Sarah Waters

Bridging the Gap: the Mobility Realities of Island-dwellers in Northern Norway

The Case of Røst, Norway

Master's thesis in Fysisk Planlegging Supervisor: Tanu Priya Uteng Co-supervisor: Dave Collins June 2023

echnology Master's thesis

Norwegian University of Science and Technology Faculty of Architecture and Design Department of Architecture and Planning



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Abstract

This thesis explores the mobilities of residents of small island communities in Northern Norway, with Røst in Nordland County as the chosen case study area. The study focuses on addressing the challenges related to transportation and mobility that contribute to rural depopulation and disproportionate aging in these areas. By investigating the mobility needs of residents, particularly youth and older adults, the research aims to propose solutions to alleviate these challenges and enhance the appeal of small island communities as desirable locations for living, working, and retiring.

The main research question is therefore: **how are constellations of mobility shaping up in the island communities of the north of Norway in light of existing constraints, evolving technologies, and modern challenges?** Such challenges and constraints include but are not limited to: rural to urban migration, the COVID-19 pandemic, and climate changes. Sub-research questions focus on the local effects of a national free-ferry policy implemented in the summer of 2022, and on the existence of and potential for alternative inclusive mobility solutions in the case area.

Using a mixed-methods approach, including a travel behavior survey, cyberresearch, and in-person interviews and focus groups, the study uncovers a complex and unique web of mobilities in Røst. Findings include a noticeable reliance on cars for local trips despite relatively short distances, seasonal variations in travel habits, and reliance on social capital and volunteer-based ride-giving services to fill the gaps left by a lack of taxi and public transportation services. Additionally, findings indicate that the mobilities of Røst residents are constantly changing, shaped by societal changes and evolving technologies.

Findings are discussed in the context of related literature, the identified research gap, and The New Mobilities Paradigm, which serves as the conceptual framework for this thesis. Based on these findings and subsequent analysis, recommendations are given for refining social and physical development policies, and transport plans at various levels. In the conclusion, the research questions are answered and possible avenues for further research are suggested.

Sammendrag

Denne oppgaven utforsker mobiliteten til innbyggerne i små øysamfunn i Nord-Norge, med Røst i Nordland fylke som caseområdet. Studien tar sikte på å adressere utfordringene knyttet til transport og mobilitet som bidrar til fraflytting og en aldrende befolkning i distriktene. Undersøkelsen av mobiltetsbehovene til beboere, spesielt ungdom og eldre, har som mål å foreslå løsninger for å dempe mobilitetsutfordringer og øke bo- og «bli»-lyst i små øysamfunn og distriktsområder.

Det overordnede forskingsspørsmålet er derfor: **hva er mobilitetssituasjonen i øysamfunnene i Nord-Norge, i lys av eksisterende begrensninger, utviklende teknologier og moderne utfordringer?** Slike utfordringer og begrensninger inkluderer, blant annet, fraflytting, COVID-19 pandemien og klimaendringer. Del-forskningsspørsmålene fokuserer på de lokale effektene av den nasjonale gratisfergepolitikken som ble innført sommeren 2022, samt potensialet for alternative og inkluderende mobilitetsløsninger i forskningsområdet.

Ved å bruke en *mixed-methods* tilnærming, som inkluderer en reisevaneundersøkelse, cyber-forskning, intervjuer og fokusgrupper, avdekker studien et komplekst og unikt nettverk av mobilitet på Røst. Funnen inkluderer en viss bilavhengighet for lokale reiser til tross for relativt korte avstander, sesongvariasjoner i reisevaner og bruk av sosial kapital og frivillige skyssordninger for å kompensere for mangel på drosje og et kollektivtransporttilbud i samfunnet. Videre indikerer funnene at mobiliteten til innbyggerne på Røst er i stadig utvikling, påvirket av samfunns- og teknologiske endringer.

Funnene diskuteres i lys av relevant litteratur og *«The New Mobilities Paradigm»* som er et viktig konseptuelt rammeverk for denne avhandlingen. Basert på funnene og påfølgende analyser, gis det anbefalinger for å forbedre sosiale og fysiske utviklingspolitikker, samt transportplaner på ulike nivåer. Konklusjonen besvarer forskningsspørsmålene og gir forslag til fremtidige forskningsområder.

Preface

The North was my first Norwegian home. After spending my first few years in Norway living in Tromsø, in the far north of the country, I moved to Bodø, which is a boat ride away from the majestic and world-famous Lofoten Islands and the island-rich Helgeland coast. Having spent most of the past few years working in the sailing tourism industry and exploring the coast of Northern Norway, I have been able to experience the special "northern Norwegian magic" and gotten to know many people living in more remote coastal areas, including islands with limited connections to the mainland.

With an analytical lens gained in my time studying Geography at McGill University and Physical Planning at NTNU, I have sought to understand what sets these communities and their experiences apart from the more urban populations of the Norwegian mainland, especially in terms of their relationships with space and movement. A keen interest for mobilities research and the apparent need for better mobility solutions in physically isolated communities has inspired me to examine the mobilities of "island people", and aid in their work towards requisite mobility and better access to opportunities.

I come from a relatively small town in northern Italy called Sandrigo. Sandrigo's "twin city" is Røst, a small island community of around 500 inhabitants located at the very tip of Lofoten, far out to sea. The connection between Røst and Sandrigo is very strong: Italian was once taught at the local school in Røst, and Røst is home to the northernmost "Italian library" in the world. Sandrigo hosts a yearly "Baccalà Festival", where, every September, Røstværinger come to Sandrigo with an abundance of Lofoten Tørrfisk, which is prepared the "Vicentina way" at the festival. I fondly remember the yearly arrival of "the Norwegians" during my time growing up in Sandrigo, and I was always so curious to visit this island and experience it for myself.

My initial motive to study Physical Planning at NTNU was because I wanted to be able to make a difference in small communities in peripheral areas in the north of Norway. My connection to Røst through my hometown has for a long time inspired me to spend more time on this island and get to know the locals better. It seemed only fitting that I venture out to Røst during the final six months of my master's degree, learning about the island, its people, and their mobility realities. I hope that this thesis can help the local population better understand mobility and access the tools they need to improve their mobilities and the sustainability of their community.

This thesis was written in the spring semester of 2023, building upon a preliminary project description which was submitted for the course AAR4874 – Theories and Methods for Master's Theses, in December 2022 (Waters, 2022). Especially in chapters 1, 2, and 4 the content or text formulation of some paragraphs and sentences may be very similar or identical to the prior project proposal.

Acknowledgements

«Med littegrann hjølp gjer det littegrann monn...»

I would like to thank my advisors, Tanu Priya Uteng and Dave Collins, for their help and encouragement throughout the demanding but rewarding process that has been this thesis. Thank you to my aunt, Sharon, who was so kind to proofread my final draft before submission. In addition, I must thank my classmates and friends for their support this past semester – I am so proud of us!

I would also like to thank my fiancé Jonas, who by now knows more about the mobilities of Røstværinger than most anyone else. Thank you to my parents, who have always supported me and my academic pursuits, and were perhaps the only people more excited than I was that I would be spending a semester learning about Røst.

And of course, I am incredibly grateful to the people of Røst, for the warm welcome I received into their community, and their willingness to share their experiences with me.

«...det er itnjå som kjem tå seg sjøl!» – Vømmøl Spellmannslag.

Trondheim, June 13th, 2023 Sanad Jatern

Table of contents

Li	st of Figures	. xii
Li	st of Tables	xiv
Li	st of Abbreviations	. xv
1.	Introduction	1
	1.1 Research Objective and Research Questions	2
	1.2 Research Area: Røst, Norway 1.2.1 Røst as a Case Study Area	<i></i> 3 5
2.	Literature Review	8
	 2.1 Existing Research 2.1.1 Insular and physically isolated communities 2.1.2 Island transportation and transportation policies 2.1.3 Rural and island mobility 2.1.4 Transport-related social exclusion 2.1.5 Mobilities and the COVID-19 Pandemic 	8 8 10 11 14 18
	2.2 Research Gap and Rationale	19
3.	Background	. 21
	 3.1 National, Regional, and Local Policy 3.1.1 National Policy 3.1.2 Regional Policy	21 21 26 27
	3.2 The Community in Røst	28
	3.3 Conclusion	29
4	Conceptual Framework	. 30
	 4.1 The New Mobilities Paradigm 4.1.1 Relational mobilities 4.1.2 Mobilities and technology 4.1.3 Mobilities as a form of power and a catalyst for inequality 	<i>30</i> 31 32 33
	4.2 Conclusion	35
5.	Methodology	. 37
	 5.1 A Mixed-Methods Approach 5.1.1 Cyber-research 5.1.2 Online travel behavior survey 5.1.3 Fieldwork and observation 5.1.4 Interviews 	<i>38</i> 38 40 41 41
	5.2 Data Validity and Weaknesses of the Method 5.2.1 Sample size 5.2.2 Potential for bias 5.2.3 Language	<i>43</i> 43 44 45
	5.3 Ethics	46
	5.4 Data Analysis 5.4.1 Quantitative data 5.4.2 Qualitative data	<i>47</i> 47 48

6.	Findings	49
e	5.1 Types of Trips 6.1.1 Local trips 6.1.2 Regional trips	<i>49</i> .49 .55
е	 5.2 Types of Transport Modes	58 .58 .62 .64 .68 .69
e	5.3 Types of People 6.3.1 Older adults 6.3.2 Youth	69 .70 .71
e	 5.4 External Factors 6.4.1 Seasons and weather 6.4.2 The COVID-19 Pandemic 6.4.3 Societal characteristics 6.4.4 Digitalization of society 6.4.5 Development, sustainability, and the green transition 	72 .72 .73 .74 .77 .78
6	5.5 Conclusion	79
7.	Discussion	82
7	7.1 Local Mobilities 7.1.1 Car dependence 7.1.2 Transport-related social exclusion 7.1.3 Youth mobilities 7.1.4 Missing links: bus and taxi services	82 .82 .84 .84 .86
7	7.2 Regional Mobilities 7.2.1 Airplane and ferry routes and schedules 7.2.2 The cost of regional transportation 7.2.3 Residential self-selection 7.2.4 Impacts of the COVID-19 Pandemic	89 .89 .90 .91 .93
7	7.3 Opportunities for the Future 7.3.1 Digital mobilities 7.3.2 Røst as a remote work hub 7.3.3 Climate change and adaptation	95 .96 .98 .99
7	7.4 Policy Recommendations	100
7	7.5 Limitations of the Study	103
7	7.6 Constellations of Mobility	103
8.	Conclusion1	04
8	3.1 Research Questions	104
8	3.2 Implications	107
8	3.3 Opportunities for Further Research	107
Re	ferences1	.09
Ар	pendices1	15

List of Figures

Figure 1.1: Røst's location at the tip of Lofoten (Lofoten.com, 2022)
Figure 1.2 : Lyngvær, Kårøya, Tyvsøya and Glea – four of many islands in Røst (Røst Kommune, 2022)
Figure 1.3: Bar graph illustrating the age breakdown of Røst's population (SSB, 2022). 4
Figure 1.4: A group of people walking home from the pub in Røst, 1995. Photo: Raymond Wardenær (Wardenær, 2022)5
Figure 1.5: The view towards Stavøya at sunset. Photo: Sarah Waters
Figure 2.1: A diagram showing connections and relationships between the various topics explored in the literature review19
Figure 3.1: An illustration from the National Transport Plan which highlights the main challenges and priorities in each of the different transport corridors (Samferdselsdepartementet, 2020)
Figure 5.1: Bar graph illustrating the proportion of Røst's population per age category compared to the proportion of survey respondents per age category (SSB, 2022)44
Figure 6.1: A map of Røst showing important meeting places and landmarks (Røst Kommune, 2019)
Figure 6.2: A group of youth walking along the road in the snow. Photo: Sarah Waters.
Figure 6.3: A group of Røstværinger gathered for an event in the town square. Photo: Sarah Waters
Figure 6.4: The new medical car in Røst. Photo: Sarah Waters
Figures 6.5 & 6.6: A four-wheeler driving along the road, and a so-called "cabin moped" parked at the local sports hall. Photos: Sarah Waters
Figure 6.7: A wooden model of the Widerøe Dash 8-100 plane (which has served the Røst airport for decades) outside a house in Røst. Photo: Sarah Waters
Figure 6.8: The ferry in Røst preparing for the evening departure towards Bodø. Photo: Sarah Waters
Figure 6.9: A Senterpartiet car sticker which celebrates the ferry being made free. Photo: Sarah Waters
Figure 6.10: An electric bicycle parked in the snow outside the local town hall. Photo: Sarah Waters
Figure 6.11: Footsteps through the snow on the sidewalk. Photo: Sarah Waters72
Figure 6.12: A windy and stormy day in Røst. Photo: Sarah Waters73
Figure 6.13: A busy day at the harbor during the winter fishery rush. Photo: Sarah Waters
Figure 6.14: Closeness to nature is something many Røstværinger value, and the northern lights are a beautiful addition to the natural landscape here. Photo: Sarah Waters
Figure 6.15 : An illustrative image of the new ROPAX hydrogen ferries that will serve the Bodø-Røst-Værøy-Moskenes route from 2025. Photo: Norwegian Ship Design (Norwegianshipdesign.no, 2022)
Figure 6.16: A diagram showing connections and relationships between various findings of this study

Figure 7.1: A diagram showing the connections surrounding car-based mobility in Røst.
Figure 7.2: A diagram which illustrates missing mobility connections in Røst
Figure 7.3: A diagram which illustrates the impacts of the COVID-19 pandemic on the mobility situation in Røst
Figure 7.4: A diagram which illustrates the mobility relationships surrounding the growing digitalization of society96

List of Tables

Table 1.1: Yin's criteria for research projects suited to the case study method (Yin, 2018).	6
Table 1.2: How the research questions in this study fulfill Yin's criteria for case study approaches (Waters, 2022, p. 20).	6
Table 4.1: A table showing the logic behind choosing The New Mobilities Paradigmconceptual framework for this study.	30
Table 5.1: Keywords that were searched in the "Røst" Facebook group.	39
Table 6.1: A list of the ages and basic mobility-related information for older adult interviewees.	70

List of Abbreviations

- **DRT** Demand-responsive transit
- **NMP** New Mobilities Paradigm
- NTM6 National Passenger Transport Model
- NTP National Transport Plan
- **RMT** Regional Passenger Transport Model
- RTP Regional Transport Plan
- **Røstværing(er)** a person who lives in Røst (-er for plural)
- **TRSE** Transport-related social exclusion
- TT-Kort Tilrettelagt transportkort, "arranged transport card"

1. Introduction

Faced with a depopulation problem due to incessant rural to urban migration, small and rural communities in the north of Norway are losing their young populations to the big cities. Island communities, especially those without road-connections to the mainland, are in an especially vulnerable position in an urbanizing Norway. It is important that these communities are given the tools they need to survive, as many of them have rich histories and are rooted in traditional farming and fishing livelihoods that are central to Norwegian history and identity.

While there are many different approaches one could take in studying and seeking to help mitigate the challenges faced by isolated rural communities, research shows that challenges tied to peoples' mobilities directly contribute to socially disadvantaging already vulnerable populations (Jeekel, 2019, p. 11). It is important to preface that mobility is about much more than just movement; rather, the concept of mobilities is a phenomenon which is contextualized by the social, cultural, technological, and temporal meanings attached to movement (Sheller & Urry, 2006). Mobility is not merely measured in access to opportunities, or in kilometers or hours traveled: it is rather about the ability to create possibilities for movement (Priya Uteng, 2006, p. 439). Mobility refers to how individuals utilize the potential for mobility in their daily lives. Individuals' opportunities and livelihoods are directly tied to their mobilities, and a lack of satisfactory, inclusive, and context-sensitive mobility solutions can lead to downwards social mobility, social exclusion, and further physical isolation, especially for the most vulnerable groups of society including older people, children, people with disabilities and women.

Western society is aging, and Norway is no exception. Rural and insular communities are aging at an even faster rate, as young people leave these communities to pursue higher education and employment opportunities in the urban centers (Nordland Fylkeskommune, 2021). Rural areas are disproportionally inhabited by older people, and the challenges these older people face are emphasized by the limitations of the communities in which they live. A limitation of resources and infrastructure, and the slow but steady decline in the number of working-age residents to perform essential jobs within the community might soon lead us to a tipping point that cannot be ignored. For this reason, it is vital to understand the mobility realities of both older adults and youth in rural and insular communities: older adults because policy must cater to the people who make up an ever-increasing majority of residents in rural areas; and youth, because local, regional, and national policy should prioritize making rural areas more attractive for young people to work and live.

This study, which uses the municipality of Røst in Nordland as a case study, will attempt to map the mobilities of residents of northern island communities, with a distinct focus on two groups: older adults and youth. An important goal with this process of mobility mapping is to identify mobility solutions that might most effectively improve the mobilities of the local population. This study will also seek

to identify which innovative inclusive mobility solutions have already been implemented, and gauge to which degree these measures have been successful in reaching this goal; and to understand the impacts of the Norwegian government's 2022 "free-ferry policy".

The ultimate goal of this thesis is to explore how constellations of mobility in island communities are evolving in light of existing constraints, evolving technologies, and modern challenges such as the COVID-19 pandemic and rural to urban migration. Finally, transport solutions in rural areas that cater to vulnerable or physically isolated population segments have certain sustainability implications that are important to consider and investigate as part of this study.

1.1 Research Objective and Research Questions

For this study, research questions that are both context-sensitive but also applicable on a larger scale have been developed. These research questions are described below.

The main research question guiding this study is as follows: **How are constellations of mobility shaping up in the island communities of the north of Norway in light of existing constraints, evolving technologies, and modern challenges?** Such challenges and constraints include but are not limited to: *rural to urban migration, the COVID-19 pandemic, and climate changes.* Other challenges and constraints are identified throughout the course of the study. The focus on evolving technologies seeks to account for technological changes and advancements that might help offer new and innovative mobility solutions for small, rural communities.

In addition to the main research question, this thesis seeks to answer three sub-research questions. These are:

- 1. To what degree has the **free-ferry program** as an inclusive mobility policy helped mitigate mobility disadvantages faced by residents of northern island communities?
- 2. Which **inclusive mobility solutions** already exist in the case study area and how effective are they?
- 3. Which **other mobility solutions** can be effective in mitigating the disadvantages experienced by people living in physically isolated island communities in the north of Norway?

These four research questions, with emphasis on the first, main question, will form the foundation of this study. These questions will have influence in the selection of conceptual frameworks, on the review of relevant policy and prior research, and on the choice of methods.

1.2 Research Area: Røst, Norway





Røst is the Norwegian municipality which lies farthest from the Norwegian mainland (Stamnes, 2021). The municipality is made up of an archipelago of small islands lying at the very tip of Lofoten, a four-hour ferry ride from the nearest city of Bodø, which is also the region's administrative center. Værøy, the closest populated island, lies 25 kilometers northeast of Røst. The largest and most populous island in the Røst archipelago, called Røstlandet, is home to most of the municipality's 467 residents and to a small airport with regional flights, but has no road-connection to the mainland or other large islands (SSB, 2022; Stamnes, 2021).

People have lived on the Røst archipelago for over 6,000 years, with the area's richness in marine resources being an important source of sustainment and livelihood (Stamnes, 2021). Fish from the sea and eggs from the many seabird colonies have provided subsistence for *Røstværinger* for many years, and are still central to both the culture and economy of the archipelago (Kaltenborn et al., 2017). Despite this, the fishing industry has been weakening in Røst in the past years, with a dramatic decrease in the number of fishing vessels operating out of the archipelago, and in the number of people employed in the fishing- and fish-processing industries (Stamnes, 2021). The traditional fishing and tourism industries on the island are threatened by a constantly expanding oil industry, which in recent years has been seeking to explore the Lofoten region for offshore oil and gas (Stamnes, 2021). This is an important contemporary policy debate that

will have important consequences and impacts on the future of Røst, and the rest of Lofoten.



Figure 1.2: Lyngvær, Kårøya, Tyvsøya and Glea – four of many islands in Røst (Røst Kommune, 2022).

According to the *Statistisk Sentralbyrå*, Røst has a population of 467 as of the second quarter of 2022 (SSB, 2022). There are significantly more middle- to older-aged adults than younger people (under 40) living in Røst, and the population has been steadily declining over the past 40 years (SSB, 2022). These population statistics make Røst representative of many similar-sized rural communities in other parts of Norway.



Figure 1.3: Bar graph illustrating the age breakdown of Røst's population (SSB, 2022).

In many ways, Røst can be said to not be too different from other insular communities of similar size: island communities are often known for being tightknit, welcoming to newcomers, authentic, nostalgic, and as having strong ties between place, history, and identity (Vannini, 2011, p. 249). For many, living in physically isolated communities is seen as a way to emphasize traditional community and family values, including cooperation, friendliness, collective identity, trust, and a sense of belonging (Vannini, 2010, p. 117).

"To live on an island can feel safe for some and limiting to others." – Einar Stamnes, author of *Røst: Ytterst i Lofoten*, 2021

In Røst, everyone knows each other, word spreads quickly, and everyone is free to be themselves: those who wish to be included will be welcomed into the community with open arms (Stamnes, 2021). There is a lot of freedom on the island, and opportunities for growth, learning, and socialization will always be available to those who seek them out (Stamnes, 2021). Established workplaces, the school and kindergarten, local bars and eateries, and the local shop are relatively close by and accessible, and the rough nature and climate contribute to the unique feeling and specialness of the archipelago (Stamnes, 2021).



Figure 1.4: A group of people walking home from the pub in Røst, 1995. Photo: Raymond Wardenær (Wardenær, 2022).

1.2.1 Røst as a Case Study Area

This thesis will use a case study approach. A case study approach is a sound and relevant method to use for this study because specific cases can, in many ways, be representative on a larger scale. According to Yin (2018), it is relevant to use a case study method when the research questions take on a "how" or "why" form, when there is no requirement for control over behavioral events, and when the study focuses on contemporary events (Waters, 2022; Yin, 2018, p. 20). This study is therefore a good fit for a case study approach:

Table 1.1: Yin's criteria for research projects suited to the case study method (Yin, 2018).

Form of research question	Requires control over behavioral events?	Focuses on contemporary events?
"How" or "why" research	No requirement for control	Yes.
questions.	over behavioral events.	

Table 1.2: How the research questions in this study fulfill Yin's criteria for case study approaches (Waters, 2022, p. 20).

Form of research	Requires control over	Focuses on
question	behavioral events?	contemporary events?
Main research question:	There is no requirement for	Yes, this is a current issue,
"How are constellations of	control over behavioral	where research will look
mobility shaping up in the	events to answer the	into present-day behavior,
island communities of the	research questions, rather	policies, and data.
north of Norway in light of	the study will seek to	
existing constraints,	observe and understand	
evolving technologies, and	the current and natural	
modern challenges?".	behavior of residents.	

When it comes to the choice of case study area, choosing a very physically isolated community might lead to more extreme data, which might give more clarity in identifying results and drawing conclusions. However, there is a risk that extremely physically isolated communities will not be as representative of other places which are also physically isolated, just not to the same degree. While this is an important consideration, literature suggests that a good strategy for choosing a case is to choose an instance that is extreme or deviant within the chosen theme and can therefore illuminate the actual phenomenon (Tjora, 2013). Yin (2018) also argues that one should choose the case which is most likely to illuminate one's research questions, which makes an extremely physically-isolated community a sound choice (Yin, 2018). Based on this, Røst Kommune, in Nordland County has been chosen as the case for this study (Waters, 2022, p. 20).

According to Yin (2018), a good tip for selecting the case for a study is to choose a case for which one has requisite access to the data for the case – this includes opportunities to interview people, review records and documents, and do fieldwork (Yin, 2018). The researcher is quite familiar with Røst, and has reliable contacts on the island, including the leaders of some local organizations, and a former mayor. This knowledge and these contacts have played a vital role in getting access to the type of information needed for this study, and for establishing trust with the local population to conduct surveys, interviews, and focus groups (Waters, 2022, p. 20).

Another advantage of choosing Røst as the case study area is how selfcontained the community is – there being no mainland road-connection to the archipelago and the large physical distances required to access Røst make it uniquely isolated and could make it an excellent potential testing site for innovative mobility solutions. Additionally, with its potential to serve as a model for selfcontained communities, Røst could be an important resource in broader sustainability research. By studying Røst, one can gain insights into designing communities that self-sufficiently and effectively address the three pillars of sustainability: social, economic, and environmental. Røst's unique characteristics make it an ideal candidate for acting as a pilot or experimental site in the broader context of developing sustainable solutions. Through such studies, valuable lessons can be learned and applied to create more resilient and sustainable communities in a broader context.



Figure 1.5: The view towards Stavøya at sunset. Photo: Sarah Waters.

In the following sections, existing research that is relevant to the abovestated questions will be discussed and evaluated, followed by a review of national, regional, and local policies impacting insular areas and rural mobility in Norway. Next, The New Mobilities Paradigm, which will serve as the theoretical framework for this thesis, will be analyzed in the context of the study. The mixed-methods approach for this study, including potential weaknesses and ethical issues with the methods, is presented. Subsequently, the findings are presented and discussed in relation to both existing research and the conceptual framework. In the conclusion of this thesis, the research questions will be answered, and the implications of the findings of this thesis will be presented in a broader context, including opportunities for future research.

2. Literature Review

2.1 Existing Research

A thorough literature review provides important context for this thesis and helps identify a research gap. This literature review section will first cover **existing research relating to insular and physically isolated communities**, before looking into **island transport and transportation policies in the Norwegian context**. Next, a series of research that focuses on **rural and island mobility** will be presented. Existing research on **transport-related social exclusion (TRSE)** will be presented and analyzed, while looking closer at the implications that *seasonality and demand-responsive transport* have in the context of TRSE. Finally, research on the impacts of the **COVID-19 pandemic** on mobility will be introduced.

2.1.1 Insular and physically isolated communities

Climate change and climate change adaptation

There is a plethora of prior research looking at island communities in all corners of the world, with different focuses and academic contexts. Environmental research focusing on islands has shown that insular communities are disproportionally vulnerable to climate changes, as their closeness to the ocean makes them more susceptible to rising sea levels, intense storms, increasing air-and sea-surface temperatures and other impacts that "stress already limited island resources while climate change policies circumscribe local decision-making" (Lazrus, 2012, p. 285). Vulnerability to climate change will be an important consideration in this thesis, as the ecosystems around Røst are extremely delicate and important for local livelihoods, and the archipelago is known for having very tough weather and long winters with lots of wind and storms (Stamnes, 2021).

A 2013 study in the Northern Norwegian context by Amundsen (2015) explores how place attachment acts as a driver of adaptation in coastal communities. The study highlights how social, economic and environmental changes are challenging already-vulnerable municipalities in the north, and how residents' attachment and emotional connection with their place of residence helps set a more robust starting point for the adaptation these communities must undertake to tackle these challenges (Amundsen, 2015, p. 257). While the study mainly focuses on environmental challenges and adaptation to climate change, other social and economic struggles are mentioned as well, including livelihood uncertainties and decreased provision of public services as a result of declining populations (Amundsen, 2015, p. 257). The communities studied in this paper are in Senja and Vesterålen, not far from Lofoten, and share multiple characteristics with Røst. These communities are also known for having strong ties between place, culture, identity, and history (Stamnes, 2021). The awareness that various approaches to human activity can be both "supported and constrained" by the physical isolation of the place in which they are practiced provides an interesting

foundation and understanding for the nature of human activity in physical isolated places and communities and is of relevance in the context of Røst as well.

Development and sustainability

Case studies from contexts far removed from each other illuminate other struggles of island communities: Hong Kong's numerous outlying islands are known for being "relatively underdeveloped due to isolation from the urban core" and their dependence on ferries, and island communities are recognized to vary greatly in characteristics depending on whether they are connected to the mainland by bridge, tunnel, or ferry (Leung et al., 2017, p. 2). Røst's extreme geographical removal from the mainland renders a (physical) bridge connection out of the question, and maritime and air transport constitute the only modes to get to and from the island. This isolation has played an important role in the current development of the island. Another case study from Ireland shows how the level of service offered by sea ferries and other modes of transportation is anticipated to be a significant factor in shaping the population levels, economy, and overall quality of life of the islands, and a case study from Java in Indonesia indicated that island-people are known for being highly mobile in their daily lives on a range of spatial and temporal scales (Christensen & Gough, 2012, p. 52; Cross & Nutley, 1999, p. 317; Waters, 2022).

A case study on sustainability of the Galapagos highlights that, in a time where the UNs sustainable development goals and sustainable development generally are a hot and contended topic, there are still questions as to what sustainable development means in the context of small islands, and how island communities experience unique drivers and threats to development when compared with non-insular communities (Kerr, 2005, p. 503). What island mobilities mean for sustainability is an interesting question for this thesis, especially in a landscape where national and regional planning authorities are putting increasing pressure and focus on sustainability and sustainable development (Nordland Fylkeskommune, 2021; Waters, 2022).

Tourism

Tourism is often an important economic generator for island communities, and has "become increasingly important in island communities following a decline in traditional industries" (Currie & Falconer, 2014, p. 162). The impact of tourism on small island communities has important meaning also in terms of transport and mobility, as there is "a growing awareness of the benefits and necessity of collaboration between sectors to increase the attractiveness, accessibility and in turn sustainability of island destinations" (Currie & Falconer, 2014, p. 162). Other research highlights how the local economies of island communities are being pressured by an increased dependence on income from tourism and government support in a time when few local, insular economies are prosperous enough to cover the level of public services required for community sustainment (Briguglio, 1995, p. 1615). While Røst has a moderate tourism industry, the extent of it pales in comparison with the tourism experienced by the rest of the Lofoten archipelago (Stamnes, 2021). In looking towards the future of the community, *Røstværinger* realize that tourism is an industry with a lot of untapped potential; and one that

might be able to bring more money, resources, and people into the community (Stamnes, 2021; Waters, 2022).

There is evidently a wide coverage of research focusing on island communities, which gives a deeper understanding into the habits, characteristics, and traits that differentiate them from communities of "mainland" areas. This research also gives greater understanding of the specific context in which issues of mobility, transport, and sustainability need to be approached. Other research highlights some of the struggles, challenges, and threats that insular communities face. Much of this research draws conclusions that can form an important base for understanding and further research on insular and coastal communities in the Norwegian context (Waters, 2022, p. 12).

2.1.2 Island transportation and transportation policies

Research in the Norwegian context has focused on transport to and from islands, and transport policies affecting island communities. A 2006 article by a group of Norwegian transport economists explores the impacts and implications a drastic reform in ferry transport policy might have: that of making Norwegian ferries free (Jørgensen et al., 2006). In the article, the authors emphasize that the argument for making ferries in Norway free is clear and simple: ferries are crucial for ensuring the settlement and economic development of coastal areas (Jørgensen et al., 2006, p. 2). With this in mind, they present an overview of expected impacts of the implementation of such a policy including socioeconomic costs and benefits, expected increases in traffic volumes, with subsequent need for growth in ferry operations to sustain them(Jørgensen et al., 2006, p. 8; Waters, 2022).

The findings of this study indicate that making ferries free would lead to a socioeconomic loss of around 500 million NOK (in 2006 NOK), with the loss augmenting with higher traffic volumes (Jørgensen et al., 2006, p. 9). Despite this, the authors argue that a free-ferry policy could still be justified if the welfare of ferry-users is given 30% greater weight than the welfare of the general population (Jørgensen et al., 2006, p. 9; Waters, 2022). This paper on the potential of a free-ferry policy in Norway will be important for studying the mobilities of Røst's residents for two reasons:

First, because of an important ferry-policy change that came in the summer of 2022. With backing from *Senterpartiet*, the Norwegian government implemented a new policy which made all ferry routes to islands and those with less than 100,000 yearly travelers (based on 2019 data) free for motorized vehicles from July 1st, 2022 (Regjeringen, 2022). This policy meant that the ferry sections connecting Røst and the neighboring island of Værøy to each other, and to Moskenes and Bodø, were made free. The Jørgensen et al. (2006) study gives important context to better understand the socioeconomic impacts this policy might have at the greater societal level. What this policy means for the realities and mobilities of the people living in Røst is something that this study has attempts to identify (Waters, 2022, p. 13).

Second, this paper introduces the notion that, in some cases, one might need to give different weight or value to the welfares of different groups of people.

As mentioned above, the Jørgensen et al. (2006) paper concluded that the implementation of a free-ferry policy would be socioeconomically beneficial if one were to assign 30% greater weight to the welfare of ferry-users compared with the welfare of the general population (Jørgensen et al., 2006, p. 9). Giving different weight and importance to the welfare of different groups in society can be an important equalizing tool when it comes to addressing social inequalities, including those caused by disadvantages perpetuated by geographical isolation. Social inequality and social disadvantages caused by mobility poverty is therefore an important dimension in this study (Waters, 2022, p. 13).

Transport economics professor Gisle Solvoll from Handelhøyskolen in Bodø published a traffic potential study in 2007 that explores the possibility of establishing a helicopter route connecting the island communities of Træna and Lovund with the region's administrative center in Bodø (Solvoll, 2007, p. 3). Træna and Lovund are small island communities located on the Helgeland coast of Nordland, which bear some similarities to Røst, including their reliance on the fishing industry and populations of about 500 people (Solvoll, 2007, p. 4). The report seeks to identify the travel potential connected to work- and private-trips that a proposed new helicopter route connecting Træna and Lovund to Bodø could have (Solvoll, 2007). Long travel times to reach Bodø from these islands, which often includes switching between multiple transport modes including ferry, speed boat, train, bus, and/or car, are given as a rationale as to why these islands should rather be connected with a helicopter route - this would reduce travel times and increase accessibility to the islands considerably (Solvoll, 2007, p. 3). Another important argument made is that comparable communities in Røst and Værøy already have direct flight- and helicopter connections to and from Bodø (Solvoll, 2007, p. 3). While the proposed helicopter route never became a reality, this traffic potential report highlights some of the challenges faced by insular communities in northern Norway, and gives an in-depth evaluation of one potential transport solution to mitigate these challenges (Solvoll, 2007; Waters, 2022).

