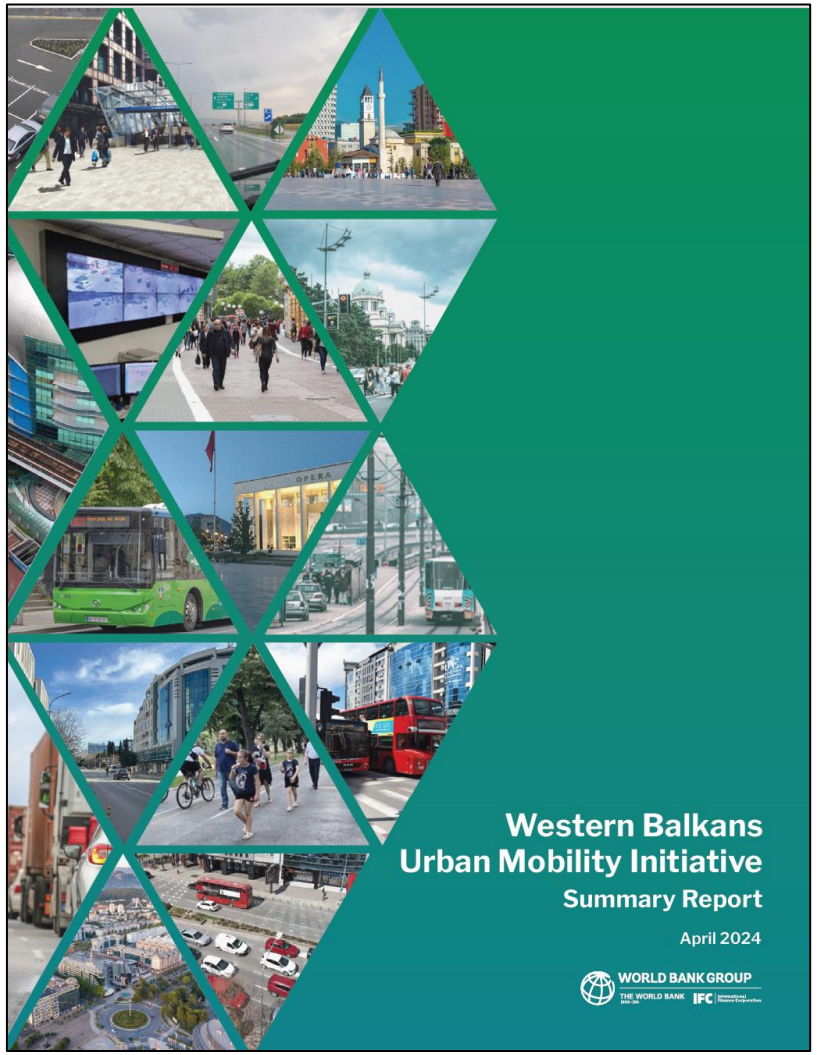
Western Balkans Urban Mobility Initiative

WORLD BANK GROUP

September 2025

Comprehensive regional study on state of Urban Mobility in Western Balkans



- High-level, comprehensive diagnostic assessment benchmarking analysis
- Overview or institutional arrangements and regulatory framework
- Review of urban mobility finance and spendings on urban transport
- Benchmarking of key mobility indicators and characterization of modes, infrastructure, and services on a regional level and with EU cities at the forefront of sustainable urban mobility
- Comprehensive stakeholder consultations and ongoing feedback on findings and urban mobility investment priorities
- Recommendations for interventions and identification of investment priority areas
- Guidance on decision-making to enable investment in urban mobility
- Informing the IFC-WB on priority engagement areas and ways to maximize investment potentials

Study cities

Banja Luka

Belgrade

Durres

Niš

Novi Sad

Podgorica

Pristina

Sarajevo

Skopje

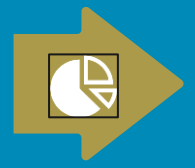
Tirana

Analytical Approach

1. City WBUMI Kick-Off Meetings

- Introduction to WBUMI initiative & objectives
- Initial views from City Representatives (Champions on urban mobility issues)
- Setting out data requests & confirmation of City Focal Points.

Political Engagement & Buy-in



2. City Urban Mobility – Data Collection

- Collection of city demographic, socio-economic & urban mobility data & information
- Stakeholders consultations, meetings & feedback

Urban Mobility Review & Assessment

3. City Engagement – Project Information

- Consultant City Co-coordinator discussions with City Focal Points
- Collection of project background information to help support MCA assessment of potential investment projects

