



University: UzSWLU
Country: Uzsbekistan

Web Address: https://www.uzswlu.uz/en

5. Transportation

[5.19] Impact of Transportation programs in supporting the Sustainable Development Goals (SDGs)

Overview

At the Uzbekistan State University of World Languages (UzSWLU), transportation is an essential part of the university's sustainability ecosystem. By integrating digital mobility systems, expanding the use of zero-emission vehicles, and encouraging walking and cycling, UzSWLU ensures that all transportation activities contribute to the achievement of the United Nations Sustainable Development Goals (SDGs).

Between 2023 and 2025, the university implemented a series of ICT-driven, low-carbon, and socially inclusive programs that generated measurable progress toward SDG 3, 7, 9, 11, 13, and 16.

1. SDG 3 — Good Health and Well-being

Objective: Promote healthy lifestyles, reduce pollution, and enhance traffic safety on campus.

Programs Implemented:

- Expansion of **pedestrian and cycling routes** to a total of **7.2 km**, connecting all four campuses and student dormitories.
- Establishment of **car-free zones (82%)** and "Walk & Learn" corridors in Langua Park and Park of Friendship.
- Awareness campaign "Move Green, Feel Better" with over 1,500 student participants.

Impact:

- Air quality improved by 15% (measured near campus gates, 2024–2025).
- Noise levels reduced by 12%, enhancing classroom concentration and student comfort.
- 45% decrease in traffic incidents thanks to LED-lit walkways and cycling paths.
- 21% rise in active commuters (walkers and cyclists).

Supports SDG Targets 3.6 (reduce traffic injuries) and 3.9 (reduce illnesses from pollution).

2. SDG 7 — Affordable and Clean Energy

Objective: Promote renewable energy use and energy efficiency in transport.

Programs Implemented:

- Installation of solar-powered EV charging stations on three campuses.
- Expansion of Zero-Emission Vehicle (ZEV) fleet to cover 35% of all campus vehicles.
- Integration of charging data with the Smart Mobility Dashboard for digital energy tracking.





Impact:

- 36% increase in renewable energy use for campus transport.
- Annual savings of **3.5 MWh**, equivalent to 30 classrooms' energy use.
- 2.7 tons of CO₂ avoided per year through solar charging and optimized shuttle routes.
- All intra-campus shuttles operate exclusively on solar power since 2024.
- Supports SDG Targets 7.2 (renewable energy share) and 7.3 (energy efficiency improvement).

3. SDG 9 — Industry, Innovation, and Infrastructure

Objective: Foster innovation and digital transformation in transport management.

Programs Implemented:

- Launch of the **Smart Mobility Dashboard (2024)** integrating IoT sensors, GPS, QR vehicle access, and AI analytics.
- Implementation of the Smart Parking Module and AI traffic optimization system.
- Transition to paperless, cloud-based mobility documentation and maintenance reports.

Impact:

- 30% administrative workload reduction via automation and real-time monitoring.
- 40% improvement in shuttle scheduling efficiency.
- Paper use reduced by 1,200 sheets per year, cutting carbon footprint.
- ICT integration recognized as a national innovation model by the Ministry of Higher Education (2025).
- Supports SDG Targets 9.1 (resilient infrastructure) and 9.4 (innovation through ICT).

4. SDG 11 — Sustainable Cities and Communities

Objective: Enhance urban accessibility and sustainable mobility integration.

Programs Implemented:

- Operation of **electric shuttles** connecting academic buildings, dormitories, and city metro stations.
- Implementation of the **Parking Reduction Program (2024–2025)** decreasing parking space by 20%.
- Partnership with **Tashkent City Transport Authority** for unified digital travel cards.
- Development of **three thematic green parks** (Langua, Jadids, Friendship) with walkways and study benches.

Impact:

- Private car use decreased by 12%, while public and shared transport use increased to 52%.
- Shuttle usage up by 18% $(1,200 \rightarrow 1,420 \text{ daily riders})$.
- Parking occupancy during peak hours dropped from 95% to 80%, improving circulation.
- Barrier-free pedestrian network (100%) provides equal access for all users.





Supports SDG Target 11.2 – inclusive, accessible, and sustainable transport.

5. SDG 13 — Climate Action

Objective: Reduce greenhouse gas emissions and strengthen climate-resilient operations.

Programs Implemented:

- Integration of CO₂ emission monitoring into the Smart Mobility Dashboard.
- AI-based emission forecasting module linked with shuttle GPS data.
- Annual "Drive Less, Move Green" campaign promoting behavioral change.
- Regular reporting of carbon data to the National Green University Initiative.

Impact:

- CO₂ emissions reduced by 13.6% (19.8 t \rightarrow 17.1 t between 2023–2025).
- **Fuel consumption** cut by 15% through smart route optimization.
- 82% of campus zones now fossil-free, replacing combustion vehicles with electric ones.
- UzSWLU recognized as Uzbekistan's #1 university for Water & Climate indicators in 2024 UI GreenMetric.
- Supports SDG Targets 13.2 (policy integration) and 13.3 (climate education and awareness).

6. SDG 16 — Peace, Justice, and Strong Institutions

Objective: Strengthen transparency, accountability, and governance through digital transformation.

Programs Implemented:

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- [1] Transport Department operational data input;
- 2 Green Office analytical monitoring;
- 3 Rector's Council strategic evaluation.
- Publication of quarterly digital reports on sustainability performance.
- Implementation of ICT Data Protection Policy (2024) ensuring secure data handling.
- Integration of student feedback through online surveys and mobile reporting tools.

Impact:

- 91% user satisfaction with ICT-based management.
- Full transparency in mobility data and decision-making processes.
- Recognized in the **Ministry's 2025 Green Campus Best Practice Report** for institutional integrity.
- Improved interdepartmental coordination and participatory governance.
- Supports SDG Target 16.6 effective, accountable, and transparent institutions.

Quantitative Summary (2023–2025)





SDG	Key Action	Quantitative Impact	
SDG 3 – Health & Wellbeing	ı	+21% walking/cycling users, –45% accidents	
SDG 7 – Clean Energy	Solar EV chargers, 35% ZEV fleet	–2.7 tons CO ₂ /year, +3.5 MWh energy saved	
SDG 9 – Innovation	Smart Mobility Dashboard, AI analytics	-30% admin workload, +40% efficiency	
SDG 11 – Sustainable Communities	Number of the strain of the st	Shuttle +18%, car use -12%, parking -15%	
SDG 13 – Climate Action	Low-emission mobility	Total CO ₂ –13.6%, fuel –15%	
SDG 16 – Strong Institutions	III. I governance fransparency	+91% satisfaction, public data reports	



Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):