Bishkek's sustainable urban mobility development

A review of current policies and investments with recommendations for enhanced transformative impact





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Cover photo: Aerial view of Bishkek. Photo: Anna Karamurzina for Peshcom



Abstract

This material is intended for the municipality of Bishkek, international banks and organisations, experts in urban mobility, as well as the scientific and civil community.

The document covers the road-transport situation in the capital of Kyrgyzstan in recent years, including public transport, cycling infrastructure, road reconstruction, and the impact of transportation on the urban environment. It describes the existing policy in the development of urban mobility within the legal context and in practice. The latest projects implemented under international investments and technical assistance are examined, along with their transparency. The possibilities for civil society participation in project planning and monitoring are analysed. The initiatives of the civil sector and their effectiveness in influencing the situation are discussed. The overview includes recent legislative initiatives affecting civil participation in the country. At the end of the document, the authors provide recommendations based on research, other documentary sources of information, interviews with local experts, best examples of urban and transport planning, as well as personal experience and observations.

The recommendations cover various aspects, including the development of a 'Bishkek Sustainable Urban Mobility Plan', addressing urban sprawl, improving access to urban services, promoting active mobility and rail transport, establishing a multimodal transport system, integrating pendulum migrants, adopting 'Vision Zero' and 'road diet' concepts, implementing effective parking policies and car-free zones, increasing the availability of public and individual electric transport, and implementing mechanisms for civil engagement to realise sustainable urban mobility principles.



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1. State of urban mobility in Bishkek in recent years

1.1 Bishkek Context

Bishkek is a growing and sprawling city. Over the last 24 years, its area has increased¹ one and a half times to 187 square kilometres. The population of the city has also increased one and a half times during this time, reaching about 1.2 million people.

The boundaries of Bishkek are blurred and overgrowing with districts of individual low-rise buildings, new neighbourhoods often deprived of urban amenities. Officially, the city boundaries for 2023 included 57 of such residential areas, which occupy almost 30 per cent of the capital's area. More than 200,000 people live in them.

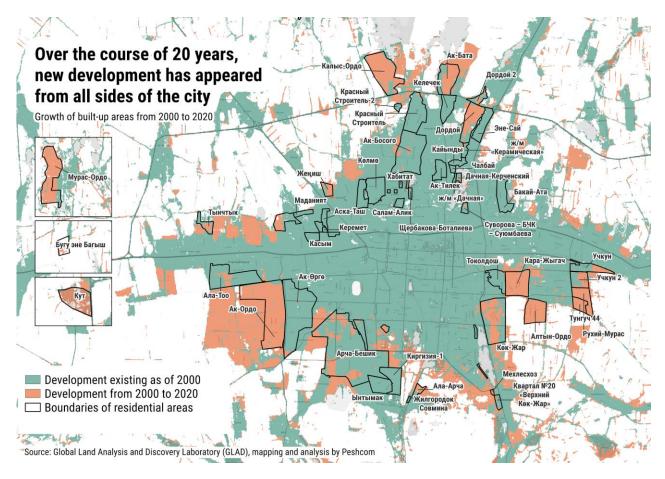


Figure 1. Expansion of urban areas in Bishkek between 2000 and 2020. Source: Peshcom

Bishkek, the most popular destination for internal migration, along with the wider metropolitan area, account for more than 60 per cent of arrivals.² The main reason the Kyrgyz people change their place of residence is to seek employment. Most of them live in the suburbs of Bishkek and do not have a city registration.

¹ Peshcom, <u>"Be patient". How residentials areas are incorporated into Bishkek but left with the same problems</u>, *Peshcom*, 12 August 2023.

² Bishkek City Council, <u>Концепция развития общественного пассажирского транспорта и дорожной инфраструктуры города Бишкек на</u> <u>2023 - 2026 годы</u>, Bishkek City Council, 2023.



At the beginning of 2024, Bishkek began the administrative-territorial reform – 15 settlements are attached to the city, as a result, the area of the capital tripled from 12.9 thousand to 38 thousand hectares, and the population grew up to 2 million³ people.

The growth of the urban population entails a load on the transport infrastructure of the capital. The population of Bishkek is served by land transport modes: buses, trolleybuses, marshrutkas (minibuses, shuttle buses) and private cars. More than 99 per cent of passenger transport in the capital is carried out by private cars, and less than 1 per cent by public transport. The marshrutkas provide 75 per cent of public transport passenger traffic (minibuses, shuttle buses).⁴

Owing to the limited number of asphalted roads, the majority of residential areas are not serviced by municipal buses and trolleybuses. Furthermore, one in every five residential areas is beyond walking distance to the nearest bus routes. Therefore, marshrutkas (shuttle buses) are the most affordable form of public transport for many Bishkek residents.

With limited access to comfortable and timely public transport, residents in the Bishkek suburbia increasingly rely on private cars. The National Statistical Committee reports that as of 2023, a total of around 400,000 private cars were registered in Bishkek.⁵ This figure is nearly 10 times higher than the capacity for which the city was originally designed during the Soviet era. Additionally, roughly 50,000⁶ commuters from the towns in Bishkek agglomeration enter the city by car daily, exacerbating the congestion on the city's streets. Traffic studies in Bishkek indicate⁷ that in 70 per cent of instances, cars are occupied only by the driver.

The affordability of car ownership in Kyrgyzstan is facilitated by the ample availability of secondary vehicles in the market. In 2023, the country witnessed a notable surge in car imports,⁸ with 184,789 passenger cars brought in, marking a substantial increase of 4.5 times compared to 2022.

1.2 Public transport

The development of public transport in Bishkek significantly lags behind the demand, with an outdated bus fleet leading to a decrease in the number of buses and trolleybuses on city streets in recent years. The depreciation of the transport fleet, ranging from 40 to 70 per cent in 2022, has further exacerbated the situation.⁹ Public transport operations have remained unprofitable for many years, as subsidies allocated

³ Maria Orlova, Бишкек не превратится в большой аул. Мэр о территориальной реформе, 24.kg News Agency, 11 January 2024.

⁴ Bishkek City Council, <u>Концепция развития общественного пассажирского транспорта и дорожной инфраструктуры города Бишкек на</u> <u>2023 - 2026 годы</u>, *Bishkek City Council*, 2023.

⁵ National Statistical Committee of the Kyrgyz Republic

⁶ ECO AKIpress, <u>Бишкек ведет борьбу со смогом. Какие меры предприняли власти перед наступлением холодов?</u>, *Eco AKIpress*, 28 November 2023, Updated 2 December 2023.

⁷ Peshcom, <u>Как разгрузить Бишкек от машин?</u>, *Peshcom*, September 2020.

⁸ Sergey Batischev, <u>Импорт легковых авто в Кыргызстан в прошлом году вырос в 4.5 раза</u>, *Economist.kg*, 19 February 2024.

⁹ Department of Transport and Road Transport Infrastructure Development of Bishkek City Hall, <u>Анализ регулятивного воздействия на проект</u> постановления Бишкекского городского кенеша 'О внесении изменений в некоторые постановления Бишкекского городского кенеша в <u>сфере транспорта</u>', *Bishkek City Hall*, September 2022.



from the budget fail to cover the losses of municipal enterprises, and private passenger transport carriers receive no subsidies at all.



Figure 2. Public transport in Bishkek. Photo: 24.kg

To boost public transport revenue, the municipal enterprise 'Passenger Transport Department was established in 2022, taking over¹⁰ 1,100 marshrutkas (private minibuses). According to the mayor's office, 750 thousand citizens regularly use public transport. According to Peshcom's calculations,¹¹ if we consider that each person makes two trips a day (home-work-home), the daily passenger traffic volume is 1.5 million. All modes of public transportation cover the transportation of 608,837 passengers per day, which is 40 per cent of the required volume. This indicates that public transport is comfortable for only 4 out of 10 citizens. At the beginning of 2023, Bishkek had an average of 147 buses, 115 trolleybuses, 880 municipal minibuses and 980 private minibuses.¹²

The fare policy has historically not provided sufficient financial support for municipal public transport, leading to an inability to recoup operating costs, including buying spare parts and fuel. Fares remained unchanged for nine years until 2021, despite a 49 per cent inflation rate during that period. Moreover, the absence of mechanisms to control cash payments from passengers, collected by drivers, further complicated financial management.¹³

¹⁰ Maria Orlova, <u>Общественный транспорт. Когда у мэрии Бишкека планов громадье, 24.kg News Agency</u>, 04 May 2024.

¹¹ Alexey Juravlev, <u>Транспортная реформа: хватит ли бишкекчанам обещанных на 2024 год автобусов?</u>, Peshcom, 14 November 2023.

¹² Response from the Department of Transport and Road Transport Infrastructure Development, Bishkek Mayor's Office, 1 April 2024.

¹³ Department of Transport and Road Transport Infrastructure Development of Bishkek City Hall, <u>Анализ регулятивного воздействия на проект</u> постановления Бишкекского городского кенеша 'О внесении изменений в некоторые постановления Бишкекского городского кенеша в сфере транспорта', Bishkek City Hall, September 2022.



Efforts to implement electronic ticketing in municipal public transport began in 2020, with validators installed in buses and trolleybuses, and the issuance of 'Tulpar' cards for cashless payments. In 2021, cashless payments accounted for 10 per cent¹⁴ of all transportation transactions.

1.3 Cycling infrastructure and Personal mobility vehicle (PMV)

In 2015, Bishkek City Hall initiated the creation of the city's first bike lane¹⁵ along Toktogul Street. However, the cycle lane was poorly designed, leading to its rapid transformation¹⁶ into a car park. In 2016, efforts to improve cycling infrastructure saw the construction of the city's first recreational circular¹⁷ bike paths in the southern area. As of 2021, the city's cycling infrastructure has expanded by 22.2 kilometres,¹⁸ yet it still lacks coherence, comfort, and safety, according to users.

Cycling and PMV users criticise¹⁹ Bishkek's cycling infrastructure as 'from nowhere to nowhere', highlighting challenges like manholes, steep ramps, informal street trade activities, and parking hindering their experiences.



Figure 3. Cycle lane on the sidewalk of Manas Avenue. Photo: 24.kg

¹⁴ Maria Orlova, <u>Полный безнал. Как мэрия Бишкека срывает электронное билетирование</u>, 24.kg News Agency, 18 June 2021.

¹⁵ City Administration of Bishkek, <u>В Бишкеке появится велодорожка</u>, City Administration of Bishkek, 16 September 2014.

¹⁶ Uulzhan Sayakbayeva, <u>Фото: Водители заняли новые велодорожки в Бишкеке для парковки</u>, *Kloop News Agency*, 02 June 2015.

¹⁷ Sputnik, <u>В южной части Бишкека открылась круговая велодорожка</u>, Sputnik Kyrgyzstan News Agency, 20 September 2016.

¹⁸ Sputnik, <u>В каких частях Бишкека появились велодорожки — карта. Где еще они строятся</u>, Sputnik Kyrgyzstan News Agency, 22 May 2020.

¹⁹ Gulmira Makanbai kyzy, <u>Жалкая пародия. Велосипедисты Бишкека оценили качество построенных дорожек</u>, *24.kg News Agency*, 26 September 2020.



Demand for cycling infrastructure has grown strongly over the last few years, particularly with the arrival²⁰ of Glovo Delivery service in 2020. By 2021, the platform had 1,289²¹ registered couriers, with 70 per cent of deliveries relying on cyclists couriers. By 2023, Glovo had over 3,000²² couriers registered on the platform.

Additionally, in 2022, a pilot project for Eco City²³ bicycle-sharing, initiated by the Department of Municipal Property Management and the business community, made 490 bicycles available for rent. However, despite these efforts, the bicycle-sharing service was discontinued, and bicycles were no longer available on city streets in 2023 and thereafter.²⁴

Furthermore, the emergence of private kick-share operators in the capital in 2022, such as SunRent, ToGo, and E-motion. SunRent, for instance, witnessed²⁵ a tenfold increase in scooter rides in 2023 compared to the previous year, totalling 1 million orders. Notably, 73 per cent of these trips served practical purposes of urban mobility, with the remainder being recreational.

1.4 Road reconstruction

Since 2014, the People's Republic of China (PRC) has been gratuitously²⁶ funding the reconstruction and rehabilitation of urban roads in Bishkek. Over the course of two phases from 2016 to 2022, substantial progress has been made, with a third phase slated to commence in 2024. During 'Phase 1', significant improvements were achieved, including the repair of 49 streets,²⁷ approximately 100 kilometres in total, the construction of 180 kilometres of pavements, and the renewal of irrigation networks along roads. Additionally, six bridges and one overpass were constructed, enhancing the city's infrastructure. 'Phase 2' saw further enhancements, with the construction²⁸ of five bridges and the renovation of 60 streets, covering about 70 kilometres. Moreover, 130 kilometres of pavements and irrigation systems were renewed, contributing to the overall improvement of the city's transportation infrastructure. According to data from the Ministry of Economy, the combined cost of 'Phase 1' and 'Phase 2' amounted to 10.39 billion KGS, equivalent to approximately 146 million USD.²⁹

²⁰ Kaktus Media, <u>В Бишкеке запустился сервис доставки Glovo</u>, *Kaktus Media*, 29 December 2020.

²¹ Economist.kg, <u>С Днем рождения, Glovo Кыргызстан!</u>, *Economist.kg*, 10 November 2021.

²² Kaktus Media, <u>Три года Glovo в Кыргызстане. Чего уже добилась компания и к чему стремится?</u>, Kaktus Media, 24 November 2023.

²³ City Administration of Bishkek, В Бишкеке запустили велошеринг, City Administration of Bishkek, 2022, accessed 12 June 2024.

²⁴ From our own observations.

²⁵ Kaktus Media, <u>Электросамокаты SunRent продолжают работать даже зимой</u>, Kaktus Media, 28 December 2023.

²⁶ Ministry of Economy and Finance of the Kyrgyz Republic, <u>Между Минэкономики КР и Министерством коммерции КНР подписан Меморандум</u> по реализации проекта реконструкции и реабилитации автомобильных дорог г. Бишкек, *Ministry of Economy and Finance of the Kyrgyz Republic*, 18 May 2014.

²⁷ Erkeaiym Taalaibekova, <u>В рамках реконструкции дорог Бишкека планировалась вырубка более 5 тыс. деревьев - Уезбаев</u>, *KABAR Kyrgyz* National News Agency, 20 April 2022.

²⁸ City Administration of Bishkek, <u>В 2024 году на 6 столичных улицах проведут капитальный ремонт дорог, появятся 3 новые трассы, City Administration of Bishkek, February 2024, accessed 12 June 2024.</u>

²⁹ Ministry of Economy and Commerce of the Kyrgyz Republic, <u>Register of international grant and technical assistance projects</u>, *Ministry of Economy* and Commerce of the Kyrgyz Republic, accessed 12 June 2024.



Additionally, the construction and expansion of urban roadways have come at the cost of green spaces,³⁰ with trees being cut down and natural areas destroyed. A study³¹ conducted by the Archa Initiative public fund in 2022 revealed a 20 per cent decrease in green areas in Bishkek over seven years, with 479 hectares of plantations disappearing since 2014, while only 250 hectares have been replanted.



