

Central Asian public transport between decline narratives and authoritarian modernisation

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Abstract. After the demise of the Soviet Union, economic decline, political upheaval and lack of funds led to a significant decrease in public transport provision in Central Asia. Entire systems were closed down, many more significantly curtailed. *Marshrutka* minibuses became the predominant feature of public transport in the region – with decline and informality as the dominant analytical lenses. However, recent developments cast doubt on this paradigm. Significant investments have been made into metro systems in Tashkent and Almaty, or into Dushanbe's trolleybuses. Samarkand has seen the opening of a tramway system – a unique case in the entire former Soviet Union. How to make sense out of these seemingly counterintuitive developments? Based on media reports and rolling stock database analyses, the paper attempts to scrutinise current developments in the sphere of public transport in Central Asia, to complicate the post-independence decline paradigm of public transport provision, and to embed it within translocal knowledge flow circuits.

Keywords: Public transport, modernisation, reforms, marshrutki, trolleybus

Introduction

In mid-December 2020, a new three-kilometre-long trolleybus line was brought into service in Dushanbe, the capital of Tajikistan. Remarkably, this has been the first line extension in the city since the late 1980s – in a network that has mainly seen decline, closures, detours and empty promises ever since. In Uzbekistan, in the course of thirty years after independence in 1991, six stations were added to Tashkent's metro system. Only the last year has seen the opening of 15 more. Furthermore, Samarkand stands out as the only city in the entire former Soviet Union where a new tramway system was built from scratch in 2017. How should we make sense of these developments? Does the expansion of local public transport signify an increased awareness towards socially relevant and environmentally friendly mobilities? Is this a genuine redefinition of state capacities and policy instruments after decades of disinvestment and neglect, or merely a consultant-driven effort to greenwash and smartify an otherwise unsustainable model of mass motorisation? Or is it simply another gilded gimmick, akin to the monorail in Ashgabat's "Olympic Village"? This paper proposes to overcome widespread deficiency narratives and to pay closer attention to long lines of infrastructural development and thought, as well as to local and national state capacities and ambitions. Overall, the paper admittedly raises more questions than it answers, and may not deliver a coherent conceptual framework. Rather, it should be seen as a first and descriptive step to build upon for further inquiry and comparative endeavours.

The ambition of this paper is, thus, to draw attention to phenomena that re-equilibrate our perception of Central Asian urban public transport. Indeed, it has been depicted both in media (Stanradar 2019), scholarship (Grdzelišvili, Sathre 2008) and activism (Varlamov 2020) in terms of post-Soviet decline and deficiency: widespread line closures, decrepit vehicles, unreliable service, and a ubiquitous incursion of dominantly privately provided minibus services, locally known as *marshrutki* – themselves more often than not depicted in unfavourable and exoticising terms. As Cima and Sovová (2022) have pointed out, the post-socialist realm is largely viewed as providing anything but best practice when it comes to energy and mobility transitions or, indeed, societal transitions more broadly:

Although studies framing the socialist past as an obstacle to modernisation were promptly refined by more critical scholarship (...), they permeated public discourse, dictating that Eastern societies get rid of socialist legacies as quickly as possible (...) At the same time, the essentialisation of the socialist past as a determining experience contributed to its reification and persistence. In this way, entire societies are trapped in a symbolic in-betweenness that is associated with failure and backwardness (...). The simultaneous stigmatisation and fixation of the socialist past reaffirm the (post)socialist subject as other (...) in spite of the convergence of Eastern politico-economic regimes to Western Europe.

It is in this conundrum of globally unequal productions of knowledge and modernities that the article attempts to place the development of Central Asian public transport modes and systems.

The paper is based on an analysis of the Transphoto rolling stock database (Transphoto 2024). This is an online bottom-up non-profit community of mostly Russian-speaking public transport enthusiasts. The website provides an unfathomable source of information on systems throughout the globe, yet with a particularly detailed outlook on the former Soviet Union. Almost every single post-Soviet tram and trolleybus vehicle in service may be found there. The database focuses on urban

electric public transport modes, and does not take buses, long-distance rail, etc. into consideration. Transphoto data is the basis for graphs and charts of this study, which reflect all tramway, trolleybus and metro systems that have been in service in Central Asia, currently and historically. The Transphoto picture metadata provides information on vehicle series, manufacturers, provenience, transfers, state of repair and other details. Still, as every other crowdsourced resource, the information needs to be treated with the appropriate caution, for example, with regard to data completeness or biases of the contributing population (Bittner et al. 2016). Since no other comparable sources from state statistical offices, transport agencies, or research institutions have covered the region in this regard, the reliability risks and biases associated with crowdsourced databases seem a fair price to be paid. Additional information was drawn from newspaper sources and secondary literature.

The surprising 1990s: Overcoming decline narratives

Public transport provision in the five Central Asian republics is, as of now, largely analysed and assessed in the light of the Soviet past. With the exception of Tashkent's tramway, dating back to the Russian Empire, all urban public transport systems in the region have been part and parcel of the Soviet infrastructural society-engineering mega-project. In the Soviet Union, urban transport systems were the responsibility of different ministries of the member republics – buses mostly under the jurisdiction of the Ministry of Automotive Transport and electric urban transport systems under the Ministry of Communal Services. Their high hierarchical position indicates the importance of public transport for Soviet urban administration. A system of cross-subsidies and annual debt write-offs enabled the financial survival of these systems (Akimov, Banister 2011).

Considering infrastructures as cornerstones of modernity is by no means specific to the Soviet and post-Soviet realm. Soviet-era developmentalism, the gigantic scope of infrastructural projects with the plethora of implications on nature, human lives and livelihoods had their respective counterparts in other world regions as well. Consider for example, the far-flung implications of transcontinental railways in North America, or China's high-speed rail network. However, these high modernist ambitions of mastering and subduing nature, and the creation of the new, socialist Man through infrastructures were declared state policy, and spelt out and celebrated accordingly. The investments into urban public transport – from the capital cities up to the farthest peripheries of the Union – are therefore one little element of this infrastructural-developmental paradigm.

