

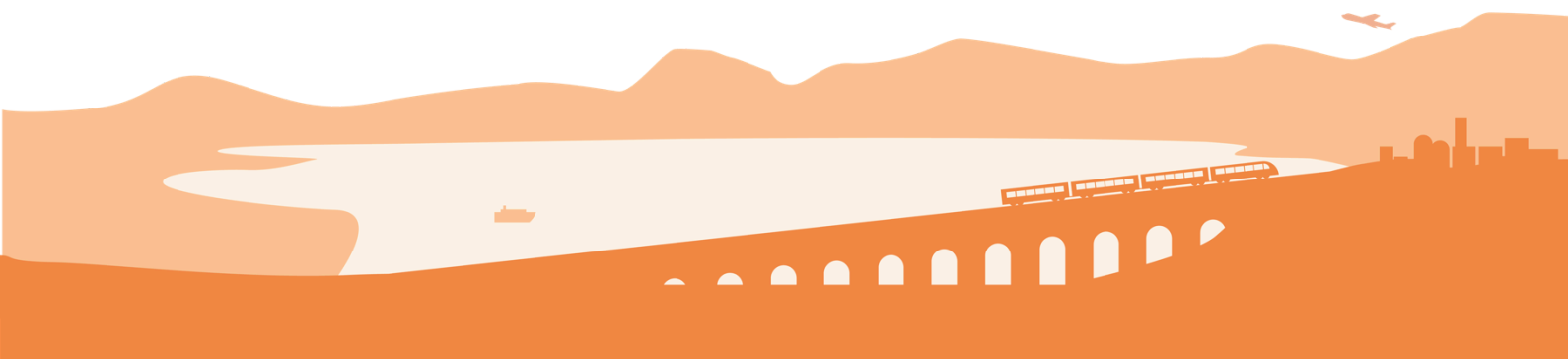
NUTSHELL@CE

WORK PACKAGE 2

VISION CO-CREATION BASED ON TRANSNATIONAL
COOPERATION

DELIVERABLE D2.4.1: Regional / local action plan
of Savio Valley (IT)

Version1
04/2026





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1. DELIVERABLE 2.4.1 overview

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2. DELIVERABLE 2.4.1 description

Deliverable 2.4.1 describes the Action Plan for the Savio River Valley region with an extended introduction on the background, the vision and strategy.



3. DELIVERABLE 2.4.1: Regional / local action plan of Savio Valley (IT)

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Background

Summary of existing goals from national/regional/local government documents

National

Mobility planning in Italy is structured across three hierarchical levels at the national stage. At the top, the national strategic framework provides non-binding guidance, defining the overall vision and priorities for mobility at national level. The latest framework, Sustainable Mobility and Logistics – Analysis and Strategic Directions for the Future, was published by the Ministry of Infrastructure and Sustainable Mobility (MiMS) on 21 October 2022. The National Sustainable Mobility Strategic Plan (PSN-MS) is a binding plan adopted by DPCM, translating the national strategy into concrete objectives, operational tools, and implementation criteria for the transition to sustainable mobility. Funding is allocated in five-year periods (2019-2023; 2024-2028; 2029-2033) to different territorial authorities, including regions, provincial capitals, and metropolitan cities. Sectoral plans (road, rail, etc.) provide detailed operational strategies for each transport mode, ensuring consistency with the PSN-MS and enabling concrete interventions at the sectoral and operational level.

Several supra-national plans also influence sustainable mobility planning in Italy. The National Recovery and Resilience Plan (PNRR) drives investments and reforms funded by the EU Next Generation programme, including infrastructure for sustainable transport, local and regional trains, and intermodal connectivity. The National Integrated Energy and Climate Plan (PNIEC) defines Italy's climate and energy targets up to 2030, supporting modal shift, efficiency, and electrification measures in the transport sector.

National Strategic Framework – 2022

Regarding passenger mobility, most daily trips in Italy cover distances under 50 km and are primarily made by private vehicles, which remain the dominant mode of transport. The share of sustainable mobility, using public transport or active modes, has not significantly increased over the past two decades. The strategic orientations outlined in the Framework, which serve as the basis for subsequent binding planning, include:

- Promoting transport decarbonisation, encouraging low-impact technologies, and reducing emissions;
- Fostering modal integration, with particular attention to public transport interconnection, passenger–freight intermodality, and innovative services such as Mobility as a Service (MaaS);
- Improving accessibility and service quality, including urban areas, through investments in infrastructures such as trams, subways, urban railways, intermodal hubs, and cycling networks;
- Planning at a wider territorial scale, integrating urban development, residential settlements, and transport services across multiple territorial levels, beyond individual municipal boundaries.

National Sustainable Mobility Strategic Plan (PSN-MS) – 2019-2033

The current PSN-MS focuses particularly on local public transport services and alternative fuels. It has been designed in alignment with European decarbonisation objectives, including EU Directive 2014/94 on alternative fuel infrastructure and EU zero-emission targets. Key highlights include:

- Renewal of the regional and local public transport vehicle fleet with low- or zero-emission vehicles (electric, methane, hydrogen, etc.);
- Promotion of alternative technologies and infrastructure, such as electric vehicle charging networks and refuelling stations for alternative fuels;
- Implementation of innovative strategies to improve air quality.

National Recovery and Resilience Plan (PNRR) – 2021-2026

Sustainable mobility is a central element of the PNRR, particularly under Mission 3 – “Infrastructure for Sustainable Mobility”. The main objective is to modernise, interconnect, and make the Italian transport network

more sustainable by promoting electrification and decarbonisation through more efficient and digitalised infrastructures by 2026. The main funding line for passenger mobility is C1 – Investments in the railway network, aimed at strengthening both national and regional rail networks and improving passenger and freight transport capacity.

National Integrated Energy and Climate Plan (PNIEC) – 2024

The PNIEC provides Italy's national framework for energy and climate targets up to 2030, including strategies for transitioning the transport sector toward cleaner and more efficient mobility. It aligns with European legislation and the Paris Climate Agreement. Although not a transport-specific plan, the PNIEC includes objectives and measures relevant to sustainable mobility, as the transport sector accounts for a significant share of national emissions. Key objectives include:

- Reducing energy consumption in transport and increasing the share of renewable energy in the sector (e.g., advanced biomass and sustainable fuels);
- Promoting transport electrification, improving vehicle efficiency, and reducing CO₂ emissions;
- Aligning measures with European greenhouse gas reduction and renewable energy targets, including sector-specific targets for transport that exceed EU average coverage by renewables.

Regional

The regional framework around the topic of transports and mobility is shaped by a set of complementary planning instruments that operate at different strategic and implementation levels. The Pact for Labour and Climate (2030) defines the overall strategic vision, while the Regional Energy Plan (PER 2030) and the Regional Air Quality Plan (PAIR 2030) translate this vision into environmental and energy objectives that directly affect mobility choices. Within this framework, the Regional Integrated Transport Plan (PRIT 2025) defines policies and measures in the short to medium term, 2021-2024.

Pact for Labour and Climate (PLC) 2020 - 2030

The Pact for Labour and Climate is a strategic and participatory governance agreement promoted by the Emilia-Romagna Region and signed by more than 60 stakeholders, including local authorities, social partners, businesses, academia, environmental organisations, the third sector and other regional civil society actors. The Pact serves as a shared platform for commitments and actions aimed at addressing the economic, social, and environmental challenges of the region with a time horizon up to 2030. It therefore represents not only a political agreement, but a collective strategic framework guiding the Region's key policy choices and public investments in the coming years. Although the Pact is not a transport-specific plan, it is highly relevant for the mobility and transport sector due to both its strategic orientations and its governance role. It steers regional programming towards shared climate and social objectives; establishes a participatory steering structure connecting institutions, businesses, trade unions, and civil society; and promotes coherence across sectoral strategies, including the Regional Integrated Transport Plan (PRIT), energy plans, Sustainable Urban Mobility Plans (SUMPs), and regional development policies. In this context, the Pact indirectly influences transport-related decisions and investments, as sustainable mobility is a core component of the ecological transition and overall regional well-being.

Among the concrete commitments linked to the Pact, several objectives are directly relevant to mobility:

- Promoting the transition towards sustainable mobility, aimed at reducing transport-related emissions and environmental impacts, including:
 - strengthening public transport networks to improve efficiency and sustainability;
 - enhancing connectivity and services to reduce dependence on private car use;
 - reducing private motorised traffic by at least 20% by 2025;
 - deploying thousands of electric vehicle charging points by 2025.
- Integrating mobility into climate and sustainability policies, the Pact embeds emission reduction and the transition towards cleaner mobility models within a broader regional decarbonisation strategy, which includes the target of achieving 100% renewable energy by 2035 and carbon neutrality before 2050. Given

the significant contribution of the transport sector to overall emissions, sustainable mobility policies are not ancillary measures but a central pillar of the regional climate challenge.

Regional Energy Plan 2017–2030

The Regional Energy Plan (PER) sets out the Emilia-Romagna Region's strategy and objectives for climate and energy up to 2030, focusing on strengthening the green economy, promoting energy saving and efficiency, expanding renewable energy sources, and supporting actions in the fields of transport, research, innovation, and training.

In particular, the Plan aligns with the European climate and energy targets for 2020, 2030 and 2050, positioning them as key drivers of regional economic development. The following objectives are therefore strategic for the Region: a reduction of greenhouse gas emissions by 20% by 2020 and by 40% by 2030 compared to 1990 levels; an increase in the share of final energy consumption covered by renewable energy sources to 20% by 2020 and 27% by 2030; an improvement in energy efficiency by 20% by 2020 and 27% by 2030. Within the transport sector, the main objective is to support the transition towards sustainable mobility by promoting the uptake of vehicles powered by alternative fuels, including electric, hybrid, natural gas, and LPG vehicles.

Regional Air Quality Plan 2024–2030

Regions are required to adopt legally binding Regional Air Quality Plans with the primary objective of protecting public health, defining concrete actions to comply with air quality standards and to reduce pollutant emissions at regional level. The Plan is designed to support and integrate with other key planning instruments, including the Regional Integrated Transport Plan (PRIT 2025), the Regional Energy Plan, urban Sustainable Urban Mobility Plans (SUMP), as well as regional, national and EU funding programmes. The Regional Air Quality Plan 2030 (PAIR 2030) aims to achieve compliance with statutory limit values for the most critical air pollutants in the shortest possible time by:

- reducing emissions of both primary pollutants and precursors of secondary pollutants (PM10, PM2.5, NOx, SO₂, NH₃, VOCs);
- addressing all major emitting sectors through a coordinated and cross-sectoral approach.

The Plan identifies 64 measures across eight intervention areas, including the transport sector. With regard to passenger mobility, the main objectives focus on:

- reducing reliance on private car use;
- improving and increasing the attractiveness of public transport;
- promoting active mobility (cycling and walking);
- restricting the most polluting vehicles;
- accelerating the uptake of low-emission vehicles;
- encouraging work arrangements that reduce travel demand;
- integrating transport and urban management policies from a climate and air-quality perspective.

Regional Integrated Transport Plan - PRIT2025

The Regional Integrated Transport Plan PRIT 2021–2025 is the main regional transport planning instrument, defining strategic priorities over a medium-term planning cycle. Building on previous planning frameworks PRIT98, the PRIT 2021–2025 introduces a renewed strategic approach focused on accessibility, sustainability, and demand management rather than on infrastructure expansion alone. The plan aims to meet mobility needs for people and goods by reducing unnecessary travel, optimising transport systems, and promoting more sustainable mobility behaviours. Its objectives are aligned with the EU climate and sustainable mobility policies, the 2030 Agenda, and the Emilia Romagna Pact for Labour and Climate.

