More buses, but is the system better?

Analysis of the public transport network in Bishkek. April 2026

June 2021. Overcrowded bus stops, surging taxi prices, and growing frustration across social media. Bishkek faced a full-blown transport collapse: marshrutka (minibus) drivers went on a five-day strike, refusing to operate unless fares were increased.

For decades, thousands of privately operated marshrutkas played a central role in the city's public transport system. They were neither inclusive, nor particularly safe or environmentally friendly — but they compensated with sheer numbers, short headways, and the ability to reach even the most remote residential areas of Bishkek. Municipal transport, by contrast, was insufficient. Only a few hundred buses and trolleybuses served the city, falling well short of meeting residents' needs.

In 2023, the city authorities launched a reform aimed at making public transport more efficient and popular, reducing congestion, and improving environmental conditions. Bishkek introduced modern buses, opened new routes, and pushed marshrutkas towards the city's periphery.

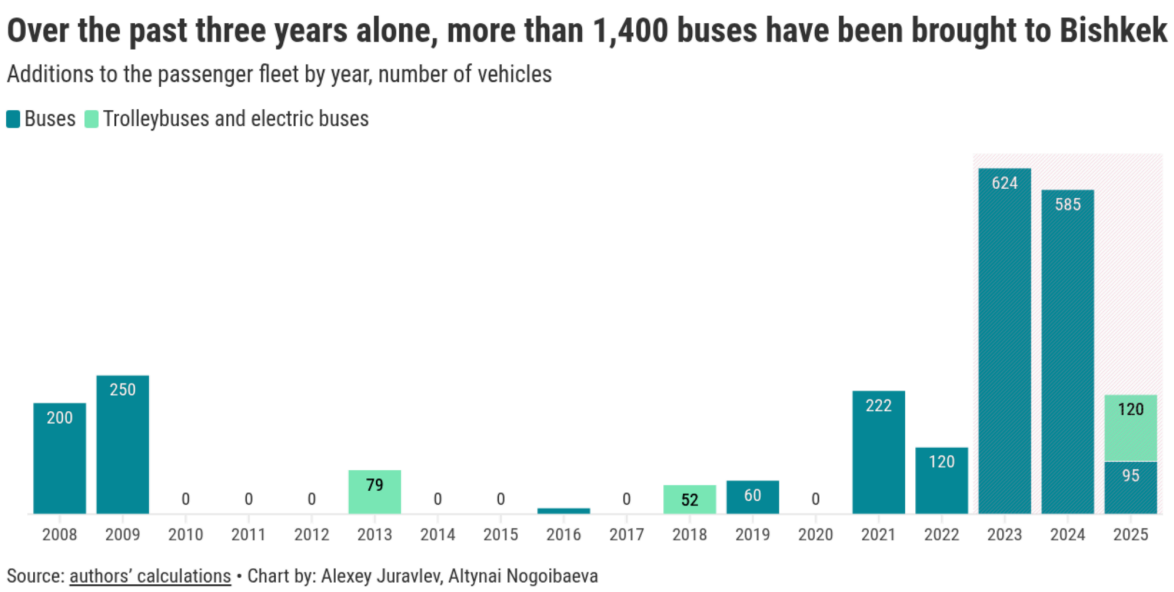
But how effective have these changes been? And what systemic challenges does the city's public transport still face? Urban researchers, with support from Bankwatch Network, examined these developments and analysed the current bus system.

New Fleet of Bishkek

"*There should not be a single marshrutka left in Bishkek. All public transport will be clean. Only natural gas buses and electric buses*," the city administration declared at the start of 2023.

By that point, as the authors of the Public Transport Development Concept noted, the city was facing a critical situation, vehicle numbers were insufficient, and demand kept growing. The roots of this decline lay in chronic underfunding and fares too low to cover operating costs – buses broke down and were stripped for parts, their numbers steadily fell, and the gap was increasingly filled by private marshrutkas. All of this took a mounting toll on residents' quality of life and the city's economy.

Unlike previous pledges, the city administration in 2023 made a firm commitment to tackling the problems of public transport. A record total of **over 1400 buses** were procured for Bishkek — some through public funds (municipal and state budget), others through financing from the European Bank for Reconstruction and Development (EBRD) and the German development bank (KfW).



In 2025, Bishkek received its first fleet of **120 electric buses**, procured with grant and loan financing from the Asian Development Bank (ADB). The electric buses were intended to strengthen the city's electric transport fleet and help address air quality concerns. However, a year earlier, Bishkek had closed all its trolleybus routes. Despite public opposition and expert recommendations, the city administration decided to transfer the trolleybuses to other cities, replacing them with electric buses and gas-powered vehicles.