2.1.3 Rural and island mobility

Rural mobility is relevant for this specific case study because Røst qualifies as a "remote rural area" since it has a population of less than 3,000 people, and has a drive time of over 30 minutes to reach the closest settlement of 10,000 people or more (Mounce et al., 2020, p. 2). The following section will identify and analyze existing research that focuses on rural mobility in general, and on rural mobility in an island context specifically.

A 2002 report from the World Bank which identifies "Options for Developing Motorized and Nonmotorized Transport in Rural Areas" found that market forces are not able to provide requisite transport services in areas with low levels of demand, and that despite extremely high spending-levels, few government efforts are able to improve rural transport options in a way that meets the needs of local residents (Starkey et al., 2002, p. v). The report also highlights the importance of focusing planning efforts to consider the needs of disadvantaged groups, including women and older people (Starkey et al., 2002).

The role of age and gender

Existing research explores the disproportional burden felt by vulnerable population groups when it comes to mobility issues in rural areas: a 2020 pilot study paper published in the Journal of Traffic and Transportation explored the opportunities and challenges concerning smart mobility and public transport in both rural and urbans area and sought to identify whether "rural areas benefit more from certain smart mobility opportunities than urban areas" (Porru et al., 2020, p. 89). Community involvement played a key role in this pilot study, and included seeking out volunteer drivers, many of whom ended up being senior citizens in the community who were very pleased to have the opportunity to feel useful and support their local community (Porru et al., 2020, p. 89).

A 2012 Irish study focused on elder mobility in rural areas, and identified key challenges older adults face in these areas, as well as clear differences in challenges faced by elder women compared to elder men, and vice versa (Ahern & Hine, 2012, p. 28). Some findings of this study include that women are less likely to drive than men, and that women are more often affected by the loss of a spouse, which can cause a significant decrease in mobility (Ahern & Hine, 2012, p. 27). It is also mentioned that the lifestyles of older men are often more cardependent than those of older women, meaning that men are often less prepared for the challenges that arise when they no longer can drive (Ahern & Hine, 2012, p. 27).

A study by Walsh and Gerrard published in 2018 explores the role of gender in mobility and migration changes in Loppa, a municipality in Norway's High North which is comprised of 11 fishing communities, eight of which are only reachable by express boat or ferry (Walsh & Gerrard, 2018, p. 1154). This paper found that changes in the social and economic situations of fishing villages in the far north of Norway are leading to a transformation of livelihoods, rather than a clear-cut decline, as previously assumed (Walsh & Gerrard, 2018, p. 1154). Many of the changes in livelihood, migration, and mobility in this case developed along clear gender lines, emphasizing the importance of taking gender into consideration when exploring the livelihoods and mobility practices of these types of communities (Walsh & Gerrard, 2018, p. 1154).

It is important to consider the role of both age and gender when exploring mobility realities in the community in Røst, especially considering the community's aging population, and traditions within the fishing industry which this island is known for (SSB, 2022). Vulnerable population groups, especially older adults, are more likely to experience transport-related social exclusion, which is discussed more later in this chapter.

Youth mobilities

The increased car dependence of modern society, especially in rural areas, means that children and youth have become more dependent on private motorized vehicles for mobility, even if they are not yet old enough to drive. This means an increased reliance on parents or other family members to access necessary daily activities such as school and extracurricular- and social activities. Lack of access to a family member with a car who can give them rides can be extremely limiting for children and youth, especially in areas where distances are long and public transport is unavailable. According to a 2009 Norwegian study by Aslak Fyhri and Randi Hjorthol, factors like distance to school and age are the most important variables for the independent mobility of children and youth (Fyhri & Hjorthol, 2009, p. 377). Another factor that is important in explaining the independent mobility of children and youth is how their parents perceive the safety situation in their local area or neighborhood (Fyhri & Hjorthol, 2009, p. 377). While Røst is generally considered an extremely safe community with short distances, where the mobilities of children and youth are characterized by a high degree of freedom, tough weather conditions on the archipelago limits their mobilities in other ways.

Another study by Fyhri and Hjorthol indicated that children living in the four largest Norwegian cities had higher activity levels than those living in other areas, that children are more active in summer months than in winter months, and that the activity level of children is more likely to be higher if their parents do not use a private motorized vehicle daily (Fyhri & Hjorthol, 2006, p. 71). These findings will be relevant to compare with results from this study, especially considering the focus on youth mobilities.

Government subsidization of transport services

Another important consideration when discussing transport and mobility in rural areas is that of government subsidization of transport services. A 2020 paper in the Research in Transportation Economics journal poses questions about the need for subsidization due to difficulties posed by the low patronage of rural transport services (Mounce et al., 2020, p. 3). The paper identifies that rural transport is subsidized in many European countries, but that these same subsidies have decreased significantly in recent years as part of a wider reduction in government public-spending (Mounce et al., 2020, p. 4). Subsidizations are very important to rural transport services, since the degree of subsidization these services receive will affect their efficiency, and a reduction in subsidization will lead to a reduction in rural transport services in general (Mounce et al., 2020, p. 4).

This question of subsidization is extremely important in the case of Røst, as both the ferry route and the flight connecting the island to the regional administrative center in Bodø are subsidized by the Norwegian government (Regjeringen, 2021, 2022). Despite subsidizations and other efforts to improve rural mobility, Mounce et. al. (2020) identified that the existence of national policy for rural mobility does not guarantee requisite mobility services in these areas, and that the effectiveness of such services is more likely to be influenced by their integration with the public transport network than the national rural mobility policy (Mounce et al., 2020).

The role of identity and residential self-selection

A 2011 paper by Canadian ethnographer Phillip Vannini explores the mobility realities of ferry-dependent coastal and insular communities in British Columbia. Vannini investigates the identities of "islanders", and highlights how island mobilities differ from city mobilities, with the former being influenced by the insulation and isolation of local residents (Vannini, 2011, p. 250). Vannini also argues that physical distance from the rest of the world can both allow for the

preservation of traditional values, but also cause out-migration so dramatic that it can lead to community collapse (Vannini, 2011, p. 265). Finally, Vannini recognizes that transit routes can isolate and foster marginalization of local communities, especially when the authorities making route and timetable decisions are far removed from the impacted communities (Vannini, 2011, p. 261). Vannini's research is an important starting point for further research on the mobilities of island people, even in different cultural contexts (Waters, 2022, p. 10).

In another paper, Vannini highlights how living in physically isolated communities is seen as a way to emphasize traditional community and family values, including cooperation, friendliness, collective identity, trust, and a sense of belonging (Vannini, 2010, p. 117). This is related to the concept of residential self-selection: peoples' reasons for choosing to live in geographically isolated or rural areas might vary, and many rural citizens accept that "the very nature of living in such a place means poorer accessibility, and that they will have to 'settle for less'" as a tradeoff for other benefits they might get from living in physically isolated places (Shergold & Parkhurst, 2012, p. 413).

Residential self-selection and the mobility implications stemming from one's chosen place of residence are directly tied to the notion of transport-related social exclusion: according to mobility researcher Hans Jeekel, "the core [to social exclusion via transport] is the household's residential location – many people choose to live in places that generate transport disadvantages" (Jeekel, 2019, p. 11). Residents of such communities might be seen to have "low travel horizons", with especially the most-vulnerable groups of people adapting their behavior to undertake fewer activities that require trips to be made, thus risking community exclusion due to transport poverty (Shergold & Parkhurst, 2012, p. 413). As society becomes more mobile there is a growing risk of exclusion for those who are less mobile, or those who are unable to keep up with the growing levels of mobility practice by the wider population (Lucas, 2012, p. 108). Transport-related social exclusion has dire consequences, especially in terms of social sustainability, and is discussed further in the following section.

2.1.4 Transport-related social exclusion

Transport-related social exclusion is the manifestation of social exclusion rooted in or related to transport and mobility. According to Preston and Rajé (2007), social exclusion is not an end-state, but rather a "constraints-based process which causes individuals or groups not to participate in the normal activities of the society in which they are residents" (Preston & Rajé, 2007, p. 151). Requisite participation in activities and access to goods and services, which require an individual to overcome potential spatial, temporal, and social barriers of travel, are necessary for an individuals' or groups inclusion in society (Kamruzzaman et al., 2016, p. 1).

There are seven specific features or characteristics of the transport system that contribute to the exclusion of certain population groups: physical exclusion, geographical exclusion, exclusion from facilities, economic exclusion, time-based exclusion, fear-based exclusion, and space exclusion (Church et al., 2000, pp. 198

- 200). While TRSE is deeply multi-faceted with various root factors at play, certain sources may be more predominant than others: for Røst specifically, geographical exclusion is most relevant, as the isolated location of the community can prevent residents from accessing transport services – a reality which is especially common in rural and peripheral areas (Lucas, 2012, p. 108). Economic- and age-based exclusion might also be factors here, as lack of car access (which can be rooted in not being able to afford a car, or no longer being able to drive due to old age) plays a role in TRSE in communities that are highly car-dependent, which rural communities are often known to be.

There are various factors that act as indicators for transport-related social exclusion, with certain indicators having more impact than others: age, gender, household income, physical ability, education level and civil status are just some of the indicators that present different levels of barriers to accessing requisite mobility and participating in society (Yigitcanlar et al., 2018). A 2018 study by Yigitcanlar et al., recognized physical disability and old age (65 and older) to be especially important indicators, while other indicators such as household size and comfort level when using public transport were found to be less important (Yigitcanlar et al., 2018, p. 105).

Older adults and TRSE

Aging populations in the global North and a shift towards focusing on prioritizing accessibility for the most vulnerable groups first, over the needs of the "average citizen", has resulted in an increase in studies focusing on the transport-related social exclusion of older people (Shergold & Parkhurst, 2012, p. 420). A 2012 British study by Shergold and Parkhurst conducted interviews and surveys with older adults in rural Southwest England and Wales to map their mobility realities, and to better understand the degree to which they felt excluded from society due to transport disadvantages (Shergold & Parkhurst, 2012, p. 412).

The study by Shergold and Parkhurst again highlights that TRSE is multifaceted, and that accessibility planning and transport modeling tools generally focusing on the "average" citizen does a large disservice to the more vulnerable groups of society, including older adults (Shergold & Parkhurst, 2012, p. 413). Interestingly, the study found that few respondents felt excluded from their local communities, with "short travel distances required to access community activities [being] a key factor in the high levels of community inclusion" (Shergold & Parkhurst, 2012, p. 412). Car availability was thus not a strong indicator of overall inclusion, though the "car-dependent nature of travel overall [meant] that there [was] a rising risk of mobility-related exclusion in rural areas, particularly amongst the older old", as the ability to access and use a motorized vehicle decreased significantly as people approached their 80s (Shergold & Parkhurst, 2012, p. 412). The results of the study suggest that *formalized lift-giving* should be given greater consideration and be prioritized over other forms of demand-responsive transport solutions, which often fail to meet the needs of targeted user groups (Shergold & Parkhurst, 2012, p. 412).

Within the scope of transport-related social exclusion, there are other factors which both impact and are impacted by, the degree to which people

experience TRSE. The following sections will look deeper at the role of seasonality in TRSE, and the potential of demand-responsive transport solutions in mitigating transport-related social exclusion.

Seasonality

The impact of seasons and weather on mobility and accessibility issues is a subject that has received little academic attention. However, the issue of seasonality is extremely relevant for the chosen study area, as the archipelago's location far out at sea on the very tip of Lofoten, north of the Arctic Circle, makes it particularly exposed to heavy weather, wind, and winter storms (Stamnes, 2021).

A conference paper about social inclusion as a transport planning issue in the Canadian context written by Litman in 2003 reveals that Canada is quite similar to Norway in some ways, with the majority of the population being concentrated in the big cities in the southern part of the country – in Canada, as in Norway, only small portions of the population live in rural and dispersed settlements in the more isolated, northern areas of the country (Litman, 2003, p. 15). According to the study, people living in these areas are very likely to experience some degree of social exclusion, at least when compared with people living in more populated areas (Litman, 2003, p. 15).

Social exclusion issues experienced by people living in rural areas are often compounded and exacerbated by the cold weather and snow brought along by the winter season (Litman, 2003, p. 1). Snow and ice on roadways have been identified as contributing factors in the social isolation of seniors and people with physical disabilities in Canada (Morales et al., 2013, p. 30). A 2013 exploratory pilot study by Morales et al. recognized the impact that low temperatures and snow precipitations have on the populations of countries in the far north, where fallrelated injuries due to ice or snow are also a big problem, especially for older adults (Morales et al., 2013, pp. 30, 31).

According to a study by Norwegian transport researcher Randi Hjorthol, a big challenge for older people getting out of their homes to carry out activities is inadequate clearing of snow and slippery surfaces during winter months (Hjorthol, 2013, p. 186). Hjorthol's research in the Norwegian context indicate that a majority of older adults see winter conditions as a barrier to mobility, and that the number of trips taken and kilometers travelled by older people are lower in winter than in summer (Hjorthol, 2013, p. 191). These barriers are even greater for older adults who have reduced mobility, especially those who use walking aids such as a walking stick or rolling walker (Hjorthol, 2013, p. 186). Indeed, older adults and people with physical disabilities were found to be less likely to go out because of the mobility- and weather-related challenges they might encounter, thus contributing to their social isolation (Morales et al., 2013, p. 32).

Considering this study's partial focus on older adults, and the weatherexposed location of the case study area, seasonal impacts on mobility and TRSE are extremely relevant.

Demand-responsive transit

Demand-responsive transit (DRT) is a common and at times effective tool used to combat transport-related social exclusion, especially in areas where patronage is not high enough to sustain a traditional public transit service. DRT is a term used to encompass transit services where groups of travelers share private or quasi-public vehicles that adjust their routes for each journey, responding to specific transportation demands instead of following routes or scheduled timetables (Brake et al., 2004, p. 324; Mageean et al., 2003).

In their 2012 article in the Journal of Rural Studies, Shergold and Parkhurst look into issues of transport-related social exclusion amongst older people in southwest England, and touch on the implementation of demand-responsive transport as a potential mitigator for this issue (Shergold & Parkhurst, 2012). The authors describe how DRT services can be expensive to maintain as they often do not achieve high enough levels of patronage, and that the flexibility advantages of such services can often be negated by the accompanying uncertainty about journey times and pick-up locations (Shergold & Parkhurst, 2012, p. 418).

Barriers to widespread availability and use of DRT services include social stigma and limitations on funding and volunteer labor (Shergold & Parkhurst, 2012, pp. 418 - 419). The use of shared taxis was suggested as a more simple and less costly DRT solution, but came with other costs such as increased travel time and less flexibility (Shergold & Parkhurst, 2012, p. 419). An alternative to formalized DRT services appears to be that of simply accepting lifts from family and friends, but this also has some negative aspects, including loss of independence and privacy issues (Shergold & Parkhurst, 2012, p. 419). In their research, Shergold and Parkhurst conclude that many rural-dwelling older adults who do not own motorized vehicles are reliant on lifts from friends, family, and neighbors, and there is a huge potential for increased formalization and organization of these currently informal transport assets (Shergold & Parkhurst, 2012, p. 420).

In their 2009 report on transport solutions for older people living in rural areas, a group of researchers from the Norwegian Transport Economics Institute identified that non-driving older adults in their Norwegian case studies expressed a desire to have a flexible minibus as a transport solution – this type of transport service could allow them to get to the local store and shop at a suitable time, and could also allow them to get out again in the evening for social activities (Hjorthol et al., 2009, p. 66). Their findings also indicated that affected groups were not so interested in which level of administration (state, regional, local) would take responsibility for such a service, as long as it was made available (Hjorthol et al., 2009, p. 66). Several factors were deemed important for such a demandresponsive minibus service, including predictability, the possibility for door-to-door trips, availability for both morning and evening activities, an acceptable price, and the possibility for cancelling an order (Hjorthol et al., 2009, pp. 66 - 67).

2.1.5 Mobilities and the COVID-19 Pandemic

The COVID-19 pandemic, which began in March 2020, has undoubtedly had important implications for mobility in Norway over the past three years. It is therefore important to review existing research which examines the impacts the COVID-19 pandemic has had on mobility in Norway.

Guillen-Royo (2022) notes that the initial travel restrictions put in place at the beginning of the pandemic dramatically decreased the number of people flying, both domestically and internationally (Guillen-Royo, 2022, p. 287). Such a change is even more drastic for inhabitants of remote areas who are generally more dependent on airplane travel than the greater population, due to a lack of viable bus and train options for regional transport (Guillen-Royo, 2022, p. 287).

Guillen-Royo's study also found that pandemic travel restrictions especially impacted work-related trips, as trips for meetings, workshops, conferences and lectures were likely to be reassessed and replaced by digital alternatives (Guillen-Royo, 2022, p. 288). There was a dramatic shift in mobility for work trips at the start of the pandemic, as government-imposed restrictions of travel forced many people to switch to home-office solutions (Nagel, 2020, p. 861). Research shows that people believe the COVID-19 pandemic has played a key role in the acceleration of the digital transformation of work, and that the future of work will be increasingly impacted by technology and digital transformation (Nagel, 2020, p. 861).

A study on the effects of non-compulsory and mandatory COVID-19 interventions on travel distance found that "distance travelled decreased following non-mandatory measures in less-populated areas" (Kamineni et al., 2023, p. 9). The study also found that rural areas were more responsive to less invasive and less-costly infection-mitigation measures (Kamineni et al., 2023, p. 9). A survey aimed at evaluating the changes in mobility and transportation due to COVID-19 travel restrictions in 10 countries also revealed that the change in mobility frequency due to travel restrictions was lower for Norwegians than any of the other countries evaluated in the survey (Barbieri et al., 2020).

The COVID-19 pandemic has another important mobility implication which is of relevance for this thesis: the pandemic and subsequent lockdowns of society have been associated with increased levels of social exclusion, especially amongst older adults (Seifert & Cotten, 2021, p. 99). This study by Seifert and Cotton also found that the pandemic perpetuated already-existing issues of social exclusion amongst older adults which are related to exclusion from digital services due to lower levels of digital fluency (Seifert & Cotten, 2021, p. 99). It will be interesting to consider how the increased levels of social exclusion of older adults due to the COVID-19 pandemic and subsequent infection prevention measures are related to and impacted by other types of social exclusion in communities, including digital exclusion and transport-related social exclusion.

2.2 Research Gap and Rationale





Based on the existing research identified above, it is clear that island communities and island transport and mobility have been of academic interest for many decades. In countries with long coastlines and an abundance of islands, coastal and insular areas have acted as the backbones of civilizations that have traditionally had strong dependence on maritime transport and marine resources, as is the case in Norway. Nevertheless, very little research on mobility in insular and small coastal communities has been done specifically in the Norwegian context. There is plenty of research in the Norwegian context about mobility in cities, transport-related social-exclusion, and other of the topics explored in the literature review, but rural areas and more specifically small coastal communities have been overlooked, especially rural areas that do not have any form of formalized local public transport service.

There is a strong need for more research on mobility in rural and coastal Norway to understand the importance of social sustainability and the prioritization and subsidization of services in these areas by regional and national governments. This area of research is extremely important to help inform regional and national authorities about the current mobility situation in island communities in the north of Norway, the needs these communities have, and the challenges they face. In moving forward with this thesis, it is important to look into current government policy relating to topics of rural mobility and social sustainability, to see where there are gaps in policy and where improvements can be made. Coastal and insular communities are extremely important for the history and tradition of this country and deserve to be prioritized and given the tools they need to survive and thrive.

3. Background

In this chapter, national, regional, and local policy relevant to the topic at hand is explored. Transportation and development plans at the local, regional, and national level form an important policy basis for transportation and mobility solutions in rural areas in Norway, which is of relevance to this case. This aids in ascertaining the degree to which the authorities, at various levels, are aware of the issues faced by coastal communities, and the kind of policies that are currently being employed to mitigate the existing issues.

3.1 National, Regional, and Local Policy

The National Transportation Plan for 2022-2033, the regional transport plan for Nordland for 2022-2033 and a regional sustainability plan for Nordland have been analyzed to see which goals and guidelines they set for coastal and rural areas, including Lofoten and Røst. Local plans and policies for Røst Kommune have also been identified and analyzed to understand the local government's interpretation of and approach to mobility issues faced by the local community.

To contextualize these various policies and planning documents, we must define what is a central pillar to the work towards sustainable mobility in Norway: the zero-growth goal. This is a national goal which serves as the basis for all landuse and transport policy, at all levels of policymaking. The zero-growth goal states that all growth in person transport in urban areas should be absorbed by climatefriendly transport modes such as walking, biking, and public transit (Tønnesen et al., 2019, p. 175). This means that, even as the Norwegian population continues to grow, private car usage should not increase. The reasoning behind this goal is often based in issues relating to urbanization and urban development, so it will be interesting to understand what the zero-growth goal can and should mean in the context of small communities with limited public transportation.

3.1.1 National Policy

The National Transport Plan

The Norwegian National Transport Plan for 2022-2033 is a national plan document which details how the national government and relevant departments will approach national transport challenges and opportunities in the upcoming 11year period. This is a comprehensive strategic plan, which places emphasis on identifying and prioritizing the most important transport-related challenges the country faces (Samferdselsdepartementet, 2020). The NTP places important emphasis on the role transport plays in reaching national environmental and climate-related goals, while still emphasizing the importance of economic and social sustainability. Overreaching goal-categories for the plan include a section on effective use of new technologies in transport and mobility, a sub-transport plan for children and youth, and prioritization of investments in eight main "transport corridors" across the country (Samferdselsdepartementet, 2020).
Lofoten, and Røst fall into corridor eight, defined as the "Bodø – Narvik – Tromsø – Kirkenes corridor, with arms to Lofoten, and the borders to Sweden, Finland, and Russia" (Samferdselsdepartementet, 2020, p. 234). The plan document explains the importance of sea and air transport in this corridor, due to huge geographical distances that must be crossed, and identifies that the corridor already has a comprehensive network of ports and harbors along the coastline

(Samferdselsdepartementet, 2020, p. 234). The NTP sets specific goals for this northern area that ultimately seek to create an environment that will lead to greater development of local and regional business, as well as increasing the living and labor market of the region (Samferdselsdepartementet,

2020, p. 126). These goals do not come without challenges, as this northern however, corridor presents certain challenges that make these goals more difficult to achieve: this corridor is especially susceptible to tough weather and long winters, and the geography of the region make building and maintaining transport infrastructure extra challenging

(Samferdselsdepartementet,

2020, pp. 141, Additionally, most inhabitants



235). Figure 3.1: An illustration from the National Transport Plan which highlights the main challenges and priorities in each of the different transport corridors of this northern corridor reside (Samferdselsdepartementet, 2020).

in rural areas, and the transport volume is therefore much larger than the population size would usually dictate (Samferdselsdepartementet, 2020, p. 234). This presents an important challenge for planning transport in this corridor, as transport costs can be huge even when the socioeconomic benefit of implementing measures is relatively small.

At the same time, important primary industries, including the fishing industry, have a strong presence in this corridor, and have a heavy reliance on comprehensive and reliable transport systems to distribute goods to larger market regions (Samferdselsdepartementet, 2020, p. 234). Oil and tourism industries are also present in this corridor, and growth in the tourism industry has already caused some accessibility challenges in the most visited destinations, including Lofoten (Samferdselsdepartementet, 2020, p. 236). These activities and industries increase the transport needs of the region.

For this northern corridor, the focus during the first six-year period of the transport plan is on road projects, as well as some measures that will improve the safety and efficiency of sea transport in the corridor. One project detailed in the NTP strives to improve the safety and accessibility of the entry area to the harbor at Røst, due to the considerable fishing activity associated with this port. Measures include marking and deepening of the port entry area to increase safety, improve accessibility, and to allow for access to larger ships (Samferdselsdepartementet, 2020, p. 239).

The NTP emphasizes the important role smaller cities and regional centers have in providing important services and access to goods for the many rural areas that surround them. These cities are important junction points for both citizens and businesses in the region, and should be further developed and managed accordingly (Samferdselsdepartementet, 2020, p. 16). The city and regional center closest to Røst is Bodø, and any transport or policy changes impacting this city will also have important implications for Røst. Røst's reliance on the administrative center in Bodø has made the ferry connection between Røst and Bodø a significantly important infrastructure for the local community. In 2020, the national government announced a requirement that ships running on the national highway ferry connection Bodø – Moskenes – Værøy – Røst use hydrogen energy instead of fossil fuels (Samferdselsdepartementet, 2020, p. 76). This government decision will be important in creating a demand for hydrogen energy, but also for increasing the environmental sustainability of the many trips made by ferry between Røst and Bodø (Samferdselsdepartementet, 2020, p. 76).

The NTP sets a goal of catering to the needs and desires of youth and children in transport and mobility (Samferdselsdepartementet, 2020, p. 141). Limited access to opportunities and services is a big reason for the incessant rural-to-urban migration of young adults in Norway, and "large quantities of public funding have been transferred to rural areas in order to strengthen their economic viability and thereby slow down rural-to-urban migration streams" (Rye & Blekesaune, 2007, p. 170). Young people often leave their rural childhood homes in search of "the good life" in the big cities of Norway and focusing on the needs of youth and children when it comes to transport might help counteract this trend (Rye & Blekesaune, 2007, p. 185).

The NTP highlights the differences in the mobility realities of children and youth living in the city compared to those who live in the countryside: youth and children living in rural areas are far more dependent on cars for getting to school, meeting with friends, and other extracurricular activities, decreasing the level of independence they have in making these trips on their own (Samferdselsdepartementet, 2020, p. 144). The plan emphasizes how children and youth really value being able to make trips on their own, and the hope is that new technology and alternative micro-mobility solutions might increase the mobility independence of youth - not just in cities, but also in rural areas (Samferdselsdepartementet, 2020, p. 147).

While rural and regional issues in transport are touched upon in the NTP, the overwhelming focus of the plan is on urban areas, where environmental impacts of person and goods transport have received the greatest attention. The government wants to use taxpayers' money in the smartest and most efficient ways, and this means solving the biggest challenges first – while building new bridges, tunnels, harbors and train stations to better connect different parts of the country might be within financial reach, the truth is that often much of this money might be better spent on building schools, hospitals, sports halls, or for other purposes (Samferdselsdepartementet, 2020, p. 141). Rural areas are often underprioritized due to their small populations, and from a general socio-economic standpoint, this is probably the correct choice. Still, rural transport and mobility challenges have their place on the list of priorities, and often require a bit of alternative thinking to solve.

The NTP does mention an example of a demand-responsive transit service: in Sauda, a DRT service called "HentMeg" was established in 2018 and seeks to offer better transport services to residents (Samferdselsdepartementet, 2020, p. 56). This service, established by the public transport company Kolumbus, allows passengers to get picked up wherever they are, and get driven to any destination the allowed zone, at the price of а regular within bus fare (Samferdselsdepartementet, 2020, p. 56). The passengers can order the service on the phone or through an app and will get picked up by a minibus at the agreed place and time. Other passengers might already be on the minibus, and the vehicle might pick up even more passengers on the way to various destinations (Samferdselsdepartementet, 2020, p. 56). This DRT solution allowed public transport costs to be reduced by 40%, while increasing the number of passengers by 20%, compared to the regular bus service which served Sauda before (Samferdselsdepartementet, 2020, p. 56).

The inclusion of an example of a DRT service in the NTP indicates that the Norwegian National Government and planning authorities are well aware of the need for these types of alternative and inclusive mobility solutions in areas where traditional public transport systems cannot operate effectively or efficiently. Other similar pilot projects and mobility solutions have been implemented in other municipalities as well. The Ministry of Local Government and Modernization has started a two-year project for learning about smart mobility, which will contribute to new solutions for public transport and personal mobility in areas with a low customer base and long distances.

Other national transport policy

Aside from the National Transport Plan, other national transport policies have affected Røst, and other scarcely populated rural areas. The 2022 national budget included a clause to make all ferry segments with under 100,000 yearly passengers free of charge for motorized vehicles, from the summer of 2022 (Regjeringen, 2022). This policy made the ferries free for both commercial and non-commercial vehicle traffic, as multiple ferry lines had already been made free for pedestrian and bike traffic in conjunction with the start of the COVID-19

pandemic in 2020, as a way to reduce contact between ferry-workers and passengers, and reduce transmission of the virus (Berghundhaugen, 2020).

Additionally, in 2021 the national government purchased all commercial domestic flight routes that cannot be operated with an economic profit (Regjeringen, 2021). These so-called "FOT routes" are airplane routes which receive public subsidization to ensure the maintenance of the regional flight offering. FOT stands for *forpliktinger til offentlig tjenesteyting*, which means "obligations to public service". This was done in an attempt to ensure a good offering of air transport throughout the country, with most affected flight routes being in Western and Northern Norway (Regjeringen, 2021).

In mid-March of 2023, the government decided to strengthen the route offerings and reduce ticket prices on the FOT routes. The strengthening of these routes includes a halving of price ceilings and subsequent necessary increases in capacity (Regjeringen, 2023). These changes will take place from April 1st of 2024 and represent another important step in protecting the transport offerings connecting isolated communities to the rest of the country. The national government's willingness to subsidize air- and sea-transport routes connecting rural areas, despite their lack of economic profitability, indicate a willingness to prioritize rural mobility issues and contribute towards the prosperity of people and businesses in these areas.

These government subsidizations directly affected both the air- and seatransit serving Røst, as both the local flight connecting Røst to Bodø, and the ferry line connecting Røst, Værøy, Moseknes, and Bodø fell into these subsidies. The helicopter route serving the neighboring island of Værøy was also included (Regjeringen, 2021).

National policies for healthy aging

In 2018 the Ministry of Health and Care services published a policy document called "A Full Life – All Your Life: A Quality Reform for Older Persons". This document details the government's plans and goals for best supporting the aging Norwegian society, and to ensure that older adults can live full, happy, and active lives even as they get older. A main goal of this policy is that older people should be able to live in their homes as long as possible – which is the preferred option of most older people, but also puts significantly less strain on the Norwegian health and care systems (Regjeringen, 2018, p. 35). Achieving this goal will require that older adults get the support they need in mastering their everyday lives, as well as assistance with accessing necessary goods and services outside the home (Regjeringen, 2018, p. 35). The policy document also emphasizes that socialization and participation in activities are an integral part to healthy aging, and it is vital that older adults are given the tools they need to be able to access such opportunities, even if their ability and mobility decrease over time (Regjeringen, 2018, p. 22).

3.1.2 Regional Policy

The Nordland Regional Transport Plan

The Regional Transport Plan for the Nordland region is a regional planning document that provides important insight and goal setting that will have a central role in informing this thesis. The RTP is based in a common northern Norwegian strategy referred to as Fra kyst til marked, meaning "from coast to market", which is also adopted by regional planning authorities in the Troms og Finnmark region (Nordland Fylkeskommune, 2022). Already from this first slogan, one can understand the importance that is, rightfully so, given to coastal areas in developing integrated regional transport guidelines for the northern regions of Norway. The main goal of the RTP is to establish a strategy to coordinate Nordland's areas of transport responsibility in a joint plan, and to establish which measures should be prioritized so that the region can solve existing transport problems and meet the transport needs of both the present day and the future (Nordland Fylkeskommune, 2022). The regional plan strategy is of utmost relevance for transport planning and mobility solutions in rural areas, as the plan states that the transport needs in the districts must be met in "new and more effective ways", which will give the opportunity for a better transport offering, for example through the development of flexible transport solutions (Nordland Fylkeskommune, 2022; Waters, 2022).

Additionally, the plan describes how integrated transport solutions can contribute to better transportation coverage in rural areas, and improve the mobility of people living in these areas (Nordland Fylkeskommune, 2022). The plan addresses some of the challenges brought on by the COVID-19 pandemic, including how it has reduced the number of people using public transportation, and changed people's travel behaviors – the regional plan highlights the importance of accounting for these changes and addressing them (Nordland Fylkeskommune, 2022). The challenges presented by COVID-19 will be of relevance in this thesis as well. The RTP also emphasizes social mobility, which is seen to be about making the region's towns, cities, and villages accessible for as many people as possible – independent of where they live, their health, their age, their physical abilities, or their socioeconomic status (Nordland Fylkeskommune, 2022). This focus on social inclusion and its relation to mobility will also be important themes in this thesis (Waters, 2022, pp. 14 - 15).

Regional sustainability plan

The RTP has a strong foundation in all three pillars of sustainability – environmental, social, and economic sustainability – which is further emphasized in a separate regional sustainability plan titled *A sustainable Nordland: Plan strategy for cooperation and a green shift* (Nordland Fylkeskommune, 2021). In this plan, stated goals related to social sustainability will be of importance to this thesis (Waters, 2022, p. 15).

The regional sustainability plan recognizes how the region is being impacted by global trends, including urbanization. Over 60% of people in Nordland live in cities or towns, although this number is quite a bit lower than in other regions in Norway (Nordland Fylkeskommune, 2021). The rest of the population is fairly spread out, and this leads to challenges connected to work trips, the organization of service functions, and people's general "everyday life" (Nordland Fylkeskommune, 2021). The sustainability strategy highlights the struggles that many small, rural municipalities face in recruiting workforce and offering varied, central, and age-friendly housing to residents (Nordland Fylkeskommune, 2021). The sustainability plan also identifies that the region has an aging population and it is ever-important to make sure young people – both those from within the region and those coming from other areas – see this northern region as an attractive place to work, live, and establish themselves (Nordland Fylkeskommune, 2021). Mobility and transport policies will be extremely important in helping mitigate these challenges and meet these goals (Waters, 2022, p. 15).

