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Developing sustainable urban mobility policy on car sharing and carpooling initiatives Kazakhstan



UNITED NATIONS

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

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Kazakhstan



United Nations

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UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE (UNECE)

The United Nations Economic Commission for Europe (UNECE) is one of the five United Nations regional commissions, administered by the Economic and Social Council (ECOSOC). It was established in 1947 with the mandate to help rebuild post-war Europe, develop economic activity and strengthen economic relations among European countries, and between Europe and the rest of the world. During the Cold War, UNECE served as a unique forum for economic dialogue and cooperation between East and West. Despite the complexity of this period, significant achievements were made, with consensus reached on numerous harmonization and standardization agreements.

In the post-Cold War era, UNECE acquired not only many new member States, but also new functions. Since the early 1990s the organization has focused on assisting the countries of Central and Eastern Europe, Caucasus and Central Asia with their transition process and their integration into the global economy.

Today, UNECE supports its 56 member States in Europe, the Caucasus, Central Asia and North America in the implementation of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs). UNECE provides a multilateral platform for policy dialogue, the development of international legal instruments, norms and standards, the exchange of best practices and economic and technical expertise, as well as technical cooperation for countries with economies in transition.

The norms, standards and conventions developed at UNECE in the areas of environment, transport, trade, statistics, energy, forestry, housing and land management, innovation or population, offer practical tools to improve people's daily lives. Many are used worldwide, and a number of countries from outside the region participate in UNECE's work.

UNECE's multisectoral approach helps countries to tackle the interconnected challenges of sustainable development in an integrated manner, with a transboundary focus that helps devise solutions to shared challenges. With its unique convening power, UNECE fosters cooperation among all stakeholders at the country and regional levels.

TRANSPORT IN UNECE

Today, UNECE services 59 United Nations inland transport conventions. Several of the Conventions are global either by design or because their success has caused them to grow beyond the UNECE region. In addition to negotiating the amendments to existing legal instruments, UNECE has been active in facilitating new legal instruments. Its normative activities are enhanced with developing methodologies, guidelines, and definitions on subjects such as transport planning, data collection and the collection of transport statistics. UNECE's work on transport is governed by the Inland Transport Committee (ITC) and its 20 Working Parties, which are in turn supported by more than 40 formal and informal expert groups and in cooperation with 11 treaty bodies (Administrative Committees). Annual sessions of ITC are the key moments of this comprehensive intergovernmental work, when the results from all subsidiary bodies, as well as the UNECE Sustainable Transport Division, are presented to ITC members and contracting parties.

In addition to servicing ITC and its subsidiary bodies, the Division also services other intergovernmental bodies including the ECOSOC Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals, as well as 11 treaty bodies of United Nations legal instruments and the TIR Executive Board. In cooperation with UNESCAP, UNECE Sustainable Transport Division supports the United Nations Special Programme for the Economies of Central Asia (SPECA). It also annually alternates with UNESCAP as the secretariat to the SPECA Thematic Working Group on Sustainable Transport, Transit and Connectivity. In cooperation with the UNECE Environment Division and the World Health Organization (WHO) Europe, the Division services the Transport, Health and Environment Pan-European Programme (THE PEP). It ensures the management and oversight of the Trans-European North-South Motorway (TEM) and the Trans-European Railway (TER) projects. The Division supports the accession and implementation of the UN legal instruments through policy dialogues, technical assistance, and analytical activities with the priority of promoting regional and subregional cooperation and capacity-building. Finally, since 2015, UNECE hosts the secretariat of the United Nations Secretary-General's Special Envoy for Road Safety and since 2018 the secretariat of the United Nations Road Safety Fund (UNRSF).

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Introduction

This publication has been prepared in the framework of the project on «Strengthening the capacity of Central Asian countries to develop sustainable urban mobility policy on car sharing and carpooling initiatives. The goal of this project is to improve understanding by national policy makers in Central Asia of the basic requirements for implementing car sharing and carpooling initiative and build the capacity of national and local policy makers in Central Asia to develop and implement sustainable transport policies focused on car sharing and carpooling initiatives. It covers more specifically Kazakhstan, Kyrgyzstan, Tajikistan.

This publication targets policy makers from Kazakhstan seeking to set up and regulate such initiatives at the national and local levels.

Definitions and concepts

Sustainable development is a core component of modern international policies aiming at solving the problem of urbanization and covering economic and social development, security, and environmental protection. An important trend in the sustainable development of urban transport infrastructure is the collective use of road network, where carpooling and car sharing can complement public transport.

Definitions

Car sharing and carpooling are key examples of the sharing economy, based on the idea that it is more convenient to pay for temporary access to a product through a marketplace than to own the product. For those citizens who prefer not to own expensive assets in order to avoid liability and costs, the use of sharing allows them to access all the benefits of technology without the cost of owning and maintaining.

Car sharing is a service that provides members with access to an automobile for intervals of less than a day. Major car sharing business models include traditional or round-trip, one-way or free-floating, and peer-to-peer (P2P), which allows car owners to rent them to other private users.¹ Another model of car sharing is stationary car sharing which provides only round trips at fixed stations. These services can be provided by specialized companies (most often for intracity and/or short trips) or individuals. This model of car rental is convenient for example for occasional use of a vehicle or when one needs a car that differs from body type and load capacity from the one usually used. Car sharing is one of the global directions in the development of the sharing economy, when the population avoids acquiring goods in ownership in order not to bear responsibility and costs but continues to have access to the benefits they can provide, through a shared usage. In 2016, car sharing organizations were implemented in more than 2095 cities around the world.

Carpooling involves adding passengers to a private trip in which driver and passengers share a destination. Such an arrangement provides additional transportation options for riders while allowing drivers to fill otherwise empty seats in their vehicles. Depending on the method of planning a joint trip, the following types of carpooling are distinguished:

- Classic – as a rule, a long (from 100 km) trip, planned in advance (from 1 day to several months)
- Dynamic – movement in urban space for short distances (1–100 km) in the presence of alternatives (by own car, public transport, taxi, bicycle or on foot)
- Regular – participants, route and schedule of the trip are constant.

¹ “Strengthening the capacity of Central Asian countries to develop sustainable urban mobility policy on car sharing and carpooling initiatives”, UNECE, 2020. <https://unece.org/transport/publications/strengthening-capacity-central-asian-countries-develop-sustainable-urban>.

Car sharing models:

Free-Floating allows users to rent and return a car to any location within a defined territory. To create a free-floating car sharing business model, companies need to take into account the following factors:

1. Geographical location of the population and density of the districts in order to attract the required number of customers;
2. Pricing policy: setting the price per minute;
3. Redemption from the city authorities of parking spaces in paid parking lots;
4. Ensuring the required number of cars for rent.

Station-to-Station includes fixed car rental locations and round trips ending at the starting point of the car rental.

How car sharing works: An example from the Russian Federation (city of Moscow)

At the beginning of 2022, Moscow came out on top in terms of the number of car sharing cars, today there are about 30 thousand of them.