The PRIT2025 defines a set of objectives that are particularly relevant for the scope of this work. These objectives aim to support a transition towards a more sustainable, inclusive, and efficient mobility system, with measurable targets referenced to the 2013–2014 baseline scenario.

- Promote sustainable and low-emission mobility by reducing transport-related emissions and environmental impacts, supporting a shift away from fossil fuel-dependent transport systems. Key targets include: 50% reduction of congested segments on the regional road network, 10% reduction in the growth of regional car motorisation rates.
- Strengthen public and collective transport by increasing the attractiveness, reliability and integration of rail and bus services as a viable alternative to private car use. Key targets include increase in regional public transport modal share (bus and rail) to 12–13%, 10% increase in minimum public bus service levels, 10% increase in public bus passengers.
- Integrate mobility planning with urban and territorial development, ensuring coherence between transport systems, land-use planning and settlement patterns, with a specific focus on reducing private car use at local level: sustainable Urban Mobility Plans (SUMPs): private mobility modal share \leq 50%, urban Traffic Plans (PUT): private mobility modal share \leq 60%.
- Promote active mobility, including cycling and walking, through the development and interconnection of cycling and pedestrian networks, also integrated with public transport.
- Improve accessibility for people and territories, ensuring equitable access to essential services and opportunities for all population groups and for peripheral or underserved areas.
- Enhance safety, system quality, and innovation, through road safety measures, deployment of intelligent transport systems, and data-driven mobility governance.

Local

At the local level, the Union of Municipalities of Valle Savio is located in the province of Cesena. For this reason, both provincial and union-level strategic plans are considered. National and regional strategic planning delegates the implementation of more operational and concrete measures to the local level. Key local instruments include the **Sustainable Urban Mobility Plan (PUMS)**, mandatory for urban areas with over 100,000 inhabitants, as well as the **Urban General Plan (PUG)** and the **Urban Traffic Plan (PUT)**.

Next Generation Valle del Savio

Next Generation Valle del Savio is a wide-area planning document and the first attempt to unify the development strategies of the six municipalities forming the Union of Valle del Savio. It establishes a shared vision for economic growth, infrastructure, research and training, and welfare services over the coming years, responding to the challenges of the UN 2030 Agenda and opportunities offered by the Italian Recovery and Resilience Plan (PNRR). Mobility is addressed in two specific sections:

Section 4.2 – *Connect: physical and digital infrastructures for a new local and global economy* outlines guidelines for physical and digital connectivity. The Union aims to maintain and guide national authorities' attention on the modernisation of major road and rail networks and their interconnections (E45, Via Emilia, Via Tiberina, A14, Adriatic railway line, and the Cesena–Florence corridor).

Section 4.4 – *New cities: sustainable mobility and urban regeneration* addresses the role of cities and historic centres, their connections, and the need to reconsider mobility habits in light of the growing climate emergency. Local authorities, in coordination with Start Romagna, are committed to:

- Improving the performance of mobility networks and services (comfort, safety, efficiency, accessibility);
- Promoting intermodality and integration among different transport systems;
- Supporting the “right not to move” through digital access to culture, work, and education;
- Promoting electrification and automation of mobility, particularly in local public transport.

Sustainable Urban Mobility Plan (PUMS) – Cesena Municipality

The Cesena PUMS shifts the focus from road infrastructure alone to an integrated mobility system, defining strategies and actions to be achieved by 2030. It also includes a Cycling Mobility Plan (Bicipolitana) detailing intervention. Although Cesena is the main hub for residents of the Valle Savio Union, the PUMS remains a municipal-scale plan, with limited impact on the efficiency and effectiveness of mobility for UVS residents. Key objectives and indicators include:

1. Reduction of overall mobility demand: -12% from 2019 to 2030;
2. Increase in active and collective modes: walking from 5% (2019) to 15% (2030), cycling from 5% to 20%, public transport from 17% to 22%;
3. Reduction of motorised trips: from 68% (2019) to 43% (2030);
4. Increase in electric vehicle share: +14% from 2019 to 2030;
5. Road safety improvements and reduction of collisions;
6. Reduction of greenhouse gas emissions in the transport sector.

Biciplan – Cesena Municipality

The Cesena Biciplan, like the PUMS, is a municipal-scale strategic plan aligned with the PUMS objectives. It plans a cycling network connecting the city centre to the periphery and linking transversal areas to ensure coverage of all major points of interest, residential areas, and production hubs. For the other municipalities in the UVS, cycling routes extend along *Line 8 – Romea*, towards Borrello, the first UVS municipality from Cesena, and *Line 5*, ensuring regional connectivity.

Feasibility Study of the Valle Savio bike path

The itinerary of the Savio Valley cycle route extends for 105 km from Cesena to Balze di Verghereto. Since 2021, part of this itinerary has been included in the proposal of the General Cycling Mobility Plan, demonstrating the interest in strengthening cycling conditions in the area. For this reason, UVS has conducted a feasibility study to explore potential intervention strategies for the territory, map the main critical issues and opportunities characterising it, and provide programmatic guidance for the implementation of future cycling projects in the area.

Description of the Status quo from the PTSQC analysis

Urban and sub-urban buses are the main public transport service of UVS. Cesena is the only town of the Union that has also trains. Start Romagna is the company that manages the local public transport in Romagna (a sub-region of the Emilia-Romagna region) on behalf of the local authorities. **Start Romagna is also our associated partner in the Nutshell@CE project.** The six towns of the Union are connected through sub-urban bus transport, whose frequency is fairly low and the timetable changes for weekdays, holidays, and school opening period (September-June) and school closing period (July-August). Cesena is the only municipality within the Unione Valle del Savio with an active urban bus system transport.

In terms of sub-urban connections, Cesena is characterized by a rather extensive network that connects the surrounding areas with the city of Cesena, the city of Forlì and the main seaside town of the Romagna coast. Below the public transport lines serving UVS area and the timetable of the Line 138, the main line operating continuously throughout the year along UVS. The following list provides an overview of the bus lines connecting Cesena with the UVS area *Figure 1* below shows the timetable for a regular workday from the UVS area to Cesena:

- Long-distance¹
 - Linea 138 Cesena – Bagno di Romagna -Verghereto
 - Linea 131 Forlì – S. Sofia – Bagno di Romagna
 - Linea 112 Montiano – Cesenatico
 - Linea 209 Bagno di Romagna – Verghereto – Pieve S. Stefano
 - Linea 221 Mercato Saraceno – Pievesestina
- Long distance - summer period only
 - Linea 222 Bagno di Romagna – Cesenatico – S. Mauro Mare
 - Linea 224 Sarsina – Pinarella

Together with Start, the Municipality of Cesena has also activated two services to facilitate the use of PT:

- BusSi, a public transport service on demand. It cost € 0,50 and you can book it through an app.
- Interchange car parks: if you park in some specific car parking, you can take a very frequent bus that takes you in the city centre. The ticket cost € 0,50: is valid all day and it also covers the costs of the parking.

Status quo PTSQC analysis

The analysis of the current status of public transport accessibility in the pilot areas, including the Union of Municipalities of the Savio Valley (UVS), was conducted using the **Public Transport System Quality Classification (PTSQC) methodology**. Overall, the results reveal a strong and consistent relationship between settlement structure, population density, and public transport accessibility. High levels of accessibility are concentrated in densely populated urban centres and along the main transport corridors, while lower accessibility categories predominantly characterise rural, mountainous, and sparsely populated areas.

The following section provides a concise overview of the PTSQC methodology and summarises the main results for the Savio Valley pilot area. For a detailed methodological description and a comprehensive presentation of results, reference is made to *Deliverable D1.5.1 – Transnational report: Results of the status-quo analysis using the PTSQC methodology*.

Methodological framework (PTSQC)

The PTSQC model classifies territorial areas according to their level of accessibility to public transport services. The key features of the applied methodology are summarised below.

¹ <https://www.startromagna.it/servizi/orari-e-percorsi/>

- First, the model is designed to ensure an explicit differentiation between urban and rural contexts, resulting in quality classes that reflect different spatial structures rather than applying uniform standards. Accordingly, the system distinguishes between more urban and more rural quality classes.
- Second, the methodology applies a hierarchisation of transport modes. Public transport services are grouped into four transport categories (rail, tram, metro, and bus), which differ in terms of travel speed, capacity, comfort, and timetable reliability. These categories are weighted differently depending on the territorial context and the availability of public transport services. For instance, rail-based modes play a more prominent role in highly urbanised areas, while bus services assume greater relative importance in peripheral and rural areas.
- Beyond service availability, the model explicitly incorporates additional factors that influence the practical usability of public transport, namely: walking distance to stops, and service frequency.
- Regarding the temporal scope, quality classes are calculated for standard working days (Monday to Friday), both during school periods and school holidays, allowing for comparative analysis. Seasonal and tourism-related variations are intentionally excluded, as are demand-responsive transport (DRT) services.
- Public transport stops are classified based on two main criteria:
 - service frequency, calculated as the number of departures per direction between 6:00 and 20:00;
 - the highest-ranking transport mode serving the stop.

By combining stop types with service interval classes, the methodology identifies eight stop categories (I–VIII), capturing qualitative differences between stops in both urban and rural settings. In a subsequent step, stop categories are combined with walking distance classes to define seven public transport quality classes (A–G):

1. **Quality Class A** represents the highest level of accessibility and is typically found in dense urban areas with very frequent, high-capacity services.
2. **Classes B to D** indicate high to good levels of accessibility, commonly occurring along major public transport corridors, at interchange nodes, or in urban–rural transition zones.
3. **Classes E to G** describe progressively lower levels of basic accessibility, predominantly in rural contexts, with Class G representing the minimum service standard.

Transport station category	Distance to transport stop				
	0 – 300 meters	301 – 500 meters	501 – 750 meters	751 – 1000 meters	1001 – 1250 meters
I.	A	A	B	C	D
II.	A	B	C	D	E
III.	B	C	D	E	F
IV.	C	D	E	F	G
V.	D	E	F	G	G
VI.	E	F	G		
VII.	F	G	G		
VIII.	G	G			

QC	Quality description	Spatial classification
A	Highest-ranking public transport development	urban
B	High-ranking public transport development	urban
C	Very good public transport connections	urban/rural, public transport axes, public transport hubs
D	Good public transport connections	urban/rural, public transport axes, public transport hubs
E	Very good basic accessibility	rural
F	Good basic accessibility	rural
G	Basic development	rural

Figure 5. Promote and diffuse the culture of sustainable mobility-

PTSQC results for UVS

In the Savio Valley study area, the following public transport services were identified: railway services connecting the city of Cesena with major regional centres and with Milan, as well as local and regional bus services operating in the area surrounding Cesena and along the Savio River. Each of these services was subsequently classified according to service frequency and walking accessibility distance.

Average course interval	Highest ranked transport means of the transport station			
	IC and regional trains	N/A	N/A	Buses
< 15 min	I.			III.
15 – 30 min	I.			III.
30 – 60 min	II.			IV.
60 – 90 min	III.			V.
90 – 120 min	IV.			VI.
120 – 180 min	V.			VII.
180 – 240 min				VIII.
240 min <				

Figure 6. PTSQC stop categories in the pilot area (LP).

