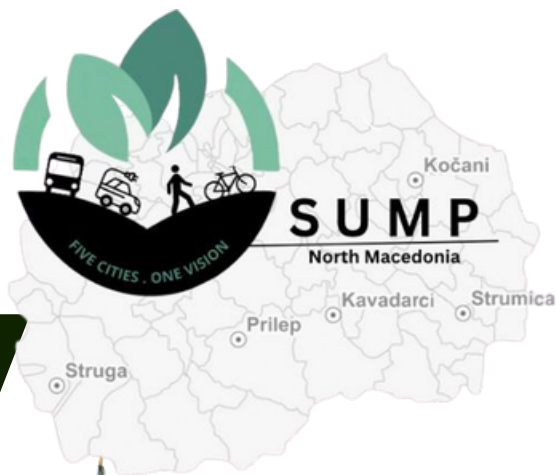
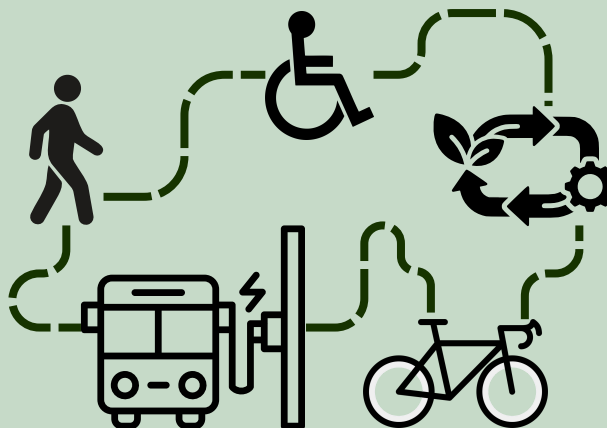


Sustainable Urban Mobility Plan 2027/2037



PRILEP




Republic of North Macedonia
Ministry of Transport

 **BOGAZICI
PROJE A.S.**

 **TRT**

Sustainable urban Mobility plan for Prilep, is developed by the Technical Assistance for Development of Sustainable Urban Mobility Plans for five Municipalities and providing training on developing and implementation of Sustainable Urban Mobility Plans (RFP No: LRCP-9034-MK-REOI-CS-CQS-A.1.1.5) within the framework of the Local Road Connectivity Project (LRCP) No. P170267 which is financed by loan from the International Bank for Reconstruction and Development – World Bank and implemented by the Ministry of Transport – Project Implementation Unit.

Project Team

Tito Stefanelli – Team Leader – TRT
Yücel Erdem Dişli – Deputy Team Leader – BP
Vardhman Lunkar – Transportation Planner – TRT
Murat Mat- Transportation Planner – BP
Seda Kadioğlu – Urban Planner – BP
Andon Petrovski - Local Expert
Filip Trajkovic – Local Expert

Project Steering Committee (PSC)

Гоце Бојкоски – Координатор – Општина Прилеп
Винета Ивановска – Заменик координатор – Општина Прилеп
Снежана Ристеска - Член – Општина Прилеп
Маја Бешировска - Член – Општина Прилеп
Горанче Јошески - Член – Општина Прилеп, ЈП за ПУП
Катерина Спиркоска - Член – Општина Прилеп, ЈП за ПУП
Илија Беличоски - Член – Општина Прилеп
Владимир Димески - Член – Општина Прилеп
Катерина Ристевска - Член– Општина Прилеп
Златко Петровски - Член – Општина Прилеп
Горан Стојаноски - Член – Општина Прилеп
Валентина Недеска - Член – Општина Прилеп
Методија Зајкоски – Член – Општина Прилеп, надворешен експерт
Златко Сиљаноски – Член – Општина Прилеп, ПС Прилеп - Сектор сообраќај
Благојче Макалоски – Член – Општина Прилеп, ПС Прилеп - Сектор сообраќај

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Glossary

ASI	Avoid/Reduce, Shift/Maintain, Improve
BAU	Business-As-Usual
CO	Carbon Monoxide
CO₂	Carbon Dioxide
EU	European Union
ITS	Intelligent Transport Systems
KPI	Key Performance Indicators
MOMOS	Sustainable MObility MOdel
NGO	Non-Governmental Organisation
NOX	Nitric Oxide (NO) and Nitrogen Dioxide (NO ₂)
PCIU	Project Coordination and Implementation Unit
PM_{2.5}	Fine Particulate Matter
PSC	Project Steering Committee
PT	Public Transport
RoP	Rules of Procedures
SMART	Specific, Measurable, Achievable, Realistic, and Time-Bound
SUMP	Sustainable Urban Mobility Plan
ToR	Term of Reference

1 Executive summary

The Sustainable Urban Mobility Plan (SUMP) for Prilep provides a coherent, evidence-based roadmap to improve accessibility, safety, public health and quality of life while supporting a cleaner and more resilient local economy. Developed in line with SUMP principles, the process combined technical analysis with structured stakeholder participation, ensuring that priorities reflect local needs and implementation realities.

The baseline assessment confirms that Prilep faces typical mobility pressures for a regional center. Private motorized travel remains dominant, while walking is important but not consistently supported by high-quality, continuous and fully accessible infrastructure. The vehicle fleet is largely fossil-fuel based, with 22,203 registered vehicles and a high share of diesel vehicles. Road safety remains a major challenge, with recorded fatalities and serious injuries indicating that vulnerable users require stronger protection through safer street design, speed management and improved crossings. Transport-related emissions and local air quality concerns further reinforce the need for modal shift and cleaner technologies.

Building on this diagnosis, Prilep's shared long-term vision is to become a safe, inclusive and people-centered city, where residents can move easily and affordably, supported by cleaner air, greener streets and efficient, sustainable transport options. This vision is operationalized through strategic objectives and an indicator set aligned with long-term outcomes: higher use of sustainable modes, reduced car dependency, lower emissions and improved road safety.

To translate the vision into an implementable pathway, three scenarios were developed and assessed: Business-as-Usual (BAU), Alternative Scenario 1 (AS1 – Moderate Transition) and Alternative Scenario 2 (AS2 – Ambitious Transition). Measures were prioritized through a Multi-Criteria Analysis and combined into scenario packages for modelling. Scenario evaluation using the MOMOS strategic model shows that both policy scenarios deliver clear improvements compared to BAU, particularly for emissions and safety. Quantified outcomes by the horizon year include reductions in greenhouse gas emissions, air pollutants and road casualties, with AS2 delivering the strongest environmental performance but requiring a higher implementation effort.

Based on performance, feasibility and stakeholder alignment, the plan adopts AS1 as the Preferred Scenario. AS1 balances realistic delivery capacity with meaningful impact, aiming to reduce car dependency, strengthen public transport, expand cycling, improve walkability and safety outcomes, and reduce emissions through an integrated package of measures that can be phased and financed within the local context.

The Action Plan consolidates interventions into ten policy areas: walkability and accessibility, public transport, urban cycling, access regulation and traffic calming, road networks, parking system, mobility management, electric mobility, urban freight transport, and public awareness and engagement. Measures are sequenced through short- and medium/long-term programs, supported by governance arrangements, financial planning and a monitoring framework.

Overall, the Prilep SUMP sets a clear direction: deliver safer and more livable streets, provide attractive alternatives to private car use, improve the reliability and accessibility of public transport, and enable walking and cycling as everyday modes. Through phased implementation and continuous monitoring, the plan offers a credible route to a more sustainable, inclusive and economically vibrant Prilep.

2 Introduction and Presentation

This Final Report provides a concise, decision-oriented summary of the Sustainable Urban Mobility Plan (SUMP) for Prilep. It synthesizes the outputs prepared across Tasks 1.1–1.5, covering the planning framework and stakeholder engagement, the baseline mobility assessment, strategy and scenario development, measure selection, action planning, implementation approach and the monitoring framework.

A Sustainable Urban Mobility Plan is an integrated planning instrument that coordinates land-use and transport measures to improve accessibility and quality of life. It promotes safer streets, healthier travel choices and a more efficient use of urban space, while supporting climate and air-quality objectives. In Prilep, the SUMP focuses on practical solutions that can be delivered through phased programs aligned with local capacity and investment priorities.

The SUMP area of analysis and intervention is defined as the functional urban area, recognizing that daily travel patterns often extend beyond administrative boundaries. The planning boundaries were discussed and refined with the Project Steering Committee (PSC) to ensure that the plan addresses the core urban area as well as surrounding areas that interact with the city. The resulting study area incorporates the functional urban area together with the municipality's administrative boundary and the General Urban Plan boundaries.

The planning process was organized through a clear governance structure, including the establishment of a PSC and a participatory program tailored to Prilep's stakeholder landscape. Stakeholder analysis and mapping informed the selection of engagement tools such as meetings, workshops and consultations, complemented by communication and feedback mechanisms (including online channels) to ensure transparency and continuous input throughout the SUMP cycle.

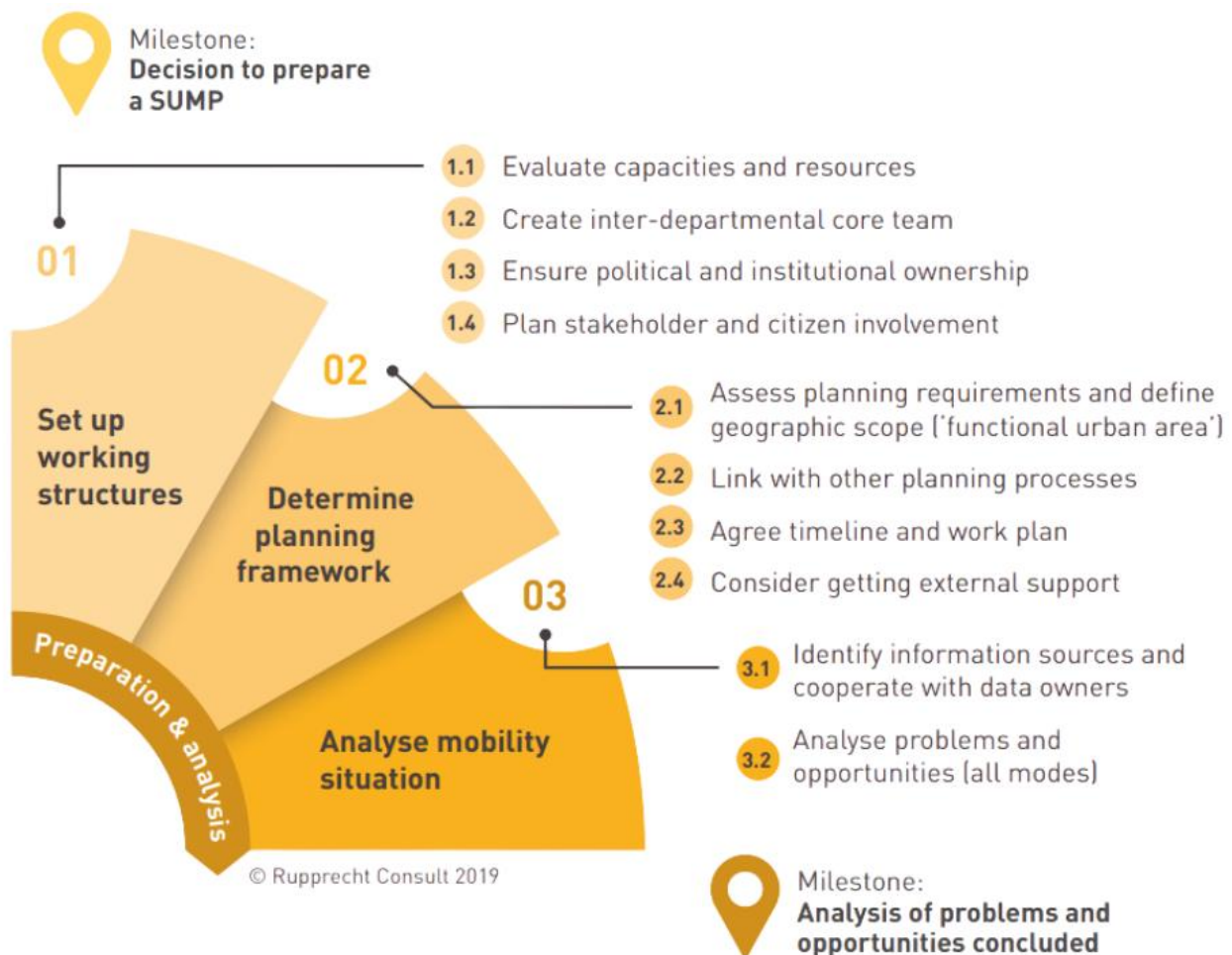
This document is structured to mirror the SUMP cycle and to support quick orientation for decision-makers. Chapter 3 summarizes the preparation and analysis work and the key baseline findings. Chapter 4 outlines the strategy development phase, including the vision, objectives, indicators and targets. Chapter 5 explains measure packaging and scenario evaluation leading to the preferred scenario. Chapter 6 presents the Action Plan organized by policy areas. Chapters 7 and 8 describe implementation planning, financing considerations and the monitoring and evaluation approach. Chapters 9–11 provide the conclusion, references and annexes.

3 Preparation and Analysis Phase

Preparation and analysis form the evidence base of the Prilep SUMP. During this phase, the project established the working structure and decision-making arrangements, clarified stakeholders and agreed a participation program, and compiled the baseline diagnosis of the current mobility system.

The phase served three functions. First, it ensured that governance and responsibilities were clear so that the process could move efficiently from analysis to decisions. Second, it built shared ownership through structured engagement and transparent communication. Third, it produced a consolidated baseline dataset that allowed priorities, objectives and measures to be tested against real conditions rather than assumptions.

The outputs of this phase were used to identify key problems and opportunities, validate priorities with local actors and ensure that subsequent strategy development and measure planning were grounded in reliable data and a shared understanding of constraints and deliverability.



3.1 Establishment of Working Structure

A clear governance and coordination structure was established to manage the SUMP process and to support timely decisions. The Project Steering Committee (PSC) serves as the core platform for coordination between the Municipality, relevant institutions and the consultant team. The PSC ensures that technical work is aligned with local priorities, that necessary inputs are provided throughout the SUMP cycle, and that the plan remains implementable within Prilep's institutional and financial context.

The PSC operates under agreed Rules of Procedure, including arrangements for meeting convocation, quorum, documentation and decision-taking. A designated SUMP Coordinator chairs the PSC, organizes meetings and agendas, ensures continuity through substitute members where needed, and may invite external experts when additional technical input is required (e.g., road safety, public transport operations, air quality, urban design).

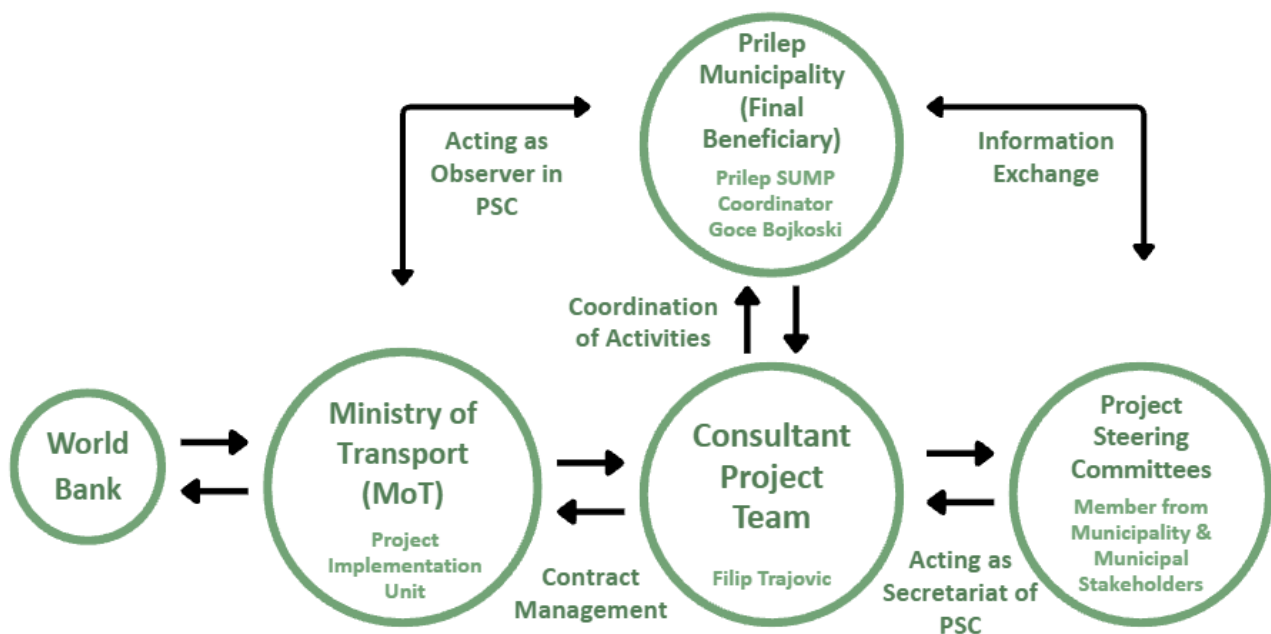


Figure 1. Project Management

In practical terms, the working structure was designed to avoid a “report-only” exercise by linking analysis and drafting to decision points. Draft deliverables were presented to the PSC for validation, and feedback was integrated before moving to the next phase. This approach strengthened accountability and reduced the risk of late-stage changes.

Key functions of the PSC and working structure include:

- guiding and validating the SUMP process and deliverables, ensuring consistency with sustainable mobility principles and local needs;
- facilitating access to municipal and national data, plans and studies required for analysis and option development;
- supporting inter-department and inter-institutional coordination to resolve issues and enable implementation readiness;
- ensuring that PSC conclusions are communicated within relevant institutions and followed up through agreed actions.

3.2 Stakeholder Clarification and Participation Program

Stakeholder clarification and participation planning were carried out to ensure that the SUMP reflects local needs and builds broad ownership. A stakeholder mapping exercise identified key public institutions, service providers, businesses, civil society and citizen groups, including the needs of vulnerable and disadvantaged users. Based on influence and interest, stakeholder roles were defined to ensure that technical discussions, policy choices and public communication all reached the right audiences.

The participation program combined structured events (PSC meetings, thematic workshops and consultations) with continuous communication channels to promote transparency and encourage feedback. Digital tools (municipal web content and social media) were used to announce events, share progress and provide accessible information to the wider public, ensuring that engagement extended beyond formal meetings.

Engagement was designed to support the full planning cycle:

- Information and diagnosis: presenting baseline findings and collecting local insights on problems and priorities;
- Strategy formation: co-creating the long-term vision, agreeing strategic objectives, and discussing indicators and target directions;
- Measure development and prioritization: refining measure packages, assessing feasibility and impacts, and aligning proposals with local capacity;
- Public consultation: capturing user experience through surveys and open feedback channels and ensuring that measures respond to everyday mobility needs.

By linking engagement to decision points and deliverables, the participation program supported both legitimacy and technical quality, helping the SUMP move from analysis to an implementable Action Plan.

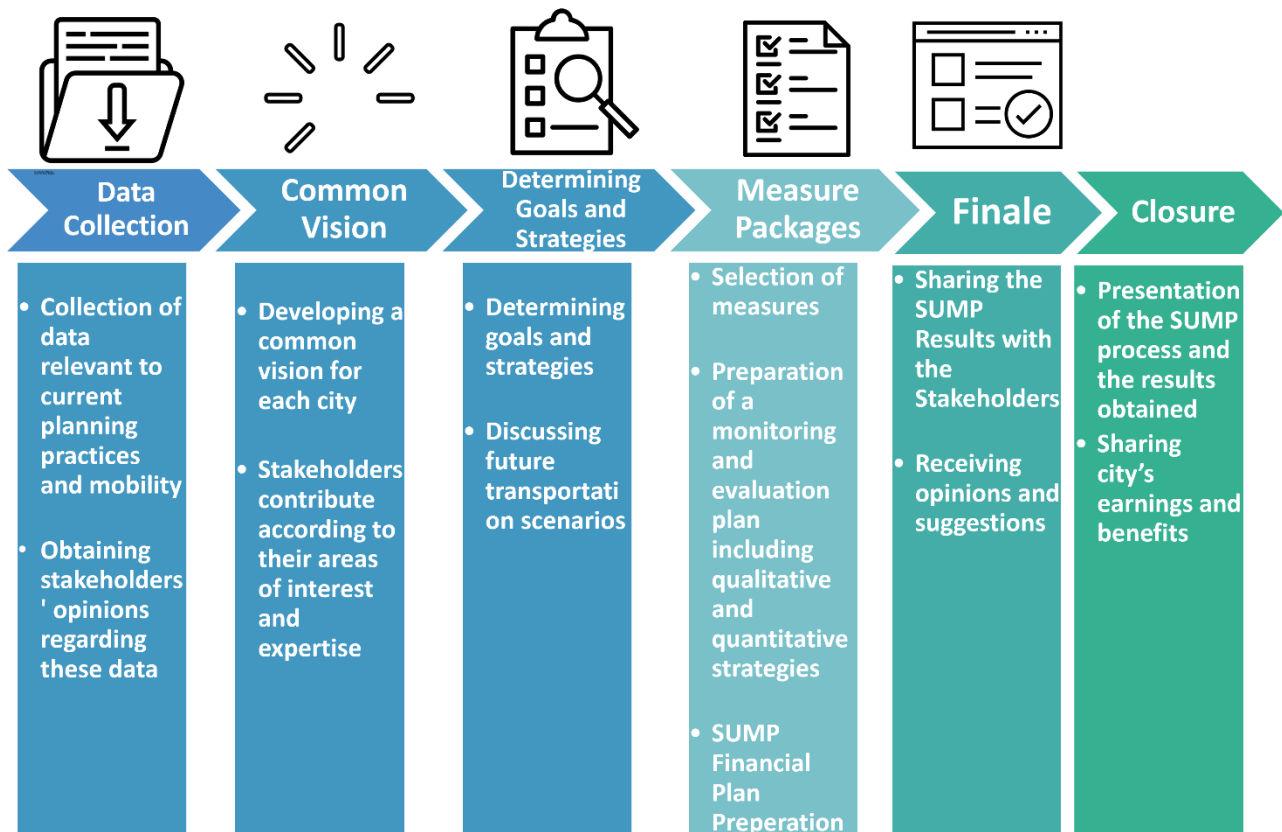
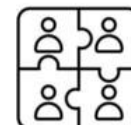


Figure 2. Stakeholder Engagement Process

3.3 Analysis of Mobility Status



3.3.1 Sociodemographic Structure

The mobility status analysis compiled available municipal and national data, reviewed existing plans and programs, and combined this with network assessment and on-the-ground observations. The assessment covered public transport, walking and cycling conditions, road network characteristics, traffic and parking, road safety and environmental aspects related to transport.

Before evaluating the current transportation habits of Prilep, data on the sociodemographic structure related to travel habits were compiled. The sociodemographic structure of the city was analyzed considering the official statistics of North Macedonia. The following tables and graphs show the sociodemographic profile of Prilep in numbers.

City Population	Population	69,025
	Household Number	24,607
Household	Household Size	2.81
Disability Status	Disabled People (%)	7.42%
	Employed (%)	36.0%
Working Status	Unemployed (%)	20.6%
	Literate (%)	95.5%
Education Status	Illiterate (%)	1.4%
	Unknown (%)	3.2%
Income	Average Household Income	450.600 mkd

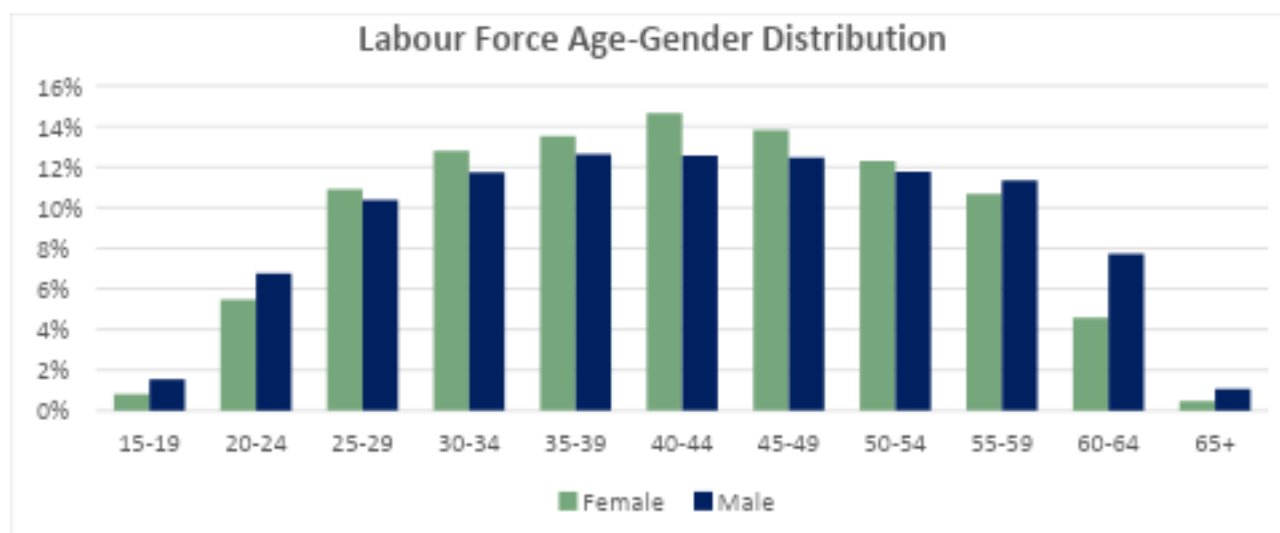
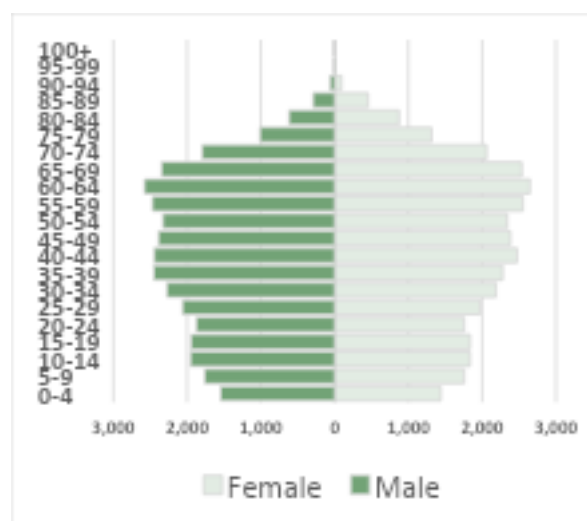


Figure 3. Prilep Sociodemographic Structure

Prilep's functional area includes 69,025 residents (2021). The urban population is around 63,308 and households number approximately 24,600, with an average household size of 2.81. The 92% of the population lives in the urban area of the city. The general women population seemed to be older comparing

with the men. On the other hand, Except the 20-24 year age group the population the number of men in the labour force is more than women.

3.3.2 Mobility Status

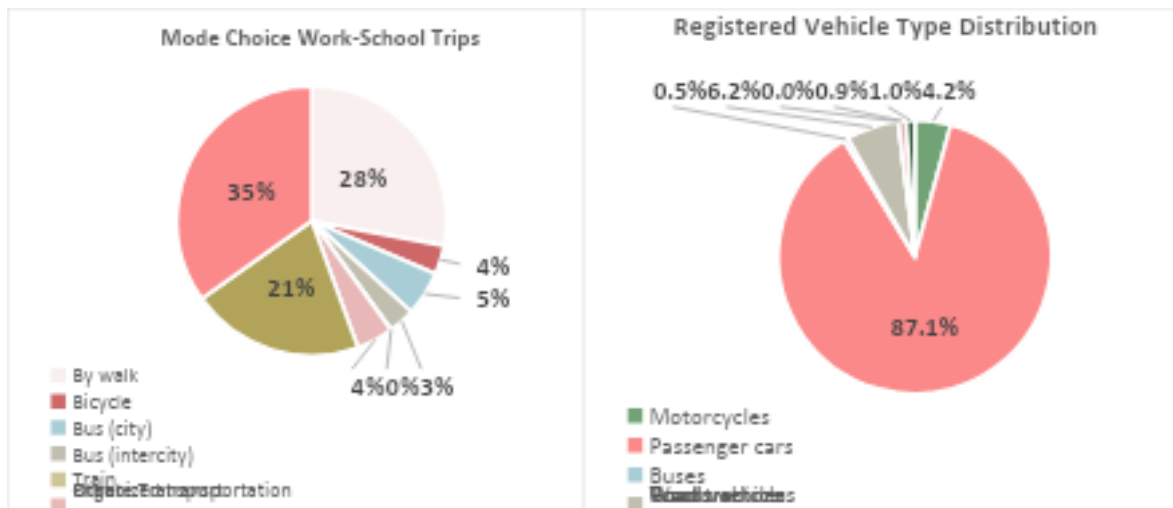
The baseline confirms a strong dependence on private motorized travel, while walking remains important in central areas and around key destinations but requires improved continuity, accessibility and comfort. Cycling infrastructure exists but is limited and fragmented, suggesting that a connected network and safer junction design are necessary before cycling can grow as an everyday mode.



Key baseline findings include:

- **Vehicle fleet and motorization: 22,203 registered vehicles;** diesel accounts for 57.8%, petrol 28.3% and petrol-gas 13.6%. The motorization rate is reported as 0.56, indicating high car availability relative to population.
- **Road network and traffic:** a significant share of the network requires better maintenance and safer design, with many intersections reported as uncontrolled. Traffic demand is concentrated in and around central areas, amplifying conflicts between cars, pedestrians and public transport.

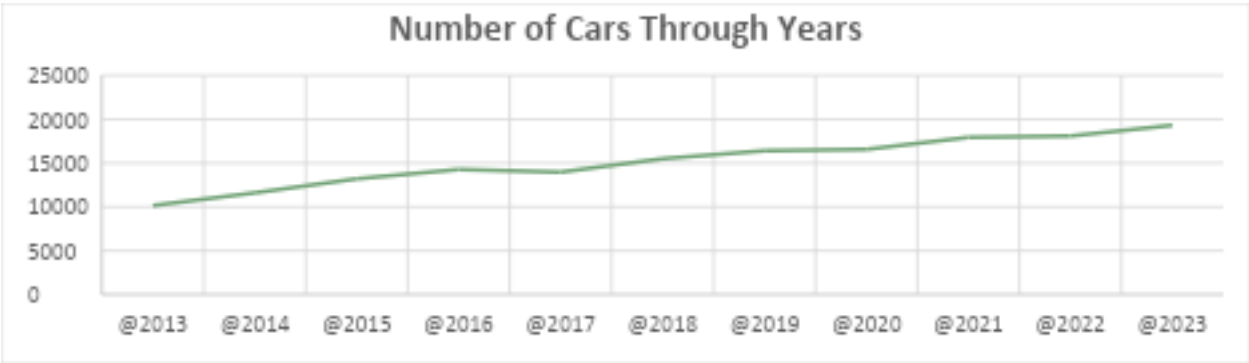
These findings provided the evidence base for the strategy and the selection of the preferred scenario, ensuring that the SUMP targets the city's most pressing and measurable mobility challenges.



Considering the population trends with align to number of registered cars, it can be clearly seen that while the population decreases the registered number of cars has increased throughout recent years.

Table 1. Population and Number of Cars Registered in Years

Year	Population	% (Increase/Decrease)
2002	76768	
2021	69025	-10,1%



- **Public transport:** three urban bus lines with route lengths in the range of 6.8–9.5 km and a **typical frequency of around 60 minutes**. The fleet is limited and ageing, and service quality improvements are needed to increase ridership and reliability.

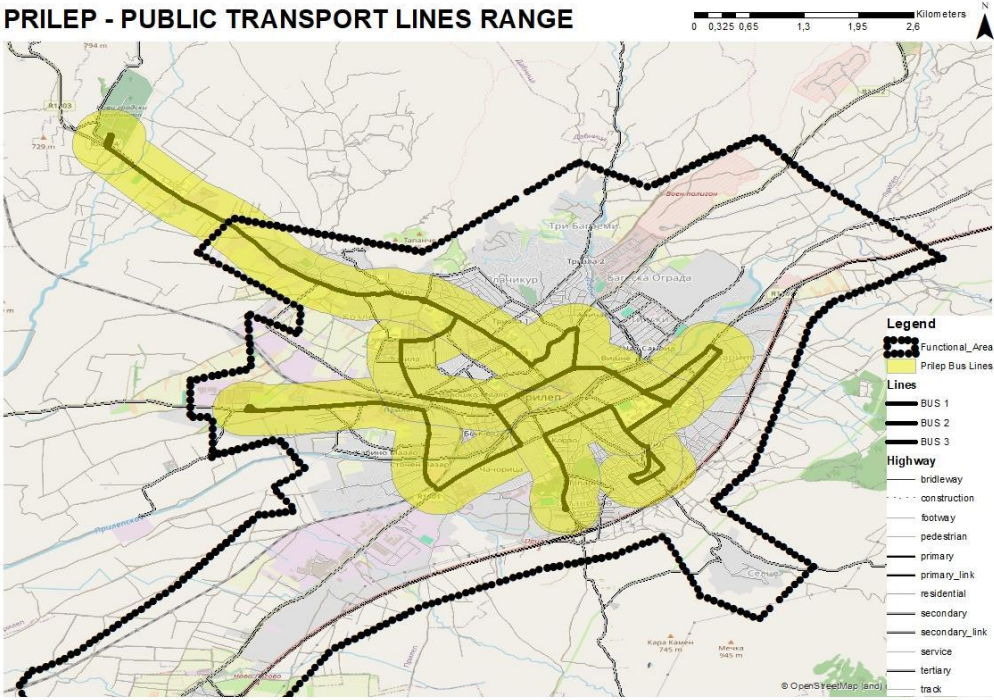
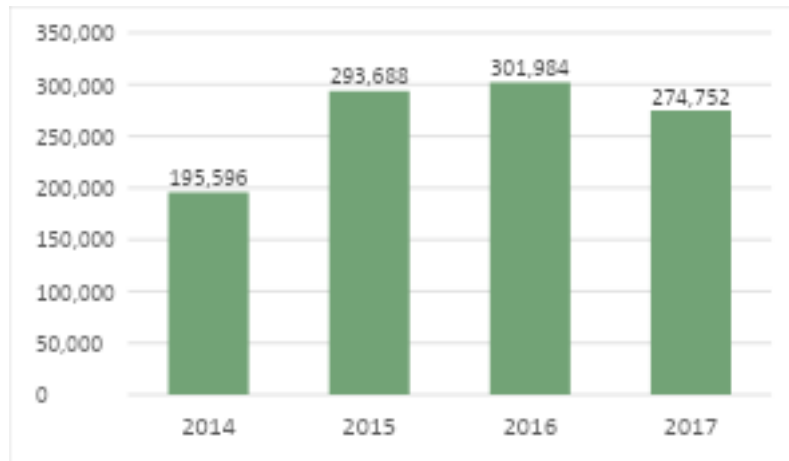


Figure 4. Prilep Public Transport Services Coverage

The figure below contains the yearly public transport passengers of Prilep. According to the study the **average daily public transport passenger** number is around **750 persons** which is considerably low for a system.