In 2022, the number of car sharing users exceeded one million people. Until recently, car sharing in Moscow was allowed to persons over the age of 21 with at least two years of driving experience. Currently there are companies that allow 18-year-old drivers, including those without experience, to use their services. Verification of documents for registration in car sharing companies usually takes several hours. The Metropolitan Department of Transport supports fast rentals and car sharing, and the city subsidizes the interest rate on leasing cars. Car sharing users themselves do not pay for parking in the capital, rental companies do it for them. However, there is a preferential parking rate for merchants. To get a car, it is necessary to register with one of the existing companies (with a photo, passport and driver's license) and sign a contract. Cars are scattered all over the city, drivers can find the nearest one using a mobile application and leave it in the parking lot when they reach their destination. Most companies provide cars for several hours or days. The cost of mileage is usually added to a fixed price. The car can be unlocked with the smartphone, and the key is firmly fixed in the ignition lock. Using the "waiting" rate, it is possible to keep the car parked for a certain amount of time. Rates are managed through a mobile application. Money for using car sharing in Moscow is automatically withdrawn from the bank card, which is linked to the personal account of the mobile application.

Success factors for car sharing business models

The general methodology for determining the most effective car sharing models is represented in the table 1 below. This table represents the study in stages, reflects the development of approaches that together form the methodology for implementing car sharing methods.

Table 1 Car sharing modes analysis²

Territory of use			Vehicle type			Fee structure			Parking type		
FF	S	P2P	FF	S	P2P	FF	S	P2P	FF	S	P2P
City centre			Small cars			Time-based			Municipal parking		
+		+	+		+	+			+		
City boundaries			Middle class type			Distance-based			Commercial		
+	+	+	+	+	+		+			+	
Regions			Freight			Fixed rate			Private territory		
	+	+		+	+	+		+			+

FF – Free floating; S – Stationary; P2P – Peer-to-peer

² Car Sharing in Europe Business Models, National Variations and Upcoming Disruptions, Deloitte. <https://www2.deloitte.com/content/dam/Deloitte/de/Documents/consumer-industrial-products/CIP-Automotive-Car-Sharing-in-Europe.pdf>.

Context in the Republic of Kazakhstan - National level

Regarding passenger transportation, the main sources of information are the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan and the Transport Committee of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan. Thus, according to the Bureau, 82.2 thousand buses were registered at the end of 2021, of which 38.9 thousand buses or 47.3 per cent of the total number of buses belonged to individual owners (appendix A). As of 1 July 2022, 80.02 thousand buses were registered in Kazakhstan (appendix B). The largest share of buses is registered in Almaty (10.4 per cent), South Kazakhstan (8.9 per cent) and Almaty region (8.1 per cent).

Passenger transportation by bus is characterized by a high level of wear of rolling stock. According to the Bureau, out of 80 thousand buses, about 60 thousand (75 per cent) have a service life of more than 10 years. The high level of wear of rolling stock negatively affects the safety and comfort of passenger transportation. In the city of Astana, the wear of buses is about 25 per cent. It also negatively impacts air quality. According to IQAir data,³ five Kazakh cities (Karagandy, Balykshi, Burabay, Shymkent and Almaty) were in 2022 among the top 500 of the world's most polluted cities (ranking based on annual average PM2.5 concentration).

Table 2 shows that urban passenger transportation has the highest figures in terms of number of buses and routes. It also shows a high number of carriers, but, in proportion, not as much as for intra-regional passenger transportation.

To protect their interests, carriers in Kazakhstan have created regional (city) associations of carriers.

Table 2 Automobile passenger transportation in Kazakhstan as of 1 January 2022

	International	Inter-regional	City	Intra-regional
Number of carriers, units	61	189	294	556
Number of buses, units	610	2 056	10 525	2 722
Number of routes, units	117	284	1 244	1 156

Source: Transport Committee of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan.

Given the COVID-19 pandemic context, passenger transportation by buses by the beginning of 2021 decreased by 4.6 times (from 8.7 billion people up to 1.9 billion people), but in 2022 it increased 1.3 times and reached 2.2 billion people.

The analysis of statistical data (transportation of passengers by buses in the Republic of Kazakhstan by the first half of 2018 to the first half of 2022 in appendix D, and characteristics of irregular and taxi transportation in appendix E, distribution of carriers by types of passenger transportation by regions of Kazakhstan on 1 July 2022, in appendix F) shows that passenger road transport plays a significant role in public transport in the Kazakh society. However, an important issue regarding passenger road transport is the negative impact of illegal carriers (shadow market) on international and interregional transportation and the lack of subsidization of losses on routes with a regulated tariff.

Measures have been taken at the State level to curb illegal transportation:

- By the Decree of the Government of the Republic of Kazakhstan dated 21 September 2021 No. 644, a comprehensive action plan for countering the shadow economy for 2021–2023 was adopted (item 47 “Analysis and development of measures to curb the activities of passenger transportation that violate the current legislation of the Republic of Kazakhstan, including those carrying out passenger transportation under a lease agreement of a motor vehicle with the crew, concluded through a mobile application for ordering a taxi”);

³ World's most polluted cities (historical data 2017-2022), <https://www.iqair.com/world-most-polluted-cities>.

- The Order of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan dated 15 December 2021, No. 645 established an Interdepartmental working group on countering the shadow economy as part of the MIID, the Ministry of Internal Affairs, Ministry of Finance, Ministry of Digital Development, Innovation and Aerospace Industry of Kazakhstan, Ministry of National Economy, Ministry of Information and Public Development, National Chamber of Entrepreneurs “Atameken”;
- A Roadmap for the Suppression of Illegal Passenger Transportation activities was approved in March 2022.

One of the significant factors of a stable operation of passenger vehicles is the full-fledged subsidization of losses of carriers on routes with a regulated tariff. The lack of budget stability can affect the provision for the maintenance and repair of the rolling stock that should ensure the safety and quality of transportation, but also the performance of transportation by qualified drivers.

An issue regarding the economic aspect of the passenger road transport sector is that carriers’ expenses are sometimes exceeding revenues, and losses are not fully covered due to an insufficiently effective subsidy mechanism at the level of local executive bodies. This might participate in the deterioration of the bus fleet. At the same time, a significant amount of passenger traffic is carried out by illegal carriers. The marketing approach is practically not used when planning passenger road transport: studies of public opinion on passenger road transport and assessment of the needs of the population regarding the quality and accessibility of public transport services are lacking.

Currently, State regulation in the field of road transport is carried out by the authorized body, represented by the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan, which provides legal support, manages licensing, drafts technical regulations, and monitors compliance with the legislation of the Republic of Kazakhstan on road transport.

State control over compliance with the legislation on road transport is carried out by the authorized body, represented by the Committee of Transport of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan, the Ministry of Internal Affairs and other state bodies within their competence established by the legislation of the Republic of Kazakhstan.

At the same time, the competence of the authorized body, according to the law of 4 July 2003, No. 476 “On Road Transport”, is to implement State policy in the field of road transport by:

- The implementation of coordination and methodological guidance of local executive bodies in the field of road transport;
- The organization and implementation of control over compliance with the requirements of the laws and resolutions defining the procedure for the functioning of road transport;
- Ensuring the interaction of the State with public associations and associations of legal entities in the form of associations (unions) in the field of road transport.

The Law of the Republic of Kazakhstan “On Road Transport”, which regulates relations between stakeholders in the transport process and establishes requirements for carriers and motor vehicles, also defines that:

“The main objectives of State regulation in the field of road transport are:

1. Creating conditions to meet the needs of the economy and the population in road transport and other works and services;
2. Protection of the legitimate rights and interests of individuals and legal entities, as well as the national interests of the State;
3. Creating conditions for the competitiveness of domestic carriers in the international road transport market;
4. Protection of the domestic road transport market;
5. Further development of road transport infrastructure”.