Figure 4. Toktonalieva Street before and after the road was widened in 2018 under a Chinese grant. Photos: Kaktus.media

When informing citizens about this project, representatives of the mayor's office often used the explanation that the construction would solve the problem of traffic congestion and relieve road congestion. However, despite these efforts, the promised alleviation of traffic congestion remained elusive. Instead, the additional lanes on widened streets often became chaotic parking areas, exacerbating rather than solving traffic jams. Moreover, the widening of narrow streets in residential areas led to increased traffic, compromising safety and environmental conditions for residents. At the same time, not enough attention was paid to the quality construction of pedestrian spaces along the repaired motorways.

In 2022, as part of the implementation of a Chinese grant, the municipal authorities cleared³² a green area containing 130 trees to extend Sydykova Street. Prior to the construction started, local residents expressed opposition, appealing to their district representatives deputy and the mayor's office to designate the site as part of the city's greening plan and stop the road construction. Despite resident protests, the mayor's office proceeded with the project without adequate technical justification. Sydykova Street, a short deadend road spanning just 500 metres within a residential area, holds minimal significance for city traffic and therefore was unlikely to alleviate congestion on major central streets.

1.5 Inadequate Road Quality and Corruption in Road Construction

In 2017, Bishkek's mayor Albek Ibraimov asserted that roads constructed with funding from China would endure 10 to 15 years without significant maintenance. However, upon completion of construction, defects necessitated corrections on all newly built roads due to a lack of monitoring over the work's quality. Ulan

³⁰ Kaktus Media, <u>Инфографика: сколько деревьев вырубил "Зеленстрой"</u>, *Kaktus Media*, 2 June 2017.

³¹ Maria Orlova, <u>Лысый Бишкек. Как и почему столица продолжает терять зеленые зоны</u>, 24.kg News Agency, 20 September 2022.

³² Peshcom, <u>Мэрия хочет реконструировать 570 метров дороги по улице Сыдыкова. Прокладка дороги через зеленую зону не обоснована.</u> <u>Объясняем почему</u>, *Peshcom*, 13 April 2022.



Uezbayev, a former deputy minister of the Ministry of Transport and Communications, acknowledged³³ the poor construction quality of the roads funded by China grant.

In 2020, an audit of external grants and loans allocated for road construction revealed ³⁴ the misappropriation of hundreds of millions of dollars. Subsequently, in 2021, Bishkek Mayor Aibek Junushaliev disclosed³⁵ that KGS 360 million (approx. USD 4.1 million) had been stolen from the funds allocated for road repairs in the capital. Azattyk journalists conducted ³⁶ an investigation into the disappearance of nearly KGS 1 billion allocated for road projects.

Between 1992 and 2018, Kyrgyzstan received USD 10 billion in foreign aid. Among the funds allocated, 26 per cent was dedicated to transportation infrastructure and road development. These grants and loans for road projects were sourced from institutions such as the Asian Development Bank, the Export-Import Bank of China, the European Bank for Reconstruction and Development, the World Bank, the Islamic Development Bank, and the European Commission.

Experts assert ³⁷ that corruption in road construction and maintenance is a longstanding issue, characterised by long-established corrupt practices. These include inflating the cost estimates for construction projects or carrying out work of lesser quality than specified in the project documents. For instance, during asphalt laying, the actual thickness may fall short by one centimetre compared to the specified thickness (can make it 6 cm instead of 7 cm), or the required number of passes by construction machinery may be reduced (instead of 5, it passes only twice).

Periodically, Kyrgyz citizens become aware of corruption allegations involving officials from municipal transportation services. In one recent case from 2023, the head of the Department of Transport at Bishkek City Hall, Ulan Uezbayev, was found guilty³⁸ of accepting a USD 45 000 bribe during his previous role as Deputy Minister of Transport and Communications. While Uezbayev faced charges for causing financial harm to the victim, he was not detained due to the expiration of the statute of limitations on criminal liability. Subsequently, in January 2024, Ulan Uezbayev was dismissed from his position.

According to Transparency International's³⁹ Corruption Perceptions Index for 2023, Kyrgyzstan received a score of 26 out of 100 points. In the organisation's methodology, scores range from 0 to 100 points, with lower scores indicating higher levels of corruption.

³³ Aidai Zulumova, <u>Не прошло и года. В Бишкеке ремонтируют все дороги, построенные за счет Китая</u>, *Radio Free Europe/Radio Liberty*, 25 July 2019.

³⁴ Ernist Nurmatov, <u>При проверке кредитов, выданных на строительство дорог, недосчитались сотен миллионов долларов</u>, *Radio Free Europe/Radio Liberty*, 27 February 2020.

³⁵ Radio Liberty, <u>Из выделенных на ремонт дорог в Бишкеке средств украдено 360 млн сомов</u>, *Radio Free Europe/Radio Liberty*, 23 November 2021.

³⁶ Radio Liberty, <u>Как на ремонте дорог в Бишкеке «сэкономили» почти миллиард. Спецрасследование</u>, *Radio Free Europe/Radio Liberty*, 5 November 2021.

³⁷ Bektash Shamshiev, <u>Строительство дорог – удобная сфера для хищения средств?</u>, Radio Free Europe/Radio Liberty, 12 March 2018.

³⁸ Maria Orlova, <u>Экс-глава департамента транспорта Улан Уезбаев признан виновным в мошенничестве</u>, *24.kg News Agency*, 25 March 2024.

³⁹ Transparency International, Corruption perceptions index - Kyrgyzstan 2023, *Transparency International*, accessed 10 July 2024.



2. Impact of transport in Bishkek on air quality

In Bishkek, poor air quality persists year-round, with particularly high levels of air pollution during the winter heating period, typically spanning from October to March. The average annual concentrations of PM2.5 in Bishkek stand at around 30 μ g/m³, significantly surpassing both Kyrgyzstan's national and all international health-based limits and guideline values (EU, US EPA and WHO).

Between 2010 and 2019, approximately 12-13 per cent (4,100-5,000) of annual deaths in the Kyrgyz Republic were attributed ⁴⁰ to air pollution. The healthcare costs associated with air pollution amounted to an estimated USD 388 million, equivalent to 6 per cent of the country's gross national income in 2015.

Transport stands out as a major contributor to air pollution in Bishkek, serving as the primary source of nitrogen oxides (NO_x) and a significant emitter of fine particulate matter (PM2.5). Emissions from road traffic have a profound impact on air quality, especially given their ground-level release. Notably, the annual mean concentration levels of nitrogen dioxide (NO₂) measured in Bishkek's urban background area reach around 40 µg/m³, surpassing WHO-recommended limit values.

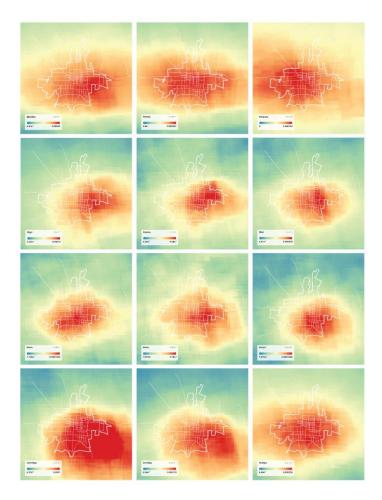


Figure 5. Satellite map images show how a cloud of nitrogen dioxide (NO₂) forms over Bishkek during 2020. Source: MoveGreen and Peshcom study: 'How we breathe nitrogen dioxide - a dangerous anthropogenic gas'

⁴⁰ United Nations Development Programme in the Kyrgyz Republic, United Nations Environment Programme, <u>Air Quality in Bishkek: Assessment of</u> <u>emission sources and road map for supporting air quality management</u>, *United Nations Development Programme in the Kyrgyz Republic*, *United Nations Environment Programme*, 8 October 2022.



Diesel-fueled lorries and minibuses emerge⁴¹ as key sources of air pollution by nitrogen dioxide in Bishkek. Intersections represent hotspots for the accumulation of harmful substances, as they witness high volumes of vehicles emitting exhaust gases and particulate matter, thereby exacerbating air quality concerns in these areas.

3. Existing policies for the development of urban mobility

3.1 Legal context

The green economy concept 'Kyrgyzstan - the country of green economy', endorsed by the Resolution of the Parliament of the Kyrgyz Republic No. 2532-VI on 28 June 2018, advocates⁴² for the development of 'green' transport in Kyrgyzstan. It suggests several measures to achieve this, including reducing the demand for road transport, transitioning from small-capacity to large-capacity public transport, incentivising the use of ecological vehicles through tax and customs preferences, implementing mandatory technical inspections of vehicles for environmental safety requirements, and promoting the development of safe modes of transport for pedestrians, cyclists, and other non-motorised vehicles. Also emphasises the importance of rational urban planning, which involves implementing measures such as pedestrian accessibility to social services amenities, densification of buildings, and increasing the norm of green space to 50 square metres per resident.

The Bishkek city development programme 'Bishkek - 2026: well-maintained and green capital', approved by the Bishkek city council Resolution No. 30 of 26 May 2022, outlines⁴³ priority areas in urban mobility until 2026. These include increasing the fleet of municipal public transport, optimising traffic routes, constructing highway interchanges and overpasses, organising parking spaces effectively, replacing gas stations with multi-storey car park, building over 10 overground and underground crossings, construction bridges, as well as 200 kilometres of pavements and 100 kilometres of bicycle paths.

The programme of socio-economic development of Bishkek city for 2023, with forecasts for 2024-2025, approved by the Resolution of city council dated 26 May 2022, outlines key objectives in the realm of road transport infrastructure development. These objectives include⁴⁴ enhancing public transport services by increasing their availability, undertaking construction and significant repairs of urban roads to improve their condition, and implementing the installation of traffic lights to enhance road safety and regulate traffic effectively.

The concept of development of public passenger transport and road infrastructure of Bishkek for 2023-2026, approved by the Resolution of city council on 12 April 2023, focuses⁴⁵ on three main areas.

⁴¹ MoveGreen, Peshcom, <u>Kak my dyshim dioksidom azota - opasnym antropogennym gazom</u>, *Peshcom*, 2022.

⁴² Ministry of Justice of the Kyrgyz Republic, <u>Концепция зеленой экономики в Кыргызской Республике "Кыргызстан - страна зеленой</u> <u>экономики</u>, *Ministry of Justice of the Kyrgyz Republic*, 28 June 2018.

⁴³ Bishkek City Council, № <u>30 Об утверждении Программы развития города Бишкек «Бишкек – 2026. Благоустроенная и зеленая столица»,</u> Bishkek City Council, accessed 12 June 2024.

⁴⁴ Bishkek City Council, <u>№ 31 Об утверждении Программы социально-экономического развития города Бишкек на 2023 год и прогноза на</u> <u>2024-2025 годы</u>, *Ministry of Justice of the Kyrgyz Republic*, accessed 12 June 2024.

⁴⁵ Bishkek City Council, <u>Концепция развития общественного пассажирского транспорта и дорожной инфраструктуры города Бишкек на</u> <u>2023 - 2026 годы</u>, *Bishkek City Council*, 2023.



Firstly, it emphasises the complex development of public transport through the implementation of modern technologies such as automated payment systems, dispatch control, and route modelling to enhance efficiency. Secondly, the concept aims to improve urban infrastructure by creating pedestrian and cyclist-friendly conditions and optimising the city's parking system. Lastly, it prioritises the enhancement of road infrastructure by introducing dedicated lanes for public transport, expanding and paving new streets, and promoting environmentally friendly modes of transport like electric buses and subways.

The concept for reducing traffic congestion and increasing road network capacity in Bishkek for 2024-

2030 was adopted⁴⁶ by the Mayor's Office in April 2024, and aimed at alleviating traffic congestion and enhancing the capacity of Bishkek's street and road network from 2024 to 2030. This comprehensive plan entails the construction of: more than 18 multi-level transport interchanges, 2 elevated and 6 underground pedestrian crossings, alongside bridge reconstruction, road widening initiatives and extending streets through the railway.

To regulate private motor vehicle usage, various measures are proposed, including environmental levies, hourly parking fees, restrictions on non-resident vehicle entry, and implementing an odd-even licence plate number policy.

For public transportation, efforts will focus on reducing environmental impact by 50 per cent, achieved through the procurement of electric buses, and the development of cable car, underground, and elevated metro projects. Furthermore, dedicated lanes will be integrated into a single cohesive system.

By 2030, it is anticipated that public transportation usage will increase to 70 per cent, covering the entire city. Pedestrian streets, 200 kilometres of cycle paths, segregated cycle lanes on roadways, and an extensive network of cycle parking will be introduced as well.

These initiatives aim to reduce private passenger car presence in the city centre by up to 20 per cent, alleviate traffic congestion by 30 per cent, increase intersection capacity by 30 per cent, boost average traffic flow speed by 30 per cent, and expand free space on the street and road network by up to 40 per cent.

3.2 Public transport development

According to several adopted Concept documents in the field of public transport development, the Mayor's Office plans to increase the share of municipal transport in passenger transport from 25 per cent to 50-60 per cent.

To support these goals, the municipality took concrete actions. In 2023, they purchased 500 gas-powered buses using funds from the national budget. Additionally, they sold 386 old municipal buses,⁴⁷ generating revenue of KGS 21.391 million for the city budget.

Looking ahead, further investments are planned to bolster the public transport fleet. An additional 500 CNG (Compressed Natural Gas) buses are expected to be acquired in the second quarter of 2024, with KGS 8.8

⁴⁶ Ibid.

⁴⁷ Maria Orlova, <u>Старые автобусы Бишкека продали за 21,3 миллиона сомов</u>, 24.kg News Agency, 08 January 2024.



billion (approximately USD 86.5 million) allocated⁴⁸ from the national budget for this purpose. This follows a previous investment in 2022 when the municipality purchased⁴⁹ 120 buses of the same brand for KGS 1 billion.

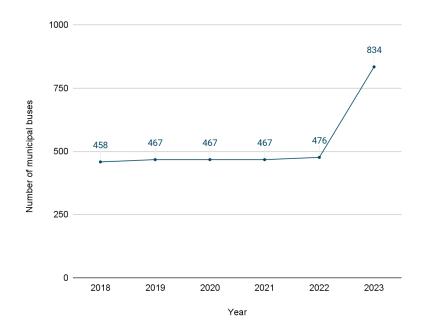


Figure 6. Number of municipal buses between 2018 and 2023. Source: Department of Transport and Road Infrastructure Development of Bishkek Mayor's Office

From the beginning to the end of 2023, significant improvements were made in Bishkek's public transport system. The number of buses operating daily increased from 147 to 389, resulting in a notable rise in daily bus passenger traffic from 48,000 to 99,000 during the same period. Additionally, the number of drivers has significantly increased from 373 to 1,184. As of April 2024, 31 bus routes are in operation.⁵⁰

In early 2024, the European Bank for Reconstruction and Development contributed ⁵¹ to further enhancements by delivering 124 new gas-powered buses to Bishkek under the Bishkek Buses project of the Green Cities 2, Window 2 programme. Additionally, 120 electric buses are anticipated to arrive in 2024 as part of the Asian Development Bank (ADB) project.⁵²

The mayor's office has committed to increasing the number of buses in Bishkek to up to 1,600 by the end of 2024. This ambitious plan is estimated⁵³ by Peshcom to cover 60 per cent of the daily passenger volume. Through these measures, the mayor's office plans to rid the city centre of shuttle buses.