These two regional plans will play an important role in informing this thesis because they identify the stance and goals of regional authorities when it comes to transport and sustainability in the Nordland region. A good understanding of regional policy will be vital in mapping the mobilities of the people of Røst and understanding how the regional plan strategy might affect these in the future. It is important to know where the priorities of regional planning authorities lie and identify which transport and sustainability solutions they envision for rural and coastal communities in the future.

3.1.3 Local policy and plans

Røst is a small municipality, and areal and community plans for the municipality do not give much information about local goals for transport or mobility. Røst's plan program for the municipality's community plan to be developed for 2022 to 2033 mentions that the local administration understands the importance of sustainability goals and strives to follow guidelines set by national and regional plans, which have been discussed above (Røst Kommune, 2021). This plan program also emphasizes the importance of transport infrastructure in the community, due to the large physical distance separating Røst from the mainland – the plan program determines that the airport, ferry route, fiberoptic internet network and water supply are critical themes for the future planning of this community, and there should be concrete goals and infrastructure strategies surrounding these (Røst Kommune, 2021). Further, the plan strategy states that a main goal is to develop an attractive and vibrant Røst, where people will want to live and work, and to attract new residents and visitors (Røst Kommune, 2021).

Digging deeper into the municipality's website one discovers that the local administrators have used different strategies to help make Røst a more vibrant and attractive community: an entire section on local business and development gives helpful information and insight into how one can become a small-business owner, a fisherman, or just in general develop their business in the community. Various financial support funds have been established to help entrepreneurs and local businesses succeed in the local community (Røst Kommune, 2023b). On this section of their website, the municipality published an article describing how one

can become a taxi driver in the community. This includes a detailed explanation of what one needs to do to get permission to be a taxi driver, including costs of licensing and vehicle registration, and emphasizes that it is now easier than ever to become a taxi driver in Norway (Røst Kommune, 2023c).

Røst municipality's participation in a project called "*De Grønne Øyene 2030*" reflects the community's desire to engage in sustainable growth. The project is a 10-year growth strategy for Lofoten which invites the region's six municipalities, business community, and local population to participate in a joint effort for green growth to become a low-emission society by 2030 (Røst Kommune, 2023a). The multi-year regional development project and green-growth strategy has a greater goal of sustainable development and growth, as determined by the UN's sustainable development goals, while also stimulating local businesses and developing sustainable communities and attractive places to live (Røst Kommune, 2023a). The project includes a focus area on developing zero-emission transport zones, low-emission air transport, and emission-free coastal fishing practices (Røst Kommune, 2023a).

Also on the municipal website, one finds more information on local support services offered in the community, including a so-called "*TT-kort*", or *tilrettelagt transport kort*, which roughly translates to "arranged transport card" (Røst Kommune, 2023d). According to the website, the TT-scheme offers transport for leisure activities for disabled people who may not be able to use normal public transport (Røst Kommune, 2023d). Holders of a TT-card can use it to cover the cost of transport with a local taxi service after covering a 10% deductible (Nordland Fylkeskommune, 2023). This scheme is offered in conjunction with the regional government, Nordland Fylkeskommune, and the municipal approval of an application form and medical certificate is required for individuals to gain access to the scheme (Røst Kommune, 2023d). The TT-scheme is an example of a demand-responsive transport solution in the municipality, although the scheme appears to cater to a very narrow population segment.

3.2 The Community in Røst

Røst resident and author Einar Stamnes published a book in 2021 titled *Røst* – *Ytterst i Lofoten:* the title referring to the archipelago's peripheral placement at the tip of the Lofoten peninsula. In this book, Stamnes describes in depth various aspects of Røst, including its history, geography, plant- and animal-life, culture, myths, and literature. Most interestingly, there is a section titled *Framtid* meaning "future". In this sub-chapter, Stamnes reflects on the future of the archipelago: he addresses important societal and demographic changes that threaten the community, including a substantial decrease in population and transitions in means of coastal livelihoods (Stamnes, 2021). Stamnes recognizes that youth are the future of the island, and that it is crucial that the region and community do their best to ensure that Røst is able to offer youth and young adults a place that they can count on and a future to look forward to (Stamnes, 2021). He explains how most children and youth from Røst grow up with the understanding that they will most likely move to the mainland for their higher education, unlikely to return

home for good afterwards (Stamnes, 2021). Stamnes' own interpretation of the limitations causing the exodus of young people – long periods of bad weather, cancelled flights, long ferry rides and unfavorable ferry departure times to Bodø, and limited opportunities when compared with cities – clearly indicate that physical isolation and constrained mobility is a main contributing factor and a pressing issue (Stamnes, 2021; Waters, 2022).

3.3 Conclusion

This review of national, regional, and local policy in the context of both transportation and mobility, and of the issues faced by rural and insular communities generally, reveals that there is a gap in policy in Norway. The prevailing urban focus of national policy and more specifically the zero-growth goal poses significant implications for rural areas. Unfortunately, rural and island communities tend to be overlooked in higher-level policies, particularly at the national level, where urban issues take precedence and are addressed with greater urgency. As a result, the specific challenges faced by rural areas receive inadequate attention and resources. This disparity is particularly evident in policies related to older adults and healthy aging, which often fail to sufficiently delve into issues of mobility and accessibility that are vital for aging rural communities. Additionally, transport models used in Norway, including the national passenger transport model (NTM6) and the regional passenger model (RTM) are based on transport modeling exercises in cities and broader regional areas, with the most isolated rural areas and insular communities being omitted from these methods.

Policy at all levels has a strong urban focus, and while focus on urban areas is important in a time where urban areas are growing rapidly, there is still work to be done in addressing the fundamental issues that are a catalyst for this rural-tourban migration in the first place.

It is crucial to address these gaps and ensure that the unique needs and concerns of rural areas are given the necessary consideration in policymaking, goal-setting, and budgeting processes.

4. Conceptual Framework

4.1 The New Mobilities Paradigm

"The New Mobilities Paradigm" (NMP) by Mimmi Sheller and John Urry is a theoretical basis for mobility research which will play an important role in informing the research methods and data analysis of this thesis. The NMP proposes a shift in how we understand and study mobility in our modern and ever-changing world. The authors maintain that mobility should not be seen as a simple and isolated act of movement, but rather as a complex and interconnected system that involves a multitude of factors that go far beyond the simple act of moving from point A to point B (Sheller & Urry, 2006).

The NMP places important emphasis on the growing role of technology in the movement of people, goods, information, ideas, money, power, images, and understandings, and how new technologies have made it so that networks and connections are constantly in flux and changing at ever-increasing speeds (Sheller & Urry, 2006). The paradigm explores how a technology-dependent society is quickly becoming less physically mobile, all while becoming more "on the go" and mobile when it comes to intellect, information, and other data that can easily be shared and transferred with the use of technology; this, in turn, often leads to the social exclusion of those segments of the population who are unable to keep up with this "life on the move" (Sheller & Urry, 2006, p. 222).

This theoretical foundation also looks towards the future and highlights the fast-changing nature of technology, and of mobility in a technological society (Sheller & Urry, 2006, p. 222). The NMP is useful for this study because it opens up for discussions about mobilities, rather than just transport. It explores how different types of mobilities can complement each other and recognizes that in the modern world many trips can be and are being substituted by digitalization.

When exploring potential conceptual and theoretical frameworks for this thesis, the case site in question (Røst) was connected to potential theories to understand which strengths and weaknesses that framework might have in the context of this thesis.

Table 4.1: A table showing the logic behind choosing The New Mobilities Paradigm conceptual framework for this study.

Røst (a relatively isolated island community) \rightarrow limitations on physical mobility to and from the community \rightarrow need for alternatives to physical movement \rightarrow digital mobility \rightarrow The New Mobilities Paradigm.

Some strengths of this conceptual framework are that it is a well-established theory well-connected to a broader body of research. The intersect of mobility with technology will have specific implications for both groups that are focused on in this thesis: older people due to technological challenges they might face due to lower levels of digital fluency; and youth due to having grown up in contact with technology and subsequently being more comfortable using it. This theoretical basis also connects to relevant sub-theories (see section about Tim Cresswell's proposed approach to mobility below).

Some weaknesses of the NMP framework for this thesis are that time limitations for this research project mean that the sample being analyzed will be indicative, but not definitive, and that the hypotheses and conclusions drawn by this research project will have limited external validity because they are only tested in one place. Additionally, many of the concepts being explored in this study lack a universal common understanding, which means that there is a risk of incorrect interpretation by potential future readers.

The emphasis that the NMP places on technology in the modern shift in the understanding of mobility will be important in studying the mobilities of members of a physically isolated community: access to and from Røst is affected by temporal and spatial constraints which humans have limited control over, meaning that technology for communication and access to virtual services from "the rest of the world" will be extremely important. Despite a certain degree of self-reliance, Røst is still quite dependent on the mainland and its services and infrastructure, especially those situated in the Nordland region's administrative capital, Bodø, located across Vestfjorden, and both physical and digital connections between Røst and the mainland are extremely important.

Thankfully, Røst is well-connected technologically, in part thanks to a modern and comprehensive fiberoptic internet network now serving the entire island (Stamnes, 2021). Possibilities for remote-working, remote-schooling, and other internet-based mobilities, which have become more common since the COVID-19 pandemic of 2020 and 2021, are facilitated by strong technological infrastructure and can allow people the opportunity to settle in physically removed areas without giving up employment and educational opportunities. The internet and other technologies have allowed for the emergence of new types of mobilities that place less emphasis on the physical crossing of distance and can help equalize the field in terms of social disadvantages caused by limitations on physical mobility and access to transportation.

Sheller and Urry's NMP discusses multiple different themes and topics relating to the nature and role of mobility in society. Three of these themes are especially relevant for this thesis: the complexity of mobility; the intersect between mobility and technology; and mobility as a form of power and a catalyst for inequality.

4.1.1 Relational mobilities

The New Mobilities Paradigm emphasizes how mobility is about more than just transportation – mobilities are relational, complex, and interconnected, a key part of a greater network of human experience and practice. Mobility is a way of being in the world, and a social practice which is intertwined with other practices such as socialization, communication, consumption, and work (Sheller & Urry, 2006, p. 214). Sheller and Urry criticize traditional social science approaches which have often normalized sedentarism and deterritorialization, and offered an overgeneralized and reductive description of the modern world and the role of mobility within it (Sheller & Urry, 2006, pp. 208 - 210). The authors sustain that mobility is rather a central pillar of human existence as the human desire to socialize and connect with others has made movement a necessity (Sheller & Urry, 2006, p. 215). Movement and connection are just small pieces in a larger network of nodes where the mobile and immobile collide, and this has caused the concept of mobility to evolve into something which involves all social spaces that have fostered new forms of social life within and between such nodes (Sheller & Urry, 2006, p. 213).

"All places are tied into at least thin networks of connections that stretch beyond each such place and mean that nowhere can be an 'island'" – Sheller and Urry, 2006, p. 209

The authors also argue that time spent traveling is not necessarily "dead" time, as has been assumed in traditional transportation research which distinguishes activities from travel (Lyons & Urry, 2005; Sheller & Urry, 2006). Rather, this time spent moving from place to place is an important part of the human experience and is an activity in and of itself which can include time spent working, socializing, gathering information, or simply just experiencing the journey (Sheller & Urry, 2006, p. 214). In this new approach, mobility is about much more than just moving from point A to point B, but rather all the human experiences, interactions, connections, and affordances that happen between nodes (Sheller & Urry, 2006, p. 216). This novel approach to mobility implies that mobility is deeply interwoven with all aspects of daily life: there are important connections between mobility and livelihood, mobility and education, mobility and social life, mobility and culture, and mobility and health and well-being. In describing their understanding and meaning of mobility, the authors make sure to highlight how mobility and the human mobility experience is impacted by a variety of factors, including technology and power relations, which will be discussed further below.

4.1.2 Mobilities and technology

In proposing a new paradigm for mobilities, Sheller and Urry argue that social science research has traditionally done a poor job at explaining how people actually move (Sheller & Urry, 2006, p. 212). The authors argue that multiple mobilities exist, and that movement is enhanced by various objects and technologies: the study of mobility should examine not only the trips people make, but also the immobile infrastructures, machines, technology, and other materials that play a role in the mobility process (Sheller & Urry, 2006, p. 212). Their article on the NMP was first published in the mid-2000s, a time when the types of technology available to people and how these were employed is miniscule when compared to today – yet Sheller and Urry already recognized how technology allows for new forms of coordination of people, meetings, events, trade, education, and work, and that these forms will continue to change and evolve, with even newer practices emerging as time passes (Sheller & Urry, 2006, p. 207). Sheller and Urry also highlight that there is an increasing convergence between transport and communication, as communication technology allows people to stay in touch

and communicate with others while on the move, which has led to increased copresence (Sheller & Urry, 2006, p. 221).

The use of technology in everyday life has caused – and is causing – a drastic change in mobilities: in some cases, digital alternatives have begun to completely replace once-physical trips. For many people of the developed world, digital machines that facilitate communication and connection have already become internalized, and the very way people exist and function is already changing these new technologies and machines enable people to be more mobile, all while requiring little-to-no physical movement (Sheller & Urry, 2006, p. 221). Indeed, this has made it that the most "mobile" places are also those places in which people are the most sedentary (Sheller & Urry, 2006, p. 221). The shift in mobility caused by emerging technology means that networking and consumption are happening at ever-increasing speeds, and there are certain tools that people must have access to in order to keep up (Sheller & Urry, 2006, p. 213). Access to tools such as a car, a mobile phone and internet connection, access to and budget for longdistance travel, and more, are necessary in order to fully participate in modern society, and those people without access to such tools will quickly see themselves left behind and excluded from parts of society (Sheller & Urry, 2006, p. 213). Thus emerges the role of mobility in establishing and perpetuating power relations, and how it can act as a catalyst for inequality, which will be discussed further below.

4.1.3 Mobilities as a form of power and a catalyst for inequality

As discussed above, full participation in modern society requires an array of tools for movement and connection that not all can afford or have access to (Sheller & Urry, 2006, p. 213). For people who do not have access to these tools and resources, this means that they might be at risk of being excluded from the network that makes up human society and interaction.

Lucas (2012) looks deeper into transport-related social exclusion and how The New Mobilities Paradigm helps us better understand this phenomenon (Lucas, 2012, p. 108). The author sustains that mobility in all its forms contributes to shaping societal values and practices and can perpetuate existing social strata (Lucas, 2012, p. 108). One's potential and ability to move is affected by their access to mobilities, their competence, and their appropriation, but that these are distributed unequally across social groups. This means that different people have different "opportunities to access goods, services, social networks and life chances, which results in the social exclusion of both individuals and whole communities" (Lucas, 2012, p. 108).

The issue might again lie within the speed at which society has transformed in recent decades, and that the current state of affairs prioritizes hypermobility (Lucas, 2012, p. 108). In a world where hypermobility is the norm, those who are less mobile will be excluded from many facets of society and daily life, which can turn into a perpetuating cycle in which the most vulnerable will fall further and further behind. Indeed, Sheller and Urry sustain that "there is a proliferation of places, technologies, and 'gates' that enhance the mobilities of some while reinforcing the immobilities of others" (Sheller & Urry, 2006, p. 213). One step in addressing transport-related social exclusion would be establishing a more equitable distribution of transport services, but as long as exclusive transport modes such as the car are the dominant form of transport in society, this will be difficult to achieve (Lucas, 2012, p. 108). The deep, societal-level changes that might be necessary to minimize the transport-related social exclusion of certain groups might be beyond the reach of local, regional, and national policymakers, however these entities still do play a role in what the futures of mobilities and TRSE will be.

When it comes to physical infrastructure and availability of transport, people are largely at the mercy of decision-makers at higher levels – most often regional or national authorities. While the systemic changes to social practice that will be necessary to have a more equitable distribution of resources might be outside of the scope and influence of policymakers, decisions made at all levels of government have direct impacts on the experiences and access to opportunities of their constituents. Indeed, "mobility and control over mobility reflect and reinforce power": policymakers at various levels are in control of the availability, routes, timetables, quality, and capacity of busses, planes, ferries, and other modes of public transport (Sheller & Urry, 2006, p. 211). It is important to understand that the people most affected by the routes and timetables of public transport rarely have the power and influence to affect these, thus putting them at a disadvantage. While lobbying relevant authorities is always a possibility, those in the most vulnerable positions might not have the time and resources necessary to partake in lengthy lobbying processes.

The unequal distribution of mobility resources, and modern society's emphasis on hypermobility has made transport-related social exclusion an important issue to address. Exclusive transport modes and limited access to services perpetuate this exclusion. Policymakers are in a position of power over their constituents, as they can shape accessibility and access to opportunities, thus risking the further exclusion of the most marginalized groups who do not have the resources to make their voices heard. Sheller and Urry's understanding of the role of power and equity in mobility will serve as an important framework for working towards a more inclusive future of mobility.

Towards a politics of mobility

In his article "Towards a politics of mobility", Tim Cresswell builds on the NMP and dives deeper into how mobility is deeply imbedded in politics and power relations and structures, and that historical aspects of society are important for understanding these (Cresswell, 2010, p. 17). The author describes the importance of "movement, representation, and practice to the study of mobility" and highlights the role that power and politics play in shaping mobility (Cresswell, 2010, p. 17). He also recognizes that there are certain hierarchies and power-relations at play in mobility and central to these hierarchies lie "why", "how", "what", and "when" questions which seek to better understand the needs and nature of mobility provide the foundation of a new notion of mobility being developed, that of *constellations of mobility*, which "entails considering the

historical existence of fragile senses of movement, meaning, and practice marked by distinct forms of mobile politics and regulation" (Cresswell, 2010, p. 17).

Cresswell argues that the study of mobility might benefit from shifting focus away from new aspects of mobility, and rather refocusing its attention on past trends of politics and power that are still impactful and relevant for mobility today (Cresswell, 2010). He thus introduces the constellations of mobility approach to studying mobility, which allows for the accounting of "historical senses of movement that is attentive to movement, represented meaning, and practice and the ways in which these are interrelated" (Cresswell, 2010, p. 26). Cresswell describes how shifts in mobility practices and representations have historically both impacted, and been impacted by, social classes and inequality, and struggles for political power and control (Cresswell, 2010). Different definitions and types of "mobile people" have emerged and developed over time, and along with these, new forms and practices of mobility have appeared. Cresswell sustains that we cannot understand new mobilities without first understanding old mobilities, as "elements of the past exist in the present just as elements of the future surround us" (Cresswell, 2010, p. 29).

The focus on history and historical aspects of mobility that this framework provides will be crucial to better understanding mobility and mobility practices in a place like Røst, which has very strong historical ties and a foundation based in traditional transport modes (boats and maritime transport) and industries (fishing). The focus on power, politics and social inequality emphasized by the constellations of mobility approach is also extremely relevant for a study which will seek to understand the mobility of communities whose physical isolation inherently puts them at a disadvantage when it comes to mobility and access to goods, services, and opportunities, and at the mercy of political forces and decisionmakers which are far and physically removed from them.

4.2 Conclusion

In further work on this thesis, The New Mobilities Paradigm is used as a theoretical basis to inform the choice of research methods and approach to data collection, and the analysis of gathered data. Central to the theme will be looking at mobility as more than the simple act of movement, or just transportation from point A to point B – rather, this thesis will seek to unpack the transportation domain with a more social focus, and seek to understand the role mobility plays in the daily lives of study participants, and how this role is impacted by aspects like technology, digital interface, affordances, frictions, and more. Further, this thesis attempts to identify the intersection between mobility, power, and social exclusion, and to better understand the role of historical aspects of social and political power in shaping the present-day mobility situation.

The complexity attributed to mobility in the NMP means that it will be necessary to dig deep to understand the mobility realities of the residents of the case study area. While a single-method approach might work well for a thesis about transport and transport issues, the topic at hand here is mobility, which – as described through the new paradigm of mobilities – is complex, multifaceted, interconnected, and relational. The study of mobility will therefore require a multimethod approach which should include both more straightforward, quantitative data about transport modes, destinations, and distances, but also more personal aspects of mobilities, which are often experience-based and can only be uncovered by speaking to people, allowing them to share what *they* think is important, and seeking to understand their choices, preferences, practices, experiences, and plans for the future with respect to the lived realities of their mobile/immobile world.

5. Methodology

The New Mobilities Paradigm framework gives specific recommendations for methods for mobilities research. As the NMP will be the theoretical framework for this thesis, it is natural to consider these suggested methods when deciding on an approach for data-gathering. Sheller and Urry recommend seven different methods which can be employed in mobilities research:

- Observation. Observation involves direct or indirect (possibly digital) observation of "mobile bodies undergoing various performances of travel, work, and play" (Sheller & Urry, 2006, p. 217). Special emphasis is placed on observing the relationships people have with [other] people, events, and places (Sheller & Urry, 2006, p. 217).
- Mobile ethnography. This involves participating in movement patterns while conducting ethnographic research (Sheller & Urry, 2006, p. 217). This method encourages the researcher to "be co-present within modes of movement and then employ a range of observation, interviewing, and recording techniques" (Sheller & Urry, 2006, p. 218). This ethnographic approach includes interviewing people, either individually or in focus groups, to understand "as to how their diverse mobilities constitute their patterning of everyday life" (Sheller & Urry, 2006, p. 218).
- **Time-space diaries**. These are diaries in which invited participants can record their activities and how they move through time and space to perform activities (Sheller & Urry, 2006, p. 218).
- Cyber-research. This involves exploring people's virtual mobilities through websites, multiuser discussion groups, and other digital platforms (Sheller & Urry, 2006, p. 218).
- Imaginative travel. This is a more abstract approach to mobility research which involves "experiencing or anticipating in one's imagination the 'atmosphere of place''', and can involve multimedia methods (Sheller & Urry, 2006, p. 218).
- Active development and performances of 'memory'. This is an approach which actively employs materials like photographs, letters, images, souvenirs, and objects in order to allow study participants to "reassemble memories, practices, and even landscapes in their varied sites of dwelling" (Sheller & Urry, 2006, p. 218). This method can also be challenging to employ, as it involves getting deeper inside the private worlds of participants (Sheller & Urry, 2006, p. 218).
- **Examining of 'transfer points'**. This entails examining "'places of inbetween-ness' involved in being mobile but immobilized in lounges, waiting rooms, cafés, amusement arcades, parks, hotels, airports, stations, motels, harbors. These transfer points necessitate a significant immobile network so that others can be on the move" (Sheller & Urry, 2006, p. 218).

5.1 A Mixed-Methods Approach

Given the scope of this thesis, it would not be possible to employ all methods listed above, nor would that necessarily be conducive to obtaining the best results to answer the research questions. However, the theoretical framing of this thesis suggests that a mixed-method approach (that is, combining both quantitative and qualitative data collection methods) will yield the most complete results for the research at hand (Clark et al., 2021, pp. 557 - 558). Bryman's "Social Research Methods" details 16 ways in which mixing methods can add value to social research: of the 16 ways described, the following are of special relevance to this thesis:

- **Completeness:** "the researcher can produce a fuller account of the area in which they are interested if they use both quantitative and qualitative research" (Clark et al., 2021, p. 557).
 - The goal in this case is that the quantitative and qualitative methods can complement each other the quantitative data can fill in gaps in the qualitative data and vice versa.
- Process: "quantitative research provides an account of structures in social life, but qualitative research provides a sense of process" (Clark et al., 2021, p. 557).
 - As highlighted by Sheller and Urry, mobility is complex and relational, and is both a process in life and a structure that forms social life – both quantitative and qualitative methods are required to uncover true findings about mobility (Sheller & Urry, 2006).
- **Sampling:** "one approach can allow researchers to sample respondents or cases for the other approach" (Clark et al., 2021, p. 557).
 - Respondents of a quantitative travel behavior survey were invited to volunteer for an in-depth interview (a qualitative approach) if they met required criteria.

Employing a mixed-methods approach allows the researcher to draw on quantitative data from both a simple travel behavior survey, and from qualitative interviews or workshops, to understand people's mobility practices and preferences, while also gaining important insight into the individual- and situationdependent context of these. A specific combination of the research methods for mobility suggested by Sheller and Urry has thus been selected, ensuring the gathering of both quantitative and qualitative data. The methods chosen will be described, in roughly the chronological order in which they were performed, below.

5.1.1 Cyber-research

One of the first steps of the research process was to conduct cyber-research. The main source of this cyber-research was a popular Facebook group called "Røst". The group is described as being "for all who love Røst", and a place for discussions, events, photos, and more pertaining to Røst (Facebook, 2023). This group is mainly used by Røst-residents to share photos, ask other residents for favors, and announce opportunities and events. The group is also used by outsiders who visit the community to announce their visit and ask for assistance in finding a place to stay and more (Facebook, 2023).

Alan Bryman's "Social Research Methods" gives some guidelines on using digital media in data collection for social research (Clark et al., 2021, pp. 510 - 513). In the chapter on digital media, the authors describe several different sources of media that can be subject to cyber-research: websites; blogs and vlogs; chatrooms, forums, and online communities; and social media (Clark et al., 2021, pp. 510 - 513). Due to the communal nature of this Facebook group, it has been identified as most closely fitting the characteristics of an "online community".

The approach to using information from the Facebook group in this thesis was to look through both old and new posts in the group to try to find discussions relating to transport, mobility, and other relevant topics. A search function in the group was helpful for this, and a series of keywords were searched to try to find posts and conversations of relevance. Some of the keywords used in this search are shown below:

Table 5.1:	Keywords that	were searched	in the	"Røst"	Facebook g	group.
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Searc	Search keywords used in the "Røst" Facebook Group				
0	Kjøre – to drive (other variants of this term were also used)				
0	Reise – to travel (other variants of this term were also used)				
0	Transport – transport				
0	<i>Tur</i> – trip				
0	Sitte på, skyss – to get a ride with someone (other variants of this term were				
	also used)				
0	Ferge – ferry				
0	<i>Gratis ferge</i> – free ferry				
0	<i>Båt –</i> boat				
0	<i>Buss</i> – bus				
0	Fly – airplane				
0	<i>Taxi</i> – taxi				
0	Bil – car				
0	<i>Sykkel</i> – bike				
0	Drivstoff – fuel (other variants of this term were also used)				
0	Bodø				

For this study, information from the Facebook group is not collected as data to be further analyzed later in the thesis, but rather the information is used to inform later phases of data collection. In the cyber-research research process, certain practices related to mobility in the community were discovered, and this information was vital in forming a basic ethnographic understanding which aided in formulating questions in the travel behavior survey and interviews. Throughout the cyber-research process, interesting points and discussions were documented, and this helped organize the information into topics and themes that were incorporated in later steps of data collection.

5.1.2 Online travel behavior survey

The next method employed was that of creating a simple online travel behavior survey, which allowed for the gathering of valuable quantitative data about the travel practices of Røst residents. According to Creswell (2015), the advantages of implementing quantitative methods in one's research include efficiency in data analysis, and the ability to more clearly establish relationships within data, and between causes and effects (Creswell, 2015).

A simple online travel-behavior survey was created, open for all Røst residents (except individuals under 16 years of age) to respond to. The travel behavior survey for this study (which can be seen in appendix C) was loosely based on the Norwegian standard *Reisevaneundersøkelse*, or RVU, but the questions, length, and format were simplified to allow the survey to be more accessible to a variety of respondents, with the goal of this leading to a higher response rate. The survey was hosted on the survey portal *Nettskjema*. The survey first asked for some basic information such as age and gender, before asking open-ended questions about mobility challenges, access to goods and services, and the impact of COVID-19 on their travel habits, with the opportunity to expand on their answers. Next, the survey posed more structured questions about types of trips and access to transport modes, and about regional trips to the mainland.

The survey questions were finalized and published in March of 2023. The survey was distributed in the following ways:

- Local administrators who were contacted in the early phase of the project promoted the survey on their own social media accounts and encouraged residents to answer.
- The project was introduced in the Facebook group "Røst" (described above in the section on cyber-research) and shared a link to the survey soliciting answers.
- Shortly after posting information about the research project and the survey on the Røst Facebook group, two different local newspapers for Lofoten (which also cover news in Røst) published stories about the project, survey, and the upcoming fieldwork visit to Røst in connection with the project. In these articles, readers living in the study area were encouraged to answer the survey.
- Flyers with information about the project and a QR-code link to the survey were hung on local bulletin boards in Røst.
- The survey was orally promoted during the fieldwork visit, and people were encouraged to respond.

Respondents were asked to give a self-declaration of informed consent, and that they are residents of Røst. Respondents over 60 years of age were invited (on a voluntary basis) to fill in their phone number or email address if they were interested in participating in an in-depth interview. The survey was open for two weeks, and in that time 70 answers were received. Considering the number of Røst inhabitants over the age of 16 is 409, 70 answers is a 17% response rate for the survey (SSB, 2023).

Issues with sample size and response bias means that the validity of data collected with this survey can come into question. Due to this, survey data will be used less for thorough analysis, and more so for informing further steps in the data collection process and helping to come up with questions for subsequent indepth interviews and give context to other collected data.

5.1.3 Fieldwork and observation

A fieldwork visit to Røst was deemed necessary to get a feel for the place, the community, and other factors that could provide insight for research. It was also concluded that interviews would yield best results if performed in-person, rather than through a digital platform or over the phone.

The fieldwork visit to Røst occurred in a 10-day period in the end of March 2023. During this time there were multiple community events and opportunities for socialization, which were important both to get in contact with possible participants for the study, but also to get a feel for how it is to live, move around, and participate in society in Røst. Above all, getting to know the people in the community was a priority. As part of this process, a detailed fieldwork diary was kept, which included summaries of daily experiences and impressions, a list of informal conversations that were had, and accompanying notes. During this 10-day period quite a few photos were taken, which are used as illustrative tools in subsequent sections.

While the observatory and experiential data gathered during the fieldwork visit will not be part of the actual data analysis, these will once again play an important role in giving context and understanding to the mobility (and ethnographic) situation in the community.

5.1.4 Interviews

When dealing with vulnerable population groups (physically isolated communities, older people, children, people with disabilities) it is especially important to understand participants' perspectives and experiences (Waters, 2022, p. 22). Due to data validity issues with the travel behavior survey, it was decided that interviews would be an excellent tool for best understanding the mobility situation in Røst. As previously mentioned, a main goal was to get a deeper understanding of the perspectives and mobility experiences of older adults and youth, and these groups were targeted in the interview process. Additionally, a series of "expert interviews" with local administrators were held, and these gave important and insightful information for the study.

Expert interviews

Three interviews were conducted with people from the local administration. These administrators were specifically selected based on the sector they were working in, to get a wide variety of information from different administrative sectors. In order to maintain the anonymity of the administrators in question, which is difficult to do in small towns with small local administrations, the exact department each administrator is in charge of or working in will not be directly mentioned. One administrator was contacted before the visit to Røst, and the interview was scheduled well in advance. The other two administrators were approached during the fieldwork visit to ask if they would be willing to participate in an interview.

A series of questions were prepared for the administrators, using the preliminary survey data, information from observations during the fieldwork, and information gathered from cyber-research and from reviewing the municipality's websites to provide basis for topics and questions. These interviews were done in an informal and semi-structured manner, allowing a high degree of flexibility for going "off-script" and asking follow-up questions based on the information provided.

Of special importance was trying to understand if the local administration felt as if they were receiving enough support from national and regional governments in their work towards improving the mobility situation of the community. Additionally, the administrators were asked which (if any) alternative inclusive mobility solutions are offered in the community or have been experimented with in the past. How local government administrators perceive mobility issues in the community will also be of relevance. Questions were also asked about how the COVID-19 pandemic affected the community, and what plans and ambitions the local administration has for the future. Each expert interview lasted between 40 and 90 minutes. A sample interview guide for interviews with local administrators can been seen in appendix A.

Interviews with members from specific population groups

Two main issues for rural and insular communities are identified in the literature review and background sections:

- 1. Rural areas in Norway are mainly inhabited by older adults.
- 2. Young people are leaving rural areas and very rarely return, thus exasperating the issue of aging populations in these areas.

Therefore, in working towards combatting these issues, it will be necessary to:

- Look at the needs of older adults, and how living and moving around in these rural areas can be made easier and more accessible for them.
- Look at the needs of youth in rural areas and try to understand the struggles they face relating to access to opportunities and mobility, and their reasons for leaving and potentially not returning.

There is thus a need to look closer at the mobility experiences and needs of older adults and youth in the community. It was therefore only natural that the target groups for in-depth interviews on the topic were older adults and youth. In this case, older adults were defined as people over the age of 60, and youth as people between the ages of 16 and 22. Information from the survey was used to first get a broader understanding of the mobility experiences, preferences, and needs of the target groups, and this information was used to write the interview questions. The interview questions for the two groups were nearly identical, except there were specific additional questions for older adults, and specific additional questions for youth, which were deemed to not be of relevance to the other group.

Interviewees were asked questions relating to the following topics:

• Basic background information like age and how long they have lived in Røst.

- Access to a personal motorized vehicle and other transport modes.
- \circ $\;$ Which types of daily and weekly trips are important for them.
- Whether they feel that they have access to the things they need living in Røst, and whether they personally feel they face challenges pertaining to mobility.
- \circ Their perceptions of mobility challenges in the community as a whole.
- Whether they feel that the local administration provides enough support and resources to assist those facing mobility challenges.
- Seasonal variations in their travel habits.
- Trips to the mainland.

The interviews were conducted in a semi-structured manner, meaning that there was a certain degree of flexibility in the order in which questions were asked, and there was the opportunity to ask follow-up questions. This is an excellent approach for gathering qualitative data, as a non-rigid interview set-up makes it easier for interviewees to talk about the things that they deem most important and wish to share.

Interviews with older adults and youth lasted between 25 and 60 minutes. An interview guide for these groups can be found in appendix B. All interviewees were briefed on the research topic and the purpose of the interview beforehand. Interviewees also gave informed consent to participate in the interview. In total, ten participants were interviewed. Five from the older adults group, and five from the youth group (four in a focus group interview setting, and one in a one-on-one interview).

