# TERRITORIAL ANALYSIS

PODGORICA, MONTENEGRO |
DP 12 - NON-GOVERNMENTAL ASSOCIATION BICIKLO.ME

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# ABOUT THE CYCLERIGHT PROJECT

The **CycleRight** project, implemented in the framework of the Interreg Europe programme, **aims to improve cycling policies in the participating partner regions through mutual exchange of experience**. Accordingly, the project activities will **focus on identifying good practices in cycling, which will be the subject of study visits** to be organized by the project partners and the **integration of the knowledge gained into their targeted policy instruments** and day-to-day organisational operations.

Project activities will be implemented in line with the following framework:

1. urban cycling,
2. regional networks,
3. multimodality.

As a **horizontal approach**, the identified practices and initiatives will also be examined and evaluated in terms of their profile in relation to:

1. climate resiliency,
2. social inclusion / accessibility,
3. safety.

This territorial analysis will serve as **a basis for the knowledge exchange process**, identifying areas where systemic gaps and weaknesses can be identified, which can be addressed by the practices in the partner regions, and presenting initiatives in our region that can provide solutions and inspiration for partner regions.

Accordingly, the document presents the following main topics:

1. the **regional background**,
2. strategic background,
3. overview of the **results reached** during the 2014–2020 programming period,
4. overview the **current plans** and results within the 2021–2027 period,
5. **SWOT analysis** on the project topics,
6. and based on these, **showcasing potential good practices** that would be shared during the study visits and/or in the Cycling Planning Guide that will be developed by the European Cyclists' Federation (ECF) throughout the project.

# 1. REGIONAL BACKGROUND

## About Podgorica

Podgorica is the capital of Montenegro and the country's administrative, political, economic, transport, educational and cultural centre. It lies in the central region of Montenegro, at the confluence of the Morača and Ribnica rivers. It encompasses a total territory of 1,508 square kilometres and borders the municipalities of Danilovgrad and Cetinje to the west, Kolašin and Andrijevica to the north, the Republic of Albania and the Municipality of Tuzi to the east and the Municipality of Zeta to the south.

According to the 2023 census, Podgorica has a population of 179,505 inhabitants, making it the largest city in Montenegro.[1] In line with the Law on Territorial Organization of Montenegro, Podgorica has the status of the Capital City.

*An aerial image of Podgorica. Photo: Capital City of Podgorica*

[1] https://monstat.org/uploads/files/popis%202021/saopstenja/SAOPSTENJE_Popis%20stanovnistva%202023%20I_cg.pdf

Podgorica has a record of continuous habitation, dating back to the Roman and Illyrian periods. Following the arrival of the Slavs in the 5th century and the collapse of the Roman Empire, the city experienced a turbulent history. During the Middle Ages, it emerged as an important trade and economic hub, strategically positioned on key routes connecting East and West. After four centuries of the Ottoman rule, Podgorica became part of Montenegro at the Berlin Congress in 1878.

The city flourished in the early XX century, but was heavily destroyed during World War II, enduring over 70 bombings by both Nazi Germany and the Allies. Following the liberation on 19 December 1944, it was rebuilt in a modern Socialist style.

Podgorica derives its name from its location and literally translates as "under the little hill", referring to the prominent, cypress-covered Gorica hill near the city centre. Before acquiring its current name, the city was known as Birziminium. During the Middle Ages, the name of the town was Ribnica, named after the river it sat upon. The name Podgorica was first found in documents in 1326. For a significant period of the 20th century (1946-1992), the city was called Titograd in homage to Josip Broz Tito, the president of the Socialist Federal Republic of Yugoslavia. After the dissolution of SFR Yugoslavia in 1992, the city restored its historic name (Podgorica), becoming the capital of an independent Montenegro in 2006.

### *Geography*

Podgorica is strategically positioned at the junction of several roads and trade routes, connecting the Adriatic Sea with the more continental part of the country and the Balkan region. It lies in a mainly flat area at the northern end of the Zeta plain, at an altitude of around 44.5 metres. It also features several hills in the urban area, the highest being Gorica hill near the city centre (around 130 m high). Other major hills in the urban area include Ljubović, Malo brdo and Dajbabska gora.

### *Climate*

Podgorica has a Mediterranean climate (Csa subtype according to the Köppen-Geiger classification), characterized by hot, dry and sunny summers contrasting with mild and rainy winters. This climate type is consistent with the broader Mediterranean region, although Podgorica experiences slightly warmer summer temperatures and slightly colder winter temperatures compared to the Montenegrin coastline (Burić et al., 2014).[2]

According to climatological data from the Institute of Hydrometeorology and Seismology of Montenegro, the average annual temperature for the period 2014-2024 was 17.6°C. August is the warmest month, while January is the coldest. The maximum daily temperature ever recorded was 44.8°C in August 2007, while the minimum temperature on record was -9.7°C in January 1956. The summer season in Podgorica is long and warm, with approximately 135 days with daily temperature exceeding 25°C.

Precipitation patterns show an average annual rainfall of 1544 mm, distributed unevenly throughout the year. The highest precipitation amounts are typically recorded in November and February, while July and August experience the driest conditions. The average number of rainy days per year is 118. Snowfall is rare and when it occurs, it typically lasts for 2 to 3 days, with

[2] Burić, D., Ducić, V., & Mihajlović, J. (2014). The climate of Montenegro: Modificators and types-part two. *Glasnik Srpskog geografskog društva*, 94(1), 73-90.

an exceptional snowfall of 60 cm recorded in 2012. The average annual relative humidity is 59.6%.