⁵⁰ Response from the Department of Transport and Road Transport Infrastructure Development, Bishkek Mayor's Office, 1 April 2024.

⁴⁸ Kaktus Media, <u>Сколько Кыргызстан заплатит за тысячу новых автобусов для Бишкека? Данные Минфина</u>, Kaktus Media, 30 November 2023.

⁴⁹ Maria Orlova, <u>В мэрии Бишкека показали, какие автобусы купили за счет бюджета</u>, 24.kg News Agency, 16 November 2022.

⁵¹ Anton Usov, <u>Greener public transport for Bishkek</u>, *European Bank for Reconstruction and Development*, 26 January 2024.

⁵² Asian Development Bank, <u>ADB Approves \$51 Million Battery-Electric Bus Project in the Kyrgyz Republic</u>, *Asian Development Bank*, 1 December 2021.

⁵³ Alexey Juravlev, <u>Транспортная реформа: хватит ли бишкекчанам обещанных на 2024 год автобусов2</u>, *Peshcom*, 14 November 2023.



In January 2023, the mayor's office launched⁵⁴ the mobile application 'My City', which enables users not only to use digital municipal services, but also to access information about public transport routes and track their locations.

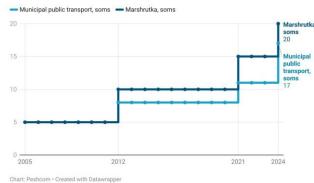
In August 2023, the mayor's office in Bishkek made a significant announcement regarding the full transition to cashless payments for public transport fares. However, this decision caused discontent among drivers, leading to strikes and mass resignations. Eventually, their demands for higher wages were met, resulting in a doubling of salaries from KGS 25 000 to KGS 50 000 (approximately USD 560 at the current exchange rate).

By January 2024, the mayor's office reversed its stance on cashless payments, officially allowing cash fares but at a higher price compared to non-cash payments. Effective from 30 January 2024, fares were adjusted to KGS 17 for non-cash payments and KGS 20 (USD 0.2) for cash payments, including minibuses (marshrutkas). Furthermore, bus and trolleybus drivers are now mandated to issue a single ticket for cash payments.

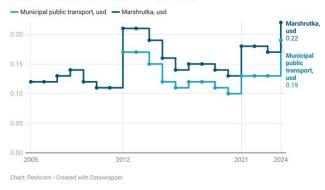
Chronology of fare increases in public transport			
2005	from KGS 3 to KGS 5	from USD 0.07 to USD 0.12	
2012	from KGS 5 to KGS 8	from USD 0.10 to USD 0.2	
2021	from KGS 8 to KGS 11 (in marshrutka from KGS 10 to KGS 15)	from USD 0.09 to USD 0.13 (in marshrutka from USD 0.12 to USD 0.18)	
2024	from KGS 11 to KGS 17 (cashless), KGS 20 (cash payment) KGS 20 in marshrutka	from USD 0.12 to USD 0.19 (cashless) USD 0.22 (cash payment) USD 0.22 in marshrutka	

Figure 7: Chronology of public transport fare increases

Fare cost in KGS from 2005 to 2024



Fare cost in USD from 2005 to 2024





⁵⁴ Nargiza Tokoeva, <u>Кто платил за разработку приложений Inobi, «Тулпар» и «Мой город»?</u>, Akchabar Financial Portal, 12 January 2023.



To streamline fare collection and encourage the use of cashless payment methods, the municipality introduced⁵⁵ discounted monthly passes, priced at KGS 1020 (USD 11) for standard passes and KGS 360 (USD 4) for school passes. Additionally, fare enforcement measures were implemented, with the deployment of controllers tasked with checking fare payment. As of February, there were 30 controllers⁵⁶ in operation. Controllers receive⁵⁷ remuneration of KGS 1,500 per day (USD 17) and an additional KGS 10 (USD 0.1) for each Tulpar card sold.



Figure 9. E-ticketing 'Tulpar'. Photo: Akipress

Notably, the 'E-ticketing project Tulpar' has witnessed significant growth, with daily transactions increasing from 9,000-10,000 at the project's inception to approximately 370,000⁵⁸ by January 2024. Moreover, the municipality now holds a 50 per cent stake in the Tulpar e-ticketing project.

Since the end of 2023, the operational hours of municipal public transport in Bishkek have been extended, with services now operating⁵⁹ from 5:00 am to 11:30 pm, a significant improvement from the previous⁶⁰ hours of 6:00 am to 9:00-10:00 pm. The approved⁶¹ interval between buses is 8-10 minutes.

- ⁵⁷ Магіа Orlova, Новые автобусные маршруты и строительство канатки. Что происходит в Бишкеке, 24.kg News Agency, 31 January 2024.
- ⁵⁸ Maria Orlova, <u>Половина проекта «Тулпар» теперь принадлежит мэрии Бишкека</u>, 24.kg News Agency, 28 January 2024.

⁵⁵ Kaktus Media, <u>С 30 января проезд в бишкекском транспорте подорожает. Как и чем платить?</u>, *Kaktus Media*, 29 January 2024.

⁵⁶ Maria Orlova, <u>Охота за «зайцами» и изменение сроков отключения горячей воды</u>, 24.kg News Agency, 6 February 2024.

⁵⁹ Maria Orlova, <u>Снег в Бишкеке. Мэрия призвала горожан пересесть на общественный транспорт,</u> 24.kg News Agency, 12 December 2023.

⁶⁰ Tulpar, <u>Расписание работы муниципального транспорта г. Бишкек</u>, Unified transport card Tulpar, 20 November 2020.

⁶¹ Maria Orlova, <u>Мэрия готова выпустить дополнительные автобусы. С одним условием</u>, 24.kg News Agency, 12 December 2023.



In autumn 2023, dedicated lanes for public transport were introduced on two main streets of the city on a pilot basis. In 2024, the mayor's office plans⁶² to expand this initiative by introducing dedicated lanes on six additional streets, necessitating changes to lane width norms⁶³ to accommodate more vehicles. Before 2023, only three streets in Bishkek had dedicated lanes for public transport, which were established in 2015.

In September 2023, the mayor's office launched a project to reconstruct bus stops. Initially, 25 public transport stop complexes⁶⁴ will be built, with plans to collaborate with entrepreneurs who can rent the bus stops for five years and install branded vending machines, among other amenities.

Bishkekglavarhitektura approved sketches for public transport stops, which will feature a uniform design. Interested parties seeking to construct stops according to the approved project can seek consultation from the Department of Municipal Property of the Bishkek Mayor's Office.



Figure 10. Newly modernised public transport stop. Photo: Akipress

3.3 Combating road congestion

Since the end of 2023, the Bishkek Mayor's Office has been actively implementing⁶⁵ changes to the city's motor traffic scheme,⁶⁶ including the introduction of one-way traffic on eight streets. Previously, one-way traffic existed⁶⁷ on only four streets, a system established in 2015.

⁶² Maria Orlova, <u>Выделенные полосы. На каких улицах Бишкека они появятся до конца года</u>, 24.kg News Agency, 5 October 2023.

⁶³ Maria Orlova<u>, Еще один эксперимент с организацией движения проведут на Южной магистрали</u>, 24.kg News Agency, 22 December 2023.

⁶⁴ Maria Orlova, <u>Все остановки транспорта в Бишкеке оснастят интернетом и кондиционерами</u>, 24.kg News Agency, 22 September 2023.

⁶⁵ City Administration of Bishkek, <u>Внимание! 27 декабря две улицы Бишкека станут односторонними</u>, *City Administration of Bishkek*, accessed 12 June 2024.

⁶⁶ City Administration of Bishkek, <u>В столице заседал штаб по развитию дорожно-транспортной инфраструктуры</u>, *City Administration of Bishkek*, accessed 12 June 2024.

⁶⁷ City Administration of Bishkek, <u>Мэрия вводит одностороннее движение на четырех центральных улицах</u>, *City Administration of Bishkek*, accessed 12 June 2024.



In early 2024, the Automated Traffic Management System (ATMS), also known as 'smart traffic lights', commenced operation⁶⁸ in pilot mode on three city streets. This system is planned⁶⁹ to be implemented across the city at 350 intersections and encompasses⁷⁰ traffic and pedestrian lights, traffic detectors, controllers, and a monitoring system for traffic flow parameters. The first phase of the project received funding from the local budget totaling KGS 128 million⁷¹, with plans to secure an additional KGS 380 million from the Russian-Kyrgyz Development Fund for the second phase.

In 2023, plans were announced to relocate two bus terminals, Eastern and Western, outside the city limits. The Eastern bus terminal was relocated to its new site in January 2024, with plans for the Western Bus Terminal relocation set for the latter half of 2024. The rationale⁷² behind this decision lies in the fact that approximately 900 marshrutkas (minibuses) entering the city on intercity routes congest city roads, contributing to traffic jams. Notably, The Old Eastern Bus Terminal building cannot be demolished as it is listed on the State Register of historical and cultural monuments of national importance.





Figure 11. The Former Eastern Bus Terminal, built in 1962 on Zhibek Zholu Avenue. Photo: Bishkek Chief Architect's Office

Figure 12. The New Bus Terminal, opened in 2024 on the bypass road. Photo: Press Service of the Bishkek Mayor's Office

Additionally, in early 2024, an electronic paid parking system was launched⁷³ in pilot mode. This system registers the entry and exit times of vehicles based on their licence plate numbers and offers payment options via the Megapay mobile wallet or the parking.kg website. The first smart parking facility was established near City Hall.

3.4 Electric cars

In October 2023, the mayor's office in Bishkek launched⁷⁴ a municipal eco-taxi initiative, consisting of 10 electric vehicles operating in pilot mode. These eco-taxis follow fixed routes during morning and evening

⁶⁸ Maria Orlova, <u>«Умные» светофоры начали работать в Бишкеке</u>, *24.kg News Agency*, 12 January 2024.

⁶⁹ Sitronics Group, <u>Sitronics Group оборудует дорожную сеть Бишкека умными системами и оборудованием</u>, *Sitronics Group*, 18 January 2024. ⁷⁰ Ibid.

⁷¹ Ilya Petchenko, <u>На умные светофоры в Бишкеке мэрия потратит 508 млн сомов</u>, *Economist.kg financial publishing*, 9 February 2024.

⁷² Merimai Alybekova, <u>Перенос автовокзалов. Мэрия Бишкека ответила перевозчикам</u>, *24.kg News Agency*, 9 January 2024.

⁷³ City Administration of Bishkek, <u>В столице в тестовом режиме запустили электронную систему платной парковки</u>, *City Administration of Bishkek*, accessed 12 June 2024.

⁷⁴ City Administration of Bishkek, <u>Запуск Муниципального ECO TAXI в Бишкеке</u>, *City Administration of Bishkek*, accessed 12 June 2024.



rush hours, utilising dedicated lanes designated for public transport. This initiative represents a publicprivate partnership (PPP) aimed at fostering environmentally friendly transportation within the city. Plans are underway to expand⁷⁵ the eco-taxi fleet by an additional 120 electric vehicles and to install⁷⁶ 30 to 60 electric charging stations. In 2023, Bishkek had⁷⁷ approximately 40 electric vehicle charging stations.

In February 2024, the Ministry of Economy revealed⁷⁸ intentions to transition certain government bodies and Kyrgyzpost to electric vehicles, utilising grant funds from the Korea International Cooperation Agency (KOICA). This initiative also encompasses the installation of electric charging infrastructure.

Over the past years, Kyrgyzstan has seen a significant increase in the import⁷⁹ of electric cars, with a total of 1,300 electric vehicles imported from China, Korea, Lithuania, and Germany in 2022. Notably, there exists a privilege⁸⁰ for the import of electric cars into Kyrgyzstan, exempting them from customs duties. This favourable importation scheme is scheduled to continue until the end of 2025, allowing for the importation of up to 20,000 electric cars into the country at preferential rates.

3.5 Other projects announced by Mayor's Office

<u>Cable car.</u> In 2023, the mayor's office in Bishkek announced plans to construct a cable car system as an alternative mode of public transportation. By January 2024, a project implementation plan was approved⁸¹, and a framework cooperation agreement was signed with Bartholet Swiss. The proposed cable car is intended to span 6 kilometres along one of the city's central avenues, with an estimated project cost ranging from USD 50 to 60 million.

<u>Construction of underground passes.</u>⁸² The city budget has allocated⁸³ KGS 1.5 million (approximately USD 17 000) for the design of pedestrian underpasses at the Chui/Shopokova and Chui/Beyshenalieva intersections which are both in the city centre.

<u>Construction of a 6-lane highway</u> in place of the railway in the centre of Bishkek, which they want to move outside⁸⁴ the city. The estimated cost of the project is USD 1 billion.

⁷⁵ City Administration of Bishkek, <u>+120 экотакси: В столице планируют дополнительно ввести новые электромобили</u>, *City Administration of Bishkek*, accessed 12 June 2024.

⁷⁶ Nazgul Abdyrazakova, <u>В Бишкеке установили первые точки для зарядки электромобилей</u>, Vecherniy Bishkek Publishing House, 15 June 2023.

 $^{^{77}}$ Ivan Donis, <u>Все, что нужно знать об экотакси в Бишкеке и инфраструктуре для электрокаров в Кыргызстане — обзор Economist.kg</u>, *Economist.kg financial publishing*, 29 September 2023.

⁷⁸ Ministry of Economy and Finance of the Kyrgyz Republic, <u>Минэкономкоммерции КР совместно с Корейским агентством международного</u> <u>сотрудничества реализует проект по переводу госавтопарка на электромобили</u>, *Ministry of Economy and Finance of the Kyrgyz Republic*, 22 February 2024.

⁷⁹ Kaktus Media, <u>В 2022 году в Кыргызстан ввезли 1,3 тыс. электромобилей. Стало известно, из каких стран</u>, Kaktus Media, 18 January 2023.

⁸⁰ Ministry of Economy and Finance of the Kyrgyz Republic, <u>Продлена тарифная льгота на импорт электромобилей в Кыргызстан на 2024-2025</u> <u>годы, Ministry of Economy and Finance of the Kyrgyz Republic</u>, 27 November 2023.

⁸¹ Maria Orlova, <u>Канатно-дорожная система в Бишкеке. Утвержден план реализации проекта</u>, 24.kg News Agency, 31 January 2024.

⁸² Ruslan KHARIZOV, <u>В Бишкеке на проспекте Чуй построят два подземных перехода</u>, 24.kg News Agency, 6 July 2022.

⁸³ Capital Construction Department under the Bishkek City Mayor's Office, <u>Тендер - Проектно-изыскательские работы: Подземный пешеходный</u> <u>переход на пересечении пр. Чуй - ул. Шопокова</u>, *Ministry of Finance of the Kyrgyz Republic*, accessed 12 June 2024.

⁸⁴ Kaktus Media, <u>Эстакада, трамвай и перенос железной дороги. Планы мэрии по избавлению Бишкека от пробо</u>к, *Kaktus Media*, 23 November 2019.