Public Transport Network	21,8 km
Annual Vehicle-Km	1.671.537
Average Commercial Speed	15 km/h
Frquency of Bus Services	60 min
Operational Cost (Euro/vkm)	19.0244

Figure 5. Yearly Public Transport Passenger Trips and Operational Features Prilep

- **Walking environment:** key pedestrian areas and destinations include City Center Boulevard, Marko's Tower, the Archaeological Museum, Varosh Park and the Holy Archangel Michael Monastery. Accessibility barriers, crossing quality and network continuity are critical issues for vulnerable users.



- **Cycling conditions:** the existing bicycle system totals **5.6 km** and consists of short, segmented sections, indicating the need for a coherent network approach rather than isolated segments.

City	Bike Line Length (km)	Bike Line Length per 1000 people (km)	Bicycle Use Rate %
Prilep	5,6	0,08	4
Bremen	390	0,69	20
Kopenhag	469	0,76	36
Barcelona	181	0,11	1,5
Melbourne	135	0,89	4

Table 1. Transportation

Infrastructure per 1000 People in Different Cities

Recommended measures include:

- ✓ Physical interventions: sidewalk reconstruction, protective buffers (planting strips, bollards), improved lighting, and upgraded crossings.
- ✓ Traffic management measures: intersection redesigns, speed limit reductions, and traffic calming in pedestrian-priority areas.
- ✓ Regulatory and enforcement measures: stricter penalties and active enforcement against illegal parking and sidewalk occupation.



Implementing these measures is expected to:

- ✓ Improve pedestrian safety and comfort.
- ✓ Support modal shift towards walking.
- ✓ Enhance public realm quality and urban liveability.
- ✓ Ensure compliance with EU accessibility, safety, and sustainability standards.



Road safety: municipal statistics report **8 fatalities** and **30 serious-injury crashes**, reinforcing the need for safer crossings, speed management, intersection treatments and a stronger safety culture.

Table 2. Traffic Accident According to The Transport Mode

Transport Mode	Fatalities	Serious Injury
Walk	0	8
Bike	2	4
Car	4	8
Motorbike	2	10
Bus	0	0
Car Sharing / Taxi	0	0
Trucks	0	0
Total	8	30

- **Parking:** **17 parking areas** are identified, highlighting the importance of structured parking management and enforcement to reduce congestion and support more livable streets. There is no parking management system with respect to the tariffs which leads the citizens to use their cars and occupy the city centre area.



- **Environment:** transport-related air pollutant emissions have been inventoried, and local air-quality planning provides a basis for coordinated actions supporting cleaner mobility. According to the measurement data of the air quality website in the Republic of North Macedonia, created by the Ministry of Environment and Physical Planning, as of January 22, 2025, at 8:00, the pollutant compound of the city of Prilep is considered as low.

Table 3. Prilep Air Quality at 22th January 2025 08.00 am (CET)

City	CO	NO2	Ah3	PM2,5	PM10	SO2
Prilep	Very Low	No Data	Very Low	No Data	No Data	Very Low



Overall, the baseline diagnosis concludes that Prilep's key mobility challenges can be summarized as: high car dependency and limited public transport attractiveness, fragmented pedestrian environment and safety deficits, lack of cycling infrastructure, pressure on public space from parking and traffic dominance, and the need to reduce emissions and improve air quality. These challenges directly informed the strategy, objectives, measure packages and the preferred scenario selection.

4 Strategy Development Phase



This phase transformed baseline findings and stakeholder inputs into a shared long-term direction for Prilep. Through workshops and an online survey, a common vision was defined and translated into strategic objectives, indicators and target trends. A scenario framework was also developed to test alternative development paths and to support an implementable package of measures.

4.1 Common Vision Practice

A common vision for Prilep's mobility future was co-created through stakeholder engagement and consultation. The vision process aimed to capture the city's long-term aspirations while remaining grounded in what is deliverable and measurable. Inputs were collected through structured workshops, PSC discussions and public-facing channels, ensuring that both institutional perspectives and everyday user experience informed the final direction.

The agreed vision emphasizes a safe and inclusive city where sustainable modes are attractive, affordable and accessible, supported by cleaner air and greener streets. It also reflects the need to improve reliability and user experience for public transport and to create a walking and cycling environment that is continuous and comfortable across neighborhoods.

"Prilep envisions a safe, inclusive, and people-centered city where walking, cycling, and public transport are the preferred modes of travel, supported by clean air and greener streets, and where mobility supports health, equity, and climate resilience."

The vision is not treated as a standalone statement; it directly informs the objectives, indicators and measure packages. This ensures that each Action Plan component contributes to a consistent end-state: lower car dependency, safer streets, healthier travel options and improved public space quality.

4.2 Strategic Objectives



Building on the vision and consultation synthesis, the strategy defines a set of objectives that guide both investment decisions and day-to-day policy choices. The objectives are aligned with the policy areas used in the Action Plan, ensuring a direct link from strategy to implementation.

The strategic objectives include:

- **Reduce car dependency** and shift trips towards walking, cycling and public transport, particularly for short urban trips and in central areas.
- **Improve public transport performance** by increasing reliability, coverage and user experience, including accessibility and passenger information.
- **Improve road safety for all users**, with a focus on vulnerable users and high-risk locations through safer design, speed management and targeted interventions.
- **Enhance walkability and accessibility** by improving continuity and removing barriers in the pedestrian network, especially near key destinations.

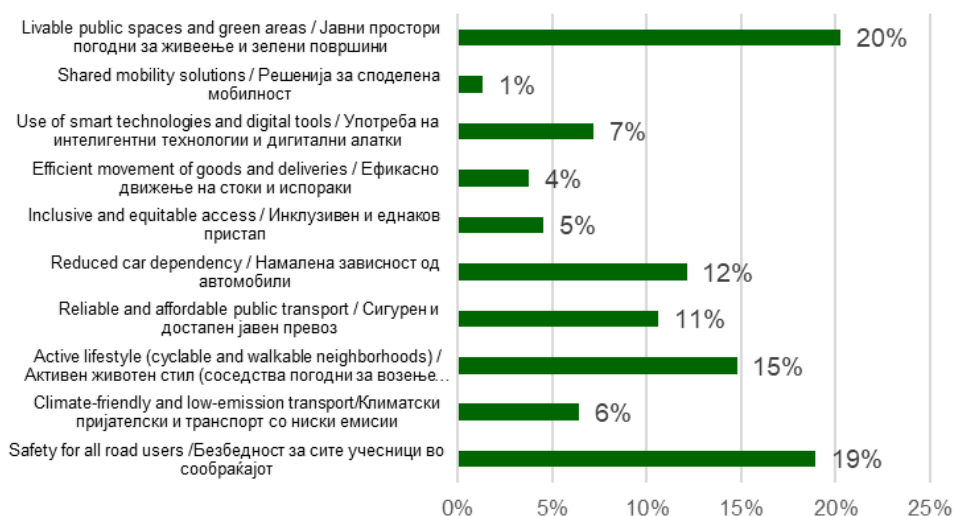
- **Develop a connected cycling system** supported by safe routes, junction treatments, secure parking and integration with public transport.
- **Reduce emissions and energy use** by supporting modal shift and cleaner technologies and aligning transport actions with air quality priorities.
- **Manage traffic and parking demand** to support livable streets and a more efficient use of public space.

To track progress, the plan adopts an indicator framework aligned with long-term outcomes. Core indicators include modal split (walking, cycling, public transport, car), car ownership rate, CO₂ emissions, PM₁₀ emissions, NO_x emissions, fuel consumption, and road safety outcomes (fatalities and injuries). Targets are expressed as trend directions toward 2037 (increase in sustainable modes and decreases in car use, emissions and casualties), and scenario evaluation provides quantitative reference values for monitoring.

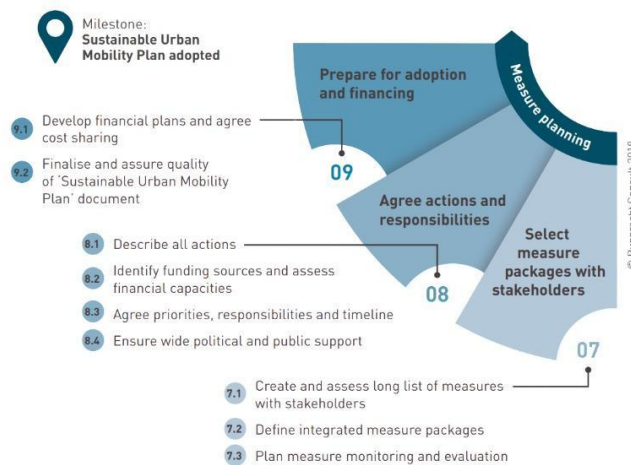
What should urban mobility in your city look like in 10 years?



Which of these principles should shape the future mobility vision of your city?



5 Measure Planning



Measure planning translated the long list of candidate measures into a coherent, prioritized program that can be implemented by the Municipality and partners over the SUMP horizon. Building on the diagnosis, vision and targets, the project team compiled measures across ten policy areas, assessed them for feasibility and impact, and structured them into packages that reflect the Avoid–Shift–Improve (ASI) approach.

To ensure that the final plan is both ambitious and deliverable, measures were first screened

against local constraints (institutional capacity, funding, acceptance and implementation timeframe) and then tested as integrated scenario packages using the strategic MOMOS model. This step provided evidence on how different levels of ambition would perform against the agreed indicators for safety, environment, accessibility and network efficiency.

This phase translated the strategy (vision, objectives and targets) into a coherent and deliverable set of interventions. Measures were derived from the baseline diagnosis and stakeholder input, and then structured into packages aligned with the policy areas used in the Action Plan.

A Multi-Criteria Analysis (MCA) was applied to prioritize measures in a transparent way and to assemble internally consistent scenario packages for testing. The resulting packages were then assessed through strategic modelling and an agreed indicator framework, providing the evidence base for selecting the preferred scenario.

The measure package development followed a structured sequence: identification of candidate measures, screening and consolidation, MCA-based prioritization, and integration into scenario packages.

The MCA evaluated measures across five weighted dimensions: Cost (21%), Implementation Time (12%), Financing Feasibility (25%), Efficiency/Impact (24%), and Public Acceptance (18%). The ranking supported the selection of measures that are both impactful and realistically implementable in Prilep.

Scenario evaluation combined strategic modelling with a harmonized indicator framework covering transport, environment and road safety. The MOMOS strategic forecasting model was used to simulate the baseline and the policy packages over the planning horizon, using local demographic, spatial and mobility inputs and agreed assumptions on exogenous trends.

Key results illustrate the expected direction of change under the preferred scenario (AS1):

- Car dependency decreases from **75.9% to 72.0% by 2037**, while **public transport rises to 7.9% and cycling reaches 3.0%.**
- Greenhouse gas emissions from transport **reduce by 18%**, with major reductions in local air pollutants (PM2.5 by 36.3% and NOx by 42.7%).
- Road safety improves significantly, with traffic fatalities and **injuries falling by nearly 40%** compared to 2023 levels.

Based on performance, feasibility and stakeholder consensus, AS1 was selected as the preferred scenario. It offers a balanced pathway that delivers measurable benefits while remaining achievable within local delivery

capacity and funding realities. AS2 provides stronger ambition but implies higher investment needs and greater implementation risk.

Measures were grouped into integrated packages reflecting the main mobility policy areas:

- **Walkability and Accessibility**
- **Access Regulation and Traffic Calming**
- **Road Network**
- **Parking System**
- **Urban Cycling**
- **Public Transport**
- **Mobility Management**
- **Electric Mobility**
- **Urban Freight Transport**
- **Public Awareness and Engagement**

Based on the prioritized measures, three scenario packages were prepared for evaluation: Business-as-Usual (BAU), Alternative Scenario 1 (AS1 - Moderate Transition) and Alternative Scenario 2 (AS2 - Ambitious Transition). BAU reflects a continuation of current trends, while AS1 and AS2 represent increasing levels of policy intervention. AS1 consists of 22 integrated, cost-effective measures; AS2 comprises 32 more transformative measures with higher investment requirements.

The selected package logic and the preferred scenario are reflected in the Action Plan presented in Chapter 6.

5.1 Measure Packages

Measures were organized into policy-area packages so that actions reinforce each other (e.g., pedestrianization combined with traffic calming, or public transport upgrades paired with parking management). Packaging also supports phased delivery: quick wins and regulatory measures can start early, while larger infrastructure elements are prepared through design, budgeting and stakeholder coordination.



Figure 6. Measure Building Process

A Multi-Criteria Analysis (MCA) was applied to prioritize measures in a transparent and repeatable way. The criteria and weights were agreed through the technical process and stakeholder inputs: Cost (21%), Implementation time (12%), Financing feasibility (25%), Efficiency / impact (24%), and public acceptance (18%). The MCA results were cross-checked through stakeholder workshops and the public survey, and then used to assemble alternative packages for scenario testing.

Three scenario packages were defined for modelling and decision-making:

- **BAU (Business-as-Usual):** continuation of current trends and already-committed interventions, providing a reference against which policy choices can be compared.
- **AS1 (Preferred Scenario – balanced):** a moderate but integrated package (22 measures) combining high-performing and feasible actions across all policy areas.
- **AS2 (Ambitious Scenario):** a more transformative package (32 measures) that accelerates network transformation and decarbonization, requiring higher investment and stronger enforcement.

For each measure, a cost catalogue and MOMOS input assumptions (e.g., network lengths, coverage shares, charging infrastructure targets) were prepared to support realistic scenario testing and implementation programming. The preferred scenario selection informed the Action Plan structure and the prioritized short-term and mid-long term implementation program.

Measures were grouped into policy-area packages to ensure internal coherence and to support phased delivery. The packaging approach combined technical feasibility with stakeholder priorities and was refined through a Multi-Criteria Analysis (MCA). The MCA applied weighted criteria to compare measures consistently and to assemble scenario packages for testing.

- **MCA weighting:** Cost (21%), Implementation time (12%), Financing feasibility (25%), Efficiency/impact (24%), Public acceptance (18%).

- **Scenario packages were prepared for evaluation:** Business-as-Usual (BAU), Alternative Scenario 1 (AS1, 22 measures) and Alternative Scenario 2 (AS2, 32 measures).

The preferred scenario selection informed the Action Plan structure and the prioritized short-term and mid-long term implementation program.

5.2 Scenario Evaluation



Cost:

The financial dimension plays an important role in the overall scoring criteria within the project life cycle. As a result, it is expected to be between 20%-30% of the project cost to be evaluated.



Time:

Since the implementation period of the measure is directly related to the success of the application, it is expected to be between 10%-20% of the total.



Finance:

The issue of financing the measure is another important issue, therefore its weight in the total score is expected to be in the range of 10%-20%.



Efficiency:

Another important issue is the determination of measures directly related to the Chisinau Sump vision goals and objectives. Efficiency weight in the total score is expected to be in the range of 10%-20%.



Public acceptance / political prioritization:

Public acceptance weight in the total score is expected to be in the range of 10%-20%.

political prioritization weight in the total score is expected to be in the range of 5%-15%.

Scenario evaluation used the MOMOS strategic model to quantify how each package performs against the SUMP objectives. The assessment covered environment (greenhouse gases and pollutant emissions) and road safety (fatalities and injuries), providing quantitative evidence to support selection of the preferred scenario.

Results show that both policy scenarios deliver clear benefits compared to BAU. By the modelling horizon year (2037), the quantified outcomes include:

- **Greenhouse gas emissions:** BAU declines from 48,107 kton CO₂-eq (2023) to 45,042 kton (−6.4%). AS1 reaches 39,462 kton (−18.0%) and AS2 reaches 35,502 kton (−26.2%).
- **PM_{2.5} emissions:** 15,562 kg (2023) reduces to 10,741 kg under BAU. AS1 reaches 9,912 kg (−36.3%) and AS2 reaches 9,719 kg (−37.5%) by 2037.
- **NO_x emissions:** 331,212 kg (2023) reduces to 197,683 kg under BAU. AS1 reaches 189,727 kg (−42.7%) and AS2 reaches 171,451 kg (−48.2%) by 2037.
- **Road traffic deaths:** 11.0 deaths per 100,000 inhabitants (2023) reduce to 9.7 under BAU (−11.5%). AS1 reaches 6.9 (−37.9%) and AS2 reaches 7.0 (−36.2%).
- **Road traffic injuries:** 40.2 injuries per 100,000 inhabitants (2023) reduce significantly; both AS1 and AS2 reach around 24.1–24.2 per 100,000 (≈40% compared to 2023).

While AS2 performs best for emissions, AS1 demonstrates a strong improvement compared to BAU while remaining more feasible within Prilep's delivery capacity and likely funding pathway. On this basis, AS1 was selected as the Preferred Scenario, with AS2 elements retained as a longer-term ambition set that can be activated if additional funding, institutional capacity or policy support becomes available.

6 Action Plan

The Action Plan translates the preferred scenario into a structured set of measures and actions, grouped by policy area and aligned with the ASI approach. It provides the implementation logic for the SUMP: what will be delivered, by whom, and in what sequence, including early ‘quick wins’ (e.g., regulatory measures, pilots and maintenance programs) and medium-term investments (e.g., corridor upgrades, network continuity and fleet renewal).

Actions are designed to be mutually reinforcing across policy areas. For example, pedestrianization and cycling improvements are supported by traffic calming and parking management; public transport upgrades are complemented by improved information, interchange quality and demand management; and freight and e-mobility actions are introduced with clear operational rules and pilot programs to build acceptance.

6.1 Walkability and Accessibility

This policy area prioritizes a safe, comfortable and universally accessible walking environment as the foundation of urban mobility in Prilep. It responds to the identified challenges in the city center and around key destinations (schools, public services, markets and interchanges), where high pedestrian activity is currently affected by vehicle dominance, discontinuous sidewalks, and limited accessibility for vulnerable users.

The plan combines pedestrianization with traffic calming to create a legible hierarchy of streets and public spaces. The center-focused interventions are paired with corridor-level upgrades (crossings, lighting, curb management and maintenance) to ensure that walking becomes the default option for short trips and the primary ‘first/last mile’ mode for public transport.

Key actions under this policy area include:

- **M1.5.1 Pedestrianization of the Center:** expand pedestrian-only public space and improve the quality of the central streets and squares through surface upgrades, street furniture, shading and wayfinding.
- **M1.5.2 Establish a Traffic Calming Zone:** introduce lower speeds, safer crossings and design-based speed management in residential streets and around sensitive land uses.
- Barrier-free accessibility upgrades (ramps, tactile paving, curb alignment and obstacle removal) to support older people, children and people with disabilities.
- Systematic improvements to crossings and night-time visibility (zebra markings, refuge islands, raised tables and lighting) at priority locations.

For scenario testing, pedestrian areas were assumed to grow from approximately 0.5–1% of urban space in the short term (2026–2032) to 1.5–2% in the longer term (2031–2037), reflecting a gradual but sustained reallocation of space towards people.

This policy area prioritizes a high-quality walking environment as the foundation of sustainable mobility. Actions focus on creating safer, more comfortable and universally accessible streets, especially in the central area and around key public destinations.

- Pedestrianize key central corridors and public spaces, including the redesign of Kej 1-vi Maj Street to function as a pedestrian-only spine for everyday activity and tourism.
- Introduce traffic-calming zones and low-speed streets in areas with high pedestrian volumes (schools, markets, public buildings), using street design, crossings and enforcement to reduce risk.
- Upgrade footways and crossings for universal accessibility (curb ramps, tactile guidance, improved lighting and continuity), with attention to elderly users, children and people with disabilities.
- Improve the walking links to major attractors such as City Center Boulevard, Varosh Park, Marko’s Towers and other cultural and recreational destinations.

6.2 Public Transport

Public transport actions aim to improve service quality, reliability and attractiveness so that buses become a credible alternative to private car use for daily trips. The plan addresses key issues identified in the baseline analysis, including limited-service coverage, inconsistent service frequencies, and the need for higher-quality stops, passenger information and operational management.

The approach combines network and operational improvements with supporting infrastructure. Priorities include clearer route structure, improved timetable discipline, better interchange conditions (especially where bus and rail/terminal functions coincide), and a transition toward a cleaner fleet. The measures are designed to deliver measurable gains in accessibility for residents without a car and to support wider modal shift objectives.

Key actions under this policy area include:

- **M6.1 Optimize bus routes and schedules and provide priority stop upgrades to improve travel time and waiting time reliability.**
- **M6.2 Introduce demand-responsive transport (DRT) to serve low-demand areas and improve coverage in a cost-efficient way.**
- **M6.3 Improve bus stops and passenger comfort through shelters, lighting, accessibility features and clear information.**
- **M6.4 Passenger information system: real-time information at key stops and in vehicles, and a consistent public-facing timetable.**
- **M6.5 Gradual fleet modernization towards low/zero-emission buses, paired with operational and maintenance readiness.**

For modelling and programming, the bus network improvement package assumed an enhanced service offer covering around 30 km with a 30-minute frequency and approximately 50% network coverage in the 2026–2032 period. DRT coverage was assumed at roughly 5–7% of the urban surface in the short term, and the green fleet measure targets full replacement with electric vehicles in the long term.

6.3 Urban Cycling

Urban cycling measures create a connected, safe and attractive cycling network that links residential neighborhoods with the city center, schools, key services and public transport nodes. The plan responds to the current lack of continuous infrastructure and the perception of safety risk, which limits cycling uptake despite Prilep's relatively compact urban structure.

The program combines strategic network delivery (primary and secondary cycling corridors) with supporting measures such as bicycle parking, junction treatments, and integration with traffic calming zones. Cycling is treated as both a daily mobility mode and a complementary 'last mile' solution, including the potential use of cargo bikes for local logistics.

Key actions under this policy area include:

- **M5.1 Develop a coherent cycling network and facilities, prioritizing continuity, safety at intersections and clear design standards.**
- **M5.2 Provide secure bicycle parking at public buildings, schools and interchanges, including sheltered and monitored locations.**
- **M5.3 Promote cycling culture and skills through training, community events and targeted programs for schools and new riders.**
- Integration with traffic calming and safe crossings to reduce conflicts and make cycling routes comfortable for a wide range of users.

For scenario assumptions, the cycling network and facilities package targeted around 14–16 km of delivered network in 2026–2032, expanding to approximately 28–32 km by 2031–2037 as corridors are completed and connected.

6.4 Access Regulation and Traffic Calming

Access regulation and traffic calming measures manage car access and speeds in sensitive parts of the city, improving safety and the quality of public space while supporting walking, cycling and public transport. These actions are particularly relevant in the central area and around schools and other vulnerable-user destinations, where conflicts between through-traffic and local movement are most acute.

The plan proposes a step-by-step approach, starting with pilots and clearly communicated rules (signage, enforcement and exemptions), and scaling up to a coherent regulated zone network. This approach allows the Municipality to build public acceptance and operational capacity while demonstrating benefits such as reduced noise, fewer conflicts and improved conditions for local commerce and social life.

Key actions under this policy area include:

- **M2.1 Implement car-free or low-emission / low-traffic zones (Passenger LTZ) with clear access rules, delivery windows and exemptions for residents and essential services.**
- **M2.2 Apply speed limits and traffic calming measures using self-enforcing street design (raised tables, chicanes, narrowed lanes, gateway treatments and improved crossings).**

Scenario inputs assumed that passenger LTZ coverage increases from around 5–7% of urban space (2026–2032) to 10–14% (2031–2037), while traffic calming expands from roughly 20–25% of the road network to 40–50% over the same periods.

6.5 Road Networks

The Road Networks policy area focuses on raising the functional quality, safety and resilience of Prilep's street network. It responds to identified issues such as inconsistent maintenance, drainage and winter service gaps, limited accessibility in street design and high-risk junctions. The aim is to ensure that the existing network operates safely and efficiently for all users, while gradually transforming oversized or car-dominated corridors into balanced urban streets.

The program combines routine maintenance and asset management with targeted redesign of intersections and corridors. Safety audits, improved signage and markings, and better pedestrian crossing quality are used as near-term interventions, while corridor redesigns and complete-street upgrades are prepared as medium-term investments. Accessibility and vulnerable-user needs are integrated into all works through design standards and implementation checks.

Key actions under this policy area include:

- **M3.1 Improve basic road maintenance and surface quality: routine inspections, pothole and surface repair, drainage and winter maintenance, and accessibility upgrades.**
- **M3.2 Redesign intersections for safer crossing and traffic flow: safety assessments, upgraded pedestrian crossings and junction improvements to reduce conflict points.**
- **M3.3 Update Road signage and markings to improve navigation, compliance and predictability for all users.**
- **M3.4 Transform oversized urban roadways into complete streets through road-diets, safer edges, and reallocation of space to walking, cycling and public transport where appropriate.**

This policy area is also a key enabler for other packages: improved junction design and maintenance directly support reliable public transport operations, safer cycling routes, and more predictable freight movement.

6.6 Parking System

Parking management is used as a practical tool to reduce congestion, support modal shift and improve the quality of the public realm—especially in and around the city center. The baseline analysis highlighted the pressure of long-stay parking in central areas, inconsistent enforcement and limited availability of structured alternatives that would allow drivers to complete trips by walking or public transport.

The plan combines pricing, enforcement and supply management. Central-area pricing and regulation are designed to prioritize short-stay activity and turnover, while peripheral parking and Park & Ride options provide alternatives for longer stays. Clear signage, modern payment options and consistent enforcement are essential to ensure that parking management is perceived as fair and predictable.

Key actions under this policy area include:

- **M4.2 Adjust parking fees in the city center: introduce/expand priced parking and manage tariffs to influence demand and reduce cruising.**
- **M4.3 Establish regular monitoring and enforcement against illegal parking, with a focus on sidewalks, crossings and public transport stops.**
- **M4.4 Introduce Park & Ride at strategic locations to intercept inbound car trips and enable onward travel by public transport or walking.**
- **M4.5 Develop peripheral parking areas to reduce pressure on the center and support regulated access schemes.**

For scenario programming, priced parking was assumed to expand to approximately 1,500–2,000 priced slots at €0.50/hour in 2026–2032 and 2,000–2,500 priced slots at €0.85/hour in 2031–2037. The Park & Ride measure includes an initial capacity of around 500 parking slots.

Parking management supports the preferred scenario by reducing long-term car dependence in central areas, improving compliance and using pricing and supply measures to manage demand.

- Adjust parking fees and time regulations in central zones to discourage long-stay parking and to improve turnover for local activity.
- Strengthen enforcement against illegal parking, especially in pedestrian and cycling priority areas and near crossings and junctions.
- Develop Park-and-Ride facilities near key public transport hubs to intercept car trips and enable easy transfer to transit.
- Provide peripheral parking options that encourage walking into the center, complemented by clear signage and pedestrian-friendly routes.

6.7 Mobility Management

Mobility management measures focus on influencing travel behavior through organizational change, incentives and targeted programs—often with relatively low capital cost. They complement infrastructure investments by reducing peak-hour demand, improving safety for children and encouraging routine use of sustainable modes.

The plan promotes cooperation with major employers, public institutions and schools to manage trip timing and route choice. It also supports the development of safe routes and mobility education for students, helping to reduce car-based school trips and to embed sustainable habits early.

Key actions under this policy area include:

- **M7.3 Promote flexible work and school schedules to reduce peak-hour demand (teleworking and staggered hours), with scenario inputs reflecting around a 10% reduction in trips in the short term.**

- **M7.4 Collaborate with schools to develop safe routes for students, supported by traffic calming, crossing upgrades and education.**
- Complementary ‘car-free day’ initiatives (up to 12 days/year in the short term) to test and showcase low-traffic environments and build public support.

Mobility management measures complement infrastructure and service upgrades by influencing travel choices through information, coordination and targeted programs.

- Develop school and workplace mobility initiatives that promote walking, cycling and public transport, supported by safe route planning and awareness activities.
- Provide user-friendly journey planning and service information through digital channels, integrating public transport and active mobility options.
- Introduce behavior-change campaigns and incentive schemes (e.g., targeted promotions, pilot programs) to support the shift away from private car use.
- Coordinate mobility management with major events and seasonal peaks to reduce congestion and improve safety during high-demand periods.

6.8 Electric Mobility

Electric mobility actions support Prilep’s transition toward low-emission transport by addressing infrastructure readiness, market uptake and local operating conditions. The plan recognizes that electrification is most effective when combined with modal shift and reduced vehicle kilometers, but that it still plays a key role in reducing remaining emissions—especially for fleets and essential trips.

The program starts with a practical charging network that is accessible to residents without private driveways and that supports municipal and commercial fleet electrification. It is paired with a local e-mobility strategy that clarifies responsibilities, standards and business models for shared services and future scaling.

Key actions under this policy area include:

- **M8.1 Install accessible public EV charging infrastructure in a phased manner.**
- **M8.3 Realize a local e-mobility strategy, including regulatory readiness and sharing schemes for EVs.**
- **M8.4 Launch test drives and pilots for e-cargo bikes to build acceptance and demonstrate operational viability.**

Scenario assumptions include delivery of around 20 charging stations (50% fast chargers) in 2026–2032, scaling to around 40 stations (70% fast chargers) in 2031–2037, alongside supportive regulation and pilot programs.

Electric mobility actions support cleaner transport by enabling the uptake of low-emission vehicles and aligning infrastructure rollout with realistic demand and investment capacity.

- Plan and deploy a basic public charging network in strategic locations (municipal facilities, activity hubs, and mobility nodes), with clear operational responsibilities.
- Promote the gradual electrification of municipal and service fleets where feasible, ensuring procurement and maintenance readiness.
- Enable electrification for key user groups such as taxis and urban logistics operators through supportive policies, parking/charging access and pilot projects.
- Coordinate electric mobility with public transport fleet renewal to maximize emissions reduction benefits across modes.

6.9 Urban Freight Transport

Urban freight measures improve the efficiency and sustainability of deliveries while reducing conflicts in the center and residential areas. The plan addresses issues such as peak-hour delivery impacts, curbside conflicts, and the need for clearer rules for freight access in regulated zones. The approach combines operational regulation with new logistics solutions. Off-peak delivery windows and restricted access rules reduce conflicts at the most sensitive times and places, while consolidation and last-mile alternatives (cargo bikes) reduce the number and size of vehicles entering the center. These measures are coordinated by business stakeholders to ensure practicality and compliance. Key actions under this policy area include:

- **M9.1 Schedule deliveries outside peak hours and define clear delivery time windows, especially in regulated central areas.**
- **M9.2 Develop urban logistics hubs / consolidation solutions to reduce vehicle-kilometers and support cleaner last-mile delivery.**
- **M9.3 Support the use of cargo bikes for last-mile deliveries, integrated with regulated access rules (Freight LTZ).**

Scenario inputs assumed Freight LTZ coverage grows from around 5–7% of urban space (2026–2032) to 10–14% (2031–2037). For consolidation, initial targets include shifting a share of retailer freight handling toward a mix of heavy-duty vehicles, light-duty vehicles and cargo bikes, demonstrating the potential for rapid last-mile transformation.

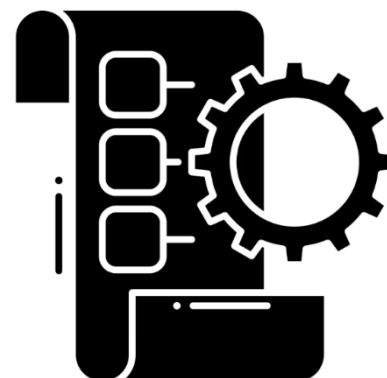
6.10 Public Awareness and Engagement

Public awareness and engagement activities ensure that infrastructure and regulatory changes are understood, accepted and used correctly. They are essential for improving road user behavior, building trust in the SUMP and sustaining political and community support over time. The plan includes targeted safety campaigns for different user groups (drivers, pedestrians, cyclists, freight operators), complemented by ongoing sustainable travel promotion and practical information services. Communication is designed as a continuous program rather than one-off events, using schools, community organizations, media and digital channels. Key actions under this policy area include:

- **M10.1 Launch safety campaigns targeting all road users, with a focus on speed, yielding behavior, school zones and vulnerable users.**
- Continuous sustainable travel information and promotion (scenario input: approximately €0.02 per inhabitant for information campaigns in the short term), including guidance on new rules in regulated zones and alternatives to car trips.

Engagement activities are integrated with monitoring and annual reporting so that residents and stakeholders can see progress, understand trade-offs and contribute to adjustments during implementation. Public awareness and engagement actions ensure that safety and behavior change accompany physical investments, and that stakeholders remain informed and involved as implementation progresses.

- Launch citywide road safety campaigns targeting all road users, reinforcing safe speeds, crossing behavior and mutual awareness between modes.
- Deliver targeted campaigns for vulnerable groups (children, older people and persons with disabilities) and for high-risk behaviors and locations.
- Run seasonal and thematic campaigns (e.g., back-to-school, winter safety) aligned with the implementation timetable and visible improvements on the ground.
- Maintain ongoing communication and feedback channels to build ownership, track concerns and support adaptive implementation.