The Department of Motor Transport of the Committee of Transport of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan has also been directly involved in the formation of State policy in recent years. The main work of this Department consists in drafting legislative, regulatory, and technical acts in the field of motor transport, regulations of domestic and international freight and passenger transportation, and regulations of interregional passenger transportation.



Traffic jam in Almaty

Context at the local level: The case of Astana

Astana is the largest city in Kazakhstan (population of 1,371,309 people, and according to the forecast by 2050, the population of Astana will reach 2.5 million people). The load on the transport network is increasing every year due to migration from other regions to Astana and a high birth rate. Currently, the city of Astana is facing serious problems associated with a busy transport system, congestion and environmental pollution. There are on average 320 vehicles per 1,000 residents. In total, according to official national statistics,⁴ 326 thousand passenger cars are registered in Astana, and in addition, 100 thousand non-resident cars arrive daily.

The main type of public transport in Astana is the bus, which carries about 800 thousand passengers daily. In 2022, there were in Astana:

- 100 bus routes;
- 900 bus units;
- 21 minibus routes;
- 250 units of minibuses;
- 2,000 km of the route network.

⁴ <https://stat.gov.kz>.

The city authorities are trying to increase the role of buses in the transport system, traffic cameras are deployed, heated bus stops are built, and a mobile application has been launched to track buses, the time of their arrival at the stop, and purchase tickets.

The “Intelligent Transport System” (ITS), the system that controls traffic lights, allows to increase the speed of traffic flow by 18 per cent, throughput up to 40 per cent. The city has purchased over 100 electric buses and the introduction of innovative ideas regarding buses continues.

Forecasts predict an even more stressful transport situation in the near future associated with an increase in population and road transport activity, as the city is dynamically developing and becomes a centre of attraction for the population, especially for young people from the regions of the country. Today, the shortage of public transport is 400 buses, especially for rush hours. There are still more than 400 stops which are not equipped with entry pockets, and 300 stops which are not equipped with closed pavilions.⁵ In addition to the shortage of buses, about a thousand category D drivers are missing in the capital.

The situation is complicated by a large flow of people from nearby settlements, such as Kosshi (more than 60 thousand inhabitants) and Karaotkel (about 30 thousand inhabitants). The introduction of car sharing and carpooling services in Astana could be one of the possible solutions to get out of a difficult traffic situation associated with the growth of motorization, congestion, lack of parking spaces and environmental pollution. The successful operation of these services will depend on a sufficient and sustainable demand, but also on the support of local administrations for their creation and development.

Astana is one of the most congested and polluted cities in Kazakhstan (80 per cent of emissions are emitted by motor vehicles, about 90 per cent of cars have gasoline engines), congestion has become a daily problem in the country's cities, where the number of cars has increased by up to 100 per cent over the past decade.

The IQAir air quality control company notes that Astana is in the top ten of Kazakh cities with the most polluted air in the world. According to IQAir data,⁶ in the past 4 years, annual average PM2.8 concentration always exceeded 3 to 5 times WHO guidelines.

Taxi services are widely developed in the city, some are supported by mobile applications. Car sharing is developing since 2018 in Astana, however there are no local carpooling platforms.

Car sharing in Astana and Almaty

Car-sharing in Kazakhstan is developing very actively, in Almaty in particular, prompted by the tightening of parking rules in the city. The first car-sharing service was launched in 2016 by Doscar, whose fleet of vehicles offered doubled in a few months, from 11 car to 20. The number of users of the service reached 6,000 this same year.

In 2018, the Anytime company developed its services, first in Almaty with a fleet of 100 cars, which in 2 months grew to 200 cars. There were 500 daily car-sharing service users in Almaty at the time, a figure that tripled after 10 months. According to Anytime and Doscar, at that time, cars were used for a short period: 3 hours on average during the week, and one day during the weekend. Anytime announced that it invested \$10 million in the service in 2018. In 2019, the company's fleet numbered 500 cars and it achieved positive EBITDA, which allowed it to cover its operating expenses on its own. In 2021, Anytime enters the Astana market, offering a fleet of 200 vehicles.

In recent years, in competition with car sharing services, car rental services in Astana have been developing significantly. This is due to the growing needs of the population for a flexible and convenient transport alternative, especially for short-term and business trips. In Astana, the number of companies providing cars for rent is increasing, also because of its affordability. This contributes to the creation of a competitive market, increasing the availability

⁵ https://tengrinews.kz/kazakhstan_news/prezident-vozmutilsiya-nehvatkoy-avtobusov-astane-lyudi-jdut-489946/ (in Russian).

⁶ <https://www.iqair.com/world-most-polluted-cities?continent=59af92b13e70001c1bd78e53&country=W3ctkwZj3TnwAZKaa&state=ycBGjutXjr7v4Tkps&sort=-rank&page=1&perPage=50&cities=>

and diversity of cars for rent. Moreover, car rental companies offer online platforms and mobile applications that make it easy to book a car, check their availability in real time and manage orders thus greatly facilitates the rental process.

Due to population growth and the desire of the Akimat (municipal administration) of the city to reduce the number of vehicles, Astana has great potential for the development of car sharing services that could replace in some cases the use of private cars. Currently, the city is considering the possibility of launching a car-sharing service through a public-private partnership mechanism.



Validator for electronic fare payment on public transport.

Car sharing operators have developed the requirements for using their services on the basis of the common practice observed in similar countries. In order to use car sharing services, the customer must install a mobile application on his/her smartphone, register in the service: enter his/her mobile phone contact number and send the documents necessary for its identification (most often, an ID photo sent using the mobile application, driver's license on the front and back, bank card information).

If the customer meets the requirements stipulated by the car sharing agreement, the operator provides access to use the service. The car sharing operator provides the car personally to the customer for temporary possession and use, without the provision of driving services. The customer accepts the car and pays the rent and the cost of possible other services provided by the operator.

The contract can only be concluded with a driver over 23 years old and driving experience of at least 3 years. The agreement often establishes some restrictions regarding the use of the car which can include: the customer is prohibited from providing taxi services, subleasing, transporting explosive, flammable, oversized, heavy and poisonous goods, etc.

To find a car, the customer checks on the mobile application the location of cars available for booking. Once the car is booked, the customer is responsible for checking the presence of documents, technical equipment, first aid kit, spare wheel, jack, set of keys, fire extinguisher and a warning triangle, as well as for conducting an external and internal inspection of the car. Once these checking are done, the customer confirms in the mobile application the acceptance of the selected car. To end the car rental, the customer clicks the "End rental" button in the mobile application.

The customer then receives a message from the car sharing operator indicating the cost of the journey, taking into account the time of the trip. The cost of the journey is debited to the customer's bank card (including prepayment). Fuel costs can be paid using the fuel card provided in the car or paid by the customer with a bank card. Depending on the tariff and conditions, the cost of using car sharing vehicles may include placing cars in city paid parking lots and parking lots at airports.

