SMARTA
smart rural transport areas

Rural Mobility Matters
Insights from SMARTA

SMARTA

Sustainable Shared Mobility Interconnected with Public Transport in European Rural Areas (Developing the Concept of "SMArt Rural Transport Areas")

Rural Mobility Matters: Insights from SMARTA

Editing and design:
European Integrated Projects

Authors:
SMARTA consortium
MemEx SRL (lead partner), Vectos GmbH, The University Court of the University of Aberdeen, Transport & Mobility Leuven NV, and European Integrated Projects

SMARTA project at:
www.ruralsharedmobility.eu

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THE SMARTA PROJECT IN A NUTSHELL

The SMARTA project has been one of the most interesting initiatives set up by the European Union for rural mobility. The project has sought to understand the role, relevance, and potential of demand-responsive and shared mobility services, integrated with public transport, in European rural areas.

What is SMARTA about?

The SMARTA project has focused on rural mobility and, in particular, on rural shared mobility. Rural public transport services in Europe are under stress, due to a combination of factors, including austerity measures, demographic change, and poor connectivity in terms of infrastructure.

The absence of diverse mobility services has resulted in rural areas that have become highly auto dependent. The inevitable outcome is that those without cars are dependent on others for lifts, often meaning they have reduced possibilities to participate in society. Since its beginning in 2018, the SMARTA project has focused on how to exploit existing mobility policies and solutions in European rural areas and explore ways to support sustainable shared mobility, interconnected with public transport.

SMARTA'S AMBITION

The project has aimed to give reliable guidance to policy makers, local authorities, and practitioners to develop suitable policies and efficient operational solutions for rural mobility. This would enable them to:

✓ Develop a new vision for rural mobility at national, regional, and local levels;

✓ Define specific and measurable targets for rural mobility;

✓ Work in a dedicated evaluation framework for rural mobility;

✓ Assign dedicated responsibilities and obligations for achievement of the identified rural mobility targets.

SMARTA'S STREAMS OF ACTIVITIES

An analysis of rural mobility at EU level

SMARTA provided the opportunity for a comprehensive analysis of the challenges of mobility in rural areas, including the market and the policy context in all of the EU-28 countries (plus selected EEA states, North America, and Australia). The project consortium has profiled for each country the framework (institutional, regulatory, organisational, financial, etc.) within which shared mobility services in rural areas sit and related policies (at national or regional level). This sets out a factual mapping of the current situation, which had not been done before.

Improving the knowledge on sustainable rural mobility

Research was done in order to identify current and emerging good practices and their level of innovation was appraised. In parallel, SMARTA has engaged with a number of pilot sites implementing rural shared mobility solutions. Pilot activities provide the opportunity to examine the effectiveness, efficiency, impacts, and future prospects for something new, improved, or extended. The aim was to gain a deep understanding about the key findings, lessons learnt, and transferability issues of different mobility solutions.

Raising awareness on rural mobility

One of the key activities of SMARTA consisted of engagement with relevant stakeholders active in the field of rural mobility. Positive links have been developed with other projects related to rural mobility and accessibility, as well as with relevant initiatives or organisations. The SMARTA stakeholder network was instrumental in ensuring the validation of the project's activities, for achieving widespread uptake of the SMARTA findings and for raising awareness about the rural mobility issues. Additionally, a number of dissemination and communication instruments have been developed, including leaflets, brochures, a rich website, and very active social media.

SMARTA PROJECT'S STAGES

TIME TO RETHINK RURAL MOBILITY

- Identifying the rural mobility problem(s)
- Understanding the existing frameworks and policies
- Establish a network of rural mobility stakeholders from all over Europe

TIME TO ACT FOR RURAL MOBILITY

- Mapping the existing solutions and their innovation component
- Studying good practice examples and understanding what makes them successful
- Selecting pilot sites, to monitor and test shared rural mobility solutions
- Closely collaborate with stakeholders from all over Europe in understanding the feasibility of the solutions

RURAL MOBILITY MATTERS

- Studying the outcome of shared mobility solutions implemented in the pilot sites
- Assessing the needs of stakeholders in implementing comprehensive policy that covers all European rural areas
- Formulating policy recommendations

01

TIME TO RETHINK RURAL MOBILITY

"The European Green Deal *is an opportunity to reshape the entire transport system, to make it safe, sustainable, affordable, and accessible to all. And this means a new vision for rural areas."* [1] **Ciaran Cuffe, MEP (TRAN Committee, European Parliament)**

[1] The quote is from Ciaran Cuffe's intervention during the SMARTA Final Conference, December 2020. You can watch the recording of the conference following this link: https://ruralsharedmobility.eu/smarta-final-conference/

It is important to address the widespread opinion that in rural areas everyone has a car. This is, for sure, not true. Many people cannot drive, by reason of age, condition, or affordability. When the household car(s) is in use, other household members do not have access to it. Low-income households and individuals may not have a car. In the absence of good public transport or shared mobility services, many people can't get around. This serious gap limits their participation in society, their earning potential, and their contribution to the economy. In addition to the human cost, many will inevitably leave, putting even more pressure on the remaining facilities in a village or rural area.

The Time to Rethink Rural Mobility stage of the SMARTA project aimed at identifying the specific challenges of rural mobility and at understanding the existing frameworks for rural policies across the EU countries.

A NUMBER OF CONSIDERATIONS EMERGED:

The rural mobility problem is not one, but many. Different issues covering transport provision were identified: limited access and connectivity, longer distances, lack of public transport and/or alternatives to private cars, and lack of financing for mobility schemes. The specific rural land-use patterns (urban sprawl, scattered regions, lack of territorial planning for rural areas) are an important factor that leads to a high degree of car dependency in rural populations and, together with the poor infrastructure and lack of public transport provision, lead to limited accessibility and connectivity. The lack of accessibility translates into a lack of (physical) access to all kinds of services. These services are seen to be much broader than mobility services and encompass public services like postal services, health services, but also services like shops, grocery, pharmacy, barber, pubs, and others.

There are real differences across types of rural areas, regions, Member States. In some locations, rural areas can be characterised by the presence of high-income people, while in other rural areas there could be a large presence of poor households. Mountainous regions are very different from coastal areas. For some areas, it is the sheer remoteness itself which is the cause of the problem. In others, there are topographical challenges, a need for conservation, or seasonality issues, e.g. due to tourism. This diversity is making it difficult for one model to work in all areas.

Everybody living in rural areas is impacted, directly or indirectly, by the deficits in rural mobility. But there are a number of vulnerable categories that are more impacted: the elderly, the disabled, low-income families or the unemployed, single parents, teenagers, immigrants, newcomers to the area, people who are confronted with a sudden crisis.

Deficits in rural mobility inhibit other strategies for rural areas and regions. The main elements which are inhibited by the lack of rural mobility are certainly the life and the (economic) development of local society and local communities. Strategies in other sectors (e.g. social and health services) often ignore the need for transport, which can limit their effectiveness if there is insufficient transport available. Businesses need to have transport options available in order to attract potential employees. Too much car mobility for people in the rural area results in disappearing services, as car mobility enables people to use services that are relatively far way.

A policy framework for rural mobility, in the sense of a framework that specifically recognises and is designed for mobility in rural areas, is lacking in most EU-28 Member States. In countries or regions where institutional, regulatory, and financial frameworks are well developed, they tend to be more urban-focussed and prioritise big infrastructure projects and urban projects over rural transport.

