDQ	13%	15%	14%	9%	12%	12%	12%	13%
FB	2%	1%	2%	4%	3%	6%	3%	3%
IF	3%	6%	4%	5%	3%	2%	3%	4%
IPS	15%	18%	17%	16%	17%	15%	17%	17%
OTH	20%	9%	19%	13%	16%	22%	16%	16%
RPM	6%	9%	11%	6%	10%	7%	10%	8%

Table I2 displays the difference in distribution across the positive response clusters between the age categories and the total distribution. It is noteworthy that there is an outlier in the "prefer not to say" category due to a small number of candidates falling into this category in the sample. As a result of the small sample size, the percentage deviates significantly from the average. It is also notable that participants under the age of 25 choose the cluster of Accessibility, Convenience, and Clarity 11% more frequently than the average, and 10% less frequently for Appreciation for the Review.

Table I2

	Younger than	Between 25	Between 35	Between 45	Between 55	65 year or	Prefer not to
ACC	11%	1%	-4%	4%	-1%	-6%	-23%
AR	-10%	1%	-3%	4%	2%	2%	2%
BDQ	1%	2%	2%	-4%	-1%	-1%	-1%
FB	-1%	-2%	-1%	1%	0%	3%	0%
IF	-1%	2%	0%	1%	-1%	-2%	-1%
IPS	-2%	2%	0%	0%	0%	-1%	0%
OTH	4%	-7%	3%	-3%	0%	6%	0%
RPM	-2%	0%	2%	-3%	2%	-1%	2%

Negative age

Table I3 represents the percentage distribution per age category across the negative response clusters.

Table I3

	Younger	Between 25	Between 35	Between 45	Between 55	65 year or	Prefer not to say	Total
DII	6%	10%	10%	12%	9%	10%	0%	10%
DRP	1%	2%	1%	3%	3%	2%	25%	2%
LQC	12%	14%	13%	15%	19%	15%	0%	15%
OTR	36%	30%	29%	25%	28%	36%	25%	30%
POS	22%	24%	36%	25%	24%	26%	50%	26%
PRC	4%	10%	4%	12%	10%	5%	0%	8%
UEA	18%	10%	7%	9%	6%	5%	0%	9%

Table I4 displays the difference in distribution across the negative response clusters between the age categories and the total distribution. Similar to the table with positive responses, there is an outlier in the "prefer not to say" category, which has the same reason as before. It is noteworthy that participants under the age of 25 choose the User Experience cluster 9% more frequently than the average.