Infrastructures of the past shape and prefigure urban and regional futures, because of their decade-long period of existence. The common infrastructural heritage justifies, for the purpose of this paper, the specific regional containerisation of Central Asia. Large technological systems are still reminiscent of Soviet-era connectedness – in terms of physical infrastructures such as the formerly common electric grid, pipelines, railway gauges – materialities, as well as related memories, practices, institutions and normativities.

Table 1: Opening and closing dates of Central Asian electric public transport systems, as of April 2021. Own calculations based on Transphoto data.

Note: Tashkent data reflects the broad-gauge tramway system (1936-2016). Prior to that, the city also had a horse tramway (1897-1912) and a narrow-gauge tramway system (1912-1968)

Country	City	Opened	Closed
Kazakhstan	Aqtöbe	1982	2013
Uzbekistan	Olmalıq	1967	2009
Kazakhstan	Almaty	2011	—
Kazakhstan	Almaty	1937	2015
Kazakhstan	Almaty	1944	—
Uzbekistan	Andijon	1970	2002
Turkmenistan	Ashgabat	1964	2012
Kazakhstan	Astana	1983	2008
Kazakhstan	Astana	2026	—
Kazakhstan	Atyrau	1996	1999
Kyrgyzstan	Bishkek	1951	2024
Uzbekistan	Bukhoro	1987	2005
Tajikistan	Dushanbe	1955	—
Uzbekistan	Farghona	1971	2003
Uzbekistan	Jizzakh	1990	2010
Tajikistan	Khujand	1970	2012
Kazakhstan	N.Bukhtarma	1979	1981
Uzbekistan	Namangan	1973	2010
Kyrgyzstan	Naryn	1994	2025
Uzbekistan	Nukus	1991	2007
Kyrgyzstan	Osh	1977	—
Kazakhstan	Oskemen	1959	—
Kazakhstan	Pavlodar	1965	—
Kazakhstan	Petropavl	1971	2014
Kazakhstan	Qaraghandy	1950	1997
Kazakhstan	Qaraghandy	1967	2010
Kazakhstan	Qostanay	1989	2005
Uzbekistan	Samarkand	1947	1973
Uzbekistan	Samarkand	1957	2005
Uzbekistan	Samarkand	2017	—
Kazakhstan	Shymkent	1968	2005
Kazakhstan	Taraz	1979	2013
Uzbekistan	Tashkent	1936	2016
Uzbekistan	Tashkent	1947	2010
Uzbekistan	Tashkent	1977	—
Kazakhstan	Temirtau	1959	—
Uzbekistan	Urganch	1997	—

Tramway, open
 Trolleybus, open
 Metro, open
 Tramway, closed
 Trolleybus, closed

The collapse of the Soviet Union brought forth widespread failures in transport, water, heating, electricity, or healthcare provision, and marked the disruption of infrastructures built on the assumption of a political – and thus technological – unity. Alongside old industrial regions, particularly the peripheries of the former Soviet Union experienced cutbacks, not only because of economic downturns but also due to out-migration of experts, and regional conflicts, with borders cutting through elaborate railway, pipeline or electricity grids. Yet, perhaps most significantly, the shift from a centralised infrastructural regime to individualised, fragmented and ailing systems affected relations between citizens and the state. Unstable provision was coupled with steadily rising costs, which, in many cases, was the most important single factor for a still prevailing nostalgia for the Soviet Union as a caretaker state.

Economic decline and the political turmoil of the 1990s, however, led to a substantial abatement of publicly run transport. Responsibility for providing public transport services was transferred from central ministries to the municipalities, without any appropriate transfer of funding (Gwilliam 2001). The ageing rolling stock was decaying, and no resources were available for the purchase of new vehicles or even spare parts, or the maintenance of overhead lines. Running vehicles were taken out of service to cannibalise the spare parts. Municipalities throughout Central Asia attempted to privatise bus fleets and created legislative frameworks for line tendering in the course of the 1990s – with various degrees of success (Akimov, Banister 2010; Finn 2007; Gwilliam 2001). In contrast to the bus systems, tram and trolleybus systems did not lend themselves to privatisation due to high initial investment costs, and they continued to place a severe financial burden on urban budgets (Muktarbek uulu 2008). Therefore, municipalities either had to keep up high levels of subsidies (up to 70 per cent of the running costs according to Akimov and Banister 2011; up to 98 per cent according to Gwilliam 2000), or decide to close down the systems. In the case

of Uzbekistan, apart from failing public budgets, market protection interests played an important role in closing down trolleybus systems, as this provided a large market for the locally produced GM Uzbekistan minibuses – ‘Damas’ – and Isuzu Uzbekistan midi-buses. These were the heydays of the massive replacement of the public ‘large-volume’ tram or bus lines with *marshrutki* (Rekhviashvili, Sgibnev 2018).

Out of the more than 30 electric public transport systems that were built in Central Asia in Soviet times, two-thirds were closed down after the demise of the Soviet Union (see table 1 for a historical overview of closed and open systems). Almost all fixed-track systems in Uzbekistan were closed down, with the notable exception of the interurban trolleybus line between Khiva and Urgench. Most systems in Kazakhstan are not running any longer, and the remaining ones have experienced severe cutbacks. Turkmenistan’s only trolleybus network in Ashgabat was cut down to one line out of eight in the early 2000s and closed entirely in January 2012, with the vague promise of a metro line to be built in some distant future.