Legislative frameworks often inhibit innovation in rural mobility, whereas they should support local initiatives and empower local communities to make changes and find solutions. For example, the way public transport is regulated in many countries excludes shared solutions or on-demand services.

THE NEED FOR A NEW VISION

Mapping the existing frameworks and practices across all EU-28 countries resulted in a need to rethink rural mobility. There is a clear need for a new vision and a new setting for rural mobility policies in order to improve rural mobility and to bring long-term benefits.

Ideally, there should be policy framework changes at a high level in order to have a big impact and, in order to do this, there is a need for these changes to be politically attractive, since politicians would need to be able to see the benefit for them to get involved.

Rural mobility should be prioritised to enable initiatives to take place; this would give direction and provide motivation at national and local levels, with the implementation being handled at a national or sub-national level.

KEY MESSAGE:

There is a clear need for a new vision and a new setting for rural mobility policies.

Read the first SMARTA brochure for a detailed description of the findings in the first stage of the project:

https://ruralsharedmobility.eu/wp-content/uploads/2020/09/Rethinking-Rural-Mobility-1st-SMARTA-brochure.pdf

02

"SMARTA has helped us to strengthen our expertise, or to develop expertise, as we need it to understand how effective mobility services could be offered for rural areas. And the project has demonstrated successful mobility schemes. [...] It has also helped us to get a better view on existing regional and national policy frameworks."[2] *Isabelle Vandoorne (DG MOVE, European Commission)*

TIME TO ACT
FOR RURAL MOBILITY

[2] The quote is from Isabelle Vandoorne's intervention during the SMARTA Final Conference, December 2020. You can watch the recording of the conference following this link: https://ruralsharedmobility.eu/smarta-final-conference/

SMARTA set out to increase the knowledge on sustainable rural mobility by identifying and evaluating shared mobility solutions implemented or under implementation in rural areas across Europe, analysing the enablers and barriers for widespread deployment of rural shared mobility solutions, as well as assessing the transferability potential of rural shared mobility solutions. **A significant number of Good Practices have been identified**, covering different countries across Europe and beyond, as shown in the figure below.

Figure 1: SMARTA's map of good practices and demonstrators

SOURCE: SMARTA PROJECT

Community Transportation Program – Ontario, CDN

ITNAmerica – Community Based Rural & Town Transportation, USA

Badenoch and Strathspey Community Transport Company – Scotland, UK

Village Bus in Kolsillre, SE

National Maas Framework, FI

Fare-free buses, EE

Donegal LocalLink, IE

Rural Transport Program, IE

Northern Commute, IE

Ring a Link, Kilkenny, IE

Suffolk Links DRT, UK

Texelhopper, NL

Muldental in Fahrt, DE

Krakow Metropolitan Transport, PL

RegioTaxi, NL

Talybont Energy – Wales, UK

Bürgerbus, DE

AV - Bad Birnbach, DE

Flexi Tec, BE

Bummelbus, LU

Go-Mobil, AT

Smart Move – Metropolitan Area of Alba Iulia, Romania

Alpine Bus, CH

Sopotiniki, SI

Rezopouce, FR

Fast seasonal bus line – Varna, BG

Rural DRT - Castilla y Leon, ES

Prontobus DRT, Modena, IT

EcoVolis, AL

Western Region DRT Pilot Stage 1 – New South Wales, AUS

Shared Use Mobility Agency – Elba Island, IT

SmartMove EU Project, EL

DRT in the region of Middle Tejo, PT

Shotl Platform, ES

A WEALTH OF MOBILITY SOLUTIONS

Is fixed-route public transport by bus the only way to offer transport solutions to rural people?
The wealth of good practices identified shows that there is a great diversity of solutions and ways of providing public transport, contextually adjusted to the specifics of the territories and the needs of the residents. Flexible transport services with minibuses, door-to-door DRT with "virtual" stops, shared taxis, and car pooling are only a part of the many solutions that can improve mobility for people in rural areas.[3]

A mobility service usually consists of the "physical" service plus the provision of "virtual" services which ease access to them. The physical services can be classified using the mobility modes: conventional public transport, flexible collective transport, and shared services (ride sharing or asset sharing). The figure below offers a clustering of such services. The virtual services might include platforms for the booking and reservation, travel service info, ticketing (B2C Services) and back-office service such as monitoring, planning, tracking and tracing, etc.
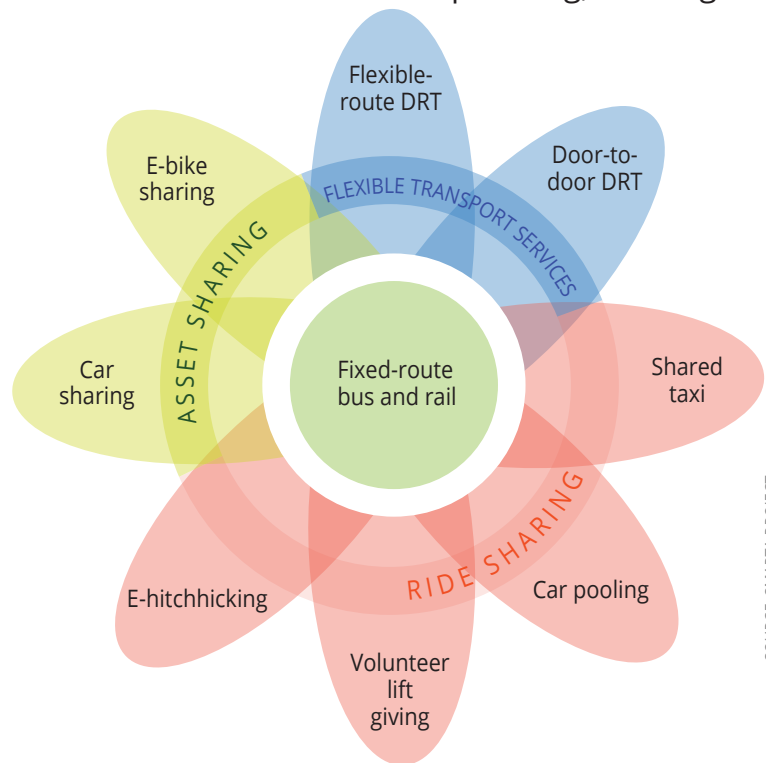