"*Replacing zero-emission public transport [trolleybuses] with gas undermines national efforts to fulfil the Paris Agreement on climate change mitigation and the obligations of public authorities to protect human rights*," UN Special Rapporteurs stated at the time. The decision to dismantle the trolleybus network was challenged in the courts, but the claim was dismissed.

As of early 2026, the municipal fleet comprised around **1,560*** buses and electric buses. According to Transport Department data from December 2025, an average of **1,100** vehicles were in service each day, and by March 2026 this figure had risen to **1,300**. Some buses were undergoing customs clearance, maintenance, or operating on alternating shifts.

** Official data on the total number of buses varies, ranging from 1,436 to 1,567. Our calculations were based on publicly available bus purchasing reports. Check the table for more details.*

At the beginning of 2026, residents were also served by **130** privately operated buses run by "Eco Passenger Transport" LLC and around **320** marshrutkas, which continue to operate in the city's peripheral areas.

An electric bus on charge. Photo: Alexey Juravlev

Which Buses Are Best?

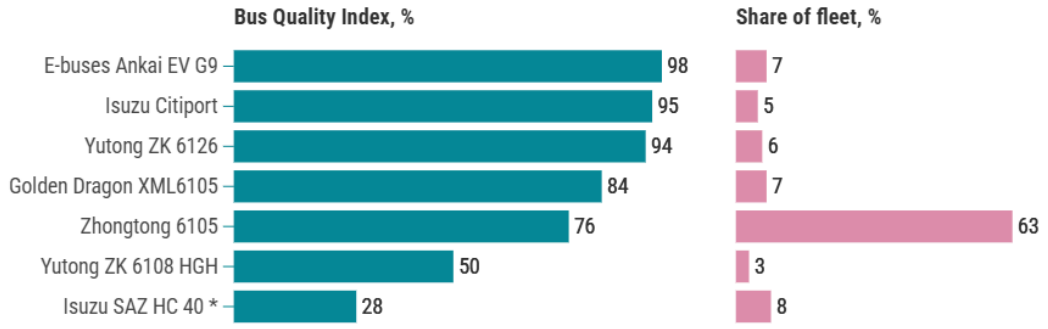
Bishkek's new buses differ from one another in model and size. To compare them, we travelled the public transport routes and inspected buses at terminus stops and in depots.

From this, we developed our own ***Bus Quality Index***, enabling us to compare different models against a common set of criteria and identify those most appealing to passengers. The Index comprises four categories: inclusivity, safety, comfort, and environmental performance. The assessment criteria drew on both local and international standards and recommendations.

*A bus is considered **inclusive** if it is low-floor, equipped with a folding ramp, priority seating for passengers with reduced mobility, appropriate handrails and seatbelts, and a driver-call button. **Safety** is determined by non-slip flooring, the presence of emergency hatches and window-breaking hammers for emergency evacuation, CCTV cameras, and door-opening announcements. **Comfortable** transport should be fitted with air conditioning, stop-request buttons to signal the driver, passenger information displays, and smartphone charging points. **Environmental performance** takes into account the type of fuel or energy used and the engine emissions standard.*

Electric buses and buses with higher Index scores make up a smaller share of Bishkek fleet

The higher the Index value (maximum 100%), the more inclusive, safe, and comfortable the bus



Source: authors' calculations, February 2026 • Chart by: Alexey Juravlev, Altynai Nogoibaeva ** Including privately operated buses. KingLong buses were excluded from the Index as they account for less than 1% of the fleet.*

According to our assessment, the best-performing models are the *Ankai EV G9* electric buses, the *Isuzu Citiport 12* buses, and the *Yutong ZK 6126* buses. All three are low-floor, fitted with air conditioning, and equipped with priority seating for passengers with reduced mobility. At 12 metres in length, they can carry up to 90 passengers. Notably, the procurement of these models was carried out with the involvement of international financial institutions — the ADB, the EBRD, and KfW. Together, they account for 18% of the total fleet.

New Yutong buses going through customs clearance — according to the city administration, they will enter service in spring. Photo: Alexey Juravlev

The most common bus in the city is the 10.5-metre Zhongtong, purchased by the city administration using national budget funds. These are less inclusive — partially low-floor, without a driver-call button to assist passengers with reduced mobility, and with fewer priority seats.

"*Public transport is a basic service that must be accessible to everyone. If it fails to account for the needs of [people with reduced mobility], it immediately excludes a large portion of residents from full participation in city life. Inclusivity is not about some additional feature — it is about equal access to all opportunities: work, education, a walk in the park*," explains Yerkanat Zaitov, urban planner at the public foundation Vision Zero Community (Kazakhstan).

