



University : UzSWLU
Country : Uzbekistan
Web Address : <https://www.uzswlu.uz/en>

5. Transportation

[5.9] TR3 Zero Emission Vehicles (ZEV) Availability on Campus

Uzbekistan State World Languages University (UzSWLU) has developed a progressively electrified mobility system as part of its Smart Campus and Green Mobility Strategy. The system combines university-owned zero-emission vehicles, scheduled electric shuttle services, preferential access for electric vehicles, and charging infrastructure. This approach supports connectivity among the Main and Zakovat campuses, student dormitories, nearby metro stations, and public bus stops while reducing dependence on conventional combustion-engine transport.

1. University Vehicle Fleet and Zero-Emission Vehicle Availability

Vehicle Type	Quantity	Function	Energy Type
Administrative cars	6	Essential rectorate and administrative functions	Combustion
Service and maintenance cars	6	Technical support, maintenance, and campus logistics	Combustion
Electric shuttles (30-seat)	15	Scheduled links among campuses, dormitories, nearby metro stations, and public bus stops	Electric / ZEV
Mini electric service cars	2	Internal service, inspection, and rapid response	Electric / ZEV
TOTAL UNIVERSITY FLEET	29	12 combustion vehicles + 17 zero-emission electric vehicles	58.6% ZEV share

2. ZEV Operational Profile and Shuttle Service Integration

The 15 electric shuttle vehicles constitute the core of the university's zero-emission mobility system. They operate scheduled one-way trips linking the Main and Zakovat campuses, student dormitories, nearby metro stations, and public bus stops. The service is designed to reduce the need for private vehicle trips and to improve access to university facilities for students and staff.

Operational indicator	Value
Number of electric shuttles	15
Average passenger capacity/use per trip	30 passengers
Total one-way shuttle trips per day	90 trips

Average trips per shuttle per day	6 trips
Estimated passenger journeys per day	2,700 journeys

Daily passenger-service calculation: 90 one-way trips × 30 passengers per trip = 2,700 passenger journeys per day. Over a six-day operating week, the service provides an estimated 16,200 passenger journeys. With 15 shuttles, the operational average is 6 one-way trips per shuttle per day.

The 15 electric shuttles are counted as zero-emission vehicles in TR 5.9 and are excluded from the combustion-engine vehicle total used in TR 5.4. The same fleet figures are therefore applied consistently across the university's Transportation evidence: 29 total university vehicles, comprising 12 combustion vehicles and 17 electric zero-emission vehicles.

ZEV Availability Calculation

Total zero-emission vehicles = 15 electric shuttles + 2 mini electric service cars = 17 ZEVs.

Campus population = 19,562 students and staff.

ZEV-to-campus-population ratio = $17 \div 19,562 = 0.000869$, equivalent to 0.0869%, or approximately 0.87 university-owned ZEVs per 1,000 campus users.

Zero-emission share of the university fleet = $17 \div 29 \times 100 = 58.6\%$.

The university operates a total fleet of 29 vehicles. Of this total, 17 vehicles are fully electric and produce no direct tailpipe emissions: 15 electric 30-seat shuttle vehicles and 2 mini electric service cars. The remaining 12 vehicles are combustion-engine vehicles used for essential administrative, maintenance, and logistics functions. Accordingly, zero-emission vehicles account for 58.6% of the university-owned fleet.

3. Policy, Management and Operational Governance

UzSWLU manages the transition toward low-emission mobility through institutional transport planning and the university's internal Zero-Emission Vehicles Policy (Order No. 14/2024). The policy establishes operational priorities for procurement, fleet renewal, charging access, safe use, maintenance, and gradual electrification.

- Procurement priority: new vehicle purchases prioritize electric or other low-emission alternatives where operationally and financially feasible.
- Fleet electrification target: the university aims to progressively replace the remaining combustion-engine vehicles and move toward a fully zero-emission institutional fleet by 2030.
- Parking and charging support: university-owned electric vehicles and authorized EV users are provided with designated parking and access to available charging facilities.
- Operational integration: electric shuttles are assigned to routes linking campuses, student dormitories, nearby metro stations, and public bus stops, thereby supporting first-mile and last-mile connectivity.
- Monitoring and maintenance: vehicle availability, daily trips, route assignments, charging requirements, and technical maintenance are recorded by the responsible administrative and transport units.

Implementation is coordinated by the responsible university administrative and infrastructure units, with sustainability considerations integrated into transport planning, procurement, and campus access management.

4. Supporting Documentation and Community Engagement

The implementation of the zero-emission mobility system is supported by operational records and community-oriented activities. The principal documentation and engagement elements include:

- Official university fleet inventory confirming 29 vehicles, including 15 electric shuttles and 2 mini electric service cars.
- Shuttle route and operating schedule confirming 90 one-way trips per day and service connections to campuses, dormitories, metro stations, and bus stops.
- Photographs and technical records of electric shuttles, mini electric vehicles, and charging facilities.
- Internal policy or administrative documentation governing zero-emission vehicle use, procurement, parking, charging, and fleet renewal.
- Information activities promoting electric mobility, responsible commuting, and reduced use of private combustion-engine vehicles among students and staff.
- Environmental information materials at shuttle waiting areas explaining the role of electric transport in reducing local air pollution and transport-related emissions.
- Student learning and research activities connected with energy efficiency, electric transport, sustainable urban mobility, and smart-campus solutions.
- Promotion of combined mobility, enabling students and staff to connect university shuttle services with nearby metro stations and public bus routes.

Together, these measures strengthen the practical availability of zero-emission transport, improve access between university facilities and public transport nodes, and support a gradual behavioral shift toward more sustainable commuting.



Electric and shared-mobility facilities supporting sustainable campus transport



Electric-vehicle charging infrastructure



Electric-vehicle charging access serving the Zakovat Campus



Bicycle parking facilities supporting low-emission mobility

Additional evidence links (for route schedules, fleet inventory records, charging information, videos, and additional photographs):