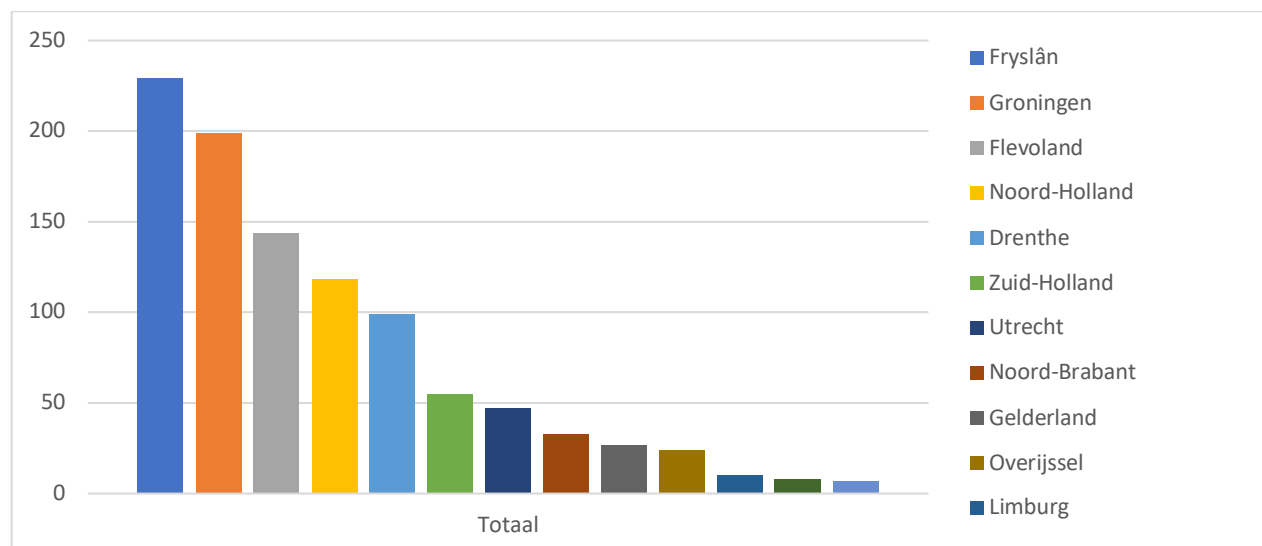
Table I4

	Younger than	Between 25	Between 35	Between 45	Between 55	65 year or	Prefer not to say	Total
DII	-3%	0%	0%	2%	-1%	1%	10%	10%
DRP	-1%	0%	-1%	0%	1%	0%	23%	23%
LQC	-3%	-1%	-2%	0%	4%	0%	15%	15%
OTR	6%	0%	-1%	-5%	-2%	6%	30%	30%
POS	-4%	-3%	9%	-1%	-2%	0%	26%	26%
PRC	-4%	2%	-4%	4%	2%	-3%	8%	8%
UEA	9%	1%	-2%	0%	-2%	-3%	9%	9%

Province

In figure I2, the distribution of participants in this sample is shown based on the province they reside in. It is notable that the distribution is not homogeneous. The candidates mainly come from provinces in the north of the Netherlands. This is primarily due to the fact that the Lelylijn project is planned to pass through these provinces, leading to more attention being given to the project in these provinces.

Figure I2



Positive Province

Table I5 represents the percentage distribution per province across the positive response clusters.

Table I5

	Drenthe	Flevoland	Fryslân	Gelderland	Groningen	Limburg	Noord-Brabant	Noord-Holland	Overijssel	Utrecht	Zeeland	Zeg ik liever niet	Zuid-Holland	Total
ACC	28%	23%	19%	15%	25%	10%	12%	29%	17%	21%	14%	38%	25%	23%
AR.	17%	15%	19%	15%	15%	30%	9%	19%	17%	15%	0%	38%	18%	17%
BDQ	11%	10%	13%	26%	15%	0%	12%	6%	21%	23%	14%	0%	11%	13%
FB.	3%	6%	2%	0%	2%	0%	6%	5%	0%	0%	0%	13%	4%	3%
IF.	2%	6%	2%	11%	4%	10%	3%	5%	4%	4%	14%	0%	2%	4%
IPS	15%	17%	16%	7%	19%	40%	24%	13%	21%	15%	29%	0%	18%	17%
OTH	16%	19%	18%	15%	11%	0%	21%	18%	8%	15%	29%	0%	18%	16%
RPM	7%	6%	11%	11%	9%	10%	12%	6%	13%	6%	0%	13%	4%	8%

Table I6 displays the difference in distribution across the positive response clusters between the provinces and the total distribution. Since most participants in the sample come from 5 provinces and the other provinces are not well represented, the numbers for the 5 represented provinces are highlighted in yellow. It is notable that the difference in distribution across the answers between the provinces is not significant.