Table 3 Main characteristics of two car sharing companies operating in Almaty

AnyTime		DosCar
Tariffs		
Per-minute rate	Trip from 55 tenge by minute Waiting rate: from 39 tenge/minute	Minute Combo rate: free booking, and after 20 minutes of waiting, 5 tenge are charged Minute rate: 8 tenge Mileage rate: 75 tenge per kilometer
Other rates «3, 6, 12 hours»	3 hours 6 290 tenge; 12 hours 9 440 tenge; 6 hours 7 490 tenge; Cost, km 60 tenge/km	Daily – 14 thousand tenge for 200 km, Excess – 30 tenge per kilometer
Daily rate	24 hours 12 064 tenge Cost, km 60 tenge/km	
The area of validity and completion of the lease		
It is possible to move by Anytime cars within a permitted zone, marked on the map in the mobile application.		Doscar works only in Almaty. The area of action is the whole city and 200 km around. The car must be returned to the place where it was taken.

Urban transport in Astana: Perspectives of evolution

The metropolitan authorities are paying special attention to the development of a more modern and intelligent public transport network. Several innovative projects have already been implemented in this area, including the modernization of the bus route monitoring and fare systems. The Astana City Transportation Systems (CTS), the responsible body for the development and support of innovative services in the field of public transport in the capital, is implementing innovative projects such as:

- The “Smart” transport system;
- Dispatching and optimization systems of the public transport route network;
- Alert systems for various accidents on the roads;
- Online fare payment systems;
- Paid parking in the busiest places of the city;
- Service for the safe transportation of school children;
- Bike rental (“Astana bike”).⁷

⁷ <https://cts.gov.kz/ru/company/activities/>.

CTS in conjunction with by the Department of Transport and Development of Road Transport Infrastructure under the Akimat of the city of Astana carries out passenger transportation in the city of Astana. According to official data,⁸ about 900 buses operate in the city every day (see appendix C). Public transport in the capital is provided by 100 routes, including 72 urban routes and 25 suburban routes. 250 minibuses are operating on 21 routes). Public transport runs all days of the week from 6 a.m. to 11 p.m. Currently, the fare on buses is 90 tenge (\$1 = 450 tenge in June 2023) when paying with a transport card and 180 tenge when paying in cash. On express routes, the fare is 180 tenge. Payment can also be made with a smartphone using a QR code. It is also possible to use the transport card “Transcard”.

Currently, Astana is one of the fastest growing cities in the region. Local authorities are planning for this potential growth through the development of the Astana City Development Program for 2021–2025 (Decision of the Maslikhat (Council) of the city of Nursultan dated 30 December 2021, No. 129/18-7) which provides for three main areas of development:

AREA 1. Increasing the level of well-being and quality of life of the city’s population:

Goal 1. Improving the efficiency of the social protection system of the population, ensuring sustainable and productive employment.

Goal 2. Ensuring the education of the future accessible to everyone.

Goal 3. Strengthening the health of the population to ensure sustainable socio-economic development.

AREA 2. A city comfortable for life – “A city for people”:

Goal 1. Creating a safe and comfortable environment.

Goal 2. Balanced development of housing and communal services and transport infrastructure.

Goal 3. A clean city for current and future generation.

AREA 3. Modern competitive city.

Goal 1. Improving the competitiveness of the city’s economy and the development of technological investments.

Goal 2. Creating a favorable environment for the growth of business economic activity.

Furthermore, the Astana City Maslikhat (a local unicameral legislative branch in the city) adopted the concept of an integrated transport system (ITS), which will allow the city to develop a unified technical vision of urban transport for 10 or more years, taking into account the annual population growth and the road traffic increase. The ITS also supports a significant modernization of public transport, including the development of initiatives related to the sharing economy in the field of car sharing and carpooling.

⁸ <https://stat.gov.kz>.



Trolleybus in Almaty

The potential of car sharing and carpooling to reduce CO₂ emissions

Car sharing and carpooling have the same overall objective to reduce car ownership or, in case of countries/cities where car ownership is low, to limit the growth of car ownership, by offering a car mobility service for those that need it, without the need to purchase and own an individual vehicle.

This objective of lower car ownership is achieved through two different mechanisms:

1. For carpooling, the average load factor (number of passengers per vehicle) of the vehicle is increased, with more people on-board the vehicle for any given trip.
2. For car sharing, the car is used more frequently, as one car is shared among different people that have access to it; the annual distance covered by the vehicle is increased.

Car sharing and car-pooling have several environmental and other types of co-benefits such as:

- Reduced congestion: with less cars on the road, road infrastructure is saturated more slowly, easing the flow of cars,
- Lower natural resources needed to build vehicles: material extraction is decreased with less vehicles being individually owned,
- Cost savings: owning individual vehicle is expensive, because of the costs associated with it (acquisition cost and all recurrent costs such as insurance, maintenance, parking, energy that are to partially or fully exempted when subscribing to car sharing or carpooling schemes).

Deployment and user-adoption of car sharing and carpooling schemes in a city or a country will impact the transport mode share in the given region; the potential CO₂ mitigation will depend on which modes of transport are being displaced for users of carpooling and car sharing schemes, and the importance of induced demand (trip that would not have been made without the car sharing/carpooling system).

Quantifying the CO₂ emissions reduction potential of car sharing schemes in Kazakhstan

Kazakhstan has a vehicle ownership of around 250 vehicles per 1,000 people and very limited data availability regarding the actual mode share.

This lack of data prevents the accurate calculation of the potential CO₂ emission reduction of a shift toward carpooling and car sharing in the countries and cities covered by this study. The study below is only for illustration purposes and does not necessarily reflect the situation in the country.

Nevertheless, following the available literature regarding mode shift and basic calculation using For Future Inland Transport Systems (ForFITS)⁹ methodology, some order of magnitude can be shown to indicate the likely potential for CO₂ emissions reduction for carpooling and car sharing schemes can be assessed.

1. Impact of car sharing schemes

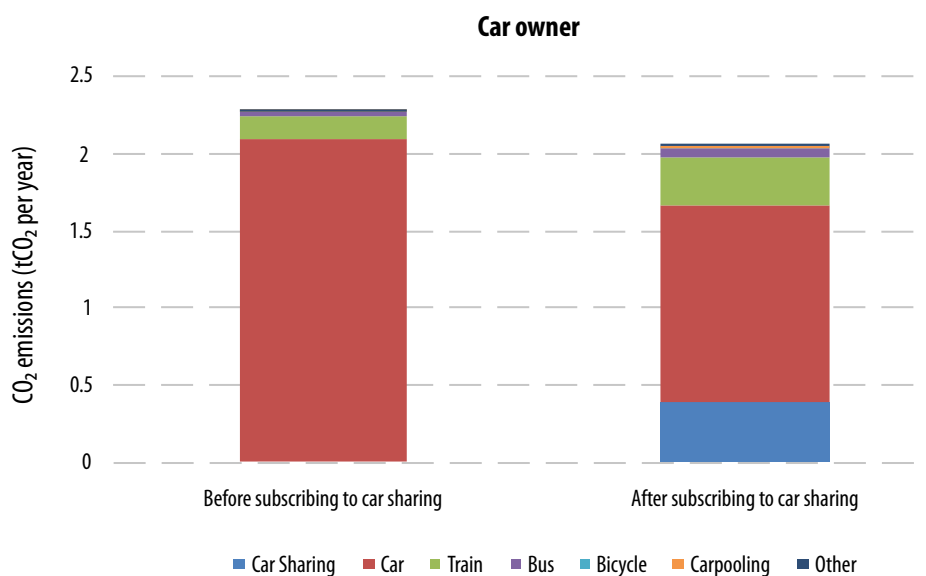
(a) Literature review

To quantify the CO₂ impacts of the private car and car sharing schemes, assumptions need to be made on the modal shift before and after the latter has been deployed, its level of adoption and the carbon intensity of each mode.

