

Mobility and Accessibility in Rural Areas

05 November 2021, VASAB Committee Meeting





EUROPEAN REGIONAL DEVELOPMENT FUND FOR THE BALTIC SET PREFION

AGSHIP

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Spatial Planning vs Mobility Planning

05 November 2021, VASAB Committee Meeting





Ministry of Energy, Infrastructure and Digitalization

Partner 1 EM MV



Expert Report on the Possibilities of Spatial Planning with Regard to Demand-Oriented Local Public Transport Services in Rural Areas





• Aim of the study:

Recommendations for

- Improving existing specifications in spatial plans
- Development of additional specifications for future spatial plans

Basic Considerations

Specifications on transport and mobility should :

Have spatially significant reasons and an objective justification (principle of objective legitimacy)

Be necessary to achieve the purpose (principle of necessity)

Be adopted by the appropriate planning level of spatial planning in each case in order to achieve the intended planning purpose (principle of appropriateness)

Partner 1 EM MV

Principle Steering Options

Accessibility of basic services for the rural population by public transport

> Objective (state level): At least basic services for the rural population by public transport

Principle (regional level): Define "needs-based" und "appropriate" accessibility: Set quality standards for public transport services Smooth accessibility between subregions by public transport

> Objective (state level): Define hubs for regional public transport offeres (central places)

Set a target for the relation of the travel time between public transport and car transport (e.g. max 2x the travel time of car transport)



Population Mobility Monitor



Application areas of the Population Mobility Monitor (PMM)

for public transport companies

- Intuitive, visual check/verification of the service intervals and routing
- Decision whether scheduled bus or ondemand bus
- Exchange with neighboring counties / federal states to harmonize, combine and create connections

for spatial planners

- For identifying and verifying "central places"
- Determining hubs

More info on mara-mobility.eu



The MARA Expert Report:

www.mara-mobility.eu/publications

Access and Info on the PMM Tool: <u>www.mara-mobility.eu/tools</u>

Thank you!

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Ministry of Energy, Infrastructure and Digitalization



MARA case studies of car sharing

Viktor Skrickij

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Car sharing in remote areas: case study in Lithuania and Poland





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More than 100,000 guests visit Birštonas every year, while the population of Birštonas is about 2,350 inhabitants.



About 150,000 inhabitants in 244 localities, 21,000 of which live in Hajnowka

People Acceptance in Poland



Which of the following innovative solutions would increase the frequency of your movement around the region?	Results (in %)					
	respondents	no impact	Little impact	Significant impact	affects to a very high degree	hard to say
e-car system with mobile application and infrastructure (basestations, charging modules)	tourists	29.2	19.3	22	15.9	13.5
	residents	36	24.1	15	8.8	16.1
e-bike / scooter system with mobile application and infrastructure (basestations, bicycle paths)	tourists	15.2	10.6	26.7	36.6	10.8
	residents	31.1	18.5	24.8	12.5	13.1
a mobile application that allows you to search for transport in the ridesharing system	tourists	9.6	13	36.1	30.8	10.6
	residents	21.3	15.6	36	15.6	11.5
bus on demand service	tourists	19.8	19	23.4	21.7	16.1
	residents	22.8	21.5	24.8	7.9	23.1

People Acceptance in Lithuania

Distribution of respondents' answers to whether they would use the assets sharing system at the resort: *a)* Residents of Birštonas, *b)* Tourists of Birštonas.



VILNIUS TECH

Benefits of Car/E-car/ Automated Car Sharing in Rural Areas

- 1. Improved people mobility
- 2. The environmental benefits of car sharing:
 - Fewer cars on the road.
 - Reduction in vehicle miles travelled.
 - Increased usage of smaller and newer cars.
 - Sharing companies increase electric vehicle usage.

Car Sharing

Car Sharing (EV)



Bus by demand (AV)

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Conclusions (I)

- TECH
- Sharing mobility providers working in urban areas do not expand to rural areas as the existing business model is not profitable.
- Car sharing service in Poland is available in cities with over 40,000 inhabitants, while in other countries this number is about 100,000. In Lithuania, services are available in towns with a population of over 150,000.
- According to the surveys, priority should go to micro mobility sharing. In small towns in remote areas, it is more convenient to travel short distances on foot or take advantage of micro mobility solutions.
- At the same time, the car becomes essential when it comes to reaching places outside the town. A car-sharing system could improve the accessibility to guests while also serving locals.

Conclusions (II)

Proposals for remote areas

- > Focus on the development of infrastructure required for electric cars.
- > Proposals for development of asset sharing systems:
- a) companies provide access to their platform for peer-to-peer (P2P) service when people or small renting companies can share their vehicles using the well-known platform;
- b) subsidise this transport mode, as it is done for public transport and railway transport;
- c) to define an additional fee for the service user who travels to a remote area.
- During the development of automated driving technologies, ensure that solutions are appropriate for rural areas.