Table I6

	Drenthe	Flevoland	Fryslân	Gelderland	Groningen	Limburg	Noord-Brabant	Noord-Holland	Overijssel	Utrecht	Zeeland	Zeg ik liever niet	Zuid-Holland
ACC	5%	0%	-4%	-8%	2%	-13%	-11%	6%	-6%	-2%	-9%	15%	3%
AR.	0%	-2%	2%	-2%	-2%	13%	-8%	2%	0%	-2%	-17%	21%	1%
BDQ	-1%	-3%	0%	13%	3%	-13%	0%	-7%	8%	11%	2%	-13%	-2%
FB.	0%	3%	-1%	-3%	-1%	-3%	3%	2%	-3%	-3%	-3%	10%	1%
IF.	-2%	2%	-2%	7%	0%	6%	-1%	1%	0%	0%	10%	-4%	-2%
IPS	-1%	0%	-1%	-9%	2%	23%	8%	-4%	4%	-2%	12%	-17%	2%
OTH	0%	3%	2%	-1%	-5%	-16%	5%	2%	-8%	-1%	13%	-16%	2%
RPM	-1%	-3%	3%	3%	1%	2%	4%	-2%	4%	-2%	-8%	4%	-5%

Negative Province

Table I7 represents the percentage distribution per province across the negative response clusters.

Table I7

	Drenthe	Flevoland	Fryslân	Gelderland	Groningen	Limburg	Noord-Brabant	Noord-Holland	Overijssel	Utrecht	Zeeland	Zeg ik liever niet	Zuid-Holland	Total
DII	4%	7%	12%	11%	14%	10%	22%	8%	8%	9%	0%	13%	5%	10%
DRP	1%	3%	1%	0%	2%	20%	6%	2%	4%	5%	0%	0%	2%	2%
LQC	12%	18%	17%	19%	15%	20%	19%	8%	17%	14%	0%	50%	22%	16%
OTR	17%	10%	17%	15%	11%	0%	9%	11%	13%	11%	17%	0%	18%	13%
POS	48%	44%	39%	41%	42%	50%	31%	53%	29%	27%	83%	25%	35%	42%
PRC	9%	8%	7%	4%	8%	0%	13%	10%	4%	18%	0%	13%	5%	8%
UEA	10%	10%	6%	11%	9%	0%	0%	9%	25%	16%	0%	0%	13%	9%

Table 18 displays the difference in distribution across the negative response clusters between the provinces and the total distribution. It is notable that the difference in distribution across the answers between the provinces is not significant. In Noord-Holland, positive responses are given 11% more frequently than the average.