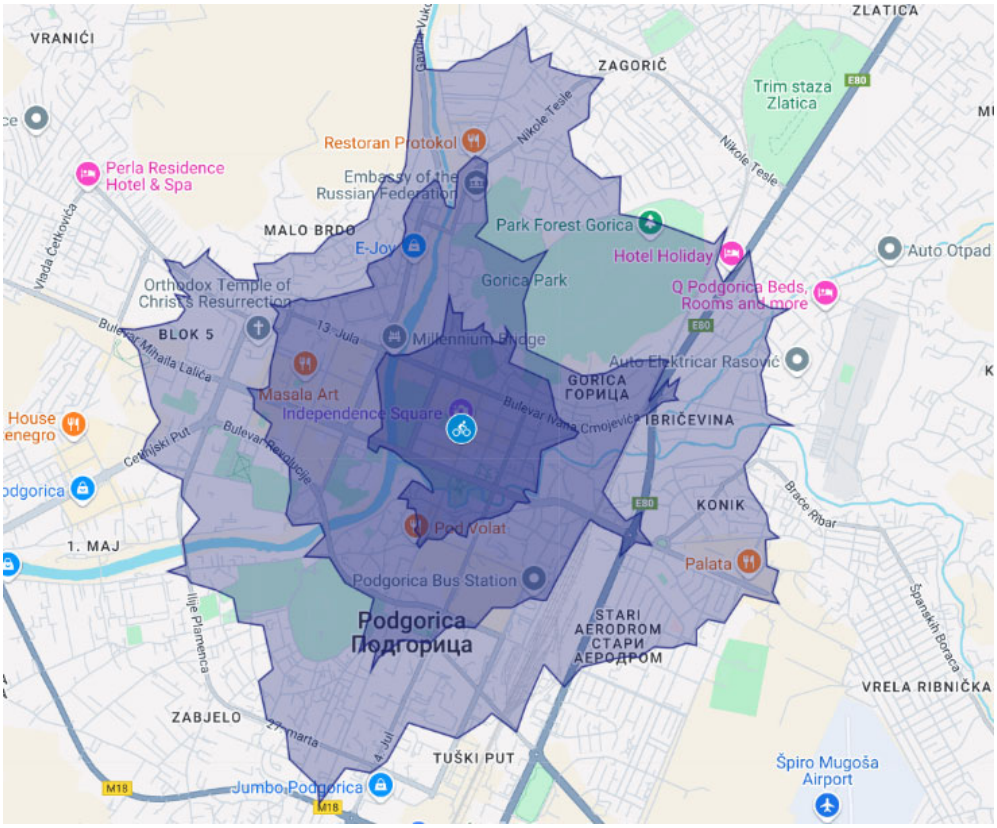
Podgorica benefits from high levels of sunshine, averaging 2,456 hours annually during the period 2015-2018. Regarding wind patterns, data from the Climate Atlas of Montenegro (2012)[3] indicate that the north wind is the most frequent (13.8%), followed by the northeast (11.5%) and southeast (11.1%). Strong winds are experienced on an average of 58 days per year.

While the region of Podgorica experiences temperature extremes, the overall climatic conditions are generally considered favourable for active mobility.

## Infrastructural background

As of 2025, Podgorica's cycling network consists of around 30 km urban cycling routes. The construction of the network began in 2015, with the creation of the city's first cycling corridor (Hotel Hilton – Mihaila Lalića Boulevard). Since then, a total of six cycling corridors have been built, forming the current urban cycling network.

Podgorica is a flat and compact city, which makes it well-suited for cycling. A pilot study conducted by Biciklo.me indicates that the majority of residential areas are within a 15-minute bicycle ride from Podgorica's central square.



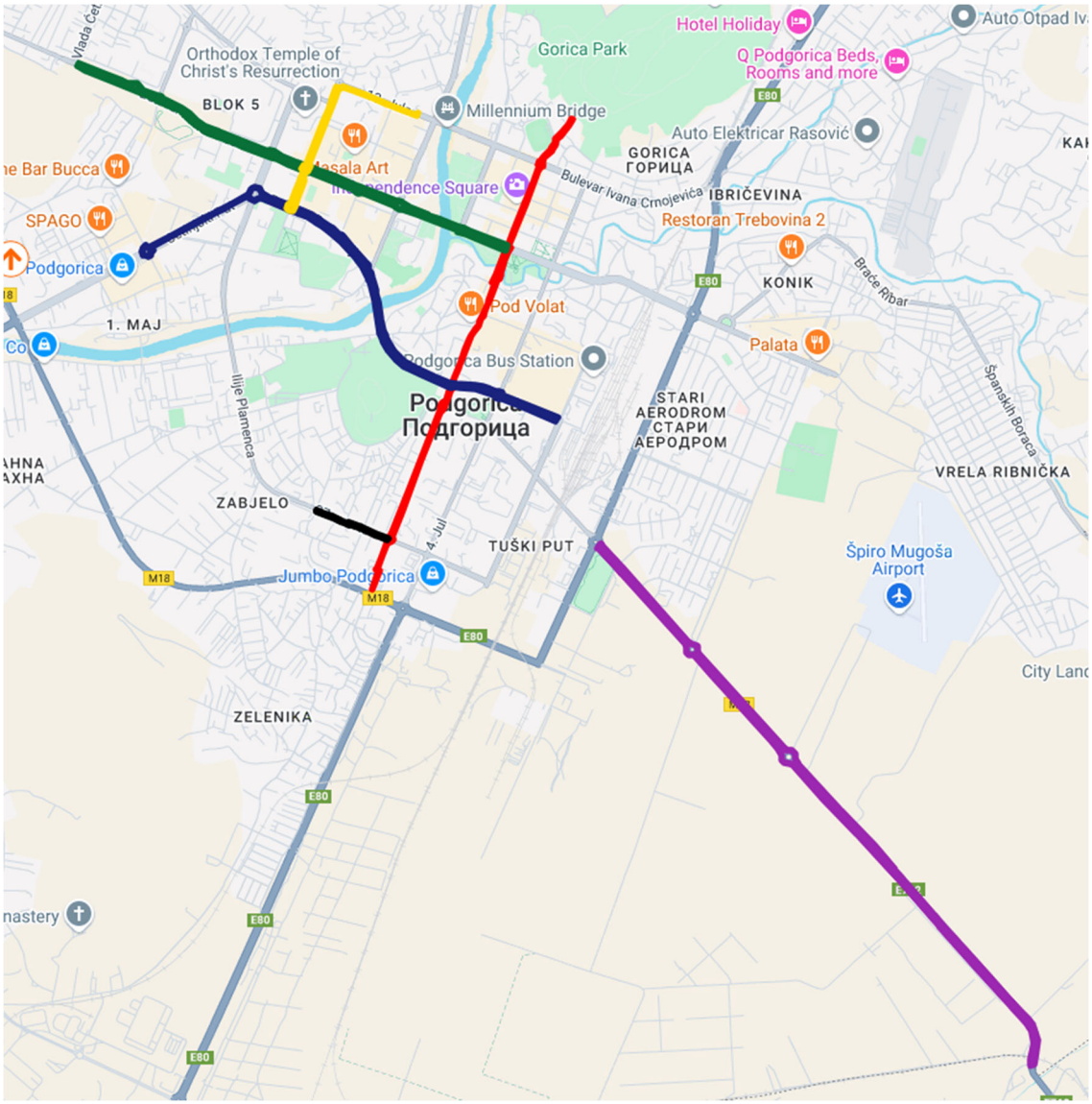

*Bicycle Accessibility Map of Podgorica, showing 5, 10 and 15-minute travel times*

[3] Burić, M, Micev, B., & Mitrović, L. (2012). *Atlas klime Crne Gore [The Atlas of Montenegrin Climate].* Podgorica: CANU, Leksikografski centar.