5.2 Data Validity and Weaknesses of the Method

5.2.1 Sample size

A challenge that this specific case presents in terms of quantitative data collection is the population size: primary survey data requires large sample sizes to be valid. Sufficiently large sample sizes would be very difficult to achieve in islands communities with just around 500 people living there.

While Bryman's "Social Research Methods" does not provide a specific number of survey responses that are necessary to achieve sufficient data validity, the authors do list various factors that can influence the sample size needed for a particular study (Clark et al., 2021, p. 180). The authors suggest that sample size should be determined based on the research design, the variability of the population, the research questions, the desired level of accuracy, and the resources available for data collection t al., 2021, p. 180). While a large sample size is generally preferred for most accurate results and reduced bias, this is not possible in all cases. In this case, a challenge to obtaining a large sample size is that only 469 people actually live in Røst as of early 2023, and only 409 of these are over the age of 16, which was a requirement for study participation based on ethical requirements from the Norwegian Center for Research Data (SSB, 2023).

Seventy responses were received to the survey. For a population size of 409, as described above, this implies a margin of error of 11% and a confidence

level of 95%. The small population size makes it extremely difficult to achieve a smaller margin of error at the same confidence level. However, 70 responses indicate a 17% response rate, which is quite high. Additionally, as previously mentioned, the quantitative data collected in the survey is to be analyzed rather superficially with the main purpose of informing further data collection methods, rather than being used as a basis for specific conclusions. Therefore, despite the high margin of error, 70 survey respondents out of a population of 409 was considered acceptable for the purpose of this master's thesis.

5.2.2 Potential for bias

Another weakness with the data collection method is the potential for bias. A specific concern for this research project is bias emerging from the sampling methods – how respondents were recruited to participate in this study:

The exclusive use of an online platform to host the travel behavior survey affects the type of people who respond to the survey. According to Bryman's "Social Research Methods", "internet users have traditionally been seen as a biased sample of the population", and that they tend to have certain characteristics that are not necessarily representative of the general population (Clark et al., 2021, p. 184). Importantly, the most active internet users are from the younger segments of population, which means that the online travel behavior survey might not have been as accessible to the older cohorts in the study area. While 20% of respondents to the travel behavior survey were over the age of 60, only 1.4% of respondents were 70 or over, and there were no respondents in categories for ages higher than 70 to 79 years old. A 1.4% response rate for adults over the age of 70 provides a poor representation of a population group in which 20.3% of people are over the age of 70 (SSB, 2023).



Figure 5.1: Bar graph illustrating the proportion of Røst's population per age category compared to the proportion of survey respondents per age category (SSB, 2022).

Even though there was a high response rate from older adults generally, the response rate from the oldest cohorts was extremely low. Other methods of distributing the survey could have been employed to try to obtain a higher response rate from the older cohorts. However, the time and scope constraints of this thesis made this difficult. Considering that it is members of the oldest cohorts in society who are most likely to be those who experience mobility challenges, the limited rate of response from these groups may mean that this data will fail to requisitely represent the full mobility situation in the community.

A small response rate from the oldest cohorts in the population also made it difficult to recruit people from this population segment for in-depth interviews.

Interviewees were recruited in the following ways:

- Older adults were invited to leave their contact information in the survey if they were interested in participating in an in-depth one-on-one interview.
- The leader of a local youth organization was contacted to invite members of that local youth organization to participate in a focus group interview.
- At least two individuals were approached directly during the fieldwork and invited to participate in a one-on-one interview.

In total, five people over the age of 60 voluntarily expressed interest in participating in an in-depth interview and left their contact information in the online travel behavior survey. Three of these were interviewed, and the last two individuals who volunteered were not interviewed due to scheduling issues. Two other older adults were approached during the fieldwork visit and agreed to participate in interviews, including one respondent in the 90 to 99 age category. Two issues emerge from this method of recruiting interviewees:

First, as previously mentioned, it appears that few people over the age of 70 came across the survey and were able to answer it. This means that members of this population group did not have the chance to volunteer to be interviewed, since they might not have heard about the project or the opportunity.

Second, attempts to compensate for this shortcoming were made by approaching people directly and inviting them to participate in an interview. However, it was generally only possible to approach these people when they were out and about in the community, or through a common contact. Naturally, the least mobile groups of society are less likely to be out in the first place, thus decreasing the likelihood that they would be the ones who were approached and invited to be interviewed.

For this study, which specifically seeks to better understand the travel behaviors and mobility challenges of older adults and explores issues like transport-related social exclusion, this can pose a substantial problem. While time and resource constraints limited the possibilities to mitigate this issue, it will be important to keep these considerations in mind when analyzing data, discussing findings, and drawing conclusions.

5.2.3 Language

A final challenge in the data collection process was that of language. First, despite it not being the primary researcher's native language, most steps in the

data collection process were in Norwegian: government websites and documents, as well as forum posts and discussions were in Norwegian. The travel behavior survey was written in Norwegian (by the researcher). The interviews were performed, and transcribed in Norwegian, and coding was performed on the transcriptions in Norwegian before translation. Only sections of the interviews that were of particular interest or direct quotes were translated into English.

Despite not being a native Norwegian speaker, the researcher is considered fluent and felt confident enough in their language abilities to use the language in these important steps of data collection. It was assumed that the respondents would be most comfortable answering a survey and participating in an interview in their own native language, and that they would also best be able to express themselves this way. There is of course still a risk of misunderstanding and things getting "lost in translation", but ample time to process the data and the opportunity to listen back to audio recordings of interviews helped minimize misunderstandings. Additionally, other language resources were available to help clarify any questions relating to language that might have arisen.

A second challenge related to language was that of dialect. The researcher is most familiar with and comfortable using a neutral dialect of Norwegian, which is very similar to the written version of the language, Bokmål. In Røst, most residents speak a local version of the Northern Norwegian dialect. While the researcher has lived in Northern Norway for multiple years, certain local variations in vocabulary, tone, and syntax were still unfamiliar to them. Aware of this potential issue, the researcher had no problem asking for clarification of specific dialect terms and expressions they were not familiar with, and the respondents were happy to provide explanations. The interview recordings also proved valuable for minimizing the risk of dialect-related misunderstandings.

Early in the fieldwork visit, feedback was given from an interviewee (who had also responded to the survey) that they had found the wording of some of the survey questions confusing, and that this might have affected their responses. Specifically, the respondent noted that, in her dialect, the term & reise ("to travel") is reserved for trips that span an extended time and distance and is not used to refer to daily trips and in the context of daily mobility. Despite having made a conscious effort to explain the notion of "daily trips" in the survey, it must be recognized that a misunderstanding occurred here, and that it might not be an isolated incident. This is important to keep in mind during the data analysis process.

5.3 Ethics

During the data collection processes described above, the question of ethics was raised and considered several times. In each such instance, it was important to consider whether the methodological practices in question could be reasonably justified in the context of the research at hand. To ensure ethical research, the privacy of the respondents was ensured throughout all steps of data handling, including collection, analysis, and storage. A notification form about the research project to the Norwegian Center for Research Data (NSD) was submitted, and the

proposed method of handling personal data was deemed satisfactory based on existing privacy regulations. In addition, a letter for informed consent was attached to the survey and provided to interviewees. In this letter, respondents were informed about how their information would be stored and handled and were asked to consent to participating in the study. Additionally, respondents were anonymized wherever, and as much as, possible.

Another question of ethics was raised in regard to the practice of "lurking" in an online forum or discussion group: during the cyber-research process there was no participation by the observing party in any of the relevant online posts or discussions: according to Bryman's "Social Research Methods", this practice of "lurking" can sometimes be seen as ethically questionable because the posters are not informed and able to consent (Clark et al., 2021, p. 512). A counterargument is that "traditional principles of ethical practice are sufficient in dealing with 'public' data such as that found in open forums" (Clark et al., 2021, p. 512). If observations from posts and discussions in an online forum are part of a wider observational ethnography, where it is not always possible to continuously gain informed consent, such information should be deemed ethical and admissible (Clark et al., 2021, p. 512). Additionally, since information from the Facebook group is not collected as data that will be further analyzed later in the thesis, but rather as a tool for informing and giving context to other methods, this practice should be considered ethically acceptable.

5.4 Data Analysis

5.4.1 Quantitative data

The quantitative data obtained from the simple travel behavior survey was analyzed to get a basic understanding of travel behaviors of residents of the community, especially the main groups of interest: youth between 16 and 22, and adults over the age of 60. The goal was to identify trends in the travel behavior of these two population groups, so that one can identify what differentiates their travel habits from those of the greater population, which will help inform further data gathering steps (specifically, the designing of the interview questions). In this case, the most relevant variable to analyze was therefore age, and a univariate data analysis was the natural choice. Univariate analysis involves analyzing one variable at a time, which produces "descriptive statistics" which are summaries of data which can help give the data meaning (Clark et al., 2021, p. 325).

The program SSPS was used to aid in this step of data analysis, and a univariate analysis on the variable of age was performed in order to identify which answers vary most on the basis of the variable of age. The small sample size for the survey that any information and results that emerged from the analysis were not statistically significant and were not considered actual findings for this thesis and were rather used to inform further steps and methods in the data-gathering process. Answers to open-ended questions of the survey offered up important information about topics that could later be taken up in interviews: both in expert interviews, but also in interviews with older adults and youth.

5.4.2 Qualitative data

Audio recordings were taken during all in-depth interviews, with consent from each interviewee. Due to the importance of asking relevant follow-up questions, no notes were taken during the interviews to ensure that it was possible to play close attention to each answer. Upon returning from the fieldwork visit, five days were dedicated to transcribing all the interview recordings. While a software could have been used to aid in the transcribing process, a special value was found in transcribing all interviews manually– this gave the opportunity to fully re-listen to each interview, which allowed the information to be processed for a second time, with the option to scroll back and listen again. This was an excellent priming exercise for further analysis of the interview data. While the transcribing was tedious, it greatly contributed to the initial understanding of the gathered data and was therefore a vital part of the data analysis process.

The analysis of the interview data was roughly based in grounded theory. Grounded theory is theory that derives from data, with the data being systematically analyzed and gathered, in tandem, throughout the research process (Clark et al., 2021, p. 361). While contradicting definitions of grounded theory exist, this thesis will use grounded theory as an approach to the generation of theory out of gathered data (Clark et al., 2021, p. 361).

The next step in data analysis after the transcribing of the interviews was a process called "coding". This process involves breaking down the data into its component parts, and giving these parts names or labels (Clark et al., 2021, p. 527). Themes emerge from the data itself, rather than the data fitting into some preconceived standardized themes or codes, and the way the data is interpreted will influence the emergent codes and themes (Clark et al., 2021, p. 527). Throughout the coding process, codes and categories were constantly being compared across data and between data and conceptualization, to ensure that these are closely enough related to each other (Clark et al., 2021, p. 527). Notes were also taken during the coding process, which helped in the process of comparison. The processes of coding and constant comparison allows one to explore the relationships between categories, and eventually lead to certain hypotheses which can be tested and will later contribute to substantive theory related to the original research questions upon which the data gathering and analysis design was based (Clark et al., 2021, p. 530).

The method employed in this project deviated slightly from traditional grounded theory, as the process was not as iterative and exhaustive. Rather, the analysis of data to generate theory continued until the theory and findings generated are deemed to "satisfice" the purpose of this thesis. This approach is taken due to time and resource constraints. Additionally, the scope of this master's thesis was limiting in that it was not possible to test the resulting substantive theory with data collection and analysis in other settings, but the emergent grounded theory should suffice in providing the basis for discussion on this specific research topic (Clark et al., 2021, p. 530). This data analysis process allows for the identification of trends, themes, and categories within the data which provide the basis for further discussion and eventual conclusions.

6. Findings

The combination of data collection methods employed in this study led to an interesting set of findings, which will be described below. The coding process during data analysis allowed for the identification of a series of topics that helped organize and frame the findings. These categories are types of trips (with an important differentiation between local and regional trips); types of transport modes; types of people; and external factors impacting both the mobility situation in the community, but also the community itself. These external factors are grouped into further categories: seasons and weather; the COVID-19 pandemic; societal characteristics; the digitalization of society; and development, sustainability, and the green transition.

6.1 Types of Trips

6.1.1 Local trips



Figure 6.1: A map of Røst showing important meeting places and landmarks (Røst Kommune, 2019).

Local trips are trips within the municipality, and can most easily be categorized into work trips, school trips, social and leisure trips, shopping trips, and healthcare trips. Which of these trips are most important in residents' daily lives, and the transport modes chosen to reach these destinations, is largely dependent on age. The map in figure 6.1 gives an overview of the locations of various workplaces, eateries, shops, and other meeting places in Røst. Important points include the ferry dock at point number 1; the harbor area with the local store, fish processing factories, and multiple hotels and eateries around points number 2 and 3; the sports hall, soccer field, school, and town hall located around point number 6; the church located at point number 7; and the airport indicated with an airplane symbol. A point relating to local trips that was made was that important community buildings and functions including the school and local store are located far from each other on the island, and residential areas are quite spread out between these two areas, and beyond them. This was considered a challenge in the community, and a wish for a more consolidated town center was mentioned by multiple respondents.

Work trips

Work trips were not extremely common for interviewees (since they were either youth or retirees), but some respondents were still able to share some information about local work trips – either retirees who recounted past experiences, or youth who undertake seasonal work, usually in connection with the winter fishery which takes place from February to Easter each year.

Workplaces are concentrated in three areas: near the harbor on the southwest side of the archipelago (points 2 and 3 on the map in figure 6.1); near the school, church, and town hall in the middle of the main island (point 6 on the map); or at the airport, on the north side of the island.

It is not uncommon for youth in island communities such as Røst to get jobs cutting cod tongues at the local fish processing plants during the winter season. This area where the fish processing plants are located is relatively far from most of the residential areas in Røst, so the youth who were interviewed explained that they relied on family members to give them rides to work (which is generally seven long days a week) during the busy winter season. While some explained that they could potentially walk or bike there, the tough winter weather and importance of getting to work on time made getting a ride the preferred option.

Several retired respondents shared some of their experiences with work trips from their time in the workforce. Their chosen transport mode depended mostly on how far they lived from their workplace. Two interviewees explained how their jobs at the town hall and school were close enough to their homes that they could easily walk to work in all seasons and weather. Two other interviewees both worked at the airport for many years, and despite living equally as far from work, one drove nearly every day, while the other interviewee biked on all except the harshest weather days, in which case he chose to walk instead. This suggests that personal preference and lifestyle also impacts the choice of transport mode for local work trips.

One respondent talked about how their job in the air traffic control tower was affected when the tower in Røst was shut down, with a remote tower in Bodø taking over responsibility for weather observations and air traffic around Røst. He was offered to continue his employment in Bodø, but opted instead to retire early, as he felt that the "commuter lifestyle", commuting to and from the mainland on a weekly basis, was not for him. "I live in Røst because I want to live in Røst", he said, explaining that weekly commuting would likely mean spending most of his week away, and long days traveling to and from the two locations.

School trips

Four of the five youth who were interviewed were in the 10th grade, which is the last class offered at the local school, as there is no upper secondary school in Røst and most youth move to either Bodø or Leknes to attend high school. These youth mentioned school trips as being one of the most important types of daily trips they make, and all interviewees expressed that they live close enough to the school that they walk to school every day. In instances of extreme weather, those who live the farthest (though still within a generally accepted walking distance) might get a ride from a family member.

In the interviews, multiple youth explained that while they live close enough to school to be able to walk there, other children and youth who live on the far northeast or southwest parts of the archipelago are reliant on family members (usually their parents) for rides to school, as there is no school bus available in the community. The youth explained that a few years ago (one of them estimated that it was not long before the COVID-19 pandemic started) there was a minibus which drove from one end of the community to the other in the mornings and afternoons, and schoolchildren were able to use this bus to get to school. However, the service stopped shortly after it started – it was not clear why: one youth assumed it was related to the pandemic, while another hypothesized that it might have had something to do with the driver not having all the necessary paperwork to run such a service.

Social and leisure trips

Trips for socialization and general participation in society were extremely

important to respondents across all age groups, however, the opportunities and destinations for these types of trips varied significantly depending on age.

Youth

When asked about if they felt they had access to the "things they need" in Røst, nearly all youth responded that there is very little to do for young people. One youth explained that she feels like there are very few activities available for older kids and youth. Another said that he misses the opportunity to participate in organized sports, and that there was a bigger offering before, which has slowly disappeared. He hypothesized that the COVID-19 pandemic might have played a role here: many activities and events had to be shut down during the pandemic, and few of these offerings have started up again once society reopened. Another youth chimed in that she feels that this might be related to the road in the snow. Photo: Sarah Waters.



Figure 6.2: A group of youth walking along

the population levels in the community, which have slowly but steadily declined over time, meaning that there are not enough children and youth to offer many organized sports and extracurricular activities.

"The biggest issue for us young people is that there is very little to do here..." – youth, 16, during a focus group interview.

Another issue raised was the lack of meeting places for youth. The youth gave a few examples of local public houses and locations where they are allowed to meet and hang out, to socialize, listen to music, and have fun together. But these are open only at specific times, and not very often. Harsh weather conditions, especially in the wintertime, make the availability of indoor meeting places for youth extremely important. Indeed, there appears to be a noticeable seasonal variation in the frequency and types of trips youth make for socialization and activities. The youth explained how winters can be long and boring for those who do not have employment cutting cod tongues at the local fish factories. Those who do have these jobs are extremely busy during the season, leaving those without employment with little to do and even fewer friends to hang out with.

In the summer, however, nice weather days are often spent on the small islands and skerries of the archipelago hanging out in the midnight sun, socializing, and grilling. Some of the youth have access to small skiffs or dinghy boats (approximately 15-foot-long boats with outboard engines) with which they can drive around to various pontoons and docks on the main archipelago to pick up their friends close to their homes before jetting out to the islands for a day of fun. Questions as to the legality of this practice concerning boating licenses and a minimum age requirement were brushed off: "That's just how it is here... I mean, our parents were driving boats when they were our age too, if not when they were even younger".

Depending on the location of activities and meeting places, most youth would try to get there on their own – mainly by foot, but sometimes with electric scooter (which one interviewee had, and used year-round), or by bike during the non-winter months. The youth interviewed were old enough that they valued a high degree of independence, especially when it came to getting to and from places where they would meet their friends.

Older adults

In general, older adults felt that there was an abundance of activities, events, and options for socialization in the community. Upon retiring people generally have a lot of free time that they can spend as they wish, and hobbies become an important driver and catalyst for daily trips for older adults.

"When I retired, I finally had time to prioritize some of the things that I had put on the backburner earlier." – woman, 69, during a one-on-one interview.

The robust community offers many different organizations and opportunities for involvement, which means that people can easily find ways to socialize and

meet people, if they wish. There appeared to be many different things happening on a weekly basis, meaning that those who wish can pretty much find something social to do every day of the week. This included a weekly knitting circle, a "language café" organized in collaboration with the community's Ukrainian refugees, and a weekly fish-dinner special at one of the local restaurants every Wednesday. There are plenty of meeting places such as cafés, and restaurants, and it is not uncommon to find groups of older adults gathered at these locations socializing and having coffee on any given day of the week.

Some interviewees explained how many activities and organizations had shut down at the start of the pandemic, and a lot of these have been slow to start up again. For example, a local dancing group was mentioned multiple times, and is sorely missed by members who enjoyed the weekly dance meetups, and the opportunity to do some fun physical activity. Community members see this as a loss but understand that some people are still wary and overly cautious out of fear for the virus.

Most older adults who had access to a car said they were most likely to drive for trips for socialization and activities, especially in the winter. Those who lived close enough to the various local meeting places (the parish house, the local gym, cafés, restaurants, etc.) would walk or bike, when possible, but might still choose to drive in instances of very bad weather. One interviewee who did not drive said that she might sometimes rely on her husband to drive her to various events and activities, but that distances are still short enough that it would not take him a significant amount of time and was therefore not a bother for him. A woman in her 90s who still has her driver's license and drives with ease all over the community explained that she is terrified of the day when she can no longer drive, as she feels that her car and license are extremely important for her to access activities and opportunities for socialization.

While none of the older adults interviewed felt that they faced mobility challenges so great that they were at risk of being excluded from social activities, multiple interviewees explained that they feel that there are others in the

community who are more likely to be excluded from certain aspects of society due to mobility-related challenges. Specifically, all interviewees mentioned that the taxi service being shut down around four years prior was a big loss for the community, as those people who did not drive and perhaps did not have enough social capital to be able to rely on friends and family



Figure 6.3: A group of Røstværinger gathered for an event in the town square. Photo: Sarah Waters.

members for rides lost an important resource for daily mobility. Some interviewees explained how they, along with other retirees in the community, have stepped up to offer rides to these people. The municipality has also set up an informal ride-offering service for special events, such as the 17th of May celebrations or to access voting locations during elections. A big issue with these informal ride-giving solutions, is that often people do not want to call and ask for a ride because they "don't want to be a bother", meaning that they might elect to stay home and miss out on something they would have enjoyed attending rather than "bothering someone" by asking for a ride.

Shopping trips

Trips to the local store were some of the most mentioned and seemingly most important types of trips for older adults. Local shopping trips were seen both as a way to get access to necessary food goods and other items, but also as an important social opportunity for people, especially older people. There are alternatives for accessing food goods for people who might not be able to get to the shop on their own: the store offers a delivery service, and in some instances people who struggle to get out might have others do their shopping for them. However, multiple interviewees emphasized that the social aspect of going to the shop and seeing your neighbors and meeting your friends for a coffee and a chat cannot be replaced. This was recognized as being typical of a small town. The local shop in Røst has a small area with a coffee machine and tables and chairs where people can sit and socialize before or after they do their shopping, and this area is very often in use.

One interviewee explained that there is a retired woman in the community who has "formalized" her ride-offering to those who do not drive, in that she has started driving the same people (sometimes in small groups) to the local shop at set days and times. This means that she does a round to pick people up on the way to the shop, where everyone can do their weekly shopping before sitting down together for a coffee and chat before driving back home. The interviewees who discussed this woman's ride-giving offering also emphasized that it appears she really enjoyed driving, as it was an excellent opportunity for her to socialize as well.

Most interviewees said that they drive to the store to do their shopping, mostly because these trips involve purchasing goods that would be heavy and cumbersome to walk or bike home with. The local post office where people can pick up packages is also located in the shop, and picking up packages here was also mentioned as a reason to drive. Two female interviewees explained that when the weather is particularly nice, they might walk to the shop, even up to 30 minutes one way, then call their husbands to pick them up if they end up purchasing many items. One man who does not drive explained that he bikes to the store to do his shopping, and usually only goes when he needs something. When asked about biking in adverse weather, he said that he chooses to go to the shop on days on which he considers the weather to be nice enough to bike – and he is sure to have at least a two-week supply of necessary food and items at home in case of longer periods of adverse weather.

Healthcare trips

In accordance with national guidelines, Røst municipality has a goal ensuring that older adults in the community can live at home for as long as possible. To work towards this goal, the municipality offers services that might help older adults live at home longer, such as assistance with shopping trips, getting to doctor's appointments, and more. The municipal health department offers transportation (in the form of rides) to patients who need to get to doctor's appointments, or to the airport or ferry terminal to catch a plane or ferry to the mainland for an appointment at the hospital. There is also a "mobile doctor" who has a dedicated doctor car and makes home visits to people who might otherwise struggle to get to the doctor's office. This dedicated doctor vehicle is brand new in the community, and local administrators consider it a great advantage to have a properly marked medical vehicle, especially in emergency situations. Local healthcare trips were not mentioned often by the groups interviewed in this study, as trips they take for health purposes were more likely to be regional trips to the hospital in Bodø for specialty doctor's visits and services that are not available in Røst.



Figure 6.4: The new medical car in Røst. Photo: Sarah Waters.

6.1.2 Regional trips

Regional trips include trips to the mainland and Bodø, but also trips to Lofoten and other places in Norway. The purpose for regional trips, their frequency, and the chosen transport mode (plane or ferry) seemed to depend mainly on the age of the respondent, and occasionally on the season. Most regional trips fall under five categories, and many times multiple trip purposes are combined into the same trip. Multiple interviewees differentiated activities on the mainland and activities happening in Røst with terms such as *der ute* ("out there") and *her inne*

("in here") and referred to the act of taking the ferry over the fjord to the mainland as å dra innover ("to head in [to somewhere]").

Work trips

While most respondents who were interviewed were either retirees or youth who did not have any regional work trips, multiple interviewees who are retired explained how they used to take a lot of regional trips for work, when they were still working. The destinations for work trips that were most mentioned were Bodø, Svolvær, and Oslo. Regional work trips were mostly taken by plane. The respondents explained that work trips were often on tight schedules, and that their employer was covering the cost of travel, so the airplane was seen as the most efficient mode of transport, and the time saved was considered worth paying the higher price. Traveling by plane was also the only way in which it would be possible to travel to a regional or national administrative center and back in the same day, with plenty of time for work meetings during the day and removing the need (and cost) of spending a night or two in a hotel.

School trips

Regional trips for education (at both the high school and university level) were very important trips for youth in the community. After the 10th grade youth need to move away from Røst if they want to continue their education in high school. This can be very difficult both financially, socially, and psychologically, and some students end up quitting after a short time due to these challenges. The options for where to go to high school are usually Bodø or Leknes (Lofoten), but most students choose Bodø because it is easier to travel to and from, and students are more likely to have a family member or other acquaintances already living or studying there.

Local teachers, students, and administrators have put in a lot of work over the years lobbying the responsible authorities to set up the ferry routes and timetables in a way that most benefits high school and university students commuting between Bodø and Røst. It is considered paramount that the ferry times and routes are set up in a way that accommodates academic schedules and allows the students to miss as little school as possible, while still having the chance to come home to their families on the weekends.

Social and leisure trips

Many respondents cited taking social and leisure trips to the mainland, often combining these with shopping or service-related trips (such as physical therapy, dentist, or hairdresser appointments). The main purposes for social and leisure trips were to visit family or friends, to go to the movies or a restaurant, to attend a sporting event or concert, or to participate in any other type of social or freetime activity not available in Røst. Many interviewees said that they have family members living in Bodø, while others had family in farther away cities such as Trondheim, Tromsø, and Oslo. Visiting these family members was considered an important activity by all, though those with family in Bodø found it easier to visit than those who had family in other cities that require onward travel from Bodø.

Multiple interviewees described how social and leisure trips were some of the first types of regional trips to be reduced or eliminated both during the COVID-

19 pandemic, but also after the pandemic when price levels began to rise. Some interviewees described how before the pandemic they might be very likely to travel to Bodø on a whim for something like a concert or cultural event, but now the threshold for such leisure trips is much higher due to a general increase in the cost of living. Regional trips are also much more expensive for Røst residents who do not have family they can stay with in Bodø, as they then must find and pay for a place to stay. Respondents with family members or a free place to stay in Bodø were more likely to make regional social and leisure trips.

Shopping trips

Shopping was one of the most mentioned reasons for taking trips to the mainland. Regional shopping trips were almost exclusively made by ferry. The goal with shopping trips to the mainland was most often to purchase goods that cannot be bought in Røst (whether due to a complete lack or a very limited selection). Specific examples mentioned were books, clothing and shoes, and electronics. When asked which items they are most likely to travel to the mainland to buy, youth were more likely to mention things like electronics and books, whereas the older adults were more likely to mention food and fuel. Respondents from both groups mentioned clothes. Multiple respondents from the older adults group mentioned that it was not uncommon for them to take a trip to the mainland to buy something for the house – a small furniture item, décor, or similar items. While some such items are available at the local shop in Røst, the selection is limited, and prices are generally higher.

Price was another main reason for taking regional shopping trips. Multiple interviewees mentioned that food goods, building materials, and fuel are often much cheaper in Bodø, so it is not uncommon for people to travel to the mainland to purchase such things. However, most interviewees explained that they still use the local store for most food shopping and might only shop for food in Bodø when they are already on the mainland for another purpose.

The ferry being made free for cars in the summer of 2022 was mentioned as being an important catalyst for increasing regional shopping trips. Multiple interviewees responded that the threshold for jumping into the car and taking it over the fjord to Bodø to do some shopping was lowered significantly when the ferry was made free for cars. It appears that this was more common practice in the early days, when the ferry was first made free, but has become less common now, for two reasons: first, there are very few days of the week that one can take the ferry to Bodø, do some shopping, and travel back the same day. Most often, such a visit would require an overnight stay, which can be expensive and impractical. Second, people generally understand the importance of supporting the local shop. When the policy was first implemented, there were concerns about how this would impact the Joker store in Røst. Residents value the store's selection, service, and quality, and there were fears that people doing their shopping elsewhere could harm the viability of the shop, and at worst force its closure. However, many interviewees mentioned that they truly believed that if the local shop was ever at risk, the local community would step up and support it to ensure its survival.
Healthcare trips

Healthcare trips are a very important type of trip for older adults, both in terms of local trips to the doctor's office, but also trips to Bodø for specialty appointments at the hospital. Healthcare-related trips were one of the main reasons respondents in the older adults group gave for taking trips to the mainland, and the most likely reason to increase the frequency of regional trips.

While some respondents choose to take the plane for trips to the hospital in Bodø, others might take the ferry. A common practice is to use a combination of both modes: *Helfo* (the administrative agency under the Norwegian Ministry of Health and Care services) gives a certain allowance to cover travel costs through a scheme called *Pasientreiser* ("patient trips"), generally covering the cost of the "cheapest alternative" trip. The cheapest alternative is most often flying one way and taking the (free) ferry the other way, as taking the ferry both ways would almost always lead to a need for spending a night in Bodø which would be an additional cost.

Older adults who are not as able-bodied or healthy might struggle to take a long ferry trip and might therefore be more likely to fly both ways. Comfort and reliability are important factors in choosing a transport mode for regional healthcare trips – the airplane is generally considered to offer a higher level of comfort and reliability than the ferry – as the trip is shorter, the plane makes it more likely to be able to travel in adverse weather, and there is a smaller likelihood of getting motion-sick. There is also an ambulance airplane (and helicopter for days with more adverse weather) serving the community which is used to transport acutely ill patients to the hospital in Bodø. This is an excellent service which works very well – patients from Røst generally get to the hospital faster than residents of rural villages on the mainland who might have to ride in an ambulance for multiple hours (the ambulance plane takes about 20 minutes to get a patient to the hospital from Røst).

6.2 Types of Transport Modes

There was a huge variety in the types of transport modes brought up in survey answers and interviews, and many different types of transport modes were also observed during the fieldwork visit to Røst. Personal motor vehicles were the most mentioned type of transport mode, giving an indication of a certain degree of car dependence in the community.

6.2.1 Motorized road-driving vehicles

Car

In interviews with older adults, car use and car dependence were "polarizing" issues, but those who had a driver's license say that it is very important for them to keep their license as long as possible. Some interviewees felt that a car was an absolute necessity to get around in the community and seemed very reliant on it. Others did not have a car and were adamant that they did not need one and that they are still able to get everywhere they needed to without it. In such cases, the respondents had very good alternatives to car-

driving: one woman's husband had access to a car and was able and willing to drive her most places she needed to go. This interviewee also felt that since she lives in a central location, she can walk and bike to most of her daily destinations with ease, at least when the weather is good. Another interviewee who lives alone explained how he bikes pretty much everywhere, and, in the few instances in which he might need to be driven somewhere, he has a family member who lives on the other side of the archipelago who can drive him. He said that the only places he might ever really need a ride to are the airport or ferry dock if he is going to the mainland for a medical appointment.

Seventy-seven percent of survey respondents answered that either they or someone else in their household owns or leases a car, and 22% responded that they did not have access to a car at all. Those who do have cars seem to get good use out of them, even in a place where distances are relatively small. Multiple people mentioned that sometimes they "go for a drive", just for fun, the same way one might go for an evening walk. Multiple interviewees also expressed that having access to a car lowers the threshold for using a motorized vehicle significantly, and they end up driving for trips that they might have otherwise been perfectly fine walking or biking for.

"It is so easy to just jump in the car when you have one..." – Woman, 73, during a one-on-one interview.

In general, it is a well-known fact that not everyone in the community has access to a car, but in a small and tight-knit community most people know each other, so the threshold is very low to ask a friend or neighbor for a ride, if one needs it. Trips that were deemed most important to drive to were shopping trips, and trips to the ferry dock or airport for those traveling onwards with luggage.

It was also mentioned that there is no driving school service in the community that youth and others who do not drive yet can use to get their license. One must travel to Bodø, Leknes or another bigger settlement to take driving courses and tests, which can be quite impractical and expensive. This has made it so that some younger people delay getting their licenses due to the impracticality and extra costs involved in going to driving school in a different city. However, in the early summer of 2023, a traffic school in Leknes (in collaboration with the local government and local business association) will be arranging a basic traffic course in Røst, which will give people the opportunity to start the process of getting a driver's license without having to travel to a different town.

Taxi

A taxi service, or the lack thereof, was a topic that came up in every single interview, both in expert interviews, and interviews with youth and older adults. Everyone expressed that the taxi service being shut down was a big loss for the community, and that the service is sorely missed. There was a taxi in Røst up until a few years ago. The municipality is working very hard to try to get someone new to start up a taxi service, by offering incentives and financial aid, but to no avail. The main barrier here is that the customer base in Røst is too small for someone to be able to make a proper living off running a taxi service – it would most likely need to be combined with some other part-time job. There was a time when the local taxi driver combined a taxi business with two other driving-based services: he also acted as the local mailman and drove the patient-transport vehicle for healthcare services. This worked well because he was able to combine three separate and part-time driving-based jobs into full employment. However, this practice was eventually stopped, and the mailman role was taken over by the national post service with their own vehicle and employee, and the taxi service was shut down. Although this combined approach worked very well for multiple years, the separation of these three services has occurred in a way which would make it difficult to combine them again.