SOURCE: SMARTA PROJECT

Figure 2: The array of rural shared mobility services identified

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[3] This brochure only presents a number of the solutions identified and researched, as a way of exemplification. All good practices reports can be consulted here: https://ruralsharedmobility.eu/good-practices/ and descriptions of the SMARTA or SMARTA 2 demonstrators here: https://ruralsharedmobility.eu/demonstrators/
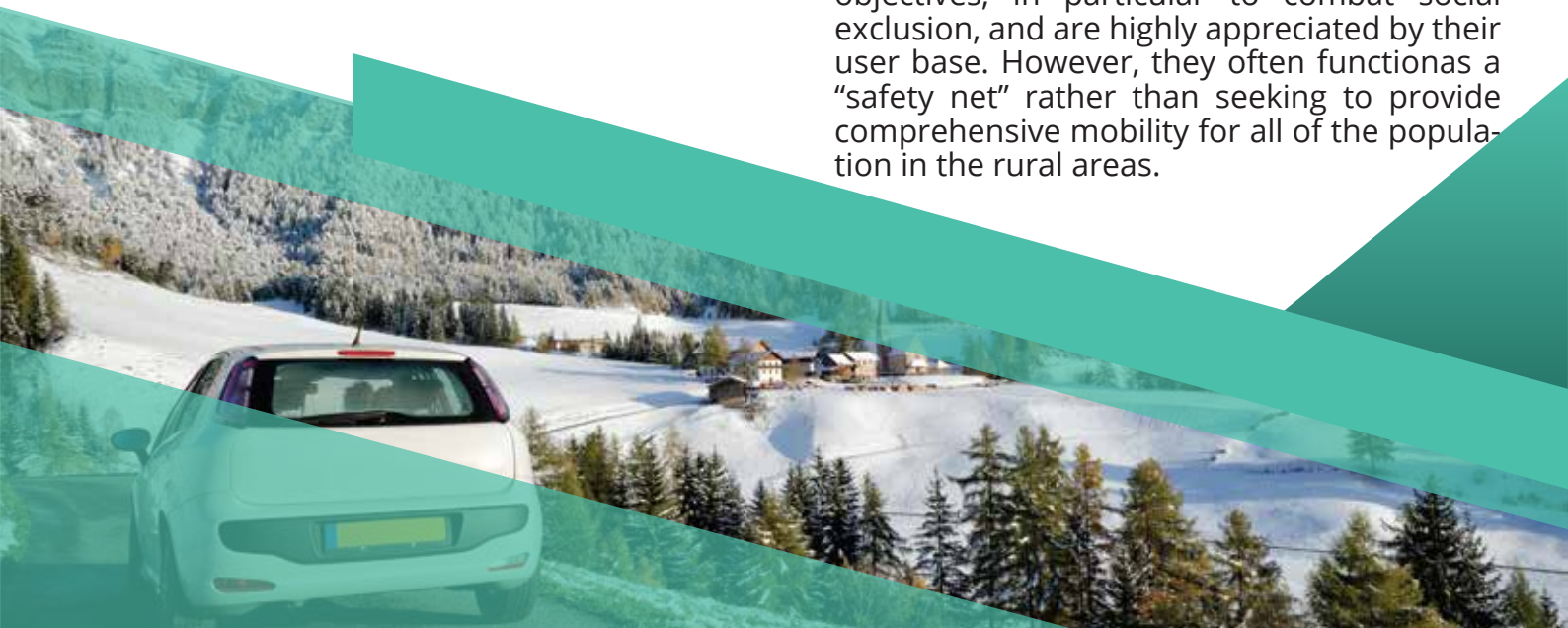
FLEXIBLE TRANSPORT SERVICES

Demand-Responsive Transport (DRT) are services scheduled to pick up and drop off people in accordance with the actual needs of the passengers. It may take the form of flexible routes or door-to-door DRT. These types of services are best viewed as a range of intermediate transport solutions that span the wide space between taxi and public transport.

Over the last two decades, there have been many implementations of DRTs in rural areas, of different types and in different contexts. This indicates that DRT could be the primary model for rural shared mobility, especially if it is well coordinated with the regular public transport network serving towns and inter-urban corridors.

The ability of DRT to provide efficient and affordable transport services has been greatly enhanced by the use of technology. For example, routes can be fully dynamic and adjusted in real time, based on traffic and demand, thanks to advanced algorithms of the software that ensure the maximum punctuality on every ride. Services are also more attractive, especially for young people, thanks to the possibility to book a trip via mobile app. And reservation can be made up to 10 or 15 minutes in advance. New organisational structures and business models have evolved for better delivery of these services.

Despite its effectiveness in rural settings and its high potential, to date DRT has not been extensively deployed in Europe as a complementary public transport service. The most common type of DRT is the services dedicated to vulnerable users, such as elderly and disabled people. These services follow social objectives, in particular to combat social exclusion, and are highly appreciated by their user base. However, they often functionas a "safety net" rather than seeking to provide comprehensive mobility for all of the population in the rural areas.

ON-DEMAND POOLING SERVICES IN THE LOW-DEMAND AREAS OF CATALONIA, SPAIN

On-demand pooling transport services have been introduced in 2017-2018 in the municipalities of Sant Cugat del Vallès and Vallirana, in the surrounding area of the Barcelona conurbation. The services cover low-demand peripheral areas of both municipalities. The service is operated by minivans and bus stops are used for pick-up and drop-off.

The services were designed as replacement of former ineffective regular services and they were implemented introducing the pooling technological platform Shotl, an integrated platform supporting the management of flexible services and providing valuable services for all the stakeholder (PT operator, PT authority, customers) through dedicated interfaces. Machine learning algorithms are used for the optimisation of the scheduling compared to the request and the traffic information.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Shotl-Catalunya.pdf

COLLABORATIVE REGIONAL TAXI SERVICES – REGIOTAXI, NETHERLANDS

Regiotaxi is essentially a regional taxi service that operates in several regions in the Netherlands. The service is primarily a door-to-door service that picks up a user from an origin point (e.g. home) and takes them to their destination. The system has no fixed stops or routes. Other travellers may also be picked up en route, which means that Regiotaxi is able to charge lower prices than conventional taxi competitors.

Regiotaxi is a collaborative arrangement between several municipalities that recognise that gaps in existing public transport services have consequent effects on the mobility of local people, including those in rural areas. The service is geared particularly towards those with limited public transport accessibility and disabled people. For municipalities, it is more expensive than the provision of conventional mass transit services.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-REGIOTAXI.pdf

DRT SERVICES TO ADDRESS SOCIAL EXCLUSION – RING A LINK, IRELAND

Established in 2001 as a grassroots organisation of local transport services focusing on combatting social exclusion, Ring a Link currently operates daily and regular DRT and scheduled services and it has expanded its coverage area. The service has now developed into a comprehensive transport coordination unit with operations in five Irish counties. It directly operates 23 minibuses and contracts in a further 10 minibuses daily. Ring a Link provides primarily minibus-based DRT services and some fixed-route services. All services are for general use, but the DRT services require to be pre-booked.

DRT services are timed to meet with scheduled/fixed-route services. Some services are designed as feeders to longer-distance routes.

The vision for Ring a Link adopted in September 2017 states: "We aspire to provide quality rural services that link our service users to essential services, supports and people in their communities. We strive to reduce isolation for the dispersed rural individuals we serve through facilitating participation and connection with communities."

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/
SMARTA-GP-Ring-a-Link.pdf

DRT INTEGRATED WITH CONVENTIONAL PUBLIC TRANSPORT – TRANSPORTE A PEDIDO, PORTUGAL

This DRT service is operated by taxis and integrated with the conventional PT services to serve dispersed demand in the peripheral/rural area and small villages in the region of Middle Tejo. The DRT services have been introduced to integrate the PT conventional offer with the main objectives of providing a feasible transport solution answering to unmet needs in terms of flexibility, coverage and interconnection with long-distance and railway services; to reduce operational costs; and to optimise them among different served areas/operated schemes. Flexible services function as feeder services for long-distance buses and trains.

A highly relevant feature showcased by this good practice consists in the management of different schemes / served areas through a common (centralized) booking centre as a solution to optimize operational costs. The service is managed by the Comunidade Intermunicipal Medio Tejo, an association of local municipalities and public authorities, and operated by a poll of about 30 taxi operators.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08
/SMARTA-GP-Tejo.pdf

SHARED MOBILITY SOLUTIONS

Shared mobility services include both ride sharing (e.g., car pooling or e-hitchhiking) and asset sharing (e.g., bike or car sharing) services. Ride-sharing services allow aggregation of the mobility demand for sharing a ride in the same vehicle (e.g., car pooling) and/or to use the same service (e.g., taxi) together with other persons. Asset-sharing services allow the traveller to utilise a specific means of transport (bike, car, e-scooter, etc.) without any property issue; still, users must be registered.