This map was generated using a methodology assuming that approximately 800 meters can be covered by bicycle in 5 minutes within an urban environment. This calculation assumes an average cycling speed of 12 km/h maintained for four minutes, with the remaining one minute allocated to potential delays from traffic lights and street crossings.

In accordance with the definitions established in the Law on Roads and the Rulebook on Cycling Infrastructure, Podgorica's cycling network encompasses dedicated cycle paths, cycle lanes, shared pedestrian and cycle paths and mixed-traffic routes.

Most of the existing cycling network was constructed prior to the adoption of the Sustainable Urban Mobility Plan (SUMP). Since its adoption, the only new addition has been the Tuški put – Cijevna Canyon corridor, on the outskirts of Podgorica, providing a connection to the Cijevna River and the Municipality of Tuzi. However, this cycle path has not significantly impacted urban mobility. A map of the cycling network is given in the illustration below:




*Map of Cycling Corridors in Podgorica, December 2024*

The cycling network in Podgorica is structured around the following corridors:

### *Kralja Nikole Street – Gorica Hill (6 km)*

The Kralja Nikole Street – Gorica Hill corridor stretches from the intersection of Kralja Nikole and Vojislavljevića Streets in the neighbourhood of Zabjelo to the foot of Gorica Hill, spanning 3 kilometres in one direction or 6 kilometres in total. Construction began in 2016 and was completed in early 2017. This corridor alternates between shared pedestrian-bicycle paths, bicycle paths, bicycle lanes and roads for mixed traffic.

Construction of this corridor began in 2016 and was completed in early 2017. This cycling route features an alternating sequence of shared pedestrian-cycle paths, dedicated cycle paths, cycle lanes and a mixed-traffic road segment. A portion of the corridor underwent reconstruction in 2020, during which a pop-up bike lane was installed over a length of 650 meters in both directions; this involved converting one traffic lane into a dedicated cycle lane. This lane was subsequently removed in 2024, reverting the section to its original shared pedestrian-cycle path design.


### *Hotel Hilton – Mihaila Lalića Boulevard (5.4 km)*

Extending from the intersection of St. Peter of Cetinje Boulevard and Slobode Street near the Hilton Hotel (formerly Hotel Crna Gora) to the intersection of Mihaila Lalića Boulevard with Vlada Ćetkovića Street in the Tološi neighbourhood, this corridor measures 2.7 kilometres in one direction, totalling 5.4 kilometres. Designed as a one-way path on both sides of the two boulevards, it maintains a width of one meter within the traffic cross-section profile throughout its entire length.

This corridor was established in 2014 as Podgorica's inaugural cycling route, following several years of advocacy for cycling infrastructure development by Biciklo.me. According to data from the Sustainable Urban Mobility Plan (SUMP), the construction cost amounted to €284,611.04. The construction was primarily funded by the Capital City (€154,611.04), with the remaining funds secured through donations from Chinese and Montenegrin construction companies.

The corridor was predominantly implemented on existing sidewalks, ensuring physical separation from motorized traffic. Although the available sidewalk space was generally wide enough to allow up to 3 meters for pedestrian movement, the cycle path was constructed at the same level as the pedestrian area. This design in some places leads to the intermingling of pedestrian and cycle traffic, raising the risk of conflicts between these user groups.

Minor damage, uneven surfaces and physical obstacles are present in certain sections of the corridor, necessitating repairs and rehabilitation.

### *Save Kovačevića Boulevard – City Kvart (6.3 km)*

The Sava Kovačević Boulevard – City Kvart corridor runs from the intersection of Sava Kovačević Boulevard and Mitar Bakića Boulevard, close to the main bus terminal, continuing along the boulevards of Srđana Aleksić, Crnogorskih Serdara and Revolucije, further along Cetinjski Put to the Big Fashion shopping mall in the neighbourhood of City Kvart. Constructed in 2016, the corridor is predominantly one-way, transitioning to two-way in shorter segments. It has a length of 3.15 kilometres in one direction, for a total of 6.3 kilometres. The entire corridor is situated on existing sidewalks and is physically separated from the roadway.

Overall, the condition of the corridor is generally good, with some drawbacks. Interruptions are present in certain parts, stemming from both incomplete construction phases and unrepaired damage caused by private development activities; these require urgent remediation. Furthermore, lack of maintenance is apparent in some parts of the route, although large portions remain in acceptable to good condition. A notable positive feature is the substantial tree canopy along many areas, which contributes positively to the corridor's overall appeal.


### *Faculty of Law – Moskovska Street (2.6 km)*

This corridor extends from Faculty of Law of the University of Montenegro in 13 July Street to the intersection of Moskovska Street and Revolucije Boulevard, where it connects with the previously discussed Sava Kovačević Boulevard – City Kvart corridor. The corridor is 1.3 kilometres long in one direction, totalling 2.6 kilometres. This cycle route comprises an alternating mix of two-way and one-way cycle paths and sections designated for mixed traffic. Constructed in 2017, it has since undergone minor modifications that have unfortunately further hindered cyclist movement.

Although the original plan envisioned the cycling corridor beginning at the City Stadium on Ivana Crnojevića Boulevard, the reality on the ground is notably different: due to high motor vehicle speeds and lack of safe infrastructure, almost no one cycles on that section. In practice, the corridor effectively begins in front of the Faculty of Law of the University of Montenegro, where the first meaningful cycling infrastructure appears. Despite the proximity of the Millennium Bridge, very few cyclists use the designated roadway there – marked only by faded pictograms and 'Cyclists on Roadway' signs – because of its high traffic volumes and vehicle speeds often exceeding 50 km/h. As a result, most cyclists continue to use the pedestrian walkway on the bridge to cross the Morača River more safely.