Another challenge is that if there is just one taxi, that person cannot be expected to be "on call" all the time, and there might be certain times when the taxi service is not available.

"We have gotten so used to not having a taxi, that we've found our own solutions to the problem." – Woman, 68, during a one-on-one interview.

While a taxi service is sorely missed in the community, it appears that the limited customer base and local government-offered incentives are not enough to get this type of service up and running. An effort from a local administrator to find an alternative solution to the issue led to the suggestion of having willing residents register with the "Uber" app-based ridesharing/taxi service so that they could formalize the ridesharing and ride-giving already occurring in the community in a legal, effective, and monetizable way. The idea was that if enough people were registered as Uber drivers, there would always be someone available to drive, and it would be easy for both locals and visitors to order rides through Uber's app.

Røst Kommune included the Uber suggestion in their article on how to become a taxi driver in Røst on the municipality's website (Røst Kommune, 2023c). This suggestion was soon picked up by the media, and an article published in a regional newspaper on the situation was met with outrage from the regional branch of the national taxi union, who are strongly opposed to the use of apps and services such as Uber. One interviewee expressed frustration towards the unionized taxi drivers in the region who criticized the municipality's attempts to find a solution to the lack of taxi service in the community when those drivers were not willing or able to offer taxi services in Røst themselves.

To account for the lack of a taxi service (and car-rental service), the local hotel owns two electric cars which they rent out to hotel guests and other tourists and visitors as needed. It is not uncommon for the vehicles to be parked at the airport so that the people renting them can easily hop in the car there and drive themselves to the hotel or wherever else they need to go.

One of the interviews with a local administrator revealed that the municipal government is working with regional authorities to try to start up a service called "*distriktsmobil*" in the community. This service entails the regional government

purchasing a car which can then be used by the local volunteer center in the affected municipality. This service, which functions as a more affordable taxi alternative, is already being used in Velvestad Kommune, also in the Nordland region. In Velvestad, the *distriktsmobil* service is advertised as an "on-demand transportation" service offering trips within the specified area for 50NOK per person in opening hours, and 80NOK per person outside of opening hours (with trips outside of opening hours needing to be pre-booked) (Velvestad Kommune, 2023). The local administrator who brought up this service felt that it presented a promising opportunity to the community in Røst, especially as the local volunteer center had just been established.

Bus

Aside from not having a taxi service, Røst also lacks any form of public bus service. A local administrator expressed disappointment that the regional authorities have not been willing to set up a simple bus service on the island, as there are other similar-sized and even smaller communities that have bus services. A common argument for not having a bus service in Røst is that patronage is too low, and distances are "too short" to justify having a bus. On the other hand, distances are long enough that it is difficult for those who do not drive to get around, especially on days with adverse weather. Young schoolchildren who live farthest from the school might benefit from a bus service that could drive them to and from school, which would also remove the burden on their parents who might have to drive them to and from school every day.

The local hotel has a minibus that is used for a variety of occasions, including picking up and driving around larger groups of tourists during the busier seasons. The bus is also sometimes used to provide transportation for local events and festivals. Multiple interviewees mentioned that a minibus had set up an unofficial bus service a couple of years ago, which was used both for driving schoolchildren to and from school, but also as an offering for people who did not drive to get to and from the local shop. Interviewees explained how this service stopped not soon after it had started up, and it was unclear if this was due to a paperwork issue, the start of the COVID-19 pandemic, or (most likely) a combination of various factors. Other

Other forms of motorized road transport were mentioned or observed during the fieldwork visit. This included four-wheelers, which were driven both on and offroad, mopeds and motorcycles, and so-called "cabin mopeds" which are mopedengine vehicles with a small cabin to protect from wind and weather. In one instance, a red "cabin moped" was seen driving in the wrong lane on the main road, with an incoming car having to drive around it into the opposite lane to let it pass. This was explained to not be an uncommon occurrence, and it appeared most locals were familiar with the elderly driver, and not bothered by this at all.



Figures 6.5 & 6.6: A four-wheeler driving along the road, and a so-called "cabin moped" parked at the local sports hall. Photos: Sarah Waters.

6.2.2 Airplane

During both expert and non-expert interviews, it was made clear that members of the community in Røst feel very thankful to have air traffic service to the island. The neighboring island of Værøy is only served by a helicopter service since a deadly plane crash in the 1990s and subsequent investigation proved that weather and wind conditions made it too risky to fly there by airplane.

There are certain advantages of having a plane instead of a helicopter, including predictability, capacity, and comfort. The local airport is an important place of employment, even if there are usually only two daily flights to and from the Røst airport. Overall, the airplane appeared to be most used for work trips, followed closely by healthcare trips. The plane is the preferred mode of regional transport for those who are on tight schedules or who value comfort and speed over affordability. When discussing the use of the airplane during interviews, the following topics were deemed important: comfort, timing, scheduling, predictability, price, and capacity.

Travel by airplane is one of the most comfortable ways to get to and from Røst, and the small planes with experienced pilots are well-equipped to handle the harsh weather that can occur in the area. The plane ride from Røst to Bodø is (naturally) much faster than taking the ferry, and the plane can fly in harsher weather conditions than the boat is able to cross the fjord in. For healthcare related trips to the hospital in Bodø, it is common for the oldest and sickest patients to fly both ways, as the short plane ride is much more manageable for these individuals than taking the ferry multiple hours each way.

The plane arrives in, and departs from, Røst twice a day – once in the morning and once in the evening, departing in the morning around 8:30 and in the evening around 21:15. There were two main complaints from residents when it came to the timing and routing of the airplane service:

First, many interviewees mentioned that the evening plane arrives in Bodø too late to be able to travel onwards – for example, if one is to take a domestic flight or train to another city such as Tromsø, Trondheim, or Oslo. This is a challenge for those who wish to travel, for example, after work, as they might end up having to spend a night in Bodø, thus extending their trip. Overall, there was a consensus that while traveling by airplane could generally save time, scheduling mismatches made finding a suitable onwards journey a challenge.

Second, although the plane route is supposed to be a Røst – Bodø route, the airline operating the route, Widerøe, has chosen to connect it to another route. In this case, the route has been connected to Svolvær, going from Bodø to Svolvær, and from Svolvær to Røst, and vice versa. This both extends the duration of the trip and can make it difficult to buy tickets if the stretch between Svolvær and Bodø is fully booked. This is an issue for Røst residents, as it often makes it necessary to buy plane tickets well in advance, when some respondents expressed that they prefer purchasing their plane tickets last minute (ideally the day before traveling) so that they can take advantage of the airline's 24-hour open-purchase policy and cancel their ticket without penalty if desired.



Figure 6.7: A wooden model of the Widerøe Dash 8-100 plane (which has served the Røst airport for decades) outside a house in Røst. Photo: Sarah Waters.

These challenges relating to scheduling and capacity frustrate Røst residents, who also emphasize that Widerøe has a bit of a monopoly on the airplane service to Røst, as there is no competition to offer better timing, routes, or pricing. In terms of pricing, the national government regulates and subsidizes the route, which helps make tickets more affordable, and price ceilings will be halved starting in April 2024. Regardless, there seems to be a fairly low price-elasticity on plane tickets, as those who are dependent on taking the plane for health or work reasons will buy tickets no matter what they cost – it also helps that both healthcare trips and work trips are often reimbursed by Helfo and employers, respectively.

"Sure, it will be nice that flight tickets will be cheaper, but at the end of the day if we need to take the plane over, we'll pay whatever it costs." – woman, 68, during a one-on-one interview.

Overall, although Røst residents are thankful for having an airplane service connecting the community to the outside world, many express that there is still work to be done and improvements that could be made, especially in terms of scheduling and routes. Increased government subsidization on the route to lower prices is regarded as an important step for making the plane more affordable and accessible to all.

6.2.3 Ferry

The ferry connecting Røst to Lofoten and the mainland is the community's lifeline and main connection to the rest of the country. Boats and sea routes are the oldest and most traditional way of connecting the archipelago to the mainland, and the ferry is still used for transporting people and goods across Vestfjorden daily. The ferry crossing between Røst and Bodø is 109 kilometers long and is the longest ferry crossing in Norway. The ferry route, which is a national route, also connects Værøy and Moskenes and is part of the RV80 (*Riksvei 80*, or national road #80). The ferry was mentioned and discussed a lot in both survey answers, interviews, and informal conversations with residents, local administrators, and local businesspeople. Some of the main topics relating to the ferry that were brought up and discussed were related to timing and routes (and predictability), comfort, price, and capacity.

Many respondents commented on the routes, timing, and predictability of the ferry service. The timing and order in which the ferry stops at the various destinations along its route are extremely important, as these factors can cause the travel time to vary from four hours long (when crossing directly between Røst and Bodø) to up to eight hours or more. Even the shortest crossing, four hours, is a long time, especially when the journey is taken on a weekly basis, as it is for most commuters. Interviewees describe how they spend their time on the ferry: knitting, reading, resting, eating, socializing, studying, working, surfing the web, watching movies or TV shows, and texting or chatting on the phone were all mentioned. The ferry routes have been a hot topic in the community for many years, as changes and adjustments in the routes (especially the order in which the ferry stops in Røst, Værøy, Moskenes and Bodø) and times have been a source of disagreement both between communities and within the community itself. A main challenge is that to make any changes in routes or timetables, the national road authority (*Statens Vegvesen*) wants the affected communities to agree on proposed changes. Being the last stop before the direct crossing to Bodø is seen as a big advantage, and Røst and Værøy are often in disagreement on this point. There is a large seasonal variation between routes, as there is a "summer route" and "winter route" – these were set up as a form of compromise between the various communities, but it appears that many are still dissatisfied with the current agreement.

"A sign of a good deal or compromise is that everyone is equally dissatisfied with the result!" – Local administrator, during a one-on-one interview.

Aside from the varying opinions and needs between the connected communities, there is also a wide range of needs and opinions *within* the community in Røst: students and workers commuting to the mainland on a weekly

their basis have needs, and businesses (mainly the fish processing plants) have different needs. Leisure travelers and especially retired people are generally more flexible to travel whenever. An interviewee who used to be a teacher at the local school explained how she and local administrators had worked hard lobbying the ferry authorities to change the ferry timetables to better suit the needs of high school students who were commuting back and forth between Bodø and Røst on a weekly basis. A top priority was setting up the winter route, which runs between early September and early June (thus coinciding with the scholastic year), in a manner that allows youth going to school on the mainland to miss as little school as possible while also maximizing the amount of time they get to spend at home on the weekends. Another youth who goes to university in Bodø and travels back Waters.



Figure 6.8: The ferry in Røst preparing for the evening departure towards Bodø. Photo: Sarah Waters.

to Røst each weekend explained how affected students who had taken the same study program as her in previous years had worked with professors and university administrators to set up the program's class schedule in a way that allowed students to have Fridays off, allowing them to travel home a day earlier. These instances of planning, community organization, and lobbying are part of an important collective effort which seeks to minimize the disadvantages and challenges of having to commute long distances to go to school each week.

Another point which was brought up multiple times is the lack of a direct connection between Røst and the main part of Lofoten (through Moskenes) during the winter months. The fish processing plants rely on fast and efficient transport to get their products from harbor to further processing and the market in a way that maximizes efficiency and minimizes the risk of spoilage. For many types of fish products, further steps in the processing chain occur in Lofoten, meaning that a fast connection to Lofoten is vital for this industry.

"No one is in more of a hurry than a dead fish!" – Local administrator, during a one-on-one interview.

A ferry route and schedule which would allow for a direct connection between Røst and Moskenes has been proposed many times but has been steadily shut down by disagreeing parties. A suggested alternative for addressing this issue would be to undertake even more of the fish processing steps in Røst, thus minimizing the need for transport to Lofoten, but this would require a significant investment and reorganization of local businesses. For now, the ferry being made

free for motorized traffic is a positive change that has been very important and beneficial for the fish industry in Røst, even though the routes and schedules still pose a challenge for local businesses and industry.

National policy made the ferry stretch between Røst and Bodø free from the summer of 2022. This change was an important one for residents, local businesses, and tourists alike, and changed the frequency and purpose of regional trips for many. The ferry was made free for pedestrian and bike traffic during the first year of the COVID-19 pandemic, and before that all ferry users had to pay, making leisure trips, commuting



making leisure trips, commuting the ferry being made free. Photo: Sarah Waters.

trips, and the transport of goods very expensive. The free-ferry policy has lowered the threshold for taking a car to the mainland, especially in the summer months when it is more comfortable to drive around and easier to find parking in Bodø. There were concerns about capacity when the ferry was first made free for vehicles, especially during high tourist season (summer). Local administrators have set up an agreement with the ferry authorities in which trucks and vehicles for local services (garbage, shop provisions, postal service, etc.) and businesses (mainly fish processing companies) will be given priority so that they are ensured a spot on the ferries when there is a lot of traffic.

Something that was mentioned in nearly all interviews is that the ferry boats that are currently in use are extremely comfortable, at least compared to some of the boats that were previously used on this route. Older adults who have lived in Røst for decades smiled when they reflected on what it was like to take the ferry over Vestfjorden "back in the day", before the new boats were introduced. "Back then, if I knew I was going to travel by ferry, I would get seasick the day before", exclaimed one man with a smile. The increased level of comfort is considered very important for making the long trip more accessible and palatable for people of all ages.

"We used to say that we would get on the boat and 'puke our way' over the fjord!" – Woman, 73, during a one-on-one interview.

A final point relating to the ferry which was brought up multiple times was about weather-related delays and cancellations. The newer boats that are currently in service have made it possible to cross the fjord even in instances of quite bad weather, but weather-related challenges still occur. It is not unusual for the ferry to be cancelled, especially in the wintertime, which can affect both people's travel plans, and the availability of goods at the local shop – if the ferry is cancelled on delivery days. Sometimes the ferry departure time is pushed forward to account for bad weather forecasted for later in the day. These types of last-minute changes mean that it is important for travelers to stay up to date on scheduling changes and cancellations. Weather-related cancellations and delays are seen to be more of an inconvenience for people on tighter schedules (generally those traveling for work or school) than people with more flexible travel plans (leisure travelers and retirees), but thankfully there seems to be a high level of understanding from teachers and workplaces on the mainland for those instances when employees or students experience weather-related delays.

"That's just the way it is. We know where we live... No one can control the weather!" – Woman, 68, during a one-on-one interview.

Plans to switch to more environmentally sustainable hydrogen ferries in 2025 are met with both excitement and nervousness: while residents and administrators are positive to the change and what it represents in terms of

sustainability, many are anxious to see how these new boats will perform in heavy seas.

6.2.4 Walking, biking, and other micro-mobility modes

Walking and biking were brought up often, both in survey responses and interviews. These transport modes are particularly favored during the summer months, when the temperatures and weather are milder, and the roads are free from snow and ice. Still, some respondents are committed to biking and walking year-round. Biking especially is viewed as an excellent way to get around, as distances in Røst are short enough to bike with ease, but perhaps just long enough that one might choose not to walk. The main part of the archipelago in which all residents live is also very flat (with the highest point being 11 meters above sea level), and this was often mentioned as a reason for why it is so easy to walk and bike here. One youth who was interviewed owns an electric scooter, and uses it to get around year-round, in all sorts of weather conditions. 74% of survey respondents claimed to own a bicycle in usable condition, and 7% own an electric scooter.

One older adult who was interviewed and does not own a car, explained how biking is his preferred mode of transport in all seasons. He explained how he has two different bicycles, one for summer use and one for winter use. His summer bike is a hybrid "city"-type bike with thin tires, whereas his winter bike is sportier, with thicker wheels and studded winter tires. Having these two options allows him to pick the bike that best fits the season and weather conditions and removes the need for swapping tires between seasons. While this interviewee does not own an electric bike, he explained that he might consider transitioning to an electric bike as he gets older, if it becomes more difficult for him to bike around.

Another older adult interviewee who does not drive says that she walks or bikes most places, especially in the summer. She is comfortable biking in the winter as well, but only as long as it is not too slippery, as her bike does not have winter tires. She felt that she lived "centrally" enough to be able to reach most of her daily activities without being driven but was still likely to get a ride from her

husband for bigger shopping trips, and in the case of particularly poor weather.

The local administration is aware of the national zerogrowth goal, and incentives have been set up to encourage walking and biking in the community. There are so-called "walking and biking calendars" at local workplaces school, where and the individuals can cross off by



their names on the days they the local town hall. Photo: Sarah Waters.

have biked or walked to school. Once or twice a year, participants are eligible to win a prize which is drawn at a local event or celebration. This initiative shows that the local administration is actively encouraging the use of more sustainable modes of transport in the community.

Something that was brought up multiple times in the context of walking and biking was that distances between most destinations are relatively short in Røst. This was often given as a reason for choosing other modes of transport than a car. However, it appeared that the consensus was that while distances were relatively short, they were still long enough that, for example, the local shop felt far for someone walking there from their home closer to the school and town hall. Additionally, distances that might feel relatively "short" for someone young and able-bodied, may be insurmountable for someone who is older or has limited mobility. The health benefits of walking and biking were mentioned a lot, especially by people in the older adults group who indicated that these were their preferred modes of transport.

6.2.5 Other

When survey respondents were asked to check off which vehicles or modes of transport they owned or had access to, 10% of respondents chose the option "other" and explained that they own some type of boat. These answers included *sjark* (which is a type of fishing boat), small and large motorboats, leisure boats, and one respondent even noted that they own "multiple boats in various sizes". Given the location of the case study site, it is only natural that boats are an integral part of the lives of many residents, although these boats are seldom used daily or weekly in all seasons – motor- and leisure boats are more used in the summer months, and various types of fishing boats are used for fishing work especially in the winter months. Non-commercial fishing is also a common activity for which personal boats are used. Despite a high degree of boat-ownership in the community, land-based transport modes are still preferred for nearly all trips to the store, work, school, and social activities.

6.3 Types of People

The biggest difference between older adults and youth was seen when they were asked the question: "Do you feel like you have access to everything you need in your daily life in Røst?". While most older adults responded, generally, with some form of "yes", all youth interviewed offered up a resounding "no". This negative answer was both in regard to physical access to goods, but also in terms of opportunities for education, socialization, and things to do.

"I have everything I need, and nothing that I don't."- Man, 67, during a one-onone interview.

This difference in attitudes may well be related to the big differences in lifestyles between youth and retired people and has likely been the case for many decades. Youth are eager to get out, explore the world, and pursue higher education and novel employment opportunities. Retired people might have already done their share of exploring and moving around and are happy to enjoy their daily lives closer to home, with easy access to nature, the goods and services they need most, and the neighbors, friends, and activities that they value.

6.3.1 Older adults

Table 6.1: A list of the ages and basic mobility-related information for older adult interviewees.

Gender	Age	Key information
Male	67	No car or driver's license. Bikes everywhere.
Female	68	Has a car and license. Drives most places.
Female	90	Has a car and a license. Drives to all but the closest places.
Female	69	Does not have a car or license. Often gets rides with her husband who has a car and license. Otherwise, she bikes and walks a lot.
Female	73	Has a car and license. Drives a lot in the winter but bikes and walks a lot in the summer and tries to stay active.

A main finding related to the travel habits of older adults was that travel (both local and regional trips) became much more flexible for people once they retired. This feeling was echoed by most retirees who were interviewed: "Now that I'm retired, I can travel when it suits me best", and "there isn't really much I *need* to do". This means that many individuals in this group mainly venture out when they need food from the shop, wish to socialize, or to participate in something happening in the community.

"Things have become less challenging since I retired, because now I don't have a job that dictates where I need to be and when. I have more freedom to travel when it is easiest and cheapest." – Woman, 73, during a one-on-one interview.

When it comes to regional trips, older adults are less affected by things like weather-related delays and cancellations, and route and scheduling issues that have been brought up relating to the ferry and airplane: they have the freedom and flexibility to travel at any time, since they do not have jobs that they need to plan around.

Most of the older adults interviewed in this study were close in age – between 67 and 73, except for one woman in her 90s. This puts most of the interviewees in the "younger" older adult category, with most of them being active, mobile, and enjoying walking and biking to their destinations when weather allows it. The woman in her 90s who was interviewed was also a bit of an outlier, as she still has her driver's license and drives all over town with ease. This woman expressed that having a car and license allows her to retain a certain level of freedom that she is not ready or willing to give up. It was made clear that this interviewee's case was not especially common – many older adults stop driving well before turning 90, especially women.

Also brought up in interviews in the context of older people was the *tilrettelagt transportkort*, which is discussed in chapter 3. Multiple residents have such cards, and the municipality occasionally receives applications for cards. However, in practice, this service does not work in Røst, as the *TT-kort* provides users with heavily discounted rates when using taxi services, and this cannot work in a community in which there is no taxi. However, people with these cards can still use them in other places, for example when visiting Bodø for an appointment at the regional hospital.

6.3.2 Youth

Youth in Røst are known for being relatively mature compared to their peers from other regions, especially urban youth. This can be attributed, at least in part, to their involvement in the traditional fishing industry from an early age, where they work alongside adults. This not only provides them with a source of income, but also keeps them busy during the winter season, which can otherwise be monotonous and boring. It is not uncommon for working youth to spend the money they have earned cutting cod tongues on important milestones such as getting their driver's license or buying their first car. This early exposure to work, responsibility, and financial independence contributes to the overall maturity and independence observed in the youth in Røst.

Opportunities for the future

The lack of an upper-secondary school in Røst means that most youth must leave the community if they wish to pursue further education after completing the 10th grade. These youth end up living away from home for extended periods of time, with this leading to a significant number of them never resettling in Røst. This is a huge loss for the community, as these youth with their higher education have competences and skills that the community in Røst could benefit greatly from. Fortunately, some of the youth recognize the importance of maintaining ties with their hometown, and these strong connections pull them home.

"Røst is unique in that we have many traditions here that aren't really done anywhere else... so it would be great if there was a new generation of young people who could take over and keep these traditions alive." – Youth, 16, during a focus group interview.

The local administration takes an active interest in the whereabouts and education of the youth who have moved away, often providing support and incentives to encourage them to return. As a result, there is a growing trend of young people moving back to Røst, particularly when they start their own families. Many are drawn to the idea of raising their children in a safe, close-knit community like Røst, with its supportive environment and easy access to nature. However, it can be challenging for both partners in a two-parent household to find suitable job opportunities, which poses a potential obstacle to their return.

Overall, a lack of opportunities in work and education is a main reason for young people to move away from Røst. Long distances and transport challenges

make daily or weekly commuting difficult or unrealistic, thus perpetuating the issue.

6.4 External Factors

6.4.1 Seasons and weather

The weather and seasons were some of the most mentioned topics in the interviews, brought up in the context of many different types of trips and transport modes. Both regional and local trips can be affected and disrupted by adverse weather, which is not an uncommon occurrence in this very flat archipelago which lies far out to sea. Weather delays for the ferry and airplane can make it hard to plan regional trips, especially in the winter months. Ferry departure times can often be changed last minute due to weather conditions, meaning that one must stay up to date in case of unexpected changes. The unpredictability of the weather and subsequent changes in routes, times, and cancellations can be especially difficult for people making trips for work or school, where they have less flexibility for when they need to arrive to and leave from their destinations.

The winter season was often mentioned as a time of the year when people go out less and are more likely to drive or be driven when they do go out. This is mainly attributed to the presence of snow and ice, which can make walkways and bike paths slippery to walk on. Among older adults there was a general feeling of unease for going out in very adverse weather and slippery conditions – of which there can be a lot of in Røst. The month during which the fieldwork for this study was conducted there was significantly more snow than usual, and a long cold

period meant there was a lot of ice on the walking paths and road. In such cases, residents rely on the local administration to clear the snow and distribute sand on the most slippery surfaces to give extra traction.

Multiple interviewees in the older adults group expressed that not having a job that structures their daily lives makes it much easier for them to avoid going out on the days with the worst weather: "As retirees we have more control over our own days and can choose to do things when the weather allows - we don't really have to go out when it is very stormy or slippery," said one interviewee. Another agreed: "Since I retired six years ago there isn't much I have to do. When the weather is bad, I can just wait until it has passed before I go out!" they said. One interviewee who the sidewalk. Photo: Sarah Waters.



Figure 6.11: Footsteps through the snow on

does not drive explained that he keeps his home stocked with a two-week supply of necessary items so that he can avoid biking to the shop in very bad weather.

"Now that I'm retired, I can adjust my plans and go out when the weather allows it." – Woman, 73, during a one-on-one interview.

Darkness was also cited as a deterrent for walking and biking during winter months. Røst's location above the Arctic Circle means that it experiences a period of "polar night" during which the sun does not rise above the horizon, and there are very few light hours each day. While most of the main walking and biking paths in Røst have streetlights, it can still be very dark in some spots, which can make it hard to avoid ice and slippery spots in the darkest months.



Figure 6.12: A windy and stormy day in Røst. Photo: Sarah Waters.

Overall, the weather and seasons play a very important role in affecting people's choice of transport modes. People are more likely to drive during the winter months and on days with adverse weather, and biking is most popular in the summertime. Walking was seen as a year-round way to get places, but mainly when the weather allows it.

6.4.2 The COVID-19 Pandemic

The tight-knit community in Røst was very cautious in the early days of the COVID-19 pandemic in 2020. Initially, the impact of the virus was less noticeable in Røst compared to other areas of Norway, as the community was quite isolated, and people were quick to reduce the frequency of their regional trips. This caution

proved successful, as the community managed to avoid the virus for quite some time, until society fully "reopened" in accordance with national guidelines. The pandemic still has long-lasting effects in the community, particularly in terms of social activities and various clubs and organizations that have not managed to start up again after being suspended at the beginning of the pandemic.

"A lot of organizations and activities shut down at the start of the pandemic. It was supposed to be temporary, but a lot of these haven't started up again yet. I guess a lot of people are still scared..." – Woman, 69, during a one-on-one interview.

In terms of how the pandemic affected people's travel habits, 55% of survey respondents answered that they did not feel that their travel habits changed during and since the COVID-19 pandemic, and 17% responded that they were unsure. However, the answers to similar questions posed during interviews gave a different, and possibly more complete, picture: when asked if (and how) they felt the COVID-19 pandemic impacted their travel habits, most interviewees answered that the pandemic had reduced their regional travels and travel for holidays but did not impact the number of local trips they took for accessing goods and services.

In 2020 national policy made the ferry between Røst and Bodø free for bike and pedestrian traffic, to help minimize the risk of virus transmission by reducing contact between ferry-workers and passengers. This was an important change for the community, especially those who commuted to Bodø on a weekly basis and were able to save a lot of money with this policy.

The current economic situation, with rising prices and increased cost of living, is very much felt in the community, and many interviewees attributed this change to the pandemic. When referring to when things got "more expensive", multiple interviewees stated that it was "since the end of the pandemic". Higher prices and cost of living has altered the frequency and types of trips that people take, especially regional trips for social and leisure purposes.

Despite the challenges brought on by the pandemic, there was a silver lining, at a societal level. Countless workers and businesses nationwide were forced to adapt to a new reality in the first months of the pandemic: working from home, and the pandemic brought about a realization that working from home is feasible and effective. This revelation could revolutionize the way work is approached in a place like Røst, where there are few employment opportunities. With remote work becoming more widely accepted, Røst residents may have greater flexibility and access to job opportunities that were previously inaccessible. Work-from-home arrangements have the potential to reshape the local economy and offer new avenues for employment and professional growth in Røst.

6.4.3 Societal characteristics

Information gathered through the interviews, survey, cyber-research, and fieldwork observations gave valuable insights into certain unique and important characteristics of the community in Røst. These insights proved important for

better understanding certain aspects of how the community works, and the values of the people living there. Many of these characteristics and phenomena are common in small towns: Røst is a town in which nearly everyone knows each other, and outsiders are quickly noticed. Word travels quickly, and people are generally warm and welcoming to both outsiders and their own. Island communities are known for being well-connected socially and often internationally despite their relative remoteness, as being surrounded by water and the rich resources of the sea mean that trade and exchange are a big part of local practice and tradition.

"I think a big difference between a coastal community such as this one when compared with... say, a little mountain village deep in a valley somewhere, is that there [in that mountain village] they don't have this tradition of new people arriving... whereas here on the coast there have always been new people coming and going, either in the fisheries, or other industries. There is more exchange, and locals are used to relating to and getting to know new people all the time." – Man, 67, during a one-on-one interview.

Even today, Røst has strong international ties, especially to Italy, and experiences alternating periods of busy-ness and calm, mostly in line with the changing seasons. The summer brings an increase in tourism, both visitors who just stay for a day or two, and others who might spend the whole season in Røst in a summer home. Late winter, extending from February until just after Easter, marks a bustling period in Røst due to the winter fishery, with dozens of people from outside the community (many of them foreigners) arriving to work in the fish processing factories, and the frequent comings and goings of bsuy fishermen.



Figure 6.13: A busy day at the harbor during the winter fishery rush. Photo: Sarah Waters.

Despite this, Røst is a very tight-knit community, where there is a strong reliance on family members, friends, and neighbors not only for socialization, but also for support in everyday life. It is not uncommon for someone to post in the local Facebook group to ask the community for assistance when they need to borrow something, or to ask for a ride to the airport or local store. Lending something as important and valuable as a car is not uncommon, even to people one is not particularly close to. Since the taxi service shut down a few years ago there has been a tradition for offering rides to those who cannot drive and may not be comfortable walking or biking. Not everyone has a family member they can call to ask for rides, so certain individuals (mostly retired people) in the community have stepped up and volunteered to give rides to those who need them. This closeknit support system enhances the mobilities of those who might otherwise be at risk of exclusion.

Additionally, Røst's small-scale setting, with limited and familiar roads, simple traffic patterns, short distances, and low speed limits gives an increased sense of safety for all road users. Even older adults who may have ceased driving in larger towns or cities can often continue driving comfortably in Røst, due to this increased sense of safety. Walking and biking are common modes of transport, as the traffic situation in the community is calm and predictable, offering a safe and enjoyable means of getting around.

Overall, there appears to be a very strong connection to place, history, and tradition in Røst. Members of the community value closeness to nature, and a peaceful and calm everyday life, while still placing importance on art, culture, and an international connection.



Figure 6.14: Closeness to nature is something many Røstværinger value, and the northern lights are a beautiful addition to the natural landscape here. Photo: Sarah Waters.

6.4.4 Digitalization of society

Røst is actively embracing the ever-increasing digitalization of society, taking steps to integrate technology in most aspects of community life. One significant integration of technology in healthcare is the use of a so-called "*kompbrett*" by the local health department. These *kompbrett* are tablets which are already utilized in multiple rural municipalities across Norway and serve as supplements in providing care to older adults living alone in their homes. With a simple interface, internet access, and a camera, these tablets facilitate social contact with those who use them and can potentially be used for a range of health services.

The municipality's approach to implementing these tablets is to first use them as a social tool, allowing individuals to use them for video calls with family, friends, or local health- and home-care service providers. This gradual implementation aims to familiarize people with the technology and see how receptive people are to the use of such solutions. In the future, the tablets could serve as valuable tools for supplementing healthcare services, including psychiatric support, physical therapy, and regular check-ins with patients. This approach holds promise, particularly for psychiatric help, as the small and close-knit nature of the community in Røst might otherwise deter some individuals from seeking psychiatric help due to privacy concerns. By using tablets to supplement these services, the municipality can offer a more private and discreet option, potentially encouraging those who need it to seek help more willingly.

As previously mentioned, the COVID-19 pandemic has changed the way people work, also in Røst. Digital solutions and technology lie at the center of a potential more-permanent transition to remote work, which could be revolutionary for a place like Røst where employment opportunities are limited. The tranquility, rich history and traditions, access to nature, and close-knit and safe community that Røst offer can help attract newcomers, and finally these people might be able to find work in the community, or even bring their own job with them. Recognizing this potential, local administrators are actively working towards establishing a *næringspark* (business park) near the harbor, which would provide office space for rent. This project aims to encourage people to move to Røst with their remote jobs, while also fostering the growth of new businesses in the community, thereby creating more employment opportunities. This would allow the island's unique appeal to be combined with the flexibility of remote work, and Røst could position itself as an attractive destination for people seeking a different lifestyle or a better work-life balance.

The increased use of online information and communication has also affected how people move. Real-time online updates have made it possible to find up-to-date information on ferry and plane delays and cancellations due to technical faults or adverse weather. This is generally regarded as a positive development which increases the ease of access to information for most users. However, these online information systems can be confusing and inaccessible to others, especially older people who have lower degrees of digital fluency. Additionally, the Røst Facebook group has increased in popularity as Facebook has become more common and people are nearly continuously connected to the internet, and the group is often used by people to ask for information and assistance. This is a platform where users can get nearly instantaneous replies from other members of the group, and it is not uncommon for people to also post asking for rides.

When it comes to shopping and access to goods, it was brought up several times during interviews that Røst is one of the top municipalities in the country when it comes to online shopping per capita. The lack of shops to buy anything other than food goods, building materials, and basic home goods make online shopping a necessity, especially for those who do not travel to the mainland often. It was mentioned during interviews that it is very common to buy things like clothes, shoes, and electronics online. While online shopping is extremely common all over Norway, Røst having some of the highest numbers in the nation for percapita online shopping is representative of the lack of availability of certain goods in the community, and that residents are comfortable using digital alternatives to access these.

Overall, Røst's efforts to embrace digitalization and incorporate technology in healthcare, employment, shopping, and other aspects of daily life demonstrate a proactive approach to adapting to the changing needs of society. By using tablets for social and healthcare purposes and promoting opportunities, for remote work, the community is encouraging innovation, connectivity, and economic growth, while still preserving the qualities that make Røst such a special place to both visit and live.