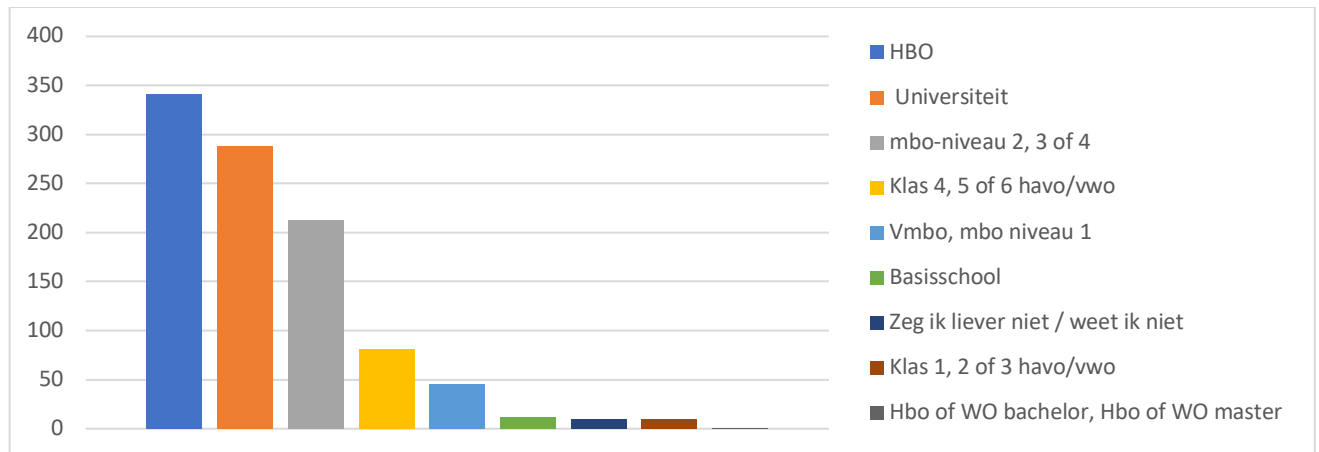
Table 18

	Drenthe	Flevoland	Fryslân	Gelderland	Groningen	Limburg	Noord-Brabant	Noord-Holland	Overijssel	Utrecht	Zeeland	Zeg ik liever niet	Zuid-Holland
DII	-6%	-3%	2%	1%	4%	0%	12%	-2%	-2%	-1%	-10%	3%	-5%
DRP	-1%	1%	-1%	-2%	0%	18%	4%	-1%	2%	2%	-2%	-2%	0%
LQC	-4%	2%	1%	3%	0%	4%	3%	-8%	1%	-2%	-16%	34%	6%
OTR	4%	-3%	4%	2%	-2%	-13%	-4%	-2%	-1%	-2%	4%	-13%	5%
POS	6%	2%	-2%	-1%	0%	8%	-11%	11%	-13%	-15%	41%	-17%	-7%
PRC	0%	0%	-1%	-5%	0%	-8%	4%	2%	-4%	10%	-8%	4%	-3%
UEA	1%	1%	-2%	2%	0%	-9%	-9%	0%	16%	7%	-9%	-9%	4%

Education

In figure I3, the distribution of participants in this sample is shown based on their highest level of education. It is notable that the distribution is not homogeneous. The candidates mainly have a background in HBO or university studies. There is also a significant group with an MBO level 2, 3, or 4.

Figure I3



Positive education

Table I9 represents the percentage distribution per education level across the positive response clusters.

Table I9

	Basisschool	HBO	Hbo of WO bachelor, Hbo of WO master	Klas 1, 2 of 3 havo/vwo	Klas 4, 5 of 6 havo/vwo	mbo-niveau 2, 3 of 4	Universiteit	Vmbo, mbo niveau 1	Zeg ik liever niet / weet ik niet	Total
ACC	0%	21%	0%	22%	33%	21%	25%	20%	20%	23%
AR.	36%	16%	0%	22%	6%	16%	19%	26%	30%	17%
BDQ	0%	16%	0%	11%	11%	3%	18%	4%	20%	13%
FB.	0%	3%	0%	0%	4%	3%	4%	0%	0%	3%
IF.	0%	6%	0%	0%	2%	3%	3%	0%	0%	4%
IPS	9%	18%	0%	22%	16%	17%	14%	20%	10%	17%
OTH	27%	10%	100%	22%	22%	29%	9%	26%	20%	16%
RPM	27%	9%	0%	0%	5%	8%	8%	4%	0%	8%

Table I10 displays the difference in distribution across the positive response clusters between the different education levels and the total distribution. Since most participants in the sample come from one of the four education level categories and the other categories are not well represented, the numbers for the four represented education levels are highlighted in yellow. It is notable that individuals with an MBO level 2, 3, or 4 choose the Breadth and depth of the questions answer 10% less frequently than the average and choose Other 13% more frequently. Students in grade 4, 5, or 6 of HAVO/VWO (Dutch high school education) choose Accessibility, Convenience, and Clarity 10% more frequently and Appreciation for the Review 11% less frequently.

Table I10

	Basisschool	HBO	Hbo of WO bachelor, Hbo of WO master	Klas 1, 2 of 3 havo/vwo	Klas 4, 5 of 6 havo/vwo	mbo-niveau 2, 3 of 4	Universiteit	Vmbo, mbo niveau 1	Zeg ik liever niet / weet ik niet
ACC	-23%	-1%	-23%	-1%	10%	-2%	2%	-3%	-3%
AR.	20%	-1%	-17%	5%	-11%	-1%	2%	9%	13%
BDQ	-13%	3%	-13%	-1%	-1%	-10%	5%	-8%	8%
FB.	-3%	0%	-3%	-3%	1%	0%	1%	-3%	-3%
IF.	-4%	2%	-4%	-4%	-1%	-1%	0%	-4%	-4%
IPS	-8%	2%	-17%	6%	-1%	1%	-3%	3%	-7%
OTH	11%	-6%	84%	6%	6%	13%	-7%	10%	4%
RPM	19%	1%	-8%	-8%	-3%	0%	0%	-4%	-8%

Negative Education

Table I11 represents the percentage distribution per education level across the negative response clusters.