Population Density and Public Transport Access

The territorial classification shows that the analysed transport stations are distributed according to a predominantly linear pattern, following the course of the Savio River. This reflects the valley’s topography and its influence on settlement development and infrastructure location. A strong spatial concentration of stations is observed around Cesena, indicating that accessibility is not evenly distributed across the valley. The urban core of Cesena and the linear corridor extending to the south-west stand out as continuous bands of higher accessibility categories, while peripheral areas are characterised by more dispersed settlement patterns.

With regard to population distribution across accessibility categories, approximately **75% of the population** resides within categories **A–E**, concentrated along the transport corridor in the lower part of the valley and in the city of Cesena. Around **13.5% of residents** live outside all accessibility zones, spatially corresponding to sparsely populated mountainous areas.

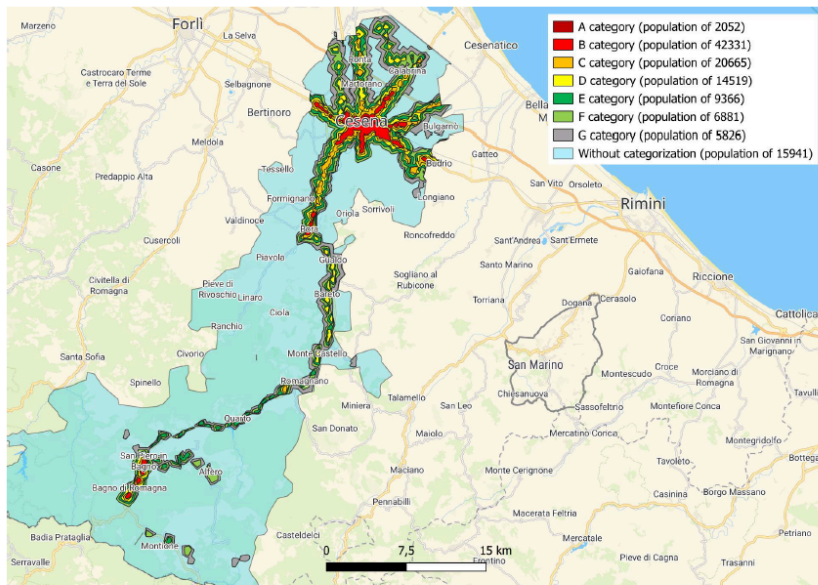


Figure 7. Population distribution of the pilot area (LP) based on PTSQC categories.

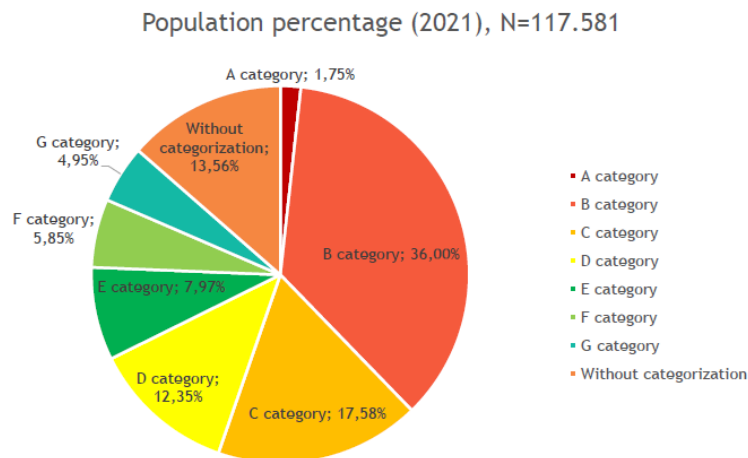


Figure 8. Population percentage in the pilot area (LP).

In conclusion, the territorial classification highlights a higher quality of public transport service in proximity to the most densely populated areas. Service quality gradually decreases when moving south-eastwards towards the mountainous areas, resulting in a discontinuous accessibility pattern across the territory.

Accordingly, the results of the PTSQC model, with specific reference to residential areas, suggest prioritising interventions in the following locations:

- **Areas with high population density that are not yet classified as A or B:** Alfero, Romagnano, Monte Castello, and the surrounding areas, as well as San Carlo and its wider area;
- Areas with above-average population density that do not fall within any of the A–G categories: Ranchio and Piavola.

Industrial-Commercial Areas and Public Transport Access

The application of the PTSQC model to industrial settlements reveals a different pattern. Industrial areas appear highly fragmented and are mainly concentrated in the municipality of Cesena and in the surrounding municipalities.

These areas largely coincide with high-accessibility public transport categories (A–C), indicating that employment centres benefit from good public transport coverage. In contrast, industrial areas located in the middle and upper parts of the valley generally fall within lower PTSQC categories.

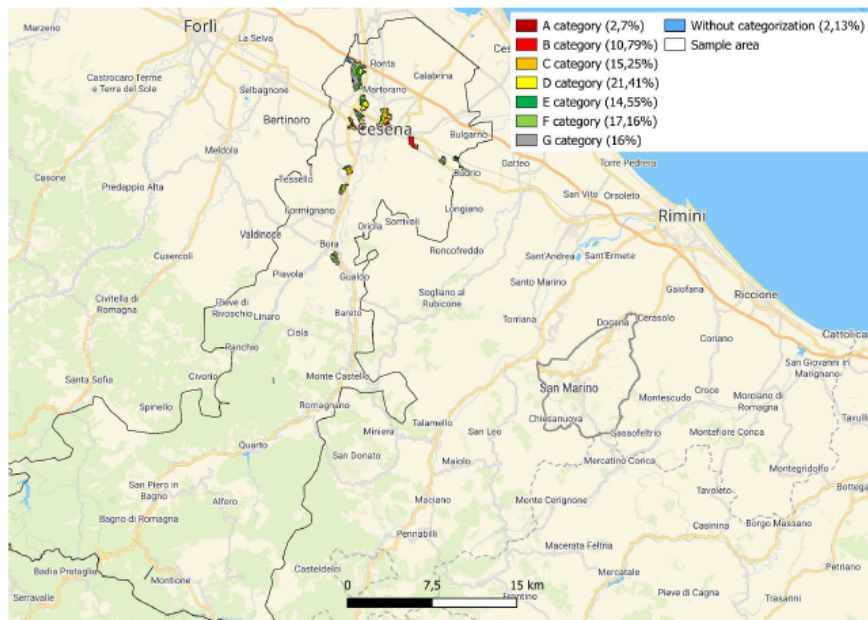


Figure 9. Percentage of industrial-commercial areas in the pilot area (LP).

Based on the results of the PTSQC analysis with regard to accessibility to industrial areas, the proposed intervention is as follows.

- Public transport should be further developed primarily in the **Borgo Pievestina area** (Municipality of Cesena, north-western sector) in order to improve access to industrial and commercial zones. On the one hand, this area shows the **highest proportion of zones classified in the lower accessibility categories (E–G)**.
- On the other hand, further analyses and in-depth local knowledge are required to determine whether improvements to the public transport network and accessibility should primarily address **commuting flows to workplaces** or respond to **demand generated by commercial and leisure-related activities** in the area.

Vision & strategies

The stakeholder workshop described in Document 2.3.1. represented a key moment of interaction and identification of the actual mobility needs of UVS residents, within a broad-area mobility coordination perspective. The workshop discussion brought to light a shared vision of future mobility aimed at a more varied, integrated, and accessible service offer, both in physical and informational terms, in order to reduce dependence on private car use, which often remains the only viable transport option for inland areas. The overarching goal is to shift a share of trips currently made by private car towards alternative modes and especially PT, by building a sustainable and diversified mobility system, promoting strategic interchange hubs, flexible services, and improved connections.

The stakeholder workshop has been developed using a Divergent thinking/Convergent thinking framework as described in the document. In summary, during the divergent phase participants were encouraged to identify all possible solutions to the issues raised, even if this required “thinking outside of the box”. This approach allowed the emergence of insights that, while not directly applicable in the short term, are nonetheless valuable for identifying specific and relevant aspects that may be incorporated into future solution packages. In this sense, the divergent phase allows contributions from stakeholders with vastly diverse backgrounds and levels of expertise.

The following Convergent phase is the subject of the remainder of the document; in it, the focus shifts on analysing the ideas generated during divergence by introducing the necessary constraints related to feasibility. During this phase, the role of sector experts and technical specialists becomes particularly valuable, as they help to identify practical limitations of ideas that have not been excluded prematurely. In this document the convergent phase is rendered concrete into developing six strategies and, within each strategy, a series of concrete actions to transform the mobility of the Unione Valle Savio in the coming years.

Vision

Unione Valle Savio (UVS) intends to promote an integrated, inclusive, and equitable sustainable mobility model, aimed at gradually reducing dependence on private cars over time in favour of more sustainable solutions for collective and active mobility.

The UVS - characterized by its nature and location by small settlements, sometimes isolated, and by a predominantly mountainous morphology - intends to work to transform these characteristics into opportunities and strengths by **promoting strategic interchange hubs, flexible services, and improved connections**. Building a **sustainable and diversified mobility** supply thus becomes an opportunity for the entire valley to improve residents' quality of life, increase accessibility to the area and therefore promote tourism and local development.

The vision for the coming years is based on gradual and progressive work **to shift part of the trips currently made by private car towards other alternatives**. In this regard, the public transport service plays a key role, with **Line 138** acting as the backbone of extra-urban mobility. Such backbone is expected to be functionally integrated with car-bus and bike-bus intermodality solutions, as well as policies for sharing privately owned motor vehicles, in order to build a new sustainable, accessible, and diversified transport supply.

Through its strategies and related actions, the Plan therefore promotes a mobility model aimed at reducing the impact generated by private motorized mobility. Moreover, with a broader perspective, it contributes to counteracting phenomena linked to land consumption, pollution, and climate change, and **works to promote social equity for all citizens, regardless of their economic means and psycho-physical condition**. Therefore, the Plan provides transport solutions aimed not only at limiting environmental impact, but also at promoting territorial cohesion and social inclusion.

Strategies

The vision described above is pursued by the Plan through six distinct strategies which together contribute to its definition:

Strategy 1 | Improve level of service of the PT service and reduce reliance on private car.



- Strategy 2 | Promote multimodality by implementing new or improve existing facilities.
- Strategy 3 | Coordinate mobility management initiatives to create dedicated services for employees.
- Strategy 4 | Develop governance for mobility planning and management at valley level.
- Strategy 5 | Promote the cycling tourism potential of the valley
- Strategy 6 | Promote and diffuse the culture of sustainable mobility

Action Plan

Strategy 1 | Improve level of service of the PT service and reduce reliance on private car

Action 1.A - Improve the “user experience” in using the existing PT line in the UVS

The objective of the action is to encourage the use of the PT in the UVS by improving the experience of the user (UX) of the service; this concerns both current users and potential users alike.

In particular, the idea of improving the user experience regards the elimination of all the possible barriers or moments of “friction” that characterize the use of any service. The overall experience, in fact, is judged positively or negatively also as a sum of small moments of frictions (or absence thereof) along the service. In fact, non-PT-users often struggle to even try PT because of how complicated it is to “use it” as a service (gather information, understand it, purchase tickets etc.

Such hardship is one the key discouraging factors to PT uses, again especially for first-time or potential users. This is true for several aspects of the use of PT:

- Timetables can often come in the form of less-than-attractive PDFs to be downloaded and scanned carefully and whose design is more comfortable for the PT operator rather than the final users
- Information on what tickets and subscriptions are available can be hard to collect and understand, especially in rural areas where multiple tariffs based on distance and areas are common.
- Opportunities for park-and-ride could be already present but unknown, mainly because the provider of the parking space (which could simply be the municipality) fails to connect and communicate with the provider of PT.
- The *barrier to entry* described above can prove to be particularly hard to face for people who are not familiar with the context, such as visitors and tourists. For them, the attractiveness of PT - which could be high if it were to provide an alternative to the use of private cars - is greatly diminished by the burden to understand the system and using it.