6.4.5 Development, sustainability, and the green transition

Data gathered in this study gave some insight into how Røst is approaching issues of sustainability and the transition to green energy. The continued development of the community is a top priority, as the development of local businesses can play an important role in enhancing the community's attractiveness and encouraging both new residents to settle there and existing residents to stay. Recognizing the need to increase employment opportunities and the availability of services, the community has goals of creating a vibrant social and cultural environment to attract new residents, and to encourage new businesses to establish themselves in the community.

A big challenge to attracting new residents to the community is a lack of housing. Although there are approximately 80 vacant houses in Røst, most of these require expensive renovations to meet modern standards. The housing market situation in Røst makes it financially risky to invest in such renovations without a long-term commitment to live there. Costs for building and refurbishing homes are even higher than on the mainland, as materials and labor must be transported out to the archipelago, making these more expensive. To address this issue, alternative housing solutions are being explored, which could serve to accommodate not only permanent residents, but also tourists, seasonal workers, temporary employees, and refugees. A sharing economy approach could be viable here, not only for housing but also for transportation, especially bikes and cars. Røst shows huge potential for growth in a variety of sectors, including tourism, green energy, and business. Local administrators and businesspeople have a strong desire and vision to have Røst develop and grow in a sustainable way. In accordance with such goals, plans are underway to introduce hydrogen ferries in 2025. Members of the community with connections to aviation also believe that Røst would be an excellent location to test out electric planes for commercial air traffic, as the specific type of electric plane mentioned, with its 12 passenger seats, would fit well with the air transport needs of the community.



Figure 6.15: An illustrative image of the new ROPAX hydrogen ferries that will serve the Bodø-Røst-Værøy-Moskenes route from 2025. Photo: Norwegian Ship Design (Norwegianshipdesign.no, 2022).

The ecosystems both on land and in the waters around Røst are full of bird and marine life but are also extremely delicate. Protecting these ecosystems from potential accidents and ecological damage is vital, especially since so much of the local economy is dependent on natural resources – a catastrophic environmental accident could put the livelihood of the community at risk. This makes it even more important to try to use energy responsibly, prioritize conservation efforts, and promote the use of green energy solutions that do not threaten local species or habitats.

6.5 Conclusion

The various data-gathering methods employed in this study produced a wide array of findings, both on a general ethnographic level, but more specifically in relation to the mobility practices and preferences of Røst residents, especially those in the target groups. The coding process contributed to the classification of findings into the following categories: types of trips (with sub-classifications for regional and local trips); types of transport modes; types of people; and external factors affecting both the present-day situation in the community and residents' mobilities. These categories and sub-categories have complex and varying connections and relationships, and in some cases, important connections are missing. A diagram illustrating connections between categories of findings, including variables for stronger, weaker, and missing connections can be seen in figure 6.16 below. The findings should be able to contribute to a fruitful discussion on rural and insular mobility challenges and recommendations on policy to address these.



Figure 6.16: A diagram showing connections and relationships between various findings of this study.

7. Discussion

The findings of this study, generated through a combination of datagathering methods, offer insights into the mobility practices and preferences of Røst residents, particularly those of older adults and youth. As represented in figure 6.16 above, these patterns, practices, and preferences of mobilities form an intricate web of connections of varying strength between the different kinds of trips, the individuals taking them, and the transport modes these individuals choose for taking these trips. Independent variables also feed into the network, either strengthening, weakening, or breaking existing connections, or allowing new ones to be formed. In the following section, these trips, individuals, transport modes, external factors, and the connections (or missing connections) between them will be further analyzed and discussed, with the goal of getting a clearer understanding of the constellations of mobilities in Røst.

7.1 Local Mobilities

7.1.1 Car dependence



Figure 7.1: A diagram showing the connections surrounding car-based mobility in Røst.

There is a high degree of car dependence in the community, especially amongst older adults. Cars are often chosen as the mode of transport even for trip distances that in other places might be undertaken by foot, by bike, or by public transit. The combination of harsh weather conditions and lack of a public transit service in the community has made personal motorized vehicles a top choice of transport mode for all types of trips. This car dependence has certain implications for the community: both for the individuals who do have access to a car, and for those who do not. This dependence also has implications for the future of the community in terms of policy, planning, and development.

Findings from Røst further indicate that simply having access to a car is a main reason for using a car, also for reaching destinations that are close enough to walk or bike to. This can reduce individuals' comfort level with using other forms of transport, such as walking, biking, or relying on their social capital for rides, thus perpetuating their car dependence. This means that the most car-reliant people in a community might be ill-equipped to maintain their mobilities if and when they suddenly no longer are able to drive, as has also been highlighted by similar case studies (Ahern & Hine, 2012, p. 27).

What car dependence in the community means for people who do not have access to a car is multifold: for those who are able-bodied and willing, it is completely possible to reach all destinations in the community by foot or bicycle, even in harsh weather (albeit with a bit more difficulty). Whether individuals were willing to undertake even the longest local trips by foot or by bicycle was often a matter of personal preference, but naturally physical ability played an important role. For those without access to a car who are uncomfortable with or unable to walk or bike to all local destinations, the car dependence of the community can lead to exclusion from daily activities and opportunities for socialization. According to Sheller and Urry (2006), requisite participation in today's society requires access to a variety of tools for movement and connection that not all have access to or can afford (Sheller & Urry, 2006, p. 213). Not being able to afford or maintain a driver's license, or afford a vehicle and fuel, leaves certain individuals at risk of transport-related social exclusion (Lucas, 2012, p. 199).

What car dependence in a small, insular community such as Røst means for policy, planning, and the further development of the community is up to local administrators and residents. Efforts to reshape local mobilities to be less dependent on personal motor vehicles could lead to a more equitable mobility situation where people are less reliant on vehicles or social capital for rides. But such efforts will require a great deal of work, organization, and funding that seemingly is not yet available.

The local government in Røst already offers incentives for walking and biking and has made a dedicated effort to set up new street lighting to make walking at night and in the dark winter months safer and more comfortable. Timely winter maintenance of roads, bike paths and walkways is also of utmost importance, as this is likely to affect the volume of people choosing to walk and bike. While these are important steps for reducing car dependence, these steps should be accompanied by novel solutions, likely aided by technological developments, which can help reduce car dependence in a community where distances are short, but winters are long and challenging, especially for the aging population.

7.1.2 Transport-related social exclusion

Transport-related social exclusion was not directly experienced by the people interviewed in this study, not even by the oldest interviewee who was in her 90s. This is in line with findings by Shergold and Parkhurst (2012), who found that people living in small communities rarely experience social exclusion since the distances one must travel to access communal activities and social opportunities are relatively short: this leads to high levels of social inclusion (Shergold & Parkhurst, 2012, p. 412). However, communities which are located in areas exposed to harsh weather, especially in high northern latitudes, are still likely to be affected by TRSE, as wind, snow, and slippery roads lead to seasonal decreases in residents' mobilities (Litman, 2003, p. 1). Røst's location far out at sea and at 67 degrees north, above the Arctic Circle, makes it especially vulnerable to tough weather conditions and contributes to the social exclusion of older people and people with physical disabilities (Morales et al., 2013, p. 30).

Therefore, even though none of the residents interviewed recognized themselves as being affected by transport-related social exclusion, this phenomenon was still much discussed in interviews, as there are other people in the community who are affected by TRSE, especially older women. Multiple interviewees mentioned that there are some older women in the community who do not drive, and that these ladies especially are at risk of being excluded from society. It was theorized by interviewees that it was less common for Røstværinger of "that generation" (people born before 1950, in this case) to get their driver's license, especially women. In many households, it might have just been the husband who had a license and could drive, and the women, who often outlive their husbands, are eventually left alone and unable to drive themselves around. This was mentioned as being an issue, and is in line with findings by Ahern & Hine (2012) which concluded that older women are less likely to drive than older men, and that women's mobility is more likely to be affected by the loss of a spouse than the mobility of men (Ahern & Hine, 2012, p. 27). However, Ahern & Hine also discussed how older men tend to be more car-dependent than older women, making them ill-prepared to deal with the challenges of losing their driver's license: this is in line with findings from Røst, which included a higher degree of reluctance on the part of men to ask neighbors and friends for rides, and survey findings indicated that older men were less likely to walk or bike for daily mobility than women.

7.1.3 Youth mobilities

Youth in Røst were less likely to experience social exclusion than older adults, as it is easier for them to walk or bike for daily mobility. Most youth also still live at home with an adult parent or relatives who have access to a car and can drive them places when necessary. The National Transport Plan recognizes that children and youth living in rural areas are more likely to rely on cars (and thus rides from family members) than youth living in cities, which decreases their independence (Samferdselsdepartementet, 2020, p. 144). Youth in Røst value a high degree of independence and expressed that they prefer to get to their destinations alone as much as possible, making summer-favored transport modes such as walking and biking their preferred modes. However, the limitations of harsh weather and winter darkness still affected this population group, and interviewees explained that they were less likely to take local trips in winter months when they would be more dependent on family members for car transport. The NTP also suggests that new technology and alternative micro-mobility solutions can be implemented to increase the mobility independence of youth (Samferdselsdepartementet, 2020, p. 147). Such solutions are not currently implemented in Røst.

In terms of transport-related social exclusion for this population group, youth explained that the winter months could be lonely and boring, as there are very few indoor meeting places available for them to hang out with each other. Summer months are more social, and many days and evenings are spent outside in nature, which the youth can easily access with a combination of walking, biking, scootering, and boating. This is in line with findings by Fyhri and Hjorthol (2009) which indicated that children and youth are more active in summer months than in winter months (Fyhri & Hjorthol, 2006, p. 71).

Age and distance to school are some of the most important variables for the independent mobility of youth and children, and most youth interviewed in this study explained that they lived within walking distance to school and felt that they could easily get to and from school, which is their main daily trip. The youth also expressed that the lack of a school bus in the community was limiting for younger children (and their parents) who lived in the extremities of the archipelago, farthest from the school, and were too young to get to school on their own.

The regional sustainability plan for Nordland acknowledges the aging population of the region and emphasizes the need to ensure that the region is viewed as an appealing place for young people to live, work, and establish themselves (Nordland Fylkeskommune, 2021). Youth who are dissatisfied with local offerings and their ability to get around their local community are less likely to re-settle in their hometown after pursuing higher education, meaning that increasing the mobilities of youth and offering them the tools they need to retain a high degree of mobility independence, in all seasons, can be crucial in working to reduce rural-to-urban migration and extreme trends of aging populations in rural areas.

7.1.4 Missing links: bus and taxi services



Figure 7.2: A diagram which illustrates missing mobility connections in Røst.

A simple bus service connecting one side of the community to the other in Røst is sorely missed. Especially since the taxi service was stopped, *Røstværinger* of all ages feel the desire and need for a bus that can provide transport for school trips, shopping trips, work trips, and trips for socialization and activities. Bottomup solutions aimed at addressing this missing connection have faced challenges, as local efforts to provide an informal bus service for both schoolchildren and adults without access to cars were quickly shut down due to paperwork issues and the onset of the COVID-19 pandemic.

Both the lack of a bus service, and the fact that residents felt the need to take matters into their own hands to provide such a service to the community, indicate that the Nordland region, which has responsibility for public transport services in the entire region, has not been able to meet the needs of this community. As mentioned in chapter 3, the Regional Transport Plan for Nordland describes how integrated transport solutions in rural areas can help enhance transportation coverage and improve the mobility of individuals living in rural areas: an entire municipality without a single road-based public transport offering is clearly a substantial missing link in a supposed integrated transport network (Nordland Fylkeskommune, 2022).

Social sustainability is also an important issue addressed in the regional transport plan, with goals of making Nordland's towns, cities, and villages accessible for all individuals, regardless of where they live, their health, age, physical abilities, or socioeconomic status (Nordland Fylkeskommune, 2022). But in a community with no public transport offering, those who cannot afford a car, or lack the physical ability to get around on foot or by bike, will naturally be excluded. The argument of distances in Røst being "too short" to justify having a bus line can quickly be refuted when one considers the aging populations of rural areas and the general decline in physical mobility of older people, which is also perpetuated by seasonal challenges.

With regard to the national zero-growth goal (if one ignores the goal's distinct urban focus) it is extremely difficult to reduce car dependence in a community with no road-based public transport available at all: while distances in Røst may be relatively short, and the terrain quite flat, not all residents are willing or able to bike or walk to all their daily and weekly destinations, but would have gladly use public transportation as an alternative to a car.

Some of the most glaring missing connections in Røst's mobility network appear to be related to the lack of a taxi service on the island. While taxi travel might not be extremely common for many city-dwellers where public transit is available, affordable, and efficient, a community with no road-based public transportation offerings will naturally be more dependent on a taxi service.

The main barrier to the establishing of a taxi service is that the customer base in Røst is too small for someone to be able to make a proper living off running such a service. This means that taxi-driving might need to be combined with other part-time work. This is in line with findings by Starkey et al. (2002), which recognize that market forces are not able to provide requisite transport services in areas with low levels of demand (Starkey et al., 2002, p. v). Even if the customer base was deemed to be sufficient to justify a taxi service, multiple members of the community have expressed that after many years without a taxi, people have gotten so used to finding their own solutions to this issue that it is not even certain that a taxi service would be used in the community at this point.

The ingenuity of *Røstværinger* has led to a good solution for this issue in the past, through the combination of taxi-driving with other part-time, driving-based jobs in the postal service and patient transport for healthcare. However, changes in the organization of these services have made it impossible to return to such an arrangement. Still, the approach offers promise: combining multiple driving-based employment opportunities can offer someone the equivalent of a full-time job and stable employment, and there may be new opportunities worth exploring. One potential avenue could be the fusion of taxi services with a driving school, as this is another driving-based service which is missing in the community. This hybrid

approach could offer transportation, but also help more *Røstværinger* obtain driving licenses and increase their mobilities. There are certainly other opportunities here which can be explored and considered.

It may also be that a taxi service is not what Røst really needs. A lack of both a taxi and bus service in the community may indicate that a hybrid solution, which is inclusive and flexible, might be best. The short distances, limited number of potential destinations, and simple road network in Røst would make the community an ideal place for a simple, inclusive, and demand-responsive public transport solution which could potentially remove the need for both a taxi and bus service, while also increasing community inclusion and reducing the number of people choosing to drive their car for daily trips.

Voluntary work for mobility

The community in Røst has done an excellent job at meeting its own needs: in this tight-knit community where everyone knows each other and looks out for their neighbors, volunteer drivers have stepped up to help those people who are most at risk for transport-related social exclusion. Multiple members of the community, mostly retired people, offer rides to those in need, in various degrees of regularity. Some individuals drive others (most often to the local shop) on a regular basis, often at agreed-upon times each week. In such cases, passengers might offer a small form of compensation for the ride, at least to cover the cost of fuel and wear-and-tear on the vehicle. Other community members are either asked or volunteer to help drive fellow residents to important community events such as holiday celebrations and voting day. Research by Porru et. al (2020) suggests that, in communities where volunteer drivers are an important asset to reducing the immobilities of those at risk of exclusion, senior citizens often step up to volunteer and are pleased at having the chance to support their local community and feel useful (Porru et al., 2020, p. 89). This is reflected in the findings of this study, where it was mentioned in multiple interviews that those who did the most volunteer driving in the community did it as much for themselves as they did for the people they were helping. For retirees with a lot of free time, driving other older adults around is an excellent opportunity for socialization, and can lead to an increased sense of purpose.

While lift-giving from volunteer drivers is recognized as an alternative to a formalized demand-responsive transit service, such practices still have some negative aspects, including loss of independence, and privacy issues for those who become dependent on rides from other members of the community (Shergold & Parkhurst, 2012, p. 419). This informal solution to the community's lack of taxi or public transportation works in practice, for now, but should eventually be replaced with a more formalized DRT service – although such a service could still rely on volunteer drivers.

7.2 Regional Mobilities

7.2.1 Airplane and ferry routes and schedules

Another big challenge to mobility in Røst is related to the scheduling of the ferry and airplane routes – which are the only two public transport modes that allow travel to and from the archipelago. *Røstværinger* feel that the community has limited influence on the establishing (and changing) of these routes that act as Røst's lifeline and only connection to the rest of the country. The national road authority has control over the ferry line connecting to Bodø, Røst, Værøy, and Moskenes, as this route is an extension of the national road RV80. Widerøe, the airline which serves Røst airport and is the main provider of regional air transit in Norway, has had somewhat of a monopoly on the air transport service in Røst.

The lack of an upper-secondary school, and limited access to goods, services, and employment opportunities in Røst means that the local population is dependent on air and sea transit to get off the island and access the same opportunities for education, employment, and consumption as the Norwegian population at large. Each trip to the mainland comes at a significant cost – be it economic or temporal – which further disadvantages the island-dwellers. Scheduling and routes that lead to longer crossings, late-night arrival times (with the subsequent need for a place to spend the night) further the financial burden on those who need to take these trips. Similarly, the Widerøe airline's hold on the Røst – Bodø airplane route also means that it has been able to connect this route to another flight route through Svolvær, which both extends the duration of the trip and has made it harder for residents to buy tickets, especially for those who value flexibility and prefer to buy plane tickets last-minute.

Cross & Nutley (1999) explain how the routes and service levels of sea ferries and other modes of transportation to and from islands play a large role in shaping the development of island communities, including their economy, population levels, and overall quality of life (Cross & Nutley, 1999, p. 317). This also applies to Røst, where intersectoral challenges relating to ferry schedules and routes have long impacted the community. Decisions surrounding the timing and routing of ferry crossings are extremely significant for the impacted communities. The decision-making process should therefore be formalized and standardized to avoid risks of unjust solutions, and to ensure the most equitable outcome for all affected communities. Sheller and Urry (2006) explain that control over mobility reinforces and reflects power: those in charge of determining public transport routes have direct influence over the livelihoods of affected travelers (Sheller & Urry, 2006, p. 211). Vannini (2011) also recognized that transit routes can lead to the further isolation of already marginalized local communities, especially if there is limited contact between the relevant authorities and impacted communities (Vannini, 2011, p. 261). Planning and transport authorities must recognize the power they have, strive to reach just and equitable outcomes, and give space for lobbying and participation by impacted groups.

Long travel times by ferry

The ferry being made free has reduced the financial burden caused by ferry trips, but the time it takes to cross the fjord is still substantial – a direct crossing from Røst to Bodø takes about four hours, and when the boat must go by Værøy and Moskenes before continuing onto Bodø, the journey can take eight hours or more. There are many ways travelers can spend these hours – resting, reading, knitting, or chatting with others. These options for things to do on a ferry crossing are not new, but in recent decades more options for "time-killing" activities have become available: the increased digitalization of society and availability of mobile internet has made it so that people can stay connected on the go, and has allowed for increased copresence (Sheller & Urry, 2006, p. 221).

This increased convergence between transport and communication means that individuals can surf the web, watch movies, study, work, or stay in touch with others via the phone or the internet – while moving through space. Sheller and Urry argue that time spent traveling is not "dead" time, but rather that how time is spent while traveling from point to point is just as important part of the journey as the act of movement in itself (Sheller & Urry, 2006, pp. 213 - 214). While the temporal burden of long regional travel times still exists, digital technology allows travelers to spend this time in more productive ways, thus reducing the burden.

7.2.2 The cost of regional transportation

Even though time spent travelling on the ferry can be spent productively, more time-sensitive trip-purposes such as healthcare and work trips are still likely to be taken by airplane, which allows for faster travel. For individuals with tighter schedules or a preference for comfort and speed over affordability, the airplane is favored over the ferry as a mode of regional transportation. Considering that healthcare trips and work trips are most often reimbursed by *Helfo* and employers, respectively, there is a fairly low price-elasticity for plane tickets, meaning that changes in prices lead to relatively small changes in demand – those who choose to fly will generally buy plane tickets regardless of cost (although certainly up to a specific upper limit, which may vary on an individual basis).

Despite this low price-elasticity, government subsidization of these transport services is an important step for social sustainability. From April 2024, price ceilings on government subsidized regional flight routes, including the route serving Røst, will be halved. This means that it will be significantly cheaper for people to fly to and from Røst. Despite the relative low price-elasticity of plane tickets, this further reduction in price could lead to an increase in demand for air travel, and capacity must therefore be increased accordingly, and adjustments to routes and schedules might be necessary to ensure that the regional transport offering connecting Røst adequately meets the needs of citizens and local businesses.

The ferry connecting Røst to Lofoten and the mainland being made free is also a result of government subsidization and is both extremely important for reducing the financial burden on commuters, but also for local businesses and tourism. In terms of tourism and local businesses, the ferry being made free for motor vehicles (including heavy industry vehicles) makes Røst a more attractive place for tourists to visit and for businesses to establish and grow. Capacity pressure due to an increased number of motor vehicles on the ferries has not been felt yet – but it is theorized that many tourists do not know about the ferry having been made free yet. Local administrators are working hard on promoting this change, and promoting Røst as a tourist destination generally, to try to get more visitors in the upcoming summer tourist season.

Tourism is an important economic generator for Lofoten, and for Røst. The coming years will present a challenge for Røst, as island communities face mounting pressure due to their growing reliance on tourism revenue and government assistance in a time where few island economies are prosperous enough to support the necessary level of public services for community sustainment (Briguglio, 1995, p. 1615). Røst sees tourism as a great opportunity for the further development of the community, but there is still work to be done to ensure that this desired growth in tourism can happen in a sustainable way. If approached in a positive way, tourism can help bring more resources, money, and people into the community – both visitors, but also permanent residents.

The subsidization of the airplane and ferry to Røst represents a positive change for the community, and the ferry being made free for cars especially has increased the number of regional trips residents take for shopping and services. In a time when there is an ever-increasing number of areas to which the government must distribute the yearly budget, it is promising to see that subsidization of regional transport services in rural areas has been prioritized. However, it is important to keep in mind that, even with subsidization and various policy initiatives aimed at enhancing rural mobility, the mere presence of a national policy for rural mobility does not ensure the availability of necessary mobility services in these areas (Mounce et al., 2020). Rather, the effectiveness of these services is more strongly influenced by how well-integrated they are with the greater public transport network. Local frustration at airplane and ferry routes and schedules means that there is still work to be done when it comes to integrating these regional transport modes with the greater transport network which connects Røst to the rest of the country, and that this work must go far beyond mere financial subsidization.

7.2.3 Residential self-selection

An important factor that plays a key role in the mobility situation in Røst is residential self-selection. Vannini (2011) explained that for many residents of insular communities of British Columbia, this choice of residence is mainly a lifestyle choice – a way to live a slower-paced life, emphasizing the preservation of traditional values, and a small-town feel with a heightened sense of belonging and safety (Vannini, 2011). This view was shared by multiple of the respondents in this study, who explained that they live in Røst because they want to live there, and that the community offers certain benefits that they might not get from living somewhere else.

However, choosing to reside in a physically isolated place, regardless of the reasons for or benefits of doing so, comes at a cost. Living in such places inherently means a decrease in accessibility, and that residents must compromise and accept a loss of some conveniences in exchange for the perceived advantages of residing in physically isolated areas (Shergold & Parkhurst, 2012, p. 413). This acceptance of reduced opportunity for movement is manifested as a decrease in individuals' affordances, which are the potential actions individuals believe they can take, which in turn are shaped by their understanding of their own abilities and their environment. Frictions to mobility such as physical, social, and economic barriers to movement perpetuate this issue, thus leading to transport-related social exclusion on a greater scale.

In the case of Røst, frictions to mobility include physical barriers such as the large distance one must cross to reach other settlements from the community. Other frictions include the high incidence of bad weather, which can lead to delays and cancellations in regional transport services. Economic barriers include the monetary cost of travel, including not only the actual cost of transit (for example, plane tickets), but also the opportunity cost from missing work due to increased travel time, and the cost of accommodation for those cases in which it is not possible to travel to one's destination in a single day.

These barriers to mobility, in conjunction with an already decreased sense of perceived mobility, means that many Røst residents experience a decreased level of accessibility and mobility when compared with the general Norwegian population. While many *Røstværinger* are accepting of where they live and what their place of residence implies, these barriers can be experienced as extremely limiting and excluding for individuals who feel like they have less power in deciding where they live, especially in turbulent financial times when cost of living is increasing rapidly.

7.2.4 Impacts of the COVID-19 Pandemic



Figure 7.3: A diagram which illustrates the impacts of the COVID-19 pandemic on the mobility situation in Røst.

Findings indicate that the COVID-19 pandemic of 2020 – 2022 altered the mobilities of people living in Røst. Most noticeably, there was a marked decrease in regional trips, which is in line with findings by Guillen-Royo (2020) which indicated that air travel decreased significantly as a result of government-imposed travel restrictions at the beginning of the pandemic (Guillen-Royo, 2022, p. 287). Guillen-Royo noted that the decrease in air travel was even more dramatic in rural communities which do not have easy access to bus or train lines for regional travel (Guillen-Royo, 2022, p. 287).

Work trips, especially regional work trips for meetings, workshops, lectures, etc., were some of the first to stop during the early days of the pandemic, as these types of trips were often considered non-essential and were most easily replaced by digital alternatives. Regional trips for leisure activities and social visits decreased the most dramatically, which is also in line with research indicating that distances traveled decreased significantly in scarcely populated areas as a result of both non-compulsory and mandatory COVID-19 government interventions (Kamineni et al., 2023, p. 9). Social and leisure regional trips have been slow to
start up again since travel restrictions have been lifted, with locals expressing that an increase in prices and cost of living since the end of the pandemic is in part to blame. Interestingly, the timeline for the steep increases in prices and cost of living most respondents referred to lines up with the first months of the Russian invasion of Ukraine, which likely also plays a role in the volatile global economic situation in Norway.

Another impact of the COVID-19 pandemic in the community was the complete shutdown of many social activities and organizations at the onset of the pandemic. These organizations and activities had to be shut down to comply with national regulations, but this development was a huge loss for the community, with many members relying on such activities as important opportunities for socialization. Research about wider effects of the pandemic indicates that the pandemic and accompanying lockdowns were a main catalyst in increasing social exclusion, especially amongst older adults (Seifert & Cotten, 2021, p. 99). The shutting down of community activities thus perpetuated the existing transportrelated social exclusion of certain older adults in Røst, by decreasing the number of opportunities they had to get out and socialize. A big issue in Røst specifically is that many of these organizations and activities have not started up again since the pandemic has ended. It is theorized that this is due to a combination of factors, including fear of the virus, reluctance, the increased age of the individuals who once took responsibility for the organization of such initiatives, and the slow but steady decrease in population in the community. Most likely, the real reason is a combination of all these factors and more.

In general, the tight-knit nature of the community in Røst made the local response to the pandemic very effective, and the community was able to avoid the virus for a long time. This is in line with findings by Kamineni et al. (2023) which indicated that rural areas were more responsive to less invasive and less-costly spread-mitigation measures – a tight-knit community where everyone knows and cares about each other is less likely to need strict and prohibitive mandatory measures to combat the spread of infection (Kamineni et al., 2023, p. 9).

Surprisingly, the pandemic also brought some positive changes to the community: the ferry being made free for pedestrian and bike traffic at the start of the pandemic to decrease the risk of virus transmission was a first and important step in the evolution of ferry policy in Norway. The ferry has continued to be free for pedestrians and bike traffic since this first implementation, and it does not seem likely that this policy will revert. This change proved to also be very important for reducing the financial burden on the people who are dependent on these ferries, especially weekly commuters who have saved a lot of money by able to travel for free. The policy was brought one step further in the summer of 2022 when the ferry was also made free for motorized vehicle traffic, and this is a positive trend.

Another positive trend stemming from the pandemic has been the accelerated digital transformation of work and workplaces (Nagel, 2020, p. 861). The reduction in both regional and local work trips at the beginning of the pandemic, and the continuation of this trend since society has "reopened", has important implications both for all spheres of sustainability, especially social and

environmental sustainability: social sustainability in that the accelerated digitalization of work can bring employment opportunities and development to otherwise limited communities, and environmental sustainability in that a large decrease in the use of fossil-fueled transport modes (especially airplanes) for work trips is good for the environment. This same digitalization trend can also be applied to school trips and presents a golden opportunity for the future of the community in Røst.

7.3 Opportunities for the Future

In looking towards the future, Røst presents several promising opportunities in terms of development and mobility.

Firstly, the rise of digital mobilities offers the potential to replace or supplement certain types of trips with technology, thereby reducing the need for physical travel and reducing the burden on the least mobile members of society. Embracing these digital alternatives can contribute to more sustainable and efficient mobility practices in Røst.

Secondly, the island community holds potential as a remote work hub, which could help the community revitalize and attract new residents. An influx of remote workers can stimulate economic growth, enhance local services, and foster a more vibrant social environment.

Thirdly, insular communities like Røst, while more vulnerable to the impacts of climate change, also possess inherent resilience due to the strong connections between the people and their surroundings. This resilience, coupled with Norway's sustainability agenda, positions insular communities as an ideal testing ground for green transport modes aligned with Norway's sustainability objectives. Røst can play a crucial role in piloting and implementing sustainable transportation solutions, contributing to the broader green mobility movement, and inspiring innovative approaches to address climate changes.

7.3.1 Digital mobilities





The increased digitalization of society has impacted the mobility situation in Røst. Most noticeably, an increase in digital mobilities is fundamentally changing the way people work, socialize, and access the goods and services they need.

Mobile technology is becoming more and more internalized, as people use technology for nearly all aspects of daily life, empowering them to traverse space with greater ease, all while reducing the need for physical movement (Sheller & Urry, 2006, p. 221). While digital technology is increasingly replacing the need for physical movement, there are few types of trips that are completely replaceable by mobile technology, with the reasons for this being multifold and including social, physical, and economic reasons.

Social trips can be replaced to a certain degree, as communication technology allows individuals to communicate and socialize with others without being in the same place as them. However, social trips cannot be fully replaced, as human beings still need physical, face-to-face meetings to fulfill their socializing needs.

In terms of *shopping and accessing goods*, the people of Røst have already proven that they are comfortable with digital alternatives, as the community has a very high per-capita rate of online shopping. While most perishable food items cannot be purchased online, the local shop's delivery service means that people can get food delivered to their front door with a quick call, text message, or email to the store. Still, findings from this study revealed that trips to the local shop were seen as an important social opportunity which most people, especially older adults, were not willing to give up.

Digital solutions show potential in the realm of **healthcare**, but as a supplement rather than a replacement: digital consultations and follow-ups for various healthcare-related services already exist, but physical healthcare services are still extremely valuable and cannot be fully replaced. Still, for the least mobile people living in the most isolated areas, digital supplements to healthcare services might be extremely valuable, as they might allow these people to access important healthcare services they might have otherwise had to go without. The implementation of the *kompbrett* for both social and healthcare purposes in Røst shows promise and may help reduce social exclusion of affected individuals and the need for physical healthcare trips. Even in discussions about the *kompbrett*, the local administrator who brought it up mentioned that this tool was to serve as a supplement to healthcare services, and not as a replacement for physical trips, at least not yet.

Digital solutions show the greatest promise in replacing **trips for work and education**. The COVID-19 pandemic proved to the world that remote work and education are a real possibility, especially as the technologies used for such purposes are constantly evolving and improving. When considering if physical work- and school-trips can be replaced by digital alternatives, the answer might be "not always, not yet", at least not for everyone. While some individuals may thrive in fully online work and schooling environments, others still need the faceto-face interactions which are important for learning, productivity, and social wellbeing. Still, remote work and remote schooling provide increased opportunities to people living in physical isolated areas, and this is extremely important.

The digitalization of society and the digital replacement of trips also have age-based implications, as there is still a large difference in how comfortable older

adults are in using technology when compared with youth. Older adults are at a higher risk of exclusion in a world where digital mobilities are increasing, especially if they do not have access to the technology in question, or to resources they need to learn how to use it. Interestingly, this challenge might be unique to the current generation: the older people of the future will be much more familiar with technology, and more adaptable to further changes and novel technologies, at least compared with the current older generation, who might not have picked up a mobile phone for the first time until they were well over 50. Economic barriers also play a role here, as full participation in modern society requires access to a variety of tools, including a mobile phone or computer, and internet access: people without access to these tools might see themselves left behind and excluded from society (Sheller & Urry, 2006, p. 213).

At this point in time, few types of trips are ready to be fully replaced by digital alternatives. It is therefore important to effectively plan for non-replaceable trips. Planning for non-replaceable trips should include optimizing or establishing public transport networks and infrastructure, providing accessible healthcare facilities, and designing inclusive public spaces to increase ease of movement for all residents, but especially those with limited mobility. Additionally, promoting things like carpooling, ridesharing, ride-giving, and community-based transport initiatives can help decrease individual car use while maintaining social providers, connections. Collaboration between healthcare community organizations, local residents, and transportation agencies is essential for establishing coordinated solutions for physical trips, ensuring that individuals can access necessary services and maintain vital social interactions. In the near future, digital technology should be used as a supplement to all types of trips, thus broadening people's mobilities, reducing the immobilities of vulnerable groups, and preparing society for even higher degrees of digitalization in the long-term future.

7.3.2 Røst as a remote work hub

Sheller and Urry's New Mobilities Paradigm highlights how the evolution and growth of technology has changed the way people live, including affecting individuals' work life, home life, social life, and travel patterns (Sheller & Urry, 2006). Data collected in this study reveals that residents, and especially local administrators, are aware of the opportunity this digitalization of society could represent for a place like Røst.

The NMP recognizes that many trips are being replaced or supplemented by digital alternatives, and the COVID-19 pandemic showed the world that work trips are some of the first types of trips that can be replaced with digital alternatives in times of need (Sheller & Urry, 2006). Limited employment opportunities in Røst and the long distances one must travel to access places of higher education and employment have contributed to the steady decline of the archipelago's population, which is a common trend in rural areas all over the country (Rye & Blekesaune, 2007, p. 170). By establishing a local business park in Røst, local administrators are hoping to create a space which not only will encourage the

establishment of new businesses but will also attract workers who can bring their remote jobs to the community with them.