The data regarding the transport mode share in Kazakhstan is limited. It shows a wide spectrum of modal share at the country level.

Available literature, such as Martin, E., Shaheen, S. (2016) or L. Amatuni et al. (2020) covers cities in developed countries, where car ownership is already high. Car-owning households that subscribe to a car sharing scheme decrease their annual Greenhouse Gas (GHG) emissions by around 20 per cent (figure 1). Their CO₂ emissions decrease as they use more often lower carbon transport modes such as public transport and active modes (walking and cycling) (table 5), keeping overall annual mobility constant.

Figure 1 CO₂ emissions from transportation of average household – Before subscribing to car sharing/After subscribing to car sharing scheme



Source: Martin, E., Shaheen, S. (2016).

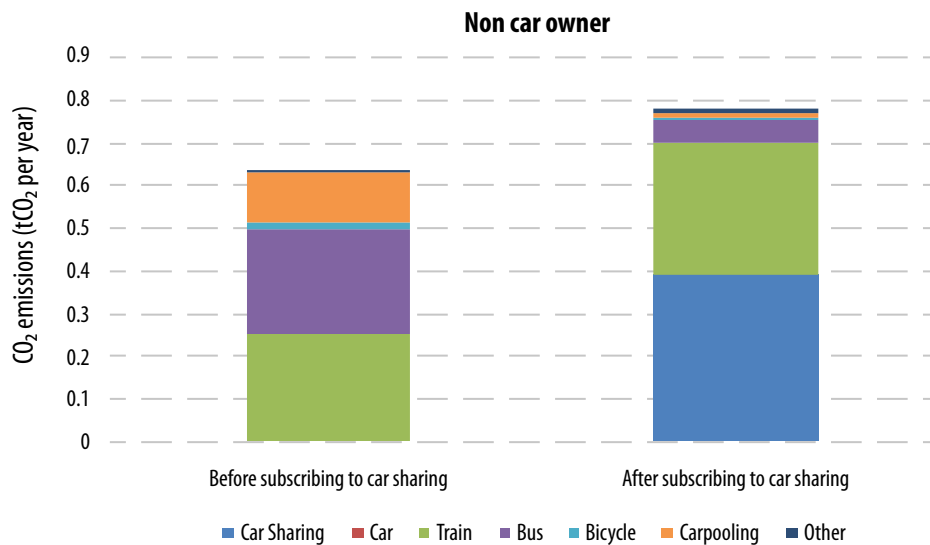
⁹ <https://unece.org/forfits-model-assessing-future-co2-emissions>.

Table 4 Mode share from car-owning household before and after subscribing to car sharing scheme

	Annual distance (km)	
	Before subscribing to car sharing	After subscribing to car sharing
Car Sharing	0	1 850
Car	9 220	5 610
Train	1 431	3 069
Bus	140	299
Bicycle	105	225
Carpooling	35	75
Other	70	150
Total	11 000	11 278

Source: Martin, E., Shaheen, S. (2016).

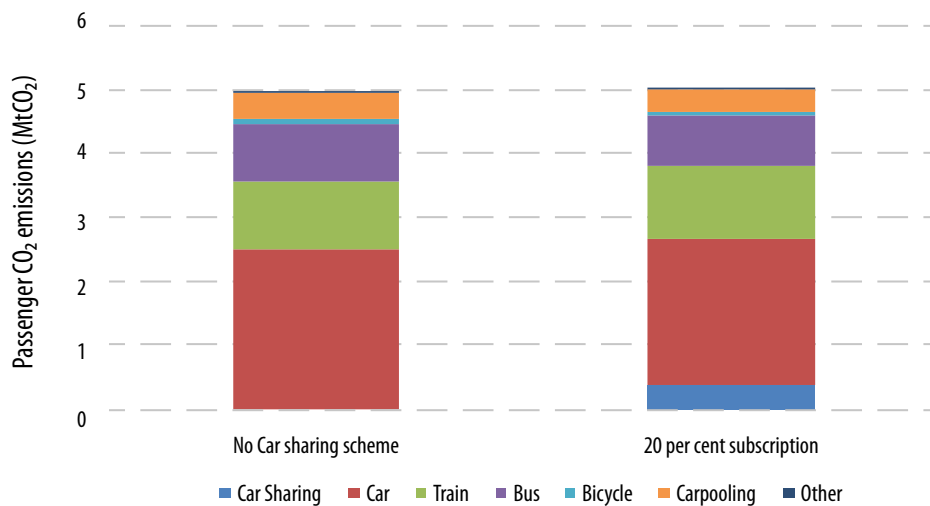
Households that do not own a car and subscribe to a car sharing scheme are likely to increase their traffic activity and GHG emissions, as for them, a shared car would be more energy-intensive than any other modes they use regularly (public transport, carpooling). With an overall annual mobility kept at similar levels, overall CO₂ emissions could increase by around 20 per cent.

Figure 2 Non car owners – CO₂ emissions before subscribing to car sharing/after subscribing to car sharing

Source: Author's elaboration based on Martin, E., Shaheen, S. (2016).

(b) The case of Kazakhstan

Assuming 20 per cent of the population in Kazakhstan would subscribe to a car sharing scheme, (whether they are car owners or not), passenger transport GHG emissions would slightly increase (by about 1 per cent), as the vast majority of subscribers would not have owned a car prior to registering to the car sharing scheme, which would compensate the GHG emissions reduction from those who are owning a car.

Figure 3 Passenger CO₂ emissions depending on car sharing scheme subscription


Source: UNECE.

2. Impact of carpooling schemes

Long distance carpooling has been the most successful mode to date and global companies have developed a service offering an organized carpooling by putting drivers and passengers in contact through centralized websites. A recent study performed by the carpooling company BlaBlaCar and based on user surveys in 8 countries estimates that carpooling decreases CO₂ by 30 per cent. This study also details the alternative transport modes that would have been chosen if the carpooling offer would not have been there. The interesting insight from this study is that most drivers would still have taken their car (alone) if the carpooling scheme was not there.

In countries where car ownership is low, carpooling might not be the preferred choice as offer would be limited, and car owners (probably from the higher income part of society) are likely not to be willing to share their journey with others.

Daily commute carpooling has not been as successful to date, given the lower incentive for drivers and the alternative offers, such as public transport.

Recommendations

Car sharing and carpooling would yield higher CO₂ benefits in countries where individual car ownership is high and where car sharing /carpooling schemes would replace individual car trips.

To maximize potential CO₂ emissions reduction benefit, car sharing schemes should preferably target car owners, or household that consider buying a car, in order to provide an incentive to sell (or not replace) or to avoid buying a car. Car sharing schemes are more effective at reducing CO₂ emissions in cities, where alternative modes of transport are available.

Carpooling schemes should first focus on long distance journeys, between cities, given the higher incentives for both drivers and passengers, before getting deployed in urban areas.