3.6 Conclusions

When examining the legal framework and development priorities, it becomes evident that Bishkek is pursuing an ambitious agenda for the revitalisation of its transportation infrastructure, public transit, and the promotion of eco-friendly modes of transport. Nonetheless, certain initiatives, like road expansion and interchange construction, tend to favour private vehicles, thereby undermining the principles of sustainable urban mobility and increasing the likelihood of traffic accidents.

Sustainable urban mobility entails shifting cities away from a conventional reliance on private cars towards a more sustainable framework centred on public transportation, sharing modes and eco-friendly modes of travel, such as bicycles, non-motorised transport, and walking.

The mayor's office has made tackling congestion a global priority, primarily by prioritising road infrastructure over pedestrian accessibility. Instances like constructing underground pedestrian passes and pedestrian overpasses indicate an urban environment that's not pedestrian-friendly and leans heavily towards car-centric urban planning. Presently, only 2 out of 16 subways in Bishkek are pedestrian-friendly, rendering the rest inaccessible for groups with limited mobility.⁸⁵

The City Hall's goal of increasing the average traffic flow speed by 30 per cent, as outlined in the Concept of Reducing Traffic Congestion, raises concerns. According to the National Road Safety Strategy of the Kyrgyz Republic for 2023-2027, one of the primary causes⁸⁶ of road accidents in Kyrgyzstan is drivers surpassing the speed limit. The World Health Organization has estimated⁸⁷ that a 1 per cent rise in speed correlates with a 4 per cent increase in the risk of a fatal road accident.

Bishkek contributes⁸⁸ to every third road accident in the country, averaging approximately eight accidents per day. More than half of the traffic accidents in the city involve pedestrians. Over the past decade, nearly 900 fatalities and over 30,000 injuries have occurred due to road accidents in the city, equating to approximately 3,000 casualties per year.

The proposed project by the mayor's office to replace the railway with a highway in the very centre of the city full of residential development, is anticipated to worsen the environmental conditions and the overall quality of life for local residents. Moreover, experts argue⁸⁹ that it will not effectively address traffic congestion but on the contrary will aggravate it. Residents from the nearby towns rely on trains for transportation. Should the railway tracks be relocated outside the city, commuters will likely transition to other modes of transport, adding further strain to the city's streets. Additionally, freight transportation predominantly relies on railways, and redirecting it will increase the burden on the capital's roadways for goods delivery.

⁸⁵ Alexey Juravlev, Altynai Nogoibaeva, Aigerim Ryskulbekova, <u>Построить и забыть. Что не так с подземными и надземными переходами</u> <u>Бишкека?</u>, *Peshcom*, 21 May 2023.

⁸⁶ Ministry of Justice of the Kyrgyz Republic, <u>Национальная стратегия безопасности дорожного движения в Кыргызской Республике на 2023-</u> 2027 годы, *Ministry of Justice of the Kyrgyz Republic*, accessed 12 June 2024.

⁸⁷ World Health Organization, <u>Road traffic injuries</u>, *World Health Organization*, 13 December 2023.

⁸⁸ Alexey Juravlev, Altynai Nogoibaeva, Aigerim Ryskulbekova, <u>"Hardly staying alive". Why doesn't the number of road accidents in Kyrgyzstan</u> <u>decrease, and what can we do about it?</u>, *Peshcom*, 7 November 2023.

⁸⁹ Alexey Juravlev, Rada Valentina kyzy, <u>Пандемия и маятниковая миграция. Как из-за коронавируса кыргызстанцев лишили поездов,</u> *Peshcom*, October 2020.



The decision to relocate the two primary bus terminals and the largest market outside the city with the aim of alleviating traffic congestion raises concerns, particularly regarding the rationale behind these decisions. It remains unclear what criteria were used to justify these actions. Carriers believe⁹⁰ that this move could worsen traffic congestion, as passengers would likely resort to taxis to reach the stations, adding pressure to already congested roads. Furthermore, the increased distance to these relocated facilities would result in doubled costs and travel times for passengers.

The restrictions on the movement of non-residential transport in the capital, as outlined in the concept for reducing traffic congestion and increasing road network capacity, contradict the principles of a socially just city and will worsen the segregation between urban and rural populations, further depriving them of access to comfortable public transport.

None of the urban mobility documents that have been adopted include plans for developing last-mile transport options.

The 'last mile' refers to the distance from one's residence to a public transport stop, which is typically covered by walking or using personal mobility devices such as bicycles or scooters.

At the same time the mayor's office has announced plans to construct a costly and questionable project such as a cable car with few stops, requiring additional access. However, there seems to be insufficient justification for such a project in Bishkek, as cable cars are typically used to overcome natural obstacles like wide rivers or rugged terrain.

Analysing the mayor's plans, it's clear that various forms of urban transportation are being addressed separately rather than as part of a unified strategy. Presently, the city's programs and initiatives, along with the decisions stemming from them, seem disjointed and often lack solid justification, potentially harming urban mobility. This underscores the importance of conducting thorough evaluations and crafting cohesive plans. Urban travel involves a mix of transportation modes, highlighting the necessity for Bishkek to establish a multimodal transportation system that seamlessly integrates each aspect of urban mobility into a unified framework.

4. Review of recent international investment and technical assistance

4.1 Projects of the European Bank for Reconstruction and Development

<u>The development of public transport in Bishkek city</u> has seen significant support from the European Bank for Reconstruction and Development (EBRD) since 2011. The first project focused on purchasing trolleybuses, partially rehabilitating infrastructure, and introducing electronic ticketing. In 2016, 79 new trolleybuses were deployed, along with 5 units of auxiliary equipment, equipment for traction substations, and other essential materials. Within the framework of this project it was planned⁹¹ to spend USD 520 000 to study the electronic ticketing system. The German firm won the tender to study the situation and give

⁹⁰ Merimai Alybekova, <u>Перенос автовокзалов. Перевозчики заявили о нарушении их прав и интересов</u>, 24.kg News Agency, 8 January 2024.

⁹¹ Anastasia Bengard, <u>На изучение системы электронного билетирования в общественном транспорте в Бишкеке затратят \$520 тысяч,</u> 24.kg News Agency, 12 April 2013.



their recommendations for an electronic ticketing system. The project's total cost amounted to USD 15.6 million,⁹² including a USD 10.1 million loan and a USD 5.5 million grant.

In 2015, the EBRD extended⁹³ the project until 2017, allocating EUR 8.4 million for the procurement of 52⁹⁴ new trolleybuses and the development of a public transport strategy. Subsequently, low-floor and medium-floor trolleybuses from Russia and Belarus were introduced in 2018.

In April 2024, the Bishkek City Hall announced plans to transfer trolleybuses, along with their overhead wires and power substations, to the cities of Osh, Kara-Balta, and Tokmok for further operation. The rationale behind this decision is that most trolleybuses have exceeded their service life, and the disorganised overhead wires negatively affect the city's appearance. The trolleybuses are planned to be replaced with new contactless trolleybuses featuring a greater range of autonomous driving capabilities, as well as electric buses.⁹⁵

Green Cities 2 Programme – Second Window: Bishkek Buses Project

Under the 'Green Cities 2 Programme's Second Window', the 'Bishkek buses' project came as a result of the memorandum⁹⁶ signed between the Bishkek Mayor's Office and the EBRD in 2019. With EUR 33 million allocated⁹⁷, comprising a EUR 25 million loan and an EUR 8 million grant, the project aims to enhance the city's green economy and reduce emissions. This initiative encompasses the renovation of vehicle fleet facilities, including depots and administrative buildings, as well as the procurement of low-emission compressed natural gas (CNG) buses to replace outdated diesel buses. The plans also involve reinstating closed bus routes and introducing new ones. In January 2024, a handover ceremony⁹⁸ for 124 new 10.5-metre buses was held.

⁹² City Administration of Bishkek, <u>Подписание грантового и кредитного соглашений между кыргызстаном и европейским банком</u> <u>реконструкции и развития (ЕБРР) по проекту «Проект развития общественного транспорта города бишкек»</u>, *City Administration of Bishkek*, 25 November 2011.

⁹³ Ministry of Justice of the Kyrgyz Republic, <u>Постановление ЖК № 1191-VI. О принятии Закона Кыргызской Республики "О ратификации</u> Кредитного соглашения между Кыргызской Республикой и Европейским банком реконструкции и развития ("Продление проекта по развитию общественного транспорта города Бишкек"), подписанного 30 ноября 2015 года в городе Бишкек; Грантового соглашения между Кыргызской Республикой, мэрией города Бишкек, Бишкекским троллейбусным управлением и Европейским банком реконструкции и развития по инвестиционному гранту, предоставляемому Специальным фондом акционеров ЕБРР по проекту "Продление проекта по развитию общественного транспорта города Бишкек", подписанного 30 ноября 2015 года в городе Бишкек; Соглашения о внесении изменений № 1 в Грантовое соглашение между Кыргызской Республикой, мэрией города Бишкек, Бишкекским троллейбусным управлением и Европейским банком реконструкции и развития по инвестиционному гранту, предоставляемому Специальным фондом акционеров Европейского банка реконструкции и развития по проекту "Продление проекта по развитию общественного транспорта города Бишкек" от 30 ноября 2015 года, подписанного 20 июня 2016 года в городе Бишкек, *Ministry of Justice of the Kyrgyz Republic*, 21 December 2016, accessed 12 June 2024.

⁹⁴ Kristina Kumanchenko, <u>Когда на улицах Бишкека появятся троллейбусы, за которые заплатили € 6,3 млн</u>, *Sputnik News Agency*, 01 August 2018 (updated on 14 December 2021)

⁹⁵ Response from the Department of Transport and Road Transport Infrastructure Development, Bishkek Mayor's Office, 5 April 2024.

⁹⁶ Akchabar, <u>ЕБРР поможет Бишкеку реализовать инфраструктурные программы</u>, Akchabar Financial Portal, 16 August 2019.

⁹⁷ European Bank for Reconstruction and Development, <u>GrCF2 W2: Bishkek Buses</u>, *European Bank for Reconstruction and Development*, accessed 12 June 2024.

⁹⁸ Kaktus Media, <u>В Бишкек прибыли еще 124 новых автобуса, купленных на средства ЕБРР и Японии (фото)</u>, Kaktus Media, 26 January 2024.





Figure 13. New EBRD buses fuelled by natural gas. Photo: Akipress

Furthermore, there are plans to acquire 12-metre CNG buses, with the exact number to be determined after the tender process.⁹⁹ Additionally, the project includes¹⁰⁰ an increase in public transport fares, which was implemented at the beginning of 2024.

Green City Action Plan

In 2022, the municipality initiated ¹⁰¹ the development of the Green City Action Plan (GCAP), aimed at shaping a sustainable development vision and strategic goals. The plan, crafted in collaboration with international consultants, the Mayor's Office, and the EBRD, targets priority environmental issues, directing investments accordingly. Key themes include air, water, and soil quality, climate change risks, transport infrastructure, building regulations, industry, energy, and solid waste management.

In April 2024, an event titled as the presentation of GCAP took place in Bishkek. However, the plan itself was not shared with anyone, and no information was provided on when or where it could be accessed ¹⁰². According to Gulnara Arymkulova, the local project coordinator, 27 projects have been selected for inclusion in the action plan, with their costs calculated. The EBRD is poised to collaborate with the Mayor's Office on several projects, while the city administration will seek financing for the remainder. Proposed projects in urban mobility encompass the development of a sustainable urban mobility plan (budget: EUR 600 000), construction of pavements and bicycle paths (capital investment: EUR 6 million), transitioning to

⁹⁹ Response of the European Bank for Reconstruction and Development, 8 April 2024.

¹⁰⁰ Ibid, footnote 97.

¹⁰¹ City Administration of Bishkek, <u>План действий «Зеленый город» будет реализован в Бишкеке</u>, *City Administration of Bishkek*, accessed 12 June 2024.

¹⁰² Based on proprietary information



electric vehicles, incentivising their purchase, establishing an electric charging network, creating a municipal 'green' taxi, implementing smart traffic lights, enhancing parking infrastructure, reconstructing the bypass road, landscaping roadside infrastructure and removal of road dust.¹⁰³

4.2 Asian Development Bank projects

'Electrification of urban transport'

In 2021, the Asian Development Bank (ADB) approved¹⁰⁴ financing for the procurement of 120 electric buses, refurbishment of two trolleybus depots, and the establishment of a pilot green mobility corridor. ADB's investment in this initiative comprises a USD 25 million loan and a USD 25.65 million grant.

The envisioned 3.5-kilometer-long 'green corridor' along Kievskaya Street from Ibraimova Street to Molodaya Gvardiya Avenue will feature¹⁰⁵ designated electric buses and bicycle lanes, optimised parking spaces, and enhanced pedestrian zones, with a budget of USD 5.5 million allocated¹⁰⁶ for this project.

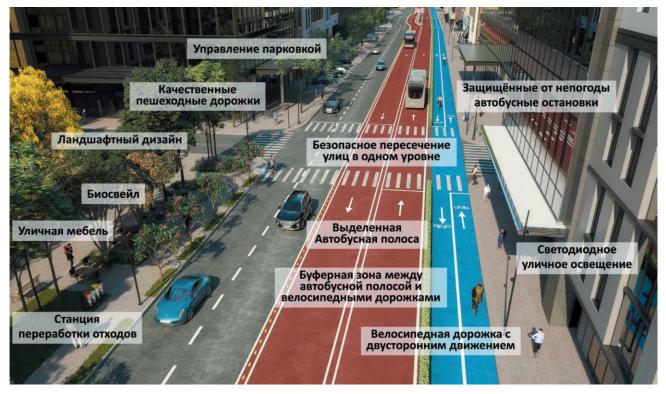


Figure 14. Green Mobility Corridor Pilot. Source: Asian Development Bank, unpublished material, 2023

¹⁰³ Interview with local project coordinator Gulnara Arymkulova, 27 March 2024.

¹⁰⁴ Asian Development Bank, <u>ADB Approves \$51 Million Battery-Electric Bus Project in the Kyrgyz Republic</u>, *Asian Development Bank*, 1 December 2021.

¹⁰⁵ Johannes Eberhard Vogel, <u>Bishkek Urban Transport Electrification Project</u>, Johannes Eberhard Vogel for Asian Development Bank, June 2022.

¹⁰⁶ Asian Development Bank, <u>Urban Transport Electrification Project: Procurement Plan</u>, *Asian Development Bank*, 5 March 2024.



According to the ADB press release, ¹⁰⁷ '120 electric buses will replace outdated diesel buses and trolleybuses'. This statement caught the attention of activists in April 2024 after the city hall announced considering transferring Bishkek's trolleybuses to other cities in Kyrgyzstan. The authors of the petition 'Preserve Bishkek trolleybuses' believe¹⁰⁸ that 'the reason for abandoning the trolleybus system is simple – new electric buses require depots and electric substations for charging. This is one of the conditions for the Asian Development Bank to allocate funds for the electrification of public transport'.

The ADB clarified that the purchase of 120 electric buses is not intended to replace the trolleybus system, and they did not discuss with the Kyrgyz government the gradual abandonment of trolleybuses. Trolleybuses play an important role and should be considered as a complement to electric buses. The press release mentioned 25 trolleybuses that are expected to reach the end of their life cycle during the implementation of the 'Electrification of urban transport' project. Charging stations for electric buses will be installed in two trolleybus depots that are currently unused, so this will not affect the number of trolleybuses.¹⁰⁹

Development of public-private partnerships (PPP)

Furthermore, in autumn 2023, ADB signed a memorandum¹¹⁰ with the Kyrgyz Republic to bolster the country's development of public-private partnerships (PPPs) across several sectors including urban mobility.

ADB's assistance will extend to the Kyrgyz Republic PPP Centre, offering support in project identification, preparation, and execution. This aid encompasses advisory services on strategic and regulatory aspects of PPP transactions, aiming to optimise commercial value within the country's economic framework and policies.

E-mobility Programme

In February 2024, funding was approved for the 'Electronic mobility program', which will be implemented by the ADB in partnership with the Green Climate Fund in seven countries, including Kyrgyzstan. Under this program, Kyrgyzstan will receive grant and credit funds totalling approximately USD 25 million for climateresilient urban infrastructure, including the development of bus lanes and infrastructure for non-motorised transport. Currently, the ADB and the Kyrgyz government are developing a program to implement these investments.

¹⁰⁹ Asian Development Bank's response, 21 May 2024.

¹⁰⁷ Ibid., footnote 104.

¹⁰⁸ Kyrgsoc, Initiative Group on Preservation of Bishkek Trolleybus, <u>Petition for preservation of ecological transport - Bishkek trolleybus</u>, *Avaaz.org*, accessed 12 June 2024.

¹¹⁰ Asian Development Bank, <u>ADB Partners with Kyrgyz Republic to Support PPP Development in Key Sectors</u>, *Asian Development Bank*, September 2023.



4.3 World Bank projects

The 'Urban mobility in central Asia' report,¹¹¹ compiled in 2020, seeks to pinpoint needs, gaps, and priorities for urban mobility in Dushanbe and Bishkek, while also devising policies and capacity development options for sustainable urban mobility in both cities.

Currently, a report is being prepared on the findings of the analytical work 'Sustainable and low-carbon cities in central Asia'. One of the project's outcomes will be the 'Development, administration, and analysis of data on urban mobility in Bishkek'. ¹¹²

Under the World Bank's technical assistance¹¹³ on urban mobility in central Asia, supported by the Korea Green Growth Trust Fund, municipal authorities from Bishkek, Almaty, Tashkent, Tbilisi, and Dushanbe are engaged in knowledge exchange¹¹⁴. Representatives from Bishkek Mayor's Office and the World Bank are collaborating on public transport administration matters, including traffic regulation methodology, studying experiences in constructing underground and elevated car parks, and receiving expert assistance in conducting aerial and topographic surveys for the general plan of Bishkek's development.¹¹⁵

4.4 United Nations Economic Commission for Europe (UNECE)

In 2023, the UNECE introduced¹¹⁶ a sustainable urban mobility policy focusing on carsharing and carpooling initiatives, aimed at exploring the potential emergence and growth of shared mobility services in Kyrgyzstan. This study outlines key principles and legal considerations for the development of carsharing and carpooling services specifically in Bishkek. The proposed recommendations from this study are intended to be incorporated into the 'Smart sustainable city Bishkek until 2033' concept. This larger concept is currently under development as part of the United for Smart Sustainable Cities (U4SSC) initiative, a global UN effort coordinated by the International Telecommunication Union, UN Economic Commission for Europe, and UN-Habitat.

4.5 Involvement of the civil sector by international banks

Activists argue that there is a lack of systematic effort from EBRD and ADB to engage the non-governmental sector in discussions regarding projects related to urban mobility. Organisations focusing on this area often receive information through general channels such as the media, after decisions have already been finalised. Moreover, the Bishkek offices of these international Banks lack individuals dedicated to working with the civil sector, understanding the local context, and identifying appropriate stakeholders for consultations. Communication tends to be ad hoc and relies heavily on personal connections.

¹¹¹ World Bank, <u>Public transport in Bishkek: past, present and future</u>, *World Bank*, accessed 12 June 2024.

¹¹² World Bank's response, 26 March 2024.

¹¹³ World Bank Group, Innovative Green Smart Urban Mobility for Bishkek, Nur-Sultan, and Tbilisi, World Bank, accessed 12 June 2024.

¹¹⁴ United Nations Economic Commission for Europe, <u>Developing sustainable urban mobility policy on car sharing and carpooling initiatives</u> <u>Kyrgyzstan</u>, *United Nations Economic Commission for Europe*, September 2023.

¹¹⁵ Ibid.

¹¹⁶ Ibid.



During the development of the 2023 GCAP, contractors hired by the EBRD actively involved citizens, including municipal staff, university representatives, and members of civil society. Through three workshop sessions, they verified collected data, discussed priority areas, and crafted the Action Plan. Representatives of the civil society were invited by the City Development Agency (CDA) under the Mayor's Office.¹¹⁷ But the CDA did not have staff dedicated to networking with community organisations. Consequently, many specialists interested in contributing to the discussions were not invited.

In 2023, the EBRD implemented a strategy for engaging with civil society and formed its first committee consisting of civil organisations. This Committee includes 13 international non-governmental organisations representing various regions where the EBRD operates. MoveGreen represents¹¹⁸ Kyrgyzstan on this committee.

4.6 Conclusions

Major infrastructure projects for the development of public transport in Bishkek are being implemented using credit and grant funds from the EBRD and ADB, with the transport departments of the city municipality serving as both the client and the executor. Civil society learns about the results of these projects through the media, which receive information from press releases issued by the city mayor's office and Banks' local offices. However, detailed information on project activities and outcomes is often lacking, and there is a lack of transparency in reporting. For example, while early media reports mention the study of the e-ticketing system by German consultants, who secured a USD 520 000 tender under an EBRD project, there has been no disclosure of the outcomes of this initiative. Furthermore, there is a lack of clarity regarding the public transport strategy of Bishkek city, which was supposed to be developed under another EBRD project. It remains uncertain whether the bank is associated with the current strategy. This highlights a broader issue: the absence of comprehensive information from the municipality detailing all activities under international loan and grant agreements in the transportation sector, hindering the assessment of project results. Currently, information must be gathered by bits, often resulting in discrepancies across different sources. Obtaining information from international banks is also challenging, with local offices failing to provide adequate data (ADB), or particularly in the case of the EBRD, which redirects inquiries to its headquarters, offering limited information. Additionally, there is a lack of systematic efforts to involve civil society organisations in discussions on the projects being implemented, both by the municipality and the Banks. This is concerning given that these projects rely on credit funds, the repayment of which imposes a burden on the country's economy.

Additionally, there is no systematic engagement of civil society organisations in project discussions by either the municipality or the Banks, despite the significant financial implications for the country's economy.

¹¹⁷ Interview with local project coordinator Gulnara Arymkulova, 27 March 2024.

¹¹⁸ MoveGreen, <u>Рады поделиться новостью, что МувГрин вошел в состав первого Руководящего комитета организаций гражданского общества (ОГО) EБРР, MoveGreen, 23 January 2024.</u>



5. Are there opportunities for civil society participation in urban politics?

5.1 Inefficiency of public discussions on normative legal acts

One of the mechanisms for civic participation in decision-making at the state level is through public discussions of normative legal acts (NLAs). Draft NLAs affecting the rights, freedoms, obligations of citizens, and introducing new regulations of public relations, are subject to public discussion by posting on the official website of the norm-making body.¹¹⁹

Information regarding the commencement of public discussions, including changes in the area of public transport, is published on the website of the mayor's office and later on the website of the Bishkek city council. Citizens can submit their opinions following guidelines. The period for public discussion of draft NLAs should be at least one month.

The current practice indicates¹²⁰ that the development and adoption of draft laws and regulations in Kyrgyzstan often occur hastily. The lack of an effective system for planning legislative work and mechanisms for public participation prevents citizens from timely response to proposed regulatory changes. For instance, the Mayor's Office announced¹²¹ one of the latest public discussions on public transport on 2 April 2024, stating that proposals and comments would be accepted until 16 April 2024 - resulting in a discussion period of only 14 days.

In 2020, the launch of a portal for public discussion¹²² of draft laws and regulations in pilot mode aimed to enhance the transparency and understanding of the rulemaking process. However, to date, not all ongoing discussions of NLAs have been posted on the portal, and the number of views of posted documents remains very low. Human rights activists have raised concerns¹²³ about violations in the platform's operation. Proposals and comments submitted within the framework of public discussion are not reflected in either the justification statements or on the site itself.

Citizens often become aware of new NLAs after they have already been adopted. The websites of the Mayor's Office and city council are not widely accessed, and media coverage of this information is insufficient. Additionally, the forms for submitting proposals and comments are not well-organised and are inconvenient for citizens. Furthermore, information about the outcomes of public discussions is not published anywhere left.

¹¹⁹ Ministry of Justice of the Kyrgyz Republic, <u>Закон Кыргызской Республики от 20 июля 2009 года № 241 О нормативных правовых актах</u> Кыргызской Республики, Ministry of Justice of the Kyrgyz Republic, accessed 12 June 2024.

¹²⁰ Ayana Ubysheva, <u>Участие граждан в нормотворческом процессе в Кыргызской Республике</u>, Ayana Ubysheva with the support of the International Centre for Not-for-Profit Law (ICNL), 2021, accessed 12 June 2024.

¹²¹ City Administration of Bishkek, <u>Уведомление о разработке проекта нормативного правового акта</u>, *City Administration of Bishkek*, accessed 12 June 2024.

¹²² Unified portal for public discussion of draft normative legal acts of the Kyrgyz Republic, *Ministry of Justice of the Kyrgyz Republic*, accessed 12 June 2024.

¹²³ Tatyana Kudryavtseva, <u>Портал общественного обсуждения работает некорректно. Просят срочно исправить</u>, *24.kg News Agency*, 09 December 2023.



Activists argue¹²⁴ that public discussions of draft laws in Kyrgyzstan are conducted merely as a formality, limited to posting documents on department websites. According to human rights activists from the 'Adilet Legal Clinic', the provisions of the law on public discussions of legal acts are ineffective and do not facilitate meaningful public discourse. State bodies often disregard the recommendations submitted by the public. Moreover, the law does not outline procedures for providing feedback to citizens who have submitted their suggestions and comments on drafts of NLAs.

5.2 Environmental Council as an example of a good dialogue platform

Many activists point to the Ecological Council as a positive example of interaction between the municipality and the civil sector. Established in 2020 at the initiative of environmental organisations with the support of Vice Mayor Aizhan Chynybaeva, the Ecological Council serves as a platform for collaboration and dialogue on environmental issues. This council was tasked with proposing solutions to environmental issues and operated on a voluntary basis, providing civil society with insight into municipal projects and allowing for monitoring and feedback. Public organisations had the opportunity to initiate meetings and provide information about their projects and studies to the municipality, enabling the municipality to make decisions based on this input. The Eco-Council initially had committees focused on air quality and greenery, with plans for additional committees on urban mobility, solid waste management, and urban planning. However, following the resignation of the vice-mayor, the council's activities were suspended, and it is currently inactive.

5.3 Lack of established interaction between the municipality and citizens

Public organisations in Bishkek highlight that the municipality's engagement with the civil sector lacks regularity, and there is a lack of active and efficient mechanisms for involving citizens and non-governmental organisations. Typically, communication is initiated by activists, but it often fails due to insufficient attention from the municipality.

On transport matters, the mayor's office collaborates¹²⁵ with the academic community of the Kyrgyz State Technical University named after I. Razzakov, but without incorporating representatives from the civil sector into the discussions.

Regarding urban mobility issues, the municipality frequently overlooks the opinions of end-users. For instance, the design department of Bishkekglavarhitektura devises plans for bicycle lanes without engaging the Bishkek cycling community.¹²⁶

Since October 2020, there has been a high turnover of mayors and other decision makers, which has had a detrimental impact on civil society activity. Within three years, there have been 10 changes¹²⁷ in mayoral appointments, hindering the establishment of conditions for continuity and institutional memory in urban

¹²⁴ Veronika Malysheva, <u>В Кыргызстане общественные обсуждения законов зачастую проходят лишь формально</u>, *Vesti.kg News Agency*, 21 November 2019.

¹²⁵ City Administration of Bishkek, <u>В Бишкеке прошло координационное совещание по вопросам транспорта</u>, *City Administration of Bishkek*, accessed 12 June 2024.

¹²⁶ From an interview with Urban Hub Bishkek representative Azhar Baisalova, March 25, 2024.

¹²⁷ Kaktus Media, <u>Вы их всех помните? За три года в Бишкеке девять (!) раз сменились мэры. Видео, Kaktus Media</u>, 2 November 2023.



policy and municipal operations. Furthermore, leadership rotations often occur across different spheres, resulting in newly appointed individuals lacking a profound understanding of the work specifics and the prevailing situation.

5.4 Civil Sector Initiatives

Until 2021, Kyrgyzstan enjoyed relatively favourable conditions for the non-governmental sector. This enabled the formation of active public organisations in Bishkek, representing citizens' interests. Although only a small number of organisations focused on urban mobility issues, some have come together to form an informal community called Urban Hub (UH). Their aim is to unite efforts in advocating for a comfortable and safe city, prioritising pedestrians, public transport passengers, and users of non-motorised personal mobility vehicles.

In 2021, activists from UH provided advice to political parties participating in the Bishkek city council) elections, urging them to prioritise a non-car-centric approach to Bishkek's development in their strategies. As a result, the theme of pedestrianised spaces and sustainable urban mobility became central to the campaign of one party.

In April 2022, UH analysed¹²⁸ the Mayor's new strategy for Bishkek's development, criticising its car-centric approach. They then forwarded their recommendations to the deputies of the city council responsible for approving the strategy. Consequently, the deputies presented UH's recommendations during a meeting with the mayor's office broadcast live on the Facebook page of the city council.

In November 2022, UH launched the 'One Bus Instead of Fifty Cars' campaign¹²⁹ to showcase how urban space is utilised based on the transportation mode chosen by citizens. As part of the campaign, 50 private cars occupied an area twenty times larger than that of a single bus capable of accommodating 50 people.



Figure 15. '1 bus instead of 50 cars' campaign. Photo: Urban Hub

¹²⁸ Urban Hub, <u>Предложения Урбан Хаба к Стратегии развития Бишкека</u>, *Peshcom*, 24 May 2022.

¹²⁹ Kaktus Media, <u>Фото дня. Сколько пространства на дороге занимают 50 автомобилей и один автобус</u>, Kaktus Media, 12 November 2022.



In 2023, UH collaborated with the Mayor's Office to craft an application for the Bloomberg Initiative for Cycling Infrastructure¹³⁰ (BICI) competition. BICI offers a competitive grant programme designed to foster the development of innovative cycling infrastructure, offering technical and financial support of up to USD 1 million. Through a joint working group¹³¹, plans were devised for routes and initiatives to enhance bicycle infrastructure in Bishkek. Problem areas were identified, and a budget was prepared. Regrettably, the developed project did not secure funding.

The MoveGreen public association consistently addresses¹³² the issue of air pollution in Bishkek. Their activism commenced with the installation of air quality monitoring sensors in 2017. Through MoveGreen's advocacy efforts, smog became recognised as a significant issue at both the city and national levels. In 2020, MoveGreen published a pioneering study pinpointing private heating as the primary source of winter air pollution in Bishkek. Additionally, in 2022, MoveGreen together with Peshcom conducted a study¹³³ further demonstrating the substantial impact of transportation on air quality.

Over the past three years, Peshcom has undertaken a series of urban interventions to highlight issues concerning pedestrian spaces, inadequate urban greenery, and unsafe cycling infrastructure. One successful intervention led to establishing¹³⁴ contact with a district administration head who initiated corrections to deficiencies in bike lanes that are on the sidewalks. However, when this head was reassigned, the efforts ceased.



Figure 16. Peshcom's urban intervention to paint a bike lane on the pavement. Photo: Peshcom

¹³⁰ Bloomberg Cities Network, <u>The Bloomberg Initiative for Cycling Infrastructure (BICI) is a competitive grant program that fosters catalytic change</u> in city cycling infrastructure around the world, *Bloomberg Cities Network*, accessed 12 June 2024.

¹³¹ Bishkek International, <u>Instagram post</u>, *Instagram*, 19 January 2023.

¹³² MoveGreen, <u>История бишкекского смога за 7 лет</u>, *MoveGreen*, 7 February 2024.

¹³³ MoveGreen, Peshcom, <u>Kak my dyshim dioksidom azota - opasnym antropogennym gazom</u>, *Peshcom*, 2022.

¹³⁴ Peshcom, <u>В минувшее воскресенье мы проехались с акимом Первомайского района Максатом Нусувалиевым по велополосам на</u> <u>тротуарах в центре Бишкека</u>, *Peshcom*, 3 August 2021.



In autumn 2023, Peshcom initiated¹³⁵ the revitalisation of the cycle lane on Toktogul street by proposing its separation from the roadway with delineators, to prevent parking on it. While initially gaining support from the Vice-Mayor Maksatbek Sazykulov and the City Development Agency (CDA), the bike lane on the road was introduced, however¹³⁶ still remains incomplete. The CDA has since been disbanded, with its functions transferred to a new department. In April 2024, Vice-Mayor Maksatbek Sazykulov was <u>detained¹³⁷</u> by the State Committee for National Security for abuse of his official authority and organising a corruption scheme.

The public association Road Safety¹³⁸ advocates for the establishment of safe road infrastructure near schools and the implementation of a policy to reduce speed limits to 30 km/h. In partnership with The Department for Road Safety of the Ministry of Internal Affairs, they modernised¹³⁹ three intersections near schools in 2021 and 2022. The modernisation efforts included replacing pedestrian and traffic LED traffic lights, installing safety islands and additional lighting, repairing adjacent pavements, stairs, and ramps, reducing pedestrian crossings length, renewing road markings and signs, and removing kerbs. In 2023, the Road Safety piloted¹⁴⁰ a 30 km/h speed limit near three schools in Bishkek where accidents involving child pedestrians were prevalent.



Figure 17. Installation of a pedestrian safety island. Photo: Road Safety NGO

- ¹³⁶ 312 News, <u>В Бишкеке улицу Токтогула начали обустраивать для велосипедистов</u>, 312 News Agency, 20 September 2023.
- ¹³⁷ Mihail Gotfrid, <u>В ГКНБ рассказали, за что задержали вице-мэра Бишкека Максатбека Сазыкулова</u>, Vesti.kg, 15 April 2024.

¹³⁵ Peshcom, <u>Предложения по организации выделенной двусторонней велополосы по ул. Токтогула</u>, *Peshcom*, accessed 12 June 2024.

¹³⁸ Public Association Road Safety, Общественного объединения «Дорожная безопасность», *Public Association Road Safety*, accessed 12 June 2024.

¹³⁹ Public Association Road Safety, При поддержке наших партнеров завершена модернизация перекрестка Московская–Бейшеналиева, *Public Association Road Safety*, accessed 12 June 2024.

¹⁴⁰ Public Association Road Safety, <u>Ограничена скорость до 30 км/ч вокруг трех школ г. Бишкек</u>, *Public Association Road Safety*, accessed 12 June 2024.



Every year, the public association 'Velofriends positive KG'¹⁴¹ organises the opening and closing of the cycling season in Bishkek. The event is held in collaboration with the municipality, which involves restricting traffic along the cycling route. In 2023, an estimated 1,000 cyclists participated in the autumn cycling event.

5.5 Centralisation of power in urban governance

In 2021, the Kyrgyz president introduced a new law titled 'On Local State Administration and Local Self-Governance Bodies',¹⁴² granting sole authority to the president to appoint mayors of cities of regional significance. Under this law, the Parliament approved¹⁴³ the measure in a closed session, excluding media representatives from the meeting room. Previously, mayors were appointed by the city council, with candidates nominated by factions, the majority coalition, and the head of the cabinet.

The city council is an elected representative body of the city government, chosen by the city residents and operating on a collegial basis.

In 2022, a faction of the parliament proposed a draft law for the direct election of the mayor of Bishkek by the city's residents. However, the Cabinet of Ministers expressed opposition to the bill, leading to its rejection¹⁴⁴ during the initial reading by the deputies.

In 2023, the Cabinet of Ministers proposed¹⁴⁵ a law titled 'On Amendments to Some Legislative Acts of the Kyrgyz Republic in the Sphere of Local Self-Governance', aiming to diminish the powers of the city councils of Bishkek and Osh while granting more authority to the mayors of these cities. Under this bill, the city councils would have been relegated to a mere supervisory role, stripped of their ability to make significant decisions. They would lose control over city budgets, the ability to assess the performance of municipal officials, and the power to reprimand or dismiss mayors. Passage of this law would have deprived city residents of the opportunity to influence urban policy through the election of city council deputies. However, the parliament rejected this bill, preserving the existing balance of power in local governance. Nonetheless, as part of the administrative-territorial reform initiated in 2024, the mayor of Bishkek was granted¹⁴⁶ certain autonomous decision-making powers, such as approving the capital's budget and setting public transport fares.

¹⁴¹ <u>Public association 'Velofriends positive KG"</u>, accessed 12 June 2024.

¹⁴² Ministry of Justice of the Kyrgyz Republic, <u>Закон от 20 октября 2021 года № 123. О местной государственной администрации и органах</u> <u>местного самоуправления</u>, *Parliament*, accessed 12 June 2024.

¹⁴³ Sputnik, <u>Жогорку Кенеш принял законопроекты Садыра Жапарова — зал был полупустым</u>, Sputnik Kyrgyzstan News Agency, 6 October 2021, updated 15 December 2021.

¹⁴⁴ Radio Liberty, <u>Депутаты ЖК отклонили законопроект о прямых выборах мэра Бишкека</u>, *Radio Free Europe/Radio Liberty*, 6 April 2023.

¹⁴⁵ Spetchreportazh.kg, <u>«Зачем вы тогда нужны?»</u>, *Spetchreportazh.kg Youtube channel*, 16 February 2024.

¹⁴⁶ Maria Orlova, <u>Территориальная реформа. В БГК одобрили делегирование части полномочий мэру</u>, 24.kg News Agency, 25 April 2024.



6. Shrinking civic space in Kyrgyzstan

On 2 April 2024, the President signed into law 'On Amendments to the Law of the Kyrgyz Republic "On Non-Profit Organisations" (the "Foreign Representatives Law")' mirroring Russia's 'Foreign Agents Law', drawing criticism¹⁴⁷ from both local and international human rights organisations. The adopted law introduced new burdensome requirements for all non-profit organisations (NPOs). Among other discriminatory provisions, the law empowers state bodies to interfere in the internal affairs of NPOs and conduct checks on their activities; compels NPOs receiving funding from foreign sources and engaging in broadly defined 'political activities' to undergo special registration as 'foreign agents'; and mandates mandatory annual financial audits. Importantly, such requirements do not apply to commercial organisations and government bodies.

Additionally, on 29 March 2024, the Pervomaisky District Court of Bishkek extended a ban on peaceful assemblies in the capital's centre until 30 June 2024, which has been in place for over two years, after several anti-war rallies in support of Ukraine near the Russian Embassy. This decision contradicts the Kyrgyz Republic's Constitution, which guarantees the right to freedom of peaceful assembly. Human rights activists have consistently opposed this ban, emphasising citizens' constitutional rights.

Furthermore, on 20 March 2024, Askat Zhetigen, a singer, composer, and komuzist, was arrested and detained for two months for criticising the authorities on social media. He faces charges under the article on calls for violent seizure of power. Zhetigen has been vocal in his criticism since 2021, addressing various issues including opposition to the legalisation of gambling, changes to the national flag, imprisonment of activists, and cultural reforms.

In early January 2024, the presidential administration introduced a new media law, marking the fifth iteration of the document. Drafted by a working group established by presidential decree in December 2022, the law raised concerns over its potential threat to freedom of expression and independent media in Kyrgyzstan. Seen as a move to bolster state control over the media and limit public access to diverse information sources, the proposed law faced criticism from the expert community, human rights advocates, and international organisations. An analysis¹⁴⁸ by the Kyrgyz Republic Ombudsman Institute, aided by international experts, concluded that the draft law conflicted with universally recognised principles and international legal standards. Consequently, in March 2024, the President withdrew the draft law, instructing for further revisions to be made.

On 15 January 2024, the news agency 24.kg's editorial office was raided, and its managers were subjected to interrogation. The State Committee for National Security (GKNB) initiated criminal proceedings against the journalists for 'Propaganda of War'. Violations of the legislation of the Kyrgyz Republic and international law were reported during the raids and interrogations. Following the interrogations, the publication's leaders were released, having reportedly signed non-disclosure agreements. In March, it was disclosed that there was a change in the ownership of the publishing house, accompanied by the resignation of the editor-in-chief.

¹⁴⁷ International Centre for Not-for-Profit Law, <u>Analysis of the Kyrgyz Republic Law on Foreign Representatives</u>, *International Centre for Not-for-Profit Law (ICNL)*, updated on 5 April 2024.

¹⁴⁸ Vesti.kg, <u>Институт Омбудсмена призывает власти КР доработать законопроект о СМИ</u>, *Vesti.kg*, 31 October 2023.



Subsequently, on 16 January 2024, searches were carried out in the homes of journalists from various publications, leading to the arrest of 11 journalists. They faced criminal charges under the article 'Calls for Mass Disorder'. By March, three journalists had been released under house arrest, while the detention of the others was extended for an additional two months.

In February 2024, the independent journalistic media Kloop Media was shut down by a court ruling, with the justification that most of its publications aimed to discredit state and municipal authorities. The court cited discrepancies in the organisation's charter as the official grounds for its liquidation.

Meanwhile, numerous activists, journalists, and public figures detained in October 2022 for protesting a contentious land swap with Uzbekistan involving the Kempir-Abad water reservoir remain in custody, facing charges of 'inciting mass disorder' and 'attempted violent seizure of power'. The investigation and trial proceedings in this case have been accompanied by numerous procedural violations.

According to the international non-governmental organisation Freedom House¹⁴⁹, Kyrgyzstan has been classified as an unfree country, with a freedom rating of 27 out of 100, political rights at 4 out of 40, and civil liberties at 23 out of 60. Previously, from 2009 to 2021, Kyrgyzstan was categorised as partially free.

Additionally, in 2023, Kyrgyzstan experienced a decline in the rankings by the international civil society alliance Civicus Monitor¹⁵⁰, shifting from the group of 'countries with oppression of civil liberties' to the group of 'repressive countries'.

7. Recommendations

'A city on the needle of total automotive dependence becomes infunctional, inefficient and inconvenient for life. The goal of the transport system is to move people, not vehicles.'

B. Vuchic 'Transportation for Livable Cities'

7.1 Sustainable urban mobility

For many years, the Bishkek municipality has been planning the city according to the principle of a 'city for cars', and as a main measure to combat congestion, primarily by expanding road infrastructure through road reconstructions and new constructions. However, global experiences demonstrate that these efforts do not lead to sustained improvements in the long run.

Designing cities and its transport infrastructure around traffic creates negative effects that lead¹⁵¹ to 1.25 million deaths from road traffic accidents and 3.2 million premature deaths due to air pollution.

¹⁴⁹ Freedom House, <u>Kyrgyzstan</u>, *Freedom House*, accessed 12 June 2024.

¹⁵⁰ Civicus, <u>Watchlist March 2024</u>, *Civicus*, accessed 12 June 2024.

¹⁵¹ United Nations Economic Commission for Europe, <u>A Handbook on Sustainable Urban Mobility and Spatial Planning- Promoting Active Mobility</u>, *United Nations Economic Commission for Europe*, 5 September 2020.



Increasing pollution, destruction of the urban environment due to the road infrastructure expansion, climate change, increasing traffic congestion and growing public health risks necessitate a shift towards a new paradigm in urban transport system development. Given the current challenges, it is crucial to prioritise the creation of sustainable and livable environments for the long term.

Recommendation: We suggest adopting the 'Sustainable Urban Mobility Plan' (SUMP) concept, widely embraced by European cities, as a guiding framework. The concept of 'sustainable mobility' aims to promote safer and environmentally friendly modes of transportation, thus ensuring the mobility needs of the population are met. This innovative approach seeks to lessen reliance on cars, optimise current transport systems, and promote sustainable modes of travel. It prioritises creating environments where citizens can meet their needs with minimal city movement, rather than solely focusing on boosting traffic flow and speed.

In 2016, Malmö, Sweden, implemented its first comprehensive Sustainable Urban Mobility Plan. The primary aim was to promote walking, cycling, and public transport. Malmö has developed a standard accessibility index to assess the impact of measures implemented, generate accessibility maps, facilitate comparisons across various neighbourhoods and demographic groups, and aid in investment decision-making. This index relies on eight accessibility criteria for ten different destination types, including public transport hubs, city centres, shopping centres, schools, health clinics, grocery stores, parks, sports complexes, and playgrounds. Moreover, the index incorporates a variety of mobility options, ensuring access to diverse sustainable transportation modes.

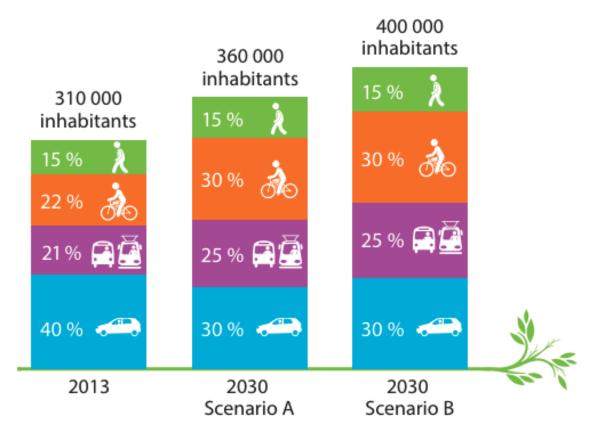


Figure 18. Targets for transportation modes in Malmö, considering population growth under two scenarios. Source: SUMP Malmö, 2016



In the strategies and plans of the Bishkek City Hall there is a limited sustainable development scenario - an increase in the share of public transport, cycling and walking. Efforts to improve public transport are currently underway, but initiatives to enhance conditions for cycling and walking are less visible. Plans addressing these modes of transport lack specificity and clear indicators of progress.

The development of the Bishkek SUMP will lead to the establishment of a more resilient urban mobility system in the capital. This plan aims not only to alleviate traffic congestion and reduce pollution but also to enhance the overall quality of life for citizens, including social justice, health, and economic vitality.

The European Commission has many valuable resources¹⁵² on SUMP in open source. It's essential that the development of such a plan by the Mayor's Office is conducted in an open and participatory manner, engaging citizens and stakeholders throughout.

7.2 Spatial planning

The layout of a city and its urban planning significantly influences the transportation choices made by its residents.

In the past few decades, Bishkek has experienced rapid urban population growth, resulting in the city's expansion. This expansion has led to the occupation of large areas, inefficient land use, low population density, and increased dependence on cars. Consequently, Bishkek's urban space has become disjointed and inefficient, resulting in the loss of urban advantages and the essence of urban living.

According to CARL's research¹⁵³ 'Sustainable and low-carbon cities of central Asia', Bishkek is following a leapfrog development pattern, characterised by declining population density and expanding urban development footprint. Between 1990 and 2020, the city's population density decreased by 2 per cent (285 inhabitants) per square kilometre, while the urban footprint increased by 62 per cent.

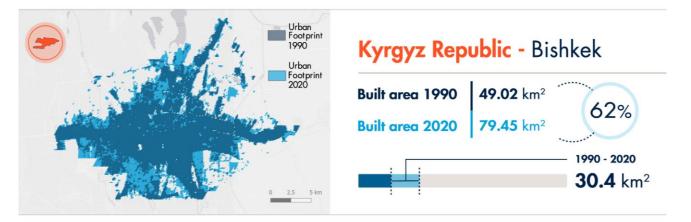


Figure 19. Over the past 30 years, Bishkek's urban footprint has increased by 62 per cent. Source: The Central Asia Resilient and Low-Carbon Cities Study, 2023

¹⁵² European Commission, <u>Sustainable urban mobility planning and monitoring. SUMP concept and guidelines</u>, *European Commission*, accessed 12 June 2024.

¹⁵³ World Bank, <u>Central Asia resilient and low-carbon cities (CARL-cities): Summary findings 2023</u>, World Bank, accessed 12 June 2024.



Recommendation: Until now, Bishkek's administration has primarily addressed congestion rather than tackling the core issue of urban sprawl. However, the most effective solution for the city would involve implementing the '15-minute city' (or 'compact city') policy and enhancing last-mile transportation options.

The '15-minute city' concept involves developing compact urban areas with diverse amenities within a short walking distance from residents' homes. These amenities include workplaces, shops, service businesses, cafes, parks, schools, and kindergartens, among others.

The greater the number of points of interest within walking distance, the more likely people are to walk and use vehicles less.

The essence of the concept is that within a 15-minute radius on foot, by bicycle, or using public transport, residents can reach essential destinations. City neighbourhoods should not be designed for a single purpose—residential, commercial, tourist, or office—but should be mixed-use, incorporating various functions.

Currently, nearly all districts of Bishkek face significant deficiencies in access to essential city services and amenities, including medical and educational facilities, public spaces, sports venues, and cultural establishments.

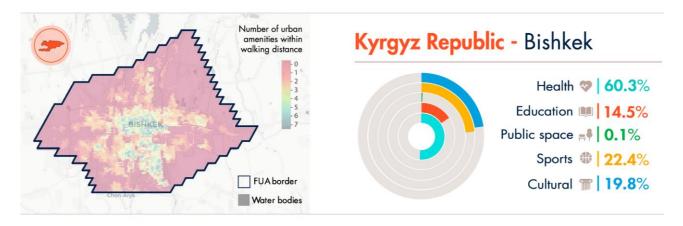


Figure 20. Average share of Bishkek population with access to infrastructure within walking distance. Source: Central Asia Resilient and Low-Carbon Cities Study, 2023

The Chief Architect of the City of Bishkek has announced¹⁵⁴ the initiation of a 'new general plan' for the city, considering that the current plan extends only until 2025. We recommend that the municipality integrates the principles of the '15-minute city' into this new plan.

7.3 Active mobility

As the population of a city increases, it becomes essential to diversify transportation options and mobility modes. In dense urban areas, it's crucial to establish suitable conditions for various types of mobility, including walking and cycling. Promoting different forms of active mobility is a vital aspect of sustainable urban transport planning.

¹⁵⁴ Maria Orlova, <u>Территориальная реформа. Для Бишкека разработают новый Генплан</u>, 24.kg News Agency, 25 April 2024.



The development of active urban mobility brings benefits to individuals in the form of reduced medical expenses due to improved health, as well as to city authorities through reduced healthcare costs.

The increasing prevalence of personal vehicle usage in the city, coupled with factors such as the rise of internet services and automation in labour, contributes to a significant increase in physical inactivity among the population. This sedentary lifestyle leads to approximately 1.9 million deaths worldwide annually, attributed to conditions associated with physical inactivity such as obesity, diabetes, and depression.

According to research, if we take into account the costs of treating diseases caused by environmental pollution and assessing the risk of road accidents, it turns out that every kilometre driven by a car in European countries costs¹⁵⁵ society an average of 15 euro cents. At the same time, every kilometre cycled brings EUR 16 to society due to the improvement in the health of citizens and the absence of negative effects from using a car.

In Copenhagen¹⁵⁶, there are over a thousand kilometres of dedicated cycle paths and several hundred kilometres of cycle lanes. The investment in one kilometre of cycle path proves to be economically viable within five years, primarily due to the improved health outcomes for regular cyclists. Notably, car traffic on these routes decreases by 10 per cent, while bicycle traffic sees a 20 per cent increase. Approximately 40 per cent of residents opt to commute to work or school by bicycle, resulting in annual savings of EUR 235 million for the state treasury.



Figure 21. Copenhagen, cycle path and cycle lane. Source: chriskarlson.com (left), Modmo.io (right)

The development of active mobility also has a positive impact on the city economy. Research conducted by the Bartlett School of Planning, University College London, and the London Department of Transport revealed that pedestrians and cyclists spend¹⁵⁷ 40 per cent more in stores compared to motorists.

¹⁵⁵ Stefan Gössling, Andy S. Choi, <u>Transport transitions in Copenhagen: Comparing the cost of cars and bicycles</u>, *Science Direct*, 23 March 2015.

¹⁵⁶ Ibid., footnote 150.

¹⁵⁷ Transport for London, <u>Walking and Cycling: The Economic Benefits Summary Pack</u>, *Transport for London*, accessed 12 June 2024.



Furthermore, the study found that employees who commute to work by bicycle take sick leave 1.3 times less frequently, resulting in an annual savings of £128 million for the country's economy.

Recommendation: Given that physical activity significantly impacts health outcomes, integrating active mobility into Kyrgyzstan's health policy is justified. This process can engage not only city services but also public organisations.

We recommend that the Bishkek municipality creates the necessary conditions and promotes cycling and other forms of active mobility alongside public transportation to integrate regular physical activity into the daily routines of citizens. This entails ensuring safety, primarily through dedicated infrastructure and increasing the priority of the bicycle as a mode of transport. For instance, all cycle highways leading from the outskirts to Copenhagen (totaling over 28) are physically separated¹⁵⁸ from the main roads, rather than simply marked on the roadside.

Cycling infrastructure should cater¹⁵⁹ to the needs of 99 per cent of residents, not solely those who cycle in specialised gear and nice cycling shorts. It's essential to construct infrastructure not just for current cyclists, but for everyone who has the potential to cycle—regardless of age or income level.

Integrating active mobility into Bishkek's transportation development will yield not only public health advantages but also other economic benefits, including:

- Reducing noise levels and emissions of pollutants into the atmosphere,
- Reducing traffic congestion,
- Reducing injuries on the roads,
- Reduced costs for road infrastructure,
- Improving accessibility and quality of city life,
- Development of tourism and creation of new jobs.

7.4 Public transport and walkability

The distribution of street space between modes of transport is determined¹⁶⁰ by capacity which refers to the number of passengers that a particular system can accommodate per lane. The capacity of a 3.5 metre wide lane is approximately the same for buses and bicycles – about 4,000 passengers per hour, which is roughly four times higher than what a car travel lane can carry (about 1,000 – 1,200 passengers per hour).

Rail transport indeed offers the highest capacity. Consequently, when capacity is limited, priority is given to rail transport, followed by pedestrians, trackless public transport, bicycles, and finally, cars, in that order of precedence for allocation of space.

¹⁵⁸ Let's bike it!, <u>Учимся у Копенгагена: больше инноваций, меньше лайкры</u>, *Let's bike it!*, 15 February 2015.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid., footnote 150.



Studies indicate that when travelling by bus, emissions of pollutants can be reduced¹⁶¹ by 1.3 to 5 times in comparison to travelling by car. Thus, the greater the capacity of the vehicle, the lower the environmental pollution per passenger transported.

For the sustained effectiveness of public transport, two critical attributes are necessary: minimal waiting times and a comprehensive network of routes covering all areas with significant transport demand. Ideally, intervals on main routes should range¹⁶² from 5 to 10 minutes, enabling most users to rely less on schedules and decrease waiting times.

Public transport must possess the capability to adjust to fluctuating passenger loads. During periods of high demand, standard buses may not suffice in terms of capacity. In such instances, consideration should be given to enhancing vehicle capacity and planning for the development of rail modes of transport. Rail transport offers superior adaptability, as the capacity of rolling stock and throughput can be gradually increased without the need for extensive infrastructure restructuring.

In Ottawa, Canada, a shortsighted decision to prioritise transportation development around dedicated bus rapid transit routes resulted in the overloading of these lanes and buses struggling to manage rising passenger volumes. Consequently, this compelled a costly transition from the bus system to light rail.

Convenient transfers between routes and modes of transport are crucial for creating a public transport network that can compete with private car usage. It is important that transfers are convenient at all intersections of two or more routes. Since many of these intersections are standard junctions, it's vital to have stopping points with minimal distances between them. Ideally, public transport should converge at the same stopping area whenever feasible.



Figure 22. Cross-platform transfer from bus to tram in Dusseldorf, Germany. Source: Handbook on Sustainable Urban Mobility and Spatial Planning, UNECE, 2020

¹⁶¹ Hanna Kalenoja, <u>Energy consumption and environmental effects of passenger transport modes - a life cycle study on passenger transport modes</u>, *Tampere University of Technology Transportation Engineering*, accessed 12 June 2024.

¹⁶² Ibid., footnote 150.



In this context, adopting a pedestrian-centric approach to stopping points (stations) is essential for an efficient public transport system and should be considered as part of it. This entails creating a comfortable network of pedestrian paths that are well-lit and shielded from dirt and noise, passing through an appealing urban environment. The attractiveness of the walking routes directly influences the distance pedestrians are willing to traverse.

France has implemented several initiatives to encourage pedestrian traffic, including the installation of pedestrian signs indicating distances in minutes. These signs effectively illustrate that many destinations are much closer than people perceived. Surveys conducted in nine cities across France revealed that 90 per cent of citizens responded positively¹⁶³ to these pedestrian signs, prompting plans for their further expansion.



Figure 23. Pedestrian sign indicating distances in minutes in Grenoble City. Photo: Handbook on Sustainable Urban Mobility and Spatial Planning, UNECE, 2020

Recommendation: Rather than investing in costly and potentially impractical projects that raise concerns regarding their accessibility and ability to accommodate expected capacity, like the cable car, we suggest that the Bishkek municipality prioritise more efficient solutions. In the medium term, consideration could be given to constructing an above ground rail link. Additionally, transport planning efforts should aim to expand geographical coverage and incorporate pendulum migrants into the user base, recognising their reliance on the city's transport infrastructure. Exploring the development of rail transport for 'village to city' routes could further reduce reliance on private cars in urban and suburban areas.

In Basel-Stadt, Switzerland, the most impactful measure for commuter transportation was the establishment of a Pendlerfonds¹⁶⁴ fund, which gathers revenue from paid parking. This fund supports

¹⁶³ Ibid., footnote 150.

¹⁶⁴ Basel Unterwegs, <u>Pendlerfonds – was ist das denn?</u>, *Basel Unterwegs*, accessed 12 June 2024.



various projects within the agglomeration, such as the expansion of a tram line connecting Switzerland and France. Considering that the Bishkek agglomeration aligns along the existing railway from west to east, a comparable fund in Bishkek could foster the growth of alternative transportation methods. This approach would be more constructive than implementing restrictions on suburban cars entering the city, as suggested in the the Concept for reducing traffic congestion and increasing road network capacity.

We suggest that the Bishkek municipality shift its perspective on pedestrian traffic, viewing it as an integral part of urban mobility rather than an obstacle to car traffic. Instead of prioritising vehicular flow, efforts should be directed towards enhancing pedestrian infrastructure in conjunction with other forms of active mobility, thereby reducing car dependence. For instance, the construction of underground and overground passages, as outlined in the city's development plans, poses considerable barriers to pedestrian movement. This approach contradicts the principles of the '15-minute city' and diminishes Bishkek's appeal as a pedestrian-friendly environment.

7.5 Multimodal Streets

A simplistic approach to transportation, where modes are strictly segregated, hinders the integration of transport into a unified system. Ultimately, passengers prioritise factors such as time-saving, safety, environmental impact, and cost, rather than the specific vehicle type or engine technology. Historically, the metro, city railway, and tram originated as integrated modes of transport but became fragmented over time, resulting in inconvenience and unnecessary transfers for passengers. Presently, efforts are being made to reverse this trend through integrated ticketing systems that allow unlimited transfers across all modes of transport within a specified time frame, such as a 90-minute ticket validity period.

Multimodality (co-modality, intermodality) refers to the development of an integrated transportation system that fosters synergy among various modes of mobility.

Another example of multimodality is the integration of public transportation and cycling. Together, these two modes of transport offer sustainable door-to-door travel over long distances. This approach allows many individuals to shorten the first and last miles to and from public transit stops and transit hubs. To implement this scheme effectively, it is crucial to ensure that public transit stops are seamlessly connected to the entire network of cycling routes in the city. Additionally, providing safe cycle parking at key points of connection with the public transport network is essential. Public transport ticketing systems could also offer financial incentives to promote flexible mobility, such as discounts on bike rentals and bike parking.

Many cities have acknowledged the significance of cycling and are integrating this mode of transportation into their sustainable mobility plans as part of a comprehensive transport system.

7.6 Road safety

Given the number of road accidents in Bishkek, the plans to increase traffic speeds outlined in the 'concept for reducing traffic congestion' appear illogical. High speeds do not contribute to safety; rather, they serve as a primary cause to accidents. Nearly half of all road fatalities worldwide are¹⁶⁵ 'vulnerable road users' –

¹⁶⁵ Ibid, footnote 150.



pedestrians, cyclists, and motorcyclists. Moreover, road accidents persist as the leading cause of death among young individuals aged 15-29 years.

Motorists often oppose speed reduction measures, fearing that it will cause traffic jams. However, in reality, this is not the case. Higher car speeds result in increased following distances, meaning that faster driving does not necessarily translate to improved street throughput. Conversely, optimal urban street capacity is believed to be achieved at speeds of 50-60 km/h, and reducing speeds to 30 km/h only marginally increases travel time by a few minutes. Moreover, quieter streets are more conducive to cycling and walking, especially for older individuals and children, potentially reducing the need for certain car journeys.