Measure Package	Actions	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5	Year - 6	Year - 7	Year - 8	Year - 9	Year - 10
M5	M5.1.4										
	M5.2										
	M5.3										
	M5.4										
	M5.5										
M6	M6.1.1										
	M6.1.2										
	M6.2										
	M6.2.2										
	M6.3										
M6.3	M6.3.1										
	M6.3.2										
	M6.4										
	M6.5										
	M6.5.1										
M7	M7.3.1										
	M7.3.2										
	M7.4										
	M7.4.1										
	M7.4.2										
M8	M8.1										
	M8.1.1										
	M8.1.2										
	M8.3										
	M8.3.1										
M8.3	M8.3.2										
	M8.4										
	M8.4.1										
	M9.1										
	M9.1.1										
M9	M9.1.2										
	M9.2										
	M9.2.1										
	M9.2.2										
	M9.3										
M10	M10.1										
	M10.1.1										
	M10.1.2										
	M10.1.3										
	M10.1.4										

7.1 Short Term Implementation Program

The short-term program (approximately 0–5 years) prioritizes measures that are feasible to deliver quickly, visibly improve daily mobility conditions and create enabling conditions for larger investments later in the plan period. The focus is on safety, accessibility and service quality improvements, coupled with the preparatory work needed to de-risk mid/long-term projects.

Short-term delivery combines low-to-medium cost interventions with ‘enabling’ actions such as feasibility studies, detailed designs, regulatory updates, procurement preparation and improvements in baseline data systems. This ensures that when capital-intensive projects are ready to start, the required technical documentation, permits and financing pathways are already in place.

- Road safety quick wins at high-risk locations, including safer pedestrian crossings, lighting and visibility measures, and targeted intersection treatments.
- Walkability and accessibility upgrades to remove barriers, improve footway continuity and strengthen safe routes to key destinations (schools, services and central public spaces).
- Public transport service enhancements that can be implemented rapidly, such as bus stop upgrades, passenger information improvements and operational refinements to strengthen reliability.
- Early cycling network steps through pilot corridors, completion of missing links where feasible and safer junction treatments, building towards a coherent network over time.
- First-phase parking management actions (clear rules, improved enforcement, demand management pilots and better organization of on-street parking in sensitive areas).

- Mobility management and public awareness programs (e.g., school travel initiatives and behavior change campaigns) that increase acceptance of sustainable modes.
- Project pipeline preparation: feasibility and preliminary design for mid/long-term investments, including refined cost estimates and packaging for funding applications.

The short-term plan should be reviewed annually through the monitoring cycle. Adjustments should prioritize actions that demonstrate measurable progress toward the preferred scenario and that strengthen institutional readiness for scaled delivery in the second half of the program.

7.2 Mid-Long Term Implementation Program

The mid and long-term programme (approximately 6–10 years) scales up the transformation by delivering measures that require larger capital budgets, multi-year procurement and stable financing arrangements. This horizon consolidates the preferred scenario by making walking, cycling and public transport structurally more attractive than private car use for a wider range of trips.

Mid/long-term delivery builds on lessons from early pilots and short-term measures, converting successful interventions into permanent upgrades and completing the network-level improvements needed for sustained mode shift.

- Completion and quality uplift of walking and cycling networks, moving from fragmented interventions to connected, legible and safe systems supported by consistent design standards.
- Public transport modernization, including investments to improve comfort, accessibility and reliability, and where applicable, fleet renewal aligned with operational funding capacity.
- Expansion of traffic calming and access management in sensitive urban areas, supported by permanent street redesign where short-term measures demonstrate positive results.
- Mature parking system reforms, progressing from organization and enforcement toward comprehensive demand management (zoning, pricing tools where appropriate and reinvestment of revenues into mobility improvements).
- Scalable electric mobility steps, expanding beyond pilots through coordinated infrastructure planning and alignment with national energy and climate programs.
- Urban freight measures that reduce conflicts in pedestrian-priority areas and improve logistics efficiency through routing, curbside management and delivery management practices.

Throughout this horizon, integration with other municipal and national strategies is essential so that mobility investments support broader objectives for public space quality, economic development, environmental performance and social inclusion.

7.3 Financial Planning



Financial planning aligns the Action Plan with realistic funding opportunities and municipal capacity. A phased budgeting approach links near-term measures to available municipal and national resources, while preparing a pipeline of well-defined projects suitable for external co-financing in later phases.

The financing approach supports implementation through prioritization and packaging of measures into deliverable project groups, progressive refinement of cost estimates through feasibility and design work, and a co-financing logic that blends sources for larger investments.

- Municipal budget allocations and routine operations/maintenance budgets, particularly for safety, accessibility and management measures in the short term.

- National government programs and sectoral funds (transport, environment, energy), especially where measures connect to higher-level networks or standards.
- European and other international donor instruments supporting sustainable mobility and climate-aligned investments, where eligible.
- International financial institutions for larger capital programs, supported by robust project documentation and packaged investment programs.
- Public–private partnership options where appropriate (e.g., selected parking or technology deployments), subject to value-for-money and governance safeguards.
- Revenue mechanisms linked to demand management (e.g., parking revenues), with clear principles for reinvestment into SUMP priorities.

The financial plan should be updated regularly (at least annually) to reflect changes in project readiness, costs and funding windows, enabling Prilep to respond quickly to co-financing opportunities and maintain a credible investment pipeline.

8 Monitoring and Evaluation

This chapter sets out how Prilep will track delivery of the SUMP, measure whether the preferred scenario is being achieved, and ensure that the plan remains a living document over the full implementation horizon. Monitoring provides regular, objective evidence on what has been delivered and what has changed in the mobility system, while evaluation assesses whether the observed changes are sufficient to meet the long-term vision and targets.

The Monitoring and Evaluation (M&E) approach combines (i) an annual monitoring cycle linked to municipal planning and budgeting, (ii) a structured set of Key Performance Indicators (KPIs) aligned with the SUMP objectives, and (iii) two formal evaluation milestones at mid-term and at the end of the plan period. The approach is designed to support transparency, accountability and timely corrective action.



Figure 1. SUMP Monitoring Structure

8.1 Monitoring Framework and Mechanisms

A dedicated coordination and data-management function is required to run the M&E system effectively. The Municipality leads the process through the SUMP Coordinator and a small SUMP Coordination / Monitoring Unit responsible for consolidating data, maintaining indicator definitions, calculating KPIs and preparing monitoring outputs. The Project Steering Committee (PSC) provides oversight, validates annual findings and supports cross-institution coordination to resolve delivery bottlenecks.

To ensure consistency over time, all participating institutions use a common monitoring calendar, agreed data formats and clear responsibilities. Data collection draws on routine administrative sources (e.g., public transport operations, road safety statistics, infrastructure delivery records) and is complemented by targeted surveys and periodic measurements when gaps are identified.

Annual Monitoring Cycle

The yearly monitoring cycle follows five phases across the calendar year. This structure ensures that progress is reviewed continuously, and that findings are integrated into the next year's work program and budget decisions.

- **Phase 1 – Data collection (Q1):** institutions compile previous-year data on infrastructure delivery, public transport performance, traffic and parking conditions, road safety, emissions/air quality and citizen feedback.
- **Phase 2 – Technical analysis (Q2):** the SUMP technical team analyses trends, compares results against KPIs and targets, and identifies causes of delays or underperformance.
- **Phase 3 – Annual Monitoring Report (Q3):** results are consolidated into a single report summarizing KPI values, delivery status of actions (e.g., completed / on track / delayed / not started) and priority issues.
- **Phase 4 – Stakeholder and public review (Q3–Q4):** findings are shared with the PSC and key stakeholder groups; consultations help validate results, capture user experience and identify emerging needs.
- **Phase 5 – Adjustment and next-year planning (Q4):** the Municipality updates the implementation program, refines priorities, reallocates resources where needed and integrates new opportunities (e.g., funding calls, regulatory changes).

This cycle allows Prilep to detect issues early, build public trust through transparent reporting, and keep the SUMP aligned with real mobility trends rather than waiting for a single end-of-plan review.

Table 1. Annual Monitoring Cycle

Phase	Time Period	What Happens?	Purpose	Key Actors
1. Data Collection	1 st Quarter	All institutions collect detailed data from the previous year: ● New cycling or walking facilities ● Road improvements ● Bus frequency changes ● Safety incidents ● Traffic counts ● Air quality levels ● Citizen feedback, etc.	To obtain a complete and accurate picture of mobility developments in the previous 12 months.	● Municipal technical units ● PT operators ● Traffic Police ● environmental agencies ● ITS systems
2. Technical Analysis	2 nd Quarter	Experts analyze the collected data ● Compare results with KPIs ● Check if actions are on schedule ● Identify early warning signs for delays underperformance, or resource gaps.	To understand ● What improved? ● What did not progress as intended? ● Why?	SUMP Technical Team
3. Annual Monitoring Report	3 rd Quarter	All findings are consolidated into a single report summarizing the year's progress. The status of every action card is presented clearly	To produce an official, transparent,	SUMP Coordination Unit

Phase	Time Period	What Happens?	Purpose	Key Actors
		using a color-coded system (Completed / On Track / Delayed / Not Started).	public record of SUMP progress.	
4. Stakeholder & Public Review	3 rd & 4 th Quarter	- Results are shared with citizens, NGOs, schools, businesses, public transport users, and neighborhood communities. - Public workshops, online consultations, and targeted meetings are held.	- To gather feedback - Identify local needs - Increase community support and ownership.	- Municipality - Project Steering Committee
5. Adjustment & Next-Year Planning	4 th Quarter	Based on the monitoring results and public feedback, - The municipality updates the action plan for the next year - Adjusts priorities - Reallocates budget if necessary - Integrates new measures	To ensure that the SUMP remains relevant, realistic, and aligned with actual mobility needs.	Municipal leadership & technical departments

8.2 Key Performance Indicators (KPIs)

KPIs allow the municipality to measure the success of mobility improvements in a clear, structured, and objective way. They help answer fundamental questions such as:

- Are more people walking and cycling?
- Is public transport improving every year?
- Are road accidents decreasing?
- Are CO₂ emissions being reduced?
- Are mobility options becoming more accessible and inclusive?

To capture these changes, KPIs are divided into two major groups: Achievement Indicators and Outcome Indicators. This dual structure provides a complete picture of both long-term impacts and short-term results.

Outcome indicators track the concrete, physical results delivered within a specific year—new infrastructure, technological upgrades, urban design improvements, or regulatory changes.

Table 4. Policy Area – KPIs (Key Performance Indicators)

Area	What Is Delivered?	KPIs
Walkability and Accessibility	- Sidewalk repairs - Safer crossings	- Number of upgraded pedestrian crossings - Increase in pedestrian zone area (m²) - Walkability score at the neighborhood level - Total length of pedestrian path network
Access Regulation and Traffic Calming	- Traffic Calming Measures - Upgrading street designs	- Traffic calming zones (m²) - Number of streets with reduced speed limits - Number of streets upgraded with safety/traffic calming measures

Road Network	• Maintenance, Resurfacing and Drainage designs • Intersection upgrade • Smart Signaling/Monitoring System	• Km of road surface improved • Number of intersections to be upgraded with redesign • Number of intersections to be implemented in smart signaling system
Parking Systems	• Regulated zones • P+R facilities	• Share of regulated parking in city center (%) • Number of parking lots with park&ride facility • Number of parking with occupancy tracks
Urban Cycling	• New bike lanes • Improved connections • Developed bike infrastructure	• Length of cycling network constructed (km) <i>(with the detail recreational green routes)</i> • Number of bicycle users • Modal share of bike trips (%) • Bike parking capacity • Number of shared bike station <i>(if stationary option implemented)</i>
Public Transport	• New bus line routes and current routes upgrade • Modernized stops • Passenger informative system	• Number of new/renovated bus stops • Population that can reach the city center within 30 minutes by public transportation • Population ratio with public transportation access within a 500m radius • Yearly Passenger-km • Modal share of public transport use (%) • Number of zero emission vehicle in the fleet
Electric Mobility	• Charging stations • E-bikes • E-vehicles	• Number of public EV chargers installed
Urban Freight Transport	• Consolidation centers • Delivery policies	• Off-peak delivery compliance (%)

9 Conclusion

The preparation of the Sustainable Urban Mobility Plan (SUMP) for Prilep represents a comprehensive and structured effort to guide the city toward a more sustainable, safe, and inclusive mobility future. Building on the analytical foundation established in the earlier tasks—ranging from the assessment of current mobility conditions to the development of a shared vision, scenario evaluation, and measure selection, the plan brings together all components into a coherent and actionable framework. Through this process, Prilep has gained a clear understanding of the challenges and opportunities shaping its mobility landscape, as well as a long-term strategy supported by measurable objectives and a robust set of interventions.

The Action Plan provides a detailed roadmap for implementation, offering practical steps that address walking and accessibility, cycling infrastructure, public transport improvements, road network management, and public engagement. These measures, grounded in local context and informed by spatial analysis, contribute directly to enhancing mobility efficiency, safety, environmental performance, and the overall quality of urban life. The 10-year Implementation Plan further ensures that actions are prioritized, phased realistically, and matched with institutional responsibilities and potential funding sources.

The Monitoring and Evaluation Plan equips Prilep with a structured mechanism to track progress, ensure accountability, and maintain alignment with the city's long-term goals. This iterative framework reinforces the SUMP as a living document—one that evolves through evidence, stakeholder engagement, and changing mobility needs. By integrating continuous monitoring, mid-term and final evaluations, and adaptive feedback loops, the plan supports a responsive and resilient mobility transition.

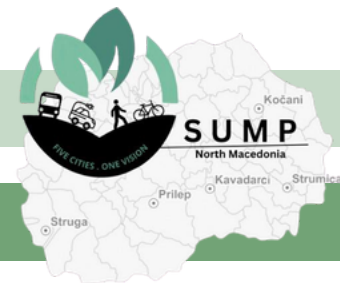
Ultimately, the SUMP positions promote toward a more sustainable and future-ready mobility system. It provides the municipality with not only a technical plan but also a strategic governance tool that strengthens institutional capacity, builds public trust, and aligns European mobility and climate objectives. As implementation progresses, the SUMP will serve as a guiding framework for improving accessibility, reducing emissions, enhancing public spaces, and ensuring a high quality of life for current and future generations.

10 Annex-Action Cards

Walkability and Accessibility

M1.5: Create pedestrian only zones in central and recreational areas

M1.5.1: Pedestrianization of the Center



Cost

360.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Avoid



Priority

High



Efficiency

High

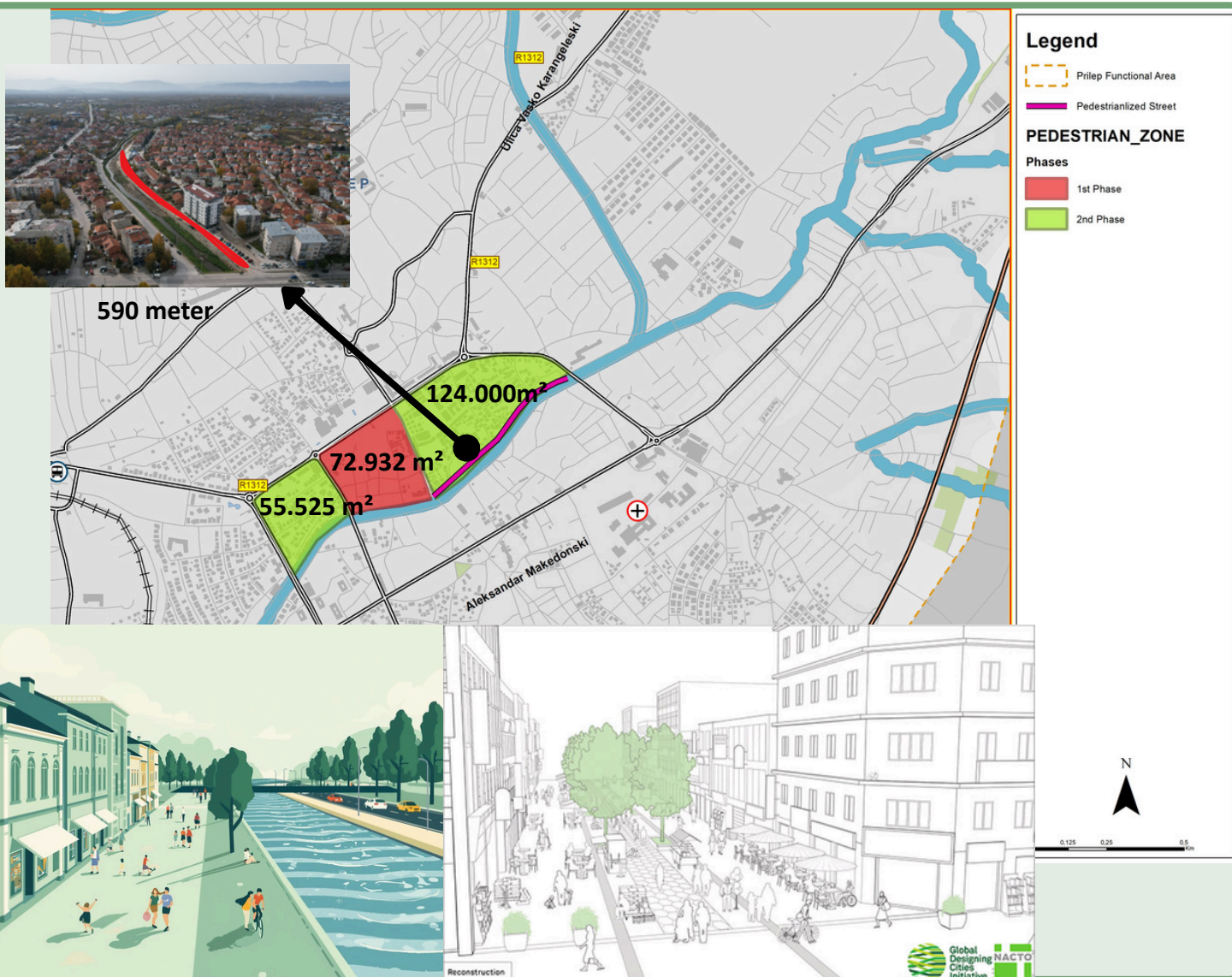


Description

In addition to existing pedestrian streets, designating Kej 1-vi Maj Street (between Kuzman Josifoski Street and 11 October Street) as a pedestrian-only zone and pedestrianizing the central area will significantly improve the overall urban environment. This intervention will not only expand the pedestrian network but also create a safer, more accessible, and more attractive public space in the city center. By removing vehicular traffic, the area will encourage walking as a preferred mode of transportation, provide opportunities for social interaction, and enhance the aesthetic appearance of the surroundings. As a result, ease of walking will be strengthened, safety for residents and visitors will be increased, and the city will offer a more inviting and vibrant atmosphere.



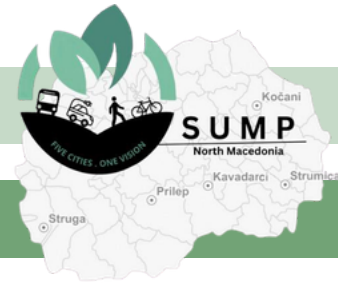
Image



Walkability and Accessibility

M1.5: Create pedestrian only zones in central and recreational areas

M1.5.2: Establish a Traffic Calming Zone



Cost

350.000 €



Period

Medium



Priority

High

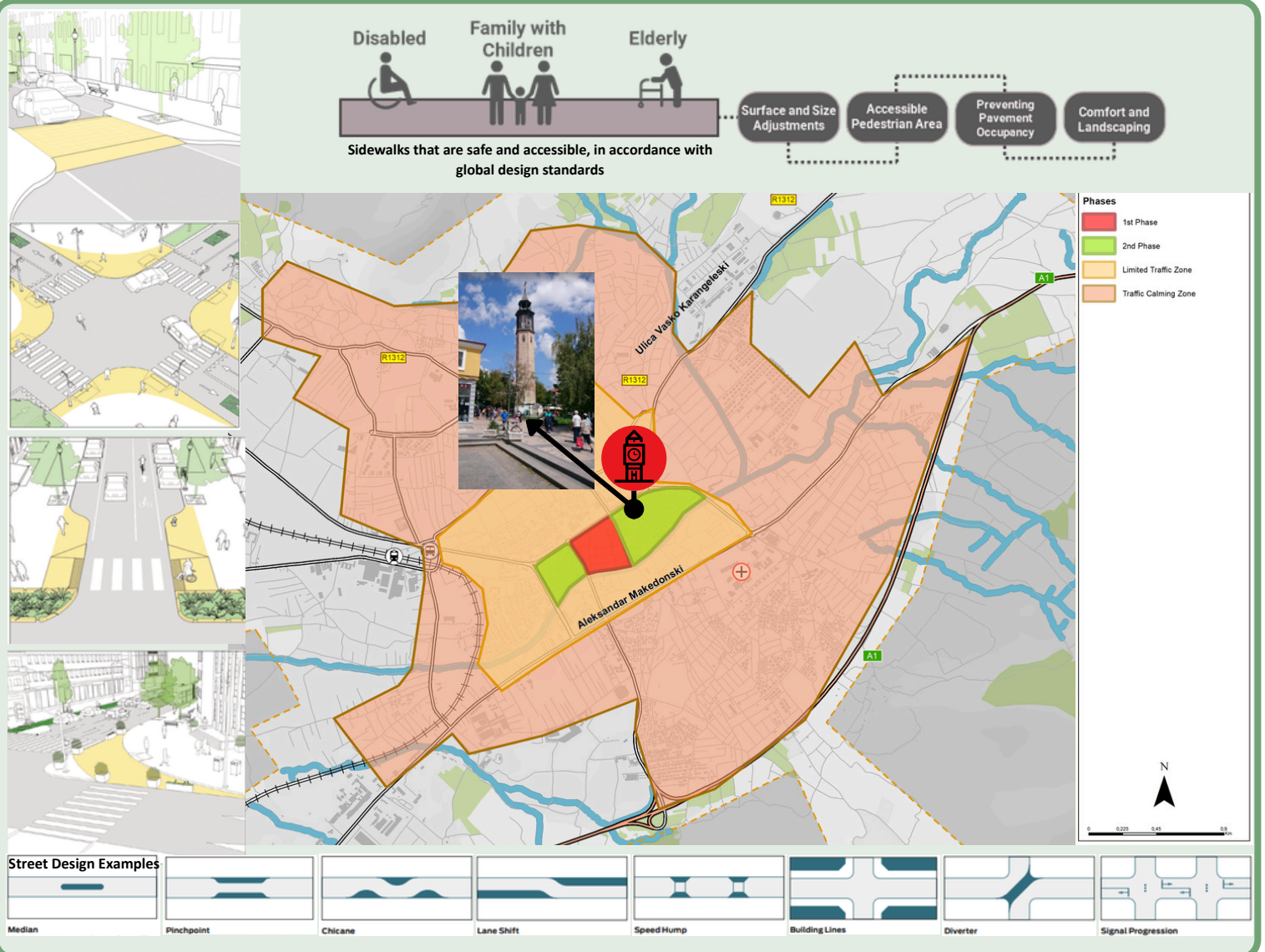


Description

The proposed mobility concept for the city centre of Prilep is based on a three-level access and traffic management approach designed to improve walkability, safety, and urban liveability. A central Pedestrian Area prioritises pedestrian movement and public space quality by significantly limiting motorised traffic. This core zone is supported by a surrounding Limited Traffic Zone, where vehicle access is regulated to reduce through-traffic and manage speeds while maintaining essential accessibility. A wider Traffic Calming Zone extends these principles across the urban area through low-speed regimes and traffic calming measures, contributing to enhanced road safety and environmental performance. Collectively, this hierarchical zoning framework provides a coherent basis for promoting sustainable urban mobility in Prilep.



Image





Cost

125.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Avoid



Priority

High



Efficiency

High

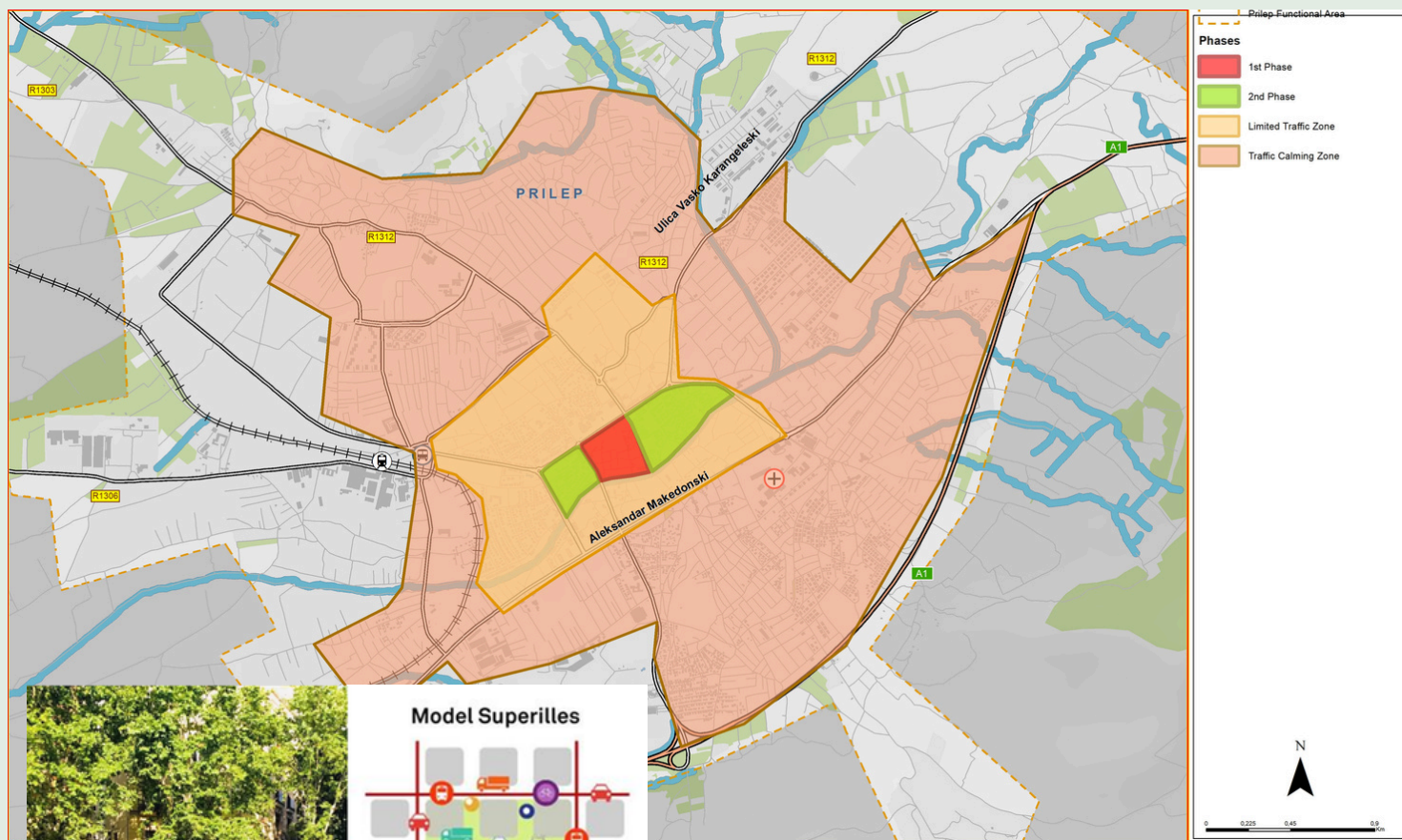


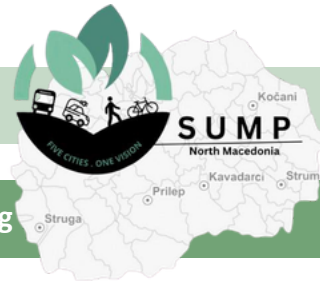
Description

Introducing car-free or low-emission zones in the most pedestrian-oriented areas of Prilep, such as Old Korzo, New Korzo and the surrounding central streets, would allow the municipality to reduce through-traffic and improve air quality and public space conditions. As shown in the images below, the Superblocks model implemented in Barcelona illustrates how pedestrianisation—also in hybrid forms—can be applied as a distributed tool across multiple neighbourhoods, rather than being concentrated along a single central street, simply by reducing carriageway widths, converting streets into residential or community-oriented spaces, removing excess on-street parking, and preserving higher road capacity along the main traffic arteries. A phased implementation, starting with time-based access restrictions and clearly defined exemptions for residents, emergency services and regulated deliveries, would ensure operational feasibility and public acceptance.



Image





Cost

100.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

High



Efficiency

High

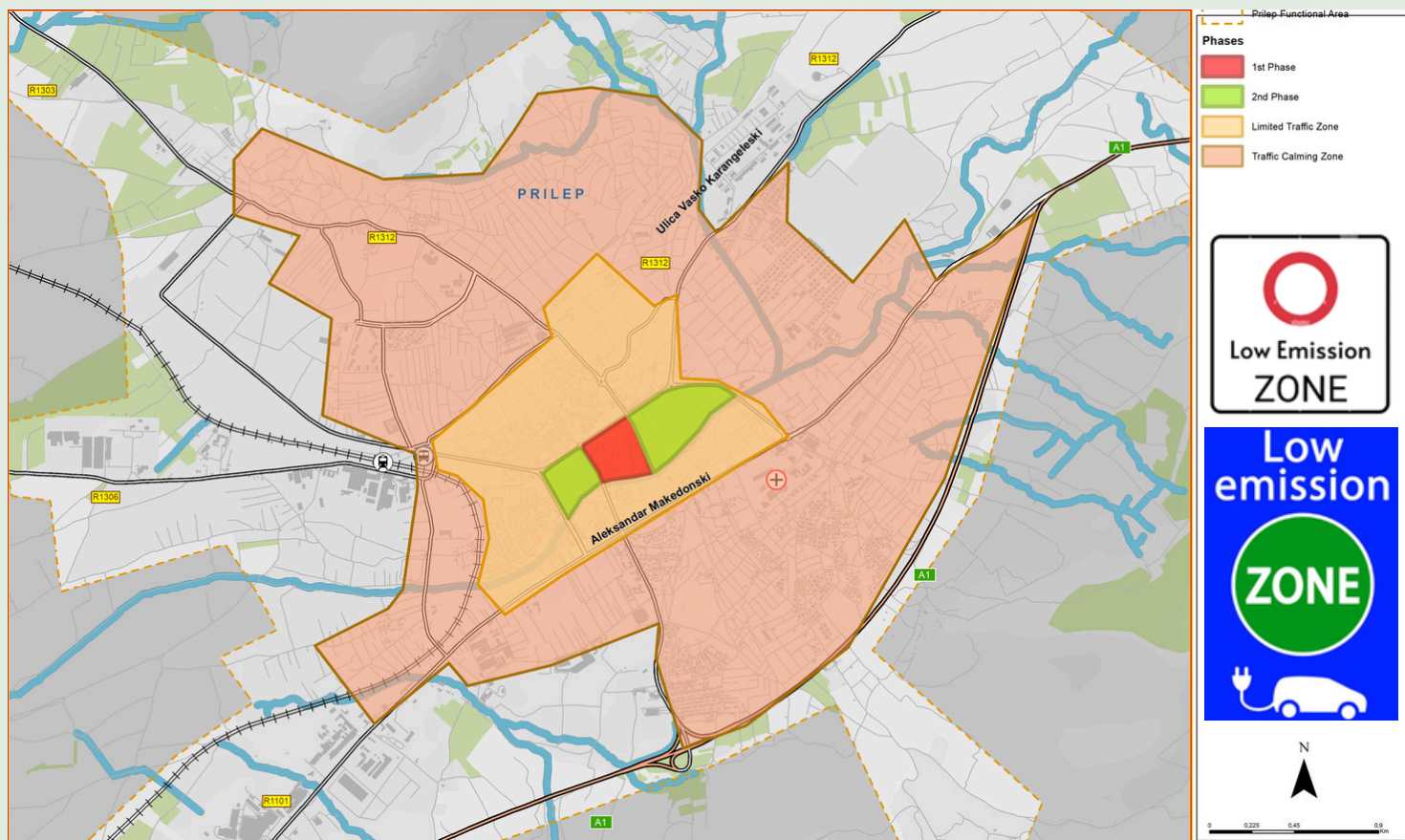


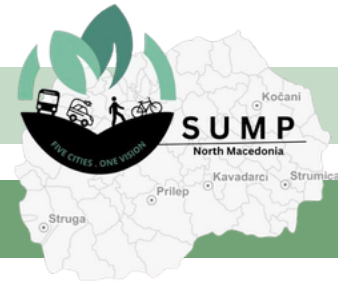
Description

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Image





Cost

40.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

High



Efficiency

Very High

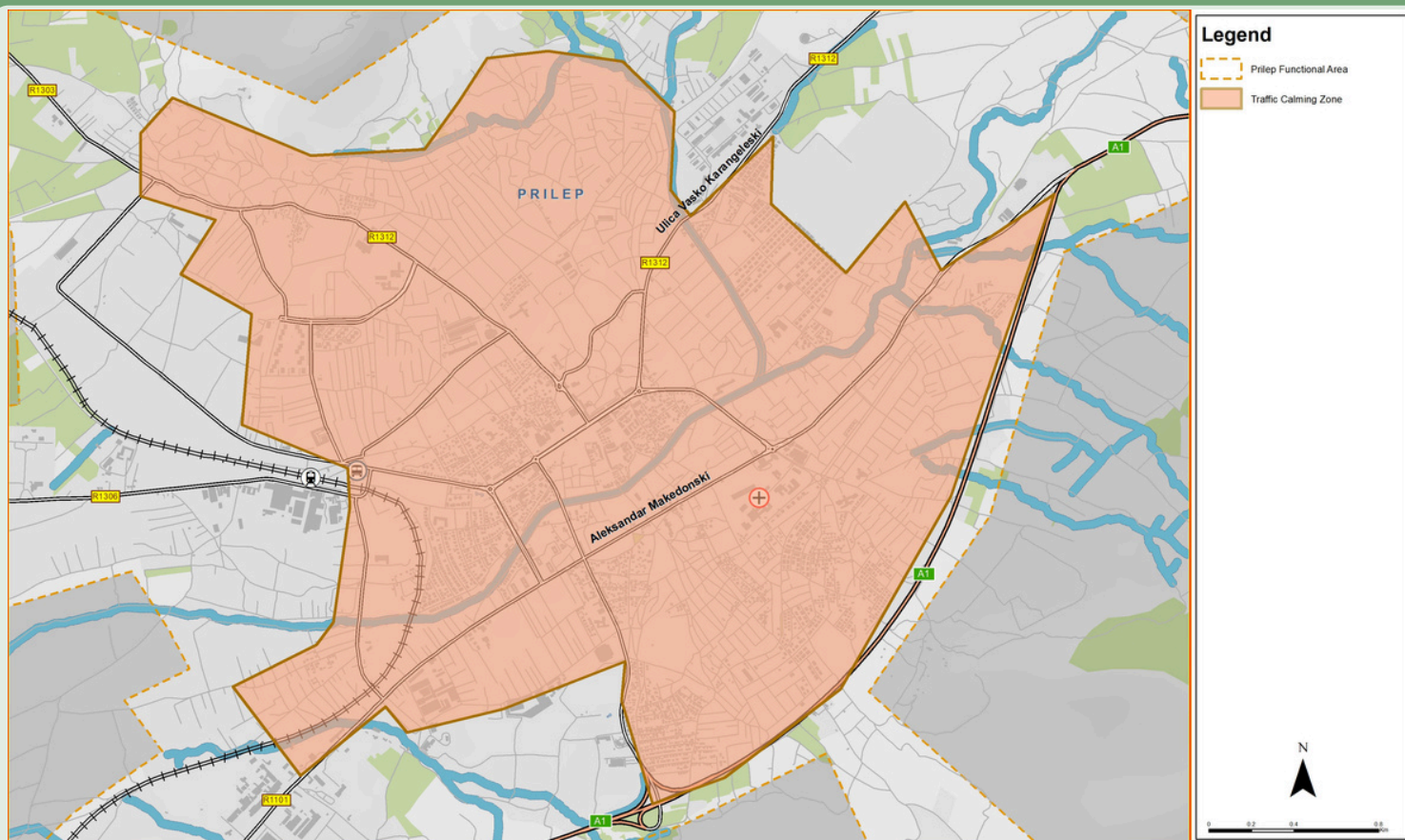


Description

Applying area-wide speed limits and traffic calming measures in Old Korzo, New Korzo and the streets surrounding the City Center, as well as in selected residential neighbourhoods such as Trizla, Bonchejca and Rid, would improve road safety and pedestrian comfort in areas with high walking activity. A city-wide 30 km/h speed limit, introduced through signage across the entire urbanised area, would contribute to reducing crashes, injuries and emissions without significantly affecting actual travel speeds, while targeted micro-infrastructure measures—such as raised crossings, lane narrowing and speed cushions—would be concentrated near schools, markets and other trip-generating locations. Redirecting regional and through-traffic to the outer ring roads, supported by temporary or low-cost pilots (e.g. painted crossings and pop-up calming elements), would allow the municipality to test and refine the approach while improving local accessibility and liveability.



Image





Cost

40.000 €



Responsible
Authority

Municipality of Prilep



Period

Short



ASI Status

Improve/Shift



Priority

High



Efficiency

Very High

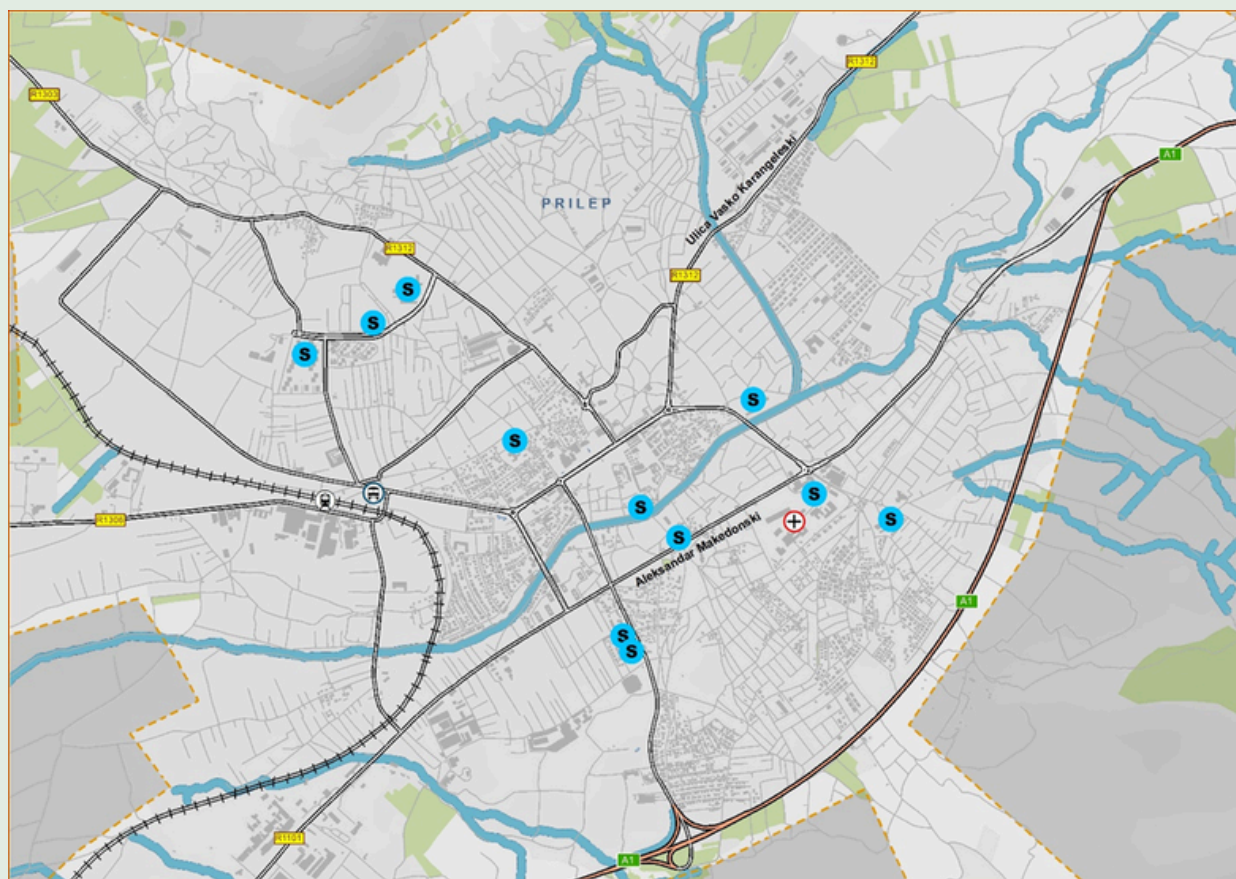


Description

Applying area-wide speed limits and traffic calming measures in Old Korzo, New Korzo and the streets surrounding the City Center, as well as in selected residential neighbourhoods such as Trizla, Bonchejca and Rid, would improve road safety and pedestrian comfort in areas with high walking activity. A city-wide 30 km/h speed limit, introduced through signage across the entire urbanised area, would contribute to reducing crashes, injuries and emissions without significantly affecting actual travel speeds, while targeted micro-infrastructure measures—such as raised crossings, lane narrowing and speed cushions—would be concentrated near schools, markets and other trip-generating locations. Redirecting regional and through-traffic to the outer ring roads, supported by temporary or low-cost pilots (e.g. painted crossings and pop-up calming elements), would allow the municipality to test and refine the approach while improving local accessibility and liveability.



Image



Legend

- Prilep Functional Area
- Schools

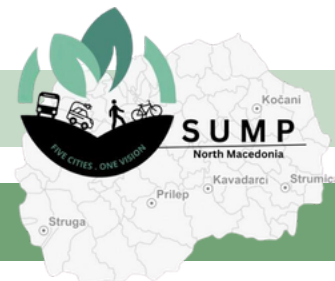


0 0.2 0.4 0.8

Road Network

M3.1: Improve basic road maintenance and surface quality

M3.1.1: Routine Road Inspections



Cost

189.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

Low



Efficiency

Medium

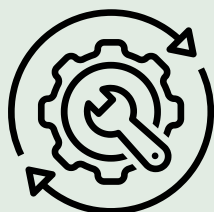


Description

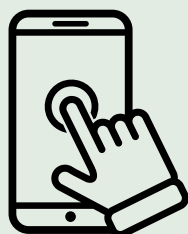
Establishing a municipal program for regular inspections, carried out at intervals such as every six months, would provide a systematic approach to maintaining high-quality urban infrastructure. By incorporating modern digital mapping tools and citizen reporting applications, the municipality can create an efficient system for identifying potholes, cracks, and other surface defects at an early stage. This combination of proactive inspections and community participation ensures that problems are detected and addressed more quickly, reducing safety risks for pedestrians, cyclists, and drivers alike. Ultimately, the program would not only improve the durability and resilience of public spaces but also foster greater trust and engagement between citizens and local authorities through transparent and responsive maintenance practices.



Image



6-Month Checkup Plan



Citizen Reporting Application



Integration & Collaboration



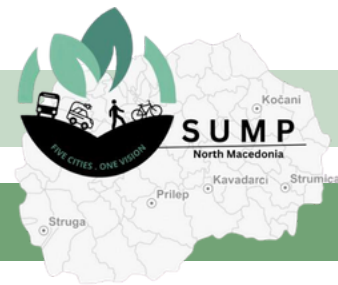
Safe & Better Environment



Road Network

M3.1: Improve basic road maintenance and surface quality

M3.1.2: Pothole & Surface Repair Program



Cost

160.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

Low



Efficiency

Low

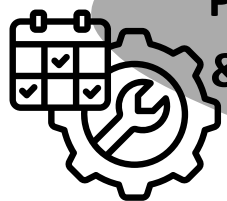


Description

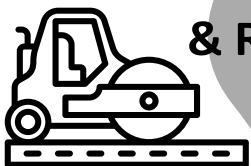
Launching a continuous repair program that prioritizes main roads, bus corridors, and other high-traffic areas would significantly improve the overall quality and safety of urban mobility. By focusing on the most frequently used routes, the municipality can ensure that the greatest number of residents and commuters benefit from smoother and safer travel conditions. The use of durable materials and modern construction techniques would extend the lifespan of road surfaces, minimize the need for frequent repairs, and reduce long-term maintenance costs. In addition, well-maintained roads contribute to lower vehicle repair expenses for drivers, improved efficiency of public transportation, and a more comfortable travel experience for all users. This ongoing commitment to infrastructure quality would not only enhance daily mobility but also strengthen public confidence in the city's ability to provide reliable and resilient transport networks.



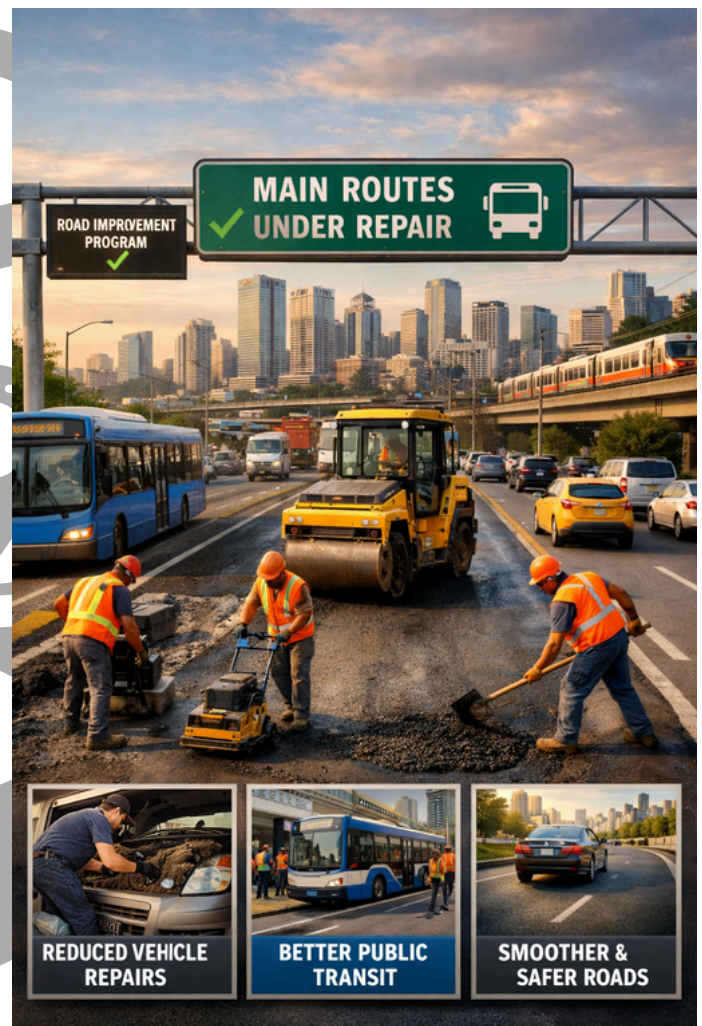
Continuous Repair Program



Prioritize & Detect



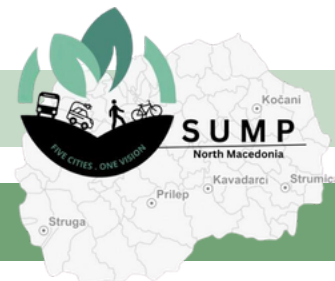
Construct & Repair



Road Network

M3.1: Improve basic road maintenance and surface quality

M3.1.3: Drainage & Winter Maintenance



Cost

50.000 €



Period

Medium



Priority

Low

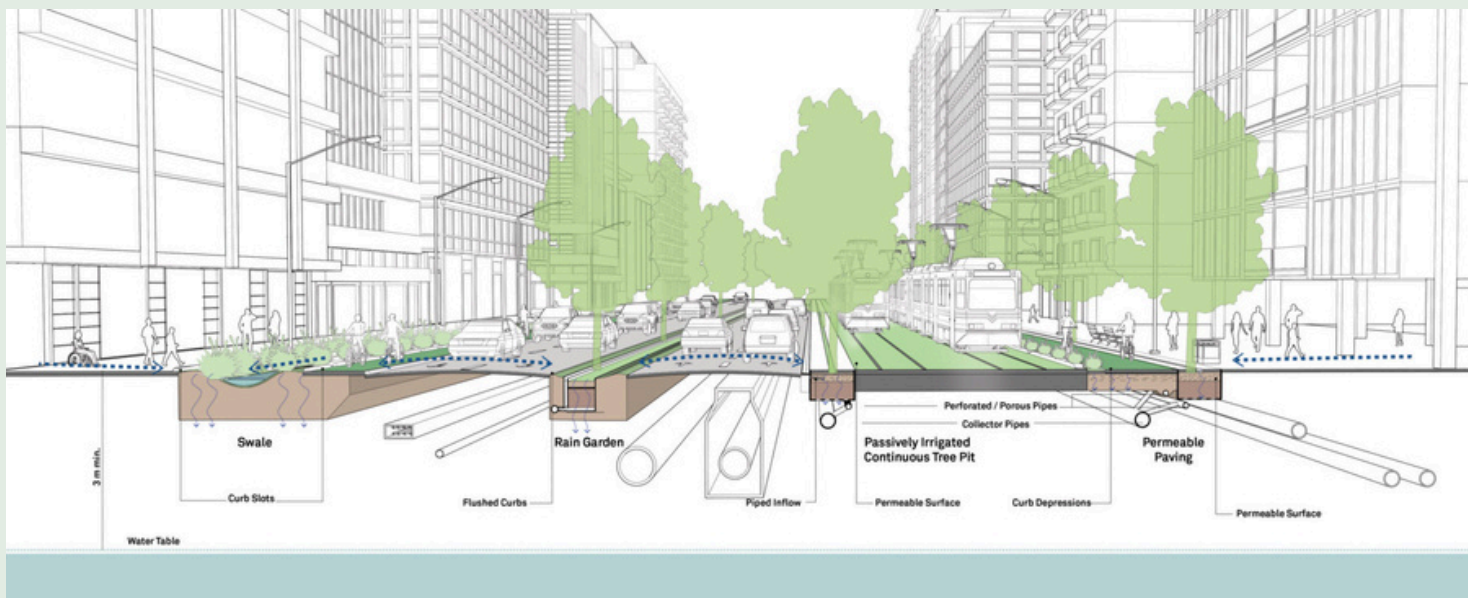


Description

Upgrading the drainage system to prevent water accumulation and damage, combined with strengthening winter services, is a crucial step toward ensuring year-round road safety and durability. Improved drainage will protect road surfaces from erosion and structural weakening caused by standing water, while enhanced winter maintenance—such as efficient snow removal, proactive anti-icing measures, and timely salt distribution—will reduce the risks associated with slippery conditions. Together, these measures will extend the lifespan of the road network, lower long-term repair costs, and provide safer driving conditions in all types of weather. By investing in resilient infrastructure and reliable seasonal services, the city can guarantee smoother, more dependable mobility for residents and visitors throughout the year.



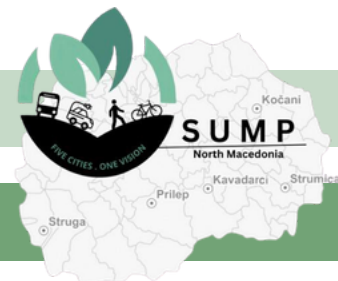
Image



Road Network

M3.1: Improve basic road maintenance and surface quality

M3.1.4: Accessibility & Vulnerable Users



Cost

279.000 €



Period

Medium



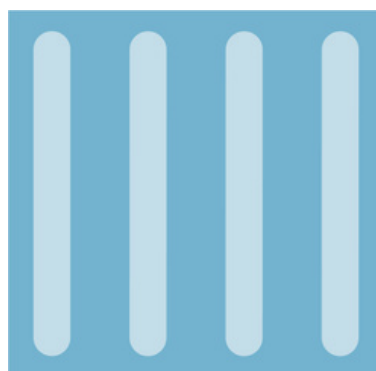
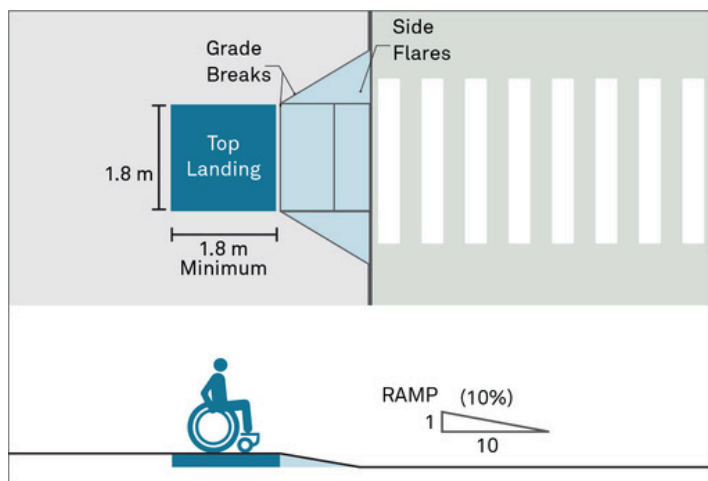
Priority

High

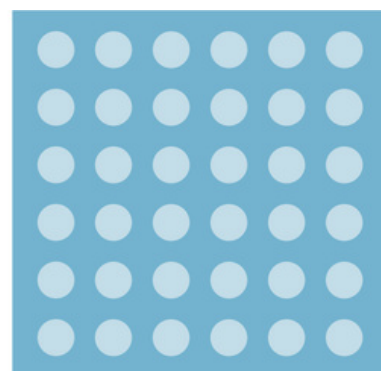


Description

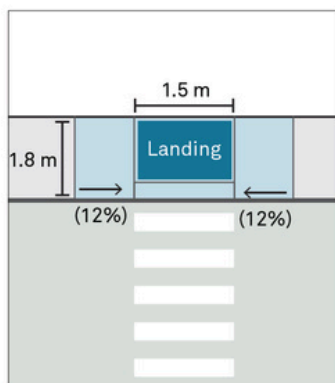
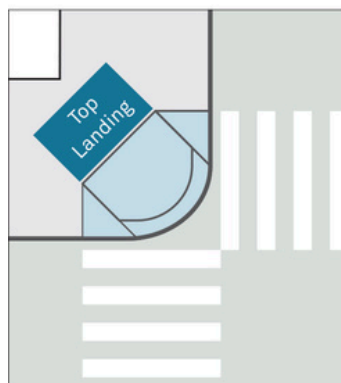
Improving sidewalks and crossings as part of road resurfacing projects is an essential step toward creating a safer and more inclusive urban environment. By eliminating uneven surfaces, repairing damaged sections, and removing barriers that hinder mobility, the city can ensure that elderly citizens, people with disabilities, and families with strollers can move around more comfortably and independently. Well-designed sidewalks and clearly marked, accessible crossings also enhance safety for all pedestrians and cyclists, reducing the risk of accidents and encouraging more people to choose active modes of transport. This integrated approach not only promotes inclusive mobility but also contributes to healthier, more vibrant, and people-friendly public spaces.



Block indicates "go"



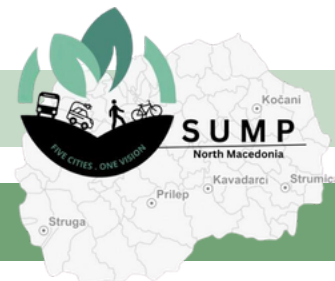
Block indicates "stop"



Road Network

M3.2: Redesign intersections for safer crossing and traffic flow

M3.2.1: Safety Assessment of Intersections



Cost

560.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

High



Efficiency

Very High



Description

Conducting a comprehensive safety audit of all major intersections is a vital step toward creating a safer and more user-friendly urban transport network. By systematically analyzing traffic patterns, accident records, and user behaviors, the municipality can identify high-risk areas—particularly those where pedestrian and cyclist accidents occur most frequently. This evidence-based approach will enable the city to set clear redesign priorities, ensuring that resources are directed where they are most needed. Implementing targeted improvements such as better signal timing, improved visibility, safer crossing facilities, and protected cycling infrastructure will significantly reduce accident risks. Ultimately, this data-driven process will not only enhance safety but also promote greater confidence in walking and cycling as viable and secure modes of transport.



Image



Analyse Accidents



Analyse Traffic Patterns



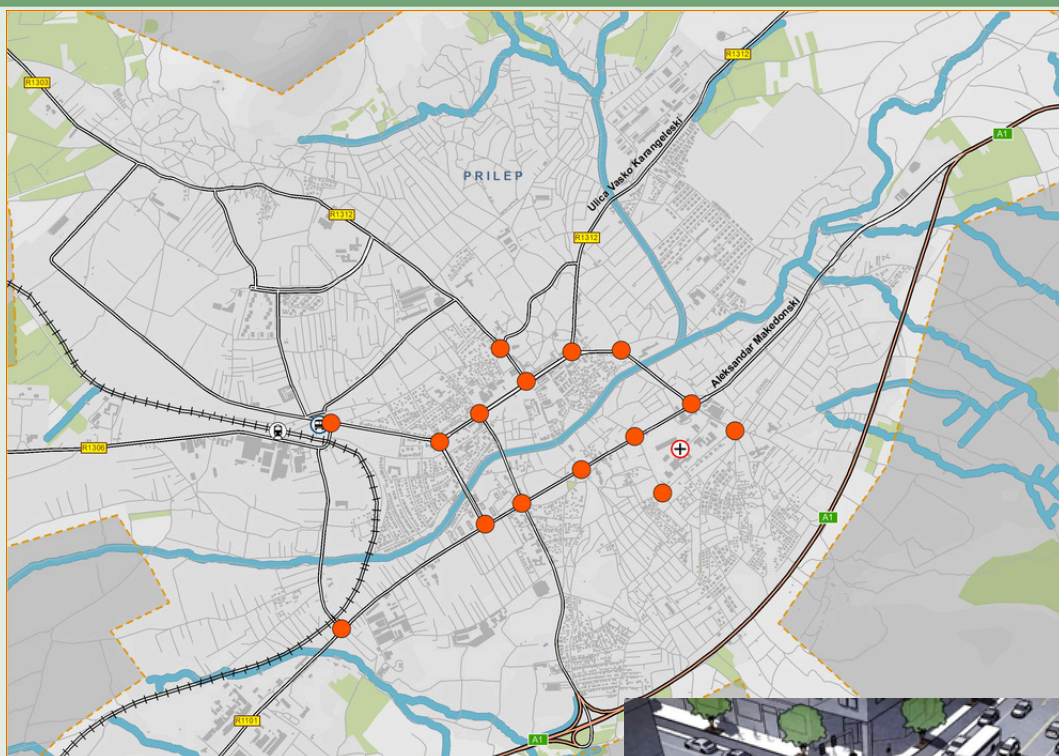
Better Signal Timing



Improve Visibility



Safer Crossing



Legend

Prilep Functional Area

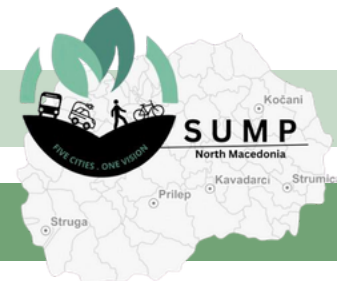
Junction



Road Network

M3.2: Redesign intersections for safer crossing and traffic flow

M3.2.2: Improved Pedestrian Crossings



Cost

450.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

High



Efficiency

High



Description

Introducing raised crosswalks, shorter crossing distances, pedestrian refuge islands, and curb extensions to improve visibility will greatly enhance the safety and comfort of pedestrians in busy urban areas. These design measures slow down vehicle speeds, make pedestrians more visible to drivers, and reduce the time needed to cross the street, which is especially beneficial for children, the elderly, and people with limited mobility. Ensuring full compliance with accessibility standards further guarantees that crossings are usable for everyone, including wheelchair users and those with strollers. Together, these improvements will create safer pedestrian crossings, promote inclusive mobility, and encourage more people to walk as part of their daily routines, contributing to a healthier and more accessible city environment.



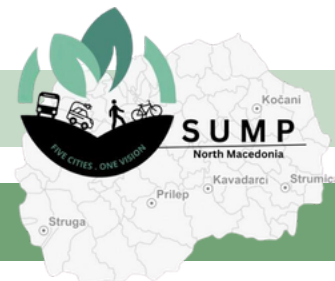
Image



Road Network

M3.2: Redesign intersections for safer crossing and traffic flow

M3.2.3: Cycling-Friendly Design



Cost

200.000 €



Period

Medium



Priority

High



Description



Responsible Authority

Municipality of Prilep



ASI Status

Improve



Efficiency

Medium

Adding dedicated cycle crossings, clearly marked colored lanes, and safe waiting areas at intersections will greatly improve the safety and comfort of cyclists navigating busy streets. These measures provide clear separation from motor vehicle traffic, reduce the risk of collisions, and make cyclists more visible to drivers at critical points. By integrating these improvements with the broader citywide cycling route network, the municipality can create a continuous and reliable system that encourages more residents to choose cycling as a daily mode of transport. The result will be a safer, more attractive cycling environment that not only increases cycling rates but also supports healthier lifestyles and more sustainable urban mobility.



Image

PROTECTED INTERSECTIONS

Protected intersections keep people biking separate from people driving and create shorter crossing distances for people walking. People driving benefit by seeing people biking better, especially when people driving turn right.

People biking should stop and wait to cross in the waiting area. They should also keep the other bike lane clear to let people biking in the other direction pass.

People biking must yield to people walking who are crossing the street and the bike lane.

People driving must stop behind the stop line so that people walking can cross the intersection safely.

People driving must yield to people biking and walking when turning right.

People biking must yield to people walking who are crossing the bike lane to reach the bus stop.

People walking should not walk on the bike lane except when crossing the street or walking to the bus stop.

People walking to the bus stop should use the designated crossings. People biking must yield to people walking.

SEPARATED BIKE LANES

Separated bike lanes are also known as cycle tracks and protected bike lanes. These lanes separate bicycle traffic from vehicular traffic. Pay close attention at intersections where separated bike lanes cross roads and crosswalks. Some are one-way, some are two-way. People biking should ride in the correct direction. People walking should stay on the sidewalk — do not walk in the separated bike lane.

People biking should ride in the lane through the intersection. Watch for turning vehicles and pedestrians.

When turning right, people driving must yield to people biking and pedestrians who are crossing.

People walking should watch for people biking when crossing the separated bike lane.

People driving must stop at the stop line to allow pedestrians and cyclists to cross the intersection safely.

People walking should cross with the pedestrian signal.

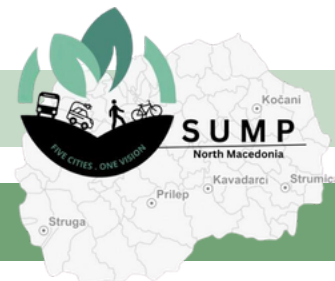
People biking must yield to pedestrians. Watch for turning vehicles.

City of Cambridge
cambridgema.gov/visionzero



City of Cambridge
cambridgema.gov/visionzero





Cost

480.000 €



Period

Medium



Priority

Low

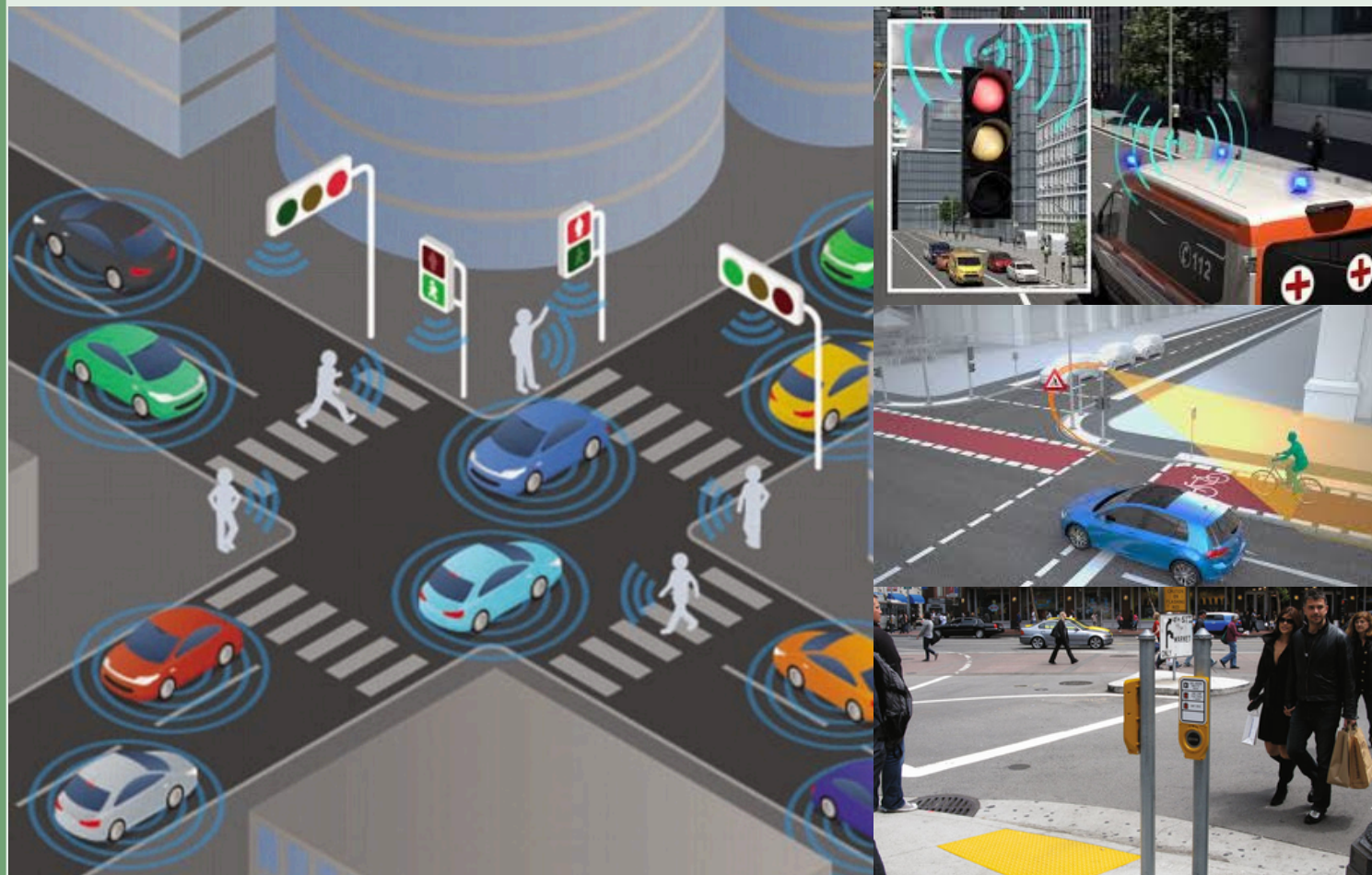


Description

Introducing smart traffic lights with adaptive timing and pedestrian detection will modernize traffic management by allowing intersections to respond dynamically to real-time demand. These systems can adjust signal cycles based on traffic flow, prioritize pedestrian crossings when needed, and reduce unnecessary vehicle idling. In addition, installing monitoring cameras will provide valuable data to evaluate intersection performance, identify bottlenecks, and continuously optimize operations. Together, these technologies will enhance efficiency, improve safety for all road users, and contribute to reduced emissions by minimizing congestion and lowering fuel consumption. This data-driven and responsive approach will ensure more sustainable and effective traffic management across the city.



