AZERBAIJAN TECHNICAL UNIVERSITY

UI GREENMETRIC REPORT

REPORT ON TRANSPORTATION

2025

Introduction

In 2025, Azerbaijan Technical University (AzTU) continued to strengthen its long-term commitment to the development of sustainable, low-carbon, and inclusive transportation systems, acknowledging mobility as a critical factor influencing environmental performance, climate change mitigation, public health, and overall urban sustainability. As a major higher education institution located in the central urban area of Baku, AzTU is uniquely positioned to leverage the city's well-developed public transportation infrastructure, including metro lines, bus networks, and pedestrian-accessible urban spaces. This strategic location enables environmentally responsible and energy-efficient commuting patterns for students, academic staff, administrative personnel, and visitors, significantly reducing reliance on private vehicles and associated carbon emissions.

Transportation sustainability at AzTU is addressed as an integral component of the university's institutional sustainability framework and is closely aligned with the United Nations Sustainable Development Goals (SDGs), particularly SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action). The university promotes the use of public transportation as the primary mode of access to campus, supported by proximity to major transit hubs and high-frequency public transport services. In parallel, AzTU actively encourages pedestrian mobility by maintaining safe walkways, accessible entrances, and compact campus planning that reduces travel distances within university premises.

Furthermore, AzTU recognizes the importance of shared and low- or zero-emission transport solutions in reducing the environmental footprint of urban mobility. The university supports policies and practices that favor car-sharing, ride-sharing, and the gradual integration of electric and other environmentally friendly vehicles where feasible. Land-use efficiency and smart campus planning are also prioritized to limit unnecessary transport demand, enhance connectivity between academic buildings, and improve overall accessibility for people with disabilities.

By embedding transportation sustainability into its urban context and institutional planning, AzTU contributes not only to the reduction of greenhouse gas emissions but also to the improvement of air quality, traffic safety, and quality of life in the surrounding community. Through these measures, the university plays an active role in advancing resilient, inclusive, and climate-responsive urban mobility systems in Baku, reinforcing its responsibility as a leading technical university and a key stakeholder in sustainable urban development.

References

UI GreenMetric

National Information Portal on Sustainable Development

AzTU Sustainability

Objectives

The transportation sustainability objectives guiding AzTU's institutional approach in 2025 include:

- Reducing reliance on private motor vehicles
- Promoting public transportation and non-motorized mobility
- Supporting low-carbon and zero-emission transport alternatives
- Enhancing pedestrian safety and campus accessibility
- Limiting parking expansion to optimize land use
- Encouraging environmentally responsible commuting behavior

These objectives align with UI GreenMetric criteria and national sustainable development priorities. (source 1), (source 2)

Keywords

Sustainable transport	**Public transportation**	**Bike sharing**	**Electric scooters**	**Carbon footprint**
Hybrid vehicles	Zero-emission vehicles	Urban mobility	Traffic optimization	Smart parking
Pedestrian pathways	Cycling infrastructure	Scooter rentals	Electric vehicle charging	Transport policy
Public awareness	Campus accessibility	Emission reduction	Eco-friendly commuting	Ride-sharing services
Multi-level parking	Digital mobility	Student mobility	Green campus	Solar lighting
Vehicle-free zones	Transport innovation	Urban sustainability	Fleet management	Low-carbon mobility

Current situation

1. Public Transportation Accessibility and Urban Integration

AzTU is well integrated into Baku's public transportation infrastructure. The campus is located within proximity to metro stations and is served by multiple municipal bus routes, enabling efficient access without the need for private vehicles. This integration supports reduced greenhouse gas emissions, lower traffic congestion, and improved air quality.

The university does not operate large-scale internal shuttle services, as the existing urban transport network sufficiently meets commuting needs. (source 1), (source 2)