Shared mobility can be an essential part of the solution set to deal with mobility issues in rural environments, where conventional public transport struggles to meet the actual needs of passengers and where people are highly dependent from the private car. It can combine travellers for more efficient travel, while improving the mobility options for people. It may enable households to reduce the number of cars they own, thus improving conditions for llow- and medium-income households. There is also a broader aspect to consider, important from the global perspective: shared mobility is essential to ensure sustainable mobility.

BÜRGERBUSES IN BADEN-WÜRTTEMBERG, GERMANY

Bürgerbus is a model of community-based transport operating in different areas of Germany. Each implementation is locally organised and adapted to the specific needs. It is most widely used in Baden-Württemberg, Lower Saxony, and North-Reine Westphalia. The service complements the conventional public transport services by offering shared mobility solutions in those rural and remote areas with infrequent or no public transport service. Bürgerbuses are financially sustained by a combination of state and private funding.

Volunteers are involved in the service operation (driver, back office, etc.). Thanks to the voluntary participation of the citizens, the personnel costs, which usually account for at least 60% of the operating expenses, are largely reduced. Bürgerbus initiative offers a sustainable transport service where "citizens drive for other citizens". The use of volunteers in driving the vehicles and undertaking part of other tasks related to the transport service is the strong point of the service.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-BurgerBus.pdf

REZO POUCE ORGANISED HITCHHIKING, FRANCE

Rezo Pouce is an organised hitchhiking service which started in 2009 and is now deployed in around 2,000 municipalities across France, covering about 20% of rural areas. It shows the potential of local communities in helping each other through a simple and well-organised hitchhiking service, supported by the Rezo Pouce Association. RezoPouce is used for all kinds of trips, including commuting for work or education. Average waiting time is 6 minutes, with 50% of the trips being available in less than five minutes and 90% in less than ten minutes.

Thanks to modern information technology and a simple registration procedure, Rezo Pouce avoids the drawbacks of classic hitchhiking, i.e. a subjective feeling of unsafety and uncertainty, and reinforces the advantages of it, i.e. that it is a rapid, convenient, and extremely cheap means of transport. Furthermore, the organisation behind the service uses an innovative governance model: a cooperative society with collective interest.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Rezopouce.pdf

SHARED USE MOBILITY AGENCY IN ELBA, ITALY

The Shared Use Mobility Agency (SUMA -ElbaSharing) is currently under implementation on the island of Elba. Large parts of the island are rural, with mountains on the western side, plains in the middle, and hills on the eastern side. SUMA allows the management of different ride sharing services integrated with public/collective transport, the centralization of information related to PT and other mobility services provided in Elba, the coordination of different service providers (in particular the operators of bike/scooter/car/boat rent services) and the collection and management of data on mobility.

The innovative concept of SUMA lies in the fact that users have a unique point of access to all information on the overall mobility offer in a consistent and efficient way (type of services, timetable, tariffs, access modalities, booking, etc.) and its brokerage role for aggregating the mobility demand and coordinating the different ride-sharing services integrated with conventional public transport.

Detailed info here: https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-SUMA.pdf

INTEGRATED RIDE SHARING AND STANDARD PUBLIC TRANSPORT IN BRAȘOV METROPOLITAN AREA, ROMANIA

The mobility pattern of the Brașov Metropolitan Area inhabitants is predictable: most citizens commute from neighbouring rural areas to the city of Brașov to work, study, or access healthcare facilities or leisure activities. However, owing to the scarcity of the public transport offer in rural areas, they do so by using their own cars. This has exponentially increased the pressure on the road infrastructure and the traffic levels on the roads that connect the rural communities to the city centre of Brașov, while it has also caused parking spots to become a commodity with high value.

As one of the SMARTA 2 demonstrators, the objective of Brașov Metropolitan Area is to test specifically designed mobility solutions in rural communities that are part of the metropolitan area. The focus will be on using regular public transport services instead of private cars, combined with alternatives such as DRT, car pooling, cycling to transport hubs, etc. One specific solution to be tested involves developing an app-based car-pooling platform and integrating it with conventional public transport. Car pooling is a sustainable way to organise trips by making sure that more passengers use the same vehicle, and thus reducing car use.

Detailed info here:
https://ruralsharedmobility.eu/demonstrators/brasov/

Read SMARTA's Report on Rural Good Practices *for an in-depth analysis of the rural mobility practices collected:*

https://ruralsharedmobility.eu/wp-content/uploads/2019/12/Smarta-Report-on-rural-good-practices-web-version.pdf

RURAL SHARED MOBILITY

SMARTA
smart rural transport areas

SMARTA
Sustainable shared mobility interconnected with public transport in European rural areas

developing the concept of 'smart rural transport areas' [SMARTA]
N° MOVE/B4/2017/473

Report on rural Good Practices

INTEGRATION WITH CONVENTIONAL PUBLIC TRANSPORT SERVICES

The conventional (fixed-route and timetable) bus and rail public transport network plays an important role in rural areas. It provides the backbone of the mobility offer, being a structuring network that connects towns, cities, and regions.

However, it does not reach everywhere. Many villages and rural areas are only served if they are fortunate enough to lie on routes that pass through. Transport services oriented to villages and rural areas are usually unprofitable. Services have been gradually reduced over time, both in response to reduced activity in rural areas and again as part of the recent austerity measures.

The pragmatic response to this situation is to improve the connectivity from villages and rural areas to the public transport hubs. Flexible and shared mobility services can play a dual role: first, to meet the local mobility needs; and second, to provide connections to the public transport hubs and stops.

COOPERATIVE ORGANISATION OF THE PUBLIC TRANSPORT SERVICES IN THE GRONINGEN AND DRENTHE PROVINCES, NETHERLANDS

The provinces of Groningen and Drenthe and the municipality of Groningen initiated a cooperation in order to collectively fulfil the task of commissioning public (bus) transport. The aim of Public Transport Authority that is the result of this cooperation is to make and keep rural and urban areas accessible. In addition, public transport must be and remain affordable for both travellers and the government.

The planning strategy adopted is based on network of hubs. At the moment, 55 mobility hubs are operating in the two provinces. This network of hubs is accessible within a range of 15 km from all users. Frequent and reliable bus services are offered in the hubs.

Detailed info here:
https://ruralsharedmobility.eu/demonstrators/mobility-hubs/

INTEGRATED PUBLIC TRANSPORT FOR THE ALBA IULIA METROPOLITAN AREA, ROMANIA

The "Smart Move" project provides integrated public transport services for the functional area of Alba Iulia, including seven adjacent rural localities. The project is aimed at ensuring better rural-urban connection, through a public transport service with an integrated information service, ticketing scheme, and coordinated transport timetable.