City investment Priorities & Assessment

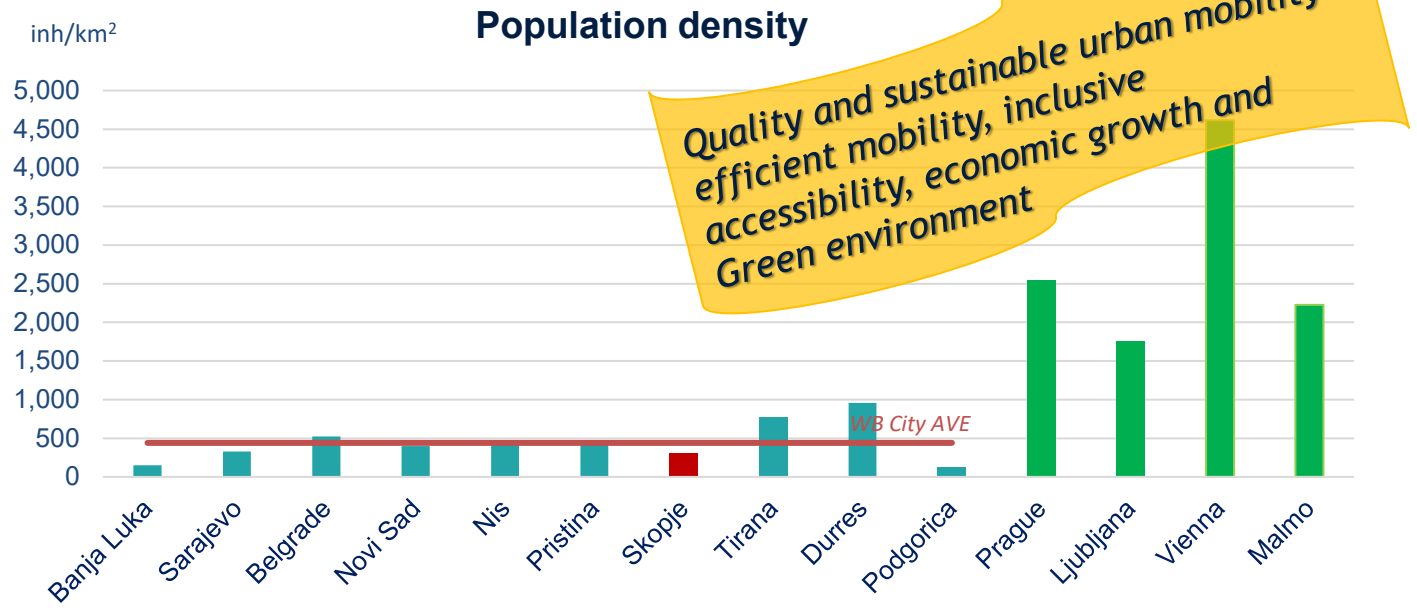
4. City Engagement –Assessment Findings

- Validation of Urban Mobility Assessment findings & recommendations with City Representatives
- Stakeholder discussions of data, benchmarking & draft list of city urban mobility investments

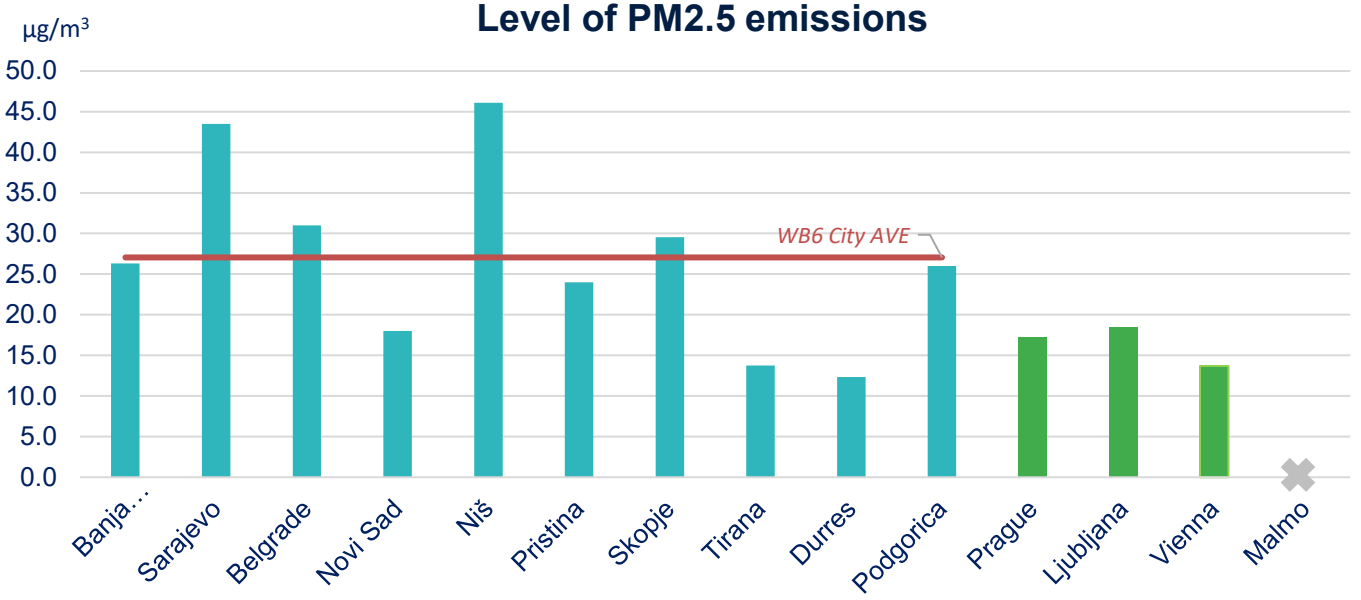
Validation of Urban Mobility Assessment & Priorities

Cities at a Glance

- Urbanization: relatively small cites driven by rural migration: population size < 500,000 and density 300 - 400 ppl/sqkm
- Capital cities are economic agglomerations: >30% nationwide enterprises in capital cities
- Most polluted cities of Europe



Quality and sustainable urban mobility: efficient mobility, inclusive accessibility, economic growth and Green environment



Institutional arrangement

- Local self-governance with governance structures in place for urban transport
- Road and traffic management and enforcement requires coordination between city and traffic police
- Public transport management is particularly problematic
  - A mix of public and private operators, including legacy SOE operators
  - Contract terms and risk allocations differ greatly among cities:
    - No performance-based contracts
    - Short contract terms limit the ability of operators to access commercial financing for fleet
    - In most cities fleet and operations cost recovery fall entirely to operators without a proper subsidy or risk sharing from the government
- Most cities have a transport plan, or SUMP, however lack feasibility studies nor investment plans

Belgrade

- "GSP Beograd" is the municipal PT company, holding a share of 63% of the city's passenger PT market; private operators run passenger transport on about 37% of the lines

Podgorica

- Public transport service is provided by two private operators (BLT and Gradski saobracaj PG) and one new, publicly owned PT operator (Putevi)

Pristina

- Trafiku Urban is the only public municipal operator, which covers more than 30% of the lines. About 20 private operators cover the other 25 bus lines

Sarajevo

- There are two operators: one is public (public utility company GRAS) and one private (Centrotrans)

Skopje

- One public utility company (JSP) operates 81% of the urban service and 86% of the suburban service. Two private operators operate the remaining services (Sloboda Prevoz and MakEkpres)

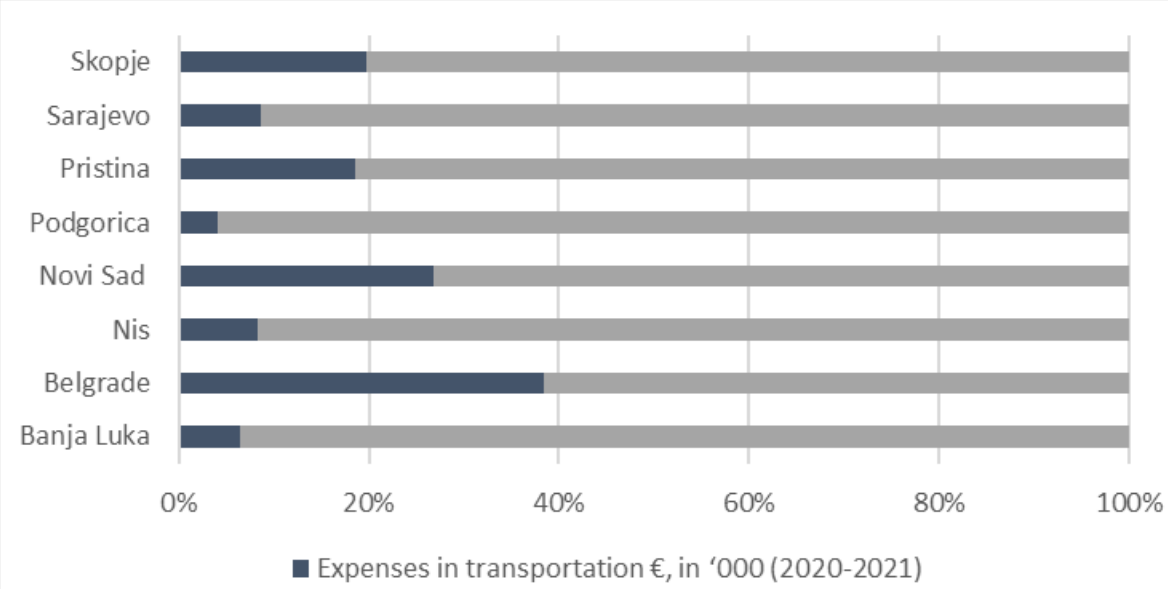
Tirana

- 11 private bus operators and they form an association

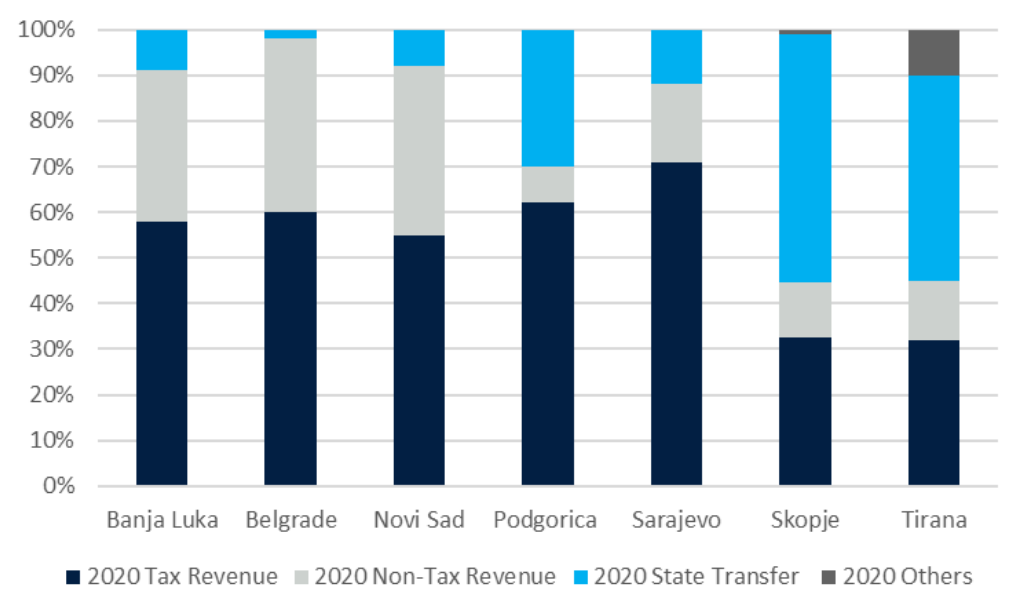
Urban Mobility Finance

- Cities rely heavily on tax revenues; even higher local contribution before the Covid pandemic
- Spending on urban transport shows great disparities; however, most funds are used for operations and maintenance to keep the existing systems running. Limited resources for new investments and expansions
- Underutilize opportunities to leverage private sectors to address urban mobility challenges. Mainly used for bus operations and parking management
- Sound overall financing management but are encouraged to explore innovative measurements to expand the base of municipal financing

Expenses in transportation versus operating revenues



Revenue Sources for Cities



Characterization of Urban Transport

Rapid motorization leading to traffic congestion, extended travel times and negative social, environmental and economic impacts
High shares of polluting vehicles

Public transport is predominantly used in the largest cities where the network is good

Slow transition to alternative fuels/EV – reducing the potential to improve air quality

Lack of safe and high-quality walking and cycling infrastructure
Pedestrians and cyclists in these cities are at **high risk of vehicle collisions and fatalities**

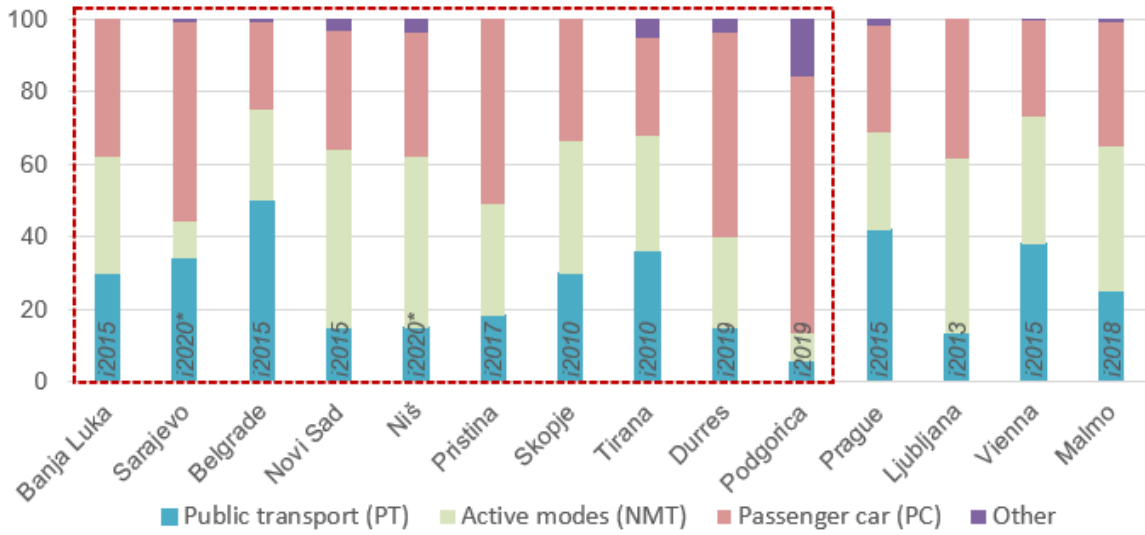
Other urban mobility areas

- Traffic is worsened by freight traffic on urban roads
- Insufficient demand management controls and a lack of parking capacity across the region
- Most cities in Western Balkans lack advanced ITS.
- Shared mobility services are in an early stages
- Road Safety: alarming pedestrian fatalities

Motorization Trend

- Private transport is becoming the predominant mode of transport in cities
- Most vehicles are imported, second-hand petrol and diesel vehicles
- High shares of polluting vehicles hinder efforts to improve air quality

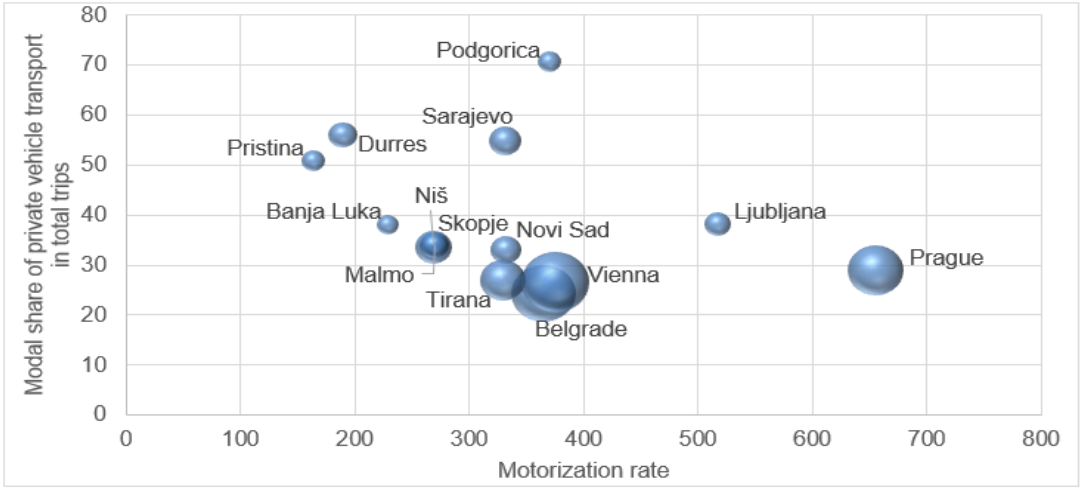
Modal share in total trips



Motorization trend (Vehicles per 1000 inhabitants)

*Kosovo motorization rate was used due to lack of available data for Pristina[21]
Vehicles per 1000 inhabitants

Motorization rate vs modal share of private cars



* Total city population is indicated with the size of bubbles in the graph
** The Kosovo motorization rate was used due to lack of available data for Pristina[5]

Public transport

- The level of public transport service are lower than other EU cities
- Lack of network planning and route optimization to meet the growing demand
- Most services are provided by a combination of both private and public transport operators
- A lack of public transport priority and dedicated infrastructure
  - BRT in Tirana and Skopje
  - Sarajevo: interested in bus priority, investing in tram rehabilitation (w/t EBRD)
- Old and polluting bus fleets
  - Cities want to go with low emission and zero emission buses, but don't know where and how to start
  - Lack technical know-hows, strategies for fleet renewal, cost efficient fleet acquisitions

Public transport modal share in total trips

Level of Public Transport Service Provision

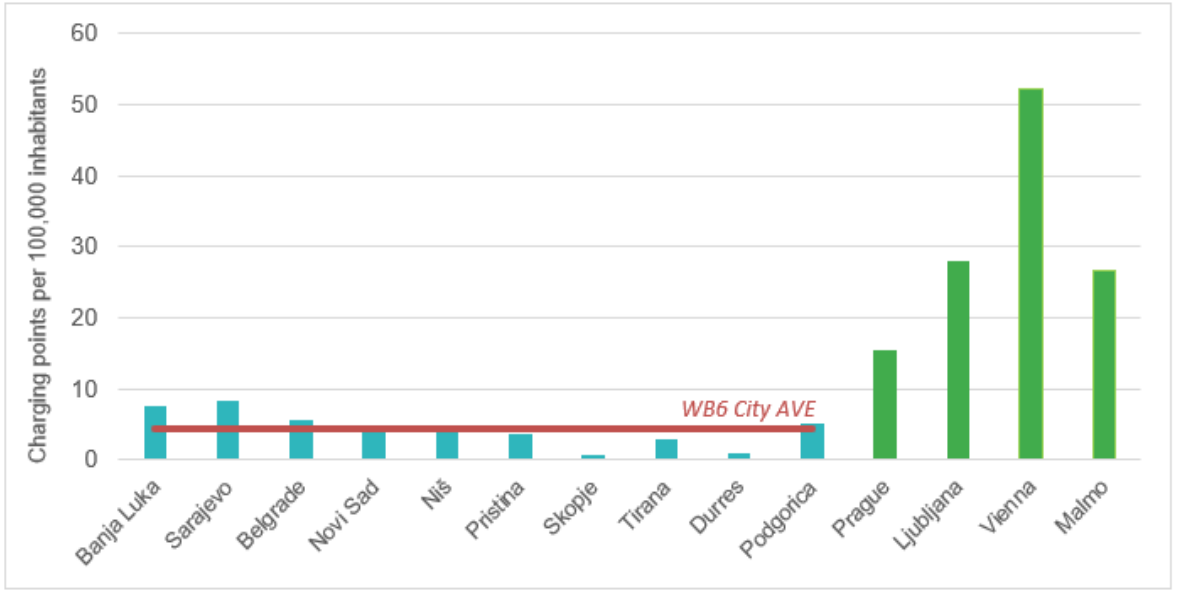
Annual PT vehicle kilometers per 100 thousand inhabitants

EV Transition

- Low level of uptake in the Western Balkans
  - Unaffordable electric vehicles and inadequate charging infrastructure: est. half are installed on the city territory
  - Lack of regulations and strategies:
    - Regulations the installation, use and pricing of charging stations (EVCSs) doesn't exist.
  - Lack of last mile connections
- Energy transition remains a parallel conundrum in a region dominated coal-based power generation
  - Albania: 95% clean energy generation vs. 90% of fossil-fuel based transport.

Old and inefficient power generation dominates the region, with a consistent 60% share of coal-based generation.

Number of EV charging points



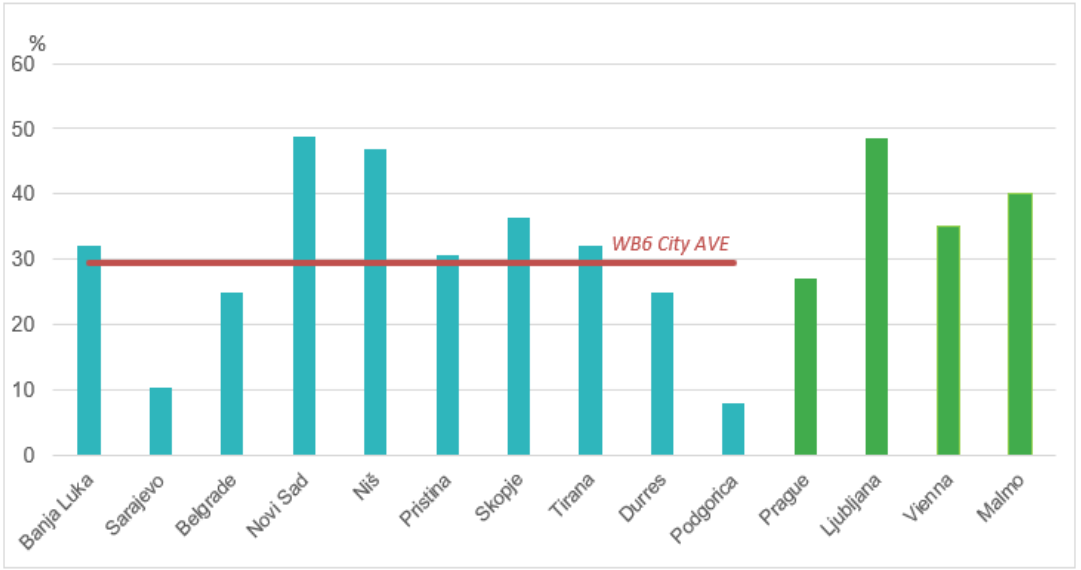
per 100 thousand inhabitants

Electric buses in Belgrade

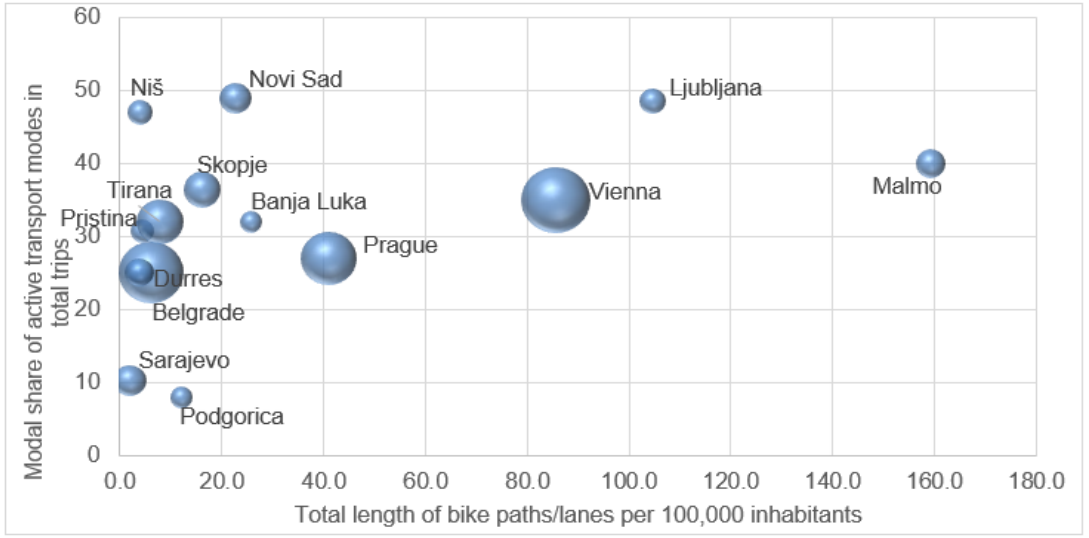
Active Mobility

- The level of bicycle infrastructure provided is still low compared to the benchmarking EU cities.
- Pedestrians and cyclists in these cities are at high risk of vehicle collisions and fatalities
- Gained momentum during Covid and needs to be scaled up to support the shift toward green mobility.
  - User perception: disconnected cycle lanes, low quality of sidewalks and cycling facilities.

Active transport modal share



Level of Existing Bicycle Lanes vs. Modal Share



Others

Parking management:

- Cities across the region suffer from insufficient demand management controls and a lack of parking capacity.
- The effect of existing parking controls is offset by low parking charges.
- Supply-side actions have started but demand-side measures lag behind.

Intelligent Transport System (ITS):

- Most cities in Western Balkans lack an operational traffic management center.
- ITS systems are predominantly used in larger capital cities
- Lack of real-time data collection from public transport vehicles in many cities.

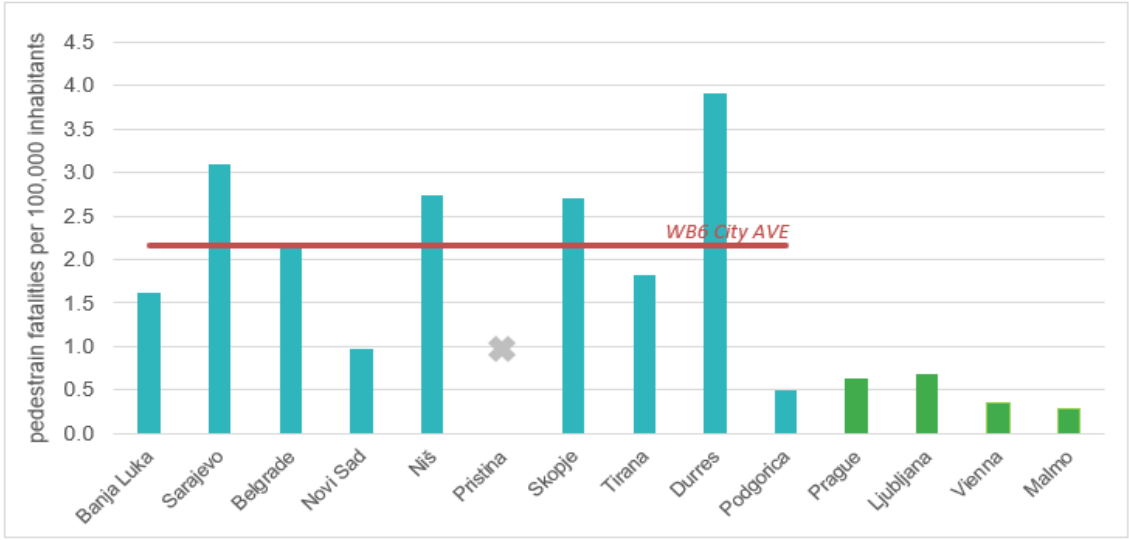
Freight & Logistics:

- Certain cities face heavy transit traffic, worsened by freight, which employs urban roads, causing adverse effects on both the environment and network efficiency.
- Some cities have introduced a special traffic regime in the city center regulating this type of traffic.

Shared Mobility:

- Bike-sharing is present in some Western Balkans cities, primarily in larger urban centers. Some cities plan to implement bike-sharing systems
- Car-sharing systems are not currently operational in WBUMI cities.
- E-scooters are not yet part of sharing schemes, but there's an interest in their inclusion. Legislative obstacles, such as insufficient definitions in national legislation, hinder e-scooter inclusion.

Road Safety: alarming pedestrian fatalities



(yearly, per 100 thousand inhabitants)

Urban Mobility: Skopje Highlights

Public Transport

- Bus network and service quality are yet to meet passenger demand in a growing city

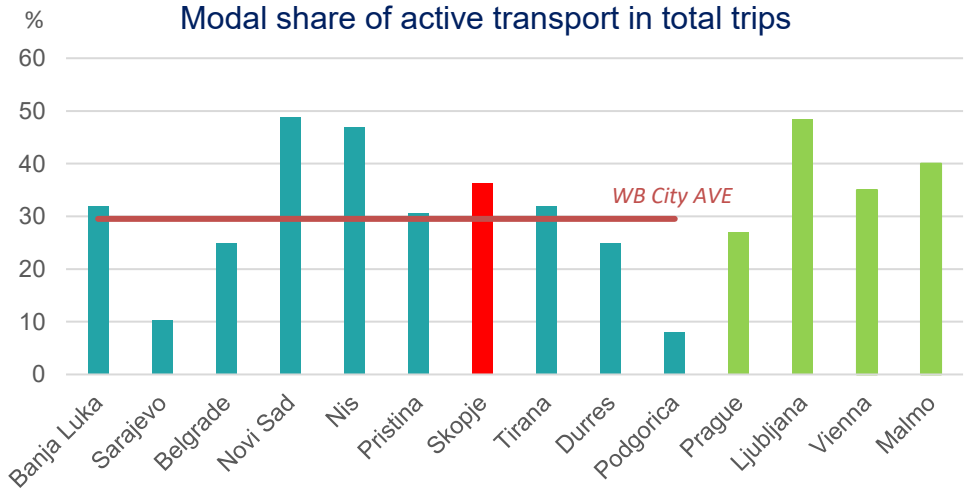
Non motorized transport

- Cycling mode share reached 5%.
- Insufficient provision of cycling infrastructure – local road project sets examples
- Risk of traffic fatalities is high compared to EU cities, high vulnerability of pedestrians

Traffic management

- Expansion of TMCC and improvement in signal control
- Road safety measures to reduce the number of road fatalities

Active mobility exceeding regional average



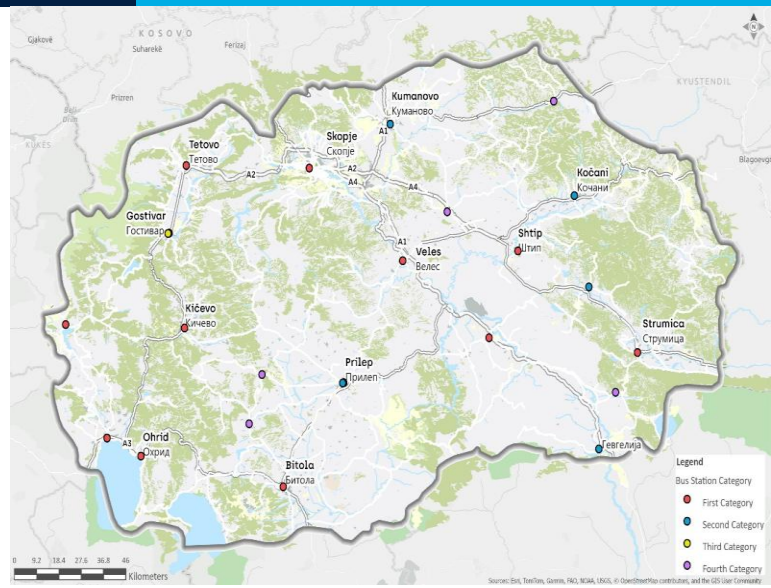
Priority areas to explore:

Improve city bus public transport (sector policy, concession, infra, fleet)

Improve municipal roads, road safety, NMT, traffic management

Interurban Mobility

Intermunicipal public transport plays a pivotal role in providing access to jobs and opportunities and connecting cities and regions.



Advantages:

1) Urbanization: a predominantly urbanized population (59%, 2022)) concentrated in its urban centers, with Skopje employing up to 4x more people than other regions (see Figure 1).
2) Social inclusion: A high share of young population (28%<25 yrs old) suggests future demand for affordable, flexible travel choices.
3) Air Pollutions: At a country level, road transports contribute 5%of PM, and 42% of Nox emissions, costing 16% of GDP.
4) Inter-modality: Bus services extend the reach of the rail network by acting as feeders from smaller towns to major rail hubs; provide coverage during off-peak hours or overnight when trains are not running or demand is low, offer flexible last-mile connections.

Priority areas:

1) Stabilize the intermunicipal public transport sector. Reversing the declining demand and improving service viability.
2) Review the regulatory framework and contractual models. Reallocating risks and enabling private investments.
3) Upgrade minimum emissions standards. Raising fleet quality standards and mitigating externalities.
4) Explore electric bus fleet electrification models with strategic adoption of clean bus technologies.

Policy recommendations to enable investment

Developing robust municipal financing

- ✓ Exploring land value capturing to augment financing:
- ✓ Central governments have roles in catalyzing local investments;
- ✓ Leveraging the efficiency of private sector through PPP

Leveraging the efficiency of private sector

- ✓ Implementing PPPs in various subsectors of transport: bus terminals; parking management, ticketing and ITS, etc.
- ✓ Creating conditions for efficient private participation

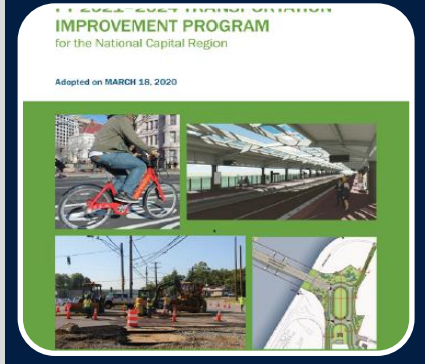
Creating public transport concessions

- ✓ Setting up the performance standards and sharing the risk of the service provision
- ✓ Standardized WeBa concessions for an added benefit of creating a regional market

Focusing on capacity building

- ✓ Improving institutional arrangements for integrated transport system
- ✓ Enhancing technical and management capacity
- ✓ Turning focus to implementation plans and project development

Implementation plans and project development



- ✓ Shift attention to operationalizing strategies and investment;
- ✓ Develop a short-term investment plan to tie the priority policy with financial resources;
- ✓ Practice full cycle of project development

Outcomes: City Specific Priorities

Banja Luka, Serbia

- City public transport investments including vehicle fleet renewal (low emission vehicles) and bus priority measures to improve reliability
- Public transport sector reform including institutional, operational, management and maintenance improvements to deliver a higher level of service
- Development of citywide NMT route networks including new infrastructure, supported by cycle parking and expanded Bike-Hire scheme
- Deployment and roll out of e-mobility measures including completion of infrastructure gaps and policies for e-mobility including micro-mobility
- City parking improvements including city center controlled parking zone (CPZ) and charges and development of off-street parking facilities on outskirts of central zone

Belgrade, Serbia

- Renewal of tram fleet
- Roll-out of a package of E-mobility measures to reduce GHG pollution and improve air quality in the city
- Extend tram infrastructure (Including implementation of new tram tracks and depots)
- Support development of cycling and micromobility
- Network investment for congestion relief and reduction of traffic related emissions

Durres, Albania

- Traffic and bus ITS, ticketing and passenger information, as well as infrastructure to improve bus service reliability, including Park & Ride
- Durres rail station upgrade as a following project to Tirana – Durres rail rehabilitation including new multi-modal interchange
- Improve the resilience of the city's road network to reduce the impact from potential flooding and improve reliability of transport infrastructure
- Greater uptake of EVs through charging infrastructure implementation
- Dedicated tourism transport infrastructure and services

Nis, Serbia

- Developing high quality public transport system that will deliver a 'step-change' in level & quality of service to attract new users
- Implementation and roll-out of E-mobility measures including new EV charging infrastructure to improve city air quality
- Potential for Park & Ride (to manage travel demand more effectively & increase public transport mode share)
- Offers potential to integrate public transport improvement with urban development to connect with growing communities
- Urban regeneration and alleviating the burden of inaccessibility and transit flows

Outcomes: City Specific Priorities

Podgorica, Montenegro

- City public transport improvements including institutional changes to improve bus service management and fleet renewal
- Improving public transport infrastructure to enhance bus reliability and regularity including stops and priority lanes
- City pedestrian infrastructure including route network enhancements, new bridge connections and pedestrian priority areas
- Development of city e-mobility including evaluation of e-buses and implementation of e-bus toolkit pilot scheme
- City parking improvements including expansion of city center controlled parking zone (CPZ), underground parking and potential Park & Ride

Sarajevo, Bosnia & Herzegovina

- Public transport sector reform and growth - including institutional and operational management
- Renewal of city bus fleet – including EV and other suitable technologies
- Public transport infrastructure improvements to improve bus service reliability and connectivity – bus priority and stop enhancements
- Managing demand for city center travel - congestion reduction with lower levels of private motorized vehicles
- Introduction of parking control to improve higher modal split for public transport including more city center enforcement

Skopje, North Macedonia

- Citywide bus fleet renewal and updated bus network plans – increased capacity and renewal of bus fleet to support new network
- Traffic ITS, bus ITS & access controls during peak period, additional junction signal control
- Bus infrastructure improvements to improve bus service reliability & connectivity – bus priority & bus stop enhancement
- Includes potential for improved bus interchanges/hubs including Park & Ride sites
- On-street parking modernization – technology to manage parking demand more effectively

Tirana, Albania

- Bus sector reform and improved business models of private bus operations
- Additional public transport capacity on key corridors into the city (Including BRT on main city corridors)
- Wider public transport infrastructure improvements to improve bus service reliability and connectivity – including bus priority measures
- Completion of infrastructure gaps and policies relating to E-mobility to expand volume & coverage of e-vehicles and infrastructure
- Potential to integrate public transport improvement with urban development to encourage modal shift to public transport