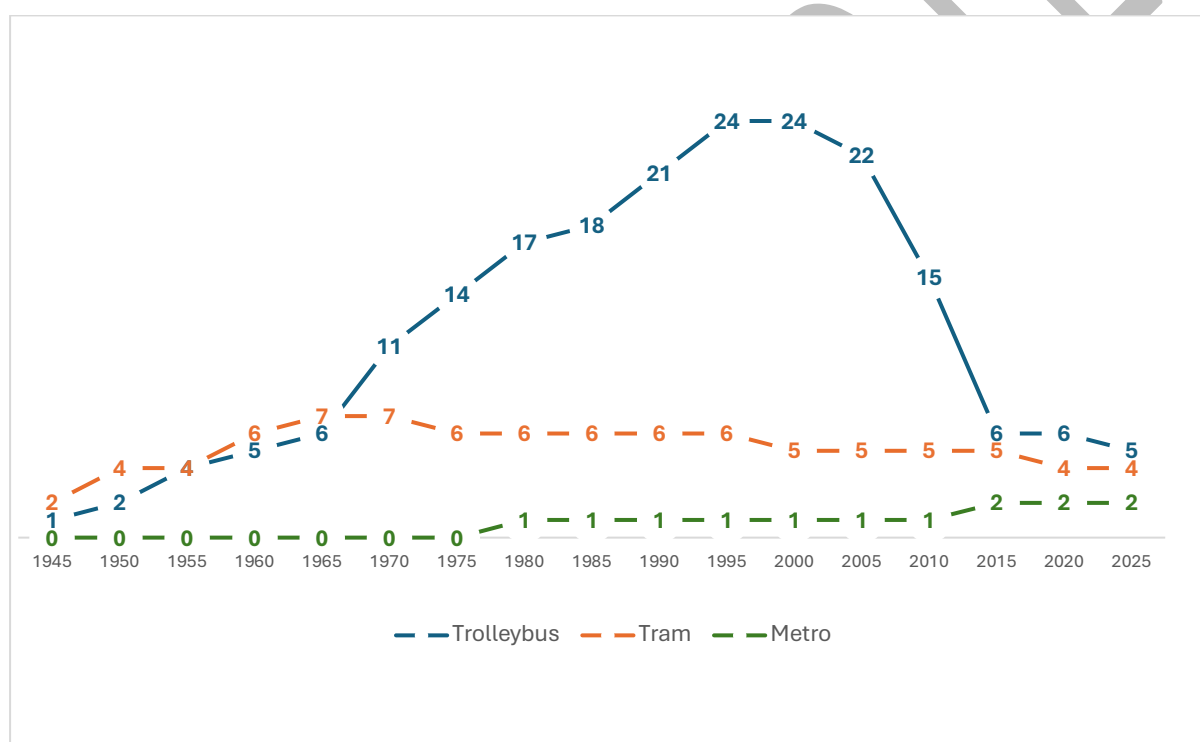


Figure 1: Number of active electric public transport systems in Central Asia. Own calculations based on Transphoto data

In Kyrgyzstan and Tajikistan, the picture looks somewhat different: although these two countries were hit worst by the dissolution of the USSR, local trolleybus systems are almost all in place and have received substantial public funding over the last few years. The fleets in both capitals – Bishkek and Dushanbe – have been renewed, not to mention the small system in Naryn in the Tien-Shan Mountains that opened in 1994 in the midst of economic turmoil after independence. A second line is being built for the trolleybus system in the southern Kyrgyz city of Osh. Notably, both the Bishkek and Naryn trolleybus systems have been recently shut down – in the case of Bishkek, amidst a tremendous public resistance and still ongoing litigations – a process too large and too recent to be covered here in full detail (for further details see Borubaeva and Muleev 2024). In Tajikistan, Khujand

closed down its trolleybus network in 2012, after many years of agony, yet rumours of a potential re-opening surface every now and then.

Large-scale investments in Soviet times, a rapid decline thereafter, massive rise of *marshrutki*, and then, some sporadic and unsustainable investments here and there, represent classic public transport trajectories, along the lines of many other accounts of post-Soviet infrastructure provision. This account is not only present in scholarship but has also been firmly internalised by many local actors, caught in a self-orientalised suspense between the loss of a Soviet-era modernity project, and a prospectively unattainable bright sustainable mobility future. Yet it is worth delving into the details, in order to decipher some intriguing developments that run counter to this narrative.

Looking at the total number of active electric public transport systems in the region, two trends are worth noting: First, the Soviet era also saw the shutdown of a tramway system – the one in Samarkand – which happened to be rebuilt 44 years later. Second, the peak for active trolleybus systems occurred, with a total of 24, in the year 2000, almost ten years after independence (Figure 1). Counterintuitively, line extensions and system openings took place well after the end of the Soviet Union. In Khujand, for instance, the interurban trolleybus line to (what was then) Chkalovsk and Ghafurov opened in stages from 1995 to 1999, in spite of the ongoing Tajik civil war. Taking aside the much later openings of the Almaty metro and the Samarkand tramway, the “wild” and austere 1990s saw a linear continuation of Soviet-era trolleybus system openings in the region (Table 2). Surely, most of these systems were already on the drawing board well before independence. Worth noting is the institutional and societal inertia that kept those projects running, and brought them, eventually, to fruition – in spite of a dire economic situation and a general lack of funding. Yet back then, Soviet-era knowledge networks, supply chains, and institutional practices seemingly still worked well enough to make these projects feasible and affordable.

Country	City	Mode	Opened	Closed
Kazakhstan	Almaty	Metro	2011	—
Kazakhstan	Astana	Metro	2026	—
Kazakhstan	Atyrau	Trolleybus	1996	1999
Uzbekistan	Jizzakh	Trolleybus	1990	2010
Kyrgyzstan	Naryn	Trolleybus	1994	2025
Uzbekistan	Nukus	Trolleybus	1991	2007
Uzbekistan	Samarkand	Tramway	2017	—
Uzbekistan	Urganch	Trolleybus	1997	—

Table 2: Central Asian electric public transport systems opened after 1990. Own calculations based on Transphoto data.