Legal context related to road transport in the city of Astana

Automobile transportation of passengers in the city is regulated by the following regulatory documents:

- Law of the Republic of Kazakhstan dated 4 July 2003, No. 476-11 “On Road Transport” (with amendments and additions as of 24 July 2019);
- Rules for the transportation of passengers and luggage by road, approved by the Order of the Acting Minister for Investment and Development of the Republic of Kazakhstan dated 26 March 2015 No. 349 (with amendments and additions as of 16 July 2019);
- The national standard “Motor Transport Services for Regular and Intermittent Passenger Transportation”, ST RK 2273-2012, according to the Law “On Road Transport” defines the requirements for the services of carriers, services of bus stations, bus terminals and passenger service points;
- The State program of infrastructural development of the Republic of Kazakhstan “NURLY Zhol” for 2020–2025.

All of these documents lack a reference to car sharing or carpooling services, therefore there is no regulation in these areas. Both regular and intermittent intercity and international passenger transportation by buses and minibuses are subject to licensing. The license is issued in accordance with the procedure established by the Law “On Permits and Notifications” dated 16 May 2014, No. 202-V. However, as there are no provisions for the licensing of car sharing and carpooling initiatives and is therefore not required.

National and local legislation regarding passenger transport

The list of normative legal documents regulating the operation of passenger transport in the Republic of Kazakhstan is provided in appendix G.

Stages and recommendations

The UNECE study¹⁰ on car sharing and carpooling initiatives in Central Asia highlights the following key areas that should be taken into account to ensure the effective development of car sharing and carpooling initiatives in the city of Astana (see figure 4).

Create a sustainable mobility plan (SUMP)

To create a sustainable transport environment with appropriate policy guidance on the use of shared mobility solutions, a sustainable urban mobility plan (SUMP) could be created. Such a plan is not a legal act but would set the long-term actions of public institutions and government bodies in the field of mobility and could mention shared mobility as a component of a global sustainable mobility policy.

During the discussion of the Program of socio-economic Development of Astana “City for People”, representatives of civil society noted the need for a unified approach to urban mobility which could come through the form of a SUMP.

Form a legal framework for the implementation of carpooling and car sharing initiatives

Changing legislative acts is an integral part of the legislative process. It is not always necessary to adopt new legal acts, as often it is enough to make a change to the relevant provision of existing acts. In Kazakhstan, the procedure for making amendments and additions to legislative acts is set out in detail in the “Information and legal system of regulatory legal acts of the Republic of Kazakhstan” (Adilet – Ministry of Justice of the Republic of Kazakhstan) and

¹⁰ https://unece.org/DAM/trans/publications/2020_CarSharing_E.pdf (pages 66 to 81).

“Methodological recommendations on the design of regulatory legal acts” (Ministry of Justice of the Republic of Kazakhstan No. outgoing 20-03-8/1 5340 dated 31 October 2018).¹¹

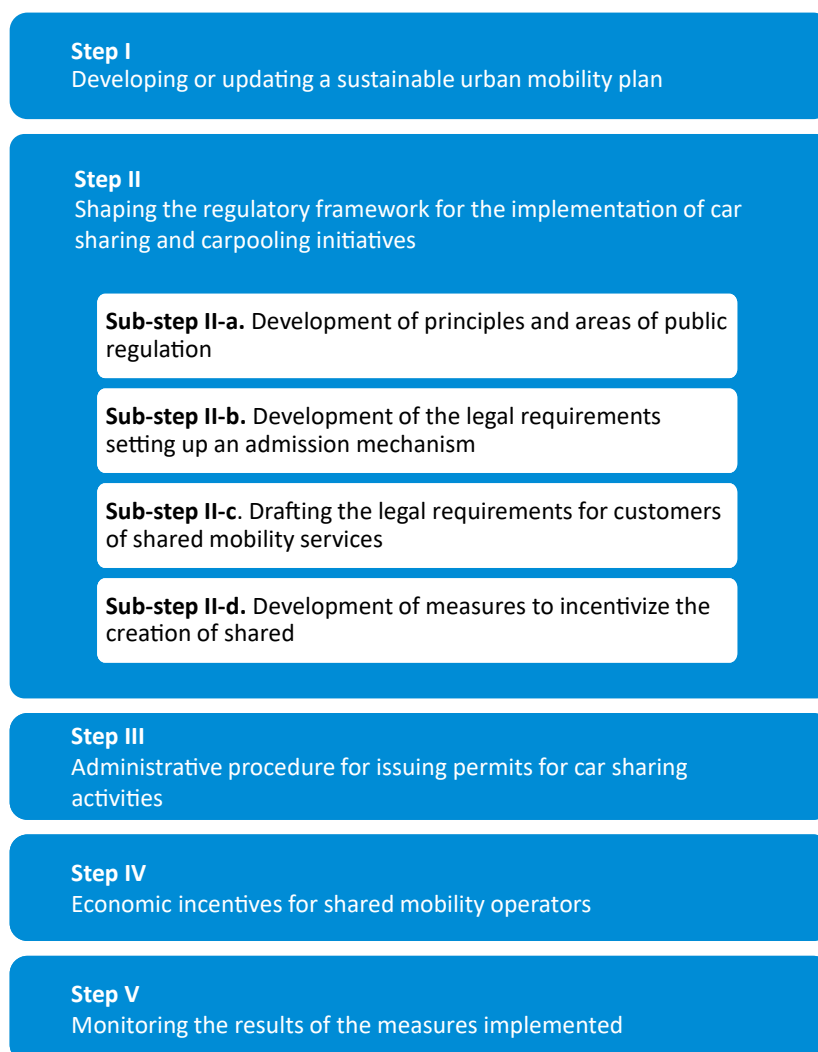
Create economic incentives for shared mobility operators

It is possible to incentivise the creation and development of car sharing activities for example by subsidizing their acquisition of electric vehicles. Tax reductions or loans at preferential rates may also be solutions to consider. However, these measures must remain temporary in order to allow the development of competition in the longer term. In addition, such things targeted specifically at car sharing programmes as free parking, tax benefits, the issuance of coupons for gasoline or cards with an advantage in a range of services (washing, diagnostics, etc.) can also be seen as potential incentives.

Establish monitoring of the results of the implemented activities

Monitoring the results of the measures and policies adopted is fundamental to ensure an effective use of the public resources for the implementation of car sharing and carpooling projects. Key targets must be defined and monitored in the short and medium term.

Figure 4 Recommended steps for public authorities to develop car sharing and carpooling¹²



¹¹ See appendix G “Normative legal acts regulating the activities of the organization of passenger transportation by road”.

¹² Strengthening the capacity of Central Asian countries to develop sustainable urban mobility policy on car sharing and carpooling initiatives, UNECE, 2020, https://unece.org/DAM/trans/publications/2020_CarSharing_E.pdf (English).