The lowest scores in the Index belong to the 7-metre *Isuzu SAZ* buses, most of which were brought in by the "Eco Passenger Transport" LLC in 2021. These models are entirely non-inclusive, uncomfortable, and have problems with their own environmental friendliness. However, unlike larger buses, they are able to serve hard-to-reach areas.

Isuzu SAZ bus with a Quality Index of 28%. Photo: Altynai Nogoibaeva

It is worth noting that the *Zhongtong*, *Golden Dragon*, *Isuzu SAZ*, and *Yutong 6108* buses **have no air conditioning** — despite its importance for passengers' health and comfort. Climate change has increased the number of hot days in Bishkek. During summer heatwaves, high temperatures inside bus cabins cause heat stress and leave passengers feeling unwell, while also reducing the appeal of public transport.

Thermometers inside buses showing high cabin temperatures. Photo: open sources

"*Towards the end of last year, we visited a factory in China that manufactures air conditioning units. Their representatives will be coming to Bishkek. They want to retrofit one bus on a trial basis and install the air conditioning*," comments Ulanbek Beishenbaev, Director of the Transport Department. According to him, the cost of retrofitting the remaining buses will become clearer thereafter.

In 2024, the city administration noted that the technical specification for the bus procurement (*Zhongtong buses procurement)* had not included a requirement for air conditioning, and that fitting each bus with one would have added $10,000 to its cost.

Route Optimization

The expansion of the bus fleet led to the restructuring of existing routes and the launch of new ones. The process was also shaped by an administrative-territorial reform: in 2024, a number of settlements were incorporated into the capital, expanding the city's area considerably.

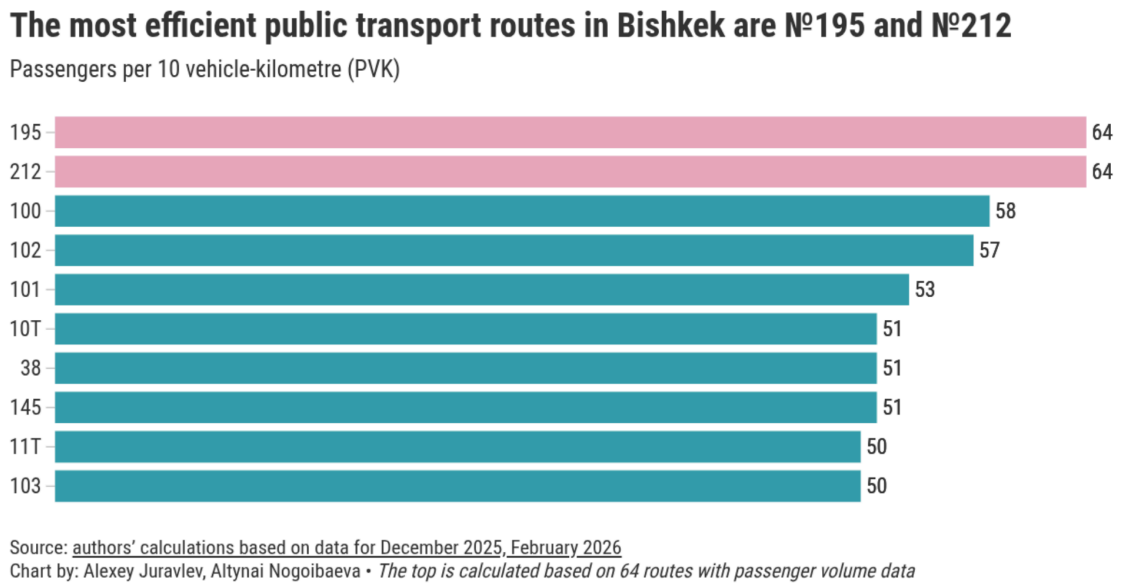
According to the e-municipality portal as of February-March, Bishkek's passenger transport network comprised **107 routes**, the majority of which are bus routes.

In 2025, electric buses and buses — including privately operated ones — carried **over 226 million passengers across their routes, approximately 619,000 per day***. Ridership naturally varies by season: in summer, for instance, numbers fall as schoolchildren and students are on school holidays, and residents leave for seasonal work or travel.

** The number of marshrutka passengers is unknown: the city administration stated that no passenger count is kept for marshrutkas.*

In December 2025, the highest number of passengers was carried by Route №9. In terms of cashless journeys — paid by bank card, Tulpar card, or QR code — Route №7 led the way in December. It is important to note, however, that passenger numbers depend on a range of factors: route length, the number of buses assigned to it, the number of trips operated, and vehicle capacity.