Røst has so many qualities and characteristics that many people seek, such as a small community, a safe environment for children to grow up in, closeness to nature, and good opportunities for socialization and cultural exchange, but a lack of employment opportunities has deterred people who might otherwise have liked to settle there. By offering modern facilities and services for remote work, in combination with the high-speed fiberoptic internet already serving the community, Røst is putting itself in an excellent position to attract new residents and foster growth and development in the community (Stamnes, 2021).

7.3.3 Climate change and adaptation

As identified in the review of existing research, climate change presents a big challenge to insular communities, and the impacts of climate change are expected to be disproportionately felt by such communities in the coming decades. Røst is an archipelago comprised of multiple delicate ecosystems. These ecosystems provide valuable natural resources and must be protected, as both general changes in climate conditions and the risk of dramatic environmental disasters are a threat to nature and the local economy.

The strong connections between the community and their local environment will play a crucial role in conservation efforts and climate change adaptation. Amundsen (2015) identified that place-attachment is a key driver to adaptation in coastal communities in Northern Norway, and emotional connections to place put such communities in a strong position to adapt to the changes and challenges expected in the coming decades (Amundsen, 2015, p. 257). Attachment to place appeared to be very strong in the residents of Røst, with people expressing an appreciation for the nature surrounding them, and the long-standing tradition of cooperation between *Røstværinger* and their local environment. However, this perceived robustness does not imply that coastal communities will not need ample assistance from regional and national governments to meet and adapt to climate-related challenges.

The sustainability agenda

The recognition of alarming shifts in climactic conditions and the need to address and mitigate these has prompted the adoption of a comprehensive sustainability agenda across all levels of policymaking in Norway. This forwardlooking agenda, coupled with goals aimed at facilitating a seamless transition to green energy, emphasizes the necessity of exploring and testing novel technologies and transportation modes.

Røst can serve as an ideal testing ground for renewable energy-based transport modes on a small scale before their broader implementation. While hydrogen ferries are already being developed, exploring the opportunities for the implementation of electric airplanes and self-driving vehicles for person transport could also be relevant. The national government's mandate to transition to hydrogen-powered ships on the RV80 ferry route indicates a commitment to green transport modes (Samferdselsdepartementet, 2020, p. 76). While there is still

enormous untapped potential, these initiatives and considerations highlight Røst's potential for testing innovative and environmentally friendly mobility solutions in the face of climate change.

7.4 Policy Recommendations

Based on the general shortcomings of Norwegian transport policy to address the mobility challenges of small, insular communities, the findings of this thesis have certain implications for national, regional, and local policy. Based on this, the following section will provide an overview of policy recommendations aimed at addressing the identified mobility challenges in the community, especially the "missing" linkages illustrated in figure 6.16.

Findings from Røst demonstrate that small, insular communities often demonstrate very strong connections between mobility and many other aspects of society, including livelihood, education, health, culture, and more. Working-age adults' opportunities to earn a living and participate in the workforce depend on having relevant places of employment close to home, or within a reasonable commuting distance. A requisite healthcare offering to people of all ages is dependent on there being health services available and accessible in the community, or mobile healthcare services that visit patients in their own homes. Safe and easy access to schools and universities is of utmost importance for children, youth, and the futures of the communities they live in, as these directly influence their prospects for education and development. These strong connections mean that solutions to mobility challenges cannot just come from transport policy at various administrative levels, but questions of mobilities must also be considered in policies relating to education, work, health, and culture.

In general terms, most national policies have goals which have been designed and set with urban centers in mind and these are not being adapted to fit the realities and needs of smaller towns and island communities. This is a major shortcoming which puts such communities in an even more vulnerable position. However, the National Transport Plan is intended to be a cohesive plan for the entire country, and the goals set in this policy document must therefore be applied at all spatial levels.

Additionally, there is a need to broaden the definition of, and conversations surrounding, public transportation. In national and regional policy documents, public transportation most often refers to large scale passenger transportation with busses, trains, ferries, and airplanes. But in the context of small communities, where there are significantly fewer people, taxis are an important part of the public transport offering. Taxis play a completely different role in rural and small communities than they do in urban centers, and this must be acknowledged and accounted for.

Below, a list of specific policy recommendations will be suggested. Most of these policies and initiatives entail intersectoral collaboration at multiple administrative levels, having implications for both local, regional, and national policy.

- 1. The National Road Authority, *Statens Vegvesen*, should take a stronger stance and role in the determination of ferry routes and timetables. Expecting the administrations of three different communities – each of which have the needs of their own municipality as their top priority – to agree on something as important and complex as a ferry route is unrealistic and unproductive. At a certain point, *Statens Vegvesen* should step in and use logical, grounded analysis to determine which routes and schedules will be most beneficial to all parties involved.
- 2. Insular communities such as Røst are not included in exercises of transport modeling, which are often targeted to urban areas and sub-urban regions. These methods and models are not equipped to deal with the mobility challenges of the most isolated communities. While it might not be realistically feasible to include extremely isolated or insular communities such as Røst into the transport-modeling exercises upon which transport policy and decisions are often based, there must be another structure or domain which allows for a separate discussion for transport and mobility in isolated and insular communities, to best meet the needs of such communities.
- 3. Considering the unique challenges faced by such areas, **national and regional transport plans should have specific guidelines** for strategies and measures **for rural and insular communities**. Such communities are overlooked in current policy documents which have an urban focus.
- 4. The ferry routes connecting isolated communities should continue to be free for both pedestrian and vehicular traffic, including commercial traffic. Given the benefits experienced by residents and businesses in affected communities, the provision of free ferry services should be sustained, even in the face of potential shifts in administrations and evolving government policies in the coming years and decades. The free ferry is an important step for social sustainability, and is vital for increased equity and affordability, social cohesion, and long-term sustainability.
- 5. There should be **stricter regulations on the altering of regional flight routes**. Stricter regulations should govern the modification of regional flight routes, so that routes such as the Røst Bodø route are treated as independent routes and cannot be connected with routes to neighboring airports. This approach can help address potential issues related to pricing and capacity, ensuring more reliable and sustainable operations of regional flights.
- 6. National policies relating to active aging and older people should **recognize the important role that mobilities (and immobilities) have in the lives of older adults**. Rural communities are mainly inhabited by elder people, and these same rural communities are often not equipped with mobility and transport solutions to cater to this aging population. This must be addressed in not just transport policy, but also policies related to aging and senior citizens.

- 7. Government funding should be used to **provide Røst with a simple and flexible demand-responsive transit service to help meet the needs of those who cannot drive**. This includes for purposes such as getting schoolchildren to and from school and removing the burden of giving rides by their parents, and to allow older adults to get out (for shopping, socializing, and activities) without feeling like they are burdening someone by asking for a ride. Existing ride-giving initiatives in the community can be formalized to protect both providers and users of this now-informal service. A lack of a government-funded local public transport offering in a community which produces so much value (mainly in the form of fish exports) for the national economy is not acceptable.
 - a. The local government in Røst has already offered to provide both financial and bureaucratic assistance to anyone wishing to start up a taxi service in the community. Perhaps this assistance and subsidization should come from higher levels of government, as taxis are extremely important for the mobilities of rural citizens, and national transport policy should recognize the importance of taxi services in such communities.
 - i. This could include facilitating the possibility of combining multiple driving-based services into one or two full-time positions.
 - b. The *distriktsmobil* service, which was brought up in an expertinterview and is already in place in nearby Velvestad Kommune, shows promise here. This service is a good replacement for a taxi service and is both flexible and affordable for users. Reliance on the local volunteer center for running the service could potentially remove some of the barriers related to funding that have often shut down other DRT services. This type of service might still have some drawbacks and challenges to integration with the local transport network and mobility practices, but it would be a huge step up from the current offering.
- 8. The long-term physical planning policy for Røst Kommune should **focus on establishing a more consolidated town center**, where activities and services are concentrated. In order to promote the utilization of sustainable modes of transportation and diminish the reliance on exclusionary transport modes such as cars, it is crucial to focus future residential development initiatives, or the renovation of existing homes close to where business, jobs, activities, and services are concentrated.
- 9. Finally, national and regional policy should recognize the potential of small island communities to serve as testing sites for novel, green transport modes, and as model "sustainable" communities which place emphasis on the three pillars of sustainability.

7.5 Limitations of the Study

Despite interesting and fruitful findings, this study still faced several limitations that should be acknowledged. First, despite efforts, it proved to be difficult to contact and interview the people in the community who were most likely to be impacted by transport-related social exclusion, especially women over the age of 80 without access to a car. As a result, the understanding of transport-related social exclusion in Røst presented in this thesis is based on second-hand accounts from community members who were not themselves directly affected by TRSE. This can have a significant impact on the findings of this study, as not hearing from affected individuals first-hand means that important information and findings might not have been uncovered, and that the information presented may be incomplete.

Additionally, to better understand differences in mobility practices and experiences along gender lines, it would have been helpful to have a more even distribution in the genders of interviewees. For youth interviews, three interviewees were male, and two were female. For older adults, four interviewees were female, and one was male.

7.6 Constellations of Mobility

Building upon The New Mobilities Paradigm, Tim Cresswell uses the term "constellations of mobility" to describe the interconnected and dynamic relationships between different forms, practices, and experiences of mobility (Cresswell, 2010). The concept emphasizes that mobility is not a singular, isolated phenomenon, but rather comprises various elements that come together and shape people's movements and experiences. The idea of constellations of mobility suggests that mobilities encompass a wide range of factors, including transportation modes, users, infrastructures, policies, destinations, social practices, cultural meanings, and individual experiences. The term "constellations" implies that these diverse elements of mobility are not independent, but exist in relation to one another, forming interconnected systems and networks. Like the stars in a constellation, the various components of mobility align and create meaningful patterns that shape how people move and experience mobility in their everyday lives.

In Røst, the movement of people and all understandings and experiences which surround these movements have both modern and historical importance. An island community far out at sea has been dependent on movement and connections since the beginning of its existence, and while the mobilities of the community are constantly in flux in the face of modern challenges, the foundations remain the same: the mainland is far, but, if given the necessary tools and resources to adapt to changing times, the resilient community in Røst will be able to bridge the gap, ultimately fostering a sustainable and future-oriented environment which is an attractive place to work, visit, and live.

8. Conclusion

The goal of this thesis, which employs a case study approach, is to understand how challenges related to transport and mobility are exacerbating issues related to depopulation and disproportionate aging in small island communities in Northern Norway. One of the main objectives of the thesis is to understand how the mobilities of island-dwellers in the North of Norway are evolving in face of such societal changes and other challenges. Considering the age-sensitivity of the demographic challenges of rural areas, this thesis focuses on mapping the mobilities of youth and older adults living in the study area. The methods employed in this thesis include cyber-research and the use of a simple travel behavior survey to gain an overview of the mobility practices of the population of the case study area, before in-depth interviews with local administrators and members of the relevant population groups are conducted to obtain deeper insights into mobility challenges and preferences, and how these are influenced by external factors.

The findings of this thesis, thoroughly analyzed in the context of existing research, plans and policies at various levels, and The New Mobilities Paradigm framework, unveil a complex network of mobilities in the research area, which are constantly evolving in face of contemporary challenges and changes. Based on these findings, a series of recommendations for local, regional, and national social and physical planning policies are given. Following a detailed analysis of the findings in chapter 7, the following section attempts to directly answer the research questions posed at the start of this thesis.

8.1 Research Questions

In the following section, the research questions for this thesis, which were first introduced in chapter 1, will be answered. A more detailed discussion on the findings of this thesis, and how these findings contributed to reaching such conclusions can be found in chapter 7.

Main research question:

How are constellations of mobility shaping up in the island communities of the north of Norway in light of existing constraints, evolving technologies, and modern challenges? Such challenges and constraints include but are not limited to: rural to urban migration, the COVID-19 pandemic, and climate changes.

The mobilities of *Røstværinger* are unique when compared with the mobilities of people living in urban areas, yet equally as complex. Community and volunteerism play a much greater role in the mobilities of residents of small island communities when compared with those of urban dwellers. Insular mobilities tend to also be more impacted by the harsh weather conditions they face, especially in the winter months. Mobility and immobility play an important role in the daily lives

of island-dwellers, where movement has traditionally been constrained to the physical boundaries of the island itself, but is now expanding to encompass greater areas thanks, in part, to **evolving technology** and the accelerated digitalization of society.

Increased **rural to urban migration** is contributing to the depopulation of island communities in northern Norway, which leads to a shrinking basis for public services, including public transportation. This means that these communities are losing transport services that they once had, and it is increasingly difficult to establish new ones, especially without increased government assistance. A lack of opportunities and services (both transit-related services and other) risks further perpetuating this depopulation issue.

The **COVID-19 pandemic** has altered mobility patterns of island-dwellers, especially in reducing non-essential regional travel. At the same time, the pandemic has led to the accelerated digitalization of work and education, which is an excellent opportunity for further development of communities where in-person employment and education opportunities are limited. These developments might indicate that the COVID-19 pandemic is playing a role in increasing the independence of such communities.

Climate change and the sustainability agenda have also impacted the mobilities of island-dwellers in northern Norway, as the traditional reliance on fossil-fuel intensive transport modes to reach these isolated communities is slowly becoming a thing of the past and renewable energy powered ferries and airplanes are starting to become more feasible. Tough weather conditions due to islands' exposed locations at sea lead to an increased dependence on cars, especially for older adults, and especially during the winter months. Policy at all levels seeks to reduce this dependence on cars and increase the use of more sustainable modes of transport such as walking and biking, even in such small communities where traffic congestion is not a major issue. Changes in global climactic conditions that contribute to more extreme weather events in northern areas, including Arctic Norway, could pose further challenges in the future.

Sub-research question 1:

To what degree has the **free-ferry program** as an inclusive mobility policy helped mitigate mobility disadvantages faced by residents of northern island communities?

The free-ferry policy has been of tremendous importance to the community in Røst, and surely for other impacted island communities as well. The ferry being made free for pedestrians and bikers was a crucial step for decreasing the financial burden on those who are most dependent on the ferry for commuting to work or school on the mainland. The ferry being made free for cars and commercial vehicles decreases the financial burden of both essential and non-essential regional trips for residents and decreases operating costs for local businesses.

Overall, though it comes at a significant economic cost for greater society, the free-ferry policy is an important equalizer for increased social sustainability in

Norway as a whole. As long as social sustainability is a national goal, it should be a top priority to safeguard the free-ferry policy, even in the face of future administrative changes and shifts in government policy.

Sub-research question 2:

Which **inclusive mobility solutions** already exist in the case study areas and how effective are they?

Inclusive mobility solutions in this case refer to services which aid in providing accessible and equitable transportation options for all individuals. Such services contribute to creating a comprehensive transportation system that caters to the needs of all residents and ensures that everyone has equal access to opportunities, services, and social activities.

Inclusive mobility solutions in Røst include both informal and semi-formal transport services. In terms of semi-formal services, the local administration makes it known that residents can call the municipal office to request rides to important community events. Informally, community-driven ride-giving provides on-demand (within certain constraints) transportation to members of the community who are less mobile and are at risk of exclusion from community events and society in general. At the time of this study, there were no formalized inclusive mobility services in place in the case study area.

In terms of effectiveness, while both solutions provide transportation to those who need it, they still have some drawbacks and challenges. While extremely flexible and affordable, such solutions can lead to increased travel time, and loss of privacy and independence. Such semi-formal and informal transport services are also generally not available around the clock, which is a drawback. Additionally, there might be a certain degree of stigma surrounding the use of such services which makes people reluctant to use them, decreasing patronage and increasing the transport-related social exclusion of affected individuals.

Sub-research question 3:

Which **other mobility solutions** can be effective in mitigating the disadvantages experienced by people living in physically isolated island communities in the north of Norway?

Given the limitations and challenges associated with the existing inclusive mobility services available in Røst, there is a need for more sustainable and long-term solutions.

In the short-term, something like the *distriktsmobil*, which is already implemented in other municipalities in the region, could work well. This is a flexible and affordable alternative to a taxi service, which is a result of collaboration between regional and municipal authorities. Since the service relies partially on volunteer labor, it can potentially overcome some of the barriers faced by traditional demand-responsive transit services, such as scarce funding. Such a service would be an important step in formalizing the ride-giving which already exists in the community, ensuring that operating costs are covered, and that it is possible to request rides at any time of day.

In the longer-term, a more comprehensive and formalized DRT service should be implemented to increase reliability and privacy. Such a service would also play an important part in increasing the independence and social inclusion of residents who do not drive, are unable to walk or bike to all destinations, or lack the social capital to rely on rides from others.

8.2 Implications

The findings of this thesis may be further employed to refine social and physical development policies, as well as local, regional, and national transport plans in Norway. The identification of context-sensitive and inclusive mobility solutions that can work in rural communities such as Røst will likely be relevant for other communities with similar qualities, and the authorities dealing with them.

Additionally, this study highlights the importance of studying mobilityrelated phenomena such as transport-related social exclusion and mobility poverty in non-urban contexts. Researching these phenomena in rural and coastal areas might provide new insight and understanding that would not have been possible when researching these same themes solely in an urban context (Waters, 2022, p. 23). The heavy urban focus of mobility and transport research does a disservice to rural communities which face as many, if not more, mobility-related challenges as urban areas, but are less likely to be equipped with the funding and tools needed to mitigate them.

Finally, this thesis outlines the implications for redefining what "smart" mobility can mean for such island communities. Røst's geographical isolation means that it has a heavy reliance on digital communications and the internet for the transfer of knowledge, information, and non-physical services. Requisite technological infrastructure on the island, combined with its extreme geographical isolation and containment, might make Røst an excellent "testing site" for innovative smart mobility services and technologies.

8.3 Opportunities for Further Research

This thesis is a first step in filling a gap in research on the mobilities of island residents in Northern Norway. The fairly broad research objective of this thesis opens up multiple avenues of further research on the same topic, and other related topics.

First, future research could address specific limitations of this study. This includes implementing research methods which are better able to solicit responses and participation from a more representative sample of the community, including the "oldest" older adults, and a more diverse sample in terms of background and gender. More time and resources will be necessary to come in contact with those people in the community who are most susceptible to transport-related social exclusion. Gathering information about the mobility experiences of such people

will lead to a deeper understanding of the challenges they face, and the effectiveness of TRSE-mitigating measures.

Additionally, future research could examine the longer-term impacts of the recently implemented free-ferry policy on affected routes. Given that the policy is still in its early stages, it would be interesting to investigate how patronage on these routes changes in the coming years. Notably, since the free-for-motor vehicles policy applies to routes that either connect islands or have under 100,000 yearly passengers, significant increases in patronage can lead to certain routes becoming excluded from this policy that affected communities seem to greatly benefit from.

Another interesting potential avenue for future research would be a more in-depth exploration of creative and novel solutions for addressing mobility challenges. While this thesis attempts to identify inclusive mobility solutions which can be beneficial to the study area, feasibility assessments and price modeling will be necessary for a more complete understanding of their effectiveness. Such assessments and modeling exercises were outside the scope of this thesis but could be within the scope of future research.

Finally, future research can explore the potential of small island communities such as Røst to serve as pilot sites for novel mobility solutions and transport modes. In a broader context, such communities could also serve as models for designing self-sufficient communities with focus on the three pillars of sustainability.



References

- Ahern, A., & Hine, J. (2012). Rural transport Valuing the mobility of older people. *Reserach in Transportation Economics*, *34*(1). <u>https://doi.org/10.1016/j.retrec.2011.12.004</u>
- Amundsen, H. (2015). Place attachment as a driver of adaptation in coastal communities in Northern Norway. *Local Environment*, 20(3), 19. <u>https://doi.org/10.1080/13549839.2013.838751</u>
- Barbieri, D. M., Lou, B., Passavanti, M., Hui, C., Antunes Lessa, D., Maharaj, B.,
 Banerjee, A., Wang, F., Chang, K., Naik, B., Yu, L., Liu, Z., Sikka, G., Tucker, A.,
 Foroutan Mirhosseini, A., Naseri, S., Qiao, Y., Gupta, A., Abbas, M., . . . Adomako,
 S. (2020). A survey dataset to evaluate the changes in mobility and transportation
 due to COVID-19 travel restrictions in Australia, Brazil, China, Ghana, India, Iran,
 Italy, Norway, South Africa, United States. *Data in Brief*, *33*.
 https://doi.org/10.1016/j.dib.2020.106459
- Berghundhaugen, A. (2020). Varsler gratis ferge for å hindre smitte. *Avisa Nordland*. <u>https://www.lofot-tidende.no/varsler-gratis-ferge-for-a-hindre-smitte/s/5-28-211599</u>
- Brake, J., Nelson, J. D., & Wright, S. (2004). Demand responsive transport: towards the emergence of a new market segment. *Journal of Transport Geography*, 12. <u>https://doi.org/10.1016/j.jtrangeo.2004.08.011</u>
- Briguglio, L. (1995). Small Island Developing States and Their Economic Vulnerabilities. *World Development*, *23*(9). <u>https://doi.org/10.1016/0305-750X(95)00065-K</u>
- Christensen, A. E., & Gough, K. V. (2012). Island mobilities: spatial and social mobility on Ontong Java, Solomon Islands. *Danish Journal of Geography*, *112*(1). <u>https://doi.org/10.1080/00167223.2012.707803</u>
- Church, A., Frost, M., & Sullivan, K. (2000). Transport and social exclusion in London. *Transport Policy*, 7(3), 10. <u>https://doi.org/10.1016/j.jdmm.2013.10.005</u>
- Clark, T., Foster, L., Sloan, L., & Bryman, A. (2021). *Bryman's social research methods* (Sixth edition. ed.). Oxford University Press.
- Cresswell, T. (2010). Towards a Politics of Mobility. *Environment and Planning D: Society* and Space, 28(1). <u>https://doi.org/10.1068/d11407</u>

Creswell, J. W. (2015). A concise introduction to mixed methods research. SAGE.

- Cross, M., & Nutley, S. (1999). Insularity and Accessibility: the Small Island Communities of Western Ireland. *Journal of Rural Studies*, *15*(3). <u>https://doi.org/10.1016/S0743-0167(98)00062-X</u>
- Currie, C., & Falconer, P. (2014). Maintaining sustainable island destinations in Scotland: The role of the transport-tourism relationship. *Journal of Destination Marketing & Management*, *3*(3). <u>https://doi.org/10.1016/j.jdmm.2013.10.005</u>
- Facebook. (2023). Røst. Facebook. https://www.facebook.com/groups/2249047178
- Fyhri, A., & Hjorthol, R. (2006). Barns fysiske bomiljø, aktiviteter og daglige reiser.
- Fyhri, A., & Hjorthol, R. (2009). Children's independent mobility to school, friends and leisure activities. *Journal of Transport Geography*, 17. <u>https://doi.org/10.1016/j.jtrangeo.2008.10.010</u>
- Guillen-Royo, M. (2022). Flying less, mobility practices, and well-being: lessons from the COVID-19 pandemic in Norway. *Sustainability: Science, Practice and Policy*, *18*(1). https://doi.org/10.1080/15487733.2022.2043682
- Hjorthol, R. (2013). Winter weather an obstacle to older people's activities? *Journal of Transport Geography*, 28. <u>https://doi.org/10.1016/j.jtrangeo.2012.09.003</u>
- Hjorthol, R., Longva, F., Skollerud, K. H., & Vågane, L. (2009). *Transportløsninger for eldre i distriktene*.
- Jeekel, H. (2019). *Inclusive transport : fighting involuntary transport disadvantages*. Elsevier.
- Jørgensen, F., Solvoll, G., & Welde, M. (2006). Gratis ferger stor og omstridt transportreform i Norge. *Selected Proceedings from the Annual Transport Conference at Aalborg University*, 1(1). <u>https://doi.org/10.5278/utd.v1i1.3727</u>
- Kaltenborn, B. P., Linnell, J. D. C., Baggethun, E. G., Lindhjem, H., Thomassen, J., & Chan, K. M. (2017). Ecosystem Services and Cultural Values as Building Blocks for 'The Good life'. A Case Study in the Community of Røst, Lofoten Islands, Norway. *Ecological Economics*, 140(1). <u>https://doi.org/10.1016/j.ecolecon.2017.05.003</u>
- Kamineni, M., Engø-Monsen, K., Midtbø, J., Forland, F., Freiesleben de Blasio, B., Frigessi, A., & Engebretsen, S. (2023). Effects of non-compulsory and mandatory

COVID-19 interventions on travel distance and time away from home, Norway, 2021. *Europe's journal on infectious disease surveillance, epidemiology, prevention and control*, 28(17).

- Kamruzzaman, M., Yigitcanlar, T., Yang, J., & Mohamed, A. (2016). Measures of Transport-Related Social Exclusion: A Critical Review of the Literature. Sustainability, 8(7). <u>https://doi.org/10.3390/su8070696</u>
- Kerr, S. A. (2005). What is small island sustainable development about? *Ocean & Coastal Management*, 48(7-8). <u>https://doi.org/10.1016/j.ocecoaman.2005.03.010</u>
- Lazrus, H. (2012). Sea Change: Island Communities and Climate Change. *Annual Review* of *Anthropology*, *41*, 17. <u>https://doi.org/10.1146/annurev-anthro-092611-145730</u>
- Leung, A., Tanko, M., Burke, M., & Shui, C. S. (2017). Bridges, tunnels, and ferries: connectivity, transport, and the future of Hong Kong's outlying islands. *Island Studies Journal*, *12*(2). <u>https://doi.org/10.24043/isj.24</u>
- Litman, T. (2003, 4 April 2003). *Social Inclusion as a transport planning issue in Canada* European Transport Conference, Strassbourg.
- Lucas, K. (2012). Transport and social exclusion: Where are we now? *Transport Policy*, 20, 8. https://doi.org/10.1016/j.tranpol.2012.01.013
- Lyons, G., & Urry, J. (2005). Travel time use in the information age. *Transport Research*, *A*.
- Mageean, J. F., Nelson, J. D., & Wright, S. (2003). *Demand Responsive Transport: Responding to the Urban Bus Challenge.* AET Conference, Strasbourg.
- Morales, E., Gamache, S., & Edwards, G. (2013). Winter: public enemy #1 for accessibility exploring new solutions. *Journal of accessibility and design for all*, 4(1), 12. <u>https://doi.org/10.17411/jacces.v4i1.57</u>
- Mounce, R., Beecroft, M., & Nelson, J. D. (2020). On the role of frameworks and smart mobility in addressing the rural mobility problem. *Research in Transportation Economics*, 83. <u>https://doi.org/10.1016/j.retrec.2020.100956</u>
- Nagel, L. (2020). The influence of the COVID-19 pandemic on the digital transformation of work. International Journal of Sociology and Social Policy, 40(9/10). <u>https://doi.org/10.1108/IJSSP-07-2020-0323</u>

- Nordland Fylkeskommune. (2021). *Et bærekraftig Nordland Planstrategi for samarbeid* og grønn omstilling 2021 - 2024. Bodø: Nordland Fylkeskommune
- Nordland Fylkeskommune. (2022). *Regional transportplan 2022 2023 med handlingsprogram*. Bodø, Norway: Nordland Fylkeskommune
- Nordland Fylkeskommune. (2023). *TT-kort (tilrettelagt transport)*. Nordland Fylkeskommune. Retrieved 28 February from <u>https://www.nfk.no/tjenester/kollektiv-og-veg/tilrettelagt-transport-tt-kort/</u>
- Porru, S., Misso, F. E., Pani, F. E., & Repetto, C. (2020). Smart mobility and public transport: Opportunities and challenges in rural and urban areas. *Journal of Traffic and Transportation Engineering*, *7*(1). <u>https://doi.org/10.1016/j.jtte.2019.10.002</u>
- Preston, J., & Rajé, F. (2007). Accessibility, mobility and transport-related social exclusion. *Journal of Transport Geography*, 15(3), 9. <u>https://doi.org/10.1016/j.jtrangeo.2006.05.002</u>
- Priya Uteng, T. (2006). Mobility: Discourses from the Non-western Immigrants Groups in Norway. *Mobilities*, 1(3). <u>https://doi.org/10.1080/17450100600902412</u>
- Regjeringen. (2018). A full life all your life. Oslo Retrieved from <u>https://www.regjeringen.no/contentassets/196f99e63aa14f849c4e4b9b9906a3f8/e</u> <u>n-gb/pdfs/stm201720180015000engpdfs.pdf</u>
- Regjeringen. (2021). *Statlig kjøp av flytransport*. Oslo, Norway: Regjeringen Retrieved from <u>https://www.regjeringen.no/no/tema/transport-og-</u> <u>kommunikasjon/luftfart/statlig-kjop-av-flyruter/id2076452/</u>
- Regjeringen. (2022). *Statsbudsjett 2022*. Regjeringen.no: Regjeringen Retrieved from <u>https://www.regjeringen.no/no/statsbudsjett/2022/id2871447/</u>
- Regjeringen. (2023). *Regjeringa vil redusere billettprisane og styrke rutetilbodet på FOTrutene* <u>https://www.regjeringen.no/no/aktuelt/regjeringa-vil-redusere-</u> <u>billettprisane-og-styrke-rutetilbodet-pa-fot-</u> <u>rutene/id2966574/?fbclid=IwAR2_OUmWsF6ZaecLOPme01-</u> <u>P8Lo3O_X_5m3MEofEHzj8fJ95I2VmNyqRf08</u>
- Rye, J. F., & Blekesaune, A. (2007). The Class Structure of Rural-to-Urban migration. The Case of Norway. *YOUNG*, *15*. <u>https://doi.org/10.1177/110330880701500204</u>

Røst Kommune. (2019). Kart over Røst.

- Røst Kommune. (2021). *Planstrategi 2021-2023 og planprogram for kommuneplanens samfunnsdel 2022-2033 for Røst kommune*. Retrieved from <u>https://tinyurl.com/rostkommuneplanstrategi</u>
- Røst Kommune. (2022). *Om Røst*. Røst Kommune. Retrieved 6 December from <u>https://rost.kommune.no/om-rost/category926.html</u>
- Røst Kommune. (2023a). *De grønne øyene 2030*. Røst Kommune. Retrieved 28 February from <u>https://rost.kommune.no/utviklingsprosjekter/de-gronne-oyene-2030-</u> <u>article1039-1075.html</u>
- Røst Kommune. (2023b). *Næring og utvikling*. Retrieved 7 February from <u>https://rost.kommune.no/naring/category984.html</u>
- Røst Kommune. (2023c). *Slik kan du kjøre drosje på Røst!* Retrieved 7 February from <u>https://rost.kommune.no/kjore-drosje-pa-rost/category1068.html</u>
- Røst Kommune. (2023d). *TT-kort (tilrettelagt transport)*. Retrieved 28 February from <u>https://rost.kommune.no/tt-kort-tilrettelagt-transport/category1085.html</u>
- Samferdselsdepartementet. (2020). *Nasjonal Transportplan 2022-2033*. (Meld. St. 20). Oslo Retrieved from <u>https://www.regjeringen.no/contentassets/fab417af0b8e4b5694591450f7dc6969/</u> <u>no/pdfs/stm202020210020000dddpdfs.pdf</u>
- Seifert, A., & Cotten, S. R. (2021). A Double Burden of Exclusion? Digital and Social Exclusion of Older Adults in Times of COVID-19. *The Journals of Gerontology*, 76(3). <u>https://doi.org/10.1093/geronb/gbaa098</u>
- Sheller, M., & Urry, J. (2006). The New Mobilities Paradigm. *Environment and Planning A*, 38(2). <u>https://doi.org/10.1068/a37268</u>
- Shergold, I., & Parkhurst, G. (2012). Transport-related social exclusion amongst older people in rural Southwest England and Wales. *Journal of Rural Studies*, 28(4), 9. <u>https://doi.org/10.1016/j.jrurstud.2012.01.010</u>
- Solvoll, G. (2007). *Helikopterrute mellom Træna/Lovund og Bodø Trafikkpotensial*. S. f. I. o. B. S. AS). <u>https://nordopen.nord.no/nord-</u> xmlui/bitstream/handle/11250/141028/HelikopterN0407.pdf?sequence=1
- SSB. (2022). Tabell 06913 Statistisk Sentralbyrå.

SSB. (2023). Tabell 07459 Statistisk Sentralbyrå.

Stamnes, E. (2021). Røst - Ytterst i Lofoten (1 ed.). Orkana forlag.

Starkey, P., Ellis, S., Hine, J., & Ternell, A. (2002). *Improving Rural Mobility: Options for Developing Motorized and Nonmotorized Transport in Rural Areas*. T. I. B. f. R. a. D. T. W. Bank.

Tjora, A. (2013). Kvalitative Forskningsmetoder (2nd ed.). Gylendal Akademisk.

- Tønnesen, A., Runde Krogstad, J., & Christiansen, P. (2019). *Ambitious goals and tools to fufil them*
- a study of opportunities and pitfalls in Norwegian governance of urban mobility International Scientific Conference on Mobility and Transport, Munich, Germany.
- Vannini, P. (2010). Mobile Cultures: From the Sociology of Transportation to the Study of Mobilities. Sociology Compass, 4(2), 11. <u>https://doi.org/10.1111/j.1751-</u> <u>9020.2009.00268.x</u>
- Vannini, P. (2011). Constellations of ferry (im)mobility: islandness as the performance and politics of insulation and isolation. *Cultural Geographies*, *18*(2), 23. <u>https://doi.org/10.1177/1474474010397597</u>
- Velvestad Kommune. (2023). *Distriktsmobil*. Velvestad Kommune. Retrieved 30 May from <u>https://www.vevelstad.kommune.no/frivilligsentralen/distriktsmobil/</u>
- Walsh, D., & Gerrard, S. (2018). Gender, mobilities and transformation in Loppa, a rural municipality of Norway's High North. *Gender, Place & Culture*, 25(8), 20. <u>https://doi.org/10.1080/0966369X.2018.1484702</u>

Wardenær, R. (2022, November 30th, 2022). Hjem fra puben [Photograph].