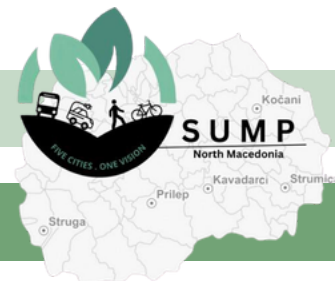
Image



Road Network

M3.3: Update road signage and markings to improve clarity and navigation

M3.3.1: Standardization of Signage



Cost

100.000 €



Period

Short



Priority

Low



Description

Replacing old or inconsistent signs with standardized, internationally recognizable symbols will improve clarity and road safety across the city. Where appropriate, bilingual or multilingual signage should be introduced to support both residents and visitors, ensuring clear communication for all users. These measures will reduce driver confusion, enhance navigation, and create a more consistent and user-friendly transport environment.



Image



STOP



NO ENTRY



GIVE WAY



ALL MOTOR
VEHICLES PROHIBITED



NO
MOTORCYCLES



NO
BICYCLES



NO BULLOCK
CARTS



NO HEAVY
VEHICLES



ONE - WAY
TRAFFIC



NO STRAIGHT
AHEAD



NO VEHICLES IN
BOTH DIRECTION



NO LEFT
TURN



NO RIGHT
TURN



NO
OVERTAKING



NO
U-TURN



HEIGH LIMIT



SPEED LIMIT



WEIGHT LIMIT



LENGHT LIMIT



NO PARKING



HORN
PROHIBITED



NO
PEDESTRIANS



LEFT CURVE

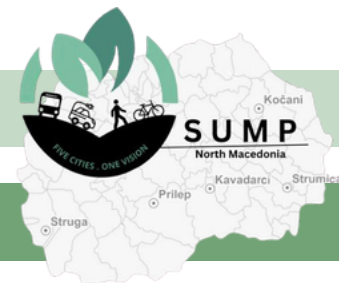


RIGHT CURVE

Road Network

M3.3: Update road signage and markings to improve clarity and navigation

M3.3.2: Enhanced Road Markings



Cost

150.000 €



Period

Short



Priority

Medium

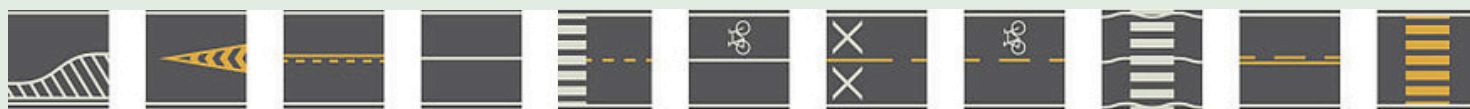
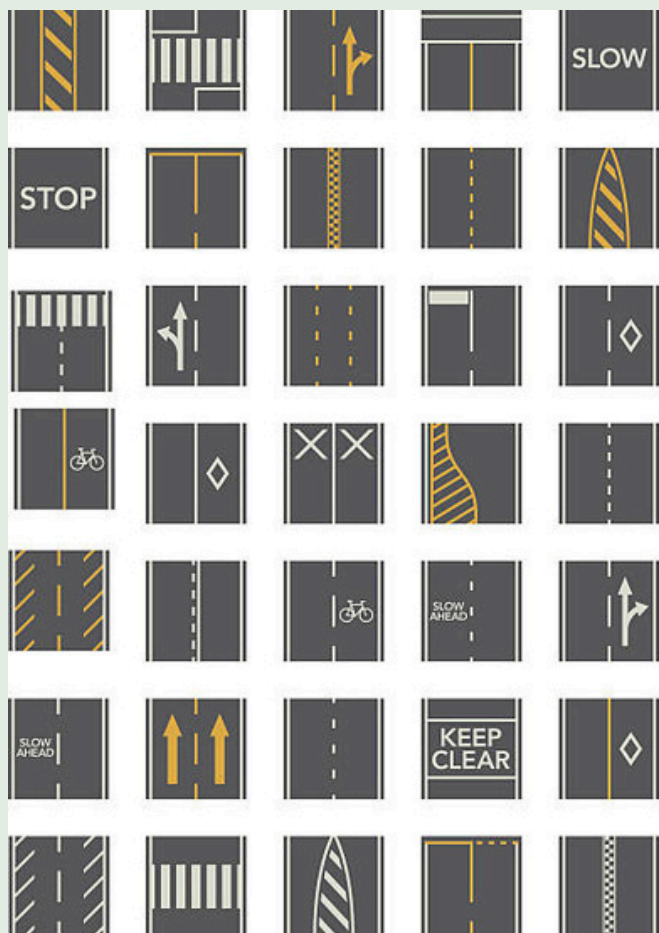


Description

Repainting faded lane markings, pedestrian crossings, and cycling lanes with durable, reflective materials will significantly improve visibility at night and during adverse weather conditions. Clear and well-maintained markings provide safer navigation for all road users, especially pedestrians, cyclists, and other vulnerable groups, while also supporting smoother traffic flow and reducing the risk of accidents.



Image



Responsible Authority

Municipality of Prilep



ASI Status

Improve



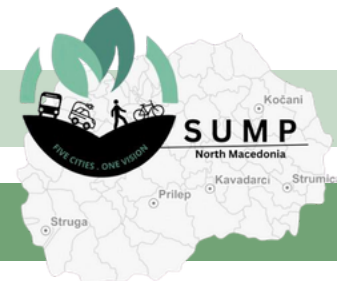
Efficiency

Medium

Road Network

M3.3: Update road signage and markings to improve clarity and navigation

M3.3.3: Wayfinding for Pedestrians & Cyclists



Cost

26.000 €



Period

Short



Priority

Medium



Description

Installing clear directional signs, maps, and route markers for walking and cycling paths will make it easier for non-motorized users to navigate the city. By linking key destinations such as schools, parks, and transit stations, these signs will encourage more people to choose walking and cycling for their daily trips. This not only improves accessibility and wayfinding but also promotes active mobility, healthier lifestyles, and more sustainable urban transport.



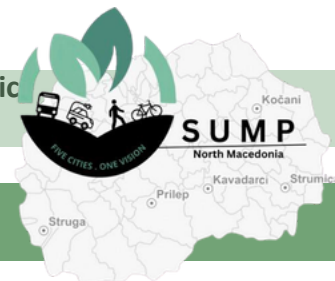
Image



Road Network

M3.4: Transform oversized urban roadways into multifunctional public spaces

M3.4.1: Reclaiming oversized urban roads for multifunctional public use



Cost

650.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Avoid



Priority

Low



Efficiency

Low

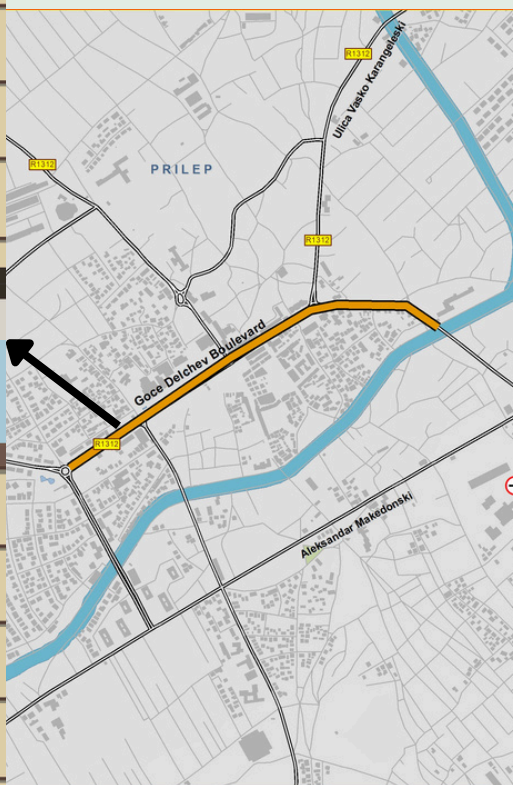
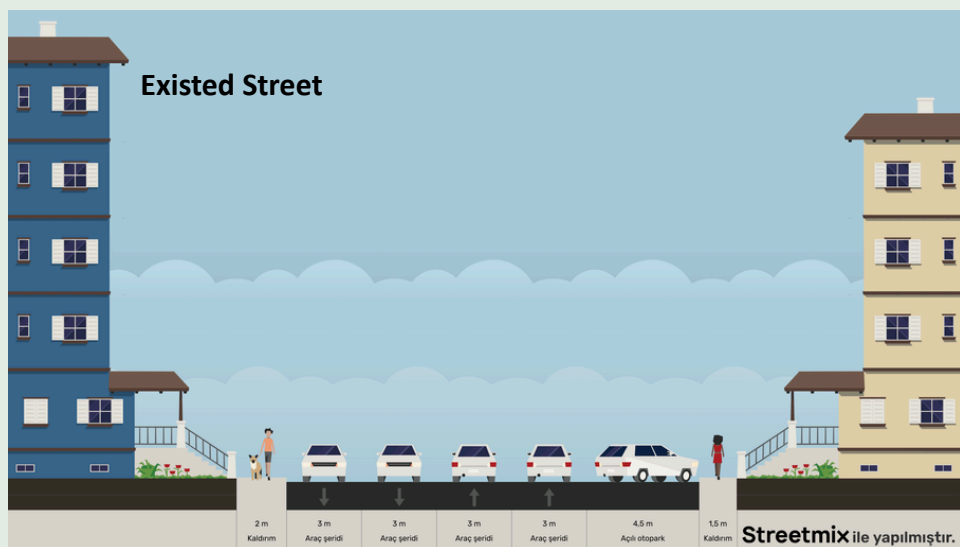


Description

Certain urban roads in Prilep are wider than necessary for current traffic volumes, creating unsafe and uninviting conditions for pedestrians and cyclists. This action reclaims excess road space to create multifunctional public areas, integrating wider sidewalks, greenery, seating, and dedicated cycling lanes. Such reallocation will not only improve safety but also foster social interaction, local business activity, and urban vitality. By transforming oversized streets into people-friendly avenues, the city will reinforce sustainable mobility objectives and enhance the attractiveness of its public realm.



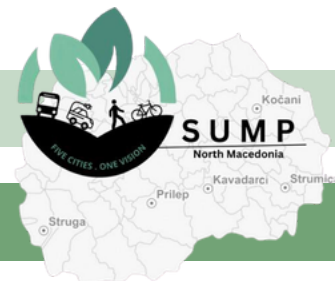
Image



Road Network

M3.5: Introduce traffic monitoring systems for real-time congestion management

M3.5.1: Integrated traffic monitoring & open-data platform



Cost

650.000 €



Period

Short



Priority

High



Description



Responsible Authority

Municipality of Prilep



ASI Status

Improve



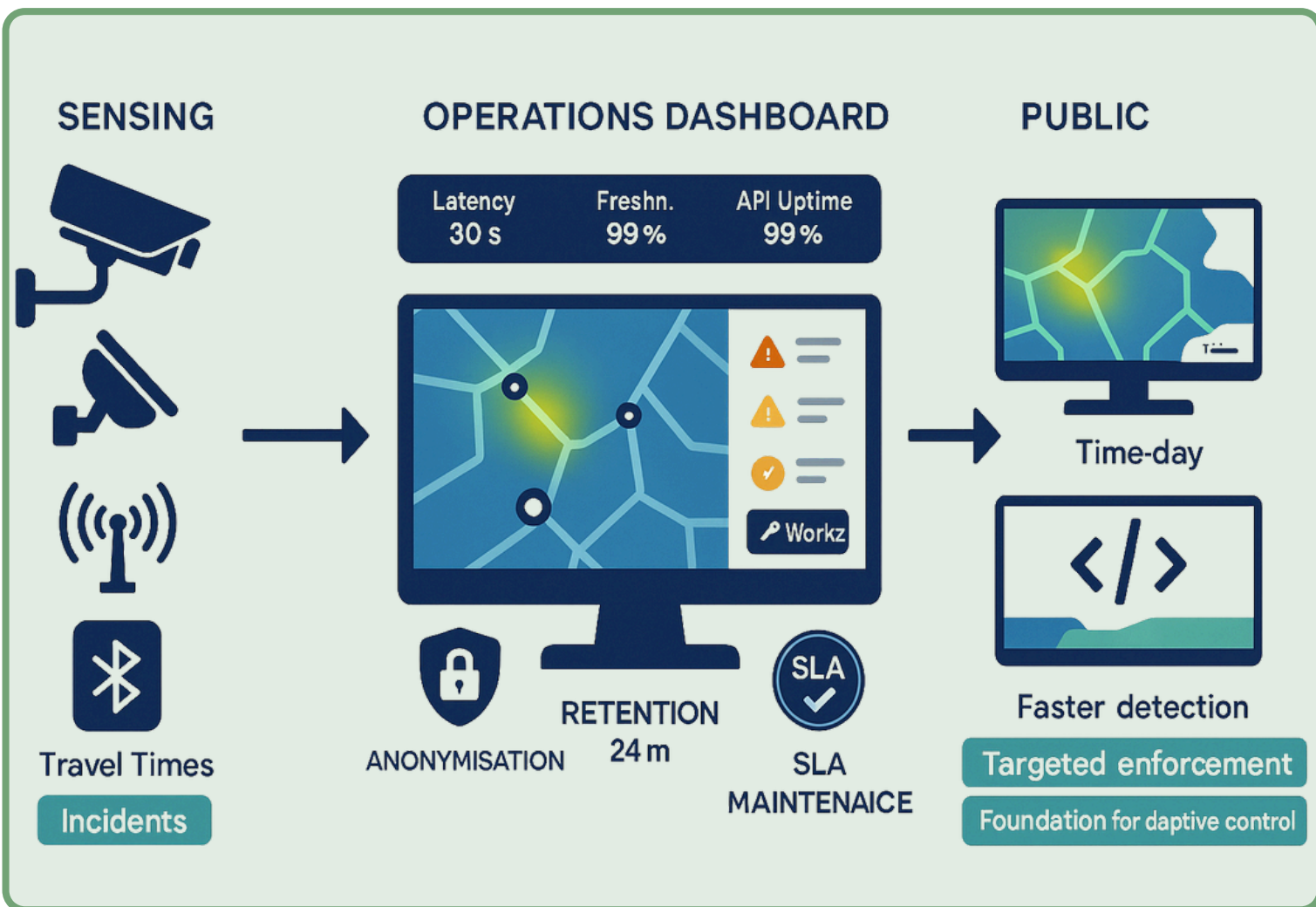
Efficiency

Medium

This action delivers Prilep's baseline intelligent traffic system by combining permanent multimodal counting, incident detection and travel-time measurement with a unified operations dashboard and an open-data interface. Camera or radar units at key junctions will provide continuous volumes, turning movements, queue lengths and abnormal-event flags, while Bluetooth/Wi-Fi and floating-car data feed corridor travel times and reliability indices. A secure, role-based dashboard enables operators to view live conditions, set alerts and annotate work zones, whereas a time-lagged public map and API foster transparency and third-party reuse. The solution includes data retention, anonymisation, SLA-backed maintenance and staff training. By standardising data, shortening detection time and sharing information responsibly, Prilep can target enforcement, adjust operations and inform travellers in real time, building the foundation for adaptive control.



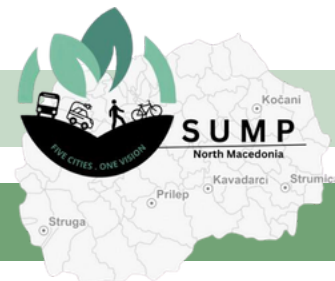
Image



Road Network

M3.5: Introduce traffic monitoring systems for real-time congestion management

M3.5.2: Adaptive signal control with public transport priority



Cost

750.000 €



Period

Short



Priority

High



Responsible Authority

Municipality of Prilep



ASI Status

Improve



Efficiency

Medium

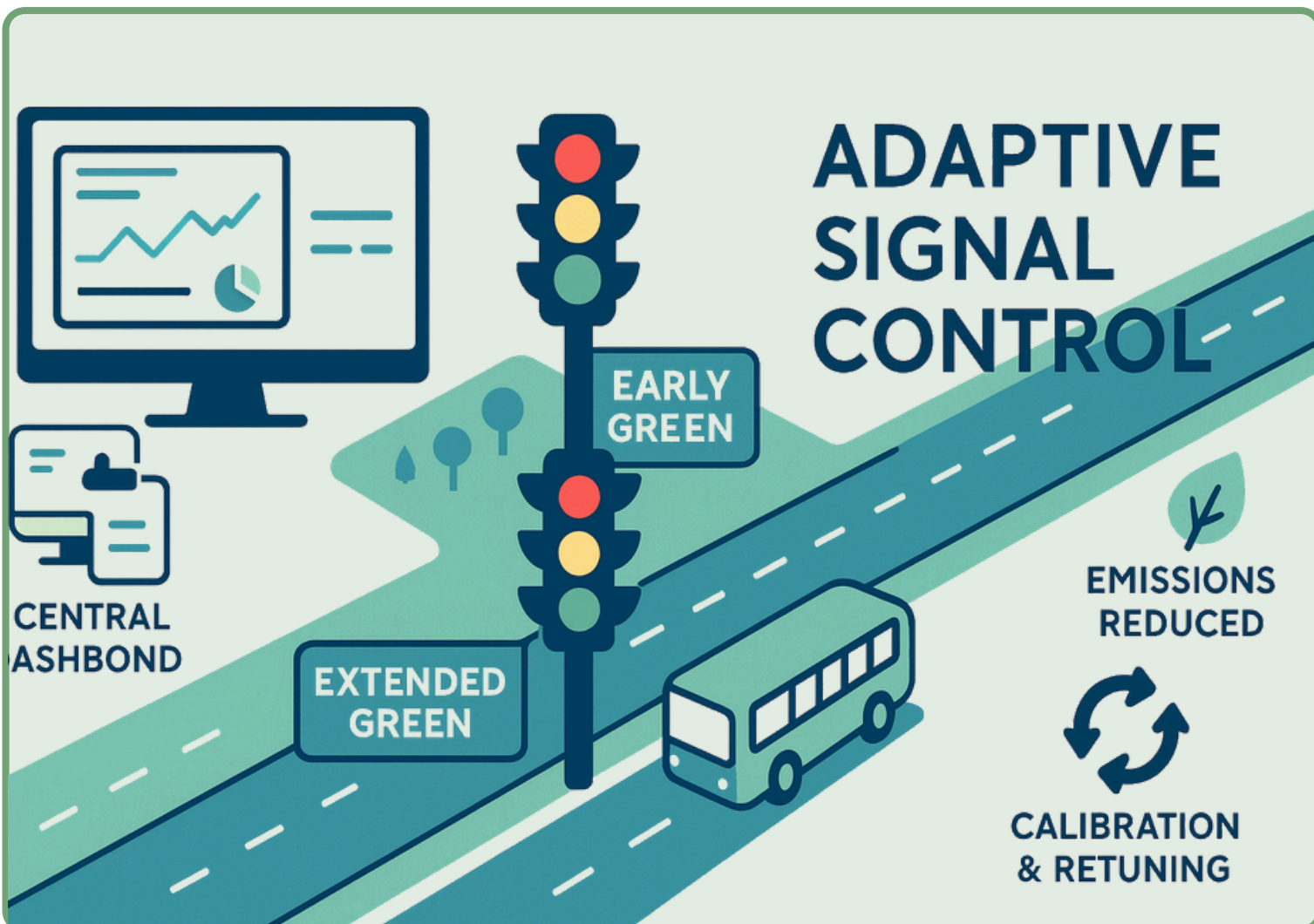


Description

This action pilots demand-responsive signal control along a strategic corridor to cut stop-and-go, smooth flows and prioritise buses at intersections. Using the real-time data streams established by Action M3.5.1, the signal system will adapt cycle lengths, splits and offsets to prevailing demand, while selective bus priority (early green, extended green or phase insertion) reduces delay for scheduled services without compromising safety. The pilot will include baseline surveys, scenario testing, field calibration and continuous performance monitoring through the central dashboard. By coordinating adjacent junctions to achieve practical green-wave bands and enabling rapid retuning after incidents or roadworks, the corridor is expected to deliver measurable gains in travel time, reliability and emissions. Results and lessons will set standards and scaling criteria for subsequent corridors.



Image



Parking Systems

M4.2: Adjust Parking Fees to Reduce Long-Term Car Use in Central Areas

M4.2.1: Central Zone Pricing & Time-Limit Scheme



Cost

45.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

High



Efficiency

High



Description

This action introduces a differentiated parking tariff and time-limit system for the historic core and streets around Korzo, the low-traffic zone, and the main commercial corridors. Short-stay parking will be allowed at higher hourly rates, while long-term parking will be progressively restricted or removed. Digital payment, clear signage, and zone-based tariffs will ensure that parking spaces are used for quick access to shops and services rather than for all-day commuter parking.

By making long-term parking in the city centre expensive and scarce, this scheme will encourage workers and visitors to shift to park-and-ride facilities, public transport, or walking. Over time, this will free up valuable street space and improve turnover for local businesses.



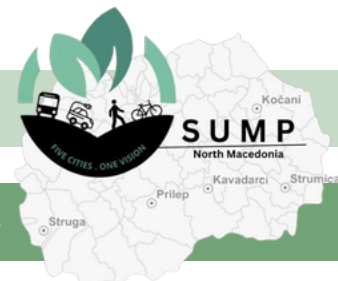
Image



Parking Systems

M4.2: Adjust Parking Fees to Reduce Long-Term Car Use in Central Areas

M4.2.2: Residential Parking Permit Program in Inner Neighbourhoods



Cost

45.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

High



Efficiency

High



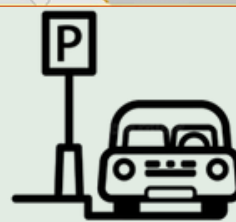
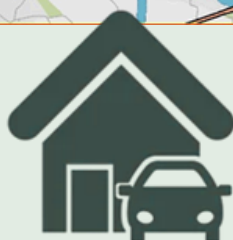
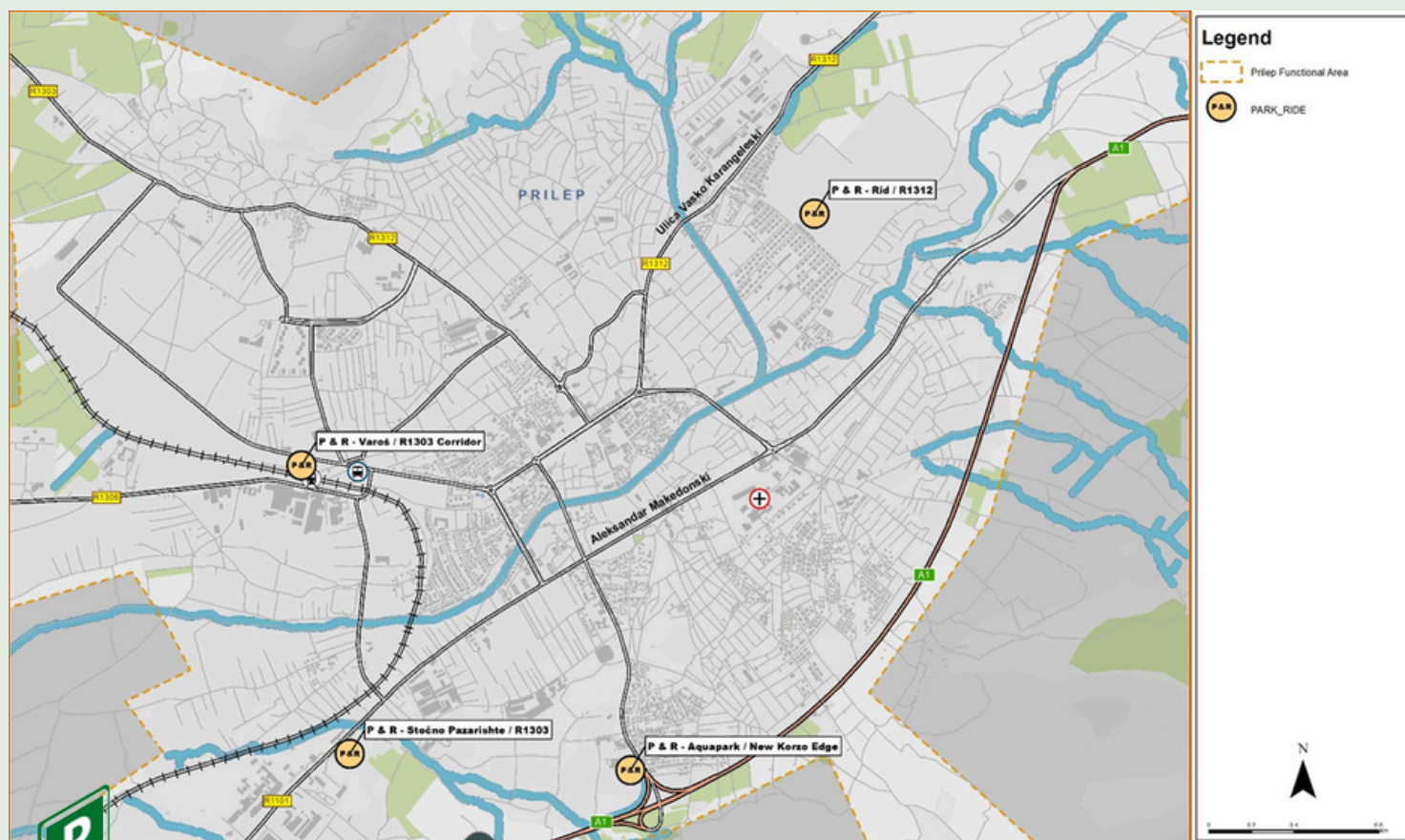
Description

This action establishes a resident-only parking permit system in dense neighbourhoods close to the centre, including Bonchejca, Rid, and Tochila. Residents will be eligible for reduced-rate permits, while non-residents will face higher fees or limited parking duration. Visitor permits and service vehicle access will be provided through a simple registration system.

The program protects local communities from spillover parking caused by city-centre restrictions. It improves parking availability for residents, reduces cruising for parking, and reinforces the effectiveness of access regulation and traffic calming measures.



Image



Parking Systems

M4.3: Enforce Regulations and Physical Barriers Against Illegal Parking



M4.3.1: Targeted Enforcement and Control Program



Cost

20.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

High



Efficiency

Very High



Description

This action strengthens parking enforcement in pedestrian streets, school zones, crossings, and cycling corridors, with special focus on Korzo, streets around public buildings, and routes with high pedestrian flows. Parking wardens and municipal inspectors will conduct regular patrols, supported by clear fines and towing procedures for repeat offenders.

Consistent enforcement will ensure that sidewalks, crossings, and cycle routes remain unobstructed and safe. Over time, improved compliance will support walking, cycling, and accessibility for vulnerable users.



Image



Parking Systems

M4.3: Enforce Regulations and Physical Barriers Against Illegal Parking

M4.3.2: Physical Protection of Pedestrian and Cycling Space



Cost

90.000 €



Period

Medium



Priority

High



Description

This action installs physical barriers such as bollards, planters, curb extensions, and raised edges to prevent cars from parking on sidewalks, bike lanes, and pedestrian areas. These measures will be applied first in Korzo, school surroundings, and high-conflict streets. Vertical and horizontal signage will reinforce the new rules. By physically protecting active travel space, this project reduces the need for constant enforcement and creates clearer, safer streets. It also contributes to a more attractive and legible public realm.



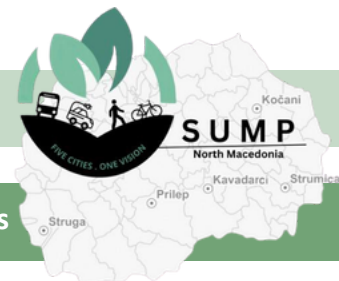
Image



Parking Systems

M4.4: Develop park-and-ride facilities near key transit hubs

M4.4.1: Construction of Peripheral P&R Sites on Main Access Corridors



Cost

375.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

Medium



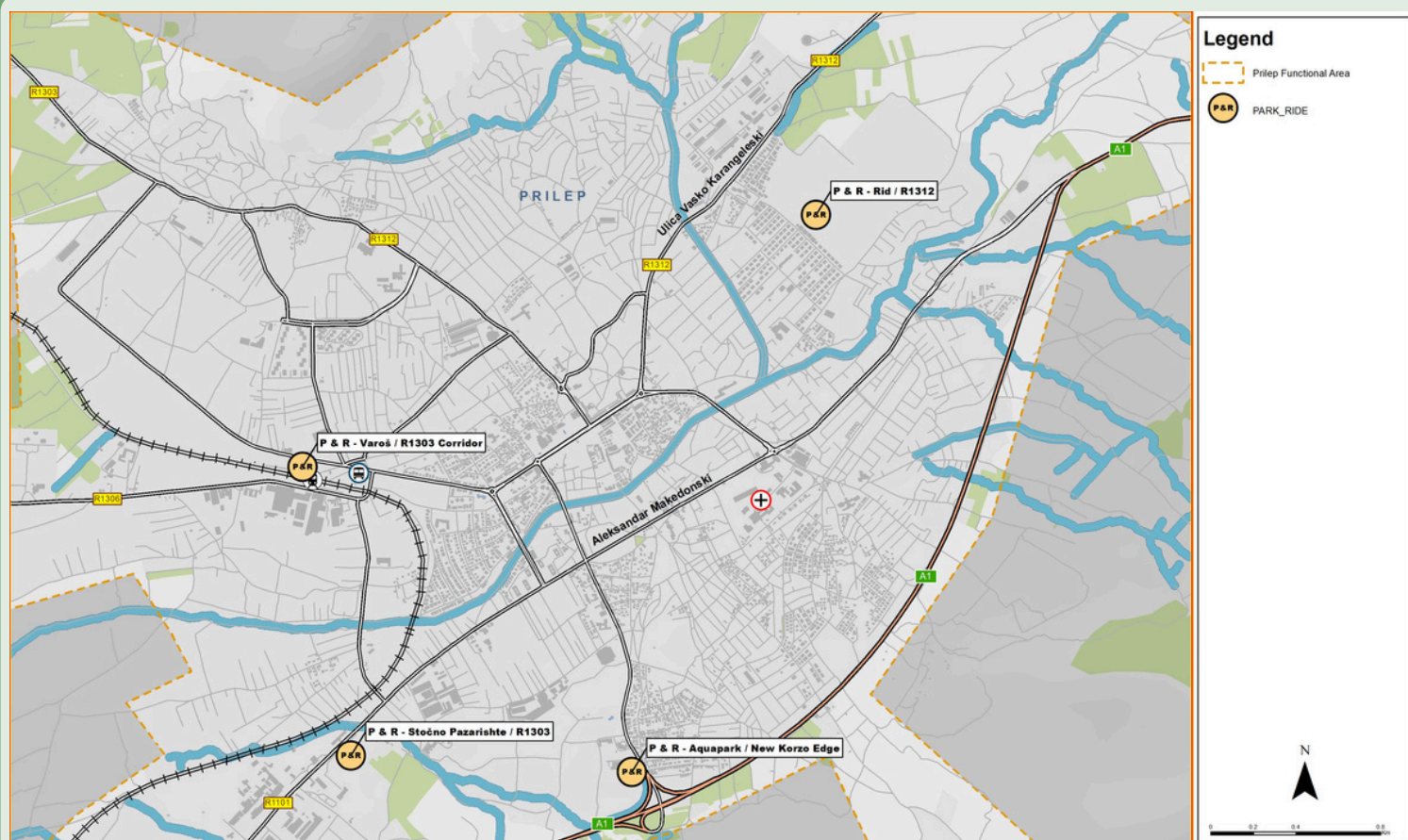
Description

This action delivers four park-and-ride facilities at Varoš / R1303, Stočno Pazarishte / R1303, Rid / R1312, and Aquapark / New Korzo. Each site will provide well-lit, secure parking, basic amenities, and direct access to public transport corridors. The design will allow easy entry from regional roads, intercepting traffic before it reaches the city centre.

These facilities will significantly reduce parking demand and traffic pressure in central Prilep. They also support access regulation and low-traffic zones by offering a convenient alternative to driving into the core.



Image



Parking Systems

M4.4: Develop park-and-ride facilities near key transit hubs

M4.4.2: Integrated P&R Access, Wayfinding and Ticketing



Cost

45.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

High



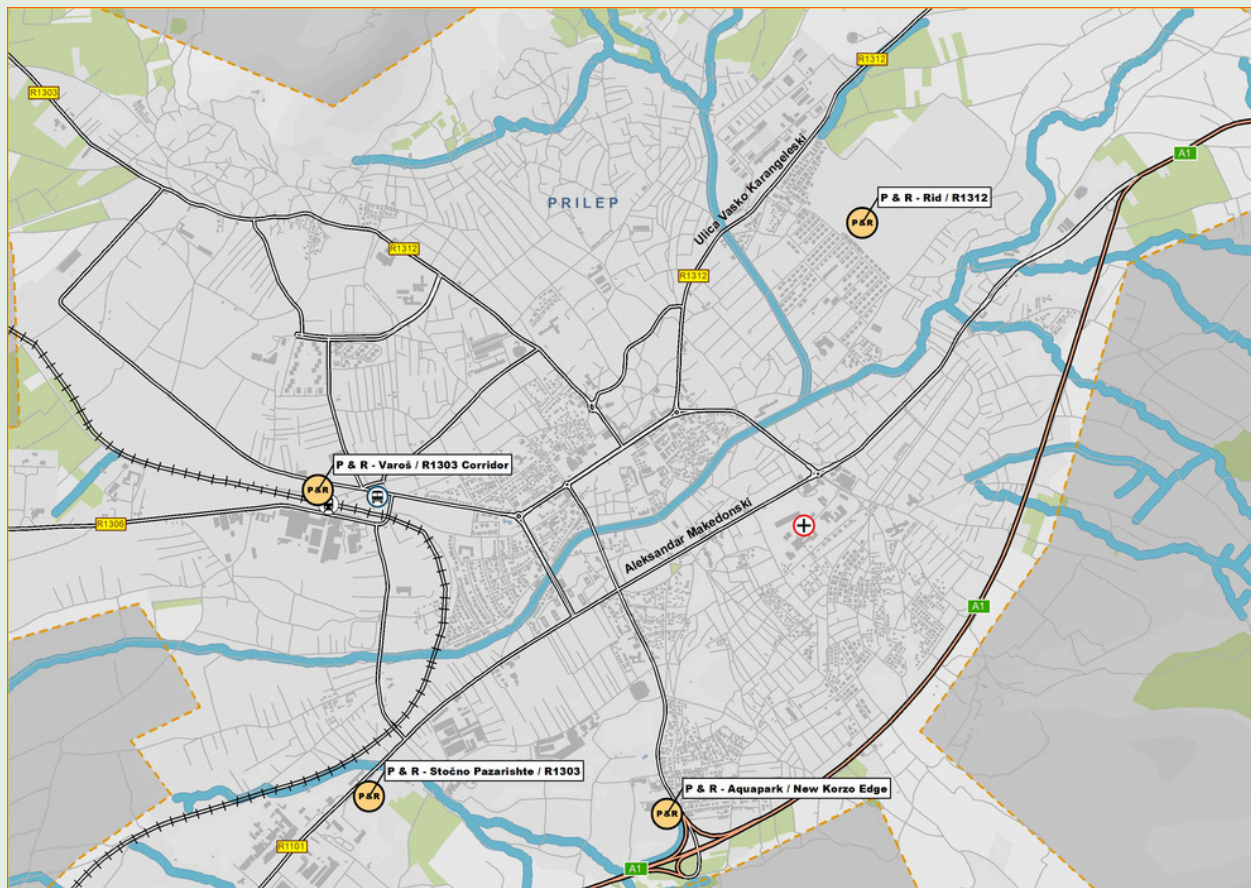
Description

This action ensures that P&R users can easily transition from car to bus or walking through short, safe pedestrian links, clear signage, and integrated ticketing. Parking fees can be bundled with public transport tickets to make P&R the cheapest and most convenient option for entering the city.

This integration maximizes the attractiveness of the P&R system and reinforces a shift toward sustainable modes. Over time, it will anchor a more balanced, multimodal access system for Prilep.



Image



Urban Cycling

M5.1: Develop a connected and safe cycling network

M5.1.1: Connect existing bike lanes



Cost

137.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Shift



Priority

High



Efficiency

High

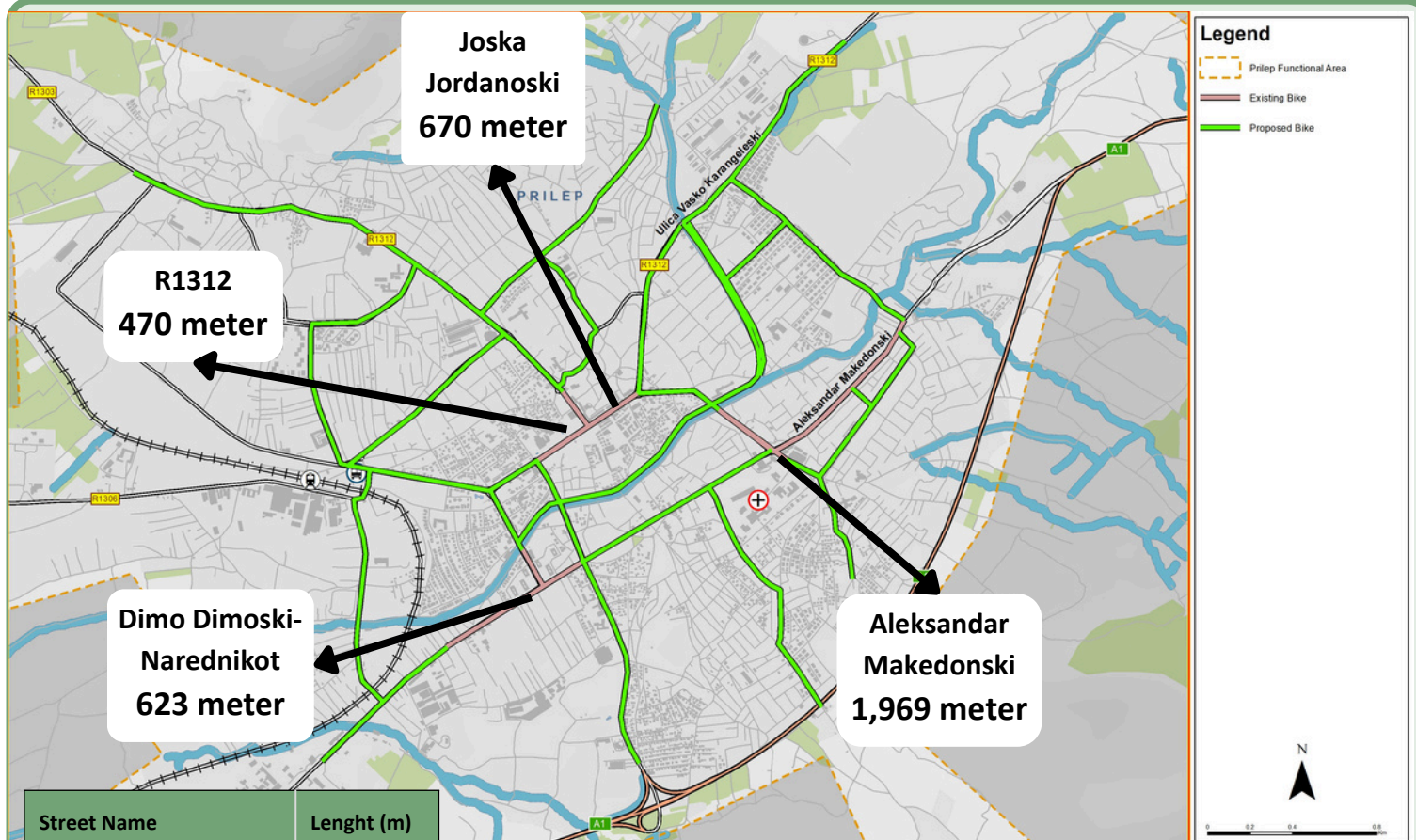


Description

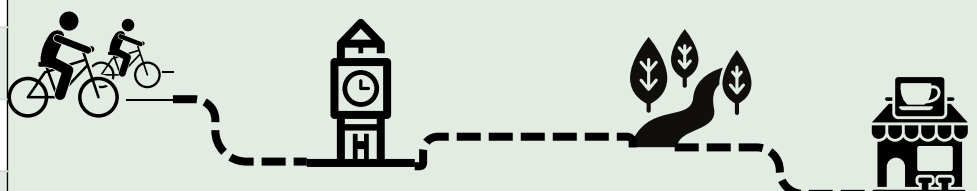
Building 3,7 kilometers (3,732 meters) of new bike lanes will connect currently fragmented segments and form a continuous, well-integrated cycling network. This investment will strengthen network integrity, provide safer routes, and make cycling a more convenient and attractive option for daily mobility. By improving connectivity between key areas, the city will encourage more people to choose cycling, supporting healthier lifestyles and more sustainable urban transport.



Image



Street Name	Lenght (m)
Aleksandar Makedonski	1,969
Dimo Dimoski-Narednikot	623
R1312	470
Joska Jordanoski	670



Urban Cycling

M5.1: Develop a connected and safe cycling network

M5.1.2: Connect schools with cycling network



Cost

832.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Shift



Priority

High



Efficiency

High

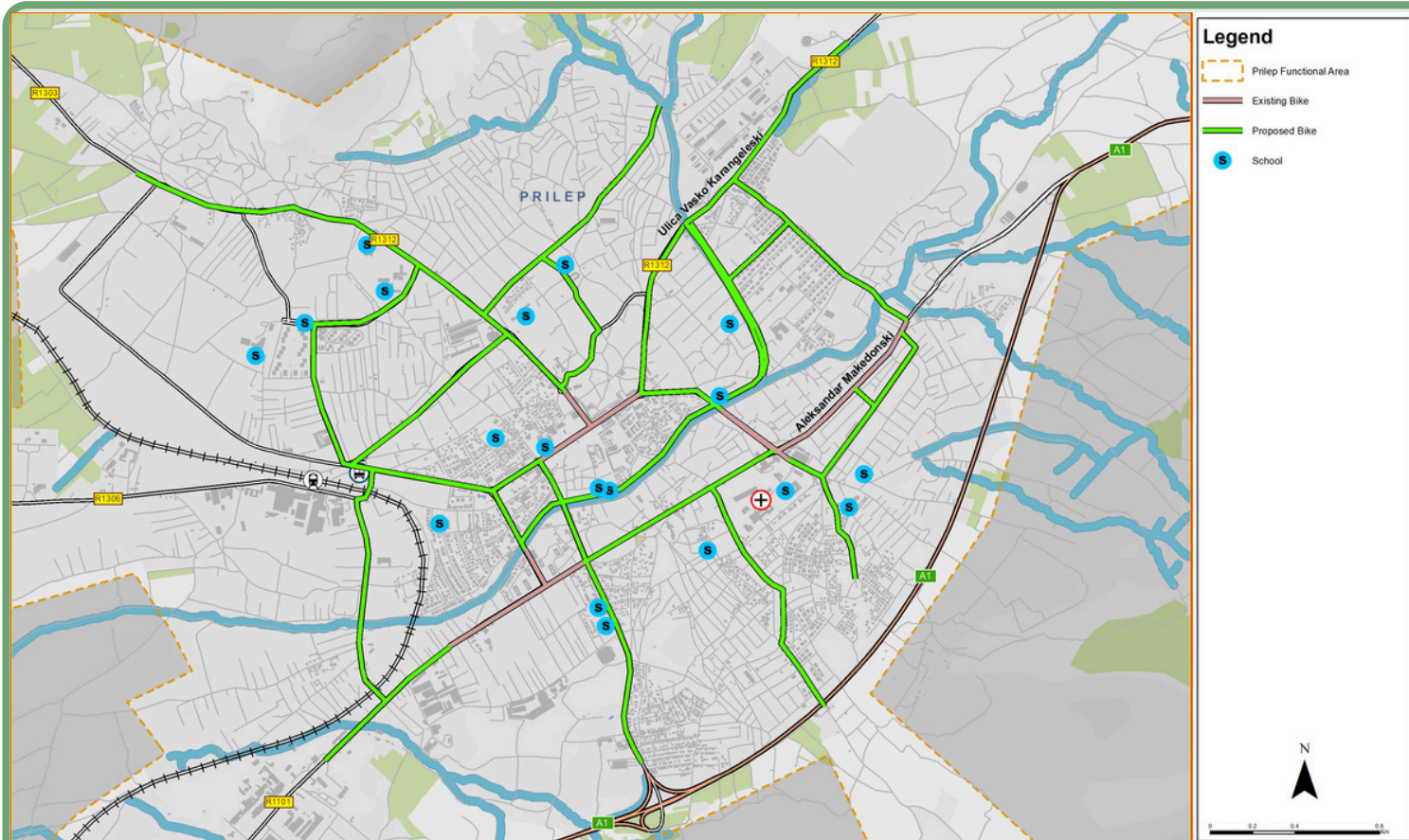


Description

Ensuring safe cycling access to key schools—including Goce Delčev, Gjorče Petrov, Saint Clement of Ohrid, Kire Gavriloski, Riste Risteski-Ričko, Orde Chopela, Kuzman Josifovski-Pitu, Rambo Levkata, and Kocho Racin—will provide students with secure and reliable routes for their daily journeys. By creating well-marked, protected paths that prioritize safety, the city can encourage healthier school mobility, reduce reliance on cars, and promote cycling as a sustainable and active mode of transport for young people. This investment will not only support student well-being but also help foster lifelong habits of active travel.



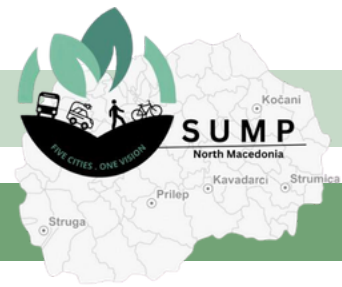
Image



Urban Cycling

M5.1: Develop a connected and safe cycling network

M5.1.3: Connect bike lanes with bus and couch stations



Cost

832.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

High

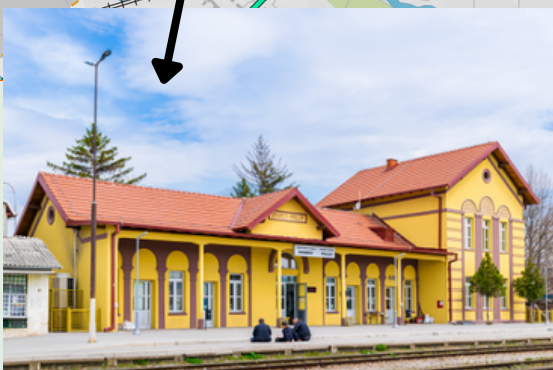
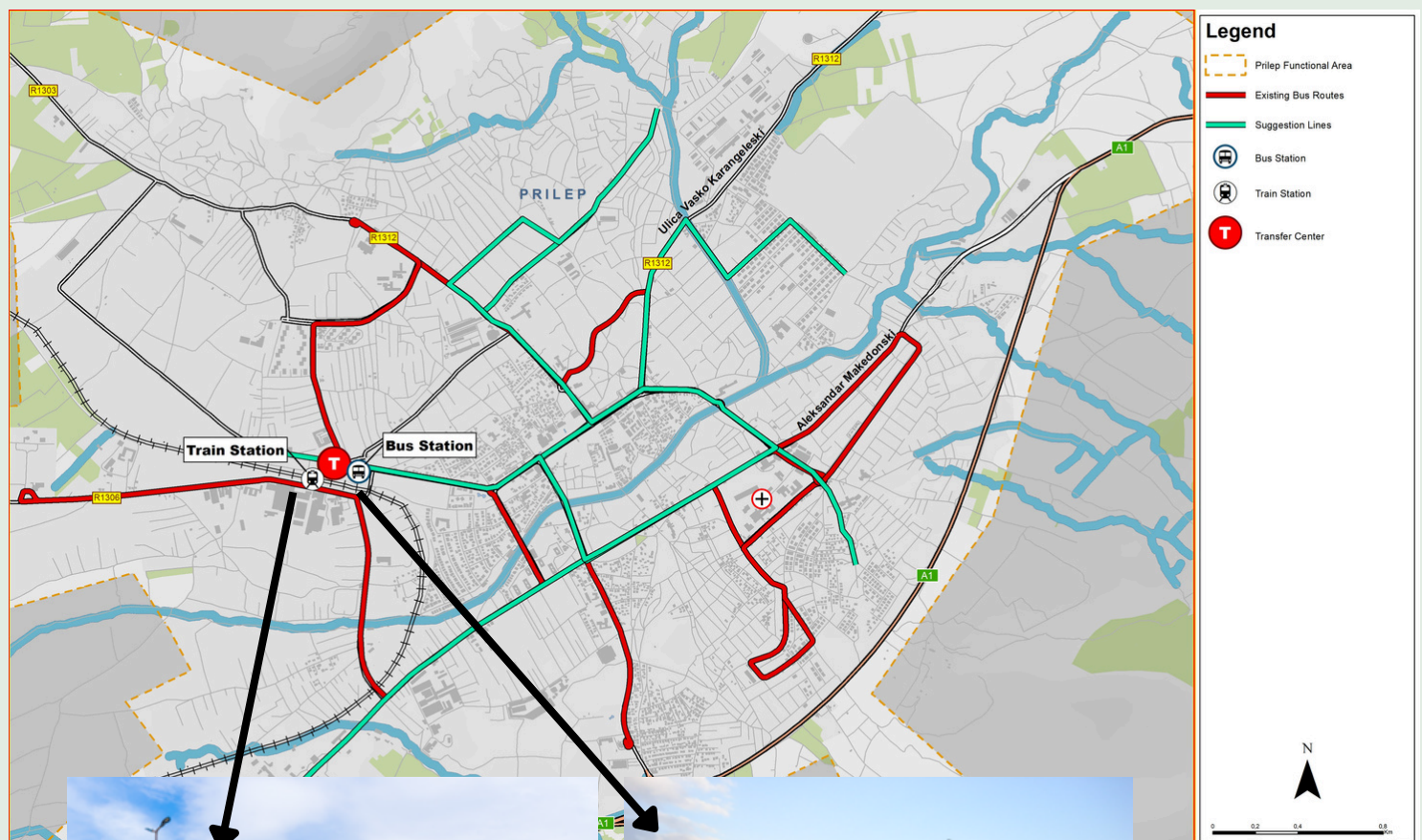


Description

Providing direct cycling links to bus and coach stations as well as other transfer hubs will make it easier for cyclists to connect with public transport. By also installing secure and convenient bike parking at these locations, the city can enable seamless intermodal travel, allowing residents to combine cycling with longer-distance journeys. This integration will not only support more efficient mobility but also encourage greater use of public transport, reduce car dependency, and promote sustainable urban travel habits.



Image



Urban Cycling

M5.1: Develop a connected and safe cycling network

M5.1.4: Connect cycling network with residential areas



Cost

832.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

High

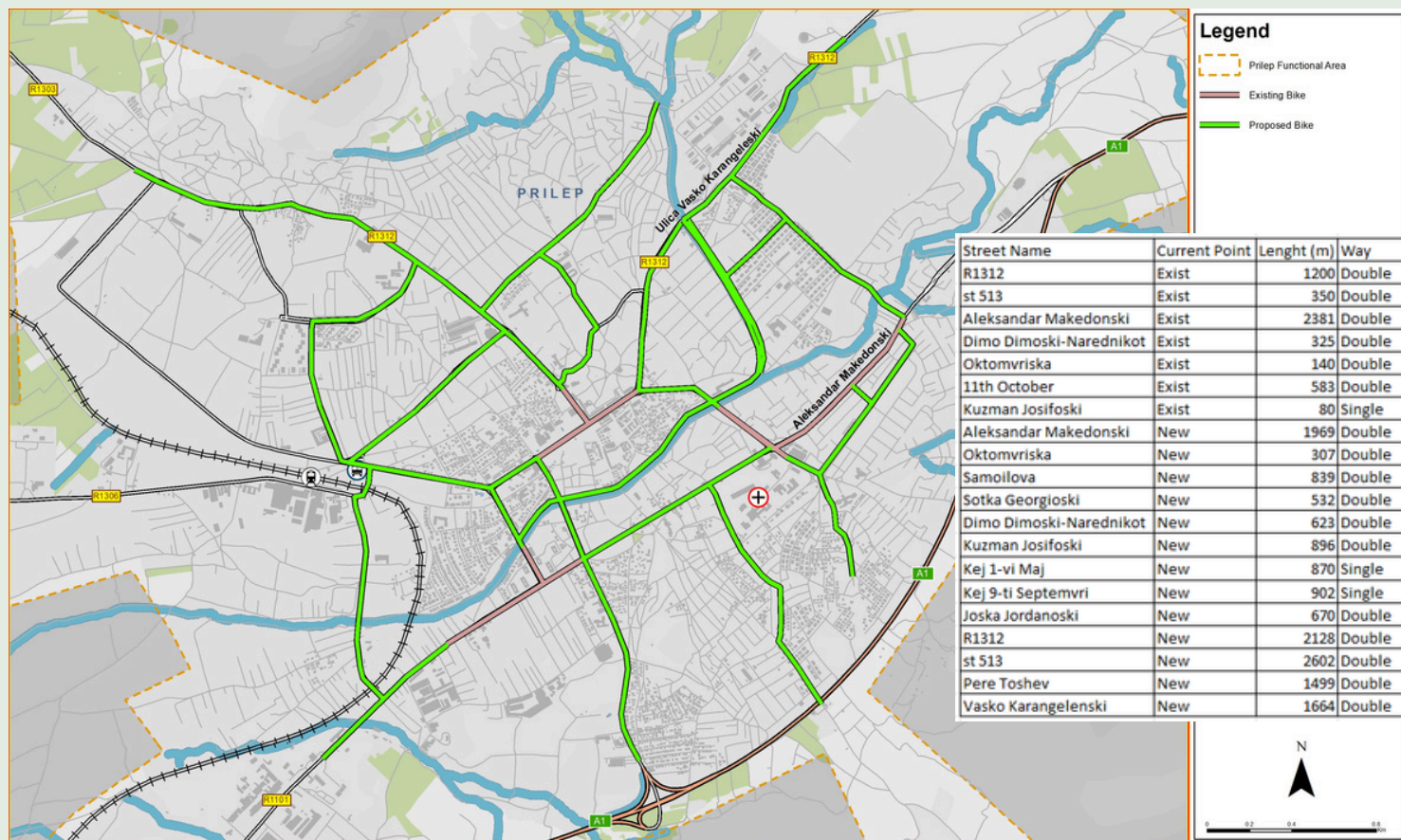


Description

Expanding cycling routes into residential neighborhoods will make it easier and more practical for people to use bicycles for everyday commuting. By providing safe and direct connections from homes to workplaces, schools, and key services, the city can encourage more residents to cycle on a daily basis. This shift will help reduce car dependency, lower traffic congestion, and promote healthier, more sustainable mobility choices.



Image



Urban Cycling

M5.2: Launch of public bike-sharing systems

M5.2.1: Establishment and expansion of bicycle sharing system



Cost

600.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

Medium

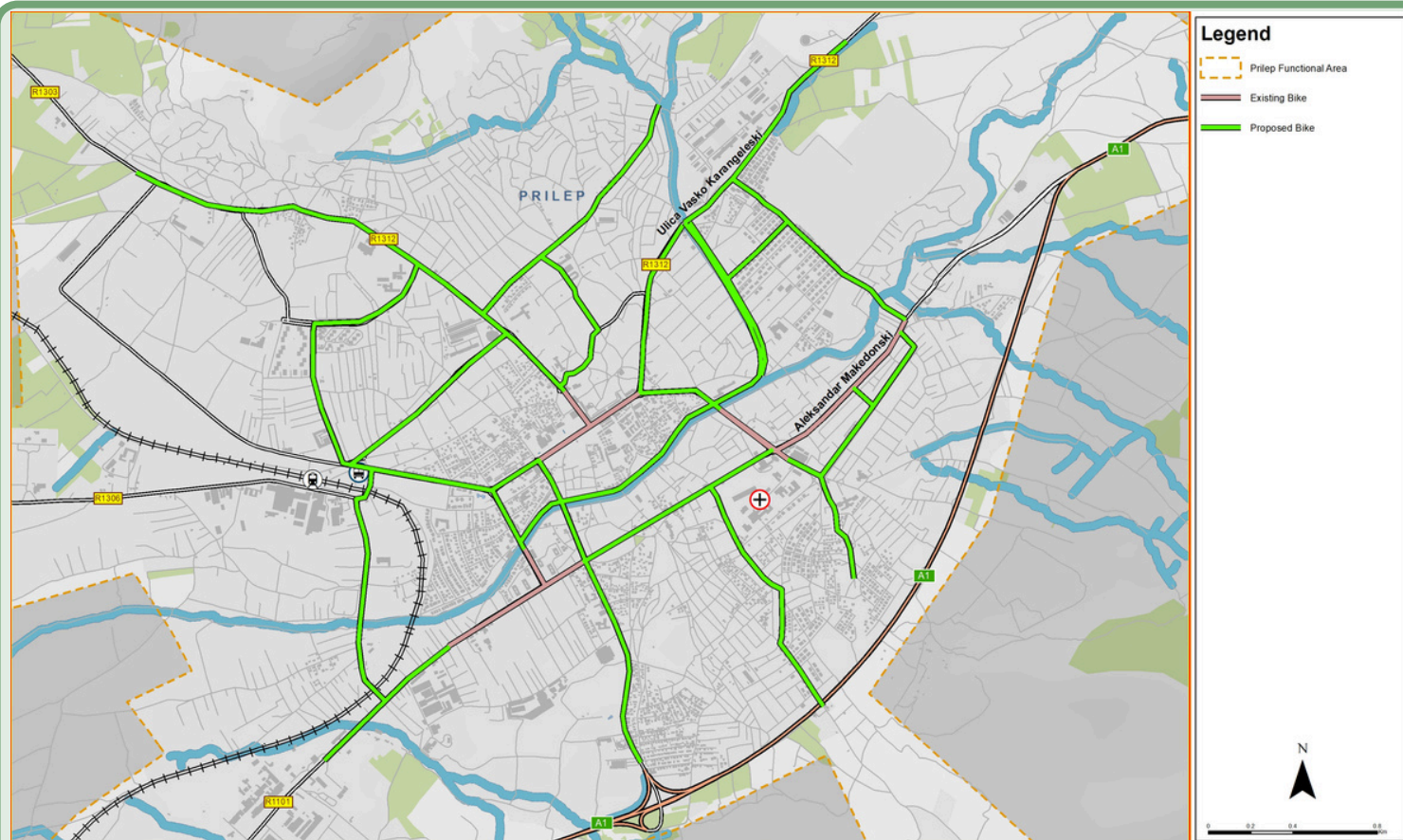


Description

The launch of a public bike-sharing system would provide residents and visitors with an affordable, flexible, and sustainable mobility option. Such a system not only encourages active travel and reduces car dependency but also integrates seamlessly with public transport, creating a more efficient and interconnected urban mobility network. By promoting cycling as a convenient everyday choice, the program would contribute to healthier lifestyles, lower emissions, and a more vibrant, people-friendly city.



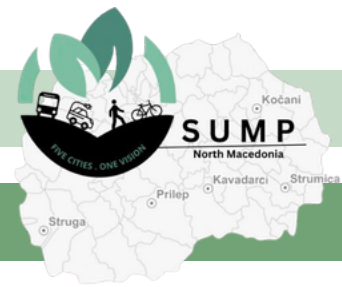
Image



Urban Cycling

M5.3: Install secure public bike parking solutions

M5.3.1: Create public bike parking



Cost

30.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

Medium



Efficiency

Medium

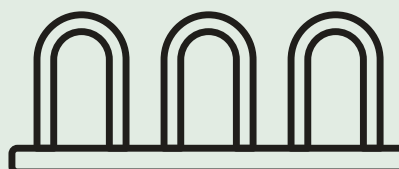
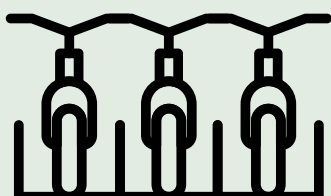


Description

Installing secure public bike parking solutions across the city is essential to support and encourage everyday cycling. Well-designed facilities—such as covered racks, lockable stands, and monitored storage areas—will protect bicycles from theft, vandalism, and weather conditions. Placing these solutions in key locations like schools, transit hubs, commercial centers, and public spaces will make cycling more convenient and reliable. By ensuring that cyclists have safe places to leave their bikes, the city will promote confidence in cycling as a daily mode of transport, reduce car dependency, and strengthen the overall sustainability of its mobility network.



Image



Urban Cycling

M5.4: Facilitate the transport of bicycles on public transport and trains, with attention to accessibility and space

M5.4.1: Enable Bicycle Transport on Public Transport



Cost

30.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Shift



Priority

Medium



Efficiency

Medium

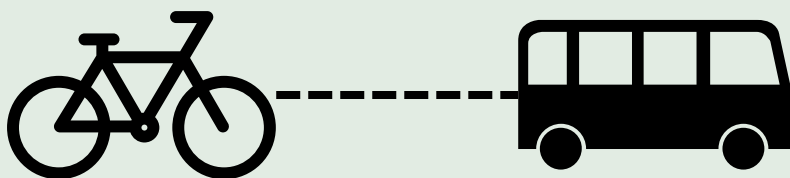


Description

Facilitating the transport of bicycles on public transport and trains is a key step toward building a fully integrated and accessible mobility system. By allocating dedicated spaces on buses, trams, and trains, and ensuring easy access through ramps, wider doors, and clear signage, the city can make it more convenient for cyclists to combine biking with longer journeys. This flexibility allows residents to travel farther while still relying on sustainable modes of transport, reducing car dependency and expanding mobility choices. Prioritizing accessibility and adequate space will ensure that both cyclists and other passengers enjoy a comfortable travel experience, strengthening the appeal of intermodal travel across the city.



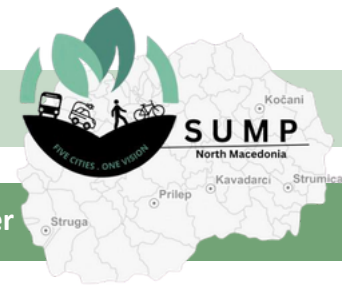
Image



Urban Cycling

M5.5: Promote the use of cargo bikes as a transport solution for families and SME's

M5.5.1: Promoting cargo bicycles for last-mile logistics in the city center



Cost

150.000 €



Period

Medium



Priority

Low

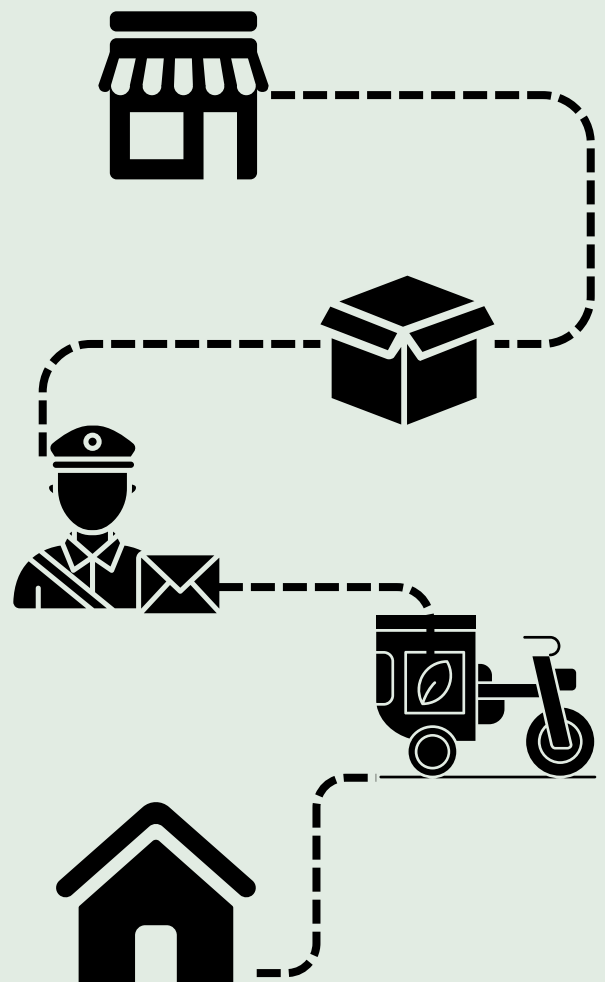


Description

Promoting the use of cargo bikes as a practical transport solution for families and small or medium-sized enterprises (SMEs) can play a significant role in creating a more sustainable urban mobility system. For families, cargo bikes provide a safe and convenient way to carry children, groceries, or daily essentials while reducing reliance on private cars. For SMEs, they offer an efficient and eco-friendly alternative for last-mile deliveries, particularly in dense urban areas where traffic congestion and parking are major challenges. By supporting incentives, dedicated infrastructure, and awareness campaigns, the city can encourage wider adoption of cargo bikes, leading to cleaner air, quieter streets, and more cost-effective transport solutions for households and businesses alike.



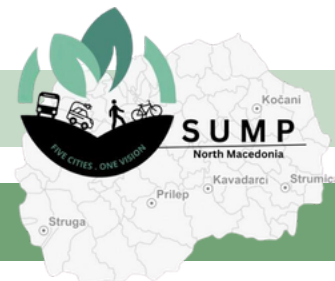
Image



Public Transport

M6.1: Increase the frequency of public transport services

M6.1.1: Reduce Headways



Cost

125.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Shift



Priority

High



Efficiency

Medium



Description

Shortening bus service intervals, particularly during peak hours, will provide passengers with more frequent and reliable service. By reducing waiting times at stops, the system becomes more convenient and attractive, encouraging more people to choose buses over private cars. This improvement not only increases ridership but also helps reduce traffic congestion, lowers emissions, and supports a more efficient and sustainable public transport network.



Image



SHORTENING BUS SERVICE INTERVALS



CONGESTION REDUCTION



EMISSIONS DOWN



INCREASED RIDERSHIP

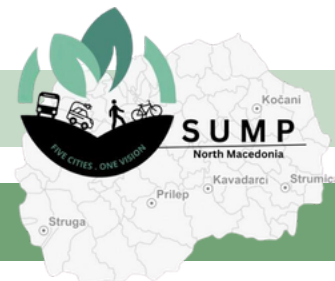


INCREASED RIDERSHIP

Public Transport

M6.1: Increase the frequency of public transport services

M6.1.2: Optimize Fleet Size



Cost

100.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Shift



Priority

High



Efficiency

Medium



Description

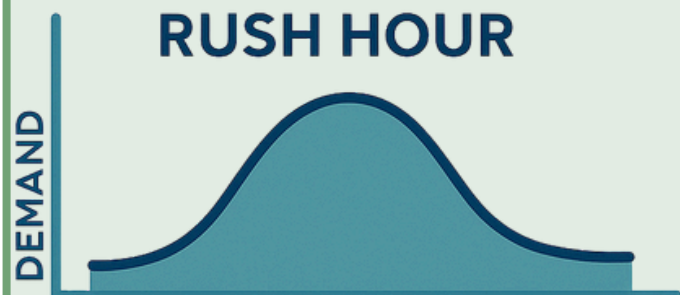
Adjusting the fleet size to match passenger demand will ensure that adequate capacity is available during rush hours while avoiding unnecessary operational costs during off-peak periods. By aligning bus availability with real travel patterns, the city can provide greater passenger comfort, reduce overcrowding, and improve service reliability. At the same time, this balanced approach supports more efficient use of resources, helping to maintain sustainable and cost-effective public transport operations.



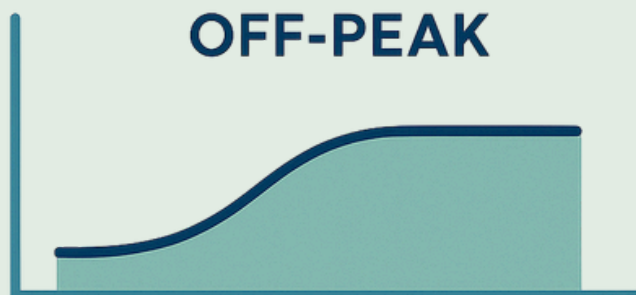
Image

OPTIMIZE FLEET

RUSH HOUR



OFF-PEAK



COMFORT



RELIABILITY

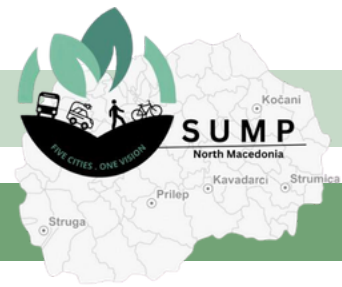


COST EFFICIENCY

Public Transport

M6.2: Extend the route coverage to underserved neighbourhoods

M6.2.1: New Bus Routes



Cost

940.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

High



Efficiency

Medium

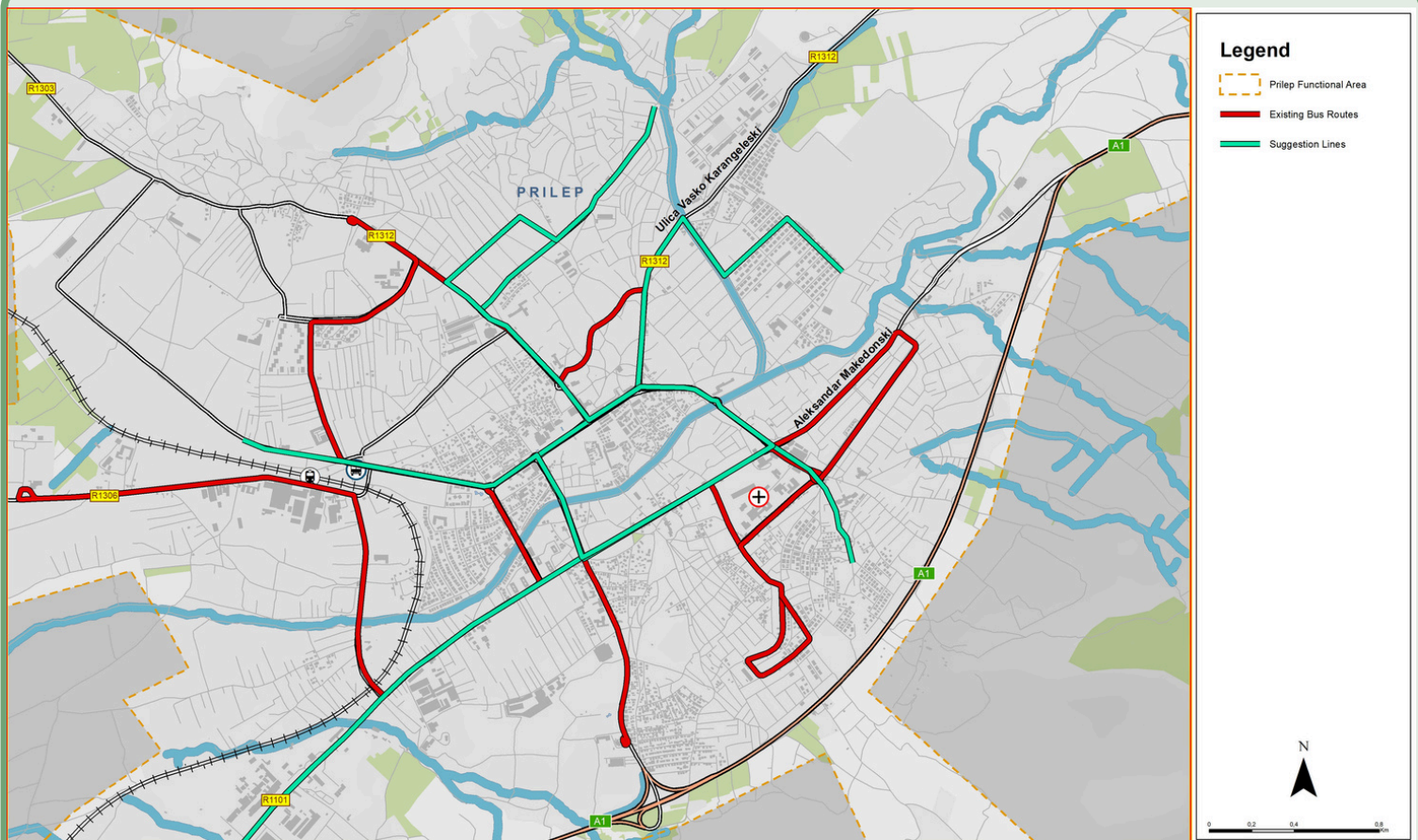


Description

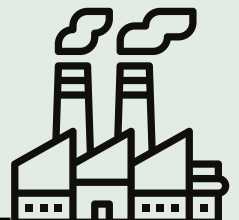
Expanding bus services to underserved residential areas and launching a new line between the southwestern industrial zone and northeastern neighborhoods will greatly improve coverage and accessibility. These measures will provide reliable links to jobs, schools, and services, offer an alternative to company shuttles (currently 21% of commuting), and promote a shift toward public transport. The result will be reduced congestion, lower emissions, and a more inclusive, efficient, and sustainable mobility system.



Image



Residential



Industry

Public Transport

M6.2: Extend the route coverage to underserved neighbourhoods

M6.2.2: Transfer Hub Development



Cost

1.500.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

Medium

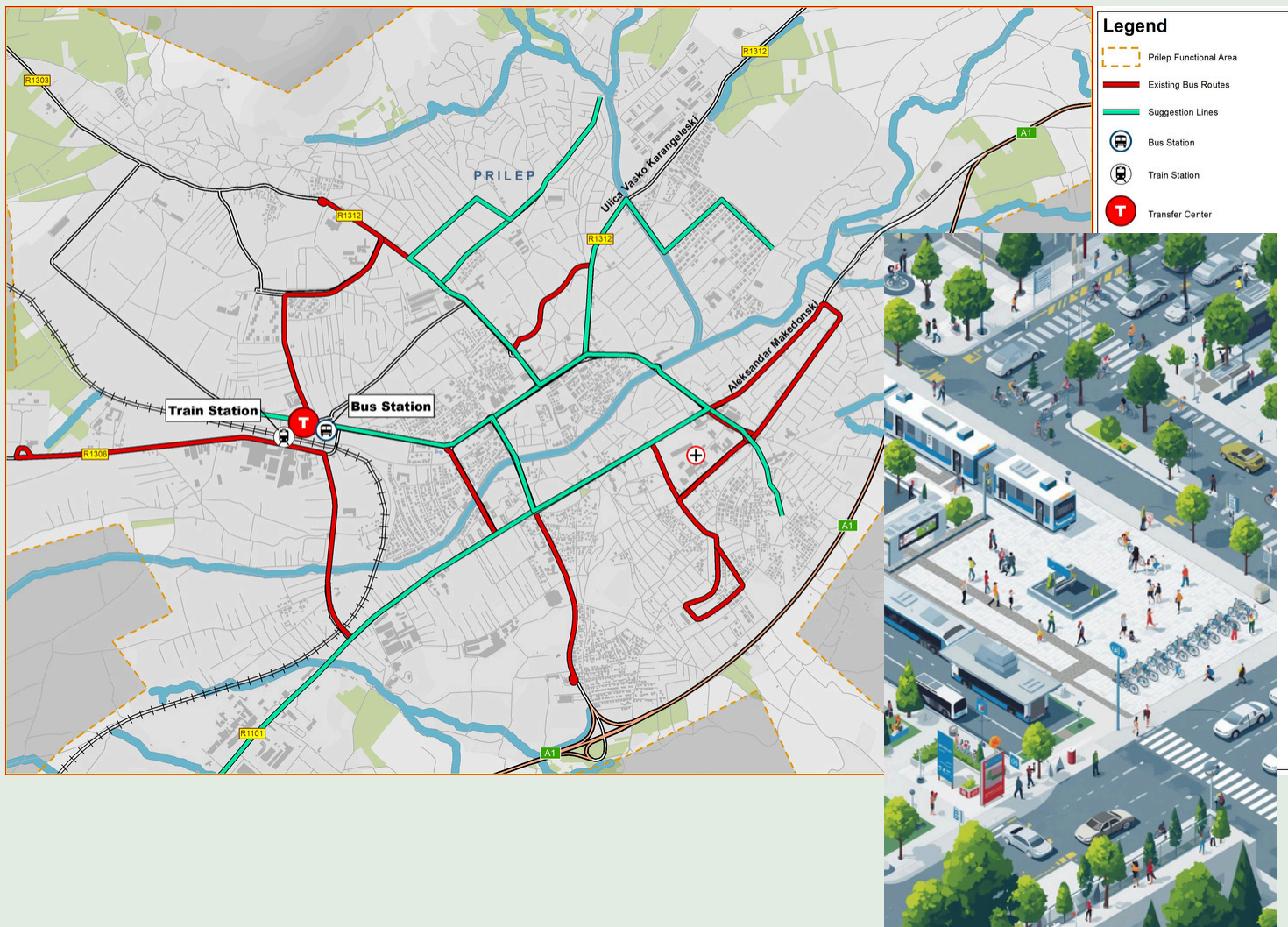


Description

Transforming the area around the train station and bus terminal into a fully functional multimodal transfer hub will create a central gateway for seamless urban and regional mobility. By integrating bus, rail, coach services, taxis, and bike-sharing facilities in one accessible location, passengers will be able to switch easily between modes of transport with minimal waiting times or inconvenience. Clear signage, safe pedestrian routes, and user-friendly facilities will further enhance the experience. This integration will not only make public transport more attractive and convenient but also reduce reliance on private cars, encourage sustainable travel behavior, and position the hub as a key anchor point in the city's mobility network.



Image





Cost

500.000 €



Period

Short



Priority

Low



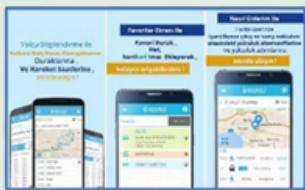
Description

Developing a comprehensive passenger information system through a web portal, mobile app, smart bus stops, station displays, and in-vehicle screens will greatly enhance the transparency and reliability of public transport. By providing real-time details on routes, schedules, waiting times, delays, and service changes, passengers can plan their journeys more effectively and with greater confidence. This improved access to accurate information will reduce uncertainty, minimize waiting times, and increase overall satisfaction with the public transport experience. In the long term, such innovations will encourage higher ridership, build trust in the system, and contribute to a more modern, passenger-focused mobility network.



Image

Passenger Information Apps



Information System on Web Site



Call Centre



Informing with Document



Bus Stop Information Unit



Smart Stops



In-Vehicle Passenger on Board





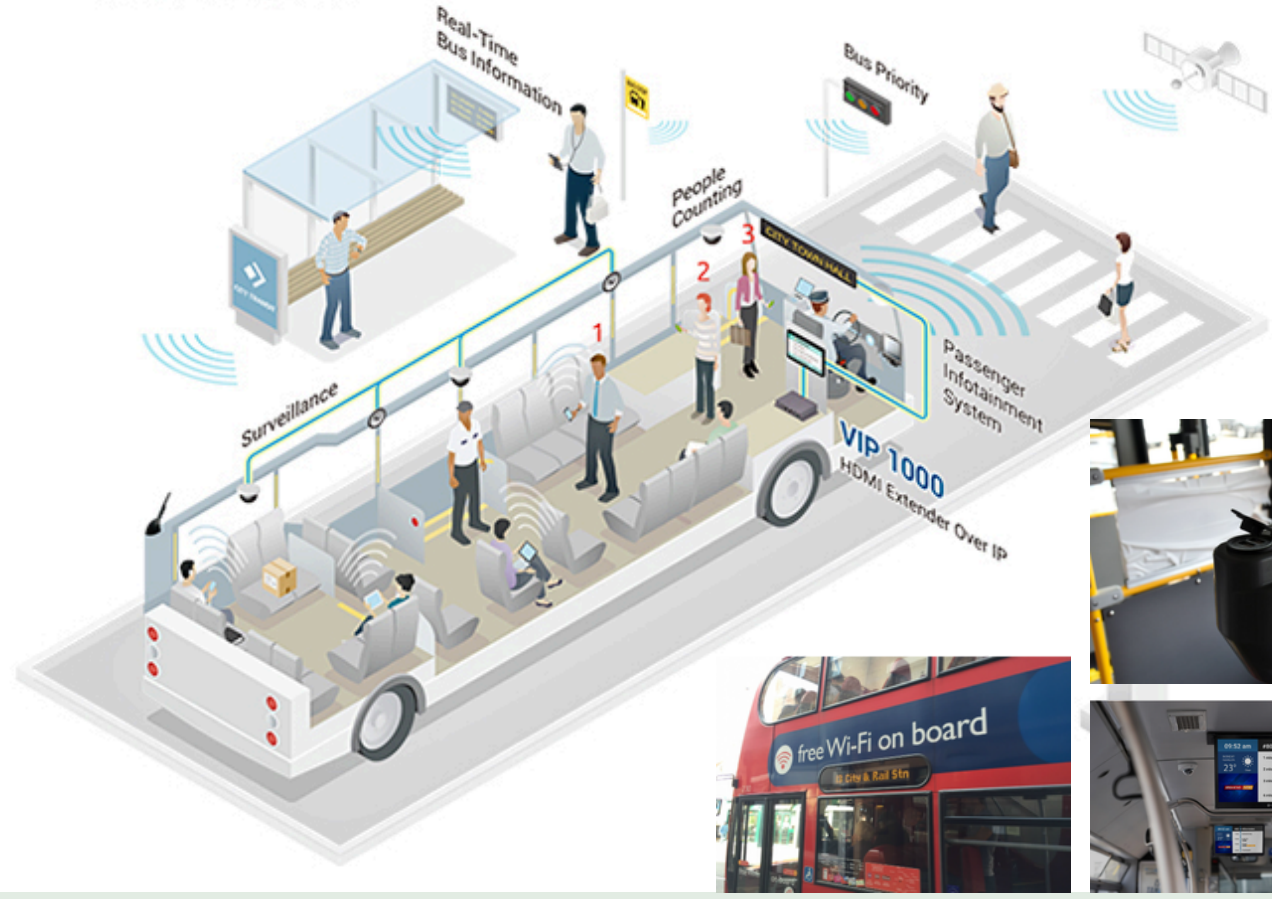
Cost	500.000 €	Responsible Authority	Municipality of Prilep
Period	Short	ASI Status	Improve
Priority	Medium	Efficiency	Medium

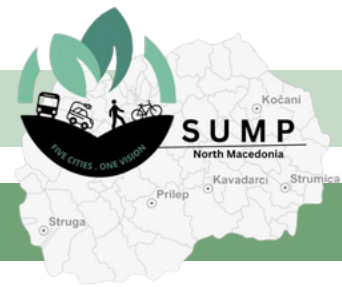
Description

Equipping buses with passenger information screens, Wi-Fi, USB charging ports, and GPS-enabled systems will modernize the public transport experience and make it more appealing to a wider range of users. Real-time route and stop information displayed onboard will help passengers navigate their journeys with confidence, while Wi-Fi and charging facilities will add convenience, especially for commuters and students. GPS-enabled systems will also improve service monitoring and reliability, allowing better coordination across the network. Together, these upgrades will enhance passenger comfort, increase satisfaction, and position public transport as a modern, efficient, and user-friendly mobility option.

Image

- PC-based in-vehicle NVRs for real-time surveillance
- Built-in GNSS with dead reckoning function for accurate positioning
- Built-in communication port for signage, card readers, and safety sensors
- Support multiple Wi-Fi and cellular modules for uninterrupted internet connection
- In-vehicle HDMI extender over IP for PIS and infotainment





Cost

200.000 €



Period

Medium



Priority

Medium

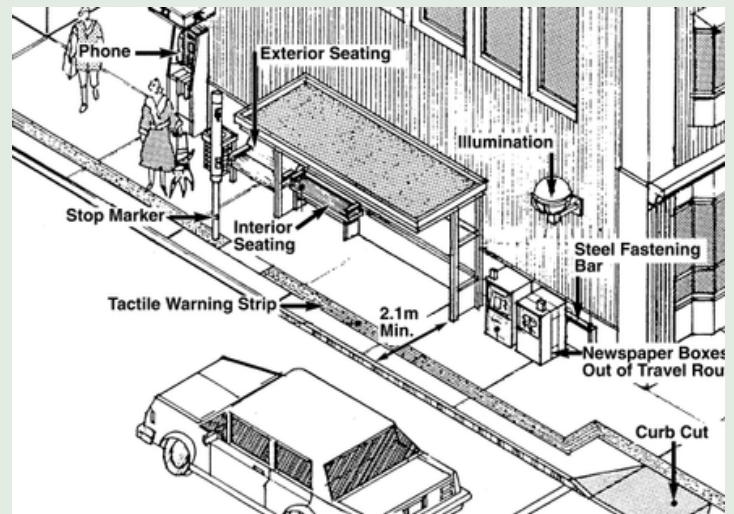
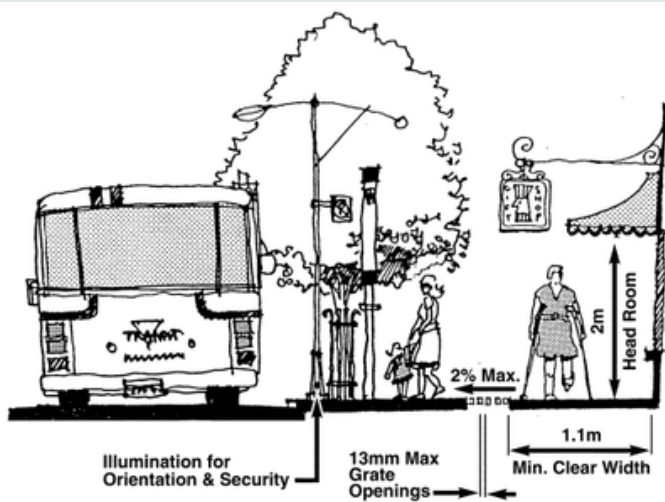


Description

Improving bus stops and stations with well-designed shelters, comfortable seating, proper lighting, accessibility features, and real-time information screens will create a safer and more welcoming environment for passengers. These upgrades will protect users from weather conditions, enhance comfort while waiting, and ensure that people with disabilities or limited mobility can access services with ease. Clear and reliable information displays will further reduce uncertainty and improve the travel experience. Together, these enhancements will make public transport more attractive, increase passenger satisfaction, and encourage more people to choose buses as a convenient and reliable mobility option.



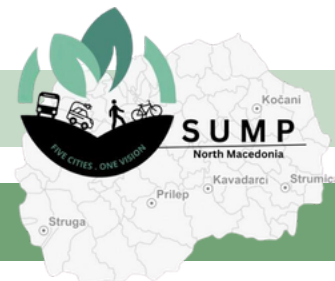
Image



Public Transport

M6.5: Invest in low-emission or electric public transport vehicles

M6.5.1: Fleet Renewal with Modern and Ecological Vehicles



Cost

4.000.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

Medium



Efficiency

High

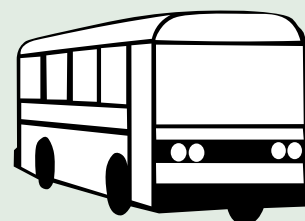


Description

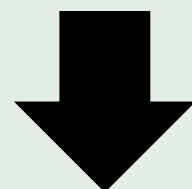
During fleet replacement cycles, prioritizing the purchase of electric and CNG buses will accelerate the transition to a cleaner and more cost-efficient public transport system. These vehicles produce fewer emissions, helping to improve urban air quality and reduce the city's overall carbon footprint. At the same time, lower fuel and maintenance costs contribute to long-term operational savings. By modernizing the fleet with sustainable technologies, the city will not only reduce air pollution but also demonstrate its commitment to greener mobility, healthier communities, and a more resilient transport network.



Image

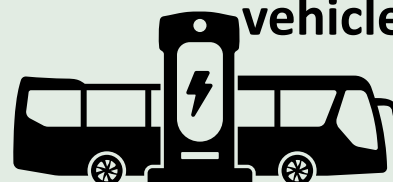


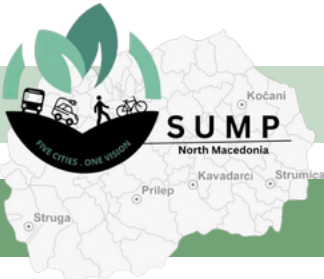
Change
old



busses
with

electrical
vehicles





Cost

8.000 €



Period

Medium



Priority

Medium



Description

This action establishes a voluntary flex-time framework for large employers, public institutions, and municipal services in Prilep. Start and end times will be staggered within defined windows (for example, 7:30–9:30 and 15:30–17:30) to spread travel demand across the morning and afternoon. The municipality will provide guidelines and coordination support to help organizations implement schedule shifts without disrupting operations.

By reducing the concentration of trips during peak hours, this program will ease congestion on central streets and near key destinations, supporting traffic calming, pedestrianization, and public transport reliability.



Image

A COMPARISON BETWEEN:

SMART WORKERS

&

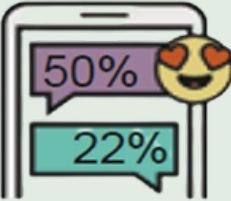
OTHER WORKERS

MOBILITY



TIME SPENT AT WORK

SATISFACTION



FULLY SATISFIED WITH HOW ONE'S WORK IS ORGANISED

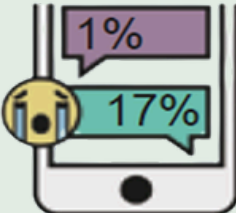
DIGITAL SOFT SKILLS



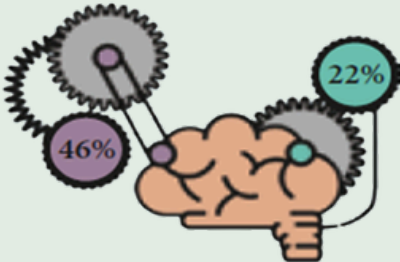
LEADERSHIP & TEAMWORK



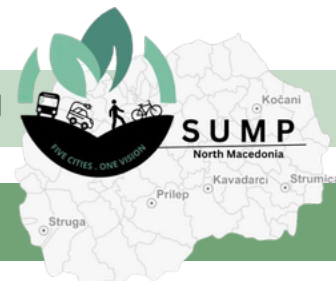
TIME SPENT WORKING FROM HOME OR ELSEWHERE



DISSATISFIED WITH ONE'S WORK



SELF-EMPOWERMENT



 Cost	18.000 €	 Responsible Authority	Municipality of Prilep
 Period	Medium	 ASI Status	Shift
 Priority	High	 Efficiency	Very High

 Description

This action works with primary and secondary schools to adjust arrival and departure times so that school-related trips do not coincide with the main commuter peak. Where needed, coordinated school bus services, walking groups, or shuttle connections to park-and-ride sites will be organized to support families. Smoother school travel patterns will reduce traffic pressure around school streets and residential neighborhoods while improving safety and enabling children to walk and cycle more comfortably.

 Image

A COMPARISON BETWEEN:

SMART WORKERS

 &

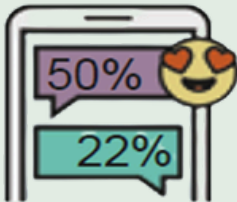
OTHER WORKERS

MOBILITY



TIME SPENT AT WORK

SATISFACTION



FULLY SATISFIED WITH HOW ONE'S WORK IS ORGANISED

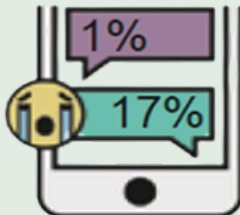
DIGITAL SOFT SKILLS



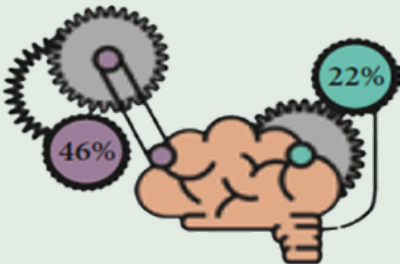
LEADERSHIP & TEAMWORKING



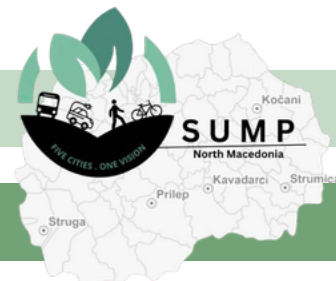
TIME SPENT WORKING FROM HOME OR ELSEWHERE



DISSATISFIED WITH ONE'S WORK



SELF-EMPOWERMENT



M7.4.1: Designated Safe School Route Network

Cost	90.000 €	Responsible Authority	Municipality of Prilep
Period	Medium	ASI Status	Improve
Priority	High	Efficiency	High

Description

This action identifies and formally designates safe walking and cycling routes connecting neighbourhoods to schools. Routes will be supported by raised crossings, signage, 30 km/h zones, lighting, and sidewalk improvements, coordinated with existing traffic calming and pedestrianization projects. Clear, visible school routes will make active travel safer and more attractive for families, reducing car drop-offs and supporting a calmer street environment around schools.

Image

The map displays the Prilep Functional Area with a network of roads and rivers. Blue circles with an 'S' indicate the locations of schools. A dashed orange line outlines the functional area boundary. Key roads like 'Ulica Vasko Karmilovski' and 'Aleksandar Makedonski' are labeled. A legend on the right identifies the symbols for the functional area and schools. A north arrow and a scale bar (0 to 0.8 km) are also present.

The inset photo shows a busy street crossing with many cyclists. A green and white sign in the foreground reads 'PARTENZA PEDIBUS "/>



Cost

90.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

High



Efficiency

High



Description

This action introduces “walking school bus” and “bike bus” schemes, where groups of students travel together along the designated routes under adult supervision. Schools, parents, and the municipality will jointly organize schedules, meeting points, and safety rules.

These programs improve safety through numbers, build daily physical activity into children’s routines, and reduce car traffic near schools, reinforcing Prilep’s wider mobility management and traffic-calming objectives.



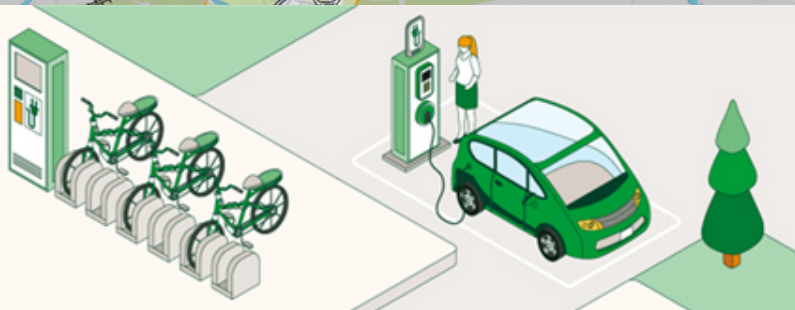
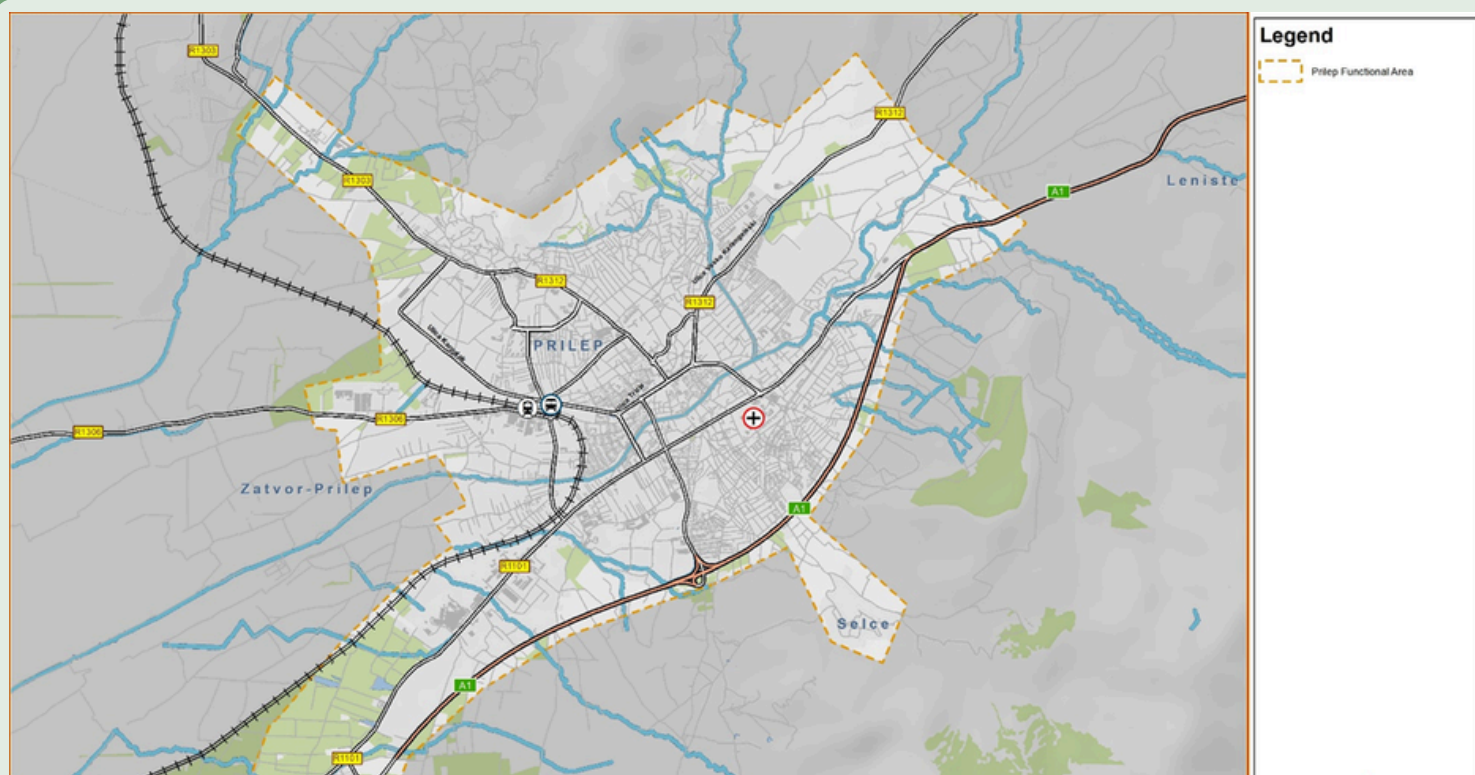
Image



 Cost	150.000 €	 Responsible Authority	Municipality of Prilep
 Period	Short	 ASI Status	Improve
 Priority	Medium	 Efficiency	Medium
 Description			

This action establishes a network of publicly accessible EV charging points in the city centre, residential areas, and at key destinations such as Korzo, municipal buildings, shopping streets, and public parking areas. Charging stations will be installed and operated by energy providers under concession or partnership agreements with the municipality, ensuring technical reliability, maintenance, and user-friendly payment systems. The network will allow residents, commuters, and visitors to conveniently charge electric vehicles, removing a major barrier to EV ownership. Over time, it will support the gradual replacement of fossil-fuel cars with low-emission alternatives and improve air quality in Prilep.

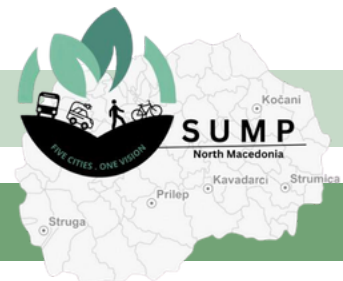
Image



Electric Mobility

M8.1: Install accessible public EV charging infrastructure

M8.1.2: Charging Hubs at Park-and-Ride and Mobility Nodes



Cost

150.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

Medium



Efficiency

Medium

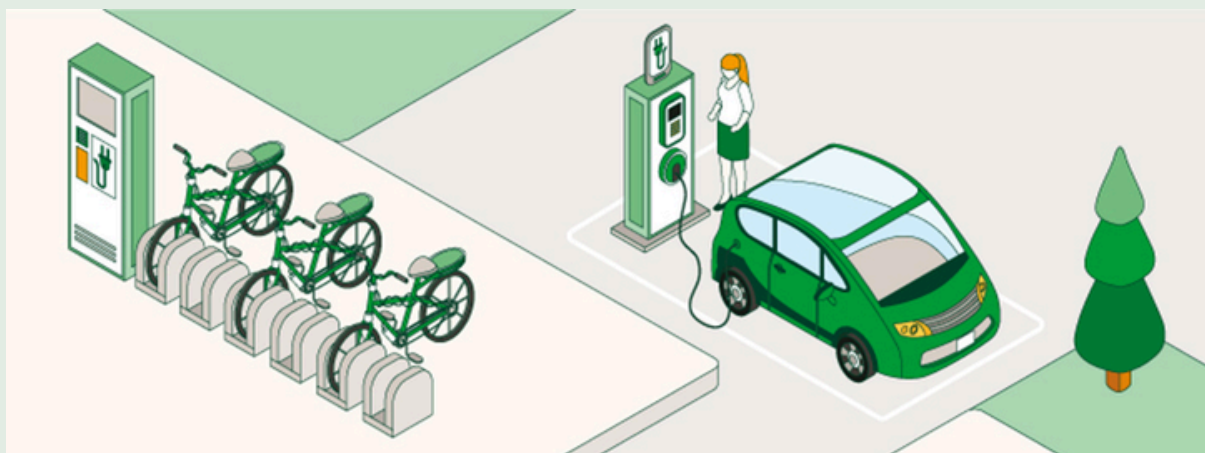


Description

This action concentrates fast and semi-fast chargers at park-and-ride sites and major public transport nodes, including the planned P&R locations on the city's main access corridors. These hubs will enable drivers to charge while transferring to public transport or walking into the city. By linking EV charging to P&R facilities, this project supports both clean vehicle uptake and access regulation, reducing traffic and emissions in the city centre while maintaining convenient regional access.



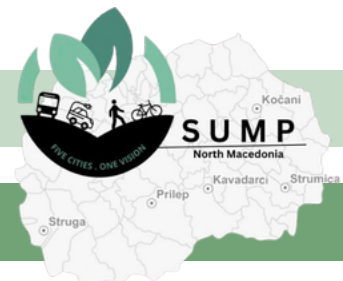
Image



Electric Mobility

M8.3: Realize a local e-mobility strategy including sharing schemes

M8.3.1: Prilep E-Mobility Strategy and Market Assessment



Cost

30.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

Medium



Efficiency

High



Description

This measure involves the development of a local e-mobility strategy to coordinate the deployment and use of electric vehicles across Prilep, based on a preliminary assessment of demand, potential supply and available incentives. The strategy includes the introduction of shared electric car schemes, allowing residents and businesses to access EVs without full ownership, and the promotion of charging infrastructure for companies and major public administration centres, potentially integrated with renewable energy sources. The approach supports the integration of shared and private EVs with park-and-ride facilities, public transport connections and municipal fleets, ensuring that e-mobility contributes to reducing car dependency and aligns with broader accessibility and low-emission mobility objectives.



Image





Cost

65.000 €



Responsible Authority

Municipality of Prilep



Period

Medium/Long



ASI Status

Shift



Priority

Medium



Efficiency

Very High



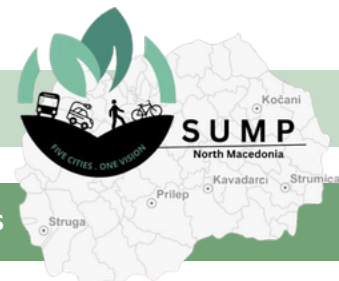
Description

This measure introduces pilot test drives for e-cargobikes, enabling residents, local businesses and urban logistics operators to experiment with electric-assisted cargo bikes for last-mile deliveries and personal transport. Test activities are concentrated in areas with high pedestrian activity and commercial functions, such as Korzo and surrounding neighbourhoods, as well as locations connected to public transport. The initiative can be implemented either through a managed sharing scheme operated by an external provider or through a more cost-effective local model coordinated by the municipality or bicycle associations, with temporary allocation, basic training and a deposit system. The measure supports the uptake of low-emission logistics and active mobility solutions, contributing to reduced congestion and emissions in central areas.



Image





Cost

30.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

High



Efficiency

High

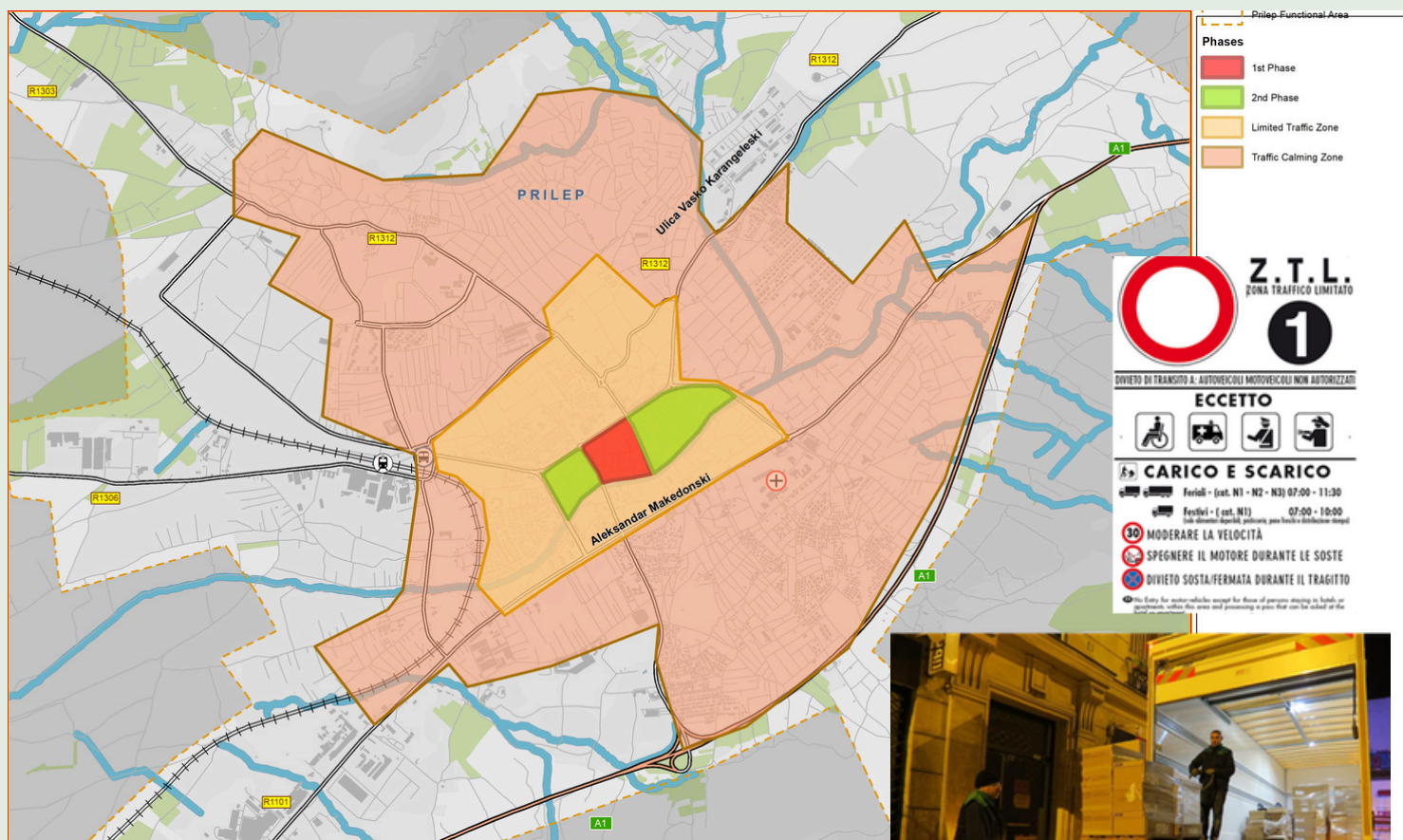


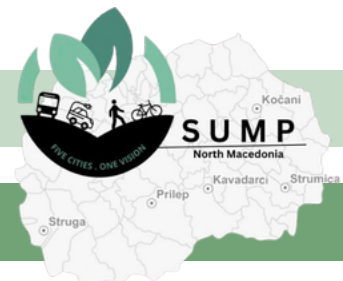
Description

This action regulates freight access by shifting deliveries to designated time windows outside peak hours, reducing conflicts with public transport operations, school zones and high pedestrian flows. The measure is applied primarily in central streets, Korzo, school surroundings and market areas, where access for delivery vehicles is permitted only during defined early-morning or off-peak periods, unless a specific municipal permit is granted. Permanent access restrictions are supported by clear signage, road markings and low-traffic zone regulations, contributing to smoother traffic conditions, improved pedestrian safety and reduced congestion in the city centre.



Image





Cost

20.000 €



Responsible Authority

Municipality of Prilep



Period

Short



ASI Status

Improve



Priority

High



Efficiency

High



Description

This action establishes a municipal permit system for freight vehicles that need to access restricted zones outside the standard delivery windows. Permits are priced and limited to discourage routine use and prioritize essential services only.

The system ensures that central streets remain protected while maintaining flexibility for critical deliveries, reinforcing a predictable and well-managed freight environment.



Image

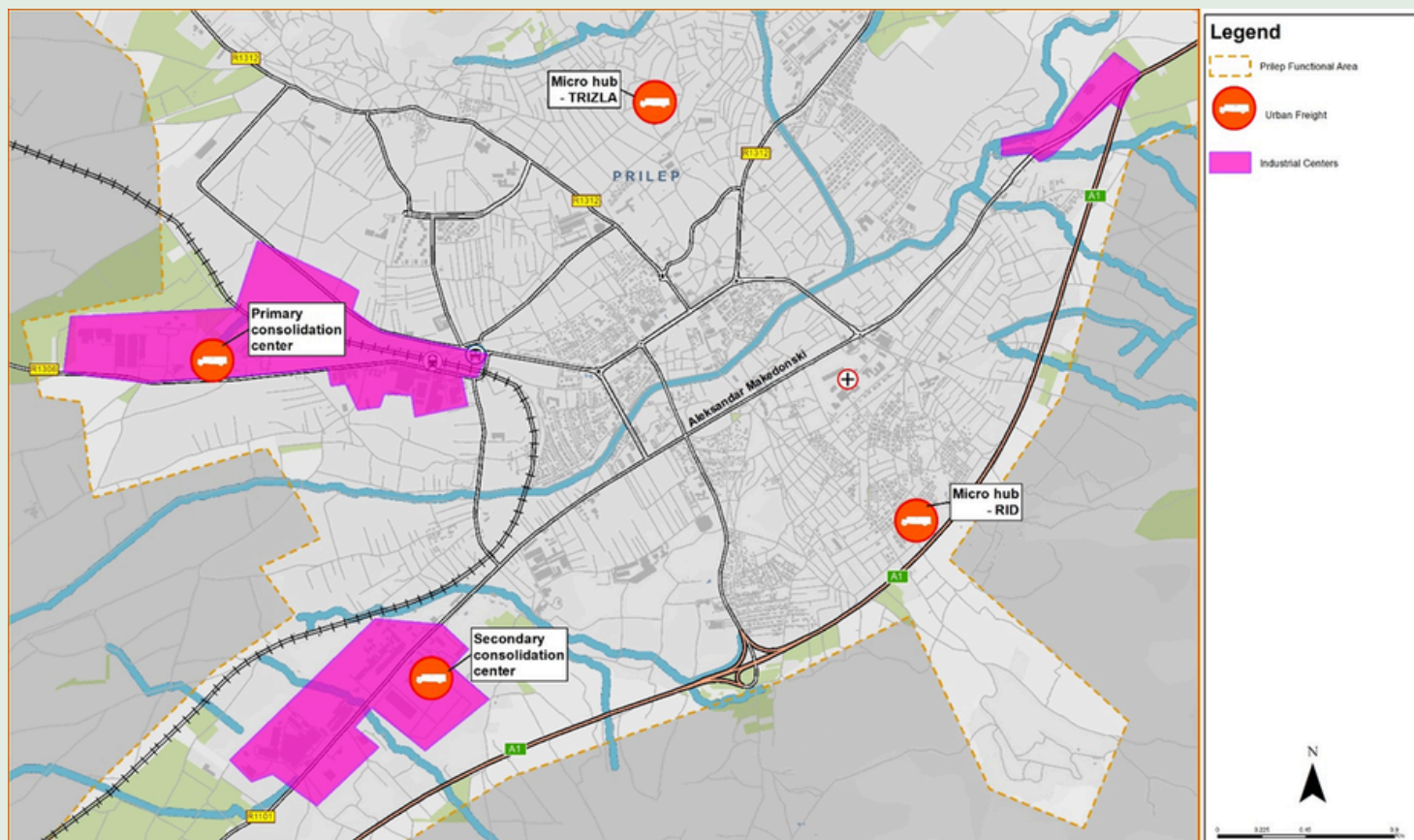


Cost	400.000 €	Responsible Authority	Municipality of Prilep
Period	Medium	ASI Status	Shift
Priority	Medium	Efficiency	Medium

Description

This action establishes a structured network of urban logistics hubs to reduce heavy vehicle circulation in central and pedestrian-priority areas of Prilep. A primary consolidation centre is located in the West Industrial Zone (Euroterm) to handle inbound freight, supported by a secondary hub in South Chacharica serving markets and commercial activities, and by micro-hubs in Rid/Sarika and Trizla enabling clean last-mile distribution. The hub system allows freight to be consolidated and redistributed using smaller and low-emission vehicles, reducing truck access to the central LTZ, improving delivery efficiency and enhancing safety and accessibility for pedestrians and cyclists.

Image



Urban Freight Transport

M9.2: Develop urban logistics hubs or consolidation centres

M9.2.2: Neighbourhood Micro-Hubs for Last-Mile Distribution



Cost

100.000 €



Period

Medium



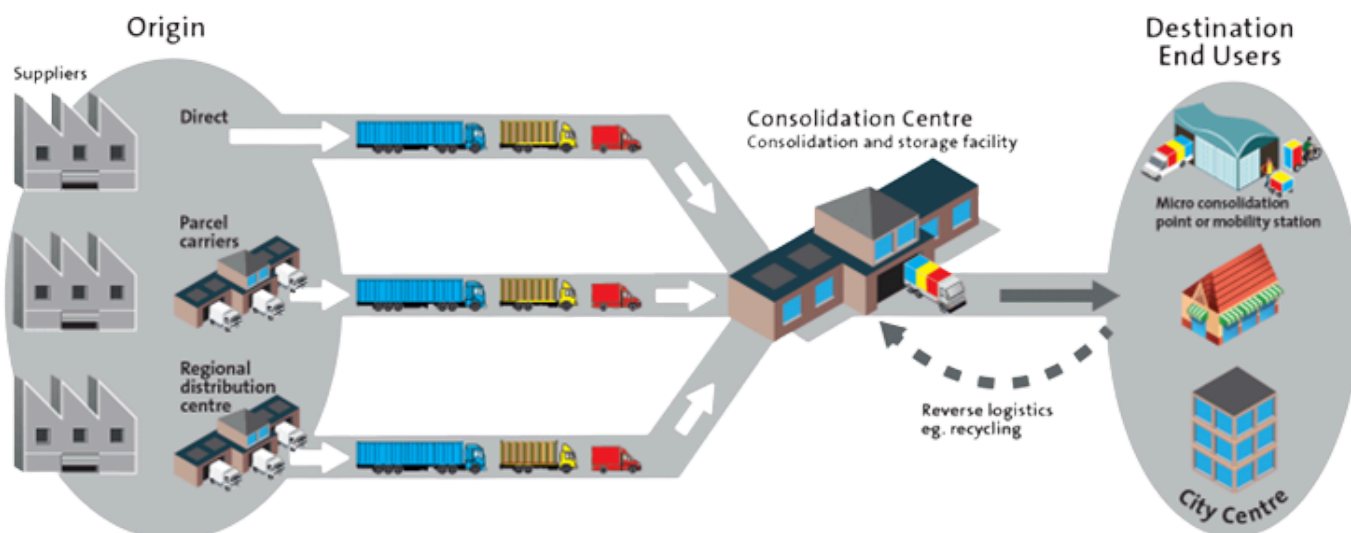
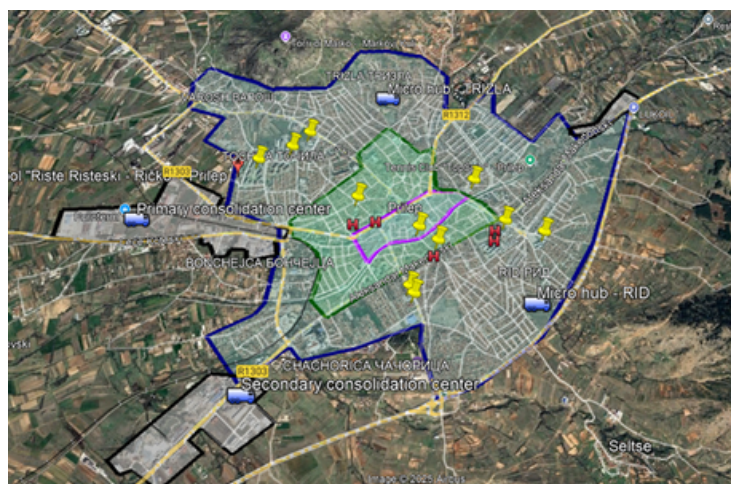
Priority

Medium



Description

This measure establishes a structured network of urban logistics hubs to reduce heavy vehicle circulation in central and pedestrian-priority areas of Prilep. A primary consolidation centre is located in the West Industrial Zone (Euroterm) to handle inbound freight, supported by a secondary hub in South Chacharica serving markets and commercial activities, and by micro-hubs in Rid/Sarika and Trizla enabling clean last-mile distribution. The hub system allows freight to be consolidated and redistributed using smaller and low-emission vehicles, reducing truck access to the central LTZ, improving delivery efficiency and enhancing safety and accessibility for pedestrians and cyclists.



M9.3.1: Cargo-Bike Based Delivery Network



Cost

50.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

High



Description

This action promotes the use of cargo bikes for last-mile freight distribution, operating primarily from the eastern and northern micro-hubs in Rid/Sarika and Trizla. Cargo-bike fleets are used for the delivery of parcels, food, medication and e-commerce goods to shops, markets and destinations within the city centre and pedestrian-priority areas. The measure is linked to pilot initiatives and test programs that allow logistics operators and local businesses to experiment with cargo-bike operations, supporting a gradual transition to low-emission delivery solutions while reducing vehicle conflicts and congestion in central streets.



Image





Cost

30.000 €



Responsible Authority

Municipality of Prilep



Period

Medium



ASI Status

Shift



Priority

Medium



Efficiency

Very High



Description

This action offers pilot schemes, test periods, and basic incentives to help retailers and delivery companies adopt cargo bikes. Training, access support, and operational guidance will be provided. By lowering entry barriers, the program accelerates the transition toward clean and space-efficient urban freight.



Image



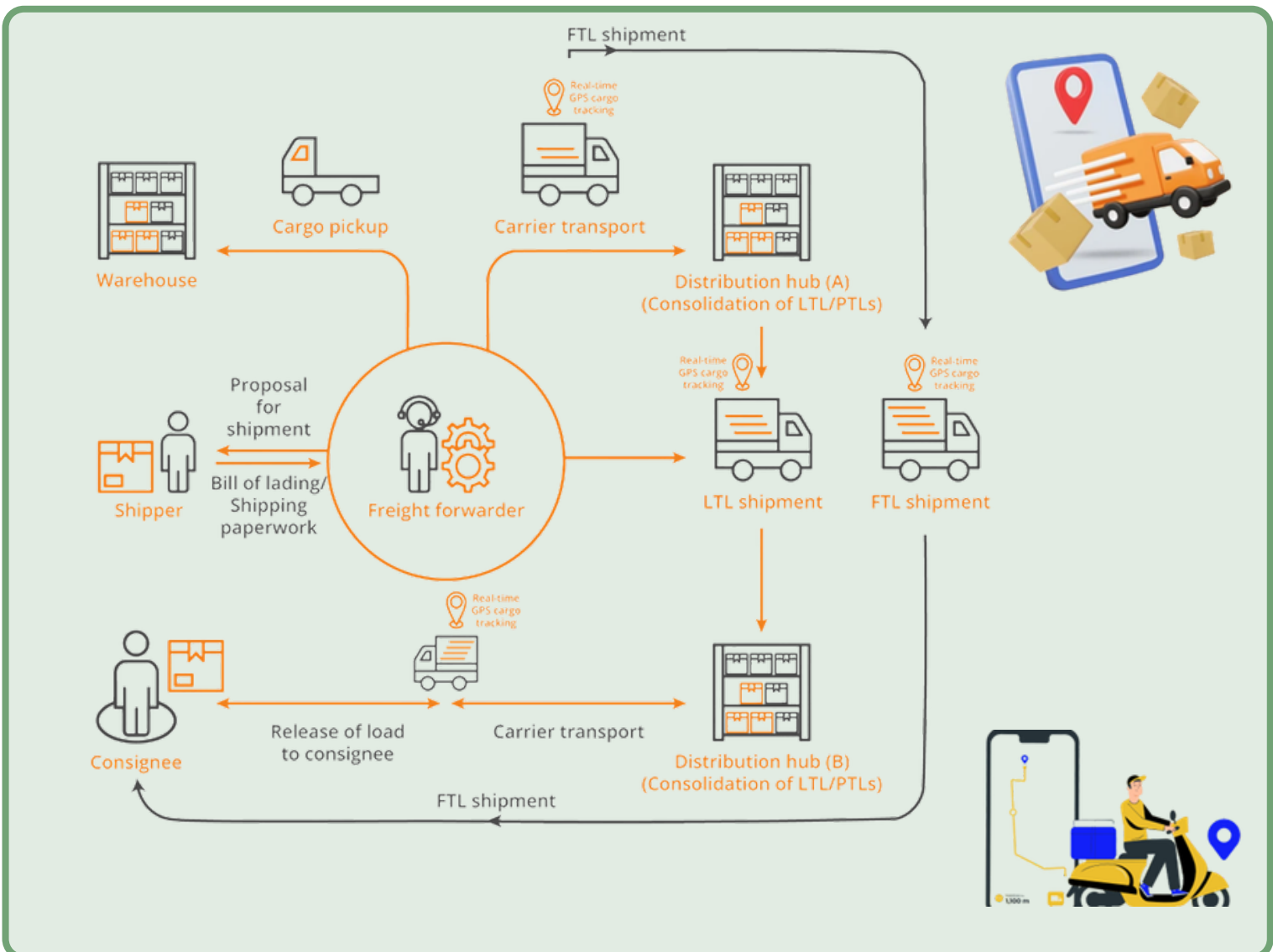


Cost	80.000 €	Responsible Authority	Municipality of Prilep
Period	Medium	ASI Status	Improve
Priority	Medium	Efficiency	High

Description

This action introduces digital tools for scheduling, routing and real-time tracking of urban freight operations in Prilep to improve efficiency and compliance with access regulations. Digital platforms are used to coordinate delivery windows in central streets, school zones and low-traffic areas, ensuring that vehicles access restricted zones only within permitted time slots and in coordination with the consolidation centres. By supporting load optimization, reducing empty trips and facilitating the use of low-emission vehicles such as electric vans and cargo bikes, digitalization strengthens the overall performance of the urban logistics system and contributes to reduced congestion and emissions in the city centre.

Image



Urban Freight Transport

M9.4: Digitalize freight logistics (tracking and scheduling) for efficiency

M9.4.2: Integrated Hub-to-Last-Mile Logistics Platform



Cost

100.000 €



Period

Medium



Priority

Medium



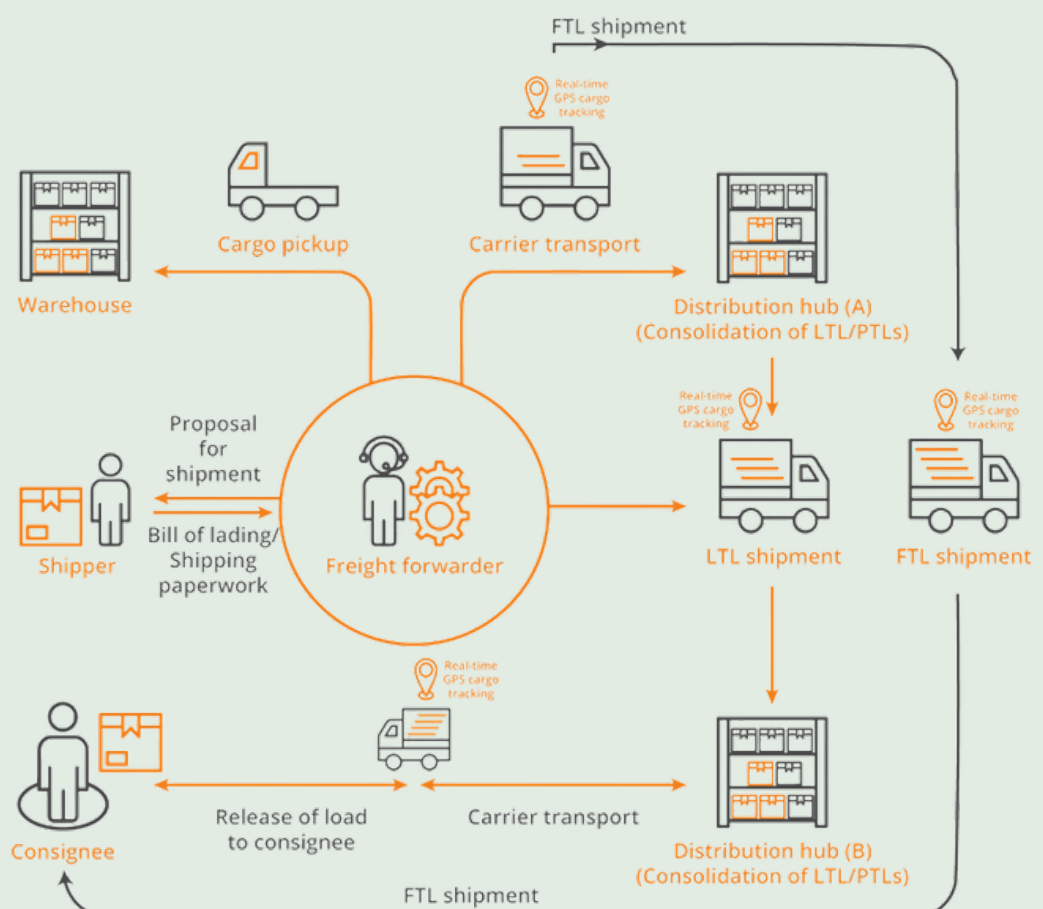
Description

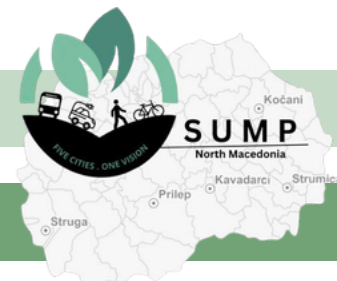
This action links consolidation centres, micro-hubs, and last-mile vehicles through a shared digital platform that supports routing, load management, and real-time tracking.

The system increases vehicle utilization, reduces empty trips, and supports the efficient operation of cargo bikes and electric delivery vehicles.



Image





Cost

300.000 €



Period

Medium



Priority

High

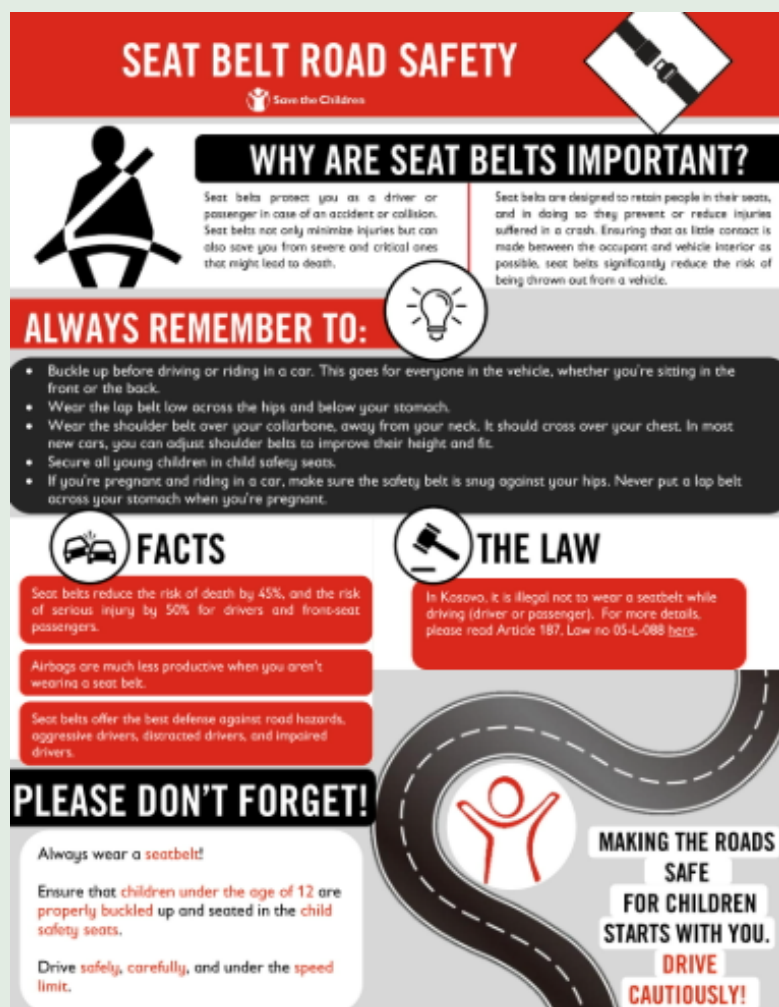


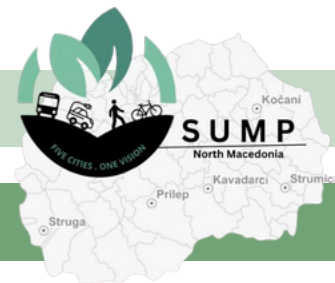
Description

Organizing citywide awareness campaigns through billboards, posters, local media, and social media channels will play a vital role in promoting safer road behavior. By focusing on key issues such as speeding, distracted driving, consistent seatbelt use, and safe crossing practices, these campaigns can reach a broad audience and encourage lasting behavioral change. Clear messages and visible reminders in public spaces will raise awareness among both drivers and pedestrians, reducing risky behaviors and contributing to fewer accidents. In the long run, such initiatives will foster a stronger culture of road safety, improve community well-being, and make the city's streets safer for everyone.



Image





Cost

300.000 €



Responsible
Authority

Municipality of Prilep



Period

Medium



ASI Status

Improve



Priority

High



Efficiency

High



Description

Launching targeted campaigns for pedestrians, cyclists, elderly, and disabled users will raise awareness of safe practices and shared responsibility on the road. These initiatives should highlight the importance of visibility, proper crossing rules, and respectful road use to protect vulnerable groups. By educating both drivers and non-motorized users, the city can reduce accidents, improve mutual understanding among all road participants, and foster a safer, more inclusive mobility environment.



Image



A Vulnerable Road User (VRU) is a non-motorist on the road.





Cost

300.000 €



Period

Medium



Priority

High



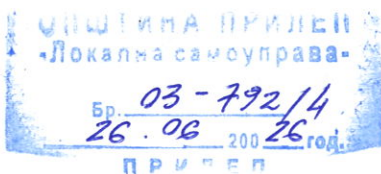
Description

Running campaigns tailored to specific risks—such as winter driving conditions, back-to-school periods, and increased holiday traffic—will help address the most common seasonal safety challenges. By delivering timely messages and practical tips, these initiatives keep road users alert to changing conditions and behaviors that require extra caution. Continuous, targeted awareness efforts will reduce seasonal accident spikes, encourage safer driving and walking habits, and build a culture of year-round road safety across the city.



Image





MINUTES FROM Project Steering Committee (PSC)

Date / Time	22.06.2026 at 1.30 PM (CET) (finished at 2.00 PM (CET))	
Location	Online	
Responsible Expert/drafter	Tito Stefaneli, TRT, Team Leader	
Participants:	Name	Institution, Position, PSC function
	Tito Stefaneli	TRT, Transportation Planner, Team Leader
	Vardhman Lunkar	TRT, Transportation Planner
	Seda Kadioğlu	Boğaziçi Proje, Urban Planner
	Murat Mat	Boğaziçi Proje, Transportation Planner
	Goce Bojkoski	Prilep SUMP Coordinator
	Katerina Ristevska	Member of Project Team
	Snezhana Risteska	Member of Project Team
	Maja Beshirovska	Member of Project Team
	Vladimir Dimoski	Member of Project Team
	Gorance Josheski	Member of Project Team
	Ilija Belichoski	Member of Project Team
	Valentina Nedeska	Member of Project Team
	Zlato Petrovski	Member of Project Team
	Katerina Spiroski	Member of Project Team
	Goran Stojanoski	Member of Project Team
	Vineta Ivanoska	Member of Project Team
Regrets:		

Appointment of the meeting

The invitation to the meeting was sent on 19.06.2026 through e-mail by the consultant team. As an enclosure to the invitation e-mail, the following documents were sent: Draft agenda

Agenda

1. Introduction
2. Adoption of Final SUMP Report Revisions
3. Questions and Discussions
4. Closure of the Meeting

Quorum for the Meeting

The majority of the nominated members were present, and the session of the PSC was valid.

Working dynamics of the meeting (main topics discussed with conclusions)

1. Introduction

The meeting was convened with the members of the Project Steering Committee (PSC) of the Municipality of Prilep to review the final revisions of the Sustainable Urban Mobility Plan (SUMP). The session focused on the comments and revision requests previously communicated by the Municipality and the way these inputs were reflected in the final version of the report.

The Consultant Team presented the updated SUMP document and explained that the requested revisions had been reviewed, incorporated where feasible, and transmitted to the Municipality for final consideration. The objective of the meeting was to ensure that the revised report was clearly understood by the PSC members and ready to proceed with the adoption process.

2. Adoption of Final SUMP Report Revisions

The Consultant Team provided an overview of the main updates introduced into the final SUMP report in response to the Municipality's requests. It was explained that the revisions were prepared in line with the feedback received during the previous consultation process and aimed to improve the clarity, completeness, and applicability of the final document.

The PSC members reviewed the final version of the revised SUMP report and discussed the updates presented by the Consultant Team. The Municipality confirmed that the requested revisions had been addressed and that the final document reflected the main comments and expectations shared during the process.

Following the presentation and discussion, the adoption process proceeded positively. The PSC members expressed their agreement with the revised final SUMP report, and the adoption of the final report revisions was confirmed.

3. Questions and Discussions

The question session focused on clarifying the final revisions and confirming that the Municipality's comments had been adequately reflected in the updated SUMP report. Participants discussed the revised content and raised questions related to the finalization of the document and the next administrative steps. The Consultant Team responded to the questions raised by the PSC members and provided additional explanations where necessary. It was confirmed that the revised report had been updated in accordance with the Municipality's requests and that no major outstanding issues remained regarding the final version.

4. Closure of meeting and next meeting

The meeting concluded with a positive agreement on the adoption of the final SUMP report revisions for the Municipality of Prilep. It was agreed that the revised final report would serve as the adopted version of the SUMP. The meeting was closed thanks to all participants for their active involvement and constructive contributions.

Mechanism for decision taking

- All decisions and conclusions were made by consensus of all Members that were present.

Action points (to be done) and responsible persons

Final Beneficiary:

- MoM's to be signed and published
- Attendance list to be shared

Consultant:

- MoM to be shared.

Attachments

Presentation

Date: 25.06.2026

Consultant's representatives:

PSC Secretariat
Project Team Leader
Name and Surname

Tito Stefanelli

Final Beneficiary's Representatives:

PSC Chairperson
Name and Surname

Goce Bojkoski

PSC Vice Coordinator

Violeta Ivanova