We calculated the **PVK indicator** (passengers per vehicle-kilometre), which measures the number of passengers carried for every 10 kilometres of service. It is used to assess service efficiency by showing how many passengers each kilometre of operation attracts. In the case of PVK, the distance traveled represents operating costs, including fuel, staff salaries, and maintenance. When ridership is low, these costs are not recovered, reducing the overall efficiency of the service.



The routes that ranked in the top ten are likely those with the highest demand and occupancy levels. At the same time, they may require **shorter headways** and a **larger number of buses** in operation.

On average, these routes also tend to be shorter in length. The electric bus routes №10T and №11T are, in fact, among the shortest in the city. The data analysis suggests that longer routes are often characterized by **"empty" kilometres** — sections where buses operate with very few passengers. In other words, demand becomes diluted: buses may be overcrowded on one segment of the route and nearly empty on another. Of course, such routes may still play an important role in serving neighborhoods located far from the city's main corridors.

Among the routes with the lowest PVK scores were electric bus routes №66 and №2, as well as the express routes №1 (Bishkek–Ala-Archa Nature Park) and №153 (Bishkek–Manas Airport). These routes are currently operated with high-capacity 12-metre buses, which could potentially be reassigned to corridors with stronger demand.

In 2026, the city administration plans once again to "optimize" routes — moving away from long routes in favour of trunk, short, and circular ones. *"For example, bus №9 currently runs from the 12th microdistrict, crosses the entire city, and goes out into Sokuluk district. That cannot continue. Optimisation will allow us to reduce headways and improve the system,"* says Ulanbek Beishenbaev, Director of the Transport Department.

According to him, passengers will likely need to make more transfers, but journey times will shorten. To make this convenient for city residents, a free transfer within a one-hour window is planned.

Back in 2013, the Japanese research group JICA recommended introducing a similar trunk-and-feeder system in Bishkek. Under such an arrangement, high-capacity buses or trolleybuses would run along the main arterial streets every few minutes, while feeder services on secondary streets and in residential areas would connect passengers to interchange hubs.

"Shifting from long routes to shorter ones can improve the efficiency of the system. But for that to work, services on trunk routes must be frequent, predictable, and fast. And feeder routes must be adapted to the neighbourhoods they serve. [...] A critically important condition is convenient interchange for passengers. You need to be able to step off a bus and immediately board another — no crossing roads, no bridges, underpasses, or overpasses. Otherwise, it is not about efficiency; it is about creating even greater problems. If such routes are poorly organised, the system will actually perform worse," explains urban planner Yerkanat Zaitov.