For these reasons, the action should be implemented by:

- Furnishing the bus stops with real-time information about bus passages and delays.
- Improve the communication and presentation about scheduling, routing, and tickets/subscription options for all users, in accordance with the PT operator. Such communication should be easily accessible and understandable for all age groups - irrespective to the facility of access through smartphone or other electronic devices - and capabilities.
- Link the information about the PT service with that of parking availability and park-and-ride systems, as well as within a more general framework of information about mobility in the UVS (see *Action 6.A - Create awareness campaigns to educate citizens on the benefits of sustainable mobility* for more details).

Expected benefits:

- Increased use of PT by greater attractiveness of the service by reducing the *barrier to entry* for locals, visitors as well as tourists.
- Reduction of private traffic both for systematic mobility and tourist-related mobility.
- Widening of the potential users of PT to elderly people or people with cognitive disabilities.

Challenges:

- The pure financial cost of these interventions is expected to be limited, as interventions often require “tuning” existing infrastructure or communication technology.
- At the same time, these interventions require expert consulting from professionals who can more easily identify both challenges and solutions. It is thus suggested to hire consultants for this specific activity.
- In addition, the required coordination among several stakeholders to implement some of these measures can be significant.

Suggestions:

Some realms where improved UX could be a factor include some administrative/ICT processes for:

4. Purchasing tickets both in physical form and online.
5. Finding the timetables and, even more important, that the timetables can be easily read and understood.
6. Finding the closest bus stops both at the departure and the arrival.
7. Navigating the general information about the service, its costs, and its main characteristics.

As previously stated, the communication and the accessibility of timetables, routing and in general the public transport UX aspects are trivial only at first glance. The hiring of specialists is highly recommended to increase the probability of success of these actions.

In addition, some UX factors also include the moments when somebody is already using the PT system, for example:

- The waiting time at the bus stop can be made “feel less” by providing distractions, games or other fun elements at the bus stop; this is for example the reason why train stations have now been refurbished with many screens or, in some cases for example in Italy, with some fun elements such as freely available pianos.
- The time on the bus itself can be made more pleasant by adding some small amenities on the bus, such as light music, books to read or similar.
- These actions are somewhat more complex than those in the previous paragraph and should thus be considered of second order priority with respect to those.
- For the interventions that specifically regards bus stops, it is suggested to work in “batches” of bus stops for their physical refurbishment, with similar logics and operation modes as those described above.

Action 1.B - Integrate the existing PT system to better serve the weaker areas of the UVS

The aim of the action is to improve the service of the existing PT service in the UVS with a particular focus on the areas that have been identified as weaker in the territory thanks to the PTQSC analysis that was done within the NUTSHELL@CE project.

Summarizing from the previous Deliverables in Work Package 1, many residents live in moderately accessible contexts (B–D in the map below), consistent with polycentric settlement and corridor-based development. Improving accessibility may depend less on intensifying already-strong A zones and more on strengthening service frequency and connectivity along the main settlement corridor and between secondary centres — where the bulk of the population actually resides.

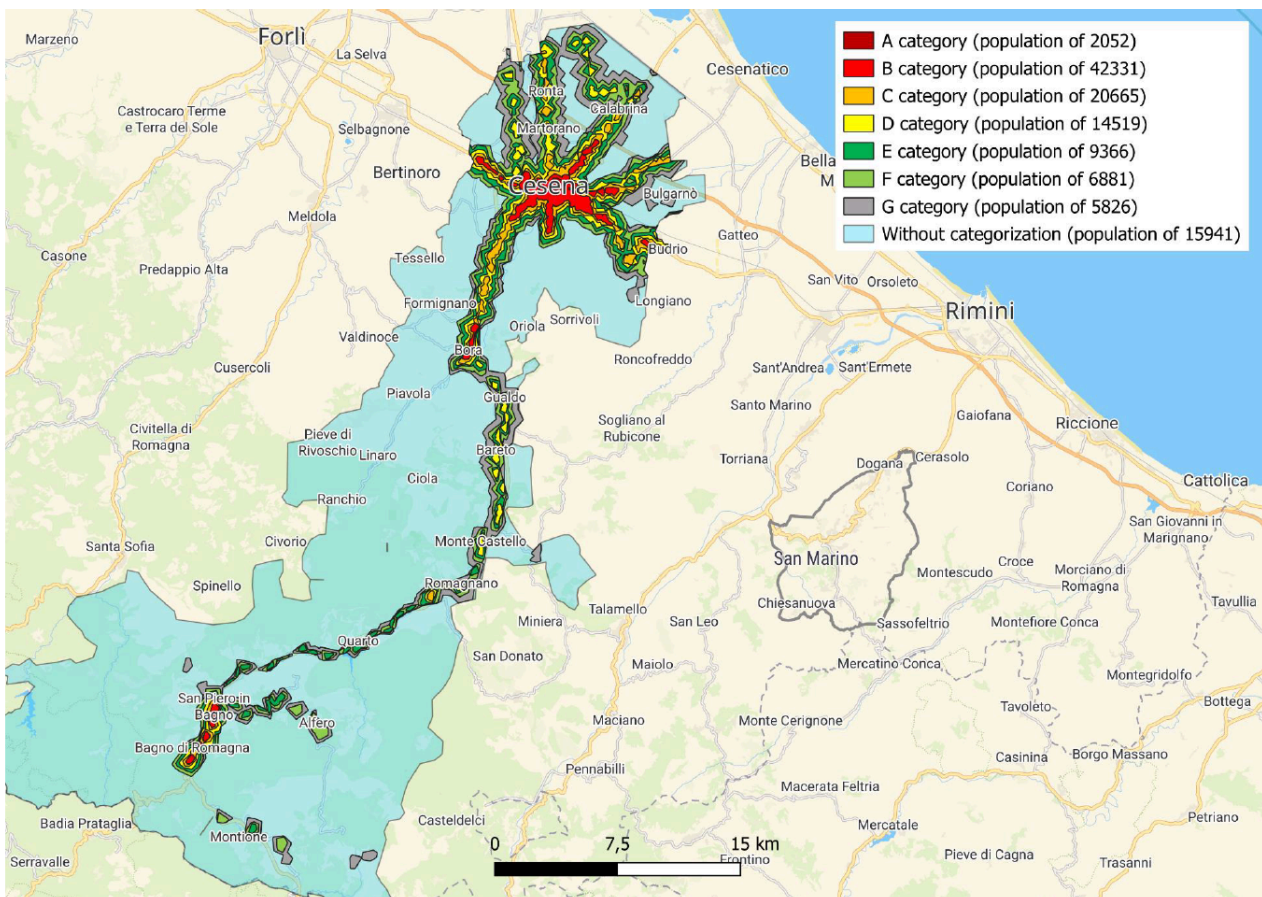


Figure 1. Extract from Deliverable 1.5.1 with the main results of the PTSQ model application to UVS.

This pattern reveals a centralized transport structure where Cesena acts as the valley’s dominant mobility hub, while upper valley villages experience systematically weaker connectivity. In particular, the proposals derived from WP1 (Deliverable 1.5.1) include actions for residential areas to be developed with public transport in the pilot area, specifically:

1. where population density is high but does not fall into either category A or B: Alfero, Romagnano, Monte Castello, and its wider area, as well as San Carlo and its wider area;
2. where population density is also higher than average but does not fall into either category between A–G: Ranchio and Piavola.

Expected benefits:

- Increased use of PT by greater attractiveness of the service in particular in weaker areas, with a potential significant effect in terms of reduced km driven by car.
- Reduction of private traffic both for systematic mobility and tourist-related mobility.
- Widening of the potential users of PT also to what are currently underserved or marginalized areas.

Challenges:

- The main challenge of the action is probably the sheer financial cost of any operation of improvement, whether is through traditional PT or On-Demand solutions (see “suggestions”).
- Another potential challenge, even when the service should be improved, is related to communicating the action and its purpose effectively to potential users, who might not even know that the service has been improved and, furthermore, might need initial incentives to “give a try” to the PT service. See actions in Strategy 3, 5 and 6.

Suggestions:

The exact ways in which such improvement will be implemented will be discussed with the local PT operator (Start Romagna) but in this document a few possibilities are proposed:

- Strengthen the existing PT supply by a combination of:
 - Increasing the density of bus stops in order to increase the catchment area of the PT service and parallelly increase the stopping of buses in the weaker locations. Examples of this include for example the municipality of San Carlo and the fractions of Monte Castello and Romagnano. The latter also represents an administrative issue, since it belongs to a municipality that in turns belong to a different province, that of Rimini, with respect to all other municipalities within UVS)
 - Increasing the frequency of the services along the lateral valleys, and the scheduling connection with the service in the main valley. A major example for this is the service within the Valle del Borello, which includes the municipalities of Ranchio and Piavola. Another example is the fraction of Alfero, which is located high and deep into the mountains and from which the connection for example with Cesena is very weak, at about 1h45m-2h0 with public transport compared to 54m by car.
- Operate with local On-Demand Bus services (see action 1.F) with a more tailored approach to each specific area and needs; this is particularly relevant where lateral valleys and areas that are further from the main area of the valley (which is basically the area surrounding the Savio River and the main E45 road). This could be particularly positive for Alfero but also potentially for the Valle del Borello.

Action 1.C - Transform the bus stops to make them accessible to people with disabilities

The aim of the action is to make it possible for people with limited mobility, such as children, elderly people, or people with disabilities, to access and use PT. Such action, besides being a good practice per se in terms of providing mobility opportunities to disadvantage parts of society, can increase the use of PT in the area in two ways: on one hand, direct beneficiaries can more easily access PT without requiring significant help from others; at the same time, their care-givers could also potentially be freed from the necessity to use the car if the person they take care of is more independent in their mobility.

Expected benefits:

- Increased attractiveness of PT by direct improved accessibility for people with limited mobility.
- Improved attractiveness of PT “indirect” increased opportunity to care-givers.

Challenges:

- The financial cost of the intervention might be significant considering the number of bus stops present in the UVS and the fact that only a fraction of them is now fully accessible to people with limited mobility. A preliminary estimate of the cost for a single bus stop indicates an amount of about 10k-20k euros per bus stop².
- The bus stop might be only one of the barriers to access to PT by people with limited mobility. Access to the bus stop itself by proper sidewalks or cycle path is definitely also a factor, but such interventions would go out of the scope of the present document.

Suggestions:

- Guidelines on how to refurbish bus stops towards increasing accessibility abound, and the Italian legislation provides accurate indications on how such a process should be conducted. It is thus not necessary to “re-invent the wheel” on this matter.
- At the same time, the intervention would be much more homogeneous and much less expensive (money-wise, timewise, and human-resource-wise) if it were planned and conducted at once or at least in large batches - definitely not stop-by-stop.

Action 1.D - Experiment the provision of dedicated shuttle services in the case of crowded events

The objective of the action is to promote greater use of PT by implementing a shuttle service dedicated to the main events in the valley. This initiative aims to reduce the use of private vehicles during large-attendance events, improving environmental sustainability and decreasing road congestion.

Expected benefits:

- Reduction of private traffic and road congestion during major events.
- Reduced need for parking in event areas.
- Promotion of sustainable mobility habits among participants; this could be particularly interesting for events aimed at young people, in order to counter the predominant culture of the use of private cars.