An even more revealing exercise consists of adding those systems to the picture that have demonstrably been under construction, yet have been mothballed before opening (Table 3). The timeline spans the entire 1990s. The list includes second-order cities in Kazakhstan, Kyrgyzstan and Uzbekistan. For the latter, it would have brought electric public transport to almost every provincial capital. Transphoto forum members speculated about the existence of a state-wide investment programme for mid-sized cities in Uzbekistan in the mid-1990s, which might have been at the roots of this development. The suspicion is that symbolic capital equally played a role: as every capital city

deserves a true metro, each regional capital surely deserves its own trolleybus network – or at least displayed the ambition to receive one. This might also have played out at the local level, where trolleybus construction served as a local prestige project – as in Qorako'l with its 17,000 inhabitants, where the local governor's ambitions might have played a larger role than actual transportation needs. Further, personal connections of regional leaders with policymakers in the capitals, party politics and regional balances were key in funnelling public transport investments to provincial cities.

Under construction, never opened			
Country	City	Mode	under construction in...
Uzbekistan	Qarshi	Trolleybus	1989-1990
Kyrgyzstan	Jalal-Abad	Trolleybus	1990-1991
Kyrgyzstan	Balykchy	Trolleybus	1992-1994
Uzbekistan	Qorako'l	Trolleybus	1994-1997
Uzbekistan	Navoiy	Trolleybus	1996-1998
Kazakhstan	Turkistan	Trolleybus	1999-2000

Table 3: Central Asian trolleybus systems in advanced state of construction, never opened. Own calculations based on Transphoto data

Fuelled by national or local ambitions, either way, the investment programmes did not prove successful or long-lasting. Most construction projects never saw completion. Out of the five which were actually brought into service, only the one in Urgench survived until the current day. Most probably, construction investments from the 'centre' were not matched by local operating and maintenance funds. Unstable electricity provision, rising motorisation rates, and waning political support brought these latecomer trolleybus systems to an untimely end.

Nevertheless, the sheer presence of latecomer systems and construction sites in the 1990s shows that the demise of the Soviet Union did not put an immediate end to Soviet-era transport planning trajectories. Interestingly, this kind of trajectory is not to be found in other parts of the former Soviet Union, nor in the conflict-ridden South Caucasus, nor in the Russian Federation or the Baltics, where mass motorisation was faster to unfold. The catch-up modernisation project stuck more firmly at the formerly Soviet periphery than elsewhere, and with it, the infrastructural appeal of trolleybuses. The successful cases of Urgench (until today) and Naryn (up until 2024) are, in this regard, worth further scrutiny, as potential sites of a localised translation of Soviet-era public transport plans and ambitions to new societal, political and economic conditions, as testing grounds of some sort of regional, Central Asian, public transport knowledge paradigm which builds on legacy infrastructures and re-develops them in the light of novel conditions.

White elephants amid decline: 2000-2015

Roughly, the years from 2000 to 2015 may be seen as the darkest ones for electric transport in the region. For two decades, trolleybus systems were able to survive on virtually no investment, instead relying on makeshift maintenance, the ingenuity of staff, and captive riders (Sgibnev 2019). Yet at some point, the 1980s rolling stock came to the end of its life cycle. Decreased rolling stock availability led to ever-increasing service intervals. Lacking maintenance led to continuous

breakdowns and, therefore, utterly unreliable service levels. Voluntarily deferred maintenance, coupled with rising motorisation, led to an increased number of road space conflicts and accidents. Trolleybus switches are illustrative in this regard: these may be located a couple of metres in front of an intersection. Dated or malfunctioning switches force trolleybuses to come almost to a halt in order to allow the traction poles to change from one wire to another. For drivers, trolleybuses braking at – from a driver’s perspective – unexpected locations became an accident-prone nuisance. Eventually, public transport passengers turned to *marshrutki*, leaving either the elderly – still entitled to free travel – or the poor waiting on the stops for trolleybuses that may never come (Vozyanov 2014). Thus, municipal public transport got stuck in a vicious circle of disinvestment, loss of farebox revenue, dwindling municipal backing, and dire public imagery.

With public transport planning – in line with many other planning decisions throughout the globe that are prone to elite projections on the added values of policies – municipalities grew reluctant to invest in “social” services. Instead, they pushed for *marshrutki*, accepting “social” fares, often with no or limited effect, yet still coupled with disinvestments into municipal public transport offers. In Khujand, the trolleybus system allegedly closed down after the municipality refused to invest some 10,000 € in the repair of an electric substation. Other systems closed due to real estate projects vying for depot premises. Widening roads at the expense of track alignments in the populist assumption that this would help alleviate traffic jams, or removing tracks and wires from central squares and thoroughfares for representational purposes, were further sources of public transport’s decline in these years. All in all, the end of most electric transport systems in the region was neither master-planned nor spectacular, yet substantial and comprehensive.

Nevertheless, a few cities did not exhibit this rapid decline. In the course of the 2000s, maintaining the status quo can already be seen as a particular phenomenon. This concerned such systems as the Oskemen tramway and the Tashkent metro, since rail-based vehicles have longer life spans than (trolley)buses. In the case of Tashkent, huge passenger flows and national representativity ambitions equally contributed to maintaining a state of good repair. Furthermore, large-scale investments were injected into trolleybus systems in Dushanbe and Bishkek. In Tajikistan, the investments were terrific indeed, considering the country’s otherwise dire budget: roughly US\$ 15 million was spent on trolleybuses from 2005 to 2010. State money was directly allocated to the town of Dushanbe for trolleybus purchases, reflecting in no way the financial capacities of the city-owned transit company Dushanbepassgortrans (Sgibnev 2014).