The segment along Moskovska Street is primarily marked directly on the roadway with pictograms, lacking physical separation from motor traffic and is frequently obstructed by illegally parked vehicles. Therefore, it can be argued that this corridor is effectively interrupted along Moskovska Street, specifically from the intersection with Dalmatinska Street to the intersection with Sveti Petar Cetinjski Boulevard.

This corridor contains numerous unsafe sections and interruptions, leading to the conclusion that it largely fails to meet the minimum requirements for cycling infrastructure.

### *27. marta Street – King Nikola Street (0.9 km)*

The 27. marta Street – King Nikola Street corridor runs from the Zabjelska Vektra building to the intersection with King Nikola Street, covering a distance of approximately 450 meters in one direction, or 900 metres in total. This corridor, constructed in 2020 entirely on existing sidewalks, initially formed part of a longer route established during the onset of the COVID-19 pandemic. That longer route extended to Krivi Most and featured a section where one traffic lane was transformed into a pop-up bike lane. However, this pop-up lane was removed in early 2024 without an alternative being provided for this segment. The current version of the corridor consists of both one-way and two-way cycle paths.

The path was constructed on the sidewalk with a width of approximately 2.5 meters. While this width is comfortable and sufficient for cyclists, its implementation significantly reduced the space available for pedestrians, leaving only about 1 meter for passage. Consequently, pedestrians often use the cycle path, increasing the risk of conflicts between these two user groups.

After the intersection with Radosava Burića Street, the path transitions to a one-way configuration. The section heading from Radosava Burića Street towards King Nikola Street is well-designed, being separated from motor traffic by a wide green belt and leaving ample space for unimpeded pedestrian movement. However, on the opposite side of the street, the path is positioned on the right side of the sidewalk (closer to the buildings/property lines). This placement increases the potential for conflict between pedestrians and cyclists. This risk is especially acute near the kiosks and shops located opposite Vuk Karadžić Primary School, an area characterized by high foot traffic, where some amenities are only accessible by crossing the cycle path.

### *Tuški put – Cijevna Canyon (7.9 km)*

The Tuški put – Cijevna Canyon corridor represents the most recently developed cycling route within the Podgorica Capital City. It extends from the roundabout near the Revenue and Customs Administration building to the border with Tuzi municipality, proximate to the Cijevna Canyon and near the turn-off for Niagara beach. It is 3.95 kilometres long in one direction, providing a total cycling surface area of 7.9 kilometres. The corridor constitutes part of the so-called Tuzi Boulevard and is designed as a one-way path along its entire length. The boulevard itself was constructed in two phases and officially opened in May 2022.

This marks the first cycling corridor in Podgorica constructed following the enactment of the Rulebook on Cycling Infrastructure. However, owing to numerous shortcomings, its implementation shows little improvement over infrastructure built prior to this regulation.

The corridor is situated on sidewalk surfaces. It is separated from pedestrian traffic by a painted demarcation line and from motor traffic by a green belt. According to the terminology defined in the Rulebook on Cycling Infrastructure, this facility falls under the category of a shared pedestrian-cycle path. Consequently, another opportunity was missed to create a physically separated cycle path alongside a newly constructed boulevard, instead opting for a design that mixes cycle and pedestrian traffic.

Despite its recent completion, the corridor suffers from multiple interruptions, barriers and instances of damage that diminish its appeal, hinder movement and compromise cyclist safety. Maintenance is inadequate, with gravel and mud frequently present on the path. Furthermore, cycle crossings at certain points are poorly executed, with markings sometimes painted directly over curbs, rendering the transitions neither safe nor comfortable for cyclists.

Overall, the existing cycling infrastructure in Podgorica demonstrates significant challenges related to design coherence, network continuity, user safety and maintenance. Design choices often result in shared pedestrian-cyclist spaces lacking clear demarcation or safe ramps, leading to safety concerns. The network's fragmented nature, coupled with insufficient directional signage, limits its usability, especially for non-local cyclists. A persistent issue is the obstruction of cycle paths by illegally parked vehicles, which forces users into vehicular traffic lanes and risks their safety. Deficiencies in maintenance, such as faded markings, accumulated debris and long-standing potholes, further undermine infrastructure's quality and safety.

## Regional network and its interconnection

### *EuroVelo*

EuroVelo is the European cycle route network, which consists of 17 existing and planned long-distance cycle routes that cross and connect the continent. When completed, it will span over 90,000 km, making it the largest cycle route network in the world. EuroVelo is intended to serve as the backbone for national and regional cycle networks, supporting long-distance tourism and local journeys. It is developed and coordinated by the European Cyclists' Federation (ECF) and a network of National EuroVelo Coordination Centres.

EuroVelo 8 is currently the only route passing through Montenegro. The 7,350 km route crosses ten Euro-Mediterranean countries, from Spain to Cyprus. While the route does not pass through the territory of the Capital City of Podgorica, it provides an important bike connection between the southern region and Podgorica via the TEN-T network.


*EuroVelo Routes. Photo: European Cyclists' Federation*

EuroVelo 8 passes through the Boka Bay, including the towns of Herceg Novi, Tivat and Kotor (a UNESCO world heritage site). It continues through two spectacular National Parks (Lovcćn and Lake Skadar) all the way to the Sukobin border crossing in Ulcinj, where it exits to Albania. The route is currently classified as “Under development (but usable)” (ECF, 2024), as it contains stretches on major roads with high levels of motorized traffic. However, it also contains some quiet sections, particularly in the area of Lake Skadar National Park.

***Other connections***

North of Podgorica, there is a possibility of connecting with emerging mountain routes, such as Via Dinarica and TransDinarica. Via Dinarica is a long-distance hiking and biking trail that connects the Dinaric Alps across several Balkan countries, promoting sustainable tourism and outdoor recreation. TransDinarica is a cycling route designed to traverse the Dinaric Alps, offering a unique off-road biking experience through diverse landscapes and cultural heritage sites.

The transnational Peaks of the Balkans leads through one of the remote and wild mountainous regions of Western Balkans and there is possibility for detour via Podgorica municipality.

## Multimodality characteristics

Multimodal transport in Podgorica is envisioned by the Sustainable Urban Mobility Plan (SUMP) of the Capital City of Podgorica, which aims to improve citizens' mobility and reduce dependence on private cars through better integration of public transport, cycling and walking. Data on walking, cycling and public transport are still not collected in a systematic manner, which impedes a comprehensive assessment and strategic planning for multimodality.