Wider car lanes pose challenges in adhering to speed regulations. Consequently, numerous countries are adopting a 'road diet' approach, enhancing street safety and encouraging drivers to abide by traffic laws.

Road diet¹⁶⁶ or changing the configuration of the roadway by reducing the width and lanes. This calms traffic and provides better mobility and accessibility for all road users. This also provides space for bike lanes, public transport lanes, and sidewalks.

Urbanists from Kazakhstan were pioneers of this concept in central Asia, with Almaty City Hall adopting similar measures in 2019, including safety islands, separated bicycle paths, and also working towards reducing speed limits from 40-60 km/h to 30-50 km/h to enhance street safety.

Almaty has embraced the Vision Zero strategy as part of its development programme.¹⁶⁷ Vision Zero acknowledges that human error is inevitable, advocating¹⁶⁸ for a road transport system designed to minimise the severity of accidents. This approach places responsibility for road safety on the system's designers rather than pedestrians. The effectiveness of this concept is evident in various cities. For instance, in Minsk, road fatalities have decreased¹⁶⁹ sixfold over a decade, reaching a historic low in 2022. Similarly, in Sweden, where Vision Zero originated, road deaths have dropped by nearly 75 per cent since 2000.

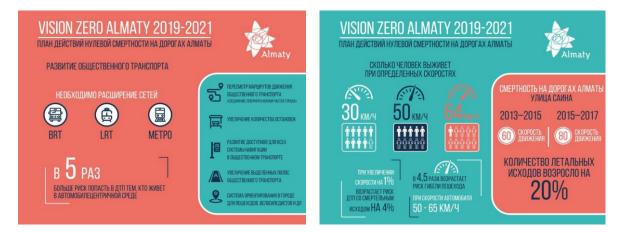


Figure 24. From the concept 'Zero Vision Almaty. Source: Vision Zero Almaty Facebook page

¹⁶⁶ Federal Highway Administration, <u>Road Diets (Roadway Reconfiguration)</u>, U.S. Department of Transportation Federal Highway Administration, accessed 12 June 2024.

¹⁶⁷ City administration of Almaty, <u>Программа развития города Алматы до 2025 года и среднесрочные перспективы до 2030 года</u>, *City administration of Almaty 2022*, accessed 12 June 2024.

¹⁶⁸ Vägverket, <u>Безопасность дорожного движения-Концепция нулевой смертности</u>, *Vägverket*, April 2006.

¹⁶⁹ Belta, <u>В 2022 году смертность на дорогах столицы достигла минимума за 20 лет</u>, Belta News Agency of Belarus, 4 April 2023.



Parking lots can also be utilised to slow down vehicle speeds. For example, in Zurich, parking is arranged in a zigzag pattern on both sides of narrow streets, creating ¹⁷⁰ obstacles for vehicle traffic. Similarly, Amsterdam features 'residential street' zones ('woonefs'), where residents park their cars in a way that creates curved lane, encouraging slower speeds near cyclists and pedestrians.

Recommendation: Bishkek experiences one-third¹⁷¹ of all road accidents in the country, resulting in over 3,000 casualties each year. Given that one of the primary reasons for these accidents in Kyrgyzstan is drivers surpassing speed limits, the municipality should prioritise traffic calming measures over road expansion. Implementing speed limits of 20-40 km/h or 30-50 km/h, and considering the Vision Zero concept are advisable. Additionally, gradual adoption of a 'road diet' approach could be beneficial.

7.7 Organisation of parking spaces and car-free zones

Parking policy is a crucial aspect of traffic management. Analysis of the experience of European countries demonstrated that successfully implemented Unified Parking Space (UPS) systems, alleviates urban congestion, decreases¹⁷² traffic volume by approximately 30 per cent, and enhances accessibility to key destinations.UPS encompasses various measures such as implementing paid parking, encouraging off-street parking, restricting parking, setting time limits for parking, regulating parking capacity for new developments, exploring alternative uses for parking spaces, and establishing park-and-ride facilities.

Intercept parking refers to parking facilities situated close to major transportation routes catering to the needs of the population going from places of residence (usually peripheral residential areas of the city) to places of work (such places are usually located in city centres). These parking lots help alleviate traffic congestion by encouraging individuals to use public transportation instead of personal vehicles. Typically located near public transport stops at the outskirts of urban areas, intercept parking lots enable car owners to park their vehicles and easily transfer to public transit options for onward travel into the city centre.

Street parking fees are implemented to better utilise urban space and influence the travel choices of individuals who rely on cars. Pricing mechanisms aim to incentivise drivers to opt for off-street parking or alternative modes of transportation. In cities like Zurich, Antwerp, Vienna, and Madrid, on-street parking pricing strategies are designed to gradually increase fees over time, discouraging prolonged parking – as the duration of parking extends, the hourly rates increase, encouraging drivers to consider shorter stays.

In cities like Hamburg, Zurich, and Budapest, central areas enforce a maximum parking limit as part of urban reform efforts. This policy restricts the current number of parking spaces and prohibits the creation of new parking areas. Additionally, any new off-street parking zones established within designated areas require the removal of an equivalent number of parking spaces elsewhere.¹⁷³ Furthermore, some cities impose additional taxes on businesses providing parking for their employees.

¹⁷⁰ Ibid., footnote 150.

¹⁷¹ Alexey Juravlev, Altynai Nogoibaeva, Aigerim Ryskulbekova, <u>"Hardly staying alive". Why doesn't the number of road accidents in Kyrgyzstan</u> <u>decrease, and what can we do about it?</u>, *Peshcom*, 7 November 2023.

 $^{^{\}scriptscriptstyle 172}$ lbid., footnote 150.

¹⁷³ City administration of Zurich, Parking - Historic Compromise Parking Cap, City administration of Zurich, accessed 12 June 2024.



The need for parking differs significantly between residents and short-term visitors in urban areas, leading many European cities to implement special parking permits in residential neighbourhoods. This measure aims to address the specific parking requirements of residents, particularly in areas where there is high demand for parking near their homes.

Many cities entrust the regulation of parking spaces to private companies equipped with digital monitoring systems to oversee parking activities. A growing trend involves allocating a portion of parking revenue to support environmentally friendly transportation initiatives, such as public transport, pedestrian infrastructure, and cycling facilities. Barcelona set a notable example by allocating 100 per cent of its parking revenue to fund a public bike-sharing programme.

Restricting or even prohibiting the presence of cars in pedestrian areas is a common practice, with emergency and courier service vehicles typically being the exception. For instance, in Cambridge (UK), the historical city centre has been closed off to cars, resulting¹⁷⁴ in a significant surge in demand for public transport. The aim of increasing public transport ridership by 20 per cent within 4 years was surpassed in just 3 years, with a remarkable 30 per cent increase in traffic volume. This successful implementation required gathering the support of the majority of the population, which was achieved through resident engagement in decision-making processes and numerous community meetings.



Figure 25. In the city of Parla, Spain, the central district was closed off to cars, and instead, rail transport was implemented. Photo: Handbook on Sustainable Urban Mobility and Spatial Planning, UNECE, 2020

¹⁷⁴ Ibid., footnote 150.



In Paris, the city municipality has initiated several projects to expand public spaces by decreasing car parking availability. Similarly, in Copenhagen, extensive lengths of streets have been transformed into pedestrian zones, with hundreds of parking spots removed in the process.

In Oslo, the capital of Norway, city officials implemented a ban¹⁷⁵ on parking in the city centre in 2019, replacing all parking spaces with bicycle paths, greenery, and seating areas. To accommodate car owners, multi-level underground parking facilities were constructed around the perimeter of the city centre.

In 2013, Moscow transformed¹⁷⁶ one of its now most popular pedestrian streets, Nikolskaya. Prior to the renovation, it was an unsightly and impassable street cluttered with chaotically parked cars.



Figure 26. Nikolskaya St. before (left) and after (right) reconstruction. Photo: stalist.livejournal.com (left), Alexey Juravlev for Peshcom (right)

Despite the specific characteristics of individual cities, all the measures discussed are aimed at reducing the overall mileage of private cars within urban areas and promoting the development of alternative modes of mobility.

Recommendation: Bishkek City Hall initiated the implementation of paid municipal parking in 2020, with a fixed fee of KGS 25 (approximately USD 0.3), irrespective of the duration of the car's stay. Attendants in orange vests oversee payments and issue receipts at 36 locations¹⁷⁷ throughout the city, which are essentially informal parking areas along roadsides.

¹⁷⁵ Adele Peters, <u>What happened when Oslo decided to make its downtown basically car-free?</u>, Fast Company & Inc, 24 January 2019.

¹⁷⁶ Alexey Juravlev, <u>Полмиллиона машин на миллион жителей. Почему бишкекчанам приходится выбирать автомобиль для передвижения?</u>, *Peshcom*, September 2019.

¹⁷⁷ City Administration of Bishkek, <u>Муниципальные парковки, эвакуатор: в столице продолжается борьба с пробками</u>, *City Administration of Bishkek*, accessed 12 June 2024.



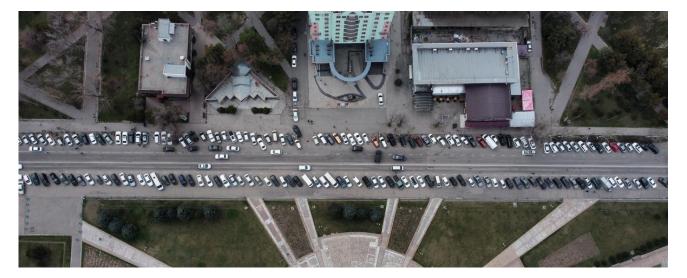


Figure 27. Municipal parking on both sides of Shopokov Street near the Central Department Store (TSUM). Photo: Anna Karamurzina for Peshcom

Additionally, free parking is permitted on streets lacking prohibition signs.



Figure 28. Free perpendicular parking on both sides of Toktogul Street. Photo: Anna Karamurzina for Peshcom

In April 2024, the mayor's office announced a tender for automated parking services. We suggest considering hourly parking fees, progressively increasing with each subsequent hour, and organising parallel parking on narrow streets with appropriate markings and signage where perpendicular parking is impractical. Furthermore, we propose reducing street parking in central areas, particularly near major shopping centres equipped with off-street underground parking facilities.

The proposal to transform a street into a fully pedestrian area has been discussed at the municipal level multiple times in recent years, yet no concrete action has been taken. We recommend ramping up efforts in this regard by engaging relevant public organisations, conducting thorough preliminary and final studies, and devising a comprehensive plan for street reprogramming.



7.8 Electric buses versus trolleybuses

Recently, the global spotlight has been on the adoption of electric buses, and Kyrgyzstan is following suit. In collaboration with the Asian Development Bank, Bishkek is set to receive 120 electric buses, with ongoing modernisation of trolleybus depots to accommodate them.

Electric buses have several benefits over their internal combustion counterparts. They're more appealing and comfortable, eliminate the need for gas infrastructure investments, operate on locally sourced renewable energy, and contribute to energy independence by reducing reliance on oil.

In reality, electric buses typically require¹⁷⁸ 10-15 minutes of dedicated charging time. This translates to downtime during each hour of operation, necessitating more buses, drivers, and increasing operating costs by 15-16 per cent. Recognising this challenge, some cities are opting to revive trolleybus systems, leveraging dynamic recharging to address these issues.

7.9 Electric cars and electric scooters

Kyrgyzstan is witnessing a rising trend in promoting individual electric vehicle usage. Alongside customs duty exemptions, other incentives¹⁷⁹ such as special parking privileges, reduced traffic violation fines, and lower car taxes are being considered. Municipal taxis using electric vehicles may also gain access to dedicated lanes for public transport.

Important: In Sweden, excessive incentives for private electric vehicles had unintended negative ¹⁸⁰ consequences. Public transport lost its advantages on dedicated lanes due to overcrowding, leading to a significant increase in private vehicle usage. This resulted in environmental pollution from tire abrasion, more road traffic accidents, and increased congestion. While <u>measures to promote electromobility</u> are positive for reducing environmental impact, <u>they should never compromise the priority of public transport</u> <u>over individual transport</u>.

Recommendation: While efforts to promote electric vehicle usage are underway in Bishkek, electric scooters remain overlooked. With the rise of courier services, electric scooters are gaining popularity as a sustainable alternative to diesel vehicles, addressing noise pollution and air quality concerns. They're also more affordable, making them accessible to a wider demographic. Urban mobility plans should incorporate electric scooters, necessitating infrastructure development and regulatory frameworks. Charging stations designed for electric vehicles are not suitable for scooters, so integration is recommended. Regulation is needed for scooter usage to ensure safety, as currently, no driving licence or vehicle registration is required, leading to unsafe practices on sidewalks and bike lanes. Poor road conditions and motorists' attitudes further add to safety concerns for electric scooter users.

¹⁷⁸ Ibid., footnote 150.

¹⁷⁹ Vesti.kg, <u>Владельцам электромобилей будут предоставлять льготы - подписан закон</u>, *Vesti.kg News Agency*, 25 April 2024.

¹⁸⁰ Ibid, footnote 150.





Figure 29. Electric scooters in Bishkek, April 2021. Photo: 24.kg

7.10 Public participation

Smart transport solutions can reduce travel needs by a third,¹⁸¹ yielding direct economic benefits for individuals, businesses, and city budgets. However, incorrect decisions can worsen the situation, resulting in significant losses. In Kyrgyzstan, including Bishkek, substantial investments are made in road transport infrastructure, often funded by the state budget, international grants, and loans. Past experiences highlight issues with poor project quality and corruption in road transport projects. Loan repayments will impact Kyrgyzstan's economy for years. It's evident that urban mobility development investments require sound management and extensive stakeholder engagement, including citizens. Unfortunately, civil society feels increasingly disconnected due to lack of transparency, control mechanisms, and involvement in planning processes, compounded by centralised power and restrictive laws limiting public participation and influence.

Ensuring transparency and involving the public in planning processes are crucial for sustainable urban mobility. We strongly recommend enhancing collaboration with non-governmental organisations and active citizens. This entails developing effective mechanisms for civic participation, building on existing structures like public discussions and environmental councils. Facilitating this process would involve appointing individuals, such as community managers, responsible for engaging with the civil community, akin to press secretaries managing media relations. Adjusting and refining existing mechanisms based on public organisation recommendations will further enhance community involvement and decision-making continuity in municipal services.

¹⁸¹ Valentina Leonchik, Pavel Astapenya, <u>Планы устойчивой городской мобильности: зарубежный опыт и рекомендации для Беларуси</u>, *Friedrich Ebert Foundation*, accessed 12 June 2024.



Using existing platforms such as the 'My City' app¹⁸² and the city hall website monitoring.meria.kg, which previously posted budget expenditure information, would be beneficial. Continuously updating and expanding these platforms to include details on international loans and projects, particularly in the transport sector, would enhance transparency and citizen engagement further. This approach leverages accessible channels to keep the public informed and involved in urban mobility initiatives.

International banks and organisations investing in Kyrgyzstan should prioritise the inclusion of civil society in both the planning and monitoring stages of urban mobility projects, even though these projects are commissioned by municipal authorities.

¹⁸² MP "Center for Digital Technologies" of the Bishkek City Hall, "My City" application, Google Play, accessed 12 June 2024.