Challenges:

- Financial sustainability of the service, which could become costly without long-term support from public or private funding.
- Managing demand during events with unpredictable attendance, which may require a rapid increase in shuttle services.
- Difficulty coordinating schedules and routes with the existing public transport system, especially in areas with limited infrastructure.
- Resistance from citizens to using public transport, making awareness campaigns necessary.

Suggestions:

8. Implement an online or app-based booking system to estimate demand and manage the required number of shuttle services.
9. Establish partnerships with event organizers and involve local sponsors to reduce operational costs.
10. Strengthen communication about the advantages of shuttle services, such as reduced traffic and lower parking costs, in line with the previously described actions for communicating mobility within UVS.
11. Offer incentives, such as discounts on event tickets for those who use public transport.

Action 1.E - Experiment a ridesharing system in the valley

As already explained, the mobility context in the valley (as well as in Italy) is characterized by a significant fraction of cars transporting solely the driver; the average occupation factor of cars in Italy is about 1,3-1,4 as previously noted². Policies to optimize the use of currently circulating cars, would then contribute reducing the overall impact of car traffic.

Car-pooling is of course one of the ways to implement this policy, but it requires a perfect coordination and communication among the people involved (driver and potential passengers) which is not always available. For this reason, an interesting system for the UVS is the so-called ridesharing, which works with the same principle of car-pooling (using one private car for several un-related people's trips) but in some forms can require less coordination.

In fact, some forms of ride-sharing (different from the "famous" ones such as BlaBlaCar or Uber) work basically as a hybrid between a public transport system and a hitchhiking system; in its purest form, a person waits at a designated location, a "stop" that is marked as part of the ride-sharing system, for a traveller to pass by and offer a lift. Many features of the system can be designed in separate ways (with or without payment, with or without the support of an app, with or without an official feedback system to testify about the trustworthiness of the people involved etc.) but the system is set to work best in valleys such as UVS. The reason behind this is twofold:

1. the probability that a driver is passing close by to a potential passenger and especially going in the same direction is much higher where only one major direction exists, like in the UVS where most trips travel up and down the valley; in this sense, the valley conformation is a logistical help with respect to what would happen in an environment where travel directions are more scattered (like a city).
2. Valleys tend to form closer communities where people tend to know each other better; in this sense, the valley conformation is a "social" help, where building the necessary trust could be easier.

Given this description, experimenting with some form of ride-sharing system could contribute to reduce the number of circulating cars, promote sustainable mobility, reduce environmental impact, ease road congestion, and improve access to mountainous areas where public transport is most lacking. When regulated within a defined framework, this practice can ensure safety and prevent risky behaviour. The initiative can also stimulate social and tourism integration by promoting interaction between people and foster community-building.

Expected Benefits:

- reduction in private vehicle traffic;
- reduction and sharing of costs associated with car use;
- improved accessibility for residents and tourists without cars in areas poorly served by public transport;
- opportunity for community building, socialising, and networking.

Challenges:

- scepticism towards hitchhiking and the perceived level of risk associated with managing passenger flows and user safety;
- need for local regulations setting out the rules for safe and effective implementation.

Suggestions:

- Roll out the project by focusing both on the usability of the service (w/o app, w/o payment etc.) but also on the sense of community that would need to be the basis for the system to work.
- plan the Ridesharing stops in clearly visible and safe locations;
- encourage the use of the system by offering incentives or discounts on local services (such as restaurants, accommodation, or tourist attractions) to those who join the scheme;



- allocate funds to launch the initiative, to raise awareness of it and promote it through proper communication.

Action 1.F - Experiment an on-demand bus service in specific parts of UVS.

The proposed action foresees the pilot implementation of a demand-responsive transport (DRT) service in the UVS area. This territory is characterised by a valley-based settlement structure, with a predominantly linear urban development converging towards the city of Cesena, and with numerous urban centres and smaller settlements distributed around the main, more densely populated nodes. In general, the main municipalities along the valley are served by low-frequency public transport services, while smaller settlements and hamlets located further from the main valley road corridor have more limited access to public transport. As a result, mobility demand from peripheral settlements and lateral valleys remains largely unmet.

In addition, the current public transport offer is primarily designed to meet school-related mobility needs, effectively excluding other segments of the population, particularly older people, who could benefit from transport services to access healthcare, personal services, and daily activities. An increasing number of areas characterised by low population density and progressive population ageing are investing in the development of demand-responsive transport services. Such services make it possible to guarantee access to mobility as a social right, while at the same time addressing the need for flexibility associated with low-demand contexts and ensuring the economic sustainability of service provision.

The demand-responsive transport service promoted through this action would not be limited to trips towards Cesena but would also support internal mobility within the Savio Valley and connections between neighbouring transversal valleys. The service may be structured according to two main operational modes:

- Strengthening existing public transport lines, with the goal of improving accessibility to the overall transport network, particularly for first- and last-mile connections. This service component may be delivered through integration with private operators as well as through publicly managed services, depending on the local organisational framework.
- Full replacement of existing low-frequency public transport services, particularly during off-peak time periods and in fractions characterised by low demographic density and transversal valleys. In these contexts, service provision may be managed either by public transport operators or by accredited private providers.

Expected Benefits:

- **Equitable access to essential services as a social right:** the service contributes to ensuring a fundamental right to mobility by improving access to essential services, particularly for older people and for those who do not hold a driving licence or have access to a private vehicle. This contributes to reducing the sense of isolation, neglect, and marginalisation often experienced in peripheral and low-density areas.
- **Option value of the service for the entire community:** an effective transport system provides value even for those who do not use it on a daily basis, as it offers an alternative mobility option available in unforeseen or emergency situations. For example, the service may become essential in the event of an unexpected car breakdown, the need to reach the workplace or return home, or when health-related conditions temporarily limit the ability to drive or travel independently.
- **Enhanced participation in social and community life:** demand-responsive transport facilitates access to social and cultural life and can be particularly beneficial for both older and younger population groups. It supports participation in cultural events, community initiatives, and social activities. In low-density areas, often perceived by residents as extended neighbourhood communities, travelling relatively long distances is a common daily practice; therefore, a flexible transport service helps maintain active social and community ties.

Challenges:

- **Ensuring technological accessibility for older populations:** the demand-responsive transport service is expected to primarily target older population groups, who may have limited familiarity with digital applications used for booking services, accessing information, or managing payment procedures. It is therefore essential to implement targeted communication campaigns and provide support tools to facilitate the use of the

service. In addition, alternative access channels should be ensured, such as an information and booking service operated via telephone by dedicated staff.

- **Ensuring long-term financial sustainability and service continuity:** demand-responsive transport services face a specific challenge related to long-term financial sustainability, as their operation typically involves costs that exceed direct revenues. One-off funding schemes can provide valuable opportunities to initiate pilot projects; however, to ensure service continuity, it is necessary to progressively integrate demand-responsive transport into the regular mobility planning framework of the area. To this end, it is essential to establish structured coordination with the regional mobility agency and local public transport operators, with the aim of reallocating existing investments towards solutions that better reflect the characteristics of local mobility demand.

Suggestions:

- **Phased introduction through pilot projects or community events:** to facilitate the introduction of a demand-responsive transport service, it is advisable to adopt a gradual approach by launching pilot projects or testing the service during specific community events. This allows for a practical assessment of users' willingness to adopt the service and helps identify potential operational challenges. Such pilot initiatives should be supported by an appropriate monitoring framework, both before and after service delivery, in order to assess user acceptance, actual usefulness, and possible areas for improvement.
- **Definition of realistic targets and socially oriented performance indicators:** Demand-responsive transport services are not designed to serve large passenger volumes or to generate direct financial returns, but rather to ensure equity in access to mobility as a fundamental right. Consequently, the definition of Key Performance Indicators (KPIs) should prioritise social and qualitative dimensions rather than purely economic metrics. It is important to establish realistic and sustainable demand targets over time, favouring steady, even if numerically limited, demand levels over occasional peaks concentrated in specific periods.

Strategy 2 | Promote multimodality by implementing new or improve existing facilities

Action 2.A - Create strategic interchange hubs at the main bus service stops

The aim of the action is to increase accessibility to the existing public transport service in the UVS, in particular for the people who live in the lateral valleys and in the most remote parts of the UVS. This is important because, as already pointed out by the use of the PTSQC model previously described, one of the main weaknesses of the PT system in the territory lies not necessarily in the service itself, rather in the difficulty to get to or move from its stops.

It must be specified this is a common feature of all PT systems in rural areas all over the world, and in fact one of the main features of PT at its core: PT is inherently efficient and cost-effective in dense areas, and conversely it struggles significantly where it fails to collect enough users along its routes. Such struggle is sometimes challenged by changing the PT routes so that they cover the most populated areas in a more punctual way, but such modification usually comes at the cost of making the route very convoluted, long and, as such, slow. This in turn fails to attract users, especially in rural contexts where the attractiveness of the private car is not burdened by significant traffic or parking issues.

In this context, the necessity to use a car to get to a public transport stop (a bus stop, in the case of UVS) in most cases pushes the user to continue the trip by car to its final destination instead of adopting a car-bus modal chain. Therefore, increasing the use of PT can be achieved, among other things, by improving the accessibility to the bus stations with a variety of additional services, thus actually transforming the bus stop into an *interchange hub*. Among the main services are for example:

- Installing protected bike parking (with roof or other cover) at or in the close proximity to the bus stops, if possible, with e-bike charging docks, to increase the attractiveness of the bike-to-bus modal chain. The attractiveness for e-bike users is particularly important in mountainous territory such as UVS.
- Providing adequate park-and-ride facilities in the close proximity to the bus stops. Ideally, parking in these facilities should be free or much cheaper than any other parking option at the final destination, especially when combined with a PT ticket or monthly/yearly subscription.
- Install electric vehicle charging stations in conjunction with the abovementioned park-and-ride facilities.
- Provide additional amenities at the bus stops that would improve the quality of the “waiting time” for the commuter, such as the provision of food and drink, information, and/or some type of playful and engaging activity.

Expected benefits:

- Traffic reduction.
- Increased use of the PT system in the UVS even without significant interventions purely on the PT supply.
- Increased attractiveness of the PT system for all users, including those who currently commute by car.

Challenges:

- Economic investment is needed to refurbish bus stops into proper interchange hubs; the investment is of course dependent on the level of refurbishment and the amount and quality of provided amenities.
- The intervention is more impactful the more car usage is discouraged and made expensive as well as inconvenient. Such interventions face significant political backlash in contexts such as UVS where the private car is so ubiquitous and part of people's habits and culture.
- The investment would need to be effectively communicated so that current non-PT-users could notice the difference with respect to the past and be at least preliminarily interested in the new configuration.

Suggestions:

- Do not plan a comprehensive intervention on all bus stops at the same time, which would prove too expensive and difficult to justify since results would not be visible. Instead, select the most relevant bus stops in the whole UVS and refurbish them in a meaningful way through a somewhat significant investment. These initial bus stops should provide the necessary data (in terms of improved accessibility to the PT service) to make intervention on other, less crucial stops, more easily accepted and funded.
- Plan the intervention in accordance with actions on the attractiveness of private car, in particular for what concern parking costs and availability. The park-and-ride option should be at least much cheaper, and ideally comparable in terms of overall speed, to the use of private cars.
- Involve the local PT operator in the redesign and refurbishment work as well as in the communication effort to explain to the population the objective and feature of the intervention. Such communication is integral to the success of the project.
- In order to jump-start the adoption of the park-and-ride (or cycle-and-ride) options, implement discounts and promotional offers for a period of time, in particular aiming at the people who have never used PT and consider themselves “non-users”.

Action 2.B - Cooperate with the public transport operator to enable the transport of bikes on board vehicles

The aim of the action is once more to improve the attractiveness of PT by increasing its accessibility through other modes, specifically bikes and e-bikes in this case. In particular, some users might want or need to use a bike at both ends of their trip (literally both for the “first mile” and the “last mile”) and thus need to transport the bike aboard the bus. In parallel to the refurbishment of the stops as mentioned in Actions 1.A and 1.C, therefore, it is recommended that buses along the UVS are refurbished to accommodate bikes - and possibly e-bikes as well, for example by using front racks or similar systems.

This action could prove beneficial not only to commuters but also to tourists, cycle-tourists as well as sport cyclists, who might want to use the PT service for part of the route and cycle the rest, in particular to avoid the most intensely trafficked areas.

Expected benefits:

- Increased attractiveness of PT by improved accessibility by bike, also for the last-mile part of the trip.
- Improved attractiveness of the UVS territory for cycle-tourists and for sport cyclists, as well as improved service and safety for current cyclists.

Challenges:

- Financial cost of the intervention is fairly limited, as the installation for a single rack is in the realm of 1.000-2000€ per single intervention.
- The main challenge might be administrative/bureaucratic, and it has been already explored with the UVS bus operator START Romagna (also a partner of the NUTSHELL@CE project). In fact, START has presented as a challenge the authorization process for the mounting/dismounting of the bikes a part of the drivers' tasks, as well as matters of safety and liability/insurance. At the same time, given the more and more common diffusion of these systems it is believed all these challenges, although present and valid, can be overcome with due process and coordination among relevant stakeholders.

Suggestions:

- Do not start from scratch: several other territories, with similar characteristics to UVS, have implemented similar systems and can therefore testify as of the main barriers and challenges to overcome and how to overcome them. This is true in terms of the financial costs as well as of the potential legal/administrative/liability challenges.
- Once again, the initiative will need to be effectively communicated to citizens and tourists to make it attractive and effective.

Action 2.C - Improve the condition of the first and last miles paths to/from the PT hubs

In contexts such as UVS, where most travel flows are external and directed toward the city of Cesena, a key aspect to encourage residents to shift travel habits is the management of the *last mile*, particularly once arriving in Cesena using public transport. Facilitating intermodal transport is not only beneficial for valley residents but also for Cesena, which daily experiences through-traffic that places additional pressure on the city. Stakeholder engagement and the results of the PTSQC analysis highlighted that some of Cesena's industrial and production areas lack alternative services and infrastructure that would enable more sustainable access. In the absence of continuous connections from Cesena city centre to these areas, many workers prefer to travel directly by car from the valley. Within this context, the pilot initiative proposed with Nutshell@CE aims specifically to facilitate last-mile connections in the valley, including the possibility of securely parking bicycles.

This action therefore involves a series of interventions across multiple fronts, both in the valley municipalities and in Cesena, with a recommended priority focus on Cesena:

- Completion of the cycling network connecting the more peripheral areas of Cesena, including industrial and production zones.
- Securing and upgrading public transport waiting areas, particularly in peripheral areas, ensuring accessibility by foot and by bicycle, and equipping them with comfort-enhancing facilities such as shelters, seating, lighting, and real-time information panels.
- Creation of secure and covered bicycle parking infrastructure at strategic locations, with potential "bike stations" at key interchange points and popular destinations.

Expected benefits:

- Increase in mobility options and potential reduction in private car use.
- Decrease in through-traffic entering Cesena, relieving road infrastructure and parking demand.
- Improved accessibility to essential services, often located in better-served hub cities.
- Potential reallocation of public space for alternative uses, which is currently mainly occupied by parking and car traffic.

Challenges:

- Significant infrastructure investment required, which may involve long implementation times and fragmented progress.
- Integration of a competitive fare system for users combining interurban and urban bus services in Cesena is needed to ensure public transport remains attractive compared to other modes.

Suggestions:

- Possibility to unify accessibility services for specific areas, such as industrial zones, for example through shared bike-sharing schemes.
- Facilitate the implementation of changing rooms and comfortable facilities for intermodal users to ensure convenience, comfort, and readiness upon arrival.

Strategy 3 | Coordinate mobility management initiatives to create dedicated services for employees

Action 3.A - Create and share informational and motivational package on commuting for new hires

People who start working at a new company often derive their behaviour from existing habits within the company; this is not different for mobility behaviours, although of course each personal situation can facilitate or hinder the adoption of sustainable mobility practices. In this sense, the workplace culture can play a significant role in influencing individual employees' mobility choices. A crucial factor to steer these choices towards sustainable mobility, therefore, is to set up a work environment where sustainable mobility is promoted and facilitated.

To do so, one key moment is the so-called “onboarding” process, which is the process of communicating company's practices and rules to a new employee during their first days/weeks. For what concerns mobility, therefore, a useful tool to nudge towards sustainable choices is the development of a comprehensive informative and motivational package covering all available mobility solutions to and from the workplace. In addition to informational materials, the package may include complimentary public transport tickets and access passes for shared mobility services.

The package should be integrated into the standard onboarding process for new hires and apprentices, as well as for employees undergoing an internal transfer or change of work location. This type of initiative is particularly suited to contexts requiring the physical presence of staff on-site, such as industrial and hospital facilities, universities, and schools, as well as service and retail businesses.

Expected benefits:

- Creation of a company culture where sustainable mobility is the norm and not the exception.
- Strengthened employer branding and potential reduction in staff turnover costs, by leveraging the "*moment of change*" in a new hire's life, a phase during which individuals are more open to adopting new routines than established employees with long-standing habits.
- Potential reduction in long-term commuting costs, combined with a perceived increase in the organisation's attentiveness to individual needs and alignment with employees' personal values.

Challenges:

- The creation and initial diffusion of these packages is quite straightforward but keeping the attention as well as the “habit” to share them with new hires can be challenging, especially if results appear in the long term.
- The “content” of the package is as important as the package itself in convincing people that mobility habits can be changed. This means that people must be offered alternatives that genuinely facilitate sustainable commuting patterns. Providing such differentiated supply to a variety of people and roles can be challenging. Some might need rapid mobility during work hours to travel from one office to another, some employees work on a shift-based schedule, some other might need to accommodate family needs within their working schedule.

Suggestions:

- Establish partnerships with public transport operators and destination municipalities to obtain informational materials, trial subscriptions, and complimentary tickets.
- Establish partnerships with external providers of shared mobility services, including bicycles, e-scooters, and electric cars.
- Explore whether preferential mobility services exist for new residents in the area.
- Distribute the package to employees during onboarding or in the context of an individual meeting.
- Monitor uptake and satisfaction levels through regular employee check-ins.
- Develop the packages according to available resources: they can go from a plain document in the simplest form to more creative (but costly, both financially and timewise) means such as promotional videos, posters or even testimonials programs within the company (best suited for medium-to-large sized companies).

Action 3.B - Financial contribution to company employees for the purchase of public transport season tickets

When considering whether to use PT or not, the economic factor always plays a role. On one hand, PT tickets (even seasonal or yearly tickets) are certainly cheaper than driving a car, especially without additional passengers. On the other hand, and especially in contexts like UVS, owning a car is usually (close to) unavoidable. This means that people often neglect to factor the cost of the car purchase and general maintenance (e.g. insurance etc.) in the cost of its use. The comparison that is often made concerns only the fuel cost vs. the cost of the PT ticket, and in that way the comparison can make the two mobility options appear financially more similar than they actually are.

In this regard, it is crucial to lower the cost of PT tickets as much as possible for employees. The action thus aims at facilitating access to and use of public transport through support for the purchase of season/yearly tickets by the employer. This can take different forms; the three most adopted ones are (alone or in combination):

1. upfront purchase of the whole ticket directly by the employer with subsequent instalment-based deductions from the employee's payslip.
2. discount on season ticket purchases, where available or negotiated with the public transport operator, through a direct contribution of the employer and usually an additional contribution from the public administration (usually the Regione or the local Mobility Agency).
3. provision of complimentary ticket booklets.

Expected benefits:

- Reduction of commuting costs through the use of PT for employees.
- Monthly payslip deductions function as a facilitating mechanism for accessing the cost of the service, allowing employees to enjoy the benefits of a long-term season ticket without bearing the full upfront expense.

Challenges:

- Coordination between the wider area authority and the public transport operator to agree on purchasing arrangements and potential discounts.
- Shift-based workers may not benefit fully, as access to this measure depends on the quality and frequency of public transport provision in the area.

Suggestions:

- Complement the measure with incentives supporting cycling for last-mile connectivity.
- Verify that the company premises are served by accessible, safe, and conveniently located public transport stops, and where necessary cooperate with local authorities and the public transport operator towards improvements.

Action 3.C - Remote and Hybrid Working incentives and programs

In order to support a transition towards more sustainable mobility, one key factor to consider is the possibility of avoiding unnecessary and non-essential travel. It is well established that proximity between place of residence and workplace is one of the main determinants influencing both residential choices and travel behaviour.

From the perspective of facilitating more sustainable mobility patterns, particularly for office-based roles, granting the possibility to work from home or remotely, represents a significant welfare measure and benefit that companies can offer.

This action foresees the **provision of social security contribution relief for companies** employing staff who reside in the UVS or who intend to relocate there. In the broader context of demographic revitalisation of small municipalities and inner areas, similar policies have also been promoted at national level through Law 131/2025 on *Provisions for the recognition and promotion of mountain areas*. This legislation aims to counteract depopulation in so-called mountain municipalities by introducing incentives for companies adopting smart working schemes. In particular, employers are granted an exemption from social security contributions for permanent employees for the period 2026–2030.

Expected benefits:

- Reduction in potential car-based commuting.
- Opportunities for residential revitalisation in municipalities most affected by depopulation.
- Stronger employee engagement in companies adopting modern, forward-looking work policies aligned with younger generations' expectations.
- Improved work–life balance and family well-being.

Challenges:

- Foster the accessibility to stable internet connectivity. It is essential to ensure the access to reliable internet infrastructure. Not all municipalities, especially those located in valleys and inner areas, currently benefit from stable connectivity, which is a prerequisite for the effectiveness of remote working policies.
- Promote social interaction and community spaces. While remote working enables individuals to remain in or relocate to inner areas, it is equally important to create opportunities for social interaction. Such initiatives can help mitigate the sense of isolation and alienation that this mode of work may generate.

Suggestions:

- Promote shared coworking spaces across municipalities in the valley. Reducing commuting needs creates an opportunity to develop local community hubs with co-working space in it. This would contribute to revitalising community spaces and strengthening social cohesion across the territory.

Action 3.D - Develop a car-pooling system along the valley

The aim of the action is to optimise the current use of private cars, which have an exceptionally low utilization factor on average in Italy and in the Region³. In a context characterised by limited resources and infrastructure, sharing private cars is an effective strategy for reducing the number of vehicles on the road, and the associated environmental impact, without limiting access to cars to the population. In fact, recent studies suggest that car-pooling in Italy is increasingly popular and effective in reducing the number of cars on the roads as well as their environmental impact⁴

Car-pooling is different than ridesharing (see *Action 1.E - Experiment a ridesharing system in the valley*) mainly because it is usually pre-planned, more organized, and routine-based. People usually agree beforehand about the trip, the timing, the cost, and the trips happen on a daily or weekly basis. For this reason, car-pooling is particularly suited when people arrive at the same destination (or in close proximity), i.e. when people work in the same company. Car-pooling has historically been developed within private companies, even though modern apps and solutions allow for a pool of companies (whose offices/factories are close to each other) to be part of a single car-pooling system.