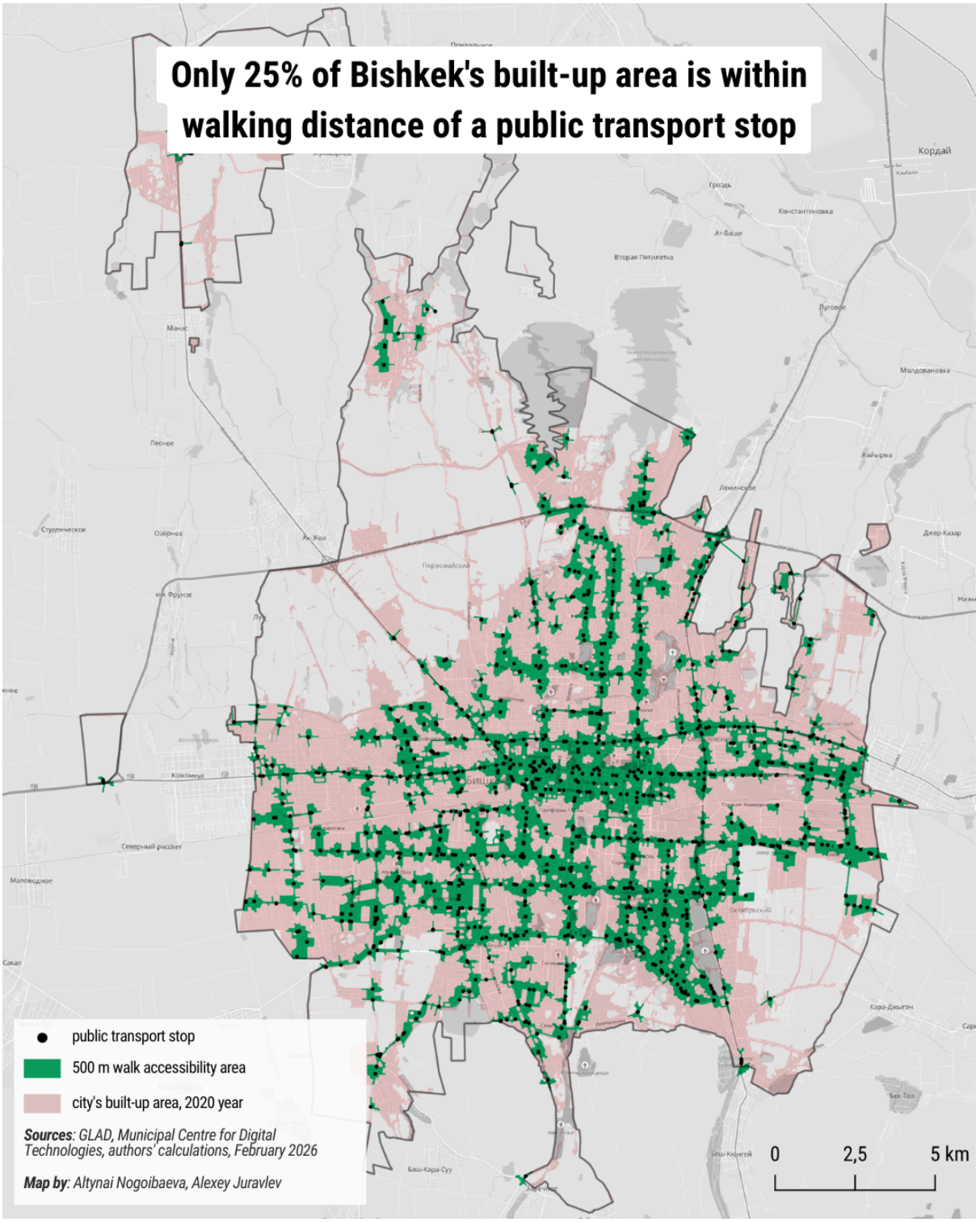
Five Minutes to the Stop — Or Is It?

Whatever the length of a route, the bus stop is what connects passengers to the system. According to Kyrgyz standards and international recommendations, the nearest stop should be within walking distance — **no more than 500 metres** (5-7 minutes on foot). Walkability calculations must follow the actual street network: turns, dead ends, crossings.

We examined how well public transport covers the different parts of Bishkek. To do so, we mapped stop addresses and routes against the built-up area within the city boundaries.

Our analysis found that **only 25%*** Bishkek's built-up area falls within walking distance of a public transport stop. This means that many residents must spend more time and effort to access a bus, discouraging public transport use. The World Bank's Urban Bus Toolkit recommends that between 75% and 90% of a city's territory should be within walking distance of a stop.

** Where a public transport route has no stops, we excluded the adjacent area from the analysis. We acknowledge that boarding and alighting may take place at informal stops.*



The city centre — broadly the area between Chui Avenue and Bokonbaev Street, and between Fuchik Street and Ibraimov Street — has the best stop coverage. Outside this area, gaps are widespread.

In residential districts, for instance, coverage gaps arise because roads are too narrow or in too poor a condition for buses to navigate. "*In newly built areas, the road width does not allow 10-metre buses to manoeuvre or turn around. We are currently monitoring prices and technical specifications for the procurement of 625 smaller buses,*" explains Ulanbek Beishenbaev of the Transport Department. The

department has pledged that these will be low-floor, accessible to passengers with reduced mobility, and fitted with air conditioning.

The problem is compounded by a simple lack of stops. Under the Passenger Transport Rules, stops must be placed along routes **every 400-600 metres** — more frequently in densely developed areas or near key destinations. Yet on many routes, stops fall well short of this requirement. For example Route №212 is missing four stops, while Route №146 is missing around twenty.

The UN Sustainable Development Goals state that walking access to public transport is essential for social equity and reducing car dependency. But the key idea is not merely access to a stop — it is access to "*the ability to reach a destination within a reasonable time, at an acceptable cost, safely and comfortably.*"

According to a household survey conducted by the National Statistical Committee, in 2024 more than 77% of Bishkek residents aged 15 and over reported having "convenient access" to public transport. For a fuller picture, however, GIS methods should be applied, cross-referencing cartographic data on walking access with population density.

Why Dedicated Bus Lanes Matter?

During the development of a new General Plan-2050 in 2025, a city administration survey found that only **38%** of residents choose public transport, while **41%** prefer private cars.

By comparison, in Prague, data from 2023 shows that over 71% of residents used public transport; in Istanbul, the figure is around 53%.

In other words, despite all the changes under way, Bishkek residents still do not favour public transport. At present, passengers sit in the same traffic jams as private car drivers. Congestion disrupts service headways, lengthens journey times, and makes travel unpredictable.

According to city administration data from 2023, the average bus speed was just **18 km/h**. The United Nations Economic Commission for Europe (UNECE) considers that speeds below 20 km/h deter residents from choosing public transport — particularly those who could travel at a similar speed in a private car.

For buses to avoid congestion and operate more efficiently, the city needs **dedicated bus lanes**. According to UNECE, the passenger throughput of a bus lane is **four times greater** than that of a general traffic lane. When allocating road space, this should be the decisive consideration: the primary purpose of a transport system is to move passengers, not vehicles.

A bus in the dedicated lane on Kyiv Street. Photo: Altynai Nogoibaeva

At present, the route network (~566 km) covers around 97% of all arterial streets in Bishkek. Yet dedicated bus lanes exist only on sections of four streets: Kyiv, Moscow, Akhunbaev, and Tokombaev. They are **not connected** to one another, and their combined length is 11.3 km — **approximately 2%** of the entire route network. Even so, they demonstrate clear benefits.

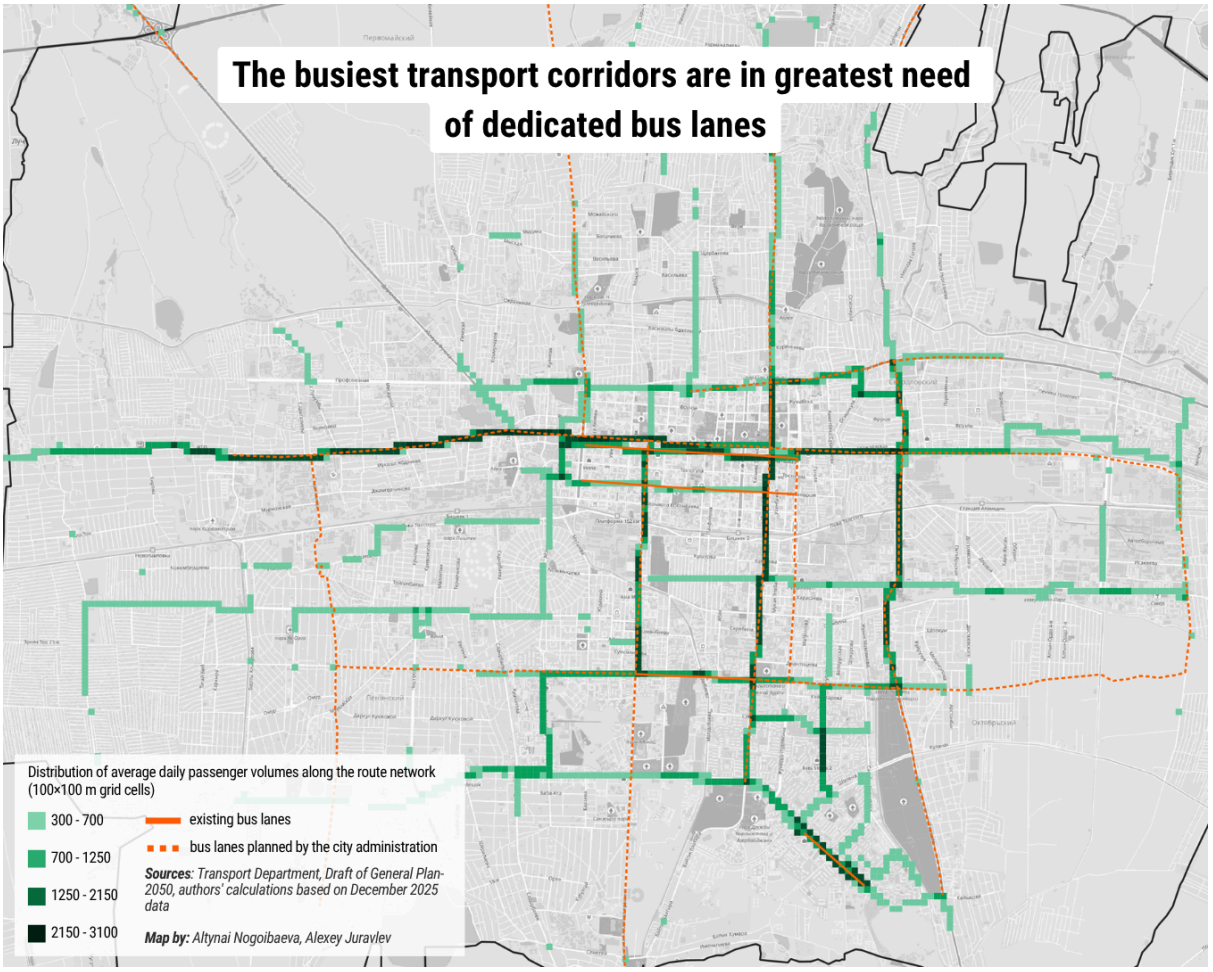
Over two weekdays in March 2026, we measured traffic flow in the dedicated lanes during the evening peak hour. On the section of Kyiv St. between Abdrakhmanov and Manas, buses in the dedicated lane moved on average **1.6 times faster** than those travelling in the general traffic flow in the opposite direction. The difference was even more pronounced on Moscow St., where buses in the dedicated lane completed the stretch approximately **twice as fast as those in general traffic**.

When properly designed, bus lanes can also improve road safety. At present, public transport is forced to manoeuvre through traffic, navigate around parked cars, and change lanes to pull into stops. Over the past two years, **more than 630 road accidents involving public transport** have occurred in Bishkek, leaving **821 people injured and 16 dead**. According to the State Traffic Safety Inspectorate, the most common causes of accidents are improper lane changes, violations of passenger transport rules, and failure to yield at pedestrian crossings.

In 2026, the city administration plans to continue introducing bus lanes, making them better connected. New dedicated lanes may be introduced on Jibek Jolu, Abdrakhmanov, 7 April Street, and Chui Avenue.

We overlaid passenger volume data onto the city map to identify where bus infrastructure is **most in demand**. The most intensive passenger flows run along Chui Avenue and Chyngyz Aitmatov Avenue, and

along Abdrakhmanov, Akhunbaev, Tokombaev, and 7 April Streets. The dedicated lanes proposed by the municipality are therefore broadly consistent with where passengers are concentrated.



Plans for Public Transport Development

Cashless payment

According to Tulpar (operator of a unified cashless payment system), over 70% of journeys on buses and electric buses are now paid for by transport card, bank card, or QR code. In 2026, the city administration plans to transition public transport entirely to cashless payment.

For now, however, drivers still have a cash quota to meet: each day they are required to hand over several thousand som to the depot office. *"More than half of drivers now support the move to cashless. They want a fixed salary, so there is no more racing for passengers,"* says Bekjan Akmatbekov, Chief Operating Officer of Tulpar.

With a full transition to cashless payment, passengers could board through all doors — reducing boarding and alighting times, which ideally should take no more than 30 seconds. "*We discussed this idea with the city administration. We are ready to invest and purchase new validators for this. But first, the*

Passenger Transport Rules need to be updated — they currently stipulate front-door entry. We would also need to increase the number of ticket inspectors and issue fines to all fare evaders," explains Akmatbekov.

New models of public transport

In 2026, Bishkek is due to adopt a new **General Plan for the city through to 2050**. Among the goals of the drafted document are: encouraging residents to use public transport rather than private cars, developing suburban connectivity, and achieving the highest possible convenience for passengers. To this end, Bishkek plans to introduce trams, bus rapid transit (BRT), and commuter rail services using the existing railway infrastructure*.

** The railway runs through the entire city from west to east. It is not electrified. It is used by freight trains and a small number of diesel-powered suburban passenger services.*

The UNECE considers that diversity in transport modes helps attract passengers and increases the overall appeal of public transport.

"Different modes of transport solve different problems. Buses provide flexibility; trams or metro lines offer stability and high capacity; BRT enables rapid transit; and commuter rail connects the city to its wider agglomeration. But the question is not how to introduce more types of transport. The main challenge is integrating them through shared routes, fares, and convenient interchange points. Without that, you end up with variety for its own sake," explains urban planner Yerkanat Zaitov.

Bus timetables

By 2030, the city administration aims to replace all bus stops in the city, bringing them to a consistent standard and making them more modern — for example, by installing Wi-Fi, CCTV cameras, and air-conditioned shelters.

Plans also include installing real-time passenger information displays showing live bus timetables. Their presence at stops makes public transport journeys more predictable for passengers. At present, passengers can track the location of public transport using the “My City” («Мой город») mobile application.

A real-time passenger information display at a bus stop in Tbilisi. Photo: Giga Beruashvili, Chai Khana

Conclusion

Renewing the fleet and replacing marshrutkas (minibuses) with full-size buses is undoubtedly the most visible outcome of Bishkek's transport reform. Yet the quantitative changes do not yet fully translate into qualitative ones.

- **Only 18%** of public transport vehicles can be described as fully comfortable and inclusive. This means that the majority of the fleet still does not fully meet passengers' needs.
- The share of clean electric transport — taking into account the closure of trolleybus routes — is low, at around **7%**. The remaining buses run on compressed natural gas and do not qualify as zero-emission vehicles.
- City residents face significant challenges in walking to public transport stops. **Only 25%** of the capital's built-up area is covered by stops within walking distance.
- Public transport routes **do not always operate at maximum efficiency**, which means some buses can be overcrowded while others run half-empty.
- Dedicated bus lanes cover **only 2%** of the route network and are not connected to one another. Buses sit in the same traffic as private cars, headways are not maintained, and journey times increase.

International practice in public transport development identifies three types of measures: **reducing** the need for travel altogether (avoid), **shifting** demand to more sustainable modes (shift), and **improving** vehicles (improve). Bishkek's reform has thus far focused on the third measure — fleet renewal.

However, for public transport to become genuinely more convenient and appealing, a **comprehensive approach is needed**:

- *Promote polycentricity* — each district should be self-sufficient and equipped with all necessary social amenities, such as schools, parks, hospitals, and cultural centres.
- *Revise the route network*: reduce excessively long routes with "empty" kilometres; reallocate high-capacity vehicles to the busiest corridors. Introduce a free transfer scheme.
- *Expand walking access by optimising routes and building new stops.* Extend bus services to new residential developments at the construction and move-in stages, to build the habit of using public transport from the outset.
- *Develop a coherent network of dedicated bus lanes* that allows buses to run on schedule, quickly, and predictably.
- *Ensure integration between public transport and other modes* (cycling, kick-scooters, rail, car) through intermodal hubs with car and cycle parking, and bikeshare.
- *Invest in supporting infrastructure*. Residents are more likely to take the bus if the walk to the stop passes along a shaded street with decent pavement and lighting. A route through a broken, noisy, or unsafe street will, conversely, put people off.
- *Make stops barrier-free:* fit ramps that comply with accessibility standards, provide weather shelters, lighting, and seating. Stop design should allow buses to pull up flush to the curb, eliminating the need to step down into the carriageway when boarding or alighting. Use concrete surfaces at stops to prevent pavement deformation caused by braking buses.

Without comprehensive changes, the system risks preserving the current model: public transport that is more modern in appearance, but still limited in efficiency — unable to compete with the private car on speed, convenience, or predictability.

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How we collected and analysed the data

To carry out this analysis of Bishkek's bus network, we used a combination of open-source and official data. Between December 2025 and March 2026, ***we received passenger volume figures, trip counts, and stop addresses in response to formal data requests.***

The city's route network was downloaded from the e-municipality portal in February 2026. Our analysis included routes in the following categories: electric buses, city buses, city marshrutkas, and suburban buses. Suburban marshrutkas were excluded. Route lengths in both directions were calculated on the basis of line geometry. It should be noted that some routes were not captured in our dataset — for example, Route №62, which the city administration only launched in March 2026.

For the ***walking accessibility analysis***, we built 500-metre walking isochorones from each stop along the street network. All areas within the isochorones were then merged into a single polygon and compared against the city's

built-up area, using data from the Global Land Analysis and Discovery (GLAD) land use change dataset for 2020. Only stops actually served by public transport were included in the walking accessibility analysis.

The ***route efficiency review*** was conducted by calculating passengers per vehicle-kilometre (PVK) — the ratio of average daily passenger volume to total vehicle distance travelled. This accounts for route length (in both directions), the number of return trips per bus, and the number of buses on the route. Passenger volume data for December 2025 were used for these calculations, while vehicle deployment was estimated from our own observations during the evening peak hour (18:00–19:00) in February 2026. Vehicle capacity, speed, and inclusivity may have an indirect effect on PVK figures.

To estimate the ***number of missing stops*** on each route, we divided the route length by 500 metres — the average inter-stop distance required under the relevant regulations — and compared the result against the number of existing stops.

Passenger demand was assessed on the basis of **64 routes** for which passenger volume data were available. For each route, we calculated the number of passengers per kilometre per day. Routes were intersected with a 100×100 m grid, and in each cell, passenger volume was estimated as the sum of the products of segment length and the passengers-per-kilometre figure. This method assumes an even distribution of passengers along the route, as data on actual boarding and alighting points are unavailable. The results therefore represent approximations, suitable for identifying the most heavily used corridors.

Limitations: calculations are based on OpenStreetMap and the e-municipality portal. **All figures should be treated as estimates**: route geometry may not perfectly match the actual alignment of streets, and gaps in OpenStreetMap data for certain routes and streets may have affected the accuracy of the results.