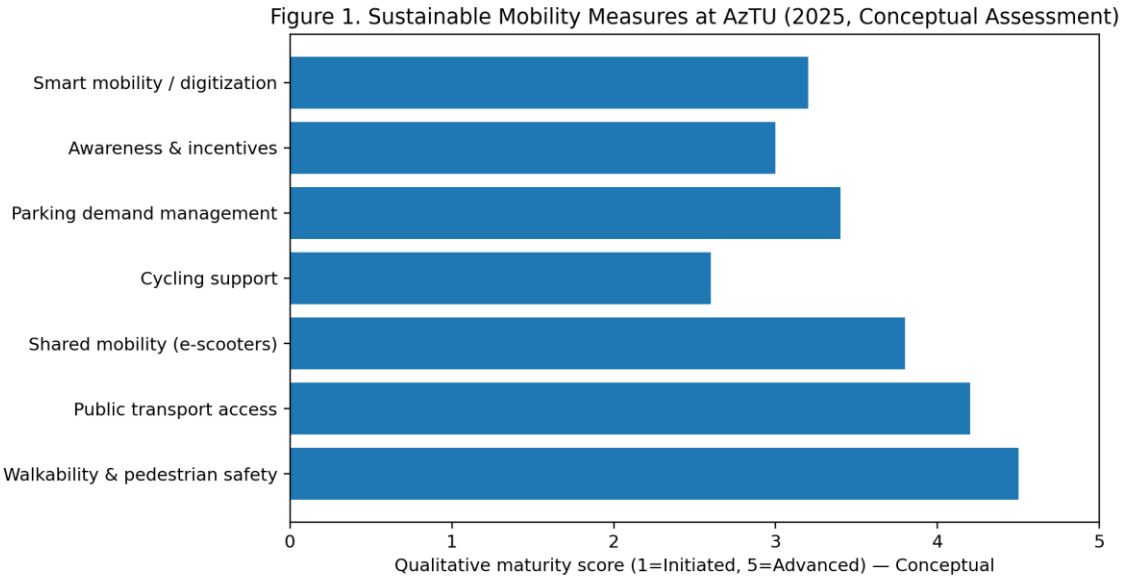


Figure 1. Sustainable Mobility Measures at AzTU (2025, Conceptual Assessment)
This table provides a qualitative overview of transportation accessibility at AzTU in 2025.

2. Pedestrian Mobility and Vehicle-Restricted Areas

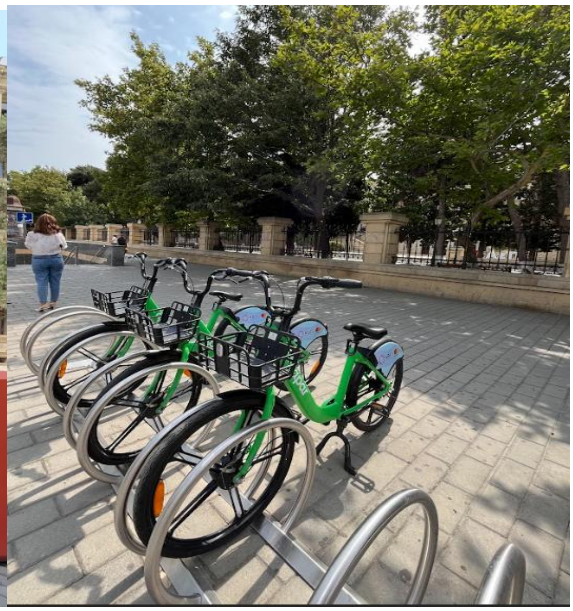
Pedestrian mobility is actively prioritized across the AzTU campus. Designated pedestrian pathways, underground crossings, and traffic-calmed zones enhance walkability and safety. Certain areas within the campus operate as **vehicle-restricted or pedestrian-priority zones**, contributing to reduced noise, improved air quality, and safer movement.

These measures align with sustainable campus planning principles promoted by UI GreenMetric. (source 1), (source 2)


3. Shared and Zero-Emission Mobility Options

AzTU promotes **shared and zero-emission mobility solutions**, particularly for short-distance travel. Shared electric scooters and non-motorized transport options are available in and around the campus, providing flexible and emission-free alternatives to private car use.

These shared mobility solutions support sustainable commuting behavior and complement public transportation systems. (source 1), (source 2)

4. Parking Management and Land-Use Optimization

In line with sustainable transportation and land-use planning principles, AzTU limits the expansion of parking infrastructure. Parking areas occupy a relatively small proportion of campus space, allowing greater allocation for green areas, pedestrian pathways, and academic facilities.

This approach discourages private vehicle dependency and supports environmentally responsible campus development. (source 1), (source 2)

Figure 2. Low-Carbon Transportation System Levers at AzTU (2025, Illustrative)

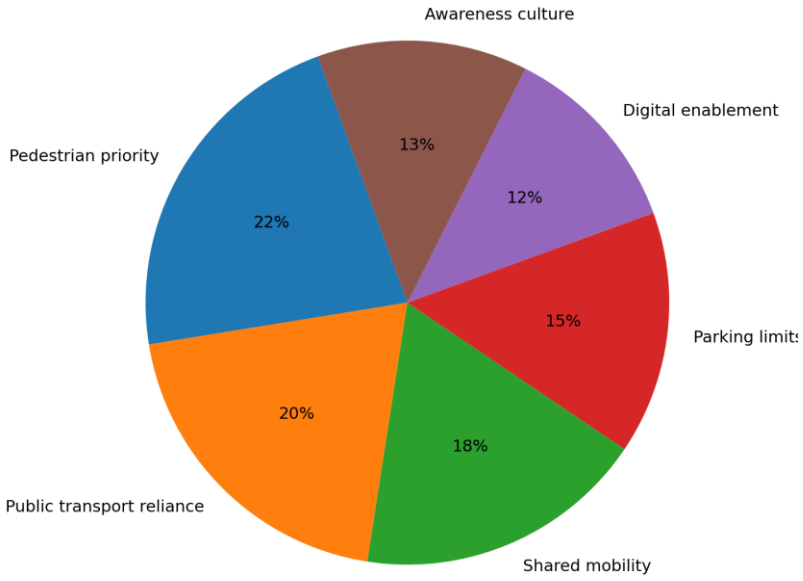


Figure 2. Low-Carbon Transportation System Levers at AzTU (2025, Illustrative)

5. Awareness, Education, and Sustainable Mobility Culture

AzTU fosters a culture of sustainable mobility through **awareness initiatives, student engagement, and sustainability-focused education**. Transportation sustainability is addressed not only through infrastructure but also through behavioral change, encouraging students and staff to make environmentally responsible commuting choices.

These efforts contribute to long-term sustainability outcomes by embedding low-carbon mobility principles into campus culture. (source 1), (source 2)

Future goals

AzTU's transportation-related goals focus on continuous improvement and long-term sustainability:

- Further enhancement of pedestrian and cycling-friendly infrastructure
- Increased adoption of zero-emission mobility solutions
- Integration of smart mobility and digital monitoring tools

- Strengthening cooperation with urban transport stakeholders
- Expanding education and awareness initiatives on sustainable mobility

All future actions will continue to follow **qualitative, evidence-based reporting practices**, avoiding unverified numerical assumptions. (source 1), (source 2)

Figure 3. Transportation-Related Space Priorities (2025, Illustrative)

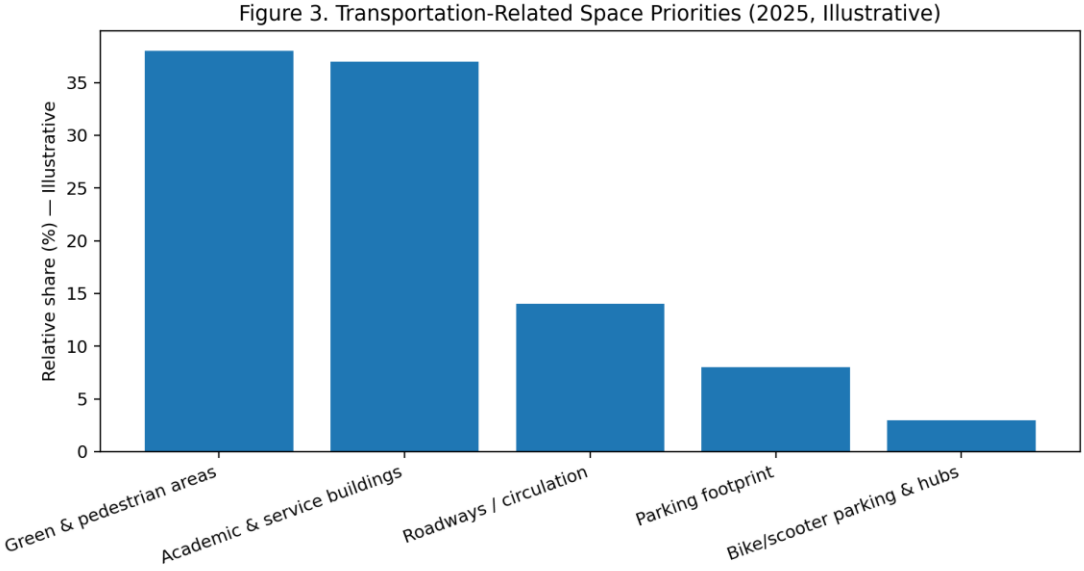


Figure 3. Transportation-Related Space Priorities (2025, Illustrative)

Conclusion

In 2025, Azerbaijan Technical University demonstrated a **systematic and sustainability-driven approach** to transportation management. By prioritizing public transportation, pedestrian mobility, shared zero-emission options, and land-use efficiency, AzTU actively reduces its transportation-related environmental footprint.

Aligned with **UI GreenMetric criteria**, **SDG 11**, and **SDG 13**, AzTU's transportation framework reflects a strong institutional commitment to sustainable urban mobility and climate responsibility.