Currently, multimodality in Podgorica is in its early stages. As a result, most citizens still have preferences towards monomodal travel. Multimodal solutions, such as park-and-ride systems, have yet to be implemented, while shared mobility services are only beginning to emerge. As of 2022, an electric scooter rental system has been operated by a private company, primarily serving tourists. Meanwhile, a bike-sharing service is under consideration for the near future.

Efforts to integrate cycling with public transport are underway but remain incomplete. For instance, while the city plans to connect the main bus terminal and train station to the city centre with cycling infrastructure, the current cycling network reaches close to the bus terminal but does not provide a direct connection to it. This gap reduces the potential for multimodal connectivity. Nonetheless, the bus terminal features a dedicated parking stand near its main entrance, thus supporting multimodal integration. Similarly, reduced fares encourage passengers to bring bicycles on trains, but the railway system’s limited departures and occasional cancellations reduce its reliability and attractiveness.

In summary, while Podgorica's commitment to multimodal transport is evident in its strategic planning, significant barriers must be addressed to realize the full potential of sustainable urban mobility.

## Funding opportunities and funding schemes

The Capital City of Podgorica finances the development of cycling infrastructure from various sources: local budget, EU-funded projects and donor funds. However, it is fair to say that the Capital City does not sufficiently utilize available funding opportunities and schemes related to urban mobility. Several factors contribute to this, including a shortage of trained staff for project proposal writing and implementation, as well a limited number of employees within the Office for International Cooperation and Partnerships. Another significant issue is the general lack of knowledge and still insufficient awareness of sustainable urban mobility. Although the city is currently involved as a partner in several EU and UN projects that address urban mobility either directly or indirectly, none of these initiatives focus exclusively on improving cycling infrastructure or promoting active mobility more broadly. Some of these projects are listed below.

The **MISSION** project (Multi-modal Inclusive Smart urban mobility SolutIONs) aims to improve urban mobility by integrating public transport with shared mobility, cycling, and walking across the Adriatic-Ionian region. Launched in September 2024, it involves partners from Italy, Slovenia, Greece, Serbia, Bosnia and Herzegovina, and Montenegro, including the Capital City of Podgorica and NGO Biciklo.me as an associate partner. Funded by the Interreg IPA ADRION programme, the 30-month project (budget: €1.48M) will develop a smart app offering door-to-door travel solutions with service and safety insights, tested in multiple cities with citizen and operator participation to support more efficient and sustainable transport.

The **Be Ready** project (UrBan hEat islands REsilience, prepAreDness and mitigation strategY), running from January 2024 to June 2026, aims to enhance urban resilience to climate change across the Danube region by addressing urban heat islands (UHIs). With a budget of €2.4 million, it involves 19 partners from 12 countries, including the Capital City of Podgorica. In Podgorica, the project focuses on assessing UHI risks and implementing "green acupuncture" interventions – small-scale, vegetation-based solutions – to mitigate heat effects in critical urban areas. Local initiatives include workshops engaging citizens, experts, and institutions to co-design strategies for increasing green spaces and sustainable urban planning, aiming to reduce extreme heat impacts and improve overall urban liveability.

The **City Experiment Fund (CEF)**, a UNDP initiative, supports cities in tackling urban challenges through innovation, and Podgorica has been selected for the 2025–2028 cohort. The city will focus on the "Twin Transition," combining green and digital innovations to improve sustainability, urban mobility, public services, and climate resilience. Supported by expert guidance and funding, Podgorica will develop strategic innovation portfolios aligned with its goal of climate neutrality by 2030, building on existing efforts like the ReWaste project to advance circular economy, sustainable transport, and holistic urban transformation.

## 2. STRATEGIC BACKGROUND

The Parliament of the Capital City Podgorica adopted the city's first Sustainable Urban Mobility Plan (SUMP) during a session held on 20 February 2020. The plan, developed for the period 2020-2025, was prepared with the support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) as part of the project entitled “Open Regional Fund for Southeast Europe – Energy Efficiency (GIZ ORF-EE).”


*Sustainable Urban Mobility Plan (SUMP), document cover*

The preparation of the plan was conducted transparently and inclusively from the beginning. To ensure effective execution, a working group of five members was established, comprising experts from local government authorities, academia and civil sector. Additionally, multiple workshops were organized during the drafting process, involving over 50 stakeholders from Podgorica. These included representatives from the Capital City’s institutions, companies founded by the Capital City, national authorities, the Union of Municipalities of Montenegro, academia, civil society, transport operators, media outlets, driving schools, businesses, the tourism sector and other relevant actors. This inclusive approach ensured that the needs of all who operate within Podgorica’s urban area and beyond were taken into account.

The goal of Podgorica's Sustainable Urban Mobility Plan is to enable the Capital City to become a successful and dynamic regional centre with a transport system that provides improved mobility, accessibility and connectivity for its citizens. This is to be achieved through reducing transportation costs, fostering economic development, protecting the environment and creating a healthier and more liveable urban environment, all while promoting sustainable modes of transport.

The plan is built on five key pillars of sustainable urban mobility, designed to complement each other in achieving strategic objectives. These pillars are:

1. Comprehensive and sustainable urban mobility planning
2. Rationalizing the use of private cars
3. Modernizing and promoting public transport
4. Enhancing the potential for cycling
5. Reviving walking as the healthiest mode of mobility

The SUMP outlines a vision and strategic objectives. Based on a status analysis, specific indicators were selected to measure progress toward these goals. Corresponding measures were defined to improve urban mobility in a sustainable and efficient manner. The plan concludes with an Action Plan that specifies timelines for implementation, responsible parties and estimated costs.

One of the measures outlined in the SUMP is the development of a local cycling strategy. Work on this strategy began in 2022 but is currently on hold, with no indication of future progress.

Montenegro does not yet have a national cycling strategy; however, cycling is referenced in key strategic documents, including the National Sustainable Development Strategy, National Tourism Strategy and Local Energy Plan of the Capital City of Podgorica. It is also mentioned in relevant planning documents such as the Spatial Development Plan of the Capital City of Podgorica.

# 3. OVERVIEW OF THE RESULTS REACHED DURING THE 2014–2020 PROGRAMMING PERIOD

As noted in Section 1, the construction of dedicated cycling infrastructure began in 2015, resulting in approximately 20 km of cycling network completed during the 2014–2020 programming period. This was made possible through individual projects funded by the Capital City of Podgorica and private company donations. The built network comprised 5 cycling corridors (described in detail above), composed of dedicated cycle paths, cycle lanes, shared pedestrian and cycle paths and mixed-traffic routes.


*Construction of the first bicycle lane in Podgorica in 2015. Photo Vijesti*

Shortly after the outbreak of the COVID-19 pandemic, the Capital City of Podgorica introduced three pop-up bicycle lanes on major routes: Kralja Nikole, Ilije Plamenca and Ivana Milutinovića streets (see the photos below). This project created approximately 5 kilometers of new cycling infrastructure across both directions, demarcated by plastic cones. The initiative aimed to address the growing demand for cycling as a mode of transport during the pandemic's initial phase and to test sustainable mobility solutions favouring bicycle transport. The lanes were established by repurposing one traffic lane on existing four-lane streets (so-called 'stroads'), which had previously frequently been used for illegal parking or stopping. This reallocation of space was part of a broader strategy to explore transformative sustainable mobility solutions and promote cycling as a viable transportation alternative. The implementation caused mixed reactions, receiving support from the cycling community while drawing criticism from a significant portion of citizens and politicians, voiced concerns about increased traffic congestion and questioned the lanes' overall impact.


*The pop-up bike lanes in Kralja Nikole and Ilije Plamenca streets, removed in 2024*

Beyond the urban cycling corridors, cycling lanes were marked on Gorica Hill in Podgorica. In 2018, the Capital City marked two cycling routes in the suburban and rural areas of Podgorica: Kučka Route (15 km) and Piperska Route (15 km), with the support of UNDP.

### *Bicycle parking*

The expansion of the cycling network was accompanied by efforts to provide temporary bicycle parking facilities. During the 2014–2020 programming period, more than 100 bicycle parking locations were installed, thanks to initiatives by NGO Biciklo.me, the Capital City of Podgorica and contributions from both the private and public sectors.

These facilities are primarily located in public areas such as squares, streets and parks, as well as in front of key institutions. Most parking facilities use the inverted-U design, which allows secure attachment of the bicycle frame rather than just the wheel. Variants include right-angle and curved-bend tops.

However, residential bicycle parking remains a challenge. Current planning documents do not mandate dedicated bicycle parking spaces in residential buildings, unlike requirements for car parking. As a result, concerns over bicycle theft discourage many citizens from owning bicycles or using them regularly.

Encouragingly, the 2024 amendments to the EPBD Directive are expected to require newly constructed residential buildings to include at least two bicycle parking spaces per residential unit, which could significantly improve the situation.

*A bicycle parking rack in Podgorica city centre*

***Promotion***

The Capital City occasionally promoted cycling through events like the European Mobility Week. However, the bulk of promotional efforts were led by NGO Biciklo.me, which organized dozens of Critical Mass events and other initiatives targeting various demographic groups to encourage cycling.

In 2019, the Capital City began preparing its first Sustainable Urban Mobility Plan (SUMP) using a co-creation approach that involved a wide range of stakeholders. The SUMP was formally adopted in February 2020.

A notable cycling promotion initiative was the "Podgorica on Two Wheels" project, launched in April 2019. Aimed at encouraging sustainable transportation and reducing urban pollution, the project included multiple subsidy distribution cycles. The city initially allocated 10,000 euros, covering 50% of the cost of bicycles, up to a maximum of €100 per bicycle. To date, the "Podgorica on Two Wheels" project has completed 10 subsidy cycles for the purchase of bicycles, electric bicycles, and scooters. Over 1,600 two-wheelers have been subsidized with a total investment exceeding 180,000 euros. Each year has featured at least one cycle, and in the latest cycle, citizens were able to submit applications electronically, a new feature compared to previous years.

# 4. OVERVIEW OF THE CURRENT PLANS AND RESULTS WITHIN THE 2021–2027 PERIOD

The 2021-2027 programming period has been characterized by challenges in respect of the development of cycling infrastructure in Podgorica. While new infrastructure has been built in some areas, there has also been a noticeable decline in others. Following the 2022 local elections, a strong campaign against the three pop-up bike lanes installed in 2020 culminated in their removal in early 2024. These lanes were reverted to car lanes despite initial announcements that separate cycling infrastructure would replace them. Although announcements were made regarding the installation of segregated bike lanes in these sections, progress has been limited. An exception is the section on Kralja Nikole Street, where cycling infrastructure was reinstated on the pavement, without physical separation from pedestrian paths, effectively returning to the pre-pandemic design. However, concrete action on the announced separate lanes has not yet materialized. The removal of these lanes has negatively impacted urban cyclists, increasing safety risks and reducing accessibility. This situation underscores the need for more comprehensive urban planning and a stronger commitment to sustainable mobility.

Amid these challenges, there has been some progress elsewhere. The first national Rulebook on Cycling Infrastructure was adopted by the Ministry of Transport, providing standardized guidelines for designing cycling infrastructure. Additionally, 7.9 kilometres of new cycling lanes (3.95 kilometres in each direction) were constructed as part of the Tuški put – Cijevna Canyon corridor. However, this infrastructure primarily connects Podgorica's outskirts and does not integrate with the city's existing cycling network.

Furthermore, the subsidies for bicycle purchase continued in this period, with at least one awarding cycle per year so far. Also, the network of bicycle parking stands has continued to expand, installed by mainly by private companies, state institutions civil society and tenant's associations.

The Capital City of Podgorica has initiated efforts to address long-term bicycle storage for residents. In 2024, the city launched a pilot project to install bicycle hangars in residential areas, aiming to provide secure storage solutions. A 2023 survey by Biciklo.me indicated that 83% of respondents lacked a suitable space for storing their bicycles. This initiative is currently in a testing phase.

The first electric scooter rental systems commenced operation in Podgorica in 2022. These services enable residents and visitors to rent electric scooters via mobile applications, contributing to the city's stated goals of promoting tourism, reducing pollution and fostering sustainable urban transport. Evaluation of the scheme is yet to be conducted.

The Capital City of Podgorica is committed to fostering cycling as an essential component of its sustainable urban mobility efforts, in line with the SUMP. To support this goal, the city has announced plans to conduct a comprehensive traffic study, which aims to gather data on trends behaviors and infrastructure needs for all means of transport, including cycling.

*A bicycle hangar from the Capital City's pilot project. Photo: Capital City of Podgorica*

Furthermore, through participation in Interreg projects such as MISSION and Be Ready, Podgorica aims to enhance its approach to sustainable mobility. In particular, the city is working to establish a systematic data collection framework with the help of digital tools and technologies, which will help collect data on cycling, identify gaps or areas for improvement and integrate cycling with the public transport system, with a view to creating a more user-friendly and efficient transport environment.

# 5. SWOT ANALYSIS

To conduct a SWOT analysis, Biciklo.me, in collaboration with the Transport Secretariat of the Capital City of Podgorica, organized a stakeholder meeting on 19 September 2024. The event served as an opportunity to introduce the CycleRight project to a wide group of stakeholders and systematically evaluate the current state of cycling conditions using the SWOT framework.

The meeting brought together a broad spectrum of participants, including representatives from key Capital City bodies, national authorities responsible for transport, environment and spatial planning, as well as academia, civil society organizations, local tourism stakeholders and international agencies. Through structured group discussions and collaborative exercises, participants engaged in an analysis of Podgorica's cycling landscape. This approach allowed stakeholders to share perspectives, identify challenges and pinpoint opportunities to enhance cycling infrastructure and culture in the city.

The key findings of the SWOT analysis are summarized below.


*SWOT Matrix for Cycling in Podgorica*

**Strengths**

*Time Efficiency*: Cycling is one of the fastest ways to move through Podgorica's urban core, avoiding frequent traffic congestion, particularly during rush hours. The compact city layout allows cyclists to reach key destinations efficiently.

*Health Benefits*: With rising concerns over sedentary lifestyles, cycling provides an accessible way for Podgorica's residents to incorporate daily physical activity. This can help reduce the burden on the city's healthcare system and improve overall public health.

*Environmental Advantages*: Podgorica is striving to reduce air and noise pollution, particularly in the city center. Encouraging cycling as an alternative to car use can significantly contribute to these efforts and support the city's sustainability goals.

*Economic Efficiency*: With increasing fuel prices, traffic congestion and a lack of parking that causes longer travel times in Podgorica, cycling remains a cost-effective transport option for individuals. Unlike cars and motorcycles, bicycles require minimal maintenance and no registration.

*Geographical Suitability*: Podgorica's flat terrain and Mediterranean climate make it an ideal city for year-round cycling. Unlike many European cities that struggle with extreme weather conditions, Podgorica's mild winters allow for uninterrupted cycling mobility.

**Weaknesses**

*Inadequate Infrastructure*: Although the city has started developing cycling infrastructure, it remains fragmented and inconsistent. Many cycle lanes abruptly end, are poorly designed, or share space with pedestrian paths, leading to safety concerns. The Millennium Bridge area and central boulevards highlight such infrastructural gaps.

*Limited Parking Facilities*: There is a lack of secure bicycle parking in key locations, such as government buildings, commercial centers and public institutions. This not only discourages daily use but also increases the risk of bicycle theft.

*Cultural Barriers*: Podgorica remains a car-dominated city, with low awareness of cycling as a primary transport mode. Motorists often disregard cyclists and traffic violations, such as illegal parking on cycling lanes and sidewalks, are common. A lack of law enforcement further exacerbates these issues.

*Absence of Public Bike-Sharing*: While bike-sharing systems are common in many European cities, Podgorica has yet to implement such a service. The absence of this system limits accessibility for visitors, students and those who do not own bicycles.

**Opportunities**

*Collaborations*: Working with health institutions, schools and the University of Montenegro can promote cycling as a health-conscious and practical transport choice. Cycling education in Podgorica's elementary and high schools can help create a new generation of informed and responsible cyclists.

*Educational Initiatives*: Including cycling awareness and road safety education in kindergartens and primary schools can shape long-term behavioral change. Driving schools in Podgorica could also integrate cyclist awareness training into their programs.

*Funding Availability*: The City of Podgorica has started investing in sustainable urban mobility projects, but not sufficiently. Additionally, EU funds and regional development programs could provide financial opportunities for expanding cycling infrastructure, improving safety and promoting multimodal transport.

*Public Bike-Sharing Systems*: The introduction of a bike-sharing system in Podgorica could significantly increase accessibility and encourage more citizens to cycle for short trips. Integration with the existing public bus network would further enhance multimodal transport options.

**Threats**

*Political Challenges*: Despite some progress, cycling infrastructure remains a low priority in urban planning. Political shifts and changing government priorities could slow down further investments and policy implementation.

*Negative Perceptions*: Car dependency remains deeply rooted in Podgorica's mobility culture. Many residents view cycling as a recreational activity rather than a serious transport alternative, making it harder to push for policy changes.

*Economic Factors*: The availability of cheap second-hand cars and fuel subsidies makes motor vehicle ownership more attractive. Without incentives to promote cycling, many residents may opt for personal vehicles instead.

*Infrastructure Deficiencies*: The lack of a well-connected and protected cycling network creates safety concerns. Many major roads, including boulevards, do not have dedicated bike lanes, forcing cyclists to mix with fast-moving traffic. The perception of cyclists as second-class road users further discourages potential riders.

| Main Topics | Strengths | Weaknesses | Opportunities | Threats |
|---|---|---|---|---|
| **Urban Cycling** | Time-efficient, cost-effective, health benefits, eco-friendly; mild climate allows year-round cycling; Podgorica's flat terrain is ideal for cycling; It helps reduce traffic congestion, noise and harmful emissions while saving space by minimizing the need for car parking. | Poor and disconnected cycling infrastructure; insufficient and insecure bike parking; weak cycling culture due to car dominance; no bike-sharing system; existing infrastructure lacks proper maintenance | Growing public awareness and local advocacy groups; potential for increased municipal funding; EU grants for sustainable mobility; collaboration with health institutions, schools and driving academies; education initiatives in schools and kindergartens | Lack of political will for significant investments; car-centric urban planning; resistance from drivers to sharing road space; negative perceptions of cycling and reliance on motor vehicles; insufficient national-level programs funding; poor planning and lack of professionals for sustainable urban mobility |
| **Regional Network** | Potential for intercity cycling routes linking nearby municipalities (e.g., Danilovgrad, Tuzi, Zeta); increasing interest in cycling tourism | No dedicated regional cycling routes; lack of coordination between municipalities; weak infrastructure for long-distance cycling; the EuroVelo 8 route through Montenegro is underdeveloped and largely unknown to the public | Cross-border cooperation with Montenegro's neighbours; EU funding for green transport and regional connectivity | Insufficient regional planning; dependency on cars for intercity travel; limited governmental focus on cycling connectivity |
| **Multimodality** | Some efforts to integrate cycling into transport policies; potential for bike-and-ride options with existing public transport | No bike racks on buses; train stations lack cycling infrastructure; missing connections between transport modes | Possible introduction of a public bike-sharing system; partnerships with transport providers; improved intermodal hubs with cycling access | Resistance from transport operators; prioritization of car infrastructure; slow adoption of multimodal transport solutions |

**Summary**

Cycling in Podgorica offers a number of advantages, including time efficiency, affordability and environmental benefits. The city's flat terrain and mild climate make it ideal for year-round cycling, while reduced traffic congestion, lower noise pollution and improved public health further strengthen its potential as a key mode of urban transport. With growing awareness of sustainability and active mobility, cycling could play a crucial role in shaping a more efficient and eco-friendly city.

However, several challenges hinder its widespread adoption. The cycling infrastructure remains inadequate and fragmented, with a lack of secure bike parking and poor road maintenance. Additionally, public perception of cycling as a primary mode of transport is weak and no bike-sharing system is in place. Cultural and behavioral factors, such as car-centric urban planning and limited respect for cyclists in traffic, further discourage its growth.

Opportunities for improvement include partnerships with health institutions, schools and driving academies to promote cycling as a safe and viable transport option. Increased municipal funding, EU grants and strategic infrastructure investments, such as a public bike-sharing system and better integration with public transport, could significantly enhance cycling accessibility and attractiveness. Strengthening regional cycling connectivity and multimodal transport solutions would further improve mobility options.

Despite these opportunities, key threats remain, including a lack of political commitment, resistance to reducing car dominance and insufficient regional planning. Without decisive policy action and sustained investment, cycling may struggle to fulfill its potential. Addressing these challenges through strategic planning, infrastructure development and community engagement will be essential to transforming Podgorica into a truly bike-friendly city.

# 6. POTENTIAL GOOD PRACTICES IDENTIFIED

**Good practice 1 – City subsidies for purchasing bicycles and electric scooters**

In recent years, the Capital City of Podgorica has implemented a commendable initiative to promote sustainable urban mobility through the "Podgorica on Two Wheels" program. This program offers subsidies to residents for purchasing bicycles and electric scooters, aiming to encourage eco-friendly transportation and reduce traffic congestion. The subsidies typically cover 50% of the vehicle's cost, up to a maximum of €100 for bicycles and €200 for electric scooters. The application process is streamlined and accessible, with submissions accepted electronically via the ePodgorica portal. Over multiple phases, the program has successfully distributed funds to hundreds of citizens, reflecting the city's commitment to fostering a cycling culture and enhancing the quality of urban life.


*Poster for the public call for bicycle and e-scooter purchase subsidies. Photo: Capital City of Podgorica*

*Direct impact*: **Urban cycling - Social inclusion / accessibility**

The "Podgorica on Two Wheels" program is a great example of promoting social inclusion and accessibility in urban mobility. By offering subsidies for bicycles and electric scooters, the initiative makes eco-friendly transportation more affordable and accessible to a broader range of residents, regardless of their financial situation. The subsidy system helps to reduce the barrier to entry for those who may otherwise struggle to afford such modes of transport, promoting social equity.

*Indirect impact*: **Urban cycling - Climate resiliency**

The program promotes eco-friendly transportation, reducing reliance on fossil fuels and contributing to the fight against climate change. As more residents adopt bicycles and electric scooters, Podgorica enhances its climate resilience by improving air quality and contributing to building a more sustainable urban ecosystem.

*Indirect impact*: **Urban cycling - Safety**

The program ensures that a wider population can adopt safer, low-impact modes of transport, ultimately fostering a more secure and inclusive urban environment.

**Good practice 2 - Installation of public bicycle parkings without paying city taxes**

In Podgorica, companies, organizations, residential buildings, groups and even individuals can install public bicycle parking on public property paying only €5.00 fees. To do so, they must submit a request to the City of Podgorica, providing a completed application form, a sketch of the proposed parking area and proof of payment of a local administrative fee of €2.00 plus €3.00 to the city's account. If the application meets all requirements, the city issues a decision confirming the location for the bicycle parking installation. The decision is delivered to the applicant and the Municipal Inspection. The deadline for issuing the decision is 30 days and the deadline for filing an appeal is 15 days from the date of the decision, to be submitted to the Chief Administrator of the City of Podgorica.

The explanation for interested citizens, as well as the request form for installing bicycle parking, can be found on the Capital City of Podgorica's website – link: https://podgorica.me/odobrenje-za-postavljanje-parkinga-za-bicikla/

This practice encourages the development of cycling infrastructure and promotes sustainable urban mobility in Podgorica. By facilitating the installation of bicycle parking, the city supports the adoption of cycling as a viable and eco-friendly mode of transportation. This initiative aligns with the city's efforts to enhance public spaces and encourage healthier lifestyles among its residents.


*One of the parking stands installed through collaboration between private sector and civil society. Photo: Biciklo.me*

*Direct impact*: **Urban cycling - Social inclusion / accessibility**

This initiative also strengthens social inclusion and accessibility by making cycling infrastructure more available to a broader range of people. By allowing companies, organizations, residential buildings and even individuals to install public bicycle parking at a minimal cost, the City of Podgorica ensures that safe and convenient bicycle parking is not limited to specific areas or groups. This approach benefits residents of all socio-economic backgrounds, particularly those who rely on bicycles as their primary mode of transport. Additionally, the straightforward and affordable application process removes financial and bureaucratic barriers, making it easier for diverse community members to contribute to the city's cycling infrastructure.

*Indirect impact*: **Urban cycling - Climate resiliency**

This initiative also plays a crucial role in enhancing Podgorica's climate resiliency by supporting sustainable transportation infrastructure. By making it easy and affordable for businesses, organizations and individuals to install bicycle parking, the city encourages more residents to choose cycling over motor vehicles, leading to reduced carbon emissions and improved air quality. By integrating bicycle parking into public spaces, Podgorica takes a proactive approach to building a more sustainable and climate-resilient urban future.

*Indirect impact*: **Urban cycling - Safety**

This initiative also contributes to improving safety in Podgorica by supporting the development of essential cycling infrastructure. By facilitating the installation of public bicycle parking, the city ensures that cyclists have secure and designated spaces to park their bikes, reducing the risk of theft and illegal parking that could obstruct pedestrian pathways or roadways.