Table I11

	Basisschool	HBO	Hbo of WO bachelor, Hbo of WO master	Klas 1, 2 of 3 havo/vwo	Klas 4, 5 of 6 havo/vwo	mbo-niveau 2, 3 of 4	Universiteit	Vmbo, mbo niveau 1	Zeg ik liever niet / weet ik niet	Total
<i>DII</i>	0%	13%	0%	11%	4%	6%	11%	0%	33%	10%
<i>DRP</i>	0%	3%	100%	0%	0%	0%	4%	0%	0%	2%
<i>LQC</i>	18%	17%	0%	0%	12%	10%	21%	0%	22%	15%
<i>OTR</i>	18%	11%	0%	11%	21%	11%	14%	16%	22%	13%
<i>POS</i>	64%	41%	0%	67%	42%	63%	22%	81%	11%	42%
<i>PRC</i>	0%	6%	0%	0%	10%	4%	15%	2%	0%	8%
<i>UEA</i>	0%	10%	0%	11%	12%	4%	12%	0%	11%	9%

Table I12 displays the difference in distribution across the negative response clusters between the different education levels and the total distribution. What is remarkable here is that individuals with an MBO level 2, 3, or 4 give a positive response 21% more frequently, while university-educated participants give positive responses 20% less frequently.

Table I12

	Basisschool	HBO	Hbo of WO bachelor, Hbo of WO master	Klas 1, 2 of 3 havo/vwo	Klas 4, 5 of 6 havo/vwo	mbo-niveau 2, 3 of 4	Universiteit	Vmbo, mbo niveau 1	Zeg ik liever niet / weet ik niet
<i>DII</i>	-10%	3%	-10%	1%	-6%	-4%	1%	-10%	23%
<i>DRP</i>	-2%	1%	98%	-2%	-2%	-2%	1%	-2%	-2%
<i>LQC</i>	3%	1%	-15%	-15%	-4%	-5%	6%	-15%	7%
<i>OTR</i>	5%	-2%	-13%	-2%	8%	-2%	1%	3%	9%
<i>POS</i>	22%	-1%	-42%	25%	0%	21%	-20%	39%	-31%
<i>PRC</i>	-8%	-3%	-8%	-8%	2%	-4%	7%	-6%	-8%
<i>UEA</i>	-9%	1%	-9%	2%	3%	-5%	3%	-9%	2%

Independent Samples T-test

The analysis of the differences in responses between groups with different educational backgrounds has revealed that participants with a university educational background provide less positive answers than participants with MBO levels 2, 3, or 4. To validate this, the average rating given by participants for the PVE) of the Lelylijn is examined. For this purpose, a statistical analysis called the independent samples t-test is performed. The t-test investigates whether the average ratings given by the two groups, differing in educational background, are the same. In this test, "University" is coded as 1, and "Vocational Education at levels 2, 3, or 4" is coded as 2. Table I13 presents the average ratings of both groups, and it can be concluded that the average rating of group 1 is lower than that of group 2.

Table I13

Group Statistics					
	EDU	N	Mean	Std. Deviation	Std. Error Mean
Cijfer	1	2204	7,36	1,424	,030
	2	1888	7,47	1,325	,030

Looking at Table I14, it can be seen that the t-value is -2.491 with a p-value of 0.006. Since the p-value is less than 0.05, the null hypothesis is rejected, and it is concluded that participants with a university educational background give a significantly lower rating to the PVE compared to participants with MBO levels 2, 3, or 4.

Table I14

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
Cijfer	Equal variances assumed	1,358	,244	-2,491	4090	,006	,013	-,108	,043	-,193	-,023
	Equal variances not assumed			-2,505	4061,870	,006	,012	-,108	,043	-,192	-,023