Remotely Controlled Vehicles in Lithuanian Car Sharing Company



https://www.youtube.com/watch?v=NFiC4W7_hb0

VILNIUS Tech For more information about the project MARA – Mobility and Accessibility in Rural Areas please visit: <u>https://journeys.mara-mobility.eu/</u>

THANK YOU FOR YOUR ATTENTION

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INNOVATIVE MOBILITY SOLUTIONS E-bikes & E-bike sharing system

05.11.2021. Experience from Setesdal & Vidzeme Planning Region

Common mobility challenges and needs

- Predominantly rural and remote region
- Distinct signs of demographic depletion
- Low density of population
- Long distances between POI
- Lack of infrastructure
- Insufficient local public transportation
- Car as dominant means of transportation
- Lack of predictable long-term investments

- Demand responsive
- Addition or part time replacement for private car usage
- Inclusive mobility (age, economics, locals / tourists, digital skills)
- Sustainability

Two different approaches (due to financial limitations)



- 30 e-bikes
- 7 stations
- Sharebike.com mobile app
- Users mainly inhabitants





- 2 pilot locations
- 2 cities involved
- 5 E-bikes per location
- 15 consecutive days
- 363 users / testers

Additional activities

- Visibility and stakeholder involvement
- Survey amongst inhabitants + feedback from users
- Established financing and management plan



Results & next steps



- Expand system
- More marketing and publicity
- Evaluation and follow up

- Evaluation and adaptation of pilot results for different areas in Vidzeme
- Financing sources for seasonal sharing system fallowed by year-round system



SETESDAL E-bike

CARD AND STREET

PRISER & BETINGELSER SPØRSMÅL & HJELP

SETESDAL E-bike

Nyt vakre Setesdal på en av våre elektriske delingssykler som du kan låne gjennom en app



Get IT ON Google Play



THANK YOU!



Integrated mobility planning in Sweden

VASAB meeting 5 November 2021

Tobias Heldt, Assc. Professor, Center for Tourism and Leisure Research, Dalarna University presenting the joint Swedish Transport Authority and Dalarna University case





Mobility and Accessibility in Rural Areas









The Swedish case in the MARA project

- Point of departure
- The Swedish Transport Administration's (Trafikverket) needs for improving methods, models and processes in the early phase of infrastructure planning for remote areas with an extensive tourism industry
- The Swedish case consisted of two parts
- improving integrated mobility planning for the boarder region Sälen in Sweden and Trysil in Norway - Åre as a follow up case
- to develop GIS based maps and to assist in transport planning

(Sälenfjällen - biggest winter tourism in Nordic countries

Malung-Sälen municipality has just over 10,000 inhabitants - 50,000 visitors in peak)









Interview study to arrive at key words for improving integrated mobility planning

Main stakeholders

- The Malung/Sälen municipality,
- Business Association Destination Sälenfjällen, SITE
- Region Dalarna,
- Local and non-local residents
- Data collection methods
 - Interviews (N:30)

Key words

- Identify stakeholders
- ► Gender

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- Culture clash
- Scan the surroundings
- Chain of command
- Choose meeting models
- Continuity and knowledge perspectives





Case area Sälenfjällen - mobility challenges and needs

Sälenfjällen challenges

- Crowded roads in the destination as well as on main access roads during peak days when "change of lodging" takes place
- Car dependent for travel to and within the destination
- Sustainable destination development more sustainable travel
- Models and processes in the early phase of infrastructure planning are weak

Needs

- To develop a dynamic planning process involving relevant stakeholders
- Visitor surveys to assess the need



63% Small group (3-5) 23% Medium group (6-10) 10% Couple/ Pair 3% Big group (> 10) 1% No company

> REGIONAL DEVELOPMEN



89% Family/ relatives and friends 9% Friends 1% No company 1% Other Disparities between the current mobility needs and the existing mobility offers (D.U.GIS GAP analysis tool)

300m GAP_analysis - 64% coverage



Figure 13. Mobility GAP_analysis 300 m Sälen area

500m GAP_analysis - 81,3 % coverage



Figure 14. Mobility GAP_analysis 500 m Sälen area



Innovative solutions to improve Planning processes at early stages - Results from PPGIS study

PPGIS a method to collect data on preferences, perceptions and location * mapping questions - mark places in need of improvement and suggest the type of improvement to be made

Heat maps show results



Figure 16. Places suggested for Improvements Source: Waleghwa and Heldt (2020)

Figure 13. Mobility GAP_analysis 300 m Sälen area

Summarizing key finding from the Swedish case in the MARA project

Improving the planning process

GIS maps as analytical support

The value of Exchange of knowledge and learning in EU/InterReg projects



Thank you!

A short film on the Swedish case to follow