Recommended criteria and conditions for car sharing and carpooling operators (when applicable):

- Availability of a sufficient number of vehicles in the operator's fleet (not older than 3 years)
- Vehicles must comply with the legislation and regulations (dimensions, environmental class, etc.)
- Vehicles must be equipped with specific equipment (satellite navigation, internet connection)
- Documents proving that vehicles regularly undergo technical inspection and maintenance in accordance with national regulations and if possible UN rules
- Documents indicating the presence of a customer service (by telephone or through the operator smartphone application)
- Documents confirming the existence of established procedures for the protection of personal data of customers and guaranteeing their safety
- Vehicle Third Party Liability Insurance (for each car) is essential
- The availability of free software that allows customers to book operator's cars;
- Providing the city's traffic management system with data on the location of the operator's vehicles and their status of use;
- Evidence of the company's good reputation status
- No arrears in payment of taxes, fees and other obligatory payments
- Presence of a registered office in the city of Astana
- The absence of gross violations in the field of road safety, liquidation or bankruptcy procedures.

Conclusion

As a result of migration from rural areas and regions to Astana, the city and suburban area have become more densely populated. Heavy traffic, traffic jams and parking problems have already become a daily routine for residents of the city. The situation worsens in winter, as Astana ranks as the second coldest capital in the world and road transport is the main public transport mode. Owning and driving a car is becoming more and more difficult, and in this context, the sharing economy presents many advantages. In addition to potentially reducing the number of cars on the streets, it offers to users an access to recent, comfortable and safer cars. In 2021, 2.87 million users in Europe have already signed up to various car sharing applications. The largest sector of the European economy of shared consumption by revenue is transport services, including carpooling, car sharing and on-demand driver services.

Car sharing and carpooling are still to be developed and could be a safe and environmentally friendly supplementary form of travel. They can offer an attractive alternative to the private car and could also contribute to a more efficient use of available resources. By reducing the number of cars in cities, it could also help to reduce road transport pollution and congestion.

International development partners are supporting the city administration of Astana by promoting staff capacity building in the area of urban mobility, while the administration and public associations of the city of Astana are also implementing measures to create innovative solutions for mobility, such as initiatives to promote the use of electric scooters and bike sharing services.

When implementing car sharing and carpooling initiatives in the city of Astana, coordination of the central and local governments is necessary. To this end, the importance of the correlation of legislation at the national and local levels is fundamental. The recommendations provided in this publication can be used as a basis for this exercise.

Proposals for the development of a sustainable urban mobility policy on car sharing and carpooling are planned to be included in the Concept “City for the People 2025” which is being developed within the framework of the United for Smart Sustainable Cities¹³ (U4SSC), a global UN initiative coordinated by the International Telecommunication Union, UNECE and UN Habitat.

The city of Astana strives to create comfortable and safe conditions for the mobility of the population using modern intelligent solutions and technologies. The recommendations provided in this publication may be used as a tool to support these efforts. With the introduction of appropriate changes to the legal acts regulating passenger transportation, a framework facilitating the development and the implementation of car sharing and carpooling services can be put in place, as a step further toward a more sustainable transport system.

In Astana shared mobility is already in its infancy and is gaining momentum and popularity. Much of the regulatory framework is already in place, however it is still necessary to amend and adjust this framework along with the development of rules for the efficient functioning of car sharing and carpooling services in the city of Astana.

¹³ <https://www.itu.int/en/ITU-T/ssc/united/Documents/U4SSC-meeting/5thmeeting/U4SSC-Report-2020.pdf?csf=1&e=sq80B4>.

Appendix A

Table 5 Availability of buses registered on the territory of the Republic of Kazakhstan

Region	Availability of buses, total				including individual owners			
	2018*	2019*	2020*	2021*	2018*	2019*	2020*	2021*
Republic of Kazakhstan	89 291	86 613	83 581	82 189	...	46 633	42 164	38 968
Akmolinskaya	3 258	3 158	3 124	3 192	...	1 209	1 085	1 040
Aktyubinskaya	3 567	3 400	3 226	3 237	...	1 461	1 336	1 328
Almatinskaya	7 814	7 589	7 288	6 253	...	5 359	4 914	2 460
Atyrauskaya	5 751	5 535	5 481	5 516	...	2 451	2 180	2 204
Zapadno-Kazakhstanskaya	3 791	3 582	3 422	3 393	...	1 728	1 555	1 413
Zhambylskaya	4 651	4 404	4 046	6 327	...	3 043	2 655	4 902
Karagandinskaya	5 936	5 823	5 684	5 910	...	2 433	2 387	2 351
Kostanaiskaya	3 310	3 135	3 075	7 085	...	1 221	1 118	5 024
Kyzylordinskaya	5 061	4 690	4 210	3 829	...	3 630	3 098	2 660
Mangistauskaya	4 690	4 456	4 197	4 117	...	2 477	2 176	2 028
Yuzhno-Kazakhstanaya	-	-	-	-	-	-	-	-
Pavlodarskaya	4 423	4 218	4 137	4 169	...	1 814	1 678	1 602
Severo-Kazakhstanskaya	2 253	2 135	2 119	2 285	...	866	756	661
Turkestanakaya	13 964	12 457	11 015	3 352	...	10 373	8 933	2 919
Vostochno-Kazakhstanskaya	6 182	5 950	5 568	5 593	...	3 030	2 653	2 515
Astana City	5 680	5 421	5 506	6 437	...	1 869	1 850	2 689
Almaty City	8 315	8 758	8 859	8 359	...	2 550	2 510	1 850
Shymkent City	645	1 902	2 624	2 769	...	1 119	1 280	1 253

* According to the Ministry of Internal Affairs of the Republic of Kazakhstan.

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan.

Appendix B

Table 6 Availability of registered vehicles as of 1 July 2022

Region	Total	Units	Per cent
Republic of Kazakhstan	4 350 474	80 015	100.0
Akmolinskaya	191 743	2 758	3.45
Aktyubinskaya	151 214	2 884	3.60
Almatinskaya	533 884	6 441	8.05
Atyrauskaya	117 089	4 309	5.39
Zapadno-Kazakhstanskaya	123 948	2 930	3.66
Zhambylskaya	222 377	3 774	4.72
Karagandinskaya	309 312	5 022	6.28
Kostanaiskaya	187 564	2 858	3.57
Kyzylordinskaya	122 865	3 507	4.38
Mangystauskaya	147 789	3 590	4.49
Yuzhno-Kazakhstanaya	191 899	7 096	8.87
Pavlodarskaya	168 985	3 679	4.60
Severo-Kazakhstanskaya	143 233	2 111	2.64
Turkestanakaya	169 521	1 052	1.31
Vostochno-Kazakhstanskaya	323 348	5 488	6.86
Astana City	303 633	4 560	5.70
Almaty City	507 215	8 291	10.36
Shymkent City	135 234	1 833	2.29
Diplomatic vehicles	41 146	1 794	2.24
No region specified	258 475	6 038	7.55

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Express information "On the number of vehicles in the Republic of Kazakhstan", 15 July 2022.

Note: Including buses.