- Waters, S. (2022). *Constrained Mobility and Island life: the mobility realities of islanddwellers in Røst, Norway* [Project Proposal]. The Norwegian University of Science and Technology.
- Yigitcanlar, T., mohamed, A., Kamruzzaman, M., & Piracha, A. (2018). Understanding Transport-Related Social Exclusion: A Multidimensional Approach. Urban Policy and Research, 37(1). <u>https://doi.org/10.1080/08111146.2018.1533461</u>
- Yin, R. K. (2018). *Case study research and applications : design and methods* (Sixth edition. ed.). SAGE.

Appendices

Appendix A: Interview guide for local administrators Appendix B: Interview guide for older adults and youth Appendix C: Survey

Appendix A: Interview guide for local administrators

Nøkkelord:

- Værforhold
- Ferge, fly, helikopter
- Eldre, Ungdom
- Båt, sykkel
- Reiser til fots
- Bil og førerkort
- Deling økonomi bil, sykkel, osv.
- Tilgang til varer og tjenester
- Sosial- og fritidsaktiviteter
- 1. Er det **utfordringer** knyttet til mobilitet og transport i Røst kommune?
 - Hvilke?
 - Er **enkelte grupper** i samfunnet mer sårbare for disse utfordringene enn andre?
 - Hva gjør ledelsen i kommunen for å bidra til å dempe disse utfordringene og gjøre ting enklere for befolkningen?
 - Har det blitt prøvd andre tiltak og løsninger før?
 - Funket disse?
 - Hvorfor/hvorfor ikke?
- 2. I din mening får kommunen nok midler og **hjelp fra regionale og nasjonale myndigheter** til å bekjempe problemer og utfordringer knyttet til transport og mobilitet?
 - Jeg ser at regjeringen har nylig bestemt at billettprisene skal reduseres og rutetilbudene skal styrkes på FOT-rutene fra neste år. Kan du fortelle meg litt mer om dette og hvorfor det er viktig?
- 3. Hvordan opplevde dere i kommunen at **ferga ble gratis** fra sommeren 2022?
 - Ble det problemer med lange køer eller andre problemer når ferga ble gratis?
 - Hvordan påvirket dette det lokale næringslivet?
 - F.eks. kanskje det er flere som drar til Bodø for å handle, istedenfor å handle lokalt
- 4. **Tilrettelagt Transport Kort**: hvordan fungerer dette i praksis i kommunen?
 - Taxi-basert løsning, men kommunen har ikke taxi for øyeblikket
- 5. **Taxi** på Røst
 - Når hadde kommunen sist taxi?
 - Hvorfor er det ikke taxi lenger?
 - Er det vanskelig å finne folk til å kjøre taxi?
 - Hvorfor/hvorfor ikke?
- 6. Kan du fortelle meg om **den nye legebilen** til kommunen?

- 7. Sosial aktiviteter or arrangement hjelper kommunen med å ordne buss eller andre samkjøring-løsning for sosiale aktiviteter or arrangement slik at alle kan bli med, også de som ikke kan kjøre eller ellers sliter med å reise?
- 8. 44 svar på spørreundersøkelsen så langt:
 - 90% sier at de ikke opplever utfordringer med reising i hverdagsliv på Røst. Betyr det at det ikke er et problem?
 - Men ... bilavhengighet. Hva med de som ikke har førerkort eller bil?
 - Ingen over 69 år har svart på undersøkelsen
 - 77% sier at de har lett tilgang til alt de trenger i dagliglivet på Røst
 - 23% som sier nei, og at det mangler:
 - Fritidsaktiviteter
 - Muligheter for å fikse juridiske ting som pass, bank ID, osv.
 - Muligheter for utdanning
 - Flere jobber
 - Frisør, apotek, butikker med klær og sko
 - Andre kommentarer:
 - Bestilling fra nett tar lang tid
 - Dårlig utvalg i butikken, og dyrt

Spørsmål som ble ettersendt via epost:

- Har du merket noen viktige endringer i mobilitets-mønsteret til folk i samfunnet under og «etter» pandemien? Jeg har hørt fra andre at det har vært litt vanskelig å få noen sosiale aktiviteter i gang igjen etter de måtte slutte pga. pandemien (tror noen snakket om dansing?)
- Tilbyr kommunen noen digitale tjenester (for eksempel, digitale møter, digital oppfølging av pasienter, osv.) for de som kanskje sliter med å komme seg ut og rundt?
- I spørreundersøkelsen svarte noen at de sliter av og til med å ordne ting som pass, bank ID, osv., da de må reise til fastlandet for det. Jeg ser at i Kvænangen Kommune de har arrangert en «mobile pass og ID-kontor» som kom på besøk til kommunen slik at folk kunne fikse sånne ting uten å måtte reise. Er dette noe Røst Kommune har prøvd, eller har lyst til å prøve?
- Under intervjuet snakket vi litt om det med å prøve å skape «bolyst» her i samfunnet slik at flere får lyst til å bli boende, eller flytte hit. Føler du at dette har funket så langt, eller er det for tidlig å se effektene? Som vi snakket om under intervjuet er tilgang til muligheter for jobb, utdanning, sosiale arrangementer og aktiviteter, osv. like viktig som tilgang til varer og tjenester. Muligheten for å utføre slike aktiviteter med digitale verktøy kan være veldig viktig for «tiltrekningskraften» av distriktene. Er dette noe dere tenker på eller jobber med?

Appendix B: Interview guide for older adults and youth

- 1. Bakgrunns info
 - a. Kjønn, alder
 - b. Hvor lenge har du bodd på Røst?
 - i. Har du bodd andre steder enn Røst?
 - c. Har du førerkort?
 - d. Disponerer du eller andre i husstanden din bil?
- 2. Hvilket transportmiddel brukte du for å reise hit i dag? ©
 - a. Hvorfor valgte du dette transportmiddelet?
 - b. Hvilke transportmidler bruker du ellers?
- 3. Hvilke **typer reiser** er viktig for deg i hverdagen din?
 - a. Jobb/arbeid
 - b. Sosiale aktivitet, besøk til venner, fritid
 - c. Handle- og servicereiser
 - d. Omsorgs- og følgereiser
 - e. Andre typer reiser?
- 4. Føler du at du har tilgang til alt du trenger i dagliglivet på Røst?
 - a. Er det noe mer du ønsker du kunne ha hatt lettere tilgang til her på øya?
- 5. Opplever du utfordringer med reising i hverdagsliv på Røst?
 - a. Hvis ja, hvilke? Beskriv nærmere?
 - b. Hvis nei, føler du at det er andre i samfunnet som opplever sånne utfordringer?
- 6. Føler du at samfunnet og lokale myndigheter gir god **støtte og hjelp** til de som opplever utfordringer med å komme seg rundt?
- Reiser du sjeldnere i noen **sesonger** sammenlignet med andre?
 a. Hvorfor/hvorfor ikke?
- 8. Reiser du ofte til fastlandet?
 - a. Hvorfor reiser du til fastlandet?
 - b. Pleier du å bruke fly eller ferge?
 - c. Har du opplevd utfordringer med ruteavvik pga. værforhold eller andre faktorer?
 - d. Betydde det noe for deg at fergesambandet mellom Røst og Bodø har blitt **gratis fra sommeren 2022**?
 - i. Har dette endre hvor ofte du reiser til fastlandet, om du tar med bil eller ikke, og hvilke typer a velger å utføre med digitale verktøy/løsninger i istedenfor personlig?
- Tilleggsspørsmål for ungdom:
 - Ungdom:
 - Hvor møter du andre folk i din alder? Føler du at ungdom har nok møtesteder og muligheter for å sosialisere med andre ungdom?

- Hva tenker du om å flytte hjemmefra når man skal starte på videregående skole? Og det med å pendle frem og tilbake mellom Røst og Bodø?
- Hvilke planer har du for fremtiden?
 - Flytte til Bodø for å studere?
 - Tenker du å flytte tilbake til Røst etter studiene?
 Nvorfor eller hvorfor ikke?
- Andre/eventuelt. Nøkkelord/begrep:
 - e. Samkjøring, skyss, frivillighet
 - f. Værforhold, vinter, snø, is
 - g. Sosial aktiviteter, arrangementer og alkohol
 - h. Eldre og ungdom, de somme ikke har førerkort
 - i. Regionale og andre lang reiser fergetider, fly korrespondanser, billettpris
 - j. Lokal, regional, og nasjonalpolitikk

Appendix C: Survey

Reisevaneundersøkelse Røst

Reisevaner på Røst

Vi inviterer beboere på Røst til en spørreundersøkelse om sine reisevaner.

Dette forskningsprosjektet er en masteroppgave som skal undersøke mobilitetsutfordringer til innbyggerne i små øysamfunn i Nord-Norge, med Røst kommune i Nordland som casestudie. Fokuset i denne oppgaven vil være å forstå utfordringene knyttet til mobilitet og tilgjengelighet som innbyggere i øysamfunn i Nord-Norge står overfor, og hvordan disse kan dempes eller løses. Dine personlige opplysninger blir ikke brukt til andre formål.



Bilde tatt av Raymond Wardenær

Informasjon om samtykke og personvern

Svarene dine er anonyme og vil bli slettet etter at studien er fullført. Reisevaneundersøkelsen tar ca. 10 til 15 minutter. For mer informasjon om personvern, <u>se her</u>.

Hvis du har spørsmål om undersøkelsen eller forskningsprosjektet, kan du kontakte Sarah på mail: <u>sarahwat@stud.ntnu.no</u>.

Jeg har mottatt og forstått informasjonen om prosjektet "Mobilitetsutfordringer på Røst", og har fått muligheten til å stille spørsmål. Jeg samtykker til:

At mine opplysninger behandles frem til prosjektet er avsluttet.

Jeg har mottatt og forstått informasjonen om prosjektet "Mobilitetsutfordringer på Røst", og har fått muligheten til å stille spørsmål. Jeg samtykker til:

Å delta i denne spørreundersøkelsen.

Del 1: Bakgrunnsinfo

Jeg bekrefter at jeg bor i Røst Kommune

Ja

Alder

- 16 18
- 19 <mark>2</mark>0
- 21 22
- 23 <mark>2</mark>9
- 30 39



40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 + Ønsker ikke å oppgi

Kjønn

Kvinne Mann Annet eller ønsker ikke å oppgi

Hvis du er over 60 og er interessert i å stille til et kort intervju om dine reisevaner og mobilitets-utfordringer, skriv gjerne inn din e-post adresse eller telefonnummer under:

Del 2: Generelt om dine reisevaner

Opplever du utfordringer med reising i hverdagsliv på Røst?

F.eks, opplever du problemer med å nå daglig reisemål som dagligvarebutikker, arbeidssted, skole, osv.

Ja

Nei

Hvis ja, beskriv nærmere:

Dette elementet vises kun dersom alternativet «Ja» er valgt i spørsmålet «Opplever du utfordringer med reising i hverdagsliv på Røst?»

Føler du at du har lett tilgang til alt du trenger i dagliglivet ditt på Røst?

Tilgang til varer og tjenester, sosiale muligheter, jobb, utdanning, osv.

Ja

Nei

Hvis nei, beskriv nærmere:

Dette elementet vises kun dersom alternativet «Nei» er valgt i spørsmålet «Føler du at du har lett tilgang til alt du trenger i dagliglivet ditt på Røst? »

Føler du at dine reisevaner har endret seg under og etter COVID-19 pandemien?

Ja

Nei

Usikker

Hvis ja, hvordan?

Dette elementet vises kun dersom alternativet «Ja» er valgt i spørsmålet «Føler du at dine reisevaner har endret seg under og etter COVID-19 pandemien?»

Hvis nei, hvorfor ikke?

Dette elementet vises kun dersom alternativet «Nei» er valgt i spørsmålet «Føler du at dine reisevaner har endret seg under og etter COVID-19 pandemien?»

Del 3: Tilgang på transportmidler



Har du førekort?

Ja Nei

Disponerer du eller andre i husstanden bil?

Eier eller leaser bil (registrert på deg eller annen person i husstanden)

Bruker eller har brukt bildeleordning, eller låner bil fra noen utenfor husstanden

Nei

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Disponerer du eller andre i husstanden bil?»

Hvor mange biler eier/leaser din husholdning?

Dette elementet vises kun dersom alternativet «Eier eller leaser bil (registrert på deg eller annen person i husstanden)» er valgt i spørsmålet «Disponerer du eller andre i husstanden bil?»

1

2

3 eller flere

Eier eller disponerer du noen av følgende transportmiddel?

Sykkel eller elsykkel i brukbar stand Elsparkesykkel MC/Moped

Jolle eller robåt

Annet

Ingen av disse

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Eier eller disponerer du noen av følgende transportmiddel?»

Hvor mange dager reiste du med følgende transportmidler i den siste uken?

Til fots

- Aldri
- 1 2 ganger
- 3 4 ganger
- 5 6 ganger
- Hver dag

Sykkel/elsykkel

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger
- Hver dag

Bilfører

Nettskjema

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger
- Hver dag

Bilpassasjer med et medlem av samme husstand

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger

Hver dag

Bilpassasjer med noen som ikke bor i samme husstand

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger
- Hver dag

Bilpassasjer i taxi eller annen betalt skysstjeneste

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger

Hver dag

El-sparkesykkel

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger
- Hver dag

MC/Moped

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger
- Hver dag

Fly

Aldri

- 1 2 ganger
- 3 4 ganger



5 - 6 ganger

Hver dag

Ferge eller annen type båt

Aldri

- 1 2 ganger
- 3 4 ganger
- 5 6 ganger

Hver dag

Hvilke av følgende transportmidler ville du sannsynligvis brukt hvis de var tilgjengelige?

Bildeling tjeneste Sykkeldeling tjeneste Offentlig busstjeneste Taxitjeneste Samkjøringstjeneste i regi av kommunen Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilke av følgende transportmidler ville du sannsynligvis brukt hvis de var tilgjengelige?»

Del 4: Reiser med ferge og fly

Hvor ofte reiser du fra Røst til fastlandet (Bodø)?

Hver dag

2 - 6 ganger i uka

En gang i uka

1 - 2 ganger i måned

2-4 ganger i året

En gang i året

Mindre enn en gang i året

Hvor ofte reiser du til fastlandet nå sammelignet med denne tiden i fjor?

Oftere

Like ofte

Sjeldnere

Hvorfor reiser du til fastlandet oftere nå enn du gjorde på denne tiden i fjor?

Dette elementet vises kun dersom alternativet «Oftere» er valgt i spørsmålet «Hvor ofte reiser du til fastlandet nå sammelignet med denne tiden i fjor?»

Hvorfor reiser du til fastlandet sjeldnere nå enn du gjorde på denne tiden i fjor?

Dette elementet vises kun dersom alternativet «Sjeldnere» er valgt i spørsmålet «Hvor ofte reiser du til fastlandet nå sammelignet med denne tiden i fjor?»

Hvilke aktiviter beskriver best formålet ditt med å besøke fastlandet?

Velg alle som gjelder.

Nettskjema

Lege-, øylege-, eller tannlegetime Annen type tjenesteavtale (f.eks frisør, fysioterapeut eller liknende) Å handle mat Å fylle drivstoff Å kjøpe varer (annet enn mat eller drivstoff) Sosial aktivitet (besøke venner, osv.) Kulturell aktivitet (konsert, teater, kino) Jobb Skole/studie Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilke aktiviter beskriver best formålet ditt med å besøke fastlandet?»

Hvilke av følgende aktiviteter har du noen ganger valgt å utføre digitalt (gjennom nettmøte, mobiltelefon, eller annet) i stedet for personlig?

Velg alle som gjelder.

Lege-, øylege-, eller tannlegetime Annen type tjenesteavtale (f.eks frisør eller liknende) Å kjøpe varer (annet enn mat eller drivstoff) Sosial aktivitet Kulturell aktivitet Jobb Skole/studie Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilke av følgende aktiviteter har du noen ganger valgt å utføre digitalt (gjennom nettmøte, mobiltelefon, eller annet) i stedet for personlig?»

De dagene du reiser til fastlandet, hvor overnatter du?

Reiser tilbake til Røst samme dag Overnatter hos en venn eller familiemedlem Har egen bosted på fastlandet Overnatter på hotell eller annet overnattingssted Reiser videre til annen destinasjon Annet Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «De dagene du reiser til fastlandet, hvor overnatter du?»

Hvilken destinasjon reiser du oftest til med ferge?

Bodø Værøy Moskenes



Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilken destinasjon reiser du oftest til med ferge?»

Når du reiser med fergen, hvor ofte tar du med bil?

Alltid Mer enn 50% av tiden Mindre enn 50% av tiden Aldri Eier ikke bil

Del 5: Valg av transportmiddel

Omtrent hvor langt må du reise hjemmefra for å utføre følgende formål?

Arbeidsreise

- Under 1km
- 1 10 km
- 10 20 km
- 20 99 km

100 km eller mer

Skole/studiereise

- Under 1km
- 1 10 km
- 10 20 km
- 20 99 km
- 100 km eller mer

Handle- og service-reise

- Under 1km
- 1 10 km
- 10 20 km
- 20 99 km
- 100 km eller mer

Omsorgs- og følgereise

- Under 1km
- 1 10 km
- 10 20 km
- 20 99 km

100 km eller mer

Fritids- og besøksreise

Under 1km

1 - 10 km



10 - 20 km

20 - 99 km

100 km eller mer

Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?

F.eks dagligvarebutikk, time med frisør, lege, fysioterapeut, osv.

Reiste ikke til og fra denne destinasjonen

Til fots

- Sykkel/elsykkel
- Bilfører

Bilpassasjer med et medlem av samme husstand

Bilpassasjer med noen som ikke bor i samme husstand

Bilpassasjer i taxi eller annen betalt skysstjeneste

El-sparkesykkel

MC/Moped

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Hvorfor valgte du dette transportmiddelet?

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Hvorfor gikk du til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «Til fots» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei Miljøvennlig Fleksibelt (har flere gjøremål på veien) Sosialt (går sammen med andre)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor gikk du til og fra handle- og servicesteder på Røst?»

Hvorfor syklet du til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «Sykkel/elsykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei



Miljøvennlig Fleksibelt (har flere gjøremål på veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor syklet du til og fra handle- og servicesteder på Røst?»

Hvorfor kjørte du til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «Bilfører» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Billig Raskeste alternativ Fleksibel (flere gjøremål på veien) Værforhold For langt å sykle eller gå Dårlig kollektivforbindelse Gode parkeringsmuligheter ved målet Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor kjørte du til og fra handle- og servicesteder på Røst?»

Hvorfor var du bilpassasjer til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Billig

Raskeste alternativ

Værforhold

Miljøvennlig (samkjøring)

For langt å sykle eller gå

Dårlig kollektivforbindelse

Noen jeg kjenner kjører uansett

Sosialt

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor var du bilpassasjer til og fra handle- og servicesteder på Røst?»

Hvordan ordner du skyss når du er bilpassasjer til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Ringer eller sender melding til venn, familie, eller bekjente

Har fast avtale om skyss til og fra handle- og servicesteder på Røst

Legger ut melding på sosial medier (Facebook gruppe, Instagram, andre sosiale medier)

Annet



Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvordan ordner du skyss når du er bilpassasjer til og fra handle- og servicesteder på Røst?»

Hvorfor reiste du med elsparkesykkel til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «El-sparkesykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handle- og servicesteder på Røst?»

Billig Raskeste alternativ Fleksibelt (har flere gjøremål på veien) For langt å gå Dårlig kollektivforbindelse Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med elsparkesykkel til og fra handle- og servicesteder på Røst?»

Hvorfor reiste du med MC/Moped til og fra handle- og servicesteder på Røst?

Dette elementet vises kun dersom alternativet «MC/Moped» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra handleog servicesteder på Røst?»

Billig Raskeste alternativ Fleksibelt (har flere gjøremål på veien) For langt å gå eller sykle Dårlig kollektivforbindelse

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med MC/Moped til og fra handle- og servicesteder på Røst?»

Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?

Hadde ikke skole/studiereise Til fots Sykkel/elsykkel Bilfører Bilpassasjer med et medlem av samme husstand Bilpassasjer med noen som ikke bor i samme husstand Bilpassasjer i taxi eller annen betalt skysstjeneste Elsparkesykkel MC/Moped Fly Ferge/annen type båt Annet

Venligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»


Hvorfor valgte du dette transportmiddelet?

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Hvorfor gikk du til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Til fots» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei Miljøvennlig Fleksibelt (har flere gjøremål på veien) Sosialt (går sammen med andre) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor gikk du til og fra skole/studie?»

Hvorfor syklet du til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Sykkel/elsykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei Miljøvennlig Fleksibelt (har flere gjøremål på veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor syklet du til og fra skole/studie?»

Hvorfor kjørte du til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Bilfører» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig Raskeste alternativ Fleksibelt (har flere gjøremål på veien) Værforhold For langt å sykle eller gå Dårlig kollektivforbindelse Gode parkeringsmuligheter ved målet Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor kjørte du til og fra skole/studie?»

Hvorfor var du bilpassasjer til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i

Nettskjema

samme husstand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig Raskeste alternativ Værforhold Miljøvennlig (samkjøring) For langt å sykle eller gå Dårlig kollektivforbindelse Noen jeg kjenner kjører uansett Sosialt Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor var du bilpassasjer til og fra skole/studie?»

Hvordan ordner du skyss når du er bilpassasjer til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Ringer eller sender melding till venn, familie, eller bekjente

Har fast avtale om skyss til og fra denne destinasjonen

Legger ut melding på sosiale medier (Facebook gruppe, Instagram, andre sosiale medier)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvordan ordner du skyss når du er bilpassasjer til og fra skole/studie?»

Hvorfor reiste du med elsparkesykkel til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Elsparkesykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig

Raskeste alternativ

Fleksibelt (har flere gjøremål på veien)

For langt å gå

Dårlig kollektivforbindelse

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med elsparkesykkel til og fra skole/studie?»

Hvorfor reiste du med MC/Moped til og fra skole/studie?

Dette elementet vises kun dersom alternativet «MC/Moped» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig Raskeste alternativ Fleksibelt (har flere gjøremål på veien) For langt å sykle eller gå Dårlig kollektivforbindelse Annet



Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med MC/Moped til og fra skole/studie?»

Hvorfor reiste du med fly til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Fly» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med fly til og fra skole/studie?»

Hvorfor reiste du med ferge eller annen båt til og fra skole/studie?

Dette elementet vises kun dersom alternativet «Ferge/annen type båt» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra skole/studiested?»

Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med ferge eller annen båt til og fra skole/studie?»

Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?

Reiste ikke til og fra denne destinasjonen Til fots Sykkel/elsykkel Bilfører Bilpassasjer med et medlem av samme husstand Bilpassasjer med noen som ikke bor i samme husstand Bilpassasjer i taxi eller annen betalt skysstjeneste El-sparkesykkel MC/Moped Fly Ferge eller annen båt Annet

Venligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Hvorfor valgte du dette transportmiddelet?

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Hvorfor gikk du til og fra arbeid?

Dette elementet vises kun dersom alternativet «Til fots» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Billig

Raskeste alternativ



Fysisk aktivitet Flat reisevei Miljøvennlig Fleksibelt (har flere gjøremål på veien) Sosialt (går sammen med andre) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor gikk du til og fra arbeid?»

Hvorfor syklet du til og fra arbeid?

Dette elementet vises kun dersom alternativet «Sykkel/elsykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

- Billig
- Raskeste alternativ

Fysisk aktivitet

Flat reisevei

Miljøvennlig

Fleksibelt (har flere gjøremål på veien)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor syklet du til og fra arbeid?»

Hvorfor kjørte du til og fra arbeid?

Dette elementet vises kun dersom alternativet «Bilfører» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Billig

Raskeste alternativ

Værforhold

For langt å sykle eller går

Dårlig kollektivforbindelse

Fleksibelt (har flere gjøremål på veien)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor kjørte du til og fra arbeid?»

Hvorfor var du bilpassasjer til og fra jobb/arbeid?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

- Billig Raskeste alternativ Værforhold
- For langt å sykle eller går
- Dårlig kollektivforbindelse
- Fleksibelt (har flere gjøremål på veien)



Miljøvennlig (samkjøring)

Noen jeg kjenner kjører uansett

Sosialt

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor var du bilpassasjer til og fra jobb/arbeid?»

Hvordan ordner du skyss når du er bilpassasjer til og fra arbeid?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Ringer eller sender melding till venn, familie, eller bekjente

Har fast avtale om skyss til og fra arbeid

Legger ut melding på sosiale medier (Facebook gruppe, Instagram, andre sosiale medier)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvordan ordner du skyss når du er bilpassasjer til og fra arbeid?»

Hvorfor reiste du med el-sparkesykkel til og fra jobb/arbeid?

Dette elementet vises kun dersom alternativet «El-sparkesykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Billig Raskeste alternativ For langt å gå Dårlig kollektivforbindelse Fleksibelt (har flere gjøremål på veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med el-sparkesykkel til og fra jobb/arbeid?»

Hvorfor reiste du med MC/moped til og fra jobb/arbeid?

Dette elementet vises kun dersom alternativet «MC/Moped» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Billig Raskeste alternativ For langt å sykle eller gå Dårlig kollektivforbindelse Fleksibelt (har flere gjøremål på veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med MC/moped til og fra jobb/arbeid?»

Hvorfor reiste du med fly til og fra jobb/arbeid?

Dette elementet vises kun dersom alternativet «Fly» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Billig

Raskeste alternativ



For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med fly til og fra jobb/arbeid?»

Hvorfor reiste du med ferge eller annen båt til og fra jobb/arbeid?

Dette elementet vises kun dersom alternativet «Ferge eller annen båt» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra jobb/arbeid?»

Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med ferge eller annen båt til og fra jobb/arbeid?»

Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?

F.eks hente eller levere barn eller voksne

Reiste ikke til og fra denne destinasjonen

Til fots

- Sykkel/elsykkel
- Bilfører

Bilpassasjer med et medlem av samme husstand

Bilpassasjer med noen som ikke bor i samme husstsand

Bilpassasjer i taxi eller annen betalt skysstjeneste

El-sparkesykkel

MC/Moped

Fly

Ferge eller annen båt

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Hvorfor valgte du dette transportmiddelet?

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Hvorfor gikk du for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Til fots» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Billig

Raskeste alternativ

Fysisk aktivitet

Flat reisevei

Miljøvennlig

Fleksibelt (har flere gjøremål på veien)



Sosialt (går sammen med andre)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor gikk du for omsorgs- og følgereiser?»

Hvorfor syklet du for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Sykkel/elsykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgsog følgereiser?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei Miljøvennlig Fleksbilitet (har flere gjøremål på veien) Annet **Vennligst spesifiser "Annet"**

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor syklet du for omsorgs- og følgereiser?»

Hvorfor kjørte du for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Bilfører» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Billig Raskeste alternativ Værforhold For langt å sykle eller gå Dårlig kollektivforbindelse Fleksibelt (har flere gjøremål på veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor kjørte du for omsorgs- og følgereiser?»

Hvorfor var du bilpassasjer for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstsand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Billig Raskeste alternativ Værforhold For langt å sykle eller gå Dårlig kollektivforbindelse Fleksibelt (har flere gjøremål på veien) Miljøvennlig (samkjøring) Noen jeg kjenner kjører uansett Sosialt

Annet



Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor var du bilpassasjer for omsorgs- og følgereiser?»

Hvordan ordner du skyss når du er bilpassasjer for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstsand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Ringer eller sender melding til venn, familie, eller bekjente

Har fast avtale om skyss til og fra sosiale eller kulturelle aktiviteter

Legger ut melding på sosiale medier (Facebook gruppe, Instagram, andre sosiale medier)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvordan ordner du skyss når du er bilpassasjer for omsorgs- og følgereiser?»

Hvorfor reiste du med el-sparkesykkel for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «El-sparkesykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgsog følgereiser?»

Billig

Raskeste alternativ

For langt å gå

Dårlig kollektivforbindelse

Fleksibelt (har flere gjøremål på veien)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med el-sparkesykkel for omsorgs- og følgereiser?»

Hvorfor reiste du med MC/Moped for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «MC/Moped» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Billig Raskeste alternativ For langt å sykle eller gå Dårlig kollektivforbindelse

Fleksibelt (har flere gjøremål på veien)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med MC/Moped for omsorgs- og følgereiser?»

Hvorfor reiste du med fly for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Fly» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Nettskjema

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med fly for omsorgs- og følgereiser?»

Hvorfor reiste du med ferge eller annen båt for omsorgs- og følgereiser?

Dette elementet vises kun dersom alternativet «Ferge eller annen båt» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med for omsorgs- og følgereiser?»

Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med ferge eller annen båt for omsorgs- og følgereiser?»

Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?

Reiste ikke til og fra denne destinasjonen Til fots Sykkel/elsykkel Bilfører Bilpassasjer med et medlem av samme husstand Bilpassasjer med noen som ikke bor i samme husstsand Bilpassasjer i taxi eller annen betalt skysstjeneste El-sparkesykkel MC/Moped Fly Ferge eller annen båt Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Hvorfor valgte du dette transportmiddelet?

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Hvorfor reiste du til fots til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Til fots» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei Miljøvennlig Fleksibelt (har flere gjøremål på veien) Sosialt (går sammen med andre) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du til fots til fritids- og besøksreiser?»



Hvorfor syklet du til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Sykkel/elsykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Billig Raskeste alternativ Fysisk aktivitet Flat reisevei Miljøvennlig Fleksibelt (har flere gjøremål på veien)

Sosialt (går sammen med andre)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor syklet du til fritids- og besøksreiser?»

Hvorfor kjørte du til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Bilfører» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Billig Raskeste alternativ Værforhold For langt å sykle eller gå Dårlig kollektivforbindelser Fleksibelt (har flere gjøremål på veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor kjørte du til fritids- og besøksreiser?»

Hvorfor var du bilpassasjer til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i samme husstsand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

- Billig
- Raskeste alternativ
- Værforhold
- For langt å sykle eller gå
- Dårlig kollektivforbindelse
- Fleksibelt (har flere gjøremål på veien)
- Miljøvennlig (samkjøring)
- Noen jeg kjenner kjører uansett
- Sosialt
- Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor var du bilpassasjer til fritids- og besøksreiser?»

Hvordan ordner du skyss når du er bilpassasjer til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Bilpassasjer med et medlem av samme husstand eller Bilpassasjer med noen som ikke bor i

Nettskjema

samme husstsand eller Bilpassasjer i taxi eller annen betalt skysstjeneste» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Ringer eller sender melding til venn, familie, eller bekjente

Har fast avtale om skyss til sånne reiser

Legger ut melding på sosiale medier (Facebook gruppe, Instagram, andre sosiale medier)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvordan ordner du skyss når du er bilpassasjer til fritids- og besøksreiser?»

Hvorfor reiste du med el-sparkesykkel til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «El-sparkesykkel» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Billig Raskeste alternativ For langt å gå Dårlig kollektivforbindelse Fleksibelt (har flere gjøremål pp veien) Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med el-sparkesykkel til fritids- og besøksreiser?»

Hvorfor reiste du med MC/Moped til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «MC/Moped» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Billig

Raskeste alternativ

For langt å gå

Dårlig kollektivforbindelse

Fleksibelt (har flere gjøremål pp veien)

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med MC/Moped til fritids- og besøksreiser?»

Hvorfor reiste du med fly til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Fly» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»

Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med fly til fritids- og besøksreiser?»

Hvorfor reiste du med ferge eller annen båt til fritids- og besøksreiser?

Dette elementet vises kun dersom alternativet «Ferge eller annen båt» er valgt i spørsmålet «Hvilket transportmiddel reiser du oftest med til og fra fritids- og besøksreiser?»



Billig

Raskeste alternativ

For langt/ikke mulig å kjøre, sykle, gå, osv.

Annet

Vennligst spesifiser "Annet"

Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvorfor reiste du med ferge eller annen båt til fritids- og besøksreiser?»

Del 6: Tilleggsinfo

Utdanning

Grunn-/ungdomsskole inntil 9 år Videregående, yrkes- og allmennfaglig Høyskole/universitet - lavere grad (til og med 4 år) Høyskole/universitet - høyere grad (5 eller flere år) Annet Ønsker ikke å oppgi

Yrkesstatus

- I arbeid (deltid)
- I arbeid (heltid)
- Skole/studie
- Ikke yrkesaktiv Ønsker ikke å oppgi

Bosituasjon

Enslig Enslig med barn Samboer Samboer med barn Flere voksne Annet Ønsker ikke å oppgi

Husholdningsinntekt før skatt

Samlede inntekt før skatt for hele husholdning Under 600 000 NOK i året Mellom 600 000 og 999 999 NOK i året Mellom 1 000 000 og 1 599 999 NOK i året 1 600 000 NOK i året eller mer Ønsker ikke å oppgi

Hvor lenge har du bodd på Røst?

Hvor lenge (totalt - ikke nødvendigvis sammenhengende) har du bodd i Røst Kommune? Under ett år



1 - 5 år 6 - 10 år 11 - 20 år 21 - 30 år 31 - 40 år Mer enn 40 år, men ikke hele livet Hele livet Ønsker ikke å oppgi

Hvilke av følgende alternativer beskriver hvor du har bodd foruten Røst? Velg alle som gjelder.

Storby (mer enn 100 000 innbyggere) Liten by (under 100 000 innbyggere) i Nord-Norge Liten by (under 100 000 innbyggere) utenfor Nord-Norge Landdistrikt eller tettsted (under 10 000) i Nord-Norge Landdistrikt eller tettsted (under 10 000) utenfor Nord-Norge Jeg har ikke bodd andre steder enn Røst Ønsker ikke å oppgi

Hvis du har andre kommentarer eller informasjon du ønsker å dele kan du gjerne skrive dette under:



