

THE RURAL MOBILITY CHALLENGE FOR PUBLIC TRANSPORT: HOW COMBINED MOBILITY CAN HELP

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INTRODUCTION

Improving public transport is one of the most pressing needs for rural and peri-urban areas, allowing to foster economic development, improve social equity and better address the climate crisis. However, solutions cannot be simply copied from urban areas as they must embrace unique local circumstances. The evolution of mobility has redefined public transport and unlocked new possibilities. Rapid developments in freight and deliveries have enlarged the range of solutions with the approach of ‘bringing services to people’ beyond the traditional approach focussed on ‘moving people to services’. Mobility as a Service (MaaS) promises to bring everything together.

Combining public transport with more tailored on-demand and shared mobility services, including peer-to-peer and volunteer-based solutions, can go a long way towards overcoming long-standing mobility deficits in rural areas. Successful strategies must embrace the different scale and needs of rural areas, and build upon a set of preconditions for combined mobility solutions to fully unlock their potential.

While maintaining a global view, this Knowledge Brief focuses on the Global North and contains main takeaways as a contribution to push the discussion of public transport in peri-urban and rural mobility into the mainstream, covering different degrees of rurality from the urban fringes to remote areas.



WHAT IS “RURAL”?

Definitions (e.g. “suburban”, “exurban”, “peripheral”, “rural”, “remote”...) and **statistics** reveal a **poor understanding** of ‘rural’. In France, after the government adopted a new policy focus on rural areas, the national statistics agency developed a definition of rural areas. If you think this is unusual, you would be surprised at how varied and inconsistent a **definition** of rural areas can be (see the Annexe with examples from the European Union, Australia and the US)¹.

¹ For further examples on how remoteness is defined, see also International Transport Forum, 2021. *Connecting Remote Communities: Summary and conclusions*.



Globally, the **data gap** concerning rural access and mobility is a problem, also for the Sustainable Development Goals (SDGs) and the ‘Sustainable Mobility for All’ initiative led by the World Bank². The European Union estimates that **83% of its territory is composed of rural areas where 30.6% of its population live**. On average, this population is older and has a smaller share of GDP. In 2018, the average GDP per capita in rural regions was 75% of the EU average versus 125% in urban regions. Although digitalisation is already a reality and is seen as a promising solution for the future of mobility in rural areas, in 2019, rural populations were less equipped in high-speed internet (60% of rural households had internet speeds more than 30Mbps, compared to 86% of urban households) and had lower rates of digital skills (48% of rural inhabitants had at least basic digital skills compared to 62% of urban inhabitants)³.

While every city context is different, it is also true that **no rural area is equal to another** and better knowledge is crucially needed to understand mobility needs.

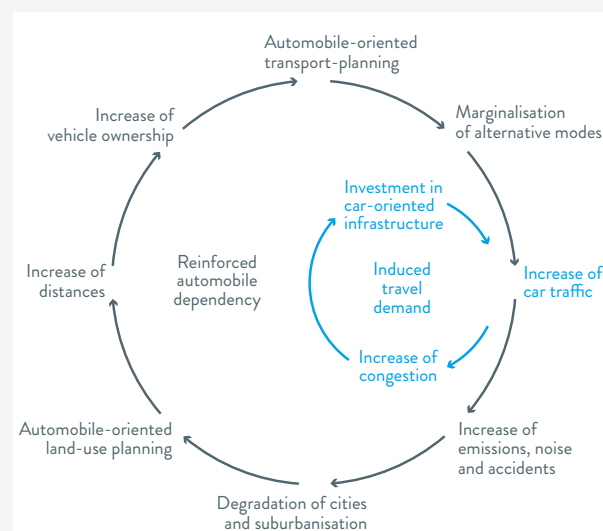
WHY RURAL MOBILITY MATTERS

Around the world, rural transport facilities and services are essential elements to **drive growth and unlock equity potential**. Good rural road infrastructure and services drive agriculture, commerce, trade, industry and allow populations to access opportunities such as education, jobs, health, culture and social activities. It is no wonder that rural transport plays a critical role in **achieving no less than half of the SDGs**⁴.