Appendix C

Table 7 Registered buses (by year of manufacture) as of 1 June 2022

Regions of Kazakhstan	Buses, total	Up to 3 years	Between 3 and 7 years	Between 7 and 10 years	Between 10 and 20 years	More than 20 years	Others
Total	80 015	5 583	6 217	8 460	25 529	33 902	324
Akmolinskaya	2 758	194	113	272	859	1 306	14
Aktyubinskaya	2 884	86	293	453	1 227	824	1
Almatinskaya	6 441	180	362	418	2 048	3 418	15
Atyrauskaya	4 309	448	809	515	1 533	1 001	3
Zapadno-Kazakhstanskaya	2 930	194	217	406	1 234	875	4
Zhambylskaya	3 774	126	176	346	1 076	2 047	3
Karagandinskaya	5 022	268	139	672	1 663	2 260	20
Kostanaiskaya	2 858	133	108	214	707	1 683	13
Kyzylordinskaya	3 507	39	206	267	1 395	1 596	4
Mangystauskaya	3 590	120	214	727	1 626	900	3
Yuzhno-Kazakhstanaya	7 096	-	181	539	2 209	4 155	12
Pavlodarskaya	3 679	135	194	436	1 171	1 736	7
Severo-Kazakhstanskaya	2 111	168	63	268	635	970	7
Turkestanakaya	1 052	87	117	128	464	256	-
Vostochno-Kazakhstanskaya	5 488	382	261	564	1 900	2 372	9
Astana City	4 560	195	669	740	1 735	1 211	10
Almaty City	8 291	1 536	1 313	671	2 393	2 371	7
Shymkent City	1 833	922	187	328	207	189	-
Diplomatic vehicles	1 794	355	534	234	487	184	-
No region specified	6 038	15	61	262	960	4 548	192

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for the city of Astana www.stat.gov.kz.

Appendix D

Table 8 Passenger transportation in the Republic of Kazakhstan for First half of 2018 – First half of 2022 (thousand people)

Types of transport	First half 2018	First half 2019	First half 2020	First half 2021	First half 2022
Automobile and urban	11 105.7	11 411.8	6 459.9	2 927.9	3 305.3
Buses	x	8 677.7	4 729.4	1 950.9	2 200.4
Trams	13.6	15.1	12.4	13.5	15.1
Taxi	2 504.1	2 693.1	1 702.4	947.6	1 067.5
Other types (cable cars and others)	x	x	4.2	3.9	6.5
Trolleybuses	x	x	11.4	12.0	15.9
Railway	x	x	5.9	6.6	9.0
Inland waterway	x	7.51	8.02	50.44	34.46
Air	3.8	3.6	2.3	4.2	4.6
Maritime	x	x	17.15	36.16	24.55

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for the city of Astana www.stat.gov.kz.

Appendix E

Table 9 Data on registered and intermittent taxi transportation as of 1 July 2022

N°	Regions	Taxi companies (registered)		Intermittent (licensed carriers)	
		carriers	taxi	carriers	taxi
1	Astana City	24	1 300	-	-
2	Almaty City	4	274	41	46
3	Shymkent City	11	905	2	4
4	Akmolinskaya	132	256	27	54
5	Almatinskaya	19	-	37	123
6	Atyrauskaya	50	600	20	20
7	Aktyubinskaya	50	810	45	56
8	Karagandinskaya	30	950	60	112
9	Kostanaiskaya	-	-	32	43
10	Kyzylordinskaya	13	484	21	46
11	Zapadno-Kazakhstanskaya	4	500	19	31
12	Vostochno-Kazakhstanskaya	1 620		76	120
13	Severno-Kazakhstanskaya	1	1196	22	22
14	Turkestanakaya	32	2 450	84	110
15	Pavlodarskaya	22	-	51	51
16	Zhambylskaya	3	115	19	43
17	Mangystauskaya	10	354	73	218
	Total	2 025	10 194	625	1 099

Source: Transport Committee of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan.

Application F

Table 10 Distribution of carriers by types of passenger transportation by regions of Kazakhstan as of 1 July 2022

N°	Regions	Number of carriers			
		urban	intradistrict	interdistrict	interregional
1	Astana City	6	-	-	1
2	Almaty City	19	-	-	19
3	Shymkent City	24	-	-	11
4	Akmolinskaya	8	25	25	20
5	Almatinskaya	14	7	15	6
6	Atyrauskaya	2	7	3	2
7	Aktyubinskaya	3	6	13	2
8	Karagandinskaya	61	9	14	7
9	Kostanaiskaya	7	8	19	2
10	Kyzylordinskaya	5	12	23	10
11	Zapadno-Kazakhstanskaya	6	19	11	1
12	Vostochno-Kazakhstanskaya	43	22	77	27
13	Severno-Kazakhstanskaya	11	20	72	31
14	Turkestanakaya	25	23	12	31
15	Pavlodarskaya	10	33	34	6
16	Zhambylskaya	29	15	12	12
17	Mangystauskaya	30	13	7	1
	Total	303	219	337	189
	Grand total				1 048

Source: Transport Committee of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan.

Appendix G

Normative legal documents regulating the operation of passenger motor transport in the Republic of Kazakhstan

- Law of the Republic of Kazakhstan dated 21 September 1994 N° 156-XIII “On Transport in the Republic of Kazakhstan” (with amendments and additions)
- Law of the Republic of Kazakhstan dated 4 July 2003 N° 476-II “On Road Transport” (with amendments and additions)
- Order of the Acting Minister for Investment and Development of the Republic of Kazakhstan dated 26 March 2015 N° 349 “On Approval of the Rules of Transportation”;
- ST RK 2273-2020 “Motor transport services for regular and irregular passenger transportation. General requirements”
- ST RK 2271-2020 “Services of bus stations, bus terminals and passenger service points. General requirements”
- Decree of the Government of the Republic of Kazakhstan dated 8 November 2007 N° 1061 “On Approval of the Rules for the Carriage of Passengers and Luggage in the Capital”;
- ST RK 2272-2020 “Motor transport services for taxi transportation. General requirements”
- ST RK EN 15140-2020 “Public passenger transport. Basic requirements and recommendations for systems that measure the quality of transportation”
- Order of the Acting Minister for Investment and Development of the Republic of Kazakhstan dated 26 March 2015 N° 348 “On Approval of a Model Contract for the Organization of Regular Automobile Transportation of Passengers and Luggage”
- Order of the Acting Minister of Investment and Development of the Republic of Kazakhstan dated 26 March 2015 N° 342 “On Approval of Acceptable Parameters”
- Order of the Acting Minister for Investment and Development of the Republic of Kazakhstan dated 31 December 2015 N° 1288 “On Approval of the Rules of Organization of Passenger Transportation”
- Order of the Acting Minister for Investment and Development of the Republic of Kazakhstan dated 25 August 2015 N° 883 “On Approval of the Rules for Subsidizing Losses of Carriers Associated with Socially Significant Passenger Transportation at the Expense of Budget Funds”
- Order of the Acting Minister of Investment and Development of the Republic of Kazakhstan dated 30 April 2015 N° 547 “On Approval of the Rules of Technical Operation of Motor Vehicles”.

Developing sustainable urban mobility policy on car sharing and carpooling initiatives Kazakhstan

In the framework of a project on strengthening the capacity of Central Asian countries to develop sustainable urban mobility policy on car sharing and carpooling initiatives, a first study was published by UNECE, focusing on a possible emergence and development of shared mobility services in Kazakhstan, Kyrgyzstan, and Tajikistan. It provided guidelines considering the best practices related to car sharing and carpooling in the public and private sectors.

This publication presents the local context in Kazakhstan related to urban transport and sustainable mobility, but also the legal aspects to consider for the development of car sharing and carpooling services in Astana. It also provides a For Future Inland Transport Systems (ForFITS) assessment and gives recommendations on the setting up of car sharing and carpooling services in Astana, based on discussions held with local and national stakeholders.

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