The project used a new approach for transport planning, developing an innovative cooperation structure, taking responsibilities from individual county authorities and delegating them to an association of local authorities. Rationalisation of previously disjointed rural and urban networks, alongside investment in new vehicles, resulted in a 43% increase in trips made.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/up-loads/2019/08/SMARTA-GP-Alba-Iulia.pdf

COMPREHENSIVE REORGANISATION OF THE PUBLIC TRANSPORT NETWORK – MULDENTAL IN FAHRT, GERMANY

"Muldental in Fahrt" is a project that increases drastically the public transport offer in the former Muldental district, south-east of Leipzig, in the German state of Sachsen. The bus network has been completely re-engineered and revitalised. The network is clearly hierarchised, with main structuring lines and smaller disclosing bus lines. Frequencies and stops have been increased (increase of the bus frequency to services every one or two hours; introduction of services during early morning, late evening, and weekend; 66 new bus stops). Also, the connection with the train network has been optimized.

The careful redesign resulted in an impressive improvement of the PT services: an increase of offer of PT/bus/km by 25%, an increase of bus stops to reach 336, the numbers of PT users increased with 10% in six months, with the number of pupils and youngsters using PT increased by 30% during the same period.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Muldental-in-Fahrt.pdf

REGIONAL PARTNERSHIPS FOR UNSERVICED AREAS – ALPINE BUS, SWITZERLAND

The Alpine Bus service aims to offer public transport where there is no public offer which is subsided by national regulation on the basis of the number of inhabitants. In some rural areas, there is a dispersed and variable demand, especially generated by tourism and leisure activities. The service is operated in 16 areas: all consisting of rural mountain areas where mobility demand is not financially viable for conventional transport offers. Alpine Bus is organized as an association combining public authorities and private companies, with a national managing board and a number of regional partnerships.

Alpine Bus is organized as a national branded association which networks local regional partnerships. The service is operated by the local partnership and the national level of the association provides know-how and guidance. The transport services are financed by public authorities and private sponsors. The level of public contribution is very variable (from 10% to 70%), depending on the service and areas.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Alpine-Bus.pdf

One aspect to be mentioned in relation with this wealth of mobility schemes and solutions is that, quite often, the regulatory framework fails to recognise them as such. More flexibility in order to acknowledge shared mobility schemes is needed. And when minimal transport services are regulated, that should take into consideration not only conventional bus services, but also flexible or shared mobility services.

GOVERNANCE OF RURAL MOBILITY ASPECTS

The lack of rural mobility services is often the result of the fact that rural local authorities may not have sufficient financial and human resources to launch or manage a service. Geographic scaling and clustering of resources is essential for ensuring feasible mobility systems to cover rural areas.

The research performed under SMARTA identified several ways of ensuring this in terms of mobility:

✓ Planning and funding mobility at the regional level and ensuring minimal accessibility across the region;

✓ Cooperation between a main urban centre and the surrounding rural communities in order to ensure mobility services for the functional area;

✓ Horizontal inter-communal cooperation in order to ensure mobility services across all areas involved.

Planning and funding mobility at the regional level and ensuring minimal accessibility across the region

That can be a top-down process. For example, as a result of the Decree on Basic Accessibility adopted recently by the Flemish Government, Flanders is divided into fifteen transport regions. One of the key points of this reform is to give local authorities a say in the organisation of public transport in their own region. That is why, for each transport region, a transport region council was set up to improve inter-administrative cooperation, all local authorities being part of the council, along representatives of various mobility stakeholders. The councils are responsible for the organisation of the public transport system, including drawing up a regional mobility plan and defining regional mobility programmes and projects within the boundaries of this plan. That ensures complete coverage of the Flanders territory, providing basic accessibility for all its inhabitants.

Cooperation between a main urban centre and the surrounding rural communities in order to ensure mobility services for the functional area

In many other cases, public transport services are offered in an integrated way for the functional area of a main urban centre, including several rural communities. This sort of vertical cooperation allows for transfer of resources from the main urban centre towards the inter-communal cooperation, as all parties benefit from commuter patterns and other economic transfers. As an example, through the "Smart Move" project, the public transport network in Alba Iulia, Romania also covers seven adjoining rural communities.

Horizontal inter-communal cooperation in order to ensure mobility services across all areas involved

In other cases, inter-communal cooperation is a bottom-up, horizontal process, where clusters of local authorities pool their resources in order to ensure a suitable level of transport services.The Public Transport Authority of Groningen Drenthe is the result of a collaboration between the provinces of Groningen, and Drenthe and the municipality of Groningen with the aim of keeping rural and urban areas accessible. The Medio Tejo sub-region in Portugal includes five medium sized towns (population 20,000–45,000) and five small towns (population under 15,000) that cooperate to operate a DRT service.

THE ROLE OF
COMMUNITY INVOLVEMENT

Community involvement plays a significant role in many of the rural mobility schemes SMARTA identified as good practice. In several countries, local communities have taken the initiative themselves to solve rural mobility issues by organising some kind of shared mobility solutions. In these situations, the social context plays a pivotal role. Indeed, mobility solutions organised at the local level depends, in most cases, on the community spirit and the level of engagement on the local level. For volunteer-based bus services and local ride hailing, to make the service work is not so much a technical question; rather, it is a cultural and social one, i.e. to convince people to use it. Nevertheless, there is still much to be done for having these solutions widespread and recognised at the national level. Local actors will invariably need to form some type of partnership within which they can develop, implement, and sustain a scheme.

Given the scale of this type of solution's adoption, maybe the best example here is the Bürgerbuses in Germany. Also, the organized hitchhike service Rezo Pouce in France can be introduced in a certain area based on the request of a local community. Sopotniki, Slovenia and Local Link Donegal, Ireland provide examples of community-based services targeted at specific groups.

MOBILITY FOR THE ELDERS THROUGH INTERGENERATIONAL SOLIDARITY – SOPOTNIKI, SLOVENIA

The "Sopotniki" NGO provides free car transport for the elderly in rural areas. The service is provided by volunteers and is free of charge for elders within individual areas, who communicate in advance their mobility needs. This practice of intergenerational solidarity is an innovative approach towards the mobility of elders in rural areas in Slovenia, where public transport options are lacking. It provides a valuable and efficient solution for the isolation and mobility of elders in sparsely populated villages.

Organisational aspects represent the innovative character of this good practice, where there is a private NGO, co-funded by public municipal funds, that implements an important social service for the vulnerable group of elderly persons in rural areas.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Sopotniki.pdf

MIXED-USE FLEXIBLE MOBILITY SERVICES – LOCAL LINK DONEGAL, IRELAND

Local Link Donegal provides a combination of fixed-route and DRT services for general use, community health services for access to day-care facilities, and non-acute emergency transport for access to dialysis services, patient discharge, and private ambulance transfer to major hospitals. Partnership working by the Irish National Transport Authority (NTA) and Health Service Executive (HSE) means that multi-purpose services and greater vehicle and staff utilisation is achieved.

Local Link Donegal is a not-for-profit special purpose company. The company was originally established for the South-West Donegal area. The company has a voluntary board drawn from the community. In the main, Board Members are co-opted from various voluntary organisations within the community, from people active within the County's Public Participation Network (PPN), etc. As the area of operation expanded over time to cover the entire county, the Board composition was adjusted to ensure a fair balance of representation across the county.

Detailed info here:
https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-GP-Local_Link.pdf
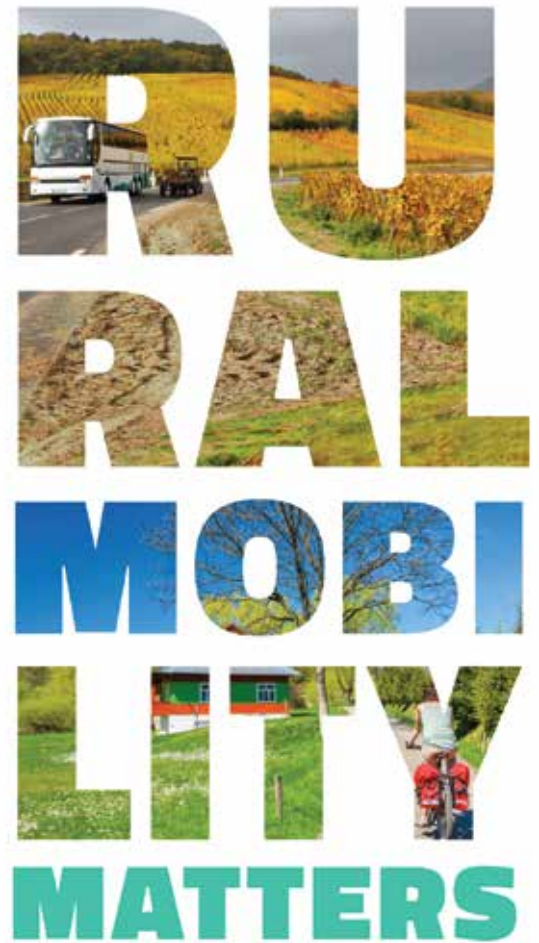
Although there are many shared mobility options available in the market, these are not well established or widely deployed in the rural areas of Europe. Nor are they integrated with the public transport offer or organised in an effective manner and by suitable financial means. This situation is so pervasive across Europe (and indeed elsewhere) that it is clearly a structural issue.

Solutions are available but Member States are not availing of them, despite having the legal, institutional, technical, and financial capacity to do so. The SMARTA project showed that virtually all European Member States lack any explicit policy on rural mobility that combines a vision with obligations on mobility services provision, specified targets/objectives, assignment of responsibility or the role that local actors can play. On one hand, competent authorities such as Transport Agencies and Regional Authorities have not been obliged to develop rural mobility in their areas and have generally only made very limited efforts (noting that there are excellent exceptions). On the other, there is no clear framework in which local actors can self-organise comprehensive mobility that meet the full needs of their communities, neither on a social or a commercial basis.

"Organisational arrangements for rural shared mobility need to be strengthened." **European Commission**, **Sustainable and Smart Mobility Strategy** *(2020)*

RU RAL MOBI LITY MATTERS

When mobility is lacking for a person or for an area, it has substantial negative impacts on individuals, households, communities, businesses, and rural development. Mobility is a major cross-cutting issue, addressing several aspects of our day-to-day life. With good mobility, a person has access to jobs, education, health and social services, leisure amenities, and social life. If people cannot access what they need or wish to do, or avail of opportunities, their life is constrained to a lesser or greater degree.

It is increasingly recognised as an essential need for every person to have affordable, accessible mobility that meets their needs. It is also recognised that lack of mobility services inhibits a rural area, impacting primarily those who are already less-advantaged and contributing to people and families leaving an area. Availability of transport is a key issue.

Rural Europe covers more than 80% of Europe's territory and comprises about 137 million people. Just over one quarter of the population of the EU-28 live in rural areas. These areas consist of highly-varied contexts, from metropolitan hinterlands to clusters of small towns and villages, active countryside, and sparsely populated countryside.

Over the past three decades, national and local governments have developed comprehensive policies and programmes for sustainable urban mobility, have invested heavily in infrastructure and technologies for mobility, and now provide substantial financial support for its day-to-day operation. In urbanised Europe, most people have choices about how they travel. By contrast, there have been no comparable policies or programs for rural mobility and related transport services, little investment in infrastructure (other than road and rail for inter-city movements) and minimal financial support for local rural mobility.

Many of these 137 million rural residents do not have the availability of mobility solutions such as public transport and shared mobility. The impacts of the COVID-19 pandemic on the overall transportation system have further exacerbated the situation by reducing existing transport services or the maximum permitted capacity of the vehicles, thus increasing car-dependency even more. Various forms of traditional and innovative shared mobility such as car pooling, organised lift giving, and e-hitchhiking have been restricted or ceased due to safe distancing requirements, reducing further the mobility options for those without a car.

Throughout the EU, there are structural weaknesses in the frameworks (i.e. the institutional and organisational arrangements, the existing policies and priorities, financing aspects) within which rural shared mobility sits. The fundamental issue is at the policy layer, which currently pays little attention and makes few commitments to rural mobility.

WHY SHOULD EU ACT ON SOMETHING THAT SEEMS TO BE A LOCAL ISSUE?

RURAL MOBILITY

Environment

Energy

Health and Food Safety

Agriculture and Rural Development

Other

Mobility cross-impacts the different European policies

Rural mobility issues are widespread across all European Countries

SOURCE: SMARTA PROJECT

Centralisation, reduced local services, jobs, shops and activities

Reduced financial support to rural mobility

Socio-demographic issues – young and old stay, the middle leaves

Need to travel further, for most purposes

Car is often the only option, as alternatives \ are not available

Many cannot use cars, due to age, infirmity, affordability

Difficult to live a daily life without a car

Increased rural traffic, converging on urban areas
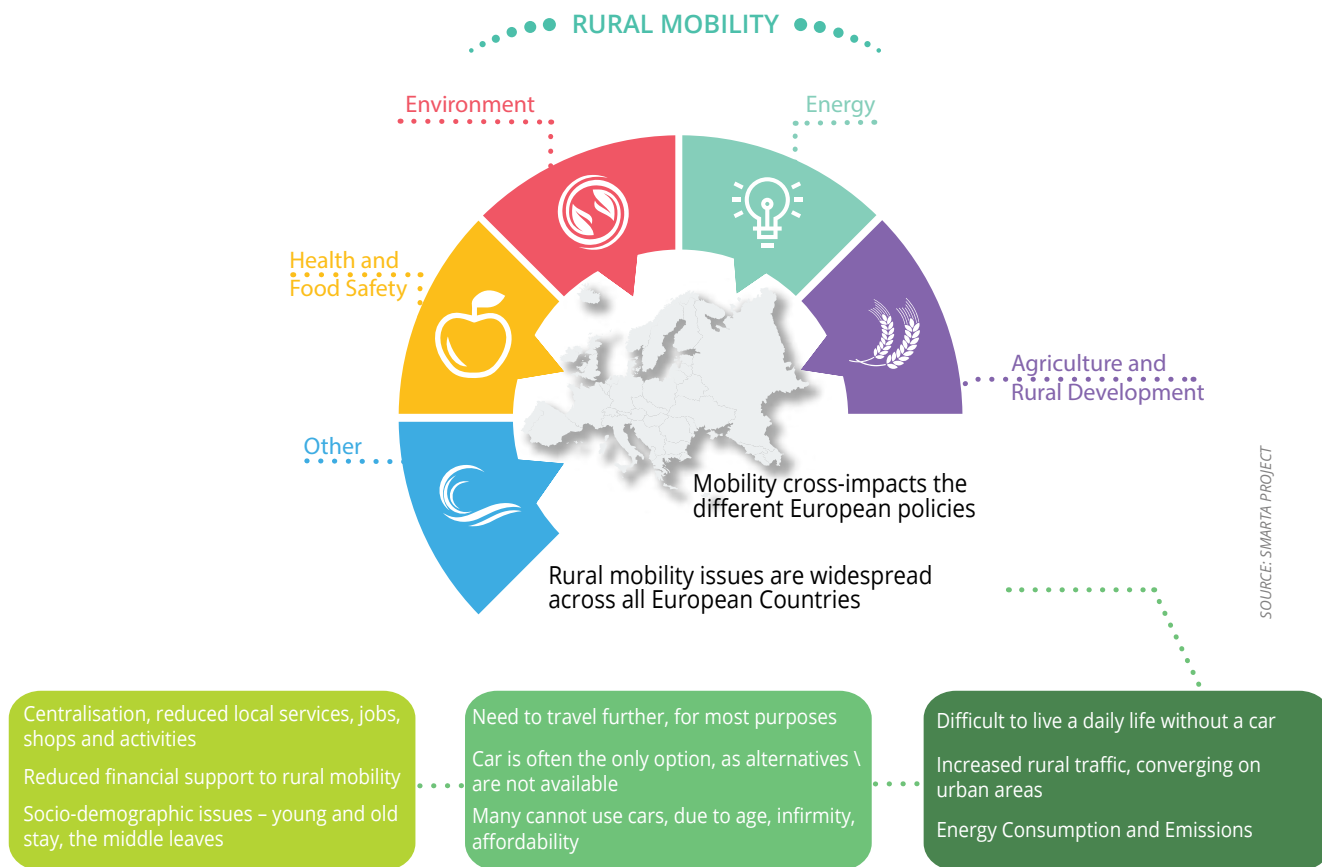
Energy Consumption and Emissions

Figure 3: The need for an EU intervention

? WHY SHOULD EUROPE ACT ON RURAL MOBILITY?

In the absence of guiding policy or structured programs to ensure sustainable mobility, the inevitable consequence has been that rural mobility is "solved" by the people themselves, relying almost entirely on personal means of transport. People who live in rural areas are more likely to say there is no alternative to taking the private car: 46%, compared to 25% of the people living in large towns.[4] The *Sustainable and Smart Mobility Strategy* recently launched by the European Commission acknowledges that "rural and peri-urban communities are more at risk [for transport poverty] because they lack access to alternatives to car-use."[5] And indeed, the *European Green Deal* is thought as a growth strategy for Europe that has as one of its key objectives leaving no person and no place behind.

> **KEY MESSAGE:**
> Today, rural mobility is characterised by almost total dependence on the private car.

? WHY SHOULD EUROPE ACT ON RURAL MOBILITY?

Rural mobility should be considered within the broader context of development and initiatives of the rural areas themselves, as well as local and global goals. Mobility is not as an end in itself, but rather a contributor to rural and regional development, to the enhancement of life, communities and businesses in rural areas, and to the achievement of local and global goals, including decarbonisation and combatting climate change.
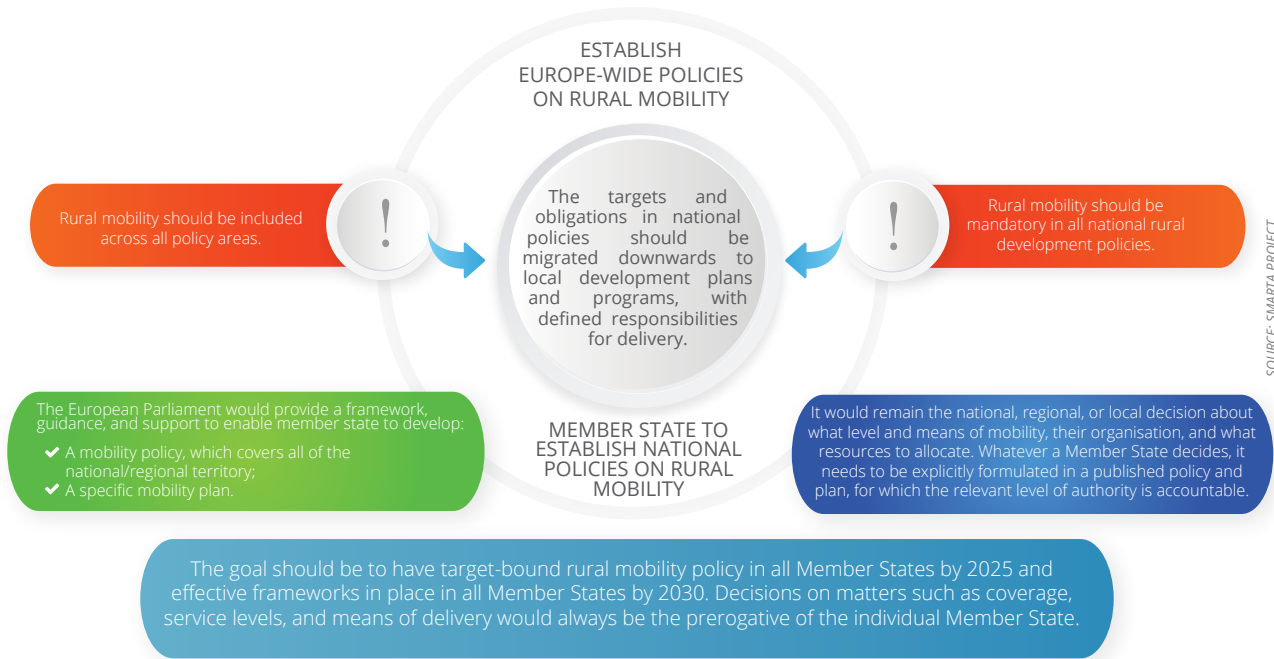
Rural areas are active economies with a wide variety of agricultural, industrial, extractive and leisure businesses, linked to their natural resources and the entrepreneurship traditions of the area. Thus, rural mobility can be viewed as an enabler or as a multiplier that can allow or improve outcomes and enhance value to other investments. In many cases, the mobility service is a value-adding component to other economic, social, tourism, or environmental projects and policies.

> **KEY MESSAGE:**
> Rural mobility can be viewed as an enabler or as a multiplier that can allow or improve outcomes and enhance value to other investments.

[4] Special Eurobarometer 495; available online: https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/SPECIAL/surveyKy/2226
[5] Commission Staff Working Document accompanying the Sustainable and Smart Mobility Strategy, 2020, p. 207; available online:
https://ec.europa.eu/transport/sites/transport/files/legislation/swd20200331.pdf

ESTABLISH
EUROPE-WIDE POLICIES
ON RURAL MOBILITY

Rural mobility should be included across all policy areas.

The targets and obligations in national policies should be migrated downwards to local development plans and programs, with defined responsibilities for delivery.

Rural mobility should be mandatory in all national rural development policies.

The European Parliament would provide a framework, guidance, and support to enable member state to develop:
- ✔ A mobility policy, which covers all of the national/regional territory;
- ✔ A specific mobility plan.

MEMBER STATE TO ESTABLISH NATIONAL POLICIES ON RURAL MOBILITY

It would remain the national, regional, or local decision about what level and means of mobility, their organisation, and what resources to allocate. Whatever a Member State decides, it needs to be explicitly formulated in a published policy and plan, for which the relevant level of authority is accountable.

The goal should be to have target-bound rural mobility policy in all Member States by 2025 and effective frameworks in place in all Member States by 2030. Decisions on matters such as coverage, service levels, and means of delivery would always be the prerogative of the individual Member State.

Figure 4: Roles for various governance levels in establishing policies for rural mobility

HOW SHOULD EUROPE ACT ON RURAL MOBILITY?

