

DEVELOPING A NATIONAL RURAL & ISLANDS MOBILITY PLAN (RIMP) FOR SCOTLAND

INTERNATIONAL

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List of Abbreviations

DRT Demand-responsive transport

MaaS Mobility as a Service

RIMP Rural & Islands Mobility Plan

RTAP Rural Transit Assistance Program

SIMP Sustainable Mobility Island Plan

SMARTA "Smart Rural Transport Areas" EU-funded project

SRITC Scottish Rural and Islands Transport Community

(CIC)

SUMP Sustainable Urban Mobility Plan

About SRITC

Established in 2017 and incorporated as a Community Interest Company (CIC) in 2021, the Scottish Rural and Island Transport Community (SRITC) has over 600 members across 19 countries. SRITC's mission is to create a space to share insights, collaborate and support members in addressing rural and island transport and mobility challenges.

SRITC connects, supports and facilitates stakeholders from individuals to national bodies, shaping rural and island transport policy by contributing to Scottish Government consultations and parliamentary committees.

Since 2020, SRITC has been exploring demand from across Scotland's rural and island communities for a Rural and Islands Mobility Plan (RIMP) and how it would align with the Scottish Government's commitment to publish a Rural Delivery Plan in 2026. The exploration process has taken place in a variety of environments, including in-person and online workshops which were facilitated through the 2023 conference 'The Gathering' at Boat of Garten (with 100 attendees), the Scottish Rural & Islands Parliament (40 attendees), and less formally through monthly Virtual Cafes.

These stakeholders, representing private, public, academic, third-sector organisations and communities, have shared valuable insights and contributed to validating demand for a RIMP and specifying the priorities. These are summarised in two reports published by SRITC: "Spotlight on Rural & Islands Transport" (2022) and "A Rural & Island Mobility Plan; Building Blocks" (2023).

Acknowledgements

Thanks go to everyone who contributed to the first stages of the project, including members of the SRITC team, volunteers, and wider members of our community who supplied literature that was reviewed as part of the desktop research. In particular, we want to thank the Virtual Cafe attendees on 28th June 2024, who commented on our initial findings and provided their feedback and thoughts on our work to date.

Resources

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Funding

The Smarter Choices, Smarter Places (SCSP) funding programme operated by Paths for All has been pivotal in developing SRITC as an organisation since 2021. The funding has allowed SRITC to build the community and consequently undertake all the stakeholder engagement activities that produced the evidence needed to demonstrate demand for a Scottish rural and islands mobility plan. In March 2024, Paths for All approved the funding application for this 12-month project, which focuses on desktop and in-person research.



Executive Summary

The development of a Rural and Islands Mobility Plan (RIMP) aims to address the unique transport challenges faced by rural and island communities in Scotland by learning from international experiences. Phase 2 of the RIMP project focused on a review of international rural transport policies, examining examples from countries such as the United States, Republic of Ireland and Greece. The objective was to identify best practice, governance structures, and innovative solutions that could inform the development of a tailored mobility plan for Scotland's rural and island areas. The analysis revealed key themes in governance, service delivery, innovation and sustainability, while highlighting several gaps and opportunities.

One significant finding is the limited number of dedicated rural and/or island mobility plans globally. The Republic of Ireland's Connecting Ireland Rural Mobility Plan stood out as a robust example, aiming to improve rural connectivity through enhanced public transport services and demandresponsive transport (DRT). Other countries, such as the United States, have adopted region-specific strategies and support programmes like the National Rural Transit Assistance Program (RTAP) to improve rural transit. These examples demonstrate the importance of flexible, locally driven solutions that address the unique geographical and social characteristics of rural areas.

The analysis also identified governance as a critical factor in the success of rural and island mobility strategies. Two dominant governance models emerged: public sector delivery agents and community-enabled services. The public sector model, common in Europe, involves government agencies directly managing transport services, while the communityenabled prevalent approach, in the United States, collaboration between local authorities, community groups and voluntary organisations to deliver services. Both models underscore the importance of adapting governance structures to local needs and fostering collaboration among stakeholders.

Demand-responsive transport (DRT) was highlighted as a key solution for filling accessibility gaps in rural areas.

Traditional DRT services, such as those provided by local operators, have long been essential in rural transport networks. More recently, technological innovations, including app-based booking and integrated service platforms, have enhanced the efficiency and reach of DRT services. These innovations offer scalable solutions for improving rural accessibility at a lower cost than traditional fixed-route public transport.

Active travel modes, such as walking and cycling, received limited attention in the reviewed plans, primarily being framed as leisure activities rather than core transport options. However, integrating active travel into rural mobility plans could promote public health, reduce carbon emissions and boost tourism. Similarly, the analysis identified the need to consider separate Sustainable Island Mobility Plans (SIMPs) to address the specific needs of Scotland's island communities, focusing on seasonal demand fluctuations, inter-island connectivity, and sustainable transport solutions.

The study's conclusions point to the necessity of clear metrics for measuring the success of mobility plans. These should encompass accessibility improvements, carbon reduction, social inclusion and economic development. Ensuring regular evaluation will allow policymakers to adapt and refine the plan over time.

Six key recommendations for the RIMP

- 1. Governance and community collaboration framework Ensure cohesive partnerships between national, regional and community stakeholders.
- 2. Demand-responsive transport solutions Expand DRT services to address gaps in rural accessibility.
- 3. Active travel and micromobility initiatives Promote cycling and walking as viable transport modes.
- 4. Island-specific mobility strategies Develop SIMPs tailored to the unique needs of island communities.
- 5. Sustainability and decarbonisation goals Align with Scotland's environmental targets by prioritising zero-emission transport options.
- 6. Clear metrics for success and evaluation Establish measurable outcomes to monitor and adapt the plan effectively.

These recommendations provide a solid foundation for developing a comprehensive and adaptable Rural and Islands Mobility Plan that meets the needs of Scotland's diverse rural and island communities.

Section 1: Background and Context

In 2024, SRITC secured funding from Paths for All's Smarter Choices Smarter Places programme to undertake a desktop and in-person study of rural and island plans, policies and strategies worldwide.

To achieve the RIMP project aims, the plan is divided into four phases:

- 1. Phase 1: Review of Scottish transport policies and initiatives.
- 2. Phase 2: Review of international transport policies and initiatives.
- 3. Phase 3: Community and stakeholder engagement
- 4. Phase 4: International study visits



Phase 2

This report focuses on the output of Phase 2 - a review of international rural transport policies and initiatives. SRITC has defined "international" as being from nations outwith the United Kingdom of Great Britain and Northern Ireland. In doing this, we have attempted to cast the net for examples of such policies and initiatives as wide as possible. However, it should be noted that the ability to do so is somewhat limited by the language fluency and knowledge of the researchers.

Much like Phase 1 of the RIMP, this focussed on gathering comprehensive insights and laying the groundwork for a more tailored transport strategy for rural and island communities in Scotland.

First, a strategic review of existing international transport policies was undertaken. This looked at policies at a variety of scales - from national, to regional, to local. This review identified common themes, innovative ideas, gaps and contradictions in the current approach. By doing so, SRITC aims to ensure that the RIMP is well-aligned with existing policies while addressing areas that are currently underserved.

Section 2: Questions and Process

At the outset of this project, SRITC identified several questions requiring answers during the collation of data and research. Phase 1 was a desktop literature review of Scotland's transport policies as an initial discovery phase. The five research questions were:

- 1. What topics do transport policy and different governance layers focus on?
- 2. What transport challenges, specific to rural and island communities, appear in each governance tier, and how are they presented and described?
- 3. How strongly do the transport policies curated nationally, and adopted regionally, align with the specific needs of rural and island communities, as expressed through their local plans?
- 4. What innovations and solutions are proposed by different governance tiers?
- 5. What metrics and evaluation criteria should be used to measure success?

The aim of Phase 2 is to gather and analyse rural mobility plans, or island mobility plans in a rural context, that have been published internationally - this forms the basis for the key research objectives of this report.

Methodology

A desktop research exercise was undertaken between September and December 2024. This involved two primary methods of internet web searches (search engines/grey literature and academic literature), using common search terms that are covered in the table below.

Search terms used, with Boolean operators		
"rural mobility plan"	Island AND "mobility plan"	
"rural transport plan"	Island AND "transport plan"	
"rural mobility" AND "development plan"	"rural connectivity"	
"rural transport" AND "development plan"	"island connectivity"	
rural AND growth OR "economic development"	"rural development" AND plan	
rural AND "transport investment"	periphery AND transport	
remote AND "transport improvements"		

The first internet-based search used online search engines like Google and DuckDuckGo. Where possible, UK-based websites were excluded from the search to maximise international results.

The second internet web search used academic literature search engines, namely ScienceDirect and Google Scholar. From these results, not only were relevant research articles identified (and summaries reviewed for relevance), but examples of strategies and plans referenced in these articles were noted and searched for separately.

The third web search was of dedicated websites sign-posted by either the wider SRITC community or the first two web searches. This primarily involved searching national and regional government websites. To enable this to happen, Google Translate was used to translate the terminology into the relevant language for those governments. Google Translate was also used to translate documents into English where there was no English language version.

It should be advised that while Google Translate provides a reasonable approximation of the terms used, direct translation can be tricky. This is in part, due to different terminology and phrases used in different languages, especially with some of the more transport-specific and technical terms. Thus, some caution is urged.

These searches were supplemented by crowdsourcing documents from the SRITC community. This was through social media posts, primarily on LinkedIn, and issuing a call for documents through the bi-weekly newsletter. This evidence call was also mentioned at the regular monthly virtual cafés. The net result of this search was the identification of 142 documents, each of which was reviewed. In addition to strategies themselves, other types of document were identified including research reports, monitoring and evaluation frameworks, and delivery plans. Each of which provided some indication to the challenges faced, primarily by public sector authorities, in the delivery of the respective strategies.

Content Categorisation Framework

SRITC identified relevant passages from the literature collected and similar to the RIMP Phase 1 process, these were categorised (Table 1). This assisted with the analysis and synthesising stage.

Geographic level	Publication type	Number of publications
National	Policy	4
	Delivery Plan	2
	Research	2
Regional	Strategy	12
Local	Delivery Plan	1
	Strategy	33
	Research	3
Community	Local Place Plan	20
	Delivery Plan	1

Table 1 - Level, Type and Number of Publications Reviewed

Grouping	Sub-segments	
Spatial	Rural	Urban
	Island	Olbail
Governance	Community Level Building	System Level Lever
	Regulatory, Fiscal, Policy Enablers	Governance
Intervention	Policy	Funding
	Regulation	Funding
Sentiment	Positive	Negative
Mode of Travel	Active Travel	Mobility Hubs
	Bus	Commercial Vehicles
	Ferries / Ferry	Alternative Fuels
	MaaS	Fixed Inter-Island Links
	DRT	Inland Waterways
	Train	Integrated Transport
	Car	Micromobility
	Electric	School Transport
	Autonomous	Community Transport
	Aviation	Infrastructure
	Logistics	Aviation
	Car Clubs	Taxis
Case Studies	Case Study	
	Decarbonisation / Energy	Transformation / Digital
	Innovation	Young People
	Minimum Service Standards	Mobility in Transport
Outcomes	Reliability	Logistics / Freight
	Fares and Costs	Accessibility
	Climate Change	Economy
	Society / Social Welfare	Road Safety

Table 2 - Groups and Sub-segments of Publications Reviewed

Section 3: Key Findings

Extent of Rural and Island Mobility Plans globally

The research could identify only one nation with a dedicated rural or island mobility plan at a national level – the Republic of Ireland. While other countries may have transport strategies – either as dedicated strategies or through transport forming part of their economic development plans – few specifically discuss the needs of rural areas. The European Union project, SMARTA¹ highlighted this in its work on reviewing rural transport governance. Its work concludes that this is associated with national governance of transport, which while varying from nation to nation, is often modally specific as opposed to focussed on spatial areas.

Connecting Ireland Rural Mobility Plan (Republic of Ireland)

The "Connecting Ireland Rural Mobility Plan" by the National Transport Authority (NTA) outlines a strategy to improve public transport in rural Ireland. Its goals include better connecting rural through communities new services, existing enhanced networks, and expanded demand-responsive transport.

The plan aims to increase access, reduce social isolation, provide reliable and connections between villages, towns, and regional hubs. A comprehensive analysis identified service informing gaps, improvements to integrate rural urban transit. Public consultation was integral shaping plan's to the development.



^{1.}Smart Rural Transport Areas, or SMARTA, was a two-year project that focussed on how to exploit existing mobility policies and solutions in rural areas in Europe and explored ways to support sustainable shared mobility interconnected with public transport. More information can be found at https://ruralsharedmobility.eu/

In instances where rural transport is mentioned, it is often as part of ancillary policy areas, most notably economic development; national policies on regional economic development may discuss rural transport as a means of opening up inaccessible areas to economic development, rather than as an issue itself. The kinds of development vary significantly between countries. For example, the country of Albania describes rural transport as being an economic development opportunity for agriculture, while many nations consider the economic potential in terms of tourism.

Where rural transport strategies do exist, these are often associated with a form of regional governance, in areas which have a high rural population. Consequently, the strategies are not referred to as "rural transport strategies", but more "transport strategies" or "mobility plans" which refer to the rural challenges of their given area. A notable example is the United States, where many predominantly rural states have respective transport strategies, with the US Department of Transportation providing support through rural funding programmes such as the Rural Opportunities to Use Transportation for Economic Success (ROUTES) programme and the National Rural Transit Assistance Program (RTAP).

National Rural Transit Assistance Program (United States of America)



The National Rural Transit Assistance Program (National RTAP), established in 1987, has significantly enhanced rural and tribal transit services across the United States. By developing and distributing free training materials, offering technical assistance, and fostering peer networks, National RTAP has empowered transit providers to deliver safe, effective, and efficient transportation in rural areas.

One of its notable achievements is the creation of comprehensive toolkits, such as the State RTAP Manager's Toolkit and the Transit Manager's Toolkit, which serve as practical guides for establishing and maintaining successful transit programmes. Additionally, National RTAP has developed web-based applications like GTFS Builder, facilitating the implementation of online trip planning for rural transit agencies.

The programme's commitment to recognising excellence is evident through initiatives like the Achievements in Rural Transit Assistance awards and the Tribal Transit Awards, which honour innovation and performance in tribal transit services. Furthermore, National RTAP's emphasis on peer networking has led to the establishment of online forums, webinars, and roundtables, enabling transit professionals to share best practice and collaborate effectively.

Through these efforts, National RTAP has played a pivotal role in improving mobility for millions in rural and tribal communities, ensuring access to essential services and opportunities.

Word frequency and in context



Figure 1 - Word cloud of most common words in our literature review

As can be seen in the word cloud (Figure 1), the most frequent words mentioned in the documents are somewhat generic, such as urban, mobility, transport, public, rural and services. So it is difficult to draw firm conclusions from these most frequent words on their own. However, further analysis of this word cloud, including some terms conspicuous by their absence, indicates that there are several terminology groupings which provide insight.

Focus on governance terminology - Several terms such as policy, management, system, regional, city, local, and SUMP point towards an interest in governance within the documents, something identified in a more in-depth analysis of the literature mentioned later.

This suggests that much in the documentation is focussed on delivery, and means of governing delivery, of the respective plans and strategies.

Lack of mention of active travel - Active travel and its component modes, walking and cycling, are hardly mentioned. Where active travel is mentioned, it is often in relation to providing leisure activities such as long-distance cycle routes. This finding reflects the focus of the strategies on investment in road infrastructure and public transport.

Frequent mention of urban areas - Terminology associated with urban areas, including urban and cities, is often mentioned. This is likely due to the nature of transport networks considered in the strategies and policies themselves. Many make mention of improvements to connectivity between urban areas having knock-on benefits to rural areas, while some mention the interface between urban and rural areas.

The literature review included a number of documents that simply summarised governance and operational arrangements of rural transport in respective countries, notably through guidelines created as part of the EU SMARTA project. Consequently, the analysis narrowed to focus only on rural and island mobility plans, given publications such as the International Transport Forum's report "Innovations for Better Rural Mobility" (2021) provided a good reference. The further analysis of the specific terms of interest were undertaken solely on strategy documents. For the latter analysis, each term searched for and its results is included in Appendix A, with only a summary of the main results reported here.



Figure 2 - Word cloud of most common terms in the strategies reviewed

In the word cloud analysis of the reviewed strategies (Figure 2), there is a significant variation in wording within rural mobility plans compared to the analysis of the entirety of the literature. The findings show that there is little in the way of common themes emerging. This maybe because many of the rural mobility plans studied were somewhat technical documents using traditionally non-policy terms, notably variables and publications. Despite this, some conclusions can be drawn:

Focus on systems as opposed to modes – There is much in the way of terminology that focuses on system-wide matters as opposed to focusing on specific modes, for example, 'models', 'connects', 'accessing' and 'systems.' This suggests that such strategies are more focussed on tackling systems and system outcomes, as opposed to developing strategy for individual modes.

Area Commissions on Transportation (Oregon, United States of America)



The Oregon Transportation Commission (OTC) works with 12 Area Commissions on Transportation (ACTs) to improve regional transport planning. These advisory groups, established in 1996, focus on identifying key highway, safety, and transit projects for the Statewide Transportation Improvement Program (STIP). ACTs emphasise a multimodal approach, aiming to "consider all modes and aspects of the Transportation System in formulating recommendations, taking into account the provision of elements and connections between air, marine, rail, highway, trucking, transit, bicycle and pedestrian facilities." Public engagement and coordination with local agencies ensure comprehensive regional development.

Ultimately, the OTC, has the final say on the investment priorities. But the ACTs are influential in their recommendations, being seen as "boots on the ground" for the plans that are developed and the projects that are delivered. Identification of area typologies – There is common terminology that is spatial and area-based in its nature, notably 'locally', 'regions', 'areas' and 'rural.' This suggests that geographical area typologies are important to rural mobility plans. A further finding is the omission on the territory of 'islands'. This may be partly explained by a lack of dedicated island mobility plans that formed part of the analysis.

Sustainable Island Mobility Plan guidance document

The Sustainable Island Mobility Plan (SIMP) provides a specialised framework for managing mobility on small and medium-sized Greek adapting Sustainable Urban islands, the Mobility Plan (SUMP) methodology. SIMPs address the unique characteristics of islands, including their limited size, seasonal population fluctuations, and lack of urban infrastructure. The plan emphasises the integration different transport modes, promoting sustainable solutions such as pedestrianfriendly zones, cycling paths, zero-emission public transport, and carpooling initiatives.



SIMP development follows several phases, from preparation and analysis to measuring outcomes, ensuring flexibility and stakeholder involvement. The plan targets both permanent residents and tourists, recognising their differing mobility needs across summer and winter seasons. Good practice highlighted includes promoting electromobility, on-demand transport services, and Mobility-as-a-Service (MaaS). Innovative solutions focus on reducing car dependency, enhancing pedestrian routes, and integrating public transport with sea and air links.

The SIMP approach aims to create resilient, low-cost transport systems while preserving the islands' environment and cultural heritage. Notable projects showcase sustainable transport innovations, such as electric minibuses in Rethymno and Heraklion and pedestrianised historical areas. Overall, SIMPs represent a tailored, strategic effort to improve mobility and reduce environmental impact on Greek islands.

Throughout the strategy documents, rural mobility is mentioned in a variety of contexts. However, common themes in which the term is mentioned are around governance, funding, and policy. Figure 3 shows the relationship between the term "rural mobility" and the context in which it is mentioned within the strategy documents.

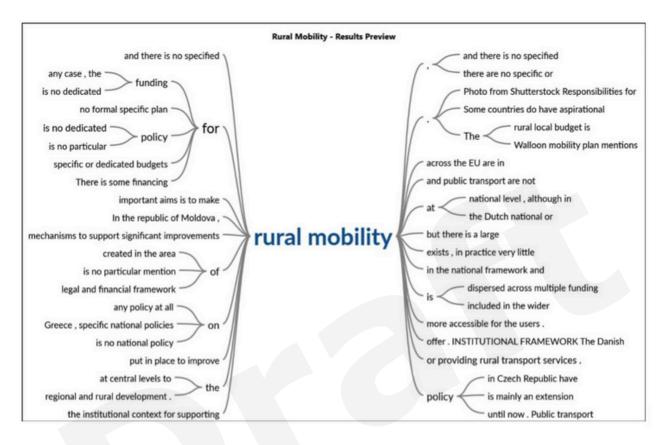


Figure 3 - Mention of the words "rural mobility" in the context of rural mobility strategies

For example, some documents reference the fact that there is no dedicated policy or specific funding stream for rural mobility issues. Incidentally, this is also a common reference made in SMARTA briefing notes on the status of rural mobility across a variety of countries. Another example is citing the need for providing an institutional context for rural mobility. The focus of this term is very much technocratic, as opposed to delivering outcomes.

Improving institutional capacity in Albania for improved roads

The European Union is helping Albania improve its road infrastructure and governance through capacity-building initiatives. The project enhances the knowledge and skills of Albanian civil servants and experts from the Ministry of Infrastructure, Economy, and the Road Authority. Training focuses on contract management, procurement, financial planning, and monitoring in the road sector. Delivered through interactive sessions and study tours, the programme aims to align Albania's road management practices with EU standards. These efforts support Albania's bid to boost economic growth, enhance connectivity, and align its transport sector with European norms.

This highlights another finding, namely that rural mobility, as a term, is widely spoken off by policy makers – primarily in terms of being an issue – which may have little substance outside of this context, whereas urban transport challenges often have clear and defined solutions that are somewhat easier to deliver (e.g., better public transport helping to solve traffic congestion). In reviewing the strategies it was notable that rural mobility was often spoken of as a challenge, with no definition as to what 'rural mobility' is, or even what good rural mobility looks like.

The Rural Mobility Challenge for Public Transport

In 2022, the Union Internationale des Transports Publics (UITP) published a knowledge brief on the Rural Mobility Challenge for Public Transport. The document defines the rural mobility challenge as a complex issue involving long-standing deficits in policies, funding, and governance. Key challenges include limited public transport options, reliance on car-oriented infrastructure, geographic isolation, and fragmented service provision. Socio-economic factors, such as an ageing population and isolation of vulnerable groups, exacerbate the problem. Insufficient digital infrastructure and data further hinder innovative solutions. To address these challenges, it emphasises the need for combined mobility services, strategic policies, and sustainable funding to ensure equitable access to essential services and reduce car dependency.

Terms relating to the economy were widespread throughout the review. This reflects the fact that economic development and supporting the economy of rural areas is a widely held policy goal in the regions covered by our review. When focussing specifically on the rural economy, two further findings emerged; first the diversifying of the rural economy, and secondly supporting agriculture. The latter may be seen as an important economic strength of rural areas which also reflects rural living. However, it would appear that policy makers do not wish for rural areas to be dependent upon agriculture as an economic sector, so as to improve economic opportunities within rural areas. Figure 4 shows the relationship between the term "rural economy" and the context in which it is mentioned within the strategy documents.

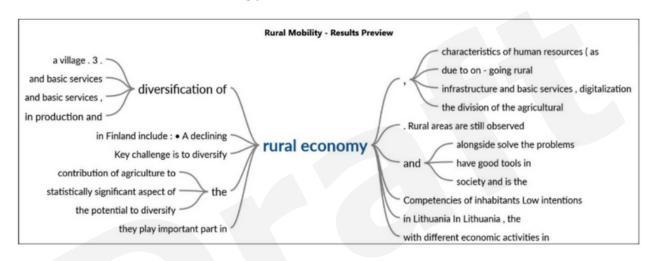


Figure 4 - Mention of the words "rural economy" in the context of rural mobility strategies

In relation to social and community development there is little mention of either concept within the context of rural mobility plans. Where they are so, they are in relation to very specific examples of social and community development. For example, the specific mention of a grants manager in the city of Eugene in Oregon. No insight into why this is the case can be revealed from the documents themselves, but this potentially points to the fact that the value of social and community development is an underexplored area of transport policy making, Figure 5 and Figure 6 show the relationship between the term "community development" and "social development" respectively, and the context in which they are mentioned within the strategy documents.



Figure 5 - Mention of the words "community development" in the context of rural mobility strategies



Figure 6 - Mention of the words "social development" in the context of rural mobility strategies

All of the strategies refer to specific modes of transport. The most common modes of transport mentioned are public transport and highways. In contrast, walking and cycling are seldom mentioned and even when mentioned it is in relation to economic opportunities associated with leisure activities. A notable example being the promotion of Eurovelo long distance cycling routes across Europe - for tourism and leisure activities. In the strategies that were reviewed, no specific mention of escooters and e-mobility were made. However, as such solutions are relatively recent and much of the work has been focussed on development in urban areas, this finding is not surprising.

Minimum public transport service standards (Switzerland)

Switzerland has often taken a whole country approach to rural public transport, focusing on public transport standards. The "Rail 2000" initiative is pivotal, promoting coordinated timetables for efficient rail and bus services, with hourly connections for major towns and rural areas. Switzerland's Federal Transport Office supervises the public transport system, ensuring accessible, reliable services through subsidies for rural connections. The Sectorial Transport Plan further supports basic rural services. A national vision for 2040 aims for sustainable, connected mobility, addressing rural areas' unique challenges. The document also highlights rural development policies related to transport accessibility.

A notable standard that is present throughout Switzerland is that every village of two to three hundred people is guaranteed at least an hourly bus service from 6am to midnight, 7 days a week. Such services are also expected to connect to frequent "trunk" rail services.

With regards to freight, there are no specific rural freight strategies. However, the importance of freight as part of wider plans to improve connectivity are mentioned. This is particularly the case in Asia and Pacific regions, where development work by national governments is in association with international agencies such as the United Nations and the World Bank, and has focussed on improving rural access by road to better serve changing agricultural supply chains.

Governance

A common matter that is mentioned within all of the strategies reviewed is that of governance. This is not in terms of changing existing governance structures to enable delivery, but through describing how existing governance structures will be used to deliver against a set plan and budget. There is no common or consistent approach across the different strategies. However, from the analysis that has been undertaken, two broad groups of governance can be determined.

Public sector as a delivery agent

A common approach across much of Europe is for the public sector itself to be a delivery agent. This is especially the case in terms of being an infrastructure manager and the deliverer of public transport services. Often undertaken at a regional level - although across Eastern Europe a high degree of centralisation can remain - the public sector procures the services based upon set routes or serving set communities. This can lead to a 'feast and famine' approach to service coverage, where inter-urban routes are often served by high quality public transport links, and more peripheral areas are served by either demand-responsive services, limited fixed schedule services, or no service at all.

Public sector as an enabler of community delivery

An approach common in the United States of America is local communities, local and state governments, and healthcare services (either local services or federally mandated ones such as Medicaid) collaborate to develop and deliver plans in low density areas. In some instances, such as in Minnesota, the state mandates that local districts work with communities and voluntary service providers to develop Local Delivery Plans. These are then funded by the state to deliver improved accessibility to key services in those districts. Local districts are also tasked to work with neighbouring districts which have particular trip attractors, such as hospitals, which such service providers serve.

Area Transportation Partnerships and Regional Development Organizations (Minnesota, United States of America)

Minnesota's rural transportation planning involves collaboration between Regional Development Organizations (RDOs) and Minnesota Department of Transportation's (DOT) Area Transportation Partnerships (ATPs). RDOs provide input on regional transportation needs, conduct studies, and manage programs such as the Transportation Alternatives Program. They work alongside ATPs to prioritise and recommend projects. Additionally, Minnesota's planning includes safety initiatives, like Toward Zero Deaths, and supports public transit planning. These partnerships ensure comprehensive regional involvement in improving and sustaining the state's rural transportation system.



The DOT routinely solicits feedback from the RDOs on its statewide planning efforts, typically providing one or more seats for RDO planners on the advisory committees for statewide planning processes related to various topics and modes. The RDO staff also played a valuable role in assisting the DOT with completing urban area boundary reviews with local governments following the 2010 Census, as well as working to achieve consensus between local governments and the DOT in the subsequent functional class review.

Highways as investment in economic development

The plans reviewed present an approach, in terms of attitude, towards highway investment. Driven in part by a focus of wider rural policy on the economic development of rural areas - primarily for agriculture but also for tourism and generally increasing productivity of rural areas - investment in road infrastructure is often referred to as a significant opportunity for rural communities. In Europe, 87% of the major highway network is in rural areas.²

Budgets: Across the plans reviewed, a significant proportion of infrastructure investment is focussed on improving highways. This is spoken of in three such ways. The first is in terms of new highways infrastructure, typically delivered by a national government, serving rural areas. The second is in terms of maintaining existing paved infrastructure assets. The third is in terms of the maintenance of key structures, such as bridges.

National and International drive for investment: As indicated previously, much of this attitude is driven centrally. Within Europe, structural funds towards peripheral regions are a key enabler of such investment, with many highway projects funded in such a way. Where such funds are not available, national government either fund and deliver the projects themselves, or provide financing to regional governments to deliver.

Public transport

Traditional modes of public transport such as buses and trains feature prominently in many strategies and plans, with modes traditionally reliant on higher densities of population and for which there is no local historical network (e.g., trams) noticeable by their absence. Such services are provided in accordance with the governance and operational laws within the respective nations, for which there is a significant degree of variability between nations.

Across many European nations, public transport is procured either at the national or regional level, and consequently the rural operations of these services are mentioned in such policies and plans.

There is often little mention of specific rural aims and objectives, these instead form part of wider objectives on increasing ridership and improving accessibility.

Infrastructure investment: Few mentions are made in rural-specific plans of investment in major new public transport infrastructure projects. Some plans mention limited investment in bus-stop upgrades, including investment in shelters and real-time information, however this is often sporadic and included as subsets of more significant budgets. Little mention is given of operational maintenance of infrastructure and services.

'Spill over' of wider investment: The literature is notable for attempting to maximise the 'spill over' effects of public transport investment within and between urban areas. This is most notable when it comes to improving intercity public transport links. For example, within Switzerland, a long running programme of investment in improving intercity rail services between major cities has seen the introduction of regular services provided at a minimum frequency across all stations on those routes. Furthermore, local buses are timed to meet trains, meaning that trains for the basis of the public transport network in rural areas, and the accessibility effects of the investment are multiplied.

Mobility hubs: Mobility hubs are mentioned in some plans, although perhaps reflecting the extent of the terminology any mention is confined to Europe. Such investment is typically centred on railway stations and major urban areas with significant rural hinterlands. For example, in Germany, many states are focussing investment on rural mobility hubs around major rural stations and larger towns in mainly rural areas.

Tackling rural accessibility: A further finding is the role of public transport in international policies is seldom mentioned in terms of improving accessibility in rural areas. This may be due to a number of challenges noted by the SMARTA project, namely that fixed-route public transport requires significant capital and operational investment to operate effectively. Combined with lower population densities in rural areas and challenges on public budgets, this has necessitated service withdrawal across most areas. In some cases, notably in France and the United States, different operational models like DRT are being trialled with the aim to reduce operational costs, while maintaining service coverage.

Freight and logistics

The needs of freight and logistics organisations are seldom mentioned or considered in international literature. The majority of plans and strategies focus on the needs of passengers and transporting the population, as opposed to goods and services, and there are few freight and logistics specific strategies among national and regional governments across the world. A notable example being the New Zealand Freight and Supply Chain Strategy, although this focuses more on supply chain resilience and connections to international gateways rather than rural freight specifically. The focus is therefore upon transporting the person to the service/goods rather than a two-way system, whereby the goods, for example a prescription, is delivered to the person.

On the occasions where freight and logistics are mentioned, it is as a beneficiary of investments for economic benefit or the benefit of passengers. For instance, when considering economic investment in highways infrastructure, mention is made of this improving access for agricultural traffic, forestry and deliveries especially in plans for nations where a significant proportion of the rural economy is still catered for by these modes of transport.

The North-South Economic Corridor (China, Myanmar, Thailand)

The North-South Economic Corridor (NSEC) links Yunnan Province of China, northern areas of the Lao People's Democratic Republic, the Shan State of Myanmar, and northern Thailand. In 2017, the Governments of China and the Lao People's Democratic Republic signed a Memorandum of Understanding to conduct a feasibility study of the construction of Huai Xai-Mo Han Expressway (R3A). This project along the Bangkok to Kunming expressway would reduce the travelling distance and the typical journey time between the two cities. Furthermore, a high speed railway between Kunming and Mohan, and several Special Economic Zones (SEZs) and Free Trade Areas (FTAs) have been established such as the Mohan-Boten SEZ (on the border between China and Laos) and the Chiang Khong SEZ (on the border of Laos and Thailand).

There has been a notable shift in routing preferences from the traditional shipping route (via Bangkok's ports to Jiang Nan market in Guangzhou) to overland routes via the NSEC and the R12 route linking Thailand, Laos, Vietnam and China. Furthermore, a softening of trade regulations has made it easier for Thai fruit exporters to trade via Laos. With the growth of online shopping in China and more digitally connected Thai producers.

Demand-responsive transport and innovation

Another finding is the significant importance in trialling or supporting demand-responsive transport (DRT) services. The plans generally made a distinction between two kinds of DRT services:

- 'Traditional' DRT services, often provided by local operators either on a voluntary basis or a taxi-style service provided on a commercial basis either contracted to the public sector (which subsidises the fare) or to passengers (who pay higher fares compared to public transport). These are considered traditional because they either use traditional technology to book services, such as a telephone, or have a longestablished operational basis in law.
- 'Technological' DRT services, provided by a mixture of local and wider operators, mainly on a commercial basis. These are considered technological because they utilise technology either as part of the customer experience (e.g., booking apps) and/or to streamline the operations of the operator.

Integration with other public services: A number of the plans and strategies reviewed seemed to take a holistic approach when it comes to DRT service integration with other public services. In many instances, this reflects the nature of governance arrangements within the area in question. For example, in many US states, DRT services have historically been integrated with local health service provision and have expanded service offerings to be outside of purely healthcare and focussing on improving rural accessibility more generally.

Filling accessibility gaps: Many plans and strategies seek to introduce DRT services as a means of filling accessibility gaps in a cost-effective manner. Consequently, many mention supporting trials of DRT services, even if details such as operational areas and hours of operation are relatively sparse in the strategies themselves.

Active Travel

A notable absence in the plans and strategies reviewed is the consideration of active travel, particularly walking and cycling, but also extending to newer modes such as e-scooters (where their use in public spaces is legal). None of the strategies reviewed make explicit mention of plans to improve local cycling infrastructure on streets or deliver shared bike or e-scooter schemes.

Where walking and cycling features, it is often in terms of being an economic opportunity, particularly for tourism. For example, where major cycle trails and walking routes pass through a region or area, these are seen as an opportunity for tourism and improved access, and are consequently an opportunity for developing rural areas.

Ferries

Many of the plans and strategies that were reviewed did not contain significant island communities and consequently seldom mention the challenges facing ferry operations. Some notable exceptions to this were plans from the Greek islands, Finland and in some US states, notably the Washington State Ferries Long Term Plan.

Within the context of Sustainable Island Plans, ferries are given a passing mention. Primarily with reference to their economic importance and their ability to maintain inter-island connectivity. Despite this reflection of their importance, few details are given on passenger numbers, or any plans for investment in ferry operations and fleets. A potential explanation for this is the regulatory environment within which ferries operate. While some ferry services are procured by national and regional governments, in some instances ferries are operated by private operators, and are therefore outside of the realms of public policy.

Islands

The development of island-specific mobility plans is just beginning to emerge in some areas of Europe, notably around Greece which has developed the concept of a Sustainable Island Mobility Plan (SIMP), a variation on the EU Sustainable Urban Mobility Plan (SUMP) framework. The development of this framework is based on a simple understanding - that each island is its own unique, self-contained community and consequently the mobility needs must be planned accordingly.

This work is at a theoretical stage at present, with no practical examples of SIMPs being developed and deployed. Despite this, there is a notable variation from the standard SUMP methodology. Particularly, visitor travel as the primary focus of initiatives to reduce the impact of travel on island communities. This includes tackling overcrowding on key services (prominently ferries), catering for significant visitor travel in small communities (e.g., pedestrianisation of key streets during high tourist season), and the establishment of temporary travel facilities to facilitate sustainable travel during busy tourist seasons.

A second notable focus of the Greek SIMP concept is inter-island connectivity. The framework allows for consideration of a variety of such types of connectivity, including fixed links, ferries, and aviation, and focuses on enhancing or maintaining connectivity as a priority, as opposed to reducing carbon emissions which is often found in SUMPs.

Menu of solutions

The USA provides evidence of an emerging field of practice, as shown in several mobility plans. This practice involves not defining a specific solution, but articulating the issue and the service specification, then developing and maintaining a menu of service options which can be used to meet those challenges and opportunities. Likewise, there is no set formula for identifying specific service options, for example technological service options, it is instead based on a principle of assessing learning from experimentation and service delivery. This, in theory, means that practitioners are able to select options most likely to succeed in their area.

The report "Rural Community Transit Strategies: Building on, Expanding, and Enhancing Existing Assets and Programs" explores innovative strategies to improve transit in rural Minnesota using a sharing-economy approach. Due to limited public transit options and the absence of services like Uber and Lyft in rural areas, residents often rely on personal vehicles. The research, conducted in partnership with Wabasha, MN, aims to develop a flexible, community-based transit model using existing assets such as school buses, car-sharing, biking, and volunteer driver programs. The study identifies transit challenges for underserved populations, examines existing rural transit initiatives, and proposes solutions such as integrating school buses for broader public use and enhancing digital platforms for ride-sharing. The project emphasizes leveraging local resources, expanding service availability, and fostering partnerships between public agencies, private businesses, and community groups. Ultimately, the recommendations seek to redefine rural mobility as a flexible, multimodal system that enhances accessibility, equity, and economic benefits while addressing infrastructure and policy challenges. The study also suggests branding the model as "Greater Minnesota Moves" to distinguish it from urban transit services and promote its adoption statewide.

The Menu of Solutions approach is only now starting to be formalised. Primarily based upon the experience of Coordinated Human Service Transportation Plans adopted across the United States of America, it is a flexible, adaptable set of mobility strategies designed to improve rural transport by leveraging existing assets and resources. Other characteristics include customisability and scalability of solutions, being equity focussed and establishing public-private partnerships. It is a concept that, while in the early stages of development, holds promise for future rural strategies.

Conclusions

The objective of Phase 2 of this project was to undertake a comprehensive review of International transport policies, from a national to a community level. As summarised below, this desktop research has yielded important insights that provide a solid foundation for developing a Scotland RIMP, and providing a framework or toolkit for others.

Getting governance correct

- No single definite structure is correct.
- Seems to work based on encouraging incentives to making a certain type of governance work, e.g., competition at odds with collaboration.

Community collaboration

- Strong need to collaborate with local communities and transport providers.
- National and regional government can provide the core public transport services, but local connectivity requires local enablement.

Achieving wider goals

- The overarching issue in rural areas is accessibility and connectivity. It
 is the 'nexus' transport issue and tackling this tackles a lot of other
 issues.
- Strategies need to identify transport's role in tackling wider issues. For example, by tackling accessibility issues you are improving the health of the general population.

Menu of delivery options

- A set solution makes sense where operational responsibilities align. For example, improving public transport by investing in new routes.
- Focus on developing a menu of options to tackle a challenge. Quantify the challenge, set the outcome, specify minimum service requirements, but don't stipulate the solution.

Recommendations

From this research, SRITC have identified six key recommendations for content that should be considered, discussed and included in a practical Rural and Island Mobility Plan (RIMP):

1.Governance and community collaboration framework

Effective governance structures and strong collaboration with local communities are crucial for delivering tailored transport solutions. A well-defined governance framework ensures that regional and national authorities can work cohesively with community stakeholders to address unique rural mobility needs. Thus, identifying and developing a collaborative governance framework is a key step.

2. Demand-responsive transport solutions

Incorporating DRT services can bridge gaps in rural transport networks where fixed-route public transport is unfeasible. These services, particularly when integrated with other public services, offer cost-effective and flexible mobility options for sparsely populated areas. Identifying barriers and opportunities for DRT within the collaboration as a key mode of transport is vital.

3. Integration of active travel and micromobility initiatives

Active travel options like cycling and walking should be promoted and included not only for leisure but also as viable modes of transport. Incorporating these into the mobility plan supports health and reduces carbon emissions as well as enhancing tourism in rural areas.

4. Island-specific mobility strategies

Islands have distinct transport needs that require tailored solutions, which a well thought-out Sustainable Island Mobility Plan could provide. These strategies should address inter-island connectivity and seasonal fluctuations in demand caused by tourism. SIMPs should be developed alongside RIMPs.

5. Sustainability and decarbonisation goals

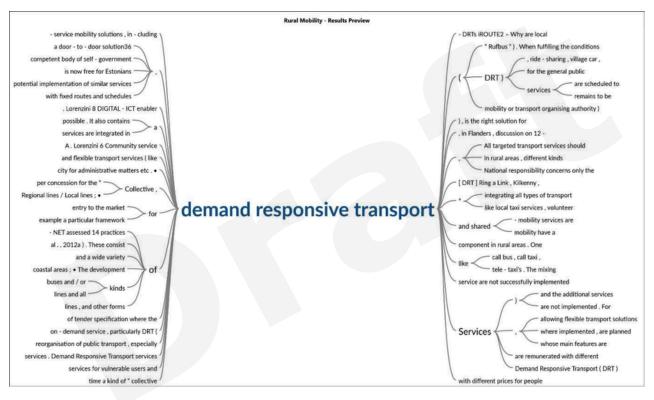
The plan must align with broader environmental goals by promoting zeroemission public transport, electric vehicles and sustainable infrastructure investments. Reducing carbon emissions in rural transport will help combat climate change and improve air quality in these regions. Understanding the policy landscape and developing a practical climate action plan, with deliverables, is recommended.

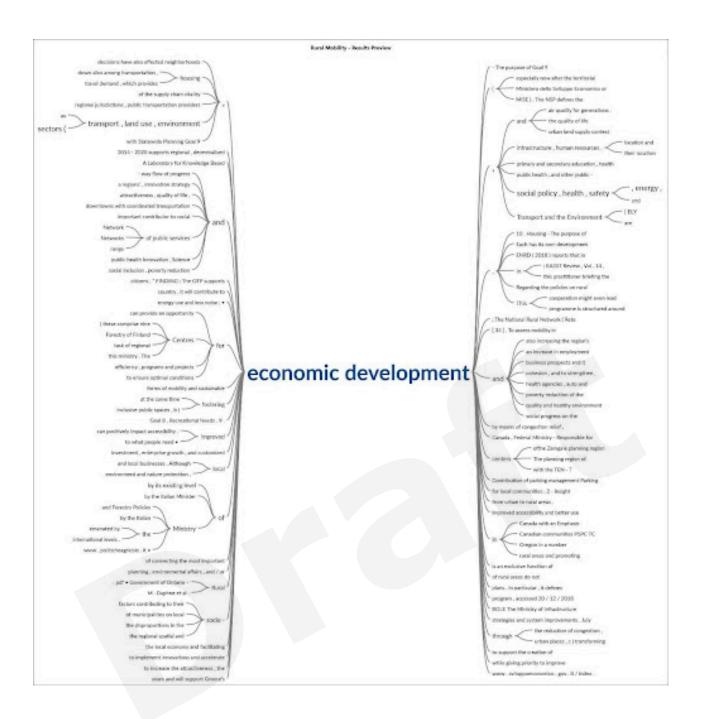
6. Clear metrics for success and evaluation

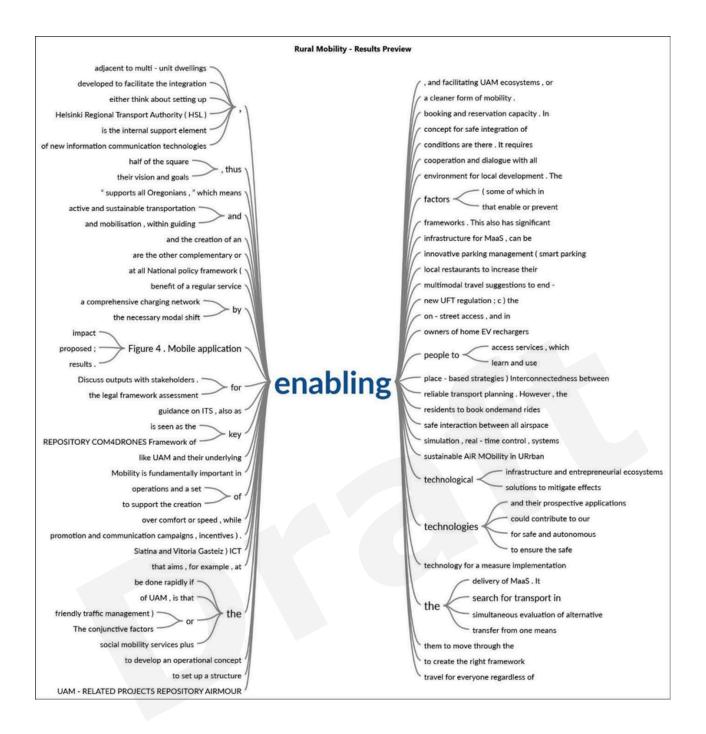
Establishing measurable outcomes is essential for monitoring the effectiveness of the mobility plan. Metrics should be developed in collaboration and cover improvements in accessibility, social inclusion, environmental impact, and economic development to ensure long-term success and adaptability.

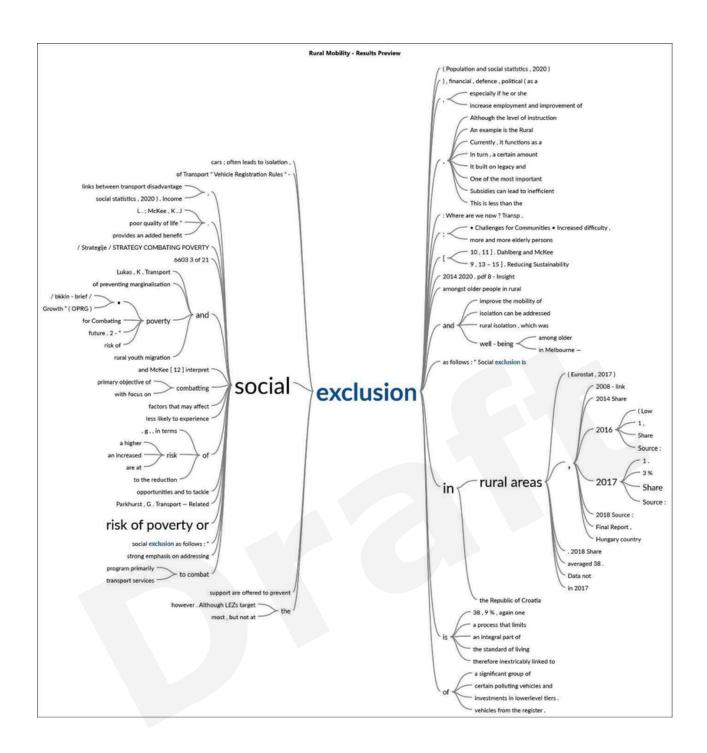
Appendix A: Word analysis in context

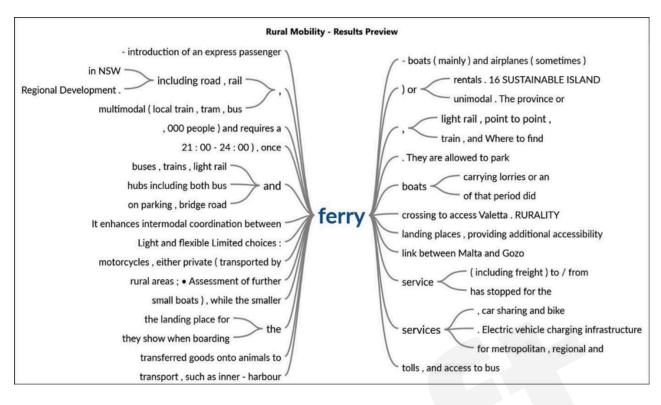


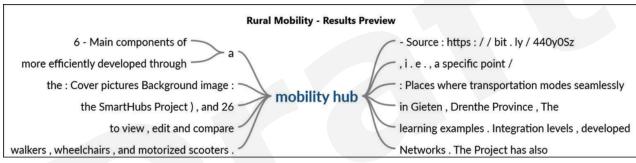


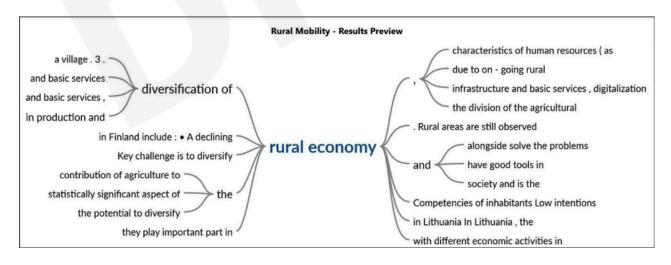


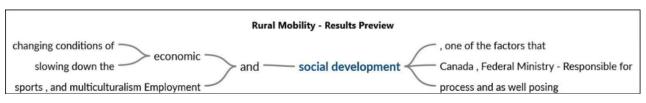












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