The use of digital applications to encourage sharing would offer a concrete solution to promote shared transport, connecting users and their mobility supply and demand. The creation of a digitalised mobility system for the whole UVS might provide institutional support that citizens could safely join to make their mobility services available or find solutions to their mobility needs.

Expected benefits:

- traffic reduction;
- optimisation and ease of travel even for those without a private car;
- financial savings through sharing.

Challenges:

- people's reluctance to change their mobility habits, still preferring to use private cars for convenience and independence;
- difficulties due to different mobility needs, which would make it difficult to guarantee regular routes;
- difficulties for some users in using apps or digital platforms;
- long-term costs for creating and managing the platform.

Suggestions:

- offer incentives to early users who register on the platform and use the service;
- provide tutorials to teach users how to use apps and digital platforms.

³ ISFORT - 21° Rapporto sulla Mobilità degli italiani (2024). Available at: <https://www.isfort.it/progetti/21-rapporto-sulla-mobilita-degli-italiani-audimob/> (last access: March 2026)

⁴ https://urban-mobility-observatory.transport.ec.europa.eu/news-events/news/italys-carpooling-growth-cutting-emissions-and-congestion-2025-03-13_en

Strategy 4 | Develop governance for mobility planning and management at valley level

Action 4.A - Define a steering group to coordinate all mobility-related initiatives within the UVS

Mobility management in the Valley is challenging due to the division of responsibilities among various bodies and institutions. This fragmentation can slow down processes and actions in the area, leading to inefficiencies in the implementation of initiatives.

Mobility management is not among the Unione Valle Savio responsibilities. To overcome the mentioned critical issues, the authority could assume this responsibility in order to establish governance over mobility policy. However, this is a multifaceted and complex process that requires a medium to long-term perspective. In the meantime, or in the event that the authority is not conferred the function of mobility, it is proposed to create other structures, such as a permanent steering group or an office responsible for all mobility-related activities, such as the management and planning of services and infrastructure and the development of new initiatives. The task of this body will be to promote collaboration between local authorities, transport companies, and other actors (also stakeholders, mobility managers, and citizens' representatives) in order to coordinate efforts and maximise the effectiveness of initiatives, analysing emerging needs and designing shared solutions.

For example, one of the steering group's roles could be to coordinate the work of mobility managers from companies in the valley. This group could work alongside the already established group operating in the municipality of Cesena, creating synergies. In fact, many workers who live in the valley work in Cesena, and vice versa.

Expected benefits:

- simplification and acceleration of decision-making processes, reducing the time needed to develop and implement mobility policies;
- mutual understanding of the difficulties faced by the various stakeholders involved, enabling any problems to be quickly identified and resolved.

Challenges:

- issues relating to the competences and roles of the various bodies could lead to conflicts or delays in the operational implementation of actions;
- the success of the working group depends on the active and constant participation of all members.

Suggestions:

- regular meetings (e.g. monthly or quarterly) should be scheduled with a clear agenda for each meeting.
- a coordinator should be appointed to manage the meetings.

Action 4.B - Update the mobility plan of UVS and its monitoring

The success of the proposed mobility plan depends, among other things, also on the ability to keep it up to date, so that it can respond to any new needs that may arise in the area in the coming years. It is therefore essential to update and monitor the Plan, in order to evaluate the effects of policies, the arise of any critical issues and new needs.

Monitoring and evaluation also serve to provide evidence to support the effectiveness of the plan and its planned measures, establishing a transparent relationship between the administration, citizens, and stakeholders on how the allocated funds are spent.

To monitor and update the Plan it is necessary to start from a solid database on which to build a system composed of various indicators. Cesena's SUMP itself promoted, among its actions the construction of a 'monitoring dashboard', a tool consisting of standard indicators updated every two years to monitor the effects of the Plan and changes in mobility.

Observing the evolution of quantitative data, as well as the effect of the actions contained in a Plan, is the basis for updating the Plan itself. Based on this evidence, it is possible to review some of the proposed actions, correcting, integrating, and modifying them so that they make it possible to achieve the set objectives in the medium to long term.

Expected benefits:

- better respond to local needs and changes, with constant updates
- chance to modify actions according to actual needs
- establish transparent communication on the progress of the Plan
- monitor the effects of the Plan

Challenges:

- need for constantly updated data to monitor effects
- constant effort by the organisation to keep the Plan up to date

Suggestions:

- Work in agreement with Cesena's SUMP to define useful indicators for monitoring
- define a timeline for updating the Plan and collecting the necessary data

Action 4.C - Improve the collection, analysis and sharing of mobility data and best practices

Facilitating the exchange of data and knowledge makes it possible to increase management efficiency, improve the quality of decisions, and stimulate innovation to promote the overall development of the territory. In addition, collaboration and mutual learning between municipalities would be promoted.

The exchange of information, data and best practices are a valuable resource that can be made available to other municipalities, as well as the sharing of administrative and procedural processes that have enabled the development of a particular initiative. Often, the implementation of innovative solutions requires a great deal of effort in terms of resources and organization on the part of an administrative body, as it is an unexplored area that needs to be studied and investigated in depth. Making this knowledge available to other entities that would like to replicate the same measure could save them time and resources, providing an excellent starting point for adapting that good practice to their local context.

Expected Benefits:

- collecting and sharing all data relating to the supply and demand of mobility available in the area allows us to understand the current situation and study the needs and requirements
- sharing information by open online platform allows citizens to access information, documents, and resources useful for their mobility choices;
- organizing regular meetings between municipal representatives to facilitate the direct exchange of experiences, ideas and solutions allows new possibilities to be explored and innovative initiatives to be launched based on the others' lessons learned;

Challenges:

- collecting, integrating, and updating data from several sources, with different formats and structures, can be complex and require time and resources;
- lack of participation in regular meetings to share information may compromise the overall effectiveness of the initiative and limit cooperation between municipalities.

Suggestions:

- the process can be standardized by proposing formats for data collection;
- best practices can be classified and collected by considering examples with distinct characteristics;
- the creation of a digital portal that is open for consultation and easily accessible can facilitate the dissemination of best practices and data consultation.

Strategy 5 | Promote the cycling tourism potential of the valley

Action 5.A - Establish a network of accommodation facilities and activities related to cycling tourism

The Savio Valley has strong tourism potential, and recent years have seen growing demand for cycling tourism in particular. For this reason, it is useful to promote the dialogue between the various tourism operators in order to strengthen the overall tourist services offered in the area. In fact, the development of tourist services in terms of food and accommodation, when combined with the potential for cycling tourism, can attract an increasing number of tourists to the area, particularly those interested in cycling.

In this sense, the involvement of tourism operators is crucial: they can, for example, include packages in their offers that combine sustainable mobility with specific local cultural and gastronomic experiences, thereby strengthening the attractiveness of the area through the development of responsible and specific tourism.

This contributes to an integrated vision for the area, where sustainable mobility also becomes a resource for economic development. The topic has been already discussed in the UVS Cycling plan “*Ciclovia del Savio*” written in 2022, where a concrete plan to develop cycle paths, itineraries as well as bike parking and other initiatives across the whole valley was laid out.

Expected benefits:

- promotion of more sustainable tourism through a broader and more diversified offering, attracting visitors who are sensitive to environmental issues;
- strengthening cooperation between local operators (public and private);
- possibility of virtuous economic synergies thanks to new business opportunities linked to sustainable mobility;

Challenges:

- slowdown in initiatives due to lack of coordination between stakeholders;
- medium- to long-term process, requiring time for economic operators to see a return on their initial investment;
- the lack of sustainable mobility infrastructure (charging stations, cycle paths, electric vehicles) may weaken the area's appeal for cycle tourism.

Suggestions:

- public-private partnerships to develop integrated solutions and share resources, encouraging private investment (e.g., supporting tourism operators in investing in sustainable infrastructure, such as charging stations, etc.);
- creating tourism packages and targeted communication campaigns on the theme of cycle tourism to attract visitors;
- mapping local entities to identify operators active in the tourism sector in the area.

Action 5.B - Promote the Ciclovia del Savio as a prominent tourist destination

The Savio Cycle Route represents a crucial element for the development of local cycling and hiking itineraries of secondary importance. The average length of the entire route in the area studied is approximately 105 km, extending from the centre of Cesena to Balze di Verghereto, connecting all the main urban centres in the valley and public transport services. From Mercato Saraceno to Bagno di Romagna, the cycle route becomes important not only in regional planning but also at the national level.

Given the valley's potential for cycle tourism, it is important to promote the area's bike-friendly identity. It is therefore necessary to start a process of developing a cycling tourism product for the valley, which could be achieved, for example, through a rebranding of the area, starting from the existing *Valle Savio Bike Hub* project. To promote this cycling tourism model, communication and marketing initiatives could be implemented to attract new users.

Expected benefits:

- promotion of the natural heritage of the area
- enhancement of the cycling tourism potential of the valley

Challenges:

- need to allocate resources for advertising campaigns to be disseminated outside the area
- need to equip cycle routes with services for tourists

Suggestions:

- organize advertising campaigns to promote the Valley and its cycle paths

Action 5.C - Equip the Ciclovía del Savio with rest and recreational areas and informative signage

To support the user experience, the Savio cycle route should be equipped with service points, i.e. locations designed to provide cyclists with services or assistance. These can include rest areas, such as spaces supplied with benches, drinking fountains and shaded areas, or facilities designed for assistance, equipped with e-bike charging points and equipment for minor maintenance (such as air pumps). These areas may be supplied with shelters that allow cyclists to take cover in the event of adverse weather conditions, such as sudden storms, as well as emergency call points for reporting accidents, assaults, and other dangers.

Providing services of this kind offers practical help to cyclists in resolving those inconveniences that would otherwise detract from their cycling experience. It is advisable to provide stations for minor maintenance of this kind at regular intervals along the cycle route that has been created.

Equally important to the cyclist's experience is the availability of clear, high-quality directional signage. Communicative signage is a key element of cycling infrastructure, as it ensures visibility, clarity, and wayfinding. In Italy, unlike in other European countries, there is no specific signage dedicated to cycling. Brown-background signs relating to tourism promotion are often used. To overcome this limitation, directional signs could be installed along the routes as required by the regulations, and additional informative signs could be added to these. These could be designed in line with the visual identity of the signage in Cesena's Cycling Mobility Plan. This approach could ensure continuity across the area and could be integrated with the inclusion of elements consistent with the visual identity of the Savio Cycle Route (e.g. logo, colours, etc.).

Expected Benefits:

- more services and a better user experience for cyclists;
- creation of a brand and a strong visual identity to promote cycle tourism.

Challenges:

- need to allocate part of the budget to signage and communication initiatives;
- need to provide equipped rest areas.

Suggestions:

- rest and refreshment areas may have a minimum level of provision to be implemented over time in accordance with a financial plan. Similarly, it is possible to start with a minimum number of equipped areas, with plans to add new ones over time;
- communication signage can be developed in line with the provisions of Cesena's cycling mobility plan.

Strategy 6 | Promote and diffuse the culture of sustainable mobility

Action 6.A - Create awareness campaigns to educate citizens on the benefits of sustainable mobility

Promoting a culture of sustainable mobility can lead to a significant reduction in car use in favour of public transport. As already discussed, however, the implementation of infrastructural change or economic incentivization actions might not be sufficient when such measures are not accompanied by proper communication to inform citizens about their existence, their scope and, more importantly, to promote their use especially among non-PT-users.