Rural territories require policy frameworks that improve mobility in EU regions. There is a need for action at the European policy-making level, to develop a common European framework that encompasses a shared future vision for rural mobility and, at the same time, takes into account the emphasis on the specificities of rural areas and their populations.

Specific actions are needed that understand and respond to the rural mobility needs, recognising that the solutions for urban areas do not always fit well with the rural environment, for many and evident reasons. In particular, this requires to focus not only on the needed conventional public transport services, but also on the complementary shared mobility solutions.

KEY MESSAGE:
Specific actions are needed that understand and respond to the rural mobility needs, recognising that the solutions for urban areas do not always fit well with the rural environment.
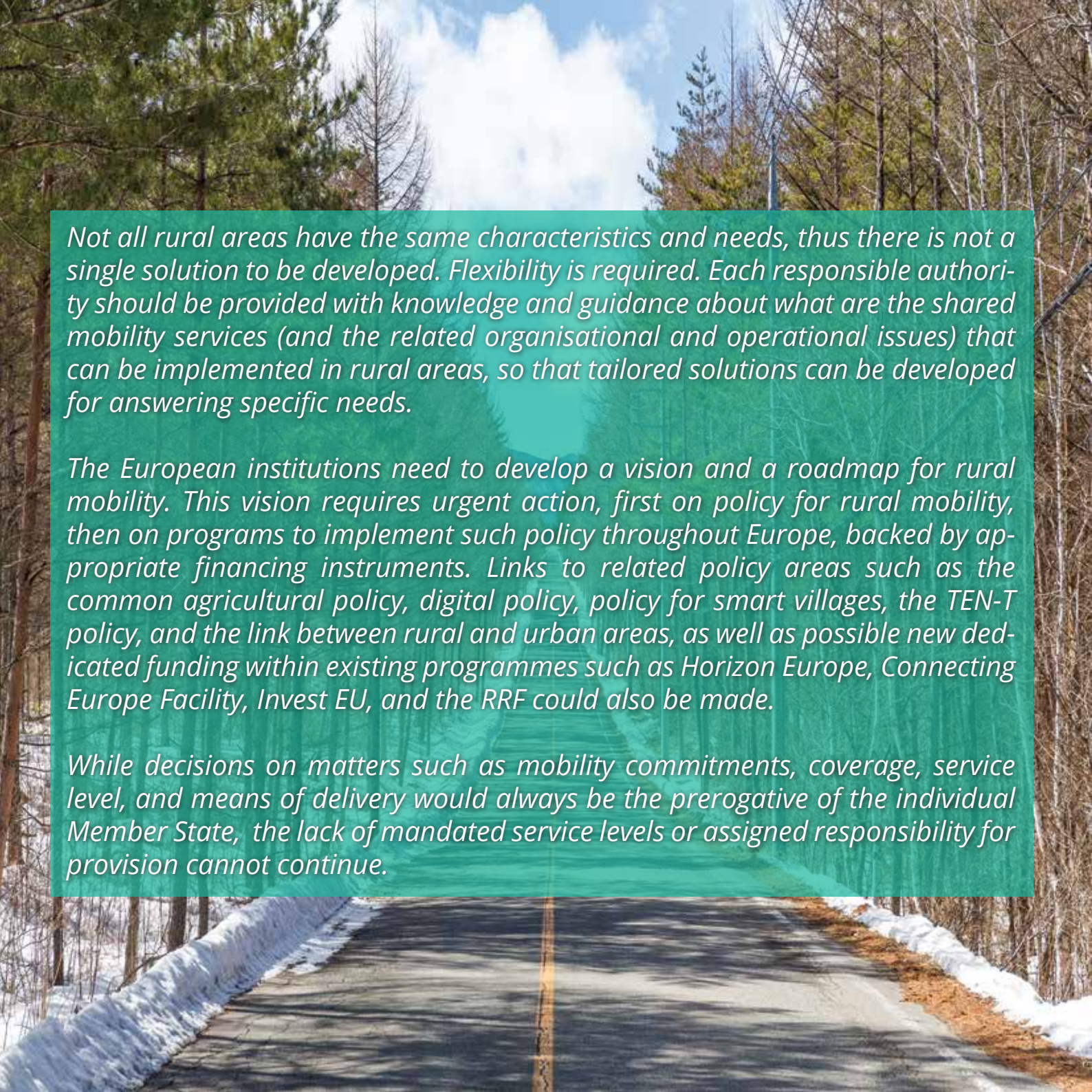
? HOW SHOULD EUROPE ACT ON RURAL MOBILITY?

Transport policies should centre on achieving mobility outcomes, rather than prescribing the solutions to be used. Transport solutions should develop "mobility packages", consisting of both the traditional means (i.e. standard public transport) and the emerging/novel shared mobility solutions (organised hitchhiking, car-pooling schemes, ride-sharing services, etc.). These should be integrated and harmonised with each other, availing of both digital and organisational innovation. This would contribute to develop "smart" mobility solutions, to fit the diversity of rural environments across the EU.

KEY MESSAGE:

Transport policies should centre on achieving mobility outcomes, rather than prescribing the solutions to be used.

The SMARTA project suggests three potential pathways to achieve its policy ambition. Each pathway begins with the common step of "Policy Debate", which should be launched in 2021 and reach conclusion during 2022. Read SMARTA's report on Policy Recommendations for Sustainable Shared Mobility in Rural Areas *for a thorough look at the proposed policy pathways:*

https://ruralsharedmobility.eu/smarta-resources-reports/

Not all rural areas have the same characteristics and needs, thus there is not a single solution to be developed. Flexibility is required. Each responsible authority should be provided with knowledge and guidance about what are the shared mobility services (and the related organisational and operational issues) that can be implemented in rural areas, so that tailored solutions can be developed for answering specific needs.

The European institutions need to develop a vision and a roadmap for rural mobility. This vision requires urgent action, first on policy for rural mobility, then on programs to implement such policy throughout Europe, backed by appropriate financing instruments. Links to related policy areas such as the common agricultural policy, digital policy, policy for smart villages, the TEN-T policy, and the link between rural and urban areas, as well as possible new dedicated funding within existing programmes such as Horizon Europe, Connecting Europe Facility, Invest EU, and the RRF could also be made.

While decisions on matters such as mobility commitments, coverage, service level, and means of delivery would always be the prerogative of the individual Member State, the lack of mandated service levels or assigned responsibility for provision cannot continue.

WHAT IS SMARTA?

SMARTA – Sustainable Shared Mobility Interconnected with Public Transport in European Rural Areas (Developing the Concept of "SMArt Rural Transport Areas") *– has been an EU project dedicated to rural mobility and implemented between 2018 and 2020. SMARTA was funded by the European Commission and it has been managed by the Directorate-General for Mobility and Transport (DG-MOVE), with support from the European Parliament.*

PROJECT OUTCOMES

SMARTA reports, webinar and conference recordings, communication materials, and other resources are posted on the project's website: www.ruralsharedmobility.eu

CONTACT

For more information, don't hesitate to contact the project coordinators at MemEx: Giorgio Ambrosino - giorgio.ambrosino@memexitaly.it Brendan Finn - brendan.finn@memexitaly.it Andrea Lorenzini - andrea.lorenzini@memexitaly.it

Or the project communication managers at European IntegratedProjects (EIP): Lucia Cristea - lucia.cristea@eiproject.eu