In Dushanbe, 45 trolleybuses built in the 1970s-1980s had survived the 1990s, sufficient to provide a basic service on a rudimentary network. In 2001, four vehicles were purchased from the Russian TROLZA factory – the first investment in the electric transit system since independence. 2004-2006, one hundred more were delivered to Dushanbe. A follow-up contract in December 2008 ensured another delivery of 60 trolleybuses in February 2009. In Bishkek, the administration proved its commitment to the trolleybus system as well, even if on a smaller scale: 35 TROLZA vehicles joined the rolling stock from 2001 onwards, and 21 units from the Minsk-based Belkommunmash plant in 2009 (Sgibnev 2014). The older TROLZA engines were immediately scrapped after the 2005 delivery, although they were still in running condition. Even the four vehicles delivered in 2001 were put out of service. Out of 160 engines available, barely 90 were in daily service, as of 2012. A total of 70 vehicles stood still – considerably more than necessary for an emergency reserve. One reason

for this was the lack of staff: drivers found good employment opportunities in Russia's trolleybus systems and were therefore prone to labour migration. Furthermore, the large funding aimed at renewing the capital's trolleybus fleet had no financial follow-up at all to provide for maintenance of the new vehicles, or the overhead wire system. As no financing for spare parts exists, drivers either had to shoulder these costs themselves or brand-new trolleybuses were cannibalised for spare parts to keep the rest of the fleet running. At least 20 machines from the latest deliveries have already been scrapped due to a lack of maintenance and spare parts. The decision to renew the vehicle fleet seems, therefore to be excessive and unsustainable, given the low rate of rolling stock maintenance, driven to a large extent by the desire for symbolic activity.

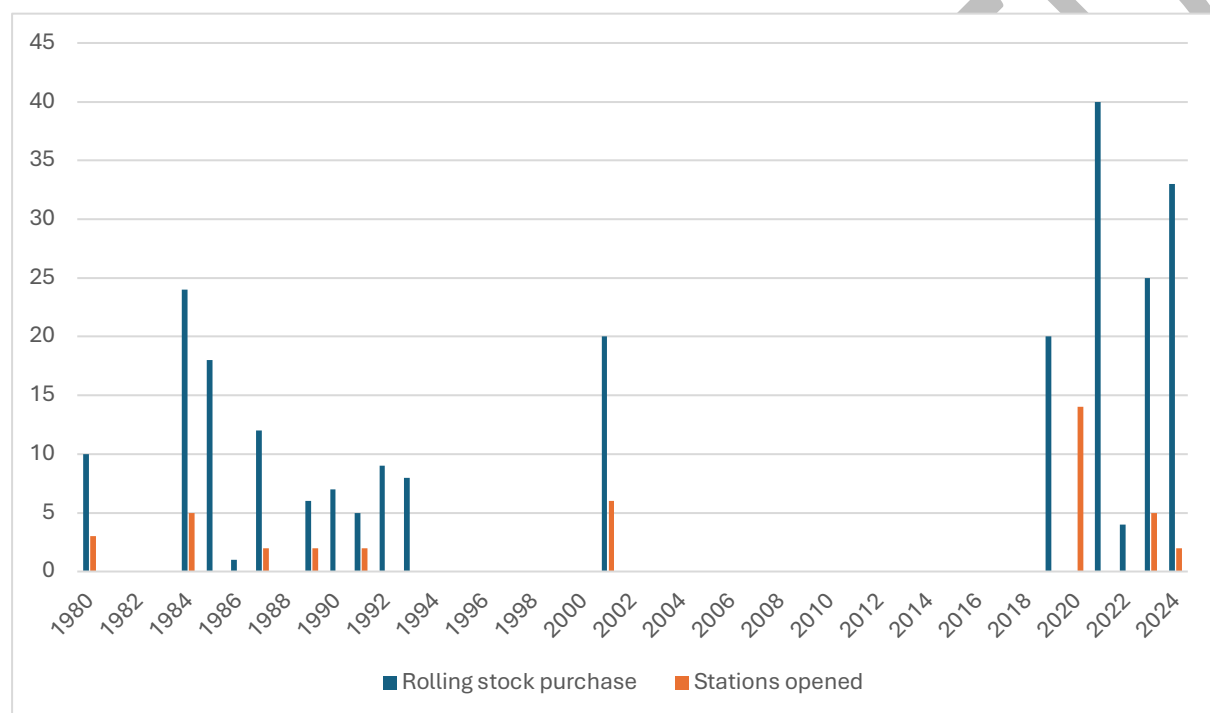


Figure 2: Tashkent metro rolling stock purchase and station openings. Own calculations based on Transphoto data.¹

Although state authorities had, by then, cut back almost all Soviet-era welfare benefits and public services, they were being upheld in the mobility sector by means of a subsidised trolleybus system. With regard to the limited role of trolleybuses in fulfilling mobility needs, they are all the more important for the representative dimension of politics: in Kyrgyzstan and Tajikistan, trolleybuses convey more than their capacity to transport people. Looking at the rampant power shortages of those days, functioning trolleybuses of the 2000s were running examples that the authorities are able to address this vital issue on a large-scale. Where social benefits are cut back to a minimum, for a pensioner, a free ride in a trolleybus maintains the illusion of a functioning welfare system. Finally, in countries with limited resources, trolleybuses allow futuristic vehicles to run on streets, promising modernity for a relatively low price, whereas Almaty, Astana and Tashkent engaged in metro investments for the same reason.

¹ The chart reflects vehicles still in service as of 2024. Scrapped or sold first-wave vehicles are not reflected.

Thinking big: recent public transport investments

In recent years, the region's public transport is exhibiting a number of interesting trends. What we can state for sure is that, at least for the respective capital cities, public transport is once again on the agenda, attracting national funding and municipal attention. The Almaty and Astana metros have received some recent attention, the latter before all, with regard to respective scandals, cost overruns, re-planning, shelving and resurfacing, change of contractors and political pressure coupled with repeated fundamental criticisms and mode changes. The project clearly had a turbulent history and a yet uncertain future: from monorail to heavy metro, to BRT, to light rail, back to BRT, and light rail once again, until the bankruptcy of the Chinese light rail contractor put the project on hold by 2019, until its long-awaited and long-delayed opening in 2026. However, other major cities of the region also feature massive and surprising public transport investment programmes.