In fact, a lack of communication can cause confusion and lead to discontent among citizens if they are not informed about the changes that are proposed or about to take place. It is therefore necessary to communicate clearly and simply what is being done and why, so that changes can be welcomed, recognized, and accepted.

In this context, proper communication and awareness initiatives are paramount to make “hard measures” more meaningful and effective.

To this purpose, various initiatives can be put in place, among which some prominent examples include:

4. Create awareness campaigns to educate citizens about the benefits of sustainable mobility, highlighting the negative impacts of excessive car use on the environment, health, and quality of life, as well as to provide ideas and guidance towards sustainable mobility choices. Campaign tools can be vastly different in tools and messages and can include the use of websites, billboards and promotional items, aimed at promoting the message through a recognisable, coordinated visual identity that can be diffused in the area.
5. Organize events and initiatives focused on sustainable mobility, such as car-free days or bicycle festivals, to promote alternatives to car use. In this regard, the UVS could be promoted as a territory that incentivizes sustainable mobility as a substitute for private car use.
6. Develop of a comprehensive informative and motivational package covering all available mobility solutions to and from the Unione Valle Savio area, tailored as far as possible to specific user groups (students, commuters, elderly residents, etc.). This type of action is particularly suited to contexts requiring the physical presence of staff and users on-site, such as industrial and hospital facilities, universities, and schools, as well as service and retail businesses but also tourism offices.

Expected Benefits:

- Promoting a culture of sustainable mobility can lead to a significant reduction in car use in favour of public transport, cycling, and walking;
- Reduction of systematic commuting costs over the long term.
- Greater social and territorial cohesion, driven by a perceived increase in attention to residents' individual needs.
- Enhanced attractiveness of the local area, making it more competitive and appealing as a place to live, work and study.
- Increased capacity to retain residents who might otherwise have considered relocating to a better-connected municipality.

Challenges:

- Cultural resistance: the ingrained habit of using cars and the perception that they are the most convenient and safest mode of transport could make it difficult to change mobility habits;
- Promoting a range of mobility alternatives delivered by different operators poses a coordination challenge, as well as the need to present them through a single, coherent information platform.
- The likelihood of choosing alternatives to private car use increases when access to other modes of transport becomes easy and immediate; careful consideration should therefore be given to the pricing and cost structure of the proposed services. In fact, the limited availability of alternatives to the car hinders the effectiveness of communication initiatives, which cannot be expected to make the heavy lifting part of the job of changing mobility habits.
- It is necessary to allocate a budget for communication activities, which must be effective and continuous. This expense can be significant for public municipalities

Suggestions:

- Allocate proper budget to communication activities to increase their effectiveness.
- involve local associations, schools, organizations, and tour operators, transportation companies, and other institutions to share organizational efforts and create more complex events
- organize fun, engaging, and accessible activities to attract a wider audience
- Regularly monitor service uptake and satisfaction levels by engaging both direct and indirect users,

Action 6.B - Provide financial incentives for sustainable mobility

When aiming at reducing private car use, consideration should be given to a plurality of tools to introduce financial incentives to encourage more sustainable transport choices through the cost leverage.

In practical terms, this could involve, for example:

- offering discounts on public transport season tickets: this initiative could be implemented with the support of local councils for certain economically vulnerable groups, or it could be introduced by companies, offering their employees season tickets as a gift or at a reduced rate;
- similarly, a sample group of people could be given free public transport season tickets to attract new users. With a free trial, some people might choose to consider an alternative mode of transport by trying it out for themselves;
- other financial incentives could relate to the purchase of bicycles and electric vehicles;
- finally, incentive schemes such as ‘bike-to-work’ could be organised, whereby employees who cycle to work receive a reward. Such schemes are widespread not only abroad but also in many Italian towns, including Cesena itself. This initiative could therefore be promoted more widely and its resources bolstered with private sector contributions, so as to involve more people;
- similarly, ‘bus-to-work’ schemes could be introduced, encouraging people to use local public transport to get to work.

Expected Benefits:

- spark interest in the topic
- overcome resistance to change by offering financial incentives that can help offset the cost of switching to alternative modes of transport
- make the transition more enjoyable and pleasant
- support and guide users through the transition

Challenges:

- cultural resistance
- the need to set a budget

Suggestions:

- establish a partnership between public and private bodies in order to secure the necessary resources
- persevere despite low commitment: even a small number of people at the initial stage can help drive change

Action 6.C - Organize events to educate and inform about mobility projects and initiatives

In addition to communication campaigns, more practical and interactive measures can also be implemented to draw attention to mobility issues and engage citizens, such as:

- recurring events or appointment, such as ‘cycle Sundays’ or days dedicated to the use of public transport, or themed festivals on cycle tourism
- small challenges or competitions, organised by businesses or in schools, aimed at promoting sustainable mobility alternatives through fun activities with prizes
- events with a greater impact at national and international level, such as European Mobility Week, by organising local events geared towards promoting a sustainable model

Expected benefits:

- Promoting a culture of sustainable mobility can lead to a significant reduction in car use in favour of public transport, cycling, and walking;
- Events can draw more people into the subject, including those who find themselves involved without having any real interest.

Challenges:

- Cultural resistance: the ingrained habit of using cars and the perception that they are the most convenient and safest mode of transport could make it difficult to change mobility habits;
- The limited availability of alternatives to the car hinders the use of public transport and active mobility;
- Changing habits is a process that takes a long time to achieve (at least 5-10 years)

Suggestions:

- Allocate part of the budget to communication and organise local campaigns;
- Organise an event to promote sustainable mobility that could become a landmark for the local area, with a highly recognisable and distinct identity, perhaps capable of attracting people from outside the area as well;
- Use the visibility of European Mobility Week to organise events aimed at informing citizens about the activities and projects currently underway in the local area.

Measurable targets & KPIs

Monitoring of mobility plans enables public administrations to assess the effectiveness of interventions over time, identify the strengths and weaknesses of the strategies implemented, and provide transparent information to citizens, stakeholders, and policymakers. In a context where sustainable mobility aims to improve the quality of life of citizens, reduce private car use, and promote more efficient and inclusive solutions, monitoring becomes a tool to continuously communicate that plans are not merely on paper but are actually being implemented. It thus becomes, in itself, a communication instrument capable of justifying policies and encouraging behavioural change.

Although monitoring is a fundamental requirement for any well-designed plan, in practice it often faces several challenges. In fact, regularly measuring results over time can be difficult to implement, even in highly structured administrative contexts. One reason is that the KPIs commonly tracked tend to be quantitative, which are often the most complex and costly to collect. Moreover, these indicators do not always fully align with the realities or the specific aspects of the scenario that the plan intends to capture.

In contexts such as the UVS, it is important to recognize that improvements resulting from implemented policies often occur on a small scale. Achieving a critical mass of awareness around issues such as sustainability and reducing car use can be challenging, particularly in areas where private car travel remains almost essential due to a lack of flexible alternatives. It is precisely for these reasons that this plan has been accompanied by a monitoring framework designed to be simple yet appropriate for the context. **The monitoring framework consists of five indicators, four qualitative and one quantitative.** Furthermore, given that the target population includes a sizeable proportion of older residents, the monitoring system has been designed with simple, pragmatic indicators that can measure potential changes while remaining realistic, feasible, and easily communicable.

The **qualitative indicators** explore the **user experience of public transport, intermodality, the willingness to shift towards transport modes other than the private car, and the ability to access essential services without using a car.** The only **quantitative indicator**, on the other hand, measures the **increase in demand for the public transport service**, i.e., the annual growth in the number of tickets and subscriptions sold.

Table 1 provides a summary overview of the monitoring framework of the Action Plan, while the details of each KPI are presented below.

KPI	KPI type	Output Unit of Measure	Targeted Direction	Source
Public transport usage	Quantitative	Annual Trend value	Increase in quantity users	Start Romagna, local public transport company
Public transport user experience	Qualitative	% distribution of responses by rating category	Quality improving	UVS annual survey
Intermodality experience	Qualitative	Identification of main “breakpoints” by textual description	Quality improving	Experience diary for at least one month
Changes in travel behaviour	Qualitative	% distribution of responses by rating category	Quality improving	UVS annual survey
Perceived accessibility to essential services	Qualitative	% distribution of responses by rating category	Quality improving	UVS annual survey

Table 1 Summary Overview of the monitoring framework.

1. Public Transport Usage

What it measures: Actual demand for public transport.

Type of indicator: quantitative.

How to measure it: number of tickets sold and number of subscriptions (season passes) sold, with a breakdown excluding student subscriptions (as students represent only a minor target group of the plan).

Data source: Start Romagna, local public transport company service.

Output: annual trend (increase/decrease).

2. Public Transport User Experience

What it measures: overall perceived quality of the public transport service.

Type of indicator: qualitative.

How to measure it: single-question survey with the possibility to provide additional details through an open-ended follow-up response.

“How would you rate your overall experience using public transport in the Savio Valley?”

Response scale:

- Positive
- Fairly positive
- Neutral
- Fairly negative
- Negative

Data source: annual survey.

Output: percentage distribution of responses by rating category, plus qualitative insights on main critical issues (from comments).

3. Intermodality Experience

What it measures: ease of combining different transport modes, particularly to/from Cesena (main hub).

Type of indicator: qualitative.

How to measure it: Single-question survey designed to drive the monitoring process.

How easy is it to complete your journey using more than one mode of transport? When answering, please consider your overall travel experience, including aspects such as connections between extra-urban and urban bus services, ease of carrying bicycles on board, safety, and comfort of waiting areas at stops, as well as journey continuity and travel times.

Data source: short travel diaries based on small samples (approx. 5–7 users). Completion is required for each travel experience involving multiple modes of transport, over a minimum observation period of one month.

Output: identification of main “breakpoints” (e.g. long waiting times, lack of connections, difficulty in transporting bicycles, absence of interchange points).

4. Changes in Travel Behaviour

What it measures: Whether individuals are starting to reduce car use, even partially.

Type of indicator: qualitative.

How to measure it: key survey question.

“Compared to 12 months ago, have you reduced your use of the car for at least some of your trips?”

Response scale:

- Yes, frequently
- Yes, occasionally
- No

Data source: UVS annual survey.

Output: percentage of respondents reporting a reduction, by municipality.

5. Perceived Accessibility to Essential Services

What it measures: how easy it is to access key services (healthcare, public services, basic retail, and Cesena) without using a car.

Type of indicator: Qualitative

How to measure it: Simple survey question.

“Are you able to reach the basic services you need without using a car?”

Response scale:

- Yes, easily
- Yes, with difficulty
- No

Data source: UVS annual survey.

Output: percentage of “car-dependent” population, by municipality.

Conclusions

The present Action Plan has been derived from the conclusions of the stakeholder workshop, which has provided a shared vision and also several concrete suggestions of potential actions to implement. The action plan has therefore devised six strategies to work on based on the indications from the participant and the emerged needs of the territory. Each of these strategies has been further developed into concrete and specific actions.

Each action has been described in general function and targets, expected benefits and challenges; moreover, a few suggestions have been also reported about the aspects to be more closely monitored and the processes to follow towards the implementation of each action.

While not “conclusive” (as no plan ever is), the hope is that the present plan can help local stakeholders both at public and private level to initiate several concrete actions for the transition towards a more sustainable mobility in the Unione Valle Savio.