Developing good rural public transport is also unquestionably **key to achieving our climate neutrality objectives** since personal motorised vehicles have flourished in industrialised countries and cities of the Global South thanks to the socio-economic benefits they bring to those that own them. However, they have contributed to numerous negative externalities: An increase in air and noise pollution, road deaths, rising energy and infrastructure costs, further isolation of the non-motorised as well as greenhouse gas emissions which exacerbate the climate crisis.

Car-oriented land use reinforces the **reliance on cars for the satisfaction of basic needs** especially in low-density areas. This is referred to as the **vicious cycle of car dependency**. It also shows how urban cores, where congestion might be more visible, and how peri-urban areas are linked together. That’s why **developing better public transport for peri-urban and rural areas is critical**.

Vicious Cycle of Automobile Dependency



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While the **COVID-19 crisis** has magnified the economic gap between urban and rural areas, it has also transformed consumption patterns (notably with greater digitalisation of work, health and education) and **brought new opportunities**. Together with greater awareness and demand for accessibility to quality services, the crises has also **created momentum** to mobilise local networks and cooperative structures as well as to accelerate a just transition towards a low-carbon economy for rural communities⁵.

Improved infrastructure, especially for public transport, has been identified as one of the most pressing needs for rural areas in the **long-term vision for the EU’s rural areas** of the **European Commission’s strategy for 2019-2024, A new push for European democracy**.

² Sustainable Mobility for All, 2019. Global Roadmap of Action Toward Sustainable Mobility, Paper 1 – Universal Rural Access.

³ From the European Commission’s “Long-term vision for rural areas”

⁴ SDGs 1, 2, 3, 4, 5, 6, 8, 9, 11 and 13. For more info see ReCAP and SLoCaT note on *The contribution of Rural Transport to Achieve the Sustainable Development Goals*, 2017.

⁵ OECD, 2020. *Policy implications of Coronavirus crisis for rural development*.

The need for a broader strategy has been promoted in the recent *communication on the new EU Urban Mobility Framework*, whereby the 424 cities of the TEN-T urban nodes will have to include integrated links between rural, peri-urban and urban areas in their sustainable urban mobility plans (SUMP).

Furthermore, the OECD's International Transport Forum makes the case for Sustainable Regional Mobility Plans (SRMPs) as strategies that reflect unique local circumstances, and cannot be extrapolated from urban frameworks⁶.

THE MAIN MOBILITY CHALLENGES

Rural areas present long-standing deficits⁷ in relation to policies, funding, governance, institutional capacity, service provision, planning and research. Some of the identified challenges in the Global North include:

SOCIO-ECONOMIC AND DEMOGRAPHICS:



- Isolation of the young and elderly and immobile, e.g. people with reduced mobility or low income (depending on available public transport and shared mobility solutions).
- Aging population, sometimes combined with declining young population, resulting in increased local expenditure such as specialised transport and community services.

GOVERNANCE:



- Lack of strategic rural mobility policies impeding stable vision, actions and funding.
- Limited available funds and/or inefficiently spread across administrations without coordination.
- Siloed approaches with a focus on providing services for specific populations, e.g. people with medical needs or disabilities, ruling out providing services to the general public for multiple-trip purpose.
- Limited and fragmented political representation and leadership (among different authorities).
- Limited capacity, support and best practices exchange among practitioners.

GEOGRAPHY:

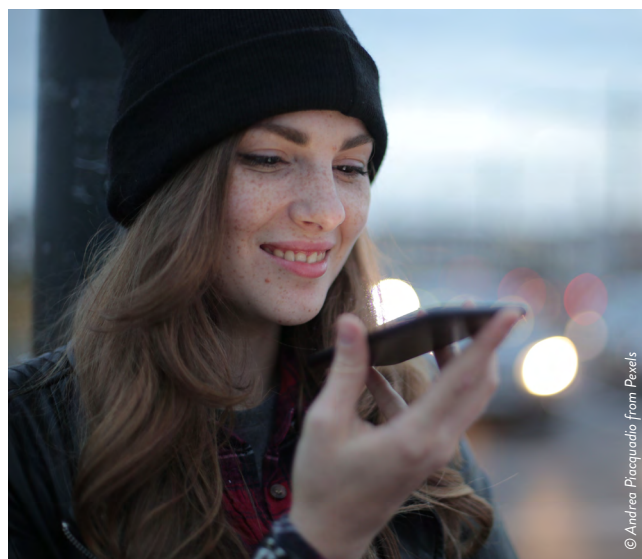


- Remoteness from larger population centres and long average trip distance to access essential services.
- Multidirectional travel patterns and decentralised trip destinations and origins.
- Problematic rural – urban connections which contribute to car use in city centres.

INFRASTRUCTURES AND SERVICES:



- Car-oriented road infrastructure which makes it unsafe to walk and cycle.
- Insufficient provision of public transport (more expensive in such a context) with minimal coverage and connectivity.
- Lack of critical mass for shared mobility and market-driven solutions.
- Gaps in availability of digital infrastructure, data and skills.



⁶ ITF, 2021. *Innovations for Better Rural Mobility*.

⁷ ITF, 2021.

RETHINKING RURAL MOBILITY

NEW POLICIES AND STRATEGIES

In view of the main challenges, successful **strategies** must embrace the different scale, needs and means of rural areas and build upon a set of preconditions for combined mobility solutions to fully unlock their potential:

- Awareness
- Political will
- Effective governance with assigned responsibilities (most European countries are lacking comprehensive rural mobility policies⁸)
- Technical assistance
- Funding and infrastructure to increase multimodal connectivity

For this to emerge, it is also often required to adapt, clarify or frame **regulation** to enable different transport solutions and to provide them as public transport (e.g. in the tendering procedures for service contracts), according to the specific areas and demand.

Another crucial aspect is **funding** because, except for a few commercially viable transport options such as interurban links, local rural transport services require some form of financial support. Funding must be sustained in the long-term with a strategy ensuring transport options go beyond the pilot phase of many services⁹. **While there is a need for more innovative mechanisms to raise finance, cost-effective use of funding is also important as well as considering the non-profit or voluntary sector to reduce operating costs.** For example, better use of public money could come from coordinating different public bodies and departments, e.g. health, education, social services, and merging into one open service for their separated single-purpose transport services. In Germany, a new legislation allows Demand-Responsive Transport (DRT), or “on demand ridepooling”, offers to be fully integrated into public transport. The public transport operators are starting projects to attract new customers, especially in rural and peri-urban areas. With long-term funding, they can establish and maintain these offers until the inhabitants have switched their habits to more sustainable options.

A strategic feature to encourage connected and combined mobility is the **redesign of public transport networks with mobility hubs** on three key levels, that could sustain a coherent governance structure.

“It is not the modalities, but the range and accessibility of facilities determines the success of the hub.”

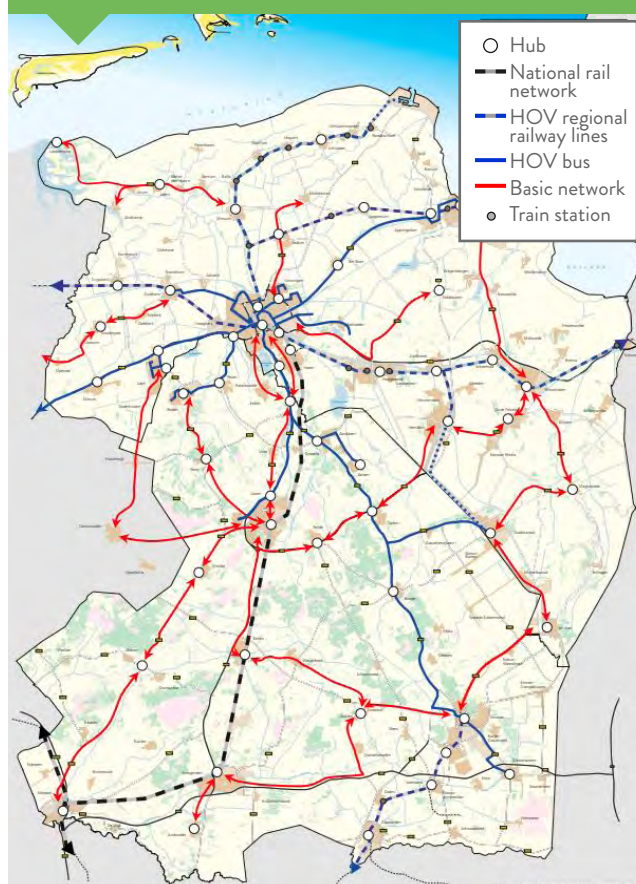
Martin Courtz, Programme Hub Manager at Drenthe Province

⁸ Last Mile, 2028. LAST MILE – Sustainable mobility for the last mile in tourism regions.

⁹ For more information on moving beyond pilot phases, check out UITP's *Using business models for better integrated mobility*

THE REDESIGNED PUBLIC TRANSPORT NETWORKS AND HUBS OF GRONINGEN-DRENTHE

The Provinces of Groningen-Drenthe redesigned their network with mobility hubs to ensure smooth transfers and additional services to communities. High quality public transport provision is provided by train and bus rapid transit (BRT) services. Feeder bus lines and additional on-demand networks connect the mobility hubs (in white on the map below).



HOV/BRT

Modal share: 60%

Frequency: every 5/10/15 min
(30 min in the evening)
from 07:00 to 00:00



BASIC NETWORK

Modal share: 32%

Frequency: every 60 min
(but Citylines 15/30 min)
from 07:00 to 00:00



ADDITIONAL NETWORK

On demand - e.g., taxis



Key elements when redesigning public transport networks.

GEOGRAPHIC LEVEL	SERVICE PROVISION LEVEL	GOVERNANCE LEVEL
Between urban and rural settlements	Core train and bus network	State, region or province
Between rural settlements	Feeder/branch networks	Region
Within a municipality with dispersed settlements	Local tailor-made services for first/last-mile travel	Municipalities

THE VISION OF FLANDERS: A NEW TRANSPORT ACCESSIBILITY POLICY TO GUARANTEE BETTER QUALITY OF LIFE

Flanders is the northern part of Belgium, is inhabited by 6.6 million people and has a relatively high density of 484 inhabitants/km² with more than 300 cities and municipalities, a regional and a federal government. The Department of Mobility and Public Works of the Flemish government (MOW) is implementing soon the “**Basic Accessibility**” policy that “guarantees the access to important social places on a demand-driven basis by different means of transportation” through a core network, additional network and first and last-mile solutions. To fulfil its mission, this system should support the economy and society and must be sustainable, safe, multimodal, integrated and intelligent.

To get there, the first step is to **transition from “supply-driven public transport” to “demand-driven transport public transport”**. For the supply-driven, the policy is that every citizen has a bus stop within walking distance (800m). While in rural areas the frequency of services is very low, with the new approach **different forms of public transport** are provided depending on the area and its demand: buses, taxis, small buses, shared cars, shared bikes etc. The transfer between one mode and another will be seamless with mobility hubs to ensure end to end transport. **Hierarchised public transport networks** are used as a tool to structure the connections between different levels as well as the governance of the overall system.

In terms of **governance**, in the previous policy the government was the main decision maker while in the new policy, except for the core network, 15

transport areas will be created whereby the local communities decide together what types of transport to offer within a budget. The **mobility plans** are done at the level of the 15 transport areas and must fit within the framework of Mobility Plan Flanders and Policy Plan Space Flanders, while integrating passenger transport freight transport, infrastructure and spatial planning.

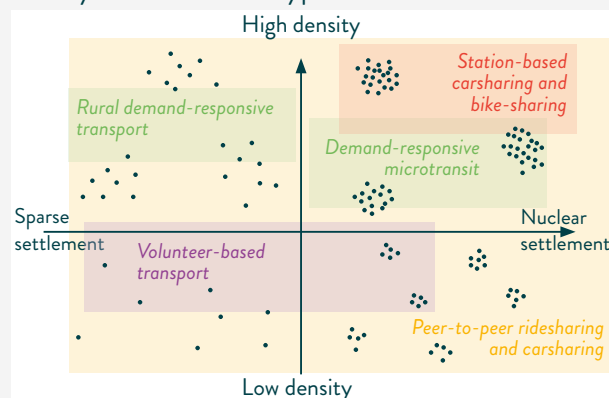
As for the **user**, it will be also another way of planning a trip. Before, you had to adapt to the bus scheme and now you will have to plan your trip via a **mobility centre**, a public MaaS, that is contracted, impartial, data-driven and customer centric that facilitates planning and booking trips. The co-creation of this MaaS ecosystem is currently ongoing. To sum up, looking for solutions for rural mobility can drive innovations in the whole public transport system.

COMBINING DIFFERENT MOBILITY SOLUTIONS FOR DIFFERENT GEOGRAPHIES AND NEEDS

Different mobility solutions, such as various types of **shared mobility**, are more tailored for low-dense geographical configurations and can be combined with classic public transport along core and feeder networks through **mobility hubs**.

Since no one rural area is equal to another, some of the variables that differentiate rural mobility include geography (e.g. proximity to city/towns), economic situation (e.g. reliance on an industry, an employer or a tourist destination), land-use structure (e.g. a compact town centre as opposed to a dispersed development) and density. These last two dimensions of density and land-use structure can be used to provide an overview of the geographic contexts in which different service types tend to work best¹⁰.

Suitability of shared mobility types by population density and settlement type



© Source: ITF, 2021

¹⁰ ITF, 2021.

On-demand solutions

- **Carpooling** solutions: While most are informal (with family, neighbours and friends), some are organised and supported by authorities, as in the *Ile-de-France Region*.

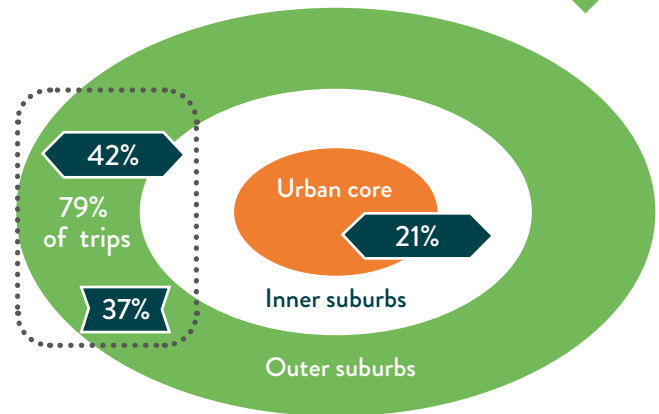
CARPOOLING PROVIDES AN INTEGRATED MOBILITY SOLUTION FOR THE OUTER SUBURBS OF ILE-DE-FRANCE: THE CASE OF KAROS

In Ile-de-France, the prospective carpooling market concerns 61% of the working population in the outer suburbs who drive to commute and overwhelmingly travel alone (95%). In 2018, at the end of a 13-month experiment with the authority, 79% of the trips done with *Karos* concerned the outer suburbs of Paris, while 36% of overall carpool trips involve municipalities with fewer than 100 residents/km², therefore catering for the least dense areas. From January 2017 to October 2021, almost 3.8 million trips were carpooled with *Karos*, within 760 suburban and rural municipalities, covering 91% of the region's population.

At the core of its success is an AI-powered mobility assistant app that offers reliable carpooling opportunities for daily commuting, including variable working hours and without being tied to a particular carpooler. Thanks to the intermodal trip planner, carpooling became integrated into the local public transport offer. 25% of *Karos*' passengers only carpool intermodal trips. On average, 2.3 people share each *Karos* trip against an average of 1.1 pp/car. With an almost 50-50 split between male and female, the majority of users are young professionals under 40.

The partnership with the local transport authority, IDF Mobilités, is crucial as it not only remunerates the carpooling partner (B2G) but also finances carpooling at a rate of €2 per trip (contribution paid to the driver). In fact, monthly transport pass holders can use carpooling for free within the limit of 35km per trip and for a maximum of two trips per day. Drivers are paid €1.50/passenger up to 15 km then €0.10/km, which provides an average saving of €92/month. Ticket holders pay just the ticket. The goals for the authority are to provide a cheap way to fight congestion and extend the reach of its public transport networks while proposing alternatives in case of perturbation of those same

networks. Carpooling partners of IDF Mobilités are klaxit, Karos and BlaBlaCarDaily, whose trips are directly available in the authority's trip planner app.



Source: Karos White Paper for Paris Region and IDF mobilités carpooling page

- **Demand-Responsive Transport (DRT) services can run in rural areas**, such as the *FreYfahrt* shuttle integrated into public transport since 2017 in the small town of Freyung, Lower Bavaria. DRT can serve suburbs like the *Flex'Hop* that is provided by the public transport operator of Strasbourg in France, CTS, to 25 suburbs and villages from 5am to midnight. DRT can substitute inefficient fixed route bus lines, as in Moree, Australia, where it replaced three fixed bus lines; a proposal from the local bus operator. The authority, Transport for NSW (TfNSW), received the proposal as a part of a government-led tender to learn about On Demand. Following a successful pilot, the *Moree on demand service* was implemented permanently from 2020.
- **Subsidised taxis offer mobility for remote areas**, such as the 100-won Taxi rides in rural South Korea for anyone whose hamlet is more than 700 meters from the nearest bus stop. These shared taxis are particularly popular with older, low-income, car-less citizens. As the population declined, no bus company could serve them, so the county government subsidises the fare beyond the 9-cent (100 won) passengers are charged for short trips¹¹.
- **Solutions powered by volunteers and NGOs**, such as *Mobitwin* that provides transport services for people with mobility challenges in Belgium.
- **Volunteer-based ride-hailing**, such as peer-to-peer ridesharing organised in *Innisfil, Canada*, through *Uber* with the strong involvement of non-profit associations and the government.

¹¹ New York Times, 2021. *It's a Godsend': 9-Cent Taxi Rides in Rural South Korea*.



MOVING PEOPLE WITH VOLUNTEERS: THE CASE OF MOBITWIN

Mobitwin connects people who need voluntary drivers. It usually concerns elderly with reduced mobility or people with a low income who do not own a car, cannot afford a taxi or live in areas with limited public transport.

Users request the trips 48 hours in advance so a volunteer can be found and at the end of the trip the member pays the expenses for the number of travelled kilometres. Since 2018, a mobile App makes it easier for drivers to manage their rides but most drivers and members still prefer to book personally.

The service is locally operated by a local Mobitwin desks, that is operated by municipalities or other local partners. Its role is:

- To promote the service, detect the needs in their community and attract voluntary drivers.
- To reward the drivers by offering personal support and organising annual informal gatherings.
- Communicate about milestones and events with local press.
- Manage the rides by offering a personal service, accessible by phone.

Mpact, a Belgian non-profit shared mobility operator, supports the local Mobitwin desks with:

- An internet application for the administration.
- Arranging insurances for members and drivers.
- Provision of supportive materials for drivers like driver cards and kilometre booklets.
- Helpdesk during office hours.
- Trainings for local coordinators.

Mobitwin has 40,000 members, almost 3,000 voluntary drivers in more than 250 different Belgian municipalities, and operates over 400,000 trips each year.

Mobility solutions based on shared assets

➤ **Car-sharing schemes**, such as the *Clem/Citiz* small-scale scheme use vehicles owned by French municipalities. This is also similar to the *case of Halden*, Norway, where cars used by municipality staff during the day are rented out to private parties in the evenings. Intermodality with trains can be ensured by carsharing schemes such as the partnership between *Mobility* and *SBB* in Switzerland.

➤ **Bike sharing schemes** can be provided in a variety of schemes, e.g. in railway stations for **train/bike multimodal last mile transport**, such as in Belgium with the *Blue-Bike* or in the Netherlands with the *OV-Fiets*, provided by the train operator. The “*bike library*” model, that set an example for rural bikeability, was created in Allen County, US, with a population of just 13,000 people and remarkable walking/cycling infrastructure. Bicycles are available to check-out for free in several different locations and for different periods of time, from minutes to months. They are sourced through, and maintained by, a local bike repair shop.



THE RISE OF OWNED E-BIKES AND E-CARGO BIKES

Sales of bicycles in Europe are forecasted to grow to 30 million a year by 2030, a 47% increase over the annual number in 2019. The vast majority of which are e-bikes. This continued growth needs to be enabled and better supported in rural areas with safe and convenient cycling infrastructure (including e.g. secure parking at mobility hubs and charging points) to facilitate more effective combined mobility options. A recent study in England concluded that e-bikes can save up to 24 million tonnes of CO₂ per year, and that these savings are greatest in rural areas because e-bike replace car trips.

Cargo and e-cargo bikes have also closed a mobility gap between the usage of a bike and a car. Many cities and regions in Germany and Austria are currently offering subsidies for buying a cargo bike because they are a solution for urban and rural areas.



Solutions to bring goods and services to people

- **Multiservice hubs** can be a part of the solution in rural areas, to bring services and social links closer to inhabitants and reduce the need to travel, as seen in the examples of **Groningen-Drenthe** and Flanders.
- Many services, often driven by a local and bottom-up approach to combat isolation in rural areas and reduce travel distances, paves the way for alternative mobility to the private car. In rural Germany, **KombiBus** combines

passengers, freight and post. In the UK, COVID-19 vaccination centres are provided by a mobile unit to bring the vaccines to rural populations. In villages in France hit by desertification, a van brings books closer to the readers and creates links around culture.

- **Drone-based delivery services** are being used to reduce shipping costs in regions with large land areas, low population density, low accessibility and high labour costs.

Rural MaaS and automation

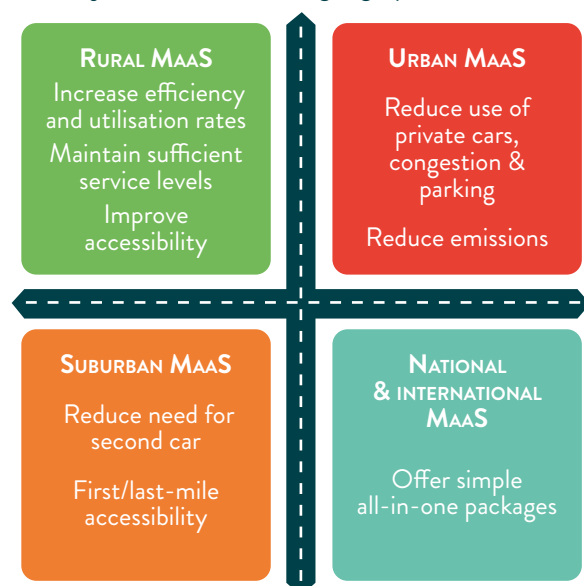
Rural MaaS, or **RMaaS**, will be different from urban MaaS, shifting the focus from the aggregation of different transport offers to the aggregation of demand, due to factors such as population density, transport services available, digital infrastructure and demography. It is crucial to understand user needs, identify mobility gaps as well as opportunities before co-creating solution(s).

“It’s not about “build it and they will come, it’s about ‘build it together from day one’.”

Valerie Lefler, Executive Director of Feonix – Mobility Rising

RMaaS schemes work more around the use of **the private car as an asset to be integrated**, from peer-to-peer services up to public formalised services such as public transport. This comes with a specific set of challenges, for example in data integration of ‘informal services’. New business models are emerging, **bridging transport with other services**, opportunities and needs, such as the RMaaS schemes of **AARP Ride@50+program** (offering public transit, taxi, rideshare and volunteer driver options) and **Tompkins County**, built around a 24/7 customer service.

MaaS Objectives in different geographic areas



Source: Carol Schweiger, 2017.

MAAS AND TOURISM IN UPPER AUSTRIA

With more than 8.5 million overnight stays in 2018, the region on Upper Austria is one of the most popular tourism regions in the country. However 84% of travellers, most of whom are couples, arrive by car.

A pilot project is offering tourists an alternative through MaaS, developed by the provider Fluidtime. It will provide information and booking options on existing mobility services. Car-free travel is incentivised by giving tourists a free budget for local mobility as part of their hotel booking or tourism card if they leave their car at home.

The MaaS solution also serves to collect data on holiday mobility: Who uses which modalities, distances covered, Co2 generated etc. Tourism regions will use this data to plan possible on-demand mobility services in rural areas, to improve existing services and for future urban and rural planning. The project started in September 2021 and the app launch is planned for April 2022.

Automated road vehicles can eventually be a game changer to enable an attractive public transport for rural areas¹². While the current limitations of the technology are still to offer suitable operations, eventually taking out the driver will reduce the costs of operations for flexible public transport, especially in rural areas. With this in mind, gathering experience with available autonomous vehicles and integrating them into the existing public transport system is key to achieving a successful implementation and an attractive, financially viable 24/7 public transport in rural areas.



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CONCLUSIONS

Public transport is needed to improve mobility in peri-urban and rural areas. Increasing reliable and coordinated transport options through combined mobility, expanding accessibility of public transport networks and thus reducing car dependence can bring positive benefits: Vibrant local communities, socio-economic inclusion, public health benefits and climate change mitigation.

Today, neither the market nor classic public transport alone can provide solutions. New policies are needed to ensure strategic vision and stable funding to go beyond disjointed pilots and isolated initiatives, articulate geographies and needs, leverage technologies and data, enable and frame new business models for public, private and non-profit delivery of services.

These strategies must particularly consider the specific needs and wants of the residents, the resources and characteristics of the rural areas.

Much can be learnt from successful solutions around the world¹³. Hierarchisation of public transport networks, multimodal mobility hubs and MaaS platforms allow combining classic public transport with new mobility services for first and last-mile(s) connections. Better regulation to enable those connections is often key as well as openness to public-private partnerships, non-profit schemes, cross-sectoral coordination and the indispensable involvement of local actors.

It is time to rethink the rural mobility challenge.

¹² UITP, 2021. *Autonomous vehicles: A potential game changer for urban mobility*.

¹³ Many recent EU-funded projects in rural areas have collected good practices: *Ride2Rail* (H2020), *SMARTA 1&2*, *MAMBA* (Interreg Baltic Region), *Hi-reach* (H2020), *Inclusion* (H2020), *LAST MILE* (Interreg Europe), *Peripheral Access* (Interreg Central Europe), *RUMOBIL* (Interreg Central Europe). In the US, the Shared-Use Mobility Center with their *Learning module: Rural and small Town Transportation*. More recently the *Scottish Rural and Islands Transport Convention (SRITC)*, founded by Jenny Milne, with its open café events and gatherings have become a (virtual) place for people involved in rural mobility.

ANNEXE

Definitions of rural in a selection of countries:

COUNTRY	DIFFERENTIATION OF TYPES OF AREAS	DEFINITION	COUNTRY FIGURES
Australia ¹⁴	Identified, in opposition to urban centres	Urban areas represent a combination of all urban centres with a population of 1,000 or more. Rural areas represent the remainder of the State and are divided in two types : Bounded Locality and Rural Balance.	-
Finland	Identified, agglomeration level	Urban areas = an agglomeration with more than 15,000 residents including a core urban area. The surroundings are peri-urban area.	72% of the surface of the country
France	Identified, municipality level	Low-density and very low-density municipalities, inferior to 300 inhabitants per square km.	30,000 rural municipalities and over 21m inhabitants.
Germany	Identified, two different types of rural areas (two types of urban areas)	Rural counties partly dense: More than 50% urban population (people living in large or medium sized cities) with less than 150 people/km ² Sparsely populated counties: Density less than 100 people/km ² with less than 50% urban population (people living in large or medium sized cities)	-
Sweden	Not clearly identified, more in opposition to urban areas. Municipality level	Urban areas should be larger than 3,000 inhabitants and need to have a basic range of services.	-
USA ¹⁵	Identified in blocks according to criteria e.g. population thresholds, density, distance and land use.	The US Census Bureau defines rural as what is not urban, i.e. rural areas are sparsely populated, have low housing density, and are far from urban centres. Counties can be 1) completely rural, 2) mostly rural, 3) mostly urban or 4) completely urban.	In 2010, 97% of the land mass and 19.3% of the population (about 60m people). It was 54.4% in 1910.

¹⁴ Australian Bureau of Statistics, (abs.gov.au)

¹⁵ U. S. Census Bureau, 2016

This is an official Knowledge Brief of UITP, the International Association of Public Transport. UITP has more than 1,800 member companies in 100 countries throughout the world and represents the interests of key players in this sector. Its membership includes transport authorities, operators, both private and public, in all modes of collective passenger transport, and the industry. UITP addresses the economic, technical, organisation and management aspects of passenger transport, as well as the development of policy for mobility and public transport worldwide.

This Knowledge Brief is the result of discussions, dedicated workshop and desk research of the Task Force on Rural Mobility established by the Combined Mobility Committee of UITP in 2021 as an exploration of the topic. For more information you can contact Lidia Signor, Combined Mobility Manager (lidia.signor@uitp.org)

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