Looking at the construction and procurement rhythms of the Tashkent metro is enlightening in this regard (Figure 2). The Soviet era saw both a steady inflow of metro wagons, as well as a regularly paced construction programme, expanding the network station by station. The very early 1990s still profited from previous preliminary work and delivery contracts, and from then on the metro system basically lived on a status quo. It took until 2001 for the Yunusobod line, in construction from 1988, to open for revenue service. This opening was coupled with a purchase of 20 metro sets from the Russian Metrovagonmash factory – the same manufacturer as for previous deliveries from the 1980s onwards.

This current expansion is part of a wider investment programme: more stations are under construction, and even more on the drawing board, part of a wide modernisation agenda – arguably coupled with the ascension of Shavkat Mirziyoyev to presidency in 2016. Indeed, the tremendous price tag of metro construction presupposes a strong engagement of the central state, and thus its heavy influence on transport policies in the capital. The structural precondition for these investments was set up in late 2016, when Tashkent metro assets were transferred from the municipal operator “Toshshahartransxizmat” to the state-owned Uzbek Railways (Gazeta.uz, 2016a). This structure also allows to tap into the technical and project management capacities of the railway company, which has proven effective in introducing high-speed rail services between Tashkent and Samarkand, and has equally eagerly expanded the network throughout the country.

Fascinatingly, the Uzbek Railways have also been at the core of re-establishing the aforementioned tramway system in Samarkand – a prime example of how a voluntarist and unsubstantiated decision in one place turned into a pragmatic and seemingly beneficial process in another location. The tramway system in the Uzbek capital of Tashkent saw a series of line closures in the course of the 2000s, authorities citing low passenger flows, insufficient track quality, and the need to widen road surfaces to accommodate rising automobile flows (Gazeta.uz 2016b). Tashkent's last tram line was shut down by May 2016. However, only four years before the closure, Tashkent received twenty new low-floor Vario.LF tramway vehicles ordered from the Czech Pragoimex factory. All while receiving state funds for overpriced vehicle procurement (almost a million US\$ per vehicle, as stipulated in Transphoto forum discussions²), the municipal company was unable to pay

² See <https://transphoto.org/photo/912501/#2002758>.

its electricity bills, which contributed to line closure decisions in 2015/2016. This is revealing of the haphazard funding flows and policy directions. After the final closure of the tramway system, the municipality attempted to sell the remaining vehicles for more than the procurement price, unsurprisingly with little success.

In the meantime, Islom Karimov, the long-standing president of Uzbekistan, died in September 2016, while Shavkat Mirziyoyev rose to power and developed a surprising vigour with regard to public transport projects. Two weeks after being appointed acting president, he announced the relaunch of Tashkent metro expansion plans. On 1 October, combined bus+metro tickets became available for the first time in history. On 5 October, Mirziyoyev announced the construction of a tramway system in Samarkand. This was enabled by a transfer of Tashkent's second-hand vehicles, as well as all wiring, substations and equipment that could be salvaged from the capital. On 28 October, the aforementioned transfer of metro assets to the state railway company came into force.

The opening of the tramway system was announced for the 2017 Navruz celebrations, in late March – alongside the national Independence Day, the fixed date for festive openings of all sorts. With limited tram construction knowledge capacities within the country, again, the State Railways were charged with laying the tracks. These were built to heavy rail curvature and load parameters, on crushed stone ballast, running side-discharging mineral wagons on tramway tracks through the city to deliver construction materials. In spite of the frenzied construction activity, the Navruz opening date was missed by one month. This was met with disdain by the trainspotters community, which also eagerly commented on the line's "un-urban" construction parameters, and seemingly low-cost and low-quality construction. Yet this does not diminish Samarkand's exclusive role as the one and only tramway system in the entire former Soviet Union, which opened after its demise. Construction activities went on, with a second line opening in due time for Navruz 2018, and two more lines in plan.

One further empirical example for the recent public transport investment boom is the trolleybus network in the Tajik capital Dushanbe. Following the disproportionate rolling stock procurements of the early 2000s, another wave was launched recently, shortly following the arrival of Rustam Emomali – the current president's eldest son – in the capital's mayoral office in 2017. In late 2018, an order for one hundred trolleybus vehicles was placed with the Minsk-based Belkommunmash plant. The last batch arrived – again in time for the upcoming Navruz celebrations – in early April 2021. Shortly before, a three-kilometre extension to a housing district on the Western edge of the capital marked the first significant line opening since the Soviet days. Furthermore, the Turkish bus producer Akia teamed up with a Tajik investor to open a vehicle plant in Dushanbe. Apart from "big" urban buses, a trolleybus production line has also been put in place, yet eventually turned to the production of battery e-buses instead.

Contrary to previous procurement waves, attempts were made to attract and qualify drivers (Asiaplus 2016, 2019), as well as to couple rolling stock deliveries with maintenance and the retrofitting of electric substations. All measures received funding from the European Bank of Reconstruction and Development, and were planned and implemented with active involvement of (mostly Baltic) consultancy companies. Yet, once again, the scope and ambition of the modernisation drive seem to prove unsustainable. A large part of the fleet does not leave the depot: as of January 2021, out of the 176 active vehicles, 57 were not in revenue service – far more than usual

precautionary vehicle planning would presume. Dushanbe's entire TROLZA fleet (built in 2009/2017) has been relegated to the backyard, in spite of its still working state.

Today, the Dushanbe trolleybus system has the lowest average vehicle age throughout Central Asia (Figure 3). When looking at the active rolling stock, an average age of 2.8 years (as calculated in 2021) is exceptional even by global standards. While it is a good sign for a system to receive investments in the first place, this low average age may hide low survival rates of vehicles due to insufficient maintenance, excessive procurement volumes due to an unaccountable availability of international donor funding, and unorthodox, to say the least, reserve vehicle management.

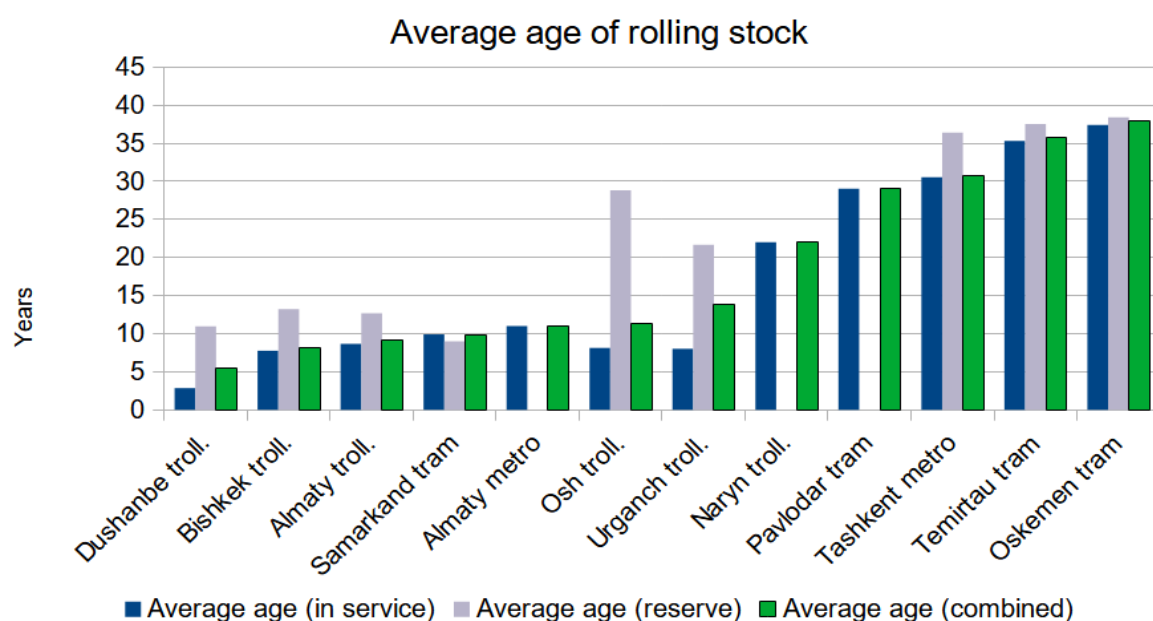


Figure 3: Average age of rolling stock of Central Asian electric public transport systems as per 2021. Own calculations based on Transphoto data

This rolling stock age distribution also shows a polarisation between two types of systems: on the one hand, those that were living off Soviet-era heritage – Naryn trolleybus, Pavlodar, Temirtau and Oskemen trams – have faced the most imminent threat of further decline and closure. On the other hand, trolleybus systems in Dushanbe, Bishkek and Almaty have profited from repeated injections of new rolling stock, but remain heavily dependent on central government interventions and international donor funding. Of crucial interest is the authoritarian 2024-2025 drive to shut down the Bishkek trolleybus system in spite of recent modernisations and a good state of repair and substantial ridership. As Borubaeva and Muleev (2024) have pointed out, the municipal executive skilfully relies on external expertise and funding sources to “monopolize the ability to imagine future possibilities”, thus placing a superficially infrastructural trolleybus question at the very heart of a societal discussion about possible and imaginable futures.

The “production” of public transport between pasts and futures

In this paper, I have shown that public transport in Central Asia does not necessarily adhere to the widespread decline and deficiency narratives that cling to the region's infrastructure provision. Indeed, elites striving for prestige and patronage, as well as the exercise of (re-gained) state capacity, prove crucial to grasp the region's public transport sector transformations. The surprising continuity of Soviet-era public transport priorities throughout the 1990s, the glimpses of short-term investment in the early 2000s, the massive capital-focused investment programmes of the late 2010s and early 2020s are all together telling of the changing and conflictual mobility narratives and normativities as well as of national and local state capacities and ambitions. The sharp GDP decline of the 1990s is not necessarily connected to a dismissal of public transport, while the economic recovery of the 2000s did by no means entail its recovery. The availability of supply chains and knowledge networks plays a role, yet changing ideologies, political agendas and mobility paradigms and mobility cultures (Hoor 2020) are equally important. Metros, trams and trolleybuses appear here, once more, as more than simply a means to move around town. The symbolic value of preserving and expanding these costly systems has contributed to political decisions surrounding them, as proved by a conspicuous simultaneity of leadership changes and public transport investments in Uzbekistan and Tajikistan alike.

Public transport investments reflect the Soviet legacy of exercising state authority via wasteful 'grand projects': although the political systems have nominally changed since independence and diverge across five Central Asian countries, the means to exercise power often seem to have remained the same. Also, out of these motivations, authorities are willing to shoulder excessive investments, which Petrova (forthcoming) has termed 'precarious modernisation'. Yet without proper rolling stock maintenance and upkeep of overhead lines, these investments still risk remaining 'white elephants'. These tendencies are connected to post-Soviet inferiority discourses that meet effectively failing infrastructure provision, a concurrent neglect of Soviet-era infrastructures and experiences, and a still prevailing nostalgia for Soviet-era mobility provision in terms of pricing, modes and design. At the same time, public transport investments bear witness to subtle shifts in the exercise of spectacular state ambitions – not only through most grandiose public projects, but also through getting things done – practical everyday solutions providing legitimacy for ruling elites.

The memory of a lost Soviet-era public transport modernity is being contrasted with the all-*marshrutki* 1990s. These, in turn, are being demonised from two sides: consultants and development agencies, with their own green and sustainable public transport agendas on the drawing board; and political leaders vying for shiny infrastructures marking their ambitions to be part of a global modernity project – one, which is not on the agenda for most citizens, all the more in peripheral regions. A 'domestic' public transport knowledge production, one which is neither driven by self-orientalisation and deficiency discourses, nor by "green" and "smart city" agendas, remains out of reach, exacerbated by the tremendous role of international development banks and related consultancies. The hope remains that this piece has provided evidence and food for thought for follow-on scholarship, including comparative avenues between Central Asia and other world regions experiencing rapid and radical public transport transformations.

References

- Akimov, Alexander, and David Banister. 2011. "Urban Public Transport in Post-Communist Transition: The Case of Tashkent, Uzbekistan." *Comparative Economic Studies* 53. <https://doi.org/10.1057/ces.2011.18>.
- Asiplus. 2016. "Meriya Dushanbe za svoi schet podgotovit voditelei obshchestvennogo transporta." <https://asiaplustj.info/ru/news/tajikistan/society/20210119/meriya-dushanbe-za-svoi-schet-podgotovit-voditelei-obshchestvennogo-transporta>. Accessed on April 20, 2026.
- Asiplus. 2019. "Meriya Dushanbe ostro nuzhdaetsya v voditelyakh avtobusov i trolleibusov." <https://asiaplustj.info/ru/news/tajikistan/society/20210116/meriya-dushanbe-ostro-nuzhdaetsya-v-voditeley-avtobusov-i-trolleibusov>. Accessed on April 20, 2026.
- Bittner, Christian, Boris Michel, and Ceren Turk. 2016. "Turning the Spotlight on the Crowd: Examining Participatory Ethics and Practices of Crisis Mapping." *ACME: An International E-Journal for Critical Geographies* 15, no. 1: 207–229.
- Borubaeva, Begimai, and Evgenii Muleev. 2024. "Governing 'Green' Public Infrastructure: The Trolleybus Case in Bishkek." *Berliner Gazette*. <https://berlingazette.de/the-governance-of-publicly-owned-infrastructure-in-bishkek-the-case-of-trolleybus-demolition/>. Accessed on April 20, 2026.
- Cima, Ondřej, and Lucie Sovová. 2022. "The End of Postsocialism (As We Knew It): Diverse Economies and the East." *Progress in Human Geography* 46, no. 6: 1369–1390. <https://doi.org/10.1177/03091325221127295>.
- Finn, Brendan. 2007. "Transition from Public Monopoly to Controlled Competition in a Post-Socialist Economy: Experience in the Republic of Kazakhstan." In *Competition and Ownership in Land Passenger Transport: Selected Papers from the 9th International Conference (Thredbo 9)*, edited by M. Rosário et al., 659–676. Amsterdam: Elsevier.
- Gazeta.uz. 2016a. "Tashkentskij metropoliten voshel v strukturu 'Uzbekiston temir yullari'." <https://www.gazeta.uz/ru/2016/11/07/subway/>. Accessed on April 20, 2026.
- Gazeta.uz. 2016b. "Tashkentskij tramvaj ushel v istoriyu." <https://www.gazeta.uz/ru/2016/05/02/tram/>. Accessed on April 20, 2026.
- Gazeta.uz. 2016c. "V Samarkande zapustyat tramvaj." <https://www.gazeta.uz/ru/2016/10/05/tram/>. Accessed on April 20, 2026.
- Grzelishvili, Ia, and Roger Sathre. 2008. "Understanding the Urban Travel Attitudes and Behavior of Tbilisi Residents." *Cooperation for a Green Future Research Paper*. http://www.cgf-georgia.org/Tbilisi_Transport_Behavior.pdf. Accessed on April 20, 2026.
- Gwilliam, Kenneth. 2000. *Private Participation in Public Transport in the FSU*. TWU Papers TWU-40. Washington, DC: World Bank.
- Gwilliam, Kenneth. 2001. "Competition in Urban Passenger Transport in the Developing World." *Journal of Transport Economics and Policy* 35, no. 1: 99–118.

- Hoor, Maximilian. 2020. *Mobilitätskulturen: Über die Notwendigkeit einer kulturellen Perspektive der integrierten Verkehrsplanung*. IVP Discussion Paper No. 2020(1).
- Muktarbek uulu, Kubanychbek. 2008. "Rehabilitating the Public Transport and Modernising Traffic Rules: The Alternative Technical Framework for Kyrgyzstan." In *Techniques and Technologies for Sustainability: Proceedings of the International Conference and Summer School 2007*, edited by A. Atkinson et al., 104–112. Berlin: Universitätsverlag der TU Berlin.
- Petrova, Maria. Forthcoming. "Personalisation of Risk and Infrastructural Care – The Transport Work on the Tram in Samarkand." *Forum IfL, Central Asian Mobilities*.
- Rekhviashvili, Lia, and Wladimir Sgibnev. 2018. "Placing Transport Workers on the Agenda: The Conflicting Logics of Governing Mobility on Bishkek's Marshrutkas." *Antipode* 50, no. 5: 1376–1395.
- Sgibnev, Wladimir. 2019. "Living Switches." In *Repair, Brokenness, Breakthrough: Ethnographic Responses*, edited by Francisco Martínez and Patrick Laviolette, 293–296. New York: Berghahn. (Politics of Repair 1).
- Stanradar. 2019. "After the April Fools' Joke, Marshrutkas in Dushanbe Stopped Taking Standing Passengers." <https://stanradar.com/news/full/33854-posle-pervoaprejskoj-shutki-marshrutki-v-dushanbe-perestali-brat-stojachih-passazhirov.html>. Accessed on April 20, 2026.
- Transphoto. 2021. *Transphoto.org*. <https://www.transphoto.org/>. Various subpages. Accessed on April 20, 2026.
- Varlamov, Ilya. 2020. "Kak chastniki na marshrutkah zahvatili nashi goroda." <https://varlamov.ru/3803589.html>. Accessed on April 20, 2026.
- Vozyanov, Andrey. 2014. "L'gotniki v gorode. Passaziry staršego vozrasta i ètika mobil'nosti v infrastrukture ukrainskogo obščestvennogo transporta." *Sociologîâ vlasti